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BEING THE

JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED FOR THE ASSOCIATION BY

ERNEST HART.

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AN ADDRESS

ON

THE EARLY RECOGNITION OF GENERAL PARALYSIS OF THE INSANE, AND THE RELATIONS BETWEEN THIS DISEASE, TABES DORSALIS,

AND

DISSEMINATED SCLEROSIS.

Delivered at a Meeting of the North London District of the Metropolitan Counties Branch of the British Medical Association.

By J. SYER BRISTOWE, M.D., LL.D., F.R.S.,
President of the Branch

At the last examination for the Membership of the Royal College of Physicians I was concerned in framing one of the written questions, the exact wording of which I have forgotten, but which in effect was, to invite a brief description of the clinical features of general paralysis of the insane, and a brief discussion of the differential diagnosis between this disease and tabes dorsalis on the one hand, and disseminated sclerosis on the other. The written answers were so far good that they showed that the candidates had generally a sufficient and reasonably accurate knowledge of the symptoms of these several affections. But there were not more than one or two out of the whole number who seemed to have any suspicion that there was any affinity or similarity between the diseases thus brought into juxtaposition; and most of them asserted or implied that the distinctions were so marked and obvious that no one of experience could possibly confound them.

The question put before the candidates on that occasion is one of two questions which I propose to consider this evening. The other relates to the recognition of general paralysis in that early stage in which as yet no thought has arisen of placing the patient in a lunatic asylum, and in which its real nature is likely to be overlooked or misinterpreted.

The question of the differential diagnosis of general paralysis, tabes dorsalis, and disseminated sclerosis is a very fair one to ask candidates whose practical acquaintance with lunacy it is desired to test; for, although typical cases of these diseases present strikingly distinctive features, and cannot well be confounded with one another, there are many cases which are not typical, and in regard to which a differential diagnosis is, for a time at any rate, difficult, if not impossible; and, moreover, it is fully recognised by alienists that there are certainly two well-marked varieties of general paralysis, in one of which the symptoms are associated with those of tabes, in the other of which the symptoms are associated with those of disseminated sclerosis. But it does not often happen, when such patients are in the lunatic asylum, that there is any real difficulty in arriving at a satisfactory conclusion with respect to the nature of their disease. Patients with simple tabes and simple disseminated sclerosis never find their way into these institutions; and when either of these affections complicates well-marked general paralysis, the predominant disease is none the less general paralysis.

The real difficulty of forming a correct diagnosis is presented during the earlier stages of these disorders, before they have yet developed the distinctive groups of symptoms by which we are accustomed to recognise them severally as specific. It is at this time that such patients come under the care or notice of general practitioners and hospital physicians. And it is at this time, when it is generally so difficult, and often impossible, that it is always important, if one can, to arrive at a definite conclusion with respect to the purport of the obscure symptoms that they exhibit, and to forecast their future.

It may be convenient, before going further, to enumerate the chief characteristics of the three diseases under consideration.

The usual symptoms of tabes dorsalis, or progressive locomotor ataxy, are as follows: impaired co-ordination of the muscular movements of the lower extremities, with abolition of tendon-reflexes, numbness of the feet and legs, and neuralgic pains in them of a peculiar character; not infrequently similar affections of the hands and arms; and liability to pains in stomach, rectum, and other viscera, to which the term "crises" has been applied. Additionally, the organs of sense are often affected; sometimes there is temporary or permanent paralysis of the motor muscles of the eyes, frequently the pupils are much contracted, and usually they are insensible to the stimulus of light, but act to accommodation; occasionally blindness or deafness ensues, or the speech acquires the scanning or divided character which is more common in disseminated sclerosis. Further, the symptoms come on gradually, and not necessarily in any definite order; so that not infrequently lightning pains, absence of tendon-reflexes, or some affection of the eyes, such as a squint, precedes by a long interval the development of muscular inco-ordination. It must be added that patients suffering from tabes become sometimes liable to epileptiform attacks, and sometimes to mental derangements wholly independently of the presence of general paralysis, and that such symptoms may either precede the true tabic symptoms or arise in their course.

The symptoms of disseminated sclerosis vary largely in different cases. Still there is a large group in which they present a striking uniformity of character; and which, in a certain sense, may be regarded as typical of the disease. The symptoms in such cases are mainly as follows:—Rhythmical tremors of the head and arms, when unsupported or in use; spastic paralysis, without impairment of feeling, in the lower extremities; nystagmus, scanning or divided utterance, and a tendency to lowness of spirits and some degree of mental failure. But, besides these, we are apt to meet, in different cases, with paralysis of the external ocular muscles, impairment, or loss of sight from atrophy of the optic discs; and, sooner or later, epileptiform seizures, in which rising temperature usually heralds the onset of each attack. In this case, just as in that of tabes, the development of the disease in a characteristic form is often preceded, at long intervals, by one or other of the symptoms which belong to it—for example, by temporary or permanent squint, by exaggeration of tendon-reflexes in one or both legs, by tremors in one or other hand, or by slight impediment in speech. And in this affection, even more than in tabes, mental derangement (chiefly, perhaps, dementia), is liable to come on early or to develop late. I have already pointed out that some degree of emotional or intellectual disturbance is one of the common symptoms of disseminated sclerosis, and that the supervention of epileptiform attacks is to be anticipated.

General paralysis of the insane, when fully developed, is a disease which can scarcely be misinterpreted. There are, in association, peculiar paralytic symptoms and peculiar mental phenomena. The patient is irritable and variable in temper. He has delusions, which are usually of a grandiose character, such as that he is the emperor of the world, or God Almighty, that he is immensely rich and infinitely powerful, that his mental and bodily qualities are unsurpassed and unsurpassable, that he feeds on whales, elephants, and ostrich's eggs, and so on. But with these delusions he mixes up the affairs of every-day life in a curiously incongruous manner, so that while he tells us he is rich as Crœsus, he perhaps begs for money to buy a little tobacco; or while he boasts of being the king of kings, he will confess that his wife is a charwoman and his children attend a charity school. His mental condition, in fact, is one of associated delusions of grandeur, and failure of memory and power of reasoning. His paralytic symptoms are for the most part general. His limbs are weak and tremulous, his gait uncertain and tottering. But it is in connection with speech, and especially in the organs of speech themselves, that the paralytic symptoms are most pronounced and most striking. In the earlier periods, and in slighter cases, there is a mere trembling of the lips,

especially noticeable at the beginning of sentences or words; later, the tremors involve all the muscles concerned in the movement of the lips; and yet later the convulsions are apt to extend to the muscles connected with the eyelids, eyebrows, and forehead; and in both these latter cases the spasms not only precede, but accompany, the acts of articulation. In the beginning there may be only a slight and scarcely perceptible tremor or hesitation in speech; but, after a time, utterance becomes markedly hesitating and imperfect; not infrequently the patient stammers, not infrequently speaks as if he were sobbing, and sometimes the tremulousness and uncertainty of articulation become so extreme that it is impossible to understand him. Besides the above symptoms, which are characteristic, we find generally that the pupils are unequal and the skin greasy, often that the tendon-reflexes are exaggerated or abolished; and that the patient, at various periods in his illness, suffers from epileptic fits, which, like those occurring in disseminated sclerosis, are ushered in by rising temperature. The disease is recognised as beginning in several ways. In some cases the paralytic phenomena take precedence; and, not uncommonly, they continue for a long period unaccompanied by any obvious mental derangement. Here the tremor of the lips in speech, and the inequality of the pupils, are of great diagnostic import. In some cases the mental symptoms first appear; the patient becomes variable and excitable in temper, loses memory, leaves out words and letters, and shows incoherence in writing, speaks and acts foolishly and childishly, steals, lies, acts obscenely, and perhaps shows signs of the exalted delusions which ultimately dominate the remnants of his mind. In other cases, the corporeal and mental symptoms arise simultaneously; and, not infrequently, the first indication of the patient's illness is the occurrence of epileptic fits. Occasionally, the grandiose delirium is replaced by melancholia. It is commonly thought that general paralysis for the most part proves fatal within two or three years of its onset. And this statement is doubtless true, if the disease be reckoned as commencing at the time when the patient's symptoms are first recognised as those of general paralysis. But there is no doubt whatever that in a very large proportion of cases the disease begins long before it is brought under the notice of alienists; and that in its invasion, and often for a long time, it is the friends and the family medical attendant, who alone recognise that there is something amiss, which they probably misinterpret, and the seriousness of which they probably under-estimate. My friend, Dr. Savage, of Bethlem, who has interested himself in this question, and is investigating it, finds, on close inquiry, that the confirmed symptoms of general paralysis are often preceded by years of progressive slight deterioration of character, and of growing irritability and weakness of mind. The early indications consist in slight degrees of some of the characteristic phenomena of the declared disease; which the experienced and careful observer might possibly, even at this period, read correctly, or, at any rate, would regard with suspicion.

Having made these preliminary remarks, I think I shall best accomplish the purpose I had in view in bringing the subject of the relationship of the above diseases, and of the early diagnosis of general paralysis, before you this evening, not by enumerating and weighing their various points of resemblance and difference, but by giving brief details of a few of the cases, illustrative of my remarks, which have come under my immediate observation, and for the most part such as have presented more or less difficulty of diagnosis.

The first cases I shall quote will be such as were obviously, when I first saw them, or proved in the long run to be, or are still only suspected to be, cases of general paralysis.

Case I: A merchant, aged 33, consulted me in January 1881. He was stout, and a free liver, and appeared to be perfectly well. But in the previous July he had had a distinct epileptic fit in the night; in the October following he had had a second fit, also in the night; and he had had another fit three weeks before his visit to me. He had had syphilis thirteen years previously; and, discovering no better clue to the causation of his illness, or hint as to treatment, I prescribed accordingly. I heard nothing more of him until November, 1883, or nearly three years afterwards, when he paid me a second visit. At this time his hands were tremulous, his gait was tottering, his tendon-reflexes were greatly exaggerated; he stood (as I find recorded in my notes) as though he had defæcated into his trousers; his lips trembled before and during utterance, and his speech was hesitating and drawling; his pupils were unequal; he looked about suspiciously, and he laughed fatuously and at nothing. He was clearly suffering from general paralysis. I learnt—partly from himself, but mainly from his wife—that he had had no recurrence of epileptic fits, but that he had been slowly failing mentally and bodily; that he had become forgetful and weak-minded, emotional and irritable with his children; that he slept all the evening long, and had ceased to be in any sense a companion to his wife; yet that he had been going daily to his business in town, and had not only exhibited no delusions, but had shown no tendency to speculate, and had not misconducted himself in any way. I had at this interview, and subsequently, to explain to the wife and friends, and to the medical attendant, the unfavourable view which I was compelled to take of the patient's case and prospects, and to warn them (so to speak) of the rocks ahead. I never saw him again; but I have learnt that some time afterwards he had to be removed to an asylum, and that within the last twelve months he has succumbed to his malady. I am not sure that I ought not to have had suspicions of the true nature of this case when it first came under my notice. But there is nothing in the notes I made at the time to show that I entertained any. I do not appear to have examined his pupils, and I made no remark as to his tendon-reflexes or his mode of utterance.

Case II.—A stonemason, aged 32, came under my care in St. Thomas's Hospital in October, 1883. The history was that for fifteen months he had been suffering from curious fits, in which he became numb and powerless, and talked and acted foolishly, but did not fall down, or apparently lose his senses; and that during the last few months he had been getting weak in body, and defective in speech. He was a healthy-looking man, without obvious loss of power in arms or legs, with little or no tremor in them, but with slight increase of knee-jerks and slight ankle-clonus. His lips, however, trembled markedly in speaking, his utterance was hesitating and indistinct, and there was some inequality of pupils. There did not appear to be the slightest intellectual deficiency; he was neither emotional nor forgetful, and neither then nor subsequently was I able to discover any evidence whatever of delusions. Two days after admission he quitted the hospital without notice, and found his way to his home in Putney. He returned, however, two days later, and stated that he had no recollection of leaving the hospital, and recollected nothing that had happened until he found himself at the Waterloo Station. While in the hospital he had occasional attacks of his fits. They came on with numbness, usually beginning in the feet, and extending thence to the rest of the body; were attended with loss of power, and, for the most part, complete loss of speech. He did not appear to be wholly insensible in them. They lasted for about half an hour to two hours, and were followed by headache. On one or two occasions his temperature was taken before and after, and was found to be normal. He remained in the hospital for two months, during which time no change whatever in his condition was observed. For the next year the patient used to visit me occasionally at the hospital, and I had the opportunity of watching the progress of his malady. I cannot say that I detected any obvious deterioration in the condition either of his mind or of his body. But he complained to me more than once that his fits continued to recur, and that though he did not fall down he often had no recollection of what happened during their continuance, and that on several occasions while in them he had been violent and destructive, and had more than once assaulted his wife murderously. I need scarcely say that when he left the hospital, shortly after his admission, he must have been in one of these fits. I have since heard that the poor fellow has had to be removed to an asylum; but whether he is now living or dead I do not know. This case so far resembles the last, that the earliest indication of the patient's disease was the occurrence of epileptiform seizures, on which, at a later period, the characteristic defect of speech supervened. Here also, as in the other case, there was long delay in the development of mental symptoms. Indeed, I cannot say that there was any real mental impairment during the whole time he was under my observation.

Case III.—An officer, aged 38, a fine, handsome-looking man, was sent to me in November of last year. He had been ailing for twelve months or more, and had been under treatment, I was told, for indigestion. Shortly before I saw him he had been on a visit to some relations in the country, who were struck with the change that had taken place in him within a comparatively short time; and with the fact that, whereas he had formerly been an excellent shot, he now invariably missed the birds at which he aimed. It was at the suggestion of those relatives, and that of a medical friend of theirs, that he came to see me. His pupils were unequal; he spoke in the drawling, hesitating manner of general paralytics, with the usual tremors of the lips and muscles of expression; his hands were tremulous; his legs trembled, especially in rising from his seat, and his tendon-reflexes were much exaggerated. He told me that he was inclined to be low-spirited, that he had lost flesh and strength, that his memory was not so good as it had been, that in speaking he was apt to misuse words, and that he had had to give up writing—partly because of unsteadiness of hand, partly because he was apt to leave out words and letters. I observed, moreover, that he was inclined to be talka-

tive, and to say things about himself and others that were neither called for, nor such as most reasonable persons would have cared or liked to mention. I thought him somewhat weak-minded, but there was no evidence that he laboured under any delusions. There is no doubt that he was suffering from general paralysis of the insane. But, having regard to the little impairment of intellect he presented, it is not surprising that his friends and even one or two medical men who saw him, hesitated for some time to accept the diagnosis and prognosis of his case that I felt it my duty to lay before them. I need scarcely say that further inquiries showed that his fellow-officers had for a long time observed growing impairment of mental and physical power, and growing unfitness for his duties; or add that his mental inability gradually increased, and that a few months since he had to be removed to an asylum. I do not know that even yet he has manifested definite delusions; but I know that he had become quarrelsome, and untrustworthy and feeble-minded.

The above three cases seem all fairly typical, and, at any rate, were such as, notwithstanding the absence of delusions and mental exaltation, could scarcely be misinterpreted by anyone who was familiar with the disease. I proceed to narrate some of which the diagnosis was, or even remains, doubtful.

Case IV.—In June, 1884, a young man, aged 32, was brought to me by his medical attendant. He had been ailing for twelve months, during which time he had been nervous, "hysterical," forgetful, and at times drowsy. Moreover, he acknowledged that his temper had become very irritable, that his memory was apt to fail him, that his handwriting was not so good as it had been, and that he was apt to omit words when writing letters. But he had been an active man of business, and had continued during the year to perform his usual onerous duties. He was a spare, fairly healthy-looking man. The pupils were unequal, and acted to light. There was no paralysis of the external ocular muscles. His speech was a little slow, and attended with slight tremor of the lips. The hands were slightly tremulous. His gait appeared to be natural, but the patellar tendon-reflexes were abnormally brisk. I suspected the presence of general paralysis in a very early stage, but thought the case might possibly turn out to be one of disseminated sclerosis. I heard nothing more of my patient until April, 1886; he was then brought to me for the second time. His symptoms had varied during the interval, but, on the whole, he had deteriorated. About a fortnight after his first visit to me, his eye-trouble had become aggravated, and he consulted an eye-surgeon, who observed that "the right pupil was larger than the left, and acted neither to light nor to accommodation; and that the discs were normal." Three months later, the same oculist reported on the state of his eyes as follows: "The left pupil is now somewhat too large, and motionless—a new symptom, pointing perhaps to slowly progressive disease about the nuclei of both third nerves." Shortly afterwards he consulted one of the most eminent London physicians, who elicited a history of syphilis, and ordered him to take mercury. This was said to have been followed by some amendment; but his irritability of temper continued to increase, and he had been liable to attacks of depression, rapidly alternating with fits of boisterous spirits and boastfulness. He had been quarrelsome and unmanageable at times, and, though not lavish in other respects, had been spending largely on his personal adornment. His memory had been very defective, but he did not seem to have had any delusions. He stated that he wrote better than he formerly did, and that he did not now make mistakes. He had still been going on with his occupation. His tongue trembled a little when put out; his lips also trembled slightly in speech. His articulation, however, was perfect while he was speaking quietly, but became hesitating and indistinct when he was excited; at which time, too, the tremors would extend from his lips to the rest of his face. The pupils were unequal, the right being the larger; and they both acted sluggishly to accommodation, but not at all to light. There was no noticeable tremor of the arms. No inco-ordination in walking could be detected, and he could stand with his eyes shut. The knee-jerk in the right leg was, if anything, a little exaggerated; it was wholly wanting on the left side. He had had lightning-pains in his legs for a few weeks. There was no loss of sexual desire or power. I have only, so far as his history is concerned, to add that, two months after I saw him, he was removed to a lunatic asylum, where I believe he now is.[1]

I think there can be no reasonable doubt that my original surmise was correct, and that this case was really one of general paralysis. But, just as in the other cases I have narrated, there was no grandiose delirium—no delusion. And the paralytic phenomena presented curious changes; the ophthalmoplegia interna varied from time to time, and the tendon-reflexes in the legs, which were at first exaggerated, in the course of time diminished in one leg and disappeared absolutely in the other. There were, in fact, associated with fairly characteristic signs of general paralysis, both symptoms of tabes and symptoms of disseminated or lateral sclerosis.

Case V.—A gentleman aged about 30, consulted me first last February. About ten years previously he had had syphilis, not followed by secondaries. Five years later he had had gonorrhœa, from which a stricture resulted. For four or five years he had been liable to shooting pains in the thighs, knees, and legs, which came on irregularly, lasted a variable time, and were often very severe. He had been married three or four years, and since then had resided abroad; and a year and a half or two years before I saw him he had been nursing his wife during a very alarming illness which followed her confinement, when, without warning, he was attacked with an epileptic fit. About twelve months ago he came back to England, and on his voyage had a succession of similar fits, and was unconscious for a fortnight, after which his memory was much impaired. He improved, however, very much in this respect, and was able on his arrival in England, to undertake clerical work. A few weeks ago he had another epileptic fit, not followed as the previous group was by loss of memory. He has suffered from lowness of spirits, and ever since his illness aboard ship has lost all sexual desire and aptitude, and has been liable to attacks of coldness (with goose's skin) involving the left half of the body only, coming on suddenly and terminating in heat of surface but no sweating. He stated that he had lost flesh, but he was in fair condition. His expression was dull and sad; his face was greasy; his pupils were unequal, neither of them acting to light, and the left (which was the larger) not acting to accommodation. The optic discs were normal and the sight good. There were no tremors in the hands; there were no traces of tendon-reflex in either leg, and no numbness. He could walk without difficulty, and could stand with his eyes shut. He had no defect of speech or writing, but I was inclined to think his lips trembled slightly previous to utterance. Beyond the facts that the patient was dull and low-spirited, and not very companionable, and that his memory (though it had improved) was still not quite so good as it formerly was, I was unable to elicit any evidence of mental derangement. I saw him occasionally during the following six months, but nothing occurred to throw any further light on the nature of his disease. There was a little variation in the symptoms from time to time; occasionally he complained of pains at the back of the head and neck, and for the last month or two his water had run away from him occasionally both in the day and when asleep. I learnt later that he had consulted an oculist ten years previously for ptosis on the left side, of which there were still occasional traces. That this patient is suffering from some chronic degenerative change in the nervous centres there can, I conceive, be no doubt, but whether he will ultimately find his way into an asylum cannot yet, I think, be positively affirmed or denied. I suspect that the case will prove to be one of general paralysis.

Case VI.—An officer, aged 33, consulted me, at the instance of his friends, in January, 1884. He was a remarkably fine, handsome, healthy-looking man, who had obtained sick-leave six months previously, and returned to England from a tropical climate. He had distinguished himself greatly, and had obtained high promotion at an early age. For the last three years he had been resident in one locality; and for the last year or two of that time had presented symptoms of mental disturbance. He had continued to do his work to the last; but he had become irritable, variable in temper, quarrelsome, taking dislike to his friends, showing jealousy of the success of others, complaining of being neglected, expressing a desire for active employment, but neglecting the work which he had to do. As an example of his behaviour, I am told that, on one occasion, he, without any apparent reason, seized upon a favourite dog of his and threw it on to the ground with great violence, then almost immediately repented of what he had done, took it up, fondled it, and seemed greatly affected. Since he had been in England he had shown something of the same quality of mind; he had been vacillating and irritable, and particularly had manifested a great tendency to fall in love. Indeed, when he called on me, he had already been entangled in two or three love affairs; and, on the spur of the moment, had engaged himself to a girl, whom he had since almost as suddenly discarded. His family now, as previously his friends abroad, were not satisfied as to the soundness of his mind; but he had never shown any delusions, nor had he done anything specially or noticeably outrageous. I could discern very little amiss with him; he was perfectly courteous and gentlemanly, talked freely with me about his condition, said that he was sleepless, and expressed regret at his behaviour to the girl whom he had jilted. It seemed to me, however, that there was a want of healthy reticence in regard to himself and his own affairs, and that he was inclined to

[1] I have since heard that he died there very shortly after admission.

be over-garrulous. There was some inequality of pupils, but no sign of affection of speech, or of any form of paralytic affection. I saw him again about a month later. He looked well; but it appeared that he had continued sleepless, and that he had been alternately low-spirited and excited. He had spent the previous three nights at balls, and told me that at one of them, much to his annoyance, a girl had proposed marriage to him. I saw him on one or two subsequent occasions, and also some of his relatives, and was instrumental in obtaining for him extension of leave. But I lost sight of him about the middle of 1884, and heard nothing more until some two or three weeks ago, when happening to meet a medical man who had come over to England from the town in which my patient had previously been, and was now again stationed, I asked him if he knew anything of him, and then learnt from him that he had married while in England, and taken his wife abroad with him, and that mentally he still showed all that vacillation of character, violence of temper, and quarrelsome disposition, which he had shown before coming to England—qualities which were foreign to his original and true character.

That this patient has been mentally unsound for some years is obvious; but whether he will in the course of time become a general paralytic is, I take it, uncertain. All I can venture to assert is that the symptoms, so far as they go, are compatible with the coming on of that disease; and they are, I believe, such symptoms as one finds, on looking back into the history of general paralytics, they often present before the true nature of their malady is recognised. I need scarcely add that the symptoms in this case were entirely mental; and that obviously the question of relationship to tabes, or any such affection, did not and does not arise.

I proceed now to quote a few cases of what I regard as locomotor ataxy, but in which the specific symptoms were so far complicated with others referable to the brain, that I can conceive that the diagnosis of locomotor ataxy might be disputed.

Case vii.—The case I am about to narrate was included in a paper which I published in the thirty-first number of *Brain*. It is that of a musician, who was admitted into St. Thomas's under my care in 1880. He was then between 30 and 40 years of age. He was suffering from obscure symptoms, the meaning of which I failed to interpret. He was extremely nervous and irritable, and gave me the impression of being hysterical. Whether I did not trouble myself to investigate his complaints thoroughly, or whether I did investigate and could discover nothing to explain his symptoms, I cannot recollect. The case, however, made little impression on me at the time, and I should have forgotten all about it but for its subsequent history. Late in the year he called at my house complaining of "tightness in his leg," but he walked without difficulty; and I still failed to discover what was the matter with him. He was still nervous and emotional, and I thought hysterical. The next time I saw him was in 1883; he was then distinctly ataxic. He was suffering from lightning pains, numbness in the feet, and inco-ordination in walking. He had complete ophthalmoplegia interna, and on the left side partial ptosis. He suffered also from gastric crises. He was still nervous and hysterical. Since then he has gradually got worse. The ataxic symptoms have increased; considerable paralysis of the external ocular muscles has taken place; he has been complaining not only of crises referable to the stomach, but of others referable to the rectum, and of a peculiar spasmodic cough. His mental condition has not changed. I have little doubt that if I had investigated with sufficient minuteness and care when the patient first came under my treatment I should have discovered the presence of phenomena pointing to the true nature of his malady. And I may add that, even if at that time the discovery of ataxic symptoms had led me to think that the hysterical manner of the patient pointed to the coming on of general paralysis, the subsequent progress of his case would have proved my surmise to be erroneous. The case is essentially one of complicated tabes.

Case viii.—The next case is that of a gentleman, aged 39, whom I saw in December, 1883. He had been ailing for seven years, and his illness had apparently been induced by long-continued overwork and anxiety. His first sufferings were mental. He became low-spirited, suicidally inclined, and was unable to apply himself to his business duties; noises worried him; he had a peculiar dread of riding in omnibuses, cabs, or railway carriages, and of walking over London Bridge. But he had no delusions, and kept most of his sufferings to himself. These symptoms, varying in severity, but never wholly disappearing, continued for five years, when they left him. Shortly after the beginning of his illness he began to suffer from a sense of weight and soreness in the right hypochondrium. This soon became almost constant, but presented frequent acute paroxysms, often induced by moving about, and also, as he believed, by taking food. When specially severe it would shoot from the hypochondrium into the lower part of the belly. The pain had tended to increase from the time of its first appearance; and during the last year or two had been so intense and a source of so much misery to him that he had been compelled to give up business altogether, and had been almost entirely confined to the house. It is noticeable that his appetite had never failed, yet that he had been in the habit of taking very little food for fear of increasing pain, that he had never suffered from sickness or flatulence, and that, indeed, he had never had any of the usual symptoms of dyspepsia. Further, he had never shown any symptoms of hepatic, renal, cardiac or pulmonary disease; nor had there ever been any obvious defect of the organs of special sense. He had lost flesh latterly. It appeared on further inquiry that for some few months he had suffered from "rheumatic" pains down the right leg, mainly a kind of soreness in the muscles, and that he had experienced a little difficulty in using the limb. He was a pale, thin man. He had a soft, flaccid abdomen, which presented no tenderness anywhere, and admitted of easy exploration. There was no discoverable tumour, or enlargement of any organ. He had an umbilical rupture, about the size of a pea, which could be readily reduced. His pupils were equal, and acted to light and accommodation. His speech was unaffected. He had no numbness or tingling anywhere, no muscular tremors; but in walking the movements of the right leg were a little uncertain and awkward. There was total absence of tendon-reflexes on both sides. This fact had been recognised three or four years previously; but its significance, apparently, had not been appreciated. Formerly the knee-jerks had been brisk. The discovery of ataxic movements in the right leg, and the absence of tendon-reflexes, led me to make further inquiries; and I elicited that, although he could walk fairly well in the daytime, or some year or two he had shown great unsteadiness in walking, and even in standing, in the dark; and that not infrequently, when washing his face at the wash-hand stand, he would become so unsteady that his wife had to run to him and support him. The patient died about a year later. Although many of the symptoms in this case, and their sequence, were unusual, there can be no doubt that the patient suffered essentially from tabes dorsalis, and that the hypochrondriac pain which had continued for six or seven years when I saw him was a form of the gastric crisis common in that disorder. It is interesting that the specific tabic phenomena should have been ushered in with prolonged mental derangement. It is clear, however, from the progress of the case, that there was never, even on this account, any sufficient reason for regarding the disease as general paralysis.

Case ix.—Nearly five years ago I saw a gentleman, aged about 35, who for several years had had marked and increasing symptoms of locomotor ataxy, including momentary pains in the lower extremities, absence of tendon-reflexes, loss of co-ordination in the movement, and numbness, of the lower extremities, and gastric crises; and in whom the symptoms had become so severe that he had been compelled some little time before I saw him to retire from business. He had recently been for a voyage to Australia, and while at sea he experienced peculiar attacks. These at first consisted in an indescribable pleasurable sensation at the epigastrium, which he was tempted to encourage. But after a while the epigastric feeling became disagreeable, and was followed or accompanied by a strange mental condition, in which it seemed to him that everyone became two or three times as tall as natural. During these latter attacks his face became livid, and his eyes fixed; and his coming-to was attended with smacking of the lips. He never cried out or fell in the attacks, and believed he had never lost consciousness. Those who had the opportunity of observing him at these times thought differently. I verified the facts of his gait being ataxic, and of the absence of knee-jerks. The pupils acted to light and accommodation. I have not seen the patient since, but I believe I heard some little while ago that he had improved a good deal. Now here, again, we have clearly—at least, so I think—a case of tabes; but it is peculiar from the circumstance that the pupils did not present the Argyll-Robertson phenomenon, and from the supervention of fits, which are so common in general paralysis, so rare in tabes. There was no mental defect, nor affection of speech, and I think, therefore, no sufficient reason to suspect the coming on of general paralysis.

Case x.—Another case, not unlike the last, came under my observation nearly four years ago. The patient was a gentleman, aged about 54, who had suffered for several years from lightning pains in the legs, and for about a year from occasional severe gastric crises. But he had had no difficulty whatever in walking or standing. He was thrown off his horse the year previously, but apparently sustained no injury. A year later he fell off his horse, probably in a fit. And since then he had, on two or three occasions, suddenly become in-

sensible, and remained insensible for some time. He had lost flesh during the last few months. The pupils were unequal, and presented the Argyll-Robertson phenomenon. The patellar tendon-reflexes were entirely absent. But he had no numbness in hands or feet, walked naturally, could stand with perfect steadiness when his eyes were shut, and could walk and stand in the dark without tottering. His speech was perfect, and there was no sign whatever of mental impairment. Again, notwithstanding the occurrence of fits, and certain other peculiarities as regards symptoms, the case must, I think, be regarded as one of locomotor ataxy.

It would have been easy for me to multiply cases, and even to quote many specially interesting cases, of tabes, disseminated sclerosis, and general paralysis, had my object been simply to lay before you striking and typical examples of these diseases. My aim, however, has been, as I explained at the beginning of my address, to show how important it is that medical men, and especially those in private practice, should not only be acquainted with these affections in their fully-developed phases and typical forms, but should recognise the fact that complex and puzzling cases are of frequent occurrence; and that, especially during the earlier periods of their history, their true nature is often extremely difficult, often impossible of determination; and yet that, even at this time, there may be apparently trivial yet really valuable signs for those who have the wit or knowledge to read them correctly. I may add that, in looking back to my past experience, I can recall some cases that a few years ago I regarded as examples of locomotor ataxy, which I am now convinced were examples, not of locomotor ataxy alone, but also of something still more serious, which at the time I overlooked; and that during the last two years I have, on two occasions seen, in hospitals which I chanced to visit, patients whose cases their physicians looked on as cases of tabes dorsalis; but whom, I am certain, anyone skilled in lunacy would have set down as general paralytics.

ABSTRACTS OF THE HARVEIAN LECTURES ON CANCER OF THE UTERUS.

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Lecture I.

The malignant growths which are met with in the uterus were first enumerated and defined, and it was shown that cancer could be distinguished from sarcoma, not by microscopical characters only, but by microscopical characters and mode of growth. Both sarcoma and cancer attack the uterus, but the lectures were limited to the consideration of cancer. The uterus was divided into three parts: the vaginal portion, which was the surface exposed in the vagina, bounded above by a line drawn from the external orifice, or a little above it, to the insertion of the vagina; the cervix proper, bounded below by the line just mentioned, and above by a plane drawn transversely through the inner orifice; the body and fundus formed the part above this plane.

Cancer of any one of these parts was cancer originating in that part, and not cancer invading it from another source. Cancer of the vaginal portion was rare. It was of the squamous type, and began in the stratified epithelium of the portio vaginalis. Eight cases were described in various stages of growth. These showed that cancer might begin at any point of the vaginal portion from the os uteri to the vaginal vault. It might begin at the external orifice, or on the surface of a polypus growing from one of the lips; on any part, in fact, covered by squamous epithelium.

The forms it assumed were few. In three there was simply enlargement of the lips; in two the disease was papillary, and possibly the beginning of a cauliflower excrescence; one presented a red tuberculated surface, and one an uneven granular surface. The cancerous portio vaginalis might be quite smooth, and appear fairly healthy, presenting perhaps only a slight lividity of the surface. In no instance did the disease start from a tear of the cervix; nor was there any evidence that laceration played any part in the etiology of cancer of the vaginal portion.

The lines of growth of the disease were peculiar and important; it did not grow deeply and involve the uterine tissues, but spread superficially towards the vaginal vault, and then down along the surface of the vagina towards the vulva. Its thickness, as a rule, did not exceed one-sixth to one-third of an inch. Later it spread in the cellular tissue, and the broad ligaments and the sacro-uterine ligaments were said to become affected; but in none of the author's cases were the latter attacked. The disease did not appear to spread up the cervical canal, but it showed a preference for the vagina. Various stages of its progress in this direction were exemplified by the cases read.

Whether the anterior or posterior lip was most frequently affected was not known. When it grew like a cauliflower it was superficial and entered but for a short depth into the cervix, as was shown by the cases which had recovered after removal of the growth by the ecraseur, which removed, as a rule, a very superficial portion of the cervix.

One instance was given in which the disease ran a course differing entirely from that described. In this case the cancer began on the vaginal surface, midway between the external orifice and the vaginal vault, and then it bored its way into the substance of the cervix, ulcerating as it grew until it had penetrated the cervical wall to a depth of about one inch. It presented no tendency to spread superficially, nor to affect the tissues extensively, for the depth of the diseased tissue, at any point, was not more than a quarter of an inch.

Cancer of the portio vaginalis appeared to be much more frequent during menstrual life than after the menopause, though it was sometimes met with in old people. It was not clear that childbearing had much to do with the disease, for, of the eight cases, five had less than the average number of children, and three none; nor had difficult labours, for in no case had labour been very bad. In one only was a family taint observed—a sister having died of cancer of the womb.

The early symptoms were by no means characteristic. Hæmorrhage was present in half the cases, and discharges in all with one exception. A fœtid discharge was generally regarded as a sign of a late stage of cancer, and as depending upon sloughing and breaking down of the growth. It might, however, be present in the earliest stages, and was then independent of sloughing.

Of the exact duration of this form of cancer of the uterus nothing was known, but it might last for several years.



Fig. 1.—Epithelioma on posterior lip of uterus.



Fig. 2.—Vertical section of the same (semi-diagrammatic).

The patient from whom the specimen, represented in the drawing, was taken was 39 years of age; she had suffered for about a year from a yellow discharge, and had lost flesh for the same time. For nine months she had had pain during, and bleeding after, sexual congress. In five weeks this bleeding had increased, and the discharge had been offensive. On admission she was thin, but looked fairly healthy. On vaginal examination there was found what was taken for a red, ulcerated surface, raised about a line above the level of the surrounding parts, and situated on the posterior lip and part of the anterior. There was a narrow strip of healthy mucous membrane on the posterior lip between the growth and the vaginal vault, and another about three-quarters of an inch in width on the anterior. The red surface had the diameter of a florin. On the left side there was a fissure in the cervix and the lips were inverted. The cervix was amputated above the internal orifice, and what was supposed to be an ulcer proved to be a papillary growth about three-fourths of an inch in diameter and one-sixth to one-third of an inch in thickness. On microscopic examination it was seen to be a squamous epithelioma commencing at the external orifice and growing along the posterior lip towards the vaginal vault.

ON PERIPHERAL NEURITIS.[1]

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THE subject of this discussion, which I have been asked to open, is "Peripheral Neuritis." By *neuritis* is, of course, meant inflammation of nerves, and by the qualifying term, "peripheral," I presume it is intended to limit the discussion to disease in the course of the nerves after they have passed beyond the intervertebral and cranial foramina. The subject, as thus defined, is so wide, that I will take it upon myself to limit the discussion still further. It would hardly lead to any profitable result were we, at one sitting, to take into our consideration the phenomena which attend inflammation of individual nerves, including sensory, motor, and mixed nerves, and the nerves of special sense. It seems to me, therefore, desirable to restrict the field of our discussion to that very important group of inflammation of nerves in which a larger and larger number of the trunks are successively invaded, the disease beginning at the periphery and extending towards the centre. This disease, variously called progressive multiple neuritis, polyneuritis multiplex, and other names, invades the body as a rule in a symmetrical manner as regards the two sides, although the phenomena may be more pronounced on one side than on the other. Now this is one of the chief characteristics of those diseases that are caused by a poison circulating in the blood, and there can be no doubt whatever, that in at least the majority of cases, this affection is caused by a poison. The best known disease of this group is probably lead paralysis, and there is no room for doubt that it, at any rate, is caused, directly or indirectly, by the introduction into the system of a poison from without. It is also known that arsenic, and probably copper and other metallic salts, give rise to a paralysis of the same general type as lead paralysis.

The second variety of this disease is typified by the paralysis which results from alcoholic excess. In this variety may be included the paralysis caused by the fumes of bisulphide and oxide of carbon, and probably also, the severe pains in the limbs caused by the abuse of chloroform and chloral. The same type of paralysis has also been met with in advanced cases of diabetes. The third variety of this affection results from animal poisons, and of these diphtheritic paralysis is probably the best known. The remarkable cases of universal paralysis recorded by Dr. Buzzard, as occurring in syphilitic subjects, is now acknowledged by him to belong to the group of peripheral neuritis, and these may be placed in the same class as diphtheritic paralysis. This form of paralysis occurs as a signal, not only of diphtheria and syphilis, but also of small-pox, scarlet-fever, measles, typhoid, typhus, intermittent fevers, and dengue. Pitres and Vaillard have recently brought together many cases as occurring in the course of tuberculosis, while the essential morbid changes in anæsthetic leprosy, and beriberi, are now found to be a peripheral neuritis. It is also probable that pemphigus, herpes, and other cutaneous diseases are caused by neuritis of sensory nerves.

It is very probable that peripheral neuritis is sometimes caused by the poison of rheumatism. I have myself seen paralysis of the extensors of the forearm, and loss of the patellar tendon reactions, but without manifest paralysis in the lower extremities, in a young girl who had suffered from an attack of acute rheumatism, and was at the time suffering from an attack of acute rheumatism which proved fatal. A case of peripheral paralysis is recorded by Freund, which supervened without any known cause; but the facts that the body was bathed in sweat at an early period of the disease, and that the patient was suffering at the time from endocarditis, rendered it probable that the neuritis was of peripheral origin.

The muscular feebleness and wasting, principally limited to the extensors, which invariably accompanies chronic rheumatoid arthritis, is also most probably caused by neuritis of the neighbouring nerves; and, quite recently, profound morbid changes have been discovered by Pitres and Vaillard in the nerves in such cases. In a certain number of cases, however, no assignable cause for the disease could be ascertained. The patient may have been exposed to severe degrees of cold; but there was nothing in the degree of exposure or in the family history to account for the initiation of so grave a disorder as the one under consideration. It must, therefore, be admitted in the meantime that there may be cases of idiopathic multiple neuritis.

It is quite impossible for me, in the time at my disposal, to give anything like a complete description of the manifold symptoms of the different varieties of this disease, and consequently I shall only endeavour to seize upon the prominent features which give character to the affection, and which help to differentiate it from allied disorders.

The *motor disturbances* consist of a more or less widely distributed paralysis, which, we shall soon see, attacks by preference certain groups of muscles. I have made inquiries of patients to ascertain whether the paralysis was preceded by active spasm; and some of them, especially alcoholic subjects, asserted that they had suffered greatly from "cramps" in the legs; but, on cross-examination, it generally turned out that the so-called "cramps" are more likely to have been severe shooting pains from irritation of sensory nerves. On the whole, I never could assure myself that the paralysis was in any case preceded by active spasms in the affected muscles.

With regard to the *nature* of the paralysis in neuritis, it is always of the atrophic variety. The muscular masses emaciate and soften, undergo rapid wasting, while they are soft and flaccid, and no tension is provoked in them by passive movements of the limb. The cutaneous reflexes are very variable. The reflex ot the sole is generally absent when the lower extremities are implicated, as in alcoholic paralysis; but the cremasteric and abdominal reflexes are generally preserved, and are often said to have been exaggerated. In a case recorded by Fischer, the reflex of the sole was present, but it was delayed in transmission. The mechanical irritability of the muscles is also often said to have been exaggerated, while it is lost in some cases, probably in all cases of advanced atrophy. Probably the most generally valuable test of the nature of the paralysis is to be found in the state of the tendon-reactions, and especially of the reaction of the patellar tendon when the lower extremities are attacked. In all the recent records of cases of alcoholic, diphtheritic, and other forms of peripheral neuritis affecting the lower extremities, the patellar tendon reaction has been examined, and found absent, with a few notable exceptions which deserve special consideration. In a case of alcoholic paralysis recorded by Dr. Buzzard in his recent valuable work on *Peripheral Neuritis*, tickling of the soles of the feet is said to have given rise to "very extensive reflexes," and the patellar tendon reactions were at first "notably exaggerated;" and a similar exaggeration of both these reactions was observed in a case of alcoholic paralysis recorded by Dettinger. In the case of rheumatic peripheral multiple neuritis recorded by Freund, exaggeration of the patellar tendon reactions was also observed; and a blow on the tendon was followed by tremors of the limb, which increased in intensity for about a quarter of a minute, and then ceased. These reactions were, however, lost a few days before the termination of the case, which ended fatally. In one of Oppenheim's cases of alcoholic paralysis, in which the patient made a complete recovery in three months, the knee-jerks were present at first; the reaction became feebler and feebler, and finally disappeared, first on the right, then on the left side; but it reappeared on both sides in the course of a few days.

In lead-poisoning it is not uncommon to find that the knee-jerks are absent, even in cases in which the muscles of the lower extremities are not appreciably involved in paralysis. If my memory serves me well, I think I remember that Dr. Broadbent remarked at one of our medical meetings in Manchester, upon the occasional absence of the knee-jerks in cases of lead-poisoning, in which the paralysis was strictly limited to the extensors of the forearm, and I was then able, from my own observations, to confirm the statement. Since that time, however, I have met with several cases of double-wrist drop, from lead-poisoning, in which the patellar tendon reactions were very lively. In a case of extensively distributed paralysis from lead-poisoning, recently under the care of my colleague, Dr. Morgan—who, with his usual kindness and consideration, has given me permission to mention the case—the patellar tendon reactions were greatly exaggerated. In addition to a widely diffused paralysis, involving all the muscles of the upper extremities, this patient is the subject of a double facial paralysis, which involves the upper as well as the lower branches of both nerves. In the lower extremities, the common extensors of the toes and the peroneal group are completely paralysed, while the tibialis anticus, the muscles of the calf, and those of the thighs, are relatively spared.

Tickling of the sole of the foot gives rise to repeated contractions of the tibialis anticus muscle, and to extensively distributed contractions of the muscles of the thighs. The mechanical irritability of the quadriceps muscle is increased, and, as already stated, the patellar tendon reactions are very decidedly exaggerated. Probably the most remarkable part of the case is that, on electrical examination, the quadriceps femoris muscles manifest the partial reaction of degeneration, showing that the anterior crural nerves are slightly implicated in the disease. In this case there are no sensory phenomena, and not the slightest grounds for suspecting disease of the spinal cord or brain.

[1] An Introduction to a Discussion in the Section of Pathology at the Annual Meeting of the British Medical Association at Brighton.

The patient is a painter by trade ; he has suffered from colic ; has had a previous attack of paralysis of the extensors of the arms, from which he recovered, and has a well marked blue line on the gums. I mention these cases to show that although absence of the patellar tendon reaction is a most valuable sign of peripheral neuritis, yet the evidence it affords is not absolute, and can only be relied upon when taken in conjunction with the other symptoms, and all the circumstances of the case.

This remark applies with equal force to the electrical examination. In by far the majority of cases, the electrical test affords conclusive evidence of the nature of the paralysis. In aggravated cases, the affected nerves and muscles manifest a complete loss of faradic irritability, and the qualitative changes of the galvanic current, which constitute the reaction of degeneration. In many cases, probably in most, the irritability of the nerves and muscles to the faradic current is simply lowered ; but, in the majority of cases, the galvanic test gives the degenerative reaction. It is important to observe, however, that in a few cases of peripheral neuritis, such as one recorded in the *Lancet* of August 7th, by Dr. Saundby, the normal formula to the galvanic current was maintained, and although, in such cases, the electrical irritability is somewhat lowered in the affected nerves and muscles, yet a relative degree of lowering does not suffice to lead us by itself to an absolute conclusion.

The distribution of the paralysis varies greatly according to its cause, but in all varieties of the disease the extensors of the limbs manifest a proclivity to become predominatingly, although by no means exclusively, affected. The usual form of lead-paralysis consists of a double wrist-drop, caused by paralysis of the extensors of the forearm, and when the lower extremities are attacked, the most common form for the paralysis to assume is double ankle-drop. In these varieties of lead-paralysis, the supinator longus is spared in the upper extremity, and the tibialis anticus often, but not always, in the lower extremity. But although double wrist-drop, and, more rarely, double ankle-drop, are the most common varieties of lead-paralysis, yet, in some cases, the paralysis is widely distributed over the muscles of the extremities, trunk, and even the face, while the laryngeal muscles have occasionally been implicated.

In poisoning from alcohol and bisulphide of carbon, and in the animal poisons generally, and even in arsenical poisoning, the lower extremities are usually the first to be attacked. The paralysis begins by a double ankle-drop, in which the proper extensor of the big toe and the tibialis anticus are attacked with as much frequency as the common extensors of the toes and the peroneal group. The curving downwards of the big toe into the sole forms, indeed, a prominent feature of the ankle-drop of alcoholic paralysis, and is in marked contrast to the hyper-extension of the toe, which is so generally seen in the various forms of spastic paraplegia.

In alcoholic paralysis, the extensors of the forearm are attacked soon after those of the leg, and, indeed, when the latter are found paralysed, it is generally found that the former are so feeble that the patient is unable to maintain his hand extended upon the forearm in the prone position when a slight degree of pressure is applied to the back of the hand. After the extensors of the leg and forearm, the next muscles to be attacked are the quadriceps in the thighs, and the triceps in the upper arm, and, after them, the muscles of the calf and the flexors of the forearm, with the small muscles of the foot and hand. If the paralysis advances further, the remaining muscles of the thigh and upper arm become paralysed, and those of the trunk are so feeble that the patient is unable to sit up, or even to turn himself in bed.

In the remarkable cases of universal paralysis recorded by Dr. Buzzard as occurring in syphilitic subjects, the muscles of the face were implicated along with almost all the other muscles of the body. The face is always very expressionless in aggravated cases of alcoholic paralysis ; and Hun reported a case in which the muscles of one side of the face were paralysed ; but paralysis of the external ocular muscles, generally of the external recti muscles, has been observed by Hillier, Lilienfeld, and Schulz, and nystagmus has been noted by Oppenheim and Vierordt.

In a case of idiopathic neuritis observed by Freund, the pupils were dilated, the left more than the right ; and, in a case of alcoholic paralysis reported by Oppenheim, the light reflex was lost in the left eye, but the pupil reacted to accommodation, while, in the right eye, both reactions were lost ; but it is probable that these changes might have been independent of the alcoholic poisoning. Diphtheritic paralysis generally begins in the muscles of the soft palate, and, after these, the external and internal muscles of the eye are invaded, and, after a considerable interval of time, the lower extremities are attacked, but the upper extremities are seldom much affected.

The predominance of the paralysis in the extensors imposes upon the extremities very characteristic attitudes. The wrist-drop of lead-paralysis causes the origins and insertions of the flexors of the forearm to be approximated ; and, consequently, these muscles undergo so much of adapted shortening as to make it appear, to a superficial observer, that paralysis of the extensors is accompanied by an active spasm of their antagonists. The same principle applies to the other joints. The ankle-drop in the lower extremities approximates the origins and insertions of the muscles of the calf, and the foot is consequently maintained in a position of talipes equinus, or equino-varus, according as the tibialis anticus muscle is or is not implicated along with the other anterior muscles of the leg. In one case of alcoholic paralysis, reported by Dr. Buzzard, the muscles of the calf had become so contracted that the patient was unable to bring his heels to the ground, although he was still able to stand and walk a little. When the muscles of the upper arm are attacked, in alcoholic paralysis, the triceps is relatively more paralysed than the flexors, and consequently the forearm is maintained flexed at right angles to the arm, and cannot be passively extended without causing great pain, by putting the shortened flexors on the stretch ; and, on the patient being asked, under these circumstances, to move his arm, the flexors of the arm and forearm, and the supinators, enter into contraction ; while the extensors and pronators remain unmoved, and, consequently, the deformity of the extremity is rendered still more marked. The forearm is drawn to an acute angle with the arm and supinated ; the flexion of the wrist on the forearm is still further exaggerated, and the fingers are drawn slightly towards the palm, so that superficial examination might lead one to suppose that the attitude was altogether caused by an active spasm, and the case then bears some degree of likeness to tetany. In the lower extremities, when the extensors of the thigh are implicated, the leg becomes partially flexed on the thigh, and the thigh on the body. In most cases, the angle formed at the knee-joint is not more acute than 120° ; but, in a case reported by Lancereaux, flexion was carried to so great an extent, that the muscles of the calves were applied to those of the thighs. In alcoholic paralysis, the patient generally lies in bed midway between the dorsal and lateral positions, but the position is more lateral in the lower extremities and pelvis than in the upper part of the body ; and, consequently, the legs lie on their side on the bed, with the thigh slightly flexed on the pelvis, the leg on the thigh, and the feet so much extended that their dorsal surfaces form, as Brissaud remarks, a continuous plane with the front of the leg ; while the toes, and especially the great toes, are curled downwards into the sole of the foot.

The deformities at the wrist-joint, and to a less extent at the ankle, tend to become permanent by adhesions taking place between the tendons and their sheaths, owing to an inflammation which attacks the flexor as well as the extensor tendons. Into the question of whether this inflammation is set up by the mechanical malposition of the tendons, or directly by the poison, I shall not enter ; it will suffice at present to notice that, when once this inflammation occurs, it tends to render permanent the various deformities of the joints.

The sensory disorders which accompany the paralysis need not detain us long. One of the chief characteristics of the usual form of lead-paralysis is the absence of any disorder of sensibility, but sensory disturbances are generally present when the paralysis is widely distributed. In the other forms of multiple neuritis, the paralysis is preceded by numbness and tingling pains in the hands and feet. The patients often suffer from paroxysms of lancinating pains, which are liable to become peculiarly distressing and teasing at night. In addition to these pains, patients complain of a distressing feeling of burning of the feet ; and, in some patients, according to Dr. Dreschfeld, the contact of any object gives rise to a sensation of cold. Cutaneous hyperæsthesia is occasionally present, but, in alcoholic paralysis, hyperæsthesia of the skin, even when present, is overshadowed by an intense hyperæsthesia of the muscles, which is so great as to evoke loud cries from the patient on the slightest pressure, and is at times so exaggerated that the weight of the bed-clothes is intolerable to the patient, and the feet have to be protected by cradles (Glyn). In the more advanced stages of the disease, the cutaneous hyperæsthesia gives place to more or less anæsthesia, sensory conduction is retarded, the tactile sense is diminished, and Remak's double sensations are sometimes observed. These sensory disorders remind one of the sensory symptoms in locomotor ataxy, and, to make the likeness more complete, the subjects of alcoholic paralysis sometimes complain of constrictive pains about the joints, and even a feeling of tightness round the chest, while swaying movements of the body occur when the eyes are closed. The subject of the disorders of the special senses, especially of the optic nerves—which may be present in the various forms of peripheral neuritis—is so wide that I dare not enter upon it.

The vaso-motor disorders consist of redness of the hands and feet, and œdema of the ankles and of the backs of the feet and hands. The body is often bathed in a profuse sweat. The pulse is in most cases accelerated, rarely beating under 120, and sometimes being as frequent as 160 in the minute. A case of alcoholic paralysis has, however, been reported by Oppenheim, in which the pulse, which was very irregular, beat only forty-eight in the minute; but, as the patient improved under treatment, the pulse rose in frequency, and the action of the heart became regular.

Peripheral neuritis may begin with a febrile movement, and there is occasionally a considerable elevation of temperature before death in fatal cases, but it probably depends upon some complication.

The trophic disorders consist of glossy skin, papulous and herpetic eruptions, local asphyxia, and even gangrene of the extremities has been met with, as in cases recorded by Lancereaux and Myrtle.

Incontinence of urine is rare, and of fæces still rarer, but both symptoms have occasionally been observed (Francott, Schulz). Sexual impotence is probably very common, and, in paralysis from bisulphide of carbon, the impotence which is always present is said to be preceded by satyriasis. Bed-sores are almost never present, but, in the case of paralysis recorded by Fox in *Brain*, a small bed-sore was situated on the left buttock. The psychical symptoms are also very interesting, but I shall pass them over.

Diagnosis.—The first disease for which progressive multiple neuritis is likely to be mistaken is chronic poliomyelitis. In both diseases, there is a widely distributed paralysis, with atrophy and the usual degenerative electrical reactions of the affected muscles. The neuritic affection in its generalised forms is, however, usually accompanied by well-marked sensory phenomena, which are absent in the spinal disease. The order in which the muscles are attacked is also different in the two diseases. When the spinal disease pursues an ascending course, the paralysis begins in the muscles of the feet, and gradually invades in succession the muscles of the leg, the flexors of the thighs, the extensors of the thigh, the gluteal muscles, and the muscles of the trunk. Subsequently, the intercostal muscles show signs of weakness, and one of the most important signs of all is to be found in the fact that the small muscles of the hand, which are innervated by the first dorsal nerves, are attacked before the extensors of the wrist and fingers, which are innervated chiefly by the seventh cervical nerves. If, then, we meet with a case of widely diffused atrophic paralysis beginning in the muscles of the lower extremities, and attacking the extensors of the forearm before the small muscles of the hand, the disease is not likely to be of spinal origin; and, again, if in a case of atrophic paralysis the diaphragm is attacked before the intercostal muscles, the disease is not a spinal one; and when the paralysis begins in the upper extremities and pursues a descending course; if, then, the anterior extensors of the leg are paralysed before the gluteal muscles and the muscles supplied by the anterior crural and obturator nerves, the disease is not a spinal one.

Acute cases of peripheral neuritis are liable to be mistaken for Landry's paralysis, and there can be no doubt that some, at least, of the cases described under the name of acute ascending paralysis really belong to the category of peripheral neuritis. The cases of ascending paralysis described by Myrtle and Fox, for instance, are undoubted examples of alcoholic paralysis. Of the remaining cases of acute ascending paralysis, some, like the cases of Schulz and Schultze, are caused by an acute myelitis or meningo-myelitis, and others are caused by an acute bulbar myelitis, but a few remain which are of obscure origin, and the pathology of which is unknown, inasmuch as no anatomical changes of any kind have been discovered after death. If we meet, therefore, with a rapidly ascending paralysis, with loss of tendon-reactions, and probably of the cutaneous reflexes, but without being accompanied by marked sensory disorders, muscular wasting, or a degenerative reaction on electrical examination, we should regard it, in the present state of our knowledge, as an example of Landry's paralysis, while an acute ascending paralysis, which is accompanied by marked sensory disturbances, muscular wasting, and degenerative reaction on electrical exploration, and in which the extensors of the forearm are attacked before the flexors we should place in the category of peripheral neuritis.

The most interesting, as well as the most difficult problem in diagnosis arises from the close resemblance between tabes dorsalis and cases of widely distributed paralysis from peripheral neuritis. I will not dwell upon all the signs by which genuine tabes may be distinguished from the cases now very unfortunately named pseudo-tabes, such as the chronic character of the former affection and the comparatively acute course pursued by the latter, and the nature of the eye-symptoms in ataxy in comparison with those met with in neuritis, but I will proceed at once to show that an attentive examination of the gait in the two affections will generally suffice to discriminate the neuritic disease from genuine tabes.

Let us suppose that one foot has just been moved forwards, and is planted on the ground in front of the other. By a contraction of the abductor muscles of the thigh, the body is now inclined to that side, so that the line of gravity passes through the middle of the arch of the foot. The heel of the foot in the rear is, at the same time, raised and now the limb is ready to be moved forwards. In normal locomotion the anterior muscles of the leg enter into contraction, and when slight dorsal flexion of the foot is made, the toe clears the ground, and the limb swings forwards with a pendulum movement, by its own weight, and not by muscular action. In pseudo-tabes, however, the toes, instead of being elevated, as in normal walking, by a slight dorsal flexion of the foot, drop lower as the foot is raised from the ground, and consequently, before the limb can be moved forwards, the heel must be elevated to an unusual degree, so that a person looking from behind sees, at each step, more of the sole of the foot than in health. During the forward movement of the foot, the necessary elevation of the toes is obtained by the thigh being flexed to an unusual degree on the pelvis, and the leg on the thigh, so that a person standing by the side of, or in front of the patient, will observe that with each forward step the knee is raised very high, while the toe drops; this elevation of the knee impresses upon the gait that characteristic which Charcot has aptly compared to the carriage of a high stepping horse, while the depression of the toe gives to the gait an appearance which has led Schulz to compare it with the walk of a dancing master. When once this peculiar gait is observed in a patient, he ought to be placed sitting on a chair, with his feet flat on the ground, and thus asked to elevate the toes of each foot in succession. If he is unable to perform this action, the disease is almost certainly not locomotor ataxy. With regard to the course of peripheral multiple neuritis, I may state briefly, that in 48 cases arising from various causes collected by me, the disease proved fatal no less than 26 times. Of the fatal cases, death was caused 8 times from some complication like granular kidney and broncho-pneumonia, and 18 times from respiratory paralysis, paralysis of the diaphragm being expressly mentioned in the majority of these last cases. The duration of the fatal cases, counting from the first appearance of pronounced paralysis, varied, with two exceptions, from nine days to five months. Of the cases which recovered, the majority were able to walk fairly well in about four months from the commencement of treatment, but a case is recorded by Fischer, in which the patient is said to have only made a fair recovery at the end of two years, and one is reported by Buzzard, in which the patient made a good recovery at the end of three years of continuous treatment.

Morbid Anatomy.—In one of the cases of idiopathic peripheral neuritis, reported by Leyden, the musculo-spinal nerves were found thickened for about 5 centimètres of their length by a deposit of fat. The nerve-sheath was thickened, and the primitive bundles held only a comparatively small number of medullated fibres, the medullary sheaths were absent and destitute of nuclei, and what remained of the fibres was constituted by thickened axis-cylinders. The vessels in the fatty tissue were surrounded by a considerable quantity of granular yellow pigment, showing, according to the author, the existence of a previous hæmorrhagic infiltration. The spinal cord and nerve roots were normal. In lead paralysis the changes described by the earlier pathologists, consisted of softening, and superficial hæmorrhages of the brain, but as the methods of microscopical examinations of nervous tissues had become perfected, attention was directed to the spinal cord and peripheral nerves. Vulpian observed vitreous degeneration and atrophy of the ganglion cells of the anterior horns of the spinal cord in one case, and in another he found neuritis of the anterior roots of the cervical region of the cord. Minor changes in the ganglion cells of the anterior horns, such as vitreous degeneration and vacuolation, have also been reported by Monako, Zuæker, Birdsall, Oppenheim, and Robertson of Manchester, but other competent observers have failed to discover any evidence of disease in the spinal cord. Disease of the peripheral nerves has been observed by Gombault and Charcot, Westphal, Vulpian, Friedlander, Déjerine, Kussmaul, and Maier, Eisenlohm, Dreschfeld, and Moritz, Robertson, Oppenheim, and others, so that now there is amongst the most trustworthy pathologists an almost unanimous consensus of opinion that the essential lesion in lead paralysis is to be found in the peripheral nerves. This last remark applies equally to alcoholic paralysis. Such observers as Lancereaux, Moeli, Dreschfeld, Déjerine, Hadden, and Francott, have failed to discover any evidence of disease in the spinal cord in cases of alcoholic paralysis, but they have found marked changes in the peripheral nerves. In diphtheritic paralysis, minor changes, indicative of spinal meningitis, have been reported by Déjerine and by Pierret,

while Vulpian described a rarefaction of the posterior and external portion of the spinal cord, but the opinion, first advanced by Charcot and Vulpian, that the essential change is to be found in the peripheral nerves, is now gaining ground with pathologists to the exclusion of all other views. In kaki or beri-beri, the peripheral nerves have been found diseased by Raelz and Scheube.

Now, upon the question of the nature of the lesion, whether it is inflammatory or simply degenerative, a parenchymatous or an interstitial neuritis, I do not feel myself competent to speak. Eichhorst and Hadden believe the changes observed by them to have indicated a perineuritis, while most other authors believe that the disease begins in the nerve-fibres themselves. In one of the cases reported by Dr. Grainger Stewart, which was most probably an example of alcoholic paralysis, the changes observed in the nerves were regarded by Professor Hamilton, now of Aberdeen, to have indicated a simple degenerative neuritis, and the same view has been adopted by Moeli and others.

In some reported cases, the affected nerves have been found much swollen, and, in a case recorded by Desnos and Pierret, the posterior tibial nerve is said to have been nearly as thick as the little finger, and such a condition could hardly have been produced by a simple degenerative neuritis. It is hardly probable that an active parenchymatous neuritis would lead to such a remarkable degree of swelling of the nerve. That a parenchymatous neuritis has been met with in some cases of this affection scarcely admits of doubt. By inducing chronic lead-poisoning in guinea-pigs, Gambault produced inflammatory changes in the nerves of such a character as to lead him to name the lesion segmental periaxillary neuritis. In this condition, a segment lying between two of the nodes of Ranvier is found diseased, while those on the other side of these nodes remain healthy, and several segments may be affected in the course of one fibre. Dr. Dreschfeld met with this condition in the nerves in a case of alcoholic paralysis, and it may be assumed that it indicates a parenchymatous neuritis. A very valuable observation has just been made by Gambault in cases of alcoholic paralysis. At a certain elevation of the diseased nerve, he found the endoneurium thickened, and the nuclei of the endoneurium and of the sheath of Schwann much increased in number, while the medullary sheaths and the axis-cylinders were simply attenuated, probably by compression. Below this level, the changes observed indicated simply the ordinary Wallerian degeneration. It is therefore possible that, at a certain level of the nerve, a perineuritis may be observed, and that the fibres below this level, being separated from the trophic centres, undergo the usual descending degeneration.

With regard to the localisation of the lesion, this much is certain; the paralysis, which is present in these diseases, being of the atrophic variety, the lesion must implicate the ganglion cells of the anterior horns of the spinal cord, the fibres which connect them with the muscles, or the muscles themselves. The sensory disorders which are present, render it certain that the disease is not a purely muscular one, and, consequently, the lesion must be situated in the grey matter of the spinal cord, or in the fibres connecting the motor ganglion cells with the muscles. We have just seen that morbid anatomists are declaring in favour of the opinion that the disease is situated in the peripheral nerves rather than in the spinal cord.

Let us now see whether the clinical phenomena can be explained on this view, as well as, or better than on the assumption of the disease being of spinal origin. Some pathologists find great difficulty in adopting the neural theory, because the motor paralysis is often, as in the usual form of lead-paralysis, unaccompanied by any sensory disturbances. But, it is a general law that inflammation and injuries of mixed nerves give rise to a degree of motor paralysis which is out of all proportion with the sensory phenomena. In disease of the musculo-spiral nerve, caused by compression and exposure of its trunk as it winds round the humerus, the extensors and supinators of the forearm remain paralysed for four or five months; but the anæsthesia which accompanies motor paralysis is only slight or transitory. We often speak as if the spinal nerves of the body were all mixed nerves throughout their whole course, and it seems to be forgotten that, for nearly half their length, they are either purely sensory or purely motor. In the musculo-spiral nerve itself, the sensory branch—the radial—is given off above the elbow; and, as in the ordinary form of lead-paralysis, the supinator longus is always spared, it is clear that the lesion does not attain to the level at which the sensory branch would become affected. Similar remarks apply, although not to the full extent, to the nerves which supply the extensors of the leg. The common extensors of the toes and the peroneal group, and the tibialis anticus, may be separately paralysed without the sensory branch being much implicated; but, when all the anterior muscles of the leg are implicated, the lesion has most probably reached the level of the external popliteal nerve, and in a case of lead-paralysis under me, in which all these muscles were implicated, the external surface of the legs and the dorsum of each foot were more or less anæsthetic.

The next argument brought against the theory of peripheral neuritis is that the muscles are paralysed in groups, according as they are associated in their actions, and not according to the peripheral distribution of the nerves. But the extensors of the forearm—which are the muscles usually attacked in lead-paralysis—form a functional group, which is innervated by one nerve, namely, the musculo-spiral, and consequently disease of that nerve would explain the paralysis as readily as disease of the spinal centre.

But what Remak calls the upper arm type of lead-paralysis, in which the deltoid, biceps, brachialis anticus and the supinator longus are attacked, is more difficult to explain on the peripheral neuritis theory, inasmuch as these muscles are innervated by three nerves, namely, the circumflex, the musculo-cutaneous, and branches from the musculo-spiral. It is now known that these muscles are paralysed by injury or disease of the fifth cervical root just before it joins the brachial plexus. This form of paralysis was first described by Erb, and, in a case observed by me a short time ago, the motor affection was accompanied by relative anæsthesia of the skin of the outer surface of the arm, and of the external border of the forearm and hand as far as the metacarpo-phalangeal joints of the thumb and index finger. Now in a case of the upper arm type of lead-paralysis recently under me, the paralysis was also accompanied by a considerable degree of anæsthesia on the outer surface of the upper arm, and even although it could not be traced below the elbow, the combination of symptoms present could be better explained on the supposition of a neuritis localised in the fifth cervical root immediately above its point of junction with the brachial-plexus than by a lesion in the grey matter of the cord. These considerations help to remove the main objections which have been advanced against the neuritic theory, but time will not allow me to enter upon the positive objections which might be urged against the spinal theory.

SOME POINTS IN THE PATHOLOGY OF MULTIPLE NEURITIS.[1]

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MODERN observation has been rewarded by the discovery of an increasing number of cases in which more or less pronounced symptoms of paralysis have been found to be dependent upon changes in the peripheral nerves, the cerebro-spinal centres being usually free from any sign of lesion. In speaking of an "increasing" number of such cases, it is not implied that many more examples of the kind occur now than formerly, but that, as observation is on the alert, a larger number of cases is differentiated from the category of central organic lesions with which these instances were formerly confounded. The writer has so recently published a work upon this subject,[2] that he does not consider it necessary on the present occasion to do more than refer in the briefest and most general manner to the clinical and pathological aspects of multiple neuritis, but proposes to present for consideration a few remarks bearing chiefly upon the nature and pathogenesis of the disorder.

Multiple neuritis has been observed in connection with many conditions which are provisionally assumed to be associated with its etiology. Amongst these may be mentioned certain toxic influences, lead, arsenic, alcohol, infective disorders, as leprosy, diphtheria, syphilis, beri-beri, variola, enteric, recurrent and intermittent fever, tubercle, whilst other examples are associated with the not easily classed conditions of cold, rheumatism, diabetes. But besides these there would seem to be a somewhat large number of cases in which it is not possible at present to discover any antecedent which can properly be considered a cause. I shall recur presently to this very interesting part of the subject.

It is not intended to assert that the various influences mentioned produce examples of disease exclusively affecting the periphery of the cerebro-spinal nerves, the great centres themselves being invariably intact. Such is manifestly not the case. Although, for example, a large number of observations has shown disease limited to the peripheral nerves in the course of leprosy and of lead-poisoning, yet examples of these disorders have occurred in which the spinal cord itself

[1] Read in the Section of Pathology at the Annual Meeting of the British Medical Association in Brighton, introductory to a discussion on Peripheral Neuritis.

[2] *On Some Forms of Paralysis from Peripheral Neuritis.* Churchill. 1886.

has also proved to be affected. Quite recently, Oppenheim has published a case of lead-palsy in which the grey matter of the anterior cornua was diseased almost throughout the cord, the principal intensity being marked in the cervical and lumbar enlargements. There was atrophy of ganglion-cells, with increase and thickening of neuroglia, multiplication and enlargement of blood-vessels—a condition, indeed, of sclerosis. Nor have certain examples of lepra failed to show changes, though of a comparatively slight description, in the substance of the spinal cord. The same may be said in reference to alcohol. But the broad fact must, I think, be generally admitted, that a large number of cases is now on record in which the periphery of the cerebro-spinal nerves, more or less of them, is the seat of morbid change, whilst at the same time there is no discoverable lesion in the roots of the nerves or in the spinal cord.

The changes in the nerve-fibres are characterised by segmentation of the myelin, with more or less marked multiplication of the nerve-corpuscles, and disappearance of the axis-cylinder. With these there is often proliferation of the nuclei of the endoneurium, and the walls of the minute vessels are stuffed with cells,—evidence of interstitial neuritis. The lesions require the microscope for their recognition, and even then a doubt may arise as to their nature. In some, the appearances recall those characteristic of Wallerian degeneration—the alteration which takes place in the periphery of a nerve after section or destruction of its trophic centre. These are changes of a degenerative character to which it seems difficult to apply a term implying inflammation. In most examples, however, the proliferation of nerve corpuscles affords signs of inflammatory action sufficient to justify the application of the term parenchymatous neuritis to the condition.

The fact that, in most examples of multiple neuritis which come to a necropsy, the spinal cord and roots of nerves are perfectly free from pathological change, which is confined to a greater or less extent of the periphery of the nerves, is very startling and difficult of explanation. One cannot help feeling that, in spite of the absence of recognisable lesion, there must probably be *some* change in the central nervous system to bring about the almost simultaneous affection of the periphery of so many nerves. It was first suggested by Duchenne (of Boulogne) as an explanation of the absence of naked-eye changes in the spinal cord in a case of general subacute paralysis, that the spinal lesion might exist dynamically, if not organically. In the case in question, our present knowledge would lead us to think that there must have been lesion of peripheral nerves. In regard to cases of lead-palsy, where limitation of disease to the peripheral nerve so often occurs, De Watteville, advancing a step beyond Duchenne's suggestion, inquires whether, in such circumstances, there is not a functional lesion of the cord, which interferes with the trophic influence normally exerted by it upon the motor nerve-fibres, and thus gives rise to degeneration. More recently, Erb has suggested a similar explanation for the same paradoxical condition obtaining in cases of multiple neuritis generally, and as an alternative asks whether there may not be a pathological process in the ganglion-cells of the cord, which is short of destructive lesion, and is yet sufficient to produce degeneration in the periphery of the motor nerve-fibres connected with them. There is something attractive in this hypothesis when we remember the anatomical relation of a motor fibre to a ganglion-cell of the cord. The ganglion-cells of the anterior horn have, each of them, an unbranching process, which is called the axis-cylinder process of Deiters. This becomes invested with a medullary sheath, and then represents a medullary nerve-fibre entering into the formation of an anterior root of a spinal nerve. It is evident that the axis-cylinder of this fibre, even when it is continued to the remotest periphery of the distribution of the nerve, is yet still a portion—a long-drawn-out portion—of a large ganglion-cell of the anterior horn. But one would not expect, if this hypothesis were correct, that the lesion of nerve-fibres would continue, as it sometimes does even after a lengthy illness, strictly confined to the periphery. Were the functional activity of the cord to be long suspended, the atrophy might well be looked for throughout the length of the motor fibres. Moreover, if recorded observations be correct, it is not in the long-drawn-out process of the ganglion-cell that the pathological change commences in multiple neuritis, but in the myelin which invests it.

In the nature of things, attempted explanations of this kind are inconclusive, but they serve a useful purpose in pointing out paths of inquiry, and I would venture to refer to another which has been already alluded to by me in another place. Is it possible to explain the limitation to the periphery by the hypothesis that an influence of some kind is exerted upon vaso-motor centres in the bulb and cord? The effect of this would be to give rise to some alteration in the calibre of minute arteries, those in which the muscular element is relatively most developed. These belong to the periphery of the arterial system, and in general terms correspond with the periphery of the distribution of nerves. It is conceivable, therefore, that the supply of blood to the periphery of nerves might, in this way, be modified by an irritative influence exerted upon vaso-motor centres in the bulb and cord.

Quoting from Michael Foster, "The tone of any given vascular area may be altered positively in the direction of augmentation (constriction), or negatively in the way of inhibition (dilation), quite independently of what is going on in other areas. The change may be brought about..... by stimuli (chemical, blood stimuli) acting directly on the central nervous system." Notable diminution of blood-supply, sufficiently long continued, would occasion degeneration of the elements of nerve-fibre, whilst arterial dilation might be expected to cause blood-stasis and inflammation.

A very evident objection presents itself to this hypothesis. It will be naturally urged that marked signs of modified circulation ought to be observed in the course of multiple neuritis if this view is to receive support. Without attempting to refute adequately this objection, I would merely suggest the probability that the vaso-motor apparatus is highly differentiated in its function, and a limitation of its action to the blood-supply of one tissue is therefore quite conceivable.

A case which occurred in the practice of Mr. Hyde in the General Infirmary at Worcester, and was reported in the BRITISH MEDICAL JOURNAL of January 30th, 1886, by Dr. Allman Powell, has a very interesting bearing on this question. It was that of a man who suffered from diphtheria, and three weeks later was attacked with symptoms of Raynaud's disease (symmetrical gangrene) involving progressively the nose, ears, four fingers of the right hand, and two of the left, as well as two of the toes of the right foot. In the sequel the gangrenous fingers were amputated. Dr. Powell remarks that in this case "the vaso-motor, or trophic lesions, which occasioned the gangrene, would appear to have taken the place of post-diphtheritic paralysis." It is peculiarly interesting that the patient presented no symptoms of paralysis motor or sensory, and this fact is, to my mind, suggestive, so far as it goes, of the differentiation of function of vaso-motor centres to which I have alluded. It is well known that Raynaud is disposed to refer the symmetrical gangrene, which is associated with his name, to an influence exerted upon the vaso-motor centres of the bulb and cord. His view is contested by Pitres and Vaillard, who are inclined to see in these cases of gangrene the results of a primary peripheral neuritis. This opinion is based upon the constant presence, in such cases, of certain signs known to be commonly associated with neuritis, *e.g.*, the exquisite pains which may long precede the appearance of sphacelus—the phlyctenæ, followed by ulceration, developed on the extremities which are the seat of the pains—the altered state of the skin, with falling off or disordered nutrition of the nails. Unfortunately, as they remark, in none of the cases of symmetrical gangrene reported by Raynaud has any regular microscopical examination of the nerves been recorded. It will be observed that the view which I take is in some respects the converse of that advanced by Pitres and Vaillard. I should regard the peripheral neuritis as secondary to the altered state of circulation in the blood-vessels, and should refer the latter to an action upon vaso-motor centres by some stimulus contained in the blood. At the same time, I must disclaim any intention of bringing forward the hypothesis as more than a suggestion which appears to deserve a little consideration. It might be worth while to observe whether symmetrical gangrene—of the cause of which we are at present quite ignorant—is at all commonly associated with the antecedent occurrence of diphtheria, or some other infectious disease. The subject is one which is evidently of extreme difficulty, and explanations at present must be something but little removed from guess-work. I cannot help feeling, however, that for an explanation to be possessed of any force, it should not only shed light on the occurrence of the localised changes of nerve-fibres in an acute disease like multiple neuritis, but should be large enough to embrace also those instances which are apt to occur in the course of chronic affections of the spinal cord, as well as in diabetes. This is provided for in the hypothesis which I have advanced.

The occurrence of various trophic lesions in the course of tabes, is very familiar to us, and Pitres and Vaillard have found profound alterations in the nerves distributed to the parts involved. There is a not unfrequent association of perforating ulcer of the foot with arthropathy, and, in such circumstances, the same observers have disclosed evidences of parenchymatous neuritis in the nerves supplying the affected joints. The observations are in accord with the view long ago expressed by me, of the nutrition of bones and joints being dependent upon a centre—possibly vaso-motor—in the medulla oblongata.

Grainger Stewart, in 1881, suggested that the localised muscular paralysis often seen in tabes was due to peripheral neuritis. Déjerine, more recently, has expressed the same opinion. In one case of bilateral paralysis of the levator palpebræ muscle, he found degeneration of the branch of the oculo-motor nerve to that muscle, whilst the main trunk of the nerve was unchanged. He sees in these an analogy with the degeneration of peripheral nerves of sensory function observed in tabes. The suggestion is an important one. The fact that these paralyses are more often than not of transitory character, lasting, however, several months, is quite consistent with the notion. There is just now a woman under my care in hospital suffering from typical tabes. Upwards of a year ago, she had complete paralysis of the anterior tibial group of muscles in each leg, causing "foot-drop," and accompanied by anæsthesia in the corresponding nervous district. She has gradually recovered from this condition, and can now perform dorsal flexion of each foot with considerable force, the sensory disturbance having also correspondingly cleared off. She has manifestly suffered from peripheral neuritis of the external popliteal nerves.

My impression is strong that it is by an attack upon the vaso-motor centres in the bulb and cord by the disease process in tabes, that we must explain the various trophic disturbances, including those of bones and joints, perforating ulcer, falling of nails and teeth, and skin affections, as well as the localised paralyses observed in the course of tabes dorsalis. They are associated, with remarkable frequency, with the occurrence of gastric and laryngeal crises. These are dependent, as I have shown, upon the irritative influence of sclerosis invading the immediate neighbourhood of the vagal nucleus, which is closely adjacent to the principal vaso-motor centre in the medulla oblongata. The peripheral neuritis occurring in diabetes may be conceived to depend upon an analogous association.

Time will not admit of further prosecution of this very interesting subject. Before concluding what I fear is a somewhat discursive paper, I shall be glad to say a few words respecting a form of multiple neuritis, to which allusion has already been made—that form in which none of the ordinary antecedents are discoverable on the closest inquiry.

I saw recently, with Mr. Howard Barrett, a young lady who was gradually recovering from what had evidently been an attack of multiple neuritis, which dated from November last. After symptoms of so-called "rheumatic" character, without any history of exposure to cold, the gait became ataxic in December; the knee-jerks disappeared; there were pains in her limbs, followed by wasting of muscles and loss of faradic excitability, together with cutaneous anæsthesia. No muscles of the trunk were apparently affected, except the rhomboid group, which were much atrophied when I examined the patient in July. She was then greatly emaciated, and the arms showed much muscular atrophy, the muscles, however, having begun to respond to induced currents. In the lower extremities, there was no power whatever of dorsal flexion of the feet, and the muscles on the front of the legs gave no response to faradism. Nor was there any increase, but rather a diminution, to the action of a slowly interrupted galvanic current. This reaction corresponded with what I have already noted in other cases published by me. The skin of the feet and legs was anæsthetic; the knee-jerks were still absent.[1]

There was nothing in the history of this girl to explain the attack, except the symptoms styled "rheumatic"—pain and swelling below the knees—with which it is described as having commenced. Such etiological factors as alcohol, lead, syphilis, and diabetes, could be confidently put aside.

In March last I first saw, in consultation with Dr. Douglas Phillips and Dr. Baldock, a gentleman aged 66, who was unable to stand or walk without support. With help he could move about, and his gait was then markedly ataxic. Without entering now upon details, which must be reserved for future publication, I will only say that he suffered from inability to swallow (so that he had to be fed by stomach-pump), diplopia, ptosis of one eyelid, facial anæsthesia, some lingual paralysis, anæsthesia of the lower extremities, and of the right arm. In the left arm a cold object felt warm, and, indeed, throughout the left half of the body cold was felt as "quite warm." The knee-jerks were absent, and only slight plantar reflex occurred in one foot. The uvula was drawn to the left side. The voice was husky. Dr. de Havilland Hall, who examined the larynx at my request, reported the right vocal cord in cadaveric position, the left transgressing the median line. The patient, whom I have since seen on several occasions, has recovered to a very great extent, being able to eat, drink and walk about. His symptoms were clearly referable to multiple neuritis. No causative antecedent was discoverable; alcohol, syphilis, diabetes, and other conditions could be excluded, and there was no history of any extraordinary exposure to cold. These two cases, in neither of which any of the ordinary causes was to be discovered, are still under observation, but I have also seen others. In the *Archives of Medicine*, August, 1884, there is an interesting paper by Dr. S. G. Webber, of Boston, in which he mentions having seen, during the fall and winter of 1883-84, no fewer than eighteen cases of multiple neuritis, in most of which no cause could be given for the disease. Some, however, appear to have been due to alcohol. Graves describes an epidemic of the disease which he had witnessed in Paris in the spring of 1828. "It began," he writes, "with sensations of pricking and severe pain in the integuments of the hands and feet, accompanied by so acute a degree of sensibility, that the patients could not bear these parts to be touched by the bedclothes. After some time, a few days, or even a few hours, a diminution or even abolition of sensation took place in the affected members; they became incapable of distinguishing the shape, texture, or temperature of bodies, the power of motion declined, and finally they were observed to become altogether paralytic. The injury was not confined to the hands and feet alone, but, advancing with progressive pace, extended over the whole of both extremities. Persons lay in bed powerless and helpless, and continued in this state for weeks and even months.....At last, at some period of the disease, motion and sensation gradually returned, and a recovery generally took place, although in some instances the paralysis was very capricious, vanishing, and again re-appearing. The French pathologists searched anxiously in the nervous centres for the cause of this strange disorder, but could find none; there was no evident lesion, functional or organic, discoverable in the brain, cerebellum, or spinal marrow."

Dr. Boissarie has described an epidemic of diphtheria, in which he was himself a sufferer (*Gaz. Hebd.*, 1881, Nos. 20 and 21). It was remarkable, he states, in this, that paralysis in several cases occurred suddenly without angina or any diphtheritic affection of the skin or mucous membrane, and led to death in some hours or days. In other cases, the paralysis was followed by angina instead of being preceded by it, as ordinarily happens. In the midst of these exceptional cases, he observed others of characteristic diphtheritic throat, which were neither preceded nor followed by paralysis.

The disease termed kakké or beri-beri, which is endémic in Japan and the shores of Eastern Asia, is manifestly a form of multiple neuritis. Lacerda (according to Webber) claims to have discovered the bacillus of this disease. However this may be, the probability that beri-beri is dependent upon a specific bacillus appears to be very great. Specific bacteria are found in leprosy, and probably in syphilis and diphtheria.

Pitres and Vaillard have shown that, in the course of tuberculosis, as in other infective diseases, it is not rare for the peripheral nerves to show microscopical changes similar to those of degenerative neuritis, occurring independently of any recognisable changes in the nerve-centres, and attacking indifferently sensory, motor, and mixed nerves, involving, also, sometimes the cranial nerves, vagus, and phrenics.

The frequent known association of multiple neuritis with diseases characterised by the presence of specific bacteria, leads one to think it very probable that the cases to which I have referred as being without recognised antecedents, may owe their origin to a source of infection. It is evident that, if this be so, we know nothing of the path by which infection is introduced, nor of its nature. Is it possibly diphtheria introduced into the economy, through some part of the alimentary canal, which is beyond the opportunity of observation? This does not seem very probable, because the symptoms of these cases of multiple neuritis are, as a rule, more serious than those of the recognised diphtheritic form, in which it is exceptional to see examples of great severity. Pierson, of Dresden, has expressed the opinion that the "spontaneous" form of multiple neuritis seen in Europe is due to sporadic cases of the Oriental disease, beri-beri.

Even if time permitted, there would be but little use in speculating further upon this point, and I content myself therefore with suggesting for consideration and observation the question of the existence in this country of a specific disorder, which may occur without the anginous symptoms of diphtheria, and display itself in the form of a progressive multiple neuritis.

Professor CHARCOT contended that the diseases grouped under the term peripheral neuritis were so different in nature, that to group them together only caused confusion. Thus, in alcoholic paralysis, the sensibility was affected, there were neuralgic pains, and the affected muscles were tender, whereas in cases of lead-paralysis these characters were absent. The term peripheral tabes was a misnomer,

[1] At the end of September I found the knee-jerks returned, though that of the right side was difficult to produce.

and probably all cases included under that name were examples of alcoholic paralysis. Peripheral neuritis was not a distinct disease, but a substratum underlying the symptoms of several very different affections.

Professor BROWN-SÉQUARD considered that the effect of vaso-motor influences in producing tissue-change was unduly exaggerated. He pointed out the necessity of remembering all the causes which operated in this direction: (1) changes in the chemical constitution of the part; (2) the blood-attracting influence of local tissue-change; (3) the temporary suspension of the ordinary relations between the blood and the tissues. Under some circumstances of injury, etc., the blood in the veins came to resemble that in the arteries. All these conditions were produced through the influence of the nervous system.

Dr. HYLA GREVES described the pathological changes found in two cases of alcoholic paraplegia occurring in the Liverpool Royal Infirmary, under the care of Dr. Glynn. In the first case, a woman aged 48, who had drunk largely of brandy for some time, had suffered from *delirium tremens*. When admitted, she was greatly emaciated, and had a large bed-sore over the sacrum. The nervous symptoms were paresis of the lower extremities, loss of knee-jerk, pain on pressure of muscles, cutaneous anæsthesia and analgesia, burning pains in the soles of the feet. She died from septicæmia following septic absorption from the bed-sore. On *post mortem* examination of the nervous system, the following changes were found. In the spinal cord, there was distinct ascending degeneration in the cervical region. The cord otherwise appeared normal. The peripheral nerves of the extremities were more or less affected, especially the cutaneous branches, the mixed nerves being affected in less extent. There was complete atrophy of a certain number of nerve-tubes in others and degeneration of the white substance of Schwann, which was split up into masses of myelin. There was also granular degeneration of the axis-cylinders. The ganglia in the posterior roots of the spinal nerves were also altered. Some of these cells were much degenerated, and the surrounding connective tissue was markedly increased; it was possible that this had something to do with the production of ascending degeneration in the cord. Similar changes were found in the second case.

Dr. WHITTLE said that the speculative problems of the subject were beyond the province of the general practitioner, but he proposed to deal with it in its clinical aspects. He had seen a case of subcoracoid dislocation which remained unreduced for about six hours, during which the patient travelled a distance of ten miles. After reduction, all went well for a day or two, when pain came on, starting in the shoulder, and radiating round the back of the arm in the course of the musculo-spiral nerve, which was distinctly tender. At the elbow, the pain became diffused, but subsequently was most intense in the hand. Atrophy of muscle commenced in the upper arm, but extended to the forearm. The ball of the thumb wasted extremely. Pain was very severe, and only relieved by hypodermic injections of morphine. Recovery took place in three months. In another case, a horny growth, causing pain disproportionate to physical evidence of disease, was removed; but the pain was intensified, and rapid atrophy of the muscles of the leg followed. After amputation of the toe, the pain was much relieved. The atrophy was arrested, and the patient slowly recovered.

CASE OF EPILEPSY OF SIX YEARS' DURATION. COMPLETE RECOVERY AFTER SURGICAL OPERATION ON THE SKULL AND BRAIN.

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WITH REMARKS ON THE SURGICAL ASPECTS OF THE CASE

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THE interest which is being taken in the application of surgery to cerebral diseases induces me to place the following case on record. Although it is admitted that sufficient time has not yet elapsed to ensure certainty as to the permanence of the so far successful results of the operation, I think it advisable, without further delay, to add another contribution to a subject which, at the present time, is so much occupying the attention of the profession, as every additional fact cannot fail to be acceptable to an important practical inquiry which may be looked upon as still undecided. That frequently repeated epileptic attacks, which had been persistent for a period of no less than six years, and so severe that the patient had been confined in a lunatic asylum for half that time, should by any procedure be suddenly arrested, and the satisfactory condition maintained for six months, is in itself encouraging regarding any proposed method of treatment, and, as such, worthy of note. In addition, however, this case presents other features of interest from a scientific and physiological point of view, which have been enhanced by the results of the operation, as it had been ascertained that each seizure was preceded by a visual aura, and followed by hallucinations, all of which have been entirely removed by trephining over the angular gyrus—a convolution of the brain which recent researches have determined to be closely associated with the sense of sight.

W. A., aged 36, married, a stationer, with good family history, and without syphilitic antecedents, states that six years ago he received a violent blow on the right side of his head, by being forcibly thrown against a wall. At the time he was stunned, and was taken to the Middlesex Hospital, where it was found that he was suffering from a scalp wound, without apparent injury to the skull. In a few hours the patient regained consciousness, and, after his wound had been strapped up with plaster, he returned home, and, with the exception of headache and local soreness, was seemingly well. A few days after, the cut had healed, and he was in his usual good health. Six weeks later, he was suddenly seized with a convulsive attack, in which he lost consciousness, and it was observed that the movements of the limbs were confined to the left side. A fortnight afterwards there occurred a similar attack, and these have continued at irregular intervals ever since. He calculated that during the past six years there had been on an average one fit a week. His general health continued good; but after most of his attacks he was seized with violent mania, which rendered him dangerous to all around him, each of these seizures lasting many hours, and even days. He was, on this account, at various times an inmate of the Middlesex and St. Bartholomew's Hospitals, Highgate Infirmary, and other institutions; but in none of these did his condition improve. On the contrary, the violence after the attacks became such that, in February, 1882, he was sent to Camberwell Asylum, where he remained three years. In the report of his condition, kindly sent me by Dr. Schofield, his attacks are described as "of a very severe type; at those times he is most dangerous to those around him, and it takes four men to hold him down and prevent him injuring himself." Treatment of all kinds was tried without material benefit. He was admitted into the hospital under my care in May, 1886.

He was a tall, fair, somewhat delicate looking man, but otherwise in good health. All the organs and functions of the body were normal, and intelligence appeared to be unimpaired. Over the right parietal bone was a transverse cicatrix in the scalp. This was movable; no abnormality could be detected in the bone beneath it, and there was no tenderness on manipulation. On one or two occasions, hard pressure caused the sensation of a flash of light, followed by temporary loss of consciousness, lasting for a few seconds. The exact site of the centre of this scar was 3½ inches from the longitudinal fissure, in a line drawn vertically 2¾ inches behind the external meatus of the ear. Nowhere was there any trace of paralysis or loss of sensation. The special senses were normal; the fundus of each eye was as in health, and the patient was in all other respects, physically and mentally, in sound condition.

The patient remained for nearly two months in the hospital under observation. During this time he had weekly epileptic attacks, none of which I myself had an opportunity of observing. The nurse, however, asserted that the attack was preceded by irritability of temper, and a tendency to let things fall. Then he somewhat suddenly lost consciousness, and had general convulsions, most marked on the left side, the whole seizure lasting from five to ten minutes. On recovering, he was only partially conscious and very violent, rushed about the ward, shouted, called out to and threatened imaginary people, and, when held, struggled and hit out with his fists. In from half an hour to an hour he gradually calmed, and fell asleep; after a few hours he woke with headache, and was dull and drowsy. Next day the patient was in his usual condition. On interrogation he asserted that immediately prior to the attack he saw a bright red light in front of his eyes, soon after which he lost his senses. He had no recollection of any hallucinations after the fits, but during them he certainly acted and spoke as if he saw people and other threatening objects.

The condition of the patient being very serious both to himself and his friends, as all ordinary methods of treatment had failed to give him any relief, and as he was anxious to adopt any means which offered the slightest chance of amelioration, I determined to have him trephined over the seat of the original injury to the scalp, in the hope that there might be a possible depressed fracture, or some other local or remov-

able injury to the underlying cortex cerebri. This was carried out by my colleague, Mr. Pearce Gould, on July 8th. A large trephine opening was made at the seat of the cicatrix. The portion of bone removed was perfectly normal, and so was the dura mater underneath. A circular portion of this was also excised, when the exposed cortex was seen to be apparently healthy. At my request, Mr. Gould then explored in three or four different directions the cerebral substance, for about an inch in depth. This was done as an exploratory measure, so as to exclude the possibility of an abscess, cyst, or tumour being in the neighbourhood. Nothing abnormal, however, was detected. The wound was then closed, and the subsequent surgical treatment was conducted by Mr. Gould, to whose skill and attention the further successful progress of the case is undoubtedly due. The man recovered without a bad symptom.

On July 20th, the patient again came under my care, his wound having completely healed. He had not had any attack, and, with the exception of being pale and weak, was in good health. A few weeks afterwards he was sent to a convalescent hospital.

On December 8th—that is, exactly five months after the operation—the patient was in perfect health. For some time past, he had been at his work, and earning his living as before the accident. He has had no attack of any kind. Physically and mentally, he appeared to be in a sound and robust condition.

Commentary.—In this briefly recorded case, two points seem worthy of comment: 1. The result of the operation on the symptoms. 2. The nature of the epileptic attacks.

1. Any special surgical features of interest I leave Mr. Gould to relate. To the physician, the fact of importance is, that violent and frequently repeated epileptic seizures, which had existed for six years, were completely arrested by the surgical manipulations described, on the area which was presumably the original seat of the cortical irritation, although nothing abnormal could be detected there. I will not speculate upon the explanation of this result, but content myself with recording the fact. Such effects are by no means unknown, although the proceeding to obtain them is rarely put into practice. In cases in which a local aura can be traced, and which resist ordinary medical remedies, might not this method of surgical treatment be more frequently resorted to? The danger from the operation itself is, under suitable precautions, probably not great, and this instance shows that a hope of recovery is offered in what seemed otherwise to have been an incurable case.

2. The attack was usually preceded by a bright red flash of light, and it was followed by what were apparently visual hallucinations of different objects. The cicatrix on the scalp and the subsequent trephining were situated over that region which corresponds with the angular gyrus. These facts seem to me to be of great scientific interest, showing that interference with the function of this convolution induces subjective sensations of light and possibly also of things. Physiological experiment seems to have demonstrated that this gyrus has close relations to the sense of sight, and to the appreciation of external objects. The sensation of light at the beginning of the attack in this case might therefore be explained by the initiating irritation of the cortical visual centre. It is possible also that the mania following the fit, which appeared to be accompanied by visual hallucinations, may have been associated with some functional disturbance of this convolution. After an epileptic seizure, the effects of exhaustion rather than irritation of the cerebral centres would have been anticipated, and how far hallucinations are the result of diminished functional activity is, I suppose, an uncertain question. These might at least be assumed to be the result of irregular or disordered activity, which in its turn might be the product of debility or exhaustion. Both the initiating sensation of light, and the concluding appearance of images, were induced by the same cause, acting on the same centre, namely, the effects of a blow over the angular gyrus, and both were removed by measures directed towards this locality. The patient, in his usual inter-paroxysmal state, had normal vision, and no opportunity was afforded me of ascertaining the condition of his sight immediately after the attacks, with the view of determining if temporary amblyopia existed. An exploding lesion of the angular gyrus might theoretically induce this effect. Singularly enough, since his recovery the patient has forgotten all about either the lights or the hallucinations, and is now unable to recall their nature, although formerly he described them with some accuracy.

In my other case, where a tumour was removed from the Rolandic fissure, I observed somewhat similar phenomena as in the present instance, that is, the presence of subjective visual hallucinations. After death the angular gyrus was found to have been partially injured.

Remarks by Mr. Gould.—The operation was performed with the usual antiseptic precautions; the entire head was shaved on the day preceding the operation, then well-washed, first with soft soap and then with carbolic acid lotion (5 per cent.), and a cap of wool, soaked in this lotion, was worn for several hours. Immediately before the operation the scalp was again well washed, and on its completion the wound was well irrigated with corrosive sublimate solution, 1 in 2,000, and dressed with Salalembroth wool. The wound in the scalp was united by gut sutures, a drainage tube being placed in the most dependent part. The tube was removed on July 9th (the day following the operation), and the wound was next dressed on July 15th, when it was found to be firmly healed, except where the tube had been, and there it was beginning to epitheliate. Morphine (¼ grain) was injected under the skin before the anæsthetic was administered.

The scar of the injury was devoid of special features—it was not adherent to the skull, neither painful nor tender. No change could be observed in the bone, either before or at the operation. The exposed dura mater showed three small specks of a yellow colour; the circle that was removed was free from arachnoid adhesions, and its deep surface was perfectly normal in appearance. The brain itself was explored by the introduction of a fine knife, and then of a director, and subsequently by puncture with a hypodermic syringe in four directions. Nothing was observed which seemed to explain the mode of production of the epileptic attacks, nor the beneficial results of the operation. The convalescence of the patient was uninterrupted; there has been no tendency to hernia cerebri, and the covering of the brain is firm.

SURGICAL MEMORANDA.

MIRRORS FOR OPHTHALMIC AND OTHER OPERATIONS.

In England, during the winter months, the usual daylight is frequently not sufficient for ophthalmic and other operations, nor are operations confined to the few hours during which daylight is present. When operations are performed under such disadvantages, the use of a large concave mirror, of eight or more inches focus, placed upon the brow, will be found of great service. By its means the operator may use artificial light of weak intensity to greater advantage, and regulate its degree and position in a manner he cannot otherwise do.

By using a mirror with two apertures, the ametrope may arrange the lenses he requires behind the mirror; so that he avoids creating the silly impression which sometimes possesses the patient, that anyone requiring lenses to operate by is not so reliable as one who can act without them. Presbyops may find this especially useful. A parallelogram form of mirror is, for this purpose, probably better than the round.

W. Laidlaw Purves, Stratford Place, W.

THE IMMEDIATE TREATMENT OF WOUNDS OF THE FACE.

It has been said by a writer of distinction that the chippings of Phidias were better than the fine work of inferior sculptors. Not to press a metaphor too far, we may at least confess that we gladly accept from the magnates of surgical art stray hints on the management of common accidents, which every one is supposed to know.

On the afternoon of June 19, 1886, a boy at the Bath College was hit by a cricket-ball on the face, which was severely cut. The wound was as neat and clean as if done by a knife, transverse in direction, and parallel with the circumferential fibres of the orbicularis muscle below the right eye. The bleeding had nearly stopped when the boy was brought to my house, and there was little or no contusion around the wound.

Now, I had read a little while before (*Edinburgh Medical Journal*, December, 1885) a suggestion by Professor John Chiene on the treatment of wounds of the face. "The best stitch to use," he says, "is horse-hair. The best dressing is a pad of salicylic cotton-wool, fixed in position with flexile collodion." Surely the ideal of cleanliness and simplicity! Dr. Chiene's directions were literally and carefully carried out in the case of my own patient, and with perfect success. Only one stitch was necessary; the wool protected the injured part from organic harm, and the collodion kept everything in position. The dressing came off within ten days; the healing process was completed, and there was hardly any scar.

John Kent Spender, M.D.Lond., Bath.

Bequests and Donations.—The Great Northren Central Hospital has received £50 from the Ladies' Association connected with it.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITIAN, IRELAND, AND THE COLONIES.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, PLYMOUTH.

TUMOUR OF LOWER JAW.

(Under the care of Mr. PAUL SWAIN, F.R.C.S.)

[From notes by Mr. BUCHAN, House-Surgeon.]

E. G., aged 37, married, was admitted on December 9th, 1885, suffering from tumour of lower jaw. Her family and personal history good. About nine years ago, while eating a crust, she felt a sudden pain, as if something had been broken, on the right side of her lower jaw. About twelve months after, she first noticed a small, painless swelling



over the right ramus of lower jaw, on a level with the lobe of the ear. It gradually increased in size, extending downwards, and displacing the molar teeth. It had grown rapidly during the last six months. Her general health was good



On examination, there was a large, firm, irregular mass, occupying the right ramus, angle, and body of the jaw, and extending beyond the symphysis. The growth was closely connected with the bone, and projected into the floor of the mouth, reaching to the median line. The upper jaw was not involved. The movements of mastication were quite free and painless.

On December 11th, under methylene, the usual incisions were made, and the lower jaw was disarticulated on the right side, and sawn through at the angle on the left side. Hare-lip pins were put through the median incision, the rest of the wound sewn up, and a drainage-tube put in; the wound was dressed with iodoform and carbolic oil. The tongue was kept forward by a silk ligature through it. For the first three days she was fed entirely by enemata of peptonised beef-tea and brandy.

On December 16th, the pins and stitches, with the tube, were removed, and the wound was found to be practically healed; the tongue was unfastened.

On December 18th, the patient had a slight attack of erysipelas in the wound. The evening temperature was 102° F.

The perfect healing of the wound was for a long time delayed by the coming away of the silk ligatures which had been used. The patient was discharged on February 20th, 1886, perfectly cured.

[The woodcuts are from photographs kindly taken by Fleet-Surgeon Longfield.]

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, DECEMBER 21ST, 1886.

J. SYER BRISTOWE, M.D., F.R.S., President, in the Chair.

Right-sided Malignant Endocarditis.—Dr. G. N. PITT showed, for Dr. HALE WHITE, a heart taken from a man, aged 39, who had been ill for four months and had had numerous rigors. On admission, he was found to have a basic systolic *bruit*, audible chiefly over the pulmonary area and conducted upwards and to the left. The rigors continued; the temperature, which was not easily controlled, sometimes reached 105° Fahr. The diagnosis of malignant endocarditis of the pulmonary valve was made. At the necropsy it was found that the right ventricle was hypertrophied and dilated. The two anterior pulmonary valves were ulcerated and perforated; a large mass of vegetations sprang from the right valve. The liver was fatty and the spleen enlarged, but with these exceptions the whole body was healthy.

Syphiloma of Heart.—Dr. PASTEUR read a paper on a case of diffuse syphiloma of the heart. The dead body of a woman, aged about 30, was brought to the Middlesex Hospital. At the necropsy the heart was the only organ obviously diseased. The wall of the left ventricle and the septum ventriculorum were thickly studied with opaque, yellowish-grey patches of varying size. The endocardium was implicated in several places. There was a similar, but less extensive, affection of the right ventricle. Altogether at least one-half of the left ventricle and of the septum were diseased. Microscopical examination showed the morbid process to consist in an actively infiltrating corpuscular growth, very vascular near its spreading margin. Some of the vessels showed well-marked peri-arteritis. The central portions of the disease showed an early degree of degenerative change. There were no signs of fibrillation or fibrosis. The invaded muscular tissue underwent gradual atrophy without exhibiting degenerative changes. The liver was slightly enlarged, and its capsule normal. Sections showed areas of diffuse interstitial cirrhosis in a very early stage, in addition to slight general fatty change. Dr. Pasteur argued in favour of a syphilitic origin on account of the similarity of the change in the two organs, the anatomical characters of the new formation, and the fact that both the ventricles were affected.—Dr. CARRINGTON was disposed to demur to the conclusion that the change was syphilitic. Might it not be a case of early fibroid disease of the heart? The change in the liver was not, he thought, characteristic of syphilitic cirrhosis.—Dr. ANGEL MONEY thought the case was probably syphilitic because the morbid changes were of precisely the same character as those seen in syphilitic disease of the heart and lungs in congenital syphilis.—Dr. THOMAS BARLOW said that he concurred with the last speaker in thinking that the changes were extremely like those seen in congenital syphilis of the heart; the section, in such cases, of the endocardium presented a curious and characteristic kind of stain like the white patches produced by carbolic acid. Further, it might be asked, What other cause was so likely to produce such changes as those described as syphilis? As to

the suggestion with regard to fibroid degeneration, it was rendered improbable by the fact that there was no evidence of old pericarditis. It occurred to him to suggest whether chronic alcoholism might not have some share in the production of fibrosis of the heart; whether it might not be, in fact, one of the causes of that condition.—Dr. DAWSON WILLIAMS mentioned a case which nearly resembled that described by Dr. Pasteur. The patient was a boy, aged about 12, who had been several times in hospital on account of emphysema and bronchitis, of which finally he died, somewhat suddenly. At the necropsy, in addition to the emphysema of the lungs, it was found that the heart was very large; the two surfaces of the pericardium were adherent over the greater part of their extent. In the substance of the heart were numerous nodules, varying in size from minute specks to masses an inch in the long, and half an inch in the short diameter. Sections of the larger nodules were opaque in the centre, but partially translucent towards the periphery. The growths, undoubtedly, infiltrated the myocardium, and though they had some resemblance to sarcoma, were supposed to be syphilitic. The boy was the only surviving child of a woman who had had several miscarriages, and he had a syphilitic aspect.—Dr. SYDNEY COUPLAND concurred with the view of the case taken by Dr. Pasteur, although the resemblance of the morbid process to the lesions of acquired syphilis was not so great as to those of the congenital disease. It was certainly the case that the infiltrating form of syphilitic growth was a rarer form than the circumscribed gummatous growth. With regard to the suggestion made by Dr. Barlow, though cirrhosis of the heart was not known to be produced by alcohol, yet it seemed to be very probable.—Dr. GOODHART supported the opinion expressed by Dr. Pasteur because the condition of the liver, the general infiltration and cell-growth, was like the condition of the liver seen in adults suffering from undoubted syphilis.—Dr. PASTEUR briefly replied, observing that he had adopted the theory that the change was syphilitic chiefly by a process of exclusion.

Aneurysm of Heart, and Cerebral Tumour of Brain in an Idiot.—Dr. ANGEL MONEY showed specimens and drawings of an aneurysm of the undefended space of the ventricular septum. The walls of the aneurysm were formed by the opened up laminæ of the septal cusp of the tricuspid valve. All the valves of the heart were in a sacculated or "pouchy" condition, and irregularly thickened. The tumour of the right cerebral hemisphere was of the size of a small orange, and of tubercular structure, though bacilli had not been found. The child was 5 years old at death. The body was very small; it weighed only thirteen pounds, and its length was only thirty-one inches. The skull was very deep or high, but was certainly microcephalic; its circumference was eighteen inches, and the measurement over the vault from ear to ear was twelve inches. The forehead was covered with hair. The child had never walked or sat up, or talked. The anterior fontanelle was widely open. A loud systolic murmur was heard over the præcordial region.—Dr. THOMAS BARLOW, who had been present at the necropsy, agreed with Dr. Money that the growth was syphilitic; the chief ground he assigned was that, while it could not be doubted that there might be fœtal syphiloma, it was more than doubtful whether there could be congenital tubercle. The case appeared, also, to raise the question whether aneurysm of the heart in young subjects might not be due to syphilitic changes in the myocardium.—Dr. SIDNEY COUPLAND dwelt on the fact that the aneurysm was in the situation where a communication between the two ventricles ordinarily occurred, and suggested that it might have originated in some arrest of development.—In reply to a question, Dr. MONEY stated that the history of syphilis was inconclusive.

Fatal Cases of Alcoholic Paralysis.—Dr. HADDEN described three fatal cases of alcoholic paralysis. The first patient was a woman aged 27, who had been drinking to excess for at least four years. Her arms and legs had been growing weak for a year before admission. The lower limbs were wasted and paralysed, especially the extensor muscles. The limbs were bent at the knees, and much pain was felt on trying to straighten them. Sensation was impaired. The knee-jerks were absent. The muscles were tender, and gave no response to strong faradic or galvanic currents. There were evident signs of phthisis. The spinal cord was quite healthy on microscopical examination. The myelin of the peripheral nerves had broken up into a finely granular material, and the axis-cylinder was quite obscured. The nuclei of the fibres were enlarged. The nerve-tubes are irregular in shape, bulged in some parts, reduced in others, in consequence of the removal of the granular material. The muscles showed an increase in the nuclei of the sarcolemma, and of the interstitial tissue. In some places, there were groups of small round cells, which gave rise to local atrophy of the fibres. Slight granular change was seen in some of the fibres, but as a rule the striation was good. In another woman, aged 44, who had suffered from alcoholic paralysis for about a month, the spinal cord was found healthy, but the nerves exhibited mixed parenchymatous and interstitial degeneration. The muscles were affected as in the first case. The third case was that of a gentleman, aged 56, who had relapsed after a severe attack of alcoholic paralysis. He was admitted into St. Thomas's Hospital for a deep ulcer on the dorsum of the left foot, opening into one of the small joints of the toe. He had well-marked paralysis of the legs, with impaired sensation. In this case also the spinal cord was healthy, and the nerves and muscles diseased. There was well-marked phthisis in all the three cases narrated. Alluding to a previous paper to the Society, the author summed up the results of his five fatal cases. The spinal cord was healthy in all. In four out of the five the nerves were examined and found degenerated: but in two the change was rather that of a perineuritis. The muscles simply showed increase of nuclei, and occasionally appeared granular. In two cases the medulla was examined and found healthy, and in two the motor convolutions were healthy. The association with phthisis was alluded to. In four cases it was undoubted, and in one the lung mischief was early.—The PRESIDENT inquired whether the neuritis was limited to special sections of the nerves, and where it originated. There was no paralysis of sensation in these cases, and he found it difficult to understand how this could be if the mixed trunks were themselves involved.—Dr. COUPLAND referred to a paper published in the *Revue de Médecine*, dealing with the occurrence of peripheral neuritis in tuberculosis, and it was worthy of note that three of Dr. Hadden's cases were suffering from phthisis. The term peripheral neuritis was no doubt in common use, but he questioned whether it was correctly applied; were the changes, in fact, inflammatory at all; were they not rather degenerative?—Mr. ANTHONY BOWLBY had examined the nerves in several cases, and had come to the conclusion that the change was a degeneration, and not neuritis. With regard to the absence of sensory paralysis, it was to be remembered that, after traumatic injuries of mixed trunks, sensation was regained before motion; it seemed that sensory impulses could travel along nerves which were not sufficiently sound to transmit motor impulses.—Dr. PITT had made a microscopical examination in one case where there was no phthisis. The changes were the same as those described.—Dr. D. W. FINLAY had recently examined one case in which the appearances were quite in accordance with those described by Dr. Hadden. The patient died of acute phthisis.—Dr. ANGEL MONEY had had an opportunity of making a microscopical examination in three cases; in these, not only were the nerves degenerated, but the muscles also; the nerve-centres were all healthy.—Mr. H. T. BUTLIN referred to the occurrence of an ulcer, apparently of the same type as perforating ulcer, though in an uncommon situation. In the investigation which he had made with Mr. Savory of the nerves in perforating ulcer, it had been found that the affected trunks showed little change in the nerve-fibres, but the interstitial tissue was affected, and that the smaller nerve-fibres were earliest involved. The change, too, was most marked in the outer part of the nerve-bundles, which pointed to a different distribution of motor and sensory fibrils in the trunks.—Dr. HADDEN said that, in alcoholic paralysis, the change began in the smaller nerve-fibres. According to his observation, sensation was sometimes impaired. He quite agreed with the view that the changes were rather degenerative than inflammatory.—Dr. ANGEL MONEY suggested that, as changes of this nature had been seen in typhus fever, it was possible that, in a phthisical patient, they were due to the pyrexia.

Ulcer of Stomach.—Dr. THOMAS BARLOW showed a specimen of gastric ulcer, probably of tubercular nature, occurring in a child 21 months old, who died of general tuberculosis. There was a small ulcer near the cardiac end, with undermined edges, but there were no signs of tubercle about it. There were in addition four other small follicular ulcers of the stomach and one small nodule beneath the mucous membrane, which was probably tubercular. Small follicular gastric ulcers had been frequently found in phthisis, but most observers had failed to find any evidence of tubercle. Andral and Frerichs had each found such ulcers once; but in children they were of comparatively frequent occurrence, as most writers on the diseases of children agreed. Barthez and Rilliet, out of 146 necropsies in cases of tuberculosis, had found follicular ulcer of the stomach in twenty-one, and they seemed to entertain no doubt that the ulceration was tubercular.

Epithelioma of Bladder.—Mr. BRUCE CLARKE showed a specimen of epithelioma of the bladder. The peculiarity of the case was, that there were two separate tumours in the bladder, two and a half inches apart. He suggested that, when the bladder was empty, the tumours were in contact; and that the one had given origin to the other by inoculation.—Mr. BUTLIN mentioned a similar case.—Mr. BOWLBY

said that there were two specimens in the Museum of St. Bartholomew's Hospital of multiple growths in the bladder.—Dr. HADDEN mentioned a case of multiple epithelioma of the œsophagus.—Mr. BRUCE CLARKE, in reply, observed that, if the lower tumour in the œsophagus had been produced by inoculation from the upper, it must have been by actual transference of particles during swallowing.

Tumours of Testis and Spermatic Cord.—Mr. F. SWINFORD EDWARDS showed three specimens of new growths involving the testis and spermatic cord: 1, a round-celled sarcoma (probably) of the testis and spermatic cord; 2, a tubercular tumour (probably) of the spermatic cord immediately above the epididymis; 3, round-celled sarcoma of testis.—Mr. BOWLBY thought that in the first case the disease was not sarcomatous, but inflammatory.

Card-Specimens.—Mr. STEPHEN PAGET, for Mr. THOMAS SMITH: Recurrent Epithelioma of Foot.—Mr. SHATTOCK: Hammer-toes.—Mr. TARGETT: Congenital Deformity of Hip.—Dr. BEAVEN RAKE: Spontaneous Cure of Thoracic Aneurysm in a Case of Anæsthetic Leprosy.—Dr. G. N. PITT: Round-celled Sarcoma of Thyroid growing round Œsophagus and into Left Vagus and Internal Jugular Vein.

MEDICAL SOCIETY OF LONDON.

MONDAY, DECEMBER 20TH, 1886.

MR. R. BRUDENELL CARTER, F.R.C.S., President, in the Chair.

CLINICAL EVENING.

Enlargement of Thigh.—Mr. BULL showed a boy with great enlargement of the left thigh, which began six months ago. There was no evidence of a tumour, phlebitis, or arterial disease in the limb. The thigh measured two inches more in circumference than the sound limb. He thought it was probably due to lymphangiectasis. There was no chyluria or albuminuria.—The PRESIDENT asked whether there was any difference in the temperature of the two sides.—Mr. MARMADUKE SHEILD asked if there was any difference in the length of the bones. He thought it was probably congenital, and had been overlooked by the mother.—Dr. ANGEL MONEY asked whether filariæ had been found in the blood.—Mr. MORGAN pointed out that it did not extend below the ankle, a fact which he thought was in favour of a congenital origin.—Mr. NOBLE SMITH inquired whether the limb had increased in size while under observation.—Mr. BULL, in reply, said there was no difference in the length or temperature of the limbs.

Chronic Hypertrophic Cervical Pachymeningitis.—Dr. ORD showed a young man, aged 26, who, a year before, was seized with pain and stiffness in the neck, followed by vomiting and high temperature; subsequently he became delirious. Under energetic treatment with iodide of potassium, perchloride of mercury, and hot water bags to the cervical region, his condition improved, and was now promising. At the same time, however, various trophic, motor, and sensory disturbances remained, pointing to an affection of the dura mater.—The PRESIDENT asked whether the eyes had been examined, and if anything abnormal was noticed.—Dr. BEEVOR said the case threw some light upon the localisation of muscle-goverument in the cord, in reference to which he had made, in collaboration with Mr. Victor Horsley, a series of observations. He asked whether the pupils were affected.—Dr. ANGEL MONEY said that, in a case under the care of Dr. Hughlings Jackson, of progressive muscular atrophy, the pupil on one side was small, and did not dilate when shaded. He inquired whether any peculiar slowness of the pulse had been noticed.—Dr. ORD, in reply, said that nothing abnormal was found in the eyes or in the pulse. He expressed the pleasure he had in bearing testimony to the extreme usefulness of the localisation-charts drawn up by Dr. Beevor, copies of which he kept in each of his wards.

Lupus of the Larynx.—Dr. ORWIN showed a case of lupus of the larynx in a woman, and alluded to the infrequency of the disease in this site as a primary lesion.—Dr. COLCOTT FOX showed an infant suffering from lupus of the scalp, face, mouth, palate, and larynx; it had been examined by Dr. Semon, who was, however, unable to see much of the larynx.—Mr. LENNOX BROWNE agreed that it was much less rare than was supposed. He had found it present in about four cases of lupus out of twenty-seven. The treatment of the complaint was in itself an interesting question.—Dr. MORELL MACKENZIE said that the stridor which was present was not attributable to cold or to the attempts at distension. He had seen Dr. Orwin's case some time previously, and had thought that tracheotomy would become necessary. He only knew of two primary cases of lupus in the larynx.—Dr. SEMON said he had treated a case of his own by the galvanic cautery, and had been remarkably successful, having cured aphonia of twelve months' standing.

Hereditary Syphilis of the Tongue.—Dr. ORWIN showed a lad with a curious disease of the tongue. No very clear history of syphilis could be made out, except that he had "snuffles" when a baby. When admitted, the tongue was three times the natural size and very painful. Under iodide of potassium and nitrate of silver, applied locally, a very good recovery had taken place.—Dr. ANGEL MONEY said he had seen several similar cases at the Children's Hospital.—Mr. W. PYE suggested that, in the absence of a history of syphilis in the parents, it might possibly have been primary.

Club-Foot.—Mr. NOBLE SMITH showed a lad on whom he had operated for severe talipes equinus by immediate extension. The foot was now quite flat, and he proposed shortly to operate on the other foot. He said that the method of immediate extension was uniformly successful, and obviated the tediousness of the old-fashioned procedure, and did away with the necessity for osteotomy. He also exhibited a baby on whom he had operated with success, and showed a series of plaster casts which had been made at different stages of the operation.

Primary Syphilis.—Mr. MARMADUKE SHEILD showed a case of syphilis in a woman, with a fungating mass at the angle of the nose, which, it was thought, might have been the site of infection, although it presented none of the appearances of a primary sore.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

NOVEMBER 19TH, 1886.

ALFRED HILL, M.D., President, in the Chair.

Disinfection of Cabs.—The Council presented a report on a communication recently addressed by the Commissioner of Police to Metropolitan Sanitary Authorities on the subject of the disinfection of cabs. The method of disinfection which the Council advises is as follows: The cushion and as much of the internal fittings as are movable should be taken out of the cab and put in a disinfecting oven, where such is available; if there is no disinfecting chamber, the cushions, after having been taken out, if movable, well beaten and dusted, should be replaced, putting them on end so as to expose both surfaces to the action of the chlorine gas which is subsequently used. All exposed woodwork on the inside of the cab should be washed with carbolic acid soap; and carbolised oil should be smeared over the metal work, with the view of disinfecting it, and protecting it from the action of the chlorine. Chlorine gas should be evolved inside the cab, and the cab shut up and kept exposed to the fumes for one hour.

Infectious Diseases in Non-paupers.—In a report on the reception of non-pauper patients into the hospitals of the Metropolitan Asylums Board, the Council recommended that the wiser and better course would be some arrangement whereby these rate-supported hospitals should be freely open without payment to all classes of the community without distinction; that orders for admission should be given by medical officers of health as well as by relieving officers; that the certificate of any registered medical practitioner should be accepted as evidence of the nature of the infective character of the illness, and of the patient's fitness for removal; and that all charges incurred in the maintenance of the hospitals should be defrayed out of the metropolitan common poor fund, until such time as the hospitals themselves shall have been transferred to a properly constituted central sanitary authority.

Sanitary Registration of Buildings Bill.—Mr. MARK H. JUDGE, A.R.I.B.A., read a paper on the Sanitary Registration of Buildings Bill, which, he said, was a legislative attempt to protect the community against unsanitary buildings. It was to be brought before the House of Commons early next session by Dr. R. Farquharson, M.P., and might be briefly described as an effort to secure the maximum advantage with the minimum of officialism.

DECEMBER 17TH.

Contagious Diseases (Animals) Act, 1886.—Dr. ASHBY read a paper on the Contagious Diseases (Animals) Act, 1886, in which he carefully analysed the provisions of the Bill, and dwelt especially on its limitations, pointing out what steps were beyond the legal powers of the sanitary authorities. He submitted a model set of regulations.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, DECEMBER 9TH, 1886.

DR. CLEAVER, President, in the Chair.

Biliary Calculi.—Mr. PYE-SMITH showed the morbid specimens and related notes of a case in which a biliary calculus had lodged in the neck of the gall-bladder of a woman, aged 42. The right leg had become gangrenous, and had been amputated, but the patient slowly sank. He also showed a facetted gall-stone, passed per anum, from a case

which had presented signs of abscess of the liver or bile passages; the patient had for some days acute intestinal obstruction, and had since coughed up suddenly a quantity of pus, coincidently with shrinking of the abscess and development of pleuritic rub on the left side. The patient, a man, aged 63, seemed now bidding fair to convalesce.

Locomotor Ataxy.—Dr. GWYNNE related notes of this case in a woman, aged 47, where the patellar reflexes were exaggerated. The girdle-pains were present, also frequent micturition, impaired sensation, and inco-ordination of movement. Dr. Gwynne explained the symptoms by supposing disease of the lateral columns to exist; and while the reflex loops in the posterior columns were more or less affected, the disease was probably mainly centred in the groups of cells which, by their connections, preside over co-ordination of muscular action.

Locomotor Ataxy (Acute).—Dr. PORTER showed a patient suffering from ataxic symptoms and diminution of muscular sense in both upper and lower extremities, and affection of speech of the same character, coming on rapidly within four months. The patellar tendon reflex was diminished. There were no paresis, wasting or sensory disorders. The early symptoms had been stiffness rather than pain in the knees, feet, and then in the shoulders, with gastric irritability, nausea, and occasional vomiting. No history of lightning pains. Pupils were equally dilated, and almost irresponsive, both to light and accommodation. Discs atrophied. Sexual power had disappeared completely. Dr. Porter considered the case to be of the nature of locomotor ataxy as regarded the symptoms, but too acute for sclerosis, and somewhat irregular. Although he could not obtain any history or evidence of syphilis, he thought that it might be of that nature, and was treating the patient with large doses of iodide.

Elephantiasis Arabum.—Mr. ATKIN showed a case, the patient being a woman, aged 33, a native of Perth, who had had the disease as long as she could remember. It was localised in the right leg, and there was no history of syphilis, malaria, chyluria, or glands. Attention was drawn to the fact that the most successful treatment of the disease could not be explained by the generally accepted view of its pathology. The only remedy from which the woman had derived comfort was iodoform, in the form of ointment. Powders and lotion caused great irritation. In case the leg got worse, Mr. Atkin proposed to tie the external iliac.

The immediate Cause of Death in Malignant Cases of Fever.—Dr. C. H. WILLEY, in reading this paper, said that the cases under consideration were those of scarlet fever and small-pox in which unconsciousness and death ensued at an extremely early stage. The pathology of this condition had not been explained. The conclusions to which Dr. Willey had arrived were based on clinical observations and *post mortem* examinations in twenty-five of these malignant cases. The chief factors in the investigation appeared to him to be that the fatal symptoms were, in each case, those of a rapidly failing circulation, and that, after death, the heart-chambers, especially the right, were completely filled with white, jelly-like clot, which was, he said, clearly of *ante mortem* formation. The failure of the circulation (particularly in small-pox cases) ensues with great suddenness, and the question arose, Was this failure or the thrombosis the primary condition? Evidence from the main symptoms, and from such invariably accompanying ones as pulmonary œdema and copious diarrhœa, Dr. Willey said, goes to show that a failure of the circulation is the primary cause of death, and, further, that not only is the heart paralysed, but the entire arterial system—in fact, a total collapse of blood-pressure throughout the vascular system is brought about with more or less suddenness by a functional failure of the sympathetic nervous system, governing, as it does, the cardio-motor and vaso-motor functions. The pulmonary œdema and the profuse intestinal flux are due to the same cause; they are undoubtedly associated with a greatly diminished blood-tension in the arterial system. —Remarks were made by Mr. WALKER, Dr. GWYNNE, Mr. BALDWIN, Dr. S. WHITE, Mr. JAMES, Dr. S. ROBERTS, and Mr. PYE-SMITH.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, DECEMBER 3RD, 1886.

J. B. JESSETT, F.R.C.S., President, in the Chair.

Reading Section.—A committee was appointed to prepare a scheme for the establishment of a reading section, open to all the members.

State Organisation of Hospital Management.—Mr. J. BRINDLEY JAMES read a paper on State organisation of hospital management, in which he exemplified the benefits derivable from a well-devised scheme with this object by the success which, for three-quarters of a century, has attended the Assistance Publique of Paris. By this excellent system all the hospitals of Paris were welded into one harmonious whole, under a State-nominated Director-General and Governing Council, while a board composed of medical men regulated all admissions into hospitals (keeping a registry of every vacant bed in Paris), nominated all hospital appointments, senior and junior, regulated the discipline and economy of the hospitals and the curriculum of the junior staff, medical, surgical, and pharmaceutical, and superintended even the manufacture and selection of the medicines and provisions supplied to the sick poor from special public establishments for this purpose. Mr. James also pointed out the forethought exercised in several great American cities, where medical alarm-posts, analogous to the fire-alarms now adopted in London, summon professional aid immediately to the spot where any person may have been suddenly injured or taken ill.—The PRESIDENT, Drs. FORSYTH, MOON, PURVIS, POLAND, CLARK, and Mr. ROBERTS, took part in the subsequent discussion.

A vote of thanks to Mr. Brindley James for his excellent and interesting paper, proposed by the PRESIDENT, and seconded by Dr. PRIOR PURVIS, was carried by acclamation.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, DECEMBER 3RD, 1886.

Dr. C. C. SMITH, President, in the Chair.

Suprabubic Lithotomy.—Mr. MCGILL read a paper on three cases he had recently operated on. From the first, a man aged 40, upon whom lithotomy had been performed seven years previously, he extracted three stones, weighing 3 oz. 120 grains, 120 grains, and 10 grains, respectively. Urine passed by the urethra on the twentieth day, and recovery was complete. In the second case, the stone weighed half an ounce; the wound was healed on the tenth day. In the third case, there was considerable doubt as to whether there was a stone really present, but eventually a calculus weighing 10 grains was extracted. The wound in the bladder was stitched up, but urine escaped by it. Mr. McGill pointed out that there was a singular coincidence between the mortality after lithotomy in early days and at present. According to the Norwich statistics, 56 per cent. of cases proved fatal when the stone weighed more than three ounces, and 28 per cent. of cases over forty. He thought the operation had many obvious advantages over the usual lateral incision: in facility of performance, convenience in thoroughly exploring the bladder, and in the diminished risk of hæmorrhage; and that shortly that operation would be completely superseded by the suprapubic method. With regard to lithotrity, he pointed out that, in Sir H. Thompson's practice, one case in seven had a recurrence of the stone. Curiously enough, Cheselden did nine suprapubic operations without a death before he took to the perineal operation.—Mr. JESSOP spoke well of the operation; he had performed it on a man in whom a large stone was encysted, and irremediable by the usual method; and also in an old man with a very large stone. The latter case proved fatal from extensive old renal disease.—Mr. WHEELHOUSE pointed out that lateral lithotomy held its ground in former times on account of the rapidity with which it could be performed in the pre-anæsthetic period. At one time, median lithotomy threatened to monopolise the field; but he held now that, with a small stone and a healthy bladder, lithotrity was the best operation; while in an old patient, with a large stone, suprapubic incision was to be preferred.—Mr. MAYO ROBSON had performed the operation twice—in one case successfully, suturing the bladder, and obtaining primary union of the wound. He recommended that this should always be done, sutures being passed previously, parallel to the intended vesical wound, so as to draw the edge close to the skin before passing the catgut suture through the muscular coat.

Experimental Researches on Pasteur's Anti-rabid Method.—Dr. HIME gave an account of the experiments which he had recently conducted (see BRITISH MEDICAL JOURNAL, vol. ii, 1886, p. 1156).

Toxic Effects after Sulphate of Duboisin.—Dr. CHADWICK described a case where one-hundredth of a grain of duboisin was used for examination of the lens in case of senile cataract. The patient was aged 75, and it was suggested that advancing years gradually increased the susceptibility, until it reached its climax in extreme age. The similarity to the symptoms included under the vague term "softening of the brain," suggested the thought whether marked susceptibility in age betrayed a pathological condition of brain-substance liable to result in symptoms of cerebral degeneration and atrophy. The drug would appear to be indicated in cases of morphine-poisoning; its use in ophthalmic practice could scarcely be upheld. The similarity between these toxic effects and the condition seen in cases of acute alcoholism and the post-epileptic state did not appear to extend to

acts of violence.—Dr. MAJOR said the symptoms closely resembled those he had witnessed in a medical friend who for experimental purposes took a large dose of hyoscyamin, being characterised by strange antics and curious unreasonableness. He attributed much of the effect to delusions of vision.—Mr. HARTLEY had seen toxic effects resembling atropinism in four cases, but the drug was still used by Mr. Teale and himself, though in very weak solution. In one case he had seen great pallor with sickness and vertigo, and unsettled mental condition.—Dr. HELLIER referred to Dr. Wood's experience of Indian hemp, as resembling in some sort the cases narrated.—Mr. JESSOP had noted a case where delusions of vision in a blind woman were removed by a single dose of hyoscyamin.—Dr. GRIFFITH said hyoscyamin had proved useful in surgical cases in the Leeds Infirmary, when there was delirium with insomnia after operations.—Mr. G. CARTER related a case where a nightly dose of hyoscyamin given in a case of acute mania produced temporary blindness.

Relapses in Enteric Fever.—Dr. GRIFFITH exhibited a chart from a case of enteric fever, which showed two perfect relapses of three weeks' duration each.

PATHOLOGICAL SOCIETY OF MANCHESTER.

WEDNESDAY, DECEMBER 8TH, 1886.

J. DRESCHFELD, M.D., F.R.C.P., President, in the Chair.

Broncho-Pneumonia in Children.—Dr. H. ASHBY showed the lungs of a child who died from broncho-pneumonia.

Epithelioma of the Tongue.—Dr. W. THORBURN showed a number of sections of an epithelioma of the tongue, which had apparently developed from an ulcerating gumma. The sections, being cut continuously, demonstrated the method of growth and invasion of the tumour.

Diaphragmatic Hernia.—Mr. A. H. YOUNG exhibited a preparation of a case of diaphragmatic hernia, which had been discovered in the dissecting-room. He pointed out the impossibility of diagnosing such a condition during life.

Surgical Kidney.—Mr. C. E. RICHMOND showed specimens of surgical kidney, together with the bladder and ureters. The bladder was chronically inflamed, much dilated, hypertrophied, and fasciculated. The ureters and the pelves of the kidneys were dilated and inflamed, and contained a mixture of foul urine and pus. The kidneys were enormously enlarged, the whole parenchyma was macerated in pus, and the capsules separated easily. There were large perinephritic abscesses. There had been a history of chronic retention, with much ropy mucus in the urine. Death had occurred from uræmia after the use of the catheter. There was no stricture or prostatic disease; hence it was inferred by Mr. Richmond that retention, and consequent dilatation of the bladder, had been due to the obstruction caused by ropy mucus.

Phosphatic Intestinal Calculus.—Mr. A. H. YOUNG showed, for Mr. WREN, M.R.C.V.S., an enormous calculus, found after death in the large intestine of a pony.

Thrombosis.—Dr. J. DRESCHFELD gave an account of some recent researches on thrombosis.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, DECEMBER 1ST, 1886.

J. HARDIE, Esq., F.R.C.S., President, in the Chair.

Cholecystotomy.—Mr. JONES showed a case of cholecystotomy for suppuration of the gall-bladder.

Ununited Fracture of Clavicle.—Mr. WRIGHT showed a man, aged 20, in whom he had wired the clavicle for an ununited fracture of several years' standing. There was good union and improved power.

Resection of Upper End of Humerus for a Sarcomatous Tumour.—Mr. SOUTHAM showed a woman, aged 30, in whom, six months before, the upper four inches of the humerus had been resected for a sarcomatous tumour originating in the cancellous tissue of the upper epiphysis. The growth was limited to the bone. The patient had a very useful arm, and there was no evidence of any recurrence.

Photographs of Cases.—Dr. ASHBY showed photographs of (1) a case of varicella gangrenosa. The varicella occurred two months before the child's death, which resulted from acute tuberculosis. At the time of death, there were from thirty to forty ulcers, with sharply cut edges, on the scalp, body, and limbs. (2) A case of double cephal-hæmatoma with facial paralysis, following a difficult labour. The child made a good recovery.

Summer Diarrhœa.—Dr. TOMKINS, Medical Officer of Health for Leicester, read a paper on some bacteriological investigations in connection with summer diarrhœa. The author pointed out that the varying prevalence of the disease in different towns, which were to a great extent identical as to density of population, class of inhabitants, and meteorological conditions, proved that neither overcrowding, neglect, improper feeding, filth, nor increased temperature, was the ultimate cause. The paper showed, from observations made in Leicester, that the disease in question was not confined to the infantile part of the population, but attacked adults more frequently than children. Dr. Tomkins then gave the results of numerous experiments carried on during the past summer, which showed that the number of germs in the air of those parts of the town of Leicester where the disease was most prevalent, was from ten to sixty times greater than in the air of the other parts. Numerous microbes had also been obtained and cultivated from the organs of those who had died from diarrhœa.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, NOVEMBER 19TH.

H. R. HATHERLY, M.R.C.S., President, in the Chair.

Gastric Ulcer.—Mr. HAYDON WHITE read a paper on Certain Forms of Perforating Ulcer of the Stomach. He related cases of sudden perforation of the stomach by ulcer, resulting in death, which were preceded by no distinctive gastric symptoms. He also showed a specimen illustrative of this form of the disease, taken from a young anæmic girl.

Myxœdema.—Mr. PRYER showed a case of myxœdema in a woman, aged 57. The disease was of about twelve years' standing, and there was a history of excessive child-bearing, miscarriage, and flooding. The patient had also experienced considerable mental worry. The cases presented the following characteristics:—Considerable hebetude; general slowness of the various movements of the body; renal aspect of face; slow, monotonous speech; resilient œdema of a translucent character in some parts of the body; slow pulse, 65; subnormal temperature 96, 97.6, etc.; dry, harsh condition of the cutaneous surfaces; filling up of the inferior triangles of the neck with superfluous tissue, and aberrations of the special senses of smell and taste. The urine was acid (specific gravity 1012) and did not contain albumen, sugar or peptone. The excretion of urea was diminished—that is, 1.188 per cent. Muscles reacted to the interrupted current. The symptoms varied in accordance with the surrounding temperature.

Specimens.—Dr. HANDFORD showed a microscopic specimen of Echinococci from Hydatid of the Liver.—Mr. ANDERSON showed a case of Extensive Wound of the Knee Joint, treated by rest and resulting in osseous ankylosis and a useful limb.

ACADEMY OF MEDICINE IN IRELAND.

PATHOLOGICAL SECTION.

FRIDAY, DECEMBER 3RD, 1886.

WALTER G. SMITH, M.D., President, in the Chair.

Parasitic Disease of Lungs in Sheep.—Dr. HENRY BEWLEY said that in the lungs of several sheep which were examined lately in the Physiological Laboratory of Trinity College, Dublin, a number of whitish or grayish nodules were found, varying in size from $\frac{1}{16}$ to $\frac{1}{8}$-inch in diameter. On microscopic examination these nodules proved to be caused by a small nematode worm, from 15 to 17 mm. long and extremely slender. The worm lay coiled up in the interior of a mass of apparently dried purulent matter. This mass was surrounded by a zone of elongated epithelioid cells, arranged in a radiating manner round the central mass. The epithelioid cells were embedded in a delicate fibrous reticulum; and here and there large giant cells were seen. Around these radiating cells was a zone of small lymphoid cells, embedded in fibrous tissue, and arranged in concentric layers. Outside these cells, in some of the specimens, was healthy lung tissue. In others the nodules were surrounded by catarrhal pneumonia. The worms in these nodules had no reproductive organs, and were apparently immature forms of strongylus filaria—a nematode worm that inhabits the bronchi and trachea of sheep and goats. Leuckart ("Die menschlichen Parasiten," 1867, Bd. ii, p. 107) and Bailliet, in his *Dictionary of Veterinary Medicine*, mention the existence of nodules in the lungs of sheep similar to those in the cases described above, caused by the embryos of strongylus filaria; but they give no account of the histological changes in the lung produced by these parasites.—The PRESIDENT remarked that animal pathology was becoming increasingly associated with human pathology.—Dr. MACSWINEY asked, Did Dr. Bewley look for this parasite in any other part of the tissue of the sheep? It would be interesting to know whether it was confined to the pulmonary organs, or whether the parasite was ubiquitous.—Dr. PURSER said it was difficult to sup-

pose that the worm could have crept down through the animal's bronchial tubes. It was possible that some might have got into the lungs from the blood. There was no difficulty in supposing that certain parasites would be in the lung and not in other parts of the body, because it was well known that different parasites had different tastes as regarded their places of living in the body.—Dr. BEWLEY, in reply, said he did not examine any other part of the sheep's body for parasites.

Stricture of the Œsophagus.—Mr. EDGAR FLINN exhibited the œsophagus and stomach of a man who died from epithelioma of the œsophagus. The œsophagus was very much narrowed in its lower fourth, and the most contracted part of the stricture was found to be about three-quarters of an inch from the cardiac orifice of the stomach, and would hardly admit of a small-sized pen-handle being passed through it. The stomach was enormously dilated—so much so that when the abdomen was opened it appeared to fill up the entire cavity. A large fruit-stone was found immediately contiguous, and somewhat beneath the pyloric orifice, imbedded in a diverticulum. This fruit-stone must have lain in this diverticulum for a long time, the *post mortem* appearances showing that its passage through the œsophagus would have been well-nigh impossible during the last two years of the patient's life; from its position near the pylorus, it exercised a considerable deal of pressure on the pyloric orifice, and thus, in great measure, the great dilatation of the stomach was to be accounted for.—The PRESIDENT remarked that the site of the disease in this case corresponded with that which was most common in malignant disease of the œsophagus—namely, the lower part of it.—Dr. WRIGHT said that the patient had been under his observation for seven years. The first intimation that he had of anything being wrong with the man's stomach was about five years ago, when he came to the dispensary, complaining of gastric pain and severe hæmatemesis. On several occasions afterwards, he had severe hæmatemesis. For three or four months there was no stricture of the œsophagus, and then suddenly the stricture developed. That was four or five years ago. It then came on spasmodically.—Dr. BALL said one of the most interesting features in the case was the presence of the diverticulum in the pylorus. True diverticula were exceedingly rare. Mr. Moore, one or two years ago, brought before the Pathological Society of London a case of several true diverticula in the neighbourhood of the pylorus; and he suggested that they might be analogues of the multiple diverticula which were present in fishes.—Dr. PURSER said the most interesting point in the case was the dilatation of the stomach, which in stricture of the œsophagus was usually contracted. There must have been some disease in this patient long before the carcinoma of the œsophagus, which produced the dilatation of the stomach. It appeared to him that the pylorus was extraordinarily small. The stricture of the pylorus must have been either produced by disease or congenital. The pouch in the stomach was, he thought, not an abnormality, but the product of the fruit-stone in its ineffectual efforts to get through the narrow pylorus.—Mr. FLINN, in reply, said he was not aware that there were any diverticula except the one where the fruit-stone was.

Adenoma from the Mammary Gland of a Rat.—Mr. J. A. SCOTT exhibited a specimen of adenoma from the mammary gland of a rat. The animal had a big tumour in its abdomen, into which its legs seemed to be drawn up, very much in the way in which a penis sometimes was into a large hydrocele. Nevertheless, the animal had been several times pregnant, and was able to suckle its young. A section of the tumour showed it to be an ordinary adenoma.

Simultaneous Fracture of both Clavicles.—Dr. E. H. BENNETT submitted a cast exhibiting this lesion, taken from a man who was treated in Sir P. Dun's Hospital, and also the clavicles of a little girl, aged 6, who had sustained a complete fracture of one clavicle, and an incomplete fracture of the other, by being run over by a tramcar. In the first case perfect union had been obtained in both fractures, with but little deformity—a fact of importance, seeing that out of eighteen cases collected by Gurlt, no fewer than eight had resulted in non-union of the fractures—a result clearly attributable to the difficulty of maintaining the parts at rest. He exhibited at the same time a series of injuries of the costal cartilages taken from the body of the child who had had the collar bone broken. On the right side, the second, third, and fourth cartilages were broken transversely, while the first was dislocated from its rib. On the opposite side one of the lower cartilages had been also dislocated from its rib, and one had sustained a partial fracture. He directed particular attention to the dislocation of the cartilages from the ribs, as the occurrence of such dislocation had been denied by Malgaigne.—After some remarks by Dr. MACSWINEY and Dr. BALL, Dr. PURSER said he could not see anything *a priori* absurd in the separation of the cartilage from the bone, particularly in children. The point where the growing cartilage joined the bone was rather a weak place. He rather wondered that the injury was not more common in young children, and that the movements of a child were not sometimes enough to tear off the periosteum.—Mr. FLYNN also spoke, and Dr. BENNETT, in reply, said that Malgaigne gave four cases of this fracture at the age of seventeen, which was the earliest age that he recorded. It was a very difficult thing to keep it reduced, for, although after the patient had taken a full breath the parts would slip into their places, when the chest collapsed they would slip out again.

Cerebral Meningitis and Abscess.—Dr. QUINLAN exhibited a case of cerebral meningitis and abscess. He said it was taken from the body of a scrofulous, starved-looking young man, aged 23, who was admitted into St. Vincent's Hospital on November 23rd. He had for many months had an offensive purulent discharge from his right ear, and was suffering from the most agonising pain, radiating from the ear to the frontal, parietal, and occipital regions. His pulse and temperature were above normal, but he was quite clear in his mind, and had no convulsions or muscular stiffness. On the morning of November 25, about 8.30 A.M., he became suddenly stupid and heavy, and the right pupil became dilated and insensible to light, the left remaining normal. He gradually got comatose, and died at 2 P.M. A *post mortem* examination was made twenty hours after death by Mr. Coen, the house-surgeon. The dura mater was firmly attached to the upper part of the brain, the general surface of which was rather congested. On removing the brain a dark discoloration was perceived on the side of the right middle lobe, and on the back part of the cerebellum and on the medulla oblongata a large patch of recent meningitis with subarachnoid effusion. On opening the right ventricle is was found full of sero-purulent fluid, and on making a section of the right middle lobe a large abscess, full of offensive pus, was discovered, corresponding to the dark spot already mentioned. The petrous portion of the temporal bone was extensively diseased; and the cause of the sudden coma on the day of death was, no doubt, the bursting of the cerebral abscess into the right ventricle.—Dr. MACSWINEY said the pathological symptoms in the case were those of chronic purulent inflammation of the middle ear.—Dr. QUINLAN, in reply, said there was an opening into the petrous bone, from which matter was flowing. He probed it and found the bone quite diseased and disorganised, but he did not cut the bone out. There was the same smell from the pus that came out of the ear as from the pus that came out of the abscess.

The section then adjourned.

REVIEWS AND NOTICES.

PATHOLOGIE DES NÉPHRITES CHRONIQUES. Par le Docteur PAUL SNYERS. Bruxelles: A. Manceaux. 1886.

PATHOLOGY OF CHRONIC NEPHRITIS. By Dr. PAUL SNYERS. Brussels: A. Manceaux. 1886.

DR. SNYERS is assistant to Professor Masius at the University of Liège, and this monograph is a prize essay. It contains a very excellent summary of modern views on the pathology of Bright's disease, and, in addition, some original experiments and observations by the author. He deals not only with what we in English mean by pathology, but also with symptoms and treatment.

Our readers are aware that there has been of late years a reaction against the old and still accepted classification of the forms of Bright's disease into parenchymatous and interstitial nephritis. This reaction originated in Germany with Weigert, but has found supporters in this country, notably in Saundby, and later in Ralfe. Dr. Snyers is a complete follower of Weigert, asserting the fundamental identity of the pathological process in all forms of chronic nephritis. But he admits the existence of anatomical varieties, describing five: chronic hæmorrhagic nephritis; large white kidney; small pale granular kidney; mottled kidney; and contracted kidney.

Chronic hæmorrhagic nephritis is recognised by Weigert, but is said to be very rare, and chiefly met with among type-founders. To the naked eye it closely resembles the red kidney of acute nephritis; but under the microscope there is thickening of the capsules of the Malpighian bodies and inner coats of the vessels. Clinically, there is greater difference, the affection lasting from one to one and a half years; there is hypertrophy of the heart, with frequent œdema and retinal lesions. The urine is variable in quantity, contains much albumen, casts, and red and white blood-corpuscles. There is a second variety, more resembling the large white kidney, while its symptoms include many usually ascribed to the contracting kidney.

Dr. Snyers gives a brief description of this kidney in a case observed by him while at Leipzig. The large white kidney and the contracting kidney he describes on the well-known lines. The mottled kidney appears to be a contracted kidney which has undergone a recent acute or sub-acute intercurrent attack.

The accounts of the principal symptoms, and the theories held respecting them are generally good, but exception must be made to the section on the vascular theories of cardiac hypertrophy, in which the author does not state Dr. Johnson's view correctly, and ignores all that may be said in favour of obstruction in the capillaries.

In describing uræmia, he states that the temperature is as a rule elevated, a conclusion quite at variance with that of most authorities and with the facts, elevated temperature being the exception.

The section on treatment is very full, but not very original. The value of rest in bed is rated too high, as are the dangers of Vichy water, "where there is any threatening of dropsy." He does not make any new suggestions, except by drawing attention to the diuretic value of boracic acid, which has been used with some success by Immermann.

Monomanie Sans Délire: An Examination of the Irresistible Criminal Impulse Theory, By A. Wood Renton, M.A., LL.B., Barrister-at-Law. Edinburgh: T. and T. Clark. 1886.

This is a bound pamphlet of 76 pages octavo, of which 11 pages are blank. The price is stated to be 3s. 6d. In the remaining 63 pages, Mr. Renton denies the existence of moral insanity, and of irresistible impulses. The author does not seem to have any experience of insanity, but criticises and shows the inconsistencies of some French and English physicians, whom he must suppose to have more opportunities but less judgment. In our opinion it is very difficult to prove, in persons brought up in a civilised country, the complete absence of the moral sense without any trace of mental impairment. Nevertheless, we have many cases where sudden degeneracy of the moral tone is very marked, while at the same time the loss of intellectual power is slight.

In his criticism of irresistible impulses, Mr. Renton admits that they may be abnormally powerful, but not irresistible. This is a difficult position to hold. Take a case of exalted erotic feeling under the irritation of disease. Formerly let us suppose the sensual desires stood to the powers of restraint, that is, decency, conscience, and worldly prudence, as 5 to 10; now they are 9 to 10. Apparently Mr. Renton admits the possibility of such a supposition, yet he holds that the existence of a case in which they stood as 11 to 10, outweighing the powers of resistence, cannot be proved. Alienist physicians think that they have seen such cases; Mr. Renton holds that they are mistaken, and points out flaws and incoherences in their ways of describing their observations.

General Paralysis of the Insane. By Wm. Julius Mickle, M.D. Second Edition. Enlarged and Rewritten. London: H. K. Lewis. 1886.

Like most authors who come to a second edition, Dr. Mickle claims it for an improvement that his book is enlarged. In fact, it is twice as big as the first edition, filling 466 pages. Since the publication of the first edition, Dr. Mickle has been on the watch for every new paper on general paralysis in English, French, or German; thus his book, although somewhat overloaded with authorities, is most elaborate and complete. He has read them all, and he has mentioned them all. Dr. Mickle has one advantage of which he is not likely to be deprived. His is the only book in the English language which is at all up to our present knowledge of general paralysis, without question the most interesting disease on the list of our *Vesaniæ*.

This position Dr. Mickle has obtained by diligent observation and hard study. You have everything about general paralysis in the book,—symptoms, course, causation, pathology, prognosis, and treatment. Dr. Mickle is very sceptical about so-called recoveries. He is inclined to believe that they are either long remissions or the result of errors in diagnosis.

At the end there are forty-three pages in very small print, containing a record of cases. Dr. Mickle regards general paralysis as a specific process due to extreme mental strain, almost invariably commencing in the higher centres of the brain and the membranes. He has made some very close and prolonged observations to ascertain whether the lesions found after death compared with the symptoms, hallucinations, and motor spasms, confirmed the functions assigned to different areas or centres of the brain. The result on the whole does not give support to the views of Ferrier and others.

In looking over the pathological anatomy, we should have liked to have got from so competent an observer a decided appreciation of Dr. Tuczek's views that the essential lesion of general paralysis is an increasing atrophy, principally involving the nerve fibres of the cortex cerebri. Apparently, Dr. Mickle, though not unfavourable to this opinion, has not repeated Tuczek's observations so as to come to a serious conclusion. Dr. Mickle is most interesting and most instructive when, leaving his authorities, he gives us the result of his own inquiries and observations.

Elements of the Comparative Anatomy of Vertebrates. Adapted from the German of Robert Wiedersheim, Professor of Anatomy, etc., in the University of Freiburg-in-Baden. By W. Newton Parker, Professor of Biology in the University College of South Wales and Monmouthshire. With additions by the Author and Translator. London: Macmillan and Co.

Professor Newton Parker has rendered a service to students of science in English-speaking countries, by translating Professor Wiedersheim's *Grundriss der vergleichenden Anatomie der Wirbelthiere*. That work is what a manual of this kind ought to be, essentially comparative and anatomical, rather than zoological. The aim of a book on comparative anatomy is to trace entire living organisms in general, and special organs in particular, from the simpler to the more complicated forms. Hence epidermic appendages should be described with the view of showing their more general variations, in the forms of scales, feathers, scutes, hair, horn, and nails, and the writer must not diverge towards the pleasant paths of pure zoology, by dwelling too much on mere fantastic varieties of the same type of appendage, features only valuable—as far as science is concerned—for purposes of generic distinction. The same distinction should be followed in every other department of comparative anatomy. In these elements, after a brief introduction on the structural plan of the vertebrate body, the chapters respectively treat of the integument, skeleton, muscular system, electric organs, nervous system, and the organs of nutrition, respiration, circulation, and generation. The diagrams are large and exceedingly clear. In fact, this work is equally well adapted for study by the student or for reference by the anatomist.

The Hygiene of the Vocal Organs. A Practical Handbook for Singers and Speakers. By Morell Mackenzie, M.D. Lond. London: Macmillan and Co. 1886.

Dr. Morell Mackenzie's last book appeals to a certain section of the public, rather than to the medical profession, being a practical handbook for singers and speakers. But there are many points in the book of more purely medical interest. In the chapter on the voice, for instance, the writer gives his views on the subject of photography of the larynx. He is of opinion that the problem may now be considered solved by the photographs presented by Dr. French, at the International Medical Congress at Copenhagen in 1884. "It is questionable, however, whether the practical outcome of such persevering efforts is at all commensurate with the time and trouble which they must have cost."

In Chapter III, the author has much to say on the vexed subject of "registers." His own views are supported by elaborate observations on trained singers, details of which are given in an appendix. His main contention is, that the essential factor in chest production is the "long reed," whilst the essential factor in the head delivery is the "short reed." "The long reed and short reed mechanisms are the natural features of the vocal territory, all other divisions being as it were merely political."

The other chapters of the work deal with the training of the singing voice, the care of the formed voice, special hygiene for singers, the speaking voice and the training thereof. Much interest attaches to the author's observations on 500 choir boys, whom he examined with the view of ascertaining whether the voice was harsh or disagreeable during transition. He found that, contrary to the usual belief, in only 17 per cent. was the voice really "cracked."

The latter part of the book contains many practical hints, both for singers and speakers, and the whole work, as might be expected, shows evidence of large experience and extensive reading. Its style is smart and at times not devoid of cynicism.

Presentation.—Dr. H. E. Richardson, who has resigned the post of senior house-surgeon to the Birkenhead Borough Hospital, has been presented by the nurses and others connected with the institution with a handsome surgical case and other gifts, as an indication of the high esteem in which he was held in the hospital.

NOTES ON BOOKS.

The Light of Life. By J. J. KAIN. (London: Wyman and Sons)—One of the "Society" journals heads its review column—Books to read, and others. Mr. Kain's work belongs emphatically to the class of "others." The work leaves upon the mind merely the impression of a farrago of mediæval superstition, leavened by much self-conceit, and permeated by a spirit of furious hostility against all regular workers in the field of science, and especially against the members of the medical profession. The following passage is a fair specimen of Mr. Kain's literary style and scientific theories. "Man's structure is divisible into three distinct regions, in a similar manner to that of the Great Globe; the highest portion of man's structure (the head) represents the heavens; contained within the head are the eyes or orbs of light; the second division of his structure, extending to the diaphragm, is the allotted aerial region, containing within its space the whole aerial apparatus (lungs, etc.), in connection with atmospheric pressure, motive power, and chemical and consolidating agency, in relation to life; the third or lower division of man's structure represents the earth, in which decay of material for future structural purposes takes place; the stomach and intestines being the allotted portions for such purpose." On reading this passage, we turned instinctively to the title page, in order to ascertain if we had not inadvertently stumbled upon the product of an age when anatomy was under the ban of the Church, and physiology was yet unborn. Mr. Kain's work abounds in allusions to chemical and physical laws. His scientific attainments may be judged of from the fact that he seems much puzzled by the phenomenon of "perpetually snow-capped mountains lying beneath the power of the sun," and is moved to invent a bran-new theory for its explanation. Mr. Kain is very contemptuous of our leading scientific authorities, and vents many a gibe against revealed religion, but he reserves the full measure of his scorn for the medical profession, and appears to have a particular antipathy for the practice of vaccination. It would be waste of time to criticise further a work of this kind.

Massage as a Mode of Treatment. By WILLIAM MURRELL, M.D., F.R.C.P.Lond. (H. K. Lewis. 1886.)—Massage, a term which it is now customary to apply to a mode of treatment which has been in use since what may be called the pre-historic days of medicine, has again become fashionable, and consequently this method of treatment is in imminent danger of falling into disrepute. Attempts are made to shroud it in mystery, and to create an idea that only a select few are capable of applying it, and that in fact the *masseur* or *masseuse* is born and not made. Undoubtedly it is not given to everyone to be equally skilful in any art, but it is equally true in this particular instance that the majority of intelligent persons could acquire a very useful amount of skill in the practice of massage at the cost of a moderate amount of study and attention; such study and attention, under, if possible, the tuition of one already expert, are absolutely necessary, and this small volume from the pen of Dr. Murrell will be of service in instructing the public, to whom, rather than to the profession, it is addressed, as to the nature, advantages, and limitations of this mode of treatment.

Sketch-Book for Ophthalmoscopic Observations. By Drs. O. HAAB (Hofer) and BURGER (Zurich). (London: Trübner and Co. 1886.)—The importance of illustrating clinical notes with sketches of the visible abnormal conditions is generally recognised; perhaps nowhere is this more obvious than in the case of changes in the fundus oculi, since the prognosis will often depend upon the observation of minute changes, and the actual conditions can be seen by only a few. To make, however, a coloured sketch of the fundus not only requires considerable artistic skill, but the mere mechanical labour involved consumes an amount of time that seems out of proportion to the result. The book before us is an attempt to minimise these difficulties. It consists of twenty-four sheets of cardboard, some simply coloured to resemble the normal fundus reflex; while in others the disc, or discs and chief vessels, are delineated, the pigment is laid on in such a way that, by rubbing it with a style provided for the purpose, all shades, from yellowish red to pure white, can be produced. Blood-vessels and hæmorrhages can be depicted by means of a coloured pencil, and pigment with ink or pencil according to its depth. We have convinced ourselves by experiment that it is perfectly easy to produce in a few minutes a very accurate representation of such conditions as optic neuritis, opaque nerve fibres, albuminuric retinitis, and so on. The glistening white spots in the latter conditions can be well represented by the pigment being removed with the point of a penknife, and the woolly-looking patches by rubbing with the style. Coloured sketches thus taken will prove most valuable clinical records, and, in point both of accuracy and of mere artistic effect, can at any rate be made superior to the coloured illustrations of the fundus that disfigure so many of the modern text-books. There is one fault which might, probably, be easily corrected; when white has been produced by the removal of all the pigment, the coloured pencil will not mark easily, therefore it is difficult to show vessels crossing a white area.

The Normal and Pathological Histology of the Eye. By C. F. POLLOCK, M.D. (Churchill's.)—This handy volume is really an atlas illustrating a collection of microscopical sections; for, although the letter-press occupies about half the volume, it contains, besides the description to the plates, little that is not, as admitted by the author, compiled from other sources. Dr. Pollock is certainly to be congratulated upon his collection, and the use he has made of it. The illustrations are for the most part excellent, and bear evidence of being unusually true to nature, the temptation to make them show more than the actual specimens having been successfully resisted. The book will prove exceedingly valuable to all who are interested in the anatomy and pathology of the eye.

Pharmacopœia of the London Lock Hospital. (London: Adlard. 1886.)—A new edition of this small but invaluable handbook has been wanted for some time past in order to bring it up to date. This has been done, and we are now in possession of a series of formulæ which have been sanctioned by the exceptional experience which the Lock Hospital of the metropolis must necessarily afford. Medical men whose practice comprises many cases of venereal affections will doubtless find these formulæ a great assistance. It is rather surprising that only one formula should be given for the treatment of syphilis by hypodermic injection. The formula for "Ricord's paste," although used at the hospital, does not appear in the list of remedies.

From Messrs. JOHN SMITH and Co., 52, Long Acre, we have received a copy of the *Physicians and Surgeons' Visiting List* for 1887. This is the forty-first year of publication of this extremely handy pocket companion for the general practitioner. In addition to being conveniently ruled and admirably arranged, it contains a large amount of useful information, such as a list of fees legally claimable by medical men, tables showing the expectation of life at various rates of mortality, average heights and weights of man in infancy, adolescence and adult age, equivalents of different thermometric scales, a pharmacopœial companion brought up to date in accordance with the present edition of the *British Pharmacopœia*, with a table of the principal poisons and their antidotes.

Whitaker's Almanack, for 1887, which has been entirely recast and very greatly enlarged, and now extends to no less than 632 closely printed pages, is a manual of information and condensation. Many fresh subjects of great public interest have been incorporated. The colonial section has been thoroughly revised and extended. In addition to the usual information of purely medical interest, we note that there has been added a list of medical fees, together with the Army and Navy medical estimates, etc.

Annual Report of the Sanitary Commissioner for Bengal (1885).—Deputy Surgeon-General Liddendale, M.D., reports that the year 1885 was an unhealthy one both for cholera and fever. The deaths in the province from all causes amounted to 1,504,745; cholera caused 173,706; small-pox 9,806; fevers, 1,042,142; bowel complaints, 63,808; injury, 28,956; other causes, 186,209. The Sanitary Commissioner is of opinion that the increase in the number of deaths in 1885 is not solely due to the more fatal prevalence of diseases, but that a good portion of it, specially under the head of fever, has resulted from improvement in registration; an inference widely supported by local opinion—among a total population of 66,163,884 within the area in which the registration of deaths was carried on, the ratio of deaths to population was 22.74 per mille, against 20.83 per mille in 1884. A characteristic feature of the year was the heavy inundations caused by the abnormal rainfall in different parts of the province; the registered average rainfall was 70.24 inches against 66.81 inches, the average of previous years. It is estimated that in the cyclone and storm-wave in Orissa alone, 15,000 people perished. These deaths are not recorded in this year's death-rolls, owing to the fact that the native officials, whose duty it was to keep the record, perished with the inhabitants. The death-rate among European seamen frequenting the port of Calcutta, has always been high, a fact due in a great measure to their reckless habits, and their careless ex

posure to climatic influences. In the year under notice, the total number of European seamen who entered the port amounted to 23,573, of whom 21,449 were new arrivals, the average daily number present was 1,693. Out of the total number, 1,976 were admitted into hospital for all diseases, of whom 40 died; a death-rate of 23.62 per 1,000 of average strength; deaths out of hospital and from drowning raised the mortality to 30.71 per 1,000. The province is divided into 45 districts; out of these, 24 are reported to have enjoyed fairly good health, due chiefly to absence of epidemic diseases, 21 were markedly unhealthy, chiefly from the excessive prevalence of cholera, or fever, or both, and in some cases of bowel-complaints. At Darjilong, the head-quarters of the tea cultivation, there was an abnormally heavy rainfall, resulting in the healthiest year known in the district for a decade. It is satisfactory to note that in the district of Balasore the magistrate is able to report that a great improvement has taken place in the health of the people, due to increasing prosperity from a long succession of good harvests and high prices. The people are improving their houses, buying extra furniture, and using better food, a superior style of living, which acted beneficially on the public health. The inundations to which reference has been made, were not an unmixed evil, they destroyed and damaged much agricultural produce and caused a heavy loss of cattle; on the other hand they replenished the tanks, thus affording a supply of good and pure water, carried off accumulated filth from villages, and deposited a fertilising silt on the fields.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS.
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

NEW VULCANITE PROBE FOR INTRA-UTERINE MEDICATION.

THE gynæcologist will find this probe an improvement on the old form of Playfair's, as it will carry sufficient liquid caustic for application to the cervical canal without the necessity for the cotton-wool, which was always troublesome to apply properly, and still more troublesome to remove. This probe was designed for use after my cervical curette had been applied, which instrument removes the tenacious secretion thoroughly from the cervical canal, and leaves it in a condition to derive the greatest benefit from the caustic applications. It also possesses the advantage of cleanliness (which in these antiseptic days is of no small importance), can be used with any acid, and utilised as an ointment-carrier at the will of the operator. The probe can be bent to any angle by being dipped in boiling water for a few moments previously. The makers are Messrs. Fannin and Co., Grafton Street, Dublin.



A. DUKE, M.K.Q.C.P.I.

BEQUESTS AND DONATIONS.—Mr. Henry Boddington, of Silverdale and of Strangeways, Lancashire, brewer, bequeathed £1,000 to the Victoria University, £1,000 to the Manchester Royal Infirmary and Dispensary, £250 to St. Mary's Hospital and Dispensary, Quay St., Manchester, £250 to the Salford and Pendleton Royal Hospital and Dispensary, and £150 to the Stockport Infirmary.—"A. F. F." has given £1,000 to the Hospital for Sick Children.—The Great Northern Central Hospital has received £236 8s., the proceeds of sale of work at Highbury, and £30 from Mr. Crosby Lockwood, towards the new building fund.—The Northampton General Infirmary has received £200 (less duty) under the will of the Rev. Henry Robinson, of Hazelbeach.—Mrs. T. E. Beamont, of Kenwood Park, bequeathed £100 to the Sheffield General Infirmary, and £100 to the Sheffield Public Hospital.

SWISS ALCOHOL LAW.—The new Swiss alcohol law conferring the monopoly of the production of alcohol on the State, contains a provision that no substances shall be used in distilleries which are not recognised as wholesome; from this category the potato is excluded.

THE annual report of the Sheffield General Infirmary, states that the expenditure for the year exceeded the income by £335 19s.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 become due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The Issue of the BRITISH MEDICAL JOURNAL now amounts to

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which will be found, if tested, to show AN EXCESS of considerably more than a QUARTER OF A MILLION Copies annually over that of any other Medical Journal in Great Britain.

The British Medical Journal.

SATURDAY, JANUARY 1st, 1887.

THE UNIVERSITY OF WESTMINSTER.

THE students of the metropolitan medical schools, and those of the provincial medical schools which are not yet directly connected with the University faculties, will see with pleasure that the prospect which we have so long held before them, of the creation of a medical faculty in London which should give them due facilities for acquiring a degree in medicine under equitable and reasonable conditions, has rapidly advanced into the sphere of practical politics. It is now, alas, many years since we entered on this campaign, and at first the crusade was stigmatised as Quixotic, and sneered at as Utopian; for formidable vested interests were arrayed against it on all sides, and existing divisions in the councils of medical magnates were such, that there seemed little probability of arriving at a speedy solution of this really urgent question. Many things, however, have combined to bring about an approximate solution of the problem: among these must be reckoned as first and foremost—and as that which we look upon as a main factor in advancing any reform, however radical or displeasing to the few—the inherent justice of the principle involved. Whatever may be the interests, however strong the prejudices or predilections arrayed against the advance of any great popular principle, or any demand based upon the solid foundations of justice, that demand must, we are persuaded, in the end be granted, and those interests must yield. This is a cardinal point, which must never be lost sight of in urging any reform. It is potent to give courage to those who have embarked in any great undertaking, and if rightly grasped, it is equally potent in shaping the ultimate outlines of the scheme, and in giving a permanently useful and enduring form to the resulting creation. We insist now upon this not as a mere philosophical dictum or a vague declaration of faith, but because we desire to emphasize the view that unless great principles be firmly grasped in their application to the present plan for constituting a new medical faculty for London, and for satisfying the just claims of English and metropolitan students, no permanent or thoroughly satisfactory result will be achieved. The

Colleges of Surgeons and Physicians have been slow to occupy themselves with this great question. Owing, however, largely we believe to the initiative of Sir William Jenner, to whom warm thanks are due for the resolute energy with which he has pushed forward the question, the two Colleges have now resolved earnestly to set themselves to provide such a University, and for that the thanks no less of the public than of the profession are due to them. Their sudden energy may be suspicious, but the medical schools of London have suffered greatly in recent years, and would be likely to suffer much more in the future from the want of due facilities for graduation by the students in the metropolitan, and some of the provincial, schools of England.

That potent influences are now at work to secure for them this great desideratum is a source of unmixed congratulation, and we by no means undervalue the debt of gratitude which is due to Jenner, Quain, the late Dr. Moxon, Paget, Macnamara, Durham, and others, who in their respective Colleges have moved so actively in this matter. But we may frankly avow that we regard some of the aspects of the movement with mixed feelings.

We are the avowed enemies of monopolies. We have no sympathy with collegiate exclusiveness, or with the permanent maintenance of exclusively privileged classes in the Colleges. In medicine, as in the world, privilege is too often used to outweigh merit, and indelible distinctions impressed upon men in the earliest stages of their life are far from being in the interests of learning or of justice. No system of education, no system of graduation, and no system of hospital appointment can be for the public benefit, which is specially devised in the interests of any one limited class, or which seeks to exclude the great body of the profession from such subsequent participation in office and administration as character, talent, and high achievement ought always justly to obtain. Let us apply these considerations to the hypothetical constitution of the new University.

As the resolution is framed, the Council of the College of Surgeons and the Council of the College of Physicians appear to be about to propose to the Privy Council to recommend to the Crown that a University shall be constituted out of the two Colleges. If this proposition were what it seemed on the face of it to be, it would not be altogether free from objection, for the two Colleges do not represent the whole medical interests of London, nor the whole graduating power of London: and any settlement which should exclude from the possibility of graduation in the new University licentiates of the Apothecaries' Society, as well as the licentiates of the two Colleges, would, in our opinion, be unjust and impolitic. Why, it may fairly be asked, should the sole avenue to the new University be through the doors of the College of Surgeons and the College of Physicians of London, when there exists in London a Corporation such as the Apothecaries' Society, which has for more than half a century fulfilled the main work of qualifying and examining the medical practitioners of England, and which possesses by Act of Parliament privileges of the highest importance to the welfare of the profession and the public?

The Apothecaries' Society will, in our opinion, be justified in claiming that its licentiates, who will have passed through the same curriculum, under the same teachers, and for the same length of time as other candidates, and who have been tested by an examination sanctioned by the Medical Council, and in all respects equivalent to that of the two colleges, shall be admitted to the examinations of the new University on the same footing as licentiates of the two Colleges. Nor will the practitioners of England be satisfied to see the Apothecaries' Society of England extinguished by this side-blow, after the Privy Council has expressly declared that it does not intend that that corporation shall be extinguished. If the Apothecaries' Society is—as we doubt not it will be—supported by the profession at large, and if it states its case forcibly and ably before the Privy Council, and, if necessary, before Parliament—we do not doubt that the Colleges will see the propriety of making some arrangement by which that corporation may be united with them, in such a way as to avoid that division, and that invidious distinction in qualifications for general practice to which the Medical Act was intended to put an end. Sir Andrew Clark gave expression to a plausible sentiment, and one which is often repeated, when he said, in the course of his reported speech at the Comitia, that he could see no harm in the creation of a new class of general practitioners of inferior qualification, intended to practice amongst the poor. Such a qualification, he said, should be open to men of small means and secondary education, and they would be a useful and convenient class of persons. For our part, we desire to see no helots in the profession. We desire to see no class stamped, from their birth into the profession, with the odious stamp of inferiority, which is to adhere to them throughout life. In what sense are the licentiates of the Apothecaries' Society to be held inferior to the licentiates of the other Colleges? By what right is it assumed that they are to be men of less means or less education? The very essence of the Medical Act is that the minimum qualification shall be uniform and similar for all. It is fair, and we believe it would be true to assume that the licence of the Apothecaries' Society will not be in any way inferior to the licence of the two Colleges.

It seems to us that the just and generous principle to observe in such cases as this is, that those who take the inferior qualification, as Sir Andrew Clark has stamped it, whether in the Colleges or in the Apothecaries' Society—by which he means the first qualification—should alike be at liberty to go on to the second and higher qualification of M.D. What justice is there in providing beforehand that men whose limited means may prevent them from taking up the more costly subsequent qualification at the outset should be for ever debarred from doing so? Why should it not be as open to the licentiates of the Apothecaries' Society, who choose that avenue into general practice, to take the M.D. of the University of Westminster, as to the licentiates of the Colleges? We object to the creation of a mint which is to stamp men from the outset with an indelible mark, as of inferior coinage, for the use of the poor. If we mistake not, there are not wanting examples in the very highest ranks of the College of Physicians of men who have passed through the Apothecaries' Society on their way to higher positions, and the profession will be right to demand that that avenue be left open. It is not in the spirit of the time, nor is it in accordance with those great principles of justice and generosity which should mark the conduct of any government or of any profession in creating any new qualification, that such barriers should be set up, or that any two colleges should in their own interests demand a monopoly, and establish a toll-gate through which everyone must pass. That is one point of view from which we regard the proposed scheme for the creation of a new Faculty of Medicine in London.

But there are other demands which we think can reasonably be urged, and cannot properly be left out of sight in the constitution of this faculty. If we venture to lay it down as a principle which it

would be alike unstatesmanlike and unjust to leave out of sight, that the constitution of such a university must be representative, let us look for a moment at the bodies which are proposing to constitute it. We have, first of all, the body of Fellows of the College of Physicians. How are they elected, and whom and what do they represent? They are a distinguished body of hospital physicians, self-elected, having no touch with, and no mandate from, the profession. They consist solely of one class, and that a very small and highly privileged class. They are eminently a close body, not having a representative constitution or mode of election.

In the College of Surgeons, the case is not less strong, and, from some points of view, still stronger. The Council persists in denying to its 17,000 members the rights of representation to which they are certainly as a matter of equity, and probably also in law, entitled. At this moment, an overwhelming expression of public opinion is known to exist in favour of granting to the Members that share in the election of the Council and in the management of the College to which they are obviously entitled by the legal history of the body, as well as by their education and their position as members of its commonalty. The new University, if the claim for it is to meet with the sympathy and support of the profession, must be far otherwise constituted. To the two Colleges, reformed or unreformed, may properly be conceded a considerable share in the constitution of the governing body. But the constitution, if it begins, must certainly not end there. It must consist of a Senate and a Convocation. On that senate must be represented the Crown, the Colleges, and the profession; and the Convocation must include all the graduates of the new university, and to them must be conceded the right of electing a fair proportion of the Senate. Such a constitution will give strength and solidity to the university. It will probably be further claimed that the schools or teaching bodies in London shall have recognised representatives as such in the university. We think this a just claim, but we are less concerned about it because those chools are all fully represented in the existing Councils of the College of Physicians and College of Surgeons, to whom undoubtedly a lion's share will be given in the constitution of the Senate of the new university. With such a constitution, the university will enter on its career with every prospect of professional sympathy, and of assured success; if one less liberal were proposed, its establishment would stand a fair chance of being considerably deferred by the professional opposition which would arise, and by the sympathy with which Parliament, Privy Council, and the Crown ought to, and we believe will, regard any proposals of a more narrow and monopolist character.

THE COLLEGE OF SURGEONS AND THE WILSON LEGACY.

At the meeting of the Council of the College of Surgeons on December 9th, a report was read from the committee on the practicability of adding a new wing to the Museum of the College. It was recommended in the report that, under the present altered circumstances of the College, it was desirable that the powers of the committee be enlarged, with a view to the more perfect extension of the Museum, the extension of the Library, the addition of workrooms, the consideration of such other improvements as may suggest themselves to the committee, and the consideration of the increase of the staff which the foregoing additions would necessitate. This report was read, approved, adopted, and ordered to be entered on the minutes. In our report of the meeting, we gave a brief description of the nature of the proposed extension of the College buildings, without further comment.

The Royal College of Surgeons lies on the south side of Lincoln's Inn Fields. Its somewhat imposing facade and portico are well known. A brief sketch of its interior will make a description of the proposed changes more intelligible. The doorway opens into the hall, which leads on the right to the Conservator's office and the western museum, on the left to the Secretary's offices. Straight on, it leads to a large inner hall, far better known to past and present students by another sadder but less dignified name, implying that it is the room of fear or dread—for the reception of candidates on examination-days. The inner hall has the library-stairs and the theatre on the left, a yard separating it from the middle museum and the lower committee-room at the back, whilst a dead wall divides it on the right from the western museum. That part of the building, beginning at its north end close to the Conservator's office, runs yet further beyond the right of the yard, as far as the whole breadth of the middle museum; and from the left of the latter runs the eastern museum. The back of the south end of the western museum, and one side of the eastern museum, are in Portugal Street, facing King's College Hospital. The three museum buildings all communicate, and each has two complete tiers of galleries. The Library and the Council Room occupy the first floor, the former looking into Lincoln's Inn Fields, and communicating at its western end, through an apartment for the use of the Librarian, with the lower gallery of the western museum. Above the Library are the workrooms, which are reached by a long and steep flight of steps, beginning to the left of the entrance to the western museum.

While the eastern museum stretches some distance along Portugal Street, there is no corresponding part of the College buildings in front, the space being occupied by the Conservator's house. If the proposed alterations be carried out, the library will be extended over this space, and a new Conservator's dwelling constructed within the buildings. The most important improvement, however, will be on the opposite side. A new museum building will be erected to the right of the Conservator's office and the western museum. It will be divided into two large compartments, and a smaller division in front, to be diverted to some purpose not yet explained; probably for lodging the collection of surgical instruments, possibly for the exhibition of casts and pathological drawings. Rooms for the Assistant Conservator are to be built at the west extremity of the new museum.

The erection of new buildings and the maintenance of new museum-rooms costs money. In the Journal of November 13th, page 934, we noted that out of the sum of about £6,000 which the College annually gained in fees, a little more than half had been, for some time, annually expended in the Museum and Library. There can be no doubt that the Council wish to absorb that half for examination expenses. Putting two and two together then, it is clear that the proposed extensions are to be paid for out of the Erasmus Wilson Legacy.

Let the Fellows and Members exert their utmost vigilance—not necessarily in frustrating the extension scheme, but rather in duly considering how far it may prove beneficial to science, and how far it may involve needless waste of money. We observed in November that the Museum may best be improved by other means than mere physical enlargement. The best manner of employing the money would

be the adoption of at least the greater part of the proposed new Museum buildings to the purposes of a pathological institute ; that is to say, the workrooms (now far too small and most inconveniently placed at a tedious height above the other buildings) rather than the Museum need extension. We can trust the present able scientific staff, Mr. Stewart, the Conservator, Mr. Eve, the Pathological Curator, and Dr. Garson, the Anatomical Assistant, as men who can give the best skilled advice from within. Criticism from without is, however, equally needed. We hear of a big sitting statue to be set up in front of each of the new wings. The smaller or front compartment of the new Museum may be devoted to an exhibition of casts and drawings, and two very able members of Council are understood to be strongly in favour of this proposition. Nevertheless, such a collection would be of questionable value, and would rapidly degenerate—not only under an inefficient Conservator, but, with equal certainty, under any officer who did not believe in its value. Pathological drawings rapidly deteriorate in worth ; in a few years men see pathological appearances with other eyes, and put no trust in old pictures. Lastly, not only is mere physical enlargement of the buildings insufficient, but simple numerical increase of specimens may be highly unadvisable. This is especially the case with the comparative anatomy series. In short, the recommendations of the Building Committee need urgent consideration, and deserves, we believe, but qualified approval. We are induced to think that the Council would do well in so serious a matter, affecting so largely the future of the College, to report to the Fellows, and take a discussion on the matter before proceeding to a final decision.

PROFESSOR VIRCHOW ON CHARCOT'S JOINT-DISEASE.

At the meeting of the Berlin Medical Society, held on November 17th, a most interesting discussion took place on the joint-affection peculiar, as is generally assumed, to tabes dorsalis. The subject elicited a speech, which amounted to an address, from Professor Virchow. The debate was opened by Herr Rotter, who began with these questions : 1. Is the joint-disease (occasionally) found in tabetic subjects a special arthropathy different from all other joint-affections ? 2. Is this joint-affection only indirectly connected with the tabes, or is there an intimate causal connection subsisting between them ?

Clinically considered, this (Charcot's) joint-disease, said Dr. Rotter, was peculiar in the following respects : Its appearance in a definite stage of the tabetic disease, the so-called prodromal stage ; its sudden onset ; the absence of inflammatory signs ; the analgesia of the deep parts, especially of the bones ; the peculiar swelling of the soft parts ; and, lastly, the rapid destruction of the joint.

Pathologically, it differed from arthritis deformans, inasmuch as ulceration of the intra-articular structures was enormously in excess of new growth, while the reverse was the case in the latter disease, especially as regards extra-articular bony growth. But this does not necessarily constitute a specific difference, for many authors refer the peculiar character of the tabetic joint-disease to analgesia of the bones, and the want of regulation in the loads they bear, the result being increased liability to injury. Others, again, consider the disease to be a special nervous affection, because, in the first place, it usually precedes all ataxic phenomena ; secondly, the process may occur in the upper limbs, which have no abnormal weight to bear ; and, lastly, it may attack bedridden people. A specific joint-disease, from direct nervous influence, is here assumed to exist, the affected bones being supposed to have an abnormal liability to fracture and lessened resisting capacity, and the bony alteration being strictly limited to circumscribed parts. This liability to fracture is assumed upon the following grounds : 1. Intra-capsular spontaneous fractures are not seldom found in this disease (the diaphysis being in this case affected, instead of the epiphysis) ; 2. Microscopical and chemical examination have revealed corresponding changes in the bones ; microscopically, a rarefaction commencing centrally, and advancing to the periphery ; and, chemically, a decided lessening of phosphorus and calcium carbonate, and an increase of fat. These latter changes are considered primary, and due to special nervous influence, and not merely secondary to the joint-disease. Other joint-diseases in tabetic subjects run their usual course.

Such is the case ably presented by Herr Rotter on behalf of a specific arthropathy in tabetic people. Virchow opposed this view. There was no doubt at all in his mind that the usual causes of joint-affection—mechanical and thermal causes—sufficed to explain the disease. He could not understand how a nervous (trophic) influence, starting from a diseased spinal cord, could be so entirely limited to a single joint. As to the early appearance of the joint-disease, that was both difficult to prove, and also a suspicious statement. Some cases—notably one of hip-joint disease, as to which he had differed in opinion from Westphal—were doubtless due to congenital luxation, or luxation soon after birth. Again, in some cases, disease of the knee-joint followed upon fracture of the femur in the lower third. Others, said to be tabetic, were plainly syphilitic. Indeed, a large proportion of cases assumed to be tabetic had been proved to be due to syphilis. But lastly, there was no doubt that arthritis deformans was the disease to be kept the most in mind. Even the advocates for a tabetic arthropathy (Virchow objected to the word "tabeticus" as being bad Latin ; "tabicus" was a little better, but not much ; he himself had used the expression "arthropathia tabidorum," as we speak of "eclampsia gravidarum") allowed that the process was at first one of proliferation, to which a regressive stage (of loss) succeeded. The only peculiarity lay in the quicker course of affairs, and the more startling results produced.

THE DEFICIENCIES OF HOSPITAL EDUCATION.

The prescribing druggist and the unqualified assistant are two individuals who are constantly occupying the attention of the profession. This fact is abundantly testified by the large number of letters in our correspondence columns, concerning the evil which they represent. The public, also, are reminded of the evil by communications of a different kind, familiar in the pages of daily papers. Recently we noted the great protection which the Apothecaries' Act afforded to th public and the profession against the class of prescribing druggists. Every advantage will be gained by allowing the Society of Apothecaries a share in the general examination together with the Colleges. Hospital teachers must not forget that the Society in question not only represents an integral part of some of the great interests of the profession, but is also associated with certain scientific or practical subjects, as important to medical students as a knowledge of medicine and surgery. The hospital teacher is ever prone to forget this fact. He has, as a rule, never been a general practitioner ; yet the great majority of his pupils will belong to that class. He puts his trust entirely in science, major surgery, and what may be termed major medicine, or more

explicitly, the diagnosis and treatment of the more definite disorders which afflict humanity. Above all, in spite of himself, he is compelled to train his men, not so much for practice as for passing examinations. The duties which he performs are important and necessary, and are generally well done. A good scientific basis of medical education is indispensable to the student. Skill in the treatment of the more serious diseases, and readiness in the diagnosis of rare affections, are qualities of great value. The future practitioner, however, will require in addition knowledge and faculties of another kind. In this respect the student can learn little from a hospital teacher. Tact, delicacy of perception, and the power of winning the patient's confidence, abating his fears, comforting him in pain, and, at the same time, keeping clear of his prejudices, are things that cannot, as a rule, be acquired at a hospital. The class of patients who seek relief at a hospital generally like to hear the teacher giving a demonstration on their complaints to a respectful circle of students. The patient only expects what he encounters, and is often aggrieved if less time be spent on him than was bestowed upon his predecessor. A private patient, on the other hand, pays for privacy, amongst other things, and would most certainly be offended if his practitioner behaved to him as though he were a hospital out-patient. Yet the newly qualified doctor will naturally so behave if he has learnt his profession solely within the walls of a hospital.

Again, hospital diseases are, as a rule, of a far more definite type than the majority of cases seen in any class of society outside. Hence the teacher must imply that diseases are, as a rule, much more definite, and therefore easier to diagnose, at least, than the young doctor will find to be the case when thrown on his own resources. Effects of excessive tea-drinking, coryza, and other common ailments for which the private patient so often sends for the doctor, are rarely seen in hospitals, and still more rarely made the subject of instruction. The young practitioner, to his dismay, soon finds that he is at a loss how to manage these ailments for which he is more often consulted than for aneurysms or myxœdema. The best remedy for this evil, by the way, has been often suggested in the JOURNAL. We refer, of course, to the utilisation of workhouse infirmaries. Lastly, the hospital teacher has seldom good opportunities of instructing his pupils in the important art of prescribing. For many reasons, the mixtures kept ready-made in hospital dispensaries are not such as are usually prescribed in private practice. Ready-made mixtures are simply written down on head-boards by house-physicians and clinical clerks; they cannot be said to prescribe them, except in a purely technical sense. The use of new drugs is seldom well-taught in hospitals. Our readers may note how our records of new remedies, such as gelseminum, urethan, paraldehyde or cascara sagrada, are derived largely from the experience of enlightened general practitioners rather than from hospital reports.

The necessity for teachers to consider the requirements of examiners selected from the Society of Apothecaries to serve on a conjoint board, will serve greatly to counteract the evils to which we have referred; for most assuredly such examiners will demand from candidates a very fair knowledge of drugs, of the right way to prescribe them, and of their action in the milder, as well as in the more severe, diseases which the practitioner has to treat. Another important advantage which will be derived from improvements in medical education in the direction above indicated, will be the certain abatement, to a great extent, of the evil of unqualified assistants. Many correspondents have explained not only why such persons exist, but also why they often flourish. The public cannot judge of a man's scientific education, nor do they understand qualifications. The unqualified assistant, unfortunately, knows what the public does understand, and that knowledge is often wanting in the young practitioner. The unqualified assistant knows his patient's prejudices, understands what demeanour he is expected to assume by the bedside, and is conversant with nice prescriptions. In this last accomplishment, the prescribing druggist is equally versed, and therefore an equally dangerous opponent to the inexperienced practitioner, who does not know how to make his prescriptions as agreeable to the taste as possible. No wonder, then, that the practitioner is not so popular as his rivals. The art of making a prescription palatable is, we must observe, a duty, for it seriously affects the patient's comfort.

From what we have said, it may be assumed that hospital teachers, more than any other persons, must bear in mind the evils of prescribing druggists and unqualified assistants, and remember that the main source of those evils lies in certain defects of medical education which they are in a position to remedy, at least to a great extent. The profession in general must also remember that a yet more important check lies in a due admission of the just claims of the Society of Apothecaries to a share in the conjoint examination board.

DR. ALFRED MEADOWS has been elected an honorary member of the Washington Obstetrical and Gynæcological Society.

THE parish of Calverley, Yorkshire, has had during the past quarter the remarkably low death-rate of 6.1 per 1,000 per annum. The rate of mortality at Calverley has been exceptionally low for some time.

A NEW periodical makes its first appeal to the public this day. It bears the title of *The Journal of Laryngology and Rhinology*, and is designed to be an analytical record of current literature relating to the throat and nose. It is edited by Drs. Morell Mackenzie and R. Norris Wolfenden, with the co-operation of correspondents in Ireland, Scotland, France, Italy, Belgium, Holland, Germany, Denmark, and Spain. As there is no journal of this character, and confined to the same field, published in the English language, the new venture may claim to occupy ground not yet entirely covered.

THE metropolitan police order for the muzzling of dogs, which came into force on December 10th, 1885, was last week withdrawn. That it has been extremely beneficial in its operation is shown by the fact that whereas in the first week of its enforcement there were recorded 46 cases of rabies and 1 death; in January the number of cases fell to 27, and 1 death; in February there were 14 cases and no deaths. The number of rabid dogs found in the streets since this order has been in force have also sensibly diminished. In July the number was 16, in August 13, September 9, October 4, and in November about 12. During 1885, there were no fewer than 373 cases of rabies reported to the metropolitan police, and 26 deaths occurred in London alone.

THE VACANCY AT ST. BARTHOLOMEW'S HOSPITAL.

IT is reported that the competition for the appointment of Assistant Physician to St. Bartholomew's Hospital, rendered vacant by the resignation of Dr. Wickham Legg, will be very active. No less than twelve candidates may appear in the field: amongst them will be Drs. Vincent Harris, Samuel West, Percy Kidd, J. A. Ormerod, W. E. Steavenson, S. H. Habershon, and A. E. Garrod. All these gentlemen will, under the antiquated and vicious system which still prevails

at St. Bartholomew's Hospital, be compelled to make an individual tedious and costly canvass of the whole body of governors. Few of the governors, of course, either have the knowledge or the desire to weigh and discriminate the respective claims and capacities of the candidates.

THE PASTEUR INSTITUTE.

THE Paris Municipal Council have agreed to M. Pasteur's application for a 99 years' lease of 2,500 mètres of ground adjoining the site already granted for his institute. The ground rent is fixed at four francs per mètre.

OLEO-MARGARINE.

THE French Chamber of Deputies has adopted a measure prohibiting offering for sale, importing, or exporting oleo-margarine or any substance bearing the name of margarine, intended as a substitute for butter. The adulteration of butter with margarine, grease, oil, or any other substance whatever, is also forbidden.

CREMATION.

ON December 24th, at the Woking Crematory, the body of a gentleman, aged 58, was cremated; his death was due to disease of the brain, as was verified at a necropsy performed at his residence in London. The cremation was attended by two relatives. The body was burnt in a simple shroud, without shell, and the ashes, which weighed 4lbs. 10ozs., were removed by the relatives and interred in Highgate Cemetery the same day. This makes the thirteenth cremation which has taken place at the Woking Crematory.

DRAINAGE AND SEWERAGE OF RICHMOND.

THE Local Government Board has acceded to the application of the vestry of the parish of Richmond and the rural sanitary authority of the Richmond Union to borrow £100,000 for the execution of a joint scheme of sewerage and sewage disposal for the parish and rural district which includes Richmond, Mortlake, Barnes, Kew, and Petersham. A term of fifty years is to be allowed for the repayment of as much of the amount as is required for the purchase of land, and thirty years for the repayment of the remainder.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE library of the College will be closed on Tuesday, Wednesday, Thursday, and Friday, the 4th, 5th, 6th, and 7th of January, and on Friday the 14th of January, for the purposes of the examinations of the Examining Board in England, and the primary and pass examinations for the diploma of Member of the College. We may hope that these will be the last occasions on which the library will be closed for examination purposes, as the new Examination Hall is expected to be ready by the end of March.

THE RESULTS OF SANITATION IN NEW YORK.

A RIGID enforcement of the sanitary and building laws is having a salutary effect in the mitigation of the evils of tenement-house life in New York. During the last five years there has been a marked decrease in the city death-rate, which is mainly attributable to the increase of cleanliness and comfort in the dwellings of the poor. In 1881 the death-rate was 31.08 in every 1,000 inhabitants, in 1884 it was 25.82, in 1885 it was 25.53, while this year it is expected to be lower than the last. The deaths from contagious diseases show even more clearly the effect of tenement-house reform. It is believed that the general decrease in the deaths from contagious diseases can be accounted for only by the improved sanitary condition of the tenement-houses.

TEMPERANCE WORK IN HOSPITALS.

OF the much good work being done in the promotion of temperance by the Church of England Temperance Society and its numerous branches, that of the St. George the Martyr Temperance Society, Holborn, in its efforts to extend the operations of this Society in hospitals, is particularly deserving of notice. Two years ago a branch of this Society was established in the Hospital for Sick Children at Great Ormond Street, and at the present time we are informed that forty-six out of the total nursing staff, numbering fifty-two, are members of this Society. A meeting was recently held in the out-patient department, which was attended by the hospital nurses and staff, at which the chairman announced that he had received letters in favour of temperance work in hospitals from the matrons of St. Bartholomew's Hospital, the Middlesex Hospital, and the London Homœopathic Hospital, who were unable to attend. Dr. Thomas Barlow expressed his hearty sympathy with the work.

THE BRIGHTON MEETING.

A MEETING of the contributors to the Local Expenses Fund for the Brighton meeting of the British Medical Association in August, 1886, was held at the Board Room of the Brighton, Hove, and Preston Dispensary on Wednesday, December 22nd, when the Mayor of Brighton was presented with a handsomely engraved silver tea-tray in acknowledgment of his generous and valuable aid in promoting the success of the annual meeting. It is one note of the brilliant success with which this meeting was organised and carried out.

ACCIDENTAL INOCULATION OF ANTHRAX.

A CASE of a healthy farm-labourer contracting anthrax from a bull affected with the disease has recently occurred in Shropshire. It appears that, on November 25th, this man was required to slaughter a bull that had been taken suddenly ill, and was apparently in a dying condition; during the operation, his bare arm became smeared with the animal's blood. On December 2nd, a small "boil" appeared on the arm. Other similar lesions subsequently developed, and the man became weak and ill; he was admitted into the Salop Infirmary on December 8th. After excision of one sore, and cauterisation of the others, the patient recovered, and by December 17th he regained his usual health. How the bull became affected with anthrax does not seem to have been as yet satisfactorily explained, but that it was anthrax from which it suffered has been established by competent examination of the animal's blood.

HOME FOR LOST AND STARVING DOGS.

THE police order of Sir Edmund Henderson of December 10th, 1885, imposing restrictions on dogs in the streets with a view of stamping out hydrophobia in the metropolis, having been revoked, it will not be uninteresting to quote the return given by Mr. J. C. Colam, the secretary, of the Temporary Home for Lost and Starving Dogs, Battersea, of the number of animals sheltered in that institution. No fewer than 40,159 dogs were, we are told, received from the police and placed in the kennels during the time the order was in operation. This institution, which has doubtless rendered valuable aid in this way towards the extinction of rabies is, we regret to hear, sorely in need of funds by reason of the great demands made upon it.

EDUCATION OF PLUMBERS.

AT the City and Guilds Institute, a large number of plumbers recently attended to undergo practical examination in order to qualify themselves for registration by the Plumbers' company. There were master plumbers and journeymen from Brighton, Hastings, Eastbourne, Tunbridge Wells, Bristol, and Ryde, as well as from various districts of London. The examination included pipe-bending, joint-making, the formation of roof gutters, cisterns, etc. After practical tests in these branches, the candidates were required to answer questions prepared by the Board of Examiners, and directed to test the candidates' knowledge in the several subjects of materials, construction, and sanitation. The examiners in attendance included—Mr. Shaw, C.C. (chairman of the Registration Committee), Mr. C. Hudson (past-master of the Plumbers' Company), Mr. W. H. Webb, Mr. J. Smeaton, Mr. H. B. Lobb, Mr. J. C. Ashdown, Mr. R. Lyne, Mr. R. A. Nurse (nomi-

nated representative of the London Plumbing Trade and of the United Operative Plumbers' Association), and Mr. C. T. Mills (the teacher of applied geometry in the metalworkers' classes of the Technical Institute). After the examination the Master of the Company, Mr. Alderman Knill, presided at a meeting, and spoke upon the popular aspects of the movement, and Mr. Mills delivered an address upon the technical training of artizans, and reported the establishment of special classes of instruction for plumbers in the provinces.

DISINFECTION OF RAGS.

A LAW which shall make the disinfection of rags compulsory before they find their way into the hands of the workers in our paper mills is urgently called for by the outbreaks of infectious disease which from time to time occur among such persons. The village of Ivybridge, which has several times suffered from epidemics of small-pox conveyed by this means was, we are informed, the scene of a fresh outbreak on December 11th. Three girls, similarly employed, were attacked on the same day, and the local board of the village has decided to erect a building to be used as a hospital for such cases. We believe that rags are frequently disinfected by the owners of paper mills, but until it becomes a compulsory enactment the danger will continue. Now that the Local Government Board has shown that it recognises the risk, by the orders which it has from time to time issued during cholera epidemics forbidding the importation of rags, we trust that disinfection of these vehicles of disease will soon be made compulsory.

HARVEIAN SOCIETY OF LONDON.

THE following is a list of the officers appointed for the ensuing year: *President:* *Edmund Owen, Esq. *Vice-Presidents:* T. Bryant, Esq. J. Cavafy, M.D., *T. Buzzard, M.D., *John Williams, M.D. *Treasurer:* *G. P. Field, Esq. *Honorary Secretaries:* E. Clifford Beale, M.B., *C. M. Handfield Jones, M.D. *Council:* W. Ewart, M.D., T. Morton, M.D., H. W. Page, Esq., *F. H. Champneys, M.D., *J. Hughlings Jackson, M.D., F.R.S., *J. Ernest Lane, Esq., *R. S. Mair, M.D., *C. W. Mansell Moullin, Esq , *F. J. Marshall, Esq., *R. H. Milson, M.D., *A. J. Pepper, Esq., *J. R. Walker, M.D. An asterisk is prefixed to the names of those gentlemen who did not hold the same office during the preceding year.

PATHOLOGICAL SOCIETY OF LONDON.

THE following is a list of the officers and council proposed for election for the year 1887. *President:* *Sir James Paget, Bart., D.C.L., L.L.D., F.R.S. *Vice-Presidents:* Henry Charlton Bastian, M.D., F.R.S., *John Syer Bristowe, M.D., F.R.S., Thomas Henry Green, M.D., *Richard Douglas Powell, M.D., William Morrant Baker, Sydney Jones, *Sir Joseph Lister, Bart., D.C.L., LL.D., F.R.S., Thomas Pickering Pick. *Treasurer:* John Wood, F.R.S. *Honorary Secretaries:* Sidney Coupland, M.D., *Rickman John Godlee. *Council:* Robert Edmund Carrington, M.D., *Henry Radcliffe Crocker, M.D., David White Finlay, M.D., *James Kingston Fowler, M.D., James Frederic Goodhart, M.D., Walter Baugh Hadden, M.D., Arthur Edwin Temple Longhurst, M.D., Norman Moore, M.D., *Joseph Arderne Ormerod, M.D., Felix Semon, M.D., Anthony Alfred Bowlby, *Henry Trentham Butlin, William Watson Cheyne, Frederic S. Eve, Cuthbert H. Golding-Bird, John Hammond Morgan, Samuel G. Shattock, *John Bland Sutton, Charters James Symonds, *Frederick Treves. An asterisk is prefixed to the names of those gentlemen who were not on the Council, or did not hold the same office during the preceding year. The election will take place at the annual meeting on January 4th.

HYGIENIC EXHIBITION AT WARSAW.

THE hygienic exhibition, which is to be opened at Warsaw on May 15th, will be divided into five groups:—(1) Food (includings beverages) and methods of analysis; (2) Clothing (hygienic and injurious); (3) Dwellings (including construction, water-supply, disposal of excreta, warming, ventilation, lighting, and pathogenic organisms; (4) Special (schools, workshops, and hospitals); (5) Vital statistics and meteorology. Products of foreign manufacture will be exhibited, but will not be allowed to compete for the prizes. The "official organ" of the exhibition is the hygienic review, *Zdrowie*, and its editor, Dr. Polak, is the general secretary; the managing secretary is M. Zdanowski, and to him application for further information should be made at the Hotel de Ville, Warsaw. The exhibition will remain open until July 1st.

A RATEPAYERS' OBJECTION TO A SANITARY MEASURE.

IN consequence of an epidemic of scarlet fever at Mythyr Tydfil, Dr. Dyke, the medical officer of health, has recommended the closing of the schools until January 3rd. This recommendation, which came before a meeting of the Schools Management Committee, met with some opposition, on the ground of the money loss involved in so doing. The Chairman said he did not object to giving holidays, but, upon the outbreak of the least epidemic, they were asked to close the schools, and, as the salaries amounted to about £1,500 a quarter, he regarded it as a serious matter. Some discussion followed, and the clerk called the attention of the meeting to Clause 98 of the Code, stipulating that "the managers must comply with any notice of the sanitary authority in the district in which the school is situated, requiring them, for a specified time, with a view to preventing the spread of disease, to close the school, or exclude any sufferers from attendance, subject to appeal to the Department if the managers consider the orders to be unreasonable." The clerk stated that he had received no such order from the sanitary authority; he had only received a recommendation from Dr. Dyke. Ultimately, after considerably discussion, the report was adopted.

FUND FOR THE MAINTENANCE OF GUY'S HOSPITAL.

THE meeting held at the Mansion House on December 21st to initiate the movement for obtaining the capital sum of £100,000 for the benefit of Guy's Hospital was addressed by His Royal Highness the Duke of Cambridge, Cardinal Manning, Mr. Leopold Rothschild, and the Bishop of Rochester. It was stated that the annual revenue of the hospital had, owing to agricultural depression, declined from £41,000 to £26,000, and that it had been necessary to reduce the number of beds in use from 650 to 400. Cardinal Manning spoke strongly against the French system of government hospitals, on the ground that the department which had the management of the hospitals was always ruled by political influences; that the system checked the flow of charity; and that it substituted a mechanical method for "the dynamic power of charity that had governed and civilised the world." It was announced that the governors were willing to publish a full annual balance-sheet if they were entrusted with public money. The fund already amounts to over £17,000.

THE LONDON HOSPITALS IN 1886.

MR. E. W. TAYE, the editor of the *Charity Record*, has summarised a few salient facts showing how far-reaching are the benefits conferred by the London hospitals and dispensaries which depend chiefly upon the voluntary generosity of the public. Last year, about 120 of these charities had a total accommodation of between 6,000 and 7,000 beds—of which the London had 790; the Metropolitan Convalescent, 500; St. George's 350; Brompton Consumption, 320; St. Mary's and Middlesex, about 250 each; Westminster, University College, King's College, and London Fever, about 200 each; City of London Chest, 164; Royal Free, 160; Charing Cross, 154; and Seamen's Hospital, 126. Relief was given at the 120 institutions to upwards of one million patients—that is, in round figures, about 60,000 in- and 940,000 out-patients. Thus, about one in five of the total population of this great and wealthy city were directly benefited; and, looking at the value of these institutions as medical schools, it may be said that at some time or other the majority of the population are benefited thereby.

PROVIDENT DISPENSARIES.

THE committee appointed at the recent conference of medical men at the Society of Arts has held a preliminary meeting, when Sir T. Spencer Wells, Bart., was appointed Chairman, and it was resolved to invite the following to join the committee: Dr. Walter Smith, Dr. Gilbart Smith, Dr. B. Meadows, Dr. Alfred Carpenter, Dr. Steele, Dr. Ord, Dr. J. Gordon, Dr. J. Ford Anderson, Dr. G. Stoker, Dr. Steavenson, Dr. Dunbar Walker, Dr. Ducat, Dr. A. Grant, Dr. H. Campbell Pope, Mr. E. C. Barnes, Mr. T. Eule, Mr. W. G. Dickinson, Mr. Ernest Hart. Lay members: Sir T. Fowell Buxton, Mr. F. D. Mocatta, Mr. U. N. Hamilton-Hoare, Mr. Claude Montefiore. The committee invites communications from medical men and others interested in the management of the metropolitan hospitals, and the medical treatment of the industrial classes, which should be sent to Mr. W. G. Bunn, Secretary Metropolitan Provident Medical Association, 5, Lamb's Conduit Street, W.C. The next meeting of the committee will be held on Tuesday, January 11th, 1887.

A NEW "CURE FOR CANCER."

DR. VELLOSO lays claim to having cured several cases of epithelioma of the face and lips with the juice of alvelos, a plant which belongs to the family of Euphorbiaceæ. It acted as an irritant, and destroyed the diseased tissue, which was quickly replaced by healthy granulations. Of the three different kinds of alvelos (male, female, and wild), the second is considered the most efficacious. It is found at Pernambuco, and although the natives have employed the juice for some time, it has not come into extensive use on account of the severe pain which it causes. The best results were obtained with the juice in a concentrated solid form, and with the addition of vaseline or lanoline. This preparation should be applied with a brush to the affected part (previously washed with a solution of carbolic acid), which should then be left exposed to the air for at least an hour. It should afterwards be covered with lint. This treatment should, as a rule, be repeated every two or three days, and never more than once in twenty-four hours, as the pain of the application is severe. The treatment was more speedily successful when begun before ulceration has occurred.

INSANITARY CONDITIONS.

AT an inquest held last week at Coventry, on the body of a child who died from scarlet fever, aggravated by a vitiated atmosphere, the following deplorable revelations of sanitary neglect were made. It was stated that the father of the child occupied a house of which one bedroom was over a dilapidated shed, where a large number of fowls, rabbits, and ducks was kept. The stench from the accumulated filth penetrated through large crevices in the boards, which served the double purpose of ceiling to the shed and floor to the bedroom. The tenant had, it was said, several times remonstrated with the owner, but nothing was done beyond removing the rabbits. The child, who was seized with scarlet fever on Sunday week, died in twenty-four hours. The attention of the sanitary authorities was directed to the matter, and the nuisance has since been abated. The jury returned a verdict in accordance with the facts, and the landlord was justly reprimanded for not having taken steps to remedy the evil when his attention was first called to it.

A FRUITLESS FAST.

THE rival of Succi and Merlatti, who started operations in London at the beginning of December, will not succeed, probably, in awakening much sympathy, because his experiment—undertaken, apparently, as a pure speculation—has failed, not so much from any difficulty on his part in carrying out his intention, as from the indifference of the public to feats of this kind. He is a man forty-five years of age, and in years gone by had suffered from gout. It is rather interesting to find that the chief inconvenience he experienced from his fast was an unmistakable attack of gout in the big toe of the left foot, which, however, passed off under the influence of a dose of Friedrichshall water, which, notwithstanding that he had taken no food of any sort for eighteen days, produced a motion weighing over a pound. The useless trouble to which he has put himself on this occasion may, in spite of his intimation to the contrary published in the daily papers this week, deter him from resuming his attempt, especially as it is a great deal more expensive to starve under these circumstances than to live on the fat of the land. His expenses are stated to have averaged £60 a week.

THE PROPOSED BRITISH HOSPITAL SAID.

ADMIRAL INGLEFIELD, a member of the English Committee formed to secure the erection of the British Hospital at Port Said, writes to report the progress which is being made towards establishing an efficient hospital for seamen and others passing through the Suez Canal. The committee has succeeded in obtaining sufficient funds to complete the construction of a wooden hospital ready for erection on its arrival, and this will be dispatched at once. The committee, however, needs at least £2,000 to cover the expenses of erection and to prepare the hospital for immediate use. Seeing the large number of sick and maimed British seamen and others who are annually landed at this port, for the proper medical treatment of whom it is most desirable that adequate provision should be made, we hope the necessary funds may be forthcoming.

THE SOUTH AUSTRALIAN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE South Australian Branch of the British Medical Association is taking the preliminary steps in the initiation of an Intercolonial Medical Congress, to be held in Adelaide during the Jubilee Exhibition period in August and September, 1887. The preliminary announcement, which was issued in September last, has, we are glad to hear, met with such cordial response from South Australia and the adjoining colonies as to warrant the prosecution of the scheme with every anticipation of good results. Though the preliminary action has been taken by the South Australian Branch of the British Medical Association, the meetings will be under the direct guidance of the whole body of the profession in the colony, in order that they may be as thoroughly representative in character as possible. The meetings will be held in the halls of the University, which have been generously placed at the disposal of the profession. Ladies will be invited to the social and ceremonial meetings of the Congress, but not to its business meetings. A payment of one guinea will be required from intending members, and will entitle each one to a copy of any transactions which may be published. The first general meeting was announced to be held during December, when it was proposed to elect a president, and take other further steps. The following are the members of the Provisional Committee: J. C. Verco, M.D., F.R.C.S.E. (Chairman); W. L. Cleland, M.B., Ch.M.; W. T. Clindening, M.R.C.S.E.; T. W. Corbin, M.R.C.S.E.; W. Gardner, M.D., Ch.M.; W. T. Hayward, M.R.C.S.E., etc.; E. C. Stirling, M.D., F.R.C.S.E., M.P.; J. D. Thomas, M.D., F.R.C.S.E.; A. Watson, M.D., F.R.C.S.E.; and the Honorary Secretary, Dr. B. Poulton, 50, North Terrace, Adelaide, to whom all communications respecting the Congress should be addressed.

ASEPTOL: A NEW DISINFECTANT.

THIS substance is orthophenol-sulphuric acid, and has been known since the year 1841. It has been lately brought forward in France as a disinfectant, and Dr. Hüppe (*Centralb. f. d. Med. Wiss.*, No. 50, 1886) has made experiments with it, which have led him to the opinion that it possesses advantages entitling it to rank beside carbolic acid and bichloride of mercury. Commercial aseptol is a syrupy liquid, having a faint odour of carbolic acid. It is soluble in all proportions in water, alcohol, and glycerine, and even in a 10 per cent. solution has no caustic action upon the skin. Such a solution kills spores of anthrax in thirty minutes, whilst a 5 per cent. carbolic acid solution requires at least twenty-four hours to pro-

duce the same effect. A 3 or 5 per cent. solution of aseptol is a true disinfectant for spore-free micro-organisms, or for such as do not form endogenous spores. A 3 per cent. solution was found quite sufficient to disinfect the (previously cleansed) hands. Solutions of aseptol in alcohol, glycerine, or oil (in the last named no permanent solution takes place) showed no disinfectant power. By heat it is changed into the corresponding para-combination.

PEREIRINE AS A TONIC.

THE bark of the pao-pereiro tree is said to be a tonic and febrifuge. It contains an alkaloid which was first isolated by Ezequiel in 1838. The name of pereirine has been given to it. The product of that name used in Brazil is an amorphous yellow powder, which is not a pure alkaloid, but contains a compound of amyl, a bitter colouring substance insoluble in water, analogous to glucose, a hydrocarburet, and another crystallised substance, probably a glycoside. Pereirine is very slightly soluble in water, to which it communicates a bitter flavour, but dissolves easily in ether. M. Guimaraes has proved that pereirine produce the following effects:—1. A period of agitation characterised by slight convulsive trembling of the skin, irregular respiratory movements, decrease of the central and peripheral temperature and of the pulse-beat. 2. A period of functional paralysis, consisting in aphonia, diminution in the number of respirations, elevation of temperature, paralysis of voluntary movements. 3. A period of complete paralysis ending in death. Pereirine, as sold commonly, is impure. M. Fereira has administered doses of two grammes a day in cases of persistent paludal infection.

A SIX-FINGERED FAMILY.

AN interesting communication, having reference to twenty-seven individuals and five generations, is summarised as follows in the *Rev. Internat. des Sci. Méd.*, November, 1886. First generation: Man, born in the year 1752, had six toes on one foot. Second generation: A son with six toes on one foot; a daughter, normal. Third generation: This daughter had five children, amongst whom were a son and daughter each having six fingers on each hand. Fourth generation: The daughter last mentioned had eight children, including one son having six toes on one foot, another son and two daughters each having six fingers on each hand, and one daughter having both six fingers on each hand, and six toes on each foot. Fifth generation: The daughter last mentioned (the *Revue* makes a mistake here) had three children, including a son, doubly deformed like his mother, and a son with six fingers on each hand, the feet being normal. Moreover, one of the two daughters of the fourth generation (with only the hands affected) had eight children, several of whom were normally developed, but the rest were deformed as follows:—One daughter had an osseous thickening at the digital extremity and on the outer border of the fifth metacarpal; one son had six fingers on each hand, and six toes on each foot; and another son had six fingers on each hand. Thus, in the first generation, one person was affected, and in the second also one; in the third, there were two cases of deformity; in the fourth, five; and, in the fifth, in all five, that is, fourteen deformed persons altogether during five generations of this interesting family.

DRUMINE: A NEW LOCAL ANÆSTHETIC.

AN alkaloid has lately been obtained from the plant, Euphorbia Drummondii, N.O. Euphorbiaceæ, by Dr. John Reid, of Port Germein, South Australia, which promises, if report be true, to compete with cocaine, as an agent for producing local anæsthesia. A tincture of the plant is made with rectified spirit, or proof spirit, acidulated with hydrochloric acid, and, after standing a few days, the spirit is distilled off, ammonia added in excess, and the whole filtered. The residue, after the smell of ammonia has disappeared, is dissolved in dilute hydrochloric acid, and filtered through animal charcoal, to destroy the colouring matter which is abundant and inactive. This filtrate is evaporated slowly, and leaves the alkaloid. It gives a colourless solution, with little taste. It is almost insoluble in ether, freely soluble in chloroform and water, and deposits from solutions microscopic acicular and stellate crystals. The crystals deposited from the hydrochloric solution filtered through animal charcoal, are circular or boat-shaped. They are colourless, and seem to be less soluble in chloroform. Sheep and cattle are stated to die in great numbers annually, in consequence of having eaten this plant, the poisonous qualities of which vary in proportion to the quantity of milky juice they contain. Sheep, bullocks, and horses die in from twenty-four hours to seven days after eating it, all of them presenting paralysis of the extremities, some of them hanging the head as if tipsy; the appetite does not appear to be interfered with. It is curious that the animals avoid the weed at first, except under pressure of hunger, but once having partaken of it, they seek for it and eat it with avidity. Injection of a solution of the alkaloid into the nostrils of a cat, produced stupidity and indifference to stimuli, with a placid, stupid expression, like that of an animal under the influence of a narcotic. The limbs appeared paretic. A few drops of a 4 per cent. solution dropped into the eyes of another cat produced insensibility to the extent of allowing the conjunctiva to be touched, and the orbicular muscle no longer contracted with the same vigour. The pupil was not appreciably dilated. Three grains were then injected subcutaneously, but, beyond local anæsthesia, no effect was noted. A larger dose by the mouth promptly produced paralysis of the limbs, and slow, difficult breathing. When dying, strychnine was injected, but failed to produce any muscular contractions. Ten minims of the 4 per cent. solution injected into the hind leg of a cat, seemed to produce paralysis of sensation, but not of motion. No convulsions ever followed its use. In the course of experiments on his own person, Dr. Reid found that the drug produced anæsthesia, with loss of taste when applied to the tongue or nostril; but small doses swallowed were not followed by any perceptible constitutional symptoms. He tried it subcutaneously in a case of confirmed sciatica in an old man, and the essay was followed by complete, and, so far, permanent relief; in sprains, it was very useful in relieving the pain. Dr. Reid recommends the use of the alkaloid in small operations, local irritation, and sprains.

DEARTH OF VACCINE LYMPH.

WE not infrequently receive letters complaining of the difficulty of procuring lymph for the vaccination of children. The complaints come mostly from practitioners who are not public vaccinators, and whose opportunities for keeping up a supply of lymph for their own purposes have been lessened since the appointment of public vaccinators by the guardians. It is urged that this inconvenience would be removed, if all registered practitioners were permitted, as formerly, to vaccinate for and on behalf of the guardians. It must, however, be recollected that the vaccination which is performed at the public stations, where there is abundant material from which to select a vaccinifer, and where arm-to-arm vaccination can always be carried out, is far more advantageous to the public than the development of a system which, apart from other objections, must necessitate the frequent use of stored lymph; for it is perfectly obvious that few private practitioners could always maintain a succession of cases throughout the year in sufficient numbers to obviate this difficulty. It can hardly be anticipated that the well-to-do will, to any large extent, take their children to public stations; vaccination by private practitioners will, therefore, be maintained, and it is the duty of the State, seeing that it is responsible for the inconvenience to which practitioners are put, to supply their wants liberally, either with humanised or with animal lymph, the latter being now produced in considerable quantities at the government calf-station. Practitioners, in their turn, should endeavour, as far as is within their power, to vaccinate their patients from arm to arm, limiting the use of stored lymph to the beginning of each series of vaccinations. To some extent, by the institution of public vaccination stations, the poor have benefited at the expense of the rich; but it should be borne in mind that,

if public vaccination has led to the practitioner encountering greater difficulties in performing arm-to-arm vaccination among his richer patients, the latter may be trusted to seek re-vaccination, which will compensate, to a large extent, for their less perfect primary vaccination, due to the greater use of stored lymph; while the poor do not, as a rule, submit to vaccination more than once in their lifetime, and, therefore, it is the more necessary that it should be done in the most perfect way.

RETROSPECT AT THE COLLEGE OF SURGEONS.

MUCH has been said during the past few years, since the meetings of Fellows and Members have become an institution, about the dignity of the Royal College of Surgeons, and the fear that things may be pushed too far. Timid persons forget that no corporation will ever progress if allowed to rest upon its own dignity, free from wholesome opposition and force from without. What used to occur at the College itself, in days when there was little or no opposition, must be tolerably familiar to the readers of the medical literature of the early part of the century. Thus the earlier volumes of the medical journals tell us how members were only admitted into the College buildings by a back door. The famous incident at Mr. Cline's Hunterian Oration in 1824 contrasts strongly with the courteous manner in which Fellows and Members are now received by the authorities in the theatre. Several minutes before the lecturer had entered the arena, Sir William Blizard suddenly desired the Members of the College to take off their hats. The command was expressed in the peremptory tone of a pedagogue, and was met with indifference or derision, the Members thus commanded keeping their hats on their heads. Fortunately, Sir William was forced to desist from exposing himself to the ridicule of the assembly by a reminder that the offending Members belonged to the Society of Friends. The papers of the period teemed with complaints of slights almost as absurd as the above example, offered to the rank-and-file and the advocates of reform in the profession. Such was the bearing of the College authorities; their government was even worse. It happened, as is probably well remembered, that the large hospitals were then close boroughs, the medical staff of each being made up of some leading member of the profession, surrounded by his nearest relatives, or by old dressers who had paid him a large premium, on the understanding that they should be, in due time, placed on the hospital staff. A celebrity of this kind was, of course, a member of the College Council, so we need hardly say that nothing was done at Lincoln's Inn Fields to reform the hospitals. Hence medical education at these charities went from bad to worse; idle students could do as they pleased, and their industrious colleagues received little aid or encouragement from the staff, unless they happened to be relatives or private pupils of some of the surgeons. Sir Astley Cooper, and some other distinguished men, had constantly impressed on their pupils the necessity of the study of anatomy, and, as it was badly taught, the students flocked to several private schools. These institutions were in many respects an evil; they caused students to wander about too much from the dissecting-room to the hospital and back, and there could be no guarantee of the merits of the teachers. Still, anatomy was so well taught at some of the private schools that they flourished, whilst the hospital schools declined. Lectures were delivered during the summer at these schools, whilst at the hospitals anatomical instruction was limited to winter. The College of Surgeons passed a by-law early in 1822 requiring candidates for the diploma to produce before examination a certificate of having regularly attended three courses, at least, of anatomical lectures "which have been delivered during the winter season." This was passed when the Court of Examiners included the honoured names of Sir Astley Cooper, Sir W. Blizard, Sir Everard Home, Mr. Abernethy, and Mr. Cline. The significance of the quoted passage was self-evident. The College government shortly afterwards met with fierce opposition; the Members of the College had to turn their attention to the abuses of the hospital schools, so that after great pressure the student was really taught anatomy by the winter lectures and demonstrations at those institutions. Then the private schools, having no further useful purpose to perform, declined and became one by one extinct. In this way, good hospital education was ensured, not through the initiation of the Council of the College, but through pressure from without. So it has been ever since. We know how, not very long ago, the anatomical examiners were mostly gentlemen who had long ceased to teach anatomy, whilst they were one and the same persons with the physiological examiners, and often knew nothing of physiology excepting what they had learnt from books. Through pressure from without that abuse was reformed, and the same agency is, and ever will be, needed at Lincoln's Inn Fields, and the College will find that such pressure, so far from impairing its influence, will only fortify it as a great centre of surgery. It may even be reasonably anticipated that, in future, as at present, the Council will claim for its own the reforms to which it reluctantly agrees on compulsion.

SCOTLAND.

THE managers of Edinburgh Royal Infirmary have acknowledged, with thanks, the sum of £17 3s. 3d. from John Henry Cooke, as the result of a performance given in his new circus on behalf of the Infirmary.

DR. JOHN THEODORE CASH, well known for his researches in experimental therapeutics, chiefly conducted in conjunction with Dr. Lauder Brunton, has been nominated by the Crown, on the recommendation of the Secretary for Scotland, to the Chair of Materia Medica and Pharmacy in the University of Aberdeen, rendered vacant by the death of Professor Dyce Davidson.

SICK CHILDREN'S HOSPITAL, EDINBURGH.

THE directors of the Royal Edinburgh Hospital for Sick Children, Edinburgh, at their meeting last Monday, elected Mr. G. H. Melville Dunlop, M.D., M.R.C.P.E., to be one of the extra physicians to the hospital.

PRESENTATION TO DR. JOSEPH BELL.

ON December 20th, a deputation of nurses from the Edinburgh Royal Infirmary waited on Dr. Joseph Bell, at his house, 2 Melville Crescent, and presented him with a handsome oak writing table and chair, and a valuable silver candelebra, subscribed for by nurses in the institution, and also by nurses now in other places in Edinburgh and abroad, who were trained under Dr. Bell. The occasion of the presentation was the recent retirement of Dr. Bell, in accordance with the rules of the Infirmary, after fifteen years' service as surgeon.

MEDICAL WOMEN FOR INDIA.

THE Anchor Line steamship *Arabia*, which has just sailed for Bombay, takes out as passengers three members of the profession belonging to the fair sex, namely, Misses S. Armstrong, M.D.; M. Fairweather, M.D.; and L. J. Wycokoff, M.D. These three ladies intend to settle in India, and to practise among the female population.

DEATH FROM DRINKING "FINISH" SPIRIT.

A CASE of death believed to result from drinking "Finish" (a variety of methylated spirit) occurred in Glasgow last week. The victim, a man aged 55, who was stated to have been drinking "Finish" for a year, was found helpless in Stockwell Street, Glasgow, smelling very strongly of spirit, and was removed to the police-station, where he was attended by several medical men; he died, however, in spite of all that could be done.

A GRACEFUL ACT BY A MEDICAL MAN.

ON Saturday last, the ceremony of unveiling a handsome drinking-fountain which has been erected in the quadrangle of the old University, Edinburgh, was performed by the Principal, Sir William Muir.

The fountain is a handsome work of art, designed by Mr. Sydney Mitchell, architect. It is a gift to the University from Dr. W. F. Cumming, and it bears a Latin inscription to the effect that this perishable memorial is given by one who has an imperishable affection for the University. Standing where it does, it will be of incalculable advantage to generations of students, and will be a thing of beauty and usefulness, amply fulfilling the wishes of its donor.

DESTITUTE SICK SOCIETY, LEITH.

THE annual meeting of the Leith Destitute Sick Society was held last Tuesday. The secretary, in submitting the annual report, stated that the demands for relief continued greatly to exceed the means at the disposal of the Society. The families relieved during the year represented 647 adults and 667 children. The weekly sums paid out amounted to £97 6s., and that spent in meal and groceries to £73 12s. 4d., total £170 18s. 4d. The cost of coal distributed during the winter by means of tickets was £28 13s. 4d. The income from all sources was £127 19s. 11d., and the expenditure had been £208 4s. 9d. The chairman, in moving the adoption of the report, referred to their loss by the death of Provost Pringle, who had been associated with the Society for forty years.

GLASGOW SICK POOR NURSING ASSOCIATION.

THE eleventh annual meeting of the Glasgow Sick Poor and Private Nursing Association was held in the Religious Institution Rooms, Glasgow, last week, Mr. J. G. A. Baird, M.P., presided. The report submitted showed that, at the close of the year, the nursing staff numbered 66; during the year, 26 nurses had entered the Association and 22 had left. Within the last twelve months, 1,621 patients, exclusive of midwifery cases, had been attended, and, in addition to these, 366 private engagements had been fulfilled. The financial report showed a deficiency on the year of over £373.

ACTION BY A MEDICAL MAN AGAINST A PAROCHIAL BOARD.

IN Kirkwall Small Debt Court last week, an action for damages was brought by Dr. T. P. Devlin, Rankeiller Street, Edinburgh, against the Inspector of Poor at Birsay, Orkney, for alleged illegal dismissal. The action was for £12 damages, and it was argued for the defender that Dr. Devlin was only engaged during the pleasure of the Board, and under the terms of the agreement could be instantly dismissed. It was also pointed out that by a minute dated October 8th, 1886, a committee of the Board offered to continue the services of Dr. Devlin. For the pursuer, it was argued that Dr. Devlin was entitled to reasonable notice of dismissal. The sheriff decided in favour of the Poor's Board, but without allowing expenses, thus showing that he thought the medical man was quite entitled to bring the action.

ST. ANDREWS UNIVERSITY AS A MEDICAL SCHOOL.

A memorial has been presented to the Secretary of State for Scotland by the Senatus Academicus of St. Andrews University, praying for two additional chairs for its medical faculty, namely, anatomy and botany. The Graduates' Association is also working for the same end, and about seven weeks ago, a deputation appointed by the University had an interview with the Secretary for Scotland and the Lord Advocate; and in urging the propriety of increasing the number of chairs in the medical faculty, stated that, with two additional medical chairs, St. Andrews would not only be able to give the two first years of the medical curriculum, but would be enabled to draw upon the extra-academical and hospital schools of the United Kingdom for the last two years, an arrangement which could not fail to be very convenient to many aiming at a university medical degree. St. Andrews has now a seat at the General Council of Medical Education and Registration of the United Kingdom, and is splendidly equipped as regards the teaching of chemistry, physiology, and zoology. It has also a very fine medical library and museum, and the advantages of St. Andrews as a pleasant place of study are everywhere recognised. Of late years the University has made great strides in science-teaching, and if it only succeed by public or private endowment in obtaining its present request, it may in the future become as well known for its medical school as it has in the past been for its Divinity and Arts teaching.

IRELAND.

WEXFORD UNION.

THERE has been a slight outbreak of typhus fever lately in the Broadway dispensary district, and also of erysipelas; this, however, has now disappeared, but has been followed by scarlatina, which is now prevalent.

BALLYMENA DISTRICT NURSING SOCIETY.

A SALE of work in aid of the funds of this Society took place in the Parochial Schoolhouse, Ballymena, on December 17th. This Society was founded a few years ago, and has done good work among the poor of the district. We are glad to learn that the sale was well organised, and proved highly successful.

ULSTER HOSPITAL FOR WOMEN AND CHILDREN, BELFAST.

THE vacancies on the staff of this hospital created by the death of the late Dr. S. M. Malcomson, and the resignation of Dr. Poole, have been filled up by the appointment of Dr. Hugh Lewers and Dr. Strafford Smith.

BELFAST: CHRISTMAS DAY AT THE HOSPITALS.

CHRISTMAS was celebrated with the usual festivity and good cheer at the various hospitals, and, the day being favourable, the number of visitors to the various medical charities was very large. In all cases, the wards were tastefully decorated, and a good dinner was served up, while several institutions provided Christmas-trees and magic lanterns for the amusement of the patients. Lady Cowan provided the dinner at the Queen Street Children's Hospital; and, at the Throne Hospital, Alexander MacLaine, Esq., J.P., acted as host for the ninth time in succession.

RATHDRUM UNION.

IN consequence of the epidemic of scarlatina in Arklow, Dr. Burke, Local Government Board Inspector, has suggested that a small district hospital in the town, at present unoccupied, might be made available for the reception of any case that might arise. Dr. Moloney, the medical officer, assigns three principal causes for the continuance of the epidemic, viz.—1. Objection on the part of the people to send their children to the Fever Hospital. 2. Difficulty of isolating the convalescent cases. 3. The unsanitary state of the town, there being no attempt to remedy the present condition of things by the guardians, Dr. Moloney's reports have usually been referred to the dispensary committee, which has no power whatever to take action in the matter. At a recent meeting of the guardians, the clerk was directed to ask leave of the governors to use the Fever Hospital during the epidemic.

FAMILY POISONED BY COAL GAS.

ON Sunday morning last several members of a family residing in Carrick-on-Suir lost their lives by an escape of gas into their bedroom, and others are in a very precarious condition, not being expected to recover. The facts of the case are as follows: On the previous evening a man named Hearne, on entering his home, after leaving off work, noticed an unpleasant smell of gas, but took no steps in the matter, and with his family retired to rest. Hearne and his family, eight persons altogether, occupied the same sleeping apartment, a room nine feet in length by six feet in width. On the following morning the house was broken into by the police, who found Hearne and his wife still alive, but insensible. Five out of the eight died, and in the evening of the next day Hearne, his wife, and only child,

were still unconscious. An investigation disclosed the fact that opposite Hearne's door the branch pipe which led from the main, and which was about fourteen inches from the surface, had burst, and the escaping gas had gained access to Hearne's house to such an extent as to bring about the calamity that had occurred.

CONSUMPTION HOSPITAL, THRONEMOUNT, BELFAST: PROPOSED EXTENSION.

PROGRESS is being made towards providing the endowment fund of £15,000 for the new wing to the above institution, which is to be erected by Mr. Forster Green. Lady Johnson, whose munificence has so often been exercised for the benefit of the medical charities of Belfast, promises £1,000. An anonymous donor, per Mr. R. W. Murray, J.P., offers £1,000, provided £10,000 be raised within twelve months, and further undertakes to give £50 for every additional £1,000 raised, until the requisite total be reached—or £1,250 in all. Mrs. Uprichard promises £100. More than one-third of the proposed endowment has now been promised, and, as the necessities of the case become more widely known, it cannot be doubted that the total amount will be speedily realised.

REPORT ON CHRIST'S HOSPITAL.

THAT threatened men live long we know, but for a corporate body to lie under a sentence of "mending or ending" would seem almost to be a guarantee for its existence in perpetuity unchanged. This *vis inertiæ* is being very well illustrated just now in the continued inaction of the authorities of Christ's Hospital, and it is not surprising that from many quarters there come expressions of deep dissatisfaction that this foundation should continue still to be administered on the lines which have been over and over again so emphatically condemned.

The case against the Hospital stands briefly thus. So long ago as 1868, the date of the sitting of the Schools Inquiry Commission, it was recognised that the existence of such a school in the heart of the City was greatly to be deprecated; but the *genius loci* came to the aid of the governors, and proved a potent spirit to conjure with. In the end, the Commissioners hesitated to disturb buildings hallowed by memories of Camden, Coleridge, and Elia. It was soon felt, however, that these associations were too dearly purchased; and in 1870 a vigorous effort was made by a section of the governors, conspicuous among whom was the late George Moore, to remove the school from town; but the resolution was ultimately negatived by the small majority of 14 in a meeting of 128 governors.

After 1870, things appear to have fallen into the old grooves again; the great fight was forgotten, and nothing was done. But in 1877 attention was forcibly drawn to the school in consequence of the suicide of one of the scholars; and a Royal Commission was appointed to inquire into the particular circumstances of the fatality, and also into the general question of the management of the school.

The Commission was a strong one, and, after a thorough investigation, reported in terms which were clear and decisive, and which might well have been expected to be final. Throughout the report are to be found opinions condemning existing details of management, with such riders as, "But, while the school is allowed to remain in London, we do not see how the suggested reform is possible;" and the summing-up is solely directed to this point, which was evidently felt to be the kernel of the whole question.

Leaving untouched the obvious question of improved sanitary conditions, the Commissioners show how the faulty arrangements and crowded state of the wards affect the possibility of discipline, and continue, "We agree with Mr. Bell and Dr. Haig-Brown, both old Christ's boys, the latter now head master of Charterhouse, and the former head master, first of Christ's, and now of Marlborough, that probably all the defects would disappear if once the school were removed to a site in the country"; and they conclude, "We think its removal from London is indispensable."

This was written nearly ten years ago, and it is as true now as then. In the meantime, what has been done to dispose of the present site, and further in any way this recommendation?

How much may, we fear, be too easily estimated if it be true, in the first place, that much of the interval has been spent in an abortive wrangle with the Charity Commissioners concerning their powers of controlling the Hospital funds, and of drawing up any plan for their administration; and, in the second, that the treasurer has lately stated, in evidence in a General Post Office compensation inquiry, that it was necessary to have residences for masters in the immediate neighbourhood of St. Martin's-le-Grand; and, further, that "The governors had discussed the question of the removal of the Hospital, and had decided not to remove it." This statement was recently the subject of inquiry in the House of Commons, but elicited no satisfactory answer, and it should be remembered that this is since a scheme has been drawn up by the Commissioners, and approved in Council, which provides for the removal of the school from town, and shows that the funds are sufficient to make a very large increase in the numbers of both boy and girl scholars.

It is not, therefore, surprising that the impression is ever growing stronger that the Hospital authorities have taken "*J'y suis, J'y reste*" for their motto, and that some more active pressure is required to induce them to bestir themselves, for of mere hard words it would seem they have already had enough and to spare.

The moral and physical conditions under which a great educational endowment, such as Christ's Hospital, does its work, must always be a matter with which the general public has a right to concern itself; but it is especially one which our profession is bound not to allow to be neglected. These conditions, as they exist at Christ's Hospital in London, have been freely condemned; at the children's branch at Hertford they are reported to be even more unfitted for modern conditions. Time is passing. It will never get easier to acquire suitable country sites than now, while there is no fear that the place where the hospital stands at present will ever be allowed to be used for other than worthy public ends. Not to speak of the project of establishing there a clergy-house under the shadow of St. Paul's, thus preserving to appropriate uses the noble hall and church, it is no secret that St. Bartholomew's has looked with longing eyes, and in a spirit of most righteous covetousness, at the west end of its neighbour's vineyard, while at the other end there is the General Post Office, a department the due development of which is essential to the growth of the Empire, so cramped for room that almost desperate expedients in the way of packing have now to be adopted. In this space of nearly five acres there is more than room enough for the proper expansion of both these establishments. Christ's Hospital must go sooner or later. Can nothing be done to induce it not to stand upon the order of its going?

YORKSHIRE ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

THE annual meeting of the members of this Association was held on December 21st at the Town Hall, Bradford, Mr. S. W. North (York) presiding. The other gentlemen present were Dr. J. Mitchell Wilson (Doncaster), Dr. R. Bruce Low (Helmsley), Dr. Giddings (Calverley), Dr. Scott (Ilkley), Dr. Roberts (Keighley), Dr. Hime (Bradford), Mr. Burman (Wath), Dr. Buncle (Purstone), Dr. Britton (Harrogate), Dr. Byles (Eccleshill), and Dr. Cameron (Huddersfield).

Dr. M. WILSON (honorary secretary) read the report of the Committee, which was adopted.

Mr. NORTH having intimated his desire not to seek re-election as President, Mr. ROBERTS moved that the cordial thanks of the Association be given to Mr. North for the valuable aid he had given to it during the eleven years he had been president.

The resolution was seconded by Dr. GIDDINGS, and carried.

Dr. T. W. HIME (Bradford) was elected president, on the motion of Dr. GIDDINGS, seconded by Dr. EDWARDS, and supported by Dr. BRITTON and Dr. BYLES. On the proposition of Dr. CAMERON, Mr. North, Dr. Giddings, and Dr. Britton were elected vice-presidents. Dr. J. M. Wilson (Doncaster) was re-elected honorary secretary, and Dr. Bruce Low honorary treasurer.

The Hon. SECRETARY read a letter from Dr. Alfred Hill (Birmingham), who said he had felt for some time that it would be to the advantage of the whole body of medical officers of health if they were to form themselves into one society, and he gave expression to that view in his remarks at the annual dinner of the Society of Medical Officers of Health in July last. The suggestion was received with a considerable amount of approval at the time, and he had reason to know that it was still very favourably entertained by many

medical officers. The advantages were, Dr. Hill thought, real. In the first place, unity would give them strength to enable them the more efficiently to protect their interests, and to achieve their various objects. The local societies or associations would stand in the relation of branches which, while enjoying all the advantages they now possessed, would benefit by the alliance with the metropolitan society in many ways, both local and material. To take only one example, it must have been felt that papers of great merit and practical interest had been read at the meetings of the provincial societies, but had not been published on account of the society or the reader not caring to incur the expense of printing. Such papers could be included in the *Transactions* of the parent society, published annually.

Dr. BRITTON moved, and Dr. HIME seconded, the following resolution :—

That this meeting, having heard the communication of Dr. Hill on the subject of the provincial societies of officers of health joining the central association in London, desires to express its concurrence in his views, and that we appoint the president, ex-president, treasurer, and secretary as a sub-committee to arrange the details.

Mr. J. PERCIVAL (Medical Officer of Health, Pontefract) was elected a member, and Dr. HELLIER an associate of the Society.

Dr. J. M. WILSON read a paper giving an account of an outbreak of diarrhœa caused by noxious gases from tide-lock sewers.

Dr. BYLES called attention to the extra duties required of medical officers of health under the Cowsheds and Dairies Order, by which the inspection of these places has been transferred from the county constabulary to the local authorities in each district. He said he foresaw that if they were to carry out the duties imposed upon them by the new order, they would have a largely increased amount of work to perform, and a deal of it of a dirty, disagreeable, and dangerous character. In his opinion, the original idea of those who were responsible for the change of authority from the Privy Council to the Local Government Board was that the inspection of cowsheds and dairies had hitherto been conducted in a very perfunctory manner. That was no doubt true. The medical officers would have to make a very different inspection when the cowsheds and dairies came under their control, for that which might have been excused as a justifiable omission on the part of a policeman would not be so regarded if done by a medical man. It looked as if medical officers were about to be called upon to perform the duties of veterinary surgeons. Another matter for medical officers to consider was as to how they were to be remunerated for their services.

Dr. EDWARDS informed the meeting that the local authority at Bingley was about to appoint a nuisance-inspector to do the work. He did not consider it a part of his duty as medical officer to inspect dairies and cowsheds, and he believed that it was the intention of the Local Government Board, in framing the order, that the nuisance-inspector should undertake the work. Unless his salary was doubled, he should not think of taking upon himself the duties imposed by the new order.

Dr. HIME said that it had been his practice in Bradford, when a person made an application for a licence, to go to the premises and see if they were suitable. The power they possessed over dairies and cowsheds was very inadequate, and they were sadly in want of stringent by-laws for their regulation.

Dr. BRITTON said that he had received no information on the subject, either from the Local Government Board or his own board, and until he did, he should not feel called upon to act in the matter. In his opinion, the examination of dairies and cowsheds ought to be left in the hands of the nuisance-inspector.

Dr. J. M. WILSON remarked that his inclination would be to superintend the work, which should be done by the nuisance-inspector. As medical officers, they ought not to forget that they were advisers on matters of health to sanitary authorities. After they had made themselves acquainted with the requirements of the new order, they could consider the question of remuneration.

The CHAIRMAN said it was a part of his duty as a medical officer to inquire into the causes of disease within the area of his local authority, and he had never hesitated to go into dairies and cowsheds to see whether they were kept in a satisfactory manner.

Dr. SCOTT believed that the new order would entail very little extra labour on medical officers.

Dr. HIME afterwards exhibited a Pasteur-Chamberland filter, and the SECRETARY a sample of peat-dust for use in earth-closets.

FAIRS AND CHOLERA.—It is stated that cholera broke out at the Purkhar fair on November 10th, when no less than 400 persons were attacked, and half of the cases proved fatal. The disease spread to Ajmere, where 200 died in two days. The outbreak has since much subsided.

THE RELATIVE PROPORTION OF MEDICAL MEN TO THE POPULATION OF THE UNITED KINGDOM AND OF AUSTRALIA.

Two years ago we drew attention to the rapidity with which the numerical strength of the medical profession was increasing in the United Kingdom. From a comparison of the number of names in Churchill's *Medical Directory* for 1883 and 1885, it appeared that the number of qualified practitioners had increased from 19,947 at the close of 1882 to 21,381 at the close of 1884; this was stated to be equivalent to an increase of rather over 7 per cent. The new edition of the *Directory* gives the number of practitioners in the United Kingdom as 22,316 at the close of 1886; the increase, therefore, has been considerably slower, and only amounts to a little over 4 per cent. In London the increase has been from 4,564 in 1884 to 4,729 in 1886, or an increase of about 3½ per cent. instead of 12 per cent., as in the previous period of two years. The increase in the number of practitioners resident abroad is also less considerable; in the last two years the number has been increased by 297, which is equal to about 15 per cent., whereas in the previous two years it was 404, which was equal to 26½ per cent.

Some highly interesting facts result from an examination and comparison of the last edition of the *Australasian Medical Directory*, with the recently issued edition of Messrs. Churchill's *Medical Directory*. It is commonly supposed that Australia offers a field for practice the like of which does not exist in this country, but statistics lend no support to this view; on the contrary, when it is remembered that in even the fairly well occupied districts of Australia the population is much more widely scattered than in average agricultural districts in the United Kingdom, it becomes evident that the opportunities for remunerative practice cannot be much more numerous. The only set off to this is that there is far less pauperism and fewer hospitals.

—	Population.	No. of Registered Practitioners.	Proportion to Population.
United Kingdom	36,707,418	22,316	1 to 1,645
England and Wales	27,870,586	17,395	,, 1,602
England and Wales, excluding London	23,721,053	12,666	,, 1,872
Scotland	3,949,393	2,448	,, 1,613
Ireland	4,887,439	2,473	,, 1,976
London	4,149,533	4,729	,, 877
Australia	2,714,000	1,457	,, 1,862
New South Wales	1,000,000	526	,, 1,901
Sydney	125,000	113	,, 1,106
Queensland	340,000	170	,, 2,000
South Australia	325,000	155	,, 2,097
Adelaide	50,000	43	,, 1,162
Victoria	1,012,000	584	,, 1,733
Western Australia	37,000	22	,, 1,681
Tasmania	136,000	71	,, 1,915
New Zealand, excluding Maoris	545,000	362	,, 1,505

ROYAL COLLEGE OF PHYSICIANS.

ADJOURNED MEETING.

THE adjourned meeting of the College was held on Thursday, December 23rd, Sir W. JENNER presiding. There was a large attendance, including nearly all the most distinguished Fellows, at what may hereafter prove to have been the most important crisis in the history of the College. The business was the further consideration of the report from the delegates appointed by the two Colleges on the question of the possibility and desirability of obtaining power to grant degrees in medicine and surgery. In this report the delegates recommended to the two Colleges the adoption of the two following resolutions :—

1. That candidates who have passed the examinations of the Examining Board in England for the licence of the Royal College of Physicians of London, and the diploma of Member of the Royal College of Surgeons of England, should have a degree in medicine and surgery conferred upon them, provided that they have passed such examination in arts and science as may hereafter be defined, and have pursued clinical studies in London—or in other medical school or schools if the governing body should so determine—for at least two years after having passed the second professional examination.

2. That an application be made to the Crown by the Royal College of Physicians of London and the Royal College of Surgeons of England, acting conjointly, for power to confer degrees in medicine and surgery.

At the meeting of the College held on December 16th, the adoption of the first of these resolutions was moved by Dr. Wilson Fox, and seconded by Dr. Handfield Jones. An amendment in the following terms was moved by Dr. Allchin and seconded by Dr. Norman Moore :—"That no scheme for conferring degrees in medicine and surgery on candidates who shall have passed the examinations of the Examining Board in England for the licence of the Royal College of Physicians of London, and the diploma of Member of the Royal College of Surgeons of England, shall be deemed satisfactory, unless it provide for the conferring of such degrees by some university body outside the Royal Colleges themselves, but on which they may be represented."

The adjourned discussion was opened by Sir HENRY PITMAN. He thought that the College had already gone too far in this matter to be able to retreat honourably. He believed that there would be no unworthy feeling of jealousy on the part of the universities. Such jealousy could only be justified by a desire to maintain the value of their degrees, and there was no danger, if this scheme were carried out, that the new degree would be given for a lower standard of merit than was required for those given by the universities. Indeed, in one respect it might even show an advance in the requirement of additional knowledge of clinical medicine and surgery. It was a mistake to suppose that it would be necessary to obtain an Act of Parliament ; all that was needed was an Order in Council conferring a charter, and it was by no means unlikely that this could be obtained. It was a fallacy to think that colleges ought not to confer degrees. The University of Edinburgh was simply a college for the first hundred years of its existence. The Royal College of Music, a college of one faculty only, had the power to confer degrees. He had no desire to exclude other faculties ; let these crystallise around this nucleus. No university had started fullgrown. He concluded a powerful speech by urging the College to rightly estimate the gravity of the decision, and to seize an opportunity which, if lost, could not be regained.

Dr. MATTHEWS DUNCAN thought that a university of one faculty was a contradiction in terms. He doubted whether the assent of the medical schools and of the governing bodies of the hospitals could be obtained. What was to be the relation of this College to the proposed university ? He feared it would mean the abolition of this College.

Dr. ORD believed that in supporting this project he was really supporting, in the way that promised the most rapid progress, the project of a teaching university. If Dr. Allchin's amendment were adopted, it would mean the indefinite postponement of the question.

Sir ANDREW CLARK felt that every senior Fellow ought to accept his share of responsibility in this grave decision. He thought that the amendment would be unwise, humiliating, and full of peril to the College. In an eloquent speech he replied in detail to the objections which had been brought against this proposal. There was compelling reason for it in the grievance which admittedly existed. The charters already possessed by the Royal Colleges, the work which they had done, the distinguished names of which they could boast in the past, justified this new departure. There was no danger that powers entrusted to these bodies would be abused by the creation of an inferior degree ; the action of the Colleges had ever been a forward one. There was no reason why "every man" should not be "a doctor" if only he were properly qualified. This, however, would not be the actual result, for a further test of knowledge would be prescribed. It was said that this step would be fatal to the College, but he thought, also, that growth and expansion were necessities of life. It was objected, also, that the Society of Apothecaries would obtain power to form an inferior class of practitioners ; but it seemed to him most desirable that there should be such a class—composed of men who had not had the time, means, or ability to obtain a higher qualification—to practise among the poorer classes. It would prove a solution of many difficulties. He heartily concurred in Sir H. Pitman's solemn warning that the present was a crisis in the history of the College.

The debate was continued by Dr. STURGES, and by Dr. QUAIN, who said that, without attempting to make a speech on the subject, he was desirous of removing the mistaken impression entertained by Dr. Matthews Duncan that the result of attempting to establish a degree would be to altogether disestablish the two Royal Colleges ; but nothing of the kind would occur in any arrangement made for establishing degrees—the very first resolution should be to the effect that the Royal Colleges should retain all their rights, privileges, duties, and functions unaltered. He was glad to see the concensus of opinion in favour of the claims of the Colleges, which he believed to be irresistible.

The PRESIDENT pointed out that the question at present in discussion was simply this : whether the degree should be given by the Colleges themselves, or by some outside body ? He regarded it as of the highest importance that a definite decision should be arrived at.

Sir RISDON BENNETT would have voted heartily for the second resolution, but objected to some of the details of the first.

Dr. DICKINSON maintained that there were three points essential to the worthiness of the proposed degree. There must be an examination in arts, there must be a clinical examination, and part of the education must be obtained in London.

Professor LATHAM (Cambridge) had formerly opposed this scheme ; but reflection had altered his view. He now heartily supported it. The universities would be able to hold their own ground, and the clinical requirements for this degree would make it desired even by graduates of Oxford and Cambridge. He did not think that in the hands of this College there was any danger of a lowering of the value of the M.D. In this view Dr. BARNES concurred.

Sir W. GULL objected to the proposed examination in arts, and thought that the College ought to examine only in strictly professional subjects. He suggested that the name of the degree ought to be M.D. Lond., that given by the University of London being changed to M.D. Univ. Lond., and, as one of the oldest members of the Senate of that University, he thought consent could be obtained to this change.

Dr. BROADBENT called attention to the fact that it was not any matters of detail, but the general principle, to which the President had referred, which was now to be decided. The real revolution in the history of the College took place when it began to examine licentiates.

The amendment was then put from the Chair. Only nine hands were held up for it, and it was rejected by an overwhelming majority.

Sir WILLIAM GULL then moved as an amendment : "That candidates who have passed the examinations of the conjoint Board in England for the licence of the Royal College of Physicians of London and the diploma of Member of the Royal College of Surgeons of England, shall be admitted to a further examination for a Degree in Clinical Medicine and Surgery." At the suggestion of the President this was withdrawn, in order that it might previously be submitted to the delegates.

Dr. BROADBENT pointed out that, though there was much difference of opinion with regard to the details of the first resolution, there seemed to be a general unanimity with regard to the second. He therefore formally moved the adoption of the second resolution, and this was seconded by Sir W. GULL.

On it being put from the Chair "That an application be made to the Crown by the Royal College of Physicians of London and the Royal College of Surgeons of England, acting conjointly, for power to confer Degrees in Medicine and Surgery," this was voted without a single dissentient.

Dr. QUAIN then moved, and Dr. PRIESTLEY seconded, a resolution referring the report back to the committee of delegates, authorising them to consider the whole subject, and to report upon it fully to a future meeting of the Colleges. This resolution was adopted.

CHOLERA AND QUARANTINE IN BUENOS AYRES.

ACCORDING to the latest advices from Buenos Ayres, the existence of cholera in that town was officially admitted early in November last, and in accordance with the traditions of the States in that locality, the outbreak was the signal for the immediate imposition of quarantine of the harshest and most grotesque character. The adjoining provinces refused to admit anything or anybody from Buenos Ayres ; whilst the latter retaliated by refusing to allow even correspondence from the other provinces to cross its borders. Monte Video absolutely prohibited any communication, even in writing, with its rival, Buenos Ayres, and we are not sure whether even telegraphic messages did not come within this prohibition. And yet, according to recent newspaper reports, it would seem as if cholera has invaded Monte Video itself. Meanwhile, the foul blots in the sanitary condition of the neighbourhood remain unheeded and unremedied, the shipping and commerce are deranged, and the immigrants to the district are huddled together in the lazaretto, or have to remain on board their respective vessels.

THE CHOLERA IN EUROPE.

No fresh cases of cholera have been reported, says a telegram from Rustchuk, of December 22nd, since the first eight deaths, which occurred about nine days ago. The sanitary cordon established around the infected village is still maintained. The Roumanian Government, having taken precautionary measures against arrivals from Bulgaria, the Bulgarian authorities, not admitting the prevalence of cholera in the country, have adopted similar measures as regards arrivals from Roumania.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room, Exeter Hall, Strand, London, on Wednesday, the 19th day of January next, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, December 16th, 1886.

NOTICE OF QUARTERLY MEETINGS FOR 1887. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on January 19th, April 13th, July 13th, and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, December 29th, 1886, and March 24th, June 23rd, and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,
THE VALUE OF HAMAMELIS, THE VALUE OF PURE TEREBENE.

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE, CANCER OF THE BREAST, and the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE, are now closed.

A Report on the CHOREA Inquiry has been prepared by Dr. Stephen Mackenzie ; and will be published in the BRITISH MEDICAL JOURNAL as soon as the printing can be completed.

A Report on CENTENARIANS, prepared by Professor Humphry, was published with the JOURNAL of December 11th; a full Report on OLD AGE will follow.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, CANCER OF THE BREAST, and HABITS OF INTEMPERANCE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

GLOUCESTERSHIRE BRANCH.—The next ordinary meeting will be held at the Gloucester Infirmary, when Dr. Batten will give his presidential address, on Tuesday, January 18th, at 7.30 P.M.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held, by the kind invitation of Dr. Mickle, at Grove Hall, Bow, on Thursday, January 20th, at 8.30 P.M. The chair will be taken by Cornelius Garman, Esq. Dr. Mickle will demonstrate a number of patients illustrating various forms and phases of insanity and general paralysis of the insane. Dr. C. R. Walker will show a patient suffering from locomotor ataxy, with perforating ulcer of the foot.

OXFORD AND DISTRICT BRANCH.—The next general meeting will be held on [illegible]nesday, January 26th, 1887. Members who wish to read papers or show cases [illegible]red to send notice of such intention to one of the honorary secretaries, on [illegible]anuary 18th.—Dr. DARBISHIRE, 60 High Street, Oxford; W. L. MORGAN, [illegible]nd Street, Oxford.

BERMUDA BRANCH.

A MEETING of the above was held at the Town Hall, Hamilton, on December 4th. Dr. C. GRAVES IRWIN, M.S., P.M.O., President, took the chair, and ten other members were present.

Hepatic Abscess.—The PRESIDENT made a few remarks on hepatic abscess, and gave some very interesting particulars of cases which had come under his own observation among the troops in Bermuda and various parts of the world.—Surgeon CECIL BIRT, M.S., read a paper on hepatic abscess as it occurs in Bermuda.

Ulcerative Endocarditis.—Surgeon BIRT also exhibited the heart and spleen of a man who died of ulcerative endocarditis. The case was of special interest, as the temperature-chart bore a certain resemblance to that of a prolonged case of enteric fever; in fact, the patient was looked upon during life as suffering from old valvular disease complicated with enteric.

Miscellaneous Cases.—Drs. TUCKER and HINSON described various cases they had treated during their long experience in the island.

Proposed Cottage Hospital.—A discussion took place on the proposed cottage hospital, and a committee was appointed to draw up a complete plan of what was required, and put it before the public.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.

THE third meeting of the session was held on Thursday, December 16th, at Brooke House, Upper Clapton, by the kind invitation of Dr. Adams. The chair was taken by Dr. C. T. AVELING; twenty-eight members and visitors being present.

Exhibition of Cases.—Dr. HADDEN showed a number of patients, illustrating the following forms of nervous disease: 1. Alcoholic paralysis. 2. Spastic paraplegia. 3. Disseminated sclerosis. 4. Paralysis agitans. 5. Locomotor ataxy. 6. Progressive muscular atrophy. 7. Athetosis. 8. Acute myelitis.—Dr. JOSEPH HUNT showed a patient suffering from mercurial tremors.—Mr. MAJOR GREENWOOD showed a girl, aged 10, with an enlarged thyroid.

Vote of Thanks.—A cordial vote of thanks was proposed to Dr. Hadden by Mr. PERCY WARNER, and another to Dr. Aveling by Mr. NICOLL.

GLASGOW AND WEST OF SCOTLAND BRANCH.

A MEETING took place in Glasgow on October 29th, at 4 P.M., the President, Professor JAMES MORTON, in the chair. There was a fairly good attendance of members.

Spina Bifida.—The minutes of last meeting having been read and adopted, the PRESIDENT, after resigning the chair to Professor G. H. B. Macleod, read a paper on "Spina Bifida," which had been unavoidably held over from the Paisley meeting in July last. Dr. Morton showed two patients on whom his operation had been successfully performed; and his remarks were illustrated by a number of diagrams. At the close of the address, there was a short but interesting discussion on the subject, and Dr. Morton answered a number of questions put to him regarding the details of his mode of operating.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Therapeutic Action of Tannin in the Treatment of Tuberculosis.—Peptone.—External Application of the Juice of Euphorbia.—Pelletierine in Infantile Disorders.—Bright's Disease.—Cholera during Pregnancy.—Case of Snake Bite.—Trichinosis in Sheep.—M. Jules Voisin's Experiments on Hysterical Patients.—Kinematic Analysis of Locomotion in the Horse.—General News.

AT a recent meeting of the Biological Society, M. Arthaud made a communication respecting his researches, in conjunction with M. Raymond, on the etiology and treatment of tubercular affections. Three substances had given satisfactory results: (1) sulphide of carbon, (2) iodoform, (3) tannin. Experiments were made on rabbits, which were submitted to the action of these substances and examined at the end of a month, in order to ascertain whether they could be inoculated with tubercle. No very decided result followed the use of iodoform, or sulphide of carbon, probably owing to the method employed for introducing those substances into the organism; with tannin, however, the results were very remarkable. Six rabbits were treated for a month with doses of tannin, varying from 50 centigrammes to 1 gramme; after two successive inoculations, one, with lung-tissue from

a patient who had died of acute tuberculosis; the other with miliary tubercle from a hospital patient—no trace of infection was observed, whilst three other rabbits, to which tannin had not been given, succumbed in consequence of inoculations with the same material. These experiments suggested a mode of treatment which has been adopted with excellent results in over fifty cases. Tannin was given in doses of from two to four grammes a day, and the improvement was visible at the end of a fortnight, the patients had increased in weight, and no relapse occurred. In cases of acute tuberculosis, both in children and adults, it sometimes happens that the symptoms appear less favourable; but, at the end of a week or a fortnight, the patient's condition improves, even when fatal results have been feared. From these experiments the following conclusions may be drawn: (1) That tannin is preferable to sulphur of carbon or iodoform in the treatment of tuberculosis; (2) that animals submitted to this treatment for a month offer great resistance to the action of tubercular virus.

Dr. Labastide, in the *Gazette des Hôpitaux*, publishes notes of cases showing the good effects of peptone. The first was that of a widow over eighty years of age of robust constitution and sanguine temperament; she had hemiplegia on the right side, and partial aphasia following a cerebral effusion which dated more than thirty years back; all the functions were normal. In the spring of 1884 she had another cerebral attack, but the symptoms disappeared under the influence of internal and external derivatives. In 1885 she had a third attack, which lasted longer than the preceding one; paralysis became more pronounced, aphasia more complete, and deglutition more painful, without any local change in the throat. The patient refused all nourishment. When obliged to take food, either solid or liquid, she immediately vomited it. Pure water, sweetened or aërated, was immediately rejected. At the end of six months the patient was extremely feeble. Dr. Labastide then decided to administer peptone. Injections of twenty grammes of "peptone Dufresne," mixed with sixty grammes of boiled milk, were given, broth being occasionally substituted for milk. After twenty days of this regimen the patient had rallied from her state of prostration; her stomach retained water, and even milk, when taken in small doses at long intervals. Twenty grammes of peptone, mixed with a little tapioca, were then ordered three times a day. After fifty days of this treatment, the patient, though still paralysed, had recovered her former condition, and had even begun to grow stout. At the end of March, however, she succumbed to a fresh cerebral attack. The second case was that of an infant nine months old, of an extremely feeble constitution. At the cutting of the first tooth symptoms of inflammation of the intestines appeared, together with wasting. Aphthæ of the mouth prevented the child from taking the breast. Dr. Labastide then had recourse to injections of peptone, ten grammes of which were given with twenty grammes of milk, a drop or two of laudanum being occasionally added. The little patient was nourished in this way for two months, and gradually gained strength. At the end of that time it could take peptone, mixed with weak milk taken from its mother, or with tapioca. After five months' treatment all trace of cachexia had disappeared. The third case was that of a child nine years old, of nervo-lymphatic temperament, and fairly good constitution. It had every symptom of anæmia, pallor, palpitations, headache, enlarged glands in the neck and elsewhere, and exostoses on both tibiæ. No treatment had been of any benefit. Peptone was then administered in doses of one, and, subsequently, two tablespoonfuls. In a few days the tumours on the legs began to disappear, the swelling of the glands diminished, the appetite returned, the little patient recovered his strength and colour, and the limbs could be moved without effort. The child no longer suffers from headaches or palpitations, and is now completely cured.

Since hypodermic injections of papain have been used in diphtheria and cancer, without accident of any kind resulting, the juice of Euphorbia has been tried. The results were not very satisfactory. M. Baudry published in the *Bulletin Médical du Nord* the case of a patient suffering from cancroid of the right lower lid, who had himself applied a kind of poultice made of crushed twigs and leaves of the Euphorbia (E. helioscopia), a plant containing a milky, corrosive juice, employed by country people as a preventive of warts. Two hours afterwards the pain became so intense as to oblige the patient to remove the poultice; he was also attacked by acute conjunctivitis. When first seen eight days afterwards, a whitish ulceration occupied the lower third of the cornea, which threatened to spread rapidly; this was followed by iritis, and hypopyon ensued. Saemisch's operation was done the next day, and the patient recovered, with a large adhering leucoma, for which iridectomy will be performed later on. M. Baudry mentions the communication made by M. Laudowski, at Grenoble in 1885, on the destructive action of the juice of Euphorbia.

M. F. Méplain, bearing in mind the difficulty of giving children vermifuge medicine in sufficient doses, and the fact that Dr. Bétancés had administered six centigrammes of pelletierine, which had expelled a tænia, resolved to try this remedy on an infant thirty-two months old, which was suffering from convulsions. M. Béranger Féraud and other writers recommend that pelletierine should not be given to children, on account of the symptoms of congestion of the brain which it occasionally causes in adults. Be that as it may, M. F. Méplain administered to his little patient a large teaspoonful of solution of Tanret's pelletierine, which represents about six centigrammes of the alkaloid; twenty minutes later, twenty grammes of manna, dissolved in a cup of milk, were given. The expulsion was tardy, owing to the insufficiency of the purgatives used, but was, nevertheless, complete. M. F. Méplain, who remained several hours with the patient, observed no alarming symptom. From the observations of MM. Bétancés and F. Méplain, it appears, therefore, that whilst a small dose of pelletierine is sufficient to expel the tænia, the use of the drug is, in the case of children, unattended with the risks which might have been expected from its physiological action, and from the effects observed in adults.

At a recent meeting of the Société Médicale des Hôpitaux, M. Dieulafoy, who has already drawn attention to a form of Bright's disease in which there is no albuminuria, communicated the details of a case which had been verified by *post mortem* examination. The patient was a man of 63, suffering from headache and dyspnœa. Neither alcoholism nor syphilis were detected. Dyspnœa dated from several months back, and was characterised by attacks of oppression of a character differing from those which occur in asthma and emphysema. There was slight transient œdema below the malleoli; no albumen in the urine. Soon after admission, the patient was attacked with violent delirium and fever. Albumen was then discovered in the urine, and death took place on the eleventh day. The two kidneys presented characteristic lesions.

At a recent meeting of the Académie de Medécine, M. Queirel, of Marseilles, read a paper entitled "Cholera during Pregnancy," in which he stated that, whilst pregnancy is not a predisposing cause of cholera, it appears to make the prognosis less favourable. It has not yet been ascertained whether the disease is transmitted by the mother to the fœtus, but it proves fatal to children at the breast. It is also a frequent cause of abortion. Danger to the mother is greater during the second period of pregnancy, though, should she contract the disease near the end of her time, the child may be born alive, only to die, as often happens, from cholera, a few days after birth. Cholera is more dangerous after delivery, and arrests lactation. From a clinical point of view, the only fact worth recording is, that a severe form of rickets is frequently met with in cases where the mother has had cholera during pregnancy.

At a recent meeting of the Paris Surgical Society, M. Terrier communicated the case of a showman at a menagerie who was bitten by a snake. Immediately after the bite, the patient tied a ligature tightly round his arm. The wound was afterwards cauterised, but considerable œdema followed. M. Pluzette (Marseilles) injected tincture of iodine locally, and gave an emetico-cathartic, followed by the administration of stimulants, etc. Antiseptic baths were also ordered. The œdema increased, and serious systemic disturbance ensued twelve hours after the accident. The general symptoms improved; but the œdema continued, and gangrene appeared imminent. Eventually, however, the patient recovered, only slight œdema of the arm remaining.

At a recent meeting of the Academy of Medicine, M. Johannès Chatin read a paper on trichinosis in sheep (measly mutton). M. Chatin concludes, from his investigations on this subject, that this parasitical affection is not so important as has been supposed. The cysticerci rarely breed in sufficient numbers to cause true trichinosis; and, even should this be the case, there is no danger of their being transmitted to human beings.

M. Jules Voisin has made two highly interesting experiments, at the Salpêtrière Hospital, on hysterical patients on whom he studied the action of telepathic remedies (*médicaments à distance*), such as metals and the magnet. He explained the phenomenon of various changes of personality presented by one of his patients, M. V., the same individual who was experimented on by MM. Bourru and Burot (see *Congress of Grenoble*, 1885, and *Société de Biologie*, 1885). M. Voisin's experiments were made with corked and sealed phials of an opaque colour. He was himself ignorant of the contents of these phials, and was careful not to utter a word in the patient's presence. He threw the subject into a lethargic, somnolent and cataleptic state,

but obtained no result under these conditions. When M. Voisin made his experiments on any patient in a waking state, the latter immediately fell into a hypnotic state, and exhibited symptoms of disturbance, nausea and vomiting. If the name of a drug, of which the effects are well known, or the effects of any medicament whatsoever were mentioned, during the state of hypnotism, the patient immediately manifested the physiological effects of these remedies. Suggestion and unconscious suggestion were thus manifested. In another series of experiments, M. Jules Voisin observed during one of the three phases of somnolence (lethargy, somnambulism, catalepsy), the state of one of his subjects, V.; he was not affected by the magnet. In the waking state no effect took place unless the magnet was seen by the patient, when it induced an attack, probably through suggestion. Gold and mercury caused redness and blisters if V. was aware of their presence; these results were obtained likewise during somnambulism. By suggestion, the effect of metals was destroyed or produced without their presence, and if the contact of metal took place without the knowledge of V. when he was awake, no effect occurred. General sensibility, sensory and motor sensibility, and the psychical state were affected by suggestion. M. Jules Voisin therefore believes it possible that the phenomenon of change of personality, as described by MM. Bourru and Butot represents the last phase of a hysterical attack, a phase characterised by delirium with delusions, and lasting several months. Similar changes of personality, lasting only a short time, were observed in somnambulism. They were always preceded by a physical change, resembling an attack, and they were apparently induced by any mental suggestion which accidentally recalled the previous existence of V.

At a recent meeting of the Academy of Sciences, MM. Marey and Pagès presented some observations on the kinematic analysis of locomotion in the horse. The tendency to economise, which is observed in different degrees in all animal mechanism, appears to reach its greatest perfection in the horse. In walking, the fore part of the body not only moves forward in a straight line, horizontally, and uniformly, but also the different radii of the oscillating member are displaced with the least possible effect. In trotting and galloping the economy, without being so great, is still considerable.

At a recent meeting of the Academy of Medicine, M. Dujardin-Beaumetz showed an apparatus of his own invention for the application of gaseous enemata after the method of M. Bergeon.

The lay nurses took the place of the sisters the other day at the Hôpital Necker and the Hôpital des Enfants Assistés, under the superintendence of M. Peyron, director of the Assistance Publique. The nuns, who belonged to the congregation of the Dames Hospitalières de St. Thomas-de-Villeneuve quietly left these two hospitals an hour later and repaired to the *maison mère*, Rue de Sèvres.

The new regulation of the Assistance Publique authorises the laicisation of the *maisons de secours*, which will henceforth be under the authority of the *bureaux de bienfaisance*. The Prefect of the Seine recently stated that he would carry out any propositions made by the committees of the *bureaux de bienfaisance*, if a suitable staff of nurses, etc., was provided. Two committees undertook to substitute lay nurses for the sisters now employed in the *maisons de secours*. As soon as the new arrangements are complete, the agreement formerly made with the nuns will be cancelled.

GLASGOW.

[FROM OUR OWN CORRESPONDENT.]

The Disaster at Crarae Quarries, Lochfyne.—White-Lead Poisoning Case in Glasgow.—Glasgow Philosophical Society.—Combe and Ambulance Lectures.—Robertson Stewart Hospital, Rothesay.—Milk Prosecution.

AN interesting report of the investigation into the circumstances of this accident has been made by Colonel Ford, Inspector of Explosives. The accident resulted from the explosion of a blast of gunpowder on September 25th, and seven persons were killed. The amount of gunpowder employed was 13,000 pounds. Colonel Ford estimates that the gases produced by the explosion of this quantity of powder would be as follows :—

Carbonic anhydride	(27.5 per cent.)	3,575 pounds.
Carbonic oxide ...	(3.6 ,,)	468 ,,
Hydro-sulphuric acid	(1. ,,)	130 ,,
Nitrogen	(11.2 ,,)	1,456 ,,
Hydrogen	(.1 ,,)	12 ,,
Marsh gas	(.1 ,,)	12 ,,

The report goes on to consider to which of these gases the disaster was due. Nitrogen, hydrogen, and marsh gas are dismissed as harmless. The action of carbonic anhydride is stated as follows :—"If administered pure it causes almost instantaneous death, but if somewhat diluted there is an immediate loss of muscular power. The patient sinks down, unable to make the slightest exertion, the head falling on the breast, and death resulting without a word or a struggle. If still more diluted, the loss of muscular power is gradual, the countenance becomes livid, and the respiration hurried, accompanied very rarely with convulsions and vomiting. The person dies in a state of complete coma. It may be broadly stated that the addition of 10 to 15 per cent. of carbonic anhydride to air would render it poisonous. Carbonic anhydride is an actual poison. The blood after death is usually dark-coloured and liquid." "Carbonic oxide is a narcotic poison.....One-half per cent. of carbonic oxide in air, containing also carbonic anhydride in considerable quantity, is more or less fatal to human life." "The symptoms of poisoning from hydro-sulphuric acid gas vary according to its degree of dilution. If somewhat diluted, nausea, giddiness, laborious breathing, irregular action of the heart, pains in the stomach, and death by coma, or perhaps in violent convulsions, with tetanus, and even delirium, are not unusual.....Air containing about 1 per cent. is unfit to sustain life." Colonel Ford estimates that the 3,575 pounds of carbonic anhydride would occupy a space of 30,770 cubic feet, and would render dangerous about 307,700 cubic feet of air. He concludes that "probably the mischief was done by the carbonic oxide, as a very small proportion of that gas in the presence of carbonic anhydride renders the air fatal. The symptoms, however, agree well with those attributed to poisoning by carbonic anhydride, and the blood of one of the deceased was so liquid after his death that it flowed through the coffin in which his body was placed." The report concludes by expressing the opinion that, much as the accident is to be regretted, no blame attaches to anyone in respect of it.

In the Glasgow Sheriff Court, a case was recently decided by Sheriff Murray, in which a worker in the Caledonian White Lead Company (Limited), Possilpark, sued her employers for £12 damages because, in breach of the Factory and Workshop Act (1883), they failed to supply her with tooth and nail brushes, respirators, acidulated drinks, or a bath-room, in consequence of which she suffered from lead-poisoning. The defenders contended that they complied with the provisions of the statute as soon as they commenced proper operations, and that, in any case, their process of manufacture rendered absorption of the poisonous material much less than other processes. The sheriff pointed out the stringency of the statute, and held that while it might have been observed in the main, all its provisions had not been complied with. He gave decree for £3 damages, with £3 expenses.

The third ordinary general meeting of the Glasgow Philosophical Society was held on December 15th, Dr. J. B. Russell in the chair. Dr. Henry Muirhead gave in his report of the conference of delegates at the British Association meeting in Birmingham. Dr. McGregor-Robertson then read, on behalf of Mr. David Sandeman, a paper on Recent Progress in Technical Education. Mr. William Milne, M.A., read a paper on A New Tentaculiferous Protozoon and other Infusoria, with notes on Reproduction and the Function of the Contractile Vesicle; and Mr. R. F. Muirhead, B.Sc., gave an experimental demonstration in illustration of Professor Osborne Reynolds' researches on Dilatancy.

Dr. Andrew Wilson is at present delivering courses of lectures in Kirkcaldy, Airdrie, Carlake, and Penicuik, each course consisting of eight lectures. In 1887, Coatbridge, Dumbarton, Bonnyrigg, and Grangemouth will be visited by Dr. Wilson, and the course to teachers in Edinburgh and Glasgow will be resumed in the summer. The subject for the teachers' course will be Health as represented in the House and in the School. In each town Dr. Wilson is favoured with large audiences. A new ambulance class for ladies, in connection with St. Andrews Ambulance Association, has been commenced in Lays, under Dr. Moyes; the course to consist of ten lectures.

Sheriff Orr presided at the annual meeting of subscribers to the non-infectious ward in the Robertson Stewart Hospital at Rothsay. The annual report showed a total expenditure of £65 19s. 9d., and a balance in hand of £51 5s. The number of non-infectious cases admitted had been eight, five male and three female. Of these, five were dismissed cured, two died, and one remained in hospital. The report was adopted, and the committee re-elected.

In Glasgow Sheriff Court a milk salesman has been fined £2, with the alternative of four days' imprisonment, for refusing to supply an inspector of the Sanitary Department with one pennyworth of sweet milk out of a particular barrel.

VACCINATION.—Mr. John Buckenham, L.R.C.P.Ed., M.R.C.S.Eng., Public Vaccinator, Borough of Cambridge, has received the Government grant for efficient vaccination.

CORRESPONDENCE.

A NEW MEDICAL UNIVERSITY FOR LONDON AND THE GENERAL PRACTITIONERS OF ENGLAND.

SIR,—In the JOURNAL of this date, you announce the resolution adopted by the Councils of the Royal College of Surgeons of England and the Royal College of Physicians of London, to apply to the Privy Council for a charter to give to them, or to a body delegated by them, the right of forming a medical university in London, which is to possess exclusive powers of giving medical degrees to students who pass the conjoint examination of those bodies. The general practitioners of England are deeply interested in this matter, and we submit that it is not one which should be settled by Councils composed wholly of hospital-surgeons and physicians—Councils which are not elected by general practitioners, and in which general practitioners have no place. The Council of the College of Physicians is a body wholly composed of self-elected members, and not at all in touch with the whole body of the profession. We appeal to the BRITISH MEDICAL JOURNAL, which has so long occupied a prominent place as a defender of the rights of general practitioners, and which must ever derive its main support from the general practitioners of England, who constitute 95 per cent. of the profession, to assist us in seeing that the voice of the whole profession is heard in this matter, and that some representation of the profession be secured in a body which is to deal essentially and above all things with the interests and welfare of general practitioners, their education, and their degrees. If the constitution of the new university as now foreshadowed means anything, it means that a degree is to be provided for the general practitioners of England, educated in London. On what plea, then, of justice can it be urged that these two corporations are to avail themselves of this pressing necessity of the profession to compel all students educated in London, in Bristol, or other provincial schools, to pass through the portals of those two Colleges as the one essential and necessary condition of their obtaining the title of "Doctor." If in the future, as in the past, it suits the requirements of general practitioners to pass the examinations, and to acquire the privileges granted by the charters and Acts of Parliament of the Apothecaries' Society of London, why should the students who have gone through the same curriculum, been educated under the same teachers, and under the supervision of the same General Medical Council, be debarred from obtaining the degree of M.D. on examination, unless they choose to pay a special preliminary toll to the authorities at Pall Mall and Lincoln's Inn Fields. Our contention is that, as the new M.D. is to be a degree for general practitioners, and as the new university is to be a university which above all things concerns itself with obtaining suitable degrees for general practitioners, that all students educated in the metropolitan and provincial schools who have passed an adequate first examination, such as that which will be provided at Blackfriars, as well as on the Thames Embankment, should equally be entitled to go up for examination at the new university. Moreover, we contend that the Councils of those two Colleges are not, in their present non-representative constitution, bodies which can properly be entrusted with the constitution of the university. If those Councils represented the profession, they would have a just basis for their present claim; but, at present, the immense majority of the profession are excluded from all representative voice in the constitution of those Councils, and it will be the duty of the Association of General Practitioners to offer its warmest support, on the one hand, to the procuring of a degree for the students of England who pass adequate examinations for the title and degree of M.D., but, on the other hand, it will be equally their duty to oppose the constitution of any new university which shall make it the price of such a degree that the Councils of the Colleges shall be maintained in their existing exclusive privileges, and that the new university shall be so constructed as to be only a means for maintaining in power the present clique of hospital surgeons and physicians who assume to rule the destinies of the profession in the endeavour to make this new university a means of strengthening their privileges, and for securing at an enhanced cost the monopoly enjoyed by the two corporations over which these hospital surgeons and physicians have assumed exclusive power. In other words, we shall support the application for a charter, but we shall claim, as a preliminary, an inquiry into the existing constitution of the Colleges of Surgeons and Physicians; and we shall urge on the Government that any new university which may be constituted shall contain a just representation of the profession at large, so far as represented in the Members and licentiates of the two Colleges; and that until such representation is granted, no new University be constituted.—We are, Sir, yours, etc.

H. W. VERDON,
W. GIBSON BOTT,
Honorary Secretaries.

The Association of General Practitioners, 414, Clapham Road.

"THE MEMBER, THE FELLOW, AND THE FRANCHISE."

SIR,—Under this title Mr. Erichsen has given to the world the substance of his speech at the General Meeting of the College of Surgeons on November 4th. This pamphlet you have fully dealt with in various articles; yet, as the author now directs special attention to a few of its salient points, we trust you will allow us to discuss them, in no spirit of hostility to himself, for whom we entertain feelings of profound veneration, but because the cause of the Members is affected thereby.

We had not thought that Mr. Erichsen attached any serious importance to these points upon which he now insists, but rather that they had, in the first place, crept into his monograph in consequence of an oversight.

For example, Mr. Erichsen's argument that the great body of Members of the College care little for the attainment of the electoral franchise, he supports by instancing the fact that, "out of 4,000 Members who could five years ago have easily acquired it, only nine availed themselves of that privilege." The contention carries, in itself, its own condemnation; for surely Mr. Erichsen will not maintain that, because the Members of the College were too honourable to covet a Fellowship-without-examination, the origin of which had been so earnestly decried by them, they therefore cared nought for the privilege of a voice in the management of College affairs. Why, Sir, if these very Members had had a vote for candidates for a seat on the Council, they would have given it only to those who would have seen that such evils were put down; and for this presumption we have very good grounds in letters received by us from men who were Members before 1843, and who have always set their faces against the Fellowship for the very reason that it had been originally so largely obtained in the manner which Mr. Erichsen advocates, and the neglect of which he would hold up as a reproach to Members. Does he or any one else imagine that the Council, the Fellows, or the Members would care to see the Fellowship swamped in the way suggested? As we have said elsewhere, the Members honour the Fellowship too much to wish to see its distinction lowered one fraction, and are even more jealous of its reputation than is a Council which would fain introduce a certain number of nominated Fellows into its ranks every year; the Members will have none of this measure.

Mr. Erichsen's next point can be easily dismissed; he states that "the Council, as at present constituted, is a thoroughly representative body." We ask whether he uses the word in the loose fashion of the day, or in its accurate sense. By the light of the latter we can only accede that the Council is representative of the London Fellows, for it is elected by them alone; any wider representative principle is totally "unrepresented" in its constitution. To Mr. Erichsen's succeeding argument, namely, that "the Members of the College have never possessed the elective franchise," we can give no unqualified assent, as this is a point upon which legal opinions may possibly differ; but he knocks the bottom out of it by recalling the disgraceful history of a self-elected Council. Better to let the dead past bury its dead, for the argument does not come forth unsullied from its partnership with the rest of the sentence.

The final issue raised we would willingly have passed over in silence; for when a past President of the College can talk of the Membership being "effectually sunk under a degree," it is indeed time that the Members hung their heads. Has it come to this, that a man can grow ashamed of belonging to the Royal College of Surgeons of England? At what grade of a degree of what university is it that a Member makes haste to cover up his title of Surgeon? We might almost answer that if these men renounce their Membership, then let the College renounce them; but those who are proud of their Alma Mater call for a system by which no man shall feel that he has no interest in the doings of the College, and everyone who bears the title of M.R.C.S. should be a real MEMBER, not a mere exostosis. On this point we cannot do better than quote an extract from the speech of the late lamented Mr. Sampson Gamgee, delivered at the memorable College meeting of October 29th, 1885, for it traverses the whole of this argument: "819 men had been sent out under the authority of this College, to practise in Her Majesty's land and sea forces, and in sanitary charge of our merchant fleet throughout the world. Of the total of 819, only 41 were Fellows of the College, while 778 were Members; so that in

round numbers the Members we e 95 per cent. of the whole, and that immense proportion was denied the right of voting in the administration of the College. Practically the College disfranchised all those who, having obtained its diploma, devoted themselves to the public service, however spotless—nay, glorious—their record. In proof of this statement he would trouble the meeting with a few more figures. Of 47 military Companions of the Bath and Companions of the Indian Empire in the profession, 27, or more than three-fifths, belonged to that College ; but of the 27, only 6, or one eighth of the whole, were Fellows ; while 17, or nearly one-third, were disqualified as Members from taking part in the College administration. Yet, among those so disfranchised, were K.C.B's, Honorary Physicians and Surgeons to Her Majesty, Inspectors-General of Hospitals and Fleets, and men who, to scientific attainments and consummate surgical skill, had added proof of heroes' mettle in the Victoria Crosses on their breasts." But Mr. Erichen himself admits that the "value of the College diploma is rising in professional and in public estimation ;" why, then, should Members who have taken so high a diploma be excluded from the management of the College, when some few hundred of those who forty years ago took a diploma which must, according to Mr. Erichsen's own argument, have been lower in grade, were nominated to a distinction which conferred the rights the more highly educated body now seeks. It is now full time that this anomaly ceased, and that the Members were admitted to a position in which each one may take a personal interest, present or prospective, in the honour, dignity, and prosperity of the grandest College in Europe.—We are, Sir, your obedient servants,

WARWICK C. STEELE,
WM. ASHTON ELLIS,
Hon. Secs. Association of Members of the Royal College of Surgeons (England).

THE PUBLIC SERVICES OF THE APOTHECARIES' SOCIETY.

SIR,—In following the history of the Apothecaries' Society, as an examining body established by Parliament to protect the large mass of the public, and especially the poor, from being prescribed for by chemists and druggists, quacks, or anyone who could procure patients, I find by a pamphlet "by an Exercent Practitioner," Samuel Merriman, M.D., in 1833, that the Society lost very little time in using the privilege conferred upon them conscientiously and honourably. It is worthy of special note that midwifery and the diseases of women and children were not neglected, for up to 1827, I observe, in a printed letter signed "A Member," addressed to the Right Hon. Sturges Bourne, His Majesty's Secretary of State for the Home Department, that the "whole female and infantile population of England, in the most critical of all situations—the only one which involves two lives at once—is confided to men whose competency to the task is left entirely to chance."

Like many others, I have never dabbled in medical politics ; but we are truly surprised at the shunting—if not throwing overboard—of the historical old Society to whom we have for so many years owed allegiance.—Yours faithfully,

JOHN J. MERRIMAN.

THE RIGHTS OF SCOTCH AND IRISH LICENTIATES.

SIR,—Can you inform me whether a Licentiate of any one of the Scotch or Irish Corporations can visit patients and dispense medicines to them ; in other words, act as an apothecary, except he is a Licentiate of the Society of Apothecaries in London, without being liable to a prosecution ?—Yours obediently,

M.D.

*** A Licentiate of the Scotch or Irish College of Surgeons is not, we believe, legally qualified to visit patients *and dispense medicines* in England. Such a person so practising in virtue of that qualification would be liable to prosecution for infringement of the privileges of the Apothecaries' Society, if that Society thought fit to authorise a prosecution.

ILLEGAL PRACTICE IN IRELAND: WHO IS TO STOP UNQUALIFIED PRACTICE?

SIR,—Every medical practitioner in England must gratefully acknowledge the valuable services of the Society of Apothecaries in suppressing illegal practice. In Ireland, on the other hand, you can see that no attempt whatever has been made to put a stop to illegal practice.

If the Society of Apothecaries of Dublin is invested with powers equal to those of the London Society, then I must say it appears very chary in using them. Throughout many towns in the west of Ireland "medical halls" are established. The reputed owners have no licence from the Apothecaries' Society. In some cases they are medical students, in others chemists' assistants, who come down to a western town, and in the most open and illegal manner start dispensing and prescribing medicines.

If the Society of Apothecaries of Dublin has a true and honest regard for the interests and protection of its own licentiates, it will lose no time in instituting a prosecution against those illegal practices.

December 9th, 1886. A MEMBER.

UNQUALIFIED ASSISTANTS.

SIR,—For many years past I have read, with much interest, the communications addressed to you on the subject of "Unqualified Assistants," with the hope of seeing this important matter satisfactorily dealt with, but hitherto it has found no solution. "An Unqualified Assistant with Complete Hospital Curriculum," makes, in the JOURNAL of December 18th, an excellent suggestion, which I think would fairly meet the difficulty. It has struck me as being somewhat remarkable, that considering how important and indispensable it is to the country practitioner to possess a really competent assistant in his surgery, no expression of their opinion on the subject has hitherto been offered by employers, and for this reason I venture to express my views, based on forty years' experience, during the whole of which time I have never been without an unqualified assistant. I can confidently state that, with a few rare exceptions, I found them intelligent, gentlemanly, well-conducted young men, in whom I could place great confidence, and for whose services I ever felt much indebted. It is not my desire to bolster up an objectionable system that has already existed too long, but by pointing out what is required, to lead to the adoption of some standard of qualification that may be satisfactory. However desirable it may be, in the opinion of many of our great professors, that the treatment of disease shall be based on such precise scientific knowledge that but little or no medicine should be required, that time has not yet come, for I venture to assert, that at no previous period was more medicine prescribed than at the present time, or I might, in many instances, rather say, advertised stuff that is made to represent medicine. Well, an assistant should be able to show—

1. That he can, read, write, and accurately dispense prescriptions, based on the *British Pharmacopœia*.

2. That he has had experience in making and compounding medicines.

3. That he has a knowledge of midwifery, and has attended a few cases.

4. That he has a fair acquaintance with the treatment of disease in general, and with the outlines of surgery.

Throughout the earlier part of my career, I had no difficulty in obtaining assistants possessing all these qualifications with the exception of the third, as the old system of apprenticeship was still in vogue, but as the generality of my assistants had passed their second or third year at the hospital, they had acquired that also. In the latter part of my time, I found that although they possessed a more competent knowledge of the third and fourth requirements, they were generally absolutely ignorant in regard to the first and second, and this is, I fear, the predicament in which many practitioners still find themselves on first commencing practice. Now, why did I give the preference to the unqualified man ? In the first place he was of an age at which he would readily submit to the drudgery of the surgery, and was not too old to be taught, or to take many useful hints from those about him. He was of an age when one could, without restraint, take him into the family circle, and could, without risk of offending his dignity, make occasional use of him, in driving the daily round, during which he gained a fund of useful information, and acquired that tact and habit of observation so essential to success in private practice, and which it would be very difficult to attain at a later period of his career.

Experience has long shown that a general practice cannot be efficiently conducted without assistance of some kind. This was formerly afforded by the system of apprenticeship, an ordeal through which every young aspirant to general practice had to pass. Although, as such, this system has fallen into disuse, there are still a considerable number of young men voluntarily submitting to the old custom, and it is from among these that the best assistants are now obtained, but as this supply falls far short of the demand, the deficiency is made up by the employment of (I hesitate to make the admission, but it must come out) wives, sons, daughters, sisters, page boys, small tradesmen, grooms, and gardeners ; in short, of any one but the young qualified practitioner ; and why ? He generally requires too high a salary ; he must be bound down not to practice, etc. ; he rarely knows anything of surgery work, or of dispensing ; he has not yet had time to discard a fund of scientific knowledge, which is apt to militate greatly against the interests both of his employer and his

patients; and should there be a rising generation in the house, he is not always a welcome addition to the family circle.—I am, Sir, faithfully yours, ALBERT NAPPER, M.R.C.S., L.S.A.

Guildford, December 22nd.

PROVIDENT DISPENSARIES v. OUT-PATIENT DEPARTMENTS.

SIR,—A Committee having been appointed to consider the question of a reform of the out-patient department of hospitals, and how far provident dispensaries may supply the needs of a large population, I have felt that it might be useful to state some of the results of a special experience as house-surgeon, and latterly for nearly seven years one of the medical officers of the Battersea Dispensary.

The present out-patient departments should be abolished entirely. Each hospital should have affiliated with it all the provident dispensaries and friendly societies in its neighbourhood. No out-patients should be received at any hospital unless sent by the medical officer of one of these institutions. The hospitals would thus benefit by a reduction in numbers, which would be compensated for by the greater interest of each case, owing to careful selection. Thus the past history would be forthcoming, and also the future course be followed. The dispensaries would reap the advantage of securing more patients, who would feel that, if their cases demanded it, they would be submitted to the most competent authorities; and the medical officers sending them would derive the same benefit as from a clinical post-graduate course.

All dispensaries would necessarily be provident; no improvident ones would be allowed. All too poor to pay the small weekly contribution to the dispensary would be left to the ordinary poor-law agencies.

Still further: a plan might easily be devised by means of which the students might be allowed to see, at the patients' homes, the ordinary infectious cases, and not be sent out fully qualified, and yet never having seen a case of measles, scarlet fever, chicken-pox, whooping-cough, etc. To secure the active co-operation of the medical profession, there must be no more monopoly of appointments to the dispensaries. Each dispensary should welcome every qualified medical man in its neighbourhood; none willing to accept office should be excluded. In this way patients would have a perfectly free choice. It would also be the greatest death-blow to all private dispensaries. Where the staff is limited, the outside practitioners feel that those in office have an unfair advantage over them, and so are veiled enemies to the system; and it seems to be forgotten also that, with such a limited staff, the very same abuses exist as in the present out-patient department; for generally one or two men are popular, get the run of the patients, have too much work to do, do it perfunctorily or too rapidly, or get overburdened, and lose all interest in their work. The wage-limit of admission must be also strictly enforced.—I am, Sir, your obedient servant, M. G. BIGGS.

101, Northcote Road, S.W.

THE MEDICAL REGISTER.

SIR,—Great inconvenience has been caused by the refusal of the Registrar of the Irish Branch of the Medical Council to register the degree of Master in Obstetrics until June next, and I am informed that the Registrars for England and Scotland have also refused to register this qualification.

As it is desirable to have an immediate decision, I have applied to the Branch Council for Ireland to direct the registrar to register all diplomas and degrees, named in Section 20, that have been tendered to him. The contention is that the Act does not come into force until June 1st, 1887. But certain provisions came into operation when the Act became law, June 25th, 1886, and have recently been carried out by the election of direct representatives; others, it is true, do not come into force until the "appointed" day, June 1st, 1887, but Section 20 has no reference to the "appointed" day and therefore became law in June last.

The Section runs: "The diploma of Member of the King and Queen's College of Physicians in Ireland, and the degree of Master in Obstetrics of any University in the United Kingdom, shall be deemed to be added to the qualifications described in Schedule A., of the Medical Act, 1858."

In case the Irish Branch Council do not see their way to order these qualifications to be registered, I intend to test the legality of the refusal to register them, and bring the subject forward at the meeting of the General Medical Council in February.—Very faithfully yours,

CHARLES FREDERICK KNIGHT, M.D.

Dublin, December 18th, 1886.

CENTENARIANS AND LIFE-INSURANCE.

SIR,—To surgeons who, like myself, attach much importance to physique as an indication of the "expectation of life," Professor Humphry's tables contain many useful and interesting facts, but there is one series to which I should like to call special attention, namely, the remarkable high stature and weight of centenarians. The average stature and weight of English men and women of all classes is 5 ft. 7½ in., and 155 lbs., for males, and 5 ft. 2½ in., and 123 lbs., for females; and of centenarians, 5 ft. 8 in., and 138 lbs., for males, and 5 ft. 3 in., and 129 lbs., for females. But these figures, which are (with the exception of the weight of the males) above the average, do not represent the measurements of centenarians in the prime of life, as the other set of figures do the general population. When observations are made on single individuals, it is found that the stature attains its maximum about 24 or 25 years, and is maintained till the fiftieth year, after which it falls away, till, at 90 years, it has lost three inches. This depreciation of stature is due to the loss of intervertebral and other cartilages, to the bending down of the neck of the thigh-bone, and to the general doubling-up of the body and limbs, from the loss of tone of the extensor muscles. We must, therefore, add at least three inches to the averages of the centenarians, which will bring them up to 5 ft. 11 in. for men, and 5 ft. 6 in. for women. This result is quite in accordance with the observations of the Anthropometric Committee, which found, on grouping the measurements of a large number of individuals together, that the curve of stature continued to increase up to the age of 70 years, which was the limit of their statistics. In the final report of the Committee, which I drew up in conjunction with Sir Rawson Rawson, President of the Statistical Society, I expressed the opinion that this increasing stature of the population throughout life was due to the greater viability of persons whose stature was up to or above the average; or, in other words, to the weeding out by disease of the smaller and worst developed members of the community. We found, also, that there was a steady increase of weight with age, but it is hardly to be expected that this would be maintained among centenarians whose functions of nutrition are nearly worn out. Nevertheless, the average weight of the women—whose numbers very largely exceed the men—is six pounds above that of women in the prime of life. The number of Professor Humphry's observations are not, however, sufficient to decide the question whether men of spare or stout habit live longest; and we may look with more confidence to the statistics of octogenarians which he has promised us, to set it at rest. It is much to be regretted that the stature of only twelve males and twenty-six females, and the weight of only seven males and ten females, are recorded out of the total of fifty-two centenarians; and I hope that, by calling attention to the value of data of this kind, greater efforts will be made to supply them in future. It is obvious that such terms as fat, spare, average; full-blooded, pale, average; strong, feeble; erect, bent, etc., which are almost in all cases answered in the schedules, are mere relative terms, and will vary with the idiosyncracies of the observer; and they are at best mere attributes of stature and weight. The chest-girths refer to the mobility of the chest-walls rather than to the mere girth of the body, and are, therefore, not comparable with any in my possession, all of which refer to the empty chest, and taken by the method employed in the army, and explained in the "Life History Album," issued some time ago by the Collective Investigation Committee.—Your obedient servant, C. ROBERTS.

Bolton Row, Mayfair, W.

A PLAN OF CASE-TAKING.

SIR,—Since entering into practice, it has always been my wish to keep notes of every case treated; but I have found this very difficult to do, partly from want of time, and partly from want of a convenient method of taking and keeping the notes. After trying a great many plans, about a year ago I arranged a case-sheet with convenient headings, and had a number of copies printed; these I have used during the present year, and have found them very convenient. The cases being entered on loose sheets, it is easy to write them up at odd moments; the subdivisions make the writing of them more rapid, and the arrangement in portfolios renders reference to old cases easy.

The sheets have the usual heading, with spaces for Name, Address, Age, Occupation, Disease, Result, Date; also spaces for a letter and a number. The former is filled in with the initial of the surname, the latter with the number which the case occupies amongst those of the same letter. Thus, if the name is Smith, and it is the tenth case commencing with S., notes of which have been taken, the case-sheet is endorsed Letter S. No. 10.

On the first page under the heading are spaces for Family History,

Personal History, Present Condition, and Advice and Treatment. Page 2 is occupied by Progress of Case; whilst pages 3 and 4 are utilised either for diagrams, charts, or for any particulars which have to be given more fully than pages 1 and 2 admit of.

The sheets as filled are placed in a portfolio which has separate compartments for each letter. Thus, if it is wanted to look up the case of Smith, it is only necessary to take the case-sheets out of compartment S. There are also compartments for unfilled case-sheets, blotting-pad, and diagrams and charts. The label outside the portfolio shows the period of time covered by the sheets within.

I showed a specimen to Messrs. Danielsson and Co., London, and they have taken the idea up and are publishing case-sheets and portfolios.—Faithfully yours,

E. MACDOWEL COSGRAVE, M.D.

MANAGEMENT OF PLACENTA PRÆVIA.

SIR,—In your report of the meeting of the Dublin Obstetrical Section of Nov. 26, a paper was read by Dr. Fleming on Placenta Prævia, when he described the manner of treating this complication of late years in the Rotunda Hospital. May I be pardoned in pointing out that the plan adopted in the second mode was originally described by me in the *Lancet* (1860) and *Obstetrical Transactions* (1863), and my little book on *Combined External and Internal Version* (1864, p. 26); the employing the child as a plug, and the advantages of moderate waiting and Barnes's bag in case the os is too small for manipulating, are there described. Dr. Lomer (not Louis) wrote a paper, with a large number of cases, in the *American Journal of Obstet.*, etc., 1884, pointing out the advantages of my plan; and, more recently, Dr. Homburger, of Carlsruhe, repeats the same approval. Not seeing my name mentioned in connection with the plan lately adopted in the Rotunda must be my excuse for these few lines. I may add that I am very gratified that the plan has been found useful; and also that the plan, when the os is dilated, is in accordance with what I have always taught, though perforation I have never had occasion to resort to, on account of placenta prævia alone.—I am, etc.,

George Street, Hanover Square, W. J. BRAXTON HICKS.

ALCOHOL AND THE MEDICAL STAFF.

SIR,—In comment on the letter of Mr. George Sturge, in your paper of December 18th, I would ask, who are included by him as "medical staff?"

We have naval hospitals in many parts of the world, as well as at home, and supplies of alcoholic drinks are not provided for the medical officers in any. In hospitals at home the servants are allowed "beer," or "beer money" in lieu, if preferred.

Why cannot a compensation be given where alcoholic drinks have been hitherto allowed, and stop the supply from the hospital?

SAM. S. D. WELLS.

MEDICO-LEGAL AND MEDICO-ETHICAL.

ATTENDANCE ON MEMBERS OF CLUBS NOT ON THE SICK LIST.

A MEMBER asks for advice under the following circumstances. He is surgeon to a lodge of Oddfellows, and during the last twelve years he has had frequently members who were not on the sick list, but only suffering from a temporary illness, applying for medical advice and medicine while still following their usual occupation. The rule of the Society reads thus: "A surgeon shall be appointed by a majority of the votes of the members present at a summoned meeting, and remain in office during the pleasure of the lodge. It shall be his duty to examine all candidates for admission, attend the sick members residing within three miles of the place of meeting at least once a week, or as often as the case may require; he shall provide them with proper and efficient medicine during their affliction, and forward a report to the lodge every meeting night, containing the names of the members who are under his care at the date of the report, and when they became entitled to benefit." "A Member" holds that so long as a man is following his usual occupation he is not entitled to medicine gratis, as, properly speaking, he cannot while working be on the sick list, and therefore has no claim on the Society.

*** The objection is one that it does not seem advisable to raise, and would probably fail to be allowed by nine lodges out of every ten. Although the literal reading of the rule appears to favour the contention that none but members on the sick-fund can claim attendance for medicine, it has to be considered by the light of a very general custom under which the medical contribution of the members assures them medical aid whenever needed, with certain restrictions which are obviously requisite and just. To limit this right as suggested would give rise to a great deal of friction—as, for instance, in the case of members recovered sufficiently to resume their employment and yet requiring further advice and medicine. Again, most of the lodges have a probationary term (generally of a year), during which new members cannot declare on the sick-fund, but most of the rules state they are immediately free to receive medical advice and medicine. The objection raised would obviously, if sustained, destroy this right. Other disadvantages would certainly arise from the system indicated, which, though it would undoubtedly put a stop to a too frequent waste of medical men's time and trouble, would probably prove unworkable.

FEES FOR MEDICAL ATTENDANCE IN POLICE CASES.

M.D. (Bolton).—The person primarily liable to pay for medical attendance is the person at whose request it was rendered, that is, apparently, in these cases the policeman. In order to sustain a claim against the Watch Committee, it must be shown that they authorised the police to send for a medical man. The fact of their having paid for such attendance on a previous occasion, if the circumstances of the case were similar, would be evidence of their having given such authority, and so would the regulation as to payment which they publish. Under the circumstances stated, the onus of proving that the policeman had no authority rests on them.

ASSISTANT STARTING A DISPENSARY ON HIS OWN ACCOUNT.

A MEMBER asks for an opinion upon the following: 1, as to professional conduct; 2, as to the legal aspect of the case.

A. engages B. (who signs usual bond) as qualified assistant. B. remains about five months, and then leaves A. after having a month's notice. The day after leaving A., B. put his name and title on his door, and also a board on the wall of his house announcing it as "The People's Dispensary," with scale of charges, etc., namely, medicine and advice, 6d.; visit and medicine, 1s., and he further circulates enclosed leaflet about the town.

*** Would that it were in our power to suggest an effective remedy for the grossly unprofessional conduct of the practitioner alluded to by our correspondent. Perhaps when the General Medical Council and the several diploma-granting bodies recognise and fulfil their ethical obligations to the public and to the profession, there may be some hope of redress. Meanwhile, we would commend for consideration the suggestions made to "A Member" in the JOURNAL for December 4th, which we think can scarcely fail to be attended with more or less success if the members of the profession in the locality unite in a memorial to the licensing bodies of which the practitioner in question is a member.

A SHORT WAY WITH UNQUALIFIED PRACTITIONERS.

DR. H. L. HOOPS (Eccles) writes: The following may be interesting to some of your numerous readers. For six or seven years an unqualified man has been openly practising in this neighbourhood, without a plate upon his door. About two years ago he put up a plate with Dr. R—— upon it. I ascertained without doubt that he still had no qualification. I applied to the Medical Defence Association, but could get no help from them. For one year or so, I took no further steps. About three months ago, hearing of three different families where he had attended alone, I discovered three deaths had resulted. I knew that he was in the habit of getting the signature of a neighbouring medical man to the death-certificates, but was told by him that the medical man was always called in to see the patient previous to death. Here, then, were three cases where that had not been done, and yet I knew he must have the legal signature, and so I made a complaint to our registrar in writing, saying that certificates were being presented to him with the signature of a medical man who had never seen the person who died. The registrar, when the next certificate was handed in, observed the name of another medical man at the foot. He called in one of his clerks, and before him asked if Mr. —— (the qualified man) had seen the patient. The answer was: "Nobody but Dr. R. (the unqualified man) has ever seen him." In a few days, two more certificates came in. The same form was gone through, with the same answer. Then the registrar sent my complaint up to the Registrar-General, and an account of his own observations. Result—The qualified man received a letter a few days later from London, requesting an explanation, when it turned out that for three years the signature had been forged. This being proved, three summonses were served by order upon Mr. R., who did not wait to receive them, but decamped, and has never been heard of since. His effects were all sold by auction a few days later to satisfy creditors.

This seems an easy and inexpensive way of getting rid of quacks, if only all registrars would work with the medical profession as kindly as our registrar does.

CLUB APPOINTMENTS: DISSATISFIED PAUPERS.

M.A., LL.B. writes: 1. A. has lately (a year ago) started in practice in a small town. B. is one of his opponents, holding the appointment of surgeon to a club. Several of the members of the club wish A. to be appointed in addition. A. has not canvassed for the appointment. Is he committing a breach of medical etiquette in accepting?

2. C. holds the parish appointment in the town where A. is practising, and C. and A. are very friendly. C.'s dissatisfied paupers occasionally come to A. for advice. Is he right in refusing to attend the case while they are receiving parish relief?

If our correspondent has, as stated in his letter, abstained from personally canvassing and also from soliciting either by direct or indirect agency (other than the unsought aid of the club members themselves) the appointment in question, he will not "be committing a breach of medical etiquette in accepting it." At the same time, we would counsel him not to enter into the proposed arrangement, for a joint yet divided responsibility, under the circumstances related, would, we fear, tend sooner or later to engender discord and jealousy—the bane of professional as of civil life—and eventually lead to mutual estrangement, and perhaps injure "M.A.'s" future professional prospects.

Our reply to his second question is that abstention from all interference in such and like cases is strictly enjoined by the ethical rules of professional life; and that any deviation therefrom would most probably result in a disruption of the "very friendly" feeling at present existing between C. and himself.

NAVAL AND MILITARY MEDICAL SERVICES.

VACCINATION IN THE FRENCH ARMY.

GREAT efforts are made by the Government of France to ensure the spread of vaccination among the population, and rewards are annually distributed among those who have particularly distinguished themselves as successful vaccinators. In a resolution dated November 29th, 1886, and on the recommendation of the French Academy of Medicine, the Minister of Commerce and Industry published a list of the rewards decreed to those who had most contributed to the propagation of vaccination, whether by special writings on the subject, or by their zeal in practising vaccination and re-vaccination during the year 1885. Among the names of surgeons who have been thus recompensed are those of 14 army medical officers. Three médecins-major of the first class receive rewards of the value of £20 each, and eleven medical officers of lower grades are each awarded a silver medal for their services in connection with the practice of vaccination.

THE NAVY.

SIR JAMES SALMON, Knt., M.D., Inspector-General of Hospitals and Fleets, and Honorary Physician to the Queen, died at Anglesey Crescent, near Gosport, on December 17th, at the age of 75. Sir James entered the Royal Navy, August 1st, 1833; was made Fleet-Surgeon, August 1st, 1840; Deputy Inspector-General, June 30th, 1855; and Inspector-General, December 2nd, 1868; he retired, February 4th, 1875. He served on the coast of Spain during the first Carlist war, 1837-38, promoted; in *Neptune*, in the Baltic expedition, 1854; present at the operations in the Gulf of Bothnia (Baltic medal); Deputy Inspector-General, Malta Hospital, during part of the Crimean war; Inspector-General of Haslar, for four years, being the first medical officer entrusted with the general superintendence of the hospital; Sir Gilbert Blane's Gold Medal, 1852; knighted, November 27th, 1878; granted a pension for good and meritorious service, July 24th, 1874.

THE MEDICAL STAFF.

THE retirement of Sir ANTHONY HOME is gazetted. He entered the service as an Assistant-Surgeon, March 17th, 1848; became Surgeon, February 9th, 1855; Surgeon-Major, September 14th, 1866; Deputy Surgeon-General, December 24th, 1873; and Surgeon-General, April 4th, 1880. Sir Anthony's long and distinguished war-services began in the Crimea in 1854, when (to quote *Hart's Army List*) he served with the Light Cavalry Brigade, and was present at the battles of Balaklava and Tchernaya, and subsequently with the force, under the French General D'Allonville, that threatened Simpheropol from Eupatoria (medal with two clasps, and Turkish medal). Was Surgeon of the 90th Regiment in the Indian Mutiny campaign; was with Havelock's force at the relief of Lucknow (Victoria Cross), with Outram's force at Alumbagh, and with that under the Commander-in-Chief at the capture of Lucknow (medal with clasp, and a year's service); was awarded the Victoria Cross "for persevering bravery and admirable conduct in charge of the wounded men left behind the column, when the troops under the late Major-General Havelock forced their way into the Residency of Lucknow, on September 26th, 1857. The escort left with the wounded had, by casualties, been reduced to a few stragglers, and, being entirely separated from the column, this small party with the wounded were forced into a house, in which they defended themselves till it was set on fire. They then retreated to a shed a few yards from it, and in this place continued to defend themselves for more than twenty-two hours, till relieved. At last, only six men and Mr. Home remained to fire. Of four officers who were with the party, all were badly wounded, and three are since dead. The conduct of the defence during the latter part of the time devolved therefore on Mr. Home, and to his active exertions previously to being forced into the house, and his good conduct throughout, the safety of any of the wounded, and the successful defence, is mainly to be attributed." He served in the war in the north of China in 1860, from the landing of Peytang to the capture of Pekin (medal); in the war in New Zealand in 1863-65 (promoted to Surgeon-Major, C.B., medal); and in the Ashanti war as Principal Medical Officer from June till invalided in December, 1873; was at all the earlier operations of this period, including the action at Essaman; and made the medical arrangements for the campaign (several times mentioned in despatches, promoted Deputy Surgeon-General, K.C.B., medal).

The undermentioned gentlemen, serving in the command specified, are detailed to proceed to England during the season 1886-87, as follows. Brigade-Surgeon J. INKSON, M.D., Bengal, *Euphrates*, January 1st; Surgeon-Major C. S. CLOSE, Bombay, *Euphrates*, January 1st; Surgeon-Major H. STANNARD, Bengal, *Euphrates*, January 1st; Surgeon J. G. W. CROFTS, Bengal, *Euphrates*, January 1st; Surgeon-Major F. POUT, Madras, *Serapis*, January 15th; Surgeon-Major W. F. SAMUELS, Bombay, *Serapis*, January 15th; Surgeon M. W. KERIN, Madras, *Serapis*, January 15th; Brigade-Surgeon H. F. PATERSON, M.D., Bengal, *Serapis*, January 15th; Surgeon S. C. B. ROBINSON, Bengal, *Crocodile*, January 29th; Surgeon G. COUTTS, M.B., Madras, *Crocodile*, January 29th; Brigade-Surgeon J. PAXTON, M.D., Bombay, *Jumna*, February 12th; Surgeon-Major J. O'REILLY, M.B., Bengal, *Jumna*, February 12th; Surgeon J. F. WILLIAMSON, M.B., Bengal, *Jumna*, February 12th; Surgeon G. T. H. THOMAS, Bengal, *Jumna*, February 12th.

Surgeon-Major Sir SAMUEL ROWE, M.B., K.C.M.G., has been granted retired pay, with the honorary rank of Brigade-Surgeon. He entered the service as Assistant-Surgeon, April 16th, 1862; was made Surgeon, July 4th, 1870; and Surgeon-Major, March 1st, 1873. At the very onset of his military career, Sir Samuel was sent to Sierra Leone, and has since served almost uninterruptedly in West Africa. In 1874, he was made a Member of the Legislative Council of the Gold Coast Colony; in the following year, he was appointed Administrator of the Government of the Settlements on the Gambia; and, in 1877, he was made Governor and Commander-in-Chief of the West African Settlements, and has retained that post until now. He was nominated a Companion of the Order of St. Michael and St. George in 1874, and Knight-Commander of that order in 1880.

THE INDIAN MEDICAL SERVICE.

SURGEON R. SHORE, M.D., of the Bengal Establishment, is appointed to the officiating medical charge of the 3rd Native Cavalry, *vice* Surgeon G. A. Emerson, in civil employ.

The Commander-in-Chief in India has sanctioned an exchange of appointments between Surgeon-Major E. PALMER, of the 3rd Bengal Cavalry, and Surgeon G. A. EMERSON, of the 9th Bengal Lancers.

Brigade-Surgeon J. F. BARTER, Madras Establishment, Civil Surgeon at Nagpore, is temporarily appointed to the medical charge of the gaol at Nagpore.

Surgeon M. E. REPORTER, Madras Establishment, is transferred to the medical charge of the 11th Native Infantry, *vice* Surgeon-Major T. J. H. Wilkins; and Surgeon WILKINS is transferred to the 19th Native Infantry, *vice* Reporter.

Brigade-Surgeon J. CRUICKSHANK, M.D., Bombay Establishment, Inspector-General of Prisons, is allowed special leave on urgent private affairs for six months.

Surgeon J. M'CLOGHRY, Bombay Establishment, medical officer 6th Native Cavalry, has returned to duty from sick furlough.

Surgeon M. B. BRAGANZA, Bombay Establishment, on field service in Burmah, is allowed leave to Bombay till May 9th next, on medical certificate.

Surgeon-Major W. E. B. MOYNAN, of the 40th Bengal Infantry, Surgeon-Major K. M. DOWNIE, M.D., of the 29th Punjab Infantry; and Surgeon F. C. CHATTERJEE, of the 30th Punjab Infantry (all of the Bengal Establishment), have been ordered to proceed to Burmah.

THE VOLUNTEERS.

MR. J. H. GIBSON, M.D., is appointed Acting Surgeon to the 1st Lancashire Artillery.

Acting-Surgeon F. H. WOOD has resigned his appointment in the 1st Volunteer Battalion of the South Yorkshire Regiment (formerly the 5th West Riding of York Volunteers); Surgeon Wood's commission dates from July 22nd, 1882.

Acting Surgeon RICHARD CREAN, M.D., is appointed Surgeon to the 3rd Volunteer Battalion of the Lancashire Fusiliers (formerly the 17th Lancashire).

Surgeons and Honorary Surgeons-Major G. E. NORTON, of the 4th Middlesex (West London), and JAMES STRUTHERS, M.D., of the 1st Midlothian (Leith), have resigned their commissions, with permission to retain their rank and uniform.

Acting Surgeon G. W. STEEVES, of the 5th Lancashire (the Liverpool Rifle Volunteer Brigade), has resigned his appointment, which bore date June 29th, 1881.

Mr. H. M. DODD has been appointed Surgeon to the London Division of the Volunteer Medical Staff.

OBITUARY.

THOS. WALKER, M.D., J.P., OF PETERBOROUGH.

DR. THOMAS WALKER, who died at Peterborough on December 16th, was born in Dumfriesshire in September, 1796, and was therefore in his ninety-first year. He had been for seventy-one years a qualified member of the medical profession, having obtained the license of the Edinburgh College of Surgeons in 1815. At the time of his death he was the oldest licentiate of that College, and also Father of the Faculty of Physicians and Surgeons of Glasgow. The eldest son of the late Josiah Walker, M.A., Professor of Humanity in the University of Glasgow, he was descended from a long line of ministers eminent in the Scotch Church. His ancestor in the seventh generation was the great reformer, John Knox. Dr. Walker's appearance must be familiar to many of our associates in the Eastern and South Midland Counties. Tall in stature, square-built and muscular, with a countenance expressive of strong individuality, with abilities far above the average, courteous, honourable, and just to everyone, he was physically, intellectually, and morally a notable man. Most hospitable, highly educated, refined in his tastes, with a mind stored with information at once varied and accurate, his society and friendship were at all times highly valued by all with whom he came in contact. He was especially fond of associating with men younger than himself. Although Dr. Walker was in his town and district universally esteemed and loved, it was given perhaps to only a privileged few to know the almost feminine tenderness of heart which lay beneath the somewhat austere exterior.

Dr. Walker studied at Edinburgh and obtained his diploma at the earliest possible date, with a view to entering at once on active medical service in the army, but the peace which followed the battle of Waterloo changed his plans. He went to Paris, and there, under Roux, Dupuytren, Dubois, Larrey, and other eminent surgeons (of whom he wrote life-like descriptions in letters still extant) continued his medical studies. On his return he became house-surgeon to Westminster Hospital, and at the same time attended the School of Medicine in Great Windmill Street. Thus prepared for the practice and teaching of surgery, Dr. Walker returned to Glasgow, intending to become a candidate for the chair of surgery, which was shortly to become vacant. The success of his candidature was considered certain, but the offer of a practice induced him to settle at Peterborough, whither he was also drawn by ties of friendship towards the family of a gentleman whose daughter he afterwards married.

Dr. Walker commenced practice at Peterborough in 1819, and the Chair of Surgery, on becoming vacant, was filled by his most intimate friend, Professor James Laurie. Dr. Walker speedily acquired the confidence alike of his medical brethren and the public, and was ap-

pointed the first surgeon to the Peterborough Infirmary, an office which he held for forty-three years. In 1843 he took the M.D. degree at Edinburgh. He was a most successful surgeon, and although he wrote but little, the first hints of many a step in modern surgery are to be found in the note-books of the young men who were from time to time his private pupils or house-surgeons at the Peterborough Infirmary. In his operations, as in all else he did, there was an utter absence of display. Thorough anatomical knowledge, a skilful hand, a sure judgment, and a cool temperament, ensured success. He was an excellent lithotomist, and operated eighteen times successfully before losing a case. Fond of mechanics and himself a practical adept, he continually devised original surgical appliances and methods of treatment. His merits as a physician were not inferior to his surgical ability.

Dr. Walker continued in full practice till the year 1876, when a severe illness laid him aside for some months, and he never resumed active work. He was a Justice of the Peace for the Peterborough Division of the County of Northampton, and for some forty years served as an active and efficient magistrate, filling also various public offices, until partial deafness made him doubt his own capacity for business.

He leaves fifty-five direct descendants, of whom two sons, Dr. T. W. Walker, of Peckham Rye, and Dr. T. F. Walker, who at Peterborough worthily maintains the reputation earned by his father, and a grandson, Dr. W. Ellison, of Eton, are members of the profession. Dr. Ellison, surgeon to the Royal Household at Windsor, is his son-in-law. An early riser, temperate in his habits, taking pleasure in hard physical exercise, he occupied his leisure in gardening, carpentering, and drawing. He was a great reader and retained his vigour of intellect and body almost to the last. In his eightieth year he, with his friend, Mr. O'Connor, of March, Cambs., went at night, on foot, across a fen drove and fields, too bad for wheels, and in a cottage, by the light of a tallow candle, performed herniotomy.

The funeral took place on December 21st at Peterborough, amid every sign of respect on the part of the inhabitants.

SURGEON J. PEDLOW, M.D.

Dr. J. Pedlow, Surgeon, Army Medical Staff, died at sea from cholera while on a voyage to Burmah towards the latter end of October. The deceased officer was born in October, 1851, he graduated M.D., Queen's University, Ireland, and shortly afterwards volunteered for service with the Turks. In the Turko-Bulgarian campaign he received a commission in the Turkish Army, and saw much fighting. In 1878 he was gazetted a Surgeon in the Army Medical Department, and served in the Afghan War, in the action at Mazina, and in the Kama Expedition (Medal). In 1884 he served in the Soudan Campaign, with the 7th Fusiliers, and was present at the battles of El Teb and Tamai; he was mentioned in despatches "for gallantry and distinguished conduct" on both of these occasions (Medal with Clasps and Bronze Decoration).

The news of Dr. Pedlow's death was received with the deepest feelings of regret by his numerous friends at Umballa and his brother officers, who mourn the loss of a brave comrade and genial friend.

INDIA AND THE COLONIES.

INDIA.

Proposed Provident Workman's Society in Bombay.—Mr. B. S. Shroff, graduate in medicine and surgery of the Bombay University, sends a long and interesting communication, stating that in the cotton-mills of Bombay there are about 75,000 workmen who are practically unprovided with medical attendance. Their average earning are ten rupees a month. It is proposed to raise a fund by each man paying five annas a month (a little over fivepence) for the carrying out of the following objects, or some of them:—Providing medical attendance and medicine when needed; opening two gratuitous dispensaries; affording pecuniary help to sick members, and during convalescence; paying a sum equal to twenty months' wages to members rendered prematurely incapable of work; providing for destitute families of members who die; building and letting improved and sanitary workmen's dwellings; making loans to the members; providing a superannuation in old age, and founding convalescent homes. The question is asked whether any similar institutions exist in the United Kingdom, and information and advice are requested on the subject generally.

*** Much would depend in a scheme such as the one outlined, on whether all the factory workers spoken of would come under it, or only a percentage, and, if so, what proportion? Much better results can be obtained with large numbers, fairly localised, than with small and scattered groups. If some plan would be agreed on under which the small sum indicated could be set aside by the wage-paying agencies, and handed over in bulk, the whole plan would be greatly strengthened. From a financial point of view, a very great deal is promised for what appears a small payment—about 5d. per head per month, 5s. a year. In Great Britain this would certainly not be too large a payment on groups of fairly healthy male lives for medical aid alone. Nor is this consideration lessened by the large revenue the number mentioned would, of course, produce. Large numbers mean a large aggregate of average sickness, and commensurate demands on all the resources of the organisation. These matters, however, would be influenced by the relative purchasing power of money, the average incidence of sickness, and various other factors which probably cannot be correctly estimated by applying the teachings of British experience to Indian circumstances. It would be wise, however, not to promise too much. Should the fund provide more than sufficient for mere medical attendance and medicine, the first and most useful purpose to which the surplus should be devoted is the provision of convalescent institutions, where recovery from illness may be completed. If British experience is to be accepted, this is a valuable, and in fact necessary, part of any organised system for dealing with the sick wants of an industrial population.

Mortality from Wild Beasts and Snakes in India.—About 20,000 people, according to the *Statistical Abstract* for India, are annually destroyed by wild beasts and venomous snakes, and of these, nineteen in twenty owe their death to the reptiles. The number of human victims tends to increase, in spite of the fact that the number of wild beasts and snakes destroyed has doubled in the last ten years, and that the Government reward paid for their extermination has risen proportionately. Nearly two and a half lakhs of rupees were thus paid in 1884. Next to venomous reptiles, tigers claim most victims. Ten years ago, wolves, mostly in the North-West Provinces and Oudh, killed five times as many people as of late years; but the extermination of wolves seems to be going on rapidly. Leopards are the alleged cause of death to about 200 human beings annually. Apart from the loss of human life, the returns show an annual destruction of upwards of 50,000 head of cattle.

AUSTRALIA.

Hospital Collections in Melbourne.—The collections in Melbourne on Hospital Saturday and Sunday (October 23rd and 24th) this year show a falling off, as compared with 1885. As far as the returns to hand show, the total amount received from the denominations is £5,540, as against £6,425 last year.

NEW ZEALAND.

Antimony Poisoning During Pregnancy.—A case of attempted poisoning by antimony has recently occupied the courts in New Zealand. The criminal was a man named Hall, of good position; he was married last year, and shortly afterwards he insured his wife's life for a sum of money sufficiently large to free him from all difficulties. The time he selected to give Mrs. Hall poison was when she gave birth to a child, and he seems to have had little fear of detection. He openly bought books on poisons from booksellers in Tamaru, and quantities of antimony and colchicum from the druggists. Dr. McIntyre, who attended Mrs. Hall during her confinement, was at first puzzled by her symptoms, but very soon came to the conclusion that she was being poisoned. He consulted with other medical men, and the result was that he laid an information which led to Hall's arrest, evidently just in time to save the wife's life. With Hall was arrested a Miss Houston, who lived with the family as lady-companion or lady-help. The trial took place at Christchurch, before Mr. Justice Johnson, and occupied nearly a fortnight. Sir Robert Stout, as Attorney-General, conducted the case for the Crown. Hall was found guilty, and was sentenced to penal servitude for life. Miss Houston was acquitted, and declared by the jury, in the customary phrase, "to leave the court without a stain on her character." Dr. McIntyre, who laid the information, has won universal praise for the courage and promptness with which he undertook a terrible responsibility, and prevented the completion of a hideous crime. Some months before the arrest of Hall, his father-in-law, Captain Cain, died; but no suspicion was excited at the time. Later events, however, led to the exhumation of the body, which was found to contain antimony in large quantities. It is not known yet what steps have been taken to find out by whom the poison was administered, and at the present time there is a good deal of discontent with what is believed to be

the remissness of the authorities. It may, however, be that they are conducting the necessary preliminary inquiries.

BRITISH GUIANA.

Medical Service in British Guiana.—It would appear from a communication we have received from a correspondent in New Amsterdam, that the new medical service in British Guiana has not met with universal approval. This correspondent says that, "since the establishment of any medical service in the colony, no measure has ever been passed creating such widespread unpopularity." "Not only is it," he adds, "universally disliked and condemned by the planters, but the medical officers of the older service are fearful lest some further reform measure may entirely remove any benefits they are entitled to, derivable from their period of service in British Guiana. We would, however, call attention to the fact that the introduction of this measure was apparently received with very great satisfaction by a large number of the members of the medical profession; and from accounts which were forwarded to us, and which were duly noted, it appeared that a public banquet was given in September last by a large number of the members of the medical profession in Georgetown to His Excellency the Governor, and to the heads of all the official departments and others, to celebrate the inauguration of the new medical service.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE HOSPITAL SATURDAY FUND.

It was decided at the last meeting of the Hospital Saturday Fund to distribute £9,750 among various hospitals, convalescent homes, and dispensaries. The sum is £250 more than was given last year, and exceeds that of any former year since the establishment of the fund. All the awards, it was stated, would be determined by the distribution committee and based on the relief afforded, economy practised, and efficiency attained by each of the participating institutions.

MANAGEMENT OF PROVIDENT DISPENSARIES.

Dr. Rentoul, of Liverpool, sends what he calls a "Member's Book," to be used in provident dispensaries. It costs about twopence, when printed by the hundred. On the first page is the name and address of the society, on the second is a space for the name and address of the medical man and the hours at which he is at home. Below this is a similar space for that of the dental surgeon. On the third page is the space for the number of the book; then a line for the names of the husband, wife, and children, and their addresses. Below this is a space for the insertion of the date on which the member is admitted, and the amount which he must pay monthly or quarterly and in advance. Next comes a copy of the rules referring to the benefit members, so that there can be no ground for complaint of ignorance of rules. In a blank table, corresponding to the months of the year, the amount paid by each member is entered, and this is signed by the person who receives the money. This, in fact, is the member's receipt. It is of further use, because it tells the medical attendant whether or not the member is "in benefit." No member is treated unless he brings his member's book, as in this way the doctor knows that he is a member of the society. (Those acting as medical officers to clubs know that people come for treatment who say they belong to the club, but who are not of it.) There is also a space for entering the dates of visits, so, if a member complains, the committee does not question him, but asks for his book. A sufficient number of blank pages for writing prescriptions are provided. They must not be torn out; but sent with the book to the dispenser. If the latter see that the member is in arrear, he refuses to make up the prescription. On the back of the book is a space where the days and hours at which medicines can be obtained are filled in.

DEVON COUNTY LUNATIC ASYLUM.

The number of admissions into this asylum in 1885, namely, 132, was smaller than for any year since 1853; but, as the number of discharges was below the average, and the death-rate the smallest since the asylum was opened, the "annual increment" was greater than usual. There were 859 patients remaining on December 31st, 1885, an increase of 31 during the year. It is a pity that Dr. Saunders does not suggest any explanation of the small number of admissions. Of the total number remaining, only 17 were deemed curable, a remarkably small proportion. The recovery-rate was 37.7 per cent. of the admissions, transfers excluded; the rate for the whole period the asylum has been open being over 40 per cent. The mortality was, as before said, unprecedentedly low, being only 4.32 per cent. of the average population. *Post mortem* examinations were made in 23 out of the 36 deaths.

Dr. Saunders reports that "one or two patients of the 'Rogue and Vagabond' class were sent here and not found insane. They have sufficient craft and cunning, as they avow, to prefer the asylum to the gaol, and are usually persons who have no claims on the county, but are only casuals. From a review of past years, it would appear that this class of patient is oftener met with than formerly."

The asylum wards were overcrowded, so that it was not possible to classify the patients according to their mental requirements. The want of a suitable dormitory for the continuous supervision of epileptics, and of patients with marked suicidal tendencies, was much felt. The provision of increased accommodation for the female patients was receiving attention at the end of 1885.

The statistical tables appear to be well prepared, and their value is enhanced by the addition of several charts illustrating the death-rate, recovery-rate, etc., from the opening of the asylum. Table IIA would be much more valuable if, instead of covering only the last four, it were carried back so as to include at least ten or fifteen years. We have searched in vain for the report of the Visiting Commissioners in Lunacy; it would be well, in future, to print this report, as is the practice in most other asylums, since various points of interest are often referred to therein which are not mentioned in that of the Superintendent.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE SANITARY CONDITION OF CORK.

At a meeting of the Public Health Committee held last week, a report by Dr. O'Farrell, Local Government Board Inspector, relative to various questions in connection with the sanitary state of the city, came under the notice of the Committee, and was taken into consideration on December 28th. Dr. O'Farrell speaks favourably of the zeal and ability displayed by the medical superintendent officer of health, Dr. Donovan, who during his two years of office has succeeded not only in reducing so materially the number of cases of typhus—a disease supposed to be the special scourge of Cork—but also, by following up and isolating cases of scarlet fever, has prevented any serious outbreak of that disease. The report refers to the water-supply, and especially to the gross pollution of the river by the Macroom sewage, showing that the present supply is neither satisfactory nor safe. It recommends that the Corporation should obtain the necessary powers to embank the riverside for a few miles above the waterworks, in places where it may be deemed necessary; and that there should be thorough and frequent inspection, by some of the sanitary officials, of the entire course of the river Lee, so as to prevent contamination of the water by the sewage of the houses and towns bordering on the river-banks. The suggestions which Dr. O'Farrell makes have reference not alone to the present outbreak of typhoid fever, but to the improved permanent sanitation of the city. Many of these suggestions have already been submitted by the medical officer of health; and, if they are acted on, Dr. O'Farrell is of opinion that Cork will in a very short time become one of the healthiest cities in Europe. The following are the suggestions:

1. That street-cleansing be improved, and that a complete system of domestic scavenging be undertaken by the Corporation.

2. That the sewers of the city be completed and modernised; and that a map of the city be provided, in accordance with the twenty-third section of the Public Health Act. That all main sewers be ventilated at their highest levels; and that they be provided with side-entrances, manholes, and not fewer than twenty ventilators for each mile of sewer.

3. That lodging house and tenement yards and premises be kept in proper sanitary condition; and that the by-laws made under the 41st, 91st, and 100th sections of the Public Health Act be strictly enforced.

4. That a public abbattoir be erected on a suitable site, such as the old Passage Railway, with proper appliances for drainage, ventilation, and cleanliness.

5. That the sewage-matter removed from drains, and deposited in the Park and elsewhere, be thoroughly disinfected; and, in future, that all scavenged materials be immediately removed from the city by water-carriage, or else that they be deposited and disinfected in suitably placed and properly constructed manure-depôts.

6. That the water-supply of the city be protected, as far as possible, from contamination by the means already suggested in this report.

7. That the medical superintendent officer of health should devote his whole time to the duties of his office.

Such an arrangement, quoting the words of Dr. M'Cabe, "would give to the sanitary works of the Corporation a certain unity of action, and secure consistent efforts towards the attainment of definite results. It would relieve the Public Health Committee of much of the sanitary responsibility devolving upon its members, and the medical officer could be held to be more directly responsible for any serious defects which might exist."

THE RIGHT OF BOARDS OF GUARDIANS TO SUBSCRIBE TO HOSPITALS.

THE Local Board of Winsford (Cheshire) having given a subscription of five guineas to the Manchester Eye Hospital, the members were surcharged that amount by the Government auditor, on the ground that the Eye Hospital was not an institution for the reception of infectious or other cases for which the sanitary authorities are by law required to provide accommodation. The Local Government Board, however, in reversing this decision and remitting the surcharge, writes that the Public Health Act does not require the Local Board to provide hospital accommodation of any kind.

FEE FOR EXAMINING LUNATICS IN IRELAND.

MR. C. J. BLAKE (Headford).—We presume the order was made under the provisions of an Irish Act similar in terms to 16 and 17 Vict., c. 97, s. 69, which applies to England only. That section makes the justices the tribunal to decide and order payment of reasonable remuneration to the medical practitioner who examines the lunatic, and leaves the guardians no option in the matter. If they refuse to pay what has been ordered, the proper course would seem to be to write to the Local Government Board stating the facts fully.

MEDICAL NEWS.

UNIVERSITY OF DUBLIN.—The Winter Commencements (Comitia Hiemalia) for Michaelmas Term, were held in the Examination Hall of Trinity College, on Thursday, December 16th, 1886. The following Degrees and Licences in the Faculty of Medicine were conferred by the University *Caput*, in the presence of the Senate.

Licentiate in Medicine.—Daniel Conway.

Bachelor of Medicine.—Thomas Guy Alexander, Alan Bell, Edmund Bourjouval Delacherois, Henry Disney, Benjamin Banks Ferrar, Edward Wallace Hamilton, John Patrick Henry, James Graham Hojel, Thomas Hopkins, Alfred Hancock Middleton, Robert Lewis M'Adam, William Edward Cavanagh Murphy, Wilfrid John Robert Nickson, John William O'Brien, John O'Conor, William Mark Russell, John Simpson, Thomas Edward Smyth, John Bellett Walter, Richard Mervyn Wilson.

Bachelor in Surgery.—Alan Bell, Edmund Bourjouval Delacherois, William L'Estrange Eames Eames, Benjamin Banks Ferrar, John Patrick Henry, Jas. Graham Hojel, Thomas Hopkins (*stip. cond.*), Robert Lewis M'Adam, Lewis M. M'Intosh, Alfred Joseph M'Nally, William Edward Cavanagh Murphy, Wilfrid John Robert Nickson, John William O'Brien, Thomas Edward Smyth, Richard Mervyn Wilson.

Doctor of Medicine.—James De Burgh Griffiths, Charles Nelson Gwynne, Thomas Lyndon, Charles Crawford Mayne, Robert Lewis M'Adam, Lewis Maxwell M'Intosh, Alfred Hancock Middleton, Richard Nunn, John Francis Walkingame Tatham (*stip. cond.*), John Bellett Walter, Hugh Woods, Augustus Warren Woodroffe.

Master of the Obstetric Art.—Hugh Woods.

Diploma in State Medicine.—Henry T. Bewley, Francis R. Cassidi, Marcus I. Eustace, Robert H. Todd, Robert L. M'Adam, Francis A. B. Daly, John Battersby.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed the Examination in the Science and Practice of Medicine, Surgery and Midwifery, and received certificates to practise, on Thursday, December 23rd, 1886.

Barton, George Alexander Heaton, Wenlock House, Burton Road, Kilburn.
Bidwell, Leonard Arthur, 34, Lee Terrace, Blackheath.
Blenkinsop, Alfred Percy, 39, Hilldrop Crescent, N.
Carvalho, Alberto Pedro de, M.R.C.S., 8, Lidlington Place, Ampthill Square.
Fox, George Martin, 5, Oxford Street, Bilston, Staffordshire.
Harris, Edward Bernard, 35, Alkham Road, Stoke Newington, N.
Hensley, Philip Henry, 10, Coleherne Road, S.W.
Phillips, Thomas, Newcastle Emlyn, South Wales.
Slater, William Arnison, 132, Green Lanes, N.
Vidler, Albert Edward, Magdala House, Rye, Sussex.

MEDICAL VACANCIES.

The following vacancies are announced.

BRISTOL DISPENSARY.—Surgeon. Applications by January 1st, 1887, to the Secretary.

BRIGHTON, HOVE, AND PRESTON DISPENSARY. Honorary Medical Officer. Applications by January 3rd, 1887, to the Chairman of the Committee of Management.

BRIGHTON, HOVE, AND PRESTON DISPENSARY.—Honorary Surgeon-Dentist. Applications by January 3rd, 1887, to the Chairman of the Committee of Management.

CITY OF LONDON LYING-IN HOSPITAL. City Road, E.C. — Surgeon Accoucheur. Applications by January 11th to the Secretary.

ESSEX AND COLCHESTER GENERAL HOSPITAL.—Physician. Applications to C. E. Bland, Esq.

MALDON UNION.—Medical Officer and Public Vaccinator. Salary, £65 per annum, and extras. Applications by January 15th to A. C. Freeman, Esq.

MONAGHAN UNION.—Medical Officer. Salary, £120 per annum, and extras Applications by January 14th to F. Dunwoody, Esq.

NORTH-WEST LONDON HOSPITAL, Kentish Town Road.—Assistant Resident Medical Officer. Applications by January 17th to the Secretary.

NORTH LONDON HOSPITAL FOR CONSUMPTION, Hampstead and London. Resident Medical Officer. Salary, £40 per annum. Applications by January 17th to the Secretary, 216, Tottenham Court Road.

ROYAL ISLE OF WIGHT INFIRMARY, Ryde.—House-Surgeon and Secretary. Salary, £50 per annum, with board, etc. Applications by January 11th to the Secretary.

UNIVERSITY OF EDINBURGH.—Examiner in Clinical Medicine. Salary, £75 per annum, and extras. Applications by January 17th, 1887, to the Secretary.

UNIVERSITY OF EDINBURGH.—Examiner in Surgery. Salary, £75 per annum, and extras. Applications by January 17th, 1887, to the Secretary.

UNIVERSITY OF EDINBURGH.—Examiner in Materia Medica. Salary, £75 per annum, and extras. Applications by January 17th, 1887, to the Secretary.

UNIVERSITY OF EDINBURGH.—Examiner in Physiology. Salary, £75 per annum, and extras. Applications by January 17th, 1887, to the Secretary.

UNIVERSITY OF EDINBURGH.—Examiner in Pathology. Salary, £75 per annum, and extras. Applications by January 17th, 1887, to the Secretary.

WORCESTER COUNTY AND CITY LUNATIC ASYLUM, Powick, near Worcester.—Third Assistant Medical Officer. Salary, £100 per annum, with board, etc. Application by January 6th, 1887, to Dr. Cooke.

MEDICAL APPOINTMENTS.

DUTT, A. C., B.A.Cantab., L.S.A., appointed Resident Medical Officer to Morpeth Dispensary.

GARDNER, William Thomas, M.B.Lond., M.R.C.S., L.R.C.P., appointed House-Surgeon to the West London Hospital, Hammersmith.

HOGG, G. M., M.B., C.M., appointed House-Surgeon to the Stockton-on-Tees Hospital, *vice* Mr. L. Robinson, resigned.

HOVELL, Dennis de Berdt, F.R.C.S.E., appointed Consulting Surgeon to the London Orphan Asylum, Watford, Herts.

HUDSON, Leopold, appointed Pathologist and Curator of the Museum to the Middlesex Hospital.

HURLBUTT, Spencer, M.R.C.S.E., L.R.C.P.Lond., L.S.A., appointed Assistant Medical Superintendent and Dispenser to the Fulham Union Infirmary, Hammersmith, W., *vice* H. Bamber, M.B., C.M., resigned.

LYON, Thomas Glover, M.A., M.D.Cantab., M.R.C.P.Lond., appointed Physician to the North London Hospital for Consumption and Diseases of Chest.

MORGAN, William Pringle, B.A., M.B., B.Ch.Univ.Dublin, appointed Medical Officer and Public Vaccinator to the Seaford District of the Eastbourne Union, *vice* Buckmaster J. Tuck, M.R.C.S., L.S.A., J.P., deceased.

MORRIS, E., M.R.C.S., L.S.A., appointed Medical Officer to the Midhurst Union. Sussex, *vice* Dr. A. Yule, resigned.

PRAEGER, E. A., L.F.P.S.Glasg., L.S.A.Lond., appointed Surgeon to the Vancouver Coal Company's Collieries at Nanaimo, British Columbia.

SMITH, A. G., M.B., C.M., appointed Junior House-Surgeon to the North-Eastern Hospital for Children, *vice* C. D. Green, M.R.C.S., F.R.C.P., resigned.

SMITH, Dr. F. J., appointed Physician to the Royal Maternity Charity, *vice* Dr. G. E. Herman, resigned.

SYLVESTER, J. Cole, M.B., C.M., appointed Assistant Colonial Surgeon of the Gold Coast Colony.

THOMSON, D. G., M.D., appointed Senior Assistant Medical Superintendent to the Surrey County Lunatic Asylum, Cane Hill, *vice* W. C. Hills, M.D., resigned.

WATSON, James, M.B., C.M., appointed Medical Assistant to the Dundee Royal Hospital, *vice* John Baker, M.B., C.M., resigned.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. Langdon Down (Lettsomian Lecture): On Some of the Mental Affections of Childhood and Youth.

TUESDAY.—Pathological Society, 8.30 P.M. Annual General Meeting for Election of Officers and Council. Mr. Eve: Multiple Cavernous Angeiomata in Deformed Leg. Dr. Griffith: Extra-uterine Foetation. Mr. Butlin: Melanotic Sarcoma of Breast. Dr. Carrington: A Case of Recovery from Tubercular Meningitis. Dr. Wiglesworth: Peripheral Neuritis in Raynaud's Disease. Mr. Bruce Clarke: Sub-peritoneal Rupture of Bladder. Card Specimens: Mr. Targett: Congenital Deformity of Hip; Mr. Eve: (1) Multiple Painful Lipomata of Anus; (2) Diffuse Unilateral Papilloma of Tongue; Mr. Charters Symonds: Hydatid of the Breast.

TUESDAY.—Society for the Study and Cure of Inebriety, 4 P.M. General Quarterly Meeting. Mr. Tudor Trevor: On the Prevailing Indifference to Inebriety.

THURSDAY.—Harveian Society of London, 8.30 P.M. Dr. T. Morton: The Analogy between Croup and Asthma. Dr. Goodhart: Cases of Peritonitis. Dr. Blenkinsop: Some Remarks on Cancer and its Treatment.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 2s. 6d., which should be forwarded in stamps with the announcements.

BIRTHS.

EVANS.—On December 25th, at 21, Westbourne Villas, Bayswater, W., the wife of William Thomas Evans, M.B., C.M.Edin., of a son.

OWENS.—On December 26th, 1886, at Long Stratton, Norfolk, the wife of Charles Arthur Owens, M.D.(Brux.), of a son.

PIGEON.—On December 25th, at 6, Albion Street, Hull, the wife of Henry W. Pigeon, M.A., M.B., B.C., F.R.C.S., of a son.

MARRIAGE.

POLDEN—ANGELO.—At Christ Church, Rawalpindi, on Tuesday, November 23rd, by the Rev. F. Armstrong, Surgeon R. J. Polden, M.B., Indian Medical Service, Resident Surgeon, Medical College and Eden Hospitals, Calcutta, to Lilian Evelyn Angelo, youngest daughter of Major J. Angelo, Bengal Staff Corps (retired).

DEATHS.

DICKINSON.—On December 27th, at 162, Bedford Street, Liverpool, Annie, the beloved wife of Edward H. Dickinson, M.A.Oxon., M.D.

SELLERS.—On December 28th, at John Street, Rochdale, suddenly, William Burdett Sellers, Surgeon, aged 67.

TAYLOR.—On December 17th, at 5, Ashley Road, Bristol, Frank Taylor, M.R.C.S., L.S.A., late of Redcliff, Bristol, aged 30.

WINDLE.—On December 25th, at Ivy House, Ovenden, near Halifax, aged 8 months, Jessie Mary, daughter of John T. Windle, M.B.(Aberd.).

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M. Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M. Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY .....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's—1.30 P.M.: St. Bartholomew's (Ophthalmic Department) Guy's (Ophthalmic Department); Royal Westminster Ophthal. mic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY .....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

QUERIES.

R. N. would be glad of experiences with cucaine in urethral caruncle, as to strength of solution, pain during and after operation, whether excision or cautery, etc.

M.B. would be glad to be informed (1) as to the best and easiest method for staining bacilli in phthisical sputum; (2) as to the lowest "power" of the microscope by which they can be seen when stained.

M.A., LL.B. asks if there is any place in London where a patient can obtain Dr. Weir Mitchell's treatment for neurasthenia.

MEDICAL DEGREES FOR LONDON STUDENTS.

NEWCASTLE writes: Permit me to ask what is there to prevent any one of the Universities of England, Scotland, or Ireland from linking themselves with the Apothecaries' Society and conduct examinations at Blackfriars? There would be no need then for the two Royal Colleges to ask for a charter; and if they do so unsuccessfully I am one of those who think it would "serve 'em right."

ALOPECIA.

JUNIOR MEMBER writes: Liebreich's lanoline is highly commended for its power of permeating the skin. It has occurred to me that this property could be taken advantage of for introducing other remedies into the skin, either when a stimulating or sedative effect is desired. In premature decay of the hair, or what is generally known as baldness, could not this be used in combination with some other drug? I have tried many of the remedies for this affection in our text-books, but without any good effect. Could any of your numerous readers recommend any preparation with lanoline?

DEFICIENCY OF THE STERNUM.

DR. W. R. SCOTT (Belfast) writes: I attended a lady at her confinement on October 4th last, when she gave birth to a girl having complete absence of the sternum; the heart was situated directly in the middle of the space where the breast-bone should have been. The mother is quite strong, and attributes the malformation to a fright sustained during the recent riots in this town. If any member knows of a similar case, I should like to hear the particulars of it. The child is now over ten weeks old, and is thriving better than during the first fortnight. It is taking a little lime-water daily. Would some of the older members kindly suggest the best treatment, both local and general? I can find no authenticated case.

ANSWERS.

COTTAGE HOSPITALS.

H. M.—Mr. Napper's pamphlet on Cottage Hospitals has been long out of print, but Burdett's *Cottage Hospitals*, published by Churchill and Co., New Burlington Street, contains all the information required.

REMEDY FOR LOSS OF HAIR.

M.D. writes: If "Surgeon" will try a dozen applications of Granville's Percuteur, he will, I think, find great benefit. In several cases of alopecia, an abundant crop has followed the use of the percuteur in my practice.

SCHOOL FOR GIRLS.

MR. F. SUTTON (Gainsborough) writes: In reply to "G. H.," I can strongly recommend the Misses Morgan and Newbold, of Old Croft House, Quarndon, three miles from Derby, where my own daughter was educated.

DR. W. NEWMAN (Stamford) writes: "G. H." would do well to write to Miss Monro, School for Girls, Stamford. The terms are near the limit he names; the teaching is very good; and the whole conditions of the school are such as any careful parent would approve.

DR. D. T. MASSON (Edinburgh) writes: For rather less than £50 *per annum*, inclusive, "G. H." will find an excellent boarding school for his daughter in connection with the Middlesbrough Girls' High School, whose directors provide a boarding house, not for profit, but at cost, for the convenience of young lady pupils who otherwise would have to come daily to school by rail. This school is under university inspection, and several of the young ladies yearly pass the University Local Examinations with distinction.

THE FREE-MARTIN.

IN reply to "J. D.," Dr. G. F. Masterman writes: The free-martin is not generally a heifer calf, but a supposed hermaphrodite, really an imperfectly differentiated female. The only suggestion I can give as to the origin of the name is, that the same accident which has made the austere St. Valentine the patron of lovers has made St. Martin the protector of rogues, his day falling on the anniversary of the ancient Vinalia, a feast of Bacchus (Brewer).

There is an account of the free-martin by John Hunter, who dissected four specimens, in his *Observations on the Animal Œconomy*, edited by Owen, 1837.

DR. ARCHIBALD H. F. CAMERON (Liverpool) writes: The word martin is no doubt from the Gaelic *mart*, a cow. The ordinary word for a cow is *bo*, but *mart* also signifies a cow, and is used in compounds, as *mairt theoil*, beef (cow's flesh). McAlpin gives *mart*, a cow to kill.

NOTES, LETTERS, ETC.

THE BRITISH MEDICAL JOURNAL, APRIL 19TH, 1884.

A copy of the BRITISH MEDICAL JOURNAL for April 19th, 1884, is required for public medical library. It is missing from the series, and is out of print. If any of our readers have the number to spare, it will be very acceptable, and serve an useful public purpose.

THE CUI BONO OF EXPERIMENTS ON THE BRAINS OF ANIMALS.

SURGEON-GENERAL C. A. GORDON (25, Westbourne Square) writes: For "Upon erasing" read "Concerning" in my letter in the JOURNAL of December 18th.

The statements in that letter are taken almost *verbatim* from the critique I referred to. The remarks appended to my letter as published leave those statements untouched; they refer to a different subject, and thus raise a side issue quite apart from the question in hand. If definite statements are made that admit of being dealt with as if they represented matters of fact, they can be discussed on their merits. But mere abstract expressions do not admit of being so dealt with, and to this category belongs what is adduced in the comments on my letter with reference to "a lamp to lighten the path of the clinicist through darkness almost chaotic," and so on.

*** Our correspondent is difficult to please. He asked the *cui bono* of experiments on the brain. We gave him some references and facts which we thought might be of use to him in forming a judgment on the matter. We cannot undertake to help him further.

The Riddell Fund.

The following subscriptions have been received.

	£	s.	d.
Amount stated in last week's JOURNAL	3	13	0
R. A. Clarke, Esq., Moses Gate, Bolton-le-Moors ..	0	10	6
Arthur E. Stokes, Esq., Welton Wansford	1	1	0
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J. Woodman, M.D. (second donation)	1	1	0
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— Pattinson, Esq., Exmouth	0	10	0

British Medical Temperance Association.

MR. HENRY HORTON (Bromyard) writes: I shall be glad if you will allow me to call attention to a decided misnomer in the advertisement columns of the BRITISH MEDICAL JOURNAL for December 18th. I refer to that of the "British Medical Temperance Association," the first condition of membership proving that its correct title would be the "British Medical Total Abstinence Association." I have not a word of complaint against total abstainers as such, but I strongly object to their attempts to appropriate the word "temperance" to themselves, to the exclusion of those who believe that the moderate use of all the good things of the earth is more in accord both with scriptural teaching and the dictates of sound common sense.

Coronership for East Middlesex.

DR. FORBES WINSLOW writes: In consequence of the numerous letters I have received in reference to my apparently sudden retirement from my candidature for this appointment, I would like to say shortly as follows. When I at first entered the field, I was under the impression that there would have been two appointments; but on finding out that this was not the case, I retired in favour of the late deputy, Mr. Collier, who had held the post for nine years. I did so after the meeting of the candidates at the sheriff's office, and on the distinct promise of this gentleman to appoint me as his deputy should he be the successful man. I immediately withdrew from the contest, and the following day my retirement in Mr. Collier's favour was in all the newspapers. Subsequently, Mr. Collier, two days afterwards, himself retired, not being able to bear the expense of an election, and transferred his interest to Mr. Baxter, requesting his supporters to do the same. This course I followed. I may, however, state that it is my intention to contest the other appointment when declared; and to prevent a possibility of clashing with any other medical candidate, I make this announcement in your columns. I may mention that, when I retired, I had issued my address, formed my committee, had influential support, and had I gone to the poll I should not have feared the result.

Lead-Poisoning from Home-Made Wines.

MR. GEO. G. D. WILLETT (Bristol) writes, with reference to the occurrence of lead-poisoning from home-made wines: I have lately had two such cases, one of which, occurring in an old gentleman, aged 79, was the more acute. About seven or eight hours after taking a glass of rhubarb wine with a friend, he was seized with violent purging and vomiting (the vomit tinged with blood), great prostration, and incipient collapse. The treatment I adopted was similar to your correspondent's: Morphine gr.¼, and a copious enema, followed by a mixture of mag. sulph. and tr. card. co., which gave speedy relief. Inquiry elicited the fact that the wine was made in a glazed pan, and testing with iodide of potassium and acetic acid gave the characteristic reaction of iodide of lead.

"Strolling Doctors."

THE following cutting is forwarded to us from Boston, U.S.A. (*Daily Globe*, October 14th, 1886). It reads like a hoax, but it would be hazardous to assume it to be so.

"*Coming to Boston.*—The sick treated free of charge. Fourteen doctors of the great English staff of physicians and surgeons, who are travelling in their own Pullman car, will visit the Quincy House, Boston, on the morning of October 18, and will remain until the evening of November 7. As this is their advertising trip, they will charge nothing whatever for their services. The only favor they ask is a recommendation from those they cure. They will return to Boston every three months. They will not take any case to treat without there is a certainty of effecting a cure. If your case is incurable they will frankly and honorably tell you; also caution you against spending more money for medicine, which travelling impostors usually suggest. Number of cases treated and rejected in the following places, viz., Louisville, Ky., 4,970, of whom 2,165 were rejected; Cincinnati, O., 8,763, of whom 5,360 were rejected; Cleveland, O., 6,578, of whom 3,117 were rejected; Toronto, Can., 2,768, of whom 1,165 were rejected; Montreal, Can., 5,220, of whom 2,480 were rejected. These English specialists have had a vast experience in the army and navy, also in the following hospitals and infirmaries, viz., London, Eng., Liverpool, Edinburgh, Glasgow, Dublin, Paris, Belfast, Heidelburg, Hamburg, St. Petersburg, and Stockholm. Office hours, from 9 A.M. to 8 P.M.; Sundays, 10 A.M. to 5 P.M."

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. J. Shirley Jones, Droitwich; Dr. Wylie, Skipton; Dr. G. Grieco, Foggia, Italy; Secretary Seamen's Hospital, Greenwich; Dr. S. Thomson, Torquay; Mr. T. A. Buck, Ryde; Dr. von Idelson, Berne; Dr. Ogilvie Will, Aberdeen; Mr. R. J. Polden, Calcutta; Mr. H. Horton, Bromyard; Mr. G. H. Younge, Meean Meer, Punjab; Mr. D. de Berdt Hovell, Elstree; Mr. C. J. Fooks, Eastleigh, Bishopstoke; Mr. A. H. Stokes, London; Dr. Gubb, London; Dr. R. Park, Glasgow; Dr. Grimshaw, Carrickmines; Dr. Hunter, Edinburgh; Mr. F. Sutton, Willingham-by-Stow, Gainsborough; Mr. Dunn, London; Dr. Willoughby, London; Mr. C. R. Laurie, Loughton; Mr. A. Jackson, Sheffield; Brigade-Surgeon Dr. Orton, Newcastle-under-Lyme; Honorary Secretary of the Intercolonial Medical Congress, Adelaide; Dr. E. M. Crookshank, London; Dr. J. Irving, Heanor, Derby; Sir C. A. Cameron, Dublin; Mr. A. Napper, Guildford; Mr. J. S. Wood, London; Mr. A. R. Kennedy, Birmingham; Mr. M. Wilson, Doncaster; Dr. Sheard, Putney; Mr. W. F. M. Jackson, Birmingham; Mr. K. Ingleby Mackenzie, Ryde; Mr. Romeike, London; Dr. Forbes Winslow, London; Mr. G. Sturge, London; Surgeon-Major Poole, Upper Norwood; Mr. Hodgson, Brighton; Mr. R. Pollard, Torquay; Mr. S. Hurlbutt, London; Dr. Michie, Cove by Aberdeen; Mr. W. G. Bunn, London; Mr. J. Vesey Fitzgerald, Birmingham; Dr. Wallace, Greenock; Dr. J. B. Pettigrew, St. Andrews; Mr. G. Stillingfleet Johnson, London; Dr. Tatham, Salford; Mr. W. F. Haslam, Birmingham; Our Manchester Correspondent; Mr. Lawson Tait, Birmingham; Dr. Hughes Bennett, London; Dr. W. L. Hunter, Pudsey; Dr. Newman, Stamford; Mr. J. Norton, London; Surgeon Battersby, Dublin; Mr. J. G. Jefferson, Lisburn; Dr. C. F. Knight, Dublin; Dr. E. L. Bey, Paris; Dr. Savage, London; Mr. H. Maturin, Winchfield; Dr. E. O. Daly, Hull; Dr. E. Waters, Chester; Dr. Walker, Peterborough; Mr. A. Hyde Clarke, Moulton; Dr. J. Johnston, Bolton; Mr. A. Devonald, Penarth; Dr. A. H. F. Cameron, Liverpool; Dr. Styrap, Shrewsbury; Dr. H. Gibbes, Hampton Wick; Mr. S. White, Sheffield; Dr. A. T. Myers, London; Mr. L. Hudson, London; Mr. J. K. Kelly, Crosshill; Mr. T. Waddington, Sevenoaks; Mr. M. Pratt, Cardiff; Dr. Rentoul, Liverpool; Mr. J. Taylor, Bristol; Mr. A. T. Stewart, Waterford; Dr. J. G. Lock, Tenby; Mr. J. E. Lane, London; Mr. R. B. Sellers, Rochdale; Mr. J. Boyd, Kingston; Mr. G. F. Masterman, Stourport; Mr. F. E. Pirkis, Nutfield; Dr. W. Pearce, London; Surgeon W. J. Lee, Devonport; Mr. G. H. M. Dunlop, Edinburgh; Mr. R. R. Young, Leicester; Dr. A. Ransome, Manchester; Mr. Wickham Barnes, London; Surgeon-Major J. Murtagh, Plymouth; Dr. Tatham, Salford; Mr. H. W. Pigeon, Hull; Miss Burnes, Ipswich; Mr. E. A. Onyon, Waddington; Messrs. Burgoyne and Co., London; Mr. L. Hill, London; Messrs. W. Wilson and Son, Manchester.

BOOKS, ETC., RECEIVED.

Anatomy and Physiology. By Furneaux Jordan, F.R.C.S. London: Kegan Paul, Trench and Co. 1886.

Text-Book of British Fungi. Illustrated by W. Delisle Hay, F.R.G.S. London Swan Sonnenschein and Co. 1887.

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ABSTRACTS OF THE LETTSOMIAN LECTURES ON SOME OF THE MENTAL AFFECTIONS OF CHILDHOOD AND YOUTH.

Delivered before the Medical Society of London, January, 1887.

By J. LANGDON DOWN, M.D.Lond., F.R.C.P.,
Senior Physician to the London Hospital.

Lecture I.

History of the Subject.—Nomenclature.—Ethnic Classification.—Etiological Classification.

History of the Subject.—In dealing first with the history of his subject, the lecturer said that the earliest attempts at the education of idiots were isolated efforts under the direction of M. Séguin, at the Bicêtre; but, in 1842, attention was more particularly directed to the subject by the establishment of a school on the Abendberg, in Switzerland, which was opened by Dr. Guggenbühl. About the same time, M. Saegert, at Berlin, who had been engaged in the instruction of deaf mutes, extended his efforts for the benefit of a class whose mutism was not the outcome of deafness. In 1846, a general movement took place for ameliorating this afflicted class. Germany took the lead by the establishment of a school at Leipzig. Discussions in the periodical press were initiated by Mrs. Plumbe, of London, whose personal interest in the matter forced the subject on the attention of Dr. Conolly and Dr. Andrew Reid. Synchronously, public attention was given to the subject in the United States of America, where, while politicians were delaying action in the matter, the private enterprise of the late Dr. Wilbur brought it to a practical issue. England meanwhile commenced the work by the establishment of a small school at Bath. It was not, however, till 1847 that the great effort was made which resulted in starting a small institution at Highgate in 1848, and subsequently another at Colchester. These grew into the large institution at Earlswood. In recent years, other institutions have been created both in England, Ireland, Scotland, the United States, and on the continent of Europe.

Nomenclature.—Passing to the nomenclature of his subject, the lecturer commented on the loose way in which the terms imbecile and idiot were used. He thought that the term "idiot" might be advantageously replaced by that of feeble-minded, idiocy being, in fact, mental feebleness depending on malnutrition or disease of the nervous centres taking place anterior to birth or during the developmental years of childhood and youth. The term "imbecile" should be applied to the cases of dementia in which there was a gradual deterioration in physical, mental, and moral condition.

Ethnic Classification.—Turning then to his ethnic system of classification, Dr. Down referred to his paper in the *London Hospital Reports* (1866). He said: I have had under my care typical examples of the negroid family, with characteristic malar bones, the prominent eyes, the puffy lips, and retreating chin. They have had the woolly hair, although not black, nor has the skin acquired pigmentary deposit. Several, again, have arranged themselves around the Malay variety, with soft, black, curly hair, prominent upper jaws and capacious mouths, types of the South Sea Islands. I have also met with a few instances of the North American Indian type, with shortened forehead, prominent cheeks, deep-set eyes, and slightly apish nose. More than 10 per cent. of congenital, feeble-minded children are typical Mongols. They rarely have black hair, as in the real Mongol, but it is of a brownish colour, straight and sparse. The face is flat and broad, and destitute of prominence; the cheeks are roundish, and widened laterally; the eyes are obliquely placed, and the internal canthi more than normally separated; the palpebral fissure is very narrow, the forehead is wrinkled transversely from the constant use of the occipito-frontalis muscle in opening the eyes; the lips are large and thick, with transverse fissures; the tongue is long and thick, and very rugous; the nose is small; the skin has a tawny colour, and is deficient in elasticity, giving on the hands the appearance of being larger than is necessary. It is often of great importance to determine the question as to whether the affliction has had an accidental beginning. The medical attendant may be charged with malpraxis; the nurse may be suspected of having allowed the infant to fall, or of having drugged it with opiates. The being able to refer the child to an ethnic type other than Caucasian, settles beyond question that the cause of the malady, whatever it may be, was antecedent to birth.

Children of the Mongolian type had always great power of imitation, became extremely good mimics, and had a strong sense of the ridiculous. They were always amiable, both to their companions and to animals; they were not passionate, nor strongly affectionate; they could usually be taught to speak, though indistinctly and harshly. The circulation was usually feeble, and whatever advance was made intellectually in the summer, some amount of retrogression might be expected in the winter. Phthisis was very frequently met with in the history of their progenitors, and very few reached adult life; they were prone to succumb to serious illness, or to become phthisical like their ancestors. Their crania had a marked similarity; they were all brachycephalic, and the posterior part was ill-developed.

Etiological Classification.—A large number of feeble-minded children were capable of being referred to one or other of two great groups, (1) the congenital, and (2) the accidental. But there were many instances which it was impossible to include in either of these categories, cases where the early months of babyhood were perfectly uneventful, and intelligence had dawned in the accustomed way, but where, during first dentition, a change came over the aspect of the child; in others, the crisis at first dentition was not so marked; speech was only deferred, but, at the second dentition, crises occurred in which the intelligence became altered; there were night terrors, and not infrequently loss of speech, or the break-down was reserved for the time of puberty.

These cases, the lecturer said, have usually characteristic crania; they are dolichocephalic, and are prow-shaped anteriorly, the line corresponding to the medio-frontal suture being a prominent ridge. There is reason to believe that in these cases there has been an arrest of the synostosis of the medio-frontal suture which should have taken place during intra-uterine life, so that the lateral pressure on the separated frontal bones determines, when the deferred ossification takes place, a prominence where there should have been a plane or slightly concave surface between the frontal eminences. In the great bulk of these cases, well marked evidence can be obtained of some disturbing cause towards the later months of pregnancy, which has led to this condition; and although the deferred synostosis and its consequent deformity is of no consequence, it is reasonable to believe that the same cause which arrested the bony union has also arrested the development of the cerebral centres, and rendered them more unstable. Certain it is that children with such a conformation are almost sure to break down at one or other of the developmental epochs. Their nervous system would appear to be equal to the requirements of growth but not of development. They form a class of cases which I have suggested should be called the "developmental," as contradistinguished from the congenital on the one hand, and the accidental on the other. They are a very important class because, forewarned, catastrophes may be avoided. They are the cases which break down by over-excitement in babyhood, and by "over-pressure" in schools at second dentition and puberty..... A large number of boys and girls come under my notice who are not feeble-minded, who have in a high degree the prow-shaped forehead, and who have their nervous system in such an unstable equilibrium, that the least intellectual pressure at developmental epochs is attended by disastrous results. They are brought to me on account of severe frontal headache, or of wayward petulance, or incapacity for sustained mental exertion.

After quoting with approval Dr. West's statement that he had "never known a child stammer before the commencement of the second dentition," Dr. Down proceeded to describe the group of cases to which he applied the term "accidental,"—children born, or ready to be born, with all the potentiality of intelligence, but whose brains became damaged by traumatic lesions, by medications, or by inflammatory disease. The great characteristic of the class was the absence of any of the physical aspects of feeble-mindedness; bright in their expression, often active in their movements, agile to a degree, mobile in their temperament, fearless as to danger, persevering in mischief, petulant to have their own way, but with a language of gesture only. They were the cases in which mothers entertained the strongest hope. But there was need of great caution in prognosis, as they were most disappointing. So interesting were the children in appearance, that it was difficult to realise that they would not be perfectly responsive to training, and that speech would not be speedily gained. They had well-formed heads, finely-textured skins, well-chiselled mouths, sparkling eyes, features when in repose leading one to augur only brightness and intelligence. There was no outward sign of mental vacuity, for there had been nothing during the period of intra-

uterine life to arrest the evolutionary stages, and stamp its impress on the bodily or facial formation. The cause of the mental deficiency had been something occurring during post-uterine life—some catastrophe not inherent in the child—not a hereditary taint to mar the beauty of his visage or the grace of his cranial contour; yet there was something more potent for evil than in the case of many a malformed face and many a distorted skull. Though much might be done by training to divert the energy into better channels, the improvement would be smaller than might be obtained from apparently less promising children, because more development could be obtained from an ill-developed than from a damaged brain. The remaining class—the congenital—contained by far the largest number of subjects. Less interesting in appearance but more amenable to training, the origin of their malady dated from earlier in intra-uterine life, in many cases the proclivity resided in the germ-cell or sperm-cell, as the result of gradual degeneration, and the children bore in their bodily formation marks of physical change. They for the most part had a tendency to fall under one or other of the ethnic groups above mentioned. In these cases, said the lecturer, the cranium is usually smaller than normal, dolichocephalic in many, but brachycephalic in the Mongolian type. Occasionally the head is scaphocephalic, the line of the sagittal suture giving a keel-like feature to what resembles an inverted boat. A very common character is a rapid shelving from the vertex posteriorly, corresponding to what is so frequently to be noticed, an arrest of development of the occipital lobe of the cerebrum. Not infrequently the cranium is extremely small, reverting to the Aztec type. These examples of extreme micro-cephalism have been attributed by Virchow to premature synostosis of the cranial sutures. I have found, however, that in some of the most marked members of the micro-cephalic group the sutures are well marked, and there is every indication that the cranium had adapted itself to the cerebrum rather than that the cerebral mass had been dominated by the cranium. They are cases in which the brain and bony covering are both in miniature, the arrest having had an early intra-uterine date. It would be a grave error to imagine that there is an inverse relation between the size of the cranium and the intellectual capabilities of its possessor.....Macrocephalic crania are not infrequently met with, some being due to hydrocephalus, and others to an increase of the neuroglia of the cerebral mass. I have had patients under my care whose brains were within an ounce of the weight of that of Cuvier, who, nevertheless, were slow in their movements and slower in thought, and were perfect contrasts in intellectual sluggishness to the volatile microcephalic Aztecs with brains only one fourth the weight. An inspection in these cases revealed the fact that the cineritious portion was pale and that the increased weight was due to the increase of the white substance, and especially of its connective-tissue elements. Another deformation met with in congenital feeble-mindedness is a marked asymmetry of the two sides of the cranium. There is also in many an increase of the facial development as compared with the cranial. The ears are implanted farther back relatively than in normal heads. The eyes have their canthi too closely approximated in the dolichocephalic cases and too widely separated in the brachycephalic. The palpebral fissures are often narrow and obliquely placed, and the forehead is, not infrequently, corrugated in consequence of the employment of the occipito-frontalis muscle to raise the lid. At the inner canthi the integument often forms semilunar folds, as if the skin were too scanty, which I have proposed to call epicanthic folds. These are met with in people who are not feeble-minded, but they are more frequent in the latter, and are, I believe, signs of degeneracy.

Dr. Down considered the deformations of the mouth as very important in the diagnosis of congenital idiocy. His views had been very generally adopted, and were confirmed by many members of the Odontological Society of London when the subject was brought before them. But they had met with opposition in two different quarters, and for different reasons. Dr. Kingsley, of New York, had been led to conclude, on general grounds, that the examination of a series of idiots would probably show that they had capacious jaws, and teeth which were not crowded; this reasoning appeared to be confirmed by an examination of the inmates of an asylum for idiots on Rundall's Island; in about two hundred children not a single case of pronounced V-shaped dental arch was found. Dr. T. Claye Shaw had tried to show that there were many idiots with well-formed mouths and palates.

With this, said Dr. Down, I agree if he includes accidental and developmental cases. My contention is that they are typical of the congenital class. Dr. de Bourneville, of Paris, has carried on investigations on the same subject in France, and in a memoir has generally confirmed my views. Dr. Ireland, in his treatise on *Idiocy and Imbecility*, says, "Dr. T. Claye Shaw took the trouble to write a paper to prove that a highly arched palate is not a sign of the existence of idiocy and imbecility; that a palatal investigation cannot afford a clue to the mental faculties. Dr. T. Claye Shaw's paper illustrates the confusion of mind one must fall into who studies the physical aspects of idiocy, while he persists in regarding it as a class incapable of further subdivision."

Common sensation is generally much less acute than in ordinary persons. Pain is borne with wonderful callousness. Special sensation is also obtuse. Hearing is generally less acute, and this is often an important element in cases of delayed speech. We all know that absence of speech is often the outcome of complete deafness, but it is not sufficiently recognised that a very slight congenital defect of hearing is sufficient to cause deferred and defective speech. Lesions of sight are very frequent. Congenital cataract is very commonly associated with congenital feeble-mindedness. Several cases have also come under my notice of blindness, the result of arrested development of the globe.

Strabismus is very common, and nystagmus, though less common, is not infrequent. Myopia, but especially hypermetropia, is a frequent accompaniment of congenital mental lesions. Colour-blindness is occasionally met with, but it is difficult to say in how many cases it is from a want of mental power. The sense of smell is ill-developed in a great many, and that of taste keeps company therewith. The most nauseous medicines are taken without question, and in fact with many, its administration is regarded as a mark of attention and appreciated accordingly.

The muscular system is weak. Not only are physical efforts feeble, there is no power of sustained endurance. Co-ordination is defective and finely adjusted movements are exceptional. There is a great tendency to automatism and rhythmical actions. Salaams, horizontal swayings and rotations of the head and body are often met with. The lack of muscular power makes itself painfully manifest in a number of instances by the postponement of walking or even of standing.....In the large number of notes which I possess of congenitally feeble-minded children, walking delayed to the third or fourth year is a very common occurrence. Imperfect prehension with the upper extremities is also a frequent characteristic, and often the vertical position is rendered impossible by virtue of muscular weakness long after children of a similar age are running about. Delayed speech is universal, permanent absence less common.

ABSTRACTS OF THE HARVEIAN LECTURES ON CANCER OF THE UTERUS.

By JOHN WILLIAMS, M.D., F.R.C.P.,
Obstetric Physician to University College Hospital, and Assistant-Professor of Midwifery in the College.

Lecture II.

Before passing on to the discussion of cancer of the cervix proper, the lecturer described so-called ulcerations of the os uteri, or erosions, and explained the mode of their production, their structure, and the differences between them and cancer and adenoma. An erosion appears to be an extension of the structures entering into the formation of the mucous lining of the cervix on to the lips, which are, in health, covered by stratified epithelium. They are glandular; their surfaces are often villous, and covered by columnar epithelium, and their glands are lined by columnar epithelium similar to that lining the cervical glands.

Adenoma of the cervix was then described; two cases of the disease were related—a disease which appeared to be of great rarity. It possessed the clinical characters—that is, the malignancy and fatality—of cancer, and was not to be distinguished from it, except by the microscope.

Proceeding to the consideration of true cancer, the lecturer described cases of the disease from the earliest stage, when the diagnosis was rendered possible only by the microscope, to the more advanced stages when it would be difficult to mistake the nature of the growth. These cases were illustrated by drawings made from specimens and from microscopic sections. The disease might begin in any part of the cervix, low down near the external orifice, or high up near the in-

ternal. It began in the glands near the surface, or in their deeper parts; but the lecturer had not met with the disease beginning in the epithelium of the cervical canal. It appeared to begin in the lower more frequently than in the upper part of the cervix; but it began in the latter situation more often than was generally supposed. The following case (Fig. 3) was given as an instance of the disease beginning in the upper part of the cervix.

A patient, aged 40, of very fair complexion, who had had two children and some miscarriages, was seen first in July, 1878. She said that she had not been poorly for six weeks, and that she felt sick, and had very frequent micturition. On examination, the os was found large and patulous, and high near the inner orifice, in the posterior wall of the cervix was a hard mass, the size of a pea. It was thought to be a small fibroid. She was seen again in 1879. She said she had had a miscarriage at Christmas-time. Her husband had been away for six months, and returned a fortnight ago, and she had observed a slight loss of blood after coitus since, but at no other time. She had no pain, and no discharge.



Fig. 3.—Cancer commencing near the inner orifice, and forming a nodule occupying the whole of the posterior lip.

The uterus was a little enlarged, freely movable. The posterior lip was thickened, and on its anterior surface was an ulcer the size of a shilling, which extended slightly on to the vaginal surface of the lip; it was depressed with hard edges, and it bled on the slightest touch. The uterus was extirpated. The organ was then found to be 3½ inches in length; the walls of the body were somewhat thickened, but appeared to be healthy. The cervix was considerably enlarged, the enlargement affecting chiefly the posterior wall, and an ulcer was situated on its anterior surface, just within the os externum. The surface of the anterior lip was papillary. Section showed the posterior lip to be occupied by a mass of the size of the kernel of a walnut. This reached upwards to the inner orifice, and occupied the whole thickness of the wall, and it reached downwards to the portio vaginalis, but it had nowhere penetrated through the mucous membrane of the portio. The growth looked to the naked eye as if it were encapsuled, but this appearance seemed to be due to the pressure of the growth on the parts immediately surrounding it.

Cancer might develop in the cervix from more than one centre, one being situated near the os externum, and the other near the os internum. And cancer might attack mucous polypi growing from the cervical canal. Cancer appeared to attack the posterior more frequently than the anterior lip. It had a tendency to grow downwards so as to invade the vaginal portion and outwards into the peri-cervical tissues, and it showed but little tendency to invade the body, although growth in this direction had been observed. After having invaded the peri-cervical tissue, its tendency appeared to be to grow downwards in the cellular tissue around the vagina, and outwards into the bladder and broad ligaments.

ON REMOVAL OF THE UTERINE APPENDAGES.[1]

By THOMAS SAVAGE, M.D., M.R.C.P., F.R.C.S.,
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I was recently asked by a medical friend what I thought would be the effect on the future population of any country, if, in every large manufacturing centre, there were established one or two practitioners who frequently operated for the removal of the uterine appendages. To this I replied that if the said practitioners were conversant with the conditions under which the operation should be performed, it would have little or no influence, because the removal of normal ovaries should be, and is in fact, a very rare occurrence.

I believe that in nearly every case where the operation is called for, the capability of maternity has been already destroyed by some abnormal condition of the ovaries or tubes.

An eminent metropolitan gynæcologist, who cannot certainly be accused of over-activity in this operation, said in a recent address: "I am not, of course, contesting the propriety of ovarian extirpation, when the ovaries are themselves so diseased as to be useless for functional purposes."

The removal of normal ovaries may be justified, in a very few instances of deformity, where the birth of a living child is impossible, or might be reasonably expected to prove fatal to the mother; and it may be, also, in some few cases of myoma, where the operation is performed to check further development of the growth, that the ovaries are normal, or, at least, do not present signs of disease such as, with our present limited knowledge, we can recognise. Generally, however, in myoma, the ovaries are sufficiently altered as to leave no doubt of their pathological state.

The most frequent conditions which give rise to indications for the operation appear to be of an inflammatory character; for example: (*a*) a localised peritonitis, glueing together in various degrees of intensity the intestines, omentum, and appendages; (*b*) a pelvic peritonitis, glueing together the tubes and ovaries to each other and to the pelvis, or in the folds of the broad ligament, and generally occluding the fimbriated extremities of the tubes; (*c*) some causes, operating from the interior of the tubes, for example, the escape of some blood through the tube-end into the pelvis, or the extension of the gonorrhœal poison upwards to the tubes and ovaries.

The first two of the above-named conditions have appeared to me to be of much the most frequent occurrence, and to have their origin in some septic poisoning in connection with abortion or confinement. The history, in such cases, is very often singularly clear as pointing to this; namely, a patient has one or more children, perfectly healthy and well, until at length comes a miscarriage or confinement which is followed by some symptoms of more or less gravity; at any rate, indicating that she is ill with some inflammatory or septic process referable to the pelvis. She thenceforth is sterile, becomes a chronic invalid, and, in most cases, the enlarged tender organs are to be felt, by double palpation on each side, through the vaginal roof.

The gonorrhœal origin of a considerable number of cases is, to my mind, undoubted, and it tends to throw a flood of light on the gravity of gonorrhœa in women. Hitherto, gonorrhœa has only been regarded as a grave disorder from some of its sequelæ in a few males who have had it; and it has been looked upon as a very mild affair in women, to be treated, as of little consequence, by the use of injections, hot-water douches, and local applications to the inflamed vaginal mucous membrane. But now that its consequences are known to be so serious, and not so uncommon, we must change our views concerning its comparative innocuousness; and we should come to regard every woman who has a gonorrhœa, however mild, as possessing the potentiality of a serious and, may be, fatal pyosalpinx.

The therapeutics of this subject, by which, of course, I mean the successful treatment by operation, is far in advance of its pathology; and there is a need of able men, other than busy practitioners, to

[1] Read in the Section of Obstetric Medicine at the Annua Meeting of the British Medical Association at Brighton

devote time to working at the pathology of the many and varied diseased conditions of the uterine appendages. Abundant material is always at hand in the practice of gynæcologists who perform this operation. We want to know better than we do at present the significance of (1) atrophied or cirrhotic ovaries, (2) enlarged ovaries, whether persistent or temporary, œdematous or cystic. Where is the line to be drawn between what is called cystic disease of the ovaries and cystoma? Is the difference mainly one of degree in the size of the cysts or of encroachment of the cyst on the stroma of the ovary? Is there not sometimes induced a condition of the broad ligament and Fallopian tubes, which has become permanent, and which corresponds to varicocele in the male, and which, by pain, disables the patient from leading an active life, and may justify removal?

I have seen a few instances, perhaps half a dozen, where there was a small cystoma, say the size of an orange, with sometimes clear, and sometimes dark or sanious fluid, in direct association with very adherent appendages, the result, according to the history of the patient, of some antecedent inflammatory symptoms. These cysts have seemed to be of more recent date than the symptoms which indicated the inflammation and subsequent adhesion of the appendages. I would ask, Have the adherent organs, as regards their adhesions, had any causal relation in producing the cyst, and, if so, what?

One great objection to operating on the appendages has frequently been raised, and that is the difficulty of diagnosis. I can quite sympathise with this difficulty on the part of those who are not frequently seeing such cases. I do not think the difficulty will ever be entirely removed. In some patients, the case is perfectly clear beforehand, and may easily be diagnosed as a "tube-case," in which all the organs inside the pelvis may be mapped out with more or less accuracy, and distinguished by double palpation; and the enlargement which is the cause of the trouble may be clearly made out. In some patients we have to rely on the subjective symptom of pain alone; in others, the majority, there are at least some objective features which guide us more or less truly, such as metrorrhagia, enlarged uterus, and most frequently a fulness, a lump, or a small tumour. The clinical history is also generally an invaluable help.

In the acute and subacute forms of pyosalpinx, the temperature is usually a guide; whereas, in the chronic form, when the tubes contain only inspissated pus, the temperature is often not found to be above the normal.

The probability, or the recognised possibility, that a pyosalpinx may burst and cause a fatal peritonitis, is enough in itself to justify an operation, over and above what is to be gained in relief to the patient by its early performance. One of the results of the chronic inflammatory disease on the ovaries is to render them apparently quite pultaceous or rotten; sometimes a large hæmatic cyst, probably the result of an abnormal corpus luteum, is present, with very little real stroma left. Hæmatosalpinx, though rare, is, I expect, much more frequent than the text-books of the past would lead us to believe.

I shall only refer to the operation for the removal of an early ruptured Fallopian pregnancy as having been led up to by operations on the appendages for other conditions.

When menstruation occurs with more or less, and sometimes with perfect, regularity, it is thought to be due to the operator having left a small portion of ovary behind, or not having removed a sufficient length of tube. I cannot at present accept this view; but I am not prepared with an alternative explanation. I know quite well that in some cases of myoma it is very difficult, even impossible, to remove the whole of the ovary, even though the silk is passed some distance beyond it. When the ligature, in such cases, is drawn up tightly, it is seen that its distance from the ovary appears to have become diminished, and that a very little space is left for the scissors, without encroaching on the gland, often not enough to leave sufficient for safety on the distal side of the ligature. I have long been in the habit of tying the tubes as near the uterus as I can get, and yet menstruation will sometimes occur. In a patient of Mr. Bethell of Bridgnorth, I removed, in November last, the appendages for myoma, and entered in my note-book "appendages *completely* removed." This I do when I am quite satisfied that they are completely removed; and yet I find that in this patient menstruation has been quite regular, though not profusely so, up to the present time.

As regards the performance of the operation itself, there is every variation possible between extreme simplicity and extreme difficulty. Without adhesions, it is perfectly simple and safe, and ought to have no mortality other than what is outside and beyond preventable causes, for example, tetanus, etc. If the inflammatory symptoms have been recent, so that the adhesions are slight and easily separated, the operation is still easy and safe. In old-standing cases, where the appendages are firmly glued to each other and to the pelvis by tough fibrous bands, the operation is often one of very considerable difficulty, involving much patience on the part of the operator. I believe there are few surgical manœuvres more fatiguing than some of these; and it requires some practice to attain to a perfect *tactus eruditus*, so as to be able accurately to distinguish the line of adhesion between the parts to be removed. I hear of cases that cannot be completed, and I am conscious of such in my own practice, but I feel that such are a reproach to my skill and dexterity, and I am coming to feel that when once attempted they ought always to be carried through; if not, the fault lies rather with the operator than with the inherent difficulties, great though they may be, of the case. The bleeding caused by the separation and tearing of these firm adhesions is often great. It is usually controlled by sponge pressure, or the insertion of the drainage-tube and the pressure of the binder round the abdomen. All this is, to my mind, a very strong argument that such operations should be had recourse to much earlier than they are.

Seeing that inflammatory conditions after confinement are such a large factor in producing chronic invalidism, with sterility, pain lasting for years, and inability to discharge the duties of life, we are justified in advising our patients to submit to operation much earlier now than was thought right a few years ago. And if we can catch the cases in the acute or subacute stage, so much the better; I mean when there are the symptoms of recent inflammation present.

In point of difficulty of performance, I would class first the cases of chronic inflammatory disease of the ovaries, where much discrimination is required and difficulty experienced in picking these organs out of their bed. The adhesions seen on the ovary, when floated in clear water after removal, testify to their having been firmly lodged in the pelvis. How it is that such adherent glands have not been fully recognised in the *post mortem* room seems difficult to understand. Next to these are the cases of pyosalpinx, especially the acute or subacute, where the tubes form a bag of pus of considerable size.

A short incision is, I am convinced, of great importance in most abdominal operations. The actual length of the cutting *per se* is of no real consequence, and can make no difference to the patient other than that she will have more tendency to a ventral hernia afterwards with a long than with a short scar. But during the operation, with a short incision, the probability is that no other parts will be interfered with or opened up than just those which lead directly from the incision down to the organs to be removed. Hence drainage, when necessary, will be more likely to be effectual; and the more the surrounding parts are disturbed, by so much the more is the door opened for introduction and absorption of septicity. The short incision—I mean one of one inch and a half or two inches—adds very little to the difficulty; and it can always be prolonged a little, if found necessary, to get below the organs in a fat subject or a deep pelvis. I think, too, that the intestines incommode the operator less with the short incision.

OBSERVATIONS ON REMOVAL OF THE UTERINE APPENDAGES.[1]

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THE expediency of removing the uterine appendages under various circumstances has recently become one of the most important topics that can engage the attention of any medical society. As this subject will, I believe, be here introduced by several supporters of the operations referred to, from some of whose views thereon I have elsewhere expressed my dissent, I presume to take part in the present discussion in the hope that all sides of the question may be now considered, on broad general principles and apart from any personal controversies, with the sole object of arriving at just, temperate, and well-founded conclusions.

With reference to Dr. Savage's able paper, I am sure he will pardon my saying that we should not be withheld from the full discussion of the operations alluded to, even by the demonstration of the success and safety with which they may be performed in many cases by himself and other experts. What we have here to consider is whether, in the experience of the majority of those engaged in gynæcological

[1] Read in the Section of Obstetric Medicine at the Annual Meeting of the British Medical Association at Brighton.

practice, the operations referred to are as commonly found necessary as by some specialists they are now deemed advisable, and whether their practice in this respect should be generally adopted by us or not.

I shall, therefore, submit a few observations on the removal of the uterine appendages—first, in certain morbid conditions of the Fallopian tubes and ovaries; secondly, in reflex constitutional and cerebro-nervous disorders ascribable to ovarian irritation; and, thirdly, with reference to such operations in cases of uterine fibro-myomata. In so doing, I may premise that, though there can be no controversy as to the possible utility of these operations in certain instances of each of the complaints alluded to, there is, in my opinion, superabundant room for consideration with regard to the expediency of their general employment as a rule of practice in such cases.

The increasing frequency of the operations in question is clearly evinced in recent medical literature. Thus, in the proceedings of the Liverpool Medical Institution, as reported in the *Medical Press and Circular*, we find it stated by Dr. Carter that in one hospital "no less than one hundred and eleven women had been deprived of one or both ovaries during the year 1885." In the *Provincial Medical Journal* about the same time it was observed: "Oöphorectomy is suggested as the panacea for all the ills from which unfortunate women suffer, and their ovaries are removed with as much impunity as the butcher spays his sows and with the same consideration for the wishes of the patient." In another journal we read: "It is more than hinted that women are spayed without being told what the nature of this operation of spaying is, and the position in which they will be placed by it." In the *Proceedings of the New York Academy of Medicine*, it was recently observed by Dr. H. C. Coe that "there are not a few women now attending the various clinics in New York who have had their ovaries and tubes removed, and yet who complain of precisely the same pain as before; in fact, I can recall cases in which, although the menstrual disturbance is wanting, the pain is more severe than it was before."

If, then, the frequency of operations for the removal of the uterine appendages is to go on increasing generally during the next decade in the same ratio as it has done in some places within the past few years, it follows, I think, that ere the end of that time a very considerable number of our female population will be deprived of an essential part of their distinctive sexual or reproductive organisation. Before this happens, however, it may perhaps be well that the operations referred to should be here again considered in all their aspects, social or ethical, as well as medical.

1. *Social and Ethical Aspects of this Question.*—With regard to the former, it cannot be altogether lost sight of in this discussion that the ovaries are to women apparently much what the testes are to men, and that by their complete removal the individual is, in either case, unsexed, or—and perhaps more correctly speaking—deprived of reproductive sexual power. New words do not alter old facts; and hence the more scientific terms by which the removal of the uterine adnexa may be now described, or the more skilful and successful methods by which this is accomplished, do not render the secondary consequences, after immediate recovery from the operations heretofore generally known by the terms "spaying," or "castration of women"—to which, I think, Dr. Battey was the first to object—any less important than was formerly the case. These ultimate or secondary consequences, however therapeutically necessary or useful such operations may be found in certain cases, are, *inter alia*, to leave those on whom the operations in question have been completely carried out, if not already incapacitated by age or disease, subsequently incapable of fulfilling what in every Christian community has, I believe, been generally recognised as one of the chief functions and primary objects of woman's married life—namely, the function of child-bearing.

In this connection, I may also observe that it appears obvious that the operations under consideration should not be resorted to without the patient's previous concurrence and full knowledge of their consequences, as far as it is possible to impart them to her. I need not dwell on the various reasons, ethical and medico-legal, assignable for this opinion, as every practitioner should, of course, be competent to form his own views thereon.

With regard to that deterioration of feminine appearance, alteration of voice, growth of hair on the face, loss of sexual instinct, and arrest of menstrual vitality, which are enumerated by some and denied by others as consequent on removal of the uterine appendages, I do not myself think these circumstances *per se* of sufficient importance, when compared with others already referred to, to materially affect our judgment for or against the operations in question.

2. *Removal of Appendages in Tubal and Ovarian Disease.*—It may here be inquired whether the present frequency of oophorectomy and salpingotomy is based on any largely increasing prevalence of the diseases for which these operations are now advocated. And, secondly, it may be also asked whether the complaints in question cannot, in some instances at least, be satisfactorily treated by less heroic measures. With regard to these points, I may remark that, as far as from some research into the older medical literature of the subject, or from the results of a tolerably long clinical experience in hospital and private practice, I can form an opinion, I believe not only that the diseases for which laparotomy is now so commonly employed were distinctly recognised by the older writers; but, also, that in some instances they have been efficiently treated long before the names by which they are now designated, or the operations by which they are now dealt with, had been made as familiar as "household words" by modern authorities.

Thus, in the course of several years' hospital experience, I have myself met with a good many cases of disease of the uterine adnexa. Comparatively few of these, however, were of such gravity as in my opinion to call for operative interference. Nor in my earlier career as a demonstrator of anatomy did I ever encounter the *post mortem* evidences of such serious pathological changes in these parts, save in one instance. Hence I think I am justified in the conclusion that cases of grave Fallopian tube, or ovarian disease, apart from cystic disease, are of rather infrequent occurrence in the city of Dublin, where I practise. I should, therefore, be glad to gain some information as to the causes that may be assigned for a greater frequency of such cases in other parts of these kingdoms, the hygienic and climatic conditions of which do not seem to be materially different from those of the sister island. The causes of salpingitis and pyo-salpinx are, however, hardly such as should be likely to be largely influenced by merely local circumstances; the most frequent of them in the cases that have come under my observation having been gonorrhœal infection, or catarrhal inflammation, sexual over-irritation, or the extension of disease through the tubes after parturition.

The chief source of danger in cases of inflammation of the uterine adnexa being the risk of the resulting inflammatory products rupturing into the peritoneal cavity, this fact has apparently influenced early operative interference, or removal of the diseased appendages. It appears to me beyond question, however, that some cases of this kind terminate by resolution, or are curable by purely medical treatment: and, in other instances, such abscesses and exudations may burst into adjoining hollow viscera, and so escape *per vias naturales*.

Hence, having, in my own practice, met with cases of inflammation and hydro-purulent exudations in the uterine appendages which proved amenable to ordinary treatment, I fail to see the expediency of resorting to operative treatment in such cases, until less serious measures have been tried without benefit.

Oöphorectomy in Reflex Ovarian Disorders.—The advantages ascribed by Dr. Goodell and other authorities to Dr. Battey's so-called "normal ovariotomy" in the treatment of the various cerebro-nervous reflex complaints associated with ovarian irritation or disease have, as I elsewhere pointed out, been apparently over-estimated by surgeons on both sides of the Atlantic. In a large number of these cases the true starting point of the reflex disorder is, I believe, to be found in the remote constitutional condition or cachexia, of which the ovarian complaint may be but the local expression or result. Hence in such instances, even although the cerebro-nervous disturbance may, as is often the case in hysterical, mental, and nervous affections of women, be unquestionably connected with ovarian irritation, the removal of the latter, by local or operative treatment, can hardly suffice to cure the former condition. That is to say, until at least any predisposing constitutional cause which in these cases may not infrequently be traced to strumous, syphilitic, gouty, or other constitutional taints, has, in the first instance, been recognised, and, if possible, remedied by appropriate constitutional remedies, after which local or operative treatment may or may not be advisable. The indications for and details of these plans of treatment, as well as my reference to the older literature and history of the subject, have been unavoidably omitted from this communication, to bring it within the limits of space here permitted.

Oöphorectomy for Uterine Tumours.—Probably the most important use of oophorectomy is in the treatment of uterine fibro-myomata. Admitting this, I am yet far from convinced of the general necessity of removing the uterine appendages, even in cases of myoma occurring in young patients, although that practice may be sanctioned by some authorities. Thus, Mr. Lawson Tait, in a discussion on a paper of mine on the treatment of myoma last year, is reported as saying, "We have a large number of cases under the age of 40, and I say that the moment uterine myoma is discovered in a patient under 40, her uterine appendages ought to be removed, and in this I am pleased

to find that I have the support of Mr. Thornton" (*British Gynæcological Journal*, July, 1885, p. 189).

That oöphorectomy may be performed with advantage in many instances of myoma is unquestionable, and I have had some evidence of its occasional utility as a possible means of checking the progress of actively developing uterine tumours, as well as of arresting hæmorrhage in certain cases of this kind. At the same time, however, I am unable to recognise the expediency of removing the uterine adnexa merely because a patient suffers from myoma, unless operative interference be specially demanded by the gravity of existing symptoms, and inability to relieve them otherwise.

As the opinions I have long maintained on this point, although elsewhere controverted, have been confirmed by my own recent experience as well as by that of others; and as the question is one that comes within the scope of this discussion, I may therefore briefly recapitulate my views thereon. In the first place, then, it appears to me of great importance to bear in mind, with regard to uterine fibromyomata, that these tumours, however much inconvenience or trouble they may occasion, very seldom indeed directly cause death. Secondly, their usual rate of development is extremely slow, their course, in many instances, being an indefinitely protracted one, their progress or increase, as well as their most urgent symptoms, in a large number of cases, being arrested by natural causes, or at the menopause.

As already observed, I have long had an ample opportunity of seeing cases of fibro-myoma, and yet I cannot call to mind ever seeing any case in which death resulted directly from this disease. Nevertheless, I do not for a moment contend that any surgeon should hesitate—and I for one certainly do not hesitate—to recommend oöphorectomy in those cases of myoma in which this is absolutely necessary for the arrest of hæmorrhage, or the relief of suffering, or in order order to check the growth of a rapidly growing tumour, and after a full and fair trial of other and less heroic measures. Such cases, however, appear to me exceptional, and, to my mind, do not prove the advisability of adopting as a general rule of practice, in the treatment of myoma, any operative measures which, however successful in the hands of some specialists, might, if adopted by gynæcologists generally, not improbably eventuate in a mortality larger than that occasioned by the disease itself when left to nature.

If, therefore, oöphorectomy be not always necessary in the cases referred to, still less generally required, in my opinion, is it in cases of quiescent fibroids largely occupying the abdominal cavity in older patients. In such cases, the difficulty of removing the appendages must be greatest in those instances in which, if practicable, it might perhaps be most useful. Thus, in large subperitoneal fibroids, lifting the uterus far out of the pelvis, and binding it by subsequent inflammatory exudations to the adjoining parts, it may prove extremely difficult to reach the ovaries by abdominal section until the uterus, by which they are overlaid and concealed, is first detached from those adhesions, and turned out of the abdominal cavity.

Space prevents any further reference in this place to the advantages of oöphorectomy, as compared with hysterectomy, enucleation, and other operations in the treatment of myoma. I may, however, allude briefly to the medical measures by the use of which I believe that in many instances we may avoid the necessity for oöphorectomy and its various operative substitutes. By appropriate treatment of this kind, we may, in cases in which operative interference is not advisable or feasible, keep pain, pressure trouble, hæmorrhage, and other symptoms of myoma, under sufficient control to enable the patient to await the menopause with some comfort as well as safety. With this view, we should in the first place endeavour to arrest hæmorrhage, especially by the free use of liquor ergotæ, which I prefer to ergotine, and employ in full doses hypodermically and by the mouth. When thus used, I have found that ergot rarely fails to check hæmorrhage of this kind; and, moreover, it appears in some instances to produce by its long-continued administration a well-marked diminution in the size of the tumour. To aid in lessening the congestive hypertrophy that generally attends the development of uterine fibro-myomata, iodide of potassium may also be freely employed with the happiest effect, when given in suitable cases, in efficient doses, and for a sufficient length of time. Lastly, in this connection I may reiterate the statement founded on my own observation and experience, namely, that, in some instances of myoma, in which operative treatment is not available, we may possibly succeed in arresting the progress of the disease, and prolonging the life of the patient, by sending her to one of those iodated or bromated Spas which are described in my works on this subject.

In thus endeavouring to suggest the advisability of a diminution of the present increasing frequency of operations for removal of the uterine appendages, I may possibly be regarded by some as an emulator of Dame Partington's efforts to keep back the advance of the Atlantic. Nevertheless, I still believe that those who would now fain slacken the pace of modern operative surgery in this particular instance may contribute towards its ultimate progress, no less than those whose practice therein is bolder, and whose opinions are apparently now more in favour. Other operations and methods of treatment have ere this been for a time generally accepted; and then, having perhaps been carried beyond their judicious application, have fallen into desuetude. We have, therefore, no guarantee in the present frequency of resort to the removal of the uterine appendages that the same may not in course of time happen also with regard to these operations, which, however valuable in cases of absolute necessity, should, in my humble judgment, never be lightly regarded as measures of election.

Dr. GRANVILLE BANTOCK said that he had followed the reading of the papers of Dr. Savage and Dr. More Madden with much interest and some profit. The cases under consideration might be divided into two great classes: 1. Those in which the appendages were themselves diseased; and, 2. Those in which these organs, being themselves quite healthy, were removed for the cure of some other condition. In the first class, there might be disease in one or both organs; the tube might be diseased alone, or the ovary alone, or both might be affected, and the disease might be limited to one side, or involve both sides. When the tube alone was the seat of disease, such as pyosalpinx, or enlargement of the organ with occlusion of the canal, the result of the inflammatory process, and, when rational and skilful treatment had had a fair trial without relief of the symptoms, then we had no resource but the radical operation. We were bound to give the patient the chance of relief by local and constitutional treatment in the first instance, because the *post mortem* table furnished abundant evidence that at least some of the products of the inflammatory process were removable in that way. It was known also from clinical observation that the acute symptoms characteristic of these conditions sometimes subsided, and the physical evidence of them disappeared. When, however, the acute and severe symptoms obstinately persisted, then it was our duty to resort to the extreme measure. In the case of hæmatosalpinx, the same considerations must guide us. Hydrosalpinx stood on somewhat different ground, as the symptoms were usually progressive. For papilloma, again, the only treatment was removal by abdominal section. Various conditions of the ovary also called for surgical interference, besides those resulting in the formation of a large tumour, for example, chronic ovaritis, which produced enlargement of the organ, and arrested its function; cirrhosis, probably a later stage of the former; a peculiar form of cystic degeneration, in which the ovary sometimes assumed the appearance of a deformed bunch of grapes in miniature; lastly, atrophy of the organ. In all of these, even the last, pain was a prominent symptom. He had been lately compelled to operate on a lady who had suffered for nine years from intense pain, for which she could get no relief. The ovaries were no larger than field beans, and the operation resulted in complete, and apparently lasting, relief. He concluded that, given one of the conditions named, we were bound to interfere surgically, with the limitations mentioned. It was very different, however, when we had to deal with cases in which the appendages were quite healthy, and in which it became a question as to their removal for the cure of some other condition. In "neurotic" cases, such as epilepsy and hystero-epilepsy, the results had not been satisfactory, and the operation could only be tentative. Few would agree with Dr. Goodell's suggestion, made at the International Medical Congress of London, that the appendages should be removed in every case of insanity in the female. Some cases might possibly be benefited, such as those in which there was a marked exacerbation of the symptoms at the time of the menses. With regard to cases of uterine fibroid of small or moderate size, accompanied with hæmorrhage, that condition furnished a rather wide field for the legitimate performance of the operation, but even there we must not overstep the limits of prudence. In a large number of cases other measures, such as dilatation of the cervix, and curetting the endometrium, followed by the application of strong iodine paint, were successful in stopping the bleeding. Again, in some cases, a submucous tumour might be enucleated by the vagina with a minimum of danger. This method, however, was only applicable when the tumour was of such size that, after enucleation, it could be delivered through the artifically dilated cervical canal. That such cases should be subjected to the operation under consideration was manifestly wrong. When the tumour was of small size, intra-mural, and incapable of enucleation, and the milder measures already mentioned had failed, we were driven to the last resort. But if the tumour were of large size,—say several pounds in weight, and rapidly growing—then

he believed we should best consult the interests of the patient by performing hysterectomy, if it were possible. In such cases the removal of the appendages, even if possible, was a very uncertain remedy. Nor should it be thought of for a moment when the tumour had already descended into the vagina through the external os. In such cases enucleation, though difficult in the case of a tumour one or two pounds in weight, was the proper remedy, while the removal of the appendages would probably be useless. One might as well remove the appendages in the case of intra-uterine or extruded polypus. In fact, the operation should be regarded as a last resource. It had been performed for the cure of menorrhagia, of dysmenorrhœa, and displacement of the uterus. He was of opinion that many of these operations were not justified by the circumstances of the cases. This was not the first time he had raised a warning note against too much zeal in this direction, and he again protested solemnly against the excessive frequency with which the operation seemed to be performed for one cause or another, to say nothing of a mortality of 33 per cent. in one series.

Dr. GORDON (Portland, Maine) wished to take as a text the closing words of Dr. Bantock, who raised a warning note against the too frequent removal of uterine appendages. Dr. Bantock maintained that, in certain given conditions, he believed the operation not only justifiable but necessary. Now, who was to judge as to the necessity? Certainly the man who had the case under examination, and if one man in a certain community saw many more cases than a practitioner in another region, was he to refrain from operating when he was conscientiously convinced it was necessary, simply because the occasion often presented itself? Certainly not. He was satisfied, from his own experience, which included twenty-six cases, that there was a large number of cases of long-continued suffering in every community, where nothing short of that operation could do any good. The best test of all was, in his opinion, the result; and in his own practice the results amply justified the resort to the operation. He was fully in accord with Dr. Savage when he said that, in many cases, we were justified in operating for objective symptoms alone. In his own cases, apart from those in which the operation had been done for myoma, he was unable to make a diagnosis by any means other than objective symptoms. In many cases the disease produced atrophy and cirrhosis, so that the touch revealed nothing that would justify operation, but the functional symptoms and extreme suffering, unrelieved by all reasonable means, strongly called for radical measures.

Dr. ELDER said that the question naturally divided itself into three parts: (*a*) removal of the appendages for uterine myoma; (*b*) oöphorectomy in cases of disease of the ovary other than cystoma; (*c*) salpingotomy for diseased tubes—pyosalpinx, hæmatosalpinx, etc. With regard to the first division, there were undoubtedly not a few cases in which the only chance of restoring the patient to a useful and healthy life was removal of the appendages. In the second division, oöphorectomy was decidedly indicated when we found enlarged, prolapsed, and adherent ovaries, especially conjoined with uterine retroflexion. In such cases, pain was a constant symptom, usually coupled with menorrhagia and metrorrhagia. Again, in cases of cirrhotic ovaries, in which subjective symptoms of a local and reflex character were otherwise incapable of cure, and in which physical evidence confirmed the diagnosis, nothing was left but the radical operation. Disappointment was, as a rule, the result of oöphorectomy in purely neurotic cases. Tubal accumulations formed the third and last division of the subject. Salpingectomy for pyosalpinx and hæmatosalpinx was the only mode of treatment which offered a reasonable prospect of permanent cure. In these cases, the patients not only had their lives rendered miserable by repeated attacks of inflammation, but imperilled by the possibility of rupture of the diseased tube. Finally, he thought that, before the performance of either of these operations, we should satisfy ourselves of the true nature of the cases from physical as well as subjective evidence; that other treatment, short of radical, if thought at all likely to benefit, should first be tried; and, lastly, that, before operating, the consent of the patient should be obtained, after full explanation of the result.

Dr. IMLACH said that the two introductory papers presented the contrast of practical experience and mere criticism. There were not many at the present day who would deny that ovarian abscess and pyosalpinx could only be treated by removal of the uterine appendages. Between these conditions and chronic salpingitis no hard and fast line could be drawn, and when there was much pain, no other treatment was of service, except in some syphilitic patients. In hydrosalpinx, when one was fairly certain of the absence of any suppurative process, apprehension of a fatal termination from the disease scarcely entered into one's calculations; the question for the patient then was whether she would live a life of pain, or have the cause of pain removed. There appeared to be some difference of opinion as to whether pelvic hæmatocele required surgical treatment. The late Dr. Thorburn, of Manchester, a conservative gynæcologist, whose memory was respected by all, and whose recent work was a monument of conscientious observation, said "The course of the disease (pelvic hæmatocele) is very varied. Death, in a very short time, often occurs in the intra-peritoneal cases. If *post mortem* examinations were more common in private practice than they are, this would be speedily apparent. Inflammation of some indefinite character gets the credit of many of these rapid deaths." Dr. Imlach regarded this as a fair and moderate description of the condition, and therefore advocated its treatment by surgical measures. Until the cause of internal hæmorrhage was removed, the life of the patient was, without doubt, endangered; and from the many kind and congratulatory notes he had recently received from members of the profession, he gathered that the passages he had quoted were more generally accepted than might have been supposed. Treatment of prolapsed ovaries, on the other hand, by removal of the uterine appendages, stood on a very different footing. Simple prolapse of the ovaries was often symptomatic of the first stage of inflammatory trouble, or there might be no inflammation at all. He would refuse to remove such ovaries, and most gynæcologists would, he believed, be extremely reluctant to perform such an operation. Yet, in a paper written by Dr. More Madden, it was stated that, in two patients, that gentleman had removed the ovaries for simple prolapse. He thought it would be difficult to justify these operations, and he confessed that he failed to understand Dr. More Madden's position when he said he did not meet with cases of salpingitis and chronic inflammation of the ovaries requiring removal of the uterine appendages, but had twice performed this operation for prolapsed ovaries. Even when there was chronic inflammation of the ovaries, in addition to prolapse, it was not always necessary to remove the organs as long as there was some healthy structure left and there was no salpingitis. In August, 1885, he had performed oöphorraphy on a lady, aged 34, who for years had been scarcely able to leave her couch from the severity of her pain. She had been twice married, but had had no children; since the operation she had been entirely free from pain, except on one day in June, when, under the care of Dr. Steeves, she was confined of a healthy child. He (Dr. Imlach) had in seventeen cases freed the ovaries from their adhesions in Douglas's pouch and suspended them to the broad ligaments, so as to relieve tension. All had recovered; three had become pregnant, and the ultimate result, as regards relief of pain, had in general been highly satisfactory. In one case, where the disease was too far advanced, he subsequently had to remove the ovaries, and in another, where necrosis of the sacrum was discovered, the benefit had been, of course, only temporary. He would not, therefore, remove ovaries that were merely adherent in Douglas's pouch, however painful that condition might be. He would separate the adhesions and suspend the organs in their proper place by a single stitch. But when the ovaries were pyocystic, hæmatocystic, or completely hydrocystic, they should certainly be removed. It was pretended by some that chronic inflammation of the uterine appendages, if left alone, was never fatal. But fatal suppurative peritonitis was a disease almost peculiar to women. Perforation of the bowel was, of course, common to the two sexes, but the fatal issue was not due to suppurative peritonitis. Rupture of liver abscesses, and so on, might cause it, but far more commonly it originated in the rupture of a small abscess of the ovary or of a suppurating tube. Kingston Fowler and Wilks in London, Dreschfeld in Manchester, and Barron in Liverpool had traced the fatal issue of these chronic inflammations, and any who chose to search would meet with like cases.

Dr. GILL WYLIE had been one of the first in America to investigate and accept Mr. Lawson Tait's views on disease of the Fallopian tubes. He had for many years assisted the late Dr. Marion Sims, and had had the best opportunity of selecting his cases. He made it a rule to keep each case for a long period under observation before deciding to operate. This had enabled him thoroughly to test the effect of other means of treating these cases before resorting to operation, and in almost every case to make a pretty accurate diagnosis as to what he would find before opening the abdomen. He also preserved every specimen; and, when he reported his cases, he could show just how much the tubes and ovaries were diseased. He had at least fifty specimens out of the fifty-seven cases in which he had removed the appendages. Not long before, Dr. Noegerath, of New York, seemed to think that he was operating upon more than his share of cases, and he asked that gentleman to come and personally examine all his specimens. Dr. Noegerath afterwards publicly stated that he had spent some time in carefully examining the specimens, and could say that he believed that not one of the cases could have been cured

in any other way. Now, when such a man as Dr. T. A. Emmet could say that for a year he had seen in his large practice only one case of disease of the tubes, and that the patient refused to be operated upon, and got well in a few months, it seemed very strange for him (the speaker) to say that he found from twenty to thirty cases every year. He would explain this by saying that Dr. Emmet and he differed in their views as to the pathological conditions to be found in the pelvis of the same woman; and the reason he got so many cases was not that he found them all in his own private practice, but that cases were sent to him by other physicians. He could not go so far as Dr. Gordon in operating on cases for subjective symptoms alone. In all his cases, except five or six, he could make out by a local examination that the appendages were diseased.

Dr. DAVIES said that the removal of ovaries for the cure of various neurotic conditions gave no help. He had seen them removed in two cases for the cure of epilepsy (not in Dr. Imlach's practice) without benefit. With regard to the tubes, their pathology should be studied in the fresh state, as, after preserving in spirit, etc., no adequate idea could be formed of their former condition. He believed that there was no possible means of treating these diseases except by operation.

Dr. H. P. C. WILSON (Baltimore) held that the operation was a justifiable one in suitable cases.

Mr. LAWSON TAIT said that the turn of the discussion being wholly in the direction of approval, made it necessary for him to say but little. With what Dr. Savage had said, he entirely concurred. Dr. Savage and he had worked together in friendly rivalry for fifteen years, seeing each other's work with an equally earnest desire to arrive at accurate conclusions, correcting in all they could what was faulty, and approving what was right; and when two men could do that as colleagues, they achieved a position which it was extremely difficult to overturn. There had been much misrepresentation, partly wilful, and partly arising from ignorance. One instance of misrepresentation was the use of the word "spaying." He was amazed that so philosophical a nation as the Germans should continue to use the term "castration." The operation of spaying animals was performed before the onset of puberty. Who had ever removed the uterine appendages in a human child? Spaying was performed for the purpose of keeping the animal quiet, and improving the food-supply. No such object was sought in the operations on women, nothing but the saving of life and the arrest of suffering. Spaying an animal and the surgical operation of removal of the uterine appendages in a woman had, therefore, no conceivable resemblance, not even in the details of the operation, and the use of the word was a misrepresentation, based on the densest and most inexcusable ignorance. Another misrepresentation was as to the frequency of the operation. His eminent fellow-townsman, Mr. Vose Solomon, who sat by, operated on large numbers of cases of cataract, and he (Mr. Tait) operated on none. He charged Mr. Solomon with being guilty of having a great ophthalmic reputation. His friend, Dr. Davidson of Liverpool, was an eminent consulting physician, and he (Mr. Tait) deliberately charged Dr. Davidson with receiving a large number of cases of pneumonia. Dr. Davidson would probably excuse himself by the plea that his position and reputation brought him inevitably into the position of being obliged to plead guilty to the charge. Concerning disease of the uterine appendages, Mr. Tait had to say that this was precisely his own position.

Dr. H. A. KELLY said there certainly existed at the present time an epidemic zeal for operations upon tubes and ovaries, and it was time for bodies like the present, and the American Gynæcological Society, to enter protests, and lay down clearly-defined rules for the guidance of those practitioners coming within the range of their influence. In a code of such rules, one of prime importance was the following: that all operators, without exception, should preserve their specimens. Dr. Kelly stated that the fear of making a long incision was, in his opinion, due to certain deductions made by Sir Spencer Wells from his own experience with large ovarian tumours, where the length of the incision was—as was demonstrable from Sir Spencer Wells's own table—dangerous not *per se*, but simply as an index of the gravity of the operation in other respects. Therefore, the rule should be to make the incision long enough to allow of working with facility, and completing the operation within the shortest time possible.

Dr. GRAILY HEWITT considered the profession under a debt of gratitude to those who had performed these operations for information which had proved valuable. Still, far too little was yet known to allow of generalisations of a complete kind. In regard to chronic disease of incurable character—the incentive to operation in some cases—he believed that the difficulty was associated with nutritional defects, and that cure could be attained by elevating the nutritional condition by rest, massage, nursing, and good feeding. One great difficulty was connected with the diagnosis. That should be made more complete by careful double examination. He considered chronic displacements were too often treated by this operation. In some such, the operation was in exceptional cases admissible. Displaced ovaries could be otherwise easily cured, a well-adjusted soft Hodge's pessary being used. Gonorrhœa had been shown to be more productive of internal disease than had been supposed, but he thought its frequency was overestimated.

Dr. MORE MADDEN said that, whilst the previous speakers had been almost unanimous in condemning his heterodoxy on the subject under discussion, they had differed so widely among themselves as to almost every other point as to have left little for him to answer. Removal of the uterine appendages might be useful for fibromata, but he was pleased that Dr. Bantock had adopted his views as to the enucleation of such tumours in suitable cases. In spite of the eloquent speeches to which he had listened, he "was of the same opinion still" regarding his contention that laparotomy was performed too frequently and in unsuitable cases. In that he hoped that he was neither prejudiced nor ignorant, as he had been said to be.

RECENT OBSERVATIONS ON URINE-TESTING.

By GEORGE JOHNSON, M.D., F.R.S.,

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THE nature of the material in normal urine which resembles glucose in its reducing action upon cupric oxide and upon picric acid has often been the subject of inquiry and discussion. In a paper published in the *Medico-Chirurgical Transactions*, vol. lxviii, p. 222, Dr. Pavy writes as follows: "The reducing action [on cupric oxide], before the addition of acetate of lead, is due partly to uric acid, and partly to the small amount of sugar naturally present in urine. It is doubtful if there is any other body worthy of consideration to exert any sensible reducing effect."

Dr. Pavy ascertained that one-fourth of the reducing action of normal urine upon copper oxide is removed after the precipitation of the uric acid by lead acetate, and the remaining three-fourths he attributes to sugar.

In my *Lectures on Albumen and Sugar Testing*, p. 43 (Messrs. Smith, Elder, and Co.), I have shown that all normal urines yield, when tested by boiling with picric acid and potash, a depth of colour which, if glucose were the reducing agent, would indicate, upon an average, 0.6 grain per ounce; the amount usually varying from 0.5 to 0.7, and sometimes, in a concentrated specimen of high specific gravity, amounting to one grain per ounce.

At the time of publication of those lectures, I expressed my belief that, if the reducing substance were not glucose, "it must surely be some nearly allied substance" (p. 44). Since then, my son has been engaged in an elaborate investigation of the reducing agent which is always present in normal urine. The results he will shortly publish in detail. Meanwhile, I may state that he has conclusively proved: 1. That not a trace of glucose is to be found in normal urine; 2. That, as uric acid has no reducing action on picric acid, the chief, if not the sole, constituent of normal urine which reduces picric acid in the presence of potash is kreatinine. He has discovered a simple means of precipitating kreatinine from the urine in combination with a metallic salt, and by a process which has no effect upon any glucose that may be present. A specimen of normal urine which has been thus treated ceases to give the red colour when boiled with picric acid and potash, but if, before the separation of the kreatinine, glucose be added to the urine in the proportion of a grain to the ounce, the sugar is found undiminished after the kreatinine has been removed.

Urine of Patients who are taking Salicylate of Soda.—I have often found that the urine of patients who are taking salicylate of soda, when boiled with picric acid and potash, gives a deeper red colour than is quite normal, the colour being equal to that which would result from the presence of from one to two grains of glucose per ounce. Fehling's solution is also reduced, as it would be by a small amount of glucose. My son has for some time been investigating the nature of this reducing agent. He has ascertained that it is neither glucose nor an excess of kreatinine. It is probably due to some product metabolism of the salicylate of soda, the precise nature of which r mains to be ascertained. The salt itself has no reducing action o either picric acid or cupric oxide.

My reason for referring to the subject now is to indicate that th increased reducing action on picric acid and copper oxide of the urin

from patients who are taking salicylate of soda is not to be attributed to the presence of glucose in small quantity.

The Reducing Action of Chloral-Hydrate upon Cupric Oxide.—Dr. Sherwin (*Boston Med. Journ.*, November 18th, 1886, p. 487, and *Pharmaceutical Journal*, December 25th, 1886, p. 507) states that a sample of urine, specific gravity 1015, to which a few grains of chloral-hydrate had been added to prevent putrefaction, reduced alkaline copper solution like diabetic urine. He also found that a very weak solution of chloral-hydrate in water reduced Fehling's solution, and the urine of two patients who had taken a medicinal dose of chloral gave a similar reaction. I have repeated and confirmed Dr. Sherwin's observations, and I have further ascertained that, while chloral-hydrate has a powerful reducing action on the copper solution, it has none upon the picric acid test.

The Potassio-Mercuric Iodide Test for Albumen is Fallacious.—The Albumen Tests Committee of the Clinical Society, in their report, published in the last volume (xix) of the *Transactions*, state: "That a solution of potassio-mercuric iodide with citric acid, particularly when used after Heller's method, gives the most delicate and clearly marked reaction." It is very noteworthy that the committee make no mention of the fact which has often been recorded, and which must now be pretty generally known, that this test causes an opalescence, not to be distinguished from a slight albuminous precipitate, in every normal urine. This reagent apparently precipitates, not only mucin, but also some other ingredient of normal urine. For it is found that when the mucin in a normal specimen has been precipitated by citric or acetic acid, and then separated by filtration, the addition of the potassio-mercuric iodide to the clear urine causes a further precipitation and opalescence. It is obvious, therefore, that this reagent, if relied upon as a test for a minute trace of albumen, would be seriously misleading.

The Quantitative Estimate of Albumen.—Since attention has been drawn to the use of Esbach's graduated tubes by Dr. Veale (BRITISH MEDICAL JOURNAL, May, 1884), by Mr. Blomfield (*Lancet*, January 23rd, 1886), and by Dr. Sidney Coupland and myself (*Lancet*, July, 1886, p. 63), this simple and accurate method of ascertaining the actual amount of albumen has been coming into general use. Mr. Cetti, of 36, Brook Street, Holborn, who supplies the tubes, with printed directions for their use, at a small cost, tells me that there is a constant and increasing demand for them. The method combines simplicity and facility of working with accuracy of results in a quite remarkable degree.

The most convenient Pocket Test Case.—After trying a great variety of pocket test cases, I have found none so convenient as the "nickel-plated pocket urine test case," made by Ernst Jahncke, Canonbury Works, Dorset Street, Essex Road, N., and sold by most surgical instrument makers and pharmaceutical chemists. The case admits of some variety in its fittings and contents. In my own case, which, after two years' use, is as bright and clean as when it was new, I have two test tubes one within the other, and within the smaller tube a nipple pipette, which is very useful for transferring the urine to the test tube. Then there is a small spirit-lamp, the glass cap of which is so accurately fitted that no spirit leaks out, a stoppered bottle for powdered picric acid, another for grain pellets of caustic potash, and a drachm measure. There are also some blue and red litmus papers.

The case, therefore, contains all the materials required for bedside albumen and sugar testing. In testing for albumen, as much picric acid powder as can be carried on the end of a penknife (about a grain by weight) is dissolved in about a drachm of water by the aid of the lamp. To this is added an equal volume of urine, when the presence of albumen is at once made apparent. Then, to test for sugar, a grain pellet of potash is added to the mixed urine and picric acid, and the liquid is again boiled for a few seconds. If sugar is present, the liquid will be rendered so dark, that no red colour is visible through the test-tube. By diluting the urine in a definite proportion until the standard red colour is obtained, a proximate estimate of the proportion of sugar may be obtained, but, for an accurate analysis, the picro-saccharometer must be used.

The Albumen Tests Committee admit that the possibility of being able to test for both albumen and sugar, by picric acid, with the addition of potash, "renders this very portable test most useful;" but they add, "There is, however, some practical difficulty here arising out of the hygroscopic quality of the potash cubes recommended by Dr. Johnson." I can assure the committee, and all whom it may concern, that there is here no practical difficulty whatsoever. I have some potash pellets which were supplied to me six months ago by Mr. W. T. Cooper, of 66, Oxford Street, and they are as dry and hard now as when I first received them. Doubtless caustic potash exposed to the air will deliquesce, but, to prevent this, nothing more is required than to keep it in a bottle, the glass stopper of which is smeared with vaseline. This effectually excludes air and moisture, and also prevents the stopper from becoming fixed by the corrosive alkali.

PERIPHERAL NEURITIS IN RAYNAUD'S DISEASE (SYMMETRICAL GANGRENE).[1]

BY JOSEPH WIGLESWORTH, M.D.LOND.,
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THIS communication had reference to a case of Raynaud's disease, under the observation of the author, in Rainhill Asylum, in which changes in the direction of chronic inflammation or sclerosis were found in the peripheral nerves after death.

The patient, a married woman, aged 26, was admitted from the workhouse December 27th, 1884, and died May 10th, 1886. She suffered from epilepsy, the monthly average of fits being about 2½. Her mental condition was one of mild dementia; but she occasionally had slight, transient, maniacal attacks, and exhibited at times hallucinations of hearing. Physically, she was a small, thin, badly-developed young woman, measuring 4 feet 10½ inches in height, and weighing only 79 pounds. There was a peculiar macular eruption scattered over face, trunk, and extremities, but most marked on the face, consisting of irregular blotches of a rather deep port-wine colour; these blotches faded completely under pressure, and were apparently caused by stasis in the capillaries; they underwent no change with time.

There was slight bronchitis; the heart was distinctly hypertrophied; and the urine contained permanently about one-fourth albumen. Both hands were very small and slender, the muscles were everywhere atrophied, and several fingers had undergone partial amputation. Thus, in the right hand, the thumb, first, and third fingers consisted of little more than the first phalanx, while the second finger consisted of this phalanx only, the fourth finger alone being entire. In the left hand, the second finger was reduced to the first phalanx, whilst the other fingers were entire, but contracted in flexion. The right foot had lost the big toe from amputation, and in the left foot the corresponding toe had undergone considerable loss of substance, and presented an unhealed sore. The patient herself stated, with reference to these losses of substance, that the parts mortified and were removed by a doctor—which was, without doubt, just what occurred; for, not only did the patient's mental condition permit of reliance being placed on her statements, but the appearance of the hands was quite characteristic.

Actual gangrene was observed whilst the patient was under observation. She suffered at irregular intervals from small excoriations, which formed chiefly on the tips of the fingers, or on the extensor aspects of the fingers and toes; at one time a superficial slough formed over the right olecranon, on the separation of which a sore was left about the size of a shilling. But the most marked example of gangrene was the formation of a slough on the extensor aspect of the second phalangeal joint of the left fourth finger; this rapidly spread upwards and downwards, opened into the second phalangeal joint, and necessitated amputation at the joint below. The patient's death occurred rather suddenly, after an epileptic fit, on May 10th, 1886. At the necropsy, thirteen hours after death, the brain weighed 1,176 grammes, and, with the exception of slight thickening of the membranes and slight wasting of the gyri, appeared quite normal. The lungs were moderately congested, and the heart (weight 9 ounces) showed considerable hypertrophy of the left ventricle. The liver and spleen were normal, but the kidneys (right 2½ ounces, left 2⅞ ounces) were diminished in size, with adherent capsules, granular surfaces, and mottled cortices, containing numerous cysts.

Raynaud described the disease as a neurosis, characterised by an exaggeration of the excito-motor centre in the cord, which presides over the vaso-motor nerves; and he attributed the local mischief to cramp-like contractions of the arterio-capillaries.

In the case above described, well-marked changes in the peripheral nerves were found on microscopical examination. The spinal cord and nerves were hardened in Müller's fluid and spirit; sections were made transversely, and stained with eosin and logwood. The spinal cord itself presented but slight changes. The nerve-cells of the anterior cornua were healthy, or nearly so, but those forming the posterior vesicular columns of Clarke presented more or less sphericity of outline. There was perhaps a little general thickening of the neuroglia. The nerves examined were the following: sciatic, internal popliteal,

[1] Abstract of a paper read at the Pathological Society, January 4th, 1887.

external popliteal, posterior tibial, median, and ulnar, on each side, and the right musculo-spiral—thirteen in all. The great majority of these nerves presented well-marked changes, and none of them were wholly unaffected. The changes found were summed up as overgrowth of the fibrous elements of the nerve, with atrophy and degeneration of the nervous elements. The left posterior tibial nerve was looked upon as the most diseased of the nerves of the lower extremities. This nerve, as a whole, was distinctly diminished in size, and the overgrowth of the fibrous framework was well marked; the hyperplasia affected all the fibrous elements—epineurium, perineurium, and endoneurium; the perineurium formed a series of richly nucleated concentric laminæ, which in many cases encroached considerably upon the nerve-bundles; the nerve-tubules were more or less atrophied and degenerated. These changes were found, though slightly less advanced, in the other nerves of this extremity examined; and the corresponding nerves of the right lower extremity were affected in an exactly similar way, though in a slightly less marked degree. Of the nerves of the upper extremities, the left median was taken to be the most affected. The epi-, peri-, and endoneurium were all hypertrophied, but the chief characteristic of this section was the great widening of the perineurial lymph-spaces, caused by shrinkage of the nerve-bundles; these spaces were more or less filled with a loose spongy sparsely nucleated connective tissue, which was seen in many bundles to be connected with thickened bands of the endoneurium. The nerve-tubules were much atrophied and degenerated. This dilatation of the perineurial lymph-space, with loose connective tissue contents, was much more marked in this nerve than in any other, but most of the other nerves presented more or less evidence of it. Of all the nerves examined, the right musculo-spiral was the least affected, the changes here being only slight. On the whole, the changes described appeared to be a little more marked on the left side than the right. The disease also appeared to be more advanced at the distal than at the central ends of the nerves; and the conclusion was, therefore, hazarded that the disease had its starting-point at or near the periphery, and travelled upwards, but a sufficient number of sections was not made to prove this absolutely.

The question was raised as to the nature of the disease. Was it to be looked upon as a chronic interstitial inflammation, which had gradually invaded the nerve-bundles, and caused them to dwindle; or had we to deal with a primary degenerative atrophy of the nerve-tubules, with sequential hyperplasia of their fibrous framework? The evidence was not deemed sufficient to draw a positive conclusion; but the appearances presented by the left median nerve seemed rather to suggest a primary atrophy, for here the nerve-bundles had obviously shrunk out of proportion to the fibrous overgrowth, and the space thus left was occupied by a loose connective tissue, which might be looked upon as representing the earliest phase in the development of the concentric laminæ of the thickened perineurium. There was, however, no reason to doubt that the localised symmetrical gangrene was directly dependent upon the changes in progress in the nerves; and should the above observation be confirmed by others, it would tend to take Raynaud's disease out of the category of neuroses by giving it a tangible material lesion to rest upon.

RUPTURE OF THE UTERUS DURING PREGNANCY,

WITH NOTES OF A CASE.[1]

By ARTHUR H. N. LEWERS, M.D.Lond., M.R.C.P.,
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Rupture of the Uterus during Pregnancy stands in marked contrast to Rupture of the Uterus during Labour, partly because it is an accident of very much rarer occurrence, but especially because its causation is little understood.

In considering the subject, it is necessary to restrict the expression "rupture of the uterus during pregnancy" to cases where the fœtus has not reached a considerable size, otherwise the causes producing rupture of the uterus during labour, causes that are well understood, come into operation. The causes of rupture during labour may briefly be described as follows: some obstruction exists opposing the advance of the child; whether the obstruction is pelvic contraction, unusual size of the child, or malpresentation does not matter: the uterus continuing to contract, thickening of the upper part of the uterus occurs, while its lower segment becomes thinned. If assistance is not given, the lower segment becomes more and more thinned, and finally ruptures. It is to be noted that rupture of the uterus during labour almost always begins in the lower segment. No such explanation will help us to understand cases where rupture of the uterus occurs about the middle period of pregnancy, when the fœtus is small, and when labour has not commenced, and where no mechanical violence has been used. Cases where the uterus ruptures during pregnancy, as the result of a severe blow, are not difficult to understand; clearly, the blow need only be hard enough, and sufficiently well-directed, to be in itself a satisfactory explanation of the accident. It is the residuum of cases where nothing of the kind has happened, where pregnancy is not far advanced, and where nothing unusual has been noticed up to the time of the rupture, that present a difficulty.

[1] Read before the Medical Society of London

In Trask's monograph on Rupture of the Uterus, 303 cases are recorded; of these 38 only are classified as ruptures during pregnancy, the others all being cases of rupture during labour. On a careful examination of the notes in each of these 38 cases it appears that the number must be considerably reduced, first by taking away cases where the evidence that they were really cases of rupture of the uterus and not some other condition, for instance abdominal extra-uterine pregnancy, is unsatisfactory, and second, by removing those cases which were really cases of premature labour, the pregnancy having advanced nearly to term. When this reduction has been made there remains 16 cases where the evidence of rupture is fairly conclusive, 14 of spontaneous rupture, and two of rupture due to mechanical violence. Trask's monograph was published in 1847, and he appears to have collected all the cases he could find recorded from about the year 1700 to the time of writing. I have only been able to meet with records of two cases of spontaneous rupture, in addition to the 14 in Trask's paper—one by Lustgarten, quoted in the *British and Foreign Medico-Chirurgical Review*, and the other in the *Glasgow Medical Journal* for 1861. To these I will provisionally add my own case, making 17 in all. Though no doubt others have been recorded, and might have been found by a further search, still a group of 17 cases of a very rare condition may be taken as representative, and affording material from which some general conclusions on the nature of the accident may be drawn. I propose to read notes of two of the cases, first that from the *Glasgow Medical Journal* of 1861, and then the notes of my own case.

Case I.—B. T., aged 37, unmarried, a farm-servant. The day before the accident, the patient had walked four miles and milked a cow, but there is nothing to suggest that she had undergone any unusual exertion. She went to bed, after a good supper, in good spirits, and apparently quite well. Soon after, about 11 P.M., she complained of pain in the stomach and bowels. When asked if she had walked too far, she answered that she had not. She vomited, and continued in pain till 7 the next morning, when she died. On *post mortem* examination, the abdomen was found to contain enough blood and clots to fill a washhand-basin. Projecting from the pelvis there was a large tumour, covered with clotted blood. This, on further examination, was found to be the uterus. A fœtus of about the fourth month, covered by its proper membranes, was seen partially protruding through a rent in the fundus of the uterus. The rent was right across the fundus, and measured transversely 4¼ inches, and from before back 3½ inches. The uterus at the seat of rupture appeared normal in structure, and at no part of it was there any appearance of disease. At the os uteri and in the neck of the uterus was found a plug of clear mucus, completely closing the cervical canal. It may be mentioned that no diagnosis was made during life; and that there was, till the *post mortem* examination, some suspicion that the patient had been poisoned.

The other case is that from which the specimen shown was taken and came under my care at the London Hospital.

Case II.—A. D., age 33, had had six children, the last about a year and ten months before admission. At the time the accident happened she believed herself to be five months pregnant. She had not menstruated for five months. Nothing had occurred during the pregnancy different from what she had experienced on other occasions. On October 12th, about 3 P.M., while going upstairs, she was suddenly seized with severe pain in the abdomen, and became rapidly blanched and collapsed. When the pain seized her she felt as if something had given way in the abdomen, and stated that she heard a crack. Vomiting occurred soon after. She was seen by someone from a neighbouring dispensary, but after a time, the friends becoming alarmed, Dr. Wheeler Brown was called in. This was about 11 P.M. He at once recognised the gravity of the case, and brought the patient up to the London Hospital. She was admitted about one o'clock in the morning, and shortly afterwards Mr. Blaxland, the resident accoucheur sent for me. When I saw the case about a quarter past two the patient was much less collapsed than I was told she had been some time before. She was able to answer questions, and in fact sup-

plied most of the history that has been already given. The pulse was small and compressible (120). She looked pale and anxious, and complained of pain over the abdomen. The abdomen was tender. The patient was very fat (subsequently it was found there were two inches of fat in the abdominal wall) and nothing definite was made out by palpation. She was then examined under chloroform, her own consent and that of her husband having been previously obtained to an operation if it should be thought desirable. Even under chloroform the examination was unsatisfactory. The abdomen, on palpation, had an indistinctly "doughy" feeling. On vaginal examination the uterus was made out to be much smaller than would correspond to a five months' pregnancy, and it had not the globular shape of the pregnant uterus. There was slight oozing of blood from the os uteri. According to the history there had not been more than a mere trace of blood lost from the vagina.

This being the state of the case, it will be seen that the diagnosis presented very great difficulty. First, as regards the existence of pregnancy at all, there was nothing to rely on but the patient's own statement. It is true there was a little milk in the breasts; but in a woman who had had a child only twenty months previously, and had suckled it, this, of course, was worth very little. The fœtus could not be felt on palpation of the abdomen; and by vaginal examination it was certainly ascertained that the uterus did not, at the time of examination, contain an ovum of anything like five months' development. Again, considering the question of tubal fœtation, according to the patient's account, she was five months' pregnant, and had not menstruated during that time, nor suffered from any pain in the abdomen; whereas, had it been a case of tubal fœtation, we should expect rupture to have taken place at least two months earlier, and also that there would have been a history of irregular hæmorrhage and more or less pain. On the whole, the question seemed to lie between so-called spontaneous rupture of the uterus during pregnancy and an extra-uterine fœtation, not, at all events, of the ordinary tubal variety, which had burst.

I came to the conclusion that the best plan would be to make an exploratory incision, as, even if the diagnosis should turn out to be wrong, the patient's risk would not thereby be much increased. On opening the peritoneum, it was found to contain a large quantity of blood and recent clot, and the hand came upon a fœtus and placenta lying loose among the intestines. The fœtus lay much nearer the liver than the uterus, the placenta being midway between the fœtus and the uterus. The membranes, which were twisted into the form of a band, passed downwards and to the left, and were found to lead to a tear in the left side of the fundus uteri. The rent was still bleeding a little. The fœtus, placenta, and blood-clots were removed; and the tear in the uterus stitched with deep sutures of silver wire and superficial catgut sutures. A glass drainage-tube was inserted at the lower angle of the abdominal wound, and this was closed in the usual way. The patient was very cold when removed to bed. Hot bottles were applied to the feet, and enemata of brandy given. She recovered consciousness about 9.30 A.M., and complained of pain, but gradually sank, and died about 12 (noon), seven hours after the operation.

A careful examination of the uterus was made after death. The sutures used for the tear at the operation were removed. On opening the uterus it became at once evident that the fœtus had never been *in utero* at all. The cavity of the body of the uterus was lined by a decidua from one quarter to three-eighths of an inch thick, in places partly detached. A glass rod passed from the cavity of the uterus through an aperture corresponding in position to the inner end of the left Fallopian tube, and appeared at the inner end of the tear in the fundus. Evidently then the ovum had developed in that part of the left Fallopian tube which passes through the wall of the uterus, that is to say, it was a case of interstitial gestation. The tear extended from the point where the left Fallopian tube entered the uterus inwards, and a little backwards across the fundus. The tear was two and a quarter inches long and two inches deep. At the inner end of the cavity formed by the tear, looked at from above, was a round hole, about three-sixteenths of an inch in diameter, which led into the cavity of the uterus. The whole uterus measured six and a quarter inches in length. The width between the Fallopian tubes is about five inches. The fœtus removed was exactly eight inches long.

Now as regards the causation of rupture of the uterus during pregnancy, if we exclude cases where there is a history of a violent blow on the abdomen and cases where rupture has occurred from attempts at criminal abortion, I would suggest that the accident is due to the presence of an interstitial gestation, that is, to a fertilised ovum having lodged and developed in that part of the Fallopian tube which passes through the wall of the uterus. In support of this view, we have, first, the fact that in all the cases where the seat of the rupture is accurately described the rupture has been at the fundus or involved the fundus. Thus, out of the seventeen cases of spontaneous rupture to which reference has been made, the rupture was at the fundus or involved the fundus in ten; of the others, in six cases the position of the rupture is not definitely stated, and in the remaining case the uterus was two-horned. Now the fundus is just the part at which tearing of the uterus must occur when an interstitial gestation ruptures. A fertilised ovum lodging in the part of the Fallopian tube that passes through the wall of the uterus may be compared to an interstitial fibroid tumour that is growing. Such a fibroid may grow towards the peritoneum and become a sub-peritoneal fibroid, or it may grow towards the mucous surface of the uterus and form a submucous fibroid, or it may remain interstitial, and as it increases in size form a projection both towards the mucous membrane of the uterus and towards the peritoneum. So it is with an ovum developing in the interstitial part of the Fallopian tube. If, from its original position, it forms a projection chiefly towards the peritoneal aspect of the uterus, then, at the time of rupture, the rupture will be most extensive on the peritoneal aspect; that is, the tear in the peritoneal coat will be longest, that of the muscular coat of the uterus not quite so wide, and the mucous coat will only be torn a little or hardly at all. My own specimen belongs to this variety.

If, on the other hand, as the ovum grows, it forms a projection chiefly towards the cavity of the uterus, then at the time of rupture the tear will be most extensive on the mucous surface of the uterus, less extensive as regards the muscular coat, and the peritoneal coat will be torn least. A case in Trask's series illustrates this point.

Patient, aged 28, good health, first pregnancy. At sixth month, while reaching over a flour barrel, felt something give way, and had pain in the abdomen where she rested against the barrel, which continued. Ten hours after this she had labour pains; the os partly dilated, and in four hours delivery took place. Placenta separated by the hand with difficulty, child alive. Patient died ninty-six hours after delivery.

Post mortem. Fœtid gas escaped from the abdomen. Uterus torn at the left extremity of the fundus above, and very near the Fallopian tube; the rent of the peritoneum not over three-fourths of an inch; that of the uterine substance greater. The lining of the uterus elsewere looked well.

If, however, as the ovum grows it forms a projection both towards the peritoneal aspect of the uterus and towards the mucous membrane (and this will be very likely to happen if rupture is delayed to a somewhat later period, such as the end of the fifth month), then at the time of rupture all the coats of the uterus will be torn to about an equal extent. When we consider that the interstitial part of the Fallopian tube is normally only about one-half inch long, and that the ovum may develop sufficiently, as in my own case, to contain a fœtus eight inches long, it will, I think, be evident that this explanation of so-called spontaneous rupture of the uterus during pregnancy is a reasonable and probable one. In the specimen shown, had the decidua, as might easily have happened, been detached and expelled (it is partly detached here and there), and had the laceration towards the mucous surface of the uterus been more extensive, there would have been nothing to show that the fœtus had not been *in utero*, and the case would have been set down as one of spontaneous rupture of the uterus during pregnancy.

Again, to take up another point, spontaneous rupture of the uterus in pregnancy has been considered to be due to some pathological softening at the seat of rupture. Now, such pathological softening would no doubt furnish us with a satisfactory explanation of the accident; but in the group of cases I have collected there is no satisfactory evidence that any disease of the uterine tissue existed at all. The evidence, in fact, is all the other way. Thus, in four cases, including my own, the uterine tissue is specially said to have seemed quite healthy; in seven cases, nothing at all is said about the condition of the uterine tissue; in the remaining six, one was a case of two-horned uterus; in the five others, there is mention of pathological change in the uterine tissue, but the expressions used are exceedingly vague: for instance, in one it is stated, "structure of the womb rather softened;" in another, "body of uterus rather thinner and softer than natural;" in another, "uterine tissue healthy, except about the rent, where it was evidently softened," and so on. It will, I think, be admitted that such vague expressions rather suggest that the observer has perhaps persuaded himself that some softening, or other change, must have existed, in order to find an explanation of an accident that would otherwise have been inexplicable.

As regards diagnosis, this must always be a matter of the greatest difficulty. Out of the series of seventeen cases referred to, a diagnosis

seems to have been made only in three ; and in only two of these, one in Trask's series and the other my own case, was the diagnosis thought sufficiently probable to justify opening the abdomen. In the histories we read that many of the cases were thought to be due to, for example, acute peritonitis, rupture of the liver, colic or lead poisoning, and so on.

In regard to treatment, I think it is a point of much significance that the only case that recovered in all the seventeen cases, was one that was treated by gastrotomy two hours after the accident. In my own case, the operation was done eleven hours after the accident, and the patient had already lost a very large quantity of blood. The rupture was still bleeding a little at the time of the operation : had the operation been done several hours earlier, the prospect would have been very much better. On the whole, when the history, and particularly the sudden onset of symptoms, render a diagnosis of rupture of the uterus, or of rupture of an extra-uterine gestation, probable, I think an exploratory incision would be the best treatment to pursue.

To recapitulate.—(1) The expression "rupture of the uterus during pregnancy" should be limited to cases where the fœtus has not reached a large size. Cases of premature labour should not be included, as then the causes producing rupture of the uterus during labour come in, which are of an entirely different nature. (2) Ruptures of the uterus from direct violence or from attempts at criminal abortion should be excluded, the cause of the accident here being evident. (3) The evidence that pathological softening of the uterine tissue is the cause of so-called spontaneous rupture of the uterus in pregnancy is altogether unsatisfactory. Though it is not intended to deny that morbid softening of the uterine tissue, when there is proof that it exists, would be a sufficient explanation of the rupture. (4) It is here suggested that limiting the expression rupture of the uterus during pregnancy in the manner described, this accident is always due to the presence of an interstitial gestation. (5) That cases where the diagnosis is fairly probable should be treated by exploratory incision.

ON LICHEN ANNULATUS SERPIGINOSUS (WILSON).

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Amongst the late Sir Erasmus Wilson's *Portraits of Skin-Diseases*, published in 1847, is a representation of what is described as a peculiar form of lichen. It is illustrated, also, in the collection at the Royal College of Surgeons, and in that at Guy's Hospital, and is a form of eruption well known to those specially interested in the subject. To sum up the eruption shortly, it is characterised by a considerable number of rings, generally situated on the upper part of the back and the breast, and liable to be mistaken by the unwary for tinea versicolor. It commences by tiny papules, which become flat, erythematous discs, half an inch in diameter, bounded by a sharp and defined margin. As they spread circumferentially, they project all round, or at some portion of, their borders bright red papules, and rapidly increasing in diameter to one, two, or more inches, they are converted into rings or segments of circles with a tawny centre covered with a corrugated cuticle, or even slight mealy exfoliation. By confluence, the rings may form an extensive patch, upon and around which traces of circles are visible. The papules may be entirely absent from some patches, and the margin be simply raised and frayed. The affection is chronic and itchy, and its distribution over the sternum and in the hollow of the back between the shoulders very characteristic. Wilson says that, whilst this is the usual distribution in young men, in elderly people it chiefly occupies the loins, and in women the limbs as well as the trunk.

Now, although this eruption is well known, its exact nature has been a subject of much discussion, and, amongst other things, a parasite has been strongly suspected, but not proved, to be the cause. An attentive examination of the cases coming under my notice has led me to the conclusion that the name lichen is a misnomer for it, and that it is in reality a peculiar phase of seborrhœa.

A point to be noticed before proceeding further is the fact that this affection is not recognised out of England, as far as I know, under the name here given to it. Turning our attention now to seborrhœa, it appears, on reference to the literature of the subject, that seborrhœa of the face has been universally recognised since Biett, and later on Rayer, first described it. I do not find any mention, however, of seborrhœa of the body or limbs by French writers, such as Bazin and Hardy, or by English writers. Hebra, it is true, described a widely diffused form of oily skin (S. oleosa) and a generalised S. sicca, but the latter is only what we understand by the pityriasis of various wasting diseases, especially tuberculosis. In the United States different views exist. Van Harlingen, writing in 1878, says, "there is one variety of seborrhœa sicca, which is essentially the same disease as those just mentioned. This is found in its most characteristic form on the chest and back, in the shape of nummular or annular patches, made up of a reddish base, surmounted by yellowish, brown, fatty, pellicle-like scales, occasionally massed together to form a greasy coating." He found extensive fatty degeneration of these scales, and noticed that they left a greasy stain on a piece of paper. Bulkley wrote to much the same effect ; and Duhring, in his well known work, gives an excellent account of seborrhœa corporis ; and the point I wish to bring out is that I do not think anyone can doubt that he is describing Wilson's lichen annulatus.

The question will, no doubt, be put, "Allowing this, are they right in the United States, in including this so-called lichen with seborrhœa?" I think so, and on the following grounds. Seborrhœa certainly takes on a different aspect in various portions of the surface. We all know that, in extensive seborrhœa of the scalp, the skin beneath the fatty crusts is usually of a characteristic ashy-grey colour ; but when, as is frequently the case, the disorder extends beyond the hairy scalp on to the forehead, the skin assumes a bright congested aspect, like an eczema, and the surface is but scantily covered with greasy scales. Then, again, on the face, the different phases of seborrhœa, with varying degrees of congestion and scaling or crusting, are well known. Further, the so-called lichen annulatus is often associated with seborrhœa of the face and scalp, and the remarkably greasy coating of the eruption on the body is very striking under the microscope. I ought to mention that I have never detected the presence of a fungus.[1] Lastly, I would add that many cases coming under the category of L. annulatus are less marked than in the typical case portrayed by Wilson ; and, in such cases, the papulated rings are the exception, and the bulk of the eruption is made up of patches indistinguishable from seborrhœa of the forehead. I will give, very shortly, one or two such cases.

Case I.—A gentleman, aged 25, consulted me lately for a chronic disease of the scalp, axillæ, and chest. The scalp was the seat of marked seborrhœa, extending on to the forehead. The hollow of each axilla was mostly occupied by a somewhat infiltrated, uniformly dull red patch, never weeping, and covered with slight greasy scales. On the chest were several oval or rounded patches, one as big as the palm of the hand, faintly red, with a brighter border and a few erected follicles. There was no clue to any eczematous lesions past or present.

Case II.—A gentleman, aged 28, was sent me for moderately severe seborrhœa of the scalp. On each side of the nose and on the cheek was a broad irregular band, half an inch wide, faintly reddened, not actively inflamed, covered with little adherent scales, greasy, but never weeping. This face-eruption was very chronic, and reminded one of some slight cases of lupus erythematosus, but there was no trace of scarring, and no clue to the formation by the confluence of discs. The point of the nose was the site of a similar, though fainter, patch with plugged follicles. On the chest were several similar, more or less rounded areas, but the lowest one was very significant. It was the size of half the palm, irregularly oblong, pinkish in colour, with very little scaling or infiltration, and simulated a ringworm by the appearance of projection and freshness of the border, which was studded with a number of small, congested, and erected follicles. A few papules existed, also, over the surface, and it was evident that, as the patch spread, the follicles were specially involved, and, later on, the congestion mostly subsided. The scales were crowded with oil-globules and granules.

Case III.—A Scotch gentleman was sent me, with typical seborrhœa of the scalp, extending to the forehead and temples, also across the bridge of the nose and adjoining portion of the cheeks. The chest looked, at the first glance, as if it were the seat of tinea versicolor, but the fused irregular patches with scattered congested follicles were redder. One patch was ringed with a few papules on the border. The original characters had been much altered by the use of strong soaps.

It would be easy to multiply instances of this kind, which show, I think, the occurrence of seborrhœa on the trunk, and connect it with the lichen annulatus portrayed by Wilson. I have already mentioned that the latter is frequently associated with seborrhœa of the scalp.

In conclusion, I will add that, besides papulated ringed patches and non-ringed patches without special congestion of the follicles, I have met with another variety in which a triangular area of character-

[1] I have made a prolonged search lately by various methods of staining in several typical cases, but have failed to find any organisms but micrococci.

istic shape on the back, was occupied almost entirely by erected follicles, and there existed only one or two little macules, and a ringed patch which gave me the clue to the nature of the disorder.

SURGICAL MEMORANDA.

ROTATION OF KNEE-JOINT.

On the evening of November 23rd I was summoned to see J. H., a boy aged 12. He had been "sky-larking" with some other boys, and was thrown down heavily, apparently when in the act of turning round. The right knee was semi-flexed when seen, and the leg rotated upon it, so that the anterior edge of the tibia looked forwards and outwards, and the outer surface of the fibula backwards and outwards; but the tibia was not dislocated in any other direction forwards, backwards, or laterally. Reduction was easily effected on acute flexion of the knee, and the leg slipped into position with a creaking sound in the joint. There has been no inflammation or swelling of the joint since. The interest of this case seems to be not so much in the rotation as in its being unaccompanied by dislocation in any of the four possible directions, the previously described cases having, I believe, been almost invariably accompanied by dislocation outwards.

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SUBCORACOID DISLOCATION OF SHOULDER REDUCED BY RIGHT-ANGLE TRACTION.

J. G., aged 85, sustained a dislocation of the right shoulder, the head of the humerus resting under the coracoid process. I directed the mattress on which he rested to be placed on the floor; and, fearing that his weight (about 115 lbs.) would not be sufficient to act as counter-extension, I passed a roller towel round the thorax, giving the end to an assistant, desiring him to "hold against" me. Grasping the arm above the wrist, I made steady traction, at the same time gradually raising it from the side; when at a right angle from the body, I ceased to elevate, but maintained the traction, and, in less than five seconds, the bone went into place with a faintly audible snap. When the arm was raised, the discomfort lessened, and the patient bore the manipulation with less complaint. I substituted the towel for counter-pressure by the foot, as I was uncertain of the elasticity of his ribs. I have, on former occasions, reduced dislocations in the same manner, but unintentionally—that is to say, I was endeavouring to carry out White's method, or one of its modifications, and I presume many others have had similar experiences.

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DISLOCATION OF THE HUMERUS REDUCED BY RIGHT-ANGLE TRACTION.

In his memorandum on the above subject in the British Medical Journal of November 6th, Fleet-Surgeon W. Digby Longfield speaks of "steadying the shoulder with his left hand." Now, as I think that the acromion has not hitherto been sufficiently made use of as a point at which the scapula may be fixed, and counter-extension be advantageously applied, I venture to bring forward, without claiming any merit of priority, a "variety" of the right-angle traction method of reduction which I first tried in 1859, when house-surgeon at the London Hospital, and have used since then in my army practice. It is briefly as follows: the patient being seated, the surgeon stands by his side, places the palm of his right hand above the inner condyle of the humerus, grasps the arm, and raises it to a right angle with the patient's trunk; he grips the patient's wrist firmly between his own arm and right side. Then, having placed the upper margin of his left palm on the prominent acromion, he makes steady traction on the arm to disengage the head of the humerus from its abnormal position, at the same time making counter-pressure on the acromion in a direction inwards and somewhat downwards; the head of the bone is then lifted into the glenoid cavity by making use of the patient's arm as a lever of the third kind, the fulcrum being at the wrist, firmly fixed to the side of the operator.

The force required for reduction by the right-angle methods is, as stated by Dr. Macleod and Fleet-Surgeon Longfield, comparatively small; but, with the hand on the acromion, considerable traction-power can be used, if necessary; the surgeon's knee, too, may be placed against the axillary border of the scapula.

It is time that the old heel-in-axilla method should be altogeter discarded; it cannot but tend to produce still further laceration of ligaments and muscular fibres.

E. H. Lloyd, M.B., F.R.C.S., Brigade-Surgeon R.P.

PLUGGING THE POSTERIOR NARES.

There is often considerable difficulty in getting a string from the anterior nares round by the pharynx and out at the mouth, preparatory to performing this operation; and various appliances have been devised for the purpose. For several years, I have always resorted to the following method, and found it both easy of application, efficient, and handy, as the apparatus is always obtainable. Take a piece of twine of sufficient length, and fasten to the end of it a pledget of lint or rag, the size of a large pea, or a small globular button with a neck does very well. Then form a ring about a quarter of an inch in diameter, on the small end of a silver probe or piece of wire, and bend it down. Run the twine through the ring till the pledget or button is close against it. Then pass the wire or probe along the floor of the nose; tell the patient to hawk, and spit out, and at once the pledget with the twine attached is ejected.

James Brydon, M.D., Hawick.

CLINICAL MEMORANDA.

PREVENTION OF IRRITATION OF THE AUDITORY MEATUS.

In the treatment of discharge from the middle ear by insufflation of boracic acid, a good deal of trouble is sometimes caused, especially in frosty weather, by the mixture of discharge and boracic acid causing irritation of the meatus. A good deal can be done to prevent this by drying the meatus well with the cottoned probe before using the acid, so as to prevent deposit of the powder on moist spots, to which it adheres, and to allow its free passage towards the membrane. I have found the following expedient very serviceable. After the powder has been blown in, a small piece of absorbent wool is rolled tightly round the end of the probe, which is then introduced into the meatus, and carried round its circumference, so as to remove all adherent particles. The probe having been withdrawn, the wool is removed, and a fresh piece applied as before; this time, however, it is dipped in eucalyptus and vaseline ointment (one of the oil to seven of vaseline in a good proportion), and the probe is again carried round the meatus. The ear is now closed in the usual way with cotton, medicated or otherwise. When the discharge is not excessive, I think the above treatment will be found not only to prevent irritation, but to cure it when it has occurred.

Duncan J. Mackenzie, M.D., Glossop, near Manchester.

BLACK TONGUE.

In the Journal of October 2nd there is an account of a case of the above, and I am desirous to call attention to one that came under my notice about two years ago, while I was assistant to Dr. Lyall, J.P., Leven, with whose kind permission I publish it. The patient was a rather neurotic woman, about 37 years of age, whose nervousness was, no doubt, added to by a complication of diseases, comprising caries of the dorsal vertebræ, chronic rheumatic arthritis, and chronic Bright's disease; she also had recurrent attacks of an erysipelatous nature on her face, legs, and hands. Her tongue presented over fully half the dorsum a blackness for which I can find no better simile than the appearance of the surface of a dog's nose. The tip and edges were almost free from blackness, as also most of the circumvallate papillæ at the base. To the touch the tongue was hard, but fairly moist. The patient told me that the blackness began with her other ailments, about twelve years ago, and was caused by the administration of large quantities of mercury by the doctor who attended her; that drug was also, she believed, the cause of her losing all her teeth. The latter statement was probably correct. The only remedy that seemed to give the patient any satisfaction (for she claimed to be as good a judge of her condition as any doctor) was a simple stomachic powder containing pulv. rhei, five grains, sodæ bicarb. ten grains, and calomel two grains. She said that it was the only powder that had ever produced a "moisture" on her skin, which was generally dry and furfuraceous, but its effect on her tongue was not observable. Lotions seemed to have no effect, and scraping simply irritated the mucous membrane. In this case, unlike that recorded by Dr. Stocker, the discoloration never altered in character, and remains unchanged to this day.

R. Balfour-Graham, L.R.C.P., L.R.C.S., etc. (Edin.),
Falkland, Fifeshire, N.B.

TREATMENT OF DIPHTHERIA BEFORE AND AFTER THE LARYNX IS INVOLVED.

WITHIN the past two years I have had a large experience of epidemic as well as endemic diphtheria. Satisfactory recovery in fifty or sixty instances—all the later cases laryngeally uncomplicated when I was sent for—makes me regard iron and carbolic acid as not only prophylactic, but specific. At first I employed liq. ferri perchlor. with glyc. acid. carbolici, adding a little acid. phosph. dil. for appearance' sake; but now I find the following mixture to be equally efficacious, readily taken by children, for continuous use much better suited to the stomach, and more attractive to look at. For a child one year old, the prescription is: R Liq. ferri dialysati ℥ss; glycer. acid. carbolici pur. (*P.B.*) ℥ss; glycerini pur. ℥iss; syrupi simplicis ℥iss. Misce bene adde aquam ad ℥ij. Liq. One teaspoonful to be given every two hours; and it is better to continue it eight days at least. This mixture is useless if the larynx be involved.

A few weeks ago I was summoned to a case of laryngeal diphtheria in a girl aged 3 years. Her parents objected to tracheotomy. Under treatment as above, the breathing became worse, and at the end of twenty-four hours I gave—R Potassii iodidi grs. v; sol. nitro-glycer. (1 per cent.) ♏iv; vin. antimonialis ♏xlviij; glycerin. pur. ℥ij; aq. ad. ℥ij. M. Liq. One teaspoonful every two hours. Contrary to my prognosis, and contrary to my previous experience, the child gradually improved; the membrane loosened, and was coughed up in large pieces. She is now well, and recovering her voice by the help of Easton's syrup.

JOHN IRVING, M.D., Heanor.

THERAPEUTIC MEMORANDA.

SCOPOLINE.

THIS new mydriatic, introduced by Pierd'houy, is, as far as my experience of it goes, a useful drug. Since the beginning of the current year I have employed it almost continuously amongst my out-patients at the West London Hospital, not for the purpose of testing its qualities as a mydriatic, but as a drug to supersede atropine in the treatment of keratitis, corneal ulcers, and iritis. I have found that in the case of troublesome corneal ulcers which had been treated respectively with both atropine and eserine without success, rapid improvement followed the instillation of scopoline. And especially was this good effect shown in cases of severe interstitial keratitis, in which atropine had been previously employed. Again, in rheumatic iritis the use of scopoline was obviously effective in reducing the pain and injection of the globe. Upon no occasion have I seen any conjunctival or other irritation set up by its use, and I have found one grain to the ounce a sufficiently strong solution for my purposes.

I am disposed to believe that, in addition to its mydriatic power, scopoline is able to effect some control upon the vascular supply of the eye; the drug may be indeed the physiological antithesis of eserine; at present I am engaged upon an inquiry, with Dr. P. S. Abraham, into the physiology and chemistry of the drug, and we hope before long to publish the results.

H. PERCY DUNN, F.R.C.S.

TOXICOLOGICAL MEMORANDA.

POISONING BY ACONITE AND BELLADONNA: TREATMENT BY APOMORPHINE.

ON October 8th, about 3 A.M., a message came to the surgery that J. N., a married man, residing within forty yards of the surgery, had taken by mistake a dose of liniment, which consisted of equal parts of lin. aconiti and lin. belladonnæ. My assistant and myself hastened as quickly as possible to his assistance, when we found him lying across the bed in a state of semi-consciousness. He had not vomited, and was just able with difficulty to drink a small cup of strong coffee before our arrival, but he lapsed almost immediately into a state of unconsciousness. We injected into the arm one-tenth of a grain of apomorphine, and vomiting commenced at once, and continued until his stomach seemed entirely emptied. The pulse soon commenced to beat feebly and irregularly, the extremities became cold, breathing difficult, a cold clammy sweat covered the body, the face became blanched, and the pupils greatly dilated. He had no power of swallowing, so we injected thirty minims of ether, but this had no perceptible influence on the pulse; and, in consequence, a further sixty minims were injected, which caused the heart to beat a little more powerfully. In about half an hour the pulse weakened to such an extent that it could not be felt at the wrist, and the breathing became almost imperceptible. We injected ether to the extent of 120 minims, and this, together with the interrupted current over the vagus and vigorous rubbing of the extremities, set the heart beating a little more vigorously. The beat of the heart gradually increased in strength; the extremities, in about three hours, became warm; in five to six hours, the surface of the body became slightly sensitive, and he was able to swallow a small quantity of brandy and water. The patient suffered afterwards from a slight attack of inflammation of the left lung, but has now entirely recovered.

The amount of liniment taken in this case (according to the patient's own statement) was about an ounce. His recovery was owing to the fact that we were able to be with him under ten minutes after the poison had been taken and the quick action of the apomorphine injected.

W. E. BRADLEY, M.B., Farnworth.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITIAN, IRELAND, AND THE COLONIES.

BIRKENHEAD BOROUGH HOSPITAL.

POPLITEAL ANEURYSM: ENTERITIS: DEATH: NECROPSY.

(Under care of Mr. A. HERBERT BUTCHER, Surgeon.)

W. H., aged 59, a waterman, was admitted on July 27th, 1885, with a popliteal aneurysm on the left side, about the size of a large walnut; expansile pulsation was marked. He had always enjoyed good health; he never drank spirits, but at times took rather a large quantity of beer; his work was not very heavy. Three years before, he had noticed a swelling in the left popliteal space, but he continued his work until two or three days before admission.

As the aneurysm was small, and the patient's general condition unfavourable (his arteries were markedly atheromatous, he had aortic obstruction, with intermittent pulse, and bronchial catarrh), it was decided not to operate.

On July 29th, pressure with a tourniquet was tried for eight hours continuously. On July 31st, a mixture, containing liq. hydrarg. perchlorid., was ordered three times a day. On August 3rd, pressure with a tourniquet and flexion of the knee-joint was resorted to for nine consecutive hours; the treatment was repeated on August 10th; and on August 17th, pressure was made by weights. From August 26th, cold was applied to the aneurysm by means of Leiter's tubes, and this was continued until August 31st, when the tourniquet was again applied in addition to the cold; this was persevered in until September 17th. A mixture of pot. iodid. was ordered three times a day. On September 25th, when the patient was discharged at his own request, the aneurysm, on palpation, appeared smaller, and its walls decidedly thickened; pulsation was not so marked. The irrigation apparatus seemed to have been very beneficial, for the tourniquet could not be endured by the patient for any length of time. On May 20th, 1886, eight months from the time of his dismissal, he was readmitted. The aneurysm had become fusiform in shape, and about the size of a large hen's egg. The patient now consented to undergo an operation, and though his general condition was so extremely unfavourable as to make it inadvisable to administer an anæsthetic, the superficial femoral artery was tied on May 22nd, 1886, at the apex of Scarpa's triangle without difficulty, the patient bearing the operation well. The ligature was of silk, and tied tightly so as to divide the internal coats; pulsation in the aneurysmal sac entirely ceased. On May 24th, the pulsation having returned, the wound was opened up, and a second silk ligature placed about an inch to the proximal side of the first, with the result of completely controlling all pulsation in the vessel and sac. The temperature rose to 99.4° Fahr., but fell in the evening to 98.1° Fahr., and continued at about this level until May 30th; the temperature of the leg remained normal.

On May 30th, in the evening, the dressing was noticed to be stained with blood. On being removed, slight hæmorrhage took place, but was effectually controlled by the house-surgeon by means of pressure. During the night, two more smart hæmorrhages occurred, which were also successfully controlled by the same method; this bleeding was evidently due to ulceration caused by the silk ligature. As this cessation of the hæmorrhage was considered to be only temporary, the wound was again opened, and the vessel was tied

about one inch above the hole which had been caused by the previous ligature, and which could be plainly seen; another silk ligature was also placed on the distal side of this aperture in the vessel. While this was being done, the circulation was controlled by digital pressure immediately beneath Poupart's ligament. The temperature on the evening of May 31st rose to 101.2° F., but by the evening of June 1st it had fallen to 99° F.; the temperature of the limb remained normal. On June 17th, the noose of the ligature being observed loose was cut through, and the external wound brought together and dressed with iodoform. The temperature rose on June 16th, and the patient continued feverish until June 20th, when an abscess was opened on the inner side of the lower third of the thigh, about two pints of pus escaped, and the cavity was found to pass downwards through the popliteal space. A second opening was therefore made, and a drainage-tube passed from the inner to the outer opening. The wound was dressed antiseptically. The abscess did well, but, on June 29th, the patient succumbed to dysenteric diarrhœa.

Necropsy.—The heart was found to be dilated, the valves were atheromatous, the ascending portion of the arch of the aorta was lined with calcareous plates; the abdominal aorta was marked along its entire course by patches of atheroma and calcareous plates. The femoral artery was enlarged, atheromatous, and studded with small plates at intervals. The site of the last proximal ligature was found 2¼ inches on the distal side of the profunda artery, and this space of 2¼ inches was occupied by a firm clot; immediately below this clot, the femoral artery was contracted into a fibrous cord for the distance of about 3 inches. The aneurysm itself was fusiform in shape; its length was 3 inches, by 2¼ inches wide, and 2¼ inches thick; it was filled with layers of fibrinous material, converting the sac into a solid impervious mass, which also obliterated the artery for 2 inches on the distal side of the aneurysm. Thus the operation was a complete success, the cause of death being found in the intestinal canal, which was in a condition of acute inflammation with ulceration, thus accounting for the diarrhœa which terminated the patient's life.

Remarks by Mr. A. Herbert Butcher.—I am certainly of opinion that, in this special case, the previous expectant treatment which this man had undergone tended to militate against the chances of a successful issue to the operation, as the collateral vessels were thus previously dilated, so that, after tying the femoral artery, the collateral circulation was, at once, too freely established to allow of the formation of a clot. The profunda, in this case, was found to be very much enlarged, and this may have accounted for the pulsation which occurred in the aneurysmal sac, thirty hours after the application of my first ligature. Considering the diseased condition of the man's arteries, it was my intention, if my last ligature had failed, to have used an instrument, which I have devised for the purpose of effectual'y compressing the vessel without cutting into its walls, and thus to have brought about the formation of a clot. The aneurysm-needle is flat, with bevelled edges, and is intended to be passed under the artery by means of the needle holder, and then the plug, which also is made flat, with bevelled edges of ivory or bone, is screwed down upon the vessel, thus completely controlling all circulation through it. The needle-holder having been removed, the rest of the instrument must be left in position until the desired result has been attained, namely, the formation of a clot; then the needle and plug are to be removed. The instrument was made for me by Messrs. Hinson and Co., Argyle Street, Birkenhead.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, January 4th, 1887.

J. Syer Bristowe, M.D., F.R.S., President, in the Chair.

Annual General Meeting.

Annual Report, Elections, and Votes of Thanks.—The ordinary business of the annual meeting was transacted. The list of officers and council for the next year, printed last week (p. 28), was adopted without alteration. The report stated that the Society was numerically and financially in a satisfactory position. A vote of thanks to the retiring President, moved in a short but highly complimentary speech by Dr. Barlow, and seconded by Mr. James Black, was warmly received. Dr. Bristowe made a suitable response. A vote of thanks to the retiring honorary secretary, moved by Dr. Goodhart, and seconded by Mr. R. W. Parker, was also received with applause. Mr. Butlin, in reply, expressed his thanks, and drew a humorous picture of some of the troubles and anxieties attaching to the office which he was resigning.

Multiple Cavernous Angeiomata.—Mr. F. S. Eve showed a specimen of multiple cavernous angeiomata distributed along the course of the internal and external saphenous veins; the majority were subcutaneous, but some were deeply placed in the popliteal space. In addition to the cavernous tumours, there were calcifying enchondromata on three of the toes, exostoses at each end of the tibia, and springing from the back of the tibia there was a diffluent sarcoma, which involved the ankle-joint. On microscopical section, large cavernous spaces were seen traversed by bands containing actively growing cells. These spaces could be injected from the vein. The tumour of the ankle was a round-celled sarcoma. The tibia was bowed backwards and outwards, and the organisation of the osseous tissue was defective. In the angeiomata were numerous phleboliths. Billroth, in the last edition of his work, had mentioned multiple cavernous angeiomata, but Mr. Eve had been unable to discover a recorded case. The case was an example of the dependence of tumours of the limb on imperfect development. Although the case bore out Cohnheim's theory as to the origin of the tumours of early life from fœtal relics, yet Mr. Eve thought the theory was pushed too far when it was made to account for the sarcoma of adult life.—Mr. Charters Symonds mentioned a case of multiple angeiomata of the foot recorded by Mr. Howse in the *Guy's Hospital Reports*.

Melanotic Sarcoma of Breast.—Mr. Butlin made some remarks on a case which he considered to be an example of melanotic sarcoma of the breast. The patient was a woman who, when first seen in June, 1880, was 64 years of age. A tumour of the breast had then been present for seven months; it had not the ordinary clinical characters of carcinoma, and on removal it was found to be melanotic on section. Recurrence occurred beneath the scar in 1882, a third operation was necessary in 1884, and three months ago two tumours beneath the scar had been removed. There was not at any time any enlargement of glands or secondary tumours. All the recurrent tumours were dark-coloured, brittle, and friable; on the second occasion on which she was in the hospital, a few of the bright nævoid spots, supposed to be characteristic of malignant disease, were noticed on the breast. On microscopical examination, the growth was seen to be an alveolar sarcoma, with melanotic material in the bands between the cells. Billroth had described one case of alveolar melanotic sarcoma in a woman aged 68. Gross had never seen a melanotic sarcoma, but thought melanotic carcinoma not extremely rare. Billroth had hesitated for long in arriving at this conclusion, but appeared to be confident that melanotic carcinoma did not exist.—Mr. A. Bowlby said that he had examined the tumours removed on the second and third occasions. In each case the growths were identical in structure. He could not agree with Mr. Butlin that the growth was a melanotic tumour; the colour was, he thought, due to extravasated blood; there was undoubtedly much extravasated blood, and this made it difficult to decide the question. He agreed with Mr. Butlin that the growth was a sarcoma; his chief reasons were the distribution of the blood-vessels which penetrated into the cell-masses themselves, and the absence of any secondary affection of the glands. One other case of melanotic sarcoma of the breast had occurred at St. Bartholomew's Hospital; this tumour had not been examined microscopically.—Mr. D'Arcy Power thought it was interesting to note the structure of the growth; from a base of connective tissue, oval pediculated cells appeared to spring.—Mr. Eve said that the sections seemed to show conclusively that it was a case of alveolar sarcoma; in his experience melanotic sarcoma had as a general rule an alveolar structure.—Mr. Butlin proposed to submit the case to the Morbid Growths Committee. Billroth's case had the clinical characters of a carcinoma. The pigment was best seen in the earliest specimens.

Recovery from Tubercular Meningitis.—Dr. Carrington admitted that the case he brought before the Society was open to criticism, but he thought that any *post mortem* evidence bearing on the question whether it was possible to recover from tubercular meningitis was worthy of discussion. The patient was a clerk, aged 16. A blow on the right knee compelled him to keep his bed for a week, and the knee subsequently continued to swell, and in the course of a year movement became much impaired. Fifteen months after the accident the left knee became affected. He improved under treatment, but on January, 26th, 1886, was readmitted with psoas abscess on the right side. He was again improved by treatment and discharged on April 24th, 1886, but was readmitted on October 2nd, 1886, with another abscess on the left side, and he gradually sank and died. At the necropsy there was general thickening of the pia-arachnoid membrane of the brain, and matting of the sulci by old fibrous adhesions. The membranes were quite granular, and exhibited small yellow tubercles; this was confirmed by microscopic examination. There was meningitis of the lower third of the cord, probably

of more recent origin. Both brain and cord were healthy, except that the latter was softened. There were old phthisical lesions at the apex of each lung. There was caries of the fourth and fifth lumbar vertebræ, and complete disorganisation of the right knee-joint. With the exception of lardaceous disease of the spleen and small intestine, the other viscera were healthy. As regarded the tubercular nature of the old meningitis, Dr. Carrington was inclined to lay much stress upon the concomitance of (1) old tubercular phthisis, (2) old cerebral meningitis, (3) caries of the spine, (4) chronic joint disease, as evidence of the tubercular nature of the meningitis which he believed had been recovered from, but he thought the naked eye and microscopical appearances were equally distinctive. The spinal meningitis was probably of more recent origin and due directly to the caries. If the origin of the disease was claimed as due to the accident, it was curious that the second knee was not affected until fifteen months afterwards, and there certainly could not have been any cerebral meningitis at the time, for the lad only kept his bed for a week and then went to work as a clerk. On the whole, he suggested that the evidence was of by-gone tubercular meningitis, probably approaching in date the old phthisis.—Mr. Shattock suggested that the nodules might be due to peri-arteritis.—The President suggested that the tubercle in the brain might be recent.—Dr. Carrington had arrived at the conclusion that the meningitis was of old standing, on account of the tough fibrous nature of the adhesions, and of the fact that the tubercles were yellow and caseous.—In reply to a question, Mr. Targett stated that the mind was not clouded until shortly before death.

Peripheral Neuritis in Raynaud's Disease.—An abstract of a paper read by Dr. Wiglesworth will be found at page 57.—Mr. Bowlby said that he had found similar changes in the nerves in a case he had examined three years ago; but he had not published the observation, because he had not reserved a sufficient number of nerves to enable him to determine the extent of the change. Raynaud's disease bore a close resemblance to the trophic changes which occurred after section of a nerve. It was common, after such nerve-lesions, to find stiffening of the joint; and it was interesting to note that one joint in Dr. Wiglesworth's case was stated to be stiff. He referred also to wasting of the muscles. In the *Transactions* of the Société Biologique of Paris, M. Pitres had described peripheral neuritis in a girl the subject of symmetrical gangrene.—Dr. Thomas Barlow observed that two such cases had been recorded by M. Pitres. Dr. Mountstein, of Strasburg, had also recorded a case; but in none were the changes so pronounced as in the case recorded by Dr. Wiglesworth, who had thus made a valuable contribution to the subject. He thought also that Dr. Wiglesworth was probably right in suggesting that the cases of symmetrical gangrene required to be subdivided. Chronic cases, such as the case then recorded, seemed to approximate to perforating ulcer of the foot; and it was easy to accept the theory that peripheral neuritis was their cause. But there was another class of cases, where all the symptoms were paroxysmal, and where all the other conditions were normal. It was on this class that Raynaud founded his description of the disease; and Dr. Barlow felt strongly that on the doctrine of peripheral neuritis such cases were inexplicable. A child suffering from this variety of the disease presented occasionally a blueness of one or more extremities, which lasted a few hours, and then completely passed away. After such an attack the child passed some dark urine, and was commonly jaundiced for a few days, but subsequently there was a complete restitution to health, which was maintained until the next attack. It appeared probable that quite other vasomotor areas might be affected; one of Raynaud's cases, for instance, had paroxysmal amblyopia, which alternated with the blueness. For this paroxysmal group it was necessary to have a wider pathology; possibly the symptoms were, as Raynaud had suggested, produced by a vascular storm, dependent on functional disturbance of the vasomotor centre.—Dr. Harrington Sainsbury pointed out that the patient was suffering from Bright's disease, and suggested that there might be some vascular disease.—Dr. Ormerod referred to a class of cases where the symptoms were those of a mild neuritis, and were yet paroxysmal (*St. Bartholomew's Hospital Reports*).

Aneurysm and Syphilis.—Dr. Withers Green exhibited an example of aneurysm of the heart rupturing into the left ventricle in a patient who had recently suffered from syphilis.

Card Specimens.—Mr. Targett: Congenital Deformity of Leg and Foot.—Mr. Eve: (1) Multiple Painful Lipomata of Arms; (2) Diffuse Unilateral Papilloma of Tongue.—Mr. Charters Symonds: Hydatid of Breast.—Mr. Lunn: Tumour of Clavicle displacing the Larynx.—Dr. Drewitt: Aneurysm of Mitral Valve.—Dr. Sainsbury: Hæmatoma of Dura Mater.—Dr. Pitt: Carcinoma of Spine and Liver with deposit in Douglas's Pouch.—Dr. Davies: Maternal Impression.

BRITISH GYNÆCOLOGICAL SOCIETY.

Wednesday, December 8th, 1886.

Lawson Tait, F.R.C.S., President, in the Chair.

Specimens.—Dr. Heywood Smith exhibited a clamp for removal of the uterus for fibrous tumour, consisting of two steel bars, with a chain running through them. This can be tightened up to any extent by means of a movable handle working like an ecraseur, and fixed in position with screws.

On the Etiology and Diagnosis, considered specially from a Medico-Legal point of view, of those cases of Nymphomania which lead Women to make False Charges against their Medical Attendants.—Dr. C. H. F. Routh read a paper on this subject, in which he said that this was a disease which had been developed during this neurotic age. A possible cause might be found in the public discussion of questions, which ought to be confined to purely professional organs. The pathological changes connected with the morbid tendency were localised in four different parts of the cerebro-spinal system, and cases might be divided into the purely spinal, the posterior cerebro-spinal, the anterior cerebro-spinal, and the anterior cerebral or psychical. The four affections might prevail at the same time in various degrees. The cases under consideration fell more especially under the third group. In such cases the idea or the sentiment which evoked the normal psychical action in the genito-spinal tract was perverted. Likes and dislikes were strong, and altogether irrespective of personal attractions. The patients almost invariably had a hereditary neurotic history; whilst for the most part agreeable and interesting, they were morbidly vain, supremely untruthful. They generally had some uterine or ovarian affection, and were frequently masturbators. Dr. Routh then related several cases which had been under his own care, in which women had brought the most groundless and absurd charges against men. He believed that, if such women were cognizant of their tendency and willing to restrain themselves, they could do so. But, to a certain degree, it was a pleasurable excitement, and, like an ordinary hysterical fit, if allowed to go beyond a certain point, it became absolutely uncontrollable. As a matter of personal precaution, such patients should never be seen but in the presence of a third party; but, as medical jurists, they must insist upon a full and complete examination of the woman herself, historically, physiologically, and locally; and this examination, as in railway cases, should be made in consultation with a medical expert on the side of the defendants. It was not enough to see if she has been outraged or not. The signs of rape should be certainly unequivocal; but was she addicted to masturbation? Had her mind been deteriorated by prurient ideas? These peculiarities were seldom, if ever, noted; juries and judges were completely ignorant of the tendencies of such women, and yet they were the key to the whole situation. To cross-examine such women was of little use, because their delusions were so strong, that they entirely believed the lies they had fabricated.—Dr. Fenton Jones said it was open to discussion whether the local symptoms mentioned by Dr. Routh were not more often the cause than the effect of masturbation in the female.—Dr. Edward Blake did not believe in the existence of nymphomania or erotomania as a special type of mental disease. It appeared to him that the cases in Dr. Routh's paper belonged to widely differing categories, and that they were rather arbitrarily brought together merely because they shared in common a symptom of non-essential and fortuitous character.—The President congratulated the Society on the fact that Dr. Routh had the courage to grapple so ably with so unsavoury a subject. He agreed almost entirely with Dr. Routh's conclusions.—Dr. Bedford Fenwick, Dr. Heywood Smith, Dr. Bantock, Dr. Bennington, Dr. Purcell, Dr. Fancourt Barnes, and others, took part in the discussion.—Dr. Routh then replied.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

Wednesday, December 22nd, 1886.

J. Urquhart, President, in the Chair.

Case of Myxœdema.—Dr. Urquhart gave the details of the *post mortem* examination in a case of myxœdema, in which the more marked features were wasting of the thyroid gland and the suprarenal capsules. Dr. Urquhart also showed a painted gelatine cast of the face made by Professor Hamilton.

Treatment of Scarlatina Maligna.—Dr. Michie read notes on the use of the vapour of an impure preparation of carbolic acid in the treatment of scarlet fever during a severe outbreak which occurred some time previously in the fishing village of Cove. He held that this treatment at once reduced the malignancy of the disease, and soon removed the poison from the place. The village of Cove has a popula-

tion of over five hundred people, and, at the time of the outbreak, was in a very unsanitary condition. The number of cases was thirty in all, mostly children of school age. The outbreak commenced in a very grave and fatal form, and, in the absence of eruption, could only be designated as diphtheria of the worst type. The first three cases died on the second day without any eruption, the next two on the fourth day, when a dark, hazy eruption was making its appearance. In all, however, great swelling of the throat and extensive membranous exudation were early symptoms. Three other cases of the same kind having occurred, and isolation being impracticable, Dr. Michie was led to abandon curative for prophylactic treatment. There was immediate relief. The membranous exudation began to exfoliate; and in twenty-four hours the process was complete, and the dusky skin gave place to an extremely abundant scarlet eruption. All three recovered. A few less severe cases occurred in houses where the disease had already existed in the malignant type, and where the vapour-treatment had already been instituted. These were followed by several cases of a progressively milder type, and finally the outbreak was quelled, after having invaded nine houses, and affected thirty children, of whom five died. From the above description, there could not be the least doubt of the value of the treatment. As an illustration, Dr. Michie cited that of a house of two apartments, three beds, and ten inhabitants, in which two of the fatal cases occurred. These two children were treated in the room where four other children slept, where the food for the household was cooked, and where the family congregated during the illness of the two children. The vapour-treatment was commenced in this house only an hour or two before the death of the second child, and was energetically continued for some days, when four of the family suffered, not from scarlet fever, but from a "catarrhal pharyngitis," or "scarlatina sine eruptione." No one else in the household suffered. Another case was that of a boy aged 8, who suffered from the anginous variety, with rash on second day, and who occupied one of three beds in a room measuring 13 by 14 feet, in which seven other persons, including three adults, slept. Here the vapour-treatment was early adopted; the boy made a good recovery, and no other member of the household suffered even from sore-throat. Dr. Michie was of opinion that the quality of the carbolic acid had a good deal to do with the success of the treatment; it had a heavy, black, tarry appearance, as if so much coal-tar oil had been carried over in the process of distillation. Half an ounce of this was vapourised every three or four hours by placing it on a flat piece of heated iron. In this way a vapour of great density and volume was produced, which penetrated into the utmost recesses of the sick-chamber, and into the clothes and respiratory tracts of the occupants. Dr. Michie thought the success depended (1) on getting the full antiseptic value of the acid in a state of vapour; (2) on the quality used, partly tar, partly acid; (3) on the frequency with which it was applied; and (4) on the continuance of the treatment for days after the last case in a house had recovered. The more malignant the type, the more value was to be derived from the early application of the tar and acid in a state of vapour; and, whatever the type, the sooner the disinfectant treatment was brought into use, the sooner they would be able to eradicate an outbreak of so infectious a disease.

Fracture of Skull.—Dr. MICHIE also narrated the details of a fatal case of fracture of the skull, occurring in a gentleman who had fallen from horseback on the crown of his head. He was picked up quite insensible, and with blood flowing from his left ear, and died five hours after the accident. About an hour before death, two small pieces of brain-substance were detected on the pillow, as if carried out by the force of the hæmorrhage from the ear. There was no *post mortem* examination; but the symptoms showed evident fracture of the base and injury to the intracranial contents, involving the petrous portion of the temporal bone and the superior frontal sinus, besides the adjoining brain-areas.

Hydrocephalus.—Dr. CHEYNE showed a child, aged 22 months, suffering from enormous hydrocephalic enlargement, the head measuring thirty-two inches in the occipito-frontal circumference. At birth the head was larger than usual, and the fontanelles more open, and soon after began growing rapidly. The child, which had been brought up at the breast, suffered occasionally from convulsive attacks and was always whining. Since the birth of the child, the mother had suffered from epileptic fits, and she stated that a previous child died of hydrocephalus at the age of two years.

Enlarged Liver and Spleen.—Dr. EDMOND showed greatly enlarged liver and spleen—probably of malarial origin—taken from a patient, aged 40 years, who, twelve years ago, when in South America, caught the fever of the country, with inflammation and enlargement of the liver and jaundice. He died suddenly of violent hæmatemesis and melæna. *Post mortem* examination showed the intestines dark and congested, the spleen greatly enlarged, the liver large and cirrhotic, the kidneys large, and the stomach full of dark, clotted blood, though no ruptured vessel could be made out. The intestines also contained blood clot, and were congested and catarrhal.

SUNDERLAND AND NORTH DURHAM MEDICAL SOCIETY.

THURSDAY, DECEMBER 16TH, 1886.

G. B. MORGAN, L.R.C.S.I., President, in the Chair.

Cystic Sarcoma and Small Round-celled Sarcoma of the Testicle.—Dr. SQUANCE showed microscopic specimens of two cases of the above diseases of the testicle.

Foreign Body in the Orbit.—Mr. W. H. MALING showed the stem of a pipe which he had removed from the orbit of a patient, who was unconscious of its presence. It was 1½ inches long.

Spinal Hæmorrhage.—Mr. W. H. MALING exhibited a man who had recovered from a severe injury to his spine. Six months before he had fallen from a scaffolding about twenty feet and struck his back, about the lumbar region, on some iron bars. He was admitted into the infirmary semi-conscious, and with complete loss of power in the lower extremities. His water had to be drawn off, and he had no power over the act of defæcation. Sensation was not impaired. A month after admission he had a smart attack of pneumonia, and, in spite of every care, a large bed-sore formed over the sacrum. Six weeks after admission he could move the toes of the right foot. Galvanism was used daily, and the muscular power in his legs gradually increased, until ten weeks after admission, when he could raise both legs from the bed. It was not till thirteen weeks from the accident that he regained perfect control over the sphincter ani. On being discharged, four months after admission, he was quite well, with the exception of the bladder weakness, for which he was still obliged to use a catheter twice daily. The case was diagnosed as intra-medullary hæmorrhage, involving mainly the anterior part of the cord.

Gastric Ulcer.—Dr. SQUANCE read a paper on the Pathology of Gastric Ulcer.

Litholapaxy.—Mr. WHITEHOUSE read a paper on this subject, and from an experience of twenty-five cases, compared this operation favourably with lithotomy.

MIDLAND MEDICAL SOCIETY.

DECEMBER 8TH, 1886.

LLOYD OWEN, F.R.C.S.I., President, in the Chair.

Radical Cure after Strangulated Hernia.—Mr. BARLING showed a man, aged 35, on whom he had operated for congenital inguinal hernia eighteen months before. At the operation, blood was found in the sac and walls of the intestine, in which there was also a slight laceration. After the strangulation was relieved, a tunica vaginalis was made from the lower part of the sac, and the upper part was ligatured and left in the inguinal canal. Two stout wire sutures were then passed through the pillars of the ring and walls of the inguinal canal; these were tightened up and cut short. The wound healed by first intention, the patient getting up in three weeks with a truss on; he had since worn a truss until a month ago, when he was instructed to discard it. At the present time there was no return of the hernia, and the external ring was tightly closed; the wire sutures could be felt *in situ*. The testicle felt normal, and slided easily in its tunica vaginalis.

Fœtal Abnormality.—Mr. A. F. HAWKINS showed an eight months' fœtus which presented the following abnormalities. The umbilical cord was 2½ inches long; there was ectopia abdominalis, the lining of the bladder being covered by a mass of meconium. The intestines opened into the left upper corner of the bladder, there being no distinction between the large and small gut; the penis was undeveloped, imperfect, and above the pubic arch, the latter being incomplete, and the two halves joined by a ligamentous band. The scrotum was divided, the right testicle lying loose in the abdominal cavity, with a stalk about an inch long; the left testicle was in front of the left kidney under the peritoneum. At the back a large cyst extended from the angles of the scapulæ above to the buttocks below; it was in the median line, about the size of a tennis-ball, and was lined by a smooth vascular membrane. It contained a perfectly clear, limpid fluid; no nerves were stretched across it. In the anterior portion were two depressions, one the size of a crow-quill, ¼ inch in depth and apparently blind; the other, which was higher, was an opening with circular and well-defined edges ⅛ of an inch in diameter; a probe could be passed through this upwards into the vertebral column. Both feet were clubbed; the hands normal.

The Leg Type of Progressive Muscular Atrophy.—Dr. SUCKLING showed a woman, aged 40, suffering from progressive muscular atrophy, which had commenced in the feet and legs. There was marked emaciation of the leg muscles, the feet being dropped, inverted, and useless. The gait was of a "high action" or "equine" character, and the knee jerk was lost. The thenar and hypothenar eminences of both hands were wasted, and the *main en griffe* was present. The reaction of degeneration was also present in the tibialis anticus, extensor longus digitorum, and peronei in both legs. The patient's two sisters were affected in an exactly similar manner, and her uncle and father suffered from wasting of the legs.

Charcot's Disease.—Mr. CHAVASSE showed a case of Charcot's disease in the ankle of a man who, some years previously, had had his thigh amputated for some disease of the knee.

Paper.—Dr. C. J. LEWIS read a paper entitled "Clinical Observations on Syphilis of the Larynx."

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

FRIDAY, NOVEMBER 26TH, 1886.

DR. EDWIN RICKARDS, President, in the Chair.

Sublingual Cyst.—Mr. HUGH THOMAS showed a calculus from a sublingual cyst, removed from a gouty subject. It resembled a uric acid calculus. The case had been diagnosed as malignant by two medical men.

Accidental Amputation of Inverted Uterus.—Mr. LAWSON TAIT read the notes of a case in which a large soft villous polypus was found occupying the vagina in a woman aged 52. This was removed with an *écraseur*, when it was seen to be the inverted uterus covered with a layer of soft villous epithelioma. An india-rubber drainage-tube was passed into the peritoneal cavity through the wound and the patient kept perfectly quiet. Recovery took place in about a fortnight. The growth of the villous endometric epithelioma had probably caused inversion of the uterus by dilating the cervix. The true nature of the case was not discovered until the operation had been performed. Such cases were very rare, but one had occurred in the practice of Mr. Alfred Baker, in which the uterus with a myoma in the fundus, which had been the cause of its inversion, was accidentally removed in the same way as in the case just related. The operation was the only thing that could have been done, and though accidental, no other treatment would have had anything like so successful a result.

Hysterectomy.—Mr. TAIT also showed a uterus, with a myoma the size of a fœtal head, removed by hysterectomy. Enucleation after dilating the cervix had been unsuccessfully tried three weeks before the patient came under his care. As the hæmorrhage was severe, he at once removed the uterine appendages. Four days afterwards, a pseudo-labour set in with serious symptoms, the uterus making violent efforts to expel the mass. Mr. Tait then opened the abdomen a second time, and performed hysterectomy. The patient lived seven days, when death resulted from extreme anæmia and exhaustion following three severe operations all within the space of one month.

Double Pyosalpinx.—Mr. TAIT also showed a specimen of double pyosalpinx from a patient who had had gonorrhœa three or four years previously.

Vertebral Column: Ossification of Bodies and Processes.—Mr. GILBERT BARLING showed a vertebral column with ossification of the bodies, laminæ and processes of six or seven dorsal vertebræ. The history was altogether unknown; but the condition was probably the result of chronic rheumatic arthritis, as there were exostoses and buttresses of bone on the lumbar vertebræ; two ribs were also ankylosed to the vertebræ.

WOLVERHAMPTON AND DISTRICT MEDICAL SOCIETY.

THURSDAY, DECEMBER 2ND, 1886.

S. A. SMITH, M.D., in the Chair.

Splenic Abscess in Enteric Fever.—Dr. EVANS showed the spleen and kidneys from a case of typhoid fever, characterised during life by extremely high temperature, and treated by cold packing. The organs contained numerous infarcts of various sizes. The spleen contained an abscess with ill-defined walls.

Axis-Traction Forceps.—Mr. GOUGH read a paper on the use of axis-traction forceps in midwifery. He described the object, mechanism, method of application, and special advantages of these forceps, and showed that their superiority was not confined to the simpler forceps-cases, but they were of the greatest value in face, brow, and occipito-posterior presentations, and occasionally when the after-coming head was arrested at the brim in breech-cases. He felt sure that, as the old-fashioned straight forceps gave way to the double curved instruments, so would these eventually be superseded by axis-traction forceps.

BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, DECEMBER 2ND, 1886.

E. NOBLE EDWARDS, M.R.C.S., President, in the Chair.

Removal of Cartilaginous Projection from Septum Nasi.—Mr. CRESSWELL BABER showed a patient, aged 9, from whom he had removed a conical projection into the left nostril, with the result of relieving persistent sleeplessness, from which the patient suffered.

Dry Eczema resembling Xeroderma.—Dr. MACKEY showed a boy, aged 4½ years, with very red, stiff, and scaling palms of hands and soles of feet; the groins and one buttock were red, but not scaling; the condition had lasted about nine weeks, and was gradually improving under treatment. Previous scarlatina was absolutely excluded. Dr. Mackey thought the malady might be called xeroderma, with some resemblance in parts to psoriasis, and in others to icthyosis, but it was probably a dry eczema.

Spastic Paraplegia.—Dr. MACKEY also showed a boy, of 3¾ years, who had never walked; when raised up the legs crossed and became flexed; the reflexes were usually exaggerated; the reaction to faradism was normal, and there was no wasting. There was no control of bladder or rectum, but this might be due to defective education, for the child could not speak plainly, smiled always in an idiotic manner, and had hypospadias, with other evidences of defective development.—Dr. HOLLIS read notes of a case of hyperpyrexia, with chronic arthritis and disease of the spinal cord in a married woman, aged 38. The results of the treatment of this case prove the superiority of cold applications over drugs in the reduction of excessive body-heat. The cold-pack, for instance, reduced a rising temperature of 108.4 Fahr. in a few hours, after a dose of 20 grains of quinine had altogether failed to check the gradual elevation of the thermometer. Twenty grains of antipyrin given every two hours had been equally unsuccessful. Dr. Hollis had found the application of vulcanite bags, filled with ice, to the head and trunk a simple and handy method of applying cold to the surface of the body. The disease differed from chronic rheumatic arthritis, inasmuch as there were no signs of osteophytes, or other hypertrophic growths, about the articulations. Again, it differed from Charcot's disease, in that the joints had been painful during life, that there was no sclerosis of the posterior columns of the cord, and in the long duration of the joint-affection.—The PRESIDENT thought it was a question whether the mere reduction of temperature by artificial means was of any value, especially as it was usually not permanent.—Mr. SANDERSON felt sure he had seen several cases where life had been saved by such reduction.—Dr. UHTHOFF thought the application of ice-bags to the head and chest, as recommended by Dr. Hollis, was a valuable method.—Mr. BABER asked if Dr. Hollis had used ice-bags in a similar manner in other cases.—Dr. WHITTLE believed he was right in saying that nearly all cases of rheumatic hyperpyrexia had proved fatal before the introduction of the cold bath.—Dr. HOLLIS, in replying, said that he believed his patient would have died two months earlier than she did if the temperature had not been artificially reduced.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, DECEMBER 17TH, 1886.

MR. H. R. HATHERLY, President, in the Chair.

Cervical Ribs.—Mr. E. POWELL showed a case of cervical rib in a woman, the patient of Dr. Handford.—Mr. PRYER showed a girl, aged 23, who presented the condition of cervical rib on both sides of the neck.

Pyelo-nephritis and Cystitis (probably Tubercular).—Mr. PRYER showed the following specimen: Pyelo-nephritis, Inflammation of the Right Ureter, Cystitis, probably of tubercular origin, from a man, aged 24, who, during life, suffered from intermittent attacks of hæmaturia, great prostration, and loss of flesh. Also a water-colour drawing of the same, by Mr. GERATY.

Disinfection and Disinfectants.—Dr. WHITELEGGE read a paper on Disinfection. The experiments of Koch, Klein, and Parsons were summarised, and shown to disprove the efficacy of almost all the ordinary chemical disinfectants. Some were practically useless, as, for example, sulphate of iron and chloride of zinc, while others were mere deodorants, without any true disinfectant action. Some, again, were antiseptics only, that is, they held in check the multiplication and growth of germs for the time being; and many of the true germicides were employed in such insufficient strength or duration of ex-

posure, that they must necessarily have no effect. The only trustworthy chemical disinfectant or germicide at present available seemed to be mercuric chloride. Of aerial disinfectants or fumigants, chlorine was by far the most satisfactory, and, unlike sulphurous acid, could at least be relied upon to disinfect all exposed surfaces; but the practical difficulties attending its efficient use were very great. No fumigant could disinfect bedding or clothing. Articles which could not be boiled without injury—blankets, for instance—should be disinfected by steam, in a special apparatus. Although hot-air disinfecting-stoves had been of the utmost service in the past, they could not deal with such refractory organisms as spores of bacilli, even if exposed on the surface, without injury to fabrics. Finally, it was pointed out that, with the exception of boiling and treatment by mercurial chloride, no real disinfection was possible by unskilled persons in private houses; and further, that isolation was the sheet-anchor in dealing with infection, its importance becoming more and more manifest as we realised the futility of ordinary disinfection. In private houses, it was rarely possible to maintain isolation for more than the commencement of the long and tedious period of still infectious convalescence.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, DECEMBER 3RD, 1886.

JAMES CARTER, F.R.C.S., in the Chair.

A Case of Abortion, with Remarks on the Causation and Treatment (Specimen shown).—Dr. BOXALL read a paper on the subject of abortion, and exhibited the fœtus and appendages from a complicated case of miscarriage. During the tenth week of gestation and as the result of over-exertion on the part of the patient hæmorrhage set in and miscarriage threatened. The patient kept about for six weeks, but during the succeeding five weeks, she was laid up and ergot was given persistently. The hæmorrhage, however, continued and her general health suffered. An early miscarriage was supposed to have occurred at the onset of the bleeding, and the patient was thought to be suffering from sub-involution consequent upon it. Careful examination, however, revealed the presence of a feebly acting fœtal heart, and the uterus was found to reach as high as the umbilicus and to be partially distended with blood clot. Two days after this examination the fœtus appeared to have succumbed. The product of conception with a great quantity of clots was expelled within the week—that is, at the end of the fifth month of gestation. It was then apparent from the examination of the after-birth that the placenta, though normally situated, had become partially detached: the lower portion had consequently atrophied while the upper half had undergone a compensating hypertrophy. As regards the causation of miscarriage, the author of the paper pointed out that though under certain conditions ergot was a powerful oxytocic, the drug, being incapable of initiating uterine contractions, was in itself unable to produce premature labour or miscarriage. The cause of miscarriage was far more frequently the result of accident than was generally admitted; and it was not so often the direct effect of the syphilitic virus as was generally supposed. Certainly a diagnosis of syphilis could not be warranted merely by one or more miscarriages in the absence of other evidence. Rest was the best preventive of miscarriage, but if it did occur, care should be taken that the whole product of conception was expelled; and, if not, any retained portion should be removed.—Dr. WILLIAM DUNCAN, whilst allowing that early abortions were not nearly so frequently the result of syphilis as was stated in books, related cases in which anti-syphilitic remedies, before impregnation and during gestation, had prevented miscarriage.

Cystic Ovaries removed for Dysmenorrhœa.—Dr. WILLIAM DUNCAN showed the ovaries, studded with cysts, which he removed from a woman, aged 23, on account of intense dysmenorrhœa. Less severe measures having entirely failed, he recommended abdominal section, having first carefully explained to the patient and her mother what it was proposed to do. Six months subsequently she was perfectly well and absolutely free from any pain. Dr. Duncan considered the operation justifiable in (*a*) chronic disease of the ovaries and tubes, especially where there was a history of antecedent pelvic inflammation and a prolonged course of other treatment had proved of no avail, (*b*) in excessive metrorrhagia due to uterine myoma which was threatening the patient's life, and where the menopause was not likely to ensue for some years. Dr. Duncan disapproved of the operation in hysterical epilepsy.

Hæmatocele from Ruptured Graafian Follicle.—Dr. WILLIAM DUNCAN showed a specimen consisting of a left ovary with a hæmatocele due to a ruptured Graafian follicle and limited by a piece of omentum. The right ovary contained a cyst about the size of a walnut, which had been ruptured. The patient from whom they were removed was a married woman, aged 26, with three children, the last two years old. Since her last confinement she had suffered from pelvic pains of the usual kind, accompanied by menorrhagia and much dysmenorrhœa. On examination, an elastic, elongated swelling, about the size of a Tangerine orange was felt to the left of the uterus, and it was thought to be probably a dilated Fallopian tube. Abdominal section was performed by Mr. Bland Sutton, who had no difficulty in removing both ovaries and tubes, together with the hæmatocele and surrounding omentum. The patient made an uninterrupted recovery.

REVIEWS AND NOTICES.

THE HYGIENE OF THE EYE. By HERMANN COHN. Translated by W. P. TURNBULL. London: Simpkin, Marshall and Co. 1886.

IN these days of high pressure and compulsory education, the publication of an English version of Dr. COHN's classical book is most opportune. Most of the facts are already known to medical readers, but it is of the utmost importance that such knowledge should be widely diffused, and we should like to see the Education Department take some such work as this as a text-book, and insist upon every schoolteacher having a thorough knowledge of it.

After introductory chapters on the anatomy and physiology of the eyes, errors of refraction are described. Then follows a truly appalling collection of statistics as to the frequency of myopia in schools, and the increase, both in the number of cases and in the degree of myopia, from the lower to the higher classes and schools.

We fully admit that objections can be urged against these; it is difficult to ensure uniformity in schools which are compared; the estimation of the refraction without atropine is liable to error, and some of the patients would, no doubt, have become myopic even if they had never been to school. But making every allowance for these sources of error, there can be no doubt that very few children are myopic when they commence their school life, that a considerable percentage are so when they have completed it, and that the conditions of school life are to a great extent responsible for the change. Were there room for doubt, it would be removed by the results of the examination of the same scholars after an interval of a few years. These show that many hypermetropes become emmetropic or myopic, that some emmetropes become myopic, and that nearly all the myopes become more so.

The faulty conditions which tend to cause myopia are pointed out, bad lighting, badly constructed writing desks, a faulty position of the paper, and bad print being the chief. Excessive hours of work and insufficient bodily exercise are, we think, hardly sufficiently insisted upon although mentioned. The school hours in Germany, where myopia is so common, are much longer than in England.

We have not space to make extracts of sufficient length to be of value from the chapters on natural and artificial lighting, the construction of school furniture, etc. We must refer the reader to the book itself.

In our more modern schools, built by the School Board, the buildings and furniture are constructed upon approved principles, but much is needed in the way of regulating the hours of home and school work, and of preventing an injurious position being assumed in writing, and no real good will be done until the teachers themselves understand the principles of the hygiene of the eye.

SŒUR JEANNE DES ANGES; AUTOBIOGRAPHIE D'UNE HYSTÉRIQUE POSSÉDÉE. Annoté et publié par les Docteurs GABRIEL LEGUÉ et GILLES DE LA TOURETTE. (Bibliothèque Diabolique: Collection Bourneville) Paris: 1886. 8vo. pp. 321.

SELDOM has there been a more singular translation of the fancies of one age into the facts—or what may pass for facts—of another, than in this juxtaposition of the mystical seventeenth century autobiography of the possessed Mother Superior of the Ursulines, Sister Jeanne of the Angels, and the painstaking notes of the hysteriographers of the modern Saltpêtrière school. The text is printed for the first time from a MS. at Tours, of the date of 1642, and its true meaning is interpreted by the knowledge and beliefs of the younger generation of the present school of neurologists in France. It so happens that Sœur Jeanne des Anges did not enjoy in her lifetime an altogether unblemished repute; and the one point on which she and her modern historians are agreed is as regards the actual exhibition by her of characteristics such as would, no doubt, have been highly

appropriate to the demons Asmodeus, Leviathan, Behemoth, Isacaaron, Balaam, Gresil, and Aman, had these seven personages really obtained lodgment in her body. We need not, therefore, feel that we are abetting the ruin of a great saint while we watch the list of the symptoms attributed by the suffering sister to divine or diabolic intervention, but inflexibly brought back by Drs. Legué and Gilles de la Tourette to the ordinary muster-roll of hystero-epileptic symptoms. We have the *fond* of egoism and caprice (p. 54), the hallucinations (p. 67), the erotic excitement (p. 68, etc.), the violent *clownisme* of the attacks (pp. 72, 96), the self-suggested vaso-motor modifications or stigmata to which the French school now give faith (pp. 75, 165, etc.), the gaping and spitting movements (p. 79), the imagined pregnancy (p. 81), the suicidal tendency (p. 88), the hæmatemesis (p. 101), the prolonged cries (p. 104), the headache and vertigo (p. 108), the sudden disappearance of symptoms (p. 137), perhaps the anæsthesia (pp. 139, 153, etc.), the involuntary laughter (p. 143), the invading lethargy (p. 149), the ecstasy (p. 154, etc.), the change in *timbre* of the voice resulting from irregularity of respiration (p. 155), and an admixture of other symptoms which will now be thought indicative of hysteria rather than of sanctity. A fine case of hysteria in the male is thrown in, in the person of one of Sœur Jeanne's confessors; and, altogether, we can imagine how delightful a *trouvaille* the discovery of this old MS. must have been to the zealous collaborators in the careful and conscientious series of works termed the Diabolical Library.

NOTES ON BOOKS.

Illustrated Lectures on Ambulance Work. By R. LAWTON ROBERTS, M.D. (London: H. K. Lewis. 1886. 179 pages. Second edition, with Illustrations.)—The book before us, now in its second edition, is the largest compendium of ambulance work in the country. The ambulance teachers to miners seem to have much enthusiasm, great belief in their pupils' powers of acquiring knowledge, and an exaggerated idea of what the St. John Ambulance Association intends should be done. Dr. Roberts is usually clear, although profuse, and introduces into the text much that is unnecessary. What has food and its digestion to do with "first-aid to the injured?" A similar question might be put as regards the functions of the skin, fat, and various organs. The crowd of details in connection with stretcher-bearer work and wheeled litters, is rather appalling to the man who is to be taught all in five lectures. It is difficult to see who is to read this work, except young surgeons about to enter as teachers to the St. John Ambulance Association. To them much harm will be done, as they might be made to believe that this is a book fitted to teach from, or to put into the hands of policemen, railway servants, dockyard labourers, or coal miners. This work is to be regarded as a standard compendium for reference, but ought not to be distributed to the public to learn from.

Ambulance Lectures. By JOHN M. H. MARTIN, M.D. With Illustrations. (London: J. and A. Churchill. 1886. Pp. 120).—This is a neatly got-up book, with large clear print and good diagrams. As usual in ambulance-books, with but few exceptions, anatomy occupies a disproportionate bulk of the text. Dr. Martin starts with a very awkward and scaring sentence on anatomy, thus: "Bone, whose basis or framework was cartilage (with the exception of the bones of the vault of the cranium, face, and lower jaw) saturated with salts and permeated by blood-vessels, etc." When the workers in a coal mine (to whom the author chiefly lectures) are to be educated up to understand such abstruse teaching, is a question for the School-Board to answer. The teaching of methods is well nigh ignored in this work, and much space is occupied by unnecessary details on stretcher drill.

Ambulance Work: Questions and Answers upon First Aid to the Injured. By JOHN W. MARTIN, M.D., and JOHN MARTIN, F.R.C.S.Edin. (London: Baillière, Tindall, and Cox, pp. 47).—We cannot do better than give a few of the questions to be answered in this catechism. "Of what does the earthy matter of bones chiefly consist?" "Of how many bones does the human skeleton consist?" "Of how many bones is the head composed?" "What is the medulla oblongata?" "If the medulla is injured, what is the result?" "How many cerebral nerves have we?" "What are their functions?" "How many spinal nerves are there?" "Of what does the sympathetic consist?" "What do you understand by vital capacity?" "What is the estimated quantity of blood in the body?" Such teaching will ruin the St. John Ambulance Association.

Refraction of the Eye. By A. STANFORD MORTON, M.B. Third Edition. (H. K. Lewis. 1886.)—We gladly welcome a fresh edition of this little book; it makes no attempt to treat the subject in an exhaustive manner, but merely aims at being a guide to those who are working practically at the subject. The book is thus kept within very small dimensions, and most of the faults of the other elementary textbooks on this subject are avoided. We are sorry to see that the action of an astigmatic lens is wrongly described, and the error emphasised by italics; and we cannot but think that the author's suggestion to add a dioptre to the amount of myopia found under atropine rests upon a wrong theory, and might prove injurious in practice. We do not look upon the book, however, as a guide to treatment, or we should take exception to other points, but consider it in the light of an aid to diagnosis. We should have liked to have seen more illustrations, but it would probably have been difficult to introduce them without making the book rather more than a student's manual.

Experimental Chemistry, founded on the work of Julius Adolph Stöckhardt. By C. W. HEATON, F.I.C., F.C.S. (George Bell and Sons, York Street, Covent Garden. 1886.)—In these days of luxurious fittings and expensive apparatus, when a student finds all that he wants, and frequently more than he requires ready to hand, the need of such a book as this is not much felt—so long, that is, as one works in a well-appointed laboratory. But let two men be placed in such circumstances that they must detect a chemical substance, or manufacture an acid with such materials only at their disposal as are in every-day household use; then, if one of them had learnt chemistry according to Dr. Stöckhardt's system, whilst the other had been through a course in a modern laboratory, there can be little doubt which would feel most at home, and would be most expeditious and successful in conducting the necessary processes. As Mr. Heaton says in his preface, it is astonishing what an amount of good work may be done with very simple materials; and, just as an angler feels greater pride in landing a large salmon with a hair-line than in hauling him in with a cart-rope, so it is well to encourage in the student a feeling of pleasure in surmounting the difficulties of chemical analysis with the simplest apparatus possible. As might be expected, in a volume which eschews all the refinements of chemical apparatus, there is nothing new or startling; indeed, the book might perhaps have been advantageously brought a little more up to date in some points; but as an educational work, particularly for students desiring a practical acquaintance with chemistry, and whose means are limited, it must prove extremely useful.

Reactions of the Substances given at the Practical Examination in Chemistry at the First M.B. London. By F. J. M. PAGE, B.Sc., etc. (London: H. K. Lewis. 1886.)—These tables will be highly popular with that (we fear numerous) class of students who delight to believe that in fifteen pages of large type lies hid, "like the music of the moon in the plain eggs of the nightingale," the sum of the knowledge which is necessary for passing an examination; but they may also do better work in serving as a condensed epitome to him who has laboriously plodded over the groundwork of the science of practical chemistry, which may enable him to soar into the higher regions of simplicity, and take a bird's-eye view of the complex maze beneath. Such tables, however, to be really useful, should be absolutely accurate; and in these we have noted the following errors, which should be speedily corrected. On p. 5, oxalate of lime is said to be "soluble" in acetic acid, clearly a misprint for "insoluble." Benzoic acid is described as possessing an "irritating odour," whereas succinic acid is merely said to "sublime readily," no mention being made of its irritating qualities, which are certainly far more marked than those of benzoic acid. On p. 6, we find PbA for PbA_2 (l. 15). In distinguishing tannic acid from gallic acid, no mention is made of the more markedly crystalline appearance of the gallic, nor of the formation of "sulphotannic acid" on stirring a solution of tannic acid with sulphuric acid. In distinguishing cane-sugar from grape-sugar (p. 9), no mention is made of the different behaviour of the two sugars on boiling with solution of potassium hydrate. Again, under the head of tests for morphine, it is surprising to see no mention of the characteristic reaction of solutions of the salts of that alkaloid with potassium hydrate. We hope shortly to see these tables complete, as well as compendious.

BEQUESTS AND DONATIONS.—The Church Burgesses of Sheffield have given £160 to the General Infirmary and £115 to the Public Hospital and Dispensary.—Messrs. Baring Brothers have given £100, and Messrs. Rothschild £100, to the Hospital for Sick Children.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 become due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 8th, 1887.

HOSPITAL FINANCE AND MANAGEMENT.

THE serious questions connected with the present financial position of most of our large metropolitan hospitals have aroused an amount of public interest rarely accorded to anything connected with medicine. The Commander-in-Chief and the Prime Minister have contributed articles on the subject, more distinguished for benevolence than originality, and the ex-Chancellor of the Exchequer is reported to be about to do the same. Meanwhile, less exalted but more business-like correspondents are offering, almost daily, suggestions through the newspapers, some of which are worthy of attention. The *Times*, a few days since, gave admission to a short letter from "A Hospital Governor," advocating, once again, the exaction of payment from hospital patients. The ground taken by this gentleman is that on which the plan is usually advocated—namely, that persons able to pay are often treated at the general, and still more frequently at the special, hospitals. It seems strange that the obvious inference does not strike people who thus argue that the patients in question are improper persons for hospital relief, and that the reform needed is one which would exclude such persons, instead of making them pay a fee which must be very inadequate, and of which no part would reach the persons whom chiefly they defraud—namely, the physicians or surgeons by whom they are treated. We would not oppose, but, on the contrary, warmly support the institution of pay-hospitals, a form of hospital we believe to be much needed in London. But we would support them only on the condition that everything supplied in them be paid for at a fair rate—first of all, as most necessary, the medical and surgical skill, to obtain which the patient resorts to the hospital. The mixture of a spurious charity with a spurious independence, by which a patient well able to pay is to receive his treatment for nothing, while his self-love is soothed by reflecting that he is not a gratuitous inmate, has always seemed to us the commencement of a worse abuse than any of those which now exist in our hospital system. "A Member of the Royal College of Surgeons," writing to the *Standard* on December 8th, represents the out-patient rooms as "thronged with crowds of people who are thoroughly able to pay private practitioners," and this we believe to be the case—though we also think that the cases which he instances of persons able to pay guinea fees frequenting hospital out-patient rooms are rare. But we fully believe that a large proportion of the out-patients could pay moderate fees quite equal to those of ordinary sick-clubs, and that they would obtain far better treatment from private practitioners than they do at the hospitals; and in this belief we wish the fullest success to Sir Spencer Wells's Committee, in devising a scheme which may be generally accepted by the hospitals and the mass of general practitioners.

A more weighty contribution to the controversy is made by Sir R. Alcock, in a letter to the *Times* of December 28th, which will well repay the reader's attentive study. Sir R. Alcock has such ample experience as a hospital governor, and is, by early associations, so ready to enter into and understand professional questions, that anything which falls from him must command attention—and still more, so lengthy and deliberate a communication. Yet there are some points in Sir R. Alcock's letter in which, notwithstanding the most sincere respect for his judgment in general, we cannot entirely agree. After remarking on the unquestionable, and most unpleasant, fact that out "of the 150 medical charities in the London district, to which the Hospital Sunday Fund annually contributes, there is not one that does not exceed its revenue," Sir Rutherford proceeds to insist on the large sum required for "maintaining the 6,000 or more beds in efficient working order, while supplying medical or surgical treatment to nearly a million of the poorer classes applying as out-patients"—and he then reminds his readers of the frequent demands which have been made of late years for a Royal Commission of Inquiry into our hospital system, and recommends that the demand should be repeated. He intimates, not obscurely, that the probable result of such a Commission would be either a rate-in-aid from the State, or a parish rate for the hospital or hospitals of the neighbourhood. Now, we have always supported, and would still support, the proposal for a Royal (or Parliamentary) Commission, but not if the only subject for inquiry were, as Sir R. Alcock seems to put it, how to get funds to enable the hospitals to carry on their present system of indiscriminate charity. To supply medical and surgical treatment to a million of persons is a gross abuse, and is so felt by the great body of practitioners, who find that between the gratuitous charities and the sixpenny sick clubs they cannot get a livelihood, though there are plenty of patients in their district quite able to pay. Nor is it possible that such huge numbers can be really properly treated. So that one at least of the subjects of inquiry must be the system itself on which the hospitals are managed, and how far economy in their aims can be carried without injury to them as schools of medicine. Another subject of inquiry obviously must be the location of hospitals in relation to the needs of the city—a subject brought prominently under the notice of the Secretary of State, when the matter was mooted some years ago. Again, much of the poverty of the genuine public hospitals seems to be caused by the diversion of funds into the coffers of institutions—hospitals only in name—which are set up by specialists for their own private advantage, which do no service to medical education, and deprive the general hospitals of cases especially fitted for treatment there, and for the clinical instruction which is so important a function of a public hospital. The proposed inquiry must then evidently include the character of the institutions classed together as "hospitals"—not that the superfluous, or speculative, or quack institutions could be suppressed by law—but that an authoritative judgment could be obtained on them as a guide to the public. Then, the possibility of substituting self-help (by means of sick-assurance and otherwise) in one class, and treatment in poor-law hospitals or dispensaries in another, for much of the work now undertaken by voluntary hospitals would necessarily come under discussion. Nor could the Commission avoid a thorough inquiry into the constitution of the

various hospitals. The system by which at the so-called "endowed" hospitals the physicians and surgeons are reduced to a kind of menial position, with no voice in the management, and under the absolute control of a set of men who have done nothing whatever for the hospital, and are entirely without knowledge of hospital affairs, is one which is entirely irrational, has produced numerous scandals, and has culminated in the partial ruin of two of the hospitals to which it has been applied. Clearly, therefore, a Royal Commission, if granted, must investigate the methods of government of hospitals. The question, therefore, is far less simple than Sir R. Alcock's letter would imply; but, if the public authorities saw their way to institute a really adequate and comprehensive inquiry into the whole of our hospital system, we believe the measure would be well received by the profession; while a mere attempt to find funds to support the present system would, we feel sure, be both unpopular and unsuccessful. A still graver objection to a Royal Commission for raising funds is one which Sir R. Alcock himself points out. The State neither does nor ought to give anything for nothing. It is only the trustee of the nation; and, if it finds support for the hospitals from the public funds, it must insist on bringing the hospitals under public control; in other words, our voluntary hospitals would stand on the same level as the poor-law institutions. No pecuniary considerations, we are convinced, would induce the hospitals to submit to such a degradation.

THE DISTRIBUTION OF PHTHISIS.

THE third volume of Hirsch's great work, *A Handbook of Geographical and Historical Pathology*, recently issued by the New Sydenham Society, contains, amongst much valuable information, some striking, and to many no doubt novel, facts regarding the incidence of pulmonary phthisis. It is, as Professor Hirsch remarks, emphatically a disease of all times, all countries, and all races. No climate, no latitude, no occupation, no combination of favouring circumstances forms an infallible safeguard against the onset of tuberculosis, however such conditions may mitigate its ravages or retard its progress. Like typhoid fever, phthisis dogs the steps of man, wherever he may be found, and claims its victims amongst every age, class, and race. A summary of results shows that the average number of deaths from phthisis is about 3 per 1,000, or nearly one-seventh of the total mortality.

The first fact which comes out clearly from Professor Hirsch's tabulated data is the relatively large mortality from phthisis in the large centres of population. Thus Vienna has a death-rate from this cause of 7.7 per 1,000, or more than twice the general average. Pesth is credited with 6.9 per 1,000, Brussels with 5.6, Stockholm with 4.1, Munich and Glasgow with 4, Berlin and Dresden with 3.8. In the smaller towns the rate sinks to 3 or 2.5 per 1,000, and in rural districts the mortality is still less. Many facts are at hand to show that an increased liability to phthisis goes *pari passu* with rapid growth of population, and especially with the massing together of large bodies of workers engaged in arts and manufactures. Impure air and bad hygiene are undoubtedly the most potent factors in the genesis of the disease, and take precedence even of hereditary predisposition and imperfect nutrition. Among nomad tribes, such as the Kirghiz of the Central Asian steppes or the Bedouins of Arabia, the disease is practically unknown, but there is much instruction and warning for us in the fact that when, as sometimes happens, these wandering tribes settle in the towns their immunity immediately ceases.

The influence of geographical position upon phthisis turns out to be much less than current opinion would indicate. We are prone to regard it as essentially a malady of temperate latitudes, and of the Anglo-Saxon race, but more accurate statistical information proves that it is very virulent in many warm countries, and that some of the inferior races, such as the negroes, the inhabitants of the West India Islands, and the peoples of the South Seas suffer more in proportion than the nations of Europe. It will be a great surprise to many people to learn that the death-rate from phthisis is as high in sunny Italy as in foggy England. Those who hold the old-fashioned notion that damp and cold are the main causes of phthisis will be puzzled to account for the almost complete immunity enjoyed by the inhabitants of the Hebrides and the Faroe Islands. Latitude is not, however, without a distinct influence, both upon the prevalence and the type of phthisis. The disease becomes rarer as we approach the poles, and is extremely infrequent within the limits of the Arctic and Antarctic Circles. In the Tropics the disease does not conform to the ordinary chronic form familiar to medical observers in this country, but in the brevity and severity of its course approximates rather to acute tuberculosis.

While the influence of latitude is comparatively slight, irregular, and apt to be counteracted by other conditions, that of altitude is most potent. Among the higher Alps, the Andes, the elevated plateaux of Mexico, Persia, and South Africa, we approximate, though probably never quite attain to, conditions of absolute immunity. In India the disease is tolerably common, and very pernicious on the lowlands, while it is extremely rare upon the upper slopes of the Himalayas, the Ghaats, and the Nilghiris. At Bogota and Quito, in spite of the aggregation of large populations, the disease is excessively rare, and is practically limited to settlers from the lowlands or from other countries. Even at Potosi, among a population engaged in mining, and amidst conditions of very imperfect hygiene, phthisis can scarcely gain a footing. It is thus evident that the protective influence of high altitudes suffices to counteract other forces which usually occasion a widespread prevalence of the disease. The extremely low mortality from phthisis in Switzerland, namely, 1.86 per 1,000, is explained by the fact that so large a proportion of the people reside at a considerable altitude above the sea-level, although the sparseness of the population, no doubt, also operates in the same direction.

The influence of a damp soil in promoting phthisis is now well established, and suggests obvious practical conclusions.

The incidence of phthisis in the Australasian colonies is of much interest, in view of their popularity as refuges for the consumptive. The large towns of Australia have now a death-rate from phthisis of over 2 per 1,000, and present little advantage to the phthisical sufferer over his own country. On the other hand, the large inland plains of Australia are almost exempt from phthisis, and constitute a genuine sanatorium. In New Zealand, phthisis has made frightful ravages among the Maoris, and is the chief factor in their approaching extinction; but the explanation of this fact is not to be sought in any adverse climatic influence, but rather in the miserable dwellings and wretched food of the native inhabitants of these islands.

Professor Hirsch's conclusions may be thus briefly summed up. Phthisis is everywhere prevalent, but it is rare in Polar regions, and

rarer still at high altitudes. The main factor in its production is overcrowding and bad hygiene. Heat and cold *per se* have no influence. Damp, when conjoined with frequent oscillations of temperature, predisposes to the disease; but humidity of the air is less important than dampness of soil. Occupation is extremely important, but mainly indirectly, as tending to good or bad hygienic conditions.

We reserve for another occasion the consideration of the very important deductions to be drawn from Professor Hirsch's elaborate and exhaustive data.

THE HOSPITAL FOR WOMEN, LIVERPOOL.

A LONG report of the Committee of this hospital comes to hand too late to permit us to analyse or comment upon it with the fulness the subject merits. We can only now say that the report appears to be drawn up in a liberal and judicial spirit. It could hardly be expected that a body of laymen should fully appreciate all the questions—scientific, surgical, and ethical—involved in the performance of a new operation—the removal of the uterine appendages, or "Tait's operation"—which even by not a few medical authorities is denounced with something of the rancour of prejudice and personal jealousy. We have already published the report of the "Inquiry Committee appointed by the Institution," and made some observations upon it. The conclusions of that report are to a certain extent accepted by the Hospital Committee. We are of opinion that there is another body which is in strict justice entitled to report upon this report, and that is the medical staff whose conduct has been assailed. Notwithstanding the spirit of fairness which seems to have animated the Hospital Committee, the case cannot he held to be closed by their report. It is a question which, after all, must be decided by the voice of the profession when sufficiently enlightened. The testimony of the many eminent men—British and Foreign—appealed to by the Committee is all but unanimous in favour of the operation, and in justification of the work of the hospital staff.

A TELEGRAM from Lima announces the occurrence of four cases of cholera in Chili.

THE subscriptions in aid of Guy's Hospital are not coming in as quickly as would be wished. Little more then £25,000 has yet been received, and of this amount twenty cheques furnish £15,000.

RENEWED efforts are being made by the coach-building industry to bring about a repeal of the carriage tax. In the interest of the medical profession, on which the tax presses most unjustly, we wish them every success in their efforts.

THE Sunday Hospital Collections Committee has handed over to the Birmingham General Hospital Committee a cheque for £4,231 from the proceeds of the recent hospital funds. The total sum collected was £4,662.

DR. ALBERT BURCKHARDT-MERIAN, Professor of Otology in the University of Basle, and one of the editors of the *Correspondenz-Blatt für Schweizer Aerzte*, died recently, after a prolonged and extremely painful illness.

WE have already reported that the Councils of the College of Surgeons and of the College of Physicians of England have recognised Mr. Cooke's School of Anatomy and Physiology in Brunswick Square, "as a place of study for candidates rejected at the second examination of the Examining Board of England." This is a just recognition of much very useful work.

ROYAL MEDICAL BENEVOLENT COLLEGE.

THE Science Class at the Royal Medical Benevolent College, Epsom, is, we are asked to state, greatly hampered in the study of zoology by the want of a number of skeletons. Mr. J. S. Jackson, who has charge of the class, entertains the hope that, at some of the hospitals, there may be extra specimens that they would be willing to present to Epsom College. The objects wanted are those mentioned in the honours subjects for the intermediate M.B. and B.Sc. of the University of London. This would also cover the work for scholarships at Oxford or Cambridge.

"VIEWING THE BODY" DURING EPIDEMICS.

IT is reported that an epidemic of measles exists in the borough of West Bromwich, and that over twenty deaths have occurred during the past month. The coroner, at a recent inquest on the body of a boy who had died from a very severe attack of this disease, wisely dispensed with the formal viewing of the body, seeing that the house in which the deceased had died was full of infection, as two other children were suffering from measles at the time. The sanitary authorities are stated to have taken prompt steps to prevent the spread of the disease.

FAITH-CURES BY WATER.

ST. PETERSBURG society has been somewhat interested in a medicinal water discovered by a Baron Vrevsky, and stated to effect marvellous cures. Owing to an official permission to continue the use of this water being necessary, the Medical Committee of St. Petersburgh caused it to be analysed; and the result of this analysis, according to the *Official Messenger*, is to show that this famous and universal remedy is absolutely identical with the water of the Neva.

THEORIES AND EXPERIMENTS IN FASTING.

IN a report read last week to the Paris Zoological Society, Dr. Laborde stated the results of experiments on fasting dogs. A dog, weighing 15½ kilos. (about 34 lbs.), died on the twentieth day of his fast. Another animal of the same kind and weight that was allowed water, was in good health on the fortieth day. The dog that died weighed, when dead, only 2 kilogrammes (about 4¼ lbs.); the dog that survived weighed, on the twentieth day, 9½ kilogrammes, and, on the fortieth, 7.6 kilogrammes, or a little more than half his original weight. There was some anxiety as to how he could safely be allowed to resume food; but the dog solved the question, taking 1.2 kilogrammes of soup and 1 kilogramme of flesh without the slightest subsequent inconvenience. There is a certain Mr. John Griscom in New York who has, according to the *Medical Record* of that city, a theory of his own to account for the success of the number of persons who are now fasting for four or five weeks at a time. According to him, it is all a matter of faith, and any person who will begin to fast with a full belief that it can be done without harm will succeed. "With the prejudice against fasting wholly removed," he says, "anyone in the enjoyment of perfect health could fast two or three weeks without inconvenience; but if a man should fast simply as an experiment, without a full belief that he could do it, he would kill himself." The use of Succi's red liquid, therefore, becomes plain,—it is a medicine for the mind, and gives to the faster the necessary confidence. Griscom says that he has fasted for more than three weeks at a time, and his statement that the craving for food passes off at the end of forty-eight hours is confirmed by the evidence of involuntary fasters. Hunger is a much less imperious craving than thirst, which grows stronger with every hour of abstention from fluids. The organism of a healthy man has extensive reserves, in the fat which is stored in the layers of adipose tissue beneath the skin and in other situations; when the habit of drawing upon the food for the energy necessary for maintaining the phy

logical processes is broken, during the first forty-eight hours, the subsequent drafts on the reserve are not attended by so much discomfort as during the period of transition.

THE CIRCULAR TO THE FELLOWS OF THE ROYAL COLLEGE OF SURGEONS.

THE replies to the circular addressed by the Council of the College of Surgeons to the Fellows, respecting the extension of the franchise to Members, and the opening of the Council to Members under certain restrictions, have been received by the Secretary, and will be submitted to the Council at a meeting on Thursday next, January 13th. Until then, we are informed, the result will remain a mystery, known only to the officials of the College, the original circular being considered as a private letter from the Council to the Fellows.

SPANISH MEDICO-CHIRURGICAL ACADEMY.

THE following is the programme of prizes for 1887. Subjects: 1. The Academy prize: "What modifications has the panspermist doctrine introduced in the treatment of internal diseases recognised or supposed to be parasitic?" 2. Prize of Sr. Morales: "Progress realised in operations on the bones. Critique." The value of the Academy prize is 250 pesetas and the title of Corresponding Member. The value of Sr. Morales' prize is 750 pesetas and the same title. The essays may be written in Spanish, Portuguese, French, Italian, English, or German. No essay must be signed, but each must be accompanied by a sealed envelope containing the name and address of the author. The essays are to be sent to the President, Montera, 22, bajo, Madrid, and must be sent in before September 15th, 1887.

SURGICAL TREATMENT OF PARALYTIC LARYNGEAL STENOSIS.

DR. G. B. HOPE, of the Metropolitan Throat Hospital, New York, suggests a new way of dealing with paralysis of one or both abductor muscles of the larynx, where respiration is impeded, and where the lesion is of a permanent character. The proposal is to open the larynx, and remove as much of the paralysed cord, together with any overhanging tissue as seriously obstructs the lumen of the glottis. In other words, the treatment is that indicated in any form of neoplastic laryngeal obstruction that cannot be removed by the open method. Of course, a tracheotomy-tube would be required until the immediate effects of the operation passed off. Since Dr. Hope conceived the idea of this operation, he has not had a case calling for it. There can be little doubt, however, that, where indicated, it would be preferable to "intubation" of the larynx. The suggestion forms the subject of a short article in the *New York Medical Journal* of November 20th, 1886.

ENFORCEMENT OF THE SMOKE-PREVENTION ACT.

So much apathy has hitherto, with few exceptions, been shown by the metropolitan magistrates in the matter of smoke-abatement, and so little desire to enforce adequately the provisions of the Smoke-Prevention Act, that it is gratifying to note that Mr. Sheil, who last week had a batch of offenders brought before him at the Southwark Police Court, feels very strongly on this question. The object of the Act, he said, which was to prevent the air being vitiated, was entirely defeated if, as in the instances before him, it took ten weeks to put the law into operation. The Act, he continued, was most useful, especially in a city like London, which, in certain quarters, was fast becoming uninhabitable from the manner in which chimneys were allowed to belch forth dense volumes of black smoke. Each of the defendants was fined £5 and costs, and the magistrate declared his intention of doubling the fine if they came before him again. We are strongly of opinion that, if the example so well set by Mr. Sheil were followed by his brother magistrates, we should soon have a sensible diminution of the smoke nuisance, from which, at times, and especially in times of fog, we are ly the sufferers. Hitherto, the Bench has shown a disposition to impose a fine less than the minimum fixed by the Act, and this instance of judicial intelligence, therefore, shows up all the more strongly.

THE NEW BOOKS OF 1886.

OF making of books there is no end; in the United Kingdom alone 5,210 new books or new editions were published during 1886; 755 new novels, 616 new works on theology, 458 new educational books—these are the numbers which head the list; after such large figures, the total number of medical and surgical works appears modest, for the new books only numbered 114, and the new editions 57; this is, of course, excluding the majority of the American books, which now find their way in such numbers to this country, and is exclusive, also, of the medical journals and periodicals which go to swell the list of year-books and serials in volumes which number altogether 291. Relatively small as the number of medical books appears when compared with that of the works of fiction, it appears relatively enormous when compared with the law books, for only 18 new books on law and jurisprudence, and 15 new editions were published during the year.

SCARLET FEVER IN WIMBLEDON AND MERTON.

THE local authorities at Wimbledon are, we learn, actively engaged in ascertaining the cause of a very serious outbreak of scarlet fever which has occurred more particularly in the southern portion of the parish and the adjoining parish of Merton. Nearly three hundred cases are reported to have developed since Christmas. In several cases whole families are prostrated, and the energies of every medical man in the neighbourhood are taxed to the utmost. As many as seventy cases have occurred in one day. In some instances the whole family, including servants, were suddenly prostrated with the disease, those who had previously had scarlet fever suffering from severe tonsillitis. It was soon found that all these people were supplied from the same dairy, and that the dairyman himself was a sufferer. Tracing it further back, it was found that the farmer supplying the milk had members of his family suffering from scarlet fever. Two of the medical men are amongst the sufferers.

THE HARVEIAN SOCIETY.

THE Honorary Secretaries announce a complete list of communications and papers for the second half of the session. Amongst the more important—and all promise to be of great practical value—are a paper by Sir William Mac Cormac, on the Suprapubic Operation in its application to Stone in Children (February 3rd); on Extirpation of the Axillary Glands, as a necessary accompaniment of the Removal of the Breast for Cancer, by Mr. Mitchell Banks (March 3rd); and on the Significance and Value of Tendon Reflex, discussed and demonstrated from an elementary point of view, on March 17th, by Dr. Buzzard, whose name has been long and closely associated with the subject. On May 5th, Mr. Hugh Owen Thomas, of Liverpool, will give a demonstration in connection with Disease of the Hip-joint. The inventor of "Thomas's Splints" for hip and knee will be warmly welcomed at a London medical Society, and his remarks will be certain to receive attention. May 19th will be a "clinical evening," and will close the session.

GENERAL HOSPITALS AND THE INSANE.

A LETTER to the *Times* from the respected superintendent of the Hanwell County Asylum, Dr. Rayner, advocates the admission of the insane into general hospitals. He thinks it a great hardship that they should be excluded, and desires to see a small ward, say of six beds, in each hospital set apart for patients who, in consequence of mental disease, are not in a state to mix with the other patients. As it is, there appears nothing to prevent this course being pursued, if the conditions attaching to a hospital laid down in the Lunacy Acts are complied with. Thus a "hospital" is defined to be "any hospital or part of an hospital or other house or institution (not being an asylum)

wherein lunatics are received, and supported wholly or in part by voluntary contributions," etc. (8 and 9 Vict., c. 100, sec. 114). But as the Act requires that every such hospital shall have a resident medical officer as "the medical superintendent and medical attendant thereof," and shall be registered so as to come under the troublesome regulations (including certificates) of a lunatic asylum, it is not likely that hospitals will open their doors to the insane, unless increased facilities are afforded by the Legislature. For these Dr. Rayner pleads, and he suggests that the power of detaining insane patients in general hospitals should be obtained by an extension of the similar powers given in regard to contagious diseases by the Public Health Act, 38 and 39 Vict., c. 55, sec. 124, and by 30 and 31 Vict., c. 106, sec. 22. There is much to be said in favour of this contention, and Dr. Rayner adduces arguments of a cogent nature. Everything depends, we think, upon whether the ordinary hospital physician (for a specialist for six cases is out of the question) would treat insane patients as skilfully as is done, or is supposed to be done, in institutions superintended by mental physicians. If this can be secured, there appears to be everything in favour of the proposal. On this point we should like to be assured before pronouncing a decided opinion. However, Dr. Rayner has done good service by ventilating this important question. We do not wish to see a repetition of the condition of things once witnessed in the separate ward for lunatics at Guy's.

THE TRIALS OF AN EXPERT WITNESS.

Correspondents not infrequently write to complain of the hardships which they suffer owing to the very inadequate remuneration allowed to medical expert witnesses by courts of law. It is perhaps a poor consolation to know that others are in harder case, but the experiences of a practitioner in Texas, reported in the *New York Medical Record*, are worse than anything which can be endured in this country. He was summoned at midnight by a deputy sheriff to examine the victim of an alleged rape; on the following day he was commanded to go to the county seat, ten miles distant, to repeat the examination. He was detained for several days at his own expense, then allowed to return to his practice, then summoned again. This was repeated more than once, and, finally, the jury disagreed. The unfortunate witness, after this, moved to another town 150 miles away, and there one day he was arrested by the sheriff, and taken in custody to the town where a second trial was being held. The trial was adjourned, and the witness was bound down under a heavy penalty to appear when wanted. In order not to forfeit his bond, he had to keep himself in telegraphic communication with the legal officials, and in one way and another spent and lost about £40. In the end the case was dismissed, and the medical witness received nothing. Lawyers have a saying that "hard cases make bad law;" but such hard cases as this, and some others which have recently been reported in our own columns, show the badness of the existing law both in this country and in the United States.

LIGHT WINES V. STRONG WINES.

At a recent meeting of the Académie de Médecine, M. Vallin made some remarks relative to the addition of alcohol to wines. In his opinion, the committee was right in making no distinction between the kinds of alcohol employed, although he thought that the addition of a small quantity of perfectly pure alcohol was much less hurtful than the same quantity of an inferior quality of spirit made from cider and rotten apples. There were two reasons why he would vote against the adulteration. In the first place, in the present state of science, it was not possible to distinguish whether the alcohol so added was very pure ethylic alcohol, or whether it contained a notable proportion of those impurities and toxic principles among which the so-called higher alcohols were only one. It was the impurity, rather than the source of the alcohol, that constituted the danger of vinage. The second reason why vinage should not be tolerated was, that in limiting the addition to 2° to wines marking primitively less than 10°, it would be impossible to control its application. Chemists appeared to be unanimous in declaring that the exact quantity of alcohol so added could not be determined by analysis. Therefore, there would always be, in consequence of this difficulty, a toleration of from 1° to 2° of vinage, and care should be taken that this was not increased. To the conclusion of the committee that "in order to respond to certain exigencies of transport and of conservation, the addition of sugar to the must may be authorised," M. Vallin replied that this would, perhaps, compromise the Academy, which would be thus extolling a technical process, and affirming its hygienic value, on the strength of what were, in reality, only theories and presumptions. M. Vallin expressed his regret that the committee, through an exaggerated fear of touching on fiscal questions, should have suppressed the following sentence: "It is proposed to reduce from 15° to 12° the limit beyond which an additional tax may be imposed on wines of general consumption." According to M. Vallin, this was an excellent means of affirming the truth that, from a hygienic point of view, there was everything to gain by encouraging the use of natural wines of low alcoholic strength, but possessing some alimentary value, and imposing a tax on wines of high alcoholic strength, which were a luxury, and often injurious. The increasing use for several years of adulterated wines, had produced a taste for strong wines in France, so that a light wine, marking 8° or 9°, was now considered to be insipid and flat. It was a duty to struggle against this corruption of taste. It could not be doubted that a wine was more capable of producing drunkenness, and even chronic alcoholism, when it marked 15°, than when it marked only 9° or 10°. M. Vallin could see no inconvenience in imposing a heavier tax on wines rich in alcohol, if the tax on natural wines mixed with the former was lowered in the same proportion. The French Under-Secretary of State for Finance had promised to exempt from additional tax the natural wines marking more than 12°, and to reserve this measure for foreign wines. Nearly the whole of the wines imported into France marking 16°, were adulterated with alcohol. In conclusion, M. Vallin said that the discussion at the Academy had demonstrated the insufficiency of our knowledge on two principal points: first, as to what were the toxic substances, besides amylic, propylic, butylic alcohol, found in badly purified alcohols, and what was their special action on the organism? and, secondly, how could these toxic principles be recognised, and their quantities determined, when the alcohol which contained them was mixed with wines and other complex liquids? If these two questions could be solved, then a great step would be taken in the direction of the prevention and suppression of alcoholism. He thought it was the duty of the Academy to hasten the solution of these problems by facilitating researches through subventions and prizes. A positive basis would thus be obtained for sanitary police measures, which were at present extremely difficult to enforce.

PROFESSOR WESTPHAL.

Last month Professor Westphal, the eminent writer on mental and nervous diseases, celebrated the twenty-fifth anniversary of the beginning of his career as a teacher in the University of Berlin. Carl Westphal was born at Berlin in 1833, and received his medical education in the university of that city under Schoenlein, Traube, Romberg, Wolf, Baerensprung, Tüngken, and Langenbeck. He took his doctor's degree in 1854, became Privat-docent seven years later, and in 1874 was appointed Professor Ordinarius. Westphal's great merit is, that he has reformed the care of the insane in Berlin. When he entered on his duties as assistant-physician to the Lunatic department of the Charité in 1858, the straight jacket, the treadmill, and the plunge-bath were in daily use. The reports of Ernst Horn (1818) contain illustrations of the various appliances employed at that time, which are more like the *armamentarium* of a torture chamber than of a place for the relief of disease. After Horn, the same bad tradition was kept up by Ideler; and after him, though to

a less extent, by W. von Horn. Westphal, in his position as a subordinate, could do little to mend matters, although personally convinced that Conolly's "non-restraint" system was more effectual as well as more humane. At last, in 1860, this method was introduced by W. Griesinger, and a *clinique* for diseases of the nerves was added to the department. In 1868 Westphal succeeded Griesinger, and whilst completing the work which the latter had begun, largely extended the arrangements both for the treatment of sufferers and the instruction of students. Through his efforts, lunacy obtained a place among the recognised subjects of academic teaching. Of great reputation as a teacher, Westphal is no less celebrated as an investigator. His contributions to mental and nervous pathology are too numerous to mention in detail. His experimental researches on epilepsy, and his study of the reflexes are well known. "Westphal's symptom" is now a matter of every day observation in clinical practice. To him also alienists are indebted for the recognition of agoraphobia as a distinct form of mental disease.

THE "ELEPHANT-MAN."

MR. F. C. CARR-GOMM, Chairman of the London Hospital, announced, in a letter which appeared in the *Times* of Wednesday, January 5th, that the practical result of his appeal to the public on behalf of John Merrick, the "elephant-man," is that the Committee of the Hospital has decided to set apart a small room where the unfortunate man may live in privacy, with the advantage of medical supervision. It was felt that no home was so suitable to his needs as the hospital. He is at present most kindly treated, being well supplied with books and papers, and frequently visited by the chaplain, and many of the sisters and nurses. A lady has engaged to provide that he should be taught the art of basket-making, so as to give him some definite occupation. Mr. Carr-Gomm also announced that he held in trust sufficient contributions to enable the "elephant-man" to live in comfort for four or five years, and, if more should then be required, a fresh appeal will be made to the charitable. Should the patient wish to leave the hospital, means will be provided to ensure that he should be properly nursed by a relative at Leicester. Mr. Carr-Gomm observes, in conclusion, "As many have desired to know particulars of this unique case, I would add that some details are given, with illustrations, in the BRITISH MEDICAL JOURNAL of December 11th. One of our objects, however, is to prevent his deformity being made anything of a show, except for purely scientific purposes, and the hospital officials have instructions to secure for him, as far as possible, immunity from the gaze of the curious."

M. PASTEUR'S PROPHYLACTIC.

AT the Academy of Medicine on January 4th, two communications were made respecting vaccination for rabies. In the first place, according to the *Times* telegram, Prince Zaghit sent word that ten Russian soldiers, bitten by a dog, had returned from Paris, where they had undergone the treatment, and were quite well, as also (like the dog that bit the American children) was the dog. Prince Zaghit hinted that the soldiers had procured a visit to Paris without expense. M. Trelat remarked that this proved at least that the treatment was innocuous. M. Trelat was followed by Professor Péter with particulars of a death attributed to the treatment, and resembling the two fatal cases which have been reported in England. A carter, named Revaillac, 20 years of age, and living in Paris, was bitten in the finger by a dog which a veterinarian declared to be mad. Two days after, he placed himself under the more intense Pasteur treatment. For twelve days, all seemed to go well, but he was then attacked by steadily increasing pains at the spots where he had been inoculated. Then followed general uneasiness and weakness. His sister advised him to go to the Laboratory for advice, but he said he was too weak to walk. This was on Sunday, December 12th. Next day, he could not leave his bedroom, and could scarcely eat. On Tuesday, he took to his bed. On Wednesday, he had spasms in the throat, could not at times swallow liquids, could not turn himself in bed, and could scarcely speak beyond exclaiming occasionally, "*Oh, ce chien!*" On Thursday, he was worse, scarcely uttered a word, and expired in the course of the day, foaming at the mouth in his last moments. M. Péter declared these symptoms to indicate, not ordinary hydrophobia, but the paralytic rabies from which the rabbits furnishing the vaccine died. A discussion arose, in which M. Dujardin-Beaumetz argued that rabies had not been proved, for the expectoration and abhorrence of water characteristic of the paralytic form of it were lacking in Revaillac's case. M. Chauveau suggested that even if rabies was the cause of death it might have resulted from the bite, not from the inoculation, which, perhaps, had too hastily been declared infallible, whereas it might in certain cases be inefficacious. The absence of medical observation during the man's illness, as also of a necropsy, was likewise pointed out. M. Péter replied that he had simply shown death to have taken place, notwithstanding the treatment, and he invited M. Dujardin-Beaumetz to join him in a further investigation.

SCOTLAND.

EDINBURGH FEVER HOSPITAL.

THE Public Health Committee submitted a report by the Medical Officer of Health to the Edinburgh Town Council, stating that the number of patients in the City Hospital on January 3rd was 138. Of those, no fewer than ninety-six (forty-six grown-up people and fifty children) were suffering from scarlet fever.

SANITARY CONDITION OF GALASHIELS.

THE important sanitary arrangements which have been carried on in Galashiels during the past few years, and the introduction of an ample supply of water for all purposes, has effected an almost total banishment of typhoid fevers from the town. The purification of the river has been carried out most effectively. This has greatly lowered the death-rate, which, for the year 1886, has had a continuous low death-rate of under 16 per 1,000. Previously to the above improvements, it averaged over a number of years 20 or 21 per 1,000.

ACCIDENTAL DEATH OF A MEDICAL MAN.

THE intelligence reaches us of the accidental death of Dr. Peter White, of Yetholm, who fell in the street. On being carried to the house, he was found to be dead. Dr. White was one of the five founders of the Bute Archæological and Physical Society, and was the first curator of the Rothesay Aquarium; he took an intense interest in botany, geology, natural history, and kindred sciences, and he had published several works on these subjects.

WORKERS' COLLECTION FOR LOCAL CHARITIES.

THE annual allocation of the fortnightly collections made by the workers in the various departments of Messrs. William Collins, Sons and Co. (Limited), Herriot Hill Works, has just been made. The total amount collected during the year has been £63 11s. 1d. The following charities have participated in the year's collections:—Glasgow Royal Infirmary, £23 2s.; West of Scotland Seaside Homes, £15; Glasgow Western Infirmary, £6 6s.; Association for the Relief of Incurables, £5 15s. 1d.; Lenzie Convalescent Home, £3 3s.; Glasgow Medical Mission, £2 2s.; Glasgow Hospital for Sick Children, £2 2s.; Mission to Outdoor Blind, £2; Glasgow Eye Infirmary, £2; Eastpark Home for Infirm Children, £1 1s.; Glasgow Asylum for the Blind, £1.

NEW YEAR ENTERTAINMENTS TO THE POOR.

BESIDES the usual entertainment arranged at each of the hospitals and charitable institutions of the city, a considerable number of special entertainments are given annually at this season to the poor in Glasgow, and they seem to be year by year increasing in importance.

The Christmas dinner to the poor, annually given by the members of the Exchange, had this year over 2,000 guests, to whom beef-steak pie, potatoes, and plum-pudding, and coffee were served in abundance. It was presided over by the Lord Provost of the city. On New Year's Eve about 3,700 poor were supplied with supper by the Evangelistic Association, and the supper was served by about 300 ladies; and, on New Year's Day, the Lord Provost entertained 2,000 poor people at dinner in the City Hall. A multitude of smaller meetings of a similar kind were held throughout the city, and year by year the number of these is increasing.

ROYAL INFIRMARY.

THE annual meeting of the nurses of the Infirmary took place on New Year's morning in the dispensary hall, the Lord Provost presiding. In the course of the proceedings the chairman of the house-committee mentioned that, during the year, 4,817 patients were admitted, against 4,945 the previous year, and that there remained in the institution 501 against 518 the year before. There had been 437 deaths against 487. Of these, however, 92 occurred within 24 hours of admission, and 123 within 48 hours. The mortality was thus 9 per cent., as against the previous 9.3 per cent. Excluding those who had died within 48 hours, the death-rate was 6.6 against 7.5 per cent.

MONTROSE ASYLUM BOARD.

THE monthly meeting of the directors of Montrose Royal Lunatic Asylum and Infirmary was held last Tuesday. The report submitted by Dr. Howden, Medical Superintendent, stated that during the year 113 patients were admitted, of whom 41 were paupers. During the year 37 were discharged recovered, 35 unrecovered. Ten were transferred to other establishments and 24 died. The removal of all pauper patients who could be kept, either in the lunatic wards or in poor houses or in private dwellings, had to a considerable extent altered the character of the inmates during the last two years, and, consequently, the requirements of the institution. The proportion of cases requiring separate bedrooms and other special conveniences has greatly increased, and a corresponding increased cost per head may be calculated upon. The average number of inmates during a month was 491 in 1886, as against 484 in 1885.

STATISTICS OF HEALTH IN VARIOUS SCOTCH TOWNS.

DURING the year 1886, the death rate in Edinburgh was 18 per 1,000; of the 4,555 deaths, 1,020 were of infants under 1 year, 1,087 over 60, 194 above 80, 25 above 90, and 1 over 100 years. Zymotic diseases caused 380 deaths, of which 4 were due to typhus, 31 to typhoid, 51 to diphtheria, 40 to scarlatina, 174 to measles, 60 to whooping cough, 17 to erysipelas, and 3 to small-pox. The intimation of infectious diseases for the year comprised—typhus, 12: typhoid, 224; diphtheria, 212; small-pox, 26; scarlatina, 1,306; and measles, 5,843. The mortality in Leith during the year was 17.50 per 1,000, and, of the 1,236 deaths registered, zymotic diseases numbered 80, and the number of intimations was 1,141, namely, measles, 842; scarlatina, 176; typhoid, 35; typhus, 11; small-pox, 24; whooping-cough, 29; erysipelas, 16, and diphtheria, 8. The monthly return for Dundee showed a great improvement in the health of the city, the return of infectious cases only being 183, as compared with 324 in November. During November the sanitary staff had in hand 311 cases of scarlet fever, and in December, 58. In the Fever Hospital there are now only 15 cases. The death-rate in the parish of Hawick has been larger than in any year since 1878; in the town it averaged 20.5, and, in the landward part, 16; over the whole parish the rate was 19.8 per 1,000. In Boness the death-rate has also risen during the past year, being 21 per 1,000 as against 17 per 1,000 in 1885. In Stonehaven, the medical officer of health reported the health of the new town of Stonehaven as unusually good during the last quarter of the year, there being a marked absence of zymotic disease.

IRELAND.

THE Dublin Branch of the British Medical Association will hold its annual meeting in the Hall of the King and Queen's College of Physicians, at 4 P.M. on Thursday, January 27th.

BY the casting vote of the chairman of the County-at-Large Presentment Sessions in Mullingar, the grant to the Westmeath County Infirmary was passed.

ARMAGH DISTRICT LUNATIC ASYLUM.

DR. WILLIAM GRAHAM, who for the past two years has acted as assistant to Dr. Merrick, of the Belfast Lunatic Asylum, has just been appointed Medical Superintendent of the Armagh District Lunatic Asylum.

COUNTY MONAGHAN FEVER HOSPITAL.

BY the death of Dr. William Woods, whose untimely decease is much regretted, a vacancy has arisen for a visiting physician to Monaghan Fever Hospital. The salary attached to the post is £50 yearly, and the election for Dr. Woods's successor will be held on January 12th.

LISBURN DISPENSARY DISTRICT.

THE salary of the late medical officer, Dr. John Jefferson, was £100 per annum, but the Lisburn Board of Guardians recently decided, in view of the present agricultural depression, to reduce that amount by £20. A brother of the deceased gentleman (Dr. James Jefferson) has been elected to the vacancy.

CHRISTMAS AT DERRY INFIRMARY.

ALL the occupied wards were decorated with evergreens and flowers with considerable taste. Mottoes and pictures were numerous. Over a doorway on one of the corridors was the appropriate couplet, "What nobler aim can man attain than conquest over pain?" The annual treat was given to the inmates on Christmas Day.

ULSTER MEDICAL SOCIETY.

AT the meeting of the Society held upon December 22nd, in the Museum, Belfast, Dr. Walton Browne opened a discussion upon the paper read by Dr. Harkin, J.P., at the previous meeting, in which he advocated the treatment of nocturnal incontinence of urine by blisters applied to the nape of the neck. Dr. Browne had found benefit from this practice in a considerable number of cases. Other speakers reported having tried it without effect. Dr. Burden read a paper upon "Cucaine." Dr. O'Neill read the notes of some cases in which he had removed foreign bodies from the bladder. Professor Sinclair showed a large sebaceous cyst which he had removed from the scalp.

HEALTH OF BELFAST.

THE monthly report of the officer of health just issued shows that, during the four weeks ending December 31st, there occcurred, among dispensary applicants, twenty-four cases of typhus fever, seven cases of enteric, and five of scarlatina. The death-rate from zymotic diseases was low, but that from phthisis and other affections of the respiratory organs showed a large increase on the previous month, attributable to the severity of the weather and the frequent perturbations of temperature. The month of December was remarkable for a series of short-lived frosts, speedily ending in thaws. The general health of the town is satisfactory, the average death-rate from all causes being 22.3 per 1,000

BELFAST TOWN COUNCIL AND SANITATION.

ON taking the chair for the first time at the meeting of the Council on December 1st, the new Mayor, Mr. James Haslett, J.P., alluded to the proposed main drainage scheme, recently before Parliament. He expressed his full approval of this measure, and hoped it would commend itself to the judgment of his fellow-townsmen. This hope

would be surer of fulfilment if the people of Belfast were convinced that the scheme of the Council was a complete one, and will not require subsequent tinkering to render it workable. On this point much doubt existed. Mr. Haslett does not seem to have alluded to the proposals for the purification of the river Lagan, but public opinion in Belfast will hardly allow this question to be overlooked when the whole sewerage system of the town is under consideration. All public bodies are prone to execute reforms by halves, and in their natural, if not quite disinterested, efforts to save the pockets of the ratepayers, they often involve themselves in a greater outlay in the long run. What is worth doing at all is worth doing thoroughly.

CORK WORKHOUSE.

The report of Colonel Spaight, Local Government Board Inspector, for the past half-year, is of a favourable character as regards the observance of cleanliness, the arrangements for nursing and medical attendance, and the sanitary condition and drainage of the workhouse; but he calls attention to some matters which require alteration. The able-bodied and infirm male dormitories are very crowded, large numbers of beds being occupied by two men, a most objectionable practice. St. Joseph's Hospital, which is composed of the two lower wards of the male hospital, is also overcrowded, 126 patients occupying 112 beds. Last spring, Colonel Spaight called attention to the cruel and reprehensible practice of leaving the bodies of those who die, for many hours, in the crowded wards of the female hospital; and, on his late inspection, he found the practice still exists, as he saw the body of an old woman, who had died at twelve o'clock the night before, left in the ward with thirty patients until six o'clock on the day of his visit. Some official ought to be held responsible for this occurrence. The report has been referred to a special committee by the guardians for their consideration.

THE CROWN REPRESENTATIVE ON THE GENERAL MEDICAL COUNCIL.

We have the pleasure to announce that Edward H. Bennett, Esq., M.D., Professor of Surgery in the University of Dublin, and President of the Dublin Branch, has been appointed by the Crown its representative for Ireland on the General Medical Council, in the place of the late Dr. Lyons. The profession in Ireland is to be congratulated on the selection that has been made. Professor Bennett is thoroughly conversant with the subjects which fall within the purview of the Medical Council, and has been practically engaged in medical education, in one form or another, ever since he became qualified. He is a Past-President of the Royal College of Surgeons of Ireland, a member of its Council, and Senior Surgeon to Sir Patrick Dun's Hospital. Among the members of his profession he is esteemed for his scientific attainments, sound honest work, and sterling qualities. One thing we may be thankful for, and that is, that he is not likely to follow the example of some past and present Members of the Council in wasting its time by needless verbosity.

CAVAN UNION.

At a meeting of the guardians of the Cavan Union held last month, a resolution was carried to the effect that, in view of the wide-spread depression in the commercial and agricultural interests of the country, the salary of every officer of the Union whose income exceeds £52 a year be reduced 25 per cent. A copy of this resolution having been forwarded to the Secretary of the Local Government Board for Ireland, a reply has been received, in which the Local Government Board expresses its opinion that it would not be reasonable or just to reduce the rate of payment while an officer satisfactorily discharges the duties he undertook to perform. The Board is further of opinion that it would be ungenerous to deprive officers, whose salaries have been raised after many years' efficient service, of part of the advantage so gained, while their duties remain unchanged; and that such a proceeding would tend to produce discontent and a feeling of insecurity in regard to their position which would have an injurious effect on the administration of the affairs of the Union, as it would discourage zeal and attention on the part of the officers in the performance of their duties; for this reason the Board has refused to give its sanction to a reduction of the officers' salaries in the manner proposed.

THE BRITISH MEDICAL JOURNAL.

It will be seen, by reference to the notice which appears on the front page of the Journal, that the number of subscribers to the Journal has again received a considerable acquisition since the close of the year, and that the issue of the British Medical Journal has risen from 13,300 copies weekly to 13,600 copies. The continuous accession of new members to the Association after each issue of our special numbers is the most practical evidence which could be afforded of the high appreciation in the profession of the social, literary, and scientific value of the Journal. The Journal has always been the chief recruiting agent of the Association, and the means by which all its readers, and the members of the Association generally, are able to maintain a vital and continuous interest in the affairs of the Association and the profession, in whatever part of the world they are situated. The process by which the members of the Association have been so largely recruited by the aid of the Journal during the last twenty-five years, when it was first introduced by the present Editor, is one which is not without curious statistical interest, which Mr. Buckle pointed out as attending even influences of a kind which would appear to defy statistical calculation. Prior to the year when Mr. Ernest Hart became Editor of the Journal, the annual accretion of members had fallen to an average of less than forty. From that date until last year, it began a new period of vitality; and the result of the methods adopted to increase its scientific and literary value, and its professional influence, was shown in a sudden leap which gave an addition of 500 to the permanent membership of the Association. This average was steadily maintained, and as continuous efforts have been made to add to the substantial value of the contents of the Journal, and to increase its influence, that growth, with occasional slight checks, has been maintained at the same rate, each half-yearly issue of a special number being followed by applications for membership to the extent of from 200 to 300.

It might have been anticipated that as higher numbers were reached, the possible limits of extension would have been attained, and the average annual growth would have been less, while the number of losses from deaths, resignations, and removals would have necessarily grown. This, however, has not been the case. The additions of successive departments to the Journal, the creation and development of the departments intended to serve the interests of the provincial medical societies, of the army, navy, poor-law, and public health services, and public asylums have each served to widen the range of interest, and to add to the representative character of the Journal. It will be seen with satisfaction that each of these departments so palpably and directly answers the object in view, as to have been made from year to year the subject of imitation by our able and senior contemporary; and imitation is the sincerest flattery. They have fulfilled the desired object of permitting classification, and thus giving prominence to the information available from week to week under each heading, and have indicated to the members of each service the channel by which they could directly make known, in a way likely to influence the whole of the profession and the public, the views which each service or specialty entertains and desires to make current.

The practical result has been that our readers and subscribers now far outnumber the combined numbers of the other weekly medical journals published in Great Britain. Still more satisfactory is it to say that we appear now to be entering on a fresh series of averages. The number of new members added to the Association during the last year, according to the statement furnished to us by the General

Manager, to whose devoted service we are all so much indebted, appears to be not less than 855, and the New Year opens with so remarkable a result from the circulation of our last Special Number, that there seems reason to hope that the extension this year may be not less. We have always been of opinion that the presentation to every member of the Association, weekly, in return for his modest annual subscription of a guinea, in addition to the other advantages derivable from membership of the Association, of a journal forwarded free by post, which—to speak, we hope, not immodestly—is at least equal to any other medical journal in the world, is the best means of consolidating the membership of the Association, and extending it numerically. This policy, supported as it has been by the Journal Committee, and accepted by the Council, has produced results of which the earlier history of the Association, up to the date at which it was adopted, afforded little prospect. For forty years the Association had made relatively but little progress in binding together the profession. After the first few years of its formation, in which 1,400 were obtained, it grew but slowly, so that at the end of that time it numbered only 2,000. Large annual meetings were accompanied by considerable local accessions of members, who fell away in numbers the following year, apparently because their weekly journal did not afford attractions adequate to maintain them in membership: those were years of great political activity, in which the Association, under the guidance of Sir Charles Hastings, Mr. Husband, Dr. Chadwick, and their many respected colleagues, fought successfully to obtain the Medical Act, and rendered many other great services to the profession.

But this side of the Association work alone was found, during those many years, to be insufficient to maintain a large and growing membership. The conclusion which we deduce from these retrospective observations is that every member of the Association will, we hope, see that his individual contributions to the JOURNAL, in whatever department, are of value to the whole profession, in assisting to make up a record of varied interest, which shall from week to week present materials attractive and instructive to the whole body of the profession.

We invite, during the present year, communications from every member of the Association on any subject coming under his notice, and especially on those within his peculiar competence, likely to interest his fellow members, in relation to subjects scientific, social, and political. We are compelled to put forward prominently from week to week a special caution as to the desirability of brevity and condensation, because, notwithstanding the large addition to our pages, which makes the BRITISH MEDICAL JOURNAL already more voluminous than any other medical journal, we find the greatest difficulty in publishing some of the matter placed at our disposal. Everyone who writes will do well to remember that what appears in our pages is intended for the perusal of 13,000 readers of very various tastes and needs; and that it is our object so to compose the weekly JOURNAL that it shall contain matter interesting to all the various classes of our readers, and that, as far as possible, equal justice shall be done to all interests and all readers as well as all contributors.

The growth and varied activity of the branches of the Association, and their extension throughout the English-speaking continents of the Empire, afford matter for the warmest congratulation. In these branches the members of the Association find an organisation capable of supplying the means of personal and scientific communion, of carrying out objects particularly interesting to the localities, and of bringing into prominence by way of local discussion the work of the great number of men of high acquirements who reside at a distance from metropolitan and other great centres. The provincial practitioner of to-day stands far more nearly on a equality with those who practice in the great centres than at any former date. Through the branches of the Association means of union and strength are afforded to all, and there are no communications which we welcome with greater satisfaction than those which we are able to select as of adequate public interest from the proceedings of our British, Irish, Indian, and Colonial branches.

CANADA AND THE INTERNATIONAL MEDICAL CONGRESS OF 1887.

THE Medical Association of Canada will hold its next meeting, under the presidency of Dr. Graham, of Toronto, in Hamilton, Ontario, during the week following the meeting of the International Medical Congress in Washington. Hamilton is only a short distance from Niagara Falls, and it is hoped some of the foreign visitors will give the members of the Association the pleasure of seeing them at their meeting, where they may be assured of a hearty welcome. One of the features of the meeting will be an excursion to the Falls.

THE ROYAL UNIVERSITY OF IRELAND.

A MEETING of the Convocation of this University was held in the University Buildings on December 30th. The Right Hon. John T. Ball, LL.D., presided. The most important business was the election of a member of the Senate of the University. There were three candidates, namely, Dr. Stephen O'Sullivan, F.R.C.S.I., Professor of Surgery, Queen's College, Cork; Mr. Hans McMordie, LL.D., of Belfast; and Mr. T. P. O'Connor, M.P. The latter gentleman (a Nationalist in politics) was put forward by "The Graduates' Reform Association," as "a fit representative of its main purpose, making the government of the University in consonance with the mind and thought of the people of Ireland." Every effort was made by his party to secure Mr. O'Connor's success, but, at the declaration of the poll, he was last on the list. The result of the voting was as follows:—

For Professor O'Sullivan	.....	316 votes
,, Dr. McMordie	.....	231 ,,
,, Mr. O'Connor	.....	166 ,,

Professor O'Sullivan was accordingly declared elected. A motion, involving the abolition of the Annual Committee, and the substitution of another Committee in its place, was carried by 36 to 29. The subject of the new medical curriculum as laid down by the recent regulations of the Senate, which have been published in the JOURNAL, was brought before the convocation by Professor PYE, of Galway. He moved the following resolution:—

"That Convocation desires to direct the attention of the Senate to a resolution of the General Medical Council, dated May 22nd, 1885, and re-affirmed November 17th, 1886, as follows:—'That the course of medical study, after registration, should occupy at least five years, if the subjects of elementary physics, chemistry, and biology are included in that period or at least four years if a satisfactory examination in these subjects has been passed previous to registration.' And again, 'That this resolution be made compulsory in the case of all students who shall be registered on and after January 1st, 1887.'

"That Convocation, observing that under an ordinance of the Senate, dated November 15th, 1886, medical study is recommended for a period of three years only after the passing of an examination in physics, biology, and chemistry, and that on the completion of such period of three years' medical study, candidates are allowed to present themselves at the degree examination, declares its opinion that such ordinance of November 15th, 1886, should be repealed, and rules framed for the guidance of medical students in accordance with the direction of the General Medical Council."

Professor PYE said that his motion was simply to induce the Senate to put the medical degrees of this University on the proper level, and not allow them to go below the level of the degrees of other bodies. The Senate recommended only a period of three years' medical study, and even these were rendered useless by the fact that the pupils did not enter the hospitals before that, so that they could have no practical knowledge of a human body.

Mr. THOMSON seconded the resolution.

After some discussion, in which Professor PYE's views were endorsed, he agreed to leave out the second part of the resolution, so as to make it one merely inviting the attention of the Senate to the matter; and in this form the motion was unanimously adopted.

A resolution that "Convocation is of opinion that hitherto honorary degrees have been conferred much too liberally, and that the Senate be requested henceforth to examine carefully the special claims of all upon whom it is about to confer such honours," was also unanimously adopted.

EDWARD DIVERS, Esq., M.D., F.R.S., Principal and Professor of Chemistry at the Imperial College of Engineering, Tokio, has been granted Her Majesty's permission to accept and wear the insignia of the Order of the Rising Sun of the 3rd Class, conferred upon him by the Emperor of Japan.

THE IRISH CONJOINT SCHEME.

A WELL-INFORMED correspondent writes:

Notwithstanding the agreement between the King and Queen's College of Physicians and the Royal College of Surgeons in Ireland, to form a conjoint scheme for Ireland on the same lines as that which has been entered into by the English Colleges for England; and notwithstanding that a joint committee of both Colleges is, and for some weeks past has been, at work arranging the details of the scheme as adopted by the Colleges and submitted to the General Medical Council, an event has occurred, at the eleventh hour, which has threatened the success of the scheme. As on former occasions, the move was now again first made by the Council of the College of Surgeons. It informed the College of Physicians that it was desirous of conferring with it in reference to a modification of the scheme for constituting an Examining Board for Ireland, "so as to embrace within its operations the Apothecaries' Company." As the College of Physicians has repeatedly declined such a "tripartite combination," the result of this application might be anticipated; although a resolution in favour of complying with the request of the College of Surgeons, and inviting the Apothecaries' Hall to join in the proposed conference was moved and seconded by two of the most esteemed and respected Fellows of the College of Physicians, it was rejected by a vote of seventeen to four. A report of a Committee of the College of Physicians appointed to consider the letter of the Governor and Court of the Apothecaries' Hall of Dublin to the General Medical Council, stating that they had been unsuccessful in effecting a co-operation with both Colleges, or with the College of Surgeons, or with either the University of Dublin or the Royal University of Ireland, and requesting the General Medical Council therefore to give them an Examiner in Surgery and in Midwifery, in accordance with the clause of the Medical Act of 1886, has just been adopted by the College. In this report, evidence, supported by legal opinion, is given that the certificate of the Apothecaries' Hall is not one "to practise medicine." It is empowered to grant a certificate in pharmacy only. Section 3 of the Act of 1886 (49 and 50 Vict., cap. 48) requires that a body capable of holding a qualifying examination must be—(*a*) a university or a medical corporation qualified to grant diplomas in medicine and surgery; or (*b*) a combination of two or more corporations, one of which at least is capable of granting such diploma as aforesaid in respect of medicine, and one in respect of surgery; or (*c*) a combination of such university or universities, or of one such university or universities with a medical corporation or corporations, being in the same part of the United Kingdom. Under these provisions, the Apothecaries' Hall was not qualified, for it was not qualified to grant a diploma in either medicine or surgery, being empowered to grant a certificate in pharmacy only. It could not, therefore, enter into any legal combination with either of the other medical corporations in Ireland. The Apothecaries' Hall, having been refused a combination with either the University of Dublin or the Royal University of Ireland (as stated in the letter to the General Medical Council), can therefore qualify candidates only by the method of the appointment of assistant examiners. The College of Physicians holds that it would be contrary to the spirit of the Statute, if not to its letter, that a body disqualified from combining with medical corporations in consequence of its inability to grant legally a diploma of medicine, and without any claim to combine with universities, should be permitted by the General Medical Council to hold, on its own account, a fully qualifying examination in medicine, surgery, and midwifery, such as is required by the Medical Act of 1886.

ASSOCIATION OF MEMBERS OF THE COLLEGE OF SURGEONS.

THE Secretaries of this Association inform us that they are issuing 5,000 copies of a petition to be signed by Members of the College, and presented to the Privy Council. This petition prays that, before any supplemental charter is granted to the College, the Privy Council should consider the claims of Members, and secure for them the right of representation and other privileges. In the event of no application for a supplemental charter being made by the Council of the College, the petition prays that the present charter may be altered so as to allow of the representation of Members, both as voters, together with the Fellows at the Council elections, and as Members of Council, and to ensure the right of voting by papers, the abolition of all fees to any College-fund on election of a Member or Fellow to office, the issue of a yearly report, including financial statements, to be submitted for approval to the Fellows and Members, and published in the journals on adoption. It is further urged that the charter may be altered so as to confer enlarged power on the Council to deal with persons guilty of discreditable conduct. A circular has been issued by the Secretaries, and forwarded to Members who have already signed the petition. This circular states that the funds of the Association are not in so flourishing a condition as would be conducive to a more energetic prosecution of the work. On several occasions the members of the Committee have individually made up deficiencies. The annual subscription is five shillings, and the Secretaries in this circular ask for donations from those who do not care to enrol themselves in the ranks of the Association. The Secretaries inform us that very complete lists have been sent in by the Local Honorary Secretaries, from all parts of the country, which tend to prove that a large majority of the Members desire representation on the Council of the College.

Correspondence should be addressed to Messrs. Warwick C. Steele and W. Ashton Ellis, at the Western Dispensary, Westminster, S.W.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room, Exeter Hall, Strand, London, on Wednesday, the 19th day of January next, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, December 16th, 1886.

NOTICE OF QUARTERLY MEETINGS FOR 1887. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on January 19th, April 13th, July 13th, and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, December 29th, 1886, and March 24th, June 23rd, and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,
THE VALUE OF HAMAMELIS, THE VALUE OF PURE TEREBENE.

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE, CANCER OF THE BREAST, and the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE, are now closed.

A Report on the CHOREA Inquiry has been prepared by Dr. Stephen Mackenzie; and will be published in the BRITISH MEDICAL JOURNAL as soon as the printing can be completed.

A Report on CENTENARIANS, prepared by Professor Humphry, was published with the JOURNAL of December 11th; a full Report on OLD AGE will follow.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, CANCER OF THE BREAST, and HABITS OF INTEMPERANCE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

GLOUCESTERSHIRE BRANCH.—The next ordinary meeting will be held at the Gloucester Infirmary, when Dr. Batten will give his presidential address, on Tuesday, January 18th, at 7.30 P.M.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held, by the kind invitation of Dr. Mickle, at Grove Hall, Bow, on Thursday, January 20th, at 8.30 P.M.. The chair will be taken by Cornelius Garman, Esq. Dr. Mickle will demonstrate a number of patients illustrating various forms and phases of insanity and general paralysis of the insane. Dr. C. R. Walker will show a patient suffering from locomotor ataxy, with perforating ulcer of the foot.

OXFORD AND DISTRICT BRANCH.—The next general meeting will be held on Wednesday, January 26th, 1887. Members who wish to read papers or show cases are desired to send notice of such intention to one of the honorary secretaries, on or before January 18th.—Dr. DARBISHIRE, 60 High Street, Oxford; W. L. MORGAN, Esq., 42, Broad Street, Oxford.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

THE December meeting of the Branch was held at 198, Union Street, Aberdeen, at 8 P.M., on December 22nd, the President, Dr. Urquhart, in the chair.

New Members.—After the nomination of four gentlemen for ballot at next meeting, Dr. James S. Milne (Peterhead), Dr. Arthur A. Morrison (Suez), and Dr. John D. Thomson (Marischal College), were balloted for and unanimously admitted as ordinary members of the Branch.

Replies to letters of condolence of the Branch from Mrs. Dyce Davidson and Mrs. Mackie, of Insch, were read by the President.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Terpine in the Treatment of Neuralgia.—Balzar on Scarenzio's Treatment of Syphilis.—Féré on Hysterical Paralysis following a Dream.—Pilocarpine as a Galactogogue.—General News.

DR. DUCROUX, in a paper recently read before the Société Médico-pratique, described some cases showing the good effects of terpine in neuralgia. The first was that of a woman, aged 47. Two years before, she had been attacked with neuralgia, consequent on occupying a damp house. Sulphate of quinine, and afterwards aconitine, gave temporary relief. On February 15th, 1886, she was suffering from constant neuralgia on the right side of the lower jaw, in the right cheek and temple. There was also pain in the supra-orbital notch, the mental foramen, and in the occiput. The patient complained of a constant feeling of heaviness in the head, and of cold in the right side of head. Terpine (.60 centigramme) was given in three pills between meals, during three days. On February 19th, considerable relief was obtained. The pains and the feeling of cold had disappeared, and also the heaviness of head, which had persisted for two years. The pains having returned in a few days, terpine was again administered in the same manner on February 25th. The pains ceased, then recommenced, but in a milder form, and without any heaviness of the head. Terpine was again given on March 8th. Neuralgia having again come on, doses of .80 centigramme were administered in four pills, beginning on March 16th, and being continued for three days. During the month of April, these doses were repeated at intervals. At the end of that month, the back of the head was still sensitive, but all other pains had ceased. At the beginning of May and June, terpine was again administered, the pains having reappeared. On June 15th, the patient was able to go out without extra covering on the head. Dr. Ducroux is of opinion that the patient may be again obliged to have recourse to terpine, as the neuralgia shows a tendency to recur, though in a milder form. The therapeutic effect of the terpine seems to cease after a few days. In cases of obstinate neuralgia, it might be advisable to give it for three days every week. The second case was that of a married woman, aged 35. At the age of 22 she had intermittent fever. From the age of 13 or 14, she had suffered from headache from time to time, and when she was 22 she had intermittent fever. Menstruation had ceased for six years. A week ago she was attacked with pain in the right side of the head differing from her habitual headache. This pain, which gradually increased, extended in front, around the ear, and over the temple and cheek, and behind, over the mastoid region. There was also pain in the external auditory meatus. The pains were accompanied by a humming in the ears. Terpine (.60 centigramme) was given in three pills, to be taken between meals. On April 29th the pains had disappeared, but the humming in the the ears continued; .50 centigramme of sulphate of quinine was administered during three days. This had no effect. A few days before May 17th the humming in the ears diminished, and took a different form. The sound in the ears was no longer that of humming but of running water. The patient could neither hear herself nor others speak. Terpine was again administered in the same way. The sounds in the ears diminished and completely disappeared two or three days after the last dose. Dr. Ducroux believes that the disappearance of the pains was due to the use of terpine, and that it had some effect upon the sounds in the ears. The third case was that of a man aged 23. Fifteen years before he had suffered from bronchitis, with hæmoptysis. In May, 1885, he was attacked with severe pain over the right eye, in the supra-orbital notch, and about the occiput. A blister was applied to the temple, and dressed with 1 centigramme of morphine; terpine (.60 centigramme) was given in the way already described. The first morphine dressing did not relieve the pain, but the second, applied the following evening, was more effectual. The patient had then taken three terpine pills. As the improvement continued, only eight pills were administered in the three days following the second day. The neuralgia was completely cured. Dr. Ducroux attributes this result to terpine, as the morphine application produced no effect.

Scarenzio's treatment, it may be remembered, consists in the subcutaneous injection of calomel, held in suspension in glycerine (10 centigrammes of calomel to 1 of glycerine). Several injections are given, to the amount of 40 centigrammes in all, the treatment lasting about four months. The plan is said to be very effectual, not only curing the symptoms appearing in the progress of the disease, but preventing their return. M. Balzar, wishing to try this treatment at the Lourcine Hospital, but fearing the irritating action of glycerine, and the great pain which it causes, determined to use vaseline oil as a vehicle for the calomel. Two hypodermic injections of the pure oil were first tried, which proved absolutely painless, and left behind them neither irritation nor induration. A severe case of syphilis was then chosen. The patient was a young woman, aged 19, who had been suffering from the disease for about five months, and was in the sixth month of pregnancy. Large mucous patches covered the labia majora, and the posterior portion of the anus; there were also some on the left tonsil. She had, besides, general roseola, with large maculæ, and an abundant papulo-squamous eruption on the abdomen and the lower limbs, with general enlargement of glands. The patient had been for some time under the following treatment: two Dupuytren's pills daily, with two spoonfuls of the syrup of iodide of iron; compresses, moistened with Van Swieten's fluid, diluted with distilled water, applied to the vulva during the night; cauterisations, with a 1-20th solution of nitrate of silver; gargles of chlorate of potash; and baths. All this had been absolutely without benefit. On October 4th, a first injection of 2½ centigrammes of calomel, in 50 centigrammes of vaseline oil, was given in the back. No pain was caused by the injection. On the following days, a small, soft, slightly painful swelling appeared at the seat of injection. On October 11th, another injection of 5 centigrammes of calomel was given in the lumbar region, and, in a few days, the swelling was as large as a hen's egg. At one time the formation of an abscess was feared, but, in about ten days, the indurated swelling began to subside. Meanwhile, the cutaneous affections which had hitherto proved so refractory under treatment, had rapidly improved. Already, on October 25th, the roseola, together with the patches on the vulva had disappeared; of the latter there remained but a dry, violet-coloured macula. The general state was excellent, and the pregnancy was following its normal course. On November 18th, the amelioration still continued, and the induration at the seat of injection had shrunk to two-thirds of its original size.

At a meeting of the Biological Society, M. Féré related the following interesting case. The patient was a young girl, aged 14, who for some time had grown rapidly, and whose menstruation had stopped. One night she dreamed that men were chasing her about the Place de l'Odéon, in order to kill her. She managed, with much effort, to escape, but, on waking up, felt extremely fatigued. On the following day, her legs gave way under her. The dream was repeated several nights in succession, and even continued while awake. Every morning the weakness of the legs increased. A few days later, on attempting to go up stairs, she fell, and was unable to rise; she was found to be paraplegic. In this case, M. Féré called especial attention to the fact of paralysis following the dream. In some cases, so-called psychical paralysis admits of a pathogenic interpretation different from that generally accepted since the investigations of Russell Reynolds and Charcot. It is, in fact, admitted that this kind of paralysis occurs through idea or suggestion; that is to say, the motor disturbance is only manifested after mental symptoms. This theory has even been applied to paralysis from traumatic shock. The circumstances which preceded the appearance of paralysis in this case seemed to favour the theory of paralysis from exhaus-

tion. In reality, the weakness of the limbs came on gradually under the influence of fatigue, caused by exhaustion of the motor centres, resulting from a rapid succession of volitional discharges not followed by actual movements. All dreamers are familiar with the muscular fatigue following dreams of movement. Moreover, the same patient offered another example of paralysis through fatigue, when she lost the power of phonation after an analogous set of phenomena. In a fit of excitement caused by enforced repose, the patient gave vent to a violent torrent of words, which continued for two hours, after which she fell asleep. On awaking, she had complete aphonia, due, in M. Féré's opinion, to fatigue. The aphonia was accompanied by difficulty in writing, which has rarely been observed in hysteria. Cure was effected by means of passive movements. M. Féré added that, by exciting dreams of movement in hypnotizable subjects during natural sleep, he could induce analogous paresis, accompanied by dicrotism of step similar to that in the patient, and due to a predominance in the action of the gastrocnemius, causing the toes to touch the ground before the heel. In a certain number of cases, the so-called psychical paralysis is brought about by exhaustion following prolonged cerebral fatigue, and not by the subjective representation of fatigue or of paralysis.

The remarkable effect of pilocarpine on the secretions, particularly of the skin and the salivary glands, has long been known. It remained to be seen whether this influence was not likewise exerted on the secretion of milk, since the mammary glands resemble, in certain respects, the sudoriparous glands. Some writers have incidentally mentioned the action of pilocarpine as a galactogogue; but, from a practical point of view, nothing seems to have been published on the subject. For several years M. Chéron has carefully studied the effect of pilocarpine on skin diseases, and he has discovered that the therapeutic action of the drug can be produced in smaller doses than are necessary to stimulate the activity of the salivary and sudoriparous glands. The discovery of this important fact enabled him to employ pilocarpine in subcutaneous injections, without risk to the child, in the case of nurses whose milk-secretion had ceased. The following was his method of proceeding in nine cases, which, with one exception, turned out satisfactorily. Five centigrammes of the nitrate of pilocarpine were injected as soon as the milk became scanty, whether this took place suddenly or by degrees. The injection was repeated every day. Under its influence the skin of the face and, afterwards, that of the body became hot for a few moments, but there was seldom any moisture. It is essential to success not to produce diaphoresis. If the scantiness of secretion has existed for some time, ten or twelve injections are required; on the other hand, if it has come on suddenly, two or three will suffice. The treatment had no ill effect either on the nurse or the nursling.

The Assistance Publique has established a school for children suffering from contagious diseases of the scalp. Owing to the limited number of beds provided by the hospital for children affected with diseases of the skin, the latter have hitherto been obliged to wait several weeks before they could be attended to. The contagious character of their disease prevented their admission into the municipal schools. At the day-school (*demi-pensionnat*) now established at St. Louis, as many as 100 children of both sexes may be received. They will receive instruction and food, and will be properly cared for during the day. At night, they will return to their homes. Dr. Lailler will superintend the school, and Madame Pigeon will undertake the instruction.

BERLIN.

[FROM OUR OWN CORRESPONDENT.]

"Dead Space" in certain Chemical Reactions.—A newly discovered Substance in the Urine.—Arthropathia Tabica.

THE most important discovery now spoken of in Berlin medical society is that of Professor Liebreich, who only a year ago presented us with the new basis for ointments. His latest discovery is more in the sphere of pure chemistry, but it is also interesting to physicians. Professor Liebreich observed that when reaction takes place only some time after mixing certain liquids together, it does not occur throughout the whole liquid; in some parts a space is left, in which no reaction is seen, and this he calls the "dead space." He has observed the same in several reactions—for instance, on mingling sulphuric acid, iodic acid, and starch together, or hydrate of chloral with carbonate of sodium, or chloride of gold, sodium lye and sugar, and in many other cases. The so-called "dead space" is not always the same, but varies according to the kind of vessel into which the liquids are poured. If, for instance, narrow tubes are used, the "dead space" is very small, while in capillary tubes no reaction whatever takes place. If the liquids are poured into closed vessels with rigid sides, the "dead space" cannot be seen, but if the closed vessels are of membranous structure, it may be observed. Thus, for instance, in a prepared rabbit's bladder the "dead space" is at the top and bottom, whilst the reaction takes place in the middle in the shape of the yolk of an egg. If a piece of gut is taken and divided by means of little rings into a number of small compartments, and if one of the above-mentioned liquids is poured into it, in each of the compartments the reaction is seen taking place in the middle, while at the top and bottom there is a "dead space." As the "dead space" depends upon the size of the vessel, it may be inferred that for every chemical mixture yielding a reaction, proportions can be imagined in which reaction ceases. The laws of reaction, therefore, are dependent on the space in which the effect takes place, and hence these observations have an important bearing on the organism. In testing the effect of certain medicinal agents, not only must their chemical constitution be taken into account, but the laws governing their reaction in large and small spaces respectively.

Dr. Leo's researches on sugar in urine are not less interesting, and tend to correct the commonly accepted views on the subject. Professor Scheibler, a chemist well known for his researches on sugar, has observed that the determination of the quantity of that substance contained in a liquid gives different results, according as it is done by Trommer's method or with the polariscope. As sugar now-a-days is exclusively dealt with according to the degree of polarisation, this fact is of enormous value in trade. Scheibler has isolated a substance which is more powerful in that respect than grape-sugar. Dr. Leo's researches yield analogous results, though in a different field. He has examined a great quantity of diabetic urine after three different methods, namely, Trommer's (alkaline solution of copper); by fermentation; and with the polarisation apparatus. In many cases the results agreed, while in others there was a considerable difference. He succeeded in isolating a substance corresponding in its chemical composition to grape-sugar, and also a carbo-hydrate differing considerably from grape-sugar, and turning the plane of polarisation to the left. The power of reduction of this newly-discovered substance is to that of grape-sugar as 1: 2.48. Dr. Leo found this substance in three specimens of diabetic urine, but it was absent in normal urine, although a great amount was examined for that purpose. From this, it may be concluded that the substance does not originate outside the organism, and that it is a pathological product. The theory of Dr. Jaques Meyer, of Carlsbad, that it may be connected with obesity is negatived by the fact that, of the three persons in whom this substance was found, only one was corpulent.

Much has been said lately about the occurrence of joint-disease in tabes. In all the cases hitherto reported, the joints of the extremities have been affected; recently, however, Dr. Krönig brought before the profession in Berlin examples of spinal disease occurring in tabes. He reports three cases of patients who had suffered from tabes for three years, and in whom the characteristic features of the disease were more or less distinctly present. In three cases the spine had been fractured by injuries quite inadequate to produce such a result in a healthy body; it appears fair to conclude, therefore, that the bones had been rendered unnaturally fragile by the disease. Dr. Krönig therefore suggests that measures should be taken, in all cases of tabes, to prevent such an accident. Professor Leyden and Dr. Beely expressed warm approval of this proposal. Dr. Leyden stated that he had seen a jacket put on in a case of tabes, and also in one of paralysis spastica, for the purpose of counteracting weakness of the legs. If the disease of the spinal marrow reaches high enough for the muscular system to be affected, it must be of the greatest benefit to immobilise the lower part of the trunk. Dr. Beely thinks that a jacket should be used as a means of preventing vertebral disease.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

The New Professor of Chemistry.—Number of Medical Students.—Physiological Course.—Biological Laboratories.—Request for an Annual Grant.—Combe Lectures.—External Examiners.

BY the resignation of Sir Henry E. Roscoe, Owens College has lost one of its brightest ornaments, and one of its best known and most esteemed teachers. The Council, after much consideration, elected Mr. Harold B. Dixon, of Balliol College, Oxford, to succeed Sir Henry in the chair of Chemistry. Mr. Dixon has a high reputation as a first-rate lecturer, and a good experimenter, and, in addition to his other qualifications, he has the precious one of youth. He is best known for his paper on the explosion of gases, and he is a good and effective speaker, as he proved at the meeting of the British

Association at Aberdeen, where he delivered the evening lecture to working men. We believe Mr. Dixon has been selected to give one of the evening addresses at the meeting of the British Association in September.

The number of students attending the medical school during the last year was 323, and there is an increase in the present as compared with the previous winter session. There has also been an increase in the number of candidates for medical degrees. It might be well, however, if some of the existing regulations were modified, more especially the entrance examination in arts. In the final examination, also, there is a large number of subjects which might be grouped together with advantage.

By a new arrangement adopted by Professor Stirling, a student may take up the whole of his physiological lectures in one year, instead of two years as formerly. We understand that the capacity of the physiological lecture-room is severely taxed to hold the students attending the lectures on physiology. Similar energy is displayed in other departments, and altogether excellent work is being done both by professors and students.

The large biological laboratories are now nearly completed, and they form a magnificent pile, splendidly lighted, and with ample accommodation for museums and for teaching purposes, as well as for original research. Already great preparations are being made to receive the British Association in splendid style in September next. The magnificent museum will probably be used as the reception room.

An influential deputation has asked from the Government an annual grant in aid of the funds of the University, and there is every reason why such a grant should be made, seeing that large sums of money are annually voted by Parliament for the Scottish universities and Irish and Welsh colleges.

Professor Stirling has completed his course of eight evening lectures to the students of Owens College. They embraced the subjects of foods, digestion, and respiration, and were illustrated by numerous experiments. The audience throughout was large, and a great number of students competed for the prizes which were offered by the Combe Trustees. This is the first time that the Combe Trustees have transferred their lectures to England, and we congratulate the trustees on the great success of the Owens College course.

The following external examiners were appointed by the Council of Victoria University at the last meeting of the Council:—External Examiner in Botany—W. R. M'Nab, M.D., M.R.C.P., F.L.S., Professor of Botany in the Royal College of Science of Ireland; External Examiner in Medicine—F. T. Roberts, M.D., F.R.C.P., M.R.C.S., B.Sc., Professor of Clinical Medicine in the University College Hospital, London; External Examiner in Materia Medica and Pharmacy—Matthew Hay, M.D., C.M., F.R.P.S.E., Professor of Medical Jurisprudence in Aberdeen University.

CORRESPONDENCE.

THE ERASMUS WILSON BEQUEST AND THE FUNDS OF THE COLLEGE OF SURGEONS.

SIR,—Although the Council of the College of Surgeons has not thought fit to make any communications to its Fellows and Members of the use which it proposes to make of the large sum placed at the disposal of the College by the munificence of Sir Erasmus Wilson, yet, as this matter is evidently one of great interest to the Fellows and to the commonalty of the College, at present excluded from their just voice in the management of its affairs, I would ask you to put before your readers the following statement on a matter which appears to me to be of great importance to the welfare of the whole profession, and on which the united experience and wishes of the profession should at least be heard before any decision is arrived at. The Erasmus Wilson Bequest amounts to about £220,000, which, when legacy duties are paid, and other charges liquidated, will be reduced to about £200,000, which will be the amount actually coming into the possession of the College. If this sum were invested in its entirety at 3 per cent., it would give an income of £6,000, or at 3½ per cent. of £7,000. There has long been before the Council of the College a proposition on which it has made no communication to the Fellows or Members, for expending a sum upon the extension of the present museum buildings, and for providing additional storage for books, which is much needed. The museums are already of great extent, but with the increasing needs of pathological and biological science, and with the accumulation of new matter, further space may with advantage be obtained. Nothing, however, is so dangerous as dabbling in bricks and mortar; no passion more devouring than that of piling up collections, and accumulating drawings, models, and glass bottles. To the true museum-lover, this, in one department or the other, seems often the highest object in life, and the *ne plus ultra* of scientific progress. Various kinds and divisions of museum-mania exist among museum-lovers. One lives in an indefinite extension of "pickles;" another in the multiplication of ordinary scholastic teaching specimens—typical or key collections, as they are called, for the instruction of the immature student. Some sniff at the "pickles,' despise the key collections, but would create picture-galleries of sketches and museums of models. It is, alas! too true that such models and such pictures have but a fleeting interest; for the eyes of to-morrow are not those of yesterday, and the pathological pictures of the past largely represent bygone theories, and the result of variously coloured spectacles long since disused. Within moderate bounds, however, there seems no reason why the College should not use part of its newly-acquired wealth for the extension of its museums; but it would be a great misfortune if more than a limited proportion of these means should be swallowed up in bricks and mortar, and if that which is intended for science should be expended on the architect, the builder, and the bricklayer, already more than sufficiently endowed by the huge structures which cover the earth in this great metropolis.

Every college and every institution in this country devoted to the progress of science is suffering from the want of income with which to aid the prosecution of research. There is no school for higher research in the metropolis. There are no laboratories or places of study and of work comparable with the magnificent laboratories of research and of higher study with which most of even the minor German towns are endowed, or such as the Collége de France in Paris. In these laboratories, to the shame of England may always be seen English, American, and Canadian students, driven there because London, with its great wealth in money and its vast stores of materials, offers them no shelter, and welcomes them with no scientific hospitality. At such schools and laboratories, the advanced student enters without fee, or at a fee merely nominal; the superintending professor supervises the work of the higher students, with the help of assistants, while he continues his own researches. The demonstrator is always at the service of the researcher or higher student, both for example and precept. Even Cambridge has put London to shame, recent as is its medical growth. We have nothing in London to compare with the facilities for research afforded under the auspices of Professor Michael Foster and the able body of researchers who are gathered about him. At present, the College of Surgeons is altogether misnamed. It is in no sense a College—it is merely an examining corporation. It teaches nothing; it affords no facilities for higher study or research, in the most essential departments of biological study; it has no physiological laboratory; it has no physical laboratory; it has no histological laboratory; and the third or fourth year student, or young practitioner who desires to continue his studies, or to make researches, is driven to continental cities. The College of Surgeons, by the munificence of Sir Erasmus Wilson, is now in a position to cease to be a mere mediæval corporation, and to become a College in very truth, such as its name implies, and such as it aspires to be, and ought to be. It is, however, very doubtful how far this result will be attained, unless the proceedings of the Council are conducted with more openness than at present, and unless the whole matter is discussed freely and publicly from the point of view of the needs of the rising generation of students, by which I mean higher students and practitioners. The College possesses important contiguous house-property in Lincoln's Inn Fields, namely, the houses Nos. 37, 38, 43, and 44. It has also an open space at the back, and a house in Portugal Street. Nos. 37, 38, and 43 bring in a

rental of £1,520 per annum; and No. 44, which was purchased last year for £12,816, is let as chambers for about £500 a year. The College owns, also, a house occupied at present by the Conservator. Recently, a "Building Committee" (ominous name) has been appointed, on the strength of the windfall of the Wilson bequest.

The more modest plans of the past, prepared in anticipation of the bequest, for utilising the open space at the back, and the house in Portugal Street, have been practically set aside for the new and far more ambitious expenditure in bricks and mortar. I have reason to believe, although the full plans have not yet been brought before the Council, that the new buildings proposed may be found to swallow up nearly all the house property now possessed by the College, and with this their rents. The total rent, according to this plan, lost by the extended building will be about £2,000 a year. The cost of the new buildings may be estimated to be not less than £80,000, probably with fittings and furnishing about £5,000 more. Subtracting this from the bequest, there would remain of it only about £115,000, which, if invested at 3 per cent., would yield an income of about £3,400. Calculating that £2,000 a year would be lost in income by pulling down the houses which at present bring in that amount of rent, the net addition to the revenue of the College from the Wilson bequest would be reduced to £1,400 per annum. Moreover, the greatly extended museum and library will cost an increased sum for rates, taxes, and assurance, and for a staff to look after them.

Now the new Examination Hall on the Embankment has already, within the last year, reduced the College funds by about £15,000, which is half of the estimate for building and the expenses of the ceremony of laying the foundation-stone. The ground-rent of that building will cost the College £1,100 per annum, so that the building of this Conjoint Examination Hall will reduce the income of the College by £1,600 per annum. Here again must also be added the cost of maintenance, salaries, rates, taxes and assurance for the Hall. The amount of expenditure upon the examinations will therefore be greater than formerly. By a re-arrangement of fees, the reduction which has taken place in the fees for the diploma of the College (now reduced from twenty guineas to fifteen guineas for those who pass the joint examination) will be covered; higher fees being charged for the earlier examinations, for which more candidates present themselves. The income of the College, after the proposed buildings have been erected, would not be materially greater than at present, owing to the increased expenses. Under these circumstances, if the proposed extension of the Museum, on the scale to which I have above referred, should include a pathological and a physiological laboratory and rooms for research, together with the endowment of a chair for the superintendence of each laboratory, the money at the disposal of the College would not be materially greater than it has previously had at its command. These laboratories, without professor superintendents of a high order, who must necessarily be paid a fair salary in each department, would be of comparatively little use. There would be no funds for the endowment of the cognate sciences of biology and anthropology, in which the museum is very rich, and for which the College has in times past spent considerable sums in accumulating the materials to be found in the existing museums.

A large and fully adequate new museum could be built and fitted as contemplated in Mr. Hutchinson's scheme for about £10,000 at most, on the property facing Portugal Street, without touching the valuable property in Lincoln's Inn Fields, which brings in so important an income. More reading accommodation is not required for the Library. There are seldom more than twenty readers to be found present at one time. Additional space might be provided in a much less costly way for the storage of books by building over the present College premises, or by converting the Conservator's house into a library, as there is no necessity for the Conservator to live at the College any more than for the Secretary, who was formerly thus provided for. There is no director's house in connection with the new Natural History Museum at South Kensington. In this way, at an expenditure of not more than one-tenth of the bequest, and while retaining the valuable house property in Lincoln's Inn Fields, the Council might have at its disposal a large sum for endowing laboratories of research, while, at the same time, the increased requirements of the Museum and Library would be amply satisfied.

I earnestly call the attention of the Fellows generally,—and, I venture to add, of the Members—to this most important question. It is greatly to be desired that it should be approached with deliberation, and that the important interests involved should not be dealt with hurriedly or inconsiderately. Why should not a report be addressed, to the Fellows at least, on this question? At any rate, I think it right in so important a matter publicly to protest in anticipation against any superfluous expenditure on buildings, which will be put to little use, and against the starving of that which is much more important, the vital work of research, and the endowment of the profession of medicine in London with those opportunities for higher laboratory work which every other capital possesses, and of which the means have, by the munificence of Sir Erasmus Wilson, now been placed within reach of the Fellows and Members of the College of Surgeons of England.—I am, Sir, your faithful servant,

ONE WHO KNOWS.

*** We are not quite sure that our correspondent is altogether exact in his information. We believe that he has been misled by some exaggerated estimate of the expenditure proposed. We should deprecate, and we believe the whole profession would deprecate, any such enormous outlay in bricks and mortar, or any such sacrifice of available income. He is, however, heartily to be thanked for the information which he gives, and for the views which he expresses, and we trust that full and accurate information will be officially forthcoming before any final decision on this important matter is reached.

THE CAMBRIDGE CHOLERA FUNGUS.

SIR,—In your issue of December 25th appears a letter from Dr. Klein, in which that gentleman attempts to show that the micro-organisms found by Dr. Graham Brown, Mr. Sherrington and myself in the substance of the mucous membrane of the small intestine in cases of cholera Asiatica are nothing more than "common mould (probably aspergillus)," which has grown on and into the tissue during the process of hardening. We were, and are, however, perfectly well acquainted with the fact that imperfectly preserved tissues are liable to be invaded by various forms of fungi, and took precautions which we believe to be ample to prevent such contamination of our material. Moreover, the presence of the micro-organisms in certain tissues, their absence in others, the fact that their presence is accompanied by anatomical changes in the part, which could not have taken place during the hardening, and most of all, the characters of the micro-organisms themselves, render such a hypothesis as that brought forward by Dr. Klein absolutely unacceptable.

It is unnecessary for me to answer all the arguments advanced by Dr. Klein in support of his views on this subject. They prove nothing more than that fungi grow in animal tissues which are not properly preserved—a fact which no one will doubt. That the micro-organisms found by us are of this nature, is a matter which neither Dr. Klein nor any other person who is unacquainted with the facts is in a position to decide. Since only a short preliminary account of the work done by Dr. Graham Brown, Mr. Sherrington and myself, on the pathology of cholera, has as yet been published, Dr. Klein has not before him the facts on which alone a decision of any value is possible.—I am, Sir, your obedient servant, CHARLES S. ROY.

Pathological Laboratory, New Museums, Cambridge.
December 30th, 1886.

PASTEUR'S PROPHYLACTIC.

SIR,—Without intending to reopen or to prolong a discussion on Pasteur's rabies-inoculations—a discussion which, in view of the kaleidoscopic changes in opinion and method which that distinguished *savant* is permitted to indulge in, would be purposeless—allow me to protest against the unwarrantable tone assumed by Dr. Whiteside Hime in his communication of December 11th. He speaks of my familiarity with Pasteur's method as "strangely illustrated" by my request to be informed of the symptoms of rabies in the rabbit. My question was seriously put, it was respectfully urged, and it did not

imply so profound a degree of ignorance of the ordinary accepted scientific knowledge of the day as Dr. Hime seems to imply. If I am to infer the extent of his familiarity with rabbit-rabies from the symptoms which he relates in his paper, I am justified in assuming that he is as unable as I am to state what they are, though scarcely possessed of the power of discerning one's own ignorance, that led me to candidly admit mine, and to ask for information. I would simply point out the fact that what he calls a characteristic chart of the temperature of a rabbit dying of "Pasteurian rabies," does not deserve the name, and that he has not mentioned a single characteristic sign of rabbit-rabies. Until he does so, all reflections on the strangeness of my requests will, I trust, be regarded as premature by impartial judges.

That I had other good grounds for my query than the failure of Pasteur to furnish reliable and definite statements about the features of rabbit-rabies, will be evident from the following expression used by Dr. Hermann M. Biggs, of the Carnegie Laboratory. He stated that "there are no characteristic signs of rabies in the rabbit, the symptoms being only those of a general paralysis;" and he regarded "any experiments on rabbits that were not controlled by similar experiments on dogs to test the nature of the virus as unreliable." These assertions by a recognised pathologist and experimenter, one who expressed himself as on the whole "favourably impressed with the principles and methods of Pasteur's preventive inoculation," and who had not only witnessed Pasteur's experiments, but enjoyed special opportunities while in Paris of studying them, justified my asking those who pretended to know, what these signs were. I regret that Dr. Hime is as unable, as Mr. Victor Horsley appears to be unwilling, to give the desired information.

Those who in this country are criticising Pasteur's method do not claim that familiarity with it which Dr. Hime assumes them to do. They simply claim to be logicians, and to have the right to direct attention to sources of error, when they suppose they have discovered any. They are aware that rabies is a rare disease, and that it is simply preposterous for Pasteur to claim having saved more lives in six months than were previously threatened by rabies in any ten years. They are also aware that foreign bodies are found in the stomachs of many dogs who are not, and are not destined to become, rabid, notwithstanding Mr. Victor Horsley's regarding their presence as an important feature. It was the demonstration of this fact in this city—of which every laboratory tyro is aware—that led to the discontinuance of the New York Pasteur Institute, one of whose chief defenders attempted to inaugurate a hydrophobia scare, on the strength of the discovery of foreign bodies in a vagrant cur. I trust that, in the future, the discussion of this subject may be continued, without resorting to insinuations of a personal character. These do not aid the searcher after truth, and merely reflect on him who makes them.—Very respectfully, E. C. SPITZKA, M.D.

New York, December 24th, 1886.

THE BRITISH MEDICAL TEMPERANCE ASSOCIATION.

SIR,—Your correspondent, Mr. Horton, having entered a protest against the title of the British Medical Temperance Association, you will doubtless allow me to attempt to justify it, especially as he has expressed the views of not a few others who do not understand our position. I am quite aware that "temperance" is far wider in its meaning than total abstinence. In the revised version of the New Testament, the word self-control takes the place of the word temperance, and exactly expresses its fuller meaning. Temperance is the control (both guidance and restraint) of every part of the complex being called man; it means control of the thoughts, feelings (or emotions or passions), and muscular system. It is a function of the will, and is exercised in response to the decisions of the judgment. All education has for one of its ends, and not the least of them, the improvement of this faculty, and as manhood comes on we expect to see this power of self-control—this temperance—exercising its sway more and more perfectly over successively higher brain-centres.

Now we call ourselves a "Temperance" Association because our object is to confirm and increase self-control (namely, temperance) by total abstinence from certain liquors containing alcohol, whose physiological action is to diminish self-control, and finally to abolish it.

If Mr. Horton will think the matter over, he will find that the action of alcohol on the nervous system from first to last, as soon as ever any effect is produced at all, is to take away self-control in precisely the reverse order to that in which it has been acquired. A glass of wine is said, in popular language, to stimulate thought; what it does is to allow the thoughts to flow more automatically, and so, as a rule, more freely (just as, in moments of dreaming, imagination is often marvellously brilliant). That the thought-centre is less under control is evident from the fact that any exercise demanding close attention and concentration of thought cannot be so well performed under the influence of even a little alcohol. Hence arises the fact that men say and do, after taking a glass of wine or beer, that which they would not have said or done without it. Later on, the emotional centres find themselves more free to act in response to appropriate stimuli, the result being good or bad according to circumstances (namely, a charity dinner, a quarrel, a music-hall, etc.) Later on (though all these circles overlap, and men's mental and moral natures vary considerably), the control of the muscles begins to be weakened, and then is lost; while, as a final step, the automatic stimulus to the involuntary muscles is paralysed, and death closes the scene.

Mr. Horton refers to common sense; well, common sense is a variable thing, but mine seems to teach me that, if I want to develop self-control, and maintain it at its highest possible elevation, I must advise total abstinence from everything which tends to weaken it by never so little.

Mr. Horton refers to Scripture. I will not enter into that question further than to ask him to note that St. Paul says: "Those who strive in the games are temperate in all things." Now, as we know that it was the custom of such persons to abstain from wine, we have direct scripture testimony that true temperance is not only compatible with total abstinence, but that the latter stands to the former as one means to that end.

I hope that Mr. Horton will see that he begs the question when he contrasts total abstinence from alcohol with "the moderate use of all the good things of the earth." The point is, Are intoxicating liquors "good things" in so-called moderation? That some of them (or even all, by acquired taste) are pleasant to the palate is no evidence of their "goodness." Chloroform is sweet, and a taste for it just as easily acquired; yet I venture to suppose that Mr. Horton is a total abstainer from chloroform (that is, from its regular habitual use, or consumption as a luxury, which alone our Association requires). Any other narcotic may become just as pleasant and just as much a felt assistance and necessity, if it be regularly taken. Such habits medical men emphatically condemn and warn against; the British Medical Temperance Association includes alcohol in its list of prescribed narcotics, and puts it first because it is the most commonly employed, and in this age and nation the cause of untold vice, crime, and misery, a thousand times more than all the other narcotics put together. I fail to see how this can be foolish or wanting in common sense. The desire for such liquors is artificial, the result of custom, example, sometimes, perhaps, of heredity, oftener of prescription, and that, I regret to believe, medical prescription. Its progress is insidious and generally irresistible when so far advanced as to be notorious. We believe in stopping before we begin, or in leaving off at the first opportunity, which is now; and we regard the medical profession as peculiarly bound to warn men from the habitual use of alcohol, the more so if they employ it as a drug for special purposes. It is a material cause of moral evil, and as it is by its physiological action on nervous tissue that this proceeds, the doctor of the body should be the first to raise his voice, and thus co-operate with the doctors of the soul to elevate the race and raise the moral standard of the nation.—Yours very truly, J. JAMES RIDGE, Hon. Sec. B.M.T.A.

Carlton House, Enfield.

UNQUALIFIED ASSISTANTS.

SIR,—The letter you have published in your issue of January 1st, from Mr. Albert Napper, is the utterance of experience and wisdom, and ought to be heeded. I most thoroughly agree with all Mr. Napper says in substance, sense and learning.—I am, etc.,

WM. ELLIOTT PORTER, M.R.C.S., L.S.A.

Lindfield, January 1st, 1887.

MEDICAL DEFENCE.

SIR,—In order to prevent possible misunderstanding, I shall feel obliged if you will kindly permit me to inform your readers that the "Medical Defence Union," whose circulars are being sent to members of the profession, has no connection whatever with the "Medical Defence Association," of which Dr. B. W. Richardson, F.R.S., is President.—Yours faithfully, GEORGE BROWN,

Honorary Secretary Medical Defence Association.

7, King William Street, E.C., January 3rd, 1887.

ARTESIAN WELLS IN THE CITY.—The City Commissioners of Sewers have requested the Finance and Improvement Committee to "report forthwith" on the power of the Commission to sink Artesian wells in the City, with a view of being independent of the water-companies.

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

SURGEON JOHN MOORE has been appointed to the *Goshawk*.

Deputy Inspector-General JOHN BREAKEY, M.D., has been promoted to be Inspector-General. His previous commissions are dated: Surgeon, April 12th, 1854; Staff-Surgeon, July 18th, 1863; Fleet-Surgeon, May 24th, 1876; and Deputy Inspector-General, October 27th, 1882. Dr. Breakey was Assistant-Surgeon of the *Penelope* during the Russian war in the Baltic in 1854, and was at the bombardment of Bomarsund (medal). He was also engaged in the China war in 1857-58 (medal).

Mr. A. B. KEARNEY has been appointed Surgeon and Agent at Roundstone.

MEDICAL STAFF.

Surgeon-Major W. F. BURNETT, recently arrived from England, is appointed to do duty in the Presidency Circle, Bombay command.

Surgeon W. T. SWAN, serving in the Bengal command, has leave of absence for six months on medical certificate.

Surgeon-Major C. H. SWAYNE, doing duty at the station hospital, Belgaum, and Surgeon H. H. BROWN, M.B., doing duty at the station hospital, Bangalore, both being in the Madras command, are temporarily ordered to do duty in the Burmah Division.

The services of Surgeon A. M. KAVANAGH, now at Woolwich, and Surgeon R. E. R. MORSE, at Netley, have been placed at the disposal of the Egyptian Government for employment with the Khedive's troops. The former will take up army duties at Abbasiyeh, and the latter will inspect the recruits who are being sought for with extra activity, consequent upon the reduction of the British garrison.

The name of Surgeon J. F. WILLIAMSON, serving in Bengal, has been expunged from the order detailing officers of the Medical Staff to proceed to England.

Surgeon O'CONNOR D'ARCY, M.D., died at Northampton on December 29th. He entered the army as an Assistant-Surgeon October 2nd, 1846, became Surgeon January 12th, 1855, and retired on half-pay March 13th, 1866. Dr. D'Arcy served in the Crimean war, and had the medal and clasp for Sebastopol and the Turkish medal.

Deputy Surgeon-General H. T. READE, V.C., has been gazetted to the vacancy caused by the retirement of Sir Anthony Home. His previous commissions bear date: Assistant-Surgeon, November 8th, 1850; Surgeon, November 3rd, 1857; Surgeon-Major, September 7th, 1871; Brigade-Surgeon, November 27th, 1879; and Deputy Surgeon-General, March 27th, 1880. Surgeon-General Reade served in medical charge of the 61st Regiment at the siege of Delhi, from July 1st, 1857, to the final capture of the city on September 20th; he was present at the repulse of the sorties of July 4th, 9th, 18th, and 23rd; accompanied the regiment at the assault of the city on September 14th, and subsequently, with a small party of the 61st, repulsed an attack of about 300 Sepoys on some wounded men, whose lives were thereby saved; on September 16th, he was one of the first up the breach at the storming of the magazine, and, with a sergeant, spiked a gun; mentioned in despatch, and recommended for promotion for "unwearied exertions and gallant conduct in the field" during the siege and assault of Delhi (medal with clasp, and Victoria Cross. He was awarded the Victoria Cross for the following services: "During the siege of Delhi, on September 14th, 1857, while Surgeon Reade was attending to the wounded at the end of one of the streets of the city, a party of rebels advanced from the direction of the Bank, and, having established themselves in the houses in the street, commenced firing from the roofs. The wounded were thus in very great danger, and would have fallen into the hands of the enemy, had not Surgeon Reade drawn his sword, and, calling upon the few soldiers who were near to follow, succeeded, under a very heavy fire, in dislodging the rebels from their position. Surgeon Reade's party consisted of about ten in all, of whom two were killed, and five or six wounded. Surgeon Reade also accompanied the regiment at the assault of Delhi, and, on the morning of September 10th, 1857, was one of the first up at the breach in the magazine, which was stormed by the 61st Regiment and Belooch Battalion, upon which occasion he, with a sergeant of the 61st Regiment, spiked one of the enemy's guns."

Brigade-Surgeon JAMES LANDALE, M.D., has been promoted to be Deputy Surgeon-General, *vice* Reade. He became Assistant-Surgeon, September 15th, 1857; Surgeon, January 10th, 1872; Surgeon-Major, March 1st, 1873; and Brigade-Surgeon, June 15th, 1882. During the Indian mutiny in 1858-59, he had medical charge of the head-quarters of the 92nd Foot, and was at the actions of Rahutghur, Mongrowlee, Sindwaho, Kurai, and Baroda (medal).

Surgeon-Major A. F. PRESTON, M.B., is promoted to be Brigade-Surgeon, *vice* Landale. He entered the service as Assistant-Surgeon, September 30th, 1863; became Surgeon, March 1st, 1873, and Surgeon-Major, April 28th, 1876. Brigade-Surgeon Preston served in medical charge of the 66th Regiment in the Afghan war in 1880, and was present at the affair at Girishk, in the engagement at Maiwand (dangerously wounded), and throughout the defence of Candahar (mentioned in despatches, promoted Surgeon-Major with relative rank of Lieutenant-Colonel, and medal).

Surgeon HERBERT COTTON, who went on half-pay in 1884, has now been granted retired pay. He ranked as Surgeon from February 4th, 1877. He was in the Afghan war in 1878-80, was in the action at Charasiah on October 6th, 1879; was present in Cabul during its investment in December, 1879; in the march to Candahar, under Sir Frederick Roberts, and at the battle on September 1st medal with three clasps, and bronze star).

THE INDIAN MEDICAL SERVICE.

SURGEON-MAJOR W. F. MURRAY, M.B., Bengal Establishment, is appointed Medical Officer of the Lawrence Military Asylum at Sunawur, *vice* Surgeon-Major G. P. Mackenzie, M.B., whose tenure of service in that appointment has expired.

Brigade-Surgeon D. W. TRIMNELL, Madras Establishment, Civil Surgeon at Raepore, is appointed to the medical charge of the 24th Native Infantry, during the absence of Surgeon-Major T. Mayne.

Surgeon J. A. BURTON, Madras Establishment, doing duty in the Bangalore Division and Ceded District, is directed to report himself to the Deputy Surgeon-General of Her Majesty's Forces, Eastern District, for general duty, on his arrival with the 12th Native Infantry at Madras.

Brigade-Surgeon H. E. BUSTEED, M.D., Bengal Establishment, late Assay Master of the Calcutta Mint, and who recently retired from the service, has been nominated a Companion of the Order of the Indian Empire.

The services of T. R. MULRONEY, M.D., and D. St. J. D GRANT, both of the Bengal Establishment, are placed permanently at the disposal of the Government of the Punjab.

The services of Surgeon-Major K. P. GUPTA, M.B., Bengal Establishment, are replaced at the disposal of the Government of Bengal, from the date on which he is relieved of his present appointment of Medical Officer in charge of the left wing of the 8th Native Infantry at Buxar.

Surgeon-Major H. G. HALL, Madras Establishment, doing duty in the Eastern District, is appointed to the officiating medical charge of the 13th Native Infantry.

The services of Surgeon-Major R. T. WRIGHT, M.D., Bengal Establishment, are temporarily placed at the disposal of the Government of the North-West Provinces and Oude.

Surgeon J. W. EVANS, Madras Establishment, who has returned from service in Burmah, will resume charge of the 4th Pioneers.

Surgeon-Major S. H. BROWNE, Bengal Establishment, is appointed joint medical officer at Simla.

Surgeon W. W. WEBB is appointed medical officer of the Meywar Bheel Corps, but will continue to officiate as Residency Surgeon in Meywar.

Surgeon-Major F. R. SWAYNE, M.B., Bengal Establishment, civil surgeon at Lohardugga, is directed to take charge of the duties of the Deputy Sanitary Commissioner of the Ranchee Circle, during the absence on deputation of Surgeon L. A. Waddell, M.B.

Surgeon C. HENDERSON, Madras Establishment, civil surgeon of Hoshungabad, is appointed to officiate as Superintendent of the Central Gaol at Nagpore.

The under-mentioned officers of the Bengal Establishment have received leave of absence for the periods specified, all on medical certificates: Surgeon-Major G. MASSY, for ninety-one days; Surgeon-Major J. W. JOHNSTON, M.D., for six months; Surgeon-Major T. MOLONEY, M.D., for three months; Surgeon S. LITTLE, M.D., for one year; Brigade-Surgeon E. BONAVIA, M.D., for one year.

Surgeon-Major P. S. TURNBULL, M.D., Bombay Establishment, has been permitted to return to duty.

The following appointments have been made in the Bengal Establishment: Surgeon-Major J. E. C. FERRIS, 1st Bengal Cavalry, to be Civil Surgeon of Mandalay; Surgeon-Major F. A. SMYTH, 27th Punjab Infantry, to the permanent medical charge of the 1st Bengal Cavalry, *vice* Surgeon-Major Ferris; and Surgeon J. C. SMITH, 3rd Gurkhas, to the permanent medical charge of the 27th Punjab Infantry, *vice* Surgeon-Major Smyth.

MEDICO-LEGAL AND MEDICO-ETHICAL.

THE STANDARD STRENGTH OF PHARMACEUTICAL PREPARATIONS.—PROSECUTIONS UNDER THE SALE OF FOOD AND DRUGS ACT.

Two cases of prosecution under the Sale of Food and Drugs Act were disposed of on December 22nd, 1886, by the Sheffield stipendiary magistrate. They were both of the greatest possible interest to all medical practitioners. In the first case, Mr. George Bywater, registered chemist and druggist, was summoned, at the instance of the Sheffield Health Committee, for selling tincture of opium which was not of the nature, substance, and quality of the article demanded. The borough analyst, Mr. A. W. Allen, certified that "the proportion of opium in the sample was less than one-third of that contained in the tincture of opium of the *British Pharmacopœia*, while the proportion of alcohol was somewhat more than one-half the proper quantity." The facts were admitted by the defendant, who, according to the report in the *Sheffield Daily Telegraph*, stated that he purchased and sold the tincture as of *British Pharmacopœia* quality. Dr. White, Mr. Allen, and Mr. G. E. Newsholme, President of the Sheffield Pharmaceutical Society, all gave evidence to the effect that only one tincture of opium was recognised by pharmacists or the public, and that an article sold as tincture of opium ought to be the tincture of the *British Pharmacopœia*. The magistrate was of opinion that, "if a preparation contained any opium, and any alcohol whatever, it could legally be sold as tincture of opium." The case was consequently dismissed. This decision seems opposed to all commonsense principles, and there can be little doubt that it is bad in law. In the Sale of Food and Drugs Act, it is true, the *British Pharmacopœia* is not recognised or even mentioned as a standard for the purity and strength of drugs and their preparations. The 7th Section, however, states that "no person shall sell any..... compounded drug which is not composed of ingredients in accordance with the demand of the purchaser." The report we have received does not state whether Dr. Sinclair White, the medical officer of health, in purchasing the tincture of opium, asked for the *Pharmacopœia*, preparation or not. The inference to be drawn from the report is that he did, since the defendant admitted selling the tincture as of *British Pharmacopœia* quality. If he did so ask, we cannot see how, under the 7th Section of the Sale of Food and Drugs Act, quoted above, the defendant could legally escape conviction. However this may be, there can be little doubt that defendant becomes liable under the Medical Act (1862) 25 and 26 Vict., cap. 91. Referring to pharmacopœias previously in existence, it enacts that—"The *British Pharmacopœia*, when published, shall for all purposes be deemed to be substituted throughout Great Britain and Ireland for the several above mentioned pharmacopœias, and any Act of Parliament, Order in Council, or custom relating to any of such last-mentioned pharmacopœias shall

be deemed, after the publication of the *British Pharmacopœia*, to refer to such pharmacopœia," and provides that notice in the *London*, *Edinburgh*, and *Dublin Gazettes* to the effect that the *British Pharmacopœia* has been published shall be deemed sufficient evidence of its publication for the purposes of the Act. There is an Order in Council, dated February 3rd, 1851, requiring "all and singular apothecaries and others, whose business it is to compound medicines, or distil oils or waters, or make other extracts, that they and every of them, immediately after the said *Pharmacopœia Collegii Regalis Medicorum Londinensis* shall be printed and published, do not compound or make any medicine or medicinal receipt or prescription, or distil any oil or waters, or make other extracts that are or shall be in the said *Pharmacopœia Collegii Regalis Medicorum Londinensis* mentioned or named, in any other manner or form than is or shall be directed, prescribed, and set down by the said book, and according to the weights and measures that are or shall be therein limited, except it shall be by the special direction or prescription of some learned physician in that behalf." The clause in the Medical Act, 1862, above quoted, continues this regulation in force, but applied to the *British Pharmacopœia*, which replaced that of the Royal College of Physicians.

But there is another Act under which the offender might be proceeded against. The 15th section of the Pharmacy Act, 1868, declares that "that any person.....who shall compound any medicines of the *British Pharmacopœia*, except according to the formularies of the said *Pharmacopœia*, shall for every such offence be liable to pay a penalty or sum of five pounds," etc.

We understand that the Sheffield Health Committee intend to carry the matter to a higher court. In doing this, they will have our fullest sympathy. Turning from the dry legal aspects of the case, it appears monstrous that, in spite of all recent legislation, it may be possible for a chemist and druggist to sell a preparation of any strength or dilution he may choose under a pharmacopœial name. It appears to us that there is legally no difference between asking for tincture of opium over the counter, and writing *tinct. opii* in a prescription. If such were the case, and in the extremely improbable event of the Sheffield stipendiary's decision being upheld by the higher courts, there would be no legal safeguard to prescribers to guarantee that their patients obtain what is ordered; and, in the interest of the public, an amendment of the Sale of Food and Drugs Act would be urgently needed, rendering the *British Pharmacopœia* the legal standard for drugs and their preparations for the purposes of that Act.

In the report of the case, the defendant states that he purchased the tincture of opium as of *Pharmacopœia* quality; it would be useful to ascertain the name of the firm which sold this so-called tincture of opium to the defendant. We must also express our surprise that, in these days, any duly registered chemist and druggist should not make his own tincture of opium from opium which has been duly assayed by himself, or purchased with a warranty as to the percentage of morphine.

In the second case, Mr. Joseph Sanderson, shopkeeper, but not registered as a chemist and druggist, was summoned under the same Act for selling paregoric elixir, which, according to the certificate of the borough analyst, was "wholly destitute of opium, which was the most important ingredient of paregoric elixir." Mr. Allen, Dr. White, and Mr. Newsholme again gave evidence in support of the prosecution, and adduced various authorities to show that opium was an essential ingredient of paregoric. Mr. Allen stated that the existence of paregoric without opium was as impossible as that of whiskey without alcohol. If the preparation had no opium in it, it had no right to be called, or sold as, paregoric. For the defence, it was shown that the bottle out of which the inspector was served was labelled "paregoric elixir, guaranteed free from opium"; but the attention of the purchaser was not called to this label until after the purchase was completed.

The magistrate said that the name "paregoric" failed to give him any definite impression, any more than "soothing syrup." Mr. Sayer, the deputy town clerk, pointed out that for all the defence amounted to they might simply sell coloured water and call it paregoric. The magistrate said he did not see that the law prevented it, and dismissed the case.

As to this case, although we condemn the practice of selling "paregoric without opium," in the strongest terms, we do not see how the magistrate could have arrived at any other decision, unless, indeed, the inspector asked for "paregoric containing opium." It is perfectly true that before the passing of the Pharmacy Act of 1868 "paregoric without opium" was never thought of. It was then introduced so that shopkeepers who were not registered as chemists and druggists, and therefore not allowed to sell preparations of opium, might evade the provisions of the Act, and foist a spurious preparation on the public. It is also true, as the witnesses for the prosecution stated, that various authorities do show that opium is an essential ingredient of paregoric.

We of course agree with the statements of these authorities, but, although they are entitled to the greatest respect, they have no official force. The term "paregoric elixir" does not occur in the *Pharmacopœia*, and, until this is placed as a synonym under compound tincture of camphor, there is little probability that any prosecution under a penal Act, such as those quoted, would be successful.

MIDWIFERY FEES IN SPECIAL CASES.

A MEMBER asks for an opinion on the following case. He engaged to attend the wife of a city clerk for a fee of £2 2s., and she was well and safely delivered of twins. Some hours after, he was summoned, and found her in convulsions, due to albuminuria, which clearly commenced in her first pregnancy. The fits were frequent, coma, and œdema of the lungs supervened, but she survived, and the return to consciousness was signalised by mania, and that not of the usual good natured form, but violent. However, she made an early and good recovery, and, on the ninth day, insisted on paying "A Member" his fee and dismissing him. He made no protest in her presence, but to her husband he explained matters, and found that he considered all "A Member's" services to be covered by the fee. Our correspondent was up two entire nights, and visited her most frequently during the first, second, third, and fourth days, and about thrice or twice a day up to the ninth.

He puts the following questions: 1. What legally are the services to be covered by the midwifery fee? 2. What is the usual number of complimentary visits paid in an ordinary case? 3. When do extraordinary services begin? 4. Would not five guineas be a fair charge to make in addition to the two guineas already paid? I may add I only accepted the fee from the woman to avoid exciting her.

*** Our correspondent will find an answer to his several questions embodied in the following note extracted from the last edition (at present out of print) of the *Medico-Chirurgical Tariffs*, under the head of "Midwifery," page 8, and which we commend for his consideration and guidance. "The obstetric tariff necessarily admits of considerable latitude in regard to the fee, consequent upon the oft prolonged and harassing attendance in cases of difficult labour, and the varying pecuniary position of the several classes of society. The fee, moreover, from long established custom, is generally understood to include a visit or two during the week after delivery, if within the prescribed distance of an ordinary visit; but for any indisposition in the mother or child subsequent to the seventh day, or when any serious ailment occurs to either within that period, a charge should be made for each visit and detention as in ordinary cases of disease." The proposed fee of five guineas for the special attendance in question, in addition to the obstetric fee received, would, in our opinion, be a reasonable one.

YOUNG PRACTITIONERS AND OLD.

L.R.C.P.ED. writes:—A. is a retired clergyman, with a large family, living in a small country village, who has always had B. for his medical attendant, who lives in a town three miles distant. C. is a younger practitioner who has lately commenced practice in the village, having the union and other appointments, who, by hard work, attention to patients, etc., has earned the public praise of A. on several occasions, and at last was called in to see him professionally, and treated him successfully. C., when next he met B., with whom he has been very friendly, thinks it only right to inform him that he has been called in to attend on A. Some weeks afterwards, C. hears from outsiders that some of A.'s family are ill, and that B. is in constant attendance. B. has often met C. since, but has not mentioned the fact.

While recognising the right that A. has to call in a different medical man to each member of his family if he chooses, I would ask, 1. Is A.'s conduct likely to promote the friendship which has hitherto existed between B. and C.? 2. Ought C., in the circumstances, to go again and attend on A. if called to do so? and 3. Whether B. or C. is acting most in accordance with professional etiquette?

*** To limit our reply strictly to the three several questions submitted by "L.R.C.P." would be to convey an erroneous view of the true ethical points involved. Our correspondent will do well to bear in mind the admitted fact that "B." has always been the medical attendant of "A." and his family, and that "C.'s" attendance upon "A." was, *de facto*, a casual one, so to speak. In communicating the fact, therefore, to "B.," he ("C.") acted in simple accord with the ethics of professional life; and, further, that when "B." renewed his attendance on members of the family, it was simply as the old trusted family doctor, from whom their confidence had not been withdrawn; consequently, he was not ethically called upon to notify the circumstance to "C.," who had never professionally attended them. To decline, therefore, again to attend "'A.' if called upon to do so," would, in our opinion, be an inexcusable blunder, as would also be a disruption of the "very friendly" feeling hitherto existing between "B." and "C." through the latter's mistaken view of his true professional position in the case. *Verbum sap.*

PROVIDENT DISPENSARIES AND THE LOWER MIDDLE CLASSES.

M.B. asks for information as to the charges that ought to be made to patients above the class of working men who wish to join a provident medical dispensary for themselves and families. The class would include £12 householders, clerks in offices, etc. "M.B." adds: I enclose a dispensary card, and repeat that my object is to extend the provident system to a higher class of patients, such patients to whom, with families of six or eight children, a doctor's bill of from £5 to £12 means hard pinching to get it paid; or, more commonly, peace of mind and self-respect interfered with by the doctor being left unpaid.

*** The particular information sought by our correspondent is not within our knowledge. Should the publication of his note not elicit replies supplying hints and suggestions for his guidance, we would suggest for his consideration the advisability of strictly limiting admission to the proposed provident dispensary for clerks, skilled artizans, and others of a like class, to persons whose wages, salary, or income do not exceed thirty-five shillings to forty shillings a week, or he will, we apprehend, find it prejudicial to his own interest and that of his brother-practitioners also. We note in the dispensary card enclosed with his letter that admission therein is limited to persons whose earnings do not exceed twenty shillings per week, and whose subscriptions are at the rate of one penny a week for all above the age of 15 years, and a half-penny for one or two children, and a penny for three or more. In regard to the latter point, we entertain a strong opinion that each child should be severally charged for, and that one penny per week should not include an indefinite number, recent custom to the contrary notwithstanding. Taking, therefore, the preceding charges as a basis, we think that, for every five shillings weekly earned in excess of the twenty shillings, not less than a fourth of the specified weekly subscription should be added thereto, and a like proportionate amount for each child. The acceptance of a less sum would, in our opinion, prove not only pecuniarily inadequate, but professionally unwise.

CONTRACTS NOT TO PRACTISE WITHIN A CERTAIN AREA.

A. sells a practice to B., and is restricted under penalty from practising within a radius of five miles. A. removes to a town twelve miles distant. Some of A.'s old patients, having no confidence in B., write to A. for advice and medicine. Is A. legally prohibited from corresponding with and sending them medicines? If A. paid a single professional visit within the five miles' radius, could that single visit be legally construed as constituting practice or practising? Could A. act as certifying factory surgeon for any district, a portion of which lay within the five mile radius?

*** These contracts are construed strictly, and a good deal often turns on the exact words used. 1. Probably giving advice by letter, in answer to inquiries, is not an infringement, but supply of medicine is. 2. A visit would certainly be an infringement, but if it only took place in reference to a single patient, the court might not enforce the full penalty. 3. A. certainly ought not to accept employment as certifying factory surgeon within the radius.

OBITUARY.

LAUCHLAN AITKEN, M.D.

Our readers already know of the death of Dr. Aitken, of Rome, at the early age of 43, and we are now able to publish further information regarding his career. Dr. Aitken was born in Scotland at Gartcows, near Falkirk. Up till the year 1859, his education was received at the Grammar School at Falkirk. Here evidence was early given of ability, and he carried off numerous prizes. His companions acknowledged his supremacy in the school, and to be second to Lauchlan Aitken was spoken of as an honour. In 1859 his family settled in Heidelberg. Here he made great progress in all branches, and soon acquired a mastery over the German language, which proved of lifelong service to him.

After two years at Heidelberg, he entered as a medical student at the Edinburgh University. His career there was very distinguished, and besides other scholastic honours, he won medals in anatomy, chemistry, botany, medicine, and obstetrics. He also obtained the Gilchrist Prize for his essay on Parthenogenesis. In the winter of 1865-66 he went to Berlin, where Virchow's great influence moulded his mind and impressed his imagination. Besides working most of the day in the Pathological Institute, he entered fully into all the medical life at the university, the cliniques of Frerichs and Traube being followed with special care. On leaving Berlin he studied in Vienna, and subsequently in Paris.

On returning to England, Dr. Aitken obtained the post of Clinical Assistant at Brompton, which he held for a year. Having thus laid a very solid foundation, he was at once thrown into the active duties of his profession by becoming the assistant of Sir James Simpson at Edinburgh. Probably only those who have served in that capacity will ever know fully what great responsibilities and anxieties that post entailed, and Dr. Aitken proved himself equal to them. Often, at a few hours' notice, he was obliged to lecture in the obstetric class-room from Sir James Simpson's manuscript notes when the professor had been called away. As he spoke with great ease and fluency, and never entered the class-room without having thoroughly mastered the subject of the day's lecture, he was always well received by the students on such occasions. During this period he wrote a paper on the dangers attending the use of tangle tents, which did much good in suggesting caution in opening up the cervix. After having been associated with Simpson for three years, two cases of scarlet fever were attended by him, and he took the disease in a severe form. The kidneys became early affected, and he had to leave Edinburgh to winter at Bournemouth.

In the meantime, Sir James Simpson died, and a tempting field for practice presented itself in Edinburgh. He had endeared himself to so many of Simpson's patients, that he was invited on all sides to settle there. The albuminuria still continuing, however, Dr. Begbie would not consent to his remaining at Edinburgh, but advised him to make two long sea-voyages. He went to Australia, and derived some benefit from both trips. The reputation of Rome as a residence for those suffering from albuminuria turned his thoughts to that city. He soon found the beneficial effect of the climate in lessening the albuminuria, and for many years he was free from this complaint, though it now and then recurred, and necessitated renewed precautions. He soon became strong enough to undertake a large amount of professional work, and, after the departure of Dr. Grigor, of Nairn, from Rome, he occupied the foremost place among the American, as well as among the English, medical men practising in that city.

The good use he had made of his educational advantages, and his exceptional experience in various fields of practice, combined to make him a many-sided physician, and a competent adviser in nearly all the ills that flesh is heir to.

Dr. Aitken married, in 1881, the elder daughter of Sir Thomas Bouch. Even amid the turmoil of practice, he paid much attention to general literature, and, in the long leisure of practice in a city visited by invalids and sightseers only for the cool months of the year, he devoted himself enthusiastically to the study of professional subjects. Science in all its branches delighted him, and art furnished him with a congenial field in which his bright and active spirit loved to linger. Dr. Aitken not only spoke French fluently, but could converse in German and Italian as easily as in English.

An intimate friend of Dr. Aitken writes as follows: "Aitken's aim through life was to do the very best that could be done for anyone under his care. He kept himself fully abreast of all discoveries in medicine and therapeutics. He was in the largest sense a religious man, for he made no profession, but acted to all as he would have desired others to act to him."

W. B. SELLERS, M.R.C.S.Eng. and L.S.A.

We have received intelligence of the death of Mr. W. B. Sellers, of Rochdale, where he has practised his profession since the year 1841, and made many friends. Mr. Sellers, who at his death was within a few days of completing his 67th year, was early apprenticed to the late Dr. Ogden. After completing his hospital course at Dublin, he came to London, and, in 1841, was admitted a Member of the Royal College of Surgeons (England), and a licentiate of the Apothecaries' Society.

Mr. Sellers immediately after commenced to discharge the duties of his profession in his native town, and soon acquired a large and lucrative practice. He was one of the honorary medical staff of the Rochdale Dispensary, and, on his retirement, was appointed Senior Surgeon. He was for a long period Medical Officer of the county police of his division. Mr. Sellers, who married in 1849, had two sons, trained for the medical profession, of whom only one survives him, Mr. R. B. Sellers, L.R.C.P.Edin., who has been in partnership with his father since 1878. The deceased gentleman never took a very prominent part in public affairs, but was a staunch Conservative, and a consistent Churchman.

ROBERT SMART, M.D., GLASGOW.

Dr. Robert Smart, of Queen's Crescent, Glasgow, died suddenly on December 25th. He had apparently been in sound health up to the moment of his death, but for some trifling rheumatic pains about the shoulder, and had been going about his professional engagements as usual. He had, however, been suffering from chronic Bright's disease, which had been known to himself and a professional friend for some considerable time. Dr. Smart was the son of a medical practitioner, of Milngavie, and was trained at Glasgow University, and studied under Professor Lister, when that distinguished surgeon was a teacher in the Glasgow Royal Infirmary. After a period of travel, and some time spent as surgeon to the Town's Hospital, he settled down private practice, in which he engaged up to the time of his death. He was connected with the Volunteers as Surgeon-Major of the 4th Lanark. It is only nine months since his marriage, and his wife is now a widow for the second time.

Abuse of Chloral.—An inquest was held at Manchester last week on the body of a chemist living at Chorlton-on-Medlock, who is supposed to have died from taking an overdose of chloral, of which it was stated he had at one time been accustomed to take medicinal doses.

HOSPITAL AND DISPENSARY MANAGEMENT.

LUNATIC ASYLUMS—IRELAND.

THE Twenty-fifth Report of the District, Criminal, and Private Lunatic Asylums in Ireland (1886) has recently been published. The Irish Lunacy Report has this indisputable advantage over the English and Scotch, that it is much shorter. One way used to get rid of superfluous matter is the omission of the formal stereotyped sort of essays which are composed for entries after the Commissioners' visits to asylums, personal enough sometimes against the officials of the asylums, but which, singular to say, are printed in the blue-books without the signatures of the visiting Commissioners who are responsible for the statements made. Out of these entries the reports about the different asylums are concocted, and the knowledge that the entries will be printed in the Parliamentary Reports for England and Scotland (as they formerly were for Ireland) makes the Commissioners more unwilling to alter or revise any mistakes they may have made when pointed out to them. The English Commissioners will not allow these entries to be reprinted as advertisements to attract cases to asylums; but the Scottish Commissioners are much less dignified. On the whole, those who read, or pretend to read, Blue-books can well do without these compositions, the shortening of Parliamentary Reports being a public need.

The number of lunatics in Ireland on January 1st, 1885, was, in district asylums, 9,687, being 5,322 males and 4,635 females; in licensed houses, 639, being 245 males and 394 females: and in Poor-law Unions, 3,775, of whom 2,257 were females. In the Dundrum Criminal Asylum there were 178 lunatics; 148 men and 32 women. In all there were 14,279 registered as being mentally affected. The rate of recovery stood at 12 per cent. on the daily average of patients, and 53 per cent. on the number of admissions. There were 4 suicides, but no life was lost from accident during the year. This is highly creditable to the Irish superintendents. Four pages are usefully given to the dietaries in the district asylums.

JAMES MURRAY'S ROYAL ASYLUM, PERTH.

THE report before us for the year ending May 31st, 1886, shows that the asylum is in a very satisfactory condition. "Kincarrathie," a large house with extensive grounds, close to the asylum, with which it is in telephonic communication, and accommodating six patients, has been added to the resources of the institution. The average number resident during the year was 95; the death-rate was very low, namely, only 2.1 per cent. of the average population. We note with surprise that while there have been 88 deaths in the last twenty-one years, only 5 *post mortem* examinations have been made.

In view of the advantages which chronic cases often derive from change of surroundings, Dr. Urquhart has effected an arrangement with the Royal Edinburgh Asylum for the interchange of such cases. It is to be hoped that this experiment will be attended with success, in which case the example will doubtless be followed by other asylums. It will, of course, be understood, as Dr. Sibbald observes in his report on this asylum, that the arrangement "does not involve any supposition that the treatment adopted in the institution to which the transfer is made is better than what had been followed before the occurrence of the transfer. The mere change seems to give a healthy stimulus to the mental faculties."

The following extract from Dr. Urquhart's report on "Special Difficulties of Treatment of Lunacy" may be commended to the attention of every member of our profession; for while the majority will doubtless subscribe readily to the views expressed therein, there is reason to fear that too many medical men are insufficiently impressed with the importance of early asylum treatment, and that, from various motives, they often hesitate to urge this step till too late. Of course, we are assuming that patients are medically treated in asylums, and that Dr. Bucknill's sarcasm[1] that this appears to have been now given up, has only partial justification.

"It is matter for regret that so many patients are detained to undergo every form of 'private care' before the guardians can be induced to send them to places of treatment specially designed to secure their recovery. To the misfortunes and anxieties attending on a case of any other physical malady, there are superadded peculiar cares and difficulties inseparable from lunacy. These difficulties tell most severely on the middle class of society, with which we are immediately concerned. The wealthy and the pauper classes are protected, in great measure, by their affluence or by their poverty. In either case, treatment is early sought, and is effectively applied. In wealth, the services of skilled attendants are instantly commanded, and recovery is promoted in every approved manner. In poverty, by reason of poverty, the breadwinner cannot be kept at home, and the State provides fully equipped and excellently managed hospitals for his reception.

"But we here, every year, have to receive a great though, happily, a yearly diminishing proportion of persons who have been allowed to slip into chronic mental disease, who block the wards with incurable cases, who depress the recovery rate, and with regard to many of whom it is felt that they ought to have been recoverable, and made useful members of society. It will be readily perceived that if a man be seized with mental disease of a violent character, his early treatment, and probably early recovery, is insured by the very nature of the symptoms; but, on the other hand, delusions and morbid habits of thought, permitting of delay in taking such a dreaded step as admission into an asylum, are allowed to be so encouraged and so branded on the mind that their eradication is imperfect, if not impossible."....."Many plans have been proposed to obviate the social stigma of legal certification, and in Scotland the admission of voluntary patients into asylums has been provided for and encouraged; but while the law looks upon the liberty of the subject and the legal disabilities of mental unsoundness as of more importance than the curative measures to be employed, such difficulties must be accepted and grappled with by the medical profession, although always under protest."

Before concluding, a word of praise is due to the assistant medical officer, Dr. Murray, for the care he has bestowed on the preparation of the statistical tables, a care exercised not infrequently in an inverse ratio to the importance they possess.

[1] "The persistent efforts to relieve, by medicine, those bodily conditions upon which the morbid mental states depend, which were practised in asylums within even recent memory, have now gone out of vogue, and even the belief in them seems to be dead and gone

SUSSEX COUNTY HOSPITAL.

A QUESTION of considerable importance, both to the Sussex County Hospital and to the town of Brighton, was discussed at a recent meeting of that institution, namely, whether the governors should or should not continue to admit fever-cases, as they have been doing, both from the town and the county. The committee was recently urged, by a deputation from the Town Council, to consider the advisability of excluding such cases from their wards. A resolution in favour of that recommendation was moved by Mr. E. J. Furner, who urged that there was no necessity for receiving fever-cases at the hospital when proper sanatoria existed to which people could be taken by the authorities with perfect safety. Mr. G. Tatham opposed the motion, contending that if fever-cases were excluded from the hospital, fever would be spread by patients being kept at their own homes; whilst it would involve the erection of a sanatorium in every village of the county, from the residents of which the hospital, which was a county institution, received considerable support. Dr. Withers Moore opposed the resolution, thinking that they were bound to provide some accommodation for the people in the county until they found it for themselves. Dr. Ewart said a few words in support of the resolution, which, on being put to the meeting, was carried by 66 votes to 22.

REPEAL OF THE CONTAGIOUS DISEASES ACTS.

IT is stated in the public press that the whole of the patients in the Lock wards of the Royal Albert Hospital, Devonport, have been discharged into the streets uncured, and the wards are closed. This is in pursuance of the operation of the Act for the Repeal of the Contagious Diseases Acts passed last session, and no ameliorative substitute of any kind has been provided. Prominent agitators against the Acts deplore this result, the disastrous effects of which are said to have become lamentably conspicuous, and almost every public body in Plymouth and Devonport has expressed an opinion strongly adverse to the present condition of affairs.

HOSPITAL FOR WOMEN.

A PETITION has been presented to Her Majesty in Council, by the Duke of Westminster and others, on behalf of the Hospital for Women, Soho Square, praying for a charter of incorporation. The petition will be taken into consideration by a Committee of Council on February 12th.

PROPOSED NEW HOSPITAL FOR ST. ALBANS.

IT has been decided to celebrate the Queen's jubilee at St. Albans by the erection of a new hospital. The present institution is far too small for the requirements of the city and neighbourhood, and the

governors have resolved to sell the building and purchase another site. The Town Council has decided to identify itself with the movement.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

INSPECTION OF FOOD.

[FROM OUR PARIS CORRESPONDENT.]

Legal Enactments.—The duty of inspecting the provisions that enter the city of Paris devolves upon the Prefect of Police, who is also charged with the execution of the law of March 27th, 1851, concerning the suppression of fraud in the sale of merchandise. Violations of this Act are punished by imprisonment (three months to one year), five francs fine as a minimum, and confiscation of the goods. The decrees that have been issued in regard to this matter by the prefects are very numerous. The following are the most important:—June 15th, 1862. Interdicting the use of mineral substances in colouring confectionery, and in regard to the adulteration of milk. September 15th, 1877. Interdicting the employment of wood that has been painted, or otherwise incorporated with any foreign substance, in the heating of baker's ovens. March 21st, 1879. Forbidding manufacturers of tin cans from using solder on the inside. October 13th, 1879. Regulating the sale of meat. The inspectors of provisions are divided into two classes—(1) Inspectors of meat, who report directly to the Prefecture of Police; (2) Inspectors of all provisions other than meat, who report to the Municipal Laboratory of Chemistry.

Inspection of Meat.—By a decree of the Prefect of Police, dated January 10th, 1883, the staff of this department was composed as follows:—

1	chief inspector,	with an annual salary of	5,500	francs
2	controllers	,, ,,	4,500	,,
10	principal inspectors	,, ,,	4,000	,,
10	inspectors of the 1st class	,, ,,	3,600	,,
34	inspectors of the 2nd class	,, ,,	3,000	,,

It was at first proposed to recruit these inspectors among veterinary surgeons, but this was found to be impracticable. The examination for admission as inspector consists of a written proof of competence upon a subject belonging to the veterinary art, and also a practical examination at the slaughter-house of La Villette. The inspectors are charged with the execution of the Prefectoral Ordinance of October 13th, 1879, which prohibits the entry into Paris of butcher's meat or pork, whether fresh, salted, or smoked, without previous inspection. The only exception is for small quantities, three kilogrammes of fresh meat, and five kilogrammes of salted or smoked meat. The entry of meat into the city is restricted to the eight following gates: Saint Cloud, Ternes, Clichy, La Villette, Vincennes, Charenton, Italie, Orleans. It must also arrive at the gate between 3 and 10 A.M. in summer, and between 4 and 11 A.M. in winter. Meat can enter the city at other gates, however, but in that case it must be escorted, at the expense of the owner, by an officer of the Custom House to the market, where an inspector is on duty both day and night to inspect it. And the same rule is enforced in the case of meat arriving in the city by the railroads. All meat which is found on inspection to be unfit for consumption is immediately seized and destroyed at the expense of the proprietor, and without prejudice to legal proceedings (conformably to the law of March 27th, 1851). Nevertheless, the meat may be returned to the proprietor, in case the latter demands it for industrial purposes; but, in this case, it must be incised in all directions, and sprinkled with the oil of turpentine, or solution of ammonia mixed with coal-dust. In case the proprietor protests against the seizure, and demands further inspection, the meat is conducted under escort, and at his expense, to Pavillion No. 3 of the Central Market, where it is again examined by an expert chosen by the proprietor among a list of veterinary surgeons furnished by the Prefecture of Police. The expense of this fresh examination in case of total or partial confirmation of the seizure falls upon the owner. When the meat is totally unfit for consumption, it is sold to horse-killers (*équarrisseurs*) at the rate of four centimes per kilogramme; when it is only contaminated, it is handed over to the administration of the Jardin des Plantes, at the rate of four francs per 100 kilogrammes. When the meat is seized at the market, the proceeds of the sale are given to the carriers (*forts*); when seized at the slaughter-house, the proceeds go to the proprietor.

Inspection of Provisions other than Meat.—This category of inspectors is attached to the Municipal Laboratory of Chemistry, and numbers twenty in all. These twenty expert inspectors, of whom ten bear the title of commissary of police, are grouped in pairs, each group having charge of one of the ten sections into which the city is divided. They inspect the markets and the shops of dealers in foods, where they take possession of specimens which appear to them suspicious, or which have been brought to their notice through other specimens deposited at the laboratory by the public. In these visits, the inspectors make a summary examination of the produce offered for sale, and, for this purpose, are provided with a microscope, and a box containing the necessary reagents. When goods are found in a manifestly damaged state, the inspectors destroy them on the spot. On the other hand, when they only appear adulterated, two specimens are taken, sealed, numbered, and certified by the inspectors and by the merchant. One of these specimens is immediately analysed, and the other is kept in case a control analysis becomes necessary. Every day's proceedings are recorded, with all the details concerning the hygienic state of the establishments and markets visited, as well as the seizures and destructions carried out in each section. The inspectors make their report every evening, and receive orders for the next day's service.

Those who desire to pursue the subject further, may consult *Administration de la Ville de Paris*, 1884, by Maurice Block; and also, *Documents sur les Falsifications, etc., Deuxième Rapport*, 1885, published by the Préfecture de Police.

BRISTOL WATER SUPPLY.

At a town's meeting at Bristol, convened by the mayor on December 30th, it was unanimously resolved to support a scheme for utilising for the supply of the city the 14,000,000 gallons of water per day now being pumped by the Great Western Railway Company from the Sudbrook spring, on the Monmouthshire side of the Severn, in connection with the tunnel works. This water, which is pumped at a cost of £10,000 per annum, has been declared on analysis to be excellent for domestic purposes, but is now being discharged into the river.

EPIDEMIC OF SMALL-POX ON BOARD SHIP.

A TELEGRAM from Melbourne, January 9th, states that a case of small-pox occurred on board the North German Lloyd steamer *Prussen* during her voyage from Southampton to Adelaide, and on her arrival there she was accordingly placed in quarantine. Twenty-four cases subsequently developed, and it is stated that thirty persons who landed at Sydney are sickening for the disease, besides several at this port and Adelaide. On the American emigrant ships preliminary revaccination is enforced to prevent such calamities.

HEALTH OF WEDNESBURY: A CORRECTION.

MR. WALTER C. GARMAN (medical officer of health for the borough of Wednesbury) writes: I write to point out a slight error which appeared in a report published in the JOURNAL of the health of Wednesbury. You will find upon page 1130 (December 4th) it is stated that the death-rate in the Wednesbury urban district for last year was 20.3, the zymotic death-rate 4.2, and the infant mortality 178. These figures apply to the preceding year (1884). As a matter of fact, the figures for 1885 were: death-rate from all causes, 17.7; zymotic death-rate, 2.1; infant mortality, 145. The difference between the real figures and those reported is so great that I feel some correction is advisable.

THE JUBILEE AND SANITARY IMPROVEMENT.

MR. MARK H. JUDGE, as a member of the Paddington Victoria Jubilee Committee, has given notice that he will propose the following resolution:—"That, in the opinion of this Committee, the dust-collecting and other trades which are carried on in connection with the canal basin between Warwick Crescent and Praed Street, besides being a continual nuisance to the health of the parish, are, during the summer months, a serious danger to the inmates of St. Mary's Hospital, and a source of annoyance to the Great Western Railway terminus, which is so often visited by Her Majesty the Queen and the Ministers of the Crown; that the Committee, therefore, considers that no better memorial of the Victorian Jubilee could be devised in Paddington than for the vestry to purchase the canal basin and adjacent property in order that this long-standing nuisance may be abolished, and the site profitably utilised for residential and other purposes."

REPORTS OF MEDICAL OFFICERS OF HEALTH.

TOXTETH PARK.—With a rapid increase of population in this suburb, there has been a proportionate increase in the death-rate. In 1883 the mortality was at the rate of 9.5 per 1,000; the following year it rose to 13.3 per 1,000, while 1885 shows a still further increase to a rate of 13.4 per 1,000. Dr. G. W. Steeves reports that new houses are springing up in various parts of the district, and, as they become more fully inhabited, he foresees difficulties in the way of preserving the still favourable death-rate. The fatality from zymotic and pulmonary diseases was slightly in excess of that recorded for 1884, but the infant mortality was less. Of small-pox, which had manifested itself at the close of 1884, there were five additional cases in January and February, two of which proved fatal. The workhouse hospital did effectual service in isolating the sick. Dr. Steeves de-

monstrates the advisability of speedily procuring hospital accommodation for infectious diseases, and reports very favourably on the site now under consideration for the purpose. He also advocates the compulsory notification of diseases. The local board would do well to have their health-officer's report printed, for the general information of their constituents.

WALSALL.—Dr. J. Maclachlan has evidently a thorough appreciation of the executive skill of his sanitary inspectors, since he delegates to them the compiling of the statistics for the year, and contents himself with a brief preface to their reports. Twenty-four lines are all he devotes to a population of about 60,000 people, and his remarks are of a most general character. The only information of a specific nature is an allusion to the favourable death-rate from zymotic diseases—1.15 per 1,000—the lowest for nine years.

WOKINGHAM URBAN AND RURAL DISTRICT.—The history of the public health in these districts calls for no special comment. Dr. John Shea states that the death-rates for the rural district in 1884 and 1885 were practically the same, the one being 15.5 and the other 15.3 per 1,000, against an average of 15.0. There were 24 deaths from zymotic diseases, of which measles contributed half. Of the town of Wokingham, newly chartered as a borough, Dr. Shea has more to say. The death-rate for 1885, 21.6 per 1,000, was much in excess of the average; but in so small a population—3,550—a very small increase in the deaths during an inclement season makes a large apparent increase when worked out in rates per 1,000. Five fatal cases of measles alone raised the zymotic rate nearly 1.5 per 1,000, and 4 cases of diarrhœa over another 1.0, so that these two deaths-causes alone explain the high zymotic rate of 6.3 per 1,000. Some cases of diphtheria and diphtheritic croup were attributed to atmospheric causes, as Dr. Shea's investigations failed to implicate either milk, foul water, or bad drainage.

DURHAM RURAL.—Small-pox, which was so prevalent in 1884, continued to spread in the first and second quarters of 1885. After much delay, and when 13 deaths had resulted in one village, a temporary cottage hospital was provided. Mr. Blackett has frequently called attention to this important subject, and he strongly urges a combination of districts, and the provision of small hospitals, for their mutual benefit and protection. His testimony as regards vaccination is most emphatic: "In my experience I never knew anyone to have small-pox who had been properly vaccinated, and most assuredly no one can have small-pox who has been re-vaccinated." During the year there were sporadic cases of measles, scarlet fever, whooping-cough, erysipelas, and puerperal fever; in the fourth quarter, measles became very prevalent, and 16 deaths were the result. Mr. Blackett reports that the district is comparatively free from fevers, and diarrhœa was also very low as to its mortality. The deaths at all ages represent a rate of 16.3 per 1,000, those under 5 years of age representing 7.8 per 1,000. Uncertified deaths were at the rate of 2.7 per 1,000, and Mr. Blackett thinks it would be well if a Government inquiry could be instituted as to this unsatisfactory state of affairs. Being a mining district, deaths from injuries are not infrequent.

SOUTH SHIELDS.—Dr. Campbell Munro had by no means a cheering report to make to his authority in respect of 1885. Infectious disease of one sort and another prevailed during the year, scarlet fever and measles being specially fatal. Dr. Munro was unfortunate enough to contract the former disease towards the close of the year. In connection with the treatment of a case in hospital, and as an example to the community at large, he considered it his duty to transfer himself as a patient to the Borough Infectious Hospital. Dr. Munro thinks that it is partly in the direction of compulsory notification, that a reduction of the death-rates must be sought. Scarlet fever caused 76 deaths, and measles 56; a large and melancholy waste of life. The zymotic death-rate of the year was 3.2 per 1,000. Three deaths were assigned to diphtheria, and five to enteric fever. The hospital was freely used for the isolation of diseases, especially of scarlet fever cases. The recovery-rate was 90.4 per cent. The depression of trade was felt with peculiar intensity in this district, which may possibly account for the apathy evinced by the sanitary authority in working out Dr. Munro's schemes for reform. Many sanitary defects exist in the borough; the by-laws are entirely antiquated; no proper police-cell accommodation is provided; an additional inspector is needed. It is satisfactory to find the announcement that Dr. Munro intends to revert to these questions, until the insanitary condition of affairs is rectified.

WAVERTREE.—Dr. Harvey's report for 1885 is not very voluminous, but it is thoroughly practical, and reveals excellent methods of work in the health department. The influence of schools in the spread of infectious diseases has been a special object of attention. An epidemic of diphtheria was directly traced to contact between children who attended the same school, or who played together. The water-closet accommodation was found to be defective, and eventually the schools had to be closed for a period of three or four weeks before the epidemic could be effectually stopped. The absence of any recorded deaths from measles was gratifying, though a good many cases were reported during the year. Dr. Harvey reverts particularly to this fact as justifying the action taken by the Board at the close of 1884, when attention was directed to the dangerous facilities for the spread of infectious diseases afforded by large public day-schools. The Board then issued forms of declaration of health to be signed by the children's parents, and presented on the return of the former to school after each long vacation, thus drawing the attention of parents to the importance of preventing the spread of infectious diseases. At the same date there were furnished to the head master and mistress in each school printed post-cards, addressed to the medical officer of health, and designed to notify to the latter the address of any pupil whose absence might reasonably be suspected to be due to some infectious complaint. During the year, thirty-two of such cards were received, and the information was, in many instances, of great service in checking the spread of disease. The general death-rate was 14.8 per 1,000.

MERTHYR TYDFIL.—"Sanitary works well planned, well executed, and thoroughly worked, conduce to better health and longer life, and become a source of profitable income to communities." This is the experience of Mr. Dyke after twenty years of office in this district. He proves his assertion by the statistical results of the sanitary improvements carried out during that period. A gradual and continuous reduction is shown in the death-rate from all causes, the proportional mortality of infants under one year has been lessened, and the death-rate from enteric fever has been reduced from 2.1 to 0.3 per 1,000. Drainage improvements and the consequent drying of the subsoil of houses, have borne fruit in the reduction of the deaths from phthisis. Mr. Dyke remarks that the contagious fevers, principally affecting children, have not been much influenced by sanitary improvements, and this seems borne out by the statistics for 1885. Measles was specially fatal in that year, and the deaths from diarrhœa were also above the average. The increased mortality from the latter disease in two divisions of the district was attributed by Mr. Dyke to the state of the water-supply during the past three years. When chemically examined, unmistakeable evidences were shown of the presence of large quantities of vegetable organic matter. Acute lung affections occasioned 25 per cent. of all deaths in 1885. The cold and wet weather which so frequently prevails in this mountainous district induces these forms of disease, and the damp, unhealthy dwellings in which so many of the poor reside bring them to a fatal issue. Mr. Dyke hopes for legislation, which will enable sanitary authorities to grapple more effectually with these prolific sources of waste of life. The general death-rate for the year was 25.6 per 1,000.

SUDBURY.—Dr. J. S. Holden gives a satisfactory account of the health of his district during 1885. More than half the deaths, 55 per cent., were among persons over 60 years of age. The death-rate among children under five was exceptionally low, being only 13.5 per cent. There were no deaths to record from any of the zymotic diseases, except one from whooping-cough. This disease began to appear in the autumn and increased as winter set in. Nineteen cases came under notice, one of whom died from the sequelæ of broncho-pneumonia. As this most lingering and fatal disease has been proved to be capable of being arrested by the proper use of volatile disinfectants such as carbolic acid, thymol, or eucalyptol, Dr. Holden suggests that it may become necessary to ask the sanitary authority to allow these to be provided in an epidemic of whooping-cough, in the same way as disinfectants are now provided for arresting the spread of other infectious diseases among the poorer classes. Scarlet fever cropped up in various parts of the town, but was always of a mild type, and measles did not occur until the end of the year. There were 30 deaths from pulmonary diseases.

WHITECHAPEL.—Mr. Loane prefaces his second annual report with a graceful tribute to the memory of his predecessor, the late Mr. John Liddle. Mr. Loane's report itself testifies to the sound practical work done in former years and is now bearing fruit. The general death-rate per 1,000 was 22.2, which exactly coincides with that of 1884. There was no increase in the general sickness-rate during the year, but a considerable diminution is to be noted in zymotic diseases as compared with the previous years. Those diseases which are attributable to exposure or carelessness, such as constitutional disorders or affections of the respiratory organs, were above the metropolitan average. Of the 197 deaths from zymotic diseases, 12 were from small-pox, 50 from measles and diarrhœa respectively, 16 from scarlet fever, 36 from whooping-cough 1 from typhus, and 5 from enteric fever. In-

cluded in the 50 diarrhœa deaths were forty-three cases of infantile diarrhœa, and respecting this disease Mr. Loane collected a few interesting particulars. Foreigners lost 27 infants, whilst of the children born of natives of the United Kingdom only 16 died (a very important matter when the relative proportion of foreigners to British is considered) 29 were males, 14 were females. An investigation into the mode of feeding these infants brought out these facts, that 6 were altogether naturally fed, and enjoyed an average life of over one year; 14 were fed partly naturally and partly artificially, and lived an average of 8 months; 23 were altogether fed upon various descriptions of food, including often meat and vegetables, and survived on an average less than 6 months. Mr. Loane very pertinently adds that "if any value can be placed upon figures, it seems clear that improper dieting has much to answer for in connection with this particular disease."

HEALTH OF ENGLISH TOWNS.

During the week ending Saturday, December 18th, 5,371 births and 3,605 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons. The annual rate of mortality, which had increased in the four preceding weeks from 19.1 to 22.9 per 1,000, declined again during the week under notice to 20.7. The rates in the several towns, ranged in order from the lowest, were as follow:—Derby, 11.9; Brighton, 12.1; Birkenhead, 14.8; Birmingham, 17.1; Sheffield, 17.1; Huddersfield, 18.2; Sunderland, 18.4; Nottingham, 18.5; Oldham, 18.8; London, 18.9; Plymouth, 19.8; Bolton, 20.7; Bradford, 20.9; Halifax, 21.3; Portsmouth, 21.8; Cardiff, 22.3; Salford, 23.0; Leeds, 24.5; Newcastle-upon-Tyne, 24.6; Leicester, 25.8; Manchester, 25.9; Blackburn, 25.9; Bristol, 26.5; Liverpool, 27.6; Wolverhampton, 28.0; Norwich, 28.3; and the highest rate during the week, 37.1, in Preston. The death-rate in the twenty-seven provincial towns averaged 22.2 per 1,000, and exceeded by 3.3 the rate recorded in London, which, as before stated, did not exceed 18.9 per 1,000. The 3,605 deaths registered in the twenty-eight towns during the week under notice included 386 which were referred to the principal zymotic diseases, against 379 and 424 in the two preceding weeks; of these, 141 resulted from measles, 77 from scarlet fever, 54 from whooping-cough, 42 from "fever" (principally enteric), 37 from diphtheria, 34 from diarrhœa, and one from small-pox. These 386 deaths were equal to an annual rate of 2.2 per 1,000. The zymotic rate in London during the week under notice was equal to 1.7 per 1,000, while in the twenty-seven provincial towns it averaged 2.6, and ranged from 0.0 and 0.4 per 1,000 in Derby and Brighton, to 3.9 in Liverpool, 5.5 in Leeds, and 6.5 in Wolverhampton. The deaths referred to measles, which had been 134 and 179 in the two preceding weeks, declined during the week under notice to 141, and were proportionately most numerous in Bristol, Halifax, Leeds, and Wolverhampton. The fatal cases of scarlet fever, which had declined in the four previous weeks from 95 to 67, rose again last week to 77, and caused the highest death-rates in Salford, Bradford, Sunderland, and Liverpool. The 54 deaths from whooping-cough showed a further decline from recent weekly numbers, and caused the highest proportional fatality in Preston and Huddersfield. The fatal cases of fever, which had been 36 and 50 in the two preceding weeks, declined during the week under notice to 42, and caused the highest rates in Manchester, Preston, and Plymouth. The 37 deaths referred to diphtheria exceeded by 5 the number recorded in each of the two previous weeks, and included 16 in London, 6 in Portsmouth, 4 in Liverpool, and 3 in Birmingham. The 34 fatal cases of diarrhœa showed a slight further decline from recent weekly numbers. One death from small-pox was registered during the week under notice in London, but not one in any of the twenty-seven large provincial towns; and no small-pox patients were under treatment in any of the Metropolitan Asylum Hospitals during the week ending Saturday, December 18th. The death-rate from diseases of the respiratory organs was equal to 5.2 per 1,000, and was considerably below the average. The causes of 99, or 2.7 per cent. of the 3,605 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

In the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons, 4,589 births and 3,745 deaths were registered during the week ending Saturday, December 25th. The annual rate of mortality, which had been 22.9 and 20.7 per 1,000 in the three preceding weeks, rose again during the week under notice to 21.4. The rates in the several towns, ranged in order from the lowest, were as follow:—Brighton, 11.7; Birmingham, 18.1; Birkenhead, 18.1; Sheffield, 18.6; Derby, 18.7; London, 19.7; Bolton, 19.7; Leicester, 19.8; Nottingham, 20.1; Huddersfield, 20.6; Bradford, 20.7; Salford, 21.2; Portsmouth, 21.4; Norwich, 21.5; Hull, 22.3; Oldham, 23.2; Leeds, 24.0; Blackburn, 24.6; Halifax, 26.0; Bristol, 26.2; Liverpool, 26.3; Cardiff, 26.4; Newcastle-upon-Tyne, 26.9; Manchester, 29.4; Plymouth, 30.0; Wolverhampton, 30.7; and the highest rate during the week, 31.9, in Preston. In the twenty-seven provincial towns the death-rate averaged 23.0 per 1,000, and exceeded by 3.3 the rate recorded in London, which, as before stated, did not exceed 19.7 per 1,000. The 3,745 deaths registered in the twenty-eight towns during the week under notice included 182 which were referred to measles, 75 to whooping-cough, 71 to scarlet fever, 40 to diarrhœa, 34 to "fever" (principally enteric), 31 to diphtheria, and not 1 to small-pox; in all, 433 deaths resulted from these principal zymotic diseases, against 424 and 386 in the two preceding weeks. The zymotic death-rate was equal to 2.5 per 1,000. In London the zymotic death-rate was 2.1, while it averaged 2.8 per 1,000 in the twenty-seven provincial towns, and ranged from 0.0 and 0.4 in Derby and in Brighton, to 5.7 in Leeds, 6.7 in Halifax, and 7.8 in Wolverhampton. The fatal cases of measles, which had been 179 and 141 in the two preceding weeks, rose again to 182 during the week under notice; this disease caused the highest death-rates in Cardiff, Leeds, Halifax, and Wolverhampton. The deaths referred to whooping-cough, which had declined in the three preceding weeks from 61 to 54, rose again to 75, and were proportionally most numerous in Bradford, Plymouth, and Huddersfield. The fatal cases of scarlet fever, which had been 67 and 77 in the two previous weeks, declined during the week under notice to 71; they caused the highest death-rates in Liverpool, Bristol, and Salford. The 40 deaths from diarrhœal diseases slightly exceeded those recorded in recent weeks. The fatal cases of fever, which had been 50 and 42 in the two previous weeks, further declined to 34, a lower number than in any week since the beginning of July last; this disease was proportionally most fatal in Preston. The deaths referred to diphtheria, which had been 32 and 37 in the two preceding weeks, declined during the week under notice to 31, and included 17 in London, 4 in Liverpool, 3 in Bristol, and 3 in Portsmouth. No fatal case of small-pox occurred during the week under notice, either in London or in any of the twenty-seven provincial towns; and no small-pox patients were under treatment in any of the Metropolitan Asylum Hospitals on Saturday, December 25th. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 5.5 per 1,000, and was below the average. The causes of 95, or 2.5 per cent. of the 3,745 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

In the eight principal Scotch towns having an estimated population of 1,283,977 persons, 789 births and 556 deaths were registered during the week ending Saturday, December 18th. The annual rate of mortality, which had been 23.1 and 22.0 per 1,000 in the two preceding weeks, rose again to 22.5 during the week under notice, and exceeded by 1.8 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 16.3 in Leith, 18.0 in Perth, 18.2 in Edinburgh, 19.0 in Aberdeen, 20.2 in Greenock, 20.7 in Dundee, 26.9 in Glasgow, and 26.9 in Paisley. The 556 deaths registered during the week under notice in these Scotch towns included 19 which were referred to whooping-cough, 16 to scarlet fever, 12 to diarrhœa, 11 to "fever," 10 to measles, 6 to diphtheria, and 1 to small-pox; in all, 75 deaths resulted from these principal zymotic diseases, against 81 and 63 in the two preceding weeks. These 75 deaths were equal to an annual rate of 3.0 per 1,000, which exceeded by 0.8 the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns during the week under notice were recorded in Aberdeen, Perth and Glasgow. The deaths referred to whooping-cough, which had been 19 and 15 in the two preceding weeks, rose again during the week to 19, and included 16 in Glasgow. The fatal cases of scarlet fever, which had been 25 and 17 in the two previous weeks, further declined to 16, of which 10 occurred in Glasgow, and 2 in Edinburgh. The 12 deaths referred to diarrhœa showed a further decline upon recent weekly numbers, and included 7 in Glasgow and 3 in Aberdeen. The fatal cases of fever, which had been 3 and 5 in the two preceding weeks, further rose during the week under notice to 11, of which 8 occurred in Glasgow. The 10 deaths from measles exceeded those returned in any recent week, and were all recorded in Glasgow. The 6 fatal cases of diphtheria corresponded with the number in the previous week, and included 4 in Glasgow, and 2 in Edinburgh. The death referred to small-pox was recorded in Aberdeen. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 7.3 per 1,000, against 5.2 in London. As many as 57, or 10.3 per cent. of the 556 deaths registered during the week in these Scotch towns were uncertified.

During the week ending Saturday, December 25th, 727 births and 648 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,283,977 persons. The annual rate of mortality, which had been 22.0 and 22.5 per 1,000 in the two preceding weeks, further rose to 26.2 during the week under notice, and exceeded by as much as 4.8 per 1,000 the mean rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 15.5 in Leith, 18.0 in Perth, 19.1 in Paisley, 22.3 in Greenock, 23.1 in Dundee, 23.5 in Edinburgh, 24.8 in Aberdeen, and 32.2 in Glasgow. The 648 deaths registered during the week in these Scotch towns included 63 which were referred to the principal zymotic diseases, against 63 and 75 in the two preceding weeks; of these, 15 resulted from whooping-cough, 13 from measles, 13 from scarlet fever, 11 from diarrhœa, 7 from diphtheria, and 4 from "fever." These 63 deaths were equal to an annual rate of 2.4 per 1,000, which was slightly below the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns during the week under notice were recorded in Paisley, Aberdeen, and Glasgow. The fatal cases of whooping-cough, which had been 15 and 19 in the two preceding weeks, declined again to 15, and included 10 in Glasgow, and 4 in Aberdeen. The 13 deaths referred to measles showed a further increase upon recent weekly numbers, and included 12 in Glasgow. The fatal cases of scarlet fever, which had declined in the three preceding weeks from 26 to 16, further fell during the week under notice to 13, of which 8 occurred in Glasgow, and 2 in Aberdeen. The 11 deaths from diarrhœal diseases also showed a further decline from the numbers in recent weeks, and included 5 in Glasgow and 3 in Paisley. The fatal cases of diphtheria, which had been 6 in each of the two previous weeks, were 7 during the week, of which 3 occurred in Edinburgh, and 2 in Glasgow. The 4 deaths from fever showed a decline of 7 from the number in the preceding week, and included 2 in Edinburgh. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 7.9 per 1,000, against 5.5 in London. The causes of 89, or 13.7 per cent., of the 648 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending Saturday, December 18th, 254 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 25.6 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000:—Armagh, 10.3; Belfast, 23.0; Cork, 18.8; Drogheda, 38.1; Dublin, 28.9; Dundalk, 26.2; Galway, 33.6; Kilkenny, 8.5; Limerick, 33.7; Lisburn, 4.8; Londonderry, 28.5; Lurgan, 20.5; Newry, 3.5; Sligo, 19.2; Waterford, 34.7; Wexford, 29.9. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.6 per 1,000, the rates varying from 0.0 in nine of the districts to 8.9 in Londonderry; the 16 deaths from all causes registered in that district comprising 5 more from measles. The 98 deaths from all causes registered in Belfast comprise 4 from scarlatina, 1 from typhus, 2 from diphtheria, and 3 from enteric fever; among the 29 deaths in Cork are 3 from enteric fever and 1 from diarrhœa; the 9 deaths in Drogheda comprise 1 from scarlatina; and the 4 deaths in Sligo comprise 1 from typhus. In the Dublin Registration District, the births registered during the week amounted to 207, and the deaths to 200. The deaths represent an annual rate of mortality of 29.5 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 28.9 per 1,000. Twenty-three deaths from zymotic diseases were registered, being 6 below the average for the corresponding week of the last ten

years, and 1 under the number for the week ended December 11th; they comprise 1 from measles, 5 from scarlet fever (scarlatina), 1 from typhus, 2 from whooping-cough, 8 from enteric fever, 5 from diarrhœa, etc. Forty-nine deaths from diseases of the respiratory system were registered, being 1 under the number for the preceding week, and 9 under the average for the fiftieth week of the last ten years; they comprised 33 from bronchitis, 7 from pneumonia or inflammation of the lungs, and 5 from croup. The deaths of 24 children under 5 years of age (including 22 infants under 1 year old) were ascribed to convulsions. Seven deaths were caused by diseases of the brain and nervous system (exclusive of convulsions), and 11 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 18 deaths, mesenteric disease 8, and cancer 2. Two accidental deaths were registered. In 48 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

In the week ending December 25th, 400 deaths were registered in the sixteen principal town districts of Ireland. The average annual death-rate represented by the deaths registered last week in the same towns was 24.1 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 10.3; Belfast, 21.6; Cork, 24.0; Drogheda, 16.9; Dublin, 27.8; Dundalk, 30.6; Galway, 33.6; Kilkenny, 0.0; Limerick, 18.9; Lisburn, 9.7; Londonderry, 25.0; Lurgan, 35.9; Newry, 14.0; Sligo, 9.6; Waterford, 27.8; Wexford, 21.4. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2·3 per 1,000, the rates varying from 0.0 in nine of the districts to 8.9 in Londonderry; the 14 deaths from all causes registered in that district comprising 5 from measles. Among the 92 deaths from all causes registered in Belfast were 1 from scarlatina, 1 from diphtheria, 2 from simple continued and ill-defined fever, 1 from enteric fever, and 4 from diarrhœa; and the 37 deaths in Cork comprised 1 from typhus and 2 from enteric fever. In the Dublin Registration District the births registered during the week amounted to 134—64 males and 70 females, and the deaths to 193—104 males and 89 females. Twenty-two deaths from zymotic diseases were registered, being 8 below the average for the corresponding week of the last ten years, and one under the number for the preceding week; they comprise 6 from scarlet fever (scarlatina), 1 from typhus, 6 from whooping-cough, 1 from diphtheria, 1 from ill-defined fever, 3 from enteric fever, and 3 from diarrhœa, etc. Fifteen cases of scarlatina occurred during the week. Thirty-eight deaths from diseases of the respiratory system were registered, being 21 below the average for the corresponding week of the last ten years, and 11 under the number for the preceding week: they comprised 30 from bronchitis, and 2 from pneumonia or inflammation of the lungs. The deaths of 22 children (including 18 infants under one year old) were ascribed to convulsions. Ten deaths were caused by diseases of the brain and nervous system (exclusive of convulsions), and 7 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 24 deaths, mesenteric disease 2, and cancer 5. Five accidental deaths were registered. In 31 instances the cause of death was uncertified, there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending December 18th, that the annual death-rate recently averaged 29.4 per 1,000 in the three principal Indian cities; the rate was equal to 22.4 in Bombay, 32.7 in Calcutta, and 34.0 in Madras. Cholera caused 73 deaths in Calcutta, and diarrhœal diseases 44 in Madras; "fever" mortality showed the largest excess in Calcutta. According to the most recently received weekly returns, the annual death-rate averaged 24.8 per 1,000 persons estimated to be living in twenty of the largest European cities, and exceeded by no less than 4.1 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 24.0, showing an increase upon the rates in previous weeks; the 427 deaths included 13 from scarlet fever, 10 from "fever," and 5 from small-pox. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 19.8, and ranged from 14·8 in Stockholm to 29.0 in Christiania; diphtheria and croup caused 12 deaths in Christiania, 5 in Stockholm, and 3 in Copenhagen; 8 deaths from scarlet fever occurred in Christiania, and 7 from whooping-cough in Stockholm. In Paris, the death-rate was equal to 24.7, and exceeded by 5.9 the rate that prevailed during the same week in London; the deaths included 40 from measles, 38 from diphtheria and croup, and 31 from typhoid fever. The 178 deaths in Brussels, of which 4 resulted from fever and 4 from measles, gave a rate of 21.3. The rate in Geneva was equal to 21.6, and no death from zymotic disease was reported. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 25.5, the several rates being 23.1 in Rotterdam, 25.8 in Amsterdam, and 27.7 in the Hague; the deaths in Amsterdam included 6 from measles and 5 from diphtheria, and 5 fatal cases of scarlet fever occurred in Rotterdam. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 25.9 per 1,000, and ranged from 19.2 and 22·3 in Dresden and Berlin, to 34.7 in Buda-Pesth, and 35.3 in Hamburg. Small-pox caused 44 deaths in Buda-Pesth and 4 in Vienna; diphtheria mortality showed the largest excess in Buda-Pesth, Hamburg, Dresden, Munich, and Prague; "fever" caused 12 deaths in Hamburg, and scarlet fever 13 in Buda-Pesth. The death-rate was equal to 25.3 in Rome, and to 22.5 in Venice; small-pox and typhoid fever each caused 8 deaths in Rome (in the week ending October 9th the most recent return received), and 12 of the 63 deaths in Venice were referred to diarrhœal diseases. The death-rate was 45.5 in Cairo, and 38.1 in Alexandria; diarrhœal diseases caused 103 deaths in Cairo and 45 in Alexandria, and typhoid fever 17 in Cairo and 4 in Alexandria. In four of the principal American cities, the recorded death-rate averaged 23.2, and ranged from 15.9 in Baltimore to 26.1 in New York. Diphtheria and croup caused 36 deaths in New York, 34 in Brooklyn, 34 in Philadelphia, and 16 in Baltimore; the deaths from typhoid fever were 13 in Philadelphia, 6 in Baltimore, and 5 in Brooklyn.

It appears, from statistics published in the Registrar-General's return for the week ending December 25th, that the annual death-rate recently averaged 29.0 per 1,000 in the three largest Indian cities; the rates were 19.8 in Bombay, 32.6 in Calcutta, and 38.1 in Madras. Cholera caused 54 deaths in Calcutta, and diarrhœal diseases 41 in Madras; "fever" mortality was nearly twice as great in Madras and Calcutta as it was in Bombay. According to the most recently received weekly returns, the annual death-rate averaged 25.5 per 1,000 persons estimated to be living in twenty-one of the largest European cities, and exceeded by 4.1 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 24.1, and showed a further slight increase upon the rates in previous weeks; the 428 deaths included 18 from typhoid fever, and 17 from scarlet fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 19.3, and ranged from 16.0 in Stockholm to 21.5 in Copenhagen; diphtheria and croup caused 17 deaths in Copenhagen, 10 in Christiania, and 8 in Stockholm; 4 deaths from scarlet fever were also returned in Christiania. In Paris, the death-rate was equal to 24.5, scarcely differing from the rate in the previous week, and was no less than 4.8 above the rate that prevailed during the same week in London; the deaths included 40 from typhoid fever, 34 from measles, and 31 from diphtheria and croup. The 178 deaths in Brussels, of which 3 resulted from "fever," and 2 from diphtheria were equal to a rate of 21.3. The rate in Geneva was 22.3, and 2 of the 31 deaths were referred to measles. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 25.3, the several rates being 23.6 in Rotterdam, 24.8 in Amsterdam, and 26.2 in the Hague; the deaths in Amsterdam included 2 from "fever," and 4 from measles; and 3 fatal cases of measles were reported in Rotterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 27.6, and ranged from 20.9 and 21.6 in Berlin and Dresden, to 36.0 in Hamburg and 36.8 in Buda-Pesth. Small-pox, caused 62 deaths in Buda-Pesth and 9 in Vienna; diarrhœal diseases 54 and "fever" 15 in Hamburg; and the greatest mortality from diphtheria and croup occurred in Dresden, Hamburg, Breslau, and Munich. The death-rate was equal to 25.4 in Rome, and 28.9 in Venice; the 161 deaths in Rome included 12 from small-pox and 8 from typhoid fever. The rate of mortality was 40.1 in Cairo and 34.9 in Alexandria, diarrhœal diseases caused 103 deaths in Cairo, and 32 in Alexandria; and typhoid fever 7 in Cairo and 6 in Alexandria. In four of the largest American cities, the recorded death-rate averaged 24.1, and ranged from 17.8 in Baltimore, to 41.8 in Brooklyn. Diphtheria and croup showed very excessive mortality in New York, Brooklyn, and Philadelphia; and 11 fatal cases of typhoid fever were reported in the last-mentioned city.

MEDICAL NEWS.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed the examination in the science and practice of Medicine, Surgery, and Midwifery, and received certificates to practise on Thursday, December 30th, 1886.

Cook, Edward Thomas, M.R.C.S., 3, Bessborough Gardens, Cottage Grove, Southsea.

Jong, Edward Meyer de, 10, Bright St., South Shore, Blackpool, Lancashire.

Walls, James, 67, Chapel Green, Hindley, Wigan.

MEDICAL VACANCIES.

The following vacancies are announced.

BEDFORD GENERAL INFIRMARY AND FEVER HOSPITAL.—Resident Surgeon. Salary, £100 per annum, with apartments and board, etc. Applications by February 3rd to the Secretary.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Resident Clinical Assistant. Applications by January 15th, 1887, to the Secretary, 24, Finsbury Circus, E.C.

CITY OF LONDON LYING-IN HOSPITAL, City Road, E.C. — Surgeon Accoucheur. Applications by January 11th to the Secretary.

CHORLEY DISPENSARY.—House-Surgeon and Apothecary. Salary, £130 per annum, with house. Applications by January 20th to B. Stanton, Esq., 14, High Street, Chorley.

COUNTY MONAGHAN FEVER HOSPITAL.—Physician. Salary, £50 per annum. Election on January 12th.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, £100 per annum, with furnished house, etc. Applications by January 25th to the Secretary, Bagdet Street, Holywell.

MALDON UNION.—Medical Officer and Public Vaccinator. Salary, £65 per annum, and extras. Applications by January 15th to A. C. Freeman, Esq.

MONAGHAN UNION.—Medical Officer, Monaghan Dispensary. Salary, £120 per annum and fees. Applications to Mr. Forster, Dunwoody House. Election on January 14th.

NEWCASTLE-ON-TYNE DISPENSARY.—Medical Officer. Salary, £250 per annum. Applications by January 12th to the Honorary Secretary.

NORTHERN INFIRMARY, Inverness.—House-Surgeon and Apothecary. Salary, £50 per annum, with board, etc. Applications by January 14th to the Secretary.

NORTH-WEST LONDON HOSPITAL, Kentish Town Road.—Assistant Resident Medical Officer. Applications by January 17th to the Secretary.

NORTH LONDON HOSPITAL FOR CONSUMPTION, Hampstead and London. Resident Medical Officer. Salary, £40 per annum. Applications by January 17th to the Secretary, 216, Tottenham Court Road.

ROYAL ISLE OF WIGHT INFIRMARY, Ryde.—House-Surgeon and Secretary. Salary, £50 per annum, with board, etc. Applications by January 11th to the Secretary.

SCARBOROUGH HOSPITAL AND DISPENSARY.—House-Surgeon and Acting Secretary. Salary, £80 per annum, with board and lodging. Applications by January 20th to the Medical Staff.

ST. PANCRAS AND NORTHERN DISPENSARY.—Honorary Physician. Applications by February 19th to H. P. Bodkin, Esq., 23, Gordon Street, Gordon Square, W.C.

UNIVERSITY OF EDINBURGH.—Examiner in Clinical Medicine. Salary, £75 per annum, and extras. Applications by January 17th, 1887, to the Secretary.

UNIVERSITY OF EDINBURGH.—Examiner in Surgery. Salary, £75 per annum, and extras. Applications by January 17th, 1887, to the Secretary.

UNIVERSITY OF EDINBURGH.—Examiner in Materia Medica. Salary, £75 per annum, and extras. Applications by January 17th, 1887, to the Secretary.

UNIVERSITY OF EDINBURGH.—Examiner in Physiology. Salary, £75 per annum, and extras. Applications by January 17th, 1887, to the Secretary.

UNIVERSITY OF EDINBURGH.—Examiner in Pathology. Salary, £75 per annum, and extras. Applications by January 17th, 1887, to the Secretary.

WORCESTER GENERAL INFIRMARY.—House-Surgeon. Salary, £100 per annum, with board and residence. Applications by February 7th to the Secretary.

MEDICAL APPOINTMENTS.

BARBER, R. D., M.R.C.S., L.S.A., appointed Assistant Resident Surgeon to the Nottingham Dispensary, *vice* R. R. C. Giddings, M.B., C.M., resigned.

BARRETT, W. A. H., L.R.C.P.Lond., L. and M.S.A., appointed Medical Officer and Public Vaccinator to the Littleport District, Ely Union, and to the South Welney District, Downham Union.

CLARKE, A. B., L.R.C.S.Ed., L.S.A., appointed Medical Officer and Public Vaccinator to the Shebbear District of the Torrington Union, Devon.

FINDLAY, G., M.B., C.M., appointed Assistant Medical Officer to Murray's Royal Asylum, Perth, *vice* J. Murray, M.B., C.M., resigned.

FRASER, D. A., M.D., M.R.C.S., appointed Deputy Coroner of the Totnes District, South Devon, *vice* Mr. Jelley, resigned.

HARDY, Albert E., M.R.C.S., L.S.A., appointed Senior House-Surgeon to the Charing Cross Hospital, London, W.C.

HAYNES, Charles, L.S.A.Lond., appointed Electrical Assistant to the Charing Cross Hospital, London, W.C.

HOCKEN, J. Preston, L.S.A.Lond., appointed Resident Obstetrical Officer to he Charing Cross Hospital, London, W.C.

JONG, E. M. de, B.A., L.S.A., appointed Junior Visiting Surgeon to the Anco ts Hospital, *vice* A. Mackey, M.B., C.M., resigned.

LLOYD, John Jenkin, L.R.C.P., etc., appointed Medical Officer to the Prince of Wales Lodge of Oddfellows, Llanelly.

LUCY, Reginald H., M.B., C.M.Edin., M.R.C.S.Eng., appointed House-Surgeon to the South Devon and East Cornwall Hospital, Plymouth, *vice* W. A. Buchan, M.B., C.M.Edin., L.S.A.Lond., resigned.

MACDONALD, P. Wm., M.D. and C.M.Abd., appointed Medical Superintendent to the Dorset County Asylum, *vice* J. G. Symes, M.R.C.S., resigned.

NELHAM, Albert E., M.R.C.S., L.S.A., appointed Junior House-Surgeon to the Charing Cross Hospital, London, W.C.

NORRIS, Edwin J., M.R.C.S., L.R.C.P., L.S.A., appointed Senior House-Physician to the Charing Cross Hospital, London, W.C.

OLIVER, W. Pye, L.S.A.Lond., appointed Junior House-Physician to the Charing Cross Hospital, London, W.C.

PARKER, G., M.A., M.D.Cantab., M.R.C.S.E., appointed Surgeon to the Bristol Dispensary, *vice* C. K. Rudge, L.R.C.P., M.R.C.S., retired.

REYNOLDS, E. S., M.D., appointed Resident Medical Officer to the Manchester Royal Infirmary, *vice* Malcolm Webb, M.D., resigned.

ROWE, Arthur Walton. M.S., M.B.Durham, M.R.C.S., appointed Surgeon to the Royal Sea Bathing Infirmary, Margate, *vice* W. H. Thornton, appointed Consulting Surgeon.

STARLING, Edwin A., M.B., M.Ch., etc., appointed Honorary Medical Referee for Tunbridge Wells District, to National Hospital for Consumption at Ventnor.

THOMSON, D. G., M.D.Edin., Senior Assistant Medical Officer, Surrey County Asylum, Cane Hill, appointed Medical Superintendent of the Norfolk County Asylum, Thorpe, near Norwich, *vice* Dr. Hills, resigned.

THORNTON, Bertram, M.R.C.S., L.R.C.P.Lond., appointed Consulting Surgeon to the Royal Sea Bathing Infirmary, Margate.

A SERIES of dances—Portman Cinderellas—have been arranged in aid of the building fund of the Great Northern Central Hospital. At the Cinderella on Twelfth Night, in the Portman Rooms, Baker Street, a new waltz by Miss May Ostlere, who is the wife of a highly respected member of the medical profession in London, was conducted by the accomplished composer. The friends of the Great Northern Central Hospital are sanguine that the medical profession in London will, both directly and indirectly, support these Cinderellas; and everybody desirous of attending should apply to Dr. Burnet, 6, Upper Wimpole Street, who is the honorary secretary.

THE DANGERS OF CHEAP LAMPS.—At an inquest held at the Islington Coroner's Court on January 5th on the body of a woman, aged 52, who met her death from burns caused by the exploding of a paraffin lamp when the deceased was in the act of blowing out the flame, the coroner, Dr. Danford Thomas, called attention to the large number of lamp accidents which were due in many instances to the fact that the lamps did not provide sufficient depth between the burning wick and the receptacle for the oil, the consequence being that the vapour which arose from the oil was easily ignited by blowing down the chimney. He called attention to the special instructions issued by the Metropolitan Board of Works, which, if followed, would tend very much to diminish these fatalities, and uttered a word of caution against the use of the cheap German lamps and dangerous oils which were so fruitful a source of accidents of this kind.

ANTHROPOLOGY IN FRANCE.—One of the most appreciated organs of French Anthropology, the *Revued' Anthropologie* of Paris, founded in 1872 by Paul Broca, and continued by Paul Topinard, inaugurates a third series with the assistance of some of the most distinguished representatives of the various branches of anthropological science, including Dr. Gavarret, director of the *Ecole d'Anthropologie;* Dr. Mathias Duval, director of the *Laboratoire d'Anthropologie de l'Ecole des Hautes Etudes;* Marquis de Nadaillac, whose works on prehistorical archæology have been translated into most languages; General Faidherbe, Grand Chancellor of the Legion of Honour, well known for his philological works; Professor de Quatrefages; Dr. Hamy, and Louis Rousselet, who represent ethnography; Baron Larrey, Jules Rochard, of the medical service of the French navy; D'Arbois de Jubainville, of the Institute, and others. The director of the *Revue*, Dr. Paul Topinard, is the general secretary of the Anthropological Society of Paris, and the author of the *Eléments d'Anthropologie*, to which the Académie des Sciences has recently awarded one of its annual prizes.

STOCKPORT AND DISTRICT MEDICAL SOCIETY.—At the annual meeting of the Society, held at the Stockport Infirmary, on Thursday, December 9th, the following were elected officers for the ensuing year:—*President*, Dr. Heginbotham; *Vice-President*, Dr. Bride (Wilmslow); *Treasurer*, Dr. Maclean; *Secretary*, Dr. Bailey (Warple); *Auditors*, Drs. Godson (Cheadle) and Bain; *Committee*, Drs. Ball, Murray, and Jones (Chapel-en-le-Frith).

PROMPT GASTROTOMY.—A tailor at St. Louis swallowed a table-knife, 9½ inches long; a surgeon was at once summoned, and with the most remarkable promptitude immediately performed gastrotomy, and removed the knife; within thirty minutes of the knife being swallowed it was once more in the outer world. This is probably the first case where immediate gastrotomy has been performed for a dangerous foreign body in the stomach, but if the risk attending the performance of the operation at one sitting instead of two stages—that is to say, the opening of the stomach before peritoneal adhesions have formed—may be safely taken, there is no reason why this example should not be generally followed. The wound in the stomach was closed by the Czerny-Lambert suture, and the man recovered.

MEDICAL MAGISTRATE.—Dr. Connor has been appointed a Justice of the Peace for County Down.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Odontological Society of Great Britain, 8 P.M. Communications by Messrs. L. Matheson, C. D. Davis, W. St. George Elliott, S. J. Hutchinson, A. S. Underwood, Morton Smale, and Joseph Walker. President's Valedictory Address.—Medical Society of London, 8.30 P.M. Dr. Ralfe: Phosphatic Diabetes. Mr. A. Pearce Gould: A Case of Wound of the Common Femoral Artery.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. Bland Sutton: Suture of the Median Nerve Ten Weeks after Division, with Recovery of Function. Dr. Eccles: Observations on the Physiological Effects of Massage (communicated by Dr. Lauder Brunton). Mr. Barwell: On Widely Incising, by a two-stage method, Hydatids of the Liver.

WEDNESDAY.—British Gynæcological Society, 8.30 P.M. Annual Meeting. Presidential Address.—Epidemiological Society of London, 8 P.M. Mr. Edward F. Willoughby: Preventive Inoculations. Council Meeting, 7.30 P.M.—Obstetrical Society of London, 8 P.M. Specimens will be shown by Dr. Amand Routh and others. Papers: Dr. Pedley: Midwifery among the Burmese. Dr. Herman: Stricture of the Female Urethra. Dr. Gibbons: Case of Unilateral Galactorrhœa.—Hunterian Society. The President: Cases of Lead-Poisoning, terminating rapidly with Cerebral Symptoms. Dr. Fox: The Nature of Asthma. Dr. Turner: Actinomycosis of the Liver. Mr. Symonds: Further History of a Case of Intestinal Obstruction.—Royal Microscopical Society, 8 P.M. Mr. A. W. Bennett: Fresh Water Algæ (including Chlorophyllaceous Protophyta) of North Cornwall; with descriptions of six new species. Mr. J. Mayall, jun.: A Visit to Jena.

FRIDAY.—Clinical Society of London, 8.30 P.M. Annual General Meeting for the Election of Officers and Council. Dr. Samuel West: Right Hemiplegia, with Aphasia, occurring during a Paroxysm of Whooping-Cough, with Slight Rigidity, subsequently passing into a Condition of Athetosis. Mr. Mayo Robson (Leeds): 1. A Method of Treating Thyroid Cysts; 2. A suggested Method of Operating on a Uniform Principle in the Treatment of Imperforate Anus. Living specimens—Dr. Radcliffe Crocker: A Case of Athetosis after Hemiplegia. Dr. Stephen Mackenzie: Living Embryo Filariæ Sanguinis Hominis from a Case of Chyluria.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTHS.

HANLY.—December 31st, at 3, Upper Phillimore Gardens, Kensington, W., the wife of Edward Hanly, M.D., M.Ch., of a son.

TYRRELL.—On January 5th, at 95, Cromwell Road, S.W., the wife of Walter Tyrrell, of a daughter.

MARRIAGE.

WAGHORN—HALE.—December 30th, at the Memorial Church, Colaba, Bombay, by the Rev. A. G. Lewis, Henry Waghorn, Surgeon-Major, Army Medical Staff, to Florence Isabel, younger daughter of the late John Hinde Hale, of Chesham, Bucks.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY .....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY .....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 8. Eye, M. Th., 2.30; Ear, M., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

QUERIES.

CONVALESCENT HOME FOR A LADY.

Mr. E. C. CRIPPS (Cirencester) wishes to know if there is any convalescent home or establishment in a warm climate, such as Bournemouth or Ventnor, where a lady with weak chest and chronic cough could go for two or three of the colder months. The charge must be moderate, as expense to any great extent cannot be incurred.

ANSWERS.

WEIR-MITCHELL'S TREATMENT.

M.D. writes: There are numerous places in London where Weir-Mitchell's treatment can be carried out thoroughly if "M.A." is prepared to pay the price. I know of no place where it is done gratuitously, and with the exception of one most successful case, where the treatment, including isolation, was carried out under the parent's roof, the total expense is nearer £100 than £50. I enclose my name to the Editor, and shall be happy to send any particulars to "M.A." by letter.

SACCHARINE.

A. M.—Saccharine is not at present procurable. It is stated that a factory is in course of erection, and that it will shortly be obtainable in considerable quantities. It is a chemical product belonging to the aniline series; very small quantities, it is said, suffice to give the sweetening effect. It has no nutritive value, and leaves an unpleasant acrid after-taste. Its use in dietetics may be considerable, but that remains still to be tested by chemical experience.

TREATMENT OF URETHRAL CARUNCLE.

DR. PERCY BOULTON recommends "R.N." to paint the urethral caruncle and urethra surrounding it with a 10 per cent. solution of cucaine. In five minutes he can snip off the caruncle with a pair of slightly curved scissors. If he holds the caruncle with anything to draw it forward, he should use dressing forceps rather broader than usual at the points, as these growths tear easily and bleed profusely. The bleeding can be stopped at once by the application of Paquelin's cautery, and, in many cases, pressure of the urethra against the pubes by means of a plug of wool in the vaginal orifice is quite sufficient. The operation, performed in this way, is exceedingly simple, effectual, and painless.

WALTER GRIPPS, M.B., writes: In answer to "R.N.'s" query in the JOURNAL of January 1st regarding cucaine in urethral caruncle, I removed a small one by ligature and the actual cautery, with the smallest amount of pain, by freely swabbing the part and surroundings with a 6 per cent. solution of the salt. I have not seen the patient for eighteen months.

SCHOOL FOR GIRLS.

IN reply to "G. H.," Mr. Brierley (Tattenhall) highly recommends Pelican House School, Grove Park, Denmark Hill. Mrs. Bennett, Lady Principal, is the widow of a medical man, and "G. H." would find all he could desire for his daughter in her establishment, it being the only high-class boarding school for girls the writer has ever heard of where advantages so valuable and special are offered to the daughters of members of the medical profession.

FREE-MARTINS.

G. P. B. writes: With regard to the word free-martin, it is quite true that a cow is called mart, which is, probably, an abbreviation of martin. But the question arises how it came to be so called. Brewer says, "November, or Martinmas, was the great slaughter-time of the Anglo-Saxons, when beeves, sheep, and hogs were killed and salted." Still, one would like to know why the north-country folk should specially "affect" a Bishop of Tours of the fourth century. As a fact they do. Haydn says, "In parts of the north of England, and in Scotland, Martinmas, November 11th, is quarter-day." The explanation will probably be found in the channel through which these parts of Great Britain were Christianised. The word free seems to be a contracted form of ferry, seen in Scotch ferry-cow, one not in calf (Palmer).

DR. R. R. YOUNG.—We cannot undertake to carry on a private correspondence on such subjects. We have, however, made an exception in this case.

PHARMACY, DENTISTRY, AND MEDICINE.

J. BROOK can legally practise dentistry if registered in the *Dentists' Register*, and pharmacy if registered in the *Register of Pharmaceutical Chemists*. He cannot legally practice medicine or surgery except he be registered in the *Medical Register*.

NOTES, LETTERS, ETC.

DR. BERGEON'S TREATMENT OF PHTHISIS.

SURGEON-MAJOR T. MURTAGH writes: The application of Dr. Bergeon's method of treating phthisis is so objectionable as to be prohibitory in many cases. Would it not be well, therefore, to test the prolonged internal administration of sulphur which, to some extent, passes off by the breath as sulphuretted hydrogen.

THE IMMEDIATE TREATMENT OF WOUNDS OF THE FACE.

DR. GEORGE MUNDIE (Canterbury) writes: In reference to the suggestion of Dr. J. Kent Spender, relative to the immediate treatment of wounds, specially on the face, I beg to state that it is the only method I have adopted for the last twenty years; but I think he will find that silk-sutures will answer every purpose, and common medicated wool suffice, if a thin layer is laid over the wound after the edges have been brought together by a ligature, and the bleeding stopped, the collodion applied with a camel's hair brush, which causes it instantly to adhere; it must be applied from the centre to the edges, so as to expel every particle of air, which ensures it acting as a perfect antiseptic. I have usually found that the ligatures have come away with the removal of the wool about the end of a week from the time of application, having cut their way through and adhering to the wool; the layer of wool ought to be very thin and even. As soon as the collodion is dry, it is scarcely visible, and there ought to be no further pain in the wound whatever.

About twelve months ago, I published in the *Lancet* an account of some cases. One very severe case, in 1882, in which a man had his face severely cut on board a vessel in the Humber from having lost his power over the windlass, the lever having struck him and cut his cheek open in several places. A few days after he was dining with his club, no one recognising that anything had been the

matter with him, although the dressing was still on. Several of the stitches were deep, but not one had to be removed; all were found adhering to the wool when peeled off. The same method may also be applied to an abrasion. However sharp the pain at the time, it will cease directly the collodion is dry. If done quickly and evenly, the wool will adhere until quite healed. In erysipelas of the face, I have found nothing equal to collodion, either with a few grains of nitrate of silver, or without, according to the case. Adhesive plaister applied to cuts or such wounds of face, hands, or exposed part of the body, is simply barbarism, and the result nothing equal to a dressing of collodion and wool.

DR. F. CHURCHILL writes: Referring to Dr. Spender's remarks upon this subject, I should like to say that the best way to avoid ugly scars in these cases, as also the pain of passing the suture-needle, is to clamp together the edges of the wound with a very fine steel pin, and then to apply a spiral silk thread over and under the pin, so as to keep up the compression, restrain hæmorrhage, and approximate the deeper tissues. The scar-tissue will then be reduced to a minimum, and there will be no "cross-scars" caused by the grip of the ligature.

A. L. EVANS, L.R.C.P. (Hawarden).—We are obliged to you for a copy of the BRITISH MEDICAL JOURNAL for April 19th, 1884, which has been forwarded to the College of Surgeons' Library, for which it was needed.

THE RIDDELL FUND.

	£	s.	d.
Amount already acknowledged	33	14	6
R. T. Davison, Esq., Newburn-on-Tyne	1	1	0
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F. Vacher, Esq., F.R.C.S.Edin., Birkenhead ..	1	1	0
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Mr. Wickham Barnes, 3, Bolt Court, Fleet Street, wishes to inform intending subscribers to this Fund that the list will close on January 19th.

AN APPEAL.

MR. W. HOWARD CORY (The Avenue, Redland Road, Bristol).—The appeal in question should be addressed to a local newspaper rather than to the BRITISH MEDICAL JOURNAL.

POISONED SANDWICHES.

A SINGULAR case of poisoning occurred recently at Sydney. A hotel proprietor, named Uhde, being troubled with the presence of rats in his house, which he sought to exterminate, spread some poison known as "Rough on Rats" on some sandwiches. Being called to another part of the house, he left the poisoned sandwiches in a room where several of his customers were sitting, enjoining on them, however, not to touch them as they were poisoned. Returning a little later, a Mr. Berndt, a merchant, one of the number, informed him that he had eaten some of the sandwiches, believing that the warning was not meant seriously. The unfortunate man at once took an emetic, and, after vomiting, retired to bed. During the night, however, he became worse, Dr. Wright was called in, remedial measures were taken, but, in spite of all treatment, the deceased expired on the following morning. The deceased was 30 years of age.

UNQUALIFIED ASSISTANTS AND THE GENERAL MEDICAL COUNCIL.

H. C. writes: As an unqualified man, may I be allowed to add my word on the subject of such vital importance to myself, and hundreds of others in a similar position, relative to the rendering illegal the employment of unqualified assistants. Surely this is not the time to add to the distress and the cries of the "unemployed" throughout the land. Personally (and I am sure mine is a parallel case with dozens more), I served an apprenticeship in a practice, where I saw much work and gained a large amount of experience. Lack of funds prevented me attending lectures and qualifying. I have been engaged as an assistant for the last few years, my work always being under the supervision of my principal. Are we, then, to be thrown on the mercy of the world with scarcely a warning word? I feel sure that the majority of practitioners would prefer an assistant who, by years of labour, has acquired a practical knowledge of his work to a young newly-fledged qualified man, whom they would be obliged really to teach and break-in to the routine of the surgery before he could be of any use. I am confident, also, that they would not wish the old custom of employing an unqualified man to do the surgery work, visit the chronic cases, etc., under their own personal supervision, and attend the ordinary confinements, to be suddenly discontinued by one sweeping reform.

I would advise the calling of a meeting of unqualified men to consider the best means of keeping their homes from ruin and misery, and to state the case plainly to the Medical Council, pointing out to them the misery and poverty they will entail on many a married man and his family, and also on unmarried men who have nothing to depend on but their salaries derived from their assistantships, and who are too old to begin life again in some other profession or business. Surely something can be done to avert this calamity. Why not let every man, before he can become an assistant, serve a moderately long apprenticeship, and then register his name? Or let all who are now assistants register their names, and allow no others to become assistants (without qualifying). By this means, if the Council are determined to put a stop to the employment of unqualified help, it would be done by degrees, but not in such a sweeping manner. I trust some early steps will be taken by the unqualified men to keep themselves, and those who have wives and families dependent upon them, from the workhouse.

COMMUNICATIONS, LETTERS, etc., have been received from:
Mr. G. Brown, London; Mr. W. Howard Cory, Bristol; Dr. F. Churchill, London; Mr. J. Whitehouse, Sunderland; Mr. M. Thomson, Boxmoor; Dr. Ward, Blyth; Mr. Brierley, Tattenhall; Mr. A. L. Evans, Hawarden; Dr. R. J. Purdon, Belfast; Mr. S. Murphy, London; Mr. R. Freeman, London; Dr. J. J. Ridge, Enfield; Messrs. J. Wright and Co., Bristol; Mr. D. Davis, Builth; Dr. J. Mackenzie Booth, Aberdeen; Mr. G. E. Douglas, London; Mr. J. West, London; Mr. H. Collins, London; Mr. J. G. Bingham, Alfreton; Dr. J. Langdon Down, London; Dr. J. J. M. Dunbar, London; Mr. F. Shapley, Sidcup; Mr. Laurence Humphry, Cambridge; Dr. E. Charles, Rome; Dr. C. Roy, Cambridge Mr. J. Jenkin Lloyd, Llanelly; Mr. W. C. Garman, Wednesbury; Dr. Rossiter, Weston-super-Mare; Mr. G. A. Blake, Dublin; Mr. S. Plowman, London; Mr. Lewis W. Reynolds, High Wycombe; Mr. P. B. T. Stubbs, Canonbury Mr. E. C. Cripps, Circencester; Mr. C. Atkin, Sheffield; Dr. Ward Cousins, Southsea; Mr. W. A. H. Barrett, Littleport; Mr. E. C. Bigger, Belfast; Dr. Wiglesworth, Rainhill; Mr. G. Cooke, London; Dr. G. Harley, London; Dr. Percy Boulton, London; Dr. G. Mundie, Canterbury; Dr. C. C. Spitzka, New York; Dr. Barnardo, London; Mr. G. E. Muskett, Sydney; Mr. Douse, London; Dr. Jeffreys, Chesterfield; Dr. Huggard, Davos Platz; Dr. T. Churton, Leeds; Mr. C. E. Lajons, Philadelphia; Messrs. Evans, Sons, and Co., Liverpool; Mr. W. E. Porter, Lindfield; Mr. B. Rolston, Armagh; Dr. Corry, Belfast; Dr. Jameson, Edinburgh; Dr. Styrap, Shrewsbury; Dr. Parsons, Dover; Mr. J. Vesey Fitzgerald, Birmingham; Mr. W. T. Cole, Holywell; The *Journal of Commerce*, Liverpool; Our Manchester Correspondent; The Secretaries of the Epidemiological Society of London; The Secretaries of the Odontological Society, London; Mr. R. Wade Savage, London; Mr. W. Gripper, Wallington; Dr. Thin, London; Mr. J. P. Hocken, London; Dr. M. O. Coleman, Surbiton; Mr. J. Gibson, Halifax; Mr. B. Brooks, Hull; Dr. J. Johnstone, Glasgow; Mr. J. S. Tibbles, Melton Mowbray; Mr. W. T. Grant, London; Mr. W. Stallard, Worcester; Mr. W. A. Evans, Wolverhampton; Mr. R. H. Lucy, Worcester; Mr. G. P. Best, Cheltenham; Mr. C. J. Symonds, London; Dr. Norman Kerr, London; Dr. Hack Tuke, London; Mr. J. S. Wood, London; Dr. Imlach, Liverpool; Mr. R. H. Rotham, Wincanton; Messrs. J. Grimaldi and Co., London; Dr. D. Adams, London; Dr. Morley Rooke, Cheltenham; Mr. Brock, Birmingham; The Assistant Secretary of the Royal Microscopical Society, London; Dr. J. Holmes, Radcliffe; Mr. W. E. Hadden, Portadown; Mr. L. Buchanan, Arva; Dr. S. Martin, London; Dr. R. Barnes, London; Mr. A. M. Sheild, London; Dr. Illingworth, Clayton-le-Moors; Messrs. Burroughs, Wellcome and Co., London; Mr. C. Maclean, Lairg; Dr. Tatham, Salford; Mr. E. Bryan, Idle, near Bradford; Mr. A. E. Wilmot, Maidenhead; Mr. E. A. Starling, Calverley; Mr. C. R. Owen, Rushden; Messrs. Turton and Sons, Sheffield; Mr. A. B. Clark, Shebbean, North Devon; Dr. S. M. Rendall, Mentone; Dr. P. W. Macdonald, Dorchester; Mr. R. Martyn, London; Mr. W. Allars, Tewkesbury Mr. W. C. Martin, London; Dr. Moore, Dublin; Mr. Warwick Steele, London; Mr. W. Ashton Ellis, London; etc.

BOOKS, ETC., RECEIVED.

Transactions of the Sanitary Institute of Great Britain. Vol. vii. 1885 and 1886 London: Sanitary Institute. 1886.

Alexander Wood, M.D., F.R.C.P.E.: A Sketch of his Life and Work. By the Rev Thos. Brown, F.R.S.E. (his brother-in-law). Edinburgh: Macniven and Wallace. 1886.

The Healing of Arteries after Ligature in Man and Animals. By J. C. Warren, M.D. New York: Wood and Co. 1886.

Transactions of the Academy of Medicine in Ireland. Vol. iv. Edited by W. Thomson, M.A., F.R.C.S. Dublin: Fannin and Co. 1886.

Druitt's Surgeon's Vade-Mecum. By Stanley Boyd, M.B., B.S.Lond. Twelfth Edition. London: H. Renshaw, and J. and A. Churchill. 1887.

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AN ADDRESS
ON
CHOROIDITIS DISSEMINATA.

Introduction to a Discussion in the Section of Ophthalmology at the Annual Meeting of the British Medical Association in Brighton.

By JONATHAN HUTCHINSON, F.R.C.S., F.R.S.,
Consulting Surgeon to the London Hospital.

Mr. Hutchinson stated that his wish was to introduce for discussion the symptomatic value of old changes in the choroid. The discovery of patches of absorption and of pigment-accumulations was very easy, and in many instances constituted what might be called a retrospective symptom of great value, revealing at once the fact that the patient had probably suffered from syphilis. The question which he wished to propose was as to the degree of confidence which might be placed in it.

In the earlier days of ophthalmoscopic investigation, and especially in connection with the discovery of the true nature of interstitial keratitis, and the value of malformations of the teeth as signs of inherited syphilis, he had himself been led to think that nearly all choroiditis disseminata was of syphilitic origin. For many years, however, he had entertained doubts on this subject, and had been carefully seeking evidence—first, as to whether there were cases which were not syphilitic, and secondly as to whether, if there were such, it was possible to discriminate them.

In order to clear the ground, he wished to state at once that he had no doubt whatever that syphilis was the cause of a very large majority of the cases of choroiditis disseminata. It was quite impossible, he believed, to draw any distinction between the examples of this disease that were due to inherited and those resulting from acquired syphilis. The disease presented certain varieties, both as to peculiarities in the pathological features and in clinical course; but these varieties were met with equally both in the acquired and the inherited form of the disease. In many cases, perhaps in most, the disease was stationary after the first attack had subsided, and there appeared to be little or no tendency to aggression. In others, however, there was definite liability to recurrence, and slow processes of disorganisation and pigment-accumulation went on for years. He had observed these differences in tendency equally in cases of acquired disease and of inherited, and he had seen them also in a few instances in which no history whatever of taint could be obtained. Having preserved portraits of the fundus in many of his cases he possessed very interesting evidence upon this point, and was in a position to place upon the table at least a dozen excellent representations of the different forms of the disease, and to challenge anyone to select those which had a specific history from those which had not.

It might be well, he said, at once to admit that he was not one of those who thought that the diagnosis of syphilis as a cause ought always to be given up when no history could be obtained, nor even when the facts seemed very strongly negative. As regards interstitial keratitis, for instance, the disease was in itself so peculiar, and the proof of syphilis in a large majority of cases so clear, that he held they were quite justified in accepting it as being proof in itself, whenever the case was well marked, in default of all other evidence.

In keratitis, however, they had the advantage of watching the whole course of the disease, and could study its peculiarities with much greater accuracy, whilst in disseminate choroiditis they but seldom saw anything but the results. In many, the process seemed to be one rather of atrophy than of inflammation. No one who had had much to do with the investigation of the antecedent history of syphilitic patients could have failed to meet with many instances in which the facts seemed strongly negative until suddenly, and perhaps quite unexpectedly, the truth was divulged. Thus in many cases of the acquired disease, the patient really did not know that he had had it, and in cases of inheritance it often happened that, even when it was thought justifiable to put a direct question, the parent's reply, although quite candid, might be misleading. There were such various ways in which syphilis might be obtained, that the fallacies in making out a long retrospective history were very great.

He should be obliged to admit that, in several of the cases which he was about to adduce, whilst the negative evidence seemed very strong, it was still not conclusive. Thus, in one of these, in which there seemed to be no reason for suspicion, the disease appeared to have been definitely arrested by iodide of potassium. In another, in which the negative history was, if possible, yet stronger, the patient having six brothers and sisters older, and two younger than herself, —all in perfect health—a possible source of fallacy was suggested in the fact that the child's vaccine-vesicles had remained unhealed for two months. Syphilis from vaccination was fortunately exceedingly rare; still it must be admitted that it occurred with sufficient frequency to be a possible cause every now and then of remote manifestations, with a puzzling absence of all history. The same remark applied—though, perhaps, with rather less force—to erratic chancres generally. Making, however, the fullest allowance for all these sources of fallacy, he could not help feeling that the evidence as regards the possible production of choroiditis disseminata, without antecedent syphilis, was very strong. To take, first, a case which he had seen within the previous week, a gentleman, aged 58, had come over from Australia on account of failure of his eyesight, which had been in progress for four years. Both eyes showed the characteristic patches in the choroid, yet the patient was the father of a healthy family, and asserted, in the strongest manner, that he had never been exposed in his life to any risk of venereal disease, and nothing whatever could be discovered to invalidate his assertion.

In another case, in which the portrait of the fundus was shown, the patient was a woman, in whom the sight first began to fail immediately after a confinement which had placed her life in great peril, first from placenta prævia, and afterwards from puerperal fever. The condition which resulted was a choroido-retinitis, arranged in zones near the periphery, yet there was no history of syphilis in the patient, and she had borne five or six healthy children before her illness, and given birth to at least one after it.

In the case of a young man, in whom the changes were very extensive, and in whom they continued to advance during several years, the diagnosis had, in the first instance, been retinal hæmorrhages; yet the results finally produced, as illustrated by a portrait which was shown, were those of choroiditis disseminata in its most marked form. A tendency to hæmorrhage into the choroid had been throughout a prominent feature of this case. The patient had no concomitant symptoms of syphilis, and although he freely admitted having been exposed to risk, he denied that he had ever had either sore or discharge. He himself attributed his failure of sight to the influence of nocturnal emissions, from which he had suffered greatly.

Mr. Hutchinson was inclined to believe, respecting this case and some others which he mentioned, that they ought to be placed in the same group as those of recurrent hæmorrhage into the vitreous, of which examples had recently been recorded by Mr. Eales, of Birmingham, and himself. These cases always occurred in young men, and appeared to be associated in some instances with a history of inherited gout; in some with nocturnal emissions; and in some with troublesome constipation. Although hæmorrhages were often seen in syphilitic choroiditis, Mr. Hutchinson was inclined to believe that, when they formed a prominent feature of the disease, syphilis had usually nothing to do with it.

Another exceptional case was cited, in which a man, aged 63, had been under observation for upwards of fifteen years. The disorganisation of his choroids was most extensive, and occurred chiefly in the central parts of the fundus. It consisted of most abruptly margined pits and patches, some of them of very large size, and exposing the sclerotic. The patient, who was apparently in excellent health, denied all syphilitic antecedents, and did not appear to have suffered from any suspicious symptoms except those in his eyes. He had a large family of healthy children. In him, the disease had advanced by a succession of recurrences attended by aching of the eyeballs, and there had been some iritis. It was suggested respecting this case that it might possibly be analogous to those grouped under the name "relapsing cyclitis," a disease upon which a discussion, opened by Mr. Anderson Critchett, had already taken place. Relapsing cyclitis, often complicated by iritis, was, Mr. Hutchinson felt sure, in the majority of cases, in no kind of connection with syphilis. It was a constitutional disease, and had to do with a mixed inheritance of gout, scrofula, and that peculiar condition of tissue-tendency which gave proneness to chilblains.

Mr. Hutchinson next adverted to the fact that changes resembling those of choroido-retinitis sometimes occurred after severe concussions of the eyeball. He did not, he said, refer to cases of laceration of the choroid, but to those in which the changes continued to advance long after the injury. In some of these, the final result was quite similar to what we often saw in syphilis; but the diagnosis could be made not only by the history of injury, but by the observation that the dis-

ease was absolutely limited to one eye. In syphilitic choroiditis, although one eye might suffer very much more than the other, there would always be found a tendency to symmetry.

Cases in which choroiditis was met with in several members of the same family, that is, amongst brothers and sisters, constituting what was known as a "family disease," in the special sense of the term, were next alluded to. A sketch was shown from the eye of a child, five or six of whose brothers and sisters were similarly affected. In this family many of the children were in perfect health, and most of those who suffered from choroiditis became also paraplegic and imbecile. In another case, two sisters were affected with choroiditis, whilst their brothers escaped, the choroiditis being peculiar in respect to the large extent of the epithelial layer involved, and the very large and almost angular masses of pigment which had accumulated. Neither of these girls showed indications of inherited syphilis; both were of defective intelligence, and their father had died insane.

In concluding his remarks, Mr. Hutchinson said that he thought that they must admit the following propositions:

1. That concussion of the eyeball might produce conditions closely resembling those of other forms of choroiditis, but always limited to the eye injured.

2. That choroiditis disseminata, affecting both eyes, was occasionally met with as a family disease, independently of syphilis, and in association with disorders of the nervous system, especially of the intellect.

3. That there were cases of choroiditis which occurred in fairly healthy persons, which showed a remarkable tendency to recurrence, which were accompanied by iritis, and ought possibly to be grouped with relapsing cyclitis.

4. That young men were liable to a peculiar form of hæmorrhagic choroiditis, which was not dependent upon syphilis, but which produced results not to be distinguished from the syphilitic forms.

5. That there were yet other forms of disseminated choroiditis which could not be assigned to any of the above groups, but which closely resembled, in their final results, what we observed in syphilis, but in which there was still no reason to suspect that disease.

Thus, whilst it was to be freely admitted that, in nine cases out of ten, the discovery of the results of choroiditis disseminata amounted to the discovery of antecedent syphilis, the symptom was yet one which must be received with caution, and could be trusted only when it was supported by other facts.

A portrait was shown, illustrating a form of choroiditis which occurred in a young lady, aged 16, the daughter of a surgeon. She was well-grown, and presented not the slightest indication of inherited syphilis, but her father volunteered the statement that he had suffered from the disease shortly before marriage, and that he had reason to believe his child had inherited it. Had it not been for this information, the case would have passed as one in which there was not the slightest corroboration of a suspicion of syphilis. The changes, which were quite recent when the patient came under care, entirely disappeared under the use of specifics. Mr. Hutchinson stated that he had a double object in showing this portrait. He wished to contrast it, first, with one published in the *Ophthalmic Hospital Reports*, by Messrs. Critchett and Juler, in connection with acquired syphilis, and next, with the portrait showing the conditions present in that peculiar form of choroiditis, first described by Mr. Waren Tay and himself. Neither in the portraits nor in the patients was it possible to notice any feature upon which to base a differential diagnosis. The history in each case alone afforded the clue to treatment. This form of syphilitic choroiditis differed, it was remarked, much from the more common type, there being present only little raised dots of exudation, with no large patches, and scarcely any disturbance of pigment. The cases afforded a remarkable example of syphilitic imitation, and also proved that the choroiditis of inherited and acquired syphilis, even in their exceptional forms, presented precisely similar features.

Mr. Edgar Browne found it consolatory to learn that no precise ophthalmoscopic symptoms could be relied upon to discriminate syphilitic from non-specific disseminate choroiditis. Choroiditis undoubtedly occurred in patients who were not sufferers from either hereditary or acquired syphilis. A close connection existed between choroid and brain-mischief. He had observed cases of indeterminate cerebral irritation in children accompanied by choroiditis shown by small atrophic patches or circumscribed pigment spots. The early symptoms were night-terrors, causeless vomiting, inexplicable constipation or diarrhœa. The mischief was generally not referred to the head, but to the stomach; and rhubarb, grey powder, and castor-oil were relied on in the treatment. As the choroidal disturbance took place in the growing period of the eyeball, myopia, or myopic astigmatism, was one of the results. These children, after second dentition, did not necessarily have notched incisors, and no evidence of hereditary syphilis was readily obtained. As the choroid was the great nutritional tract of the eyeball, it was only reasonable to suppose that, in persons of weakly constitution, the border-line between accelerated nutrition and inflammation was overstepped both in the brain and the choroid. These cases appeared to have occurred in children who had a strumous parentage, or who were themselves of a strumous type. If this were true, it indicated the importance of ophthalmoscopic examination in obscure or slight cerebral mischief.

Mr. Critchett said that he would have been more inclined to attribute nineteen cases in twenty than nine in ten to acquired or inherited syphilis. He deemed it most important that anti-syphilitic treatment should extend over some years.

Mr. Vose Solomon related a case of choroiditis the result of a hard chancre, in which, although the primary chancre and secondary ocular disease were carefully and persistently treated by mercury and iodide of potassium, amblyopia with well-marked ophthalmic signs of diseased choroids remained through life. The subject was a man of excellent health, and bore the mercurial course well.

Dr. Hughlings Jackson thought that Mr. Hutchinson's researches would be of great value beyond the ophthalmological value. He mentioned a case of Freidreich's disease (in addition to some ordinary tabetic symptoms there were lateral curvature of the spine and nystagmus) in a man, aged 20, who had become rapidly ataxic, and who showed signs of old choroiditis. Treatment was followed by very great improvement in the patient's gait. Later, keratitis of the left side came on, enforcing the diagnosis of inherited syphilis. If the nystagmus were owing to the choroiditis, it was not, in this case, a nervous symptom. He thought that the possibility of syphilis being a factor in the causation of "family" nervous diseases should be considered, and that the ophthalmoscope should be used in all cases.

Mr. Hutchinson, in reply, stated that the case to which Dr. Jackson had referred was one of very great interest. The youth had, at the time that Dr. Jackson sought the consultation, shown no indications of having inherited syphilis, excepting such as the patches in his choroid might be deemed to furnish. He was the subject of an obscure nervous disorder, and it was, therefore, of great importance to decide whether or not he was syphilitic. He (Mr. Hutchinson) had been obliged to say that he did not think the state of the choroids was conclusive; but the result proved that Dr. Jackson's inferences were more correct than his own, for the boy subsequently passed through an attack of keratitis, which conclusively proved him to be syphilitic. With regard to the question of symmetry and asymmetry as indicative of local or constitutional origin, he had seen a single notched upper central incisor by the side of one which was well-formed, and he had seen the patient suffer from keratitis on one side only, the eye affected being on the same side as the malformed tooth. Some years afterwards, however, the other eye suffered also.

We must be very careful, in judging as to symmetry, that our observations extended over a sufficiently long period; for, in many cases of constitutional disease in which symmetry was the final result, the interval between the attacks on the two sides might be a long one. In the case of interstitial keratitis, he had known frequently the second eye suffer several years after the first one had got well. Again, it must be borne in mind that it was not necessary for the full significance of symmetry, as a symptom, that the disease should be of equal severity on the two sides. It was, indeed, almost exceptional that it should be so. In the case of syphilitic choroiditis, he thought that he had scarcely ever seen a case in which there was not, sooner or later, an attempt at symmetry; but in many instances the disease was severe in one eye and slight in the other.

He had been much interested in what Mr. Edgar Browne had said as to the frequency of choroiditis disseminata in children without any syphilitic history, and in connection with debility and nervous exhaustion. He could not say that he was himself familiar with the class of cases to which Mr. Browne referred, and he hoped that they would soon be made the subject of a detailed report. He believed that the conditions under which choroiditis occurred, apart from syphilis, were well worthy of investigation, and they had as yet received no detailed consideration. He had been asked a question respecting the cases of hæmorrhagic choroiditis, of which young men were the subjects, and which were supposed to be analogous to the cases of hæmorrhage into the vitreous. It was not himself, but Mr. Eales, of Birmingham, who, in his able report on this subject, had stated that constipation appeared to be constantly present in those who were liable to recurrent hæmorrhages into the vitreous. For himself, he felt no doubt that the constipation, when present, was but an indication of the general nerve-disturbance incident to the ado-

lescent period. As had been remarked, constipation was far more common in the female than in the male sex, yet the subjects of vitreous hæmorrhages, hæmorrhagic choroiditis, and, he might add, of recurrent and severe epistaxis, were almost invariably males. The explanation of this was, he thought, tolerably obvious. Both sexes at the adolescent period were liable to peculiar disturbances of the nervous and vascular systems, and in both probably something of periodicity was observed. In the female sex, however, menstruation afforded the necessary relief, and hence males only for the most part were liable to hæmorrhages in abnormal positions.

The inheritance of gout, he believed, took its share in these cases by leading to weakness in the walls of the blood-vessels. It was well known that a history of gout was almost always a strongly marked feature in the families of those who suffered from the hæmorrhagic diathesis. As regards the indications for treatment in cases of choroiditis in which the diagnosis was doubtful, he could not feel the least hesitation that the patient ought to have the benefit of the doubt and take mercury. He should be very sorry if anything that he had said in support of the belief that choroiditis disseminata was not invariably syphilitic should lead to feeble practice. In cases of acute choroiditis, such as that referred to by Mr. Vose Solomon, he should be in favour of making the patient keep in bed, and pushing the remedy by repeated small doses until ptyalism was induced. If this was done vigorously, he believed there were very few cases in which the result would not be satisfactory. In chronic cases a milder treatment of the same kind should invariably be used.

In thanking those who had taken part in the discussion, he wished to express a hope that the subject would receive much more attention within the next few years, and that we should soon be able to speak with much more confidence as to the symptomatic value of traces of by-gone choroiditis, and also as to the causes and clinical history of those forms of disease which were not due to syphilis.

REMARKS
ON
THE VALUE OF INDIAN HEMP IN THE TREATMENT OF A CERTAIN TYPE OF HEADACHE.[1]

By STEPHEN MACKENZIE, M.D., F.R.C.P.,
Physician to, and Lecturer on Medicine at, the London Hospital, etc.

I must premise my remarks by at once stating that I have no novelty to bring forward. Indian hemp is well known as a sedative, and enjoys a considerable reputation—not so large, however, as it deserves—in the treatment of headache. Whilst its efficacy is considerable in most forms of headache, if given in sufficient doses, its value has scarcely been insisted on or widely recognised in a particular class of headaches to which I shall presently allude. At least, that is the impression I have gained from my reading, from conversations with professional brethren, and my experience in regard to many patients who have sought my advice for this complaint, and who have not been treated with this remedy. Dr. Sydney Ringer is an exception, and has advocated its use in the kind of case I mean (*Handbook of Therapeutics*, eleventh edition, p. 562). It is probable that many more are in the habit of using the remedy for such cases as I shall describe, but it is quite possible there are others who have not tried it, and who will be glad to be informed of a mode of treatment generally effecting the cure of a malady which, though not dangerous, is annoying or distressing, and which is often most rebellious to treatment.

The headache to which I wish to draw attention is of a dull, continuous, or subcontinuous character, attended sometimes with paroxysmal exacerbations. What is especially characteristic of it is its constancy. Patients will tell you that they rise with it in the morning, are troubled with it all day, and carry it to bed with them at night. If by chance they awake in the night, they find their head is aching. The headache may in some cases become aggravated as the day advances, but sometimes the opposite condition obtains, and the headache is worse at the early part of the day. The situation of the headache varies; it may be frontal, temporal, or occipital, or, more rarely, vertical. Usually, however, it is diffused. It is not as a rule attended with local soreness or tenderness. Nausea may be present, but is not constant; vomiting is usually absent. In some cases, distinct exacerbations, sometimes of great severity, occur. As these subside, they give place to the dull continuous headache that preceded their advent. As a rule, the ocular phenomena characteristic of migraine are absent, and the headaches are not usually hemicranial. Constipation is present in a certain number of cases, but removal of the constipation does not cure the headache. In some cases, it is associated with disorders of digestion, but the same remark applies to these as to constipation.

Headaches of this type may last for weeks, months, or even years. They occur in persons of different ages, but are, perhaps, most common in the middle period of life, and in young adults. Several of my best marked cases have been in medical students. Patients so suffering are usually able to pursue their usual avocations, except, perhaps, during paroxysmal exacerbations, especially when their work is of an active rather than of a sedentary and intellectual character. Thus medical students have been able to attend to their dressing and other duties at the hospital, but when they have attempted to read they have found it impossible; the headache prevented the full engagement of their attention.

As to the nature of these continuous or chronic headaches, I do not intend to offer a decided opinion, but I hope further experience will reveal it. All I can safely affirm is that they are not due to peripheral irritation or anæmia. They do not seem to be of the nature of megrim—at least in the majority of cases. I have thought they may be due to some dyscrasia or diathesis. In a few cases it has seemed a slight malarial taint might be present; in others, gout or rheumatism appeared a possible cause. These, however, are conjectures only, unsupported by sufficient positive evidence to warrant definite conclusions.

For the relief of headaches of the class I have described, I have found Indian hemp of the greatest service. In the majority of cases, it cures the complaint. The one element of the headache which, in my experience, indicates the probable success of the remedy, is its continuous character.

The preparation of Indian hemp I always employ is the extract. I begin by giving one third or more (usually half a grain) night and morning, or occasionally three times a day. If at the end of a week some amelioration of the headache has been procured, I advise its continued use in the same doses; but if little or no improvement has taken place, I increase the dose to one grain at night and half a grain in the morning. If this is insufficient, I increase the dose so as to make it one grain night and morning; this failing, I increase it by half grain doses, giving the maximum dose at night, until two grains at night and one and a half grains in the morning are reached. I have scarcely ever had occasion to exceed these doses. There are two points I wish to urge:—1. The gradually increasing dose. 2. Steady perseverance in its employment. The treatment must be as obstinate as the disease.

Given in these doses, usually no inconvenience is experienced by those taking cannabis indica; but a few patients have complained of a feeling of slight confusion or giddiness, not in any way so annoying as the condition for which it was administered.

The length of time over which treatment has to be continued varies in different cases; usually, it extends over several weeks, but rebellious cases may require a treatment of two or three months. As the malady recedes, the dose should be reduced, and it is advisable to continue the administration of the remedy for a week or two after the headache has disappeared.

In the majority of cases, the Indian hemp may be given alone, with compound glycerrhiza powder, powdered valerian, or extract of gentian, as excipients. My largest experience has been gained in many years out-patient practice, where, for therapeutic testing and teaching purposes, simplicity has been studied. It by no means follows however, that because our patient has a headache, we are not to attempt to relieve his other sufferings. Thus, when constipation is present, as it is in a fair number of cases, some aperient may conveniently be combined with the hemp; aloes and myrrh pill, compound rhubarb pill, in small doses, may be added to the cannabis indica. Where flatulence troubles the patient, compound assafœtida pill, carbolic acid, or quinine, separately or combined, may be given with the Indian hemp in a pill.

I have, however, had the most striking results with the Indian hemp alone. My experience in hospital practice is difficult to collate, but I append a few cases from my case-book of private patients, which illustrate most of the points to which I have directed attention, and indicate various combinations of drugs with the Indian hemp to meet the requirements of particular cases.

[1] Read at the Section of Therapeutics and Pharmacology at the Annual Meeting of the British Medical Association at Brighton.

Case I.—A medical student of the London Hospital consulted me on May 6th, 1881, for headache. For several weeks—five at least—he had suffered from dull, continuous frontal headache. He woke up in the morning with it, and had it all day, and it increased in severity as the day advanced. He was able to do his active duties in attendance at the hospital, but it entirely prevented him reading, and interfered with his sleep at night. He had, under advice, tried various remedies, none of which had afforded him any relief. He suffered slightly from constipation. I ordered him a pill containing half-grain doses of extract of cannabis indica. The same night he had better sleep than he had had for some time previously. He took the pills regularly, I believe, for some weeks. The headache gradually wore off, and he has had no return of it. He has since himself administered the drug to others suffering in like manner.

Case II.—Mr. C. G., aged 22, a very active young man, assisting his father, a contractor in a large way of business, consulted me once on July 11th, 1884, for headache and constipation. I prescribed a vegetable and saline aperient, and did not see the patient again until October 20th of the same year. He had derived no benefit from the treatment I had ordered. I inquired more particularly into his case, and made the following notes. During the five years that he lived at Walthamstow, in Essex, he had headache almost continuously for three years. He then came to live in London, when it improved, but had again returned. The present attack has lasted nearly the whole of the present year—nine months. The headache was chiefly at the back of the head, and was usually of a dull heavy character, increasing at times to such a degree as to prevent him attending at all to his business. He said: "I feel as if I could knock my head against the wall,"—in the exacerbations, that is. He occasionally had nausea, but no vomiting. His brothers and sisters do not suffer from headache. His father is a patient of mine suffering from heart and kidney disease, and has occasional attacks of gout. He was ordered the following pill: ℞ Ext. cannabis indicæ gr. viij.; quiniæ sulph. gr. xxiv; pil. rhei co. gr. xxxvj; M. Ft. pil. xxiv; one to be taken night and morning. He was also given a stomachic mixture.

On October 31st, the pill was modified to ext. cannabis indicæ gr. xij; quiniæ sulph. gr. xij; pil. rhei co. gr. xxxvi. M. Ft. pil. xxiv. One pill night and morning. The headache was less, but still had the same characters.

On December 5th, the headaches were much less; he had no exacerbations, but constant slight headache. He was now ordered to take two pills at night and one in the morning.

On February 18th, 1885, I have the following note in my case-book: "Has come to report himself as cured. He has been free from headache since three weeks before Christmas, when he had it for three days, but it subsided with the pills. Is well and hearty in all ways."

In this case, quinine was prescribed in conjunction with the Indian hemp, under the idea, created by residence at Walthamstow, that malaria might have a share in the production of the headache. The quinine may also have had a share in the cure; but I have seen exactly similar cases where there was no reason to believe that malarial influences were at play, and where Indian hemp alone sufficed to remove the complaint. The compound rheubarb pill served to regulate the bowels satisfactorily.

Case III.—M., aged 42, a rather stout, heavy-looking man, was for sixteen years a station-master on the Great Western Railway, but for the last fifteen months has kept a public-house in a village in Hertfordshire. For the last seven years he has suffered from "neuralgic" pain in the head, and slightly in the face. It was this which led him to give up his former post, as it rendered his duties almost impossible. The pain in the head is not quite constant, but he rarely goes three days without it. The individual attacks, or paroxysms, generally last about three days. He feels the pains on such occasions at whatever hour he awakes; it becomes intensified when he rises, lasts through the day and night, and then gradually wears off. He feels sick, and has pyrosis previous to, and during, the attacks—not at other times. He suffers a good deal from flatulence. His bowels act regularly twice a day. He is a very temperate man. His father suffers from gout; he himself has not had it, but suffered from sciatica four years ago. Physical examination revealed nothing abnormal in the chest, and there were no changes in the optic nerve or retina. Knee-jerks normal; urine not obtainable. He was ordered, on February 26th, 1884, a mixture of bismuth, gentian, and strychnine, and the following pill: ℞ Ext. cannabis indicæ gr. vj; pil. assafœtidæ co. gr. xlviii; quiniæ sulph. gr. xxiv; acid. carbolic. gr. vj; ol. cajuputi gr. xij. M. Ft. pil. One to be taken night and morning. If the pain is not relieved in a week, take two pills night and morning. The assafœtida, quinine, carbolic acid, and cajuput were combined with the Indian hemp to relieve the flatulence.

March 11th. Headaches less frequent, but has had one very bad attack, lasting three days. Less dyspepsia and flatulence. Urine 1018; deposits pale lithates, but is free from albumen. Easton's syrup substituted for the bismuth mixture, and the dose of cannabis indica in the pill increased to half a grain. To take a pill night and morning; two pills at night, if the pain is severe.

March 25th. No pain since last visit; feels quite a different man. To take the pills only.

April 22nd. Only one attack, moderately severe, fourteen days ago. He persevered with the pills for some little time longer, and lost the pain entirely.

Case IV.—Miss D., aged 22, a rather tall, not unhealthy-looking girl, consulted me on April 7th, 1886. She had suffered for several months from headache. At first it was occasional, lasting a week, or two or three days, and then leaving her. Lately it has become constant. It is chiefly on the left side and forehead and over the eyes. Exacerbations of considerable severity occur, not traceable to any particular cause, and not occurring at any special hour of the day. They are not influenced by the catamenial periods, which are regular, as also are the bowels. Other members of the family were not subject to headaches. Her complaint dates from a fright, when she saw a man nearly killed. No signs in the chest; no changes in the eyes. She was ordered the following pill. ℞ Ext. cannabis indicæ gr.xij; pil. aloes et myrrhæ gr.xlviij; ext. gent. gr.xxiv. M. Ft. pil. xxiv. One pill night and morning.

April 28th. Headaches much better; has had pain, apparently rheumatic, in feet; gets easily tired; appetite not good. Ordered Quiniæ salicylatis, pil. aloes et myrrhæ āā gr.ij; Ft. pil., three times a day.

I heard of her at the end of July, and she was free from headache.

REMARKS
ON
HEPATIC PHLEBOTOMY, AND PUNCTURING THE LIVER'S CAPSULE, AS REMEDIAL MEASURES IN HEPATIC DISEASES.

By GEORGE HARLEY, M.D., F.R.S.,
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Seeing that the study of liver-diseases has not only come prominently to the front in recent years, but that, at present, when hepatic surgery is actively engaging the attention of some of the most acute and original thinkers in the profession, both in Europe and America, the members of our own Association, familiar with liver-diseases, take a deep interest in the subject, as this was manifested not alone by the animated discussion which followed upon the reading of the above-named papers at our agreeable and instructive Brighton meeting, but by the letters[1] that have since appeared in the Journal, I crave leave to make a few more observations on the matter. This appears to be all the more desirable since it is highly probable that these newly proposed methods of treatment may open up an entirely fresh epoch in the handling of many of the liver-cases which have hitherto been regarded as among the most intractable, and consequently most hopeless, forms of disease. As well as from the fact that some of the gentlemen that have commented upon them in the pages of the Journal have unwittingly confounded the two above-named new forms of operative procedure with two old ones—namely, hepatic exploration, associated with accidental hæmorrhage, on the one hand, and the Chinese system of acupuncture, upon the other—entirely distinct surgical procedures, which resemble them in nothing, except in so far as it is the same organ of the body that is operated upon, and the instruments employed happen to possess the same form.

There being apparently no longer any doubt as to the practical value of the newly proposed method of hepatic phlebotomy in suitable cases, from even the personal experience of accidental hepatic hæmorrhage

[1] British Medical Journal, November 13th, p. 899; December 4th, pp. 1134-5.

recorded by its adverse commentators, pointing strongly in favour of the operation, I can at once proceed to explain what are the differences not only as regards the nature, but the actual objects of hepatic phlebotomy and hepatic exploration, with hæmorrhage, on the one hand, and Chinese acupuncture and puncturing the capsule of Glisson, on the other—four such distinctly different forms of hepatic surgery, that it is almost inconceivable to me how any well-educated man could possibly have fallen into the error of confounding them. Nevertheless, as the readers of the JOURNAL must have seen, this has actually occurred, not alone in the case of Dr. Boyes Smith, but likewise in that of Surgeons Alexander, Ryan, and Quill—all army men. I think it my duty to endeavour to remove the ambiguity. And, while doing so, in order to increase the value of the communication, I shall take the opportunity of throwing out one or two practical hints, which, if attended to, will, I think, greatly tend to diminish the dangers which occasionally attend the present modes of exploring the liver for purulent matter.

First, then, as regards exploring the liver for pus. This is an operation which has been had recourse to by our Indian *confrères* for nearly forty years. If I remember right, it was first done in the Bengal Presidency about the year 1848; and, to my personal knowledge, it has been practised in London since the year 1864. At first the instruments employed in the performance of the operation were merely ordinary trocars of about the size of No. 12 English male catheters. But as dangerous, and sometimes even fatal, hæmorrhages occasionally followed upon the operation, much smaller instruments began to be employed, and now it is the fashion only to use the needles of an aspirating apparatus. Even with these, however, regrettable accidents have occurred, most probably, I think, on account of the operators thrusting the exploring instruments into any and every part of the liver where pus is suspected to exist, without paying any attention to the anatomy of the organ, either as regards the distribution of its vessels, or the relationship of the point at which its surface is penetrated to the interior of the abdominal walls. This opinion I arrive at from the fact that, notwithstanding the frequency with which I have had to operate upon the liver during the last twenty years, I have never on one single occasion as yet encountered any dangerous hæmorrhage.

The precautions I take are the following: (*a*) Always to commence the exploration either with a fine aspirating needle, or an equally fine 7 inch long French exploring trocar, attached to a small (drachm sized) glass syringe, which acts as an aspirator, and admits of my at once perceiving whether I have pus, hydatid fluid, or blood to deal with. So that, if need be, I can instantly withdraw the instrument.

When pus is the product found, as it flows but badly through a small tube, I replace the fine instrument with a larger one, attached to which is a caoutchouc exhausting ball, aspirator,[2] and syphon-tube, with which I can withdraw the purulent matter.

(*b*) I never allow the point of my exploring instrument to go anywhere near those portions of the liver in which its large blood-vessels are normally situated.

(*c*) I make it a point always to penetrate the capsule at a part of the liver where the wound-orifice (after the withdrawal of the instrument) can be brought into immediate contact with the abdominal parietes, so as to admit of the opening into the liver being firmly closed by the direct pressure produced upon it from the application of a pad and tight bandage to the abdominal walls. Thus, I believe, is precluded all possibility of any hæmorrhage taking place from the liver into the peritoneal cavity after the completion of the operation. The external abdominal wound I simply close with a two-inch-square piece of sticking-plaster.

If these common-sense precautions be taken, I think it is very unlikely that any such untoward accident as that which Dr. Boyes Smith tells us befell him would be likely to occur. Namely, that his patient died in a state of collapse, from hæmorrhage into the abdominal cavity, within a few hours after his exploring the liver for an abscess. Nor do I believe it is at all probable that the accidental hæmorrhage occasionally occurring during the operation of exploring, would ever reach an amount sufficient to endanger life. The escape of a few ounces of blood during the operation is never dangerous. We are even told by the very correspondents, who are apparently anxious to deprecate the employment of hepatic phlebotomy in acute hepatitis, that in the course of their own experience the bleeding has been followed by salutary results! Indeed, when the wording of their letters is carefully analysed, it is difficult to see why they were ever written, unless it were solely for the purpose of depriving me of the credit of being the first who ventured to employ hepatic phlebotomy as a remedial agent. For their only cry is "hepatic phlebotomy is not a new operation; as blood has been withdrawn from the liver during the course of an exploration for abscess." Seeing, however, that the one operation is performed solely with a diagnostic intent, and the other with a direct curative one, it appears to me about as logical to say that they are identical (on account of the occasional occurrence of accidental hæmorrhage), as it would be to call the accidental wounding of a brachial vein during the opening of an abscess in the arm, a venesection. Of course, the assertion in the latter case would be instantly condemned as preposterous. But is it one whit more preposterous than to call an accidental liver-hæmorrhage hepatic phlebotomy? I think not. So I will leave the point, and now add one or two more hints that may be useful to would-be operators, in addition to those already given in my paper.[3] These are: that, as all enlargements of the liver are not suitable for hepatic phlebotomy—to wit, those arising from cancerous, fatty, and amyloid degenerations—great care ought to be taken that a correct diagnosis is made before entering upon the operation. This is all the more imperative, seeing that it is sometimes difficult to differentiate different kinds of liver-enlargements. Fortunately, however, should a mistake in this respect be made, it is consoling to know that it is very unlikely much blood will come away: probably not more than a few drops. For it is only when the liver-tissues are engorged that blood flows freely from the organ when it is punctured.

Having finished with the subject of hepatic phlebotomy, I now come to the consideration of puncturing the capsule of Glisson as a remedial measure in cases of congestive hepatic hypertrophy, which some of our associates boldly assert is the same operation as the old Chinese one of acupuncture. The mere fact of acupuncture (as the word *acus*, a needle, implies) being performed with solid gold or silver needles in painful affections, and my operation being performed with trocars and cannulæ in a diseased state of the organ which is anything but painful, one would imagine might presuppose that the two forms of operative procedure were entirely distinct. Except in so far as the same organ happens to be the one operated on, and the instruments employed possess the same form. Some of our associates, however, appearing to be of a different opinion, and no doubt having good grounds for their belief, I would suggest that they furnish us with all the facts in their possession regarding acupuncture of the liver as practised by the Chinese. I must candidly admit I know nothing whatever regarding it, except from the vague and unsatisfactory statements that have at various times appeared in our weekly medical journals, from the pens of men who, though writing as if they knew all about it, never by any chance whatever, as far as I am aware, condescend to furnish their readers with a single particular.

So soon as my critics have detailed the grounds of their criticisms on this point, I shall, to the best of my ability, duly consider and comment upon them. Meanwhile, I think I have said sufficient to prove that Messrs. Smith, Alexander, Ryan, and Quill have erred in confounding two entirely new operations with two totally distinct old ones, with which they have nothing whatever in common, either as regards nature or design.

[2] This mode of aspirating the liver I was led to adopt from my having, on one occasion, been present at a liver-exploration when one of our metropolitan hospital surgeons had the misfortune to withdraw a quantity of liver-tissue. And on another occasion I had a liver sent to me for examination, with a cavity in it, the size of a small orange, produced, as I imagined, by the surgeon's aspirator having acted too powerfully, and sucked out the softened liver-tissue. With the caoutchouc ball all danger of an over-suction is annulled, and it possesses the additional advantage of admitting of a graduated aspiratory pressure being employed, by slowly relaxing the ball with the fingers, which is often a point of no mean importance in certain cases. Since my first employing this caoutchouc contrivance, I have almost entirely abandoned the use of the metallic aspirator, either in exploring the liver, emptying cysts, or withdrawing acetic fluid from the abdomen.

[3] BRITISH MEDICAL JOURNAL, November 13th, 1886, p. 899.

BEQUESTS AND DONATIONS.—Mr. Caledon George Du Pre, of Wilnot Park, Bucks, bequeathed £300 to the Hospital for Consumption and Diseases of the Chest, £300 to King's College Hospital, and £200 to the Buckinghamshire General Infirmary at Aylesbury.—The General Hospital at Birmingham has received £200, and the Queen's Hospital £100, under the will of Miss Marianne Weston; and the General Hospital of £100, and the Queen's Hospital £100, under that of Mrs. Elizabeth Shawe Smith.—Addenbrooke's Hospital, Cambridge, has received £100 under the will of Mr. R. L. Clark.—Miss Alice Hockley, of Goldsmith Road, Acton, bequeathed the residue of her real and personal estate to the Hospital for Consumption and Diseases of the Chest, in case her niece, Edith Mary Hinds, for whom she bequeathed it in trust, should not live to the age of 21 or marry.

HARVEIAN LECTURES
ON
CANCER OF THE UTERUS.

By JOHN WILLIAMS, M.D., F.R.C.P.,
Obstetric Physician to University College Hospital, and Assistant-Professor of Midwifery in the College.

Lecture III.

Most of the cases were perhaps too little advanced to manifest secondary growths discoverable by clinical investigation, and in only three of them was the disease watched to the end, and a *post mortem* examination made. In these the glands along the internal iliac vessels, and in one those along the spine, were cancerous. The sacro-uterine ligaments were not affected in any of the three, but the cellular tissue around the cervix was diseased in two. Age seems to have a considerable influence on this form of cancer, though no age above 28 excludes it. In the ten years within which the menopause generally falls, the disease is far more rife than at any other period of life. It is comparatively rare after 50 and before 30. The history of the menstrual function, the age at marriage, the character of the labours, appear to have no influence in producing it. Hæmorrhage is a common symptom, and may come on at a very early period; but it may be absent until the disease is far advanced. Pain is often absent. Discharges are common, but were absent in four out of twenty-one cases. Wasting or extreme emaciation was present in nearly half the cases; on the other hand, in some, there was an abundance of subcutaneous fat present at the time of death. Laceration of the cervix is often mentioned as a cause of cancer of the cervix. We found no evidence in favour of this in any one of the cases observed. In no instance did cancer start in a tear; and the tear appears to be the last part to become involved in the disease.

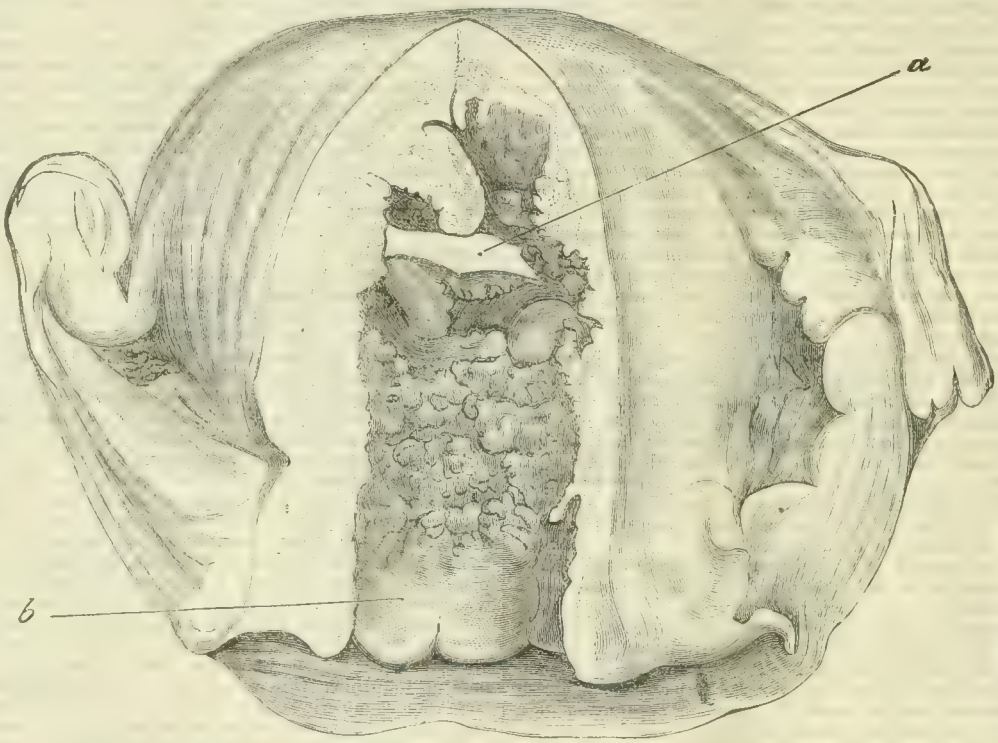


Fig. 4.—Cancer commencing in the body of the uterus has invaded the cervix as far as *b*. At *a* is shown an opening into the intestine due to ulceration.

Cancer of the Body of the Uterus.

This is much less common than cancer of the cervix, and at one time it was thought that cancer never attacked the body primarily. It is certain, however, that the disease occurs much more frequently than is generally supposed. The following are brief notes of the case from which the specimen represented in Fig. 4 was taken: The patient was a widow, 52 years of age, and complained of a profuse and offensive vaginal discharge, which excoriated the external parts. She had one child at 23, and no miscarriages. There was some evidence of her having had syphilis. She had a polypus removed from the womb five years before admission. There was no history of cancer in her family.

On admission, she was pale, anæmic, and emaciated. The uterus appeared to be of about the normal size, but its mobility was impaired. The cervix was normal, except that a small villous growth could be felt in the os. The outlines of the body could not be made out, and the sound was not used. Examination by the rectum revealed several nodules apparently growing from the posterior wall of the uterus. While in the hospital, she had two attacks of fever, with the symptoms of peritonitis. Before death, fæces escaped by the vagina. At the necropsy, the small intestines were found adherent to the fundus of the uterus and the wall of the bladder. At the posterior part of the uterus were several nodules projecting into the peritoneal cavity. There was a big nodule on the anterior surface where the intestines were attached, and a communication which admitted the thumb was found between the adherent intestines and the cavity of the uterus. The cavity of the uterus was a stinking abscess; its surface was irregularly nodular, and of a greyish colour; beneath this was a layer of highly vascular tissue, and, still deeper, the altered uterine tissue.

Cancer of the body may be diffuse or circumscribed, but the diffuse is the more common. It is a glandular or columnar epithelioma. The uterus is usually much, but sometimes very slightly, enlarged. Fibroid tumour and cancer are occasionally met together in the same uterus; the cancer may invade the fibroid, but there is no satisfactory evidence that it begins in a fibroid. It grows from the whole of the inner surface of the body, enters deeply into the substance of the walls, and subsequently invades adherent and neighbouring organs, intestines, and broad ligaments, etc., but yet respects the cervix until a very late stage. The glands secondarily affected are those in the broad ligaments and those along the spine. Secondary deposits may be present in many organs, as in the liver, lungs, and kidneys. The disease is rare under 50. My cases were over 50, and the menopause was passed. Ruge and Veit record three cases out of sixteen under 50; two of these were under 40 years of age, one being only 32. It is as common between 50 and 60 as it is between 60 and 70. Of eighteen patients who had cancer of the body, five had never been pregnant. This shows a much larger proportion of sterile women than is met with in cancer of the cervix. Hæmorrhage is the symptom which usually attracts attention and points to the existence of the disease. Hæmorrhage after the menopause—or a "return of menstruation," as women often call it—is a symptom which should never be neglected. It is generally, though not always, due to cancer. It is not characteristic, as has been said, for it is seen also in the endometritis of old age, and in a form of ulceration of the body of the uterus called lupus. Pain is a common symptom, and in some cases it recurs at stated hours, and is of great severity, as was pointed out by Simpson. In my cases cachexia was present in a marked degree.

The palliative treatment of cancer of the uterus was not discussed, for the natural history and pathology of the disease gave no aids

towards it. The radical treatment of the disease consists in the removal of the diseased parts. For cancer of the body, no operation except total extirpation offers a prospect of cure. Cases, however, in which the conditions justifying the operation are present were not often met with. For cancer of the cervix, supra-vaginal amputation of the cervix gives excellent results. Total extirpation is, as a rule, not indicated for this condition by reason of the direction which the growth takes—its usual course being outwards and downwards, and not upwards, into the body of the uterus. Clinical experience, as well as pathological investigation, proves this fact, for when recurrence takes place after partial amputation, its seat is in the cellular tissue around the cervix, and not in the uterine stump. This clearly shows that the disease can be entirely extirpated from the uterus by the minor operation, but that it is difficult to eradicate it from the infected pericervical connective tissues. Were the difficulty in eradicating the disease from the uterus, or were the recurrence in the uterine stump, total extirpation would come to our aid; but the recurrence being in the pericervical tissues, total has no advantages over partial amputation. In operating for cancer of the vaginal portion, or of the cervix, the object should be to make the incisions as wide of the disease as possible.

NEW REMEDIES IN OPHTHALMIC PRACTICE.[1]

By EDGAR A. BROWNE,
Surgeon to the Liverpool Eye and Ear Infirmary.

THE list of actual novelties for the past year is not long, but one or two points of practice may be advantageously compared. Scopoline (*London Medical Record*, 1885, p. 251), derived from the Scopolia japonica, is recommended by Dr. Pierd'houy as a mydriatic. It is rather more energetic than atropine, acts more quickly, and its effects pass off more slowly. It is not easy to procure at present; some of the specimens proved entirely inert. Of the hydrochlorate of aconitia as a local anæsthetic, recommended by the same practitioner, I am compelled to report unfavourably. The anæsthesia seemed exceedingly slight and transient, but the well-known tingling and burning characteristic of aconite were complained of by the patients for some hours after the application; this, together with its extremely poisonous quality, to my mind, puts it out of court at once. Iodol has been recommended by Dr. Trousseau. It is a greyish powder, obtained by precipitation with iodide of potassium of pyrrhol, a product of the destructive distillation of mineral substances containing bone-oil (protein). Chemically it is described as a tetra-iodo-pyrrhol, and I am informed that its formula is C_4HI_4N; it differs from iodoform (CHI_3) in containing less iodine; its constitution seems to be more stable, as it is free from odour. As the clinical value of iodoform is probably due to the very slow and continuous disengagement of iodine, this stability is presumably a drawback. As a 10 per cent. ointment, it gives rise to no pain when applied in the same manner as the yellow oxide. A small piece may be placed between the lids and rubbed over the eyeball in cases of indolent ulcers following phlyctenulæ or ulcerations of the lids. It seems to me void of offence, but unworthy of praise. Two years ago, I drew attention, in this Section, to the value of a complete and prolonged irrigation of the conjunctiva, and especially the upper *cul de sac*, in cases of gonorrhœal ophthalmia. I prefer making the application with a lid-irrigator of my own design, but I have succeeded with extemporaneous apparatus. I still continue to use a solution of trichlorphenol, a potent germicide which, in a solution of one half per cent., has no ill-effects on the conjunctiva or cornea.[2]

More recently I have adopted the same method in the treatment of lacrymal abscess and blenorrhœa of the sac with excellent results. An abscess is opened (under an anæsthetic), the sac incised, and a full sized probe passed. After the probe, a gum-elastic catheter, smaller than the probe, is passed to the bottom of the duct, connected with an elevated reservoir by means of a long tube and a prolonged play of the phenol solution commenced. The catheter is pulled up gradually higher and higher in the duct, and turned round to irrigate every part thoroughly. The probing and irrigation are to be continued daily. Some convenient cannula-probes are made which may be employed if desired.[3]

The introduction of cucaine has enabled us to resort to the use of the actual cautery, either thermic or electric, with great frequency. A comparison of the value placed upon its action cannot fail to prove instructive. In my own practice I accord it the first place in the treatment of hypopion-keratitis, a formidable affection, occurring frequently among the poor and ill-nourished, of whom stone-breakers may be taken as the type. These unfortunate creatures present the necessary combination of noxious circumstances. They are half-starved, exposed to the vicissitudes of climate, have chronic conjunctivitis, blenorrhœa or abscess of the sac—to this is added a blow with a fragment of stone, and suppuration of the cornea is established. It occurs in the middle layers, spreading centrifugally, and if not checked, destroys the cornea. Antiseptics have no effect in the early and remediable stage, the anterior elastic lamina is intact (or practically so) and prevents alike the ingress of the medicament and the egress of the necrosed tissue. The orthodox practice (Sæmisch, Teale) of incising the abscess merionally, and teasing out the slough with forceps, undoubtedly gives occasional brilliant results. Everybody must have noticed that the results are far less brilliant in the case of large peripheral than of central sloughs. But even a better effect may be attained by the use of the cautery. It must be applied carefully along the margin, and then with a few rapid touches over the substance. A clean, easily detachable eschar is left, and healing takes place with rapid absorption of the hypopion. This proceeding has the advantage over the median incision of not opening the anterior chamber and allowing the lens and iris to fall forward and give rise to synechia anterior.

As a practical point, it must be remembered that the cautery, whether thermic or electric, must be of a dull-red heat, just sufficient to char the tissues with which it is immediately in contact. If used too hot it causes an unnecessary destruction of uninfected tissue. The cautery may also be used effectively in doing peritomy for vascular keratitis, and is superior to the scissors.

Our information on the question of antisepsis in cataract-extraction is still unsatisfactory. It is a matter of familiar observation that the corneal wound in extraction is liable to suppurate, while incised corneal wounds in general are not particularly liable to that kind of action. Iridectomies very seldom go wrong in this way—accidental wounds very seldom go wrong—and even in hypopion-keratitis, when an incision is made through the base of the abscess, it is the incision that stops the suppuration and not the suppuration that attacks the wound. Assuming that suppuration is due to the introduction of pyogenic micro-organisms, it is obvious that one kind of wound is as much exposed to infection as another, and some peculiar conditions must be sought.

The conditions of healing in a corneal wound are (1) lavage from within outwards by escaping aqueous, tending to wash germs outwards, and, of course, preventing their entrance; (2) exact apposition of surfaces; (3) an aseptic condition of surrounding secretions; (4) absence of favourable soil for germs. These conditions are less perfectly fulfilled in extraction-wounds than in many others, and less perfectly since the introduction of cucaine. The wound is necessarily large, and the secretion of aqueous is not sufficient thoroughly to wash it. Cucaine still further diminishes the secretion of aqueous. In addition to the chamber after the removal of the lens, there is the space it occupied to be filled. If the cornea regains its convexity by its own elasticity, before the resecreted aqueous has filled this space, it tends to draw the conjunctival secretion inwards, and woe betide if this be not aseptic. It is under these circumstances that McKeown's method of removing sticky cortex by syringe or irrigation is likely to prove valuable. The outer flow will replace the defective flow of aqueous, and the inward suction action of the cornea is counteracted. Moreover, it removes the soft matter which forms almost a perfect soil for germ growth.

To render the conjunctival secretion innocuous has been the aim of all antiseptics. M. Panas so highly praised a solution of biniodide of mercury, claiming for it almost infallible powers in the prevention of suppuration, that I felt constrained to give it a trial. The solution is nominally 1 in 20,000; but, owing to the high atomic weight of the iodine, the amount of mercury is not much above 1 in 40,000

Are we all to join M. Panas in his cry of "Eureka"? The solution is not sufficiently potent to destroy a virulent germ in a favourable

[1] Read in the Section of Ophthalmology at the Annual Meeting of the British Medical Association in Brighton.

[2] The absolute necessity of prolonged irrigation must be insisted on. Bacteriologists in laboratory experiments teach that exposure for a certain length of time is necessary to effect sterilisation, and we must remember that gonococci, or other germs, would be much more difficult to immerse on the convoluted surface of a mucous membrane than in the cultivation-medium of the laboratory.

[3] Trichlorphenol is a substitution product in which chlorine replaces a portion of hydrogen in carbolic acid. Carbolic acid $H.C_6H_5O$. Trichlorphenol $C_6H_2Cl_3OH$. It apparently acts by the slow and continuous disengagement of chlorine. Its odour persistently clings to any tissue with which it has been brought in contact.

habitat. Sattler, who has carefully examined the micro-organisms of the lacrymal sac,[1] is of opinion that Panas's solution does not ensure antisepsis. He recommends the biniodide to be dissolved in an aqueous solution of corrosive sublimate (1 in 5,000), which is a powerful antiseptic. But if we take the precaution to disinfect the lacrymal sac and the ciliary follicles—and every day more and more care is exercised on this point—we shall scarcely need a germicide of great power, and it may be sufficient to thoroughly wash out the conjunctiva with a solution that is aseptic, and not actually antiseptic.

My own practice, lately, has been to wash out the lids thoroughly with the biniodide solution, and carefully to apply iodoform ointment to the wound immediately on completion of the operation. So far so good. But are there any drawbacks? It seems to give rise to a cloudiness of the cornea in the neighbourhood of the wound. In one case—an old man—it spread downwards, and entirely covered the pupil, rendering the removal of the cataract rather a nugatory proceeding as regards vision. In the second eye the opacity was limited to the immediate neighbourhood of the wound. It has never exceeded this dimension, except in this one eye. At first I regarded it as keratitis, but I think now it is really due to the direct action of the mercury on the elements of the cornea. Cucaine, I fear, aids this absorption by its desquamating action. I have great hopes that this effect is merely temporary. In the case of the old man the opacity is slowly clearing away. Still it is a point to be borne in mind, and I shall certainly hesitate considerably before I employ a stronger mercurial antiseptic in conjunction with cucaine.

DISLOCATION OF THE LENS.[1]

By ANDERSON CRITCHETT, M.A. Cantab.,
Ophthalmic Surgeon to, and Lecturer on Ophthalmic Surgery at, St. Mary's Hospital.

This accident, though not one of extreme rarity, is yet sufficiently uncommon to justify ophthalmic surgeons in placing their experiences of it on record; and as within the last two years, I have met with three interesting cases of lens dislocation in my own practice, I venture to bring them before the notice of this Section.

The first case was that of a young barrister, aged 24, who was highly myopic, and who some ten years previously had, while practising gymnastics, dislocated the lens in his right eye.

An attempt was made to remove it, but the operation was unfortunately not successful. The patient, by cautious use of the remaining eye, was able to complete his education both at school and college, and was careful to avoid any sudden or violent physical exertion; but a few days before I first saw him in September, 1884, he had, whilst fishing, been tempted to jump suddenly off a bank to secure a particularly fine specimen of the finny tribe, and at the same moment he felt that something had given away in his left eye. I saw him four days after the accident, and found the lens had become dislocated forwards into the anterior chamber. The patient could still read Jaeger 2, but the tension had increased, and after a consultation with Sir William Bowman it was decided that the lens must be removed.

When the patient had been placed under the influence of an anæsthetic, I passed a fine needle through the substance of the lens, and it was held there by my colleague, Mr. Juler, while I proceeded to make the necessary section.

This latter was not very easy to accomplish, because the lens occupied the whole of the anterior chamber, but I used a very narrow Graefe's knife, and completed the latter half of the section by a series of small cuts, after the manner of the late Mr. Streatfeild.

I did not attempt to perform iridectomy, but at once inserted a spoon beneath the lens and extracted it, Mr. Juler withdrawing the fine needle as soon as my traction instrument was *in situ*. Very little vitreous was lost, the edges of the wound were seen to be in apposition, and the lids of both eyes were kept closed with small strips of plaster. These latter were applied for more than a fortnight, and I did not suffer the eyes to be open for eighteen days, when I was pleased to find that perfect union had taken place, and a few weeks later the patient was able, with suitable lenses, to see $\frac{6}{6}$ and read Jaeger 1.

The second case was that of a young gentleman, aged 17, who was brought to me by Mr. Sydenham Knott.

Whilst he was amusing himself with chopping wood, a log flew up and struck him violently on the right eye. When I first saw him there was a little blood in the anterior chamber, and the lens was seen to be dislocated backwards. There was such severe pain, and the eye had been so seriously injured, that I doubted whether it could be saved; but I sent the patient to Mr. Hulke, who suggested that I should make an attempt to extract the lens, and, if that were unsuccessful, I must enucleate.

Mr. Sydenham Knott administered ether, and I made a corneal section upwards. As the upper edge of the lens was depressed backwards, some difficulty was experienced in passing a spoon beneath it, but by introducing the latter at the outer angle of the section, and sliding it under from the outer side I succeeding in extracting the lens. There was a considerable loss of vitreous, but the lids were supported by strips of plaster, as in the first case, and the patient made an excellent recovery, but there is a large atrophic patch near the macula, and, although the hands of a watch can be seen eccentrically, the sight must always remain very imperfect.

In the third case, a gentleman, aged 29, received a severe blow on his left eye from a cricket-ball, which dislocated the lens outwards and slightly upwards, so that it was evidently hinged upon its lower margin, because, whilst the eye was under ophthalmoscopic examination, the lens would suddenly fall downwards into something like its natural position, and then a few moments later a slight movement on the part of the patient would throw it again into its new resting place.

The patient consulted Mr. Power soon after the accident, and, as the eye was free from pain, and the tension fairly normal, I think that gentleman was justified in advocating a Fabian course of inaction, but soon after I first saw the injured eye it became so rapidly hard that I felt that an attempt must be made to extract the lens, and this opinion was confirmed by Sir William Bowman.

It will at once be acknowledged that, from an operative point of view, the case was one of exceptional difficulty, owing to the fact that the lens was entirely out of sight.

Sir Walter Scott has sung of—

> "That stern joy which warriors feel
> In foemen worthy of their steel;"

but I confess that I approached the operation with some misgiving as to the result. Ether was administered, and I made an incision with a very broad keratome at the inner side of the cornea, and there was an immediate gush of vitreous, but I at once passed a Taylor's vectis in the direction in which I hoped to find the lens, and as I withdrew the instrument I was delighted to find that I had secured the object of my search. Plaster was applied over the lids, as in the former cases; the patient made a slow but good recovery, and with the aid of a lens can see the time by a watch correctly. In future, I shall be inclined to use the vectis for removing dislocated lenses in preference to the spoon, because the former allows the lower portion of the soft lens to sink through the aperture in the wire loop, and there is less chance for the lens to slip away during the process of extraction.

Since I commenced to write the present paper, my friend Dr. Agnew, of New York, has kindly sent me an account of a new instrument that he has designed for the removal of dislocated lenses, and to which he has given the name "bident." Dr. Agnew says: "It consists of two ordinary fine, straight, delicately-pointed, cataract-needles, about six-eighths of an inch long, fixed parallel at a distance a little less than an eighth of an inch apart. These needles are united at their proximal ends by a projection which is flat, and otherwise so sharpened and roughened as to be adapted to the grasp of a holder."

He passes this instrument downwards behind the lens, and, bringing the latter upwards into the anterior chamber by depressing the handle of the bident, he passes the needle-points through the sclerotic in the other side of the globe, and leaves the instrument *in situ* while he completes his operation.

I confess that I am, as a rule, averse to running even fine needles through the ciliary region, but time will prove the safety or danger of this new operation; and Dr. Agnew certainly deserves our cordial thanks for his ingenious endeavours to solve one of the difficulties which beset us in dislocation of the lens.

The experience of the last few years, both in general and ophthalmic surgery, has shown us that operations which were formerly deemed hazardous and unjustifiable may now, by the light of modern knowledge, be safely and successfully accomplished; and I have good hope that we may be able to bring the removal of dislocated lenses into this category.

[1] He finds two varieties of pyococcus filogenus, staphylococcus, which appeared to induce keratitis and iritis, pneumococcus, and six species of bacteria.—*Year-Book of Treatment*, p. 272.

[1] Read in the Section of Ophthalmology at the Annual Meeting of the British Medical Association in Brighton.

ON THE EXTRACTION OF SOFT CATARACT BY INJECTION.[1]

By CHARLES G. LEE, M.R.C.S.,
Surgeon to the Liverpool Eye and Ear Infirmary.

It will be, doubtless, in the recollection of some present that, at the Belfast meeting of this Association, in 1884, the then President of our Section, Dr. A. M'Keown, introduced to the notice of the members his method for the extraction of cataract by the intracapsular injection of water; and subsequently, at a meeting of the Ophthalmological Society, held on October 15th, 1885, Dr. M'Keown brought the results of the added experience of the intervening fifteen months before that learned body.

Although, from the tone of the discussion that followed on each occasion, it might have been surmised some trial would have been made of M'Keown's operation, the absence of records of any such experiments in the English medical journals would seem to indicate that this has not been done. Moreover, during the debate on Mr. Brudenell Carter's paper on Cataract-Extraction, at the June meeting of the Ophthalmological Society, while such points as the retention of the speculum, the substitution of the third finger of the fixing hand for a lid-elevator, etc.,—points which each surgeon will for himself best determine,—were fully discussed, no reference appears to have been made to Dr. M'Keown's novel but effectual method for getting rid of soft matter.

I must add that Dr. Wicherkiewicz, of Posen, has adopted the same principle; but, as it appears to have been a spontaneous action on his part, and independent of inspiration from British surgery, it will not affect the present contention.

The particulars of the six cases I have to submit to your notice, in which M'Keown's ideas have been carried out—with, however, such modifications of the instruments employed as experience appeared to suggest would be improvements—will, I trust, be considered sufficiently interesting to merit the attention of the Section, and, perhaps, may induce some members present, tentatively at least, to adopt this practice.

On the two first occasions M'Keown's syringe was employed, but at once obstacles were encountered from the inefficiency of the piston, and the inability to regulate the amount of pressure used; the shortness of the syringe added to the difficulty in bending it over the eye-brow. With so marked a jerk was the flow that I had almost abandoned the operation; yet so satisfactory was the action in removal of soft matter, that I determined to try if by some irrigating apparatus these difficulties might not be overcome. It did not require much ingenuity to attach a piece of indiarubber tubing to one of M'Keown's terminals, the distal end of the tubing being fixed to an ordinary metal reservoir.

An objection to the use of M'Keown's terminal was made on account of the screw end being so large, that it would require a piece of tubing of such a calibre to receive it, that the stream of water passing would be too rapid and not easily controllable. To meet this, I have had the screw end replaced by a smooth bulbous one, large enough to distend the fine tubing I use to make it secure, and yet not too big to give rise to any difficulty in unattaching it. The irrigator thus constructed was accordingly substituted for the syringe in the remaining cases with most gratifying results. The reservoir being held by an assistant, or nurse, who elevates or lowers it under the operator's direction, no difficulty is experienced in obtaining a rapid or slow stream, and the surgeon holding the tube close to the terminal, between the finger and thumb of one hand, can in a second stop the stream much more readily than if he were dependent on any tap, or other mechanical contrivance.

I notice Dr. M'Keown states he has abandoned "the gravitation bottle" for the scoop-syringe. If the action of the bottle resembles that of the irrigator, I can only express my surprise. The difference between the intermittent and sudden action of the syringe, and the steady and controllable flow from the irrigator, is so great that I submit anyone who has seen the two in operation will have no difficulty in deciding on their respective merits. The experience of my colleagues of the Liverpool Eye and Ear Infirmary will, I think, support me in this observation.

I think the irrigator would be preferable to "the Undine" of Dr. Wicherkiewicz, because through the elastic tubing it is easily adaptable to the varying heights of the superciliary ridge, or the supra-orbital arch, while "the Undine," being an arrangement of unyielding metal and glass, must in some cases be with difficulty applied.

It would serve no useful purpose to particularise each case, nor to give in detail every step of the operation; the summary handed round will supply most of the important points. A few general remarks, however, will not be out of place. I may observe, in the first place, that no departure was made from our usual method of operating; in each case an iridectomy was performed upwards twice, as a preliminary step to the extraction, while in the remaining four cases, the whole operation was completed at once; the line of incision was in the sclero-corneal junction.

As a rule the speculum was removed, if not before, immediately after expulsion of the lens, and the patient allowed a moment or two's interval before the removal of cortical matter was commenced. Then, the lids being held either by an assistant or by the operator himself taking the upper lid when the irrigator was employed, the terminal was introduced well in the capsule, often right across the area of the pupil to the lower edge of the iris, or wherever cortical matter was seen, and the stream of water allowed to flow steadily but slowly; sometimes the instrument was withdrawn to be re-introduced, if any soft matter was observed; or if the patient's inability to count fingers made it likely that some remained. It was most interesting to watch the pieces of cortex slowly floating up, sometimes from behind the iris towards the incision, there to escape with the out-going stream.

While the irrigation is most effectual in removing soft matter, it is at times inefficient in getting rid of capsule; in one case, a piece of capsule was observed to be attached to the lower border of the iris; and although three attempts were made to induce it to "move on" by inserting the terminal well beneath and behind the obstruction, it had to be abandoned. The fragment remained *in situ*, fortunately without any ill effect on vision. I have in every case employed simple distilled water, at a temperature of about 95° Fahr., nor do I see any reason to substitute any so-called aseptic solution; the water appears to fulfil all requirements, and its use has not been followed by the slightest indications in any case of septic mischief.

No general anæsthetic has been used; a 4 per cent. solution of cucaine has been instilled. In the case of children, or excitable persons, I should, however, have recourse to ether, as it is an important point to ensure the eyeball being perfectly still while the instrument is in its interior.

The results as regards vision cannot but be considered satisfactory: in no case has a less acuity than $\frac{2}{3}$ been obtained; while the residence of the patients in the infirmary has not been prolonged, sixteen days being the average. One patient, both of whose lenses were extracted, might have been discharged fully a week earlier had he had a home to go to.

The table shows that all the patients were past 40 years of age; consequently, their lenses would at least have a certain amount of nuclear density. I have not yet employed the irrigator in either the semi-gelatinous cataract of adolescence, or the fluid one of infancy; I can, however, easily imagine the benefits likely to be derived from it. For example, the necessity for repeated operations will be obviated; the dependent risks of iritis and of panophthalmitis, which all must have seen follow the introduction of even a single needle, will at the same time be minimised.

I freely admit that the number of cases I have to report is small, yet it is sufficiently large to indicate that irrigation or injection is a method of practice deserving of more credit than has hitherto apparently been accorded to it, seeing that in not one of my cases has a single accident happened during the operation, nor has it been followed by a single bad symptom that could be attributed to it, while the ease and effectiveness with which the soft matter was expelled appeared little less than surprising, in some cases large masses of cortical substance being removed, almost equalling in size the portion that represented the nucleus.[2]

Mr. EDGAR BROWNE had employed the method in some six or seven cases. For removing sticky cortex it was a valuable aid, but it must not be considered as a routine procedure. In extraction, the fewer instruments introduced into the eye the better.

Mr. ARTHUR H. BENSON had used a saturated solution of boric acid for irrigation in cataract cases, and found it also useful for the removal of haemorrhage from the anterior chamber after iridectomy and before opening the capsule of the lens. He had now a small glass instrument with an india-rubber top like that of the ordinary drop bottle, to which a fine silver nozzle (flattened) had been fixed;

[1] Read in the Section of Ophthalmology at the Annual Meeting of the British Medical Association in Brighton

[2] A table of cases illustrating the results of the method of extraction described in the above paper was prepared, but cannot be published here owing to want of space.

Wecker, he believed, was the inventor. He had so far seen no disadvantages from the use of irrigation.

Mr. GRANGER (Chester) objected to the form of instrument used by Mr. Lee, as being more difficult to keep clean than a simple bottle, the contents of which can so satisfactorily be removed by syphon action.

Mr. LEE, in replying, said he was careful to pass an antiseptic solution through the tube before using. In reply to Dr. Bell, Mr. Lee said he had reported the first six cases on which he had operated, and without any drawback whatever; he had also done three cases subsequently to the completion of the table.

ON THE RELATION OF HEADACHE TO THE CONDITION OF THE EYES.

By C. HIGGENS, F.R.C.S.,
Ophthalmic Surgeon to Guy's Hospital.

HEADACHE arising from ocular causes is very frequently met with. Ophthalmic surgeons have again and again called attention to the subject; but as yet the bulk of the profession do not appear to recognise the necessity for a thorough examination of the eyes in all cases of obstinate head-pain.

As a rule, when a case of ocular headache comes before the ophthalmic surgeon, the patient has undergone a protracted course of medical treatment, having been looked upon as nervous, plethoric, bilious, or anæmic. Indeed, in some cases, after having "suffered many things of many physicians," a patient has been pronounced the subject of incurable brain-disease, when all that was necessary to effect a cure was a properly selected pair of spectacles.

The symptoms of ocular headache are fairly well marked; they nearly always begin in early life, though a reference to any ophthalmic surgeon's case-book will show that, in many instances, the cause has never been discovered till late on in life. "I have had headaches as long as I can remember," or "I have had headache off and on ever since I first went to school," is what we are frequently told. The most marked symptom is that the headache is either brought on, or made worse, by reading or working. The object of this paper is more especially to call attention to ocular headache as occurring at the time of life which is mostly taken up by education, and I thought this occasion appropriate, as Brighton seems to be a favourite place of education. The ocular conditions causing headache are anomalies of refraction (hypermetropia and myopia), astigmatism, and insufficiency of the internal recti muscles. All these conditions are easily remedied by optical means, but are quite beyond the reach of medical treatment. I have looked over two of my case-books, containing rough notes of 1,072 cases, and find that 31, or nearly 3 per cent., suffered from obstinate headache which appeared to be due to the condition of the eyes. The following five cases will serve as illustrations.

Simple Hypermetropia.—Ernest W., aged 10, came to me on April 3rd, 1883. He had suffered from headache for four months, and had lately noticed that the headache was made worse by reading. He was thought to have some brain trouble. Hypermetropia (manifest) $\frac{1}{36}$ was found in both eyes, and he was ordered +30 for reading, etc. On January 17th, 1884, he consulted me again for phlyctenular ophthalmia. He had had no headache since he got the glasses.

Simple Hypermetropic Astigmatism.—Miss N. B., aged 14, came to me on April 26th, 1883. She had suffered from headache for some years. She had always found the headache much aggravated by reading or doing any work. She was ordered +36 cyl. for all purposes. On May 28th of the same year a letter was received from the child's father, from which the following is an extract: "The glasses you ordered for her we got.....and from that time her headaches have entirely disappeared."

Hypermetropia: Periodic Squint.—Miss H. D., aged 6½, came to me in January, 1884. She had periodic squint in the left eye, and complained of headache. The ophthalmoscope showed hypermetropia of 2 D in the right eye, and 3 D in the left. She had manifest hypermetropia of 1.50 D in both eyes. She was ordered +1.50 for reading, etc.; nine months later +1.75 was ordered. On July 12th, 1886, the squint was scarcely noticeable, and she had never had a headache since the glasses were ordered.

Hypermetropia: Insufficiency of Internal Recti Muscles.—Charles E., aged 11, seen May 5th, 1884, complained of headache and double vision at times. Manifest hypermetropia $\frac{1}{36}$ was found, and either eye diverged when covered; both were unsteady when trying to fix an object at 10 inches or nearer. Ordered +40 decentrated inwards for reading, etc. The use of these glasses cured both the headache and the diplopia, but both returned if they were not used.

Compound Myopic Astigmatism.—Arthur E., aged 13, was seen on January 17th, 1884. He had had headache for twelve months, always made worse by reading. In each eye there was myopia $\frac{1}{3}$, with myopic astigmatism $\frac{1}{36}$. He was ordered —20 spherical —30 cylindrical for both eyes for reading, etc. He did not care to have glasses for distance. On September 4th in the same year, the myopia was the same, but he had had no headache since he used the glasses.

I have said that treatment by optical means is all that is necessary in these cases. This is not quite all, however. In the case of children and young adults, more especially young ladies, we should inquire into the methods of education. Many of our patients, I have no doubt, suffer severely from the strain of many hours' work, which, with or without glasses, is more than their eyes or brains can bear. Here is the daily programme of a "young ladies' finishing school" given me by a late pupil: Rise at 6 A.M.; work from 7 to 8.30; breakfast; work from 9.30 to 12 or 12.30 on alternate days; go out for a walk from 12 or 12.30 till 1; dinner; work from 2 to 5; tea; work from 6 to 8.30 or 9; go to bed at 9, or soon after; Saturday a half holiday. With the exception, therefore, of Saturday, the daily routine was not less than nine hours of work, and not more than one for exercise. Such a system requires no comment from me, and will, I think, be condemned by all reasonable beings.

Mr. CRITCHETT ventured humbly to suggest that general physicians should seek the aid of the ophthalmic surgeon at an early period in cases of persistent headache. He called attention to the importance of seeking whether there were insufficiency in these cases. Professor Liebreich had been our pioneer in this direction, and he had been well seconded by Dr. Landolt, of Paris. The former relied chiefly on the use of prisms, and the latter had recourse to operation.

ON A CASE OF ANEURYSM OF THE ABDOMINAL AORTA.[1]

By HENRY F. A. GOODRIDGE, M.D., F.R.C.P.,
Senior Physician to the Bath Royal United Hospital.

R. B., aged 38, but looking older, a porter, was admitted on December 19th, 1871. He confessed to intemperate habits, but stated that, except for some winter cough, he had usually enjoyed good health, and was not aware of anything much amiss with him until eleven days before admission, when he was attacked somewhat suddenly, whilst walking, with pain in his left lower limb, so that he was scarcely able to get to his home. The pain was chiefly in the knee, and was attended with swelling of the limb. He kept his bed, in consequence, for the next four days, when, the swelling being nearly subsided and the pain much relieved, he began to move about again. He soon, however, got worse; the swelling increased, and the pain, though not so severe as at first, continued very troublesome. He now, therefore, December 19th, applied for advice, and was at once admitted an in-patient, his state at this date being as follows. The left lower limb from the thigh downwards presented considerable œdematous enlargement; this having commenced, he said, above and not below; there was none whatever in the fellow limb. On further examination, an irregularly globular but smooth resisting mass, causing distinct bulging and tension of the iliac and lumbar parietes, especially of the former, was found to occupy the greater part of the left half of the abdomen. It extended superficially, from near the vertebral column behind, to an inch or two beyond the umbilicus, where it dipped deeply with a rounded, well-defined border; and from Poupart's ligament and the crest of the ilium below to nearly the left false ribs. In this upper direction in front it seemed gradually to subside; moreover, the dulness on percussion which its surface pretty uniformly yielded elsewhere, shaded off here into the normal resonance of the part. It presented a certain amount of elasticity on pressure, varying, however, at different spots; but its most marked feature was its strong heaving pulsation, perceptible anteriorly at its most prominent part, but hardly less distinctly felt in the vertebral groove, when the patient was on his hands and knees. The mass was quite immovable, and free from tenderness on manipulation, and no *bruit* could be detected on auscultation anywhere over its extensive area. Just above the pubes on the left was some ecchymotic discoloration of

[1] Read before the Section of Pathology at the Annual Meeting of the British Medical Association held at Brighton.

the integument, also the glands in his left groin were indurated. On further inquiry it was elicited that six months previously he was knocked down backwards by a passing truck, the fall being felt chiefly on his left side, and he admitted that, from time to time since then, he had had vague aching in the left loin, which was never, however, made worse by movement. There was some deficient stroke-sound and breath-sound, with absence of vocal fremitus at the base of the left chest; a systolic murmur was heard at the base of the heart; his liver reached mid-way between the ensiform cartilage and the umbilicus. His temperature in the axilla was 99.8°; his pulse was 108, small, but regular; his respirations were 36. He had some cough, attended with scanty muco-purulent expectoration; his tongue was moderately clean; his appetite was fair; he had had no vomiting except on two occasions, shortly after the accident referred to; his bowels were pretty regular; his urine was acid, deposited lithates, but was free from albumen. He lay on his back, shelving to the left, and had difficulty in sitting up straight in bed, also in fully extending his left thigh.

December 22nd. His sleep had been disturbed by the pain in his left leg; he had had none elsewhere; the œdema of the limb was much the same. His bowels had been freely opened by castor-oil, given to remove any accumulation; but the physical signs and the characters of the tumour remained unaltered.

December 26th. With the aid of hypodermic injections of morphine and atropine at bed-time, he had been sleeping better. He was easier in his left leg; his temperature had slightly risen; his urine was of specific gravity 1018, and showed, as it had done once or twice before since his admission, a small proportion of albumen.

December 29th. The skin could barely be pinched up over the most prominent part of the tumour. The two patches of ecchymosis above the pubes had almost disappeared. The semicircumference at the level of the umbilicus measured, right 15½ inches, left 16¾ inches; and from the anterior superior spine of the ilium to the most dependent part of the ribs, the distance was, on the right side 5½ inches, on the left 6⅝ inches. His temperature was 101.4°; his pulse was 108; his respirations were 36.

December 31st. He had had paroxysms of acute shooting pain in the left thigh, relieved only by hypodermic injections of morphine.

January 2nd. He had been sleeping pretty well, and was more free from pain; but his appetite was not so good, and he was beginning to suffer from dyspnœa. There was still deficient resonance on percussion over the base of the left lung, and bronchial breathing was heard at the angle of the left scapula; at this spot vocal fremitus was present. The breathing over the right lung was free. A good deal of undulatory pulsation was observable at the epigastrium.

January 5th. His cough had increased during the few preceding days. There was dulness on percussion more or less all down the left side of the chest, with the breathing obscure and indistinct; bronchial breathing and bronchophony were heard over the left chest posteriorly; vocal fremitus was present at certain spots. At the right base, the breathing was harsh and rhonchal. What appeared to be the descending colon with solid contents was observed now coursing over the upper part of the tumour in a direction downwards and inwards. His bowels were confined; his urine contained some albumen.

January 6th. At 11.30 P.M. he had a severe paroxysm of pain in his left leg; his respirations were hurried, his breathing was oppressed. The swelling of the limb, which latterly had diminished a little, was now much as before.

January 7th. He had slept very badly. His temperature was 100.8°; his pulse was 108, very small and feeble; his respirations were 36. He had tremulous movements of his fingers at times. He lay shelving down on the left side of his bed as though he would fall out.

January 8th. He had been wandering in the night. The tremulous movements continued. His bowels had acted twice after an enema; he had considerable tympanites. His pulse was 112, very small and feeble.

January 9th. He died at 2 A.M.

Necropsy, twelve hours after death. The abdomen was distended, but in the left iliac region, where the almost solid resistance of the tumour had been observed as usual the preceding day, the parietes were now comparatively yielding. On opening the peritoneal cavity, some serous effusion was found inferiorly; also a long flat band of blood-coagulum was seen extending from the left flank towards the pubes, and thence into the pelvis. On reflecting the great omentum, the tumour was exposed to view. The descending colon crossed it from above, downwards and inwards, and was inseparably adherent to its front. It presented a convex smooth and red surface, formed of peritoneum; was more or less elastic to the feel; was well defined on its right border, but in the left flank was firmly and extensively adherent to the abdominal wall. It sent a prolongation under Poupart's ligament; while superiorly it was in close contact with the left wing of the diaphragm. In this last named situation, one or two more coagula of large size were met with. The small intestines were very much pushed to the right by the tumour. The left pleura contained much serous effusion, and the lung was compressed into a small bulk; it had two or three tough bands of adhesion laterally and posteriorly. The right lung did not collapse, having old adhesions. The heart was rather small; its aortic sigmoids were healthy. On tracing the aorta downwards in the abdomen, the aneurysmal nature of the tumour soon became apparent. It sprang from the left side of it by a narrow opening, about two inches above the bifurcation, and just below the giving off of the inferior mesenteric artery. There were numerous opaque patches of atheroma in the course of the vessel, but no calcification or breach of surface of the inner coat; nor was there any at the mouth of the sac. A quantity of fluid and loosely coagulated blood escaped from the interior, leaving a free space that would contain a fœtal head at full term, while laminated fibrinous deposits were present to such an amount that, including some residual coagula, the mass was found to weigh nearly six pounds. At the posterior part the wall of the sac had gone, and the bodies of the second, third, and fourth lumbar vertebræ were exposed to view. These were all more or less eroded, the intervertebral discs being intact. Below Pouart's ligament, the aneurysm resting on the psoas and iliacus muscles extended to near the trochanter minor, where it formed a *cul-de-sac*. The left common and external iliac arteries had the tumour closely overlying them, but their lumen was quite free; the corresponding veins, however, with the upper part of the femoral, were thrombosed. The liver and kidneys were anæmic; some of the mesenteric glands were calcified.

The huge size of the aneurysm here, and the almost entire absence of subjective symptoms until just about one month before the fatal termination, combine, I think, to give to the foregoing case a somewhat exceptional character; at least, under that impression, I have ventured to bring it before this Section on the present occasion, when the subject of aneurysm is specially selected for discussion. Perhaps another noteworthy feature that the case presents is the rupture into the peritoneal cavity, it being uncertain how far death was directly due to this circumstance. The amount of extravasation was small; and the patient had been gradually sinking from exhaustion for some days, the increasing effusion in the left pleura appearing to have a considerable share in accelerating the fatal event. The seat of rupture was clearly in the upper and posterior portion of the sac, which was under cover of the left wing of the diaphragm; but the opening was so small that (the time for examination being limited) it was not detected; it seemed probable that the blood had found its way by a sinuous passage through the strata of fibrin, penetrating at last the peritoneum. The concurrence of pleuritic effusion on the same side (which was already present to some amount on the patient's admission), the extension of the aneurysm below Poupart's ligament, and the limitation of the pain—the one prominent symptom—to the lower limb, that is, to the distribution of the crural branches of the lumbar plexus, there being none higher up where pressure and tension were so widely at work—are severally, I submit, additional points of interest in the case. As to treatment, it was deemed unadvisable, under the circumstances, to withdraw the fluid in the pleura by thoracentesis, and wholly futile to do anything, whether surgical or medical, for the cure of such an enormous aneurysm; the relief of pain by morphine, etc., was thus all that could be attempted.

CASE OF DYSPHAGIA ACCOMPANIED BY ASCITES.[1]

By E. LONG FOX, M.D., F.R.C.P.,
Consulting Physician to the Bristol Royal Infirmary.

In January, 1885, the Rev. R. C., Fellow of a college at one of the universities, came under the care of my friend, Dr. Colman. As during a period of eighteen months I had the pleasure of meeting him in consultation on the case two or three times in each month, he has allowed me to bring this brief record before this Branch of the Medical Association.

The patient was a shy, reserved bookworm, hard-working, and very intellectual, of irreproachable habits and morals, aged 35. In the early stage of his illness he was said to have had symptoms suggestive of gastric ulcer. These were not severe, but during convalescence he quite suddenly found himself unable to swallow solid food. There was no hæmorrhage, no rejection of mucus. He was able to take plenty of liquid food, especially soup and cream, if he allowed definite

[1] Read before the Bath and Bristol Branch.

intervals between swallowing. His meals, therefore, were very protracted, often over three hours.

In the spring of 1885, he was seen by a distinguished London physician, who diagnosed cancer of the œsophagus.[1] He was then becoming much emaciated. His complexion was naturally pale and sallow, and not unlike the complexion of one suffering from malignant disease. He complained of a feeling of difficulty in swallowing, which he referred to the sternum, about the level of the third rib.

In the summer of 1885, a new symptom appeared. He began to have fluid in the cavity of the abdomen. This was not associated with any tangible change in the liver itself, with any mucous hæmorrhage, with enlargement of any of the superficial veins, or with interference with the free passage of bile. He was then becoming very thin and weak, and was losing the power of taking interest in literary pursuits; there was never any albumen. The ascites rapidly increased, and was associated with some anasarca of the lower extremities; this latter condition was relieved by careful bandaging. The girth of the abdomen amounted to forty-three inches. From the excess of the abdominal fluid, diuretics seemed to be useless.

On December 1st, about half a gallon of clear fluid was evacuated by paracentesis, and from this time the fluid gradually, but surely diminished. All through the illness he had slept well.

Up to December 25th, 1885, he had been nourished almost for twelve months wholly on liquid food, but he had seemed better during the first three weeks of December, since the urine had increased after the tapping. On Christmas Day, 1885, he suddenly fancied, from the improvement in his feeling beneath the sternum, that he could swallow solid food. He had frequently tried to do this before, but always with the effect of rejecting the solid morsel with great distress.

On this Christmas Day, however, he was able to take some solid food at dinner; and, although for weeks he was very slow about it, and had occasional drawbacks if he attempted too large or too hard a morsel, he has continued to take food in the proper form and quantity, and now for six months has been well. All the ascitic fluid disappeared last spring. He gained flesh, was able to walk without dyspnœa, and resumed his full literary pursuits.

In speaking of treatment, it may be said that, as far as it is ever possible to exclude the idea of syphilis from any human being, it was so in this case. The London opinion as to the lesion being malignant was founded upon data that may easily have seemed incontrovertible, except in the one point that the dysphagia was so sudden. We felt that, however probable the diagnosis of malignant disease was, it was possible to give the patient the benefit of the doubt; and, long before the appearance of ascites, we had hoped that the œsophagus was not diseased upon its internal surface, but was pressed upon externally by a gland, either strumous or in a state of chronic inflammation. The appearance of ascites confirmed this belief. It was reasonable to suppose that the same tumour, probably glandular, that was pressing upon the outer part of the œsophagus, was also pressing on the other side on an important channel for conducting the blood from the lower extremities to the heart. It is possible that this may occur in the normal position of the œsophagus and vena cava almost immediately after passing the diaphragm; and, in this relation, it may be stated that the sensation of a patient as to the probable seat of obstruction is not wholly reliable, so much of such sensation being more or less reflex. But the position of the inferior vena cava in the thorax is exceedingly variable. It sometimes bears abnormally towards the left side; and occasionally, instead of ending in the right auricle of the heart, it has been seen to join the right azygos vein. It is, at any rate, highly probable that the cause of the pressure on the œsophagus prevented also some of the return of blood from the inferior vena cava.

The view entertained as to the best chance of promoting recovery was the prolonged administration of iodide of potassium, sometimes with diuretics, sometimes with tonics.

The chief points against the lesion having been malignant are:

1. The sudden access of the difficulty of swallowing solids. There was no gradual notice given of the organ affected; and although, no doubt, much of the constriction was spasmodic, this spasm cannot have been caused by sudden ulceration of the internal membrane.

2. The absence of blood and of mucus from the œsophagus.

3. The absence of pain when the œsophagus was distended by large quantities of fluid.

4. The co-existence of the ascites, showing that the pressure on the œsophagus was external to that organ; in the face of the fact that cancerous glands in the mediastinum are very rare, except as secondary to cancer elsewhere.

5. It is comparatively easy to diagnose when the illness is over, but we believe the good result of this case was largely due to the iodide of potassium.

[1] This opinion was partly based on the fact that a surgeon, in the endeavour to pass a bougie down the œsophagus, met with an obstruction.

A NEW METHOD OF PERFORMING EXCISION OF THE KNEE-JOINT.[1]

By HERBERT ALLINGHAM, F.R.C.S.,
Demonstrator of Anatomy at St. George's Hospital.

A NEW method of excision of the knee is a title which may appear surprising, for of the various operations that have already been performed, it might be thought hardly possible that a new one could be suggested. However, not only is it new, but it has, I maintain, many advantages over the methods of excision for knee-joint disease at present in vogue.

The method which I submit to you for criticism and trial I tried several times on the dead body, and having carefully considered every point in the performance of the operation, in May, 1886, I excised the knee of the patient before you. The operation is performed in the following manner. A vertical incision is made over the joint, beginning about two to three inches above the patella, and prolonged over the patella down to the tubercle of the tibia. Above the knee-cap the knife splits the quadriceps tendon right into the synovial pouch above the joint. The soft tissues over the patella are divided to the bone and the knee-cap sawn through, dividing it into two lateral halves; then the ligamentum patellæ is also split down to the tubercle of the tibia.

Now we have the patella divided vertically, each lateral portion having half the quadriceps tendon and half the ligamentum patellæ attached to its upper and lower borders respectively. These halves are then slipped well to the sides of the joint, so exposing the condyles of the femur and the head of the tibia. Divide the crucial ligaments, if these are not already destroyed; then the leg being flexed, push the condyles of the femur forwards on to the tibia and remove a thin layer of bone. Now deal with the head of the tibia by completely flexing the leg on the thigh, and carefully separate the internal lateral ligament from the internal semi-lunar cartilage, which is most important, for this attachment tends to prevent the tibia coming forwards. The tibia is then pushed forwards on to the condyles of the femur, and in order to avoid dividing the lateral ligaments a thin slice is removed from the tibial articular surface with a strong knife or chisel. It is necessary to follow these particulars so as not to interfere with the lateral ligaments.

With scissors and forceps the synovial membrane must be carefully dissected away from the synovial pouch above the patella, and underneath the ligamentum patellæ; in fact, as far as possible the joint had better be cleared of synovial membrane. At this part of the operation, openings for drainage should be made at the postero-lateral aspects of the joint on the outer side, between the ilio-tibial band and the tendon of the biceps, and on the inner side just above the inner hamstring tendons. The best place is behind and on a level with the upper border of the patella, which is the lowest point, and where the drainage-tubes will not be pressed upon by the fibrous structures around the joint. Attention is now turned to the split patella, which, if not diseased, should be left. If only a little of the cartilage is eroded, cut it away with a knife. Should, however, the patella be extensively diseased, carefully separate the quadriceps, the extension of the quadriceps tendon over the patella, and the ligamentum patellæ from the bone; in other words, shell the patella as a sesamoid bone out of the entire quadriceps tendon, without destroying the connection of the quadriceps muscle with the ligamentum patellæ. If the patella is to remain, the halves are sutured together by a strong catgut suture, introduced as advised by Sir Joseph Lister in wiring fractured patellæ—that is, not going through the articular surface with the catgut. If the bone has been removed, bring together with catgut the extension of the quadriceps, which has been carefully separated from each half of the patella.

Lastly, adjust and sew with fine catgut, from the tubercle to the patella, the split ligamentum patellæ; and in the same way deal with the divided quadriceps tendon above the patella.

The skin is then united with separate sutures, and the limb dressed antiseptically.

In pointing out the advantages of this operation, I must ask you to allow me first to allude to a few important anatomical facts. The fascia lata is strong and thick around the knee, and is strengthened by expansions from the biceps sartorius, gracilis semitendinosus,

[1] Abstract of a paper read before the Medical Society of London.

and quadriceps extensor, and is attached to the condyles of the femur and the tuberosities of the tibia. The rectus femoris and the vasti are attached, the rectus to the upper part, and the vasti to the sides, of the patella. From these, tendinous fibres pass across the patella, and become continuous with the ligamentum patellæ. In fact, the patella is regarded by many anatomists as a sesamoid bone developed in the tendon of the quadriceps extensor muscle, which is inserted into the tubercle of the tibia. The external and internal lateral ligaments are inserted nearer the back than the front of the knee-joint.

Bearing these important points in mind, I humbly submit that the following advantages will be obtained by operating in this way.

1. The attachments of the fascia lata, the lateral ligaments, and the prolongations of the vasti to the tibia and fibula, are not divided as they are in nearly all the other methods employed; consequently, there is much more support to the joint during the healing process and when the leg is well.

2. Above the patella the synovial pouch is well opened, and all the synovial membrane can be thoroughly removed.

3. Dislocation of the tibia backwards, and tilting of the femur forwards, which commonly occurs after the operation, is thus prevented.

4. The joint and the ends of the bone can be thoroughly examined where in those methods of lateral incisions I can hardly imagine how a good view can be obtained.

5. The undivided quadriceps is a strong antagonist to the hamstring muscles; and, should the splint be left off, the leg is much less likely to become bent.

6. Progression is greatly improved, the attachment of the quadriceps being neither divided nor the muscle shortened, as must necessarily take place when either the transverse, H or V-shaped operation is performed.

7. And, above all, as we hope after excision to obtain movement in the knee-joint, I think the chances of such a result being brought about will be greatly facilitated by the operation submitted to you to-night.

Case I.—Frederick H., aged 9, a delicate-looking boy. Family history good. Previous history: When five years old, he had scarlet fever, followed very soon after by measles. A short time after the fever, the child complained of pain in the right knee, accompanied with swelling of the joint. He was taken to Guy's Hospital, and attended there as an out-patient for sixteen months. He then went to the country; but the knee did not improve, there being frequent pain and swelling of the joint. A fall greatly aggravated the disease, and the leg became flexed on the thigh. On April 22nd I saw him, and found the joint in the following condition. The right knee-joint was swollen, hot, and tender, the leg being bent so as to form nearly a right angle with the thigh. The tibia was displaced backwards and outwards. The muscles of the leg were wasted; the synovial membrane was thickened, and there was an abscess at the lower and outer part of the joint. The joint was fixed, and any attempt at movement caused the child pain. Measurement around the right knee over the patella, 12½ inches; the left, 11½ inches.

On May 6th I operated in the manner before described, removing all the synovial membrane, which was greatly thickened and diseased; and cut thin slices off the tibia and femur. The patella, being healthy, was left, and sutured with catgut. The split quadriceps muscles and ligamentum patellæ were also sutured, postero-lateral drainage being used.

May 7th. There being extensive oozing, the leg was dressed under ether. Temperature 101.6°.

May 8th. The boy had a restless night; no pain. He vomited, and there was a trace of carbolic in the urine. Temperature 101°.

May 12th. Temperature normal, and from that day remained normal. As no discharge came through the dressings, the patient being quite comfortable, the knee was not touched again until May 20th, thirteen days after the first dressing. The wound was then quite healed; so the sutures and drainage-tubes were removed, there being only a little bloody discharge, no pus on the dressings. Antiseptics were again applied.

June 2nd. The knee was dressed again, antiseptics being now discontinued. The openings occupied previously by the drainage-tubes were healed. A small piece of the cicatrix, about the size of a farthing, had slightly broken down; the bones were well united. Side-splints, which had been used, were discontinued, and the ulcer was dressed with zinc ointment.

July 1st. Another part of the scar broke down; otherwise the patient was quite well; no pain; no bone to be felt in probing the wound.

July 20th. He went to the country, the leg being enveloped in a strong leather splint.

August 17th. The knee was quite well, and since that time has remained well. The boy was shown at the Medical Society of London, December 6th.

Case II.—Alfred T., aged 8, had a very similar history to the former case. His left knee was excised in the manner I advocate. Space forbids me relating the case in full.

Lastly, I wish it to be understood that by this operation I hope the patients may be able to have a movable knee-joint, as this method is specially suited to those cases in which the synovial membrane is chiefly involved.

In the next case I operate upon, I intend thoroughly to remove the synovial membrane, and only dig out with a gouge the diseased spot on the cartilage; I shall not in any way interfere with any of the cartilage that looks healthy.

If the crucial ligaments are not extensively diseased, they shall be left undivided. The joint then shall be kept at absolute rest until the wound has healed, when I shall commence passive motion.

ON THE USE OF STEM-PESSARIES.[1]

By J. GORDON BLACK, M.D.Lond., Harrogate.

Several interesting discussions upon the subject of this paper have taken place in recent years, at the meetings of this Association, and of the Obstetrical Society of London. Not only have they been favourable, in the main, to this mode of treatment, but it has had the advantage of such able and distinguished advocacy as that of Drs. Routh, Wynn Williams, Greenhalgh, and others, who have quoted numerous successful cases in support of their views. Nevertheless, there is a decided prejudice to be noted in some professional minds against the use of these instruments. A gentleman who has just completed his education at one of the largest London hospitals tells me that the teaching there entirely discredits this practice. Not long ago I was consulted by a young lady, suffering from an acutely anteflexed uterus, which admitted a fine sound with difficulty. The periods had been increasingly painful, and accompanied by distressing neuralgias and dyspeptic troubles. In my provincial ignorance I advised that a simple stem should be worn for a few months, feeling confident that a cure would result. However, the family doctor, a distinguished London surgeon, when applied to, wrote back to the lady's mother that he would have nothing to do with such a dangerous remedy.

From such an adverse dictum I appeal to a personal experience of fifteen to sixteen years, during which I have constantly and successfully employed stem-pessaries; and, further, let me add that such experience has been corroborated by that of several provincial obstetricians, who have lately expressed to me their continued confidence in the utility and safety of these instruments when properly used.

Now, Sir, I believe that most of this distrust of stem-pessaries dates from a period a few years back, when they were used indiscriminately, and without precaution as to their effects. They were often introduced in the practitioner's house or the out-patient department of a hospital, and the cases not seen again till the next visit. Although, even under these circumstances, many patients did well, yet no doubt preventable mischief resulted to some. The uterus naturally, at first, regards a stem as a foreign body, and some varying degree of resentment is to be expected for a few hours or days. My own rule is to keep the patient in bed or upon a couch for about a week, or as long as there is much hypogastric pain or discharge of blood from the womb. A few hot fomentations with laudanum soon relieve the pain, and the administration of hazeline or ergot keeps the discharge in check. Even where there is no obvious necessity, I believe it safest to insist upon the horizontal position for about a week. This is also desirable for the first two days of several ensuing menstrual periods. Indeed, till tolerance is established, the presence of menorrhagia should induce extra care and rest. Under this head, the paper read before the Obstetrical Society of London by Dr. Routh, December 4th, 1873, is well worthy of study. Were those recommendations carried into practice, less would be heard about the so-called dangers of stem-pessaries.

In regard to the latter, the terror of certain gynæcologists is somewhat grotesque, seeing that they do not hesitate to introduce into the uterus the most powerful irritants and caustics, or mould its tissue into new shapes by the boldest plastic operations.

The affections for which I have found stems of most use may be classed broadly under the heads: dysmenorrhœa and flexions. The dysmenorrhœa is evidently caused by a cervical stricture of some

[1] Read in the Section of Obstetric Medicine at the Annual Meeting of the British Medical Association in Brighton.

kind. Whether it be regarded as organic or spasmodic in character, the ultimate result is more or less obstruction to the menstrual function. Frequently the retardation is so great as to cause amenorrhœa, with all its attendant troubles, and serious constitutional complications. As an illustration, I quote the following:—

An unmarried lady, aged 28, stated that she had suffered a severe fall about five years ago, while skating upon the ice. The lower part of the spine was much bruised. After this, the menses became very painful, and then irregular, and now complete amenorrhœa had persisted for six months. Besides dragging pains in both inguinal regions, complaint was made of constant dyspepsia, want of appetite, and frequent vomiting of food. Gastralgia was the usual result of a meal, and could only be relieved by emptying the stomach. The general appearance of the patient was suggestive of phthisis, but no chest affection was discovered. Upon vaginal examination, the uterus was found high up and very movable. There was a tight stricture just within the os tincæ, which at the first visit resisted my utmost efforts with a fine probe. Next day, however, I succeeded, and by-and-bye also gained admission for a vulcanite stem. She was kept in bed for a few days; but little or no pain was felt. It was truly astonishing to witness the magical way in which the reflex disorders disappeared. Gastrodynia was cured, and appetite and digestion returned with vigour. The menses soon became as regular as before her accident. Without further interference from me, the stem was worn for about eight months, after which time it was removed, and I am glad to report that the body has since then remained perfectly well. Under the conditions described, I believe some practitioners would have used a hysterotome in this case. However, putting aside the danger of hæmorrhage, and the increased chance of sepsis—certainly no small drawbacks to the utility of the instrument—the fact remains that where the latter can be employed, a stem can always be introduced, probably with the prospect of a more permanent and satisfactory result.

Cases similar to that just described are not at all uncommon; and I believe are nearly always curable in like manner. In married women the removal of the stem is very frequently followed by pregnancy, which latter was impossible previous to the treatment. Where the strictured condition of the cervix goes unrelieved for several years there is great danger of some constitutional or local disease supervening. In one of my patients aggravated optic neuritis had been present for a long time, and she had undergone various iridectomies at the hands of a celebrated oculist. The violent attack of inflammation which had originally ushered in this complaint, was synchronous, I learnt, with a sudden stoppage of the menses; and the ophthalmic congestion was always worst at these times. From the decided relief which followed the introduction of a stem, I could scarcely resist the conclusion that, had the uterus been treated instead of the eyes, the metastatic congestion would have been removed, and the lady's sight saved.

Referring now to uterine flexions: I have long made it a rule, where these are aggravated and of long standing, not to waste time in trying outside pessaries, but at once to apply the stem, with a proper basic support, capable of maintaining the womb in something like a natural attitude. Other forms of pessary merely turn the organ around its axis of suspension, or perhaps make matters worse by slipping up into the angle of flexion. In anteflexion, they often produce irritation by too much pressure behind the bladder; whilst it is very difficult to get a satisfactory fulcrum for the instrument in cases of latero-flexion. Then, again, the success of an outside support is often marred by the presence of a tender prolapsed ovary or tumefied cyst, which decidedly resents being used as a buffer between a pessary and the womb.

Now, under the proposed method, the uterus is simply worn upon the stem like a glove on a finger, without undue pressure being exerted at any one point. By the erect position, the circulation of blood and lymph through the organ is rendered easier, and nipping of nerves and tissues avoided. Abundant opportunity is thus given during treatment for the strengthening of atrophied structures, or the absorption of hypertrophies. The various reflex neuroses are soothed into a quiescence which is soon rendered apparent by the increased desire and ability for active physical exercises exhibited by patients. Such tendency should be encouraged in every possible way, and all habits of invalidism disallowed. In order to keep pace with the increased tissue-change, a most liberal meat-diet three times a day should be prescribed. Provided that a due amount of muscular exercise be taken, it will be found that appetite and digestion are quite equal to the occasion. By such means a renewed tone and muscularity is given to the body generally. The tissue-fibre of the womb, of course, receives its quota of improved strength, and, if sufficient length of time be allowed, is eventually enabled to hold its own when the factitious support contributed by the stem is withdrawn.

Amongst the various stem-pessaries in vogue, I have preferred that of Dr. Graily Hewitt, on account of its excellent shape and cleanliness while in use. It is made entirely of vulcanite, which is unacted upon by secretions. This cannot be said of india-rubber or gutta-percha, on account of the unpleasant odour they create, which is most offensive to the patient, and also probably, sooner or later, prejudicial to health. Dr. Hewitt's pessary, however, has several serious disadvantages. It is by no means easily applied; and the stem is very apt to slip out of its socket in the basic support. When the instrument holds together it does so with such tenacity as to be only removable as a whole—a very uncomfortable and unscientific operation. To remedy these defects, I have made certain alterations, illustrated in the specimens now shown. It will be observed that the stem fits into an oval, instead of a round, socket, and is permanently fixed there, at the pleasure of the practitioner, by a little gold bolt. The latter is under his complete control, so that the pessary can be removed, as well as applied, in its separate portions. The introducer, now shown, enables the obstetrician to hold the stem in any position he desires, without danger of slipping, until the various steps of the operation are concluded. I may certainly say for the pessary, as altered, that it is simple in construction, easy of manipulation, and does not tend to get out of order while being worn. The latter is an advantage to be appreciated by all who like myself, strive earnestly to make vaginal manipulations as "few and far between" as possible.

In the *Lancet* for May 16th, 1885, I have recorded, for another purpose, a case of hysterical mania which aptly illustrates the efficacy of stem-pessaries in the treatment of uterine flexion. Hysteria had taken such complete possession of its victim as to present to my notice, within a brief period, the following manifestations, namely: Double wrist-drop; inability to flex the body upon the lower extremities, so that the patient was unable to rise from a recumbent to a sitting posture, nor, if placed in the latter, was she able to stand erect; intense salivation, accompanied by horribly fœtid breath; complete aphonia, lasting many days; paralysis of the inspiratory muscles to such an extent that sometimes she seemed threatened with immediate suffocation by the retained mucus; and, lastly, the occurrence of catarrhal croup of very decided character. The lady had become a slave to the hypodermic use of morphine. "Under its soothing influence she was indeed happy and reasonable, but, so soon as the effect passed off, she became once more a raving lunatic, disturbing night and day the neighbourhood where she lived."

Now, the *fons et origo malorum* turned out to be a completely retroverted and retroflexed uterus. I noticed that, whenever the womb was lifted upwards and straightened, the patient felt immediate relief, and became reasonable and manageable, however outrageous had been her previous conduct. A Hewitt's stem was accordingly introduced, and proved to be the only pessary competent to maintain the organ in an erect position. The results were most encouraging. In a very short time the patient was able to give up the morphine habit of several years' standing; sickness and vomiting moderated, and then disappeared, their place being taken by a natural appetite; and, finally, she threw off invalidism, and left her bed and couch for the long-forgotten pleasures of locomotion. The lady was practically well in about eight months; and I am pleased to add that she remains so, though an interval of nearly three years has elapsed. At no time during the treatment of this case did I ever witness the slightest irritation from the stem. In aggravated cases of flexion one not infrequently observes this perfect tolerance, as if the womb instantly recognised the aptness of the remedy.

As an instance of reflex neurosis, the following case may be worth quoting:—A lady, aged about 48 years, consulted me on account of a harassing infra-mammary pain, with which she had been tormented for several years. It was never quite absent, but agonising exacerbations, closely resembling attacks of angina pectoris, were very frequent. During these seizures she would sit rocking herself to and fro, grasping the left breast tightly with both hands. I could discover no evidence of thoracic or other organic disease. Beyond some menorrhagia, not unusual at her age, she denied having any pelvic trouble or disordered function; so much so that, had it not been for the necessity of finding some adequate cause of the frequent nerve storms, I should never have made a vaginal search. However, it was fortunate that I did so, for a large, heavy uterus was discovered, lying across the vaginal roof in a state of complete left latero-flexion. The sound entered between three and four inches, and the case did not seem very promising for treatment. A Hewitt's pessary, with an extra length of stem and large-sized basic support, was nevertheless introduced. It was cheering to observe that in two or three days afterwards the pain had decidedly

moderated. By the end of a week it even disappeared for many hours at a stretch. This, it must be borne in mind, was the first real relief which the lady had experienced from the visits of her terrible enemy for a number of years. Previous to the application of the stem walking was difficult and painful; whilst riding in a train or carriage always made her very ill. Now, however, all was changed, and she was enabled to practise locomotion again with comparative comfort. This lady is now enjoying fairly good health, though the stem was relinquished more than a year ago, after it had been in use about sixteen months.

Of late, it has been somewhat the fashion to speak of uterine ailments as mere neuroses, and accordingly to decry mechanical appliances as means of cure. Of such a view I declare emphatically that none of my experience is corroborative. If the neuroses I have been describing were not reflective of the specified uterine distortions, one certainly is puzzled to realise how a stem pessary would succeed in banishing nervous disorders which had obstinately resisted all medicinal methods of cure. What, may I inquire, are the alternatives to mechanical treatment? If they are to include an elaborate and costly system of nursing, with medical rubbing, carried on for a lengthened period under special surroundings, I would ask, *cui bono?* when the comparatively simple and inexpensive means I have indicated are capable of restoring the patient to health.

I do not, of course, pretend that the stem-pessary is an instrument to be put into the hands of practitioners who have not had the advantage of some special education. Nor do I desire to advocate its employment, except in such aggravated cases as have been quoted; but enough has, I trust, been advanced to warrant its occasional judicious application without fear of any very dreadful consequences ensuing.

TWENTY CASES OF EMMET'S OPERATION FOR LACERATION OF CERVIX UTERI.[1]

By M. BEVERLEY, M.D.Ed., Norwich,
Assistant-Surgeon to the Norfolk and Norwich Hospital.

THE results rather than the records of twenty cases of Emmet's operation of trachelorraphy would have been the more correct title for the short paper I have to read to you, as I do not propose to weary you with detailed notes of the individual cases. I have already read them at Norwich and Ipswich.

It may be, I think, reasonably granted that laceration of the os and cervix uteri occurring during labour was the primary cause of the abnormal conditions which rendered these operations necessary, as they were all performed on women who had borne children; and, although I can give no precise information as to the actual character of the various labours (as I attended but one of the patients), I have ascertained that of the twenty, sixteen were multiparæ and four primiparæ; of the latter, three had forceps applied. In a large proportion of the multiparæ instruments were employed during some of the labours, which were often described as difficult. In six, rapid delivery is noted; most of the patients remarked on their bad "getting up," that their milk was arrested or absent; five spoke of the fever they had had, four of inflammation of body, three of inflammation of leg,—all, in fact, giving more or less evidence of septic conditions, producing cellulitis in some, phlebitis in others, consequent on laceration of the cervix occurring during one or more of their various labours, and, owing to a septic condition, remaining unhealed.

In the one case which I attended myself, the patient suffered from pelvic cellulitis after labour, unquestionably septic in origin; there is good reason to believe that this was due to an extensive laceration of the cervix, which was subsequently cured by Emmet's operation.

Of their general symptoms, or those which led them to apply for treatment, the most marked were persistent backache, irritability of bladder, leucorrhœa, irregular menstruation, in some menorrhagia, marked anæmia, headache, sleeplessness, irritability of disposition or depression of spirits, and many reflex symptoms (such as facial neuralgia) usually associated with and referred to uterine disorders. When examined *per vaginam* (and here I may remark that by Sims' speculum, or its modification alone, aided by tenacula, can the true condition of a torn cervix be recognised), I found in all my cases evidence of laceration of the cervix uteri in various degrees, resulting in fissures more or less deep, unhealed and eroded surfaces, indurated tissue, what has been termed cicatricial ectropion from the rolling out of the tissues of the lacerated cervix, and the subsequent obstructed circulation. In the majority, the laceration was in the anterior lip, in others in the posterior, some in both, giving rise to a stellate appearance.

In most there was erosion—what used to be termed "ulceration," of the "rolled-out" tissues—in nearly all the uterus was abnormally large; in some very considerably so—from arrested involution. In many a considerable amount of cicatricial tissue existed, giving rise, as I have repeatedly proved, to many reflex symptoms, and due in some cases to the "healing powers of nature," but in by far the majority produced by the efforts of art, and certainly not of fine art. They were the natural result of the repeated use of irritants, caustics, or the cautery, by the various gynæcological artists through whose hands the patients had passed—and myself among their number—as I invariably pursued what may be termed the routine practice for that which I thought and had been taught, were uterine ulcers. I continued doing so until I saw Dr. Emmet perform his plastic operation, and heard his lucid description of its *rationale*, in the operating theatre of the Women's Hospital in New York, where this distinguished American gynæcologist demonstrated this and other of his special operations to several medical members of the British Association who, in the autumn of 1884, were passing through New York.

Of the twenty cases, ten have been performed in the Norfolk and Norwich Hospital, and ten in private practice; eighteen healed entirely by first intention; two only partially: of these, I repeated the operation in one, with a successful result; in the other, the patient left the hospital before I could do so, and has not since returned. I have examined several since the operation, and have found the condition of the os and cervix most satisfactory, and the uterus normal as to size and position. Two have become pregnant, one has been delivered since the operation, but I have not yet had an opportunity of examining her since her confinement.

As this operation has been recently discussed in the columns of the JOURNAL of this Association, I felt that there would be an especial advantage in seizing the opportunity of Dr. Emmet's presence for its discussion here; personally, I am quite satisfied with the results obtained, and I know my patients are. I have not performed it in any case in which the orthodox treatment by topical applications has not been first thoroughly tried; and, when compared with the old system, this plastic operation gives far more satisfactory results. A linear, and after a time almost imperceptible scar is left—instead of a considerable indurated cicatrix—frequently of itself the cause of many reflex symptoms, and often the origin of more serious organic disease. Dr. Emmet claims for his operation that it secures to the patient an immunity from epithelial and other malignant affections of the os and cervix uteri, so much more frequent in women who have borne children than in others. He told me, when in New York, that he had not yet seen or heard of a single such case occurring in any of the patients on whom he had performed trachelorraphy during the past twenty years. If such be the case—if direct effects so expeditious and striking can be accomplished, if remote results so satisfactory can be obtained, and after consequences so grave and serious can be averted—then this simple plastic operation termed trachelorraphy, but for which its author prefers to use the English expression, observing that "it would be but human nature for the uninitiated to dread the severity of an operation so termed" should come into more general use. If these things be granted—and the experience of gynæcologists in America, and so far as I know, of those who in this country have given Emmet's operation a fair and careful trial, amply confirms them—then it becomes our duty to select this means, rather than those hitherto adopted, for the cure of these accidental, but natural lesions, which under adverse circumstances lead to serious consequences direct or remote.

Emmet's Operation for Procidentia Uteri.—The object sought to be obtained by this operation is the construction, from the superabundant tissues of the upper part of the vagina, of a platform on which the uterus can rest, and the prevention of the yielding of this support by the formation of a natural buttress secured by the further removal of tissue from the anterior wall of the vagina, thus limiting the capacity of the vaginal cavity, and effectually preventing the descent of the uterus. I have not had the advantage of seeing Dr. Emmet perform this operation, but, according to the description of it in his work, I have done it three times. My first case was done a year since; it was one of complete procidentia of twenty years' duration. I had an opportunity of examining the patient very recently, and found the uterus *in situ*, the os resting on the vaginal *cul-de-sac* or platform. It had never once prolapsed, and the patient expressed herself highly satisfied with the result of the operation.

Dr. Beverley concluded his paper by a further reference to the cases

[1] Read in the Section of Obstetric Medicine at the Annual Meeting of the British Medical Association held in Brighton.

in which he had performed the operation which he described, with illustrations on the black board.

Dr. Howard A. Kelly, of Philadelphia, stated that the whole genius of any operative procedure upon the vagina, with a view to curing prolapsus uteri, lay in a careful consideration of several factors, and with these, the principles, borne in mind, success was attainable by various methods. Three of the most essential points were, first, retention of the uterus in a position of anteversion, as they knew, from experience, an anteverted uterus could not prolapse; secondly, placing such a bar of firm united tissue in the anterior vaginal wall that the vagina could not roll out, everting like the finger of a glove as before, but, if there was subsequent descent of the uterus, it must swing on this bar as a radius, extending from urethra to cervix. But, thirdly, even with these barriers, the vaginal outlet was still in many cases large enough, or, if smaller, yielding enough, to allow the uterus to swing out, and hence the necessity of building up, also, the perineum by some one of the many operations devised. M. Sims had achieved the second result by his well-known oval denudation on the anterior wall, which was in many places still practised, and with the modification of using Werth's buried sutures with excellent results. It was, however, found very soon that the strength of union was just as great if a broad band of the oval be denuded and united across, and that the tissue remaining undenuded in the centre practically disappeared with the involution the structures immediately underwent after restoration to their proper position. In the present operation, so well described by Dr. Beverley, two denuded areas, one on each side of the cervix, were drawn downwards and forwards, and united to an area of denudation in front of the cervix. The simple fact of thus pulling these points down from above created a slack between their point of attachment and the tissues below, and this slack was evident in two gently curved folds running from the points above, as now attached in front of the cervix to the urethra below. The denudation was made along these folds on either side, a half-inch in breadth, and the tissues were united from side to side, all the way down to the urethra. It would be seen that this operation was but a modification (in the opinion of the speaker a vast improvement) upon the older Sims' method. The difficulties were not, however, to be underrated, and the difficulty of securing satisfactory co-aptation of the spots at the sides of the cervix with the spot in front of it, were sometimes very great. In a short vagina it was impossible to put a "bar" in the anterior wall so long that it would not eventually swing down and out of an outlet, which had once been broken down; in a long vagina, however, the anterior operation alone might suffice. It had been most gratifying to the speaker to read a recent paper by Dr. Smith, of London, and to hear the present admirable description of Dr. Beverley, of his cases of laceration of the cervix uteri. The difference between the American and English practice in the matter was well known, and it was customary in England to explain the difference by stating that, owing to the peculiar conditions of the midwifery practice prevailing in many parts of America, lacerations were much more frequent. The speaker, however, differed from this opinion, and believed that there was no difference between the two countries as to the relative frequency of this lesion, but that the apparent difference rested in the diagnosis. Every case of erosion, without exception, in which the speculum revealed a cervix large, engorged, with more or less "papillary hypertrophy," and a weeping surface, and the finger detected the induration, depending upon the chronic stasis of the circulation—every such case in America is termed "laceration of the cervix, with infiltration of the lips and ectropion." As an illustration of the opposite views of the American, and the English and German gynæcologists, the speaker wished to select no better pictures for illustrating the different degrees of laceration than the well known plates published by Ruge and Veit, in the *Zeitschrift für Gynecology*, in their article on "Erosio und beginnendes Krebs." The test of a laceration had been stated to be, catching each of the extreme opposite points above and below the split with tenacula, and drawing them forward and together, when it would readily be seen that there was a broad tear; it would also then be evident that the appearances which have masked the true condition, rendering it so difficult of recognition, were due to infiltration of submucous and endo-cervical tissues, which pout, and thus force the lips into extreme eversion. This test was not, in many cases, immediately applicable. Wherever the cervix was large, of an angry red, or congested blue colour, and full of enlarged follicles, a period of careful preparation, including rest, with free local depletion once or twice a week, emptying of all the follicles, and the daily use of the hot douche, or packings, or paintings, must in all cases precede operation. Then, when the lips were thus greatly reduced in size, and of a normal soft consistency, the process of demonstration with the tenacula is one of extreme simplicity, and the inference was so obvious than no one would question the diagnosis. The question had been raised as to whether the knife or scissors were best adapted to denuding the flaps. His opinion was that, in skilled hands, the knife is best adapted to all cases, while the scissors, particularly those invented by Dr. Dawson, made an easier denudation, especially in cases where the lips had been well softened by preparatory treatment. Much has been said about the "plug of cicatricial tissue" in the angle; and Dr. Beverley had illustrated the reflex symptoms which might arise from its presence by detailing two beautifully typical cases, and to close the cervix without removing this would in effect be much the same as forcing the hand to the shoulder with a base-ball in the bend of the arm. How should they determine when this "plug" was present, and what means had they of deciding that it had been completely removed? The touch supplied the test. So long as any of the offending tissue was left in the angle, the sense to the touch was one of gristly or even bony hardness. When this was completely removed, the structures were soft and yielding.

Dr. Gordon (New York) said that Dr. Beverley might congratulate himself upon having seen Dr. Emmet operate. The cases he (the speaker) had seen operated upon in England and Germany had not, in his opinion, been operated upon by Dr. Emmet's methods. He was not surprised, therefore, that the operation was not generally well received. It should be a clean cut on each side from the extreme end to the angle, any diseased tissue being included in the angle. A pair of long-bladed scissors was a much better instrument than a knife, as ordinarily used.

Dr. W. Gill Wylie (New York) said he agreed with Dr. Emmet in many things, but could not accept all of his teachings. He had done the operation for laceration of the cervix many times, and considered it by far the best method of curing many cases. As long ago as 1881 (see *American Obstetrical Journal*, Jan., 1882), he had written a paper on this subject, differing from Dr. Emmet in the etiology, and especially in the pathology, of the disease. He held that the mere fact of the cervix being torn was of itself of little importance, unless the laceration extended very high up and impaired the sphincteric power of the internal os, except in those cases in which the cervix was imperfectly developed and the mucous membrane diseased, or in those in which the tissues were affected by disease (usually mild forms of sepsis) before the laceration had had time to heal. In other words, if a healthy cervix were torn, and did not become affected by disease soon afterwards, no operation would be needed; and it was not alone the sewing together of the flaps and restoring the shape of the cervix which cured the case, but the good results were chiefly due to the fact that the diseased glands and follicles were removed by the operation for repairing the lacerated cervix. He did not agree with Dr. Emmet about the cicatricial plug. He had too much respect for nature to think that cicatricial tissue alone could do much harm. It must not be forgotten that many of the glands and follicles of the cervix were deep-seated; and he was sure that the cicatrix would cause no trouble when free from diseased glands and follicles, tending to fill, distend, and cause disturbance by pressure. It would be found that the deep cicatricial plug of Dr. Emmet was merely the firm deeper muscular fibres indurated by inflammatory action kept up by the presence of diseased glands and follicles. Many of these cases could be cured in a short time by simpler treatment; but, as a rule, it was only a temporary cure. He was satisfied that many of the cases treated in England by astringents and caustics, and called "erosions," were really what in America were called and treated as laceration of the cervix; and that many of those cases of subinvolution, with enlargement and elongation of the cervix, that were operated on by manipulation of the cervix, were cases that could be completely cured by the simple operation devised by Dr. Emmet.

Insured Infants.—The facilities with which people can insure the lives of children almost from birth, apparently without any inquiry or medical certificates, or any of the precautions required in the case of adults, were rightly denounced by the coroner who held an inquest at Yeovil, on Tuesday last, on the body of an illegitimate child, aged 8 months, whose life was insured for £2. It had been delicate from birth, and was found one morning dead in bed, with the bed clothes half over its forehead. The jury, in returning their verdict, added a rider that they were of opinion that the present facilities given to parents for insuring infant children, especially illegitimate children, required some legal restrictions.

Measles at Padiham.—Owing to the large number of children suffering from measles at Padiham, it has been decided to recommend the day and Sunday school authorities to close the schools for a fortnight.

THERAPEUTIC MEMORANDA.

RASH PRODUCED BY ANTIPYRIN.

Two cases have lately come under my notice, in which a rash closely resembling that seen in measles appeared in patients who were taking antipyrin. The rash observed differed from that of measles in the following points:—

1. It did not make its first appearance on the forehead, was most marked on the extremities, though also present on the trunk, and to a limited extent on the face.

2. It was not arranged in crescentic patches, and its colour was rose-red.

3. There was an absence of general symptoms; for example, swelling of the face and eyelids, coryza, lacrymation, cough, etc.

4. Its duration was only from twenty-four to thirty hours, quickly subsiding after the drug was left off.

Probably those who use the drug much have noticed a similar eruption, though I have not seen any mention made of it in the JOURNAL. It seems to cause no inconvenience, and would hardly be worth mentioning were it not that from its resemblance to measles it might be mistaken for that disease, and so occasion the unnecessary isolation of the patient, and the fumigation of his clothes and room.

EDWARD O. DALLY, M.A., M.D.(Oxon), M.R.C.P., Hull.

NOTE ON THE EXISTENCE OF IODINE IN THE FREE STATE IN A MINERAL WATER.

IT has been known for many years that the water of the Woodhall Spa, near Lincoln, is exceptionally rich in bromides and iodides. In the course of an investigation which I have recently conducted, I have made an observation which appears to be important. I find that there is free iodine in the waters, and not a mere trace of free iodine, but sufficient to impart to the water a brown colour of considerable depth of tint.

The proof of the presence of the free iodine in this water is very striking. There is the formation of the blue iodide of starch when a little starch paste is simply poured into the water. Another character presented by the water is, that when it is shaken up with 1-20th of its volume of bisulphuret of carbon, it loses its brown colour and becomes colourless, whilst the bisulphuret of carbon assumes a pink-violet colour, owing to its having dissolved out the iodine.

So far as I am aware, this is the first instance in which an appreciable quantity of free iodine has been found in any natural water.

For many years the Woodhall Spa has been reputed as a valuable remedy in skin-diseases. The fact that it is a solution of free iodine is most interesting in this connection, and is well worthy of the attention of the medical profession.

J. ALFRED WANKLYN.

PULSATILLA IN ACUTE ORCHITIS.

HAVING witnessed the striking curative action of pulsatilla in acute orchitis and epididymitis, I should like to persuade others to follow Dr. Brunton's advice, and give this drug in inflammatory states of the testicle, epididymis, and spermatic cord. To have it in our power to subdue promptly the intense suffering of such cases, is a great blessing; and the relief is so rapid that it is even unnecessary to employ morphine to subdue the pain, whilst the swelling and heat subside more rapidly than under any other drug.

GERARD SMITH, M.R.C.S., Upper Clapton.

ON THE OPEN-AIR TREATMENT OF CONSUMPTION.

I AM glad to find in the JOURNAL of December 4th, 1886, an account of the treatment of a case of consumption by a modified form of open-air treatment, as, so far as my experience goes, it is the only means by which there is any chance of curing the disease. Some twenty-four years ago (1862) I published an article on the subject in the *American Journal of Medical Sciences*. I then gave an account of some cases, showing the beneficial result that followed, even when the treatment was carried out but partially, that is, where the patients lived in the open air during the summer, but had to come back to their houses in the winter. Whilst living in the open air they invariably improved, gaining in weight from four to twelve pounds; whilst living in their houses during the winter they all lost weight. Two of these cases that I did not lose sight of recovered from the disease; one dying of small-pox after twelve years, and the other is still alive, and was in the enjoyment of perfect health the last time I saw him, about six months ago. The history of this last case is interesting. He belonged to a consumptive family of four sisters. I attended three who died of the disease, and of the next generation I attended one child that died of tubercular meningitis, and another that died of tubercular peritonitis. When I first saw the case there had been cough for about three months. The upper part of the right lung was solid as far down as the nipple, with commencing breaking-down at the apex. There was emaciation and want of appetite as the stomach was upset, and the disease was being hurried on by the use of cough medicines. Some improvement took place on restoring the digestive organs, and free exposure to air night and day. By the middle of April (I took the case first in January) he was well enough to join a surveying party that was surveying a route from California to Salt Lake for the Central Pacific Railroad, mostly through the Nevada and Utah deserts. At first he could do but little work, but his strength rapidly improved, and by the end of the summer the cough was almost gone. Two years were spent with the party, camping out all the time, with the exception of about three months in the winter. His health was perfectly restored, and has remained good ever since. As regards the etiology of the disease, the following facts may be interesting:—In the early days of the settlements in California, a great many Indian children were brought in and sold as servants, their parents having been killed as the country was settled up. The children were carefully raised, being well clothed and fed, but fully five per cent. of them would die of consumption, generally between the ages of 10 and 15 years. On looking into some of the cases, I arrived at the conclusion that the disease was caused from the children sleeping in too comfortable rooms, and having too farinaceous a diet. I advised that they should be lodged in out-houses, under sheds in bad weather, and when it did not rain that they should sleep in the open air. They were also to get a little more bacon and meat. This certainly prevented, to a great extent, the development of the disease, and many children that would otherwise have died grew up to be useful servants. The great objection that, not only patients, but even physicians have to this out-of-door treatment, is that it is liable to give rise to catarrh. My experience is that there is no greater preventive of catarrh than living in the open air. I have had patients who could not go across a passage from one room to another without taking cold, and yet who could camp out, sleeping on the ground under a waggon, and who would tell me, after three or four months in the open air, that they had not had a cold during the whole of the time. When living in houses, I am particularly liable to take cold, often sneezing from putting on a cold pair of slippers; but I have left the Sacrament Valley with the thermometer at 30° to 90°, and in forty-eight hours have woke up with two or three inches of snow on my blankets without even thinking of taking cold. It is difficult to explain how living in the open air should confer such immunity from the effects of cold. I believe it is through an action on the nervous system, for it is evident that, if in two or three minutes after putting my feet into cold slippers I find the blood-vessels of the Schneiderian membrane distended, this can only be through some change produced by the cold on the vaso-motor centre. Although this effect on the nerve centre is most plainly shown on the very vascular Schneiderian membrane, yet I think it probable that all the mucous membranes in the body are simultaneously affected to a greater or less extent; and any improvement in the Schneiderian membrane implies also an improvement in the state of the pulmonary mucous membrane, and in the mucous membrane of the stomach and intestines. The great improvement in the appetite and in digestion that almost invariably is caused by living in the open air, finds its most ready explanation through some such action as I have indicated on the vaso-motor centre. However, leaving these theoretical considerations entirely aside, experience has satisfied me that no other treatment of consumption promises such favourable results as the open-air treatment; and I think it will be a happy day for consumptives when the search for new drugs for treating disease shall give place to an attempt to find out those diseases which can be better treated without them.

JAMES BLAKE, M.D.Lond., F.R.C.S.

TOXICOLOGICAL MEMORANDA.

LEAD-POISONING FROM HOME-MADE WINES.

I HAVE read Dr. Campbell's and Mr. Wilcox's communications on the above subject, and, interesting as they are, as pointing out one source of lead-poisoning, they do not tell us anything new; neither do they, I am fully convinced, settle the question whence the poison, from which a great part of the lower classes of this country appear to be suffering, is principally obtained. During the last three months I have attended as many as thirty cases of plumbism—all, be it observed, among the working classes—and in one case only, in which a man and his wife suffered severely after drinking home-made wine during the harvest-time, was I able to trace it to this cause.

I feel convinced that the poison is lurking somewhere in the pantry of these poor people, as the majority of my patients had no wine, or anything beyond the ordinary requirements of people of this class; and I trust further investigation may discover the principal source of this wide-spread malady.

JOHN S. LUSH, M.R.C.S., L.S.A.L., Market Lavington.

OBSTETRIC MEMORANDA.

THE EFFECT OF TIGHT LACING IN PRODUCING FLEXIONS OF THE UTERUS.

MR. A. B. R. MYERS (BRITISH MEDICAL JOURNAL, Dec. 11th, 1886), commenting on my paper on the early history and etiology of uterine flexions recently published in the JOURNAL, calls attention to my omission to mention tight lacing, which he considers "a very important factor in flexions of the uterus." Unquestionably tight lacing is one of the causes of "forcible downward pressure on the uterus as a whole," which I spoke of in my paper, although I did not specially mention it. I am happy to express my entire concurrence in Mr. Myers's views on the subject, and his remarks will doubtless be of great service in directing special attention to the evils which he so forcibly reprobates.

GRAILY HEWITT, M.D.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITIAN, IRELAND, AND THE COLONIES.

GLASGOW ROYAL INFIRMARY.

TETANOID CONTRACTIONS AND CONVULSIONS FROM PERIPHERAL IRRITATION: RECOVERY.

(Under the care of Dr. ROBERTSON.)

A BOY, aged 9, was admitted on August 25th. His aspect attracted immediate attention, the risus sardonicus being at once suggested by his facial expression. He could not open his mouth for more than than half an inch; the muscles of his neck were rigid, so that he was unable to turn his head from side to side; his arms were also stiff, and all their movements were performed slowly and with difficulty. He walked with a peculiar gait, and there seemed a degree of stiffness in the legs also. There was some induration behind the angle of the jaw on both sides. Pain was felt on pressure over the lower cervical region of the spine. He complained of soreness in the front of the chest, apparently in the muscles. General sensation and the special senses were normal, and his intelligence was good. The functions of the bladder and bowels were not disturbed. There was no fever. He was pale, weak, and reduced in condition. His mother stated that his right big toe was hurt about a month before admission, and an ulcer was found at the root of the nail. A few days after his toe was injured, he became subject to convulsive attacks. These always began in his sleep, and he frequently bit his tongue when they set in. He awoke at once when they occurred, and his consciousness never seemed to have been lost. This point was carefully inquired into, and as he was having two or three fits a-day on admission, there was no difficulty in determining its correctness. The seizures always began with a scream, and they generally lasted about four or five minutes. The nurse of the ward—a woman of great experience—stated that his back got arched while in the fits, and added that the arching was as bad as she had ever seen in any case of tetanus. Although nothing was said about his teeth at first, it was found that his lower back molars, and especially the right one, were decayed and painful, and the gum around them swollen.

A mixture of chloral hydrate and potassium bromide was prescribed; his toe was poulticed, and, on the third day after admission, the right inferior molar was extracted under chloroform. There was marked and speedy improvement. The rigidity of the muscles passed away, and, on the day following the extraction of the tooth, he could open his mouth to nearly the full extent. The fits also diminished in frequency, their number falling from about two or three a day to one in the week. He still occasionally screamed at night, though no contractions occurred. A mixture of liq. arsenic, vin. ferri., and sodæ hypophos ph. was ordered, the previous medicine being only given at bedtime. It was deemed advisable to have the left lower molar removed also. The result of its extraction was very satisfactory; all pain disappeared from the gum, and the tendency to screaming likewise passed away. He was dismissed on October 21st, stout and well, having been running about the wards and grounds for the previous twelve days, quite free from all his symptoms.

REMARKS BY DR. ROBERTSON.—In this case, the decayed teeth and inflamed gums are believed to have been the special source of irritation. The toe did not seem to give him much annoyance, and healed readily after a few days. This view was supported by the great relief to the symptoms after the extraction of the one molar tooth, and their entire disappearance on the removal of the other one. The persistent irritation in the gums appears to have been very great, and to have induced so much disturbance in the sensory centre of the fifth nerve, that it was transmitted to the nucleus for the motor division, inducing the trismus. Thence, probably, there had been irradiation to the motor centres, which preside over the other muscles involved.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 11TH, 1887.

G. D. POLLOCK, F.R.C.S., President, in the Chair.

Suture of the Median Nerve Ten Weeks after Division, with Recovery of Function. By J. BLAND SUTTON, F.R.C.S.Eng., Assistant-Surgeon to the Middlesex Hospital.—This paper contained the details of the case of a porter, who, through the bursting of a soda-water bottle, sustained a deep wound of the wrist. The median nerve had been completely divided, and the parts supplied by it were deprived of motion and sensation below the point of section. Ten weeks after the accident the ends were found by dissection, the cut ends vivified and united by suture. Sensation began to return in five days. The most important feature in the case was the ease with which the ends of the severed nerve were found by following the rules which had been gained by studying the effects of neurotomy in horses. A list of previous cases of secondary nerve-suture accompanied the paper.—Mr. HOWARD MARSH said he felt much obliged to the author of the paper, for the subject was an important one, and the operation comparatively recent. He had seen several cases, and estimated the results as uncertain.—Mr. HOLMES remarked that Mr. Sutton seemed to set much value on the knowledge he had gained from neurotomy in horses, where he had observed a cord running from one end of the divided nerve to the other, and serving as a guide in the search for the other end so soon as one is found. He could not think that any such guide was to be found in most cases in the human subject, especially when there had been any laceration about the division of the nerve, or any suppuration round it. He regarded the operation as common, the benefit as uncertain, but he should certainly recommend it if the nerve-ends could be found; in fact, in such a case he should think the operation urgent. In his own practice he had had a remarkable case, where the nerve had been divided six or seven months; the ends were then sewed together, and though there was no improvement in function for the next three or four months after union, there was ultimately complete recovery. His colleague, Mr. Pick, had had a case in a boy, in which after nerve-suture there was no immmediate improvement, and the boy was sent away from the hospital as a case of complete failure. After the long suspension of recovery which had been noticed in the other case it was thought worth while to make further inquiries after the boy, and these showed that he also had recovered completely after a long interval. The best prospects for the operation were that the injury should have been both simple and recent.—Mr. BOWLBY quite agreed that the cords Mr. Sutton had spoken of between the divided ends of nerves in horses were not generally to be found in men. He had seen twenty cases, and in none of them were they to be traced. If it did happen that they should be found as in Mr. Sutton's case, the best plan would be to find the upper end of the nerve, and trace downwards to the lower end. They certainly would be useful, for the lower end was generally hard to find. As to the prognosis of these cases, he thought that if there had been no suppuration or sloughing, and if the cases were traced for long enough, it would be found that all, or very nearly all, recovered. In Mr. Sutton's case, where the division had continued for ten weeks, there could be little doubt that the muscles would be undergoing fatty atrophy, the faradic contractility being destroyed, and the reaction of degeneration clearly marked. It took some time for the recovery—or, more strictly, remaking—of the muscle, and he had

known cases in which such a process took two years. He did not think that the distance of time of the operation from the accident as important as Mr. Holmes had estimated it to be, for he had found that the distal end of the nerve could be remade before union with the proximal, and, in such a case, time might be usefully employed in such a reconstruction, and the effect of the operation afterwards be made more rapid. There were instances of six months', and even as much as four years', interval between accident and operation, in which the recovery of sensation had been rapid, even quicker than when the interval had only been a few weeks. It was the duty of the surgeon to sew the nerve-ends together even if they had been separated, as had happened in one case, for fourteen years. It was quite safe to pass the suture through the bulb at the end of the nerve, and that gave the best hold. Tetanus was a bugbear that might safely be disregarded; there was no instance on record of its occurrence after such an operation. —Mr. BARWELL recounted a case of division of the ulnar nerve, followed by great wasting of the hand. After suture there was gradual recovery, both of nutrition and movement.—Mr. HULKE felt bound to bring forward a difficulty to which other speakers had not alluded, viz., what was to be done when the divided ends of the nerve were so far apart that no stretching or conditions of posture would make them meet. German surgeons had tried some experiments in splitting up the nerves and splicing them; or in putting in a piece of a sheep's sciatic nerve, or a double piece of dog's sciatic which was too thin to be of use unless two parallel pieces were used, or even of a piece of decalcified bone from a bird. These are said to have been successful, and should be borne in mind.—Mr. HAWARD thought the prognosis depended a good deal on the length of interval between the accident and the operation, for if that were long the isolated parts degenerated, and certainly if there was suppuration the central end also would degenerate. He had removed a neuroma from the wrist which involved excision of about an inch of the median nerve; he had brought the ends together at once and sutured them. There was no loss of sensation or power for the next five or six days; then erysipelas and suppuration came on for two or three days, sensation and motion were rapidly lost, and it took two months to recover them. After suture it was desirable to continue some treatment of the distal part by warmth and exercise, active or passive.—Mr. SUTTON thanked his critics for what he had learnt from them. Though they all spoke of the operation as common, he had only been able to find seventeen cases in print in English. Four of these were at St. Bartholomew's; of the sixteen others that had been referred to that evening he should be very glad of more details. As to the band between distal and proximal ends, he did not draw his only knowledge of it from horses, for it had served him very well as a guide in his operation on a human subject. The question of degeneration and regeneration of the distal end was a matter of great interest both to physiologists and veterinary surgeons, and wanted more detailed testing.

Observations on the Physiological Effects of Massage. By A. SYMONS ECCLES, M.B. (communicated by Dr. LAUDER BRUNTON, F.R.S).—Four distinct manipulations were briefly described, and their immediate effects on the human tissues and functions, as observed by the writer in a series of experiments on healthy persons, were noted: *Effleurage* stimulated the skin muscles, produced dilatation of the superficial vessels and insensible perspiration, excited the skin reflexes, and, acting through the cutaneous nerves, increased the rapidity of the circulation and heart's beat. *Pétrissage* forced the lymph out of the muscles, increased the velocity of the blood-current through the part, temporarily decreased the size of a limb, and increased its muscular power. The pulse-rate was reduced, especially in abdominal kneading. *Massage à friction* produced the same local effects as *pétrissage*, and was peculiarly applicable to joints. *Tapotement* excited muscular contractions. The immediate and remote effects of massage as a combination of the above-named manipulations were: that the texture of the skin was improved, the sense of locality was increased, the general body temperature was raised, and the free surface temperature of a part under massage became higher than that of the rest of the body, while abdominal massage decreased the surface temperature of the extremities. A course of massage of one month's duration increased the body weight, the appetite, muscular strength, and ability to sleep and work well.—Mr. HOLMES said he had no intention of criticising the statements made in the paper, but he must protest against the foreign words. If, as he imagined, *effleurage* meant nothing more than stroking, and *pétrissage* than kneading, he saw no advantage in not using the familiar terms.—Dr. HERMANN WEBER thought it important to consider massage as being a form of treatment without drugs, and to rescue it from the hands of well known and highly reputed quacks.—Dr. W. PLAYFAIR said there was much in Mr. Eccles's paper which he could not criticise, but he felt strongly the value of the form of treatment. He had been the first in England to introduce massage prominently into notice, but he admitted that he looked upon it as only one agent along with overfeeding, and freedom from previous surroundings in the treatment of profound cases of neurasthenia or malnutrition, whose exact character we did not as yet thoroughly understand. Some of the cases which were commonly counted as incurable, and were a curse to their families could, he thought, really be cured by these means. He was indifferent what terms were used, but underlying mere criticism of the language there was apt to be a sneer at the treatment. The increase of weight in healthy men, of which Mr. Eccles had shown them the tables, was remarkable. In severe cases of illness under his treatment, he was accustomed to see an increase of ten pounds or twelve pounds a week, and many patients ultimately doubled their weight. He had seen this treatment wrongly used in cases of locomotor ataxy and disseminated sclerosis, owing to mistaken diagnosis, and he was anxious not to run a hobby too hard, so that he had only used massage in a few uterine cases with a view to replace exercise. Dr. Powell's presence encouraged him to mention a remarkable case he had had lately in a lady whom he had found, as he thought, moribund, with the right lung riddled with cavities, a hectic temperature and profuse night-sweats. There was very abundant expectoration, in which eminent bacteriologists could find no bacteria. He declined to attempt any treatment, and it was only after urgent pressure, and against his own wish, that he did so. The results turned out to be the most remarkable he had seen; the cough stopped, the patient rapidly improved, and in two months and a-half gained six stone, and her lungs were practically recovered. Over-feeding he considered only possible when there was massage to take away the waste. He was not speaking hyperbolically, but seriously, when he said that, given a girl who had wasted to a mere shadow, he would in a fortnight put her into a condition to eat with pleasure more than a Lifeguardsman could manage. He wished to protest strongly against the doctrine that the art of massage was a very difficult one, and took two years to learn; in his opinion, half-a-dozen lessons were quite enough, and any nurse who could not learn all that was wanted in that time was never likely to make herself useful at it.—Mr. HAWARD, speaking as a surgeon, commented on the usefulness of massage in cases of infantile paralysis, where he found it much superior to galvanism in any form; and also in some cases of spinal curvature which were really due to chronic constipation and overloading of the sigmoid flexure.—Dr. DOUGLAS POWELL said he had seen the lady to whom Dr. Playfair had referred towards the end of the treatment, when she could walk some distance, and had greatly improved. He thought she had had phthisis, and had it still, and that there was evidence of some contracted cavities in the lungs. He found it difficult at the Brompton Hospital to select phthisical patients on whom to try the treatment, for he thought it only applicable to one-sided cases which were going through the eliminative stage.—Dr. ARTHUR GAMGEE considered that a nurse wanted most accurate anatomical knowledge in massage of some cases, such as Scrivener's palsy. He had had lately a young man, aged 19, under him, in whom Dr. Grainger Stewart agreed in diagnosing great dilatation of the stomach. There was much discomfort, and some functional albuminuria. Massage was tried, and in a fortnight the stomach seemed to have resumed its normal size, and he ultimately recovered completely. It was important to avoid cases tending towards insanity. In phthisis he had seen some distinct failures in improving the appetite.—Mr. ECCLES thanked the meeting for the discussion his paper had evoked, but observed that he had purposely avoided introducing any clinical matter into his observations, in order to eliminate any results of over-feeding, etc., from his conclusions.

MEDICAL SOCIETY OF LONDON.

MONDAY, JANUARY 10TH, 1887.

R. BRUDENELL CARTER, F.R.C.S., President, in the Chair.

Phosphatic Diabetes.—Dr. RALFE brought forward a case of phosphatic diabetes, and read the particulars of twelve others. These he arranged in groups, in which excessive elimination of phosphoric acid occurred in connection (1) with derangement of the nervous system; (2) in relation to pulmonary disease; (3) as alternating with diabetes mellitus; (4) as running a distinct course like saccharine diabetes, only without sugar. The cases occurred mostly in young male adults, the chief features being great and progressive emaciation, thirst, increased appetite, a tendency to boils, cataract, a dense urine, with or without increase of the other urinary constitutents, but always an exaggerated excretion of phosphoric acid. The causes that led to this increased elimination of phosphoric acid were not definitely

determined; probably two factors were concerned, namely, inability of the tissues to utilise the phosphorus brought to them, and also an excessive formation of acid in the tissues dissolving out the earthy salts. The prognosis in cases associated with derangement of the nervous system or with pulmonary disease was very gloomy: on the other hand, it was a favourable sign when in diabetes mellitus the sugar was replaced by phosphoric acid. Out of three cases related, two had completely recovered, whilst the third was running a very mild course. With regard to the term phosphatic diabetes, it was evident that the increased elimination of phosphoric acid was symptomatic and not a disease *per se*; it would be improper, therefore, to use the term in that sense, but it would be useful as a distinctive appellation to distinguish between phosphaturia caused by deposition from alkaline urine, but without excess, and the enormous discharge of phosphoric acid, met with in urines, but not necessarily deposited from them.—Mr. BRUDENELL CARTER asked what means existed for estimating the proportion of phosphates in the urine.—Dr. RALFE, in reply, said that no very practical means of estimating the quantity of phosphates existed except by volumetric analysis, but this operation did not take long once the apparatus was fixed up, and then once in a fortnight was quite often enough.

Wound of the Femoral Vein.—Mr. A. PEARCE GOULD read the notes of a case in which the femoral vein had been accidentally wounded by a knife belonging to a cat's-meat woman. The wound was just below and parallel to Poupart's ligament, and the bleeding was profuse. Mr. Gould enlarged the wound under chloroform, and found that it communicated with the femoral vein, which he ligatured above and below without arresting the hæmorrhage. Ligatures were then applied to the internal saphenous and external circumflex veins, when the bleeding ceased. The wound was carefully syringed out with a solution (1 in 2,000) of perchloride of mercury. The femoral artery was seen, and seemed to be quite uninjured. On the following day (October 12th) the patient was comfortable, with normal pulse and temperature. There was no œdema or loss of heat in the damaged limb. In the evening, the temperature rose to 101.2° F., and on the 13th to 103.6° F., and the patient became restless. On the 17th, there was delirium and a "fit." The wound looked healthy. On the 20th, profuse hæmorrhage took place from the femoral artery, which had again to be ligatured. The patient, however, succumbed to the shock and loss of blood on October 22nd.—Mr. MORGAN alluded to a similar case which he had seen where a bullet had set up fatal hæmorrhage.—Mr. GOULD, in reply, said that the artery might have been bruised, but showed no signs of injury.

BRITISH GUIANA BRANCH.

THURSDAY, DECEMBER 16TH, 1886.

R. GRIEVE, M.D., Surgeon-General, President, in the Chair.

Ethics of Medicine.—Dr. WILLIAMS (Medical Inspector) read a paper in which he discussed various ethical topics of professional interest.—Some remarks were made by the PRESIDENT.

General Paralysis.—Dr. LAW read a paper on general paralysis, in which it was stated that the exalted ideas so characteristic of the disease in Europe were not observed in British Guiana.—The PRESIDENT confirmed this observation, and dwelt on the necessity of studying the special characteristic of disease as observed in the colony.

Isolation and Disinfection.—Dr. J. S. WALLBRIDGE (Health-Officer, Georgetown) read a paper on the isolation of infectious patients and on disinfection. He said that the spirit of fatalism, which led to a disinclination to take the necessary trouble to prevent the spread of a disease which it was thought would come and go by some law over which human agencies could have no influence, was one of the greatest obstacles in the way of sanitary improvement. He insisted that isolation must be immediate and complete, and quoted two recent instances of small-pox on board ship, and one of cholera, where rigid isolation was carried out, with the result that in no case did the disease extend beyond the immediate attendants of the sick. He pointed out the advantages to be gained from early notification. With regard to disinfection after yellow fever, he recommended the use of corrosive sublimate and carbolic acid for closet-pits or pails and drains, washing of the walls with the same solution, fumigation of rooms with sulphur, and the rinsing of clothes with chloride of lime, and the destruction of all soiled clothes by fire.—Dr. ANDERSON referred to the difficulty of isolating patients on the estates, in the absence of any authority to prevent communication between the sick and healthy.—Dr. PENTLAND said that the estate-hospitals only contained two wards—male and female—and that isolation was therefore impossible.—The PRESIDENT referred to the difficulty of preventing the spread of whooping-cough and measles; the fact that the port of Georgetown had been free from contagious disease for the whole year reflected great credit on Dr. Wallbridge.

Cardio-Vascular Disease.—Dr. ARTHUR RANNIE read a paper on cardio-vascular disease, and the subject was discussed by Drs. WILLIAMS, LAW, PENTLAND, LEARY, HILL, and the PRESIDENT, who pointed out that the negroes in British Guiana suffered severely, a very large proportion of those born in Africa dying of rupture of cerebral arteries.

ACADEMY OF MEDICINE IN IRELAND.

MEDICAL SECTION.

FRIDAY, DECEMBER 17TH, 1886.

JAMES LITTLE, M.D., President, in the Chair.

Addison's Disease.—Mr. DOYLE read a paper on a supposed case of Addison's disease occurring in a dark-complexioned female somewhere between 22 and 25 years of age, having brownish and bronze-looking pigmentation of temples, cheeks, backs of hands, and front of legs. Constitutional symptoms preceded the pigmentation by nearly three months. Ill-health first commenced with an unhealthy ulcerated condition of one of her fingers. This patient was said by her friends to have recovered, but a slight discoloration remained along the attachment of hair to the temples. The chief interest connected with the case was to discover the primary disease that gave rise to weakness, lassitude, vomiting, cough, fever, and discoloration.

Select Clinical Reports.—Dr. A. W. FOOT read a communication styled "Notes of Some Unusual Cases observed in Hospital Practice." One was a case of obstinate vomiting from "land-sickness," which continued for nine days after the man had come ashore. It was the third time he had thus suffered. Another was a case of mistaken identity on the part of four persons. The man was living, but comatose from alcohol. A husband, wife, and two of their daughters claimed him as their son and brother—wrongfully as it turned out. There was a case of well-marked articular gout in a hospital patient, very corpulent and long addicted to porter drinking. The series concluded with an account of a man who was firmly convinced that he was the source of an offensive effluvium, which made his presence unbearable and even injurious to others—animals as well as men. Dr. Foot called this, and some similar cases which he alluded to, by the provisional name of "subjective osmidrosis." The question was discussed of an hallucination of smell or organic irritation of the sensory centre.—Mr. COX said he had himself a tendency to sea-sickness, which lasted for some hours after he came on shore. He had had in hospital two cases of acute articular gout. One was that of a butler, who considerably improved under a treatment of colchicum and lithia, and subsequently iodide of potassium. The other was that of a policeman. Bromide of lithia gave him considerable relief, and the administration of salicylic acid seemed decidedly beneficial. Other patients he had seen relieved by ointment of belladonna and iodine, with powder of opium or the extract of opium. With reference to the curious case of delusion, he might state that at present he had under treatment a man who was sensible of emitting a disagreeable smell, which might be the result of disease of the bones of the nose or of mischief at the back of the pharynx. It appeared that an impression once made on the sensorium remained even after all disease had passed away. Large doses of the extract of belladonna with the oxide of zinc were found useful.—Mr. FOY mentioned a case which came under his notice five years ago of a lady who was sea-sick on the passage from Holyhead to North Wall; and the sea-sickness continuing after her arrival, she died from sheer exhaustion.—Dr. PATTON asked whether, in the case recorded by Dr. Foot, there was any sense of unpleasant smell to the man himself.—Mr. MOLONEY said a case came under his observation of a young fellow, aged 20, suffering under a fixed delusion that a bad smell was given off by his body. Under a course of tonics, sponge-baths, and open-air exercise, he recovered. Among paralytics he had noticed hallucinations of smell. — The REGISTRAR-GENERAL (Dr. GRIMSHAW) asked had Dr. Foot tested whether his patients had a proper sense of smell independent of their own delusion.—The PRESIDENT had seldom heard of a case in which the mistaken idea was so persistent as in that of Dr. Foot's printer. He had himself been consulted three years ago by a gentleman on account of a bad smell which he said emanated from his body, and made him offensive to everyone around him. He saw that the gentleman was under a delusion, and endeavoured to convince him of the fact, greatly to the patient's annoyance. Once afterwards he again saw this gentleman, who had, he believed, given up the idea. As to remedies against hallucination, and to support a broken-down nervous system, he would have more hopes from opium than from antiseptics or deodorants, which latter would be administered under the impression that the conviction was a true one.

Even specialists seemed to have forgotten the great results published many years ago by Seymour of London, as to the value of opium in cases of hallucination and melancholia.—Dr. Foot, in reply, said Mr. Cox's experience proved he came under the description of "those who suffered most at sea," as published by a naval officer, of persons of light complexion and light hair. From none of the patients had he elicited a definite statement that they themselves perceived a bad smell. What they said was that they consumed the fresh air. No doubt there were some persons who seemed to use up the air in a room, and whose presence suggested the desire of having the window open. He had not specially tested the patient's sense of smell; indeed, he did not take over much trouble in that respect, cases of hypochondriasis not being very attractive; and it was better to leave testing alone than apply an inefficient test, such as holding a smelling bottle or a bottle of Eau-de-Cologne to the nose, and asking if the patient could smell that. He had met with cases, such as Mr. Moloney alluded to, arising chiefly from fæcal retention. The President's remark on the morbid sensitiveness of the gentleman who consulted him was a striking feature, and was often an early symptom of insanity. Opium was of great advantage in those cases. It was in the same direction that Dr. Osborne had recommended chloroform, thinking hypochondriasis was an affection of the solar plexus, the stimulation of which would induce a more favourable view to be taken by the patient of things in general.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

Thursday, December 23rd, 1886.

W. J. Cleaver, M.B., C.M., President, in the Chair.

Malignant Disease of Pancreas and Liver.—Dr. Dyson related a case of malignant disease of the pancreas and liver. The patient, aged 49, was previously under his care for left pleural effusion, for which he was tapped, and he made a good recovery. His colour was suggestive of Addison's disease, and there was a history of alcoholism. Patient applied at the Sheffield Infirmary for relief, because the tumour, which was situated in the epigastrium, and which was somewhat movable, interfered with his work. The most noteworthy fact in the case was the complete absence of pain and digestive troubles, until within a month of his death. During the last month, pain, vomiting, obstruction of bowel, hæmorrhage, and pyrexia supervened and patient died of exhaustion. *Post-mortem:* the pancreas was almost entirely invaded by scirrhus; the neighbouring glands were affected, and there were numerous secondary deposits in the liver, an especially large one in the left lobe; no other deposits. Left pleura adherent.

Incipient Graves's Disease.—Dr. Dyson exhibited a man, aged 36, iron-turner, suffering from tremor and incipient exophthalmic goitre. The tremors were fine and generally distributed, and probably due to chronic alcoholism. Cardio-vascular symptoms were first to appear; slight exophthalmos and Graefe's lid-symptom came on quite recently; pulse frequently 150. He had also slight internal convergent strabismus, and dilatation of the pupil of left eye; no glycosuria. Many drugs had been tried for his relief, but, so far, unsuccessfully.

Some Clinical Features of Graves's Disease.—Mr. Snell read a paper on this subject, based on cases coming under his observation. Referring to those in which the eye-symptoms were the first to appear, he mentioned the case of a young woman in whom the other cardinal symptoms had recently developed, and the patient was introduced by Dr. Dyson, under whose care she was now; also to that of a woman, aged 45 (introduced) with Graefe's and Stellwag's symptoms in right eye; no marked (if any) exophthalmos; slightly enlarged thyroid, unobserved by patient; absence of other symptoms; left eye normal. Two monocular cases in females were related, besides the one above, as were, also, two instances of suppuration of both corneæ, the cases coming under observation first when the cornea was seriously affected in one (aged 23), and destroyed in the other (aged 40). The question of Stellwag's (retraction of eyelids), and Graefe's (loss of co-ordinated movement of upper eyelid and globe on looking down), signs occurring independently of the usual train of symptoms of Graves's disease, was discussed, and the two following cases in particular were related: A young lady with Graefe's and Stellwag's symptoms in one eye (right); no other apparent symptoms of exophthalmic goitre; greatly improved under treatment. A miner, aged 36 (introduced), the subject of miner's nystagmus; in both eyes Stellwag's and Graefe's signs were present; no exopthalmos, enlarged thyroid, or other symptoms of Graves's disease. The man seemed to possess some control over the lid-phenomena. Among other points, the pathology was briefly touched upon, and support given to the cases related to a central disease theory (Sattler, Fitzgerald).

REVIEWS AND NOTICES.

Diseases of Bones and Joints. By C. N. Macnamara, F.R.C.S., Surgeon and Lecturer on Surgery at the Westminster Hospital; Surgeon to the Royal Westminster Ophthalmic Hospital; Member of Council of Royal College of Surgeons; and Examiner in Surgery, University of Cambridge. Third Edition. London: J. and A. Churchill. 1887.

A good surgical work, where pathology and clinical matter is not neglected, prepared by a distinguished hospital surgeon, is always welcome. Such a work is *Diseases of Bones and Joints*. Its reputation is already established, but will be greatly increased by this new edition. It contains some excellent new illustrations. Several chapters have been much enlarged or written over again. Thus the third, devoted to the important subject of suppurative osteitis in growing bone, includes the results of the most recent practice in the surgery of this disease. The observations on bone-grafting, or rather the grafting of periosteum after the removal of a necrosed diaphysis, will be read with great interest by all surgeons, the practical experience of the author being well-known. Periosteal operations are almost, if not quite, as remarkable and satisfactory features of contemporary surgery as abdominal sections. Mr. Macnamara is a strong advocate of free incisions in the acute osteitis of children, not so much to save the periosteum and bone, as to prevent the absorption of the products of inflammation into the circulation, and the consequent fatal results. The fourth chapter, on tubercular osteitis, is also of high importance. The author treats at length the early pathological appearances of hip-joint disease, as occasionally observed after death from some other affection, and the chapter is adorned with some fine coloured engravings representing the head of the femur in the incipient stages of this disease. As might be judged from the presence of these observations in a chapter on tubercular osteitis, Mr. Macnamara is strongly in favour of the tubercular origin of hip-joint disease. He does not agree with Mr. Edmund Owen's theory that hip-joint disease commonly commences in a strain or injury to the ligamentous tissue. Mr. Macnamara has had long experience of the diseases of the natives of India, and yet never remembers seeing, in a native, a case of scrofulous hip-joint disease, such as is met with in young persons in this and in every other country where tuberculosis is common, yet the native children are exposed to the same kinds of injuries involving the ligaments of the hip-joint as European children. The author has detected tubercles in the medulla, in the early stage of hip-joint disease, when the ligament yet remained healthy. The chapter ends with an account of the author's remarkable case of acute tubercular osteitis, where tubercle bacilli were found in abundance in caseous matter in the affected bone. The seventh chapter, on rickets, is very exhaustive, and the recently published opinions and experience of Drs. Barlow, Goodhart, Mr. Bland Sutton, and others are ably summarised. Mr. Macnamara quite rightly does not allow his readers to take the etiology and symptoms of common diseases too much for granted. Thus, at page 196, we find a model clinical history of a case of rickets in a child. Many other writers of the author's standing would do well to follow his example; younger writers are too fond of clinical curiosities, and apt to neglect the practical demonstration of frequent and typical cases, for the benefit of their readers.

The thirteenth chapter is the most original, as far as the new edition is concerned, of those which treat of diseases of joints. Many pages are devoted to the most recent experience in cases of arthritis of a septic type, and here again are useful epitomes of clinical reports of typical cases, especially such as are associated with gonorrhœa and the puerperium. We regret that it is impossible for us to review in detail all the original passages in this edition. It is no exaggeration to say that *Diseases of Bones and Joints* is a rich mine of clinical and pathological research. The amount of labour which the author must have undergone, even in the preparation of the new edition, can only be thoroughly estimated by those who have had a considerable experience in literature, but such labour is well directed and cannot fail to bear good fruit. This work is indispensable to the pathologist and surgeon, who wish to learn the most recent advances in the knowledge of the nature and in the operative or expectant treatment of the many serious disorders which affect the osseous and articular systems.

NOTES ON BOOKS.

Der Blutkreislauf der Ganglien Zellen, von Professor Dr. ALBERT ADAMKIEWICZ. (Berlin: Hirschwald. 1886.)—This little publication contains the results of some very painstaking and careful observations on the blood-supply and circulation in ganglion cells. The ganglia, which were more particularly made the subject of observation, were the intervertebral ganglia connected with the cords forming the brachial plexus. The vessels supplying these ganglia were injected with carmine through the spinal arteries, with the result of showing that each cell is supplied with blood by means of a separate arterial loop, so disposed as to invest the ganglionic cell, which is thus bathed in the arterial blood, much as the placental tufts are bathed by the blood in the maternal sinuses. The cell itself, moreover, is said to contain very minute and delicate ramifications or passages from the circumference to the centre, through which serum alone can penetrate. The serum, which thus soaks through the cell-substance, collects in the centre, giving rise to the appearance of a nucleus. As a matter of fact, according to Dr. Adamkiewicz's researches, the nucleus is merely a collection of serum in which floats the nucleolus. This liquid leaves the cell through a single passage or vein, through which it passes into the general venous circulation. The arrangement of lymph-vessels or spaces around the cell is correspondingly complicated, but is naturally less easy to define. The work is illustrated by four very beautifully drawn and coloured engravings, which alone are sufficient to give a high idea of the patience and care with which these investigations have been conducted.

Leçons Cliniques sur les Maladies des Ovaires. Par Dr. T. GALLARD, Médecin de l'Hôtel Dieu de Paris. (Paris: Baillière et fils. 1886.)—This volume constitutes the second series of lectures by the author on the pathology of the ovaries. In it, he deals with diseases proper to the ovary, commencing with those resulting from intra-pelvic extravasation of blood dependent on lesions of the ovary. The author discusses the etiology of these affections very fully, especially with respect to the theory which attributes them in every case to a simple derangement of the process of ovulation—in fact, an extra-uterine ovulation, the mechanism of which differs in no essential particular from that of extra-uterine pregnancy. Several chapters are devoted to peri-uterine inflammations, foremost among which he places ovaritis. He affirms the existence of pelvic cellulitis, and states that the localised peritonitis, generally described as pelvic peritonitis, is invariably secondary, and never primitive. The various nervous derangements which are associated with ovarian mischief claim and receive their share of attention, and the author gives his own views in reference to paralysis of alleged ovarian origin. Cysts and other tumours of the ovary are very thoroughly examined, and the author has brought his long experience to bear on the diagnosis of these cases. It is gratifying to find to what a large extent English authorities are quoted, and the confidence which their experience inspires. The various methods of performing ovariotomy are fully gone into, and the reader is left to form his own opinion on their merits.

Hémorrhagies Utérines. Par le Dr. SNEGUIREFF, Professeur de Gynécologie à l'Université Impériale de Moscow. Traduit en français par M. H. VARNIER, sous la direction du Dr. PINARD, Accoucheur de l'Hôpital Lariboisière, Paris. (Paris: Steinheil. 1886.)—This work constitutes an able and exhaustive treatise on the etiology, diagnosis, and treatment of uterine hæmorrhages. It is interesting, as showing the views as to treatment which obtain in the Russian school, and valuable from the large experience of its author. He insists on the undesirability of operative interference in cases of established uterine cancer, the result being, in his opinion, invariably to accelerate the fatal issue. When complicated by pregnancy, the author advocates the Cæsarean section, which he has performed successfully so far as the fœtus was concerned. Among the methods of treatment to which the author alludes with favour is that by "bains de soleil." For this purpose, the patient's body and legs are wrapped in black garments, the chest and head being covered with a white woollen material. She is then placed on a sofa or couch in the direct rays of the sun for a period of from half an hour to one hour. The patient then turns on the abdomen, and exposes the postero-lateral regions to the vivifying influence. Dr. Sneguireff speaks very highly of the results which he has obtained by these means. The author speaks in a very guarded manner of Mr. Lawson Tait's method of treating salpingitis by ablation of the Fallopian tubes. No mention, apparently, is made of laparotomy and removal of the tubes or ovaries for hæmorrhage consequent on uterine fibromata or for hæmatocele.

Sanitary Record and London Medical Record Diary for 1887.—The new issue of this invaluable diary has now made its appearance. Its contents vary somewhat from those of the previous numbers, but the fundamental articles have been retained. The amount of useful information contained is as considerable as heretofore, and is invaluable to persons having to do with sanitary matters. The chapter on sanitary legislation is an accurate barometer of the progress of sanitary reform. During the past year, the pressure has been low—lower, in fact, than for some years past. Like commercial prosperity, sanitary prosperity is liable to fits of depression, and future reforms will be none the less real for having been awaited with some patience, or possibly impatience. The diary proper is, in some form or another, an indispensable companion to everybody, and is conveniently placed in juxtaposition to the information to which reference has constantly to be made.

A Manual of Urine-Testing, compiled for the Use of Matrons, Nurses, and Probationers. By K. M. HEANLEY, Matron of Boston Cottage Hospital. (London: H. K. Lewis. 1886.)—Acting upon the conviction that hospital nurses should know something of the *rationale* of urine-testing, in order that they may supply intelligent aid to the medical attendant in preparing the excretion for examination, Miss Heanley has compiled a very useful and well written epitome of the subject, which should be well within the grasp of the class of readers for whom it is intended. Considerable care has obviously been expended in the compilation of this book, the authoress having made herself acquainted with all the recent additions to this branch of medical chemistry, and meriting congratulation upon the admirable clearness with which she expounds the views of others.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS.
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

TESTS FOR ARSENIC IN PAPERHANGINGS.

WM. WOOLLAMS AND CO. (Paperstainers) write: Having made the subject of arsenic in paperhangings a matter of close study for many years, we read with great interest the description of the test devised by Mr. Grenstted, as published in the BRITISH MEDICAL JOURNAL of Saturday, December 11th. We hoped some rough, ready, and reliable test for arsenic had been at last discovered, but in the result we were disappointed: The method proposed would answer in most cases where "considerable quantities" of arsenic are present, so far as Tests 1 and 2 are concerned; but there are still a large number of papers made and coloured with arsenical pigments which would exhibit no recognisable reactions of the kind described; and there are many others highly arsenical, but free from copper, which would yield no such reactions as those described as "Tests 3 and 4." Of the former, the red and the light coloured papers enclosed are examples, while sample A, B, and C (containing arsenic) are quite free from copper, the blue C being highly arsenical.

An experience of over a quarter of a century in the manufacture of non-arsenical papers, and a knowledge of many methods, both empirical and scientific, of ascertaining the presence, or what is sometimes more difficult, determining the absence of arsenic in a suspected paper or other fabric, embolden us to ask your permission to point out to your medical readers that it would be essentially injudicious, where the health of a patient is at stake, for any of them to rely upon any test, such as that now referred to, to determine the absence of arsenic; and that the only way in which such a conclusion can be safely arrived at, is to submit a sample of the paper to a competent analytical authority for careful examination. A superficial, or even an exhaustive examination of the visible paper is often deceptive, since it is frequently found that a perfectly harmless paper is hung over an old arsenical one, and where it is suspected that illness arises from arsenical poisoning, the medical adviser should not be content with anything less than a sample of the paper or papers stripped off clean to the plaster. This can generally be done without disfiguring the room by taking it from behind the bed or some other heavy piece of furniture. We have seen as many as twelve coats stripped off in one mass, of which perhaps half would be arsenical.

BEQUESTS AND DONATIONS IN 1886.—The following are among some of the principal bequests made during the past year to medical charities. Mrs. Mary Anne Curwen (in default of her daughter having issue), £40,000 to St. George's Hospital; £5,000 each to two, and £2,500 each to about twenty other London medical charities.—Mr. Henry Christey left nearly £14,000 to the London Hospital.—M. W. de Hague Routh, £3,000 each to St. George's, Westminster, Middlesex, and London Hospital, the Royal Hospital for Incurables, and the Chest Hospital (City Road).—The Duke of Westminster gave £1,000 to the Hospital for Women, Soho Square.—Mr. Philip Horsman defrayed the cost (£4,000) of the in-patient department of the new Eye Infirmary, Wolverhampton.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 15th, 1887.

THE LIVERPOOL HOSPITAL FOR WOMEN.

IN our last number we briefly noticed the special report of the Committee of this hospital, relating to the practice of their medical staff. This report is prepared for submission to the Governors. Of course, it appeals to a tribunal beyond that body. We have full confidence that it will receive at the hands of the body to which it is directly addressed liberal and enlightened consideration. The governors cannot be expected to pass a definite and conclusive judgment upon an operation new to surgical science, not yet adequately known even to the medical profession, and one which has not emerged from the storm of opposition let loose by ignorance and prejudice, as well as by less blamable motives.

A body of impartial laymen, invested with a quasi-judicial function, cannot fail to see that much of the criticism spent upon the enterprising surgeons who have had the courage to perform the operation of removing the uterine appendages—that is, the ovaries and Fallopian tubes—bears evidence of the not unwise tendency of many scientific minds to oppose what is new. It will not be inopportune to remember that nearly every great step in the healing art has been assailed with almost as much fierceness as this; many innovations in theory and practice, now well established among the commonplace doctrines and operations of to-day, have at their inception been denounced as cruel, many as immoral and criminal. Vaccination, ovariotomy, and the use of the speculum may be taken as examples.

The report includes: 1. A statement of the Committee; 2. Report of the Committee of Inquiry appointed by the Liverpool Medical Institution; 3. Recommendations for the future. We have already published a very full abstract of the report of the Inquiry Committee (BRITISH MEDICAL JOURNAL, December 11th, 1886), and have commented upon it. We will now, therefore, mainly direct attention to the statement and the recommendations.

The report of the work of the hospital for two and a half years was presented to the Governors in January, 1886. It set forth that 10,344 patients had been treated, and that the death-rate in major operations, in 1885, after allowing for 9 cases which were hopeless when received, was only 7 per cent. This report was challenged by one of the consulting physicians, who "raised a doubt whether necessary precautions in operations had always been observed." "Furthermore, the work of the hospital having been the subject of animadversion at a meeting of the Medical Institution, that body appointed a Committee of Inquiry, which placed itself in communication with the Committee of the hospital." It is the report of this Committee which we have already printed; it forms, to a great extent, the basis of the "statement" and "recommendations" of the hospital Committee.

In order to ascertain if the report of the hospital Committee of January, 1886, in itself justified the objections raised upon figures and statistical data, the opinion of gynæcological authorities in this country and abroad was invited. We need only say that, as regards the selection of those invited, no possible objection can be taken. With one exception, the replies bear unequivocal testimony in justification of the work done at the hospital. We will cite but one opinion, that which most clearly sets forth the true answer to the main impeachment that the operation had been undertaken with undue frequency, and that the number of times it had been performed by one operator was so extraordinary as only to be explained on this theory. The opinion expressed is: "It appears to me that the work done during the year is very creditable to the skill and courage of the medical staff. The proportion of cases treated by abdominal section—167 out of 347—is no doubt very large, but cases of serious diseases usually go where the surgeons get a reputation for dealing efficiently with them." This is, or ought to be, obvious enough. A very few men in London get all the eye-operations, others get the great majority of operations on the rectum, and so on through the nosological record. When ovariotomy was struggling for recognition, two or three men who had the courage to do it were, as we have said, assailed with scarcely less heat. The number of cases is further explained by two facts: first, that Liverpool is the centre of an enormous population; secondly, there had been an accumulation of cases gathering. The number of cases of ovarian disease that suddenly came to light when it became known that surgery offered a cure was hardly less startling.

If it be urged that the cases are not parallel, inasmuch as the motive for ovariotomy was made palpable by the exhibition of the tumour, may not as much be said for the operation for removing the uterine appendages? These also are exhibited, and bear witness to conditions also threatening health and life, incurable by other means. If it be objected that in some cases the abdomen has been opened without finding the disease which was expected, the same may also be said of ovariotomists. Is there anyone of extensive experience who has not at some time opened the abdomen with the view of removing an ovarian or a uterine tumour, and found himself mistaken? Even yet, with all the skill which long practice has given, diagnosis of ovarian tumour is not certain. It is, therefore, unreasonable to expect universal precision in the diagnosis of disease of the appendages. And what is the penalty of error? In the vast majority of cases, an exploratory incision brings out a clear diagnosis, which directs treatment in the right way, and, in fact, does no harm.

We will only make a few observations upon the "recommendations." The Committee state that "the gravamen of the charge made against the practice of the hospital is, not that certain surgical operations were practised, but that sufficient care and discrimination were not exercised in the selection of cases." The Committee are of opinion, on this point, "that sufficient care and discrimination have not been exercised in the selection of cases for operation." They think "a sufficient trial of rest in hospital had not been given." By "discrimination," we assume, is meant "diagnosis." We have already referred to this element in the question. At the commencement of a new departure in surgery, it cannot be expected that

diagnosis should be infallible. And it may not unfairly be urged that, even in the case of operations long practised, and of established propriety, infallible diagnosis does not precede operation. The time required for rest in hospital before action must, after all, be a question for the surgeon to determine, especially when he knows—what all surgeons ought to know by this time—that disease of the tubes is, according to the weight of evidence, for the most part, not likely to be cured by being left alone, and that danger may arise by waiting.

Two other points are urged: the propriety of holding consultations, and of placing the full state of the case before the patient or her friends before the operation. These recommendations we cordially approve, and we took occasion (BRITISH MEDICAL JOURNAL, December 18th, 1886) to advise how the latter should be carried out. The information should be given in writing. A book might be kept for duplicate entry, so that a copy of the statement given to the patient may be preserved. If this is done there can hardly arise ground for misunderstanding.

We cannot conclude without expressing our disapproval of the criticisms of those who denounce the operation for removing the uterine appendages as "spaying." This is clearly an abuse of language, and one which tends unfairly to cast odium upon those who perform it; it ignores the difference between the two cases. "Spaying" is an operation performed upon young healthy animals for economical purposes. To call the removal of diseased organs for the sake of health "spaying" is a perversion of language. To represent that one effect of it is to cause sterility, to unsex the subject, is not less open to objection. It is the disease that causes sterility, and that renders sexual life intolerable. In those exceptional cases where pregnancy might occur, it could only be at imminent peril to life. By the operation, diseased organs unfit for their functions are removed, and, in the majority of cases, ordinary sexual relations can be resumed.

The time has hardly come for universal agreement upon this operation; but enough evidence surely has been obtained to place it in a high rank amongst the triumphs of modern surgery, and the Committee of the Liverpool Hospital for Women will certainly share in the honour that waits upon those men of enterprise and sagacity who have initiated a surgical proceeding which, conducted with due prudence and justifiable boldness, will rank among the most important achievements of the art of healing.

ON THE RELATION OF MODERN SURGERY TO MEDICINE.

SUCH is the title of an address delivered by Professor Bergmann before the German Scientific Medical Association, during its late meeting in Berlin. The gist of the discourse is, that owing to the extraordinary progress made by surgery during the last few years, it has taken the lead of medicine, as the wing of an army may be in advance of the main body; it is, therefore, time to examine afresh the relationship which exists between modern surgery and medicine, considered in its widest sense. "Such disturbance and rupture now threaten the peace of the great medical family, that it becomes necessary to examine and settle the new claims and the ancient titles of possession." The scientific development of one branch of practical medicine, namely, ophthalmology, is generally acknowledged, and it affords ample warrant for the words of Donders respecting the labours of von Helmholtz in this field. "On foundations laid down by H. Müller and H. von Helmholtz, the work of von Graefe alone has carried the treatment of eye-diseases to a degree of perfection far beyond that of any other branch of surgery. All national differences in ophthalmology have ceased, and their plan has been taken by one method and one school."

General surgery now claims a similar position, in virtue mainly of its newly acquired ability to invade, with comparative impunity, regions of the body hitherto looked upon as sacred from the knife. Though the enormous strides which surgery has made, during the last decade or so, are not the effect of a blind empiricism but of a clearer insight into the processes of nature, practice in this field has always been in advance of theory. Ambroise Paré tied arteries a hundred years before the discovery of the circulation of the blood, and the good man regarded his idea as a divine inspiration. "The considerations that impelled Lister to adopt the antiseptic treatment had only the value of an hypothesis, which surgeons examined solely in regard to its practical consequences, until other and non-surgical experiments and results established this hypothesis on solid foundations." It is satisfactory to find the name of an Englishman at the head of the brilliant band of workers of all nations, who have raised modern surgery to the position which it now occupies.

The two chief principles, established alike by observation and experiment, on which the surgery of the present day is based, are these: first, that all wounds necessarily heal of themselves by virtue of a natural tendency in that direction; and, secondly, that this tendency is only altered by external influences, to which alone all inflammation and suppuration are due. Only those wounds are fatal which prevent a vital organ from continuing its functions; with any less serious injury the surgeon can now deal with almost unfailing success. There is no special vulnerability of tissue of any organ; age, and even disease, make no difference. "The flesh of a man eighty years old heals as well as that of a boy of eight, and operations on feverish consumptive patients are now as successful as those performed on patients in perfect health." It is not fifty years since Astley Cooper said that trephining was "one of the most dangerous operations in surgery; whilst performing it, there is but a single step, a small network, between your patient and eternity." The brain is now boldly entered for the opening of abscesses and—Professor Bergmann might have added here—even for the removal of tumours.

Surgery now aims at extending its ancient limits; and, misled by the success of surgery, medicine is tempted to have recourse more and more to operative measures. We now have the surgery of the brain, of the lungs and kidneys, of the stomach and gall-bladder. There is naturally more or less rivalry between them in the cure of disease. But the least reflection will show that any further progress in surgery can take place only through an increased knowledge of internal medicine. Mere "chirurgery" has hitherto dwelt in less ethereal regions than pure medicine; its sphere of observation has been simpler and more direct; and it has always kept itself far more aloof from speculative inquiry and philosophical abstractions, than the sister branch of the healing art. Surgeons, however, must now avail themselves more of the accurate means of investigation which we owe to the physician, auscultation and percussion, thermometry, chemical,

microscopical, and electrical investigation. All these are especially necessary when the surgeon interferes for purposes of diagnosis, as when, for example, the abdomen is opened for the sake of ascertaining whether cancer is present or not. Thus, as long as internal medicine remains the guardian of scientific methods and scientific principles, so long will it remain the parent tree of which surgery is only a branch—at present a vigorous and flourishing one.

The few infectious diseases against which surgery is now armed are, however, but a small fraction of the plagues and pestilences which afflict mankind. Numerous as were the victims of powder and shot in the struggle between France and Germany, that was the first war recorded in history in which they were not exceeded by the multitudes who fell a sacrifice to disease. It is to a better knowledge of the causes of disease that the success of both surgery and medicine is due. Medicine had isolated the group of infectious diseases, and had shown that the infectious material was reproduced in the body, long before surgeons recognised all disturbance of a wound to be due to inoculation from without, and set themselves to prevent that occurrence.

Surgical measures are now directed against the entrance of microphytes into the body at the surface; but numerous workers are busily engaged in seeking for means to destroy them after admission within the body, and the results of their labours are anxiously expected. Perhaps the study of these elementary organisms will throw more light on the vital elements of complicated organisms, than the biology of the latter themselves. "At least we are no longer inclined to assume that the lowest microbes behave in a manner essentially different from the higher plants and animals. On the contrary, the physiological chemist now seeks in the fundamental structure of all living matter, a single original chemical organisation, from which all its properties may be deduced in common." In other words, the future of medicine appears to lie in the domain of physiological chemistry.

It follows from what has been said that surgery owes all its recent development to clinical medicine, and just as the antiseptic treatment is a product of careful observations in etiology, so the energetic procedures of internal surgery will have successful results only when firmly established by the methods of clinical medicine. Otherwise, surgery will sink in the hands of expert specialists to a mere display of manual dexterity. Two instances may be given of the importance of taking the widest possible view of the surgical art. The course and limitation of tuberculosis cannot be grasped so well from the study of internal organs as from those surgical diseases which we know to be due to the presence of the same morbific material; these comprise various affections of the skin, the lymphatic glands, the bones, and the joints; and the observation of them has thrown new light upon the most important phenomena of tuberculosis. The first beginnings of the process in all its varieties have thus been disclosed. Again, the revelations made by surgery as to cancer are not less important than the foregoing. They have shown that this scourge is at first not a general disease of the whole system, that it has nothing to do with poisoning of the blood or juices, but is always purely local in the commencement. Thus, when viewed in its proper aspect, surgery, far from stealing from medicine, enlarges the boundaries thereof, and Dr. Bergmann's eloquent address will be of service in defining the relationship between the two, and in insisting upon the pursuit of clinical surgery as an integral part of scientific medicine.

UTILISATION OF WORKHOUSE INFIRMARIES FOR CLINICAL STUDY.

We have many times pointed out how much it is to be regretted that the vast resources for clinical teaching and observation available in workhouse infirmaries have, since their establishment, been allowed to lie idle, except so far as the medical officers of these establishments are concerned. This state of things is directly contrary to the plan laid down by Mr. Ernest Hart and the late Dr. Anstie, on which Gathorne Hardy's Act creating the metropolitan asylums and reforming workhouse infirmaries was based. Latterly, attention has happily been once more directed to the desirability of introducing modifications which would, in part at least, cause these asylums to revert to the type defined by Mr. Ernest Hart in his paper on "The Hospitals of the State," in which the creation of these asylums was definitely proposed, and their scheme of management laid down. That document, of which ten thousand copies were reprinted from the *Fortnightly Review*, became the basis of the existing system. A proposition to carry out the clinical arrangements there laid down was negatived by the old Poor-law officials, but a suggestion was laid before the infirmary committee of the St. Marylebone Guardians a short time ago by the energetic medical superintendent of that institution, Mr. J. R. Lunn, F.R.C.S., and the matter has, we are glad to see, been taken up by the able chairman of the committee, Mr. Edmund Boulnois. The project provides for the admission of a resident qualified clinical assistant, to hold office for a period of six months, who will receive an honorarium at the expiration of that time. It is pointed out that in any infirmary with 744 beds there must be ample scope for a clinical assistant, who would not only render great service in the discharge of the onerous duties which are comprised in the daily routine work, but who would also be enabled to replace either of the senior officials when absent from sickness or on vacation. It is not proposed to interfere with the position of the medical superintendent, who would continue to discharge his functions as at present. Not only would it become possible to obtain records of the cases, which it is impossible to provide for under existing circumstances, but the experience thereby obtained would be of sufficient value to ensure an adequate supply of freshly-qualified men, able and willing to become candidates for the post. We referred recently to a somewhat similar, but better and more comprehensive proposition, that was submitted to the Guardians of the Whitechapel Union by their Clerk, Mr. W. Vallance. As was then stated, this project, which more nearly coincides with Mr. Ernest Hart's original scheme, provides for the appointment of consulting physicians and surgeons on the plan adopted in general hospitals. There are, of course, two aspects to the question. It is desired to provide the best skilled attention for the patients, and also to make use of the vast field of clinical observation offered by these institutions. Duly organised, such a system is undoubtedly the best, both for patients and doctors.

The late Dr. Fowler had energetically adopted Mr. Hart's views on this subject, and a proposition in that direction, brought forward by Dr. Fowler, was adopted by the Metropolitan Asylums Board at their meeting on November 8th. It is recommended that their fever and small-pox hospitals should be made available for clinical instruction by the appointment of qualified clinical assistants attached to each hospital, who would have specified duties, and would in all respects be subject to the regulations in force with regard to the hos-

pitals. The extension thus given to the opportunities for clinical instruction is peculiarly a subject for congratulation in this instance, from the fact that the maladies treated in these hospitals are of a kind not often to be met with in the general hospitals, and regarding which medical men are necessarily more or less ignorant until the experience acquired in private practice, possibly at the expense of their patients, fills up the gaps in their medical education. It may be hoped, therefore, that the time is not far distant when the already large field of clinical study open to the Metropolitan student will be extended so far to cover the whole area of disease. We have from the first pointed out that the benefit of such a system will not be confined to its effects on medical education; it is within the experience of everyone that nothing conduces so much to the careful and scientific observation and treatment of patients as the attendance of students. It imparts a healthy stimulus to work, which otherwise becomes inevitably and often insupportably wearisome. Observations can be made and records kept in a way and with a completeness which is scarcely possible when the medical attendant is his own clinical clerk. Some resolutions by the medical superintendents of the workhouse infirmaries which we publish this week move in the right direction, but, in our opinion, they do not go far enough.

There is a general impression that the cases to be found in workhouse infirmaries are chronic, and of comparatively little interest from a medical point of view; but a visit to the wards will dispel any such idea, which the results of M. Charcot's studies at the Salpêtrière have more than disproved. The cases differ, to some extent, from those met with in general hospitals, but are not on that account of less importance; chronic nervous affections and the various manifestations of senile degeneration can be observed there to advantage. Such diseases as myxœdema and chronic nervous ailments, in poor people, seem to gravitate to the infirmary, together with many other cases which are too slow in their course to be retained in other hospitals. The record, even of surgical operations, is a comprehensive one, and comprises operations of all kinds, from the extraction of cataract to that for strangulated hernia, as evidenced by the *Transactions* of the various Medical Societies.

Such reforms as these, prepared and matured quietly by men like Dr. Fowler and Mr. Vallance, who is one of the ablest and most thoughtful of Poor-law administrators, will do more to aid the efficient treatment of the sick poor than many changes of more ambitious and radical character.

THE DEATH OF THE EARL OF IDDESLEIGH.

The sudden death of the Earl of Iddesleigh, under circumstances and at a moment which gave to the event a peculiar dramatic interest, will probably tend to strengthen the horror of disease of the heart which is so deeply engrained in the public mind. In reality, however, the history of his life teaches a quite different lesson, and affords a striking confirmation of the truth of the view so admirably maintained by Sir Andrew Clark, Professor Gairdner, and many other distinguished physicians, during the meeting of the British Medical Association at Brighton last autumn, that disease of the heart, when it has passed into a quiescent state, and when there has been time for complete compensation to be established, need not in any way interfere with a useful career.

It is known that since early manhood Lord Iddesleigh had been the subject of chronic disease of the heart. As a young man, he was possessed of great physical powers; he was a bold horseman, a noted oar, and an adept at many other athletic exercises. An attack of acute rheumatism, however, involved the heart, and in conformity with the current medical opinion of that day, he was forbidden to engage in active pursuits or to enter the political arena. There is good reason to believe that, for the last forty years of his active life, the mitral orifice has been damaged.

It was for this reason that he made no effort to obtain a seat in Parliament, and was content to remain in a subordinate capacity for so many years, and discharge the duties—never, it may be supposed, very exacting—of Private Secretary to Mr. Gladstone in Sir Robert Peel's last administration. For the same reason, he went abroad for a year in the hope of improving his general health, but the result was far from satisfactory, and Lord Iddesleigh himself was inclined to attribute to the strain and fatigue of this journey the origin of the illness from which he suffered in recent years.

In 1855, when he was 37 years of age, he determined to disregard the unfavourable opinions which had been given, and entered Parliament as Member for Dudley. How fully this step was justified by the consequences it is hardly necessary to say. For the quarter of a century which followed, he was not merely able to discharge his official and Parliamentary duties in a manner which won him a leading place in English politics, but it was a matter of observation, both with his medical attendants and with his family, that when most actively engaged in political work, he was in the best health. In fact, the disease of the heart was quite stationary, and completely compensated. As we stated at the time, he first suffered in 1882 from some disability of the heart's action, but for the whole of the intervening period the history of his life was a striking example of the positive advantages of entirely neglecting and putting out of mind the existence of chronic disease of the heart, of the variety from which he was then suffering, that is to say, mitral insufficiency. But, about three years ago, possibly in association, if not in consequence, of political events which then occurred, his health began rapidly to deteriorate. About that time signs of obstructive disease of the aortic valve appeared; this, of course, entirely changed the prognosis of the case, and was a source of great anxiety. In addition, he also began to be troubled by symptoms of a chronic nervous malady affecting the arms. Never at any time, however, were there any symptoms of affection of the brain, and, up to the last moment of his life, he retained his mental faculties unimpaired. Within about the same period he suffered from fainting fits, which commonly occurred after lunch, and were associated with giddiness, but Lord Iddesleigh himself believed that he never actually lost consciousness.

Dr. Mortimer Granville informs us that some gouty symptoms existed, and that, in the early part of last year, Lord Iddesleigh was in a low and depressed state of mind, sleeping badly, and suffering from physical weakness, but that there was never at any time any complication of any sort. Under a generous diet and the healthy stimulus of a congenial occupation he materially improved; but, as in all cases in which the aortic valves of the heart have become involved and compensation is not perfect, it was well understood that he stood, as it were, upon the brink of a precipice; and although there was every reason to hope that, under favourable circumstances, he might have lived for some years to come, his sudden decea

means a surprise to those who were best acquainted with his state of health.

We believe that he had been for some years aware of the serious turn which the old standing disease of the heart had taken. He was a man of an exceedingly sensitive, though not nervous, temperament, and there can be no doubt that recent political events had produced a state of mental depression, which, however, was greatly relieved when under the advice of his medical attendants, he accepted office as Foreign Secretary in the present Government. During the autumn his health was fairly good, but the re-arrangements necessitated by the present crisis undoubtedly caused him much anxiety, and it may be noticed that the final attack, which was of the same nature to others from which he had suffered for several years, occurred after lunch, at the same time of the day as similar attacks had previously seized him, and when he was probably labouring under considerable emotion.

Professor Jacques Reverdin, of Geneva, has been gazetted *Chevalier de la Légion d'Honneur*.

Lord Brabazon will preside at the thirteenth annual meeting of the Hospital Saturday Fund, to be held at the Memorial Hall, on February 8th.

The medical faculty of France has this year 108 female students—namely, 83 Russian, 11 English, 7 French, 3 American, 2 Austrian, 1 Turk, and 1 Roumanian.

The Queen has conferred upon Mr. C. H. Newby, F.R.C.S.Eng., of Southsea, the decoration of the Red Cross, in recognition of his services to the sick and wounded Servians in the late campaign.

The Municipal Council of Bordeaux has decided that the name of Paul Bert shall be given to a street in Bordeaux. Paul Bert was one of the promoters of the Faculté de Médecine of Bordeaux, where he subsequently occupied a chair.

The annual general meeting of the Harveian Society of London will be held on Thursday, January 20th, at 8 P.M., at the Stafford Rooms, Tichborne Street, Edgware Road, when an address will be delivered by the retiring president, Dr. Hughlings Jackson, F.R.S., after which a conversazione will be held.

We have the pleasure of announcing that our Paris correspondent, M. Vignal, of the Collége de France, has been awarded, by the Académie des Sciences, the prix Lallemand, for his work on the *Développement des Eléments du Système Nerveux Périphérique et Central*. Professor Charcot, in his report to the Académie des Sciences on M. Vignal's memoir, said that it contained a considerable number of new facts which were important discoveries.

SMALL-POX AND THE MECCA PILGRIMS.

Small-Pox having disappeared from the lazaretto of Porto-Farina, permission has been accorded to the 1,500 pilgrims who have arrived in this town from Mecca, to perform their religious ceremonies.

RABID DOGS.

The number of rabid dogs in the provinces would seem to be largely on the increase. A report was made to the Grantham magistrates last week of the existence of rabies at Colsterworth. Seven dogs, it was stated, had been bitten, and four of these had died. Two men, also, are said to have been bitten. At Higher Walton, near Preston, a mad dog has severely bitten two boys and a girl, who have been despatched to M. Pasteur.

CARELESS DISPENSING.

The coroner concluded an inquiry on Monday night, at Cheltenham, concerning an infant who died after having been given a compound of ipecacuanha and opium, instead of simple ipecacuanha powder. The jury decided that death was due to opium-poisoning, but thought the evidence not sufficient to warrant them in returning a verdict of manslaughter against the dispenser, who was, however, censured for carelessness.

THE PASTEUR INSTITUTE.

At a recent meeting of the General Council of Upper Alsace, M. Boch proposed that a grant should be made in aid of the Pasteur Institute for the Preventive Treatment of Rabies. M. Boch recalled the fact that the first cure effected by M. Pasteur was that of a young Alsatian, Joseph Meister. The Council requested the Government representative to put aside a sum, out of the 12,000 marks accorded for public charities, to be presented to the Pasteur Institute, for the treatment of Alsatian subjects.

INFECTIOUS DISEASES IN COMMON LODGING-HOUSES.

It is officially stated that the number of cases of infectious disease in common lodging-houses increased by more than 25 per cent. during 1885. The total number was 74, of which 65 are set down to small-pox, 3 to scarlet fever, and 2 each to typhus, English cholera, and measles. The report does not state what proportion of these diseases resulted fatally; but of the 73 cases of non-infectious illness, 51 resulted in death and were followed by inquests, the verdicts returned in many cases stating the causes to be privation and intemperance.

TYPHOID FEVER IN FRANCE.

Drs. Brouardel and Chantemesse have gone to Clermont Ferrand to inquire into the cause of the typhoid epidemic there. During the last three months, there have been, in the civil population of 40,000 persons, 1,800 cases, and in the barracks 400. Latterly there have been a large number of relapses among the convalescent soldiers, and in most instances they were fatal. The mortality is greatest among recruits, and among children and young persons between the ages of 15 and 25. There are either fatal consequences or slow convalescence with complications, often followed by relapses. The two medical men think the cause of the disease must be in the drinking-water, samples of which they are bringing back for analysis to Paris.

MICRO-ORGANISMS IN AIR.

In a recent communication to the Royal Society, Dr. Percy Frankland described a new method of examining air for micro-organisms. It consists in aspirating a known volume of air through a glass tube containing two sterile plugs of glass-wool alone, or of glass-wool with fine glass-powder, etc., the first plug being more pervious than the second. These plugs are then transferred to sterilised liquid gelatine peptone, and thoroughly agitated with it, and then the gelatine is congealed, so as to form an even film over the inner surface of the flask. The number of colonies which develop are then counted. The great advantage of this plan is its simplicity and accuracy.

THE BACILLUS OF MALARIA.

At a conversational meeting of the Pathological Society of Philadelphia, November 3rd, Dr. Osler communicated the result of a study of the blood in over fifty cases of ague, and he, too, finds the bodies described by Laveran to be constant features. He described the bodies as occurring both inside the red corpuscles, and free in the plasma. The intra-cellular form appears either as a hyaline, or a darkly pigmented body, filling one-third or one-half of the corpuscle, and undergoes slow amœboid changes. The hæmoglobin of the corpuscle is gradually destroyed by the organism, and the stroma becomes pale, and finally colourless. There seems to be no doubt whatever about the amœboid character of these movements, which are readily followed with a high power objective. The forms occurring outside the cor-

puscle are still more remarkable. These are (1) small, circular, pigmented bodies; (2) curious, crescent-shaped, organisms; and (3) an extraordinary flagellate body, resembling an infusorian. The pigmented crescents have been noted by all observers, and are much more readily seen than the amœboid bodies. They do not occur so frequently, and apparently only in the later stages of the disease. The flagellate form, also pigmented, is still less common, and was seen by the lecturer in only six cases. The movement of the flagella is very active, so that it brushes away the red corpuscles in its vicinity. The confirmation given by Dr. Osler to the observations made by Laveran, Marchiafava, Celli, Golgi, Sternberg, and Councilman, seem to settle the fact that we have found at last a micro-organism peculiar to malaria. This organism belongs probably to the flagellate infusoria. It is observed not only in the febrile paroxysm but in the intervals, and its presence is likely to be helpful in diagnosis if we cannot yet say that it is the cause of the disease.

CHOLERA IN ROUMANIA.

A BULGARIAN gardener has imported cholera from Hungary to Tirnova, in Roumania, and fifteen villages have since been attacked. The Turkish authorities show considerable alarm, and are taking energetic measures. Military cordons are established along the southern frontier, with instructions to fire on whoever attempts to break through. Whoever neglects his duty, whether officer or soldier, is threatened with death. A medical commission is instructed to carry out the measures prescribed by the International Health Council at Constantinople. A quarantine-station is organised at Moustapha-Pacha. All travellers are kept under medical inspection for eleven days. Unfortunately, the lazaretto is very badly organised; twenty people are put in a sleeping-room measuring 6 feet by 10. Rest is, of course, impossible; and the other inconveniences resulting from such close contact among inmates of all kinds and classes are both disagreeable and dangerous.

TREATMENT OF MALIGNANT PUSTULE.

TWO methods of treating malignant pustle, for which the respective authors claim marked success, have lately been mentioned in Spanish journals. Dr. Avendaño, of Peru, makes a crucial incision, and applies the ordinary solution of ammonia to the cut surfaces with a brush, giving at the same time a mixture containing acetate of ammonia. Dr. Rivas, of Cartagena, applies to the affected part a paste composed of oil of turpentine and quinine. This latter is said to have been efficacious even in a case where it was applied by the patient himself without medical advice, after having seen the beneficial effects of the paste prescribed on a companion.

OOPHORECTOMY IN NEUROTIC WOMEN.

A CORRESPONDENT writes: Professor Schröder, in his paper published in the second part of the thirteenth volume of the *Zeitschrift für Geburtshülfe und Gynäkologie*, although he speaks as if he believes that the removal of normal ovaries may sometimes be followed by the cessation of various hysterical or convulsive affections, or mental disorders, is very cautious in his anticipations as to the permanence of the recovery, and he relates some cases where the results were more than doubtful. The first operation was in April, 1878. In August, 1880, the report was that, so far as sexual appetite was concerned, the woman was "completely dead," and there was so much vaginismus, that she could not suffer coitus. The second case was operated on in January, 1880. In November, 1881, there was a return of cramps, etc. With regard to these cases, Schröder remarks that, "in contradiction to Lawson Tait's theory, I have twice performed castration, removing the ovaries only and leaving the tubes, yet in both patients the menses were permanently stopped." The third patient was operated on in October, 1881, and although the report was generally satisfactory, she went to Marienbad in the summer of 1886, on account of fainting fits and incontinence of urine. The fourth patient, operated on in August, 1881, is reported in May, 1882, as suffering every four weeks, without any appearance of menstruation, from abdominal pain, flatulence, epistaxis alternating with bleeding from the anus, and once with bloody urine. This was followed by a variety of nervous symptoms leading to morphinism and coccygodynia, for which the coccyx was removed, and partial incontinence of urine, for which several operations on the urethra were performed.—We must add, however, that according to the experience of other operators, these results rarely, if ever, follow removal of the uterine appendages.

THE WALTER MOXON MEMORIAL.

A GENERAL meeting of the friends of the late Dr. Moxon will be held at the Royal College of Physicians on Tuesday, February 1st, at 5 P.M., to determine the form of memorial best suited to perpetuate his memory. At this meeting Sir William Jenner, who has consented to act as president of the fund, will take the chair. Among those who have already given their names in support of this object are the President of the Royal College of Surgeons, Sir William Gull, Sir James Paget, Sir Andrew Clark, Sir Thomas and Sir Henry Acland, the Registrar and Treasurer of the Royal College of Physicians, the President and Treasurer of Guy's Hospital, Professor Humphry, Sir William McArthur, Dr. Pavy, and Mr. Bryant. We understand that upwards of a hundred gentlemen have expressed a wish to join in this memorial, and we have been requested to state that, previous to the meeting, Mr. Clement Lucas will receive the names of those desiring to contribute.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.

THE following is the list of the members of the Council of this Society for the present year:—*President:* Charles S. Tomes, F.R.S. *Vice-Presidents* (resident): Henry Sewill, S. J. Hutchinson, J. H. Mummery; (non-resident): Andrew Wilson (Edinburgh), Richard Rogers (Cheltenham), G. C. McAdam (Hereford). *Treasurer:* James Parkinson. *Librarian:* Felix Weiss. *Curator:* Storer Bennett. *Editor of the Transactions:* Frederick Canton. *Honorary Secretaries:* R. H. Woodhouse (Council), Willoughby Weiss (Society), C. J. Boyd Wallis (for foreign correspondence). *Councillors* (resident): Morton A. Smale, Arthur S. Underwood, E. G. Betts, J. F. Corbett, Thomas Arnold Rogers, Sir Edwin Saunders, John Fairbank, David Hepburn, Ashley W. Barret; (non-resident): J. R. Brownlie (Glasgow), J. H. Whatford (Eastbourne), F. H. Balkwill (Plymouth), George Brunton (Leeds), E. Apperley (Stroud), J. H. Redman (Brighton).

CLINICAL SOCIETY.

THE following officers and council of the Clinical Society of London are proposed for election for the year 1887. (The gentlemen whose names are marked with an asterisk (*) were not on the council or did not hold the same office during the preceding year.) *President:* *William Henry Broadbent, M.D. *Vice-Presidents:* *Sir Dyce Duckworth, M.D.; *John Hughlings Jackson, M.D., F.R.S.; Samuel Wilks, M.D., F.R.S.; Sydney Jones; *Howard Marsh; Sir Henry Thompson. *Treasurer:* Christopher Heath. *Council:* Robert Edmund Carrington, M.D.; Sidney Coupland, M.D.; F. G. Dawtrey Drewitt, M.D.; David W. Finlay, M.D.; *James Kingston Fowler, M.D.; Walter Baugh Hadden, M.D.; F. de Havilland Hall, M.D.; Felix Semon, M.D.; *Francis Charlewood Turner, M.D.; William Joseph Tyson, M.D.; *Samuel West, M.D.; Henry Hugh Clutton, M.B.; William Harrison Cripps; *Henry Trentham Butlin; A. Pearce Gould, M.S.; *Rickman John Godlee, M.S.; *Cuthbert Hilton Golding-Bird, M.B.; *William Appleton Meredith, M.S.; Walter Rivington, M.S.; John Wood, F.R.S. *Honorary Secretaries:* Stephen Mackenzie, M.D.; *Robert William Parker.

BOLDO-GLUCINE IN NERVOUS INSOMNIA.

DR. RENÉ JURANVILLE has been studying the hypnotic action of a glucoside extracted from the leaves of the Chilian plant, boldo (*Pneumus boldus*). M. Chapateaut, who discovered this body, has called it boldo-glucine. After trying experiments on dogs, which appeared to show that boldo-glucine was a safe hypnotic, producing a

certain degree of cerebral anæmia, Dr. Juranville administered it either per rectum or in capsules, in doses of 1.5 to 5 or even 8 grammes, to a number of patients suffering from different forms of insanity with insomnia. All the patients obtained sleep, or, at least, rest from excitement, and some were relieved from nocturnal hallucinations. Though the effect of the drug was, however, only temporary, the author believes it will prove useful in many cases of nervous insomnia, when other remedies have been unsuccessful.

ENFORCEMENT OF THE SMOKE ABATEMENT ACT.

SIR CHARLES WARREN'S report on the police of the metropolis for the year 1885, states that of the 124 cases in which proceedings were taken under the Smoke Nuisance Abatement Acts, all but four resulted in conviction. This is rather under the average of the three years preceding as to the number of convictions, though the average fine inflicted, £2 5s. 11d., is very much larger than in any of the three years 1882-1884. This appears to have been caused by the infliction of one exceptionally heavy fine of £40. The lowest fine of the year was 1s., and more than one-half of the total number of fines were below the minimum (40s.) prescribed by the Act. The report adds—"During the years 1884-85 a further increase has been observed in the number, variety, and practical application of smokeless methods of obtaining heat and motive power required in the chief trades falling under the provisions of the Act. In view of this extension of the means of preventing smoke, the smallness and irregularity of the penalties imposed becomes the more noticeable."

THE UNIVERSITY OF LONDON.

THE University of London was constituted fifty years ago, and we have reason to believe that it is in contemplation to celebrate this coincidence in the jubilee year of the University with the Jubilee of Queen Victoria in some appropriate manner. At the meeting of Convocation of the University of London, to be held on Tuesday next, the report of the Annual Committee will be presented; the Committee seems to have been chiefly occupied in choosing a motto for the University arms, and, as the result of these deliberations, it will be proposed to recommend the motto *Spiritus intus alit*. An interim report by the Special Committee for the consideration of the scheme for the constitution of the University, proposed by Sir Philip Magnus's Committee, merely states that a conference with the Senate has been held, and that the Senate promised, as we announced at the time, to take the whole question into careful consideration.

MYOCTONINE.

THE *Journal de Médecine de Paris* publishes the following note on myoctonine. Myoctonine is one of the two substances extracted from aconitum lycoctonum by MM. Dragendorff and Spohn. It is a yellow, bitter, amorphous body, having for its formula $C_{27}H_{39}N_2O_8$, and fusible at a temperature of from 143.5° to 144° C. It is not very soluble in water, but much more so in acidulated water, and soluble in all proportions in sulphide of carbon, absolute alcohol, chloroform, and benzine. Ether and the light essence of petroleum only dissolve traces of it. Myoctonine is a powerful poison, resembling curare in its action. The injection of $\frac{1}{1000}$ of a gramme produced distinct toxic symptoms in a cat, while one-tenth of a gramme caused death in twenty or thirty minutes. Lycoctonine and lycaconine, which are products of the decomposition of lycaconitine and of myoctonine, have a physiological action which recalls that of the primitive alkaloids, but less powerful.

THE UNITED STATES ARMY MEDICAL HISTORY SHEET.

THE law relating to pensions of Federal soldiers who served at the great war in America, 1861-65, appears to have operated hardly in some instances; the claim to pension being apparently based in too exclusive a manner upon the hospital record of the individual soldier. Whilst this must be an important factor, it is obvious that many soldiers who do not enter the hospital during their army service will be permanently undermined in health, and their lives shortened, by the hardship and exposure incidental to campaigns so trying as those fought out during the prolonged struggle between the North and the South in America. Again, the bravest soldiers, those most faithful in their duty to their country, are the very ones who, to the last moment possible, will keep their places, endure hardships, and face the enemy to the last. On the other hand, malingerers, those who shrink from battle, those who prefer ease and comfort to the performance of duty, will be the most ready to seek hospital treatment, or in some cases will intentionally make themselves fitting subjects for it. An eloquent appeal on this subject has been addressed to a United States senator by Dr. Manfred, of Cincinnati, United States of America, who was surgeon during the war to a Kentucky Federal regiment. As he rightly argues, "the army record of service should be the predominating test, and the hospital record occupy only the subordinate position. The army record of battles bravely fought is the true test of soldierly merit." This is a matter which ought to be entirely above party politics.

"ST. GOVOR'S WELL," HYDE PARK.

WE have received from Mr. Alfred W. Stokes, F.C.S., public analyst to the Paddington Vestry, whose attention has been directed to the article on "St. Govor's Well, Hyde Park," in the JOURNAL of November 13th, a communication which will throw considerable light on the composition and quality of the water, which had for many years a considerable reputation for its supposed medicinal virtues. Mr. Stokes, on September 20th last, procured a sample of the water, and submitted it to analysis; the water was then flowing very slowly, at the rate of only two gallons per hour. He found it to contain 25.2 grains per gallon of dissolved solid matter. This consisted of: sulphuric anhydride, 6.65; lime, 4.53; chlorine, 3.36; silica, 1.75; magnesia, 0.71; oxides of iron and alumina, 0.21; alkalies, etc., 7.29; ammonia, 0.0014. The water gave 0.0056 grain of albuminoid ammonia, and was entirely free from nitrites. With the microscope no living organisms could be detected. Special tests showed that iron was present in very minute quantities indeed, so that the water has no pretensions to be a chalybeate spring. Its source, Mr. Stokes thinks, is probably a small spring aided by surface percolation, and not a mere filtration from the Round Pond, in the vicinity of which it is situated, for it has been seen to be trickling when the Round Pond was cleared out and dry. In purity from organic matters, Mr. Stokes points out, it is inferior to the waters supplied by the various London companies, and its medicinal properties are very doubtful.

ANOTHER POISONOUS MEAL NEAR CARLISLE.

ANOTHER remarkable case of food poisoning has taken place in Sykeside, which is a small farm near Kirklinton, about six miles from Carlisle. It appears that on Wednesday, January 5th, there was a sale of farm stock at Sykeside, and that, before the commencement of the sale, a sort of luncheon was provided for the visitors, who were pretty numerous. The principal dish provided for the company was salt beef and pease-pudding. Some time after the sale, at varying intervals, those who had partaken of the food were attacked with symptoms of irritant poisoning. We are indebted to Dr. Carlyle for the report of the symptoms he observed in some cases he was called to see. The patients were very sick and vomited freely. There was also great purging, attended with very severe pains in the bowels, and a sense of very severe straining and burning heat of the rectum. One of the patients actually fell down insensible, and was thought by his friends to be dead. He was raised up, and gradually recovered consciousness. The patients presented a haggard and anxious expression of countenance, and experienced a feeling of coldness. There was also some confusion of mind, amounting at times almost to delirium, and there was considerable thirst. It is worthy of observation that, in the cases seen by Dr. Carlyle, there was a burning sensation of the throat, together with a loathing for food, and much pain after taking anything. These symptoms lasted for four days at

least. There was no urinary difficulty. In many respects these cases bore all the appearances of irritant poisoning, such as is produced by arsenic. It appears that saltpetre is sometimes used with the salt in curing the beef, and the liquor in which the beef has been boiled is often used in preparing the pease-pudding. But Dr. Carlyle has ascertained that common washing soda is occasionally put in with the peas, in order to soften them. If this were used in this instance, it may be well (as Dr. Carlyle suggests) to inquire carefully whether or not the soda might help to explain the symptoms. The circumstances attending this matter are of a very exceptional character, and should be carefully investigated. We understand that those chiefly concerned in attending to the food are observing much reserve and reticence. This is not a satisfactory way of dealing with a matter which is one of great importance, as well as considerable interest to the general public. It is reported that a large number of those present, who had partaken of the food, were affected with symptoms, more or less severe, similar to those described above. The number thus affected was doubtless very considerable. It is somewhat remarkable that, in Dr. Carlyle's cases, the sufferers were harrassed about four or five days after with an intense itching of the skin all over the body.

FEMALE MEDICAL ATTENDANCE FOR INDIAN WOMEN.

THE Countess of Dufferin is appealing through the public press for funds to assist her in carrying on the good work which has already been accomplished by the National Association for supplying female medical aid in India for those Indian subjects who are debarred by custom and religion from availing themselves of the services of male attendants. The Association has been in existence for eighteen months, and Lady Dufferin states that every day shows more clearly how great is the need of such help, and how warmly the attempt to supply it is appreciated in India. Her Majesty the Queen Empress is the patroness of the Association, and it is suggested that the jubilee year might be regarded a fit occasion for the special effort to help Indian women in which Her Majesty has shown so great and personal an interest. Subscriptions to this fund may be sent to Messrs. Coutts and Co. for the "Countess of Dufferin's Jubilee Fund."

DEATH FROM CHLOROFORM.

THE death of a man, aged 54, while under the influence of chloroform, administered for the purpose of performing an operation on a long standing disease, recently occurred at Bradford. The evidence given at the inquest showed that every precaution was taken, and that an examination of the heart before the administration revealed no evidence of disease. An ounce of brandy was administered three-quarters of an hour before the administration of the chloroform. Immediately on the completion of the operation the heart's action was found to have ceased. It was stated that the deceased had successfully undergone a similar operation twenty-five years before.

THE GENERAL MEDICAL COUNCIL AND UNQUALIFIED ASSISTANTS.

THE Executive Committee of the General Medical Council, which meets this day (Friday), will have before it, among other matters, the mode in which diplomas or certificates in sanitary science are to be registered, and questions connected with the registration of foreign and colonial practitioners, and the employment of unqualified assistants. It is understood that the proposal under discussion has no reference to unqualified assistants employed in the ordinary way, but to cases of gross misconduct in the employment of so-called unqualified assistants, who are in reality merely covered by a registered practitioner. The question whether the Council have the legal power to order the expenditure of the large sums of money which would be necessary if the proposed visitation of medical schools were carried out, will also be considered.

OBSTETRICAL SOCIETY OF LONDON.

AT a meeting of the Obstetrical Society on Wednesday, January 12th, Dr. Amand Routh exhibited a specimen illustrating fibroid disease of one horn of a bicornute uterus from a married nullipara, who died of phthisis in the Brompton Hospital. There was a remarkable history of suspected extra-uterine pregnancy two years previously. A paper by Dr. T. F. Pedley, medical officer of health at Rangoon, Burmah, on midwifery as practised by natives in that country, was read by the Secretary. Dr. Herman read a monograph on Stricture of the Urethra in Women. He found that in young and middle-aged women this disease was generally caused by gonorrhœa.

BRITISH GYNÆCOLOGICAL SOCIETY.

AT the annual meeting of this Society on Wednesday, January 12th, Dr. Bantock was elected President for the present year. Mr. Lawson Tait gave a farewell address as President for 1886, in which he referred to the work done by the Society, especially in relation to the true significance of menstruation. He also vigorously defended the operation of removal of the uterine appendages, when performed in suitable cases, and expressed regret that some leading authorities offered so much opposition to this operation.

SANITARY REGISTRATION OF BUILDINGS BILL.

AT the monthly meeting of the Council of the Sanitary Assurance Association on Monday last, the above Bill was reconsidered. Sir Joseph Fayrer, K.C.S.I., M.D., F.R.S., presided, and there were also present Professor Roger Smith, Sir Kennett-Barrington, General Sir Peter Lumsden, G.C.B., Dr. Danford Thomas, Mr. Mark Judge, Mr. H. Rutherford, Mr. Andrew Stirling, and the Secretary, Mr. J. Hadley. A report of the Draft Bill was submitted with several clauses redrawn. The Bill was further amended, and ordered to be printed for final consideration at the next meeting of the Council. The new Bill is intended to be compulsory with regard to schools, hotels, asylums, hospitals, and lodging houses, while Clause 6 has been made much more stringent in the matter of qualification of persons entitled to give sanitary certificates.

SCOTLAND.

THE plans for the proposed new hospital at Johnstone have been decided upon. This hospital, which is to contain sixteen beds, will be built on a site which has been procured at Muirhead at a yearly rate of £1 per acre. The building is expected to be completed at an expense of less than £2,000.

MEDICAL MEN AND POLICE CASES.

RECENTLY a man was stabbed in the chest with a penknife by another man in Edinburgh, and shortly afterwards died from hæmorrhage. A correspondence has since gone on in one of the daily papers, in which it was alleged that two medical men were sent for but refused to come, but recommended that the wounded man should be sent to the Infirmary. Their conduct is, on the one hand, criticised adversely, while, on the other, it is stated that medical men, unless directly authorised by the police to give assistance, are very seldom remunerated for their services, and not infrequently have a considerable amount of annoyance through such cases. Whether the allegation regarding the two members of the profession be accurate or not, it has raised the important question of having divisional police-surgeons in Edinburgh, and the subject has this last week been before a committee of the Town Council, which has not, however, seen its way to recommend the institution of such divisional surgeons. In connection with the particular case alluded to, a paragraph in Wednesday's paper states that a *post mortem* examination of the man who was stabbed showed that no surgical interference could have prevented a fatal issue.

NEW MEMBERS OF THE GENERAL MEDICAL COUNCIL.

THE Senatus Academicus of St. Andrews University has appointed Professor J. Bell Pettigrew to be representative of the University on the General Council of Medical Education and Registration for a period of five years. The University of Edinburgh has appointed Sir William Turner as its representative on the General Medical Council, and Professor William Leishman has been nominated by the University of Glasgow. Sir William Turner has previously been a Member of the Council for several years, and was replaced by Professor Struthers representing the University of Aberdeen. Professor Leishman takes his seat for the first time on the Council. Thus each of the Scotch universities and corporations now has a representative; in addition, there is one member for Scotland appointed by the Crown, and one elected directly by the profession, so that there are altogether nine representatives from Scotland.

GLASGOW PHILOSOPHICAL SOCIETY.

THE Philosophical Society met on January 4th, Dr. J. B. Russell in the chair. On the motion of Mr. William Smart, M.A., a committee was appointed to take steps for the formation of an Economical Section. Mr. A. B. Kelly, science student at the University, gave an account of recent methods of embedding in paraffin, and cutting tissues for microscopical examination; and exhibited the rocking-microtome of the Cambridge Scientific Instruments' Company, which had been lent by Professor McKendrick for this purpose. Other papers on the bursting of leaden water-service pipes by water pressure and frost, and one on the new "Foulis's" gas-fire, were read by Mr. George C. Thompson and Mr. John Mayer. Mr. J. J. Coleman was appointed the representative of the Society on the governing body of the New Technical College.

GLASGOW SOUTHERN HOSPITAL.

AT the first meeting for the year of the Glasgow Town Council, a deputation from the executive of the proposed new infirmary on the south side of the town was received. The deputation presented a memorial, inviting the co-operation of the Council in the erection of the infirmary during the present year, as a permanent memorial of Her Majesty's Jubilee. The memorial states that the Council, some years ago, granted a site on favourable terms for the proposed hospital, and that plans for its erection had been prepared, but that proceedings were subsequently arrested by an intimation that the residue of the estate of a wealthy citizen had been bequeathed for the erection of an infirmary and convalescent home on the south side. A few weeks ago, however, the committee was informed that there was no available residue for the purpose mentioned. The memorialists consequently wish to proceed according to their original design. The cost of erecting and furnishing the portion of the structure they propose to begin with will be about £20,000, and, to meet this expense, they have obtained subscriptions to the extent of about £8,000. They desire to make the infirmary a commemoration of Her Majesty's jubilee year, and intend to ask Her Majesty's approval of her name being given to the institution. For this purpose they seek the aid of the Town Council. The deputation consisted of ex-Lord Provost Ure, Archbishop Eyre, several members of Parliament, Drs. Duncan, Napier, and Pollock, and other prominent citizens. It was pointed out that while Dublin provided one hospital bed for every 157 of the population, and Edinburgh one for every 400, Glasgow provided only one for every 700, and that even that was obtained in Glasgow by considerably curtailing the number of cubic feet of air-space desirable for each patient. After filling every available bed in the Royal and Western Infirmaries, the average weekly number of suitable applicants waiting for admission was 48 in 1885, and 52 in 1886, the number reaching a maximum in February of each year of 120 in 1885, and 144 in 1886. It was also mentioned that Her Majesty's sanction had been obtained to the giving of her name to the Aberdeen Hospital, which was about to be reconstructed at a cost of £30,000, Aberdeen having a population of only a little over 100,000, while the population of the south side of Glasgow reached nearly a quarter of a million. The memorial was remitted to the magistrates for consideration. A somewhat different light is, however, shed on the proposal by a letter in the *Glasgow Herald*, of January 8th, from the pen of Mr. William McEwen, who was for a long period the chairman of the Royal Infirmary directors, and who is, perhaps, more competent to speak on the subject than any other man in Glasgow. He offers the opinion that the figures of the relative hospital accommodation in Glasgow, as compared with other towns, and the statistics of the weekly numbers of patients waiting for admission, are erroneous. He maintains that there is already ample accommodation for all the medical and surgical cases occurring, and points out that by the erection of a home for nurses, about to be proceeded with at the Royal Infirmary, about sixty additional beds will be set free for patients, while accommodation is provided by the local authority for all infectious cases, which was formerly supplied by the Royal Infirmary. Criticising the financial aspect of the question, he shows that to make an efficient new hospital, 200 beds would be required. The first cost of each bed would be about £200, making a total of £40,000. That this is not an excessive estimate he concludes from the fact that each bed in the Western Infirmary cost initially about £300, in Edinburgh £500, and in St. Thomas's (London) £1,000. The annual support of these 200 beds would require £10,000. He sees no prospect of securing nearly this amount for a south-side hospital, since from the south side only £1,400 came for the support of the Royal Infirmary, and altogether there have never been more than 3,000 subscriptions of from twenty shillings upwards, for the support of the Royal, from the whole population of Glasgow. For many years the expenditure at the Royal has been £5,000 in excess of ordinary income; the deficit of the Western Infirmary was in 1885 £5,158, and last year £3,429. Mr. McEwen is wont to speak rather bluntly, and he concludes his letter by expressing the opinion that the movement originates with a few medical practitioners who wish to get the benefit of hospital practice, an opinion which a good many medical practitioners of Glasgow share. That there is a good deal of plain truth in Mr. McEwen's trenchant criticism is evident to anyone who chooses to make himself acquainted with the facts. We do not know how the proportion of one bed to each 700 of the population is made out by the memorialists. That was the number stated in 1881, when the proposal for a new hospital was first made, and since then an addition of fifty beds has been made at the Western Infirmary, and the Sick Children's Hospital with fifty-seven beds has been erected. The proportion can only be secured at the figure stated by omitting to remember many of the smaller institutions erected for the treatment of special diseases. It is much to be feared that a new hospital will withdraw a considerable amount of support from the older institutions, which already are far short of making their ordinary income meet their ordinary expenditure, without at the same time obtaining nearly adequate support for itself. It would be a grievous pity if the Queen's Jubilee were commemorated by the erection of an institution which can count on no "visible means of support," and which had speedily to shut its doors from lack of funds for maintenance.

IRELAND.

AT a meeting of the Belfast Dispensary Committee last week, the salary of Mr. Mehany, apothecary at Great George's Street Station, was increased by £25 per annum, subject to the sanction of the Local Government Board.

THE WATER-SUPPLY OF LIMERICK.

THE Limerick Corporation have applied for a loan of £35,000 for the construction of works to supply Limerick with water from the falls of Doonas. It will provide a supply of one million and a half gallons daily. There is no opposition to the scheme.

FEES FOR EXAMINING LUNATICS.

At Strokestown Union last week, an application from Dr. Duffy for £2—the fee for examining a lunatic—came under discussion. The magistrates had ordered £2, which the Board refused to pay, and only allowed £1. It was shown that in the previous seven cases £2 had been allowed by the guardians. We believe once the magistrates make an order for the £2, that amount must of necessity be paid.

CARLOW UNION.

A special meeting of the Board of Guardians was recently held to consider an application by Dr. McDowell, medical officer of the workhouse, for the transfer of a ward from the female to the male side of the house, so as to provide an isolated ward for delirious and other cases, in order not to have the inmates of the other infirmary wards disturbed at night. A similar suggestion was made by an inspector of the Local Government Board on a recent visit, and was referred to a committee, who, for reasons stated by them, could not recommend the change. After some discussion, a committee was appointed to report as to what arrangement could be carried out to obtain a ward for isolated cases.

ATHY UNION.

Dr. Hobson, medical officer of Ballylinan district, being in bad health, has been allowed three months' leave of absence, but, as he still remains seriously ill, and is over 80 years of age, the guardians last week wrote to the Local Government Board, asking whether a further extension of leave is not unreasonable, and unjust to the ratepayers. The dispensary committee have, it is stated, offered to recommend Dr. Hobson for a superannuation allowance.

THE SANITARY CONDITION OF CORK.

At a meeting of the Public Health Committee recently, certain recommendations of Dr. O'Farrell, relative to the sanitary condition of Cork, came under consideration. Dr. O'Farrell recommended that the street cleansing be improved; that a complete system of domestic scavenging be undertaken by the Corporation; that the sewers be completed and ventilated; that lodging-houses and tenement-yards and premises be kept in a sanitary condition; that a public slaughter-house be erected, with proper appliances for drainage, ventilation, and cleanliness; that the sewage-matter removed from drains be thoroughly disinfected; that the water-supply be protected, as far as possible, from contamination; and that the medical officer of health (Dr. Donovan) should devote his entire time to the duties of his office. Some of these recommendations were adopted; and on several no action was taken.

UNSANITARY CONDITIONS.

Dr. Dougan, one of the medical officers of Lurgan Union, recently reported to the guardians of the district the extraordinary unsanitary conditions which he had found in the dwelling of one Pat M'Connell, Clencore, county Armagh, which was in a shocking state; it consisted of one apartment only, but its inhabitants were fourteen in number—Pat, his wife, and twelve pigs. The guardians ordered that twelve members of the household should be promptly evicted, and the cabin whitewashed.

NORTH-WEST SECTION OF NORTH OF IRELAND BRANCH OF BRITISH MEDICAL ASSOCIATION.

On January 5th the Annual Dinner of the North-West Section of the North of Ireland Branch of the British Medical Association was held in the Northern Hotel, Londonderry. Twenty members were present. A very pleasant evening was passed. Some of the speakers regretted that more of the country members were not present. This was in part due to the severity of the weather. The work done by this Section, which has been in existence for the last six months, was shown by some of the members to be very considerable. A large number of patients have been exhibited at the meetings; fifteen papers have been read; and the discussions have been joined in by most of the members. Amongst the patients shown were very good examples of Raynaud's disease, molluscum fibrosum, ichthyosis, sarcoma of jaw, lamellar cataract, Addison's disease, chronic hydrocephalus, sclero-keratitis.

BRITISH MEDICAL BENEVOLENT FUND.

The annual general meeting of subscribers to this Fund was held on January 10th, at 34, Seymour Street, Portman Square, W., the residence of the Treasurer, at 4 P.M., when the chair was taken by Dr. Jonson, Chairman of Committee, in the unavoidable absence of the President, Sir George Burrows, Bart. The financial statement was submitted, and the annual report of the committee read, from which it appeared that the donations during 1886 had amounted to £869 5s. 6d., subscriptions to £1,228 9s. 5d., exclusive of £226 3s. 1d. contributed from the Jubilee Fund—a total of £2,324 3s. 0d., which shows an increase over the receipts of 1885 of nearly £300. The disbursements during the year had been, in grants to 183 applicants, £2,128; in annuities, distributed amongst 61 old people all over 60 years of age, £1,074. The cost of the collection and distribution of this large sum (over £5,500), minimised though it is by the fact that the officers are all honorary, with the exception of the collector, amounted to £130, including stationery, collector's commission, the printing and postage of the report, of which a copy is sent to every subscriber, the postage and other expenses of the secretaries for finance and cases, and the postal and incidental expenses connected with the distribution of over £3,200 in weekly or monthly instalments; this is carried out by means of the Cheque Bank, and by Dr. Jonson more especially for the annuities, although the Committee entrusts the distribution of grants to the various honorary local secretaries when it can be done without imposing too irksome a task upon the gentlemen who so kindly undertake that duty. The number of applicants for grants was 209, of whom 183—an excess of two over the number relieved in any previous year—received sums varying from £5 to £20. Many of those inadequately relieved would have been given larger grants had the sum in the hands of the Committee been larger. Personal inquiry proved dire and distressing want in many instances amongst those who had been brought up in comparative ease and comfort, and who, by the death of the breadwinner, found themselves dependent upon charity for the common necessaries of life. This must apply still more to those who, in addition to want of money, are suffering from the weight of years or disease as well as misfortune. Of such the list of 61 annuitants affords many an example, and well shows the infinite good wrought by this charity. The celebration of the jubilee year by a banquet in July, under the presidency and aided by the distinguished advocacy of Sir James Paget, resulted in the addition of £3,000 (including a donation of £100 from Her Majesty the Queen) to the funded property, from which the annuity-payments are derived. This splendid addition will allow of the creation of new annuities, and a consequent relief to the donation or grant department. Dr. Brett, of Watford, joined the Committee of Management, in the place of the late Dr. Harvey K. Owen, a liberal contributor during his lifetime, and the generous donor of a legacy of £500. The names of Dr. Coates, of Bath, Dr. Matthews Duncan, and Dr. R. Quain, were added to the list of Vice-Presidents of the Fund in recognition of their liberality.

THE CHRIST'S HOSPITAL QUESTION.

The general statement of the present position of affairs at Christ's Hospital, which recently appeared in the Journal (January 1st, 1887), may usefully be supplemented by a short consideration of some points for which urgency of reform may be pleaded.

Foremost among these we would put the condition of the junior establishment at Hertford. Here, between 300 and 400 boys are maintained, of all ages between 7 and 11, until, that is, they are able to be transferred to the London School. Here, also, about ninety girls are trained. The school buildings are about 200 years old, and are quaint and picturesque enough. So far as the large dining-hall and the class-rooms are concerned, there is nothing to excite adverse criticism; but the case is very different with regard to the wards, as the dwelling-houses for the children are called. These on the boys' side consist of two rows of cottage-like buildings, in each of which a ward-nurse and about forty-five boys are lodged, and although it may freely be acknowledged that the present arrangements are perhaps the best of which circumstances permit, the verdict must still be that "bad is the best," for we believe that there can be no two opinions as to the unfitness of these wards for the purposes of school buildings,

judged, that is, by the light of modern sanitary requirements. For example, at night, or in case of illness, the only closets which are available are hardly separated from the sleeping rooms. And if they are used at night they cannot be flushed out until the following morning. The arrangements for bathing and washing are primitive to a degree, while the rooms in which the children sleep are altogether too confined. Of these bedrooms there are two in each ward, one on the first floor and the other in the attic, each containing twenty or twenty-five beds. In the attic room the highest part of the ceiling is little more than six feet from the ground, and this only just in the centre, so that the beds at the sides are close under the roof. These wards are, in fact, very fair examples of what school buildings were 200 years ago, but from their small size and general plan of construction, they are incapable of any satisfactory remodelling in accordance with modern ideas. They are old, but not in the least venerable. Now, when they are pulled down, need they call for any sentimental regret?

The wards on the girls' side have practically the same arrangements as upon the boys—that is, they are also, or they should be, buildings of the past. There is also a new ward, built of corrugated iron, consisting of one ground-floor room. This can hardly be looked upon as other than a temporary arrangement; but, taking into consideration the extra accommodation thus afforded, together with the fact that fewer boys are taken at Hertford altogether than used to be the case, we may believe that, in the matter of overcrowding, things are better than they were. But even now, we repeat, the old wards are not fitted for the accommodation of children, still less of the number which is packed into them.

It is a significant fact also that, although there is no longer the full tale of 400 boys in the school, it is deemed necessary to maintain an infirmary establishment of 100 beds, in addition to another separate building wherein ringworm cases can be isolated. This number of beds, however, although it seems large, may not be excessive, if it be the case that there were about thirty of the scholars in the infirmary within a week of the commencement of this last autumn term.

While the present condition of uncertainty prevails at headquarters, it is useless to look for any radical change at Hertford. But changes are, indeed, called for. Only by the most scrupulous care on the part of the school authorities—care, of which there is evidence on every side—can the health of the children be maintained, at even a reasonable standard, under conditions so unfavourable as there exist.

Moreover, while the inaction of the Governors of Christ's Hospital directly encourages the continuance of imperfect sanitary conditions in Hertfordshire, hardly less directly is it instrumental in keeping up a somewhat similar state of things in Smithfield. It is ten years since a Home for Nurses and Probationers was established at St. Bartholomew's. The only accommodation that could then be secured for it was by making use of some of the small houses which separate the hospital from Little Britain. What in the way of internal alteration could be done to the houses, was done; but it was always recognised that the "Home," as placed in such quarters, was only a makeshift, which might just do until more room could be had.

It was an experiment, also, at first, but its success was quickly assured, and, from that time to this, the insufficiency of the nursing accommodation has been more and more acutely felt. Probably enough, had it been known some years ago that the prospect of obtaining that coveted corner of Giltspur Street would have been such a Will-o'-the-Wisp as it has proved to be, the authorities of the hospital would have long since pulled down the present home, and rebuilt it. Even now it is said that considerable difference of opinion on this point prevails between the treasurer and the almoners, one party being still loth to give up the hope of being able to build a new nursing home, and, at the same time, to provide for the increasing requirements of the medical school, upon a site superior in every way to that in Little Britain; while the other holds that hope deferred is likely, at any rate, to make the nurses sick, and that it is, therefore, best to provide them with decent accommodation without loss of time. We believe that there is no question but that St. Bartholomew's is able to pay the necessary price for the ground it wants, as soon as ever Christ's will make up its mind to act on the recommendation of the Royal Commissioners, and vacate a site from which, having regard to the objects of public usefulness, which are the sole reasons for its existence, it ought to have moved, or been moved, long ago.

POISONING BY MISADVENTURE.—A sad case of poisoning by misadventure has occurred at Wolverhampton. A little girl, the daughter of a working man, being taken ill, her mother gave her a dose of a preparation, intended for outward application, in mistake for soothing syrup, and the child died in great agony.

MEDICAL OFFICERS OF SCHOOLS ASSOCIATION.

A GENERAL meeting of the Medical Officers of Schools Association was held in the rooms of the Medical Society on Tuesday, January 11th; the President, W. S. SAVORY, Esq., F.R.S., occupied the chair. A paper was read by Mr. Charles E. Paget, Medical Officer of Health for Westmoreland, on the Arrangement and Construction of School Sanatoria for Infectious Diseases. The paper, which dealt clearly and exhaustively with the subject, and which included a description of some novel and ingenious details of construction, gave rise to a full discussion; and a general opinion was expressed that the public, no less than school authorities, would derive benefit from a more intimate acquaintance with the necessities and the claims of this important branch of school sanitation.

DEGREES FOR LONDON MEDICAL STUDENTS.

THE MEDICAL STUDENTS' VIEW.

THE following resolution, moved by Mr. Edmund Owen and seconded by Mr. J. J. Clark, was passed at a recent meeting of the Medical Society of St. Mary's Hospital: "That, in the opinion of the Medical Society of St. Mary's Hospital, it is expedient that a degree in medicine be placed within the reach of the bulk of London Medical students; and that this Society ventures to express the hope that this may be accomplished though the conjoined influence[1] of the Royal College of Physicians and the Royal College of Surgeons, subject to the approval of the General Medical Council."

FURNEAUX JORDAN TESTIMONIAL FUND.

	£	s.	d.
Bartleet, T. H., J.P., F.R.C.S.	10	10	0
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HENRY TESTIMONIAL FUND.

WE gladly comply with the request which has been made to us to publish the following letter, now in process of circulation.

69, Connaught Street, Hyde Park Square, W.,
January 1st, 1887.

DEAR SIR,—The eminent services which Dr. Alexander Henry rendered to the Metropolitan Counties Branch of the British Medical

[1] The word "influence" to be taken strictly in its literal interpretation, and not to imply by the conjoined examination of the two Colleges.

Association, as one of its honorary secretaries for more than twenty-six years, seem to the Council to be worthy of special recognition by the members. His resignation of the Secretaryship in June last was unfortunately followed by an illness that seems likely to incapacitate him from future professional work. The Council consider that, under these circumstances, his services to the Branch should be acknowledged by a substantial testimonial. We enclose a list of contributors to the "Henry Testimonial" Fund; and invite you to authorise us to add your name thereto.

Donations should be sent to Mr. Eastes, at the above address, before the first day of February, when it is hoped the fund may be closed.—We are, dear Sir, yours faithfully,

WALTER DICKSON, M.D., Hon. Treasurer to the Fund.
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January 5th, 1887.

ARMY MEDICAL DEPARTMENT REPORT FOR THE YEAR 1884.

CONCLUDING NOTICE.

THE average strength of the warrant officers, non-commissioned officers, and privates of the European army in India during 1884 was 55,252; of commissioned officers, 1,827; and of women and children with the troops, 3,380 of the former, and of the latter 6,601. Among the non-commissioned officers and men, there were 82,586 admissions into hospital, being at the rate of 1,494.7 per 1,000; 720 died, or 13.03 per 1,000; and the average number constantly sick was 3,723, or 67.37 per 1,000 of the strength. The largest proportion of admissions into hospital, and the highest number of men constantly sick, occurred among the troops quartered in the Bengal command, but by far the highest proportion of deaths occurred in the Bombay command. The least proportion of hospital admissions, as well as the least proportionate number of deaths, occurred in the Madras command. When the deaths in the three commands are regarded together, as the average ratio of mortality for the ten years from 1874 to 1883 was 17.52 per 1,000 of the strength, it is seen that the ratio of deaths during 1884, namely, 13.03 per 1,000, was considerably below the average. The proportionate number of men sent from India to England as invalids in 1884 was also under the average. The state of health of the troops in the three provinces of India will now be noticed separately.

In Bengal, the average strength of British troops was 33,716; the admissions into hospital were 55,448, or 1,644.6 per 1,000; the deaths 408, or 12.10; and the number constantly sick 2,389, or nearly 71 per 1,000. When compared with similar averages for the preceding 10 years, the foregoing numbers show an increase of 115 per 1,000 in the rate of prevalence of sickness, and of 7.35 of consequent constant inefficiency, but, notwithstanding this increase, a diminution in the death-rate of 6.64 per 1,000. The report states that the increased proportion of admissions into hospital was largely due to an outbreak of malarious fever, which became very prevalent during the latter half of the year. Ague was especially prevalent at Delhi, where, out of an average strength of 483 troops, there were 1,892 admissions for this form of fever, or 82 per cent. of the admissions for disorders of all kinds. From the same cause, the sickness at Lahore, Mean Meer, and Amritsur, assumed very high proportions, the rates of hospital-admissions being 3,795, 3,476, and 3,139, per 1,000 of the strength respectively. Altogether, in the Bengal command, there were 18,708 admissions into hospital for ague.

Enteric fever caused 423 admissions, and 111 deaths. The number of admissions for this disease was higher than in the preceding year, but the proportion of deaths was less. In 1884, the percentage of mortality to cases treated was 26.2, while in 1883 it was 30.6. The disease was most prevalent in the hot season, less so in the rainy, and still less prevalent in the cold season of the year. It was more or less present in all parts of the command, the hospital returns of 47 different stations showing admissions for it. The greatest number of admissions in any one station was at Lucknow, where there were 54 cases, with 9 deaths. At Morar, there were 33 cases and 17 deaths, the mortality being equal to 51.5 per cent. of the cases treated. The medical officer in charge describes the disease as of a severe type, and states that most of the cases occurred in young soldiers lately arrived in India, the average age of the men attacked by it being 23¼ years. No explanation could be found for its occurrence in the existence of sanitary defects, and the medical officer could only attribute it to climatic causes and individual susceptibility. At Moultan, where there were 23 cases with 6 deaths, it was thought the disease might have been contracted in the neighbouring villages; at Sitapur, there were 24 cases and 4 deaths, and the outbreak was attributed to an unsanitary state of the latrines near the barracks; at Fyzabad, where 22 cases with 3 deaths occurred, adulterated milk, or the fact of the drinking water being affected by changes in the subsoil-water, are mentioned as probable causes. No special sources of the disease appear to have been traced in any other stations where cases of it occurred.

Eruptive fevers caused 78 admissions, of which 50 were due to small-pox. Six cases proved fatal. The rates of prevalence and mortality from small-pox were 1.5, and .18 per 1,000 respectively, as compared with 2.5 and .20 in the previous year. The disease appeared in 16 different stations, chiefly in Dinapore, where there were 13 cases in the months of March, April, and May. The disease was epidemic among the civil population. The fatal cases occurred at Benares, Cawnpore, Fyzabad, Fatehgarh, Ferozepore, and Peshawur, one death at each station. Four admissions are shown for scarlet fever, three at Delhi, and one at Chakrata. A case of dengue is also recorded, and nine cases of measles appear in the hospital returns.

Cholera led to 71 admissions and 45 deaths during the year, the cases being distributed over 17 stations in the command. The greatest incidence of the disease was at Meerut, where there were 28 cases and 13 deaths. In a special report on the outbreak, Surgeon J. R. Clark states that "it commenced with three isolated cases occurring between June and September, and on the 9th of the latter month it assumed an epidemic form. This continued until the end of October. Including civilians and natives, there were 56 cases and 35 deaths, the mortality to attacks being at the rate of 62.5 per cent. The weather previous to the outbreak had been very unseasonable. Heavy rains for ten days, at the end of June, were followed by a month of very hot weather free from rain. After this, rain and hot weather alternated until the end of September, when very heavy rain occurred and flooded the country. This was succeeded by fine weather." At Allahabad 10 cases and 5 deaths occurred. It is reported by the medical officer in charge of the station that, during May and June, cholera prevailed in an epidemic form among the native population, and caused 300 deaths. In June, two cases occurred among the troops. In the early part of September, there was a most exceptionally heavy fall of rain, at which time the city and neighbourhood were reported to be free from cholera. Cases of the disease, however, now occurred among the troops, and continued until October 17th, when the troops were sent out by rail to camps at a distance, and the disease among them ceased. At Dinapore, 9 cases occurred, 7 of them ending fatally, between August 6th and October 10th. The disease was prevalent in the surrounding villages from the beginning of April to the end of October. Two deaths among the officers were due to cholera.

Sunstroke caused 97 admissions and 27 deaths. The stations where most cases occurred were: Morar 18 cases with 1 death; Nowshera, 7 cases with 1 death: Ferozepore, 5 cases with 3 deaths; Dinapore and Lucknow, each 5 cases with 2 deaths; Peshawur, 4 cases and 4 deaths. Three deaths occurred from hydrophobia; one at Sialkot, a second at Umballa, and a third at Bareilly. In the case at Sialkot, a boy was bitten by a dog on January 16th, and died on February 14th; in that at Umballa, the date of inoculation was uncertain; in the third at Bareilly, the man was bitten by a native dog on May 25th, and was attacked by the disease on August 13th. Under the head of Poisons, 350 admissions into hospital and 7 deaths are shown. The admissions were considerably above the average, the increase being chiefly due to the frequency of the admissions for alcoholic poisoning. Of the total number of admissions, all but 28, and all the deaths, were due to the effects of drink. Delirium tremens caused 72 admissions and 1 death; while 250 cases and 6 deaths were shown under alcoholic poisoning. Two cases of oxalic acid poisoning were returned,

the drug being taken in each instance by mistake for Epsom salts. Neither case ended fatally. There were 22 cases of poisoning by hill-nuts, described as a species of jatropha. They were eaten by soldiers of a detachment which was on the march between Roorkee and Chakrata. The symptoms produced were vomiting, purging, cramps about the abdomen and extremities, and collapse. All the men recovered.

Local injuries caused 4,105 admissions into hospital and 26 deaths. A serjeant died at Rawal Pindi from multiple injuries caused by the accidental explosion of a shell; 2 natives were killed and 4 soldiers wounded by the same accident. There were 11 deaths from drowning, one suicidal, the rest accidental. Eleven deaths took place from gunshot wounds. Two of them were homicidal, the men being shot by a comrade, who wounded other men at the same time; the remaining 9 cases were suicidal.

Among the officers in the command, there were 846 attacks of illness, with 29 deaths, and 45 were invalided to England. These numbers gave ratios of 711.5, 24.39, and 37.85 per 1,000 respectively. Among the cases treated were 3 of small-pox, and 20 of enteric fever, being at the rates respectively of 16.8 and 2.52 per 1,000, as compared with 12.5 and 3.29 per 1,000 among the men.

There were 2,301 admissions of women into hospital. Of these 1,731 were for various diseases, while 570 were for child-birth. The deaths among them were 38 in number, a mortality rate of 20.64 per 1,000. Eruptive fevers caused 17 admissions, of which 13 were for small-pox. Three of the cases proved fatal. Enteric fever led to 7 admissions and 4 deaths. Among the children, averaging 3,545 in number, there were 2,653 admissions to hospital and 238 deaths, showing a ratio of admission of 748, and of mortality of 67 per 1,000. Eruptive fevers caused 184 admissions, among them being 10 for small-pox, with 1 death; 4 for scarlet fever, with 1 death; and 141 for measles, with 17 deaths. Under diarrhœa, 279 admissions appear, with 44 deaths; under ague, 403, with 1 death; under whooping-cough, 99, with 5 deaths; and under infantile convulsions, 52 cases, with 43 deaths. There were 2 fatal cases of cholera among them. The remaining admissions occurred under the various forms of disease commonly incidental to children.

In Madras, where the strength of the troops, exclusive of commissioned officers, was 10,812, the admissions into hospital numbered 11,960, or 1,106 per 1,000. This was higher than the rate of sickness in 1883. On the other hand, the proportionate mortality was less than it was in 1883, and considerably less than the average of the previous 10 years. In 1884 the deaths in the command numbered 100, and were at the rate of 9.25 per 1,000, while in 1883 the death-rate was 2.06, and the average during the preceding 10 years was 5.81 per 1,000 higher. The highest rate of hospital admissions was at Rangoon, in British Burmah, having been 1,553 per 1,000, as compared with 1,286 in 1883, and an average during 10 years of 1,298 per 1,000. One of the lowest rates occurred at Port Blair, in the Andaman Islands, namely, 688 per 1,000, which was lower than the rate in 1883 and the average rate in the previous 10 years.

The febrile group of diseases led to 1,953 admissions into hospital, and caused 31 deaths. Among them were 32 eruptive fevers, including 9 cases of measles, and 19 cases of small-pox. One of the latter terminated fatally. The disease appears to have been epidemic among the natives of Southern India. Cholera is also stated by the principal medical officer to have been very prevalent, and to have led to a very large mortality in the civil population. Among the troops only 12 cases occurred, but 10 of these proved fatal. Enteric fever caused 129 admissions and 18 deaths. Although the disease was more prevalent in 1884 than in the previous year, the proportionate mortality was less; the proportion of deaths to attacks being 13.9 per cent. in 1884, while it was 30.8 per cent. in 1883. The principal medical officer remarks that "enteric fever has increased steadily during the last 4 years, the increase being most marked at Bangalore, where the water-supply is always bad, and where it was scanty as well as bad in 1884. It seems probable that the quality of the water therefore, has something to do with the spread of this disease, but seeing that there were many cases at Secunderabad, where the water supplied to all the barracks is good, there must be other agencies at work." At Secunderabad there were 39 cases and 10 deaths. The medical officers in charge of the station hospitals all reported, that, after the fullest inquiry, they were unable to trace the source of the disease.

There were 1,096 admissions for primary, and 272 for secondary syphilis; while there were also 1,256 admissions for gonorrhœa, and 188 for its sequelæ. The rate of prevalence of all forms of venereal disease amounted to 260 per 1,000, and the rate of constant inefficiency from them to 18.38 per 1,000 of the strength. Attacks of sunstroke caused 15 admissions with 7 deaths. One case of hydrophobia occurred and terminated fatally. Diseases of the digestive system caused 2,478 admissions and 30 deaths. Among these were 602 cases of dysentery, with 5 deaths; 452 of diarrhœa with 1 death; and 440 were admissions for hepatic affections, with 24 deaths. Among the latter were 12 cases of abscess of the liver, 10 of which ended fatally. The admissions for alcoholic poisoning were less frequent in Madras than they were in the Bengal command. Only 22 cases due to alcoholic excess were admitted to hospital, 15 being cases of delirium tremens, one of which proved fatal, and 7 being registered under poisoning by alcohol. Only 1 case of poisonous snake bite was treated. A soldier on the march with his regiment, was bitten in the arm by a rock snake; nitrate of silver was applied to the wound, and the man recovered. Among local injuries, there were 52 cases of fracture, 10 of dislocation, 1 of cut-throat (self-inflicted) and 2 of gunshot wound, all of which recovered. Four deaths resulted from gunshot wounds of the head, all suicidal. One death is returned from a gunshot wound received in action. A soldier, while engaged with Moplahs in the Malabar district, "received his death-wound from a bullet which took off the upper part of his skull."

Out of the average strength of 292 officers in Madras, there were 260 cases of illness, with 4 deaths, and 25 were invalided to England. The deaths resulted in one instance from cholera, in a second from hepatitis, in a third through a fall from a horse, causing fracture of the skull; and the fourth was suicidal, death being caused by opium-poisoning. Among the women, whose average strength was 887, there were 908 hospital admissions, 646 being for disease, and 262 for child-birth. The death-rate among them was 11.27 per 1,000. The deaths among the children, who averaged 1,784 in number, were 56, or 31.39 per 1,000. Tubercular affections, dentition, convulsions, and diarrhœa, gave rise to a large proportion of the deaths among them.

The principal medical officer, in his sanitary report, remarks on the universal approval accorded to the coffee-shops in the Madras command, and adds that a great variety of useful articles are supplied at them to the troops at moderate rates.

The average strength of the troops in the province of Bombay during the year was 10,724. The admissions into hospital were 15,178 in number, or 14.15 per 1,000; the deaths 212, or 19.76 per 1,000; and the number constantly sick was 694, or a rate of 64.70 per 1,000. All these are higher than the corresponding rates for the year 1883. The death-rate is nearly 8 per 1,000 higher, and it is also increased by 3.84 per per 1,000 when compared with the average mortality-rate for the preceding decennial period. The increased mortality in 1884 was largely due to the number of deaths which occurred among troops on the march, namely, 61, of which 41 resulted from cholera; and to the unhealthiness of Quetta, where out of an average strength of 1,075 troops, there were 2,151 cases of sickness admitted into hospital, with 41 deaths. The total number of cases of cholera in the command during the year were 66, and 52 of these cases ended fatally. Forty-eight of the cases, with 39 deaths, occurred in the North Staffordshire Regiment while on the march from Quetta to Mhow. The regiment was attacked by the disease in the Bolan Pass. The cause of the outbreak was not traced, but, in the Mhow circle, cholera was prevailing at the time among the civil population.

Enteric fever caused 97 admissions, and 22 deaths; of the 97 cases, 80 occurred at Quetta, with 10 deaths; 28 at Karachi, with 3 deaths; 5 cases, with 2 deaths, at Mhow; 10 cases, with no deaths, at Ahmednagar; the remainder at 7 other stations. The disease was attributed in some instances to contaminated milk, in others to impure water, in the larger number of instances no supposed cause for it could be found. Paroxysmal fevers led to 3,917 admissions into hospital, with 14 deaths; diseases of the digestive organs to 2,291 admissions, with 32 deaths; and general and local injuries to 1,215 admissions, with 24 deaths. The admissions due to the abuse of alcohol were 100 in number, 26 being cases of delirium tremens, but none terminated fatally. Forty of the admissions occurred at Aden. Among the deaths under general injuries were 6 caused by lightning at Nasirabad; the lightning struck the roof of a barrack supported by iron girders, to which punkah wires were attached; it was conducted along these wires through the upper story, killing one man who was lying on his cot, and then passed through to the lower story, where it killed five men sitting at a table. At Kirkee, 8 men, who were engaged in filling shells in a tent, were severely injured by an explosion of gunpowder. Two of them subsequently died, one after amputation of the thigh for fracture, and the other from tetanus supervening on compound comminuted fracture of both legs.

Among the officers, 346 in number, there were 231 attacks of illness, 5 deaths, and 34 were invalided to England. The 5 deaths were caused by meningitis, hepatitis, hepatic abscess, fracture of the skull,

and gunshot wound of the head, the death in the last instance being suicidal while the patient was in a state of temporary insanity. The average strength of the women was 652. There were 689 admissions into hospital among them, 515 being for sickness, and 171 for ordinary childbirth. Eight deaths occurred among them, and were due to continued fever, cholera, pneumonia, diarrhœa, ascites, debility, childbirth, and *post partum* hæmorrhage, 1 case respectively. The average number of children was 1,272. the admissions into hospital were 806, and the deaths among them 69.

The troops stationed in Lower Egypt, including a small permanent garrison at Suakin, averaged 6,468 in number during the year 1884. The hospital admissions numbered 8,190, giving a ratio of 1,266 per 1,000; the deaths 75, or 11.59 per 1,000; while the number constantly sick was 497, or 76.85 per 1,000. The principal diseases which affected the health of the troops were enteric and other continued fevers, dysentery, diarrhœa, and venereal disorders. Enteric fever caused 161 admissions, with 32 deaths; other continued fevers 853 admissions, without a death; small-pox 25 admissions, with 1 death; diseases of the digestive system, including dysentery and diarrhœa, 1,338 admissions, with 6 deaths; venereal disorders 2,493 admissions, of which 1,724 were for syphilis, primary and secondary, and 769 for gonorrhœa and its sequelæ. The greater number of cases of small-pox occurred at Cairo, where the disease is reported to be very common. The Principal Medical Officer remarks; "The cases among the troops were usually mild, but one was confluent. Vaccination is greatly neglected in this country, and precaution is difficult when the barracks are so close to low parts of the town." There were no cases of cholera among the troops in Egypt in 1884. Of the cases of enteric fever, 60, with 13 deaths, occurred at the citadel, Cairo; 35 cases and 3 deaths at Abasiyeh; 65 cases and 14 deaths at Alexandria: 1 fatal case at Port Said, and another at Suez. With regard to Cairo, the report states, "the unsanitary conditions of Cairo are quite enough to account for the presence of enteric fever, which is perhaps the chief disease among the native population;" and with respect to Alexandria, it is remarked: "When we consider the general absence of underground drainage, and the prevalence of cesspits beneath the houses everywhere in this country, it is not difficult to understand how, favoured by warmth, stagnation, and seclusion from open air, fermentation of fæcal matters ensues, and poisonous effluvia become generated."

Among the officers, whose strength is returned as 236, there were 147 attacks of illness, 5 deaths, and 25 were invalided to England. Three of the deaths resulted from enteric fever, one from dysentery; the cause of the fifth death is not stated. The strength of women was only 14, of whom one died from periostitis; of the children, 18, one of whom died from enteric fever, and another from dysentery.

The volume of Army Medical Reports under notice contains an Appendix, occupying 106 pages, and containing 17 papers by medical officers on various subjects. In our reviews of the volume issued last year, and of some other recent volumes, we adverted to the absence of the appended papers and original contributions which had formed special features of the earlier series of these Departmental publications. Attention was called to the subject during the last session of the House of Commons by Dr. Farquharson, who mentioned that certain copies of these Reports were published with, and others without, the Appendix. The copies presented to Members of Parliament, which were identical with those alone open to purchase by the public, were destitute of the Appendix; while certain copies reserved for the use of the medical department had the Appendix. The copies sent to us were similar to those sent to Members of Parliament, and were without the Appendix. We are at a loss to conjecture the purpose which the publishing department of the War Office had in view in adopting this arrangement; as the Appendix of papers was already in type, the insertion of it in all the copies would have only added a small fraction to the cost, and this might easily have been met by a proportionately increased charge to purchasers, while the discouraging effect such a suppression of their papers was calculated to produce on the medical officers who contributed them was quite obvious. However, as the attention of the Minister for War has been called to the matter in the House of Commons, we have no doubt that these departmental Reports will be issued in a manner more just to the medical officers, and more conducive to the public interests in future. The papers in the Appendix of the present volume possess very considerable scientific and professional value, and we regret that the space at our disposal prohibits us from giving more than a passing notice of them. Dr. Mouat supplies a medical history of the Nile Expedition, from March 18th, 1884, to July 31st, 1885. Wounds caused 241 admissions and 42 deaths in hospital, while 84 men were killed in the open field. There were no fewer than 760 admissions for enteric fever, and these led to 277 deaths and 63 men being invalided. The average strength of the force was 10,771 men and 600 officers. Of the latter, 41 died and 105 were invalided. A report on the European troops with the Suakin Expeditionary force, by Dep. Surgeon-General Barnett, follows, while a medical history of the Followers (Indian, Arab, and others) with the British forces is supplied by Surgeon Hendley, Indian Medical Service. Dr. Fleming contributes a paper on the tents and other equipment used on active service at Suakin, and Brigade-Surgeon Gribbon furnishes a Report on the Hospital-ship "*Gangcs*," from February to September, 1885. The latter report is accompanied by a series of illustrations. An account of the "Medical Transactions of the Bechuanaland Field Force, South Africa," is given by Dep. Surgeon-General Faught, who expresses his conviction that the excellent health of the troops was mainly due to the impossibility of obtaining intoxicating drink. A report on the Hut-Hospitals exhibited at Antwerp in September, 1885, in connection with the prize offered by the Empress of Germany, is furnished by Professor Longmore, who also has another paper on a case of gunshot fracture of the femur. There are two papers of particular interest on Hydrophobia, one by Surgeon Freyer, I.M.S., giving a detailed history of the case of an officer, who died of the disease at Mussoorie in September, 1885; the other containing notes of 23 cases which occurred in the Bengal command between 1871 and 1885, and taken from a return furnished by the Principal Medical Officer in India.

SIR ERASMUS WILSON'S BEQUEST TO THE COLLEGE OF SURGEONS: A ROUND-ROBIN.

A ROUND-ROBIN, addressed to the President, Vice-Presidents, and Council of the Royal College of Surgeons of England, has been signed by—

Sir John Lubbock, Bart., M.P.	Sir William Bowman, Bart.
Sir William Gull, Bart.	Sir Henry Thompson
Sir Andrew Clark, Bart. [C.B.	Mr. J. E. Erichsen
Sir Joseph D. Hooker, K.C.S.I.,	Mr. Geo. Pollock
Sir Joseph Fayrer, K.C.S.I.	Mr. John Simon, C.B.
Sir Henry Acland, K.C.B.	Professor T. H. Huxley
Sir James Risdon Bennett	Professor W. H. Flower
Sir Edward Sieveking	Professor Gerald Yeo
Dr. Richard Quain	Professor Michael Foster
Dr. Withers Moore	Professor Burdon Sanderson
Dr. Samuel Wilks	Professor E. A. Schäfer
Dr. J. Hughlings Jackson	Professor J. Tyndall
Dr. David Ferrier	Professor Francis Darwin
Dr. E. Klein	Professor H. N. Moseley
Dr. George Savage	Professor E. Ray Lankester
Dr. Pye-Smith	Professor George Fleming
Dr. F. W. Pavy	Professor Thiselton Dyer
Dr. W. H. Broadbent	Professor C. S. Roy
Dr. Thomas Stevenson	Mr. Francis Galton
Dr. Lauder Brunton	Mr. George J. Romanes
Dr. R. Cory	Mr. Victor Horsley
Dr. Arthur Gamgee	Mr. W. Watson Cheyne
Dr. W. H. Corfield	Mr. R. Brudenell Carter
Dr. Donald Macalister	Mr. Charles Groves
Dr. W. H. Gaskell	Mr. Shirley Murphy
Mr. J. N. Langley	Mr. Hugo Müller

The letter is in the following terms:

GENTLEMEN,—We, the undersigned, being informed that a legacy of a considerable amount has been bequeathed to you by the late Sir Erasmus Wilson for the benefit of the College, and presumably for the advancement of science, beg respectfully to direct your attention to the need of support of those collateral branches of medicine which can only flourish by liberal pecuniary aid.

We would, therefore, suggest to you the desirability of founding an institution under the direction of the College which shall have for its object "Physiological and Pathological Research." The want of such an institution in England has long been felt, and more especially of late, when we have had to look to Berlin for information respecting tubercle and to Paris for experiments on the prevention of hydrophobia. It is a national discredit that we have nothing in London like the splendid laboratories which exist not only in the capital cities of Europe but in comparatively small towns such as Bonn, Strassburg, and Leipsic.

There is little prospect of the Government establishing such an institution, or of its being founded by public subscription; the only hope of its foundation lies in the possible bequest of a large sum of money to be devoted to scientific uses. An opportunity has now

occurred which has put it in the power of the College to carry this into effect, an opportunity which, if now lost, may never recur.

The foundation of an institution of this nature would tend to raise England to the scientific position held by France and Germany, would create a body of men anxious to devote themselves to scientfic work, would be in accord with the best wishes of the donor, and would place the Royal College of Surgeons of England amongst the foremost institutions of Europe.

The President and Council would be adding much to their honour if, when an endeavour is being made to strengthen the Empire by a consolidation of the Colonies, they founded an Institute in the mother country which should draw to it students from all parts of her Majesty's dominions.

Dr. Wilks, F.R.S., 72, Grosvenor Street, has acted as secretary.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A QUARTERLY meeting of the Council was held at the College on Thursday last. The minutes of the Extraordinary Council held in December last were read and confirmed.

The Council, on the recommendation of the Museum Committee, resolved to purchase for the museum the collection of Entozoa, made by the late Dr. T. Spencer Cobbold, and the manuscripts relating thereto.

It was announced that one essay had been received for the Jacksonian Prize.

An analysis of the circular-letter sent to the Fellows for the purpose of ascertaining their feeling regarding the election of members of Council by the Fellows and Members of the College was submitted, and is as follows:—

CIRCULAR TO FELLOWS.

Analysis of Answers.

Number of circulars sent out		987
Answers received		706
Difference		281
Returned through Post for various reasons ...		21
Unanswered...		260

From the 706 answers, 6 must be deducted as giving no decision one way or the other.

Of the remaining 700 answers, it was stated that in reference to—

Question (a)—In your opinion, should Members of the College be allowed to vote for Fellows as Members of the Council? The numbers were:—

Fellows voting "No"		419
Fellows voting "Yes"—		
Answers unqualified...	181	
Answers qualified	95	
Total Fellows voting "Yes" ...	—	276
Majority for "Noes"		143

And that in regard to—

Question (b)—In your opinion, should Members of the College be eligible for seats on the Council? The numbers were:—

Fellows voting "No"		526
Fellows voting "Yes"—		
Answers unqualified	84	
Answers qualified	88	
Total Fellows voting "Yes" ...	—	172
Majority of "Noes"		354

It was resolved that the Committee on Charters and By-Laws be requested to send in a further report as soon as possible in reference to the proposed changes of charters and by-laws.

Professor HUMPHRY'S resignation as a member of the Court of Examiners was received and accepted, to take effect from after the Pass Examination for the Membership now taking place. The election of a successor to him will take place at the next ordinary meeting of Council.

Mr. F. A. FISHER, who had been called on to explain certain advertisements by him, in compliance with the conditions of the Council, undertook to cease from issuing advertisements and publications in violation of the by-laws, and on this understanding the Council took no further action in the matter.

A letter, received from the Metropolitan Counties Branch of the British Medical Association, was read, communicating the resolutions passed at a meeting of that body held at the School of Mines on December 3rd last (the proceedings of which were published in the BRITISH MEDICAL JOURNAL of December 11th, page 1185), and it was resolved that the President of the Branch be informed that the letter had been laid before the Council.

The important memorial printed above, in relation to the disposition of the funds accruing to the Council by the Erasmus Wilson bequest was received, and it was resolved that they be informed that the disposal of the funds was already under the consideration of a committee of the Council, to which the memorial will be referred.

Sir SPENCER WELLS moved, and Mr. JONATHAN HUTCHINSON seconded, the following resolution, which was carried by 11 to 8:—"That, although the Council are not prepared to give effect to the recommendation contained in the first resolution carried at the meeting of the Fellows and Members held at the College on November 4th, 1886—the Council are prepared to act upon the second resolution, so far as to appoint a small committee to confer on the subjects of the first resolution with representatives appointed by the Association of Fellows and the Association of Members."

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room, Exeter Hall, Strand, London, on Wednesday, the 19th day of January next, at 2 o'clock in the afternoon.

Tuesday, January 18th, 1887.—Scientific Grants Committee, 5.30 P.M.—Committee on Work of Collective Investigation, 6.30 P.M.—*Wednesday, January 19th*, 1887.—Arrangement Committee for Dublin Meeting, 9.30 A.M.—Arrangement Committee for Annual Meetings, 10.30 A.M.—Journal and Finance Committee, 11.30 A.M.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, December 16th, 1886.

BRANCH MEETINGS TO BE HELD.

GLOUCESTERSHIRE BRANCH.—The next ordinary meeting will be held at the Gloucester Infirmary, when Dr. Batten will give his presidential address, on Tuesday, January 18th, at 7.30 P.M.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held, by the kind invitation of Dr. Mickle, at Grove Hall, Bow, on Thursday, January 20th, at 8.30 P.M. The chair will be taken by Cornelius Garman, Esq. Dr. Mickle will demonstrate a number of patients illustrating various forms and phases of insanity and general paralysis of the insane. Dr. C. R. Walker will show a patient suffering from locomotor ataxy, with perforating ulcer of the foot.

OXFORD AND DISTRICT BRANCH.—The next general meeting will be held on Wednesday, January 26th, 1887. Members who wish to read papers or show cases are desired to send notice of such intention to one of the honorary secretaries, on or before January 18th.—Dr. DARBISHIRE, 60 High Street, Oxford; W. L. MORGAN, Esq., 42, Broad Street, Oxford.

DUBLIN BRANCH.—The annual meeting of this Branch will be held in the Hall of the King and Queen's College of Physicians in Ireland on Thursday, January 27th, at 4 P.M. The President, Dr. Grimshaw, will give an address on the State in its Relation to Medicine.

NORTH OF IRELAND BRANCH.—A meeting of the above Branch will be held in the Belfast Royal Hospital on Thursday, January 27th, at 12 noon. Members who may be willing to contribute papers or read notes of cases are requested to notify same to JOHN MOORE, M.D., Honorary Secretary.

SOUTH EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of the above District will take place at St. Bartholomew's Hospital, Chatham, on Friday, February 18th. Gentlemen desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary of the District, A. W. Nankivell, F.R.C.S., St. Bartholomew's Hospital, Chatham, not later than January 29th. Further particulars will be duly announced.—A. W. NANKIVELL, Honorary Secretary, St. Bartholomew's Hospital, Chatham.

HEALTH OF FLORENCE.—The sanitation of Florence, which has been most unfavourably commented upon, in a series of articles in a contemporary, is to be thoroughly inspected and reported upon by a skilled English sanitary engineer; and Dr. Baldwin, of Florence, has started a subscription-list for the purpose.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Diagnosis of Tumours of the Bladder.—M. Pierre Sébileau on the Heart and Large Abdominal Tumours.—Pilocarpine in Datura Poisoning.—Phosphatic Calculus.—Reciprocal Influence of Diabetes on Syphilis.—Septicæmia of Rabbits.—Transmission of Hysterical Symptoms by means of a Magnet.—Disadvantages of Milk Diet.—M. Quinquaud on the Reaction of Urine containing Albuminoids or similar Bodies.

At the French Congress of Surgery, M. Guyon made the following statement concerning the diagnosis of tumours of the bladder. Hæmaturia is a very important symptom on account of its duration, its frequent recurrence, and its being easily provoked by the mere passage of a bougie. This serves to distinguish a tumour of the bladder from a tumour of the kidneys. The latter are recognised by the increased size and mobility of the kidneys, the concomitant varicocele frequently observed, and the cylindrical clot, peculiar to hæmaturia and colic. A neoplasm in the wall of the bladder is discovered by examining the rectum and the bladder. Another important symptom is the increased size of the bladder. The introduction of a catheter does not reveal the presence of a tumour, but in certain cases may afford valuable indications. It has been suggested that perineal incision should be employed in order to determine the exact spot to which the growth is attached. M. Guyon does not recommend this, except in cases in which the tumour causes complications such as cystitis, retention of urine, or any kind of disturbance in the urinary function. In such cases the operation should be done rapidly. M. Guyon prefers hypogastric to perineal operations, and uses the actual cautery in the lower part of the bladder. He performed eighteen operations on fifteen patients, and discovered thirteen malignant and two benign tumours.

At a recent meeting of the Biological Society, M. Pierre Sébileau read a paper on the heart and large abdominal tumours. Whilst house-surgeon at the Salpêtrière Hospital in Dr. Terrillon's ward, he was struck by the frequency of cardiac complications in women suffering from large tumours of the abdomen. Among forty-six cases of that kind the condition of the heart was not noticed in eighteen; in eleven it was unaffected, but in seventeen there was functional disorder. Among these seventeen there were thirteen cases of cystic disease of the ovary, four of solid tumours of the ovary, and one uterine myoma. In the eleven cases in which there was no cardiac affection there were six of ovarian, or parovarian, cysts, three of uterine myoma, one of chronic encysted peritonitis, and one of large hydatid cyst of the liver. The conditions noticed were hypertrophy of the left ventricle, or dilatation of the same cavity, according to the period of the affection at which the patient was examined. Frequently both symptoms were co-existent. Hypertrophy is difficult to recognise, but dilatation produces mitral regurgitation. A *souffle* with the first sound is a constant symptom, systolic friction-sound is rare, and the pulse is slow and feeble. The heart may be affected by disturbance of the general abdominal circulation from pressure; by increase of area in the circulatory system; by secondary renal lesions resulting from the compression of the ureter; by reflex spasm of the general capillaries, or by deterioration of the blood. Pressure on the aorta, however, is in all cases the cause of the existing hypertrophy, or dilatation.

Dr. Roth (Nagy Bajour, Hungary) was summoned to a little girl, aged 4, whom he found quite unconscious. The pupils were dilated, the face and the rest of the body were swollen as in dropsy, and covered with a rash resembling that of scarlatina. The little patient was uneasy and restless, and ground her teeth. Pulse, 146, slight and weak; respirations, 40; temperature, 39° Cent. (102.2° Fahr.). Her bowels had not been opened, nor had she passed urine since the commencement of the attack. A local medical man had prescribed fifteen centigrammes of antimony; but her father, who was a chemist, being persuaded that this would do no good, gave her a solution of sulphate of copper. She vomited a large quantity of the fruit of the datura stramonium. Dr. Roth, remembering how Professor Purjeck had cured a case of atropine poisoning by means of subcutaneous injections of pilocarpine, administered half a centigramme of that drug in twelve hours. This produced neither salivation nor perspiration, and there was no improvement. After a centigramme had been injected, however, the rash and the swelling began to subside. A quarter of an hour later, another centigramme was injected, and the child's condition improved still more. The injections were continued, and at six o'clock the pupils had become almost normal. Pulse, 120; temperature, 39.7° Cent. (102.9° Fahr.). The patient spoke with ease, and said she felt hungry. An hour later, as there was still no perspiration, another half centigramme was injected. Salivation and perspiration ensued, and rapid recovery followed. Altogether, five grammes and a half were administered. Dr. Roth considers that this dose was necessary to neutralise the poison.

Dr. Arnozan, in the *Journal de Médecine de Bordeaux*, reports that a child, aged 14, suffering from coxalgia, was treated for six months with the Coirre solution of sulphate of lime, in doses of two spoonfuls a day. This preparation contains hydrochloro-phosphate in the proportion of one gramme in twenty. The patient had three attacks of nephritic colic, at intervals of a few days, characterised by vomiting and slight renal pains. Three small calculi were passed during micturition. The phosphatic treatment was immediately suspended. There has been no return of the colic, nor any sign of renal lithiasis for the last three months. The coxalgia is improving, and there are no lesions of the internal organs. The largest of the three calculi passed by the patient was examined. It was about the size of a hemp-seed, rough on the surface, greyish-white in colour, and weighed about twenty-five milligrammes. With the exception of traces of organic matter, it consisted entirely of phosphate of lime, a composition which is somewhat exceptional. Phosphates are not rare in renal concretions, but they do not exist alone, and are generally found in conjunction with uric acid or uratic salts. In the present case, the phosphate of lime was the sole mineral element in the calculus. From an etiological point of view, it is impossible not to connect this with the treatment. The composition of the calculus, its formation in a child without any hereditary predisposition whatever to gravel, the administration of a considerable quantity of phosphate, the cessation of the colics immediately on the discontinuance of this medicament—all tend to prove how the disease originated. One case, however, is not sufficient to condemn phosphatic treatment, which is so beneficial in many cases. Dr. Arnozan thinks that the motionless condition of the patient conduced to lithiasis. This experience suggests that the examination of the urine of patients undergoing such treatment might give valuable indications of the time at which the treatment should be suspended or discontinued, and that, more especially in cases of patients kept in a state of immobility, it might be advisable to substitute phosphate of soda and potassium for calcareous phosphates.

In a recent article published in the *Journal des Connaissances Médicales*, the question of the reciprocal influence of diabetes upon syphilis, and of syphilis upon diabetes, was discussed. The question of the connection between diabetes and syphilis is of recent date. Different authors have only kept in view the fact of syphilis being regarded as the cause of diabetes, and have paid but little attention to diabetes coexisting with syphilis. It is the latter point which gives great interest to the recent thesis of M. Arnaud. Two circumstances may arise where diabetes and syphilis are co-existent. (1) The patient may have been suffering from diabetes for a longer or shorter period when he contracts syphilis, and the latter complaint is modified in its evolution and progress from the fact of diabetes having preceded it. (2) Diabetes developing after syphilis seems to be the direct or indirect consequence of that disease. The result of M. Arnaud's observations on this subject have led him to the following conclusions: when diabetes has pre-existed, it modifies the clinical aspect of syphilis, either because it induces cachexia, and thus renders the patient less able to resist the invasion of the disease, or because it exercises an injurious influence upon the anatomical elements by bringing them into direct contact with the sugar contained in the pathological secretions of the human economy. It cannot be denied that syphilis may give rise to diabetes, which may be more or less persistent, owing to the changes in the blood and tissues which it constantly produces. Syphilis may bring on another form of diabetes through tertiary products (gummata) becoming developed in the surrounding parts of the fourth ventricle, and compressing the centre of glycosuria described by Claude Bernard. When syphilis develops in a diabetic patient, infective chancre and secondary lesions have a tendency to ulcerate. As these deviate from their ordinary aspect, they may give rise to an error in diagnosis. Under these circumstances, the evolution of syphilis appears more rapid than in a normal case of the complaint. According to some writers, sugar disappears when specific symptoms show themselves. M. Arnaud's observations prove that sugar seems to leave the urine more rapidly in these cases than in ordinary diabetes. Syphilis will prove more serious in diabetic patients than in others. Anti-diabetic should be combined with anti-syphilitic treatment in such cases.

At a recent meeting of the Paris Biological Society, M. G. Daremberg made the following statement concerning septicæmia of rabbits. This disease is produced by the inoculation of tuberculous matter—lungs, glands—taken from dead bodies during the heat of summer, when there is slight putrefaction. Rabbits thus inoculated die after an interval of twenty-four to forty hours. Septicæmia is inoculable by means of subcutaneous, peritoneal, or venous injections, and also by trephining. Some hours before death the animal loses all desire for food, is in a panting condition, and is depressed; it is attacked by diarrhœa and convulsions, it cries out, drags itself painfully along between the convulsions, is paralysed in one or more of its limbs; sputum, mixed with blood, issues from the nostrils and mouth. *Post mortem* examination reveals the following conditions: Sero-sanguineous infiltration of the areolar and connective tissues around the place of inoculation; ecchymoses, slight capillary hæmorrhages on the surface of the intestines, areas of pulmonary apoplexy, hepatic infarcts, the spleen enlarged and black; occasionally serous or fibrinous effusion in the peritoneum and pleuræ; large blood-clots scattered about, more especially in the sinuses of the dura and pia mater; occasionally slight meningeal hæmorrhages, or, in some cases, encephalic and medullary pachymeningitis. These clinical and pathological phenomena are in accordance with those described by M. Koch in cases of experimental septicæmia of rabbits, with those described by M. Charrin in cases of septicæmia produced through deteriorated blood in charbon, and by M. Pasteur in cases of disease inoculated by means of the microbe of saliva. M. Daremberg states that the spinal marrow taken from his rabbits, whether in the fresh state, or after drying for twenty days, causes death in rabbits in twenty-four to forty hours. From the twentieth to the twenty-fifth day of desiccation, the toxic properties diminish in strength, and the medulla kills the animals only after the lapse of from three to five days. When the twenty-fifth day of desiccation is reached, the medulla does not generally kill the animals, but they are ill for two or three days (loss of appetite, depression, etc.). It was observed that in two cases, the caudal extremity of the spinal marrow after only eighteen days of desiccation, did not kill the animals. After ten transmissions from one rabbit to another, the medulla kills the animals in five hours, and at this stage the disease becomes epidemic, and kills nearly all the animals in close vicinity. Medulla dried in oxygen kills rabbits twice as rapidly as when dried in the open air. Air at 55° Cent. (131° Fahr.) vapours of nitrogen, carbonic acid, mercury, at 15° cent., and 55° cent. (131° Fahr.), those of osmic and hydrocyanic acids, pyridine, iodine, ethyl, or amyl, benzine, turpentine, sulphur, carbon, thymol, paraldehyde, methylated spirits, acetic ether, are all powerless to diminish the toxic properties of the medulla. Iodoform, phenol, and ammoniac vapours delay the death of the animal one or two days. Vapours of chloral, chloroform, aldehyde, amylic alcohol, sulphuric ether, sulphurous acid and sulphuric anhydride, destroy all toxic property in the medullas when allowed to dry in an atmosphere impregnated with any of them during four or five days. The same result is obtained by means of nitrous vapours, or those of chlorhydric acids, which reduce the medulla to a pulp. The blood and all the organs of animals that have died from this infectious disease contain an ovoid micrococcus, which may be cultivated in veal broth and in gelatine. The latter is not liquefied. The micrococci are occasionally scattered in small rows, or in zooglœic clusters, rarely in twos or fours. These conditions, however, are not constant, and the successive cultivations in broth and gelatine present sometimes one aspect, sometimes another, and often a variety of aspects. The toxic action of this micro-organism is always the same, and is equal to that of the fresh medulla. These cultivations preserve their virulence at 55° Cent. (131° Fahr). Towards the seventeenth day they become less poisonous, and cause death only in four or five days; in some cases even they are inert. The second cultivations are less virulent than the first; both coagulate milk. These properties prove the analogy of this micrococcus with that described by M. Pasteur, of which the first cultivations die in fifteen days, and the successive ones gradually fall away. They differ from the properties of the microbe described by M. Charrin, of which the cultivations die at 45° Cent. (113° Fahr.), and of which the second cultivations are as virulent as the first. M. Daremberg has attempted the Pasteur method of successive inoculations, but without positive results. The precise method of vaccination in the case of this septicæmia has yet to be determined.

M. Babinsky, in a paper recently read at the Paris Biological Society, stated that by means of a magnet certain hysterical symptoms may be transferred from one person to another, even at some distance. In a first series of experiments upon two hystero-epileptic patients, capable of being hypnotised, the hemi-anæsthesia from which they suffered was transmitted from one to the other, as well as other symptoms produced in the patients by suggesting different forms of paralysis, brachial or crural, monoplegia, hemiplegia, paraplegia, coxalgia, or dumbness. In a second series of experiments, one of the above-mentioned patients was placed in communication with others suffering from different forms of hysterical paralysis. Then symptoms were transmitted to the hypnotised patient, whilst still continuing in the original subjects. After two consecutive experiments, an improvement was observed in one case of spontaneous paralysis. In a case of hemiplegia, M. Babinsky succeeded in causing the disappearance of paralysis, after four consecutive experiments of the kind above described. A method of treatment is thus suggested. The author has proved, by other experiments, that hysterical symptoms are not the only ones capable of transmission. He succeeded in transmitting other symptoms, such as paralysis, tremors, etc., combined with organic changes of the nervous system. In these experiments, made in Dr. Charcot's ward at the Salpêtrière, suggestion or simulation was carefully avoided.

At a recent meeting of the Société Médicale des Hôpitaux, M. Debove presented a patient, who is in good health at the present time. His case offers a striking example of the disadvantages of a milk diet. Two years ago he showed signs of alcoholic gastritis, followed by symptoms of simple ulcer of the stomach. A milk-diet was adopted, and the patient finally took as much as eight litres a day. After a certain time he grew weak, and reached such a condition of cachexia that he was unable to stand. M. Debove washed out the stomach, removing two and a half litres of liquid. This was repeated, and the patient was put on a diet consisting of one and a half litres of milk, with a little meat. The patient lost 36 lbs. under a milk diet. Since M. Debove's treatment has been adopted, he has gained 30 lbs., and is now perfectly well. The excessive dilatation of the stomach was due to an excessive milk diet.

At a recent meeting of the Paris Biological Society, M. Quinquaud read the following note. When to distilled water containing traces of albuminoids or other similar bodies a few drops of cupro-potassic solution are added, a beautiful violet colour is produced, called the *réaction du biuret*. This reaction is common to a great number of chemical substances, and, when found in a liquid, does not absolutely prove the presence of albumen or peptone, but makes it very probable. On attempting to get the same reaction in urine while cold, or only slightly heated, there is in the normal state a compound precipitate of a greenish-blue and yellowish colour. In urine containing albuminoids or analogous substances, however, the tinge is a pale agate-blue, a dirty blue, a pale sky-blue, or slightly violet; in a word, it is a modified *réaction du biuret*. To appreciate the difference, one has only to compare the two shades produced in two test-tubes, into one of which are put two cubic centimètres of normal urine with three or four drops of Fehling's solution; whilst in the other is put the same quantity of pathological urine containing albuminoids or similar bodies. If the same quantity of copper solution be now poured into the tubes, the difference in the shades of colour will be very striking, and at the same time the eye will perceive the shade of the modified *biuret*. When, in working according to this method, this special colour is met with, the existence of an albuminoid should be suspected, or at all events a modification of the urinary secretion, which may indicate the probable existence of a renal affection. This reaction has already been of great service in cases of nephritis where albumen could not be detected by the ordinary means of investigation, or in slight "peptonuria," with traces of albumen; in a word, in those affections of the kidneys called latent, or in general diseases with a disordered urinary secretion.

CORRESPONDENCE.

THE ERASMUS WILSON BEQUEST AND THE FUNDS OF THE COLLEGE OF SURGEONS.

SIR,—The letter written by "One Who Knows" in the JOURNAL of January 8th, contained much that is worthy of reflection. The Fellows and Members have every right to demand that they should be consulted as to the utilisation of the Erasmus Wilson legacy. I cannot, myself, understand why there should be any mystification about the building-plans which have been laid before special committees at the College of Surgeons. Many Fellows and Members, including myself, have held Museum appointments, and enriched the anatomical, pathological, and other collections by preparing—often

at the cost of several years of labour—large series of specimens which serve to illustrate different structures and diseases. We consider that we ought to be consulted, or that at least no intelligence as to the views and designs of the Council should be withheld from us, for some of us, at least, must be competent to give an opinion on Museum questions, whilst it is highly probable that some of the distinguished surgeons on the Council have had little, if any, real experience of museum work.

At the same time, "One Who Knows" is hardly just to the College, especially when by that term he signifies what should properly be called the Museum. The conversion of the College into a teaching institution must be a serious, and might be an unadvisable, innovation. The establishment of professorships is open to several objections; the lectures already delivered at the College do not always attract large audiences eager to be taught. The medical public go there to hear distinguished surgeons, and the friends of a young lecturer flock to his first lecture, but few go really to learn; and this must always be the case so long as there are so many other institutions organised for scientific and medical education.

The Museum has done all that can be done under the present circumstances, and it is difficult to see how its sphere of utility could be advantageously enlarged, though increased means for continuing its present work on a larger scale are very desirable. I deny entirely that it affords no facilities for higher study or research in the most essential departments of biological study. During the past twenty years, morphological work of the most valuable kind has been carried on there by leading scientists and by industrious juniors, and the authorities have afforded these workers every facility by purchasing rare or requisite specimens whenever required. As for the question of pathology, the Museum must always be like a large city far from the sea or a river. Dr. Goodhart and myself could hardly have done any work of the slightest value without the facility of procuring series of specimens from hospitals to which we happened to be attached at the same time that we held appointments in the Museum. Without agents for the College, such as we were, at the London hospitals, the best kind of pathological material must inevitably be lost to the Museum. This must be borne in mind by all who have a voice in the disposal of the legacy.

The workrooms may be and will be enlarged, and called "laboratories," if a high-sounding name be preferred. There need be no difficulty about histology; as to establishing physical and physiological laboratories, this implies an innovation not to be proposed lightly. Lifts and other conveniences will be necessary, as the workrooms must be placed at the top of the buildings. An increased staff will be needed; and for reasons just stated, it should be almost imperative that the officers of the pathological department be selected from the ranks of registrars or teachers at hospitals.

In fairness to the College, as distinct from the Museum, "One Who Knows" must remember that most of the assertions which have got abroad concerning the proposed buildings are quite premature. I understand that only £800 *per annum* in rents would be dropped according to the largest estimate ever conceived by the Council. The College counts as Nos. 40, 41, and 42, Lincoln's Inn Fields, and it has been suggested that No. 39 should be demolished to make room for the extension of the library, and No. 43 taken down, the new pathological museum being reared on its site. Lastly, no action has been taken by the Council beyond the adoption of a report from the "Committee on the Practicability of Adding a New Wing to the Museum of the College," asking for enlarged powers.

No good will be done either by abuse of the Council and the genial lay officials of the College on the one hand, or by needless mystification on the part of the College authorities on the other. Let all be known, openly discussed, and submitted to the Fellows and Members, and also to scientists who, through experience in museum-work, are in a position to offer valuable advice.—I am, etc., ALBAN DORAN.

THE UNIVERSITY OF WESTMINSTER.

SIR,—I trust that the delegates appointed by the two Colleges to consider a scheme for conferring a degree in medicine and surgery, will also discuss how it can be given without further examination to those who, like myself, have been in active practice for over twenty years, and who hold the two qualifications of L.R.C.P. and M.R.C.S. —I am, etc., G. P.

January 10th, 1887.

THE SURGICAL TREATMENT OF PARALYTIC LARYNGEAL STENOSIS.

SIR,—Under the above title, I find in the BRITISH MEDICAL JOURNAL of January 8th, p. 72, an annotation, on which, with your permission, I should like to offer a few remarks. According to that annotation, Dr. G. B. Hope, of New York, proposes to open the larynx "in cases of paralysis of one or both abductor muscles of the larynx, where respiration is impeded, and where the lesion is of a permanent character," and "remove as much of the paralysed cord, together with any overhanging tissue (?), as seriously obstructs the lumen of the glottis." It is added that there could be little doubt that, where indicated, this proceeding would be preferable to "intubation" of the larynx.

Permit me to observe, in the first place, that paralysis of one abductor, as I have proved beyond doubt (*Berliner Klinische Wochenschrift*, 1883, p. 759), never causes, *ipso facto*, in adults impairment of respiration. Of course the original disease, which produces the unilateral abductor paralysis, may also cause dyspnœa by additional direct compression of the lower air-passages, as in cases of goître, aneurysm of the aorta, cancer of the œsophagus, etc., but obviously in such cases the obstruction will not be relieved by an operation on the paralysed vocal cord. Practically, adults only are concerned in this question. In infants, even unilateral abductor paralysis may produce dyspnœa (Sommerbrodt, *Breslauer Aerztl. Zeitschrift*, No. 10, 1881), but an event of this character is excessively rare; in fact, Sommerbrodt's case is, so far as I am aware, unique.

In cases of bilateral paralysis of the glottis-openers, removal of the vocal cords would, no doubt, relieve the laryngeal dyspnœa, but this relief appears to me to be rather dearly bought at the expense of the incurable and complete loss of voice which must necessarily follow such an operation. Considering that this form of paralysis leaves the voice altogether unimpaired, I fail to see why, as hitherto, tracheotomy simply should not be performed, and the patient provided with a valve to the tube, which enables him to speak without occluding the tube with his finger. In this manner, the danger of laryngeal suffocation is averted, and normal voice retained. I do not believe that many patients will be found who, when the two alternatives are fairly laid before them, and their consequences fully explained, will elect to have their vocal cords cut out. I may observe here, in passing, that the rather general prejudice, namely, that the permanent wearing of a tracheal tube curtails life, is not borne out by facts. Of the two patients on whom I performed tracheotomy for bilateral paralysis of the glottis-openers exactly eight years ago, and whom I showed at the meeting of the Clinical Society on April 25th, 1879 (*Clin. Soc. Trans.*, vol. xii, p. 184), the one is alive and in robust health, the other only succumbed in the course of last year to the fundamental disease (tabes dorsalis). Quite recently, a patient was shown at the Berliner Charitéverein, who has worn a tracheal tube for twenty-four years (*Berliner Klin. Wochenschrift*, November 4th, 1886).

Finally, with regard to "intubation" of the larynx, I must say that I altogether fail to understand its *rationale* in cases of this sort. I will not dispute its usefulness in cases of acute laryngeal stenosis (œdema, diphtheria), though even with regard to those it is still on its trial. But it appears to me absolutely unwarrantable to introduce and leave a large foreign body in cases of chronic stenosis between the vocal cords, where it not only prevents the formation of the voice, but may—and, as experiences with Schrötter's tubes and plugs have shown, sometimes will—lead to decubital ulcers and even to perichondritis, whilst, when the laryngeal tube is coughed out, or blocked by secretion, the patient is in danger of immediate death. Add to this that the introduction of these tubes is admittedly not easy, and it will be seen that, as the tube will necessarily have to be often cleaned and reintroduced by experienced hands, the adoption of this method in such cases, even if everything goes well, means that the unfortunate patient will have to remain until the end of his life under almost daily medical supervision.—I am, Sir, yours obediently,

Wimpole Street. FELIX SEMON, M.D.

SCARLET FEVER IN EDINBURGH.

SIR,—Under the head of "Scotland," in the JOURNAL of January 8th, you notice that, of 138 patients in the Edinburgh City Fever Hospital, no fewer than ninety-six were suffering from scarlet fever, of whom forty-six were adults.

The notification of infectious diseases has been carried out in Edinburgh long and well, and an excellent hospital exists for the isolation and treatment of infectious diseases; nevertheless, such a report as that comes from Edinburgh. There must be some explanation for the existence of an epidemic of such a dangerous and preventable disease,

occurring in a town so favourably circumstanced as Edinburgh; and, considering the mischief it is likely to do, not only among the regular inhabitants of Edinburgh, but also to that great body of youth who annually flock to her various educational institutions, it is a calamity to be deplored, and, if possible, its recurrence ought to be prevented.

Following the paragraph from which I have quoted, you have another on the excellent sanitary condition of Galashiels. Now, Galashiels has no complicated system of underground drainage, whereas such a system exists in Edinburgh; and in one of the series of Health Lectures, delivered in Edinburgh by Dr. Stevenson Macadam, he stated, if my memory serves me, that the only ventilation of the main drains of Edinburgh was into the houses. I have seen no contradiction of that statement, which was made before a large audience, and reported in the newspapers. If it be true, it may perhaps help us to account for the present epidemic of scarlet fever in Edinburgh, as well as for the fact that typhoid fever and diphtheria are seldom, if ever, absent from the sickness or mortality returns. The law has done all that is needed to enable those who are willing to perfect their sanitary arrangements, and the responsibility for imperfect sanitation of towns rests entirely between the medical officer of health and the Corporation. The most efficient medical officer of health may, however, be rendered powerless by an obstructive Corporation, whereas an inefficient medical officer of health is an unmitigated evil. It would be satisfactory for those who are interested in the welfare of our modern Athens to have some authoritative contradiction to the statement of Dr. S. Macadam, or to know what steps have been taken, since his lecture was delivered, to improve the sanitary arrangements in a city where so many of our best youth annually congregate.—I am, etc.,

JOHN HADDON, M.D.

Melrose, N.B., January 9th.

GENERAL HOSPITALS AND THE INSANE.

SIR,—I quite agree with Dr. Rayner that insane patients should be admitted into general hospitals. I advocated this in a paper of mine upon the "Examination of Lunatics and Lunacy Certificates," which is reported in the July number of the *Liverpool Medico-Chirurgical Journal* for the year 1885.

It seems to me unfortunate that the clinical teaching and study of mental diseases should be, even at the present time, conspicuous by their absence at most of our general hospitals, so that the student is deprived of the advantage of being able to daily observe patients suffering from mental alienation. Of course, the cause of this is not far to seek. General hospitals, as a rule, are not adapted for the reception and treatment of insane people; but surely this is no reason why they should not be made so, either by setting apart a ward or two properly equipped in every way for such cases, or by erecting a small building distinct from, but adjoining, or in close proximity to, the main one.

If some such arrangement as this could be carried out, at any rate at those hospitals which have medical schools in connection with them, it would be advantageous, not only to the patient, but also to the student and physician.—I remain, Sir, yours obediently,

STANLEY A. GILL.

Shaftesbury House, Formby, near Liverpool.

CARRIAGE-TAX.

SIR,—Now that we are again required to put our hands into our pockets to pay the carriage licence duties for the current year, the time seems fitting for arousing the attention of the profession—which I fear has rather gone to sleep of late—to the hardship and injustice of the tax.

A very active movement for the abolition of the tax has been set on foot by the "Scotch Association of Carriage Builders" and the "Institute of British Carriage Manufacturers," in the interest of their own trade, on the ground that it blights the industry of coach-building, checks enterprise, and diminishes the earnings of workmen, and also that it is a grievous burden on medical men and others whose duties render it imperative that they should use a carriage.

These assertions can scarcely be gainsaid, though it has hitherto been found difficult to bring them home to the minds and consciences of recent Chancellors of the Exchequer; but it is understood that Mr. Goschen is at least not unfavourable to fair and full consideration of the subject and it is our duty to ourselves and to those who have been advocating our claims with their own, to do everything to further the cause.

In the event of the Chancellor not being able to abolish the tax at Mr John Philipson, of Atkinson and Philipson, carriage builders, Newcastle-on-Tyne, who has taken a leading part in the movement, suggests a modification which would afford us some present relief, and that, as he clearly shows, not only without loss, but probable gain to the revenue, namely: to leave two-wheelers, and cabs and hackney carriages running under police regulations at 15s., as at present; to withdraw the restriction of weight of 4 cwt.; to make all one-horse carriages with four wheels £1 1s., and all pair-horse carriages £2 2s., as at present. This would be a great boon to medical men, as they could have an open phaeton, victoria, etc., for £1 1s.; also a brougham for wet weather, £1 1s.; also a two-wheeled car for going long distances, 15s; in all, £2 17s., instead of £4 19s., as at present.

Now, what I propose is, that a petition to the House of Commons, which may be stated in a few words, and which need not necessarily be uniform, be drawn up by the Secretary of each Branch of the British Medical Association, to be signed at the next meetings, and by as many members of the Branch as possible; that the petitions be entrusted to the local members of Parliament to be laid before the House, and every effort be made to explain our grievance, and to enlist the support of the members. Already much has been done in this way in Scotland where the "Association of Carriage Builders" has obtained promises of support from fully one-half of the members for Scotland.

The British Medical Association now includes between 13,000 and 14,000 members, and the active co-operation of so large a number, with the presentation of petitions signed by even one-half, could not fail to greatly promote the object we have in view.—I am, Sir, yours faithfully,

WILLIAM CAIRNS WICKS, M.B., M.C.

Newcastle-on-Tyne, January 8th, 1887.

UNQUALIFIED ASSISTANTS.

SIR,—It cannot but be admitted that many eminent medical men have been unqualified assistants, and that some of these have rendered great service to the profession.

I quite agree that unqualified assistants should not be allowed to swamp the market to the prejudice of the hard-working and respectable qualified ones, except they can satisfactorily show that they are pursuing their studies at some recognised medical school, and that it is their intention to qualify.

With regard to full hospital curriculum assistants being allowed to practise (unless they are still students), it would only, in many instances, be putting a premium on the beer, 'bacca, and billiard fraternity. Of course, any regulations of this kind would fall hard on many; but they must recollect that that which they sow in youth they must reap in old age. At the same time, the law which applies to the unqualified assistant should also include that "officious and knowing" class of individuals, the prescribing druggists.—Yours, etc.,

W. B.

SIR,—I entirely concur in the sensible, though evidently constrained, remarks on this subject by Mr. Napper. Experience of both qualified and unqualified assistants gives me unhesitating preference for the latter; among others, I will mentally refer to three of the former who had each distinguished himself in legally qualifying examinations. Neither could dispense nor set himself at work; one of these gentlemen, and he a man who had taken honours at his university, on being called to a case of fractured fore-arm, placed the splint upside down; a second, a polished and scholarly man, could neither read a prescription nor fold a powder; the third, a Doctor of Medicine, always ready in quotation of authority, on being deputed to a midwifery case, gave such terrific "assistance" to the poor woman, that I at once made an excuse to supersede him in the attendance. In the course of a long practice, I had two other qualified assistants, both industrious, but who, unrestrained by good breeding, brought their competence to bear in comparison of my inferior abilities. A legally unqualified, but practically a very competent and well-mannered man, I had the valuable assistance of during many years, and seeing that such men have no ulterior motive beyond the preservation of a good repute, I should, if again in general practice, rejoice in the advantage obtainable from a class of medical assistants whose reliance for a livelihood is in qualification for the daily exercise of practical duty rather than that at first often only nominal qualification conferred by collegiate examination, whose possessor, now and then, takes with it a motive not altogether favourable to the peaceable course of his employer's practice.—Your obedient servant,

PROBE.

THE Tendring Guardians have increased the salary of Dr. Foster, as Medical Officer to the Workhouse, from £40 to £50 *per annum*.

MEDICO-LEGAL AND MEDICO-ETHICAL.

THE PRESCRIPTION OF ALCOHOL TO TOTAL ABSTAINERS.

We have already referred to a case in the Brompton County Court in which the father of a deceased member of a temperance society (the Benjamin Hadfield Lodge of the Original Grand Order of the Total Abstinent Sons of the Phœnix) sought to recover from the trustees of the society the sum of £8, the usual amount paid on the death of a member, which the society refused to pay on the ground that the deceased had broken the rules of the society by taking wine which had been prescribed for him by his medical man as a medicine. The secretary of the society informed the deceased that he had thus placed himself out of benefit; the subscription, paid a few days previously, was returned. In consequence of the acceptance of this repayment, the judge found for the defendants, but condemned the rules of the society, and stated he would give every facility to appeal. The defendant's counsel, in the course of the case, having stated that the deceased was treated by Dr. Gaven for dysentery, while death was certified to have resulted from scirrhus of the rectum, "an illness for which port wine would have been the very worst of medicines," Dr. Gaven has written a letter to a contemporary in which he states that, in the earlier part of his professional attendance, the patient was suffering from dysenteric symptoms and great debility and exhaustion, amounting at times to faintness. In consequence, he was ordered port wine in sufficient, but very moderate quantity, knowing that for many years he was a teetotaler. He took the wine with benefit, and it was discontinued after a time. Subsequently, symptoms of epithelioma of the bowel became manifest, and the patient was admitted to a hospital, with a view of having the operation of colotomy performed. At the hospital it was also considered that an alcoholic stimulant should be given to the patient, and he was ordered brandy, which he took daily while an inmate of the institution. He left the hospital at his own request, and died on the second day after his return home. The epithelioma was situated unusually high up.

Sir,—A recent remarkable county court trial has attained a wide publicity. The widow of a member of a Phœnix Total Abstinence Society brought an action against the Society for the amount of death-claim due on her husband's decease. The Society's defence was that the man had broken his total abstinence pledge (the Phœnix insisting on absolute abstinence, without medical exception), by taking some intoxicating wine ordered by his medical attendant. The judge was most righteously indignant at this defence, but was compelled to yield to the defence on the ground that the man himself on his sick bed had accepted the return of his subscription, and his exclusion from benefit.

On inquiry, I am happy to find that this is an isolated society, and is not connected with the great Phœnix orders, leaders of which general bodies assure me that their action in such *bonâ fide* circumstances would have been to pay the widow's claim.

We all know the false medical pretences on which people are apt to father their teetotal pledge-breaking, and also the loose way in which alcoholic stimulants are sometimes ordered; but it ought to be thoroughly understood that the temperance cause is not responsible for such treatment of a man on his death-bed and a widow in her sorrow.—Your obedient servant, Norman Kerr, M.D.

42, Grove Road, Regent's Park, London, N.W.

A Member.—Discreditable as are the circulated "leaflets," and the "board on the wall of the house" of "A Member's" late assistant, with the tradesman-like advertisement thereon of "Advice and Medicine, Sixpence; Visit and Advice, One Shilling," etc., we fear that no really effectual check can be put upon such disreputable proceedings, otherwise than by the direct intervention of the licensing bodies of which he is a member. We would therefore suggest that our correspondent should forward to them one of the printed handbills in question, and more especially a copy of any local paper in which it may chance to have been published, and solicit their attention to the matter. With regard to "the legal aspect of the case," in the absence of the "usual bond" for reference, we are not in a position to tender advice. Perhaps "A Member" will do well to consult his solicitor on his own behalf, and in the interest of the profession at large. So bold an assertion of assumed personal professional freedom on the part of our correspondent's late assistant indicates to our mind some important omission in the bond referred to, otherwise he would scarcely have ventured to provoke his late principal to an enforcement of the penalty usually attached thereto.

ADVERTISEMENT OF THE NAMES OF HOSPITAL STAFFS.

M.D. writes: I herewith forward to you two copies of the *Manchester Courier*. To-day's paper contains a set of advertisements relating to some of the Manchester medical charities—advertisements which, I am sorry to say, are far too common in this district. The paper of December 21st, 1886, contains an article which has appeared in the *Medical Chronicle* for this month. As the article appeared in the *Manchester Courier* before the *Medical Chronicle* was published, it seems to me that it can only have done so with the consent of the author. I think, when members of the profession who are on the staffs of the various medical charities, allow their names to be indirectly advertised, as in to-day's paper, and when others contribute medical articles to lay papers, it need not be a matter of surprise if needy members of the profession resort to direct advertisement.

*** It has long since been decided in the metropolis that such advertisements are not permissible.

THE RIGHT OF L.S.A.'S TO PRACTISE SURGERY.

Dr. McD.—A person holding the diploma of the Society of Apothecaries alone is not legally qualified to practise surgery as well as medicine; in other words, he has no statutory qualification to do so.

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

The following appointments have been made at the Admiralty during the past week:—Deputy Inspector-General E. T. Mortimer to Hong Kong Hospital; Deputy Inspector-General C. A. Slaughter to Haslar Hospital; William Fergusson to be Surgeon and Agent at Banff; C. A. S. Ling, to be Surgeon and Agent at Brightlingsea.

MEDICAL STAFF.

Surgeon-Major F. A. Turton, who retired on temporary half-pay on July 1st last, has been re-appointed Surgeon-Major *vice* Duke Parke, who has retired.

Surgeon-Major F. P. Staples has taken up his appointment as officer commanding at the Depot and Training School at Aldershot, *vice* Surgeon-Major J. Hector, M.B.

Deputy Surgeon-General R. Wolseley, M.D., was accidentally killed at Meerut on December 22nd, aged 52. His commissions bore date:—Assistant-Surgeon, July 28th, 1858; Surgeon, March 9th, 1867; Surgeon-Major, March 1st, 1873; Brigade-Surgeon, November 27th, 1879; and Deputy Surgeon-General, September 8th, 1883. Dr. Wolseley served in the Crimea in 1854-55, and was at the battles of the Alma, Balaklava, and Inkermann (wounded), at the siege and fall of Sebastopol, and at the assaults on June 18th and September 8th (medal with four clasps and Turkish medal). He was Principal Medical Officer with the expedition against the Mahsood Wurzeerees in 1881. He was the brother of General Lord Wolseley.

THE INDIAN MEDICAL SERVICE.

Surgeon E. L. Robinson, Bengal Establishment, who was transferred to the half-pay list in January, 1881, is now removed to the retired list.

Brigade-Surgeon H. Cayley, Bengal Establishment, has been granted an extension of furlough for three months on medical certificate.

Surgeon-Major S. H. Browne, Bengal Establishment, Joint Civil Surgeon of Simla, has been placed in charge of the army headquarters' staff and establishment, *vice* Surgeon G. F. A. Harris.

Surgeon-Major C. F. Pollock, M.B., Bengal Establishment, has leave of absence for twelve months on medical certificate.

Consequent on the completion of his tour of hill duty, Surgeon P. J. Freyer, M.D., of the Bengal Establishment, is transferred from Mussoorie to Moradabad, holding Saharumpore as his grade station from the date of his making over charge at Mussoorie.

The services of Surgeon-Major R. T. Wright, M.D., Bengal Establishment, are temporarily placed at the disposal of the Government of the North-West Provinces and Oude.

Surgeon-Major A. P. Holmes, Bengal Establishment, Medical Officer to the 1st Sikh Infantry, died at San Remo on January 31st, at the age of 51. He entered the service as Assistant-Surgeon, July 27th, 1859, and became Surgeon-Major twelve years thereafter. He served in the campaign on the North-West frontier of India in 1863, and was at the forcing of the Umbeyla Pass (medal with clasp); with the expedition against the Jowaki Afreedees in 1877-78 (clasp); in the Afghan war in 1878-79 (medal); and in the expedition sent against the Mahsood Wurzeerees in 1881.

THE VOLUNTEERS.

Mr. Edward Sharpley has been appointed Acting-Surgeon to the 3rd Volunteer (Lincolnshire) Brigade of the Eastern Division of the Royal Artillery (formerly the 1st Lincoln Artillery Volunteers).

Surgeon J. Robinson, of the 1st Volunteer Battalion of the King's Own Royal Lancaster Regiment (formerly the 10th Lancashire), has been granted the honorary rank of Surgeon-Major.

PROFICIENCY EXAMINATION FOR VOLUNTEER MEDICAL OFFICERS.

Acting-Surgeon writes: Recent correspondence in your columns has shown that there is a desire for a better knowledge of the requirements of the proficiency examination by volunteer surgeons. I wish to suggest that this could be best attained by a course of lectures authorised by one of the three existing organisations: (1) the Volunteer Medical Staff Corps; (2) the Volunteer Medical Association; (3) the Volunteer Ambulance Department.

THE INDIAN ARMY HOSPITAL CORPS.

A Correspondent, writing from Bengal, suggests that the *Manual of the Medical Staff Corps* should be translated into Urdoo and Hindi, for the use of the men of the Indian Hospital Corps, a body of men supposed to represent the Medical Staff Corps in India. That these men are ignorant, he says, may be true, but how can they be otherwise when they have no handbook to study from? This he thinks a really urgent matter.

Suicides in Vienna.—There were never, it is stated, so many suicides in Vienna as in the past year, when 358 persons (280 men and 78 women) destroyed themselves. The oldest suicide was 83 years of age and the youngest 11.

HOSPITAL AND DISPENSARY MANAGEMENT.

CANTERBURY DISPENARY.

THE report presented at the fiftieth annual meeting of subscribers to the Canterbury Dispensary showed that, during the existence of the dispenary, 76,210 persons had been attended; nearly 90 per cent. had been visited at their homes. It was recommended that a gratuity of £50 should be presented to the medical officer, Mr. George Rigden, by the governors, in consideration of his fifty years' service. The adoption of the report was moved by the Dean of Canterbury.

A VICTORIA JUBILEE NURSING INSTITUTE.

AT Taunton, on Saturday, a largely attended county meeting was held, under the presidency of the Earl of Cork and Orrery, Lord Lieutenant, for the purpose of promoting a movement in connection with the Taunton and Somerset Hospital, to commemorate Her Majesty's jubilee. It was resolved to raise a special fund of £10,000, to be applied in establishing a building to be called the Victoria Jubilee Nursing Institute, in building a children's ward, and in extending the out-patients' department, all of which the medical staff regard as of urgent importance. The sum of nearly £2,500 was subscribed in the room, including £500 given by Dr. Liddon on the condition that £5,000 be raised, and £500 by Dr. Kolly under similar conditions.

JUBILEE MEMORIAL HOSPITAL AT GATESHEAD.

THE subscriptions to the building-fund of the proposed Children's Hospital for Gateshead (a memorial of the Queen's Jubilee), already amount to upwards of £1,300. A number of designs for a hospital on the pavilion principle have been received, and are under consideration. The cost of the building and furnishing will be about £5,000; the central portion, which is to be built as early as possible, is to cost about £1,600.

DEAF AND DUMB ASYLUM.

AT the annual meeting of the Deaf and Dumb Asylum, held on Monday last at the Cannon Street Hotel, the report presented stated that, as a result of adopting the oral system of teaching the children in the asylum, a serious expenditure had been incurred. At the Margate Asylum for 300 children, a number of additional rooms suitable for small classes were provided, together with new dormitories and other domestic conveniences, as well as a new infirmary. The committee announced that for the future every child in the asylum capable of being so taught would be trained under the oral system. The old and very dilapidated asylum in the Old Kent Road had been demolished, and a new building, capable of holding sixty little children, was nearing completion. In all, 4,763 children had been admitted into the institution.

EDINBURGH ROYAL MATERNITY AND SIMPSON MEMORIAL HOSPITAL.

ON February 1st, Dr. Underhill will assume duty, for three months, as Physician on duty at the Royal Maternity Hospital, Edinburgh, in place of Professor Simpson, whose term of office for the present session expires then; while Dr. A. H. F. Barbour will succeed Dr. D. Berry Hart as Assistant-Physician on duty. Messrs. G. N. Sutherland, M.A., M.B., and C.M., and A. Primrose, M.B. and C.M., will act for the next three months as Resident Surgeons, in place of Messrs. Netting S. Fraser, M.B., C.M., and M.R.C.S., and Joseph Tillie, M.B. and C.M., and Scott Scholar, whose term of office has expired.

EDINBURGH FEVER HOSPITAL.

THE report on the Edinburgh Municipal Fever Hospital for the month of December gives a very fair idea of the relative numbers of the various kinds of infectious diseases treated in an institution which is freely open to all in the city, and which have occurred in a municipality where compulsory intimation by the profession has been in force for years. On November 30th, there were 100 inmates—45 adults and 55 children. On December 31st, there were 128 inmates—58 children and 70 adults. These consisted of 15 cases of typhoid fever, one of diphtheria, 92 of scarlatina, 4 of measles, 2 of whooping-cough, 11 of erysipelas, and 3 cases in quarantine. In the report, it was mentioned that £30 15s. had been given by friends of patients treated there.

DUNDEE LUNATIC ASYLUM.

AT a quarterly meeting of the Directors of the Royal Lunatic Asylum, held on Monday, the report submitted showed that there were in the asylum 237 pauper patients, and 46 private patients; and that the income (£6,758) for the past six months was £36 in excess of the sum for the corresponding date in the previous year. It was also reported that the amount due to the Bank on the building account for the new asylum at West Green was £53,862. The meeting confirmed the appointment of Dr. James Watson as medical assistant, in place of Dr. Baker, who has received an appointment in the South of England.

PROVIDENT DISPENSARIES AND THE LOWER MIDDLE CLASSES.

DR. ROBERT RENTOUL (78, Hartington Road, Liverpool) writes: In the JOURNAL of January 8th, "M.B." asks for information regarding the above. The question of "wage limit" is a difficult one, and few committees like to discuss it. As the rates of wages vary in the South and Midland Counties, it adds another difficulty. The Manchester Provident Society began with a 30s. wage, but they have now no money limit, but leave the committee and medical men to decide; at the same time, asking others to call their attention to any case of imposition. But it will be found that from 40s. to 45s. is a fair limit. It must be remembered, on the one hand, that as many as six in one family may be bringing in 40s. each; and on the other, that a young man or woman may—when making 50s. weekly—be keeping two old parents. Hence the wide margin for a little worldly common business sense. One of the best plans for stopping abuse is for each "form of application for membership" to be inspected, and signed by the medical man, whom this proposed family wish to be treated by. If he objects to them entering the society, he refuses to sign, and then the committee investigate the case. If the committee agree to pass the family in, then the medical man may refuse to treat them, and if the entire medical staff back each other up, why there the matter ends.

As regards the fees paid, they average thus: Entrance-fee for entire family or single member, 1s.; member's book, 1d.; copy of rules, 1d. (sometimes these are included in entrance fee). Single member, 6d. to 8d.; man and wife, 10d.; each person under 14, 3d. per month. Generally not more than four or five children are paid for, all the others being entitled to benefits. Some object to this, and hold that each child should pay 1d. per week. If there be a family of eight or twelve, this would be too much.

The above fees cover medical treatment and medicines. The Manchester Society charges less, but makes the members pay for medicines—one penny for prescription. This is a good plan in some cases, and when there is a dispenser, but a medical man should not collect coppers. The confinement fee is usually one guinea, including vaccination. For others the vaccination fee varies from 1s. to 2s. 6d. If it be too low, the public vaccinators are robbed of their fees, and bad competition springs up.

The dental fees vary; extractions, scalings and advice, are included in the monthly fees; extraction with gas, 3s. 6d.; with chloroform, 5s.; stopping with amalgam, 1s. 6d. per tooth; stopping with gold, 4s. per tooth; artificial tooth and vulcanite plate, 4s. 6d.

I have not yet been able to draw up, or find, a satisfactory scale of surgical fees, but such should be arranged for at once. In the "club Dr." system, the club pays the medical man as little as possible—from 3s. 6d. to 4s. per member per annum. Then, again, the medical man does as little as he can. The majority of his club cases "cannot be treated properly at home," and so "must go to the hospital." Not being properly paid, he does not operate, and so there is a plan of shirking responsibilities, and throwing it on other shoulders all round.

"M.B." will find that if he makes the members pay weekly, he will have a sorry time. All should pay monthly or quarterly, and in advance. They should be encouraged to do so, by ruling that those who pay monthly, and in advance, will get a discount of 1d. in the shilling, and those who pay quarterly, 2d. This is much better than paying a collector 10 or 15 per cent., or £1 weekly.

One word as to success. It takes 2,500 to 3,000 paying members to make a Provident Society a success. If it be in a village or small town there may not be this number, hence there must be honorary subscribers. In small towns there should always be a cottage home or hospital in connection with the society, the members obtaining special facilities when entering it.

If "M.B." wishes any more information I will give it to him, and if he wishes his provident society to succeed, he must be willing to work it for two or three years without much gain.

It would be better not to talk of the "lower" middle classes, each man who pays his way according to the gifts given him being no lower than his neighbour. Because I may make £1 a week, I am not "lower" than he who makes £10. If medical men are going to give their services to a provident insurance in a manner similar to the Poor Law medical men, and treat members as being low, and paupers, then the provident medical society will not be a success.

INDIA AND THE COLONIES.

INDIA.

SICKNESS AMONG TROOPS AT BURMAH.—A correspondent writing from Kyouske, gives the following facts respecting the large amount of sickness which, in spite of the cold weather, prevails among the Bombay troops in Upper Burmah: Out of a total of about 240 men of the 25th B.L.I., in garrison at Kyouske, on November 29th, no fewer than 113 were in hospital with fever. Sixteen of them were so bad that they have left for Mandalay; and the daily sick report gets worse instead of better. The regiment has been six months in the district, and appears to be getting unhealthy. Of the 56 military police at Kumé, there are at times not more than 13 fit for duty, the remainder being in hospital with fever. On November 23rd, a batch of 161

(chiefly Madras troops) left the Mandalay Field Hospitals for the General Hospital, Rangoon.

VENEREAL DISEASE IN INDIA.—A measure, which will take the place to some extent of the Contagious Diseases Act in Calcutta, is now before the Government of India.

ATTEMPTED MURDER OF SURGEON-MAJOR OLDHAM.—Surgeon-Major Oldham, 1st Goorkhas, and two other members of his family, have, according to a report from Dharmsala, narrowly escaped being murdered by a *khitmatgar*. The ruffian first made an attack on the elder Miss Oldham, whose jaws and neck he cut with a carving-knife; he was, however, checked in his murderous intentions by a younger daughter, who wrenched the knife from his grasp. Seizing another knife, he finally attacked Surgeon-Major Oldham, who, in the scuffle, fell undermost. The other servant fled. The *khitmatgar* was secured and handed over to the police.

SOUTH AFRICA.

ST. JOHN AMBULANCE ASSOCIATION.—An interesting case of "first aid" is reported in the *Cape Mercury* of December 11th. The local secretary of the King Williamstown Centre of the St. John Ambulance Association, Mr. A. J. Fuller, cut his wrist with a chisel from side to side. Just as he was losing consciousness from loss of blood, his son, a certificated pupil, arrived, arrested the bleeding by applying an extemporised tourniquet to the "brachial" artery, and bandaged up the hand in such a manner that, on the arrival of Dr. Ross, two hours afterwards, he stated he could not have done more if he had been present himself on the spot at the time. Another certificated pupil of the same centre successfully set a broken leg, in a country district seven miles distant from any place where the services of a medical man could be obtained.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

CLINICAL STUDY IN THE METROPOLITAN POOR-LAW INFIRMARIES.

AT the recent adjourned meeting of the medical superintendents of poor-law infirmaries, held at St. George's Union Infirmary, Fulham Road, Dr. Lloyd in the chair, the following resolutions were adopted moved by Dr. SPENCER, seconded by Dr. NEAL): "That it is desirable that the medical superintendents of the metropolitan infirmaries be authorised to call into consultation a specialist of eminence when the circumstances of any case under their charge may be deemed by them to render such a course advisable. 2. That it is desirable such consultant should receive a fee in each case. 3. That any such consultant called in should be on the permanent staff of a London hospital. 4. To advise in the treatment of cases, and only when they have been called upon to do so by the medical superintendents." Moved by Dr. WEBSTER, seconded by Mr. LUNN: 5. "That it is desirable, in view of the large amount of clinical material in the metropolitan infirmaries, both in the interests of the patients and of medical science, that one or more qualified clinical assistants be appointed in each infirmary, in addition to the present medical staff."

THE Commissioner of Sewers, on January 11th, resolved to expend £2,300 in sinking wells to supply artisans' dwellings at the east end of the City with water, as a protest against the extravagant charges of the New River Company.

UNSOUND MEAT: HEAVY PENALTY.

THE sanitary authority of Portsmouth summoned, on Wednesday last, a bailiff, who had consigned to market ten pieces of meat unfit for human food. The meat was seized at the railway station and condemned by a medical man and a magistrate. The evidence for the prosecution was that the animals from which the meat had been cut had suffered from fever, probably pleuro-pneumonia. The Bench fined the defendant £100 and costs.

HEALTH OF CORK.

THE monthly report for December, presented to the Town Council at a recent meeting, is as follows:

The total number of deaths, including 21 which took place in the workhouse, was 137, of which 7 were due to infectious diseases—namely, typhoid fever, 3 deaths; scarlatina, 2; diarrhœa, 2. The births registered amounted to 145. The annual mortality calculated on these figures gives a total ratio of 22.22 per 1,000 inhabitants, and an urban death-rate of 18.82. The infant-mortality was 2.2, and 1.1 died from infectious diseases. The birth-rate was 23.52; and compared with the corresponding month of the previous year, the death-rate was lower and the birth-rate higher by about 2 and 5 per 1,000 respectively. During the past month there has been a complete absence of typhus fever from the city, and a marked decrease in the number of typhoid cases returned as compared with the four weeks of the preceding month.

THE DISPOSAL OF PAUPER IDIOTS.

A CASE which recently came before the sitting magistrate at one of the metropolitan police courts illustrates the inadequacy of the present arrangement for dealing with pauper idiots or lunatics, or the defective manner in which they are understood. According to the *Times* report, an application, which in the event was granted, was made to the magistrate to order the medical examination of an idiot boy, with a view to his being placed under proper control in some suitable asylum. The lad had been sent to one of the county asylums. The medical officer there, finding that the case was not an acute one, after some time certified that it was suitable for treatment in the Darenth Idiot Asylum, and remitted the patient to the union. There he was placed in the workhouse, on the order of the guardians acting under the advice of their medical officer, and they refused to place the lad in the infirmary or in the Darenth Asylum. The lad's father took him home, kept him till "dangerous symptoms" again arose, and then, successively, applied to the guardians, the relieving officer, the magistrate, the Commissioners in Lunacy, and, at their advice, again to the relieving officer, who again brought the case before the magistrate. Without fuller details, we cannot say whether the difficulties raised in this case were justifiable; but if the report is accurate, and does not omit essential points, we do not see why the case should not have been dealt with promptly under 16 and 17 Vict., c. 97, s. 67, and the lad sent to an asylum, if found, on examination, to be a suitable case for admission.

HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, January 1st, 5,397 births and 4,374 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,093,817 persons. The annual rate of mortality, which had been 20.7 and 21.5 per 1,000 in the two preceding weeks, further rose during the week under notice to 25.1, and exceeded the rate recorded in any week since March last. The rates in the several towns, ranged in order from the lowest, were as follow:—Blackburn, 16.8; Derby, 17.6; Sunderland, 18.4; Bradford, 19.5; Sheffield, 20.1; Salford, 20.7; Huddersfield, 21.2; Nottingham, 21.3; Leicester, 21.7; Birkenhead, 22.4; Birmingham, 22.9; Bristol, 22.9; London, 23.9; Brighton, 24.2; Bolton, 24.4; Portsmouth, 24.9; Leeds, 28.5; Plymouth, 29.3; Preston, 29.9; Wolverhampton, 30.7; Oldham, 30.8; Hull, 31.1; Newcastle-upon-Tyne, 31.6; Norwich, 31.7; Manchester, 32.3; Liverpool, 32.4; Cardiff, 35.2; and the highest rate during the week, 36.0 in Halifax. The death-rate in the twenty-seven provincial towns averaged 26.1 per 1,000, and exceeded by 2.2 the rate recorded in London, which, as before stated, did not exceed 23.9 per 1,000. The 4,374 deaths registered in the twenty-eight towns during the week under notice included 537 which were referred to the principal zymotic diseases, against 386 and 434 in the two preceding weeks; of these, 244 resulted from measles, 90 from whooping-cough, 80 from scarlet fever, 56 from "fever" (principally enteric), 36 from diarrhœa, 30 from diphtheria, and one from small-pox. These 537 deaths were equal to an annual rate of 3.1 per 1,000. The zymotic rate in London during the week under notice was equal to 2.6 per 1,000, while in the twenty-seven provincial towns it averaged 3.5, and ranged from 0.0 and 0.9 per 1,000 in Derby and Brighton, to 5.3 in Halifax, 6.5 in Wolverhampton, and 7.2 in Leeds. The deaths referred to measles, which had been 141 and 182 in the two preceding weeks, further rose to 244 during the week under notice, and were proportionately most numerous in Newcastle-upon-Tyne, Halifax, Leeds, and Wolverhampton. The 90 fatal cases of whooping-cough showed a further increase upon recent weekly numbers, and caused the highest death-rates in Sunderland, Manchester, Oldham, and Huddersfield. The deaths from scarlet fever, which had been 77 and 71 in the two previous weeks, rose again to 80, and caused the largest proportional fatality in Salford, Newcastle-upon-Tyne, Bradford, and Manchester. The fatal cases of fever, which in the three preceding weeks had declined from 50 to 34, rose again during the week under notice to 56, and caused the highest rates in Portsmouth, Preston, Norwich, and Cardiff. The 36 deaths from diarrhœa differed but slightly from recent weekly numbers. The 30 fatal cases of diphtheria were within one of the number in the previous week, and included 9 in London, 5 in Portsmouth, 3 in Birmingham, 3 in Wolverhampton, and 2 in Newcastle-upon-Tyne. Small-pox caused one death in Portsmouth, but not one in London, or in any of the twenty-six other large provincial towns; and no small-pox patients were under treatment in any of the Metropolitan Asylum Hospitals during the week ending Saturday, January 1st. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 7.2 per 1,000, and slightly exceeded the average. The causes of 129, or 2.9 per cent. of the 4,374 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

In the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 9,245,099 persons, 6,099 births and 4,690 deaths were registered during the week ending Saturday, January 8th. The annual rate of mortality, which had been 20.7, 21.4, and 25.1 per 1,000 in the three preceding weeks, further rose during the week under notice to 26.5, and exceeded the rate recorded in any week since March last. The rates in the several towns, ranged in order from the lowest, were as follow:—Sunderland, 15.7; Derby, 17.2; Nottingham, 18.3; Brighton, 18.9; Portsmouth, 18.9; Hull, 20.4; Sheffield, 21.4; Birkenhead, 23.5; Blackburn, 23.7; Birmingham, 24.4; Leicester, 24.4; Salford, 25.8; London, 26.3; Bradford, 26.3; Wolverhampton, 26.5; Oldham, 26.8; Cardiff, 26.9; Huddersfield, 27.2; Bristol, 27.3; Bolton, 28.3; Liverpool, 28.8; Preston, 29.6; Halifax, 30.3; Norwich, 31.5; Newcastle-upon-Tyne, 33.2; Leeds, 34.0; Manchester, 36.4; and the highest rate during the week, 40.6 in Plymouth. In the twenty-seven provincia

towns the death-rate averaged 26.6 per 1,000, and slightly exceeded the rate recorded in London, which, as before stated, was 26.3 per 1,000. The 4,690 deaths registered in the twenty-eight towns during the week under notice included 235 which were referred to measles, 81 to whooping-cough, 63 to scarlet fever, 47 to "fever" (principally enteric), 28 to diarrhœa, 21 to diphtheria, and not one to small-pox; in all, 475 deaths resulted from these principal zymotic diseases, against numbers increasing from 386 to 537 in the three preceding weeks. The zymotic death-rate was equal to 2.7 per 1,000. In London the zymotic rate did not exceed 2.1, while in the twenty-seven provincial towns it averaged 3.2 per 1,000, and ranged from 0.2 and 0.4 in Nottingham and in Brighton, to 5.4 in Manchester, 6.4 in Leeds, and 7.0 in Newcastle-upon-Tyne. The fatal cases of measles, which had risen in the three preceding weeks from 141 to 244, declined during the week under notice to 235; this disease caused the highest death-rates in Manchester, Newcastle-upon-Tyne, and Leeds. The deaths referred to whooping-cough, which had been 54, 75, and 90 in the three preceding weeks, declined again to 81, and were proportionally most numerous in Oldham and Plymouth. The 63 fatal cases of scarlet fever showed a decline of 17 from the number in the previous week and caused the highest death-rates in Norwich, Liverpool and Bristol. The deaths referred to "fever," which had been 34 and 56 in the two preceding weeks, declined during the week under notice to 47, and caused the highest proportional fatality in Preston. The 28 fatal cases of diarrhœa showed a further decline from recent weekly numbers. The deaths referred to diphtheria, which had declined in the three preceding weeks from 37 to 30, further fell to 21, a lower number than in any week since August last; they included 9 in London, 2 in Bristol, 2 in Manchester, and 2 in Preston. No fatal case of small-pox occurred during the week under notice, either in London or in any of the twenty-seven provincial towns, and no small-pox patients were under treatment in any of the Metropolitan Asylum hospitals during the week ending Saturday, January 8th. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 9.0 per 1,000, and considerably exceeded the average. The causes of 120, or 2.6 per cent. of the 4,690 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

In the eight principal Scotch towns having an estimated population of 1,283,977 persons, 813 births and 641 deaths were registered during the week ending Saturday, January 1st. The annual rate of mortality, which had increased from 22.0 to 26.2 per 1,000 in the three preceding weeks, declined during the week under notice to 26.0, but exceeded by 0.9 per 1,000 the mean rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 16.4 in Perth, 18.5 in Leith, 19.9 in Aberdeen, 21.8 in Dundee, 22.5 in Edinburgh, 22.5 in Paisley, 24.6 in Greenock, and 32.9 in Glasgow. The 641 deaths registered during the week under notice in these Scotch towns included 21 which were referred to whooping-cough, 16 to measles, 13 to diarrhœa, 12 to scarlet fever, 10 to "fever," and 1 to diphtheria; in all, 73 deaths resulted from these principal zymotic diseases, against 75 and 63 in the two preceding weeks. These 73 deaths were equal to an annual rate of 3.0 per 1,000, which slightly exceeded the average rate during the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns during the week under notice were recorded in Leith, Paisley, and Glasgow. The deaths referred to whooping-cough, which had been 19 and 15 in the two preceding weeks, rose again during the week under notice to 21, of which 18 occurred in Glasgow. The 16 fatal cases of measles showed a further increase upon recent weekly numbers, and were all recorded in Glasgow. The 13 deaths from diarrhœa slightly exceeded those recorded in the two previous weeks. The fatal cases of scarlet fever, which had declined from 25 to 13 in the four preceding weeks, further fell during the week under notice to 12, and included 5 in Glasgow and 5 in Dundee. The 10 deaths referred to fever exceeded by 6 the number in the preceding, week, and included 3 in Glasgow, and 2 in Greenock. The fatal case of diphtheria occurred in Leith. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 7.5 per 1,000, against 7.2 in London. As many as 88, or 13.7 per cent. of the 641 deaths registered during the week in these Scotch towns were uncertified.

During the week ending Saturday, January 8th, 869 births and 746 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,299,000 persons. The annual rate of mortality, which had been 26.2 and 25.6 per 1,000 in the two preceding weeks, rose again to 29.9 during the week under notice, and exceeded by 3.4 per 1,000 the mean rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 18.7 in Leith, 21.1 in Perth, 24.0 in Greenock, 25.3 in Aberdeen, 26.5 in Edinburgh, 27.3 in Dundee, 35.0 in Glasgow, and 40.2 in Paisley. The 746 deaths registered during the week under notice in these Scotch towns included 94 which were referred to the principal zymotic diseases, against 63 and 73 in the two preceding weeks; of these, 27 resulted from whooping-cough, 18 from diarrhœa, 17 from measles, 13 from scarlet fever, 12 from diphtheria, 7 from "fever," and not one from small-pox. These 94 deaths were equal to an annual rate of 3.8 per 1,000, which exceeded by 1.1 the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns during the week under notice were recorded in Aberdeen, Paisley, and Glasgow. The fatal cases of whooping-cough, which had been 15 and 21 in the two preceding weeks, further rose to 27, of which 18 occurred in Glasgow, 3 in Edinburgh, and 3 in Paisley. The 18 deaths referred to diarrhœal diseases considerably exceeded the average. The fatal cases of measles, which in the four preceding weeks had steadily increased from 5 to 16, further rose during the week under notice to 17, of which 16 occurred in Glasgow. The 13 deaths from scarlet fever showed a slight increase upon the number in the preceding week, and included 9 in Glasgow and 3 in Edinburgh. The fatal cases of diphtheria, which had been 7 and 1 in the two previous weeks, rose to 12 during the week under notice, of which 7 were recorded in Glasgow and 4 in Edinburgh. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 8.9 per 1,000 during the week, against 9.0 in London. The causes of 98, or 13.1 per cent., of the 746 deaths registered in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending Saturday, January 1st, 1887, 561 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 32.8 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 25.8; Belfast, 32.0; Cork, 34.4; Drogheda, 33.8; Dublin, 36.8; Dundalk, 13.1; Galway, 23.5; Kilkenny, 25.4; Limerick, 40.5; Lisburn, 9.7; Londonderry, 35.7; Lurgan, 10.3; Newry, 21.1; Sligo, 19.2; Waterford, 53.3; Wexford, 42.8. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.8 per 1,000, the rates varying from 0.0 in nine of the districts to 19.6 in Londonderry; the 20 deaths from all causes registered in that district comprising 10 from measles and 1 from diarrhœa. Among the 136 deaths from all causes registered in Belfast are 4 from scarlatina, 1 from whooping-cough, 2 from simple continued fever, 2 from enteric fever, and 3 from diarrhœa; and the 53 deaths in Cork comprise 2 from enteric fever and 1 from diarrhœa. In the Dublin Registration District, the births registered during the week amounted to 210, and the deaths to 257. The deaths represent an annual rate of mortality of 38.0 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 36.3 per 1,000. Twenty-three deaths from zymotic diseases were registered, being 1 over the the number for the preceding week, but 9 below the average for the corresponding week of the last ten years; they comprise 11 from scarlet fever (scarlatina), 1 from cerebro-spinal fever, 4 from enteric fever, 2 from diarrhœa, 2 from erysipelas, etc. Fifty-three deaths from diseases of the respiratory system (including 35 from bronchitis and 9 from pneumonia or inflammation of the lungs) were registered, being 15 over the number for the preceding week, but 7 under the average for the fifty-second week of the last ten years. The deaths of 18 children (including 9 infants under 1 year old) were ascribed to convulsions. Seven deaths were caused by apoplexy, 3 by epilepsy, 11 by other diseases of the brain and nervous system (exclusive of convulsions), and 18 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 28 deaths, mesenteric disease 4, and cancer 3. Nine accidental deaths and 1 case of homicide were registered. In 42 instances, the cause of death was "uncertified," there having been no medical attendant during the last illness.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Primary Examination in Anatomy and Physiology at a meeting of the Board of Examiners in Anatomy and Physiology on January 8th, and when eligible will be admitted to the Pass Examination, namely:

J. S. McGowan, R. E. Lord, and F. W. Begbie, students of Owens College, Manchester; P. B. Morris, of Liverpool; D. R. P. Stephens, of Cambridge University School of Medicine; W. J. Haslett and J. D. Wynne, of Dublin; J. H. Leadbeater, of Charing Cross Hospital; C. J. Girling, of Guy's Hospital.

Passed in Anatomy only.

L. W. Westall, of St. Bartholomew's Hospital; R. C. Rankin, of Liverpool; W. Bott, of Birmingham; J. Lupton, of Owens College, Manchester; F. Cole, of Melbourne University.

Passed in Physiology only.

G. Sidley, of Owens College, Manchester; J. H. Dawber, of Middlesex Hospital; J. Slatter, of Charing Cross Hospital; and W. J. B. Robinson, of London Hospital.

Passed on January 10th in Anatomy only.

T. H. Leggett, of St. Bartholomew's Hospital.

Passed in Physiology only.

R. W. Logan, of St. Thomas's Hospital, and C. T. Standing, of King's College.

Passed on January 11th in Anatomy only.

H. W. C. B. Cave, H. Vermaak, of Birmingham; R. B. Morris, R. H. Read, G. S. Pope, F. W. A. Stott, of Owens College, Manchester; P. E. Davies, of Liverpool; A. H. Wilson, of Harvard; A. F. McVety, and W. F. Cory, of Kingston, Canada; H. P. Johnson, of Cambridge; R. A. Cleveland, of University College; A. W. Lyons, of King's College

Passed in Physiology only.

A. L. Chignell and W. Hichens, of London Hospital; W. F. W. Wilding and T. Eyton-Jones, of Liverpool; A. M. Ewing, of Toronto; A. H. Barstow and H. Robinson, of Leeds; C. R. Pigg, of Owens College, Manchester; H. G. L. Allford and W. J. Rugg, of King's College; A. S. Phillips, of St. Thomas's Hospital; F. S. D. Hogg, of St. George's Hospital; C. T. Bowen, of St. Bartholomew's Hospital.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentleman passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received a certificate to practise on Thursday, January 6th, 1887.

Strickland, Percy Charles Hutchison, M.R.C.S., 11, Ildersly Grove, West Dulwich.

MEDICAL VACANCIES.

The following vacancies are announced.

BEDFORD GENERAL INFIRMARY AND FEVER HOSPITAL.—Resident Surgeon. Salary, £100 per annum, with apartments and board, etc. Applications by February 3rd to the Secretary.

BIRMINGHAM GENERAL HOSPITAL, Jaffray Suburban Branch.—Resident Medical Officer. Salary, £150 per annum, with board, etc. Applications by January 29th to Henry Fox, Esq., R.N.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Resident Clinical Assistant. Applications by January 15th to the Secretary, 24, Finsbury Circus, E.C.

CHELSEA HOSPITAL FOR WOMEN, Fulham Road, S.W.—Assistant Physician. Applications by January 31st to the Secretary.

CHORLEY DISPENSARY.—House-Surgeon and Apothecary. Salary, £130 per annum, with house. Applications by January 20th to B. Stanton, Esq., 14, High Street, Chorley.

EAST SUFFOLK HOSPITAL, Ipswich.—House-Surgeon. Salary, £100 per annum, with board, etc. Applications by January 26th to the Secretary.

ENNISCORTHY UNION.—Medical Officer, Ferns Dispensary. Salary, £100 per annum, and fees. Applications by January 22nd to Robert Lett, Esq.

ESSEX AND COLCHESTER HOSPITAL.—Physician. Applications to the Secretary.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, £100 per annum, with furnished house, etc. Applications by January 25th to the Secretary, Bagdet Street, Holywell.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Surgeon. Applications by January 29th to the Secretary.

LAMPETER UNION.—Medical Officer. Salary, £30 per annum, and fees. Applications by January 27th to D. Lloyd, Esq.

MALDON UNION.—Medical Officer and Public Vaccinator. Salary, £65 per annum, and extras. Applications by January 15th to A. C. Freeman, Esq.

NATIONAL ORTHOPŒDIC HOSPITAL.—Surgical Registrar and Anæsthetist. Applications by February 1st to the Secretary.

NORTH-WEST LONDON HOSPITAL, Kentish Town Road.—Assistant Resident Medical Officer. Applications by January 17th to the Secretary.

NORTH LONDON HOSPITAL FOR CONSUMPTION, Hampstead and London. Resident Medical Officer. Salary, £40 per annum. Applications by January 17th to the Secretary, 216, Tottenham Court Road.

RETFORD DISPENSARY.—Surgeon. Salary, £120 per annum, with rooms, coals, gas, and attendance. Applications to the Secretary, West Retford Rectory, Retford.

SCARBOROUGH HOSPITAL AND DISPENSARY.—House-Surgeon and Acting Secretary. Salary, £80 per annum, with board and lodging. Applications by January 26th to the Medical Staff.

ST. PANCRAS AND NORTHERN DISPENSARY.—Honorary Physician. Applications by February 13th to H. P. Bodkin, Esq., 23, Gordon Street, Gordon Square, W.C.

SEAMENS' HOSPITAL, Greenwich, S.E.—House-Surgeon. Salary, £50 per annum, with board, etc. Applications by January 22nd to the Secretary.

UNIVERSITY OF EDINBURGH.—Examiner in Clinical Medicine. Salary, £75 per annum, and extras. Applications by January 17th, 1887, to the Secretary.

UNIVERSITY OF EDINBURGH.—Examiner in Surgery. Salary, £75 per annum, and extras. Applications by January 17th, 1887, to the Secretary.

UNIVERSITY OF EDINBURGH.—Examiner in Materia Medica. Salary, £75 per annum, and extras. Applications by January 17th, 1887, to the Secretary.

UNIVERSITY OF EDINBURGH.—Examiner in Physiology. Salary, £75 per annum, and extras. Applications by January 17th, 1887, to the Secretary.

UNIVERSITY OF EDINBURGH.—Examiner in Pathology. Salary, £75 per annum, and extras. Applications by January 17th, 1887, to the Secretary.

WORCESTER GENERAL INFIRMARY.—House-Surgeon. Salary, £100 per annum, with board and residence. Applications by February 7th to the Secretary.

MEDICAL APPOINTMENTS.

BLUETT, George Mallack, M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Physician to the General Lying-in Hospital, York Road, Lambeth, *vice* W. G. Holloway, M.B.Cantab., resigned.

CALDER, Mr. Frank, appointed Medical Tutor to the University College, Bristol, *vice* W. C. Lysaght, L.R.C.P., M.R.C.S., resigned.

CURRIE, George Burnett, M.A., M.B., C.M.Abdn. Univ., appointed to be District Medical Examiner of Recruits for the Army and Militia, *vice* Dr. Mackie, deceased.

DAMIAN, F. G. Claxton, M.R.C.S.Eng., L.R.C.P.Lond., L.S.A., appointed House-Surgeon to the Grimsby and District Hospital.

DIGHTON, Adair A., L.R.C.P., L.R.C.S., appointed Honorary Medical Officer to the Branch Dispensary of the Cheltenham General Hospital and Dispensary.

GORDON, Robert, M.B., C.M.Ed., appointed Honorary Medical Officer to the Sidmouth Cottage Hospital.

HACKETT, Harry Eugene, L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer and Public Vaccinator to the Gorton District of the Chorlton Union, Manchester, *vice* R. E. Hammond, L.R.C.P., M.R.C.S., resigned.

HOPKINS, Thomas, M.B., B.Ch.Dubl. Univ., has been appointed House-Surgeon to Sir Patrick Dun's Hospital, Dublin.

HUMBLE, George A., M.D., M.R.C.P., appointed Physician to the Spanish Mutual Benevolent Society of Viedma, Patagones, Argentine Republic, South America.

PERCIVAL, A. S., M.R.C.S., appointed Resident Clinical Assistant to the Hospital for Consumption, Brompton, *vice* Mr. S. S. Sprigg, resigned.

REYNOLDS, G. H., M.B., C.M., appointed Junior Assistant Medical Officer to the Hospital for Insane, Earnwood, *vice* F. Silva White, M.R.C.S., L.S.A., resigned.

THORNTON, Bertram, M.R.C.S., L.R.C.P.Lond., appointed Surgeon to the Royal Sea-bathing Infirmary, Margate, *vice* Dr. T. Smith Rowe, appointed Consulting Surgeon.

MANCHESTER MEDICAL SOCIETY.—List of officer-bearers for 1887. *President*, James Hardie, M.D.; *Vice-Presidents*, Charles James Cullingworth, M.D., Julius Dreschfeld, M.D., James Ross, M.D., Alfred William Stocks; *Treasurer*, Charles Edward Glascott, M.D.; *Secretary*, Frederick Armitage Southam, M.B., 242, Oxford Road, Manchester; *Members of Committee*, James Brassey Brierley, M.D., William Edward Burnett, James Fielden Howard, M.D., William N. Maccall, M.D., Frederick Melland, Frederick Morrish Pierce, M.D., Thomas Carlton Railton, M.D., George James Robertson, M.B., William Japp Sinclair, M.D., George Arthur Wright, M.B., William Yeats, M.D., Alfred Harry Young, M.B. The above, with the past Presidents of the Society and two representatives of the Council of the Owens College, form the Committee. *Library Committee*, Abraham Matthewson Edge, M.D., Abraham Emrys-Jones, M.D., Siegmund Moritz, M.D., James Ross, M.D., William Yeats, M.D.; *Auditors*, James Niven, M.B., Simeon Holgate Owen, M.D.

REGISTRATION OF SANITARY PLUMBERS.—On Saturday, January 8th, plumbers from Folkestone, Salisbury, Cardiff, Colchester, Leeds, and various districts of London, attended at the City and Guilds' Technical Institute, Finsbury, to undergo practical examination, in order to qualify themselves for registration. The examination included pipe-bending, joint-making, the formation of roof-gutters, cisterns, etc. After practical examinations in these branches, the candidates were required to answer questions prepared by the Board of Examiners, and directed to testing the candidates' knowledge of materials, construction, and sanitation. The candidates on this occasion were chiefly journeymen.

MEDICAL MAGISTRATE.—At the last Quarter Sessions for Carlisle, Dr. Barnes took the oaths as a Justice appointed by the Lord Chancellor. Dr. Barnes took an influential part in founding the Border Counties' Branch of the British Medical Association. He was the first and a most energetic secretary of the branch, and its eighth president. He originated the Hospital Sunday movement in Cumberland, whereby the medical charities in the county have received an aggregate sum of nearly £19,000.

JUBILEE HOSPITALS.—A suggestion, which has met with a good deal of favour in Folkestone, is, that the Queen's jubilee should be commemorated in that town by the foundation of a hospital.—In Carnarvon, a cottage hospital, which is said to be sadly wanting in that town, would it is thought form a fitting memorial of the jubilee.

SURGICAL INSTRUMENTS IN JAPAN.—From the report of the Austro-Hungarian Consul at Yokohama, it appears that, as a result of the presence of German instructors there, surgical instruments are imported exclusively from Berlin.

DR. MULES, of the Manchester Royal Eye Hospital, has been elected a Vice-President of the ophthalmic section of the International Medical Congress, Washington.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—MEDICAL SOCIETY OF LONDON, 8.30 P.M. Dr. J. Langdon Down (Second Lettsomian Lecture): On some of the Mental Affections of Childhood and Youth.

TUESDAY.—PATHOLOGICAL SOCIETY, 8.30 P.M. Address by the President. Mr Fenwick: Section of Hypertrophied Bladder from a case of Stricture. Dr. Handford: Fatty Tumour of Heart. Dr. Ord: Spontaneous Disintegration of Vesical Calculus. Dr. Sharkey: Infantile Paralysis of long standing. Mr. Bland Sutton: Diseases of Genito-Urinary Organs of Animals. Mr. D'Arcy Power: A Neglected Point in the Pathology of Colles's Fracture. Card Specimens: Dr. Handford: Specimens of Œsophageal Disease. Dr. Sharkey: Syphilitic Arteritis. Dr. Maudsley: Ulceration of Trachea, with perforation of Aorta. Dr. B. O'Connor: Mediastinal Tumour.

WEDNESDAY.—ROYAL METEOROLOGICAL SOCIETY, 7 P.M. Ordinary Meeting. Hon. Ralph Abercromby: On the Identity of Cloud Forms all over the World; and on the General Principles by which their indications must be read; and On the Cloud to which the name "Roll-Cumulus" has been applied. These papers will be illustrated by pictures thrown on the screen by a lime-light lantern. At 8 P.M. the Annual General Meeting. Address by the President, Mr. W. Ellis, F.R.A.S.

THURSDAY.—HARVEIAN SOCIETY OF LONDON, 8 P.M. Annual General Meeting. Election of officers. President's Address. *Conversazione.*

PARKES MUSEUM OF HYGIENE, 5 P.M. Mr. M. Ogle Tarbotton: Engineering and Architecture in relation to Sanitary Science.

FRIDAY.—SOCIETY OF MEDICAL OFFICERS OF HEALTH, 7.30 P.M. Dr. C. E. Saunders: Legislation for the Purification of Rivers, and its failure.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 5s. 6d., which should be forwarded in stamps with the announcement.

BIRTH.

HILLS.—On December 27th, 1886, at Carlton House, Prince of Wales Road, Battersea Park, S.W., the wife of A. Phillips Hills, M.R.C.S.E., F.S.Sc., of a daughter (Lorna).

MARRIAGE.

CREERY—STIRLING.—On January 6th, at St. [illegible]hn's Church, Killowen, Coleraine, by the father of the bridegroom, assisted by the Rev. James Stewart, rector of the parish, John Tate Creery, M.B., second son of the Rev. Canon Creery, Rector of Kilmore, co. Down, to Julia Mary (May), only child of the late Major Thomas Stirling, H.M. 64th Regiment.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY.....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY.....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, M., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED

QUERIES.

R. H. B. writes: I should be obliged if you could inform me through your JOURNAL when we may expect the Apothecaries' Society to begin giving a surgical diploma? Also whether, after passing the examination, the successful candidate will be able to add anything further to his name than L.S.A. as at present? Also what the fee will be?

*** It is impossible at present to give a definite reply to the questions contained in our correspondent's letter, but it is probable that we may be able to do so in the course of next month.

MR. A. L. N. JOHNSON (Leicester) writes: Can you inform me if there are any large hospitals in England where lady probationers are taken without the payment of a preliminary fee?

DR. ARTHUR HANDS (Clyde House, Heath Town) asks where he can procure the latest and best Manual on transfusion of blood.

ANSWERS.

J. H. J.—We have taken steps to procure for our correspondent the information desired, which will be duly forwarded to him.

THE FREE-MARTIN.

MR. C. ROBERTS writes: Dr. Edward Jenner, writing to the Rev. Dr. Worthington under the date of April 5th, 1810, says: "Pray don't part with your *free martin*. It will be a beautiful animal, and docile and useful in your fields as the ox. I have dissected many; but why this mingling of the sexes should arise under such circumstances eludes all my guesses. I was the first who made the fact known (some thirty years ago) to Mr. Hunter." This does not give a clue to the origin or meaning of free-martin; but it carries the subject further back than Dr. Masterman's note, and points to Gloucestershire as the part of the country where it is in use, and where its origin may probably be traced. I do not remember to have heard the word used in Yorkshire.

YELLOW FEVER.

SURGEON M. J. KNIGHT, M.S. (Meean Meer, Punjab), writes to ask from what books and sources (English or foreign) he can obtain the latest and completest information as to the "Causation and Prevention of Yellow Fever."

*** The literature of yellow fever is enormous. The following are the chief writers on this disease: Cullen, Chisholm, Blane, Wood, Tommasini, Cleghorn, Lind, Alison, Craigie, Martin, Hirsch, Arnold, Jackson, Moseley, Macdonald (in Russell Reynolds' *System of Medicine*), Downes (in *Naval Reports*), Blair, McWilliam, the great work by De la Roche, Rush of Philadelphia. The latest "view" on the causation of yellow fever is that which has been worked out by Dr. Charles Creighton, on the basis of Anduard's observations on the origin of the disease from the excretions of negroes in slave-ships. Creighton's paper appeared in the *North American Review*. A summary of it will be found in Aitken's *Doctrine of Evolution in its Application to Pathology*, and in Professor Maclean's Lectures on Tropical Diseases.

DETECTION OF TUBERCLE BACILLI.

J. WILSON HAMILL, M.B., writes: "M. B.," in your issue of January 1st, enquires the best and easiest way of staining bacilli in phthisical sputum. To reply briefly, I may say that your correspondent will find the following one of the most satisfactory methods, as well as one of the quickest. The preparation may be completed by it in two or three hours. The sputum is spread as a thin layer on the cover-glass, which may be done by pressing two covers together, with the particle of sputum between them. These are separated, and the cover with the thin coating of sputum upon it is to be passed several times through the flame of a spirit-lamp, to dry and set the bacilli. The next step is to colour the preparation, and for this object there is a choice of staining fluids; but I think "M. B." will get the best results by using the ordinary magenta solution, the formula of which is: magenta crystals, grammes 2; aniline, cc. 3; alcohol, cc. 20; aq. dist., cc. 20. A few drops of this solution should be poured into a watch-glass, and the cover-glass floated on it for about half-an-hour, after which it is washed thoroughly in distilled water, to remove redundant stain, and then in a mixture of pure nitric acid and distilled water (1 to 4), in which it should be allowed to remain for a few minutes. This clears the stain away from all parts but the bacilli. Redundant water is drained off by the use of blotting-paper, and by immersion in pure alcohol, and the cover-glass is then gently dried. "M. B." will not find it essential to stain the ground of the preparation, although this procedure improves the appearance of the slide; a blue ground throws up the red bacilli into much more beautiful relief. The cover is then cemented to the slide in the usual way, either dry or in Canada balsam.

With regard to the objective necessary to detect the tubercle bacillus, I do not think "M. B." will obtain satisfactory results with anything lower than a $\frac{1}{12}$-inch of our English makers. Even with this power, an achromatic condenser is a great aid, and with lower powers than this it is a necessity. In the use of higher powers, I think many fail to detect the bacilli, through mounting the preparation on the slide, and then using a too thick cover-glass and a thick layer of cement, through which it is impossible to get the focus. This is obviated by using a very thin cover, to which the sputum has been attached. It is also important to be certain that the expectoration comes from the lungs, and is not the ordinary mucus from about the fauces. "M. B." should also remember that the tendency of all stains is to fade after a longer or shorter period, so that, if he examine his slide a few months after mounting it, he may be unable to find a trace of a bacillus.

ALOPECIA.

M. D. writes: In your issue of the January 1st, "Alopecia" makes enquiries regarding the serviceability of lanoline (Liebreich) in "premature decay of the hair, or what is generally known as baldness." If I mistake not, Professor Frankel, of Berlin, found lanoline of extreme service, where there were atrophic tendencies of the skin, while Dr. Lassar has referred to the advantages lanoline affords in treatment of the hair. Both a lanoline cold-cream and a lanoline pomade are now prepared, either of which should prove of value in treating baldness and alopecia. I would suggest olei cadini, 1 part, to lanoline 4 parts. Dr. Steven found a "cold-cream" curative in seborrhœa capitis (*Deutsche Med. Wochenshrift*), and the new basis for ointments seems to have given some very excellent results in other affections of the scalp as well.

NOTES, LETTERS, ETC.

Unqualified Assistants.

C. H. M. writes: As an unqualified assistant, permit me to thank Mr. Napper for his very able letter on this subject, which expresses the convictions of many medical men of long experience and good repute. I am glad to see that such gentlemen are voluntarily coming to the front to speak the plain truth with regard to a body of men of whom it has lately been the fashion to speak disparagingly. I am also glad to see that the assistants themselves are beginning to demand that consideration which is due to them from the profession. Medical men have called this class of assistant into existence for their own convenience, and it is only just that they should make some provisions for them and their families, instead of trying to ostracise them suddenly.

Of course there are assistants and assistants, and it is the doings of a few of the proprietors of many-branched dispensaries and their assistants that has brought disgrace upon not only assistants, but the medical profession generally. The General Medical Council has already, I believe, distinguished between assistants proper, under the direction and supervision of their principal, and those without such supervision. In the latter case, the fault lies more with the employer than the employed.

Mr. Napper's list of desirable qualifications in an assistant is very good; but one other must be added—temperance, without which all other qualifications are useless.

There is precedent enough in the history of the medical profession for providing for those who have already been assistants for some time; at the same time, a plain warning could be given to other young men before they, too, get caught in the trap, as they generally become assistants when they are too young to see their danger.

Now that the general practitioners have direct representation on the General Medical Council, a register of assistants should be prepared, as suggested by "M.R.C.S." in the JOURNAL of November 27th. Newly-qualified men would have nothing to lose, but everything to gain, by this arrangement.

I would like to see an association of unqualified assistants, to be called, say, "The Medical Assistants' Association," and would be glad to share the initiatory work in forming it, if any others show themselves willing to do the same. Perhaps my remarks may bring one or two to the front.

Right-Angle Traction for Sub-Glenoid Dislocations.

W. J. PEACOCK, L.R.C.S.I., L.K.Q.C.P.I., etc. (240, St. George's Road, Bolton), writes: Seeing some cases reported in the JOURNAL of the above mode of reduction in shoulder-dislocation, I thought I would try right-angle traction on a case I was called to see some days ago, during the absence of the principal, Dr. Macfie.

The patient was a woman well advanced in life, being close on seventy. She fell on her shoulder, during the late frost, and sustained the aforesaid injury. Medical advice was not sought for ten days. After the lapse of these days, she presented herself at the surgery, and I immediately diagnosed sub-glenoid dislocation. I tried the older methods of procedure without success. Then I determined on trying right-angular traction, which succeeded immediately, with very little force needed. I strongly recommend the mode of procedure in all similar cases.

The Riddell Fund.

	£	s.	d.
Amount already acknowledged	50	3	6
D. P., Edinburgh, per Dr. Dolan	1	1	0
Dr. Whitwell, Shrewsbury	1	1	0
Dr. Fegan, Blackheath	1	1	0
M. D., Torquay	0	10	0
W. S.	0	3	6

Mr. Wickham Barnes, 3, Bolt Court, Fleet Street, wishes to inform intending subscribers to this Fund that the list will close on January 19th.

Scarlet Fever in Wimbledon and Merton.

MR. LENNOX BROWNE writes that, on January 3rd, he was consulted by a lady, aged 45, who, being a governess, had abruptly terminated a visit to Wimbledon on the previous Saturday, on the alarm that some of the inmates of the house in which she was staying had been attacked by the epidemic. He says: I found her suffering from very slight inflammation of the fauces, but with a temperature a fifth of a degree below normal. I, therefore, had no hesitation in then and there giving a certificate that she had no sign of scarlet fever, and I felt justified in assuring her that there was not the least likelihood of an attack. I advised her, however, to wait in town for a week. On Wednesday, the 5th, the temperature was still low, and pain, with a slight swelling, was felt under the angle of the jaw; although there was no rash, I gave the opinion, again in writing, that the patient was suffering from rötheln. This being communicated to her friends in Wimbledon, she learns that other cases supposed to be scarlet fever are now discovered to be of the same nature, one of the doctors said to have been attacked being of this number. Nevertheless, as a result of the statements in the public and medical press, this lady is placed in the position of being obliged to resign her appointment rather than re-enter a family with such an onus of responsibility. It will be interesting to learn how many cases there really are of scarlet fever amongst the "300 reported to have developed since Christmas."

I should be glad to be informed how long an interval should elapse before a patient recovered from rötheln may mix with others. No work that I have consulted gives information on this point. The incubation period is, I believe, very much shorter than that generally stated in books.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. de Vere Mathew, Felixstowe; Dr. G. B. H. Currie, Insch, N.B.; Mr. F. C. Carr-Gomm, London; Mr. D. Smith, Montrose; Mr. G. H. Rogers, London; Dr. Campbell, Carlisle; Dr. Gubb, London; Dr. Ward Cousins, Southsea; Mr. J. Ernest Lane, London; Mr. J. Chatto, London; Dr. J. C. O. Will, Aberdeen; Mr. W. Marriott, London; Dr. J. Langdon Down, London; Mr. J. T. Tibbles, Melton Mowbray; Dr. Norman Kerr, London; Mr. F. Treves, London; Surgeon-Major Evatt, Woolwich; Dr. Rentoul, Liverpool; Our Paris Correspondent; Messrs. J. Wright and Co., Bristol; Dr. T. W. Griffith, Leeds; Mr. J. D. Power, London Captain D. Brander, Pitgaveny, Elgin Dr. J. Rorie, Liff; Mr. H. H. Jennings, Halifax; Mr. G. Marshall, Christchurch; Mr. G. B. Browne, London; Mr. A. W. Nankivell, Chatham; Dr. W. E. Steavenson, London; Mr. W. C. Wicks, Newcastle-on-Tyne; Dr. Mickle, London; Dr. Willoughby, London; Mr. T. Whitehead, Birmingham; Mr. A. H. Meller, Ascension; Mr. A. Douglas, Handsworth; Dr. G. D. McReddie, Glasgow; Mr. Lennox Browne, London; Mr. J. Startin, London; Mr. Simeon Snell, Sheffield; Mr. C. Roberts, London; Mr. G. A. Atkinson, M.B., Wylam-on-Tyne; The G. K. Cooke Manufacturing Company, London; Dr. Keith, Edinburgh; Dr. M. Cameron, Glasgow; Editor of the *Stockkeeper*; Brigade-Surgeon Curran, London; Dr. Cordwent, Milverton; Professor Pettigrew, St. Andrews; Mr. W. Allard, Tewkesbury; Mr. B. Thornton, Margate; Mr. Lawson Tait, Birmingham; Mr. F. J. R. Dudley, Stalybridge; Mr. Heath, London; Mr. C. H. T. Godwin, Netley; Mr. J. B. Martin, Ventnor; Mr. W. Jones, Upper Edmonton; Mr. T. Allan, Irvine; Mr. W. J. Peacock, Bolton; Dr. F. F. Caiger, Lindfield; Dr. Neale, London; Mr. K. Benham, London; Dr. P. H. Mules, Manchester; Dr. McDowel, Morpeth; Mr. S. A. Gill, Formby; Mr. W. Buchanan, Chatham; Dr. J. Haddon, Melrose; Mr. R. Reynolds, Leeds; Mr. T. Jones, Aberkenfig; Mr. J. H. Jones, Edinburgh; Mr. D. Dutch, Crewe; Dr. Wilks, London; Dr. E. P. Thurstan, Tunbridge Wells; Mr. E. J. Flynn, South Stockton-on-Tees; Sir E. Lechmere, London; Mr. A. W. Stokes, London; Mr. J. Tilt, London; Mr. Lorimer, London; Mr. H. H. Phillips, Reading; Dr. G. A. Humble, Patagones, Argentine Republic; Dr. A. T. Myers, London; Dr. H. F. A. Goodridge, Bath; Dr. Hughlings Jackson, London; Mr. J. W. Hamill, Manchester; Mr. A. S. Manders, London; Mr. C. Sheather, London; Mr. Vincent Jackson, Wolverhampton; Dr. Duke, Dublin; Mr. A. Roberts, London; Mr. C. H. Newby, Southsea; Mr. A. H. Tubby, London; Dr. E. L. Fox, Clifton; Mr. G. M. Bluett, London; Dr. W. Pearce, Maidenhead; Mr. D. Lloyd, Lampeter; Dr. Barnardo, London; Mr. C. S. Hall, Carlisle; Mr. A. L. N. Johnson, Leicester; Mr. E. East, London; Dr. Tatham, Salford; Mr. Hunter, Gosport; Dr. Foulis, Wylam-on-Tyne; Mr. A. Hands, Heath Town; Mr. T. D. Greenlees, Carlisle; Dr. Gahne, Belize, British Honduras; Dr. Grimshaw, Carrickmines; Dr. J. Blake, London; Dr. Prosser, Monmouth; Mr. A. A. Dighton, Cheltenham; Member, B.M.A.; Rev. J. W. C. Hughes, Leeds; Dr. J. Moore, Belfast; Mr. W. S. Weiss, London; Mr. W. R. D. Davies, Chelford; "Dublin"; Dr. Edwardes, London; Mr. J. Mitchell, Bridgeton; Mr. Lucas, London; Dr. G. R. Poole, London; Mr. A. W. Warry, Aberdeen; Mr. J. Thornley, Bolton; Our Glasgow Correspondent; Dr. Payne, London; Mr. J. D. McCaw, Portglenone; Mr. R. Gordon, Sidmouth; Mr. J. Hadley, London; Mr. E. White Wallis, London; Mr. G. Willis, Monmouth; Mr. J. A. Gavan, London; Dr. R. W. Raudnitz, Prague; Mr. J. W. Whitehouse, Sunderland; Dr. J. J. Bailey, Marple; Mr. Bennett May, Birmingham; Mr. T. Hopkins, Dublin; Mr. F. G. C. Damian, London; Mr. C. E. Shelly, Hertford; Mr. H. A. Geldham, Ilfracombe; Mr. R. L. B. Head, Wimbledon; Mr. E. A. Onyon, Lincoln; Mr. J. E. Mayhew, Ipswich; Messrs. R. B. Close, Blackrock; Mr. F. A. Southam, Manchester; Mr. E. Ridgway, Liverpool, etc.

BOOKS, ETC., RECEIVED.

A Manual of Obstetrics. By F. A. King, M.D. Third Edition. London: J. and A. Churchill. 1887.

Diseases of Bones and Joints. By C. N. Macnamara, F.R.C.S. Third Edition. London: J. and A. Churchill. 1887.

Treatise on the Principles and Practice of Medicine. By A. Flint, M.D., LL.D. London: J. and A. Churchill. 1887.

Retrospect of Medicine. By James Braithwaite, M.D. London: Simpkin, Marshall and Co. 1887.

The Bovine Prescriber. By J. B. and A. Cresswell. London: Bailière, Tindall and Co.

A Junior Course of Practical Zoology. By A. Milnes Marshall, M.D., M.A., F.R.S., assisted by C. Herbert Hurst. London: Smith, Elder and Co.

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AN ADDRESS
ON
THE FUTURE OF PATHOLOGY.

Delivered on the occasion of his taking the Chair at a Meeting of the Pathological Society of London, Tuesday, January 18th, 1887,

By Sir JAMES PAGET, Bart., F.R.C.S., D.C.L., LL.D., F.R.S.,

President of the Society; Serjeant-Surgeon to Her Majesty the Queen; Consulting Surgeon to St. Bartholomew's Hospital; and Vice-Chancellor of the University of London.

Gentlemen,—I thank you heartily for the honour you have conferred on me by electing me to be your President. It is a great compliment that I should still be thought fit to be President of a Society of which the most active members are much younger scientific men, some of whom are studying pathology in subjects and with methods almost unknown to me. If I can be at all fit for the office, it may be because, in my very imperfect knowledge of many of the numerous methods in which pathology is now studied, I can look with full respect upon them all; and, indeed, there are few things in relation to our science of which I am more sure than of this: that every possible method of studying it should be by all possible means promoted. And while I am your President this shall be my object, so far as I may have power.

I hope I shall not prove myself unwise if I do not take for the subject of my address that kind of knowledge in which alone I might claim superiority over my hearers, namely, the personal memories of the far distant past. It would be very pleasant to me to tell some of them, and might be amusing and flattering to those who can compare the best modern knowledge with that which it has displaced. But it may be more useful to think and speak of what may next be done, and how to do it. For every increase of knowledge brings before us a larger and clearer view of the immeasurable quantity which is still to be gained. The more we know, the more can we see, if we will, how much more there is that we do not know.

I wish I could indicate all or many of the ways in which new knowledge is to be gained; but I cannot. It is characteristic of modern pathology that, as it certainly surpasses all other sciences in the variety and complexity of its problems, so it offers work sufficient for the employment of nearly every variety and opportunity of the scientific mind. Pathology, as distinguished from practical medicine, used to be regarded as scarcely more than morbid anatomy; but now there is in it work not only for the anatomist and physiologist, but for the clinical observer, the experimentalist, the minutest microscopist, the statistician, the chemist, the naturalist, the historian, the psychologist, and yet more. I cannot pretend to be all these; and I will not pretend to decide who has done the best work or is most likely to do it in the future. Only, it is certain that complete pathology must be constructed from the works of all these; they are all mutually dependent, mutually corrective; none can alone suffice, and none can safely be neglected.

But, of all the methods of study, there are only two with which I have been much occupied—those, namely, of pathological anatomy and of clinical pathology in active practice. I can therefore speak of the future employment of only these two. But I will hope they may suffice, especially as the greater part of the members of the Society are engaged in them, and because we may justly believe that practice and pathological anatomy, if they be studied with the scientific mind and methods, will still contribute largely to the progress of the whole science of pathology.

I say practice studied with the scientific mind, because practice is often spoken of as if it were altogether distinct from science and inconsistent with it. We hear science and practice spoken of as in opposition, and sometimes as if they were mutually distrustful. I will not deny that strange contrasts of the practical and the scientific may be found among us; but these contrasts are constantly becoming more rare, and it is an excellent influence of this Society that it tends to cultivate the scientific mind, and to maintain it in the practical life. For what practice may be depends, in all respects, much more on the person engaged in it than on its own subject-matter. It may be for one a noble profession, for another a vile trade; and in equal contrast it may be a mere useful art practised by one who has neither love nor knowledge of any science, or to the man of scientific mind it may be a thoroughly scientific study, as well as an applied science. I could name many living in active practice, of whose work a great part is as definitely scientific as is that done in any other section of biology. And so are the works of many who are gone. For example, I know no reasonable definition of science which would exclude the researches by which Bright attained the knowledge of the disease which bears his name; or which, in a just history of pathology, would separate, as if they were of different merits, the clinical and the experimental researches from which we have our knowledge of the diseases of arteries and veins. Surely, it would be hard to name a discovery in biology which more deserves the name of scientific than does Jenner's discovery of vaccination; and yet it was made in the plainest practical manner while he was a country practitioner. But, observe, Jenner was a thorough naturalist, trained by John Hunter; and I suspect it will be found that all the best advances in clinical pathology, the best not only in their utility, but in their fitness for adjustment among the largest principles of our science, have been made by practitioners who were either by nature or by cultivation men of scientific mind. And it is as sure as anything of the kind can be that similar studies by men of similar mind will still attain as good results.

Practice is full of opportunities for science. Let me suggest only one group of them. Reflection on any day's work in practice may convince us that we have been using a good deal of knowledge or belief which we cannot explain by its relation with other knowledge, whether in pathology or any other branch of science. We may have given what are called specific medicines, or have advised some one in the belief that he was predisposed to some disease, or may have talked of functional diseases. Yet I doubt whether in any of these things there are more than unexplained facts; and if there are not, then we may be sure that the facts are very hopeful beginnings for scientific study by those engaged in practice. I may illustrate this by the example of the use of some of the specific medicines, such as that of quinine in malarial diseases, of mercury and iodide of potassium in syphilis, of arsenic in many cases of psoriasis, or of bromide of potassium in some cases of epilepsy. Here are sure facts, practical and useful, as sure as anything in therapeutics. I would not call them scientific, for, so far as I know, they are isolated facts, and separate from what may be called general laws in biology. They are, indeed, the chief of those facts which, in some minds, bring our clinical pathology into discredit; for, being only useful and not scientific, they are cited as examples of unscientific practice. They are called empirical, and the empiric is deemed equivalent with the quack. Let me say, as in parenthesis, that I think we have here an example of the common fate of words in our language—that if a word acquires a discreditable meaning, its better meaning is gradually lost, and only the worse remains with it. For the empiric and the experimentalist are, I think, synonymous; and yet in pathology the one, having a degraded name, is now deemed a hopeless hindrance to progress, and the other is its hero.

But, however this may be among these empirical facts, modern scientific work in practice may win great riches for pathology; for the medicines I have named are not only remedies, but diagnostic tests; they prove differences among diseased conditions

that in other things appear alike. The epilepsy which is averted by the habitual use of bromide of potassium cannot depend on the very same conditions as that which is not so averted; the ulcer which heals under the influence of mercury cannot be of the same kind as that which looks like it, but does not so heal. Thus, as we all know, these medicines are tests; and we may guess that each of them detects the presence of some material belonging only to the disease which it cures. Here, then, is work for the scientific practitioner; he may find the material and more, if he will observe the facts in practice much more minutely, and record and collect them, and bring to bear on them as much light as possible from other sections of pathological science. They will yield more knowledge, and his practice will be promoted to a better title than "empirical."

Let me again refer to some facts which I have already mentioned, and which are now accepted in the largest principles of pathology. I remember that during my apprenticeship, more than fifty years ago, in a *post mortem* examination of one who had died with dropsy, a young Guy's man cut across one of the kidneys, and said "Dr. Bright, of Guy's, says there is a form of dropsy which is always associated with disease of the kidneys." This was accepted by the practitioners standing by as a singular fact, and nothing more. I should find it difficult to tell now into what, with fifty years of scientific culture, that singular fact has grown. Or, again, could any fact stand more alone than did that of the use of vaccination as first observed by Jenner? And now it may be honoured as the first knowledge attained in all that wide range of pathology in which Pasteur's great work has been done, and to which Power and Klein have lately annexed their admirable discovery of the true source of the milk scarlatina.

There are many more of this group, of the facts of which we have better knowledge in practice than we have in morbid anatomy or any other section of pathology. We are sure, for instance, that there are certain conditons which are justly called predispositions to disease; but in what many of these consist we are, I suppose, quite ignorant. There are diseases or disorders which we must be content to call functional, though I suppose none of us would hold that there can be any change in the working of a part without a change in its structure or composition. We know that certain disorders, such as typhoid and scarlet fever, are apt to be followed by certain other disorders, which we call their sequels; but we have not yet shown the changes of which the sequence is a necessary consequence. We know that different morbid conditions may be combined, as in diseases which we may call hybrid or mongrel; we can recognise many of these combinations during life; they are things to be "attended to," as we say, in treating cases; but of the allied varieties of morbid changes of structure or composition, and of the lessons they would teach, we know, I think, at present very little.

How may these defects be remedied? Surely the best way will be by study and minute scientific work in practice. I say emphatically minute work, for I think it can be proved by the example of other sciences that the more minute the inquiries and the facts obtained by them, the more sure and complete will the fusion of pathology become with the whole body of biological science, and the more will it thence gain.

Now, these more minute investigations may be made not only in the records of clinical observation,—which may be far more minute than they are now,—but, I venture to think, even in microscopic examinations, especially if these be made whenever it is possible on the living as well as on the dead morbid structures. I would not, in any degree, depreciate the value of the knowledge gained by examining the well-defined structures which are shown in microscopic specimens prepared with hardening and staining and other fixing processes. They ensure a more exact diagnosis, and they may be studied deliberately and with comparison; but while they have all the value, they have also some of the defects, of botanical specimens dried and flattened in an herbarium. These are essential to accuracy in descriptive botany, and to the diagnosis of species and varieties, but the vegetable physiologist must study living things. The herbarium tells little of the true plant-life, and of many processes in which that life is expressed, such as the minute intra-cellular movements and others of the like kind. Things of this kind, and important differences among them, may be found if the method of examining still living tissues can be improved, and if it be the rule to examine each morbid growth or product both directly after its removal from the living body, while it may be deemed still alive, and after it has been prepared for repeated examining by staining or other like processes. I venture to expect that by methods such as these, and with improving microscopic power, the sight may often reach far beyond the boundary of what has yet been seen, and will detect differences of structure or of movement in what we are at present obliged to call structureless. And, even beyond this, I would hope that the microscope, with microscopic chemical tests, will detect differences which must be referred to differences of composition rather than of anything that can be called structure, and yet not less decisive of distinctive properties.

But I will not go on thus hoping, and perhaps only guessing. Let me only add one warning suggested by that word "structureless." It suggests the recollection that we are all apt at times to submit to the fascination of promises of finality; to find comfort in believing that we have really reached a boundary; that something is really structureless; or that there is a protoplasm which is the same always and everywhere, at least in the same species; or that in apparently similar substances there may be differences of potentiality; as if in things material there could be differences of power or property without differences of structure or of composition. We should get rid of these idle-making fallacies. The protoplasm in every structure, or of every embryo, must be as essentially different from that of every other as is the structure or the creature which in due time it may become; and these differences will be discovered by our successors if we—I mean you—do not discover them. And one caution more. Let us never be content with present utility. Glad of it we may well be, and even proud, for science cannot be degraded by being useful in good things, and I suppose that of all utilities none can minister more happiness to those who most need it than ours may; but we must not be content with it as it is; it will be increased by every increase of our real knowledge.

Let me, before I end, again express my regret that I have been obliged to limit myself thus narrowly in speaking of pathology. Let me repeat that it is only because I have too little knowledge of other methods of study to speak of them definitely or even safely. But I earnestly hope that in our meetings we shall have contributions from them all, for all are essential to the progress of our science; and it will be a singular pleasure to me if, in my office as President, I can promote them. To do so will make my office very happy and very useful to me in helping me to avert that sad defect of old age, the indifference or dislike to the changes which come of the increase of knowledge. One sees that, as men grow old and wish for rest, they are prone to ask, Where are we to stop? I do not know more than this: that we must not stop where we are; we must go on and on, and we may be sure that they who work to find the truth will not work in vain—sure that with true work true good will come. So I will hope that it may be here during my presidency.

Acrobats and Science.—M. Guyot-Daubès, in a work entitled *Hommes-Phenomènes*, enumerates the services rendered to science by the class of acrobats known as sword-swallowers. Owing to the amiability of an acrobat, Stevens, in 1777, was able to study the human gastric juice. For this purpose, he placed small quantities of meat in metallic tubes pierced with holes, which the acrobat swallowed and brought up again when directed. Sword-swallowers have demonstrated how instruments for facilitating swallowing must be adapted. Fauche's tube is based on their information; also the construction of œsophageal catheters, for injections into the stomach, and the invention for illuminating the stomach with the electric light. In a word, acrobats are unknown benefactors to science.

PRESIDENTIAL ADDRESS
ON SOME PENDING QUESTIONS IN GYNÆCOLOGY.

Delivered before the British Gynæcological Society on Wednesday, January 12th.

By LAWSON TAIT, F.R.C.S.,

President-elect of the Birmingham and Midland Counties Branch of the British Medical Association; and Surgeon to the Birmingham and Midland Hospital for Women.

TWELVE months ago, I opened the second session of this Society with a short introductory address, in which I pleaded the difficulties of that apparently easy task. I said that one of its difficulties certainly was not lack of material; and now that I have to close my year of office, I find a difficulty in keeping my words within bounds, when I review the work of the past session, the work of the Society immediately, and the progress of the department of medicine which it represents. I confess when I was asked to take part in the formation of this Society about thirty months ago, I had little idea that we should ever be more than two or three gathered together, struggling in a long uphill fight for mere existence. But during the past year we have added sixty-five Fellows to our list, and only eight have left us by death or resignation, and we number now, all told, four hundred and sixty Fellows of the Society. Financially, our affairs are not only in a prosperous condition, but we are positively affluent, and have already quite a large sum permanently invested, so that we are more than paying our way in spite of the heavy costs of our *Journal*. But it is the heavy costs of that *Journal* which have, to a very large extent, given us our prosperity; and no words of mine, no expressions of thanks on your part, can adequately represent our indebtedness to the work of its editor. Not only is the *Journal* a faithful record of what is done in our Society, printed and corrected without the speakers or readers being troubled with proofs, but, so far as my own productions are concerned, without any but the most trifling literal errors being sparsely discernible. Further, the *Journal* is brought up to the very last hour of its issue with all that is being done in our department, and its reviews and critical notices are characterised by a fairness and a perfect regard to the opinions of those who are in opposition. Both of these features redound greatly to the credit of the editor and the welfare of the Society he represents. For myself, I desire to express a hope that it will be a long time before the present editorial management of the *Journal* requires any change.

Of the general work of the Society, it is quite impossible to speak in terms other than those of the highest praise. Not a specimen has been shown which has not materially added to our information, and the results of the careful reports upon those submitted to investigation by a subcommittee have been specially valuable. Of the papers, it is difficult to speak without a selection which must appear invidious, because it is impossible for me to speak of them all, and I am tempted to mention only those specially where points are brought out affecting questions now under general discussion. First amongst these I mention—not only because the paper in itself was a model of exact and careful observation, just such a paper as a man in general practice can contribute with great effect and benefit to the Society—but I mention Dr. Chalmers's paper on Puerperal Septicæmia because it raised the question of operative treatment in puerperal as in other forms of peritonitis. I have now come deliberately to the conclusion that it is an act almost of criminal omission to allow a case of peritonitis to die without abdominal section. This is a stronger view of the question than I am prepared to find ready for general adoption, but I was sustained in my view to a great extent when I heard Dr. Barnes say, in the discussion of Dr. Chalmers's paper, "Whenever pus formed and collected in the abdomen and pelvis, he believed the indication was strong to make an incision into the abdomen so as to give it exit." This is the surgical rule in the finger, the eye, the perineum—in every region of the body—why should the abdomen be exempt? Some tacitly admit their inability to diagnose the conditions. If they cannot improve their knowledge, they should give up practice, or, at least, refrain from criticising others whose powers of discrimination are greater than their own. The very grave question of surgical infanticide, under the name of craniotomy, was raised by Dr. Meadows, and I cannot help feeling that the immense impression which anything from his pen on such a question must leave, must have succeeded already in making thoughtful men pause. It is very sad to hear men speak at random, and wildly gesticulate on the question of removal of ovaries who, with a light heart, stab a child in the head with a sharp instrument, and deliberately destroy a life under the plea of an obstetric operation. Dr. Meadows has, however, sounded the death-knell of such persons, and it is our duty as disciples of the great beliefs of humanity as well as honest practitioners of our art to aid him in his crusade. Dr. Bedford Fenwick's paper on Intra-Abdominal Tumours as a cause of Cardiac Degeneration is one deserving far more than a mere passing notice, because it is one of the first efforts, if not the very first, to justify and explain the empirical conclusions to which Dr. Bantock and I arrived simultaneously some ten years ago, that all abdominal tumours ought to have early surgical interference, not only on account of the intrinsically better results thereby obtained, but by reason of the far more extended, though less apparent benefits in other directions. We have ceaselessly warred on this subject ever since, and we have brought over to our side every one save those who have arrived at that age when, according to Professor Huxley, all men of science ought to be painlessly destroyed. That time may be taken to have arrived when they give evidence that they can no longer be taught. The scholarly paper of Dr. Robert Barnes, flanked as it was by the masterly criticism of Dr. Samuel Wilks, formed a very remarkable feature of our year's work. If I say that even that paper has not shaken my sceptical position on this subject, I shall not in any way detract from the merits of the paper, for it only means what I said at the time, that the evidence hitherto collected on this subject is almost entirely, if indeed it is not wholly, on the authority of men who have been completely impressed with the authoritative decisions of tradition, that such a thing does occur. I want some new evidence collected if possible, by men who are open to the same doubt as that by which I am myself affected.

The question of normal menstruation naturally suggests itself here; first, because it is the subject of a standing committee of the Society, from which I hope for much good work, although little has as yet been done. We have had in the Society a few scattered discussions on this subject, but nothing definite has resulted. To my own name have been attributed theories of menstruation, as, for example, lately by Martin, of Berlin, of which I am as ignorant as I am innocent. All I plead for is a wholesome scepticism; our text-books and our teaching are infiltrated with the belief that ovulation and menstruation stand as cause and effect, every one so believing being forgetful of two great facts, that menstruation is known amongst the primates only; and that in women it comes long after, and goes long before ovulation.

It is most amusing to hear Sir Spencer Wells and Mr. Knowsley Thornton insist that for the arrest of menstruation by operation every scrap of ovarian tissue must be removed. Of all living men, these two should have been the last to forget that two men of the name of Ritchie, father and son, wrote a remarkable book, every word of which has been confirmed by the writers who have discussed the subject since, and whose conclusions are absolutely proved by Drs. de Sinéty and Malassez. If the observations recorded in that book are accurate, the ovary can have no relation whatever to menstruation as a cause. The papers of the two Ritchies were collected and published in 1865, and the book is dedicated to "Thomas Spencer Wells."

The second reason why, in my opinion, normal menstruation must occupy a prominent place in what I have to say regarding the work of the Society during the past year is, that it has been the occasion of two of the most remarkable papers which have yet appeared on the subject; and I repeat here what I said when they were read, that they conferred marked distinction on our Society. I refer to the papers of Mr. Bland Sutton and Dr. Arthur Johnstone. It was a most remarkable thing that these two men, working upon different materials, in different ways, and approaching their subject from altogether different standpoints, and without the faintest kind of association, should come to conclusions which seem to me, on revising them, to be absolutely identical. The latest work on menstruation which had taken possession of the mind of the profession was the theory of Dr. John Williams, and by each of our authors that theory has been knocked "higher than a kite," and in the same way, for both Mr. Bland Sutton and Dr. Johnstone show conclusively that Dr. Williams's methods were faulty, and his preparations badly made. Processes which he regarded as normal were therefore shown to be only the results of inexperience on the part of the observer. Mr. Bland Sutton's conclusions are as follows: Macaque monkeys and baboons suffer a periodical loss of blood from the uterus. Unlike the human female, in them there is no shedding of the epithelial lining of the mucous membrane of the uterus and utricular glands. The amount of blood which escapes is very small in quantity. In examining badly-preserved specimens, all the remarkable appearances described as occurring in the uterus of the human female by Dr. John Williams could be pro-

duced. Dr. Johnstone's paper is equally conclusive, and I am specially proud of it, because he is a typical example of the splendid race which the implantation of Britons on a new soil has produced, and I have had the privilege of ranking him amongst my pupils. He comes forward with a new theory, that menstruation is the result of a glandular function, and he proves that the menstrual organ is the endometrium. First of all, his observations exactly tally with those of Mr. Bland Sutton to this effect, that Dr. John Williams's views are entirely based on the inaccuracies of imperfect preparations, and from the employment of too low powers. Dr. Johnstone's paper is illustrated by some beautiful drawings, for the accuracy of which I can vouch, as I saw the preparations from which they were made; and these, almost without a word of explanation, establish an *a priori* probability for his new doctrine which is most remarkable. A section of the uterus of a girl eleven years of age shows a mere coating of columnar epithelium, without corpuscular development. A section of the endometrium of a girl aged 13, who had menstruated twice, shows more elaborately developed columnar epithelium, and the beginning of a corpuscular layer. The menstruating uterus of a woman of 20 shows abundant corpuscular development, constituting a thick endometrium, with its epithelium in process of casting; whilst a senile uterus at 60 shows merely the skeleton of the endometric structure, with almost complete exhaustion of its corpuscular elements, and a total absence of epithelium. Both Sutton and Johnstone agree that in menstruation the epithelium of the tubes is not shed.

Here, then, and at last, we have the explanation of a long series of most intricate physiological and pathological difficulties, the riddles of which seemed to be wholly beyond our grasp.

First of all, we have an explanation of the familiar fact that impregnation and menstruation seem to have a clear relation as to coincidence, the plain fact being that an impregnated ovum adheres only to a surface denuded of epithelium. When desquamative salpingitis has destroyed the tubal epithelium, the ovum may be impregnated in the tube, and may adhere to the exposed corpuscular tissue, and the dreadful issue of tubal pregnancy will result. The writings of the Ritchies, De Sinéry and Malassez, and many others, and my own observations from operative experience, show that ovulation is going on constantly from infancy, long antecedent to puberty, and, in old age, long after the climacteric. For pregnancy not only an ovum is required, but it is necessary that the ovum, when fertilised, should pass over the endometrium when it is denuded of its epithelium, and in the condition of turgescence fit for the subsequent processes. But for one ovum thus secured, there are probably scores or hundreds whichperish, either dropping into the peritoneal cavity or passing out through the uterus. The menstrual process is necessary, or, at least, such parts of it as involve the preparation of the endometrium are necessary for impregnation, but menstruation has nothing to do with ovulation further than being a means to the end of gestation.

Many curious clinical experiences and pathological facts are connected with—are explained by, and in their turn support—these simple views. Chronic endometritis involves sterility in a large number of its victims. The curette cures the disease and removes the obstruction. The condition of "infantile uterus" means absolute sterility by reason of the arrest in development of the glandular tissue. Cancer of the uterus between 16 and 50 always produces abundant endometric cell-development, because it has its favourite glandular material to work upon. On the contrary, in senile women the process is ulcerative, slow, and free from the immense tumour-development characteristic of its progress in the earlier period.

The singular discrepancy between the uterus and ovaries in their pathological tendencies is clearly due to the two facts, the first discovered by Ritchie, that from infancy to death the glandular function of the ovary is never quite at rest, so that ovarian tumours are met with at all ages; the second, displayed for the first time by Johnstone, that the truly glandular function of the uterus begins with puberty and ends with the climacteric, therefore we have myoma practically limited—indeed in origin the limitation is absolute—to the time between these two incidents of woman's life.

The analogies which go to establish Johnstone's theory are numerous. He gives the thymus gland and the hair follicles, and he might have quoted the testicle. Briefly stated, and in his own words, this theory is "that the endometrium, above the internal os, is not a 'mucous membrane,' but belongs to the so-called 'adenoid' tissues, and that menstruation is for it, exactly what the lymph-stream is to the lymph gland, or the blood-current to the spleen." But how, it will at once be asked, can we explain this curious phenomenon occurring in women only, and in some of the higher apes in a partial sort of way? Johnstone's observations, though not yet complete, give already almost a complete answer. He says, "In two of the ruminants I have shown that nature has supplied this tissue with an abundant lymph-stream, which in the unimpregnated state washes away the ripe material to the general circulation exactly as it does any other lymph corpuscle. But in woman, where, on account of its erect position, the uterus has to depend on the tenacity of its own fibres for the preservation of its shape, no such thing as loose tissue of a lymphatic network can be depended upon. So, to preserve the integrity of the uterine wall, the emulgent stream is poured into the cavity of the body and got rid of through the vagina. The sow does not menstruate for the same reason that the child does not. The corpuscles are so slightly developed that they do not need rapid removal. Whether there are more than these three conditions in the animal kingdom I am now unable to say; but by this negative kind of proof I am ready to corroborate Ercolani's statement that the change necessary to the formation of the placenta must be much greater in some than in other animals." The Fallopian tubes and their ciliated epithelium, the endometrium and its menstrual discharge, are, therefore, all the result of the upright position.

Much else I might say about the work of the Society during the past year, but I feel I cannot pass over without notice a struggle which Gynæcology is now passing through, which seems to have reached its bitterest phase during the year just past, and in which I have been called upon as your President, along with several other and more distinguished members of your Council, to take a somewhat prominent part.

Struggles such as this are by no means unknown in the history of surgery, and they have been as bitter, but never so short nor so decisive. When Charles Clay, Frederick Bird, and Baker Brown were doing their best to advance their art, and relieve suffering women by their intrepid efforts to establish abdominal surgery, they were persecuted through a long series of years. But they triumphed in the long run, and Clay at least has lived to know that he is recognised as the Father of Ovariotomy in England. His share of credit is certainly larger than McDowell's, because he had to bear the brunt of a malicious misrepresentation, from which McDowell's relative obscurity and retirement in a Kentucky village protected him. Clay and his colleagues made mistakes—fatal mistakes we know them now to be—but the very man who chiefly persecuted all of them has made blunders of a far more serious kind. No kind of human progress is free from error—error sometimes so great that, when we look back on it, we may begin to doubt whether it would not have been better to have forfeited the progress than have gone through what was necessary to secure it, and we should in many instances come to this conclusion but that the advance is permanent, whilst the errors inherent to its progress are transitory. I am sure it is absolutely certain that no progress has ever been made in medicine without awful blunders, and I know of no reason which should make us expect abdominal surgery to be an exception to this rule. That every kind of effort should be made to diminish these mistakes to the utmost must be admitted on all hands, but persecution is not a legitimate weapon to use under any circumstances; and if the surgeons of the Liverpool Hospital for Women had been guilty of everything laid to their charge, the persecution to which one of them has been subjected could not have been more bitter, nor the punishment more severe. His health has been shattered, his practice—for a time at least—ruined, and an enormous fine in costs has been levied upon him. In fact, a seven years' sentence of penal servitude would have been a mild alternative to what he has gone through.

Some of those who have been instrumental in bringing about this result have been all along crying out that what they were doing was for the honour of their profession and the public interest. I remember that a native of a small Scotch village was complimented on the evidence of the high moral and religious tendencies of his community, as evidenced by three large, elegant churches in the village, one Established Church, one Free Church, and one a United Presbyterian, each large enough to hold more than the entire population of the place. He put the matter right by saying that their prominence was due not so much to religion as to spite.

For nearly twelve months this burning question has been before the law courts, and has been discussed in journals both lay and professional; it has been whispered that even the opinion of the highest personage in the land has been solicited upon it. Further information is wanted, however, before our side of the story is complete. We want to know who provided the funds for the prosecution of Dr. Imlach, and who are the anonymous writers in two medical papers who have so unfairly and unjustifiably misrepresented the questions at issue, and the grounds upon which they have been

decided. These men are either familiar with the questions upon which they write, or they are not. If they are not so, then they have no business to use the enormous influence of a certain journal to misrepresent a great question, and place themselves under the shield of the anonymous leader-writer; and for this reason, that such articles as have appeared in that journal must inevitably deter a large number of timid men from doing work concerning the necessity of which there can be no doubt. I think it infinitely more harmful that the thousands of women in this country suffering from the risks and agonies of pyosalpinx should go unrelieved, than that a few uterine appendages should have been unnecessarily removed.

[Mr. Tait here protested against the action of the Editor of the *Lancet* in refusing to report in any form the proceedings of the British Gynæcological Society.]

The questions raised against the staff of the Liverpool Hospital for Women were mainly three: 1, that operations were there performed without consultations being properly summoned; 2, that they were done without the patients being aware of the nature of the operation, and its possible results; and 3, that such operations were done in cases where they were unnecessary.

These questions have all been decided in favour of the staff by evidence on oath, subjected to most rigorous cross-examination in a court of law; by evidence obtained by a full inquiry by the committee of the hospital; and partially, if not wholly, by an independent Inquiry Committee appointed by the Liverpool Medical Institution. But it seems to me my duty here to remark on these three questions, by reason of the intimate relations they bear to the work of this Society, and from the fact that, as your President, I was asked to give evidence at the trial, and also asked by the committee of the hospital to make an independent inquiry.

The trouble was started by the consulting medical officer making a complaint to an outside body that he was not consulted for such operations, and that they had risen in number from 86 in 1884 to 166 in 1885. He concealed the fact, or overlooked it, that the number in 1884 was confined practically to little more than the last six months of the year, during which the work of the hospital really began, so that the rise was far more apparent than real. Up to that time the results of abdominal surgery in Liverpool, at least as represented by that done in the special ward of the Royal Infirmary, were so awful, that it could be no matter of surprise that the opening of a special hospital, where the mortality was small, was followed by the usual rush of patients to the more successful workers. This was the story of the Samaritan Hospital in London, and has been abundantly illustrated elsewhere. Further, this consulting medical officer gave us his views on oath on abdominal surgery. All I can say is that there are, and have been, six consulting officers of eminence attached to my own hospital, whose services have been sought for freely, and given loyally and abundantly. Had there been one of them who held the views enunciated by Dr. Grimsdale, I should have disregarded him; I should have plainly intimated my opinion that he was a dangerous and obstructive person, and I believe that unanimously his resignation would have been asked for. At a recent meeting of the Medical Society of London I raised the question most pointedly, and had the passive support of the meeting, whilst Mr. Knowsley Thornton gave me his active support in saying that men who went to consultations prejudiced against such operations rendered such consultations merely farcical, and were men who did a great deal of harm. We have then, and for the first time, a pronounced professional verdict on this point.

That operations were done at Liverpool without the details of the proceedings being made sufficiently clear to the patients, is a very much more difficult question to deal with. To inflict such a rule is a new departure in professional practice, but I think a very wholesome one. I have always followed it, at least, since it dawned upon me how easy it was to be misrepresented. But what the writer in the *Lancet* wants us to do, is to tell the patients roughly that they are going to be "spayed." For one, I shall do no such thing; for they would go away with an altogether erroneous impression. I should lead them more astray if I told them that than if I told them nothing at all.

Sir Spencer Wells adopts the phrase of "spaying," and actually has gone so far as to say that "modern oöphorectomists touch hands with the spayers of New Zealand." But Sir Spencer Wells has given abundant evidence himself that removal of the appendages does not bring about the terrible evils which have been anticipated from it. In his books he has laid special stress upon it. Sir Spencer has "spayed" his thousands, for what difference can result in physiological effect if Sir Spencer removes a large cystic ovary or a small one with an abscess in it?—two large cystic ovaries or two ovaries involved in the troubles and adhesions of double pyosalpinx? The remote effects on the system, as the growth of hair, in consequent and unseemly obesity, or the change of voice and the loss of sexual appetite, must be exactly the same. Sir Spencer Wells stands up now as the most wholesale "spayer" alive, and he tells us that his "spaying operations" have had no such ill-effects as were anticipated. I accept his evidence because it wholly agrees with my own experience.

On the evidence of Sir Spencer Wells, the *Lancet* writer makes a most curious slip in his issue of last Saturday. He says: "Hospital patients in Liverpool differ but little from those in London and elsewhere; they suffer from the same diseases, and the proportion of those requiring abdominal section is much the same in every large town. Sir Spencer Wells is intimately acquainted with this class of patients in a hospital for women in London, and his criticism must be considered to have much weight." But Sir Spencer Wells says exactly the reverse. In his article in the *International Medical Journal*, he asks: "Who can diagnosticate with certainty the presence of irreparable disease in these out-of-the-way organs?" plainly indicating that he at least cannot. But in the same hospital, and from the same *clientèle*, his successors, Dr. Bantock, Mr. Thornton, and Mr. Meredith, are picking out lots of such cases and operating on them successfully. It is very funny to hear Sir Spencer speaking of the organs upon which he has spent the energies of his life as "out-of-the-way organs," when the younger generation can get at them with the greatest ease.

The Committee of the Liverpool Hospital for Women selected a number of specialists, and wrote officially to them all for opinions, and with one exception, arising out of Dr. Angus McDonald's death, they obtained answers. What Dr. Angus McDonald would have said I know, for on his death bed he consigned to my care one of his best and favourite patients, to have the operation done, and in the last paper he wrote occur these words: "I therefore confess myself a convert to the opinions of Mr. Lawson Tait on this subject, 'impugn it whoso listeth.' I have seen enough to satisfy me that in a considerable number of otherwise incurable and excessively distressing cases, complete relief from suffering and return to usefulness is afforded by the removal of the uterine appendages."

The list, besides Sir Spencer Wells, included Dr. Thomas Savage, Dr. Thomas Keith, Mr. Knowsley Thornton, Dr. Bantock, Dr. Aveling, Dr. E. Garrett Anderson, Professor Simpson, Dr. Fabricius, Professor Hegar, and myself.

From all they received answers entirely confirming the views of the medical staff of the Liverpool Hospital for Women, with the exception of Sir Spencer Wells, who, curiously enough, forwarded his reply to Dr. Grimsdale, who in turn published it in the Liverpool daily papers, before it reached the secretary of the hospital. The only criticism favoured by Sir Spencer was, that the statement that one-third of the in-patients of the hospital were subjected to abdominal section was so shocking, as to be almost incredible. But I have examined the records of the Samaritan Hospital, as supplied to me by Sir Spencer Wells himself, and I find that he used to "spay" about 40 per cent. of his patients in that institution. In spite of Sir Spencer Wells, the report of the Hospital Committee is eminently satisfactory, so much so that I think it ought to be placed permanently on record in the pages of our *Journal*. Otherwise it will be a lost document.

There also, and as a contrast, should appear the report of the Inquiry Committee of the Liverpool Medical Institution—a document as impotent and colourless where it ought to have been effective, and as wrong where it ought to have been right, as it is possible for it to be. You have already dealt with its most salient features; let me, in conclusion, deal briefly with one other point, for it brings that report, Sir Spencer Wells, and Dr. John Williams, all into the same current of condemnation. In the report of the Council, just adopted, it is pointed out most clearly and most properly that the period over which the inquiry extended was far too short to be conclusive. If the Committee had included one specialist, or if they had asked the advice of someone experienced in diseases of women, they would have been kept out of the ludicrous blunder here apparent.

When both ovaries are removed for cystoma, the pedicle is secured so as always to embrace the tubes, and therefore the woman is completely "spayed,"—to use Sir Spencer Wells's own expression. She thereupon, in the great bulk of cases, undergoes an artificial climacteric, and this is equally the case in the removal of both appendages no matter for what causes. It is one of the peculiarities of this discussion, that removal of the appendages for cystoma has been made to appear something quite different, far more barbarous than their

removal in other instances. But it is only fair to Sir Spencer Wells to insist that this is a mistake; the results are entirely the same. Menstruation is arrested immediately in the great majority of instances, and a premature climacteric is gone through, with all the disturbances, mental, moral, and physical, which characterise nature's own change. If the Liverpool Committee had known this, and had taken the trouble to read up the symptoms of the change of life, they would have made their report more precise and of some value.

Some ten or eleven years ago I removed the appendages of two young women for cystoma; that is, in the language of that time, I did double ovariotomy on them, and ever since I have remained on terms of close friendship with them, so that I had no hesitation in asking the permission of their husbands to obtain from them a detailed account of their subsequent history.

The first, aged 22, was engaged to be married when I operated, and was married a few weeks after her convalescence was completed; she has never menstruated since then. At the time of her marriage the curious phenomena of the change had begun. She was greatly troubled by the sudden flushes and chills which most women have at the climacteric. Her temperament altered very much; she became morose and fretful, had great aversion to marital intercourse, and derived nothing in the way of pleasure from it; in fact, she told me frankly, she had almost made up her mind to leave her husband, and blamed her friends and myself for permitting her marriage. Her husband was a good fellow; he had been warned of the possible troubles, and he bore himself well in the trial. He waited patiently, and in about thirty months he had his reward. The climacteric troubles ended, and his wife began to reciprocate his caresses, and they have since lead a perfectly satisfactory married life.

The second patient had been married two years, and had one child, when I removed both appendages for cystoma. The wound was a long time in healing, because the pedicles were very short, and she menstruated regularly through the wound for nearly a year, during the whole of which time she suffered intensely from flushes and chills, and severe nervous headaches. Indeed, for some months it really seemed a grave question whether we had done any good by saving her from death by removing the tumours. Menstruation ceased, and she became morose, and had such a tendency to religious melancholia, that we sent her away. She took to drinking, and we were in despair, for she had lost all interest in her husband, her child, and her home. We kept her moving about amongst strange people and places for nearly two years, when improvement set in, but it was nearly four years before she returned to the healthy tone of body and mind in which she had lived before she grew her tumours. Now, her husband confides to me, her sexual appetite is almost aggressive.

If similar inquiries are made amongst women who have gone through the normal climacteric—that is, the change of nature's own making—similar experiences will be found in large numbers. Very many women at that time lose all sexual desire, even acquire absolute antipathy to their husbands, take to drinking and the opium habit, and make their surroundings as miserable as they are themselves. This distress is not the lot of every woman; some pass through the change hardly knowing more than occasional discomfort, but I have known many to whom this miserable stage of existence has been extended over four, five, and even six years. Can anyone imagine that, in imitating nature, which after all is the limit of the art of physicians and surgeons alike, the surgeon's knife can work miracles? When a woman goes through this climacteric change as the result of an artificial process, and before her time, she has at least this comfort, that it has not to be repeated. We may assume that, if her misery is more than usually protracted, it would have been as bad if she had not been the victim of disease requiring an artificial process. In fact, in the case of myoma, we know with certainty that the artificial troubles are far less than those associated with the indefinitely delayed senility of an intra-mural myoma.

For the Liverpool Inquiry Committee to have overlooked all these important facts is the most absurd thing I have ever known a collective body of men to be guilty of. Before the Imlach trial I made some occasional and quite casual inquiries amongst married patients from whom I had removed the appendages for various reasons, and I did not find one who did not give a perfectly satisfactory account of her sexual life after the climacteric troubles were over. Since the trial I have made a far more extensive and systematic inquiry—a very objectionable occupation, but one necessitated by the filthy statements made then and since, and I have not found a single instance in which an appetite which existed before had been in any way impaired. I found also, what I suspected to be the case before, that a large proportion of women have no sexual appetites at all, but do their best to gratify the aggressive requirements of men they love. In a majority of instances sexual powers have been restored by the operation which had been placed completely in abeyance by the diseases for which they had been operated upon. Further than this, and most surprising of all, I have found seven instances where I removed the appendages in women before they had ever engaged in sexual intercourse, who have married since and in whom perfect sexual reciprocity seems to exist.

More wonderful still, I have two cases of women who have married after having hysterectomy done, and who were certainly *virgines intactæ* at the time of the operation. In one there is an occasional reciprocation in the act, but in the other there is an aggressive sexual activity not usual amongst women. My inquiries are still proceeding, and it may be necessary to place some details on record, though there are manifest objections to such a course of action. I cannot but regard the whole investigation as brutal, though not a single patient has resented the inquiry, when informed as to the cause which has driven me to it; and I have had but little difficulty in getting full replies from private patients of an intelligent kind. I did not pursue my inquiries far amongst hospital patients, as the Liverpool Inquiry Committee did, for I soon found that they were somewhat difficult to make understand that I had a serious object in making it, and I further found, what I knew beforehand, that hospital out-patients of the female persuasion will readily say what they think you want them to do. I have, by accident, come across one of the women examined by the Liverpool Committee, and I am perfectly certain that the method of investigation pursued by that committee was not the way to arrive at the truth about them, or any other matter in issue.

Gentlemen, I have taken up much of your time on this subject; but, whether you agree with my views on it or not, you cannot but admit that it possesses an interest so great for us individually, as well as an importance so overwhelming for the department of surgery which we practise, as not only to excuse, but to demand, the fullest discussion. That I have had to descend to quagmire—that I have had to use rough words in the row which has gone on for now nearly a year—is not my fault. We have had to follow the enemy, and I think we have had a very satisfactory issue so far. We have been fighting not only the battle of a man who has been grievously wronged, but we have been fighting the battle of surgical progress, and, in accordance with that Hippocratic oath to which we have all subscribed, sustaining the interests of those suffering creatures whom we have sworn to aid as best we can.

A more pleasing duty I have now to perform—to congratulate the Society on the choice it has made of Dr. Granville Bantock as my successor. To follow Meadows was an honour which greatly enhanced the distinction you conferred on me; to be followed by Bantock increases, if it may be, my appreciation of your favour. I have tried to recollect how long I have known him, and I cannot remember. It seems as if it were since the dawn of abdominal surgery that we have gone on as friendly rivals, eager to outstrip each other, but never showing other than a friendly and brotherly interest in the mutual progress. It would be useless to record the various fights of the last ten years which have occurred over the many questions of abdominal surgery, but in all, I think without the most trifling exception, we have always been side by side. I cannot wish better for myself—I hope I may say that it is no ill I wish for him—than that our relations may so continue.

Bequests and Donations.—An anonymous donor has given £1,000 towards the endowment fund of the Jaffray Hospital, Birmingham.—Mr. George Fielder, of West Horsley Place, Leatherhead, bequeathed (after the falling in of two life interests) £500 Consols each to the Charing Cross Hospital, the Middlesex Hospital, the Surrey County Hospital, and the Seamen's Hospital (late "Dreadnought"), Greenwich.—The Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties, Lancaster, has received £500 under the will of Miss Alice Lowe, of Blackpool, and £284 4s. 1d. under that of Mrs. Mary Kitson, of Rochdale.—Mrs. Mary Ann Garston, of Aigburth, near Liverpool, bequeathed £100 to the Liverpool Royal Infirmary.—Mr. John Rawlins bequeathed £100 to the Yeovil Hospital.—Mr. Charles J. Schofield has given £100 to the Royal Hospital for Women and Children.—Mr. Thomas Berry, of Grove House, Worksop, has given £100 to the Sheffield Public Hospital and Dispensary.—"F. R." has given £100, "in memory of dear sister," to the National Hospital for Consumption, Ventnor.—"W. L. T. R." has given £50 each to the London Fever Hospital, the Hospital for Consumption and Diseases of the Chest, the East London Hospital for Children, and the National Hospital for Consumption at Ventnor, and £20 to the Chelsea Hospital for Women.—The Mercers' Company have given £52 10s. (in addition to previous donations) to the Central London Throat and Ear Hospital.

LETTSOMIAN LECTURES
ON
SOME OF THE MENTAL AFFECTIONS OF CHILDHOOD AND YOUTH.

Delivered before the Medical Society of London, January, 1887.

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Lecture II.

Causes of Idiocy. — Accidental Origin. — Developmental Origin. — Congenital Origin. Influence of Maternal Health; of Alcoholism; of Malignant Disease and Syphilis; of Neurotic or Phthisical Inheritance; of Trades and Professions; of Marriages of Consanguinity; of Illegitimacy; Idiocy from Deprivation of Senses; Cretinism; Influence of "Over-Education" of Women.

The second lecture discussed the causes of idiocy or feeblemindedness.

Accidental Idiocy.—The history, as a rule, in these cases made the cause plain. Injury received at birth by necessary instrumental interference, was an infrequent cause. The late Dr. Ramsbotham, who had large opportunities of forming an opinion, had stated that the cases were very few in which he could trace any cerebral lesion as resulting from the employment of the forceps; and the lecturer, from statistics he had himself collected, found that it was probable that in 9 per cent. of purely "accidental" cases, instrumental interference might have been the principal factor. Far more important, however, in the production of accidental cases, was the prolonged transmission of the child in the maternal passages. In so large a proportion as 20 per cent. of all idiots whose history he had investigated, there was an undoubted account of suspended animation at birth, requiring active efforts to bring about resuscitation; the transit of the child was obviously more likely to be delayed to a perilous extent in primiparæ. Ergot had been thought to be a cause of "accidental" idiocy, but the condition for which it was used, namely, delayed transit of the child, was more probably the cause of the evil; independently of what concerned the safety of the mother, mental and physical evil to the child was more likely to be induced by prolonged pressure and a delayed use of instruments than by their early and adroit employment. Insolation in infancy was certainly a cause of accidental idiocy. Dr. Down had seen a notable number of feeble-minded children who owed their disaster to sunstroke while making the passage of the Red Sea and Suez Canal *en route* from India, or from exposure in that country. The administration of opium by nurses to keep their charges quiet, and traumatic injury to the cranium from falls, were not so common as causes of idiocy as a cursory consideration might suggest. In a large number of cases referred by the mothers to falls or suspected falls, or to opium-drugging, the objective evidence placed the congenital nature of the affection beyond dispute. But though opium-drugging was but rarely a factor in the production of feeblemindedness, morbid sexual erethism, too often produced by nurses to procure the quietness of their charges, was a more tangible cause of mental hebetude. Meningitis very frequently led to this variety of idiocy. In a large number of cases of "accidental" idiocy there was a history of scarlatina, measles, or smallpox, followed by inflammation of the ear with extension to the membranes of the brain, or of otitis set up by catarrh. Evidence of a long past inflammatory process might be found after death, and in such cases it appeared probable that the anæmic condition of the cerebral convolutions had for a cause the constringing effect on the vessels of organised lymph at the base of the brain. Epileptiform convulsions, whether eclampsic or not, frequently caused accidental idiocy, but it was in the "developmental" class that the results of epileptiform convulsions were the most manifest. Hydrocephalus was also an occasional cause of accidental idiocy, but more frequently of the congenital variety. Paralysis arising from cerebral hæmorrhage was a cause of accidental as well as of congenital idiocy; the amount of intellectual defect varying very greatly.

Developmental Idiocy.—The maternal health during pregnancy was a very potent factor in the production of "developmental" idiocy, especially if the deviation took place during the sixth or seventh month. Causes which, occurring early in the embryonic life of the child produced congenital, operating later produced developmental idiocy. The health deviations which led up to this kind of idiocy were sickness, whether produced by the sea or other causes, uterine hæmorrhage, great emotional disturbance or grave febrile disease. The members of this class were very prone to eclampsia at first dentition, to epilepsy or chorea at second dentition, and to epilepsy or chorea, and moral deviations at the period of puberty. At any of these epochs there might be intellectual lesion varying in gravity with the nature of the malady.

Congenital Idiocy.—The majority of idiots fell properly under the head of the congenital class, and questions as to the cause of congenital idiocy really became an inquiry into the pre-efficients, or all that had gone to the making, of idiocy. One of the great causes was heredity; there was overwhelming proof of the transmissible nature of neurotic disease, and there were also to be found in many of the progenitors of idiots indications of decadence. In the investigation into the antecedent history of 2,000 cases, in 36 per cent. of the fathers I failed, the lecturer said, to get any history which could throw light upon the affliction, and the same failure occurred in 38 per cent. of the mothers, but in only 16 per cent. did I fail in obtaining a grave history of physical or psychical decadence from one or other of the progenitors. But even where there was no evidence of gross departure from a normal standard, one could not fail to notice, frequently, cranial and other signs of racial degeneration, such as narrow palates, rabbit-mouths, bad foreheads, and facial exaggerations. The causes of idiocy are not always operative in a single generation, and it is only by having the opportunity of examining into the physical conformation of parents and grandparents that one can see that idiocy in many cases is the culmination in the individual of a gradual degenerative process.....It had been a matter of speculation with me whether great disparity of age in the parents was not likely to be a cause, and strength was given to this supposition by a few remarkable cases which came under my observation—cases where the disparity was very great, and where there was feeblemindedness in the offspring. On making inquiries, however, over a large field, I was led to results which, though interesting, did not tend to confirm the speculative opinions I at first entertained. I found that the average age of the fathers of feeble-minded children at their birth was $35\frac{8}{12}$, and that of the mothers $31\frac{6}{12}$; a disparity of only $4\frac{2}{12}$ years. On looking about for some standard of comparison, I met with Mr. Galton's statistics on the ages of the parents of men of scientific attainments at the period of their children's birth. Mr. Galton states that their fathers average 36, and their mothers 30 years. With reference to the ages of the fathers in whose case we should naturally look for the potential cause, there is a remarkable similarity, the advantage being on the side of the procreator of feebleminded children to the extent of $\frac{4}{12}$ of a year, while there is less disparity of age among the parents of the feeble-minded than among the parents of men of prominent ability; the difference being six years in the case of Mr. Galton's selected men's parents as against $4\frac{2}{12}$ in the case of the parents of afflicted ones. It is clear, therefore, that disparity of age in the parents, although doubtless having an important influence on the well-being of the offspring, does not rank as an important factor in the production of idiocy. It is worthy of remark that only 20 per cent. of the mothers give birth to idiots at the age which Aristotle regarded as the most suitable one for a vigorous progeny, namely, between 30 and 34. Whereas, according to Mr. Galton, no less than 34 per cent. of men of eminence are given birth to by their mothers at that age. There was a greater liability to idiocy among primiparous children, 24 per cent. of the 2,000 idiots examined by Dr. Down being first-born children. Prolific child-bearing appeared to be the characteristic of people begetting feeble-minded children. The preponderance of idiocy in first-born children might be due to the exalted emotional life of the father and mother as well as to the increased difficulties of parturition, and to the attendant greater risk of suspended animation; while 24 per cent. of idiots generally were first born, no less than 40 per cent. of resuscitated idiots came under this category. The production of twins was not a very appreciable cause of idiocy; 2 per cent. only of Dr. Down's collection were twins, while, on the other hand, in 2 per cent. the mothers had given birth to twins who were not afflicted in any way. The statistics collected by Dr. Arthur Mitchell, C.B., in Scotland, were rather different, for he found that one in forty idiots was one of twins. Having regard to the greater tendency to abnormal presentations, to the increased necessity for instrumental interference, and the greater liability to premature birth, Dr. Down was prepared to expect a much larger number of idiots to have been twin children.

The Influence of Maternal Health.—The lecturer, continuing, said: I attach immense importance to the emotional life of the mother during the period of pregnancy, and I feel convinced it is one of the most potent of all the pre-efficients of idiocy. In 32 per cent. of my cases there was a well-ascertained history of great mental disturbance

on the part of the mother at that time. My ever-to-be-revered teacher, the late Dr. W. B. Carpenter, relates how, at the siege of Landau in the year 1793, in addition to a violent cannonading, which kept the women in a constant state of alarm, the arsenal blew up with a terrific explosion, which few could bear with unshaken nerves. Out of ninety-two children born in that district within a few months afterwards, sixteen died at the time of birth, thirty-three languished from eight to ten months, and then died, eight became idiots and died before the age of five years, and two came into the world with numerous fractures of the bones of the limbs, probably caused by irregular uterine contractions. I can from my own experience refer to the number of cases of feeblemindedness which were the outcome of the siege of Lucknow, and to many others the result of sudden shocks from the receipt of distressing tidings of death or other calamities. Another element in the etiology of idiocy is the physical health of the mother during the period of pregnancy. In 20 per cent. of my cases there was marked physical disturbance. In 4 per cent. of these there was a history of serious falls, falls from which uterine hæmorrhage followed; the other cases were those in which there was prolonged ill-health, and in which vomiting was a prominent symptom. They were all such events or ailments as would be likely to interfere with the nutritive life of the embryo.....If, after a perusal of Mr. Galton's statistics of the antecedents of men of science, we compare the antecedents of my 2,000 cases, the contrast is so great that all wonder at the production of mental feebleness vanishes. With fathers phthisical and irascible, with mothers feeble in judgment and so emotional that everything is a cause of fright, one is astonished that they should have procreated any sane child at all, and, indeed, in some cases the whole progeny of these parents is puny and feeble, failing to perform social duties. I find that in 16 per cent. of the cases there was insanity or marked feeblemindedness on the father's side of the family, and in 15 per cent. there was the same condition on the mother's side. Severe emotional disturbance, bordering on insanity, occurred in 4 per cent. of the fathers, while a like affection in the mothers occurred in 13 per cent.

Influence of Alcoholism.—The lecturer first referred to the difficulty of obtaining reliable statements with regard to the influence of alcoholic intemperance. He found avowed and notorious intemperance in 12 per cent. of the fathers and 2 per cent. of the mothers, but the proportion varied extremely with the stratum of society. In the upper ranks it was an insignificant factor, while in the lower social class it was of great importance. Some of the cases were the result of deterioration of the fathers' mental and physical powers, others of procreation having taken place during a debauch. In Norway, when the spirit duty was removed, insanity increased 50 per cent., and congenital idiocy 150 per cent. Dr. Down's opinion that acute alcoholism produced a distinct form of idiocy had been questioned, but M. Morel, of Rouen, had noticed similar facts, and Dr. Ruez had observed that idiocy was very common among the miners of Westphalia, who, living apart from their wives, only came home, and generally got drunk on their holidays. M. Demeaux had also recorded parallel cases. Dr. Delasiauve said that in the village of Carême, whose riches were its vineyards, ten years' comparative sobriety enforced by vine disease had a sensible effect in diminishing he cases of idiocy.

Influence of Malignant Disease and Syphilis.—Without seeking to attach too much importance to the fact, it was interesting to notice that 3 per cent of the fathers and 5 per cent. of the mothers—in all, 8 per cent. of the progenitors—died from cancer. Goitre occurred in 2 per cent. of the mothers, but not once in a father. Syphilis was not an important factor in the production of idiocy; in not more than 2 per cent. were there signs of inherited syphilis.

Influence of a Neurotic or Phthisical Inheritance.—There was a history of epilepsy in three per cent. of the fathers and in six per cent. of the mothers. Phthisis exercised a very important influence among the progenitors. There was a marked history in 25 per cent. of the fathers or their immediate relatives, and in 20 per cent. of the mothers. The Mongolian type was the outcome of a predominance of phthisis, and it included about 10 per cent. of all idiots. In 23 per cent. of the cases there was a history of idiocy, mental feebleness, insanity, or other grave neurosis in one or several of the brothers and sisters. Many facts tended to indicate that the mental condition of the embryo took its impression from the mental condition of the father at conception; just as intemperance at the time of procreation might eventuate in degenerate offspring, so various kinds of mental perturbation of the father at that time might so result. He had, for example, several instances of the father begetting healthy children, except when he was the subject of recurrent mania, when idiocy resulted to the children conceived at that time. In like manner he had examples of healthy children being produced except when the merchant's business speculations had been hazardous, when the clergyman's parish had been disturbed, or the dissenting minister's church meetings stormy.

Influence of Trades and Professions.—After referring to the danger of drawing conclusions for general application from the experience of a single observer whose experience, however large, was certain to be limited in some directions, the lecturer continued: I have collected from my notes 400 cases with fair social antecedents, and I find that 75 per cent. are the children of merchants, country gentlemen, officers in the army and navy, gentlemen of independent means and liberal education, and members of the titled aristocracy. No less a proportion than 25 per cent. are the children of members of one or other of the three learned professions, a proportion which I take to be extremely large. On analysing still further the cases supplied by these three professions, I find that 3 per cent. are the children of lawyers, while 4 per cent. are the children of members of my own profession. The remarkable circumstance, however, in the investigation is that no less than 18 per cent. are the children of members of the clerical profession. Mr. Galton has made some interesting investigations from an opposite standpoint. He takes the members of the councils of some of the prominent scientific societies of London, such as the Royal, the Linnean, the Geological, etc., and makes the very fair inference that the 100 members of the Councils of such Societies may be taken to be men of marked scientific attainments and of intellectual prowess. He inquires into the various professions of the men who have had such representative offshoots. He finds that the legal profession, which, according to my statistics, procreates fewest idiots, gives birth to 11 per cent. of the foremost men of eminence; that the medical profession, with its 4 per cent. of idiots, gives origin to only 9 per cent. of scientific men, while the clergy, who have the maximum amount of idiocy, give birth to only 6 per cent. of men of science. In other words, while lawyers give origin to nearly three times as many scientific men as do the clergy, the clergy, on the other hand, beget six times as many feebleminded children as do lawyers. Now, I venture to suggest that there is more than a mere accident in this. I bring it forward because, interesting in itself, it is also interesting in the support it gives to the theory that a process of natural selection has been taking place.

The Influence of Marriages of Consanguinity.—The data on which accurate calculations as to the influence of consanguineous marriages could be made were unfortunately wanting, inasmuch as there was great uncertainty as to the number of people born who were the children of first cousins; it was to be hoped that at the next census this might be remedied. Among the out-patients at the London Hospital, .5 per cent. only were the children of cousins, and the people who claimed to be the product of consanguineous marriages were, as a whole, really above the average in physique and vigour. An investigation among the workpeople in an institution gave approximately the same result. M. Boudin, using the French official returns from 1853 to 1859 inclusive, found that of every one hundred mixed marriages, there were .9 consanguineous, while from another official return of marriages in France in the years 1863 to 1865, of every one hundred mixed marriages, 1.28 were consanguineous. M. Dalby deduced from the records of the Mairie at Paris that 1.4 per cent. was the proportion of consanguineous marriages in Paris, a larger percentage than that derived from the official returns of France generally. Mr. George Darwin, in a paper read before the Statistical Society, by a calculation based on the number of same-name marriages, came to the conclusion that the ratio of consanguineous marriages in London was 1.5 per cent., and in country districts 2.75 per cent. Having regard, therefore, to results arrived at by different observers, Dr. Down thought that 1 per cent. might be taken as the percentage of marriage of first cousins. Dr. Arthur Mitchell, C.B., estimated them, at a rough guess, on the basis of his inquiries in Scotland, at 1.5 per cent. Mr. Huth appealed to the early history of the world to show that consanguineous marriages were the rule. Close intermarriage was practised by the great founders of the Hebrew race. Among the ancient Egyptians and Persians, incestuous marriages were common in the kings and people of high rank without apparently any evil result, and numberless appeals to Athenian and Spartan history showed how frequent, and yet how harmless, was marriage of near-of-kin. Dr. Down had found that in 852 cases of known parentage 60 were children of consanguineous marriages, or at the rate of 7 per cent., while among these, 46, or 5.4 per cent., were first cousins. Dr. Shuttleworth, in analysing 900 cases, had found that 5.1 per cent. were consanguineous marriages, and of these 2.9 per cent. first cousin marriages. The average number of children to relatives who have intermarried was 5 according to Dr. Shuttleworth's statistics, and 6.9 in Dr.

Langdon Down's. Consanguineous marriages were not apparently much less prolific than others. The comparison, however, was not quite sound, for Dr. Shuttleworth's statistics did not include epileptic children, whereas the lecturer's did. Recent examination of the notes of 400 fresh cases showed 26 were children of consanguineous unions, or 6½ per cent. Nineteen of these were the children of first cousins, or 4.75 per cent.; 6 were children of second cousins, and 1 of third. On further analysis I was struck, said the lecturer, with the obvious causes of their feeblemindedness, other than the marriage of near kin, which the notes of my cases brought to light. I took out of my portfolio twenty unselected cases, and, on examining the life-history of their progenitors, I found that in one only was the consanguinity of the parents the only discoverable factor. I am convinced that frequently the absence of investigation into the other possible factors has led to such contradictory opinions on this subject..... My views are quite in harmony with those of Dr. Charles Withington, who regards morbid inheritance rather than specific degenerative tendencies as accounting for all infirmities met with in the offspring of cousins. Dr. Kerlin, of Pennsylvania, a remarkably accurate observer, arrives at precisely the same conclusion as I have, that 7 per cent. of feebleminded people are the children of consanguineous marriages. Dr. Voisin made a careful examination of his patients at Bicêtre and Salpêtrière, and in no instance could healthy consanguinity be regarded as the cause of idiocy, epilepsy, or insanity. I have thus endeavoured to show that while the marriage of cousins insures a degenerate offspring where there is something morbid in the family history—where phthisis, scrofula, and especially the neuroses exist, I am by no means sure that by a judicious selection of cousins the race might not be improved.

The Influence of Illegitimacy.—Dr. Arthur Mitchell, from statistics taken in Scotland, came to the conclusion that illegitimacy was a very common cause of idiocy; and it was reasonable to expect that the mental agony endured by the mother should arrest the development of the embryo, and give rise either to congenital or developmental idiocy. Attempts to produce abortion might also have a similar effect.

Idiocy from Deprivation of Senses.—Idiocy was occasionally induced by deprivation of the senses. The case of Laura Bridgman was known wherever the English language was spoken, as a triumph of the perseverance of the late Dr. Howe over difficulties which seemed insurmountable. The lecturer mentioned the case of a boy, under his care, who could neither see, hear, nor speak; this deprivation was from birth. He had a very acute sense of touch, and that of smell was equally good. He knew by their odour all those who were brought into daily relation with him, and caressed lovingly those who ministered to his wants in the way of food and warmth. Attempts were made to teach him to associate actions with things, but failed, owing to a damaged cerebrum, and he became epileptic.

Cretinism.—A very important class of cases, owing its origin to malaria or other endemic causes, was cretinism. It was not unknown in England, and had been found in Derbyshire, in some parts of Yorkshire, and in part of Somersetshire. Cretinism was also met with in England sporadically. Mr. T. B. Curling was the first to call the attention of the profession to these cases in 1850, and Dr. Down brought a case before the Pathological Society in 1869. Altogether, he had had twelve sporadic cretins under his care; and, in the majority, there was reason to believe that they were procreated during the intemperance of the father; some of the later ones could not have been procreated under any other condition. Three of the cases were males, nine females. In three only was there much intellectual response to teaching. The relationship between goitre and cretinism was discussed, and the lecturer observed that it was very noticeable that many of the physical, as well as the mental and moral, characteristics of myxœdema resembled those of sporadic cretinism, and, like it, occurred mostly in women. The only exception he had seen was a cab-driver, brought by Dr. Fenn, of Richmond, before a meeting of the Thames Valley Branch of the British Medical Association.

Influence of the "Over-Education" of Women.—Referring to the doctrine that the higher culture of the faculties of women makes them less capable of becoming "mothers of men," the lecturer said: If there is one thing more certain than another about the production of idiocy, it is the danger which arises from the culture of only one side of woman's nature; so long as only the emotional side of their nature is cultivated, and they are responsive to the least unexpected sound, unreasoning as to the world of nature about them, and thrown into emotional paroxysms by the sights and trials which will be sure to cross their path, they will, from my point of view, be liable to become the mothers of idiots. Without advocating over-pressure, which is as bad for the neurotic boy as for the neurotic girl, and which is to be avoided during the developmental life of the one as well as during the developmental life of the other, there can be no reason why the faculties which they possess should not be cultivated, so as to make them, not only fit to be "mothers of men," but also companions and helpers of men. At all events, let the trial be made without prejudice; and let us welcome the advent of a time when women shall not be the mere frivolous toys of the hour, but have and enjoy the privileges and rights of which it is absurd to deprive them. My statistics show that we must look mainly to the health and mental life of the parents. They point to the importance of training our sons to be temperate, and our daughters to be self-possessed. They indicate that we should seek alliances for our daughters with men from a healthy stock, that our sons should avoid women whose emotions are developed at the sacrifice of their judgment and self-control. They show that idiocy is often the natural outcome of a gradual process, in which the strain becomes more and more degenerate, requiring only an insignificant factor to produce the direst results.

NOTE ON TINCTURE OF STROPHANTHUS.

By THOMAS R. FRASER, M.D., F.R.S., F.R.C.P.E.,
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SINCE my communication, at the Cardiff meeting of the British Medical Association, on the Therapeutic Uses of Strophanthus (BRITISH MEDICAL JOURNAL, November 14th, 1885), I have been favoured with many letters from medical practitioners describing their experience of its effects. The general character of this experience has been confirmatory of the statements I had made. The therapeutic employment of strophanthus seems to be extending even more rapidly than was anticipated. Until now, this extension has been impeded by the difficulty in procuring the substance, but large supplies have recently been imported into the country by several drug merchants, and especially by two gentlemen associated with East Africa in their commercial pursuits—Mr. Buchanan, of Blantyre, and Mr. John W. Moir, of the African Lakes Company. The ample supply of strophanthus now available will no doubt lead to a further extension of its therapeutic employment in this country, and probably also in America and in the continental countries of Europe, where hitherto it has been tested to a very limited extent by a few physicians.

It has, therefore, become of importance to consider the pharmaceutical form of preparation that should be adopted, so as if possible to obtain a preparation of uniform strength and convenient dose. Were these conditions to be obtained, the preparation would generally be adopted for therapeutic purposes, and errors and risks from variations in strength and dosage would be avoided.

In the communication referred to, I described several cases of cardiac disease treated with strophanthus in the form of tincture, in which, however, several tinctures varying in strength and in other characters had been administered. These variations were to some extent due to the circumstance that, in the absence of knowledge regarding the therapeutic effects of strophanthus, trials of a tentative description were required with preparations of different strengths before one could be selected whose dose is a convenient one. More recently, I have nearly always employed a tincture corresponding to the officinal tincture of digitalis (1 in 8), as it was more easy with it to institute a comparison between strophanthus and digitalis. The dose of this tincture was ascertained to be from two to four minims, two minims being, in a large proportion of cases, a sufficient quantity. The preparation has in my hands proved altogether satisfactory, but no doubt for general use its dose may be an inconveniently small one.

Judging from expressions of opinion in various quarters, the requirements of general practice would in all probability be satisfactorily met by a tincture whose doses range from five to ten minims. These doses would be obtained by a tincture of 1 in 20, prepared by the following process; and I would accordingly propose the adoption of this tincture in the future applications of strophanthus in the treatment of disease.

Strophanthus seeds, deprived of their comose appendices, reduced to powder, and dried, 1 ounce or 1 part. Ether, freed from spirit and from water, 10 fluid ounces, or 10 fluid parts. Rectified spirit, a sufficiency to obtain 1 pint, or 20 fluid parts.

Remove entirely the stalks and comose appendices from the seeds, reduce the seeds to a moderately fine powder, dry the powder by exposing for twelve hours to a temperature of 100° or 120° Fahr., and

weigh. Pack in a percolator (the percolator being furnished with air valves, or being otherwise so constructed that the percolation may be arrested when desired), add ether until the whole of the powder is saturated, and a small quantity of the ether has dropped into the percolator; arrest the percolation for twenty-four hours, and then continue percolating slowly until the whole of the ether has been used. If the last ether percolate should not be almost colourless, use more ether.

Remove the powder from the percolator; expose to the air, and break up any lumps after the ether has sufficiently evaporated; and continue the exposure, heating the powder, if necessary, to 100° or 120° Fahr., until all the ether has evaporated, when a uniform, nearly white, dry powder may easily be obtained.

Repack the powder in the percolator, add enough of rectified spirit to moisten it thoroughly; arrest the further flow of the spirit, and macerate for forty-eight hours; and pass rectified spirit slowly through until twenty fluid parts of tincture have been obtained.

In this process, the preliminary extraction with ether is for the purpose of removing the large quantity of inert oil contained in the seeds, which, if present in the tincture, would cause it to become opalescent on the addition of water.

The dose of this tincture is from five to ten minims. It may also be used in doses of half a minim to two minims, frequently repeated. It is nearly colourless, having a very pale yellow tinge; neutral in reaction, and intensely and rather persistently bitter in taste. It mixes unchanged with water, is not precipitated by solution of tannin, but becomes markedly opalescent when ether is added to it. Solution of perchloride of iron intensifies its yellow colour, and, at the same time, produces a slight haziness in the solution; and, after some hours, the slightly opalescent fluid acquires a greenish yellow colour.

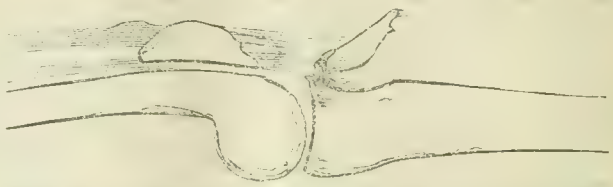
The chemical and pharmacological experiments which I have made show that the seeds contain a much larger quantity of active principle than any other part of the plant. The pericarp of the follicles, and the comose appendices of the seeds, contain a relatively small quantity, and the quantity is not the same in each part of the pericarp. Details of observations on these points, as well as on the histology, chemistry, pharmacology and therapeutics of strophanthus are now nearly ready for publication; but, in the meantime, I must express the opinion that the seeds furnish the most convenient and trustworthy preparations for therapeutic administration, and that they alone should be used for preparing the tincture.

ON FRACTURE OF THE TUBERCLE OF THE TIBIA.

By J. C. OGILVIE WILL, M.D., F.R.S.E.,
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FRACTURE of the tubercle of the tibia is an extremely rare injury, and the case now to be recorded is interesting on that account, and also because it presents, in addition, features of unusual interest in connection with its diagnosis, treatment, and result.

G. W., aged 17, a fairly muscular lad, a stone-cutter, was admitted to the Aberdeen Royal Infirmary on the afternoon of Friday, August 28th, 1885, suffering from the effects of an accident which he had sustained a short time previously. He stated that, when jumping with a pole, he felt something give way in the region of the knee-joint, when he had risen about two feet from the ground. He was examined by the house-surgeon, who diagnosed the case as fracture of the patella, and applied a posterior splint, with elevation of the limb. When I visited the patient next day, the joint was enormously swollen, and extremely painful to touch, and there were two small, movable, bony swellings, one at the upper, and the other—the smaller one—at the lower aspect of the articulation. The patient had been unable to extend his limb, and the slightest movement occasioned great pain. Believing that I had a case of fractured patella to deal with, and holding, as I do, the belief that wiring the broken ends is, if properly carried out, a safe and the only thoroughly reliable mode of obtaining bony union, I arranged to carry the procedure into effect on August 31st. The patella was exposed in the usual way by a vertical incision, when I found that it was intact, but that there was a fracture of the tubercle of the tibia; the ligamentum patellæ, instead of having given way itself, as it is known to do not infrequently, having been torn away with the bony prominence into which it was inserted. The portion of bone was about the size and shape of a small oyster-shell, and on the incision being extended downwards so as to expose it more thoroughly, its fractured surface was turned upwards from muscular contraction. It could, however, be readily replaced, closing with a snap not unlike that of a Cavendish whist-marker. The joint was full of blood. I attempted to fix the broken bone in position with ivory pegs, but finding that they would not answer, I fastened the detached tubercle to its shaft by means of an Archimedean drill, and having detached the handle, I left the metal point in position, its proximal extremity projecting considerably, to allow of its subsequent removal. The joint was then thoroughly cleared of clots. The soft parts were accurately adjusted, and an antiseptic dressing and a splint applied. The operation was carried out under spray, and I had the advantage of my colleague, Professor



Ogston's, kind assistance. The dressings were removed on the following day, when there was some bloody discharge on the protective and on the piece of gauze overlying it, but it was so slight in amount that the same external dressing was again employed. The patient had had a fairly good night; with the exception of some twinges of pain, he stated that he had suffered nothing. The temperature, on the night of operation, was 99.8° F., and on the following morning, 100.2° F. The wound was not dressed again until September 5th, when it looked well, and was free from all signs of inflammation. It was next dressed on September 11th, when the sutures were removed, healing, except in the neighbourhood of the pin, being complete. The pin was found to be quite loose on September 17th, and it was therefore taken away. There was slight superficial necrosis of a small portion of skin, but this soon healed under a carbolic oil and boric lint dressing, which was now substituted for gauze, and the limb was put up in a gum and chalk bandage.

The stiff bandage was removed on November 2nd, when union was found to be quite firm, but the knee-joint was, of course, extremely stiff. Massage was then employed, and the power of flexion and extension was gradually regained, so that, on November 9th, he could flex his leg to an angle of 120°.

On November 12th, he was allowed up for the first time on crutches; a week afterwards he could walk unaided, but he felt the joint weak, and, on November 24th, he left the hospital. He returned on December 4th for the purpose of showing himself, and then I had the satisfaction of finding that the functions of the limb were restored, for he walked rapidly and easily without the slightest perceptible limp, and he could execute all the ordinary movements of the joint as readily and completely with the injured as with the uninjured limb.

The symptoms presented by this case were extremely misleading, for fracture of the patella was exactly simulated, nearly all the signs of that injury presenting themselves, for the joint was largely distended with blood, there were two bony tumours whose outlines could only be indistinctly made out, on account of the swollen and exceedingly painful condition of the articulation, with a considerable interval between them, and the power of extension was entirely lost. The mode of occurrence of the injury likewise suggested fracture of the patella. The treatment adopted, although founded on a mistaken diagnosis, proved eminently satisfactory, and I believe that by no other means could so successful a result have been obtained. The injury itself seems to be a very rare one, for, so far as I have been able to ascertain, all English authors—with the exception of Treves, who quotes a case from a French writer—and all American writers, are silent on the subject. König notices fracture of the tubercle in the following sentence: "It is unusual that the ligamentum patellæ tears partly through at its insertion into the patella, still rarer that this occurs at its tibial insertion, and, rarest of all, that it is torn across. As in all similar ruptures at points of insertion, larger or smaller portions of the bone are sometimes torn away." While Pitha says: "The ligamentum patellæ is so strong that an extraordinary force is required to tear it, and the direct traction of the muscles tears the patella itself asunder much oftener than its ligament. Exceptionally only, and most likely when the substance of the patella is thick and firm, does rupture of the ligament occur under these circumstances, and usually it is at its insertion, or even in its insertion, so that a portion of the spine of the tibia remains hanging to the ligament itself. In this case the subsequent growth of osteophyte indicates the point when the bone has been torn out."

He quotes two cases of his own; one caused in a railway-guard by a violent effort to save himself from falling in jumping over a pool,

where the insertion was torn out, and the patella was displaced upwards for four fingers' breadth. The other occurred to a young officer when making a similar effort. The symptoms, this writer enumerates, are great pain, evident deformity, and upward displacement of the patella, but his cases were some months old before he saw them, and in them a loose band of union had been formed, enabling feeble movements of extension to take place, results so different from that attending the treatment in the case now described, that I venture to suggest the procedure adopted by me, or some modification of it, as a reliable method of treating this injury.

MENSTRUATION AND PHTHISIS.

By H. HANDFORD, M.D., M.R.C.P.,
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In 1882 I called attention to the connection of menorrhagia with pulmonary phthisis in a graduation thesis for the University of Edinburgh. Since then, extended clinical observation has convinced me of the truth of the following two maxims, the first of which receives very strong confirmation from some statistics of phthisis published by me for another purpose in the *Medical Times and Gazette* for November 28th, 1885 :—

1st. Early or excessive (frequently only relatively excessive) menstruation is an important and common predisposing cause of phthisis.

2nd. The female children of phthisical parents tend to menstruate unduly early and excessively.

The association of amenorrhœa with phthisis is universally recognised. It is the rule in the later stages, and is far from uncommon in the earlier periods of the disease. That menorrhagia plays a part in predisposing to phthisis, and that it is not infrequently met with in the very early stages is not generally acknowledged.

Dr. Graily Hewitt[1] has noticed the connection between uterine hæmorrhage and tubercle, or a tendency to tubercle. Similarly it was observed by French authors towards the earlier part of this century that many cases of phthisis in the earlier stages are characterised by menorrhagia rather than amenorrhœa, which latter only supervenes much later. But these observations seem to have been forgotten and discarded, especially since the discovery of the tubercle bacillus has, in the minds of many, done away with the importance of "predisposition" and "heredity"—a view by no means countenanced by the writings and labours of Koch.

Dr. Wade, in the Ingleby Lectures (British Medical Journal, June 5th, 1886, p. 1056) says : "We see other cases ; cases in which the patient is precipitated by a first menstruation, or by two or three repetitions, not into a better, but into a worse state of health, and often into phthisis. One such case of phthisis has come under my notice within the last few weeks." My experience, gained chiefly from hospital out-patient practice, strongly confirms this. A typical case, illustrating both the maxims with which I commenced, is as follows :—

A. E , aged 19, curtain mender. Menstruation first commenced at the age of 11½ years, flow lasted five days, was excessive in amount, but recurred regularly every month, till the last year, when she began to spit blood, then it recurred every fortnight. This statement the patient volunteered. For the past year she has menstruated eight days at a time, the flow has been excessive in amount, and has recurred every fortnight, so that she is only "well" six or seven days. Her father and mother both died of consumption. She has had one brother and three sisters. Of these, one sister died of consumption, aged 19. Another died of "worm fever," aged 8. The remaining brother and sister are both consumptive.

The patient has had a winter cough for several years, has had a muco-purulent sputum for one year, and occasional hæmoptysis for the same time. For the past four or five months she has spit blood nearly every day to the extent of a teaspoonful, and sometimes much more. There were physical signs of consolidation at both apices, with a few moist *râles*. She had suffered from night sweats for one year. Temperature at noon usually 99° Fahr. Under treatment, chiefly by ergot at first, the hæmoptysis and the menorrhagia were checked, and the chest condition also improved somewhat, but after three or four months she was lost sight of. Other cases have been followed out to a fatal termination.

Turning now to the evidence afforded by statistics, it will be seen, by referring to my paper in the *Medical Times and Gazette*, quoted above, that for equal numbers of each sex living, the death-rate from phthisis at "all ages," is much greater for males than for females in Prussia, Sweden and Copenhagen, and slightly greater in England and Wales for the decade 1871-80. In the United States and in England for the two periods, 1851-60, and 1861-70, the female death-rate is very slightly higher than the male. But when we take the death-rate for each sex at different groups of ages for equal members of each sex living at each group, we find that during the first year of life there is a preponderance of male deaths. For the next years up to 10, the proportion remains very equal, but eventually the female deaths are slightly in excess. At the age-period 10 to 15, in all the tables the female deaths are nearly double the male. The home and school life, and the employment of children between these ages, are not sufficiently different in the two sexes to account for such a sudden change. The years 10 to 15 embrace the period of puberty, the establishment of which produces a greater disturbance, and causes a more rapid general development in the female than in the male. At this time, and at no other, the female, inferior to the male in stature and weight from birth onwards, rapidly catches him up and surpasses him ; so that between the ages of 12½ and 15 or 16, girls are both taller and heavier than boys (see *Life History Album*, by Francis Galton, F.R.S., pp. 84-5). It is probable that this excessively rapid growth, together often with some drain upon the strength from the menstrual flow, renders the female sex at that period an easier prey to tubercle than the male. From 15 to 20 the female deaths are double the male in the United States, half as many again in England, slightly in excess in Prussia and Copenhagen, and slightly below the male in Sweden. From 20 to 40 or 45, the female deaths still remain in excess in England and America, except in the decade 1871-80 in England. Here the male deaths are very slightly in excess, but the difference is remarkably less than after the year 45 is passed, when the male deaths are, as a rule, nearly half as many again as the female. In the other countries the great excess of male deaths shows itself at this period 20 to 45 also, though the difference is much less than at more advanced ages. Here again the simplest explanation seems to be the drain put upon the strength and general nutrition by child-bearing and lactation,[2] acting in a similar manner to menorrhagia at an earlier period. It is difficult to find any condition in the occupation or habits of women between the ages of 20 and 45, which should render them more liable to phthisis than men at the same age, and which would not be equally operative from 45 onwards, when in all countries there is a very marked predominance of male deaths.

Referring to the supplement to the Forty-fifth Annual Report of the Registrar-General, pp. cxii—cxvi, we find that the mortality for equal numbers of each sex living at each group of ages is from "All Causes" about equal for the two sexes at the age-period, 10—15. There is, however, a very slight predominance of female deaths. I have already stated that for the thirty years 1851-80, the female deaths from phthisis at this age-period are nearly double the male. There is also a definite, though very much less marked, predominance of female deaths at the age-period in question from diseases of the respiratory system other than phthisis,—from diseases of the circulatory system, fevers, whooping-cough, and diphtheria. From all the other classified causes, the male deaths are in excess. It is possible that the cause of the predominance of female deaths from the diseases mentioned may be the same as in phthisis, which is the only one in which the difference is so striking as to require an explanation.

And now coming to the bearing of these points on practical medicine. The occurrence of unusually early menstruation in a girl with a

[1] *The Diagnosis, Pathology, and Treatment of Diseases of Women.* Second Edition. Pp. 45 and 421.

"Pathologically, tubercle of the uterus has been usually supposed to be rare ; but *hæmorrhage from the uterus in tuberculous women*, dependent on the state of the blood, rather than on organic local changes, *is not so uncommon.*"

"According to my experience, *young women in whom there are signs of a tendency to, or an actual development of, tubercle, are very frequently the subjects of profuse menstruation*, the cause being the defective and vitiated state of the blood."

In these passages, which were, of course, written long before my observations were made, I was glad to find so strong a confirmation of the views I have expressed above—views which were based purely on the result of personal clinical observation before I had read the passages quoted. In the majority of the ordinary text-books I have not found any distinct reference to the connection of uterine hæmorrhage and pulmonary phthisis.

In making the above quotations, I must not be understood to accept the view that the "defective and vitiated state of the blood" is the sole cause of the hæmorrhage.

[2] Fagge's *Principles and Practice of Medicine*, vol. i, p. 979. Child-bearing and lactation are recognised as playing an important part in predisposing to phthisis. Dr. Pye-Smith states, in the same place, that deaths of mothers "in childbirth," or "after delivery," are frequently due to phthisis. It is not without significance that in cattle, highly bred cows, and especially those animals that are noted for being good milkers, are unusually frequently affected with tubercle. In them the effect of quickly repeated pregnancies and of excessive lactation in predisposing to phthisis is well known.

phthisical inheritance should be taken as an indication that she is in a specially suitable condition for the infection of tubercle, and for the progress of the disease when infection has taken place; and should warn us to place her in the most favourable conditions of life. Menorrhagia, too, interpreted in its widest sense, occurring under similar conditions, should be speedily checked. Not because there is any specific connection between menorrhagia and tubercle, but because the occurrence of menorrhagia seriously lowers the state of nutrition of the tissues, and renders them an unusually favourable soil for the growth of tubercle whenever infection, to which so many of us are constantly exposed, takes place. The frequency of menorrhagia among the children of phthisical parents I take to be due to no specific action of tubercle, but merely to indicate an undue "vulnerability" of the tissues which renders them less capable of maintaining healthy life under unfavourable conditions than the tissues of other children are.

NOTES ON A CASE OF SEPTICÆMIA WITH SUBNORMAL TEMPERATURE.

By JOHN T. TIBBLES, L.S.A., Melton Mowbray.

G. W. B., aged 35, stonemason, at the beginning of November last suffered from contusion and ecchymosis caused by a slab of stone falling across the inside of his right leg; after treatment and a fortnight's rest, he was enabled to return to work. There had been no ordinary sign of periostitis. At the end of fourteen days he felt unwell, and incapable of continuing his work; complained of coldness down the back, and had symptoms of gastro-hepatic derangement to which he was frequently subject. There was no pyrexia. The patient did not improve, and on the seventh day of attendance had diarrhœa. The following notes were made of the subsequent progress of the case.

December 13th. During the last three or four days, symptoms had developed which seemed scarcely consonant with the diagnosis of simple disease of the liver and stomach, namely, great depression and exhaustion, absence of fever with a gradually increasing typhoid condition, and restlessness. Further examination of the abdomen revealed depression of its walls, increased sensitiveness of the skin, and enlargement of the spleen, which was painful on pressure. There was no pain or tenderness along the injured leg. Pulse 84, feeble. No pyrexia; urine normal.

December 14th. No action of bowels. Symptoms persist. Aching of limbs, especially inner side, and calves of legs. Has slept but little. Respirations slow; temperature 98°.

December 15th. A little muttering delirium. Well marked and general lymphangitis. Respirations slow; pulse 86; temperature both in axilla and mouth 97.5°.

December 16th. Enlarged and painful axillary glands; no redness, heat, or other sign of suppuration. Spleen less painful. Rambles and picks nose. Abdominal walls in same tense condition. Pulse 84; temperature 97°.

December 17th. Lymphangitis fading away. Typhoid condition persists; "aches all over," lies with legs drawn up. Pulse feeble, 86; temperature still falling, 96.8°. *Night.*—Being summoned at 7.30, I found the patient raised on pillows, very pale and pinched, complaining of pain in his chest. There was distinct pericarditis, with a well marked rub; but there was still no pyrexia, rather the temperature had fallen during the day to 96.5°. Respirations 13.

December 18th. Not so much pain in the præcordial region; appearance of a mealy desquamation about skin of extremities; subsultus tendinum; typhoid condition the same; bowels and urine normal. Respiration slow, regular, deep, 13; temperature, 96°. Dr. Powell saw the patient this morning, and verified the temperature-reading. *Night.*—Main symptoms unchanged. Pulse 84; respirations 13; temperature 95.8°.

December 19th. Somnolent. Respirations 12; pulse 80; temperature 95.3°. *Night.*—Same drowsy state. Breathing noisy, slow, with long pauses; respirations 12; pulse 78; temperature 94.5. Boat-shaped condition of abdomen persists.

December 20th. Slept on right side in a state of general flexion; can be easily roused, and, though his speech is very thick, answers rationally. Pupils contracted. Hiccough, but no pain. Breath, previously of the peculiar sweetish character, now offensive. Deglutition impossible. Respirations 12; pulse 60; temperature 93°. *Night.*—Since 3 P.M. has been sinking into deep coma. Pulse 48; respirations 15; temperature so low that thermometer could not register it.

December 21st. Died at 6 A.M.

Remarks.—The foregoing is a brief record of a case of septicæmia, peculiar as presenting a subnormal temperature. We may suppose that some localised suppuration followed the injury to the leg, which did not make itself manifest by the ordinary signs. Thirty-four days after the accident, fourteen days after apparent recovery, the patient developed symptoms which might belong to any of the usual and common disturbances of the digestive system not marked by pyrexia, subsequently assuming an asthenic form, and followed by lymphangitis and pericarditis. Yet the most characteristic symptom of septicæmia was absent; rather there seems to have been an inversion of the temperature. At no period of the later illness was the temperature above 98°; but there was a continued fall, at first slow, more rapid towards the end, until the night before the patient died it was considerably less than 93°.

OPHTHALMOLOGICAL MEMORANDA.

GLASSES "À DOUBLE FOYER."

I wish to call the attention of ophthalmic surgeons to those cases in which they may deem it expedient to prescribe glasses "à double foyer." Convenience and optical advantage to the patient are derived from setting the lower, or reading-glass, in such a position as to form with the upper, or distance-glass, an obtuse angle, whose apex looks forwards and downwards (the distance-glass being of course vertical) of 150°. The patient has then no alternative other than to look directly through the glass prescribed for his immediate want, and he will do this without factitious astigmatism. The comfort and ease afforded by this arrangement to patients for whom I have ordered these glasses are described by them as being exceedingly great.

These glasses were exhibited at the late meeting of the British Medical Association at Brighton, by Messrs. Rowley and Son, opticians to the Sussex Eye Hospital, St. James's Street, Brighton, who carried out the suggestions I made to them some months before with their usual accuracy and good workmanship.

Charles Oldham, F.R.C.S.,
Senior Surgeon to the Sussex Eye Hospital.

CLINICAL MEMORANDA.

"A SIX-FINGERED FAMILY."

Having read in the British Medical Journal of January 1st an interesting article under the above heading, I was reminded of the following notes which I collected last year of a similar case. During October, 1885, there appeared in your columns a series of letters by Mr. Noble Smith and others on the ætiology of congenital deformities, which at the time aroused considerable interest. Meeting with this case some time afterwards, I made the following notes:—

Having delivered Mrs. A. of a female infant, I was struck at her anxiety to see the child's hands, when I became aware that it had six fingers on each hand; at a subsequent visit I questioned the mother about it, and found that it was a hereditary deformity (paternal side). She was one of a large family (three sisters and four brothers), and was born with six fingers on each hand, but one had been removed by silk thread a short time after birth. The other allowed to remain was equal to the fifth finger in size, and growing at a right angle from the inner side of the hand, and, as far as I could ascertain, the joints of both communicated, but in the extra finger flexion was very limited, and consequently, not only awkward, but most unsightly. The infant had an almost identical condition.

Great bias existed amongst the friends on the point of amputation, as in each case in which it was practised it proved fatal. Of the three sisters two were free, but of these one married and had a child with extra fingers on each hand. Now we come to the brothers, and find a new feature added. Each alternate one had the deformity; one of these so deformed married, and has a son with extra fingers and toes. This finishes Mrs. A.'s generation. Her father was free from it. Her grandfather had an extra digit on each hand. Beyond this I could not get accurate details, only that it did exist in previous generations.

Several interesting features are here presented, namely, alternate brothers only had it, and in one case extra toes are found; regarding transmission it showed a tendency to atavism.

I do not presume to offer any solution of the pathology of this complex problem, but it has occurred to me that we should distinguish between these deformities and cleft palate, hare-lip, etc., for in one case you have partial arrest of development, and in the other, nature is in excess.

Campbell Boyd.

MUMPS, ORCHITIS, RHEUMATIC FEVER, CHOREA.

THE following case, I think, is of interest, as lately there has been much discussion about rheumatic fever following several diseases. About a couple of months ago I was called to see a boy, aged 12, who was suffering intense pain in the left testicle. On examining the patient, I found that he was recovering from an attack of mumps, and as there was no other obvious cause for the pain, I came to the conclusion that this was a case of metastatic inflammation in the testicle.

The pain soon yielded to a course of poultices. Hardly had the pain left and the patient expressed himself better than a rather severe attack of rheumatic fever set in, with pains in the joints, but without any heart mischief. The boy was then treated with salicylate of soda, with much benefit, and was free from pain in five or six days' time.

On the sixth day, at my morning visit, I noticed that the boy was jerking his hands and arms about, would laugh without any reason whatever, and had some slight difficulty in answering my questions; in fact, he had an attack of chorea, which was more marked on the right side than the left.

I then gave him arsenic and iodide of potassium, and after a few days he was convalescent, but rather weak. Since that time I have occasionally seen the patient, who is progressing favourably, but slowly. The curious part of this sequence of diseases is that the mumps was followed by the inflammation of the testicle, which is rather rare, and that the rheumatic fever should have been succeeded by the attack of chorea.

An epidemic of mumps has paid this place a visit, and I have only had two cases of metastatic inflammation; one, the case mentioned above; the other, inflammation of the left ovary in a middle-aged woman.

CHAS. AITKEN, M.B., St. Mawes, Cornwall.

THERAPEUTIC MEMORANDA.

OPEN-AIR AND CONSUMPTION.

THREE years ago, while riding about the west coast of the south island of New Zealand, examining on an average a hundred men every month for the life insurance department of the Colonial Government, I was so struck with the absence of consumption (notwithstanding that the great majority of the men were emigrants from Great Britain, and that cardiac and other serious affections were by no means infrequent), that I took some trouble to study the conditions under which they lived, with a view to finding some explanation. I was very soon led to the conviction that it was largely owing to their houses, which were invariably constructed of wood, and in all of which there was unintentionally the most complete and constant ventilation, by reason of the very imperfect contact of the overlapping boards that formed the walls, often so very imperfect, that abundant daylight was easily visible also. In a report to the Commissioner, I drew special attention to the fact, and suggested the above explanation.

Now, granting that in cows consumption prevails specially among those kept in numbers within stuffy dairies: that in horses it is found specially among those aggregated in ill-ventilated stables; that in monkeys it spreads among those herded together in cages; granting also that in human beings consumption is found in largest proportion where the population is most dense, as in every large city in the world; that it specially attacks indoor factory operatives, whether male (Birmingham, Sheffield, etc.) or female (Nottingham, Huddersfield, etc.); that its prevalence in our own and other European armies was reduced from 12½ to 1½ per cent., by abolishing the stuffiness of barracks; and that a similar improvement has been noted in our navy, gaols, workhouses, asylums, and schools; granting finally that 10 per cent. of our population still die of consumption, and that no other single disease kills half so many; surely we may rely much more than we do upon the efficacy of fresh air, and leave a smaller number to prop themselves up with hypophosphites and cod-liver oil.

WM. RUSHTON PARKER, M.A., M.D.Cantab.

OBSTETRIC MEMORANDA.

SUBCUTANEOUS EMPHYSEMA FOLLOWING LABOUR.

ON February 10th, 1885, during my residence in New Zealand, I was summoned to attend a lady who lived up country. The messenger who came for me said that she had been safely delivered of a child, but had developed peculiar symptoms, which the midwife who was in attendance had never, during a long experience, seen before.

The mother was a primipara, aged 24, of dark complexion and slight build. She had consulted me twelve months previously, thinking that she suffered from consumption, of which complaint she told me her father had died. I could, however, find no trace of lung-disease, both sides of the chest acting equally well, the percussion-note also being good. She was, as I have often found amongst people who live in the bush, where neighbours are few and far between, of a decidedly melancholic temperament.

On arriving at the house, I found the labour had been satisfactorily completed. The pains during the second stage had been extremely severe and of long duration. With the expulsion of the placenta there had been rather more than the usual amount of hæmorrhage, but not to a dangerous extent, and soon afterwards the patient complained of loss of eyesight. On examination, I found extreme puffiness of the whole of the face, which extended to the neck and upper part of the chest. She was quite unable to open the eyes, and complained of a tightness of the skin on the face and forehead. The breathing was unimpaired. On palpation, marked crepitation was felt over the whole of the affected part, and was evidently due to the presence of air.

An evaporating lotion was applied to the skin, and absolute rest ensured. The swelling gradually subsided, and after eight days it had entirely disappeared.

J. PRINCE STALLARD, M.B., Oxford Road, Manchester.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

LIVERPOOL ROYAL INFIRMARY.

CASE IN WHICH A FOOT OF GANGRENOUS INTESTINE WAS SUCCESSFULLY EXCISED IN HERNIOTOMY.

By RUSHTON PARKER, B.S., F.R.C.S., Professor of Surgery in University College, Liverpool.

DENNIS M., aged 50, was admitted on August 21st, 1886, on account of strangulated hernia of only about twenty-four hours' duration. Herniotomy was undertaken without delay, the tumour, which was on the left side, being inguino-scrotal, very tense, and about the size of a fist. On opening the sac, excessively fœtid blood-stained liquid escaped, revealing a coil of greenish black small intestine, and a mass of omentum. The neck of the sac was the external abdominal ring tightly embracing the contents. On freely laying open the sac through the stricture, the peritoneal aperture was plugged with a sponge soaked in perchloride of mercury solution, while the unsound contents were being excised. The narrow omental pedicle was tied with catgut in two portions, cut beyond, and the stump returned, while the whole of the intestinal coil, steeped in and dripping with putrid liquid, was cut away with a corresponding wedge of mesentery, hæmorrhage being prevented or arrested by clamping with the fingers and by sponge-pressure until the bleeding vessels were tied with catgut. The mesenteric gap was closed by continuous catgut suture, and the intestinal tube re-united by means of interrupted stitches of the same material. These latter penetrated no deeper than the muscular layers, and were passed twice through the tissues of each piece of gut, so as to bring peritoneum closely up to peritoneum, leaving the cut ends of the tube inverted into the canal. After reduction of the loop of united gut, the question of attempting to provide a radical cure, in the event of immediate recovery, naturally followed. The sac was cut across at about the level of the recent seat of stricture, stripped up the inguinal canal, and tied high up at or above the internal abdominal ring. But this was not here enough. The inguinal canal was pretty wide to begin with, and had been further widened by division of the intercolumnar fascia. Altogether, the appearance of the inguinal outlet showed but a poor prospect of offering resistance to a return of the hernia without close attachment of the very lax margins, and a serious obstacle to this lay in the presence of the spermatic cord. Examination of the testicle showed it to be atrophied; so it, together with the tunica vaginalis and all the scrotal part of the hernial sac, injured by putrid imbibition as the latter was, were stripped up to the level of the inguinal canal, and the cord tied with separate ligatures on each artery, and one round the whole. The abdominal aperture was then closely sewn with catgut sutures as far down as the

edge of the pubic bone. A drainage-tube, stitches, and Listerian dressings were then applied to the superficial part of the wound.

The patient passed the first week in a precarious state, alternating between restlessness and drowsiness, with delirium, suffering much from thirst, and having for days a dry, brown tongue. His temperature rose to over 101° F. the first night, and reached 100° F. on three other occasions, gradually declining to normal before the end of the week. The pulse averaged 110 at first after the operation, and by the end of the first week had declined to about 80. He first passed flatus two days after the operation, and the first stool on the eighth day.

For the first three or four days he was fed upon tea and brandy-and-water, but he became so emaciated, with increasing delirium, that slight additional nutriment was cautiously given earlier than had been intended. Bread was given on the fifth day, and pea-soup on the sixth, in each case with good effect. On the eighth day he had eggs, brandy, and beef-tea, and on the ninth, after the stool, a glass of ale, for which he craved, and some potatoes. After this he gradually and uninterruptedly improved, eating meat on the twentieth day, and getting up a little. The deep parts of the wound within the sutures of the inguinal canal healed up by first intention, while the subcutaneous and cutaneous part gaped, and healed by granulation, revealing the satisfactory progress of the more important deep parts. He left for a convalescent hospital thirty-seven days after the operation, having still a small sinus, which has since gradually closed.

REMARKS BY MR. RUSHTON PARKER.—The hernia was an old one, having existed since childhood; but no truss had been worn, or apparently required. It would seem to have been merely omental, though evidently irreducible, as shown by the narrow pedicle, until the descent of intestine on the day before admission, when strangulation rapidly, if not immediately, followed. This probably well explains the acuteness of the damage to a loop of intestine forced through so narrow a neck; for a single day is seldom enough for the development of gangrene, even by the narrowest strictures.

The state of the gut is one that deserves some consideration, differing as it did from all other cases that I have seen. The bowel, to a length of about a foot, was to all appearance gangrenous, or at least utterly beyond the probability of recovery, but nowhere presented the peculiar leathery consistence that often, and perhaps generally, pervades at least a portion of intestinal loops that have similarly become gangrenous. The peritoneum retained its glistening character over the entire constricted loop, showing through it the greenish black colour of the other tissues of the gut, with a sharp line of definition at each end of the constricted portion, but no line of demarcation in the inflammatory or ulcerative sense of the word. The point that decided me against the return of such a piece of intestine was the putrid percolation that had taken place through its tissues. There was no sign of the inflammatory change that may result during a more gradual constriction. The pinching had been very tight, and had apparently arrested the circulation of blood, and all processes except decomposition and the passive transudation of its products. I am aware that some prefer, under such circumstances, to attach the cut ends of intestine to the skin, and establish an artificial anus, postponing the re-union of the bowel to a subsequent operation, in the event of recovery. However, I preferred the procedure described, and it has succeeded well.

This is the third time in four years that I have performed excision of gut in herniotomy, but the first recovery. A similar successful case, undertaken about three years ago in the same hospital by my colleague, Mr. W. Mitchell Banks, is already known to the profession.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, JANUARY 18TH, 1887.

Sir JAMES PAGET, Bart., F.R.S., F.R.C.S., President, in the Chair.

President's Address.—Sir JAMES PAGET, in taking the chair as President for the first time, delivered an address, which will be found at page 143. At the conclusion of the address, which was listened to by a crowded meeting with marked attention, a vote of thanks was moved by Sir JOSEPH LISTER, Bart., who said: It gives me the greatest pleasure to ask you to accord a vote of thanks to Sir James Paget for his very beautiful and instructive address. I am sure we have all listened to it with great instruction, and with very great admiration. I will not do more than ask you to pass this vote of thanks, while at the same time giving feeble utterance to the sense which we must all have of the very great kindness that Sir James Paget shows in accepting the Presidency of this Society. At the same time, although we all feel it to be a very great kindness at his time of life, we also feel that, while he is as a Nestor among us in every sense, he is in spirit, and also in faculty, youthful.—Dr. S. WILKS: I am very glad to second that proposition. It always delights me much to hear Sir James Paget at any medical society. I am sure, as he says himself, he never grows old. As we get on in years, many of us are apt to look at the past more than the present; but Sir James is always *au courant* with what is going on, and I think it is highly complimentary to our Society that he should be in the place he is, and should take interest in all the modern work that is being done.—Sir JAMES PAGET: I thank you, gentlemen, for thanking me, especially as your thanks have been given by those who so eminently represent the progress of science as Sir Joseph Lister and Dr. Wilks. I thank you with all my heart, and I will do all I possibly can.

Hypertrophied Bladder in Urethral Stricture.—Mr. HURRY FENWICK showed a frozen section of a hypertrophied bladder, from a case of stricture of the urethra; the patient had died of intercurrent disease. The specimen demonstrated the greater thickness of the anterior wall, as compared with the posterior. In this case, the anterior wall was twice the thickness of the posterior. He believed this condition, which obtained in hypertrophied bladders, had been overlooked; the reason for this was the wasting of the muscle wall after the stricture had been relieved, and cases of unrelieved stricture were rarely found in the *post mortem* room. He adduced anatomical proofs to support the theory that it is the anterior wall which possesses the greater power of hypertrophying; and he submitted that the comparatively greater strength, elasticity, and stress-resistance of the anterior wall was one of the reasons for its acknowledged greater immunity in ruptures of the urinary bladder.—The PRESIDENT said that, so far as he was aware, Mr. Fenwick had observed a new fact.—Mr. BLACK suggested that, if there were a general tendency to hypertrophy, this would be most manifest in the anterior wall, which was supported, and could not expand.

Fatty Tumour of Heart.—Dr. HANDFORD showed a specimen of fatty tumour of the heart. Ziemssen enumerated lipoma among the true tumours of the heart; but Cornil and Ranvier made no reference to the subject. He had communicated with the curators of nineteen pathological museums in Great Britain, and had only heard of three doubtful specimens of fatty tumour of the heart. One was in a sheep's heart, in the Museum of the Royal College of Surgeons, and in this case there was much fatty infiltration; the second specimen was in the Museum of St. Bartholomew's Hospital: it was the heart of a young girl who had died suddenly. The third specimen was in the Museum of Queen's College, Birmingham; but Professor Bertram Windle was of opinion that it was probably an example of fatty infiltration. Albert, of Bonn, had recorded one case in Virchow's *Archiv*, and Gernet had recorded another in the same periodical, but its nature was doubtful. A third case had been recorded by Dr. Banti, in *Lo Sperimentale*. The specimen shown by Dr. Handford was from a woman, aged 76, who had been under the care of Dr. Evan Powell in the Nottingham Borough Asylum, suffering from melancholia. The heart-sounds were clear, but faint. The patient died suddenly. No excess of fat was found in the body after death, except on the surface of the heart. The right auricle and ventricle were full of red clot; the left auricle and ventricle were contracted and empty; their substance was pale, yellow, and greasy to the touch. In the inter-auricular septum was an oval tumour, the size of a small pigeon's egg, which had all the appearances of an ordinary fatty tumour; the growth was distinctly limited, but not encapsuled. The liver was fatty, and the arteries were degenerated. The tumour, on microscopical examination, was seen to consist chiefly of fat-cells, with a few degenerating muscular fibres. The probable origin of the tumour from a perverted fatty degeneration, with retention of the fat *in situ*, was discussed.

Spontaneous Disintegration of Vesical Calculus.—Dr. W. M. ORD showed some fragments of a vesical calculus separated by a process of spontaneous disintegration. The patient was a gentleman, aged 75, whose urine for four years had always contained sugar and albumen varying in amount, and free uric acid (crystals). For the last ten months he had been confined to bed by extensive sloughing of the skin of the leg, due to thrombosis. While still confined to bed, he began, three months ago, to pass fragments of calculus; the expulsion involved little pain or bleeding. He had experienced no shock or concussion, and no catheter had been passed before he began to pass the fragments; on only one occasion recently a soft catheter had been passed to dislodge a fragment which had become impacted, so that it was clear that the fracture could not be due to violence. The fragments appeared to have been detached from an oval calculus. Though the event was supposed to be extremely rare, this was the

sixth specimen of spontaneous disintegration of a urinary calculus which he had shown to the Society. There were two ways in which disintegration might be brought about. In some cases, of which he had recently shown one example, the disintegrating force came from within, in others from without. In this case the disintegration was probably due to external influences; the calculus consisted of uric acid and urate of ammonium; the varying specific gravity of the urine, due to the varying quantities of sugar it contained would lead to continual disorder of the relations of the calculus to the fluid in which it lay, and this would have a disintegrating effect of the same kind as that produced by the drying of calculi in the air.—The PRESIDENT thought specimens of spontaneous disintegration of urinary calculi very rare; he referred to one case where the fragments which remained in the bladder, after increasing in bulk, again underwent disintegration.

Infantile Paralysis of Long Standing.—Dr. SEYMOUR J. SHARKEY read a paper on infantile palsy, chiefly dealing with the final stage. The specimens were removed from an old man, aged 60, who died of epithelioma of the œsophagus. All the muscles of both legs were represented by masses of fat, showing numerous pinkish streaks running longitudinally. The lumber part of the spinal cord was much wasted. The microscope showed innumerable corpora amylacea; the large nerve cells were reduced in size and number. A large number of nuclei were present, and the groundwork of the anterior horns had a finely fibrillar structure. The walls of the vessels had a hyaline appearance, with abnormally large perivascular spaces. All the white columns were shrunken, but the antero-lateral strands seemed to have undergone greater diminution than others. The muscles, on microscopic examination, were found to consist almost entirely of fat, but were here and there traversed by striated muscular fibres which almost all appeared to be quite healthy. The infiltration of fat was not an invariable accompanient of the final stage of infantile paralysis; the specimen was an extreme example of the condition.—Dr. WILKS said that surgeons had formerly been too much inclined to discuss infantile paralysis merely as a cause of club-foot, whereas physicians knew that this was a comparatively rare event.—Mr. WM. ADAMS referred to the account of progressive fatty infiltration of the muscles contained in the earlier editions of his book.—In reply to Mr. R. W. Parker, Dr. SHARKEY said that he could perceive no secondary changes in the cortical centres, but that it was necessary to remember that the changes were symmetrical, and that it would therefore be very difficult to establish the existence of any atrophy.

Card Specimens.—Dr. HANDFORD: Four specimens of Diseases of the Œsophagus. Dr. SHARKEY: Syphilitic Arteritis. Dr. MAUDSLEY: Ulceration of Trachea, with Perforation of Aorta. Dr. B. O'CONNOR: Mediastinal Tumour invading Heart and Right Lung.

CLINICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 14TH, 1887.

THOMAS BRYANT, F.R.C.S., President, in the Chair.

A Case of Right Hemiplegia with Aphasia in a Child.—Dr. SAMUEL WEST read the notes of a case of right hemiplegia with aphasia, occurring during a paroxysm of whooping-cough, with slight rigidity, subsequently passing into a condition of athetosis. He attributed the paralysis to hæmorrhage, possibly into one of the central ganglia, but, of course, this could only be surmise.—Dr. RADCLIFFE CROCKER said that he had had a case with a very similar history to that of Dr. West's. A girl, aged 10, was brought to the hospital in November last, complaining of inability to use the right hand. On examination, there was a condition of athetosis and spasm, just as Dr. West had described. On making forced extension of the hand, the fingers began to close up, then the wrist was bent in pronation. On making inquiry as to the history, it appeared that twelve months before the child had three right-sided fits in twelve hours, the last being followed by paralysis and aphonia. The child was unable to talk for three weeks, and to walk for three months. The athetosis came on about three weeks after the onset of the paralysis. As to cause, he found that the child had a mitral obstructive and regurgitant murmur; and, therefore, the inference was that it was a case of embolism. Her general condition did not appear to have made any progress during the last three months.—Dr. BROADBENT said that he thought the lesion in Dr. West's case was more likely to be located in the cortex than in the central ganglia. It was, of course, difficult to localise a cortical lesion which had followed so accurately the motor area.—Dr. WEST, in reply to Dr. Broadbent's remarks, said that he did not attempt to localise the injury, but only suggested the possibility of the central ganglia being involved.

A Method of Treating Thyroid Cysts.—Mr. MAYO ROBSON (Leeds) read a paper on this subject, in which he advocated antiseptic incision and stitching the edge of the cyst to the skin, draining for a short time under an antiseptic dressing, and then packing with zinc lotion and lint. He read notes of two cases thus treated, the first in a girl, aged 22, who had a cyst the size of a Tangerine orange over the trachea, which occasionally produced dyspnœa; the second in a girl, aged 24, in whom the right lobe of the thyroid was forming one large cyst. In both the above treatment was perfectly successful, and produced no constitutional or local disturbance. When seen some time afterwards there was very little trace of scar, and no tumour in either case. He quoted from several surgical standard works to prove that the usual operations for thyroid cysts, such as injection, seton, etc., were either dangerous or unsatisfactory, and thought that the advantages of this method were its simplicity, safety, and certainty.—Mr. BRYANT asked Mr. Robson whether, if the tumour had proved semisolid and multilocular, he would have broken down the divisions.—Mr. CHRISTOPHER HEATH said that Mr. Robson had not spoken of any difficulty with the hæmorrhage, which, in his experience, was apt to be profuse from the interior of the cyst when emptied. For that reason the use of perchloride of iron, plugging and reinjecting until suppuration was set up, and healing from the bottom occurred, was probably introduced. He had employed the system several times with success.—Mr. CLUTTON said that, in his experience, hæmorrhage from the interior of the sac was apt to be very profuse. It, however, stopped on plugging, but high fever, lasting for six or seven days, had succeeded the operation until he employed iodoform gauze for the packing. The fever was then much less marked. He advocated the removal of the cyst wall. One disadvantage of plugging was that the sinus was apt to persist for a very long time; in one case it had done so for three years.—Mr. GANT said that he would never tamper with the cyst walls, as he had seen embolism follow the operation. He inquired whether, in removing the colloid material with the spoon, the cyst walls were much interfered with.—Dr. STEPHEN MACKENZIE, alluding to his microscopical examination of the cyst walls, said that they contained an abundant supply of thin-walled blood-vessels, very liable to give rise to hæmorrhage, and he inferred therefrom that perchloride of iron was peculiarly indicated for injection, much more than the injection of iodine.—The PRESIDENT said the salient point in Mr. Robson's paper was the proposal to stitch the cyst walls to the skin. He hardly thought this was required in the majority of cases; experience alone could determine the point. He remembered two cases; one of simple tapping, in which a good deal of bleeding took place, and, on pressure being applied, the tumour became very tense. It all went away, however, when a free incision was made and the cavity packed. In the other case he at once made the incision, and no trouble was experienced with the hæmorrhage. He mentioned that in one case in which he was injecting a mixture of tincture of iron and iodine, the sac suddenly filled with blood, and pulsated in a way which caused him considerable alarm. Ice was applied, and, after a period of anxiety, matters subsided. He thought the scooping out was a bold plan to adopt.—Mr. ROBSON, in reply, said that in both cases the cyst was simple. Had it been multilocular he would have broken down the partitions, in order to remove all the contents. The advantage of stitching the sac wall to the skin was that it shut off the cellular tissue of the neck from the danger of infiltration. As to Mr. Clutton's suggestion to excise the part of the gland affected, the difficulty in cutting away the thyroid was to know where to stop. He had done it twice, and both times with imminent risk to the patient, once from asphyxia and once from hæmorrhage. In scraping the walls, he employed just enough force to set up sufficient inflammation to secure obliteration of the cavity.

A Suggested Method of Operating on a Uniform Principle in the Treatment of Imperforate Anus, with Example.—Mr. MAYO ROBSON (Leeds) read a paper on this subject, in which he gave extracts from several authors to prove that the recognised treatment of cases where the bowel was not soon reached was to perform either Littre's operation or colotomy, although the mortality of the operation, judging by published statistics, was extremely heavy—for example, M. Guersant had operated in this manner twelve times without saving a patient. He advocated an incision from the central point of the perineum to the coccyx, and then a careful dissection, until either the bowel was reached or the peritoneum was opened, when the upper end of the rectum or the sigmoid flexure of the colon could be brought down and sutured to the skin in the anal region. He described a case in a child one day old, on whom, in March, 1886, he had performed this operation with a very good result, the child recovering without a bad symtom, either local or general, and when seen last the patient had what appeared to be a normal anus, through which it had a motion about once a day. He considered the operation ought not to be very difficult if a catheter was passed into the bladder and a good horizontal light was available, that it should not be very dangerous either from shock,

peritonitis, inflammation, or hæmorrhage, and that the result, if successful, was infinitely preferable to that of Littre or a colotomy.—Mr. GODLEE said that the escape of meconium into the peritoneum did not set up the same irritation as ordinary fæcal matter.—Mr. HARRISON CRIPPS criticised the statistics brought forward in the paper. He had collected about a hundred cases, in many of which Littre's operation had been performed with success. He had had five successful cases out of sixteen. The results of operations when there was no sign of an anus were much more favourable than when some trace could be seen, as the malformation was often more serious in the latter case. He preferred Verneuil's operation of resection of the coccyx without opening the peritoneum, when the bowel was almost always found close to the bone. If Verneuil's operation failed, he would do Littre's. —Mr. ROBSON, in reply, said that there was an advantage in stitching the mucous membrane to the skin, if only to prevent extravasation of the areolar tissue.

Living Specimens.—Dr. RADCLIFFE CROCKER showed a case of hemiplegia followed by athetosis in a child.—Dr. STEPHEN MACKENZIE showed a case of chyluria with living specimens of the *filaria sanguinis hominis* under the microscope.—Dr. ANGEL MONEY exhibited a case of hemiplegia with spasm in a syphilitic child.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JANUARY 12TH, 1887.

J. B. POTTER, M.D., President, in the Chair.

Specimen.—Dr. AMAND ROUTH showed a specimen of what appeared to be a fibro-myoma attached to the left cornu of a bicornuate uterus. Early in 1885 there was a history of extra-uterine fœtation. —Dr. W. GRIFFITH and Mr. DORAN remarked on the case, and the specimen was referred to a committee for report.

Midwifery among the Burmese.—Dr. T. F. PEDLEY, of Rangoon, read a paper which described the occupation, dress, and physique of Burmese women. The knowledge of the native medical men is handed down by tradition, and takes origin from fable, horology, astrology, etc., and dieting is followed according to a certain letter, date, name, good or evil spirit. The midwives are of the poorest and lowest class, their chief qualification being age and being the mothers of large families. The more decrepit the more they are respected. All new methods are resisted. Nature is kind, as a rule, to the mother, and carries her safely through. In Lower Burmah there is little real poverty, and the women lay by for the event from five to fifty rupees. A large store of firewood is laid in; if she cannot buy it, she collects it before her delivery. A room is set apart, where the mother remains till convalescent. Regardless of all sanitary laws, every effort is made to keep out air, and especially the smell of cooking, which is supposed to be particularly injurious. A fire is made of wood, no chimney being provided, and the smoke renders the air stifling. The patient, when in labour, is surrounded by female friends, and a crowd of men and women squat behind the curtain which divides the apartment, and smoke or chew betel. When the pains become severe, the patient squats on the floor supported by a woman sitting behind her. The midwife assists in front by pushing with her hands on the abdomen, using more and more violence as the pains increase. A silk scarf or cloth is tied tightly round the body above the umbilicus, which is drawn tighter as the case proceeds, not with any idea of restraining hæmorrhage or supporting the uterus, but to prevent its rising into the chest. As the head progresses the woman is laid on her back on the floor with her knees drawn up. Her attendants press on the abdomen with all their might. When the head of the child presses on the perineum, the midwife leaves the pushing to others, and in all first cases tears the perineum either with her thumb nail, which is grown sharp and long for the purpose, or with her great toe-nail. In other cases, the perineum is retracted, and as soon as the head is born, the child is rapidly extracted. If the placenta does not follow quickly, the cord is dragged on, and this failing, it is removed by the hand, or torn away piece by piece. The mother is washed, and the whole body rubbed with turmeric, and saffron is plastered over the vulva. The fire is kept up, and hot bricks wrapped in rags, or bags of hot sand, are placed on the abdomen, and twice a day the patient has to squat over smouldering embers upon which turmeric has been thrown, or over steam arising from hot bricks. The skin is often blistered by the application of heat, but heat is supposed to permeate the parts and heal them. The food is hot water, hot broth, with fish and rice. The poor get up on the fourth or fifth day, but the better classes scarcely move for a fortnight, except for the daily steaming process, and the calls of nature. On the seventh day a hot "pack" is used for some hours which produces free perspiration. When the blankets are removed, the patient is bathed freely in cold water. The constant sweating during the first week brings out a miliary rash, which is considered a good sign. Shampooing or massage is used for hours together, often to so severe a degree over the abdomen that displacements of the uterus are produced. Though Burmese women are clean in health, washing is avoided during sickness, and their habits are then dirty. When delivery is not rapid various barbarous methods are followed, such as standing on the patient's abdomen, and pressing or kneading it with the feet, or a bamboo or plank is placed across the abdomen, while the attendants endeavour to expel the child by using all their force at the two ends. This method is very usually fatal to mother and child, and often causes rupture of the liver or bladder. Tetanus often follows lacerations of the perineum, cervix, or rectum; one case of recovery under the use of chloral was recorded. In cross-births the part presented is torn or cut off, and the child removed piece by piece, the head being extracted by means of a large fish-hook. In all cases the object is to remove the child as quickly as possible, and regardless of risk to the mother, owing to the superstition that if a woman dies undelivered the spirit of the mother and child haunt and bring misfortune to the relatives ever after. Burmese women really need little assistance if nature is left to herself. Their pelves are roomy, and expulsive efforts strong. The native system leaves little for perverted ingenuity to devise towards preventing recovery, and is about the most severe and fatal in the world. The only remedy is a supply of properly trained Burmese midwives, which the Burmah branch of the "Countess of Dufferin's Fund" has determined to undertake.—The paper was illustrated with coloured drawings by native artists, of the most characteristic points mentioned.—Dr. BOXALL said there were many points of similarity between the Burmese and Chinese, as regards sophistry and superstition in the practice of all the branches of medicine; and the description of the practice of Dr. Hua during the Han Dynasty, about a thousand years ago, taken from the *Story of the Three States*, takes abdominal surgery back several hundreds of years.—Mr. DORAN asked Dr. Boxall if he knew whether women in the East suffered from disorders incidental to menstruation and pregnancy, in consequence of the habit of tobacco-smoking, to which it was said they were addicted from an early age.—Dr. BOXALL was not aware of any.—Dr. W. GRIFFITH thought the paper of great interest, as a record of most barbarous midwifery in the nineteenth century, which would be still more interesting at some future time. There was a field open for gentlemen who had the opportunity of studying midwifery amongst various races, to investigate the modifications of the process due to different conditions present, which are peculiar and normal to these races. Sir W. Turner, and others, are investigating their crania and pelves, and have shown such differences in them as to indicate the probability that the mechanism of labour, including the position of the head at the brim, must be altered accordingly.

On Stricture of the Female Urethra.—Dr. HERMAN read a paper on this subject. He had measured the female urethra in fifty-five cases in which no urinary trouble was complained of. He found that in the majority a No. 17 catheter would pass, and, in all but two, a No. 14. He related six cases of stricture of the female urethra under his own care. He had collected and arranged in tabular form twenty-three others, which were all that he had been able to find reported. He drew a parallel between the two sexes as to the etiology of urethral stricture, and showed that while it was much commoner in males, its causes were much the same in the two sexes. In both it might be the result of injury (these cases being proportionately commoner in women on account of child-bearing), or of the cicatrization of chancres. In the woman it was sometimes due to so-called lupus of the vulva. In both sexes the chief cause in young and middle-aged subjects was gonorrhœa. In the aged of the male sex, enlargement of the prostate was the common form of stricture. In old women there was found stricture due to general fibrous thickening and induration of the urethra occurring without any history of gonorrhœa, or other discoverable local cause. The author suggested that as in women the homologue of the prostate gland was the urethro-vaginal cellular tissue, these cases were possibly analogous to enlarged prostate in the male. As to treatment, he found that rapid dilatation was so simple and successful, that it was preferable to any other method.—Dr. HORROCKS related two cases under his own care, both of which he considered were congenital. He approved of the treatment by dilatation.—Dr. AUST LAWRENCE (Clifton) considered stricture of the female urethra rare. He had met with only two cases in the last fifteen years. One was in an old woman, and appeared to be due to cicatricial bands, the other was in a young woman, probably the result of specific urethritis. Both were cured by dilatation.—Dr. AMAND ROUTH mentioned a case of inflammatory urethritis which appeared to have commenced with anterior parametritis, and spread

downwards along the cellular tissue of the vagina, a double urethral stricture eventually resulting.—Dr. W. GRIFFITH had that day seen a case at the Samaritan Hospital in a married nullipara, aged 30. She had probably suffered from gonorrhœa. The stricture was one inch and a quarter from the meatus, and only just admitted a uterine probe. It was dilated in a few minutes with bougies to No. 13.—Dr. GALABIN related a case, and Dr. HERMAN replied.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, JANUARY 6TH, 1887.

J. HUGHLINGS JACKSON, M.D., F.R.S., President, in the Chair.

The Analogy between Croup and Asthma.—Dr. MORTON read a paper on this subject, the object of which was to compare stridulous laryngitis—to which he gave reasons for thinking the name of croup should be confined—and "spasmodic" asthma, with a view to their mutual elucidation. He called attention to the resemblance in the sudden nocturnal invasion, the diurnal remissions and recurrences for two, three, or more nights, the liability to repeated attacks, the greater prevalence in the male sex, the dry early and moist later stages, the cessation of the liability to croup, as the beginning of that to asthma at about 6 years of age, the frequent origin of both in slight catarrhal or dyspeptic disorder, the common occurrence of both in summer as well as winter. All these peculiarities showed that croup could not be a real laryngitis, with paralysis, according to the commonly accepted pathology, but a paroxysmal dyspnœa from disturbed innervation of the larynx as asthma was of the bronchi. This left it open whether the disturbance was motor or trophic. Sir Andrew Clark's hypothesis of fugitive quasi-erectile swellings of the mucous membrane afforded as complete and adequate an explanation of croup as it did of asthma. It was further suggested for inquiry whether hay-fever, croup, and asthma might not be different expressions of the same state, forming really one and the same disease.—Dr. CHARLES WEST observed that children who had been the subjects of croup or stridulous laryngitis in their earlier years were prone to suffer from true asthma in later life. The child-asthma, as a rule, ceased almost entirely before puberty, and this point should be especially borne in mind by practitioners, since it was possible that the rule might not hold good in cases where the general health of the child was not carefully maintained. Croup was essentially spasmodic in its nature, but was frequently caused by sudden variations of temperature, by attacks of slight catarrh, and by errors in diet. In croup the phenomena were those of spasm and something else; in laryngismus stridulus the spasm was the principal feature, a distinctive difference being formed by the catarrhal signs in the former. He thought that for the present it would be advisable to retain the term stridulous laryngitis, as he could not altogether renounce the view that some form of congestion or inflammation of the larynx was generally associated with it.—Dr. GOODHART referred to the replacement of croup and stridulous laryngitis by asthma in later life, and inquired whether any corresponding replacement occurred in the case of child-asthma after its subsidence at the period of puberty.—Dr. HUGHLINGS JACKSON, after remarking on the great value of Dr. Morton's paper, spoke of laryngismus stridulus, and also of convulsions in cases of spasmodic laryngitis. He believed that these fits, and probably the fits occurring in pneumonia and other acute diseases of children, were owing to discharges beginning in parts of the medulla oblongata or pons Varolii; in other words, they were dependent on discharges beginning in parts on the lowest level of evolution, which was pretty much the "true spinal system" of Marshall Hall. He thought it a matter of great importance to note the mode of onset, and the march of the convulsions in those cases, as carefully as most people now did in cases of epileptiform seizures originating from the middle level of evolution (the so-called motor region), and as they ought to do in cases of epilepsy proper, dependent, as the speaker believed, upon discharges from the highest level of evolution. Bearing in mind Victor Horsley's researches, they should, among other things, carefully note the nature, tonic or clonic, of the spasm in the different regions affected in the convulsions of children. He stated again an hypothesis he had put forward regarding the convulsions of laryngismus stridulus (*Brain*, April, 1886). He thought they were owing to discharges beginning in the respiratory centres determined by supervenosity of the blood,—by an excess of their natural stimulus. That convulsions could be produced in some lower animals by inducing supervenosity, and by rapid bleeding, was well known; in these cases the convulsion was respiratory, and was probably owing to absence of oxygen. According to Kussmaul and Tenner convulsions in rabbits were producible by rapid bleeding when the cerebrum proper was taken away. Laryngismus stridulus occurred in children at an age when the respiratory apparatus was imperfectly developed, and most often in those who from rickets had soft ribs; moreover, the attacks usually came on during sleep, when respiration was less active; these were conditions favouring supervenosity. The good effects of fresh air, country air and cold sponging were in favour of this hypothesis; moreover, some authorities praised highly musk and belladonna, which drugs were respiratory stimulants. Spasmodic asthma in the child and adult was, he supposed, a respiratory convulsion, owing to discharge of imperfect (? small) respiratory centres from supervenosity.—Dr. WEST added that both asthma and croup appeared to affect males more frequently than females, while in other nervous affections, such as chorea, the frequency was exactly reversed. He did not recollect any instance of neurosis in after-life succeeding to child-asthma; nor could he remember any case in which general convulsions occurred during stridulous laryngitis. In laryngismus stridulus the convulsive movements were almost always confined to the limbs.

Suppurative Peritonitis.—Dr. GOODHART read a paper on this subject, of which the following is an abstract. The author related several cases, illustrative of the resemblance of the symptoms of suppurative peritonitis to those of intestinal obstruction, in each of which, however, there had been subsequent diarrhœa. A remarkable feature of these cases was the absence of high temperature, and much stress was laid upon the uncertainty of this symptom, as, in a considerable proportion of such cases, the temperature was not raised at all. The degree and position of pain was also shown to be indefinite in its indications. Diarrhœa, in the presence of other symptoms of peritonitis, must be regarded as a most serious symptom. The bowel, in ordinary peritonitis, was more or less paralyzed, and constipation resulted as a general rule; but this did not hold good for the suppurative form of the disease. The fact that peritonitis, and especially suppurative peritonitis frequently spread to the pleura by direct extension, was insisted upon, and the necessity for closer observation of this point was maintained. Apart from the ordinary treatment of peritonitis by opium, belladonna and the administration of food by nutrient enemata or suppositories, no positive rules of treatment could be laid down. Surgical interference in some cases might save life; but its use could only be determined by close study of the particulars of each individual case; those most generally suitable for such interference were those in which the disease showed a tendency to localise itself, or, at any rate, had given some indication of having originated in an accessible situation.—Dr. WALTER PEARSE mentioned a case in which, after resection of the knee, excessive vomiting, with diarrhœa, but no rise of temperature, had supervened, with fatal result. Suppurative peritonitis had been diagnosed, but none was discovered after death. Enormous dilatation of the stomach was the only abnormal condition.

Cancer and its Treatment.—Dr. BLENKINSOP made a passing reference to the pathology and causation of cancer, and then dealt with the purely medical aspect of the question, both in regard to internal forms of the disease, and its general constitutional treatment. He leaned to the belief in a cancerous diathesis, and argued in favour of preventive measures in suspected constitutions. He thought that efforts should be made to test the value of all remedies which presented a reasonable prospect of success, and related details of four cases in which lime salts appeared to have had a beneficial effect. He assumed that the deposit of lime salts in the vessels gave rise to atheromatous and calcareous degeneration, and so lessened the supply of blood to the cancerous tissues. Cretaceous preparations derived from the animal kingdom, for example, from oyster-shells, appeared to derange the stomach less, and to be more readily absorbed.

SOUTH AUSTRALIAN BRANCH (ADELAIDE).

THURSDAY, JULY 29TH, 1886.

J. C. VERCO, M.D. (Lond.), President, in the Chair.

Cerebral Tumour.—The PRESIDENT exhibited the viscera of a man who died with right hemiplegia, preceded by right-sided convulsions. One kidney was cystic with putty-like contents; there was a communication between the transverse colon and duodenum of old standing; the head of the pancreas was indurated and enlarged, and pressed on the common bile duct (icterus had been present for a month before death); there was a hydatid tumour on the under surface of the right lobe of the liver; in the brain were two tumours, one at the upper surface of the right hemisphere, and a second smaller one in the left hemisphere, immediately over the anterior part of the third ventricle.

Alexander-Adams Operation on the Round Ligaments.—Dr. W. GARDNER read a paper on the Alexander-Adams operation for re-

storing inveterate displacements of the uterus by pulling up the round ligaments. He gave a report of the first twenty cases. Among these there had been no death. The first case he operated on was a complete failure, owing to imperfect performance of the operation, due to want of knowledge. Of the rest, one had been found to continue well three years after operation; two for a period of two years; seven for a period of one year; nine for a less period than one year. Four of them had since been delivered of living children at full time. He thought the operation would be found most useful in cases of chronic retroversion with prolapse of one or both ovaries. Only cases with symptoms required any treatment; pessaries only relieved symptoms, and the only radical cures were pregnancy and the Alexander-Adams operation.—The PRESIDENT thought that Dr. Gardner had shown that the operation was safe, feasible, and efficient.—Dr. GÖRGER said that Dr. Gardner's practice had convinced him that the operation was a safe and justifiable one, and he had himself operated in one case with a good result.

THURSDAY, AUGUST 26TH, 1886.

J. DAVIES THOMAS, M.D. Lond., Vice-President, in the Chair.

Enteric Fever.—Dr. B. POULTON made some remarks on the cases of enteric fever treated at the Adelaide Hospital during the period from August 1st, 1885, to June 30th, 1886, with a tabular record of the cases. He observed that the number of cases treated during 1882, 1883, 1884, and 1885, appeared to be above the average, and that the work of connecting city houses with the new deep drainage system was begun in 1882 and finished in 1885; during these four years there was much upturning and emptying of old cesspools. Dr. Corbin and other members of the Branch had called attention to outbreaks of diphtheria following disturbance of night-soil, and Dr. Poulton thought his own figures warranted the adoption of the greatest precautions during the progress of such work.

Absorption of Alveolus.—Mr. L. W. BICKLE related a case of absorption of the alveolus, with loss of sound teeth, in a man.—Mr. RODWAY commented on the case, and on the causation of the condition.

Accidental Vaccinia.—Dr. MELVILLE JAY related the case of a child, aged 8 months, suffering from eczema of the face and scalp, who was accidentally inoculated with the vaccine virus from the arm of an elder child with whom it slept. The mother, who had been vaccinated in infancy, developed several well-marked vesicles on both nipples and breast, the right anterior nares, the left lower eyelid, the left cheek, and two or three on the neck. The child at first did well, but refused food on the fourteenth day, and died. The eruption in the child was almost entirely limited to the parts affected with eczema, but there were some isolated vesicles on the forehead, nose, eyelids, and chest.

Lateral and Suprapubic Lithotomy.—Dr. WM. GARDNER related a case in which, after making the lateral incision, he was unable to extract the stone on account of its great size. A suprapubic operation was at once decided on. A Barnes's bag, holding about 8 ounces, was introduced into the rectum, and distended. An incision was then made, about 3 inches long, over the pubic bone, and the tissues separated with a steel director till the bladder appeared in view, but at a considerable depth in the wound. It could be felt collapsed and closely applied to a large mass inside of it. A short-beaked sound was then passed in through the perineal wound, and on the turned-up beak the bladder was incised, and the sides grasped with forceps. With the finger a large stone was then felt, and the forceps were applied, but slipped. A large-sized scoop was then passed into the bladder, and under the stone. With this it was lifted up, and the bladder-wound enlarged upwards until it could be safely delivered. The peritoneum could be seen bulging in the wound about 1½ inches above the pubic bone, and was carefully protected from injury. At the suggestion of Professor Watson, the peritoneal surfaces of the bladder-wound were sewn together with carbolised silk for 2½ inches, leaving just room in the lower part to insert a large drainage-tube. Another similar drainage-tube was placed in the bladder through the perineal wound. Throughout the operation the hæmorrhage was slight. The edges of the superficial part of the abdominal wound were then accurately brought together with carbolised silk, and well dusted with iodoform. Gauze pads filled with salicylic wool, freely sprinkled with iodoform, were then lightly bandaged over the abdominal wound. The calculus weighed 6 ounces and 20 grains, and was covered all over with short spines. It was a large specimen of a mulberry or oxalate of lime stone. At the date of the meeting there was still a small perineal fistula; and after an interval of a fortnight, during which no urine had passed by the abdominal wound, it was again finding its way through that channel.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, JANUARY 7TH, 1887.

Dr. ALDERSON, President, in the Chair.

Phthisis, and its Treatment from a Hygienic Standpoint.—Dr. BLENKINSOP read a paper upon this subject

The Etiology of Phthisis.—Dr. SEYMOUR TAYLOR read a paper under this title, of which the following is an abstract. Phthisis he considered a condition or symptom having several causations, inflammatory, fibrous, tubercular, or otherwise. The tubercular form might be described as bacillus-phthisis, or Koch's phthisis. The author said that other factors were necessary for a man to catch the disease than the mere contact of the bacillus, while, whatever the gate of infection might be—mucous or otherwise—an abnormal condition of the points of contact was a certain factor in the production of the disease. He then sketched briefly the life-history of a tubercular patch, and discussed the origin of the giant-cells. He concluded by saying that our cold damp climate, by favouring the prevalence of catarrh of the respiratory apparatus, was directly responsible for a condition which allowed the tubercular parasite to flourish.

The Operative Treatment of Intercurrent Disease in Tubercular Patients.—Mr. BRUCE CLARKE read a paper upon this subject, in which, after briefly discussing the nature of tuberculosis, he proceeded to show that it was almost impossible to remove, by a surgical operation, the whole of the bacilli that had found their way into the body. A growth which was causing much constitutional disturbance could be removed with benefit; such cases healed easily.—Dr. THOROWGOOD said that a depressed state of the nervous system was an important factor in the causation of phthisis.—The PRESIDENT said that a dry soil was an important preventive of the disease. In the second decade, men were much more prone to the disease than women.—After some remarks by Mr. KEETLEY, Dr. THUDICHUM said he thought the koumiss cure, advocated by the Russians, was of no real use. It was remarkable that, since Koch's discovery of the bacillus, phthisis had increased all over the world.—Messrs. H. H. TAYLOR, LLOYD, BENHAM, and DUNN continued the discussion; and Drs. BLENKINSOP, SEYMOUR TAYLOR, and Mr. BRUCE CLARKE respectively replied.

Specimens.—Dr. P. S. ABRAHAM showed a selection of sections of tubercular organs in man and the lower animals, and specimens of the tubercle bacillus.

Instruments.—Messrs. WRIGHT and Co., of New Bond Street, exhibited a large collection of instruments, sprays, and inhalers.

ACADEMY OF MEDICINE IN IRELAND.

SURGICAL SECTION.

FRIDAY, DECEMBER 10TH, 1886.

SIR WILLIAM STOKES, M.D., President, in the Chair.

Conservative Surgery in Diseases of the Foot and Ankle-Joint.—Mr. WHEELER read a paper, of which the following is an abstract. Having briefly alluded to the anatomical distribution of the synovial membrane, and to the arches of the foot, he recorded several successful operations, including excision of the os calcis, of the astragalus, scaphoid, cuboid, middle, cuneiform, and metatarsal bones; also resection of the first phalangeo-metatarsal articulation. The last case he recorded was excision of the os calcis, astragalus, and the malleoli, together with the articular surface of the tibia. He described in detail the diseases requiring excision of the os calcis, the form of incision and after-treatment; he condemned the subperiosteal operation in such cases. All his excisions of the os calcis were successful, and the locomotion of the patients was but little impaired. The case of excision of the astragalus had been seen within a very recent period; the patient had a movable joint between the os calcis and malleoli, and possessed nearly equal powers in the foot operated on and the other. Mr. Wheeler concluded his communication by emphasising the necessity for carefulness in diagnosing the seat and cause of disease in the foot, likewise the stage the disease was in before undertaking partial operations.—The PRESIDENT congratulated Mr. Wheeler on his unbroken series of successes, which did not tally with the experience of most operating surgeons, including his own. He had not found cases in which the disease was sufficiently limited to ensure satisfactory and permanent results by partial excision, and the want of such limitation was the chief reason why Pirogoff's operation was abandoned. Indeed, he was himself one of the first, if not the first, in this country to perform excision of the ankle-joint for caries, and he obtained what seemed to be a successful result—the wound healed and the patient had the use of his foot for two years; but at the end of that period the disease again manifested itself, and at the same time there was also

evidence of tubercular disease of the lungs, which prevented further operative measures. In caries of the tarsus, he would, in the majority of cases, be disposed to perform Syme's amputation at once, having regard to the liability of a recurrence of the disease in the bones which at the time of operation were apparently healthy. Mr. Wheeler seemed inclined to disparage the subperiosteal method, without giving definite reasons. While the advantage of some excisions (as of the elbow-joint) by that method were exaggerated, yet in others there was no doubt that it was useful, especially in the shoulder-joint, and the excision of shafts of bone, as the fibula, radius, and ulna; for in the young the preservation of the periosteum was of great importance.—Mr. CROLY did not like the operation for excision of the os calcis. He had not had success in saving the foot where the disease seemed to be confined to that bone. He had had, however, a most successful case of excision of the os calcis for gunshot injury where the bone was shattered and shot lodged in it, and the patient now had a useful foot. He had met with another case of great interest. A man fell off a horse injuring his ankle-joint, which exhibited all the evidence of compound fracture. Amputation was proposed, but was refused. Months afterwards he cut down under the ankle-joint and found that the astragalus was detached and that the tibia had come down and accommodated itself on the os calcis. The man was now engaged as a coachman and groom with a useful foot.—Mr. FRANKS said the tendency of surgery was to the partial excisions, and it was obviously better to leave a periosteum that could develop bone rather than excise it with the bone, and hope for a pad of cicatricial tissue to walk upon. He witnessed a case in a girl 18 or 19 years of age, which impressed him with the power of the periosteum in forming bone. Mr. Bryant had, by a long excision, excised the head of the thigh-bone and three-fourths of the shaft, leaving the periosteum. This bone was standing by the patient's bedside. On examining the girl he found that the head and neck of the femur had reformed, and also three-fourths of the shaft, every movement of the hip-joint being perfect.—Mr. HENRY FITZGIBBON said that in considering the question of excision, the main point was what was the primary cause of disease in the bones. The great distinction was between disease of bone resulting from accident, and disease arising from constitutional cachexia. He had had a case of a girl who dropped a needle into the middle cuneiform bone, which he excised, and she made a perfect recovery. She had thirty-two sound teeth, a good indication of the absence of constitutional cachexia.—Mr. BARTON, Dr. DOYLE, and Mr. MCARDLE also took part in the discussion, and Mr. WHEELER replied.

REVIEWS AND NOTICES.

CONTRIBUTIONS TO PRACTICAL MEDICINE. By JAMES SAWYER, Knt., M.D., F.R.C.P., Senior Physician to the Queen's Hospital, and Professor of Medicine in Queen's College, Birmingham, etc. Birmingham: Cornish Brothers. 1886.

IN this volume, Sir JAMES SAWYER has brought together certain of his contributions to medical periodical literature. He has revised some in the light of increasing experience, and condensed or amplified others, with the result of producing a most instructive and readable series of essays. The first lecture, on the causes and cure of insomnia, is a good example of the author's method. His division of the cases into three classes—the psychic, toxic, and senile—is essentially practical, and the essay contains many shrewd observations and useful hints. The statement that women who habitually drink large quantities of tea sleep badly, but rarely suffer from serious insomnia, is in accordance with general experience. In persons, on the other hand, who are susceptible, the insomnia produced by tea is most complete while it lasts; but, like all toxic effects, it soon passes off if the dose is not repeated.

In speaking of senile insomnia, Sir James Sawyer truly observes that an exaggerated appreciation of the merits and value of early rising mostly increases as age advances. The cerebral anæmia produced by the evening meal sends the old man early to bed, and the rigid cerebral arteries are unable to adapt themselves to the maintenance of the relative anæmia which is essential to prolonged healthy sleep. In the treatment of acute insomnia, the author recommends opium or chloral to produce a few nights of sound and sufficient sleep, but in chronic insomnia he is opposed to their use. He strongly recommends bromide of potassium, combined with ergot or digitalis, to favour the contraction of the weakened cerebral vessels; at the same time he is, of course, fully alive to the necessity of treating the general condition by a course of iron, out-door exercise, or other means.

The other essays in the book are on phthisical laryngitis, on the use of chloride of calcium in phthisis, on the treatment of constipation and obstruction, and on the accentuation of the pulmonary second sound (both originally published in the BRITISH MEDICAL JOURNAL), on floating kidney, and on the progress of therapeutics. The sound practical teaching in the first lecture is only a foretaste of what may be found in the other lectures.

A MANUAL OF OPERATIVE SURGERY. By LEWIS A. STIMSON, B.A., M.D., Surgeon to the Presbyterian and Bellevue Hospitals, Professor of Clinical Surgery in the Medical Faculty of the University of the City of New York, etc. Second Edition, with 342 Illustrations. London: H. K. Lewis.

THERE is always room for a good book, so that, whilst many works on operative surgery must be considered superfluous, that of Dr. STIMSON has held its own, although many of equal merit are read in this country and America. The author knows the difficult art of condensation, and the publisher has succeeded in making a book of five hundred and six pages physically portable, without the necessity of small print, and small incomprehensible drawings. Thus the manual serves as a work of reference and, at the same time, as a handy guide; it is suited both for the medical library and for use in class-rooms. It may be read with profit both by the dresser and the operating surgeon. Not that it is desirable that the dresser should attempt to learn surgery from its pages, nor can the operator readily grasp the principles of an operation which he has never performed from a perusal of Dr. Stimson's work—but it teaches what it professes, the steps of operations. The author, unlike many other writers, has not attempted to do too much; he has confined himself to the task of writing just what is necessary.

Perhaps we may be weary of many time-honoured woodcuts which appear in the manual, still Dr. Stimson has only admitted such veteran drawings as are really clear. Among the most useful diagrams are such as represent certain foreign methods of ligature, suture, etc. Thus the author introduces sketches which explain Lambert's, Gély's, Bouisson's, and Bérenger Féraud's methods of applying sutures to wounds and incisions of the intestines. These terms are familiar to the readers of foreign works and periodicals. If they be worth any consideration, they must be understood by the translator, and they should be explained in English works for the benefit of the British reader; but such matters cannot be made clear without the aid of diagrams, and this fact has been understood by the author.

In this edition Dr. Stimson has sought to indicate the changes that have been effected in operative methods and procedures by the antiseptic system, and has added an account of many new operations and variations in the steps of older proceedings. We do not desire to extol this manual above many excellent standard British publications of the same class, still we believe that it contains much that is worthy of imitation. Writers of manuals of operative surgery in this country are too apt to overlook special operations, to fill their pages with disquisitions on the principles, rather than with descriptions of the course of operations, and to confine themselves to the routine proceedings not so much of the hospital operating theatre as of the medical school Operative Surgery class. A description of Ogston's operation, or of any similar widely-adopted new proceeding is of as much importance as directions for the ligature of arteries which are seldom tied. Dr. Stimson has not overlooked this principle; he has neglected neither new nor old operations.

ON ASTHMA: ITS NATURE AND TREATMENT. By HORACE DOBELL, M.D. London: Smith, Elder and Co. 1886.

YET another theory on the nature and treatment of asthma; this time from the pen of Dr. HORACE DOBELL.

Dr. Dobell's theory is founded on the statement of Dr. Tidy, that other gases besides oxygen are capable of combining with hæmoglobin, such as carbonic oxide, which forms carbonic oxide hæmoglobin; and that this carbonic oxide hæmoglobin has the same bright red colour as ordinary oxyhæmoglobin, but, unlike it, does not part with carbonic oxide as readily as oxyhæmoglobin parts with oxygen. He then propounds the theory that asthma is possibly "due to some interference with the ease with which hæmoglobin combines and delivers up oxygen. Probably it is an arrest in the delivering up of oxygen which first disturbs the respiratory act."

The same idea has been suggested to account for the attacks of dyspnœa coming on in the early hours of the morning, which so frequently is the case. After a room has been shut up for several hours during the night, the atmosphere becomes so close, and so deficient in

oxygen, that there is not enough for the blood to absorb, hence the commencement of an attack of asthma in a patient predisposed to it.

Dr. Dobell explains his theory by a most ingenious and elaborate "Diagrammatic Scheme of an Asthmatic Paroxysm," which is placed at the end of the work, and is so arranged that it can be kept open and consulted during the reading of the letter-press. The whole theory is worked out very well. It would be as difficult to prove that it is not the correct explanation of an attack of asthma, as in the case of any of the other dozen theories that have been brought forward.

Dr. Dobell does not try to explain why the hæmoglobin refuses to take up, or does not take up, sufficient oxygen at certain times and in certain people who are prone to asthma. He mentions that there are climatic and meteorological conditions to be taken into consideration, and also special idiosyncracies as to smells. He also mentions the powerful influence which digestion exerts over the asthmatic seizure. He says that flatulent distention of the stomach, after food, impedes the free action of the diaphragm. He also notices that the most frequent interference with the respiration takes place when the new food from the digestive organs is being poured into the blood which supplies the lungs, and says that "any excess or any defect of the nutrient current may overtax, paralyse, or otherwise disturb the oxygenating process." But he does not say why the difficulty occurs in some persons and not in others; or why, in some localities, the hæmoglobin appears never to refuse to absorb the proper amount of oxygen.

Throughout the treatise, Dr. Dobell is evidently dealing with the asthmatic paroxysm which so frequently accompanies chronic bronchitis and emphysema. Several times the words "bronchial asthma" occur, and many references are made to the author's earlier work, *On Winter Cough*. The true asthma—pure spasmodic asthma—is treated rather as an exception, both as to its symptoms and etiology. The chief hypotheses which have been brought forward to account for an ordinary attack of bronchial asthma are mentioned. The hypothesis of Rosenthal and G. Sée, of Jaccoud and others, who attribute an attack of spasmodic asthma to reflex spasm of all the inspiratory muscles and over-distention of the bronchial tubes and air-cells, is not mentioned at all. The "spasm of the diaphragm hypothesis" is mentioned only to be discredited. The function attributed to the bronchial muscles is a rational, and, most probably, the correct one—namely, that of subsidiary regulators, altering from time to time the air-pressure, just as the muscular coat of the arteries presides over the blood-pressure.

Dr. Dobell appears to agree with what is now generally accepted—namely, that the chief wheezing noise in asthma occurs during inspiration. He accounts for the higher pitch in one of two ways: increased rate through an opening of constant size, or a narrowing of the opening, the rate of motion of the current of air remaining the same. These premises being accepted, one would suppose that the different kind of force producing the equal velocity would not have any effect upon the sound produced; but the difference in size and shape, in the resounding space behind the point where the sound is produced, would modify the sound. Dr. Dobell thinks that the difference between the expiratory and inspiratory sound is due to the different force which, in each case, propels the air through the opening where the sound is produced.

In describing the last stage of an asthmatic paroxysm before it yields, when, according to Dr. Dobell's diagram, the will centre is brought into play, the patient's life is saved by the induction of artificial respiration, that is, by calling into play the extraordinary muscles of respiration. Again, at the end of the work, when dealing with the question of treatment, mention is made, among the list of external remedies, of real artificial respiration. Life is saved by the forcible introduction of air into the lungs. But, if hyper-distension of the thorax with air, due to spasm of all the inspiratory muscles at the point of deepest inspiration, is the true condition in an asthmatic seizure (a well established hypothesis, which Dr. Dobell has ignored), then the additional supply of oxygen by artificial respiration is hardly the remedy required.

The want of oxygen for combination with the hæmoglobin suggests to the author the use of anhydrous oxide of barium (BaO), as a salt which might be found useful in the treatment of the constitutional causes of asthma, on account of the analogous behaviour of BaO and hæmoglobin to oxygen. Anhydrous oxide of barium has the power of absorbing oxygen from the atmosphere, and delivering it up again under diminished pressure. Dr. Dobell mentions, in the way of caution, the poisonous properties of barium, but also points out that it is not more poisonous than arsenic, which is now freely used as a medicinal agent.

Dr. Dobell's treatise is most interesting, clever, and suggestive. The chief criticisms in this review have been made at the invitation of the author, not for the purpose of disparaging an ingenious and scientific hypothesis on a much controverted subject, but that they may be taken into "careful consideration while pursuing future investigations."

PRACTICAL PATHOLOGY: An Introduction to the Practical Study of Morbid Anatomy and Histology. By J. L. STEVEN, M.D., Demonstrator of Pathological Anatomy in the Western Infirmary of Glasgow, etc. Glasgow: 1887.

THIS small work is intended as a student's guide to the systematic study of pathological histology. The first part deals with the methods of performing *post mortem* examinations and of hardening, cutting and staining tissues for microscopic study. The second part deals with special diseased conditions. The methods are described with clearness, and include the most recent knowledge on the subject. The second part of the book, however, is not quite so satisfactory. It contains a great deal of information on morbid anatomy, but the arrangement of the matter would be more satisfactory for the student, if the descriptions were less diffuse. Thus we cannot but think that the book would be much enhanced in value if a shorter account were given of what the student ought to see in a particular specimen. The author has evidently taken great pains in the preparation of the work, which will no doubt be of value to the student.

NOTES ON BOOKS.

Veterinary Surgical Pathology and Practical Medicine. By JOHN BURKE and RICHARD W. BURKE. Translated into Urdu. (Printed at the Medical Hall Press, Cawnpore, India. 1886.)—We must commend the authors for thus advancing civilization by putting within the reach of races subject to us complete and modern instruction in an important branch of veterinary knowledge. It is to be hoped that its sphere of usefulness may be still further extended by translation into several of the other dialects of our great Eastern Empire. Such knowledge can only be productive of good, and in times to come the veterinary surgeon, sent into a tract of country as large as France, without a single trained assistant, to suppress an outbreak of cattle disease, may unexpectedly find valued assistance from the native ranks. We could have wished that the illustrations in some cases had been better. Fig. 10, modifying Percivall's illustration of a horse in slings, does not give us the idea of an animal at ease and in safety, two essentials in "slinging"; there is a danger of the horse's coming out of the apparatus backwards if he were to "squat," through the "breeching" being drawn too near the root of the tail. Percivall's illustration in this particular suggests no such danger. We could instance several other practical points worthy of consideration in the illustrations, but we will refer to only one more. In giving Fig. 45 as an illustration of Lupus of the Head (original), we consider the dog's head should be drawn without a bandage covering the parts, or the title of the illustration altered. We commend the work as one of considerable merit in itself, and as an interesting proof of English enterprise.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

PREPARATIONS OF STROPHANTHUS.

MESSRS. BURROUGHS, WELLCOME and Co. write: As the demand for strophanthus since we first prepared the tincture has become very large, it being now quite extensively used, it seems that a less concentrated preparation is desirable, both for safety and convenience. We have, therefore, decided to adopt Professor Fraser's new formula, and reduce the strength of our tincture from one in eight, as hitherto prepared, to one in twenty, the dose being from one to ten drops.

We now have a good supply of very superior seeds on hand, and physicians should no longer have any trouble in obtaining as much of the drug as they need.

We shall be pleased to distribute among hospitals, free of cost, a sample quantity of tincture and tabloids of strophanthus, in any cases where we are informed that the attending physicians desire clinically to test its uses.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 22nd, 1887.

THE ERASMUS WILSON BEQUEST.

APPREHENSIONS have been felt by us and freely expressed by the medical and scientific public that the munificent bequest of the late Sir Erasmus Wilson would be unsatisfactorily expended on a scheme privately arranged by the Council of the College of Surgeons. Doubtless, the Council would have very much preferred to be left alone to plan a scheme for enlarging the Museum, and making the College buildings appear yet more imposing to the public eye than they are at present. These plans would have remained a profound secret, but a secret of a kind common to all the *arcana* of any corporation. In other words, everybody would have known the facts of the case, but anybody would have been held blameworthy by the Council for publishing the secret. In his corporate capacity, every member of a privileged committee or council considers that the secrets which have been communicated to him are inviolable; yet at the same time, in his individual capacity, he thinks otherwise, for he represents certain views held by less responsible persons, whom he is obliged to take into his confidence. Notwithstanding this well-known fact, when schemes get known and plans published, great is the astonishment of councils and of their experienced permanent officials.

However, not only have the acts of the Council been closely watched ever since the legacy question entered the field of practical politics, but the most powerful pressure is being brought to bear on the Council from without. Few items of intelligence recently printed in our columns can be more satisfactory than the paragraph in the JOURNAL of January 15th, which consisted of the text of an important circular addressed to the President, Vice-Presidents, and Council of the College by the leading authorities in biology of this country. The signatories turned the attention of the Council to the need of support of those collateral branches of medicine which can only flourish by liberal pecuniary aid. They suggested the desirability of founding an institution under the direction of the College, which should have for its object "Physiological and Pathological Research." The want had long been felt, especially of late, when British workers had to look to Berlin for information respecting tubercle, and to Paris for experiments on the prevention of hydrophobia. It was a national discredit that there was nothing in London like the fine laboratories to be found even in some of the smaller German towns. The only hope of the foundation of such an institution lay in a bequest of a large sum of money, to be devoted to scientific uses. The College now enjoyed that opportunity which, if lost, might never recur. Such an institution would raise England to the scientific position held by France and Germany; would create a body of men anxious to devote themselves to scientific work; would be in accord with the best wishes of the donor; and would place the Royal College of Surgeons of England amongst the foremost institutions of Europe. Lastly, the petitioners reminded the Council of the endeavours which are being made to consolidate the colonies, and hoped that the Council would found an institute in the mother country which would draw to it students from all parts of Her Majesty's dominions. Then followed the signatures, including such names as those of Huxley, Hooker, Tyndall, Lubbock, Burdon Sanderson, Galton, Klein, Romanes, Flower, Michael Foster, Gerald Yeo, Schäfer, Cory, Ray Lankester, Thistleton Dyer, Shirley Murphy, Corfield, and Roy, not to mention the names of the large number of scientists who practice medicine and surgery.

Thus, at length, outside scientific opinion has taken the matter in hand. There is, we believe, a general impression that small sums of money put aside out of the annual income of the College would soon suffice to extend the College buildings as far as desirable. If, however, England is to have an experimental institution well endowed, supported by a large sum of money, and kept as free as possible from the vexatious assaults of faddists and reactionaries, a large bequest will be needed. Such a bequest is now at hand. We learn that the petitioners are not all agreed as to what form the institution should assume. Some believe that it should be chiefly pathological, like the Brown Institution, with a paid director and assistant. Somewhat in this sense, by a coincidence, Mr. Doran wrote, in a letter which appeared in our columns last week, pointing out, however, that certain circumstances interfered with a good supply of pathological material, and tended to place the College at a disadvantage as compared with a medical school. Still there is great scope for a pathological institution where zoo-pathology would not be neglected. Another petitioner is in favour of a truly scientific pharmacological institute; others wish to expend most of the bequest on appliances for the promotion of bacteriology. A very leading scientist believes that a working and teaching pathological laboratory would answer best; there, scholarships could be instituted to encourage young workers. One of the petitioners, we learn, wished to protest in the memorial against the extension of museum buildings, which he held to be injurious.

It is satisfactory to learn that, as reported in last week's JOURNAL, the Council resolved, at their quarterly meeting on January 13th, to take some official notice of the memorial, by informing the petitioners that the disposal of the funds was already under the consideration of a committee of the Council, to which the memorial will be referred. The scientific public now have their eyes on the Council, which, moreover, contains more than one scientist. There is now less fear that the Council will lose the money during a headstrong leap in the dark. The thanks of the profession are particularly due to Dr. Wilks, who acted as Secretary to the petitioners. But vigilance must not be for a moment relaxed, and it would appear very advisable that a suggestion made by a correspondent this week should be acted on, and that steps should be at once taken to give the profession at large an opportunity of expressing its opinion. There can be little doubt that it will be found to be in substantial agreement with the views expressed by the leading scientists who signed Dr. Wilks's memorial.

DR. R. SAINT PHILIPPE has been appointed Senior Medical Officer of the Children's Hospital, which has just been opened in Bordeaux.

SIR JAMES PAGET AT THE PATHOLOGICAL SOCIETY.

THE announcement made last autumn that Sir James Paget had consented to take the office of President of the Pathological Society of London was hailed with universal satisfaction. Everyone must have been glad to learn that an eminently scientific, yet at the same time essentially medical institution, was about to obtain the leadership and active patronage of so great a medical scientist as Sir James Paget. The presidency of the leader of English surgery could not but be as useful as it is honourable to the Society, and it is not surprising that the Society's meeting-room in Berners Street was crowded on Tuesday night, when the illustrious President took the chair for the first time, and delivered a short address. He has long enjoyed the reputation of possessing great skill in selecting and submitting to his audience abstract questions of a kind which, on his own demonstration, are no mere intellectual luxuries. His address on this occasion showed this kind of skill developed to perfection. Sir James Paget admitted that he had for many years given up active work on the details of pathology. He spent most of the time devoted to the address in stating his convictions as to the practical value of that science, to which he had been led by an experience of over a quarter of a century in clinical work. He concluded that pathology should be cultivated and encouraged by all possible means. He especially insisted on the advantages which the private practitioner possesses for the study of clinical pathology, and scouted the prevalent opinion that practice and science were antagonistic. What practice might be in any particular case depended, he said, upon the individual practitioner, and not upon the subject-matter. The discoverer of vaccination was a country doctor. We know that Jenner must have laboured under innumerable disadvantages, which no living rural practitioner can bring forward as an excuse for neglecting scientific study. True, he was a disciple of Hunter, but, on the other hand, few living medical men in this country can deny that they received a fair education in the rudiments of medical science at the medical school where they worked before taking their qualification.

Again, we know that the country medical man's time is much occupied in the duties of practice; but there is nothing that relieves the mind of a hard-worked man so much as scientific observation. The notion that the confidence of the public in a practitioner is materially affected when he gains the reputation of being given to scientific study, is a common fallacy; such study can always be carried on without detriment to other duties, just as many industrious and successful practitioners spend some of their time very profitably in the cultivation of social accomplishments and artistic pursuits.

Sir James Paget held up for imitation the example of Jenner, as that of a scientific practitioner. He further indicated the direction of pathological work in the future. He dwelt for a little on the subject of specifics, which he said in reality were diagnostic tests of disease. The forms of epilepsy which could be cured by bromides must, he declared, be different from the varieties of epilepsy not amenable to the action of these drugs.

Another rich field for clinical pathology, the especial department of the practitioner, was the study of the sequels of disease. There must be some definite reason why certain local affections were sequels of particular constitutional diseases, and that reason should be discovered. The true character of mixed disorders also deserved patient study.

Sir James Paget concluded by a reference to some more definite and concrete questions, pertinent rather to experienced pathologists than to practitioners. He spoke of the microscope, and pointed out that it must be made to reveal far more minute structures than it had yet discovered. Protoplasm, or indifferent tissue, whose component parts could not yet be detected by microscopy, must differ greatly in different organisms, and improvements in microscopic research might discover the difference. He also spoke of the examination of tissues whilst still living—that is, directly after their removal from the body, in contradistinction to their inspection after hardening, staining, and mounting. These, however, we believe to be questions which only experts, like some of the habitual workers at the Pathological Society, can attempt to solve. Sir James Paget spoke of the value of the labours of such workers, and declared, most truly, as all must admit, that he had no senile objection to novelties. He concluded with the question and reply which will eternally run through science. The pupil and the ignorant multitude will ever ask: Where are we to stop? The master in science, or rather any person inspired with the true scientific spirit, will ever answer: We must not stop where we are.

THE RECENT POLL OF THE FELLOWS OF THE ROYAL COLLEGE OF SURGEONS.

THE Council of the Royal College of Surgeons has published the result of its recent appeal to the Fellows on the two questions of the desirability of giving to the Members the right of voting in the election of Councillors, and of sitting on the Council. The result is what might have been foreseen, namely, that the majority answer both questions in the negative. The questions, as we pointed out at the time, were so framed as to catch all possible negative answers—the Fellows were acting as judges in their own cause—every prejudice of fancied superiority concurred with all the legitimate arguments that might be brought against the unlimited admission of Members suggested by the Council, to ensure a negative reply. It is, therefore, in our opinion, simply impossible that such a reply so obtained can be final. No other body in this or any other country can maintain their own privileges by simply voting for them themselves; nor do we suppose that the Fellows of the College of Surgeons expect to set the fashion. What then is to be done? It is understood that the Council has decided to grant the request made to it by the Fellows and Members, at the recent general meeting, to appoint a committee of its own body to meet delegates from the two Associations; and if this meeting take place, the Council must then inform the profession what steps it means to take with regard to the new Charter. The matter will then rest with the general body of Members, aided by such of the Fellows as sympathise with their objects, and these, though outvoted, constitute a minority respectable in number and still more respectable in intelligence. It is, however, no doubt the Members' Association that must make the next move; they must be prepared, when the Council appeals to the Privy Council for the new Charter, to meet it there with a petition signed by a very large proportion of the total body, setting forth the history of the question, the feeling of the general body of the profession about it, the evils which have arisen in times past from the exclusiveness of the great Colleges, and the benefits which must accrue from admitting the general body to a share in the management of these institutions under proper restrictions. If

there is anything like the general desire for reform which we believe to exist, it is not the class-prejudices of the Fellows that can stop it. But the Members must be up and doing, for there can be no doubt that the Council, encouraged by the support of its own constituency—the Fellows—will now be anxious to bring this long-deferred question to an issue. To all reformers, therefore, who have not yet signed the Members' petition, we say, "Lose no time in doing so;" and we would urge on the Association of Members the necessity of drawing up a case for the Privy Council, and entrusting it to some one who can do it ample justice in argument. It may be necessary to take further steps so that the matter may not be argued solely in this private fashion. If it has to be fairly fought out in Parliament, there can be no doubt of the issue, and this too it may be possible to arrange, if necessary, with the aid of the Parliamentary Bills Committee of the British Medical Association. With the necessary vigour and sagacity on the part of the advocates of reform, there ought to be no doubt in the minds of any unprejudiced authority. Meantime, we recommend the Fellows and Members generally to forward without delay their signatures to the petition for the necessary amendments of the Charter (which has been prepared, and is awaiting the appending of such signatures) to Messrs. Steele and Ellis, Honorary Secretaries of the Members' Association, Western Dispensary, Westminster, S.W. We believe 4,000 signatures have already been received.

DR. BANTOCK will deliver on Wednesday, January 26th, at the British Gynæcological Society, an Inaugural Presidential Address on "Listerism: its Past, its Present, and its Future."

ACCORDING to Ricker's *Almanack for Practitioners* for 1887, there are sixty-three women practising as physicians in St. Petersburg, thirteen in Moscow, and three in Kharkov.

WE regret to hear that Mr. William Mackay, of Norton, has had his leg broken in two places, just above the ankle, by his pony falling on it. Mr. Mackay was driven home, where the injured limb was attended to by Drs. Colby, J. Hartley and B. Hartley.

M. CHEVREUL, the centenarian professor at the Museum of Natural History in Paris, has sent in his resignation. It is stated that M. Chevreul intends to give up the Académie des Sciences and reside with his family at Dijon.

DR. ALBERT ROBIN has been awarded the Prix Lacaze (10,000 frs. = £400) for his work, entitled *Leçons sur le Traitement de la Fièvre Typhoïde*. Dr. Thoinot has been awarded the Prix Jeunesse for his work, entitled *Histoire de l'épidémie Cholérique en 1884*.

AT the annual meeting of the Society of Public Analysts, held in the rooms of the Chemical Society, Burlington House, on the evening of January 12th, Mr. A. H. Allen, of Sheffield, analyst for the West Riding of Yorkshire, author of the well-known work on *Commercial Organic Analysis*, was elected president for the ensuing year.

WE are asked to announce that a new medical periodical will appear on March 1st. It will be devoted to children's disease and allied subjects, and will be called the *Centralblatt für Kinderheilkunde*. It will be published in Vienna, and edited by Dr. R. W. Raudnitz. The English editor is Dr. H. Ashby, of Manchester, to whom all papers for abstraction may be sent.

INSANITARY CONDITION OF FRENCH SHIPS.

NEWS comes from Cochin China that the Conseil de Santé has again drawn attention to the bad sanitary condition of the steamers that bring back the sick soldiers to France. Merchant ships are used instead of troop-ships. The *Béarn*, which left Saigon on June 27th, 1886, with 219 healthy and 619 convalescent passengers, lost 18 men in thirty-eight days. *Le Canton* left Saigon on August 26th with 229 invalids, 22 of whom died during a sea passage of forty days.

THE HEALTH OF FLORENCE.

THE Italian journal *La Nazione*, in a recent number, publishes a declaration from the Hygienic Society, which includes the principal medical men in the city of Florence, contradicting the statements made in letters recently published by a London morning paper regarding the health of Florence, and quoting statistics to show the excellent sanitary condition of the city and its environs.

DEATH OF MADAME TRELAT.

THE death is announced of Madame Ulysse Trélat, the wife of the late Dr. Trélat, governor of the Salpêtrière Hospital. Madame Trélat, whose life has been largely spent in charitable work among the deserving poor, and who took an active part in the creation of technica schools for girls, has left £8,000 to the poor of Paris. The rest of her fortune she leaves to schools and other institutions of public utility.

VEGETABLE FIBRES IN THE INTESTINES.

AT a recent meeting of the Société Médicale des Hôpitaux, M. Laboulbène showed some worm-like bodies which had been passed by a cachetic child of 12. They proved to be macerated vegetable fibres twined round in the intestine, and subsequently expelled in the form of scybala.

DEATHS FROM RABIES.

A boy, aged 9, died from hydrophobia last week at Todmorden, near Rochdale. The lad, who was bitten about five months ago, died in great agony the day following the manifestation of hydrophobic symptoms. A man named Mullett, at Bolton, who was bitten by terrier bitch on October 16th last, has also died from rabies. In this case it is stated the wound bled freely, was cauterised, and sucked by a young man. The dog, it is said, showed no symptoms of rabies, and when killed on January 12th, appeared to be in perfect health.

SERIOUS EPIDEMIC OF DIPHTHERIA IN BAVARIA.

DIPHTHERIA has been more prevalent in Bavaria this autumn than for a number of years previously. In Oberplalz, Mittelfranken, Oberfranken, Unterfranken, and in Pfalz, many of the schools have been closed on account of the epidemic, and the number of deaths has been very considerable. Altogether, it is estimated that ten thousand children have been affected, three thousand having suffered in Bamberg alone.

PROFESSOR JOHANN RUDOLPH RANKE.

THE University of Groningen is just now mourning the loss by death of the much respected Professor of Surgery, Dr. Johann Rudolph Ranke, who, though a foreigner, seems to have endeared himself to all classes of the people. For the last eighteen months he had suffered from the effects of blood-poisoning, which had caused him continual severe pain; but he stuck most heroically to his work to the last, teaching from his bed students who were about to present themselves for examination, and, on days when he was somewhat better, going in a bath-chair to the university or hospital. Only three days before his death he performed an important operation.

CHANGES IN THE PROFESSORIAL STAFF OF THE PARIS SCHOOL OF MEDICINE.

M. DIEULAFOY, Professor Agrégé at the Paris Medical Faculty, has been elected Professor of Medicine in place of M. Peter, who is appointed to another chair. M. Farabœuf, Director of the Practical School of Dissection, has been chosen to succeed M. Sappey in the Chair of Anatomy. M. Gariel, Professor of Medical Physics, has been appointed to the Chair of Physics in place

of M. Gavarret. A law recently passed ordains that no professor of medicine shall continue in office after the age of 70. MM. Sappey and Gavarret have attained that age. M. Pajot, in terminating his course of lectures at the Clinique de la Faculté de Médecine, announced that he preferred retiring from office before reaching the age of 70. In the midst of the applause which followed M. Pajot's speech, a curtain was drawn aside, and a bust of the Professor placed on a pedestal, draped in velvet and gold, was discovered. M. Peyron, Director of the Assistance Publique, then came forward to thank M. Pajot, in the name of the poor of Paris, for the devoted kindness which he had shown towards them for forty-five years.

THE FRENCH HOSPITAL AT CONSTANTINOPLE.

A French contemporary states that the French Hospital at Constantinople is an old wooden building, utterly unfit for the purpose. The other Powers have constructed beautiful, well-arranged hospital-buildings, and the contrast is excessively humiliating for France. It has been proposed to photograph the Russian, German, and Italian hospitals, and the tumble-down building used by the French, and to send these photographs to every French deputy, so that they may look first "upon this picture, then on that."

DACRYORRHŒA IN TABES DORSALIS.

M. Féré has recorded a case in which unilateral dacryorrhœa, a profuse secretion from the lachrymal gland, was occasionally noted in a patient suffering from locomotor ataxy, in whom many of the most characteristic symptoms of the disorder were present. The flow of tears from one eye supervened apart from any evident disturbing cause, external or otherwise, and disappeared as suddenly. Sometimes it was accompanied by pain on the side of the affected eye. There can be no doubt that it was the result of some temporary nerve-disturbance, comparable with those producing the other crises of tabes, such as the gastric, the renal, and so forth.

THE TELEPHONE AS A SOURCE OF INFECTION.

At a meeting of the Caucasian Medical Society, Dr. A. P. Astvatzaturoff, of Tiflis, drew attention (*Proceedings of the Caucasian Medical Society*, November 17th, 1886, p. 263) to the danger of infection, arising from the promiscuous use of the mouth-pieces of public telephones. To prevent any accident of the kind, he recommends that the mouth-piece should be disinfected every time after, or still better, before it is used. In other words, some disinfectant fluid should be kept at every telephone station, and the speaker should, first of all, dip the mouth-piece into the fluid, and then wipe it with a clean towel.

THE METROPOLITAN BOARD OF WORKS AND OPEN SPACES.

Efforts are being made to secure the site of Coldbathfields Prison as an open space and recreation ground. Deputations from the Vestry of Clerkenwell and the Holborn District Board have presented memorials to the Metropolitan Board of Works, and these have been referred to the Works Committee of that body for consideration and report. At the last weekly meeting of the Metropolitan Board of Works, the Board resolved to contribute £1,000 towards converting the disused burial ground at St. Luke's Church, at Chelsea, into a recreation ground. At a special meeting of the Hampstead representative Vestry last week, a motion was carried to the effect that, if £10,000 were raised by private subscriptions for the proposed extension of Hampstead Heath, the Vestry would contribute £10,000. Mr. Harben promised £1,000 on behalf of himself and his sister.

SIR EDWARD SIEVEKING.

On Friday, January 14th, Sir Edward Sieveking delivered his last clinical lecture at St. Mary's Hospital, at the beginning of which he remarked that he was the only remaining member of the original staff of the hospital. He was appointed in 1851, together with Drs. Handfield-Jones, Sibson, Tyler Smith, Chambers, and Markham; and Messrs. White Cooper, William Coulson, S. and J. Lane, Baker Brown, Toynbee, and others, who have left a mark upon contemporary medicine and surgery. Sir Edward had a large and enthusiastic attendance at his lecture; amongst those present were many old students, and several members of the present staff of the hospital and school.

SANITARY ADMINISTRATION IN FRANCE.

At a recent meeting of the Académie de Médecine, Dr. Hanrot, Deputy and Mayor of Rheims, described a plan for the organisation of public hygiene. The present laws relating to public hygiene are inefficient, and are of little use in checking the spread of epidemics. In the epidemic of small-pox which recently raged at Rheims, thirteen hundred persons died. M. Hanrot proposes to make the immediate notification of every case of contagious disease, together with isolation of the patient, compulsory. Detailed rules for the notification of such cases, for the isolation and conveyance of patients and for disinfection ought to be drawn up by a medical authority, and carried out by the administration. Each commune ought to have its medical officer of health. The chief towns in every department ought likewise to have a medical superintendent, who would receive the reports of the officers of health, which he would communicate twice a month to the Academy. By this means well authenticated statistics would be furnished, which would help to explain the causes and laws of different epidemics.

NORMAL SCHOOL OF SCIENCE AND ROYAL SCHOOL OF MINES, SOUTH KENSINGTON.

We are asked by Colonel J. F. D. Donelly, of the Science and Art Department, South Kensington, to state that the number of applications for admission to the Normal School of Science and Royal School of Mines, at South Kensington, at the commencement of the present session, having been considerably in excess of the accommodation which the school can afford, it has become necessary to adopt some process of selection for the future. Hereafter, applications for admission should be sent to the registrar of the school, before the end of May, accompanied by a statement of studies which the applicant has already pursued, the examinations he has passed, and the name of a teacher (or teachers) to whom reference may be made. Such applications will be considered by the Dean and Council of the school, who will decide on them according to their merits. A knowledge of elementary mathematics, such as is required of all Royal Exhibitioners and National Scholars, will be held to be of the first importance for those who desire admission to the course for the associateship of the school; while for occasional students, who propose only to take up certain specific branches of science, some preliminary knowledge of them will have weight.

SCHOOL OF DENTAL SURGERY IN FRANCE.

At the recent distribution of prizes and diplomas of the École Dentaire de France at the Institut Odonto-technique there was a brilliant assemblage. M. Lockroy, Minister of Commerce, was to have presided at the ceremony, but, being prevented at the last moment, was replaced by Professor Gavarret, Medical Inspector-General in France, and member of the Comité Consultatif of Hygiene. Professor Lefort, member of the Academy of Medicine, and the Mayor of the 6th *arrondissement* were seated on either side of Professor Gavarret. A considerable number of deputies, municipal councillors, mayors, distinguished members of the medical profession, members of the Conseil de Surveillance des Hôpitaux, and members of the Press were present. Addresses were delivered by M. Brasseur, director of the École Dentaire, Dr. Ramonat, one of the professors, and by M. Gavarret. The aim of the École Dentaire is to train skilful practitioners, and to ensure gratuitous attendance to a considerable number of poor people, and to the municipal schools. First started by private enterprise, the École Dentaire has now a council which includes many of the leaders in medicine and surgery, such as MM. Gosselin, Lefort, Gavarret, Béclard, Brouardel, Al. Fournier, Duplay, Guyon, Trélat, Richet, and Sappey. Medals and diplomas were awarded to MM. Saussin, Vauthier, Wisner, Hyvert, Helot, and Klett. The prize of the Société Odonto-technique was awarded to Dr. Eyssautier.

LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

THE annual course of lectures will be commenced on Monday, January 31st, at four o'clock, by Professor Francis Warner, M.D., who will deliver three lectures on the Anatomy of Movement. Professor W. H. Hylton Jessop will deliver three lectures on The Intra-Ocular Muscles, commencing on Wednesday, February 16th. Professor C. Barrett Lockwood will deliver three lectures on the Development and Transition of the Testicles, Normal and Abnormal, commencing on Wednesday, February 23rd. Professor A. Alfred Bowlby will deliver three lectures, commencing on Wednesday, March 2nd (the subject will be announced later). Professor Charles Stewart will deliver nine lectures on the Auditory Organs of the Vertebrata and on Some Recent Additions to the Museum, commencing on Wednesday, March 9th. The course will be concluded in June by Dr. L. C. Wooldridge, Professor Henry Power, and Professor Christopher Heath. The subjects of the several courses of lectures will be hereafter published. The lectures will be delivered in the theatre of the College on Mondays, Wednesdays, and Fridays at four o'clock precisely each day.

THE BACILLUS OF TYPHOID FEVER.

AN inquiry lately made by Dr. Brouardel into the circumstances of an outbreak of typhoid fever at Compiègne led to the discovery of a bacillus in the water which the victims used for drinking. This is the well-known bacillus which, when cultivated in gelatine, multiplies in colonies; and a similar germ was found in blood drawn from a patient suffering from enteric fever. It had probably come from the water-closets, which were established in a sandy porous soil; beneath this was a layer of compact clay, through which the water drained to the well. The bacilli were much more numerous in the infiltrations of the sandy layer, a purification apparently taking place there which left the well-water limpid, without any impure taste. This fact proves that in the filtration of sewage-water through the soil, certain organic matters may be retained, whilst dangerous bodies are allowed to pass.

PRIZES OF THE ACADEMIES OF MEDICINE AND SCIENCE IN FRANCE.

M. MONOD, Prefect of Finisterre, has been awarded a prize by the Academy of Medicine for his work on the cholera epidemic of 1885 at Guilvinec. We recently (BRITISH MEDICAL JOURNAL, December 18th, p. 1236) gave an account of M. Monod's interesting and valuable memoir. The distinction conferred on him by the Academy of Medicine will be a source of satisfaction to all French sanitarians, as M. Monod is one of the few public men in France who is both a practical and a theoretical hygienist. It is encouraging to see his services officially recognized. The Academy of Sciences has likewise shown sound judgment in awarding the Prix Jean Reynaud (£400) to M. Pasteur for his experimental researches on rabies. M. Kolb has also received a prize from the same body, for the improvements in the sanitary condition of factories, which he has been instrumental in introducing.

GYMNASTICS FOR GIRLS.

AT the Beethoven Street Board School, a demonstration was recently given, under the presidency of Lord Brabazon, of Swedish drill for girls. The drill was conducted by Misses Ely and Strachan, who are the teachers appointed by the Board. The proceedings were followed with great interest by the large number of people present. The application of this systematic method of gymnastics to girls is quite a modern innovation—at any rate, so far as the girls at Board schools are concerned—but it is one which cannot fail to meet with the approval of those who take an interest in educational matters, and who are, at the same time, in a position to appreciate the importance of carefully regulated and systematised muscular exercise for girls, or where from education and habit, proper exercise has hitherto formed far too infinitesimal a part even in institutions where better might have been anticipated. It constitutes a distinct improvement on the 'calisthenics," a comparatively restricted method of muscular exercise which was formerly in vogue. At the conclusion of the drill, the visitors were invited to inspect the boys' workshop, where the lads are instructed in the fundamental principles of the commoner handicrafts. The utility of such instruction is so obvious that we can only hope the public spirit of the Board will be imitated more generally.

MR. GOSCHEN ON THE REFORM OF LOCAL GOVERNMENT.

THE *Sanitary Record* publishes, with the permission of Mr. Goschen, a summary of the views of the new Chancellor of the Exchequer, on the subject of local government, made in 1885. Mr. Goschen proposes the parish as the unit of local government. He deals exclusively with the shortcomings of local authorities; the housing of the poor; the objections to providing dwellings for the poor at the public expense; competitive rents; and the best methods of providing improved buildings for the working classes. He discusses taxation, imperial and local, insisting that taxation and representation should go together, and that, in the distribution of taxation, the proportion paid by real property towards imperial taxation and local taxation should be considered together, as well as the extent to which the enormous value of houses throughout the United Kingdom has relieved taxation upon land, and diminished its apparent burdens. The complexity of the problem, "Who really pays the rates?" is examined; and also the results of sanitary effort and the value of increased health and strength as an asset in the national balance-sheet.

THE PROFESSION AND THE COLLEGES.

A FULL and influential meeting of the Council of the General Practitioners' Association was held on Wednesday, at Exeter Hall, which was attended by Mr. Wheelhouse (in the chair), Sir Walter Foster, Mr. Warwick Steele, Mr. Wickham Barnes, Dr. Danford Thomas, and many other prominent members, some of whom had come from a considerable distance. An important series of resolutions was passed. We shall publish a report of the proceedings in our next issue. The profession may be congratulated on the response which is being given from all sides to the appeals which we have made to their public spirit, in urging them to claim their rightful share in the management of their own affairs. We are glad to know that it is not in vain that we have tried to stir up general practitioners as a body to insist on their right to be living members of the great medical corporations and not mere tax-paying, but unrepresented, appendages thereof. It certainly seems an abuse crying aloud for reform that institutions which exercise a vast influence over the education and status of the profession should be governed exclusively by representatives of one class, and that the one which is by far most limited in number and least varied in professional experience.

FUNERAL OF PAUL BERT.

A SAD and imposing ceremony took place last Saturday at Auxerre, where the mortal remains of Paul Bert were confided to their last resting-place. Auxerre was his birth-place, and he is buried there doubtless in accordance with his own expressed wish, otherwise the ceremony would have taken place at Paris. The bier was covered with flowers and flags, which had been placed on it during the journey from Tonkin to France. All the medical and scientific academies and societies, together with many others, were represented, their delegates in the funeral procession being preceded by one, two, three, or four men carrying the garlands sent by the respective associations. In many cases, the burden of flowers was a heavy one, even for four men. Before the procession started, eloquent addresses were delivered. M. Flourens, Minister of Foreign Affairs, represented the Government, and gave an admirable sketch of Paul Bert as Minister and Governor of Tonkin. M. Berthelot, Professor of Chemistry at the Collége de France, and Minister of Public Instruction, also represented the Government; in his address he dwelt on the eminence of Paul Bert as a man of science and an educational reformer, laying special stress on the fact that his private life was as exemplary as his public career was

brilliant. M. Chauveau, speaking on behalf of the Biological Society, deplored the loss which the Society had sustained in the deceased statesman, who had been its President up to the time of his departure for Tonkin. M. Spuller and several other orators also delivered funeral addresses.

THE REFORM OF THE UNIVERSITY OF LONDON.

We understand that Lord Justice Fry is preparing a draft report for presentation by the committee over which he presides, to the Senate of the University of London. The report will embody the committee's scheme for the reform of the University.

PASTEURISM.

The Academy of Medicine of Paris concluded on Wednesday an animated and somewhat heated discussion on the Pasteur system. M. Peter gave details of five deaths among M. Pasteur's patients, apparently due to the paralytic form of rabies; that is to say, not to the canine, but to Pasteur's virus. On the other side, it was stated that of 2,682 persons treated up to the end of last year, only 31 had died, 10 of these being among the 186 persons bitten in the face or head. No death, moreover, had occurred among the 50 of those 186 persons to whom the intenser treatment had been applied. In the end each party adhered to its original opinion.

DEGREES FOR LONDON MEDICAL STUDENTS.

A meeting of delegates from the metropolitan medical schools was held on Saturday last, January 15th, at the Middlesex Hospital, to consider what action should be taken by these schools to support the application which will shortly be made to the Privy Council by the two Royal Colleges to obtain the right to grant degrees in medicine. The delegates will report the result of this discussion to the committees of the various medical schools; and it is believed that though there are many differences of opinion on minor points, there is practical unanimity on the main principle.

STROPHANTHUS.

The communication on the therapeutic uses of strophanthus, by Professor Fraser, of Edinburgh, which was published in the Journal of November 14th, has attracted the serious attention to which it was entitled, and has led to extended trials of the drug. Strophanthus appears to be a cardiac tonic of very considerable power. Attention may be directed to the communication which we publish this week from Professor Fraser, in which he gives some details of importance with regard to the uniform strength of its preparation, and a convenient dose. He recommends a tincture of the seeds of the strength of one part in twenty, of which the dose would range from 5 to 10 minims.

MEDICAL FEES IN CROWN CASES.

In a case in which a charge of manslaughter was preferred before the magistrates at Wigan last week, Dr. Brady, one of the medical witnesses, declined to be bound over to appear at the Liverpool Assizes, alleging, as a reason, that he would not undertake to leave his patients and practice, from day to day, to attend the Assize Courts at Liverpool, for the remuneration offered by the Crown, but expressing his willingness to give evidence, and render what assistance he could, when called upon. The magistrates threatened various pains and penalties, and the assistant magistrate's clerk stated that, with an experience of thirty-five years, it was the first time he had known a professional witness refuse to be bound over. Dr. Brady was eventually allowed to leave the court without being bound over. There is no doubt that the remuneration is quite inadequate; the fee ought to be two or three guineas at least. The medical man's time should be saved as much as possible, and he should not be expected to wait about law courts day after day. The result of this refusal will be watched with interest.

LIVERPOOL MEDICAL INSTITUTION.

At the annual meeting held on Thursday, January 13th, 1887, the following list of Officers, Council, and Microscopical Committee was adopted. Those marked (*) did not hold the same office last year. *President:* J. B. Nevins, M.D. *Vice-Presidents:* W. Alexander, F.R.C.S.; J. Barr, M.D.; *R. Robertson, M.D.; *W. Williams, M.D. *Treasurer:* F. J. Bailey, L.R.C.P. *General Secretary:* A. Bernard, M.B. *Secretary of Ordinary Meetings:* *Damer Harrisson, M.R.C.S. *Librarian:* R. Williams, M.R.C.S. *Council:* A. Davidson, M.D.; E. T. Davies, M.B.; R. Gee, M.D.; M. K. Marsh, M.R.C.S.; T. G. Wollaston, M.D.; *J. D. Crawford, M.D.; *Karl Grossmann, L.R.C.P.Edin.; *W. Irvine, M.D.; *C. G. Lee, M.R.C.S.; *W. P. Rowe, L.R.C.P.Edin.; *G. E. Walker, F.R.C.S.; *W. Whitford, M.D. *Microscopical Committee:* W. Alexander, F.R.C.S.; A. Barron, M.B.; P. M. Braidwood, M.D.; H. Briggs, F.R.C.S.; G. Hamilton, M.R.C.S.; J. S. Hicks, F.R.C.S.Edin.; J. R. Logan, M.B.; Rushton Parker, F.R.C.S.; F. T. Paul, F.R.C.S.; W. Williams, M.D.; J. Wiglesworth, M.D. *Auditors:* *W. Fleetwood, M.K.Q.C.P.; *T. G. Wollaston, M.D.

THE BRITISH GYNÆCOLOGICAL SOCIETY.

At the annual meeting of this Society, on January 12th, Mr. Lawson Tait gave an address, which will be found at page 145. Dr. Barnes showed a parovarian cyst he had removed that morning from a girl, aged 20. The cyst contained the limpid fluid characteristic of parovarian growths. The following is a list of officers and council who were elected for the ensuing year: *Honorary President*, Robert Barnes, M.D., F.R.C.P.; *President*, G. Granville Bantock, M.D.; *Vice-Presidents*, James H. Aveling, M.D., Fancourt Barnes, M.D., John Chalmers, M.D., J. Halliday Croom, M.D. (Edinburgh), William Gardner, M.D. (Montreal), William T. Lusk, M.D. (New York), Arthur V. Macan, M.D. (Dublin), Alfred Meadows, M.D., Paul F. Mundé, M.D. (New York), F. L. Neugebauer, M.D. (Warsaw), C. H. F. Routh, M.D., Thomas Savage, M.D. (Birmingham); *Treasurer*, Arthur W. Edis, M.D.; *Librarian*, Bedford Fenwick, M.D.; *Council*, William Alexander, M.D. (Liverpool), A. H. Freeland Barbour, M.D. (Edinburgh), Robert Bell, M.D. (Glasgow), R. C. Benington, J. E. Burton (Liverpool), J. G. Sinclair Coghill, M.D. (Ventnor), Alfred Cooper, F.R.C.S., Thomas M. Dolan, M.D. (Halifax), J. J. Macwhirter Dunbar, M.D., Francis Imlach, M.D. (Liverpool), T. Vincent Jackson, F.R.C.S. (Wolverhampton), W. Culver James, M.D., R. Milne Murray, M.B. (Edinburgh), R. D. Purefoy, M.D. (Dublin), H. A. Reeves, F.R.C.S., J. H. Simpson, M.D. (Rugby), W. J. Sinclair, M.D. (Manchester), Bryce Smith, M.D. (Belfast), Greig Smith, M.D. (Bristol), Dunnett Spanton, M.D. (Hanley), J. Bland Sutton, F.R.C.S., Lawson Tait, F.R.C.S. (Birmingham), W. Walter, M.D. (Manchester); *Secretaries*, W. Chapman Grigg, M.D., J. A. Mansell-Moullin, M.D.

CLINICAL SOCIETY OF LONDON.

The annual meeting of this Society was held at the end of the ordinary meeting on Friday last, January 14th. Dr. Sidney Phillips and Mr. G. R. Turner were nominated scrutineers of the ballot, and reported that the officers and Council for 1887, nominated by the outgoing Council, and whose names were published in the British Medical Journal of January 15th, had all been elected. Mr. Godlee, the outgoing Surgical Secretary, read the report of the Council for 1886. This dealt chiefly with the last volume of the *Transactions*, which contained forty-nine ordinary communications. The report stated that an increase in this number was scarcely desirable, as it would almost necessarily lead to the curtailment of debate, a result much to be deprecated. The Council has determined to print annually fifty more copies of the *Transactions* than heretofore, with the view of presenting them to about forty of the more important foreign and colonial seats of learning. The Society now consists of 317 resident and 110 non-resident members. One honorary member

Dr. Austin Flint, and four ordinary members, Mr. John Burton, Dr. Sutro, Dr. Wiltshire, and Dr. Moxon, died during 1886. The financial statement, read by Mr. Christopher Heath, the Treasurer, showed that there was a balance of £94 in the bankers' hands. The labours of the Committee on Myxœdema, and of that on Charcot's Joint-Disease, are approaching completion. Dr. Radcliffe Crocker moved that the reports be received and adopted; this resolution was carried unanimously. Mr. Heath moved the alteration in the Rules by which every non-resident member will have to pay £5 5s. instead of £3 3s. in order to have a copy of each volume of the Society's *Transactions* delivered to him. Dr. S. Mackenzie seconded the resolution, which was carried. Dr. Whipham moved, in felicitous terms, a vote of thanks to the retiring President, Mr. Thomas Bryant Mr. Robson (Leeds) seconded the vote, which was carried by acclamation, and suitably acknowledged by Mr. Bryant. Mr. Golding-Bird proposed votes of thanks to the retiring Vice-Presidents and the retiring members of the Council. Dr. Angel Money moved a vote of thanks to the retiring Secretary, Mr. R. J. Godlee; Mr. Harrison Cripps seconded, and Mr. Bryant warmly supported, the motion. The vote was carried with enthusiasm; after which Mr. Godlee returned thanks.

VACCINATION AND THE ANTI-VACCINATORS.

THE London Society for the Abolition of Compulsory Vaccination has adopted a resolution to the effect that, inasmuch as vaccination has been "the means of spreading dangerous and infectious diseases," and that this is no longer denied by the heads of the profession, it is the duty of medical men to petition Parliament for the repeal of the Vaccination Acts. It would be equally rational to expect the medical profession to take up an attitude of opposition to the wearing of clothes, because certain garments had been known to induce a skin eruption, or, as the medical officer of the Local Government Board lately argued, to protest against the use of bed-clothes because babies were occasionally smothered in bed. The childishness of the proposal carries with it its own condemnation. Medical men see, in the occasional very rare accidents attending vaccination, reasons for endeavouring to make the method of operation as perfect as possible, not for abolishing a means of protection, which annually saves countless persons from death by one of the most terrible disorders which has ever afflicted mankind. We do not, therefore, anticipate that the proposal will meet with a favourable response, nor do we suppose that such is expected.

ANOTHER METROPOLITAN HOSPITAL!

WE hear that a project is on foot for founding a new hospital, to be called the "Queen's Jubilee Hospital," at Gloucester Terrace, Queen's Gate, S.W. It is to be established for the treatment of diseases of the throat, ear, skin, eye, rectum, and various deformities of the human frame. The catalogue of diseases will be seen to be sufficiently comprehensive. Notwithstanding the assurance that every endeavour will be made to prevent abuse of the charity, the opinion that there is a necessity for reducing hospital expenditure so that it may be more nearly covered by income is, we believe, daily gaining ground. This certainly will not be facilitated by the establishment of new hospitals, particularly those of the "special" type to which the proposed institution would belong. Serious doubts may justly be felt as to the propriety of allowing some of those already existing to receive a share of the proceeds of Hospital Sunday and Saturday, and few competent observers will be able to see any valid reason for adding to their number. The vacancies on the (at present) non-existent staff will doubtless be filled with tolerable ease, and men may be found who will derive, or profess to derive, satisfaction from the title of Surgeon for one or other organ to the Queen's Jubilee Hospital, or what not. Whether the committee, when one has been formed, will be as successful from a pecuniary point of view, is perhaps rather more doubtful.

ADULTERATED BEER.

NOTWITHSTANDING the authoritative assertions which have been made, to the effect that beer is seldom or never adulterated, a series of cases tried at Lambeth during the past week demonstrated the fact that it is possible and practicable to tamper with beer in such a way that it ceases to be of the nature, quality, and substance demanded. The process is simple. Water is added, and to prevent the flatness which would, under ordinary circumstances, result from such addition, sugar in varying quantities is employed. In each case a fine of £25 and costs was inflicted, but it is idle to suppose that even fines of this amount will be effectual in preventing the practice, as it is far too remunerative when practiced on a sufficiently large scale. It would be well, perhaps, to borrow an idea from our neighbours, and oblige the delinquents to post up in some prominent place on their premises a notice of their conviction, duly framed and glazed. Only a few days since, a public analyst declared his intention of abstaining from making examinations of samples of beer, seeing that, in the absence of a legal definition of what beer is, it is impossible to prosecute, while it is equally impossible to certify that it is what it pretends to be.

ARE ANGLO-INDIANS GLUTTONS?

IN discussing this question the *Indian Mirror* says:—"It is not possible to fix a standard of moderation for all men. But, judged by results, Anglo-Indians must, we are afraid, seem to be of a gluttonous disposition. Many Anglo-Indians have brought the idea with them from England, that the Indian climate is exhausting, and that they must make up for loss of energy by eating. In the next place, very few of them know how to adapt themselves to the circumstances of Indian life. Because they have eaten meat four times a day in England, they continue eating meat four times a day in India. They eat even more meat, and a larger number of times, than they do in England. *Chota hazree, barra hazree*, tiffin, dinner, supper, with no end of intermediate drinks and light refreshments, keep the Anglo-Indian stomach fully occupied all the twenty-four hours of the day. Each of the principal meals, such as breakfast and dinner, consists very often of three or four heavy dishes—chops, steaks, boiled meat, roast meat, curry, etc. All this may not be too much to a sturdy European soldier on active service in the cold months, but to an Anglo-Indian, breathing steam, taking little exercise, seldom sleeping soundly, and always in bad temper, it is a fatal overdose."

THE LONDON WATER-SUPPLY.

IN the published report of the examination made by the late Colone Sir Francis Bolton, of the water supplied by the several metropolitan water companies during the month of November, 1886, the eminent official examiner says that, having regard to the "steady increase in the population of the urban and suburban districts supplied with water from the Thames by the metropolitan water companies, the time has now arrived for immediate action to be taken to purify the source of supply. The matter will not admit of any further delay, and the responsibility will be great upon those authorities and towns which persistently neglect to undertake works to free the river from contamination should ever an outbreak of epidemic take place, and the fatal words 'too late' be said." This is a serious warning to water drinkers, and one which should lead to speedy action. To be told by Sir Francis Bolton, the highest official authority, that Thames water, which is the drinking-water of London, is in such urgent need of purification at the sources of supply, that we are in danger from contamination, and that to secure the citizens of London from epidemic, large works must be undertaken, is to know that even at present there is pollution, which, apart from epidemic risk, cannot but be a source of danger and disgust. Surely the Government and the municipality are bound to interfere. These last words of this able and eminent official leave a legacy of responsibility which ought not to be disregarded. Is it not intolerable that in London, the wealthiest and most powerful city of the world, we are provided with drinking-

water which is, according to the best authority, chronically and disgustingly polluted, and may at any moment become a source of danger? Not everyone can afford to drink a pure natural mineral water as the alternative of safety. Nor is it much consolation to people who are nice in their tastes to know that, by boiling the ordinary drinking-water provided for them, they can probably neutralise the activity of any poisonous albuminoids which it may contain. Many other towns, great and small, are in similar plight. Until our water-supply is purified, we cannot expect to reduce to their smallest dimensions the typhoid, diarrhœal, and other like disorders which swell the bills of mortality from week to week, even in the absence of epidemic. These are, in fact, the normal index of our liability to epidemic, on the occurrence of which Sir F. Bolton seemed to rely as a startling reminder of an urgent duty. Is it not a pity to wait for epidemics, and to disregard the daily toll which we pay to water pollution?

THE HIGHER EDUCATION OF WOMEN.

In the second Lettsomian lecture, delivered by Dr. Langdon Down, before the Medical Society of London, on Monday last, a report of which will be found elsewhere, some interesting remarks fell from him in reference to the effect of the higher education of women in the production of feeblemindedness in their offspring. Coming from so good an authority, and based as they are on an experience of infantile mental affections extending over so long a period of time, they have a scientific as well as a social interest, which justifies attention being called to them. No objection, he said, was shown to women being taught everything relating to art, music, or their emotional life, but directly attempts were made to cultivate their judgment, to teach them how to reason, to inculcate habits of self-control, the proposal was met by clamours which, in his opinion, were not based on experience, and, so far as the etiology of feeblemindedness was concerned, were likely to be prejudicial. Still more emphatic was Dr. Down's assertion that if there was one thing more certain than another about the production of idiocy, it was the danger which arose from the culture of only one side of woman's nature. The whole gist of the matter lies in the necessity of proportioning the education given to the physical and mental calibre of the recipient. The average female mind is often assumed to be inferior in power and compass to the average male intellect, but the difference is not, according to Dr. Langdon Down, such as to render it either desirable or necessary to restrict female education to the narrow limits of the drawing-room and the kitchen. Reliable statistics on the subject are not forthcoming, and it is even difficult to imagine any which could command acceptance. The observance of ordinary care, and the mandates of elementary physiological knowledge, will in all probability afford as great a safeguard in this direction as they do in the region of athletic exercise for girls. Either or both may be overdone, but if this occur, it is only in consequence of inattention to, or ignorance of, this very important subject.

INTERNATIONAL HEALTH CONGRESS AT VIENNA.

The Executive Committee of the sixth International Health Congress, which is to be held at Vienna from September 26th to October 1st, 1887, has already issued its preliminary programme. The Congress is under the patronage of the Hereditary Prince of Austria, and the following are honorary presidents: the Ministers, Taaffe and Gautsch; Statthalter Possinger; Landmarschall Kinsky, and the Bürgermeister of Vienna, Herr Uhl. The president of the Congress is Hofrath Professor Schneider. The council consists of the vice-presidents Hofrath von Tuama, Professors Böhm, Professor E. von Hofmann, and many other notabilities. The subscription of each member of the congress is ten florins. Each member who announces two months beforehand his intention of taking part in the congress, will receive a copy of the reports (*Expositions-referate*) which appear before the meeting of the Congress, and also a copy of the general report which will be published afterwards. At the two general meetings only lectures will be delivered; at the sectional meetings there will be discussions of the reports. Papers which have already been published, and which have already been read before scientific societies, will not be received.

HOSPITALS AND THE JUBILEE YEAR.

Mr. F. B. Money-Coutts, in forwarding the munificent donation of £1,000 towards the special appeal now being made for Guy's Hospital, says, in a letter addressed to the Treasurer, published in the daily press: "I cannot help saying how much I regret that the national jubilee has not been connected with a scheme for endowing the metropolitan hospitals, and (if there must be a visible memorial) for building a new one. It might have been named the Victoria Hospital. Of course, as the Prince of Wales has himself taken up the Imperial Institute, we must understand that this is the memorial most acceptable to the Royal family," and concludes by saying: "The London hospitals appeal to everyone's feelings. On the whole, they are extremely successful. The patients do not derive temporary benefit only. Patients come to them from all parts of the world. They are a permanent boon to the poor. They are one of the few quite explicit outcomes of civilisation against which no stable cavil can be alleged. It is a great pity that efforts made in other directions to cope with the evils attendant on over-population should have withdrawn money from these well-tried institutions."

SOCIETY FOR THE PREVENTION OF HYDROPHOBIA AND REFORM OF THE DOG LAWS.

A most important meeting of this Society was held at the offices, 50, Leicester Square, London, W.C., on Monday, when Mr. Ernest Hart, Dr. J. G. Glover, Mr. Victor Horsley, F.R.S., the Rev. Henry Jones, Dr. G. W. Potter, and many leading persons in the kennel world, took part in the proceedings. The Duke of Northumberland, the Duke of Westminster, the Earl of Egmont, Lord Stanley of Alderley, and Professor Huxley, were elected Vice-Presidents, and several members were added to the general committee, among them being some well-known breeders and exhibitors of dogs. Proposals for future legislative action had been circulated among members, and these were considered and adopted formally as a basis for subsequent discussion. The Society aims at such amendment of the Dog Act as will ensure permanently the better control of all dogs throughout the kingdom, and the removal of the large number of stray dogs, which are a constant source of danger and trouble. In consequence of the continued spread of rabies in the country, it is hoped that a short Act may be carried when Parliament meets, for the extension to the provinces generally, for six months, of those regulations which have recently proved so effectual in London, where there was no certified case of rabies in the month of December, and where the deaths in the year from hydrophobia were 9, as compared with 27 in 1885.

"THEATRE-CLUBS."

Such a disaster as that which occurred on Tuesday night at a dramatic club in Princes Street, Spitalfields, whereby seventeen persons lost their lives, during a panic created by a false alarm of fire, will, it is to be hoped, result in bringing under legislative control that very numerous class of buildings wherein, under the guise of "clubs," large numbers of people are wont to congregate, and entertainments are from time to time given which draw crowded audiences. Not coming under the designation of "theatres" or "music-halls," they are not licensed, and are at present exempt from any official supervision as regards their structural fitness. We cannot overlook the fact that there are daily in this great metropolis brought together large assemblies of men, women and especially children, as spectators of entertainments of one kind or another, in buildings from which it would be impossible for them to escape, in a time of panic, without much loss of life and injury to limb. It is idle to expect that a crowd of some four hundred persons will in such an event act either with calmness or deliberation; it behoves the legislature, therefore, to deal with this source of danger, and make

it a legal obligation on the part of those who build or contract to manage these structures to take this matter into account, and to provide adequate means of speedy exit. It is imperative to render less possible such accidents as those to which we have referred.

SCOTLAND.

AYR COUNTY HOSPITAL.

THE funds of the Ayr County Hospital have benefited to the extent of £408 by a ball held recently in Ayr Town Hall for the benefit of the hospital. The whole of the local expenses were given free.

EDINBURGH UNIVERSITY STUDENTS' UNION.

THE treasurer of the Student's Union Fancy Fair, at a meeting of the Committee held last week, stated that, although the accounts could not yet be finally closed, about £10,000 had been realised by the fair, of which a temporary investment of £9,500 was agreed to. The total drawings amount to upwards of £11,000.

MORISON PRIZES FOR MERITORIOUS ATTENDANCE ON THE INSANE.

ON the nomination of Dr. Alex. Keiller, LL.D., F.R.C.P.E., the Morison Lecturer on Insanity, the treasurer of the Royal College of Physicians, Edinburgh, has awarded the two annual prizes founded by the late Sir Alex. Morison, for meritorious attendance of the insane, to Miss Agnes Shankland, of the Crichton Royal Institution, Dumfries, and Mr. Edward McMahon, head attendant, Saughton Hall, Murrayfield, both of whom were very strongly recommended for their long and trustworthy service.

CASE OF ALLEGED POISONING FROM HAM IN GLASGOW.

EARLY on Sunday morning, January 16th, four boys, aged 17, 13, 7, and 4, respectively, were taken to the Royal Infirmary, suffering from symptoms of poisoning, suspected to arise from ham taken late on the previous night. Neither father nor mother was affected, though they both had partaken of the supper. On the 17th the boys were able to be taken home. Meanwhile inquiries are being conducted into the case.

A THOUGHTFUL KINDNESS TO MEDICAL STUDENTS.

AT a meeting of the Aberdeen University Senatus, held last week, it was intimated that Mrs. Pirie, widow of the late Professor Pirie, contemplated, in conjunction with her son, Professor George Pirie, an act of kindness which will prove of much service to medical students. They have offered to the university the interest of £500 a-year, for the purpose of providing cordials, nursing, etc., for students during sickness, the gift to be in memory of the late Principal Pirie. At the same meeting it was intimated that the Dr. John Milne Medical Bursery, was conferred upon Mr. John Harper.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.

THE usual monthly meeting of this Society was held on January 14th, Professor MacLeod presiding. Dr. Joseph Coats showed specimens of true ossification of the arterial coats. Dr. Alexander Robertson described a case of tumour of the brain, and exhibited the specimen. A primary sarcoma of the diaphragm, with secondary deposits in the bones, was shown by Dr. T. K. Dalziel, and Dr. W. G. Dun brought before the Society a case of gall-stones in which the stones were removed by abdominal incision during life.

GLASGOW ROYAL ASYLUM FOR LUNATICS.

THE seventy-third annual meeting of the subscribers to this asylum was held on January 13th. The report showed that at the commencement of the year the asylum contained 471 patients. There had been 200 admissions, 155 discharges, of which 77 were recoveries and 36 deaths. The number resident at the close of the year was 480, of whom 301 were private patients. There had been no suicide or serious accident. The reserve fund now amounted to £23,845 18s. 3d.; the increase had been £27,413 10s.; and the expenditure £27,403 8s. 4d., leaving a balance of £10 1s. 8d.

GLASGOW ASYLUM FOR THE BLIND.

THE sixtieth annual meeting of the qualified subscribers and contributors of this asylum was held on January 17th, Lord Dean-of-Guild Blackie presiding. The report showed that the number of blind persons who had received the benefits of the institution during the past year was as follows:—Non-resident in the asylum employed in the manufacturing department at November 30th, 1885, 91; admitted during the year, 26; non-resident children attending school left and died, 3—total, 120. The residents in the asylum at November 30th, 1885, numbered 49; 3 were admitted and 10 left, so that the total number receiving the benefits of the institution at November 30th, 1886, was 162, an increase for the year of 16. In the manufacturing department there had been employed 133 blind persons, who had earned the sum of £2,341 4s. 2d. as wages. In addition to this sum, however, there was allowed them the further sum of £1,037 1s. 6d. as supplement to wages, sick, holiday, and coal allowances, and special grants, the greater number being unable to earn sufficient for the support of themselves and those dependent upon them. The sales for the year amounted to £16,071 8s. 8d., as against £16,165 1s. 8d. for the year 1885, showing a decrease of £93 13s. An increase of sales had taken place at the institution, the falling-off having occurred in the sale shops. The amount of work had increased, as indicated by the extra number of blind persons employed. An effort had been made to employ the blind on work made from less costly materials, and this had sensibly affected the value of work sold. Regarding the fire which recently took place in the asylum, the managers expressed the expectation that a settlement would soon be effected with the insurance companies. A very gratifying feature in the year's transactions was a gain of £404 7s. 3d. on the trading account of the industrial department which had taken place notwithstanding the depressed state of trade. There had been 32 pupils in the school during the year, and only one had left. Twenty-seven pupils had received the benefit of the tuition of Miss Inskip in music. The ordinary income had been £2,237 5s. 5d., and the expenditure £3,208 10s. 4d., so that the excess of expenditure was £971 4s. 11d. The extraordinary revenue was £1,430 12s. 9d., and the extraordinary expenditure £481 11s. 11d. The profit on the trading account amounted to £402 7s. 3d., which, with the excess of extraordinary revenue, made up the sum of £1,353 8s. 1d. The deficiency of ordinary revenue being deducted from this left a balance of £382 3s. 2d., which represented the increase of the capital for 1886. The stock account now amounted to £12,129 10s. 2d.

EDINBURGH HEALTH SOCIETY'S ANNUAL MEETING.

THE annual meeting of the Edinburgh Health Society was held last Saturday. Mr. R. Cox, of Gorgie, presided, and submitted the report, which stated that they had now completed the seventh course of lectures, all of which had been of great interest. The Committee regretted that special lectures to men and women had not been delivered, owing to the difficulty of obtaining lecturers; but, as such lectures were largely taken advantage of, they hoped to include them in their next session's list. The number of members who had joined was not as large as last year, but it was hoped it was only a temporary falling off. The Committee gave their hearty thanks to the lecturers, who had given their time and knowledge for the benefit of the public. There had been 550,000 copies of lectures sold up to that date. The financial report showed that the income for the year was £54 12s. 2d., and the expenditure £64 14s. 7d., leaving a deficiency of over £10, which was taken from the capital account. The funds to the credit of the Society amounted to £150 6s. 11d., and the total loss on the year was about £20. The Committee of Management were re-elected

and a hearty vote of thanks given them for their services. Professor William Stirling, of Owens College and Victoria University, Manchester, delivered the closing lecture of the course, and took for his subject "Tear and Wear." Professor Chiene occupied the chair. The lecture was of great interest throughout. It was admirably illustrated; and, in the course of it, Professor Stirling sarcastically alluded to the silly starvation experiments, accounts of which have recently appeared in the public prints. The lecturer received a very cordial vote of thanks.

AN APOLOGY.

MUCH comment has recently been excited in Edinburgh by the resignation by Dr. Ashdown of his post as Senior Assistant to the Professor of the Institutes of Medicine. Dr. Ashdown has felt that, in view of the circumstances of this resignation, which was due to unjustifiable language used to him by the Professor, and of the remarks by the Professor to his class, it is necessary that full publicity should be given to a letter of apology and retractation which Professor Rutherford has since addressed to him. In this letter, of which the printed copy is publicly circulated, Professor Rutherford makes unqualified retractation of the charges, which he admits were without foundation, and expressed his deep regret at having made them; and, further, his sincere regret that what he said caused Dr. Ashdown's resignation as his Senior Assistant. Thus, it may be hoped, ends, as well as it could end, a very regrettable incident.

LEGACIES TO MEDICAL CHARITIES.

THE late Mrs. Jane Mary McKerras or Bridges, of Belfield House, Musselburgh, has bequeathed the sum of £100 to the Royal Infirmary, Edinburgh, and £50 to the Society for the Relief of the Destitute Sick. Miss Jane Crawford Lang and Miss Janet Lang, of Warren Park, Largs, have bequeathed to the Glasgow Royal Infirmary £1,000, and to the Largs Infimary £1,000. The Misses Lang were life rented in the estate of their deceased brother, John, who, under his deed of settlement, provided for payment, among other things, of £6,000 to each of the Universities of Glasgow and Edinburgh, for the purpose of founding "Lang Scholarships" of £60 each in natural philosophy, mathematics, chemistry, and botany; the residue to be divided among charities of an unsectarian description in Glasgow, and the Royal Infirmary, Edinburgh. Dr. Robert Beveridge, of Aberdeen, who died suddenly last week, has bequeathed a sum of £1,250 to be divided equally between the Royal Infirmary, Aberdeen, and Gordon's College, and £500 to the Medical Chirurgical Society.

ST. ANDREWS UNIVERSITY.

ON Friday afternoon last, Mr. Balfour, Secretary for Scotland, and his colleague, the Lord Advocate, received a deputation of the Council of the St. Andrews Graduates' Association, at Dover House, Whitehall. There was a numerous attendance of the Members of the Council, and a memorial signed by 789 graduates of the University was presented. The prayer of the memorial was that an endowment be found for two additional professors—a professor of anatomy and a professor of botany, so that the University might be enabled to give two *Anni Medici* to medical students attending the University. After completing their two years' course of preliminary and theoretical study, they could go for practical clinical work to any of the great hospitals of the United Kingdom most convenient to them; they could then return to the university, and submit themselves to examination, and thus obtain a degree in medicine, and a license to practise their profession. Dr. B. W. Richardson, F.R.S., president of the Association, Sir J. Crichton Browne, F.R.S., Surgeon-General Gordon, C.B., and Dr. Hicks, F.R.S., spoke in support of the memorial. Mr. Balfour and the Lord Advocate, in reply, said that the ancient University of St. Andrews was secure of the good-will of Her Majesty's Government, and that the memorial itself, and the arguments in support of it, would receive due attention. They also intimated to the deputation that evidence upon the matters set forth in the memorial would be received by the Commission about to be appointed to inquire into the constitution and endowments of the Scottish Universities, and the deputation agreed to furnish this evidence to the Commission. A cordial vote of thanks to Mr. Balfour and the Lord Advocate for their courtesy and attention was then proposed, and carried unanimously.

IRELAND.

DR. HACKETT is a candidate for the vacant Coronership of North Kilkenny.

DRS. GREENE, Kidd, and Rossiter are candidates for the appointment of Medical Officer to Ferns Dispensary.

DR. JOSEPH F. O'CARROLL, Assistant Physician to the House of Industry Hospitals, has been appointed physician in succession to the late Dr. Lyons.

DR. O'DONOHOE has resigned the post of Medical Officer to Castleplunket Dispensary District, and the election of a successor will take place on January 28th.

THURLES UNION.

THE Local Government Board Inspector, in a recent report, states that the hospital wards in this workhouse are overcrowded, and suggests that they should be reserved for acute and special cases.

CHARGES AGAINST THE MEDICAL OFFICERS OF LIMERICK WORKHOUSE.

AT the meeting of the Limerick Board of Guardians on Wednesday, January 19th, the Chairman, Mr. William Abrahams, M.P., presiding, charges of neglect of duty and immorality are reported to have been preferred against the two resident medical officers, Dr. Butler and Dr. Nolan, and Mr. Hance, the resident apothecary. The incriminated officials were represented by a solicitor at the board, and, in the end, it was unanimously resolved to ask the Local Government Board to hold a sworn inquiry. The charges were made at the instance of Mr. Ambrose Hall, a borough magistrate, and a member of the board.

CORK UNION.

AT a meeting of the Guardians last week, the condition of the able-bodied and infirm male dormitories, as referred to in a recent report of Colonel Spaight, an Inspector of the Local Government Board, came under consideration. These dormitories, the Inspector reported, were very crowded, in consequence of the infirm dormitories having been appropriated as St. Patrick's Hospital. One of the wards underneath, containing fifty-eight beds, is vacant; and, as there are only thirty-eight patients in the other ward of the hospital, the Inspector suggests that the infirm men be removed to their original wards; and that the medical officer be requested to remove, as far as possible, the old chronic cases from the hospital to the infirm ward, so as to make room for those cases which it is necessary to treat in hospital. This arrangement would be productive of a very large saving of expense, and would enable the building which was intended for the infirm males to be occupied by them, and give facilities for ensuring proper classification, which do not now exist. The report has been referred by the committee to the medical officers for their opinion on the matter.

ULSTER MEDICAL SOCIETY.

THE meeting held on January 12th was devoted to the subject of sanitation, and the members showed their interest in the question by attending in large numbers. The president (Dr. Whitla) occupied the chair. Dr. Woodhouse (Local Government Board Inspector) read an

interesting and valuable paper upon "House Sanitation," explaining the various methods of piping, trapping, and ventilating. Dr. Whitla then gave a lucid description of the main drainage scheme for Belfast, lately before Parliament, and illustrated his remarks by a specially prepared map. Both the paper and the address were listened to with the deepest attention by a large gathering, and were heartily applauded. The evening being somewhat advanced, the discussion of the various questions raised was postponed, and the secretary was instructed to summon a special meeting for the purpose.

CROWN REPRESENTATIVE FOR IRELAND ON THE GENERAL MEDICAL COUNCIL.

Dr. William Moore, Physician to the Queen in Ireland, Ex-President of the King and Queen's College in Ireland, and a Vice-President of the Dublin Branch of the Association, has been appointed Crown Representative for Ireland on the General Medical Council, in place of the late Dr. Lyons. The announcement in this Journal, and in some of the daily papers, of the appointment of Dr. Bennett to this important position, was an error caused by natural belief in an authoritative rumour which prevailed in well-informed circles. All that we said as to the suitability of Dr. Bennett for the post applies equally to Dr. Moore. Dr. Moore filled the post of King's Professor of Practice of Medicine for fourteen years, and is thoroughly familiar with the subjects of medical education and legislation, to which he has given much attention.

BELFAST WATER-SUPPLY.

On Thursday, January 13th, the first sod for the construction of the new reservoir at Lagmore—a section of what is known as the Stoneyford scheme—was cut by Mr. Robert Corry, Chairman of the Works Committee of the Belfast Water Board. The storage works at Stoneyford were commenced last August. The Lagmore section includes a conduit and a service reservoir, with all subsidiary details. The work has been entrusted to Messrs. Fitzpatrick Brothers, at Belfast, the amount of the contract being £34,695. The proposed conduit will be seven and a half miles long, with a diameter of three feet, and its conveying capacity will be about seven and a half millions of gallons in twenty-four hours. There will be a new service reservoir situated in a small valley south of Colin Glen. It will be five miles distant from Belfast, and will have a capacity of sixteen million gallons. An important adjunct to the reservoir will be the straining wells through which all the water will be passed before being sent into the town. The cost of the entire Stoneyford scheme is estimated at £130,000, for which the ratepayers of Belfast will obtain a supply of about four million gallons a day, giving a cost of about £33,000 per million gallons per day supply. This is a very moderate figure. Belfast is peculiarly well situated for obtaining an excellent water-supply, and the present Water Board is showing commendable energy. The water supplied at present is pleasant to the taste, and free from any serious impurity, but it contains a considerable excess of vegetable matter. It is to be hoped that the proposed methods of filtering the water will do something to remedy this defect.

COLLECTIVE INVESTIGATION COMMITTEE.

LIST OF RETURNS RECEIVED DURING THE MONTHS OF NOVEMBER AND DECEMBER, 1886.

Bath and Bristol Branch: Terebene, W. F. Lovell.
Dorset and West Hants Branch: XIII, C. V. Lush, M.D.
Dublin Branch: X, E. N. Green.
Glasgow Branch: V, R. McC. Service.
Metropolitan Counties Branch: X, H. D. Rolleston; Intemperance, H. E. Friend; Hamamelis, R. Barnes, M.D., H. Gervis, M.D., C. W. Cunnington.
South-Eastern Branch: East Kent District: X (2), XIII, XIV (3), C. Cotton.
West Kent District: XIV (3), Hamam., Tereb., C. Boyce, M.B.
South-Western Branch: X, J. E. Square, F.R.C.S.
Southern Branch: Isle of Wight District: X, W. E. Green.
Staffordshire Branch: XIII, J. T. Hartill (3).

The Secretary to the Collective Investigation Committee will feel obliged if any contributors who do not find their returns included in this list will communicate with him at once.

THE HENRY TESTIMONIAL FUND.

Donations promised or received, for the fund for Dr. Alexander Henry, as announced in the British Medical Journal of January 15th, £100 11s. 0d.

Second List.

	£	s.	d.
Dr. J. O. Adams	2	2	0
Mr. W. Allingham	2	2	0
Mrs. Garrett Anderson	1	1	0
Dr. J. Armstrong	1	1	0
Mr. W. Morrant Baker	2	2	0
Dr. G. G. Bantock	1	1	0
Dr. Lionel Beale	2	2	0
Mr. J. Bisshopp	1	1	0
Mr. J. Blackstone	1	1	0
Dr. W. G. Bott	1	1	0
Sir W. Bowman, Bart.	5	5	0
Dr. T. Bridgwater	3	3	0
Dr. J. S. Bristowe	2	2	0
Dr. W. H. Broadbent	3	3	0
Dr. C. Gage Brown	1	1	0
Mr. Lennox Browne	2	2	0
Dr. T. Lauder Brunton	1	1	0
Dr. A. Burger	1	1	0
Mr. C. T. Carter	1	1	0
Dr. W. B. Cheadle	1	1	0
Dr. T. B. Christie	1	1	0
Dr. W. F. Cleveland	1	1	0
Dr. E. H. Cree	0	10	0
Dr. T. B. Crosby	1	1	0
Dr. L. T. Cumberbatch	1	1	0
Mr. T. B. Curling	2	2	0
Dr. J. Matthews Duncan	1	1	0
Mr. C. F. Du Pasquier	1	1	0
Mr. J. E. Erichsen	5	5	0
Sir Joseph Fayrer	2	2	0
Dr. E. Baxter Forman	0	10	6
Mr. F. Fowke	3	3	0
Mr. W. Fuller	1	1	0
Mr. W. Garlick	1	1	0
Dr. A. T. Gibbings	1	1	0
Dr. R. A. Gibbons	1	1	0
Mr. J. R. Gibson	1	1	0
Dr. T. Hawksley	1	1	0
Mr. Timothy Holmes	1	1	0
Dr. J. W. Hunt	1	1	0
Mr. Jonathan Hutchinson	5	5	0
"A. K."	0	10	0
Dr. Norman Kerr	1	1	0
Dr. J. Keser	1	1	0
Dr. G. Lichtenberg	1	1	0
Dr. T. Ligertwood	1	1	0
Dr. Stephen Mackenzie	1	1	0
Dr. J. Macpherson	1	1	0
Mr. W. G. Marshall	2	2	0
Mr. J. J. Merriman	1	1	0
Dr. T. Morton	0	10	6
Dr. J. L. Paul	1	1	0
Dr. C. D. Phillips	1	1	0
Mr. E. Pope	0	10	0
Dr. W. O. Priestley	3	3	0
Dr. H. Cooper Rose	1	1	0
Dr. C. H. F. Routh	3	3	0
Dr. Felix Semon	1	1	0
Mr. B. Shillitoe	1	1	0
Mr. F. Simms	1	1	0
Dr. G. Slight	1	1	0
Dr. S. T. Smyth	0	10	6
Mr. J. Startin	1	1	0
Dr. W. H. Strange	1	1	0
Dr. H. Sutherland	1	1	0
Mr. Thomas Taylor	0	10	6
Dr. G. Thin	1	1	0
Dr. E. S. Thompson	1	1	0
Sir H. Thompson	5	5	0
Mr. S. Tilley	1	1	0
Dr. W. Travers	1	1	0
Dr. F. C. Turner	1	1	0
Mr. J. S. Turner	1	1	0
Mr. C. Vasey	0	10	6
Dr. H. W. Verdon	1	1	0
Dr. W. H. Walshe	1	1	0
Dr. F. R. Walters	0	10	6
Mr. F. E. Webb	1	1	0
Dr. John Williams	2	2	0
Dr. W. Wood	5	5	0
Mr. R. H. Woodhouse	1	1	0

Donations should be sent to Mr. Eastes, at 69, Connaught Street, Hyde Park Square, London, W., before the 1st day of February, when it is hoped the fund may be closed.

Walter Dickson, M.D., Hon. Treasurer to the Fund.
W. Chapman Grigg, M.D., } Hon. Secretaries
George Eastes, M.B., } to the Fund.

January 19th, 1887.

UNIVERSITY OF LONDON.

A meeting of Convocation was held on Tuesday last, January 18th, at which Dr. F. J. Wood, the Chairman of Convocation, presided.

Mr. J. W. Bone, B.A., presented the report of the Annual Committee, and moved its reception, which was carried *nem. con.*

Mr. Bone also moved the adoption of the following resolution, recommended in Paragraph 4 of the Report of the Annual Committee. "That the motto, *Spiritus intus alit,* be selected for submission to the Senate, as an appropriate one for use in connection with the University Arms." This proposition was seconded by Mr. Nesbitt. Mr. Bentwick moved, as an amendment, that the Senate be requested to adopt one of seven mottoes which he named. This was negatived. Sir A. K. Rollit moved: "That the whole subject be referred back to the Annual Committee, with power to select a motto in conjunction with the Senate, and that the members of Convocation be invited to send in appropriate mottoes to the clerk of Convocation." This new amendment was seconded by Mr. B. H. Cooper, B.A., and carried.

Sir Philip Magnus presented the report of the Special Committee on the Constitution of the University, and moved its reception. The report stated that the Senate had received a deputation of the Special Committee, and had promised to take the whole question into their careful consideration. Sir Philip Magnus said that the grievance of the medical schools was a real one, which he hoped the Senate would find some way of removing. As regards the report that University College had been seeking affiliation with the University of Victoria, he noticed the fact that a large proportion of the students of Owens College, Manchester, continued to present themselves for the London degree, and that it would be strange if the professors of University College should find that the shortest way from Gower Street to Burlington Gardens was by way of Manchester.—The motion was carried *nem. con.*—Mr. J. E. H. Cotton and Mr. Tyler withdrew the propositions standing in their names which referred to this same subject.

THE JACOB TESTIMONIAL FUND.

THE following is a complete list of subscriptions which have been handed in or promised to present date, and which the Honorary Secretaries and Treasurers beg to thankfully acknowledge.

	£	s.	d.
Alcock, N., Surg.-Maj. A.M.S.	1	0	0
Atkin, J., Oldcastle	1	0	0
Atkin, J. M., Oldcastle ..	1	0	0
Atthill, L., Dublin	2	2	0
Auchinleck, H. A., Dublin ..	1	1	0
Ball, C. B., Dublin	1	1	0
Barton, J. K., Dublin	3	3	0
Barton, J., Dublin	0	10	0
Benson, J. H., Dublin	1	1	0
Blake, G. F., Dublin	1	1	0
Bolster, G., Newcastle ..	1	0	0
Boyce, J. W., Stillorgan ..	1	1	0
Bourke, G., Shercock	1	1	0
Bourke, M., Limerick	1	1	0
Brady, D. F., Rathgar ..	1	1	0
Brennen, J., Dublin	1	1	0
Brodie, M., Rathgar	1	0	0
Browne, H. P., Delgarry ..	1	0	0
Browne, R., Rathmines ..	1	1	0
Browne, S., Belfast	1	1	0
Burnside, G. S., Clondalkin ..	1	1	0
Byrne, J., Londonderry ..	1	1	0
Cahill, J., Ballynacargy ..	1	1	0
Caldwell, S., Virginia	1	1	0
Callan, R., Drogheda	1	1	0
Cameron, Sir C., Dublin ..	3	3	0
Chapman, J. H., Dublin ..	2	2	0
Clarendon, S., Newcastle ..	1	1	0
Clark, Sir A., London	5	5	0
Clarke, J., Bailieborough ..	1	1	0
Collins, T., Dublin	1	1	0
Corley, A. H., Dublin	3	3	0
Croly, A., Rathlarnham ..	0	10	0
Croly, A. E., Army Medical Staff	1	0	0
Croly, H. G., Dublin	2	2	0
Croly, R., Tinahely	0	5	0
Davis, F. A. G., Dublin ..	1	1	0
Davis, H. A., Newport ..	1	0	0
Davys, F. J., Swords	1	1	0
Denning, F. A., Sligo	1	1	0
Dobbin, W., Banbridge ..	1	1	0
Donaldson, E., Burt	1	0	0
Dorman, E. B., Kinsale ..	0	10	6
Doyle, P. J., Arklow, ...	0	10	6
Dudley, H. N., Durrow ..	0	10	6
Duncan, J. F., Dublin ..	1	1	0
Fagan, J., Belfast	1	1	0
Ferguson, J. R., Dublin ..	1	10	0
Fisher, M. W., Mountmellick	1	0	0
Fitzgibbon, H., Dublin ..	5	0	0
Fletcher, R. V., Ballinasloe ..	1	1	0
Flinn, D. E., Kingstown ..	1	1	0
Franks, K., Dublin	2	2	0
Fry, A., Templeogue	1	1	0
Fulton, T., Sainttield	0	10	0
Gelston, T. J., Limerick ..	0	10	6
Gick, T., Dublin	1	1	0
Gray, R., Armagh	1	0	0
Grealy, N., Galway	0	10	6
Hadden, H. R., Rathgar ..	1	1	0
Hamilton, E., Dublin	2	2	0
Hanlon, M. W., Innishannon	1	1	0
Hanrahan, J. A., Hollymount	1	1	0
Harold, R., Castle Island ..	1	1	0
Harvey, A., Rathmines ..	0	10	0
Harvey, J. R., Monkstown ..	2	0	0
Hazelton, R., Dublin	1	1	0
Heard, R. L., Bray	1	0	0
Hearne, E. C., Ballickmoyler	1	0	0
Hearn, G. M., Bawnboy ..	2	2	0
Heily, J., Roscommon ..	1	1	0
Hemphill, W., Clonmel ..	2	2	0
Hepburn, W. J., Dublin ..	2	2	0
Higgins, T., Maryborough ..	1	0	0
Hill, J., Milton-Malby ..	1	1	0
Hobson, A., Ballylinan ..	1	0	0
Jamison, D., Newtownards ..	1	0	0
Johnston, H. M., Stranorlar..	0	10	6
Jordan, M. J. D., Castlebar ..	1	1	0
Jordan, W. S. D., ,, ..	1	1	0
Kennedick, J. S., Clonmel ..	1	1	0
Kerr, N., London	0	10	0
Kidd, G. H., Dublin	5	5	0
Kinkhead, R. J., Galway ..	2	2	0
Kisby, J. W., Castleblaney ..	0	10	0
Knott, J. F., Dublin	1	1	0
Laffan, T., Cashel	1	0	0
Lyster, C. G., Kilkenny ..	1	1	0
McCabe, F. X., Dublin	1	1	0
McClung, J., Carrickmore ..	0	10	0
McCraith, E., Michelstown ..	1	1	0
McDowell, F. V., Baltinglass	1	1	0
McIntire, R. L., Coleraine ..	1	1	0
McKee, A. B., Dublin	1	1	0
Mackenzie, M., London ..	2	2	0
McManus, G., Trim	0	7	6
Macnamara, P. J., Bruff ..	1	1	0
Malcomson, W., Cavan ..	1	1	0
Mapother, E. D., Dublin ..	5	5	0
Martin, J., Portlaw	2	2	0
Mayne, C. C., Ballybrack ..	1	0	0
Molony, M., Arklow	1	0	0
Monks, J. H., Dublin	1	1	0
Moore, C. F., Dublin	1	1	0
Mullins, J., Ardrahan	1	1	0
Mulock, T. H., Moate	1	0	0
Neale, W., Mountmellick ..	1	0	0
Newett, R. H., Ligoniel ..	1	0	0
Nolan, A. O'K., Gort	2	2	0
Norman, C., Dublin	2	2	0
O'Brien, W. E. (R.N.), Rathmines	1	0	0
O'Connell, M., Killmallock ..	1	1	0
O'Grady, E. S., Dublin ..	2	2	0
Ormsby, L. H., Dublin ..	2	2	0
Patton, A. Finglass	2	2	0
Perceval, W., Stradbally ..	2	0	0
Phillips, F., Navan	1	0	0
Pollock, J. F., Blackrock ..	2	2	0
Purcell, T., Dublin	1	1	0
Quain, R., London	3	3	0
Reardon, D. C., Bruff	1	0	0
Reid, J. S., Belfast	2	2	0
Rice, P., Galway	1	1	0
Rice, T., Portarlington ..	1	1	0
Ringwood, J., Kells	3	3	0
Sewill, H., London	5	5	0
Sparrow, J. F., Kells	3	3	0
Speedy, A. O., Dublin	1	1	0
Stack, R. T., Dublin	2	2	0
Stafford, T. J., Boyle	2	2	0
Stoker, W. T., Dublin	2	2	0
Stokes, Sir William, Dublin ..	3	3	0
Stoney, H. B., Abbeyleix ..	1	0	0
Tabuteau, J. M., Portarlington	1	1	0
Tagert, R. M., Clones	1	1	0
Thomson, W., Dublin	2	2	0
Tichborne, C. R. C., Dublin ..	1	1	0
Tobin, R. F., Dublin	1	1	0
Tuite, F., Enfield	2	2	0
Tweedy, H. C., Dublin ..	1	1	0
Usher, J., Dundrum	2	0	0
Walker, G., Bonmahon ..	1	0	0
Walshe, J. L., Kilmacthomas..	2	2	0
Wheeler, W. J., Dublin ..	2	2	0
Woodhouse, S., Belfast ..	1	1	0
Woods, O., Killarney	1	1	0
Wyse, G., Dublin	1	1	0

Cheques to be made payable to the hon. treasurers: Professor Edward Hamilton, 120, Stephen's Green, W., Dublin; or Dr. Thomas Purcell, 71, Harcourt Street, Dublin: or any of the co-treasurers; or to the hon. secretaries: Professor E. D. Mapother, 6, Merrion Square, N., Dublin, and Dr. J. H. Chapman, 122, Pembroke Road, Dublin.

EPIDEMIC OF MEASLES.—An alarming epidemic of measles is reported to have broken out at a village named Sebastopol, Monmouthshire, and is causing the utmost concern to the local authorities. There are over one hundred cases under medical treatment, and no fewer than twelve children lie dead, there being as many as three in one house. The authorities are taking every precaution to prevent the spread of disease, and neighbouring medical officers have obtained permission to close the schools at once, should the epidemic spread to their district.

LIVERPOOL HOSPITAL FOR WOMEN.

THE following letter from Dr. Thomas Keith is published in the *Liverpool Daily Post* of January 17th:—

SIR,—In your paper of January 11th, which has just been sent to me, Dr. Imlach makes the monstrous statement that I am entirely in accord with him on the question now in dispute at the Liverpool Hospital for Women. So utterly does my practice differ, that during the last seven years, of a great number of cases submitted to me, and including all operations done by my son, I have only felt justified in advising the performance of this operation in not more than half the number that were operated on in the Shaw Street Hospital in the course of a single year.

I have also had brought under my notice, for the first time, the printed report of the committee submitted to the governors and subscribers of the hospital. At page 4 it is stated that my opinion on this matter was sought last year by the committee. I never received any communication from them. Had my opinion been asked, however, it would have been to this effect—that at their hospital it seemed to me that there was an undue haste, amounting almost to recklessness, in operating, and that the death-rate of one in every twelve women, following an operation for a complaint that of itself is rarely dangerous to life, was an excessive mortality, and far more than sufficient to banish the operation from surgery altogether.—Yours, etc., THOMAS KEITH.

Edinburgh, January 14th, 1887.

To this letter Dr. Imlach has published the following reply:—

SIR,—Dr. Keith has inverted the words and sense of my letter. What I said was that I was acquainted with his opinions, and entirely agreed with them. I spent the whole afternoon of February 18th in his house, listening gladly to the free and unrestrained expression of his opinions on the debated subject. I would readily subscribe to all of them, and I shall now proceed to show my committee, by published cases, that our practice is not so dissimilar as he hastily imagines. Not even Dr. Keith is always successful, as we know to our sorrow in this district, nor his judgment infallible. By his own admission, he has operated upon a far greater number of cases than our senior metropolitan authority, and many of them since the recent visit of his distinguished son to Birmingham. Indeed, considering that Dr. Keith has command, I believe, of only seven beds, while we have thirty-three, and that his fame has been made in another direction, I am genuinely surprised to learn that he has found occasion and opportunity to have recourse so frequently to what he now denounces. I do not question that he has written down his conscientious convictions of the moment, but also I do not forget that more than once in his long and honourable career he has finally adopted what for a time he vigorously opposed. There is no one whose writings I have studied with so much devotion as those of Dr. Keith, and none whose work I more admire, and strive to imitate; but I must confess that I never knew him to utter or to write a generous word of any living man in his own line of practice on this side of the Atlantic. And I believe the Edinburgh school to be more truly represented by his colleagues in the Royal Infirmary and the professor of obstetrics in the University, Dr. Simpson, who says of our hospital that he "does not consider the proportion of cases excessive in an institution where one of the surgeons makes a speciality of the class of patients requiring that operation."—Yours, etc. FRANCIS IMLACH.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1887. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Meetings of the Council will be held on April 13th, July 13th, and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary, not later than twenty-one days before each meeting, namely, March 24th, June 23rd, and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch

Council, unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,

THE VALUE OF HAMAMELIS, THE VALUE OF PURE TEREBENE.

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE. CANCER OF THE BREAST, and the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE, are now closed.

A Report on the CHOREA Inquiry has been prepared by Dr. Stephen Mackenzie ; and will be published in the BRITISH MEDICAL JOURNAL as soon as the printing can be completed.

A Report on CENTENARIANS, prepared by Professor Humphry, was published with the JOURNAL of December 11th; a full Report on OLD AGE will follow.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, CANCER OF THE BREAST, and HABITS OF INTEMPERANCE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

OXFORD AND DISTRICT BRANCH.—The next general meeting will be held on Wednesday, January 26th, 1887. Members who wish to read papers or show cases are desired to send notice of such intention to one of the honorary secretaries, on or before January 18th.—Dr. DARBISHIRE, 60 High Street, Oxford; W. L. MORGAN, Esq., 42, Broad Street, Oxford.

NORTH OF IRELAND BRANCH.—A meeting of the above Branch will be held in the Belfast Royal Hospital on Thursday, January 27th, at 12 noon. Members who may be willing to contribute papers or read notes of cases are requested to notify same to JOHN MOORE, M.D., Honorary Secretary.

SOUTH EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of the above District will take place at St. Bartholomew's Hospital, Chatham, on Friday, February 18th. Gentlemen desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary of the District, A. W. Nankivell, F.R.C.S., St. Bartholomew's Hospital, Chatham, not later than January 29th. Further particulars will be duly announced.—A. W. NANKIVELL, Honorary Secretary, St. Bartholomew's Hospital, Chatham.

DUBLIN BRANCH.—The tenth annual general meeting of this Branch will, by the kind permission of the President and Fellows, be held on Thursday next, January 27th, at 4 P.M., in the Hall of the King and Queen's College of Physicians, Kildare Street. The Officers and Council for the ensuing year will be elected by ballot, and any other necessary business transacted. Dr. T. W. Grimshaw, President-elect, will deliver the annual address. The annual dinner of the Branch will be in the College Hall, at 7 P.M., on the day of the meeting. The charge for dinner tickets for members who purchase their tickets on or before Wednesday, the 26th instant, is 17s. 6d ; for members purchasing their tickets after that date, and for guests, £1.—WILLIAM C. NEVILLE, M.D., Honorary Secretary and Treasurer.

SOUTHERN BRANCH: ISLE OF WIGHT DISTRICT.—The ordinary meeting of this district will be held at Delf's Hotel, Ryde, on Thursday, January 27th, at 4 P.M.; David Lloyd, Esq., President, in the chair. Agenda:—1. Report of Collective Investigation Committee: R. Robertson, M.D. 2. A Question of Diagnosis: W. A. Harvey, M.B. 3. Four Cases of *Post Partum* Hæmorrhage treated with Injections of Perchloride of Iron: Surgeon R. W. Barnes. 4. Case of Quinsy in an Infant: W. E. Green, Esq. Gentlemen who are desirous of introducing patients, exhibiting pathological specimens, or making communications, are requested to signify their intention at once to the honorary secretary. Dinner at 6 P.M.: charge 6s., exclusive of wine. Members to send in names before 25th instant.—W. E. GREEN, Honorary Secretary.

EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held, by the kind invitation of Dr. Adams, at Brooke House, Upper Clapton, on Thursday, February 17th, at 8.30 P.M. The chair will be taken by T. Vere Nicoll, Esq. A demonstration of interesting cases of skin-disease will be given by Stephen Mackenzie, Esq., M.D.—J. W. HUNT, M.D., Honorary Secretary, 101, Queen's Road, Dalston.

THAMES VALLEY BRANCH.—A meeting of the Branch will be held at the Griffin Hotel, Kingston, on January 26th, at 6 P.M.; Dr. Langdon Down in the chair. A paper will be read by Dr. Lewers on Modern Improvement in the Treatment of Malignant Diseases of the Cervix Uteri, and there will be a discussion on Terebene.—CHARLES C. SCOTT, M.B., Honorary Secretary.

SOUTH AUSTRALIAN BRANCH.

Monthly Meeting.—Held at the Adelaide Hospital, August 26th, 1886. Present: The Vice-President (Dr. DAVIES THOMAS), Drs. Gardner, Lendon, Mitchell, Poulton, Stewart, Symons, Messrs. Giles, A. A. Hamilton, Hayward, Jay, Lloyd, Vaughan, and the Honorary Secretary (Mr. Cleland).

The minutes of the meeting held July 29th, 1886, were read and confirmed.

New Member.—Dr. Johnson was elected a member of the British Medical Association, and of its South Australian Branch.

Centenary Celebration.—A letter was read from the University of Sydney, asking for the co-operation of the Association in conjunction with other scientific societies, in forming an Australasian Association for the Advancement of Science; the meeting to be held in Sydney during the year 1888, to celebrate the hundredth anniversary of the foundation of these colonies. The Association to be formed on the lines of the British Association.—Dr. GARDNER, seconded by Mr. JAY, moved that the Branch express its willingness to co-operate as far as possible. Carried unanimously, and referred to the Council.

Jubilee Exhibition.—The Council having recommended that an honorary secretary should be appointed in connection with the Medical Committee *re* the Jubilee Exhibition, it was unanimously decided to appoint Dr. Poulton to the position.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Poisoning by Corrosive Sublimate used as an Antiseptic.—Dieulafoy on Puncture with the Aspirator Needle.—Fusiform Aneurysm of the Popliteal Artery.—Skin Grafting.—Cocaine as Antagonistic to Strychnine.—Physiological Action of Ordinary Piperidine.—General News.

AT a recent meeting of the Biological Society, M. Lucien Butte made a communication respecting the danger of mercuric chloride when used in dressing wounds and washing out cavities. The digestive organs are those most easily affected by corrosive sublimate. When the poison has been absorbed in sufficient quantity, diarrhœa comes on a few hours after the dressing of the wound; at first it is simply watery but afterwards becomes sanguinolent, and is accompanied by tenesmus, pains in the rectum, and abdominal colic, together with nausea and vomiting. Stomatitis and salivation are rarely observed. There is albuminuria, varying frequently in degree; the urine contains lymphoid and epithelial cells with granular casts. There is also severe headache, with slight transient disturbance of the intellectual faculties and insomnia. There is occasionally slight hyperæsthesia of the skin. Towards the end, although the intelligence is intact, sensation is less acute, the sight becomes dim, the pulse is weaker, the pupils contract, the temperature falls, and erythema appears, often in a very exaggerated form. The most important lesions are found in the alimentary canal, especially in the large intestines. The inflammation is generally limited to the colon, and rarely extends beyond the valve of Bauhin. There is violent hyperæmia of the mucous membrane, and the epithelium may be easily detached; the mucous membrane, which is superficially necrosed in some parts, is in others covered with a diphtheritic coating infiltrating the underlying layers. This coating is easily removed, when slight ulcerations with well defined edges become visible. These ulcerations only affect the epithelial layer of the mucous membrane. These intestinal changes, which have been already observed by Prévost, of Geneva, have been recently studied by Charrin from an experimental point of view. Characteristic lesions are also sometimes found in the kidneys. These organs are large, pale, and anæmic, and show the changes indicative of acute parenchymatous nephritis. Moreover, at the periphery and in sections striæ are seen of irregular size and of a yellowish-white hue. Microscopic examination shows that these points and striæ are composed of deposits of amorphous masses of oxalate of lime, which are situated in the hooked tubules, and are more abundant in the cortical matter than in the pyramids. Saikowsky succeeded in producing these lesions experimentally in rodents. Prévost showed that the calcareous deposits were caused by the decalcification of the bones, which in this form of poisoning lose as much as 9 or 10 per cent. of their solid constituents. The peritoneum is sometimes slightly injected. The liver is generally pale and anæmic. The other organs are unaffected excepting the brain, which, in an ex-

periment of Doléris, was found to be slightly congested. The course and duration of the affection are variable. In some cases the patient after a time gets quite well; whilst, in others, death occurs in from three to fourteen days.

At a recent meeting of the Société Médicale des Hôpitaux, M. Dieulafoy stated that the operation of puncture with the aspirating needle is not dangerous; accidents are of the rarest occurrence. A fine needle, about No. 2, should be used for the purpose. Cysts should be punctured as early as possible; if much time be lost, there is less chance of a radical cure. Several months must elapse before the cyst can be pronounced to be radically cured. M. Dieulafoy mentioned a case of hydatid cyst, which was cured only two years after the operation. He drew attention to the symptoms of pseudo-peritonitis, or *péritonisme*, which sometimes occur after puncturing. These are evidently connected with urticaria, which is observed at the same time. While house-surgeon, the author once drew off 300 grammes of liquid from a hepatic cyst. Vomiting, pains in the shoulder, *facies Hippocratica*, in a word, all the symptoms of *péritonisme*—were present. A quarter of an hour later, hemi-urticaria appeared, and the abdominal symptoms immediately disappeared. The patient was cured after a second puncture. Another case was that of a woman with a voluminous cyst of the liver, which was punctured. On the evening following the operation the patient appeared to be in the last stage of acute peritonitis; urticaria was observed at the same time. The following day the urticaria had spread all over the body, and dyspnœa and dysphagia came on; three days afterwards the patient recovered. M. Dieulafoy described other cases in which puncturing had been followed by *péritonisme* with urticaria. In one of these, a slight exploratory puncture made with a Pravaz syringe was followed by *péritonisme* and widespread urticarial eruption. In short, these symptoms of pseudo-peritonitis, following the puncture of a hydatid cyst of the liver, nearly always precede the urticarial eruption, disappearing when it comes out. Urticaria never appears after a second puncture of the same cyst. The operation may be often repeated without danger. M. Dieulafoy made as many as three hundred punctures in the case of a woman with numerous cysts of the liver. M. Labbé described a case in which urticaria was observed before puncture; this was owing to the cyst having broken under an eschar produced by Canquoin's paste. Dry pleurisy frequently occurs when the cyst has extended to the convex surface of the liver. M. Labbé is of opinion that if, after two consecutive punctures, a cyst of the liver refills, and the fluid is not albuminous, laparotomy should be performed. If, however, there is albumen, the hydatids are dead, and one puncture will cure the cyst.

M. Dieulafoy presented a treatise upon opium smokers, by M. Lieberman. This author concludes, from his personal experience, that the narcotic sleep induced by opium is due to severe cerebral congestion.

At a recent meeting of the Surgical Society, M. Humbert read a communication, by M. Schwartz, of a case in which ligature of the popliteal artery had been performed. The operation was followed by cardiac oppression, œdema of the legs, and sudden death. The necropsy showed complicated disease of the heart and interstitial nephritis. There was a clot in the femoral artery, reaching to the deep femoral; the vessel was almost cut through by the catgut which had been absorbed. M. Schwartz laid great stress on the connection of the operation with the aggravation of the cardiac symptoms. M. Trélat mentioned two cases with cardiac symptoms in which death occurred. In the first, there was carcinoma of the breast, and a slight blowing murmur could be heard. An operation was done, and, five days afterwards, the patient's condition became worse, and, a few days later, she died suddenly. The second case was one of epithelioma of the tongue; there was no abnormal sound in the heart. An operation was easily performed, with no graver accident than slight syncope during the dressing of the wound. Four days afterwards, the patient died. In both cases, there was slight premonitory syncope. M. Verneuil stated that he considered that premonitory syncope suggested the necessity of cardiac treatment, either before or after operation. M. Lucas-Championnière stated that he had never seen any accident from the administration of chloroform to patients with heart-disease.

At a recent meeting of the Biological Society, Dr. Dubousquet-Laborderie made the following communication concerning skin-grafts taken from a frog and applied to a granulating wound following a severe burn. The patient, a foundry-man, aged 20, was on May 12th, 1886, burnt on the foot in two places from molten iron falling on it. One of the wounds beginning at the root of the third toe and extending over the back of the foot, measured 9 centimètres in length by 4 in width; the other, beginning at the root of the big toe and extending along the sole of the foot, measured 11½ centimètres in length by 6 in width. Up to June 20th the wounds, which at this date were covered with healthy granulations, had shown no sign of cicatrisation. In order to compare the effects, M. Dubousquet placed four human grafts taken from the patient himself on the upper wound, and four frog-skin grafts as large as the thumbnail on the lower wound. On removing the dressing, twenty-four hours later, it was found that one human graft and one frog-skin graft had fallen off; all the others were adherent. For several days the frog-skin grafts retained their colour, but on June 30th none of the pigment remained and they resembled in every respect the human grafts. On July 10th the larger wound was about one-quarter healed. From this date cicatrisation set in rapidly, so that on July 20th the wound was entirely healed. The cicatrix was soft, elastic, and colourless, and the patient after a few days was able to resume his work without the least inconvenience. M. Dubousquet attributes his success to the numerous antiseptic precautions taken; washing the wound with strong carbolised solutions, clearing away the frog-pelliculæ, Lister dressing, and slight compression with cotton wool. The author mentions a very interesting fact in connection with this case. The human graft, which was found to have fallen on removing the first dressing, left behind it a slight ash-coloured spot, which developed into an islet with prolongations like the other grafts.

The result of M. Bignon's experiments on dogs shows that cocaine acts antagonistically to strychnine. A dog which has absorbed a dose of crystallised strychnine not exceeding two milligrammes to one kilogramme, does not die if cerebral stimulation is maintained by hypodermic injections of cocaine, until the poison is completely eliminated. This experiment succeeds even after the first tetanic attack has occurred. A dose of three milligrammes of strychnine to one kilogramme (even if the action of the poison is kept in abeyance for several hours), is followed by the death of the animal, mainly owing to the large doses of cocaine (greatly exceeding the poisonous limit) which are needed to hold the effect of the strychnine in check.

At a recent meeting of the Biological Society, MM. O. de Coninck and Pinet, communicated the result of their experiments on the action of ordinary piperidine on warm-blooded animals. A series of eight experiments on guinea-pigs showed that no appreciable difference exists between the action of hexahydrate of pyridine and that of ordinary piperidine. Sub-cutaneous injections were made of the alkaloid in a pure state, and diluted with water.

CORRESPONDENCE.

THE COLLEGE OF SURGEONS AND THE ERASMUS WILSON BEQUEST.

SIR,—The memorial to the Council of the Royal College of Surgeons, printed in the BRITISH MEDICAL JOURNAL on January 15th, is a remarkable document, because it is signed by men whose individual contributions to medicine or the sciences on which it is based entitle them to speak with an authority which even the Council can hardly dare to disregard. The leaders having spoken so decisively, it seems to me that the rank and file ought not to be silent, and I would venture to suggest that the Association of Fellows and the Association of Members of the Royal College of Surgeons should draw up similar memorials and invite signatures from the general body of the profession.—I am, etc., M.D., M.R.C.S.

*** Our correspondent's suggestion may be usefully commended to the secretaries and council of the Associations of Members and Fellows of the College of Surgeons. They must feel deeply interested in the full discussion of this important subject, and the deliberate attainment of the wisest and best results. The voice of the Fellows and Members generally should be heard in an authoritative and well-considered utterance as to the disposal of the Erasmus Wilson bequest after the manner best suited to advance the professional, educational, and scientific usefulness of the College. We learn with pleasure that the memorial to the Privy Council for the better representation of the Members and Fellows of the College in its executive, and for the corresponding amendment of its charters, has already been signed by upwards of 4,000 Members and Fellows of the College, and that further signatures are being daily received. Communications on the subject should be addressed to the honorary secretaries, Messrs. Steele and Ellis, Western Dispensary, Westminster, S.W.

DEGREES FOR LONDON MEDICAL STUDENTS.

The Medical Students' View.

Sir,—In the report which you gave last week of the resolution passed by the members of the St. Mary's Hospital Medical Society, the reader is referred to a footnote, concerning which I would like to remove a possible misapprehension. The resolution affirmed the expediency of a degree in medicine being placed within the reach of the bulk of London students, and expressed the hope that this might be accomplished through the conjoint influence of the two Royal Colleges. The footnote doubtless appeared in deference to the ruling of the chairman, that "conjoint influence" was not to imply "conjoint examination." My individual opinion, however, is strongly in the other direction; the degree should be conferred without further theoretical examination or vexatious delay.

Some of the speakers, on the two evenings which were devoted to the discussion, seemed disinclined to support the motion, because they thought that they saw in the misty horizon the scaffold of the "Teaching" University. But surely our two Royal Colleges would constitute the most important influence in the medical department of that ideal fabric, so that their conjunction now for conferring the degree ought in no way to interfere with the development of that Utopian scheme.

The chief opposition to the resolution came from members and graduates of our London University; but these gentlemen, as might be anticipated, were conspicuous by their intellectual attainments rather than by their numbers. I accepted the harmless amendment that the scheme should be "subject to the approval of the General Medical Council," chiefly on account of the eloquence with which it was argued by a gentleman who will, in a year or two, find himself compelled to pay a heavy fee to the said Council for a highly problematical set-off. The keen interest which was taken in the debate entirely disposes of the statement that London medical students are apathetic in the matter of the degree.—I am, yours faithfully,

January 17th, 1887. Edmund Owen.

DEGREES FOR SCOTCH MEDICAL STUDENTS.

Sir,—Now that the Colleges of Physicians and Surgeons of England are agitating for a charter which will confer the title of M.D. upon the London students, does it not seem curious that the Scotch Colleges are doing nothing towards the same object? Surely, if the M.D. Westminster, or whatever they will call it, can be gained by those capable of passing in London, some such degree should be within the means of the Scotchmen who take the Northern licenses. I hope that those interested in the Scotch colleges will bestir themselves. Now is the time, for a Government willing to grant the London degree will hardly refuse the Scotch one.—Your obedient servant,

L. B. Richardson, M.B.Ed., etc.

The Towers, Torquay, January 15th, 1887.

THE MEDICAL REGISTER.

Sir,—With reference to my communication as to the registration of the diploma of Member of the King and Queen's College of Physicians in Ireland, and the degree of Master in Obstetrics of the Universities, which appeared in your issue of December 25th, I have since that time been engaged in correspondence with the English and Irish offices of the Medical Council, as to the refusal of the registrar of the Branch Medical Council for Ireland to carry out Clause 20 of the Medical Act, 1886.

The result is that these qualifications are now registerable in England, Ireland, and Scotland, and I understand that those already on the register can have these additional qualifications appended to their names, in the register for 1887, by making application to the registrar for Ireland during the next week or ten days.—Very faithfully yours,

Charles Frederick Knight, M.D.

Dublin, January 15th, 1887.

THE WORKING OF "THE RABIES ORDER OF 1886."

Sir,—This Order provides in:

Section 14. (1) That "where a person having a dog or an animal, or a horse or ass or mule in his possession or under his charge, gives notice to a constable that the dog or animal or horse or ass or mule is affected with rabies, or a person is convicted of an offence against the Act of 1878 by reason of his having failed to give such a notice in respect of any dog or animal or horse or ass or mule, then, if at any time thereafter it appears to the local authority, on a special report of a veterinary inspector or veterinary surgeon, that the dog or animal or horse or ass or mule is affected with rabies, the local authority may, if they think fit, serve on the owner of the dog or animal or horse or ass or mule a notice in writing requiring him to slaughter it, or to permit them to slaughter it forthwith."

Section 15. "Where a dog or animal or horse or ass or mule has died of, or has been slaughtered on account of, rabies, or disease supposed to be rabies, the local authority may, if they think fit, previous to the disposal of the carcase, cause a *post mortem* examination to be made thereof, in which case such examination shall be conducted by a veterinary inspector or veterinary surgeon specially appointed in that behalf, who shall forthwith report to the local authority, for their information, the result of such examination."

Section 16. "The carcase of every dog, animal, horse, ass or mule (*a*) that has died of rabies; or (*b*) that has been slaughtered in consequence of being affected with rabies, shall be disposed of by the local authority as follows. (i) Either the local authority shall cause the carcase to be buried as soon as possible in its skin in some proper place, and to be covered with a sufficient quantity of quick-lime or other disinfectant, and with not less than six feet of earth. (ii) Or....."

Section 8. "An inspector of a local authority on receiving, in any manner whatsoever, information of the supposed existence of rabies, or having reasonable ground to suspect the existence of rabies shall proceed with all practicable speed to the place where such rabies, according to the information received by him, exists, or is supposed to exist, and shall there and elsewhere put in force and discharge the powers and duties, by or under the Acts of 1878 to 1886, and any Order of Council, conferred and imposed on him as inspector."

Section 17. "It shall not be lawful for any person, except with the Licence of the Privy Council, to dig up, or cause to be dug up, the carcase of any dog that has been buried on account of rabies."

Such are the sections of the Rabies Order of 1886 which bear upon the case I am about to relate, as briefly as possible, with the object of showing that the important question which at once arises when any person has been bitten by a dog supposed to be rabid—namely, whether or no such person should be advised to undergo Pasteur's treatment of inoculation—has been lost sight of in framing the sections.

A few weeks ago a child was brought to the surgery, having been bitten by a stray strange dog. The wounds were on the shoulder, and showed nothing beyond broken skin at the bottom of the marks of the teeth, at the spot where the dog had seized her. The attack had been witnessed by the Inspector of the Local Authority, and the dog was secured, under Section 8; submitted to the veterinary surgeon, under Section 14; and, having been pronounced rabid, slaughtered, and its carcase disposed of, under Section 16 (i).

As to the child, one of the clergy called, a day or two after it had become known that the dog had been pronounced rabid, to know if Pasteur's treatment were practised in this country. I wired to Mr. Victor Horsley, who very kindly replied to the effect that Pasteur's treatment was not practised in this country. A day or two afterwards I received a letter from one who offered to send the child to Paris for the purpose of undergoing Pasteur's treatment, if I would give a certificate to the effect that I considered such treatment advisable. I sent for the inspector, who brought with him the Rabies Order of 1886, from which I have quoted above. My object was to learn if it were possible to have had a portion of the spinal marrow of the dog to send to the Brown Institution, for the purpose of ascertaining by a control experiment if the dog were indeed rabid. The inspector replied by pointing out to me Section 17. I then asked him if he thought that the veterinary surgeon had any doubt at all about the case. He said the veterinary had declared it to be a clear case of dumb-madness. In consequence of this, coupled with the vivid recollection of a case of hydrophobia in a little boy of four years old, which I was once called upon to treat, and which I reported in the Journal at the time, I gave the required certificate. The child went to Paris, underwent the treatment, returned none the worse, and remains well.

The case in itself is unimportant, but its bearing on the Acts is illustrative, and goes to show that some clause is required making *post mortems* of supposed rabid dogs compulsory in country districts, and, at the same time, ordering that a portion of the spinal marrow be supplied to any medical man requiring it.—I am, etc.,

Petworth, Sussex. S. Wilson Hoff.

LICHEN ANNULATUS SERPIGINOSUS.

Sir,—In Dr. Colcott Fox's interesting remarks (British Medical Journal, January 8th, 1887) on a peculiar form of lichen, called L. annulatus by Erasmus Wilson, it is not stated that this is really the disease called lichen circumscriptus by Willan and Bateman, and figured by the former in 1808, so that his name clearly has the priority.

It has also been called L. circinatus and L. marginatus, and, as such, is described by Dr. Liveing. For so unimportant a disease, the number of synonyms it has received is remarkable; it being also known as lichen acnéique, eczema flavum, etc. Unna, Fagge, and Pye-Smith regard it as an eczema. The Americans, as Dr. C. Fox points out, have called it seborrhœa.

Which of the three names—lichen, eczema, seborrhœa—should be retained? I have described several cases in *St. Thomas's Hospital Reports* (1884 and 1885), and have suggested that, as the disease is not really either lichen or eczema, a neutral name, such as circinaria, which does not beg the question, would be preferable.

With regard to the seborrhœa question, I would beg to remark (1) that this affection is certainly often associated with seborrhœa of the scalp, as I have pointed out in the *St. Thomas's Hospital Reports;* (2) that minute examination undoubtedly shows that the starting-point of each so-called papule is a sebaceous gland; (3) but that it is not accurately described as merely seborrhœa or excessive secretion. The bright red colour of the papules or margins of the patches, which strikes every observer, depends, not only on hyperæmia, but on dilatation and elongation of the capillary vessels, which project above the skin level, as in psoriasis. Hence it is that very slight scratching causes hæmorrhage. This is something more than over-secretion.

Dr. Colcott Fox has not mentioned a condition which I believe to be constant in this disease—namely, the wearing of thick woollen under-vests, especially flannel, and generally the same day and night. Hence the name "flannel-rash," which has long been used at the Hospital for Diseases of the Skin.

I have failed to establish this connection only in a few cases, in which the eruption existed on the limbs as well as the body, and which I now believe to belong to a different disease, apparently identical with pityriasis rosea of Gibert.

This curious affection is commoner than might be supposed. A good many of my cases came before me in the general out-patient department, when they applied for some other disease, and the eruption was discovered on stripping for auscultation.

No one can help suspecting that it is a parasitic disease; and, like Dr. C. Fox, I have examined a large number of cases, without finding any distinctive parasite. Single or scattered spores of fungi are, I may say, not uncommonly found in epidermic scales from any kind of diseased, or even healthy, skin: and so are micrococci.—I am, etc.,

Wimpole Street, January 12th. J. F. PAYNE, M.D.

A NEW METHOD OF EXCISING THE KNEE-JOINT.

SIR,—I, at the earliest opportunity, most frankly acknowledge that the operation I thought to be my own has previously been suggested and performed by Professor Ollier. I also tender my sincere thanks to Mr. Keetley for referring me to Professor Ollier's paper in the *Revue de Chirurgie*, which I had never seen before this day.

The merits of the operation, I submit, should in fairness be left to future clinical experience.—I am, etc.,

January 19th, 1887. HERBERT W. ALLINGHAM.

ACCIDENTAL REMOVAL OF AN INVERTED UTERUS: A CORRECTION.

SIR,—Will you permit me to correct a mistake into which I have fallen in alluding to Mr. Alfred Baker's case? He informs me that he has operated upon two cases of chronic inversion of the uterus, removing the uterus in both cases successfully, but in neither was the operation performed accidentally, as mine was, but by deliberate intention, the true nature of the case having been recognised.—I am, etc., LAWSON TAIT.

7, The Crescent, Birmingham, January 13th, 1887.

THE ABUSE OF HOSPITALS.

SIR,—On Friday night I was called to Mr. A., a tradesman in good circumstances, the family being, in short, desirable and paying patients. He had fallen on the ice and broken his leg.

I set the fracture, and all was going on well, when two days later Mrs. A. asked me if he would not be better at the infirmary, as he was getting cross and unmanageable. I replied that the infirmary was well adapted for such cases, but that there might be some difficulty in obtaining his admission. She replied she did not think so, as she knew many in better circumstances than they had been admitted, and amongst her clients she had many who were patrons of the infirmary, and that her family had attended regularly, and given liberally to the hospital collections.

In the evening I was informed application had been made, and he had been admitted. Thus I lost my patient, which was of some consequence, and the fees for attendance, which I could ill afford.

Through your kindness, I bring this practical grievance, which is common in the experience of many general practitioners, under the notice of the profession. The art of surgery is acquired only at a considerable outlay of time and money, and if its practice and emoluments are to be denied, as they must necessarily be, in centres where a well-equipped and well-conducted infirmary exists, the sooner surgery, like dentistry, is omitted from the curriculum of the general practitioner the better.—Your obedient servant,

A. G. P.

VENEREAL DISEASE IN OUR NAVAL PORTS.

SIR,—I trust you will allow me a small space in your valuable paper to comment on the results of the repeal of the Contagious Diseases Acts, and on the lamentable results of unchecked venereal disease on our young men—notably on our sailors and soldiers. It is with the deepest regret that I see your notice in the JOURNAL of January 8th that the inmates of the Lock Hospital at Devonport have been discharged uncured on the streets. I believe that but few people really know the state of affairs after dark in our large towns and great naval ports, for the reason that the majority of the upper classes are either enjoying the privacy of their own homes, or are, at any rate, far distant from the poorer parts of the town, principally frequented by our soldiers and sailors, to whom temptation is offered in every form. No corner is to be found without a small group of prostitutes, who make a set at each passer-by. Taking, as an instance, Portsmouth, at any hour after dark the streets from the upper part of Landport to the Dockyard gates are thronged by women of all ages, from the young girl commencing her evil life to the broken-down and gin-sodden woman, now, it is feared, past all hope. Towards the lower end of Queen Street is situated the Sailor's Rest, established by Miss Weston, the value of which cannot be too highly estimated. At the same time, solicitation is carried on to its very doors. It is hard to see so charitable and good a woman doing her best, and striving her utmost to prevent our sailors from ruining themselves body and soul, whilst the authorities will do nothing to prevent our men being tempted and led away at the very entrance to the harbour of refuge. On examining the returns of venereal disease amongst our sailors, I find that by an immense majority it has occurred in young men under the age of 25; and one rarely meets a man of that age in the navy who has not been affected by some variety of venereal disease. By the notes before me at present I find, in round numbers, that one hundred cases of venereal disease had occurred on board one ship during the last half-year, about half being gonorrhœa, and the remainder of a syphilitic nature; besides an immense number of cases of scabies.

Now, what does this foretell? That in a few years tertiary symptoms will cause the invaliding of a great number of men, healthy up till now, but who have sowed the seed of a disease which ruins their own health, the health of their families, and which will show itself in a poor and weak offspring. We must consider carefully the result all this will produce on our next generation, as well as on the health of the present. The general public are but little aware of the frequency with which venereal disease is met with, and do not grasp the fact that it is making ravages to such an extent, that it is gradually sapping the foundation of the nation, and attaining such terrible proportions, that, if not rapidly checked, it will ruin the coming generation. It is becoming a national subject which must not be neglected.

Venereal disease is comparatively rare in foreign places, and in few ports is it to be met with to such a terrible extent as in our own land; our foreign returns prove this beyond all doubt, and any one who has had any experience of foreign services will confirm it. What can be more distressing than to see our soldiers and sailors who have braved the trials and hardships of the tropics, of war, or the storm, return home to fall victims to this horrible disorder?

I once heard a sailor singing,

> "Stick close to your ship, and never go ashore,
> And you'll never have to muster at the sick-pay door."

One has to have worked amongst sailors to understand the full import of this.

Now, what is to be done to prevent these disastrous results? Since the authorities have seen fit to remove every check on prostitution, the Contagious Diseases Acts having been repealed, and have substituted nothing in their place, and as prostitution, and consequently venereal disease, is rapidly on the increase, it is time that every man, having the health and strength of our country in mind, should agitate the subject.

When the Contagious Diseases Acts were in vogue, the fear of being

noticed and taken in charge by the police to a great extent limited the number of young girls who may now once more be seen parading the streets after dark, drifting (often in ignorance) towards the breakers ahead, and who, before their danger is fully appreciated, find themselves hopelessly lost, their futures wrecked, and often the heart of the widow broken or the happiness of a family irreparably destroyed, whilst they themselves soon become added to that vast and steadily-increasing army of fallen unfortunates who are by rapid, yet sure, strides, carrying destruction to the very heart of our nation.

British subjects are horrified at the licensing of houses of ill-fame, as it countenances vice, they say. What, may I ask, do we do but countenance vice? Not only do we countenance it to a greater extent than foreign nations do, but are now making no attempts to stem the torrent.

Prostitution has existed from the earliest periods of history, and will continue to exist as long as nature itself; and therefore what has been proved without doubt to be incurable, and which cannot be absolutely prevented, should be at least reduced in magnitude by the strictest rules and regulations being enforced. From careful inquiry I find that the majority of venereal cases have been contracted through the victims having been solicited in the streets, and in very few cases has the said victim proceeded unsolicited to the house of ill-fame; there is, indeed, a sort of shame which, to a certain extent, prevents their doing so.

The police, I believe, have orders to prevent this solicitation; but who ever sees them carrying out this order? They are ever ready to "move on" the beggar and homeless, but ignore the greater evil. I feel assured if the order were strictly carried out, loitering groups of known characters dispersed, and single ones "moved on," whilst a few others were made examples of, that a great number of cases would be prevented.

This is by no means impracticable, and should be seen to. In some foreign places a woman of ill-fame is not allowed even to look out of window—at Malta, for instance—and in these places venereal diseases is very limited.

In conclusion I must once more express my opinion that, were solicitation prevented and women of bad character forbidden to practice their ghastly trade before our very eyes—a great temptation being removed—the home of our fathers would soon cease to be more fatal to the health and lives of our present and future generation than the battle or the storm. N.M.D.

NAVAL AND MILITARY MEDICAL SERVICES.

GOOD SERVICE PENSION.

THE Naval Medical Good Service Pension, vacant by the death of Sir James Salmon, has been awarded to Sir William Smart, K.C.B., the senior retired Inspector-General. We think that this recognition of meritorious services will be generally well received, as the recipient is distinguished as a professional and literary man, and has won the highest laurels of the service to which he devoted himself.

DISTINCTIONS GAINED BY FRENCH ARMY MEDICAL OFFICERS.

IT was announced at the annual sitting of the French Academy, on December 27th, that the Montyon Prize of 2,500 francs had been awarded to M. Léon Colin, Médecin-Inspecteur in the Army, for his treatise on the topography, sanitary condition, and diseases of Paris. On the same occasion, honourable mention was accorded to three other medical officers of the army who had competed for the same prize—namely: Médecin-Principal Dr. Chauvel, one of the Professors at the Val-de-Grâce; Médecin-Major Dr. Longuet; and Médecin-Major Dr. Aubert.

THE LATE DEPUTY SURGEON-GENERAL WOLSELEY.

A CORRESPONDENT writes to us from India: The Indian papers will have conveyed to you the sad and deplorable news of Deputy Surgeon-General Wolseley's death and burial, for, as said by *The Civil and Military Gazette*, "his popularity was widespread, and he was beloved by his own profession." As a first-class administrative officer, his loss in the Meerut circle is great, while throughout his department it will be felt as much, owing to his genial, able, and devoted career in it.

In India, his services were well known and appreciated as Secretary to Sir Anthony Home, when some of the best corrections and addenda to our medical regulations and reforms—since the days of our present worthy Director-General—were introduced. If it were possible, he would do his utmost by his advice, given privately, to those officers who might be in difficulties from, perhaps, innocent offences, yet who, by having such a warm sympathiser, had their troubles removed, their offences never seeing daylight, and seldom reaching the Surgeon-General. This assistance was often sought by and given to administrative officers as cases cropped up in their circles. To none did he show partiality, but to all lent a ready hand.

I can only conclude by conveying to those akin the grief that is felt by my department for them—of their, as of our, great and irreparable loss.

ARMY SURGEONS AND ARMY PRACTICE.

FRED GAHNE, M.D. of Glasgow University (Belize, Honduras), writes: In the JOURNAL of November 20th, I observed a letter signed "J. Jenkyns," in which he states that my name is not to be found in the *Medical Register*, in such a manner as to insinuate that I am sailing under false colours, and do not possess the qualifications which I claim to have. This way of mentioning me reveals the animus which actuates the writer, not only because, when I was introduced to him on his arrival in this colony, I mentioned to him that I was a graduate of the University of Glasgow, but because he must be aware that his employer, the Colonial Surgeon, in his first communication to you, mentioned that there were four medical practitioners with British qualifications practising in Belize; and only three others besides myself practising in this town claim to have British qualifications.

The disingenuousness of the writer's affectation of ignorance of my existence is proved by a letter I received from him, as late as November 12th last, in which he says that "he would feel obliged if I would supply him with as full details as possible of any cases of yellow fever that may have come under my observation," to enable him to write a report on a recent epidemic that occurred in this town.

At a time when Mr. Jenkyns was probably learning his alphabet—on July 29th, 1864—I received my degree of M.D. from the University of Glasgow, but (as I stated in the unpublished postscript to my first communication to the JOURNAL) registration not being necessary to practise in this colony, I did not have it registered; hence the non-appearance of my name in the *Register*.

With regard to the charges made against the army surgeon, none who are well acquainted with him will believe them; and Mr. Jenkyns himself, when he shall have acquired a little more experience, will be less ready to believe tales to the discredit of his professional brethren.

CHANGES OF STATION.

THE following changes of station among the officers of the Medical Staff of the Army have been officially notified as having taken place during the past month:—

	From	To
Brigade-Surgeon W. O'Halloran	—	Curragh.
,, J. Jameson	Madras	Aldershot.
,, J. Davis	Dublin	Bengal.
Surgeon-Major I. Hoysted	Bengal	Belfast.
,, W. J. Wilson, M.D.	Portsmouth	Bombay.
,, C. A. Maunsell, M.D.	—	Aldershot.
,, W. Creyk, M.B.	Aldershot	Bengal.
,, H. S. Muir, M.D.	Hounslow	Bengal.
,, F. W. L. Hodder, M.B.	Newry	Bengal.
,, T. S. Cogan	Birmingham	York.
,, J. R. Rahilly	Bengal	Devonport.
,, P. T. Frazer	Newcastle	Canterbury.
,, C. J. L. Bushe, M.B.	Bengal	Hounslow.
,, G. D. Bourke	Portsmouth	Madras.
Surgeon J. Brodie	West Africa	Netley.
,, A. P. O'Connor	Bengal	Dublin.
,, C. G. D. Mosse	Dover	Shorncliffe.
,, T. F. W. Fogarty, M.B.	Cork	Dublin.
,, T. E. Noding	—	Chatham.
,, J. Hickman	Bengal	Chatham.
,, L. P. Mumby, M.B.	Dorchester	Portsmouth.
,, F. T. Skerrett	Dublin	Madras.
,, H. M. Adamson, M.B.	Cork	Madras.
,, T. G. Lavie	Colchester	Bengal.
,, D. M. Greig, M.B.	Edinburgh	Leith Fort.
,, R. J. D. Hall	Ashton-u.-Lyne.	Bombay.
,, C. Hayden, M.D.	Sierra Leone	CapeCoastCastle

THE NAVY.

THE following appointments have been made at the Admiralty during the past week:—EAST ARTHORP, Surgeon, to the *Boscawen*; GEORGE SCOTT to be Surgeon and Agent at Stranraer and Cairn Ryan.

THE MEDICAL STAFF.

SURGEON W. A. MORRIS, recently serving in Bengal, in civil medical charge of Chunar, has been appointed to the command of the Ambulance Corps of the Burmah Field Force. Since his arrival in India in 1882, Surgeon Morris has been favourably mentioned for his services by H.R.H. the Commander-in-Chief, and in the report of Deputy Surgeon-General Farrell, Principal Medical Officer of the Southern Force at Delhi.

Surgeons D. SEMPLE, M.D., C. E. FAUNCE, H. C. DENT, M. O'D. BRADDELL, M.B., S. H. LINDEMAN, A. E. MORRIS, M.D., C. O'DONEL, M.D., G. G. ADAMS, J. M. NICOLLS, M.B., J. H. BRANNIGAN, H. F. HORNE, G. J. A. TUKE, all of whom are serving in the Bengal command, have passed the examination in Hindustani by the lower standard.

Surgeon-Major W. H. BRIGGS has been appointed Surgeon to the Governor of Madras.

Brigade-Surgeon A. ALLAN, M.D., serving in the Bombay command, is transferred from the station hospital at Mhow to that at Poona.

Surgeon-Major T. M. O'BRIEN, also serving in the Bombay command, is transferred from general duty at the Presidency, to the station hospital at Mhow.

Surgeon-Major D. B. BROWN has returned from furlough to general duty at Poona, Bombay Presidency.

THE INDIAN MEDICAL SERVICE.

SURGEON G. DUNCAN, Bengal Establishment, who has been officiating in medical charge of the 4th Sikh Infantry at Kohat, has been appointed medical officer to the newly-organised 2nd Battalion of the 5th Goorkhas.

Surgeon-Major F. A. SMYTH, Bengal Establishment, is appointed medical officer

to the 1st Native Cavalry, *vice* Surgeon-Major J. E. C. Ferris, who has been transferred to civil employ.

Surgeon J. C. Smith, Bengal Establishment, is appointed to the medical charge of the 27th Punjab Infantry, *vice* Surgeon-Major F. A. Smyth.

Surgeon-Major P. S. Turnbull, M.D., Bombay Establishment, has been appointed Secretary to the Surgeon-General, Her Majesty's Forces.

Surgeon-Major J. P. Stratton, M.D., Bombay Establishment, has retired from the service on a pension of £700 a year. Dr. Stratton's commission as Assistant-Surgeon dates from October 20th, 1852, and he attained to Surgeon-Major October 20th, 1872. During the Indian Mutiny in 1859, he was Political Officer with the columns under Brigadier-General Wheeler for the expulsion of the rebels from Bundelcund.

Surgeon A. F. Sargent, Bombay Establishment, in medical charge 3rd Light Infantry, has been granted leave out of India on medical certificate for one year from date of being struck off duty. Surgeon Sargent is in his ninth year's service for pension, which commenced on December 25th, 1885.

Surgeon F. A. Rogers, Bengal Establishment, is appointed to the medical charge of the 42nd Goorkha Light Infantry, *vice* Surgeon-Major J. Wilson, M.D., transferred to civil employment.

Surgeon J. W. Rodgers, Bengal Establishment, is appointed to the medical charge of the 2nd Sikh Infantry, *vice* Surgeon J. A. Nelis, M.B.

Brigade-Surgeon A. Porter, M.D., Madras Establishment, Professor of Medical Jurisprudence at the Medical College, has been appointed Principal and Professor of the Medical College, on the retirement of Brigade-Surgeon J. Kees, M.D.

Surgeon P. J. Damania, Bombay Establishment, in medical charge of the 22nd Native Infantry, has leave of absence to Bombay for ninety days, on medical certificate.

The following is the allotment of annuities in the Bombay Medical Retiring Fund for 1887:—Deputy Surgeon-General J. Y. Smith, M.D., £252; Surgeon-Major T. E. P. Martin, £210*; Surgeon-General J. Lumsdaine, £210*; Brigade-Surgeon T. B. W. P. Johnston, £168*; Deputy Surgeon-General H. Cook, M.D., £168*; Surgeon-Major R. Dick, M.D., £168*.

[* Lapsed to Government, these officers having received a refund of their subscriptions.]

Surgeon-Major Hamlin Nott, M.D., on the retired list of Her Majesty's Indian Forces, died at Kensington, on January 17th.

THE VOLUNTEERS.

Acting-Surgeon William Mackie, of the 1st Dumbarton, and Acting-Surgeon D. Hardie, of the 1st Elgin, have resigned their appointments; the former joined his corps June 23rd, 1883, the latter April 15th, 1882.

Erratum.—In the Journal of December 4th, 1886, p. 1124, it was erroneously stated that Surgeon-Major Charles Sibthorpe, of the Indian Medical Service, had been promoted to be Brigade-Surgeon for services in the Soudan, instead of in Burmah.

INDIA AND THE COLONIES.

Female Medical Appointments in India.—The following facts, which we quote from the *Times of India*, will have considerable interest for those who are concerned in the subject of female medical education. Madras, which of the three presidencies has been foremost in this movement, naturally returns the largest number of successes. Of the batch who first passed out in 1878, Mrs. Scharlieb, M.D., now holds the honourable position of Lecturer in Midwifery to the female students in the Madras Medical College, and also that of Superintendent of the Victoria Caste Hospital. Miss Dora White has for several years past been carrying on a successful practice among the Mahomedan women of Hyderabad; besides having charge of a large dispensary there, she is medical attendant to the ladies of the Nizam's zenana. She recently proceeded to England for the purpose of obtaining an English diploma. Mrs. Mary Lonorgun (formerly Miss Beale) is medical adviser to the Maharana of Meywar, at Oodeypore, on a salary of 225 rupees per month, with free quarters and carriage allowance; and she has also charge of a hospital for women and children, which has become so popular as to be attracting a yearly attendance of 9,210 patients. The only one of those who passed out in 1878 who does not hold a medical appointment, is Mrs. Small (formerly Miss Susan Mitchell). Of those who passed out subsequently, Mrs. Van Ingen, who has the honour of being a medical graduate of the Madras University, has been appointed to the medical charge of Lady Dufferin's dispensary for women and children in Calcutta, on a salary of 300 rupees per month, with free quarters. Miss Esther Smith has charge of a similar hospital in Ulwar, on a salary of 125 rupees, rising to 150 rupees. Miss Stewart has accepted an appointment offered her by the Begum of Bhopal, on a monthly salary of 200 rupees, rising by annual increments to 300 rupees. Miss Ramsbottom is employed as resident medical officer of the Military Female Orphan Asylum, on 70 rupees per month with free quarters. Miss Yerbury is working as assistant-medical missionary in Khetri (Rajpootana), under an American lady doctor, on a salary of 100 rupees. The above facts are culled from the annual report of the Madras Medical College, in which an opinion is expressed by Dr. Keess, that with the growth of Lady Dufferin's movement, all women who have the necessary qualifications will soon be provided with appointments. Dr. Keess, moreover, confidently hopes that the day is not far distant when the inhabitants of every district and town of Southern India will enjoy the benefits of having in their midst a well trained lady doctor from some Indian college.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE UTILISATION OF WORKHOUSE INFIRMARIES FOR CLINICAL STUDY.

Sir,—My attention has been drawn to your article of January 15th upon the Utilisation of Workhouse Infirmaries for Clinical Study, in which it is stated that the superintendent and chairman of the St. Marylebone Infirmary are moving their Board to appoint a resident qualified clinical assistant for that establishment.

The article would lead your readers to the conclusion that this scheme originated with the medical superintendent of the St. Marylebone Infirmary, and I am, therefore, desirous to make known that in September last Mr. William Adams, F.R.C.S., Vice-Chairman of the St. Pancras Board of Guardians and Chairman of the St. Pancras Infirmary Committee, addressed a letter to the Board—a copy of which I herewith enclose—laying down a scheme for the appointment of two resident qualified clinical assistants to be nominated by the Dean of the Faculty of Medicine of the University College Hospital from the qualified students of that school, who should hold office for a period of six months, and receive an honorarium of 25 guineas each at the expiration of that period of office.

That scheme was unanimously adopted by the Guardians of St. Pancras on October 14, and was sanctioned by the Local Government Board on November 30th, and since December 25th last has been in full operation at the St. Pancras Infirmary, Dartmouth Park Hill, two gentlemen from the University College Hospital, Bachelors of Medicine of London, with surgical qualifications, being now in office.

I think, therefore, that it should be known that St. Pancras has taken the lead in a movement which, we hope, will greatly extend beyond the parish in which it originated.—I am, Sir, your most obedient servant,

Alfred A. Millward,
Clerk to the St. Pancras Guardians.

Mr. William Adams, F.R.C.S. (Tower Lodge, Regent's Park Road), in the letter referred to, after referring to previously existing arrangements, expressed the opinion that the Infirmary at Dartmouth Park Hill was undermanned, and that if the work was to be performed with any approach to efficiency, three medical officers at least were absolutely necessary. The letter continues:

"Let me remind you that the large charitable hospitals of this metropolis are officered—and you will admit most efficiently too—by the system of appointing newly-qualified medical men to have charge of the patients under the direction of the physicians and surgeons. This system I would introduce into our infirmary, hoping thereby to secure the same efficiency of administration. I shall propose, then, that two assistants be appointed in the place of Dr. Bridgeford, and that they be engaged for six months only, as in the metropolitan hospitals. At the expiration of this time, they shall cease to hold office, and two others be appointed in their stead for another period of six months. These assistants I would propose to draw from the medical schools, and from the same high class of men who obtain the posts of house-surgeons and house-physicians of our hospitals, as a reward for superior practical skill and scientific attainments. The payment of these officers should be an honorarium at the end of their period of office; and I believe that a sum of twenty-five guineas, in addition to board and lodging, for each officer, would suffice to attract for that limited period the best class of men. I have had a conference with the medical staff of the University College Hospital, and have received from them an assurance that they would find no difficulty in nominating a sufficient number of fully-qualified young men of the highest order for the guardians to select from; and that they are ready to accept the responsibility of keeping up the supply. These changes would not affect, in the slightest degree, the position of the medical superintendent. His relationship with the assistants would be precisely the same as that now existing between himself and the assistant medical superintendent."

After showing that the increased cost would be very slight, Mr. Adams pointed out that the scheme ensured the following very substantial advantages: "1. An additional officer—a point of absolute necessity—and consequently a more thorough attention to the wants of the sick. 2. An introduction into the infirmary, from time to time, it is hoped, of the advances and improvements which are continually being made in the scientific treatment of disease. 3. A record of the history and treatment of every patient admitted into the infirmary, which might reasonably be required of the increased staff. 4. The great advantage to the public at large in affording experience to young medical men, at the commencement of their career, and in acquiring a knowledge of Poor-law medical work and the management of Poor-law infirmaries before engaging in private or public practice on their own responsibility. 5. By the continual influx of men of enthusiasm and energy, a means of combating that lethargy which is so apt to settle down upon isolated institutions such as ours, to the detriment of the sufferers therein."

On December 23rd, 1886, Mr. Lucien De Chazel, M.B.Lond., M.R.C.S.Eng., L.R.C.P.Lond., was appointed Senior Assistant Medical Superintendent; and Mr. Frederick Sherman Toogood, M.B.Lond., M.R.C.S.Eng., L.S.A.Lond., was appointed Junior Assistant Medical Superintendent.

BEVERLEY DISPENSARY AND COTTAGE HOSPITAL.

THE scheme for the amalgamation and future management of the Beverley Dispensary and Cottage Hospital has been completed. It is provided that the Cottage Hospital shall be for the reception and treatment of poor persons of the labouring classes suffering from illness or accident, and the Dispensary for the benefit of the poor inhabitants of Beverley and its neighbourhood not in receipt of parochial relief. Paying or provident members shall also be entitled to medicine and attendance either at the hospital or at their own homes, and they may choose their own medical officer. A small weekly payment —1d. for individuals and 2½d. for families—secures these benefits. The directors are to appoint two medical officers and a dispenser, the latter of whom may be required to reside at the hospital.

MIDLAND COUNTIES HOME FOR INCURABLES.

AT the annual meeting of the Midland Counties Home for Incurables, Leamington, presided over by Lord Leigh, on Monday last, it was decided that patients shall henceforth be elected by the votes of subscribers, and not by the managing committee. The revenue had been sustained, and the Endowment Fund increased to nearly £3,000. There are at present thirty-six patients. Satisfactory reports were received from Stafford and Worcester, but Leicester pressed for patients being elected by votes, which it was thought would largely augment the number of supporters in that county.

INFECTIOUS DISEASES HOSPITAL FOR CARDIFF.

MUNIFICENCE OF THE MARQUIS OF BUTE.

THE Mayor of Cardiff (Mr. Morgan Morgan) has received a letter from Sir W. T. Lewis, with reference to the erection of a hospital for infectious diseases at Cardiff, stating that Lord Bute, desiring to assist in providing the necessary accommodation, was prepared to arrange for the purchase of a site from the Bute Trustees, and to present the same to the corporation. It was, however, to be understood that the building proposed to be erected by the corporation should be in the immediate vicinity of the permanent buildings which his lordship proposed to erect at his own cost for the purpose now served by the *Hamadryad* hospital-ship.

THE METROPOLITAN ASYLUMS BOARD.

THE returns from the fever and small-pox hospitals, made to the Metropolitan Asylums Board at its meeting on January 15th, stated that there had been admitted in the four weeks since the last meeting 174 fresh cases, namely, into the Eastern Asylum, 70 ; the Western Asylum (Fulham), 51 ; and into the South-Eastern, 53. There had been 30 deaths in the four weeks, and 220 had been discharged cured. The number under treatment on Thursday night was 600, as against 676 in the preceding four weeks. Of the cases left under treatment, 507 of the patients are suffering from scarlet fever, 4 from typhus, and 86 from enteric fever. Five cases of small-pox had occurred. The proposed erection at Darenth of a small-pox hospital for convalescents —a matter which has been for a long time discussed—again came under review. A resolution had been sent to the Local Government Board to the effect that the managers were in favour of a brick hut-hospital. In reply to this, a reply from the Local Government Board was read to the effect that the central authority adhered to the opinion that the erection of a permanent hospital was undesirable, and that wood would be the most suitable for the construction of huts ; but that no objection would be raised to the employment of brick as suggested by the managers, who, by the letter, were requested to modify the proposals in the manner they offered to do in the resolution carried at the penultimate meeting. After much discussion, the matter was referred, by 26 votes to 18, to the General Purposes Committee.

STIMULANTS IN WORKHOUSE INFIRMARIES.

A PARLIAMENTARY return just published states that, during the year 1885, the average number of daily inmates in the workhouse infirmaries of London was 53,297, and the cost of providing drink was £16,098, or in one day rather more than £44. In London, therefore, an inmate cost nearly 0.2 of a penny a day for drink. In Wales, the same computation showed 5,656 inmates, at a total cost of about £515, which indicated about 0.06 of a penny a day.

THE QUEEN'S JUBILEE AND HOSPITALS.

AT a meeting of the ratepayers, held at Hastings and St. Leonards, to arrange for the celebration of the Queen's Jubilee, the proposal which met with the most favour was that a sufficient sum of money should be raised—namely, £8,500—to pay off the debt on the new hospital ; and that if any surplus remained, it should be devoted towards erecting a free library.

IT is proposed to commemorate the Queen's Jubilee at Southend by the erection of a hospital. The cost is estimated at £2,500 and the annual expenditure at £250. A committee has been appointed to carry out the scheme, and about £500 has been subscribed.

OBITUARY.

ROBERT BEVERIDGE, M.B., L.R.C.S.ED.

MUCH regret has been caused in Aberdeen and the North by the sudden decease of a very prominent and highly esteemed physician, Dr. Robert Beveridge, of Aberdeen. On Wednesday, December 12th, Dr. Beveridge, who was in his usual health, attended a meeting of the Aberdeen School Board, of which he was a member, and afterwards proceeded to the house of a friend (Mr. Charles Sleigh), where he suddenly expired, from a cardiac affection of considerable standing.

The deceased physician was sixty-one years of age, and had lived a many-sided and busy life. He graduated both in arts and medicine at Aberdeen, obtaining his medical degree at Marischal College and University in 1847. He acted for many years as Demonstrator of Anatomy and as Lecturer on Botany, afterwards becoming Lecturer on Pathology, and Pathologist to the Royal Infirmary. He filled these posts up till 1869, when he became one of the Visiting Physicians and Lecturer on Clinical Medicine. At one time he discharged the duties of Examiner in Medicine to the University, and for several years he was President of the Medico-Chirurgical Society, while, in addition, he acted with credit in various public capacities, being a member of the Town Council, a magistrate, and latterly a member of the School Board. To the Public Health Department of the city he rendered signal service.

At the same time, Dr. Beveridge found time to contribute a variety of papers to the medical journals and societies.

He was personally of a most kindly and amiable disposition ; and his lucidity, comprehensive grasp, and clearness of diction were well and widely known.

THOMAS WARD JESTON, J.P.

AT a recent meeting of the Pathological Society of Reading, the President, Mr. J. Harrinson, F.R.C.S., made a reference to the late Mr. Jeston, of Henley-on-Thames, one of the founders of the Society. Mr. Jeston was in practice prior to 1815, and spent the first three years of his professional life (from 1812 to 1815) as an army surgeon, having served as assistant-surgeon to the 36th Regiment of Foot in the Peninsular War. In 1815, when in his 25th year, he settled at Henley-on-Thames, and continued to reside there for the long period of seventy-one years. His communications to the Reading Pathological Society commenced in 1841, and several of them show that he was deeply interested in the possible connection between erysipelas and puerperal fever. He recorded several remarkable cases of illness, occurring in men who had been cleaning out foul cesspools ; in one paper he recorded how three men thus engaged were taken out insensible, the subsequent constitutional disturbance varying in each case: one man having severe inflammation of one eye, another erysipelas of the calves of the legs, and a third pneumonia of the right lung. A case of a severe injury inflicted by a ploughshare may almost be placed beside the famous case—of which a specimen is preserved in the Museum of the Royal College of Surgeons—in which a shaft traversed the thorax. In Mr. Jeston's case the tenth rib was torn away, the lung exposed, the diaphragm torn, and a portion of the liver scooped out ; yet the boy, under treatment with opium and stimulants, recovered in six weeks. Mr. Harrinson described Mr. Jeston as a man of acute observation and retentive memory ; taking into consideration his striking capabilities, Mr. Harrinson thought it was a question whether education, as insisted on in these days, would have done much for one so constituted. Would the grain of gold which he undoubtedly possessed have been frittered away in the process ? Would not its ductility have been increased at the cost of its tenacity, and endangered by excessive malleation ?

LOW BAROMETRIC PRESSURE IN GREAT BRITAIN.—Dr. Zenker has drawn attention to the extraordinarily low position of the barometer in England and Scotland this month, being as low as 706 millimètres ; for the last 120 years, only four cases have been ascertained in which the barometer had sunk in Scotland below 700 millimètres.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

ENGLISH URBAN MORTALITY IN THE FOURTH QUARTER OF 1886.

THE vital and mortal statistics of the twenty-eight towns dealt with by the Registrar-General in his weekly returns are summarised in the accompanying table. During the three months ending December last, 72,690 births were registered in the twenty-eight large English towns, equal to an annual rate of 32.1 per 1,000 of their aggregate population, estimated at more than nine millions of persons. In the corresponding period of the two preceding years, 1884-5, the birth-rate in these towns was 34.2 and 33.3 per 1,000 respectively. The birth-rate last quarter in London did not exceed 31.4 per 1,000, while it averaged 32.6 per 1,000 in the twenty-seven provincial towns, among which the birth-rate ranged from 24.8 in Brighton and 26.8 In Halifax, to 37.3 in Preston, 38.2 in Newcastle-upon-Tyne, and 41.5 in Cardiff.

The 46,020 deaths registered in the twenty-eight towns during the fourth quarter of 1886 were equal to an annual rate of 20.3 per 1,000, against 21.2, 21.7, and 20.0 in the corresponding quarters of the three preceding years. In London the rate of mortality did not exceed 18.8 per 1,000, while in the twenty-seven provincial towns it averaged 21 6. The lowest rates in these towns were 14.9 in Brighton, 16.6 in Birkenhead, 17.4 in Derby, and 17.7 in Birmingham; in the other towns they ranged upwards to 24.6 in Oldham, 25.7 in Manchester, 27.2 in Wolverhampton, and 28.2 in Preston. During the quarter under notice, 5,697 deaths were referred to the principal zymotic diseases in the twenty-eight towns, equal to an annual rate of 2.51 per 1,000. The lowest zymotic death-rates in these towns were 1.21 in Brighton, 1.53 in Derby, and 1.62 in Bolton; while they ranged upwards to 4.08 in Preston, 5.27 in Leeds, 5.33 in Halifax, and 7.37 in Wolverhampton. The 5,697 deaths from the principal zymotic diseases included 1,495 which resulted from measles, 1,379 from diarrhœa, 1,012 from scarlet fever, 708 from "fever" (including typhus, enteric fever, simple and ill-defined forms of continued fever), 641 from whooping-cough, 459 from diphtheria, and only three from small-pox. The 1,495 deaths from measles registered during the quarter under notice in the twenty-eight towns were equal to an annual rate of 0.66 per 1,000, against 0.59 and 0.34 in the two preceding quarters; this disease was slightly less prevalent in London than in the aggregate of the twenty-seven provincial towns, among which the rates of mortality from measles were highest in Leeds, Halifax, and Wolverhampton. The death-rate from diarrhœa was equal to 0.61 per 1,000, which exceeded that recorded in the corresponding period of any recent year. The rate of mortality from scarlet fever, which had been 0.14 and 0.24 per 1,000 in the two preceding quarters, further rose during the three months under notice to 0.45. In London the scarlet fever death-rate did not exceed 0.30 per 1,000, while in the twenty-seven provincial towns it averaged 0.57, and showed the highest proportional fatality in Manchester, Bristol, Liverpool, and Salford. The 708 deaths referred to different forms of "fever" were equal to an annual rate of 0.31 per 1,000, which showed a further increase upon the rates recorded in the two previous quarters; in London the rate of mortality from this disease did not exceed 0.23 per 1,000, while it averaged 0.38 in the twenty-seven large provincial towns, among which fever was most fatally prevalent in Derby, Portsmouth, Plymouth, and Preston. The death-rate from whooping-cough, which had declined during the first three quarters of 1886 from 1.00 to 0.28 per 1,000, was again 0.28 during the three months under notice, and was considerably below the average of recent corresponding quarters. This disease was much less prevalent in London than in the provincial towns, among which it caused the hightest death-rates in Preston, Hull, and Huddersfield. The 459 fatal cases of diphtheria recorded in the twenty-eight towns corresponded to an annual rate of 0.20 per 1,000, against 0.13 in each of the two preceding quarters. The rate of mortality from diphtheria was equal to 0.24 per 1,000 in London, while it averaged 0.17 in the twenty-seven provincial towns, among which this disease showed the highest proportional fatality in Halifax, Norwich, and Portsmouth. Only three deaths were referred to small-pox in the twenty-eight towns during the three months ending December last; of these, 1 occurred in London, 1 in Portsmouth, and 1 in Leeds. Only 6 small-pox patients were admitted during the quarter into the Metropolitan Asylums Hospitals, and no patient remained under treatment in any of these hospitals at the end of the year.

The rate of infant mortality in the twenty-eight towns last quarter, measured by the proportion of deaths of children under one year of age to registered births, was equal to 160 per 1,000, which exceeded that recorded in the corresponding period of the two preceding years,

Public Health Statistics relating to Twenty-eight Large English Towns, for the Fourth Quarter of 1886.

Towns.	Estimated Population middle of 1886.	Births.	Deaths.	Annual Rate per 1,000 Living. Births.	Deaths.	Principal Zymotic Diseases.	Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Fever.	Diarrhœa.	Rate per cent. of Uncertified Deaths.	Deaths of Children under one year of age to 1,000 Births.
28 Towns	9,093,817	72,690	46,020	32.1	20.3	2.5	5,697	3	1,495	1,012	459	641	708	1,379	2.5	160
27 Provincial Towns	4,944,284	40,190	26,591	32.6	21.6	3.0	3,676	2	851	702	206	439	470	1,006	3.4	173
London	4,149,533	32,500	19,429	31.4	18.8	2.0	2,021	1	644	310	253	202	238	373	1.2	144
Brighton	116,416	720	432	24.8	14.9	1.2	35	—	—	8	5	—	4	18	5.3	161
Portsmouth	136,278	1,154	666	34.0	19.6	2.7	93	1	11	3	32	1	30	15	2.3	146
Norwich	92,028	709	555	33.5	24.2	2.8	64	—	—	5	9	13	15	22	1.8	183
Plymouth	76,584	629	454	33.0	23.8	2.0	39	—	—	8	2	6	17	6	0.7	140
Bristol	220,915	1,616	1,208	29.4	21.9	3.4	186	—	48	57	7	31	7	36	1.2	187
Wolverhampton	80,012	687	543	34.5	27.2	7.4	147	—	102	1	1	6	4	33	1.7	207
Birmingham	434,381	3,448	1,915	31.9	17.7	2.2	235	—	37	10	25	27	24	112	2.5	152
Leicester	139,606	1,181	685	34.0	19.7	2.0	70	—	20	13	2	4	9	22	2.5	178
Nottingham	217,733	1,772	1,003	32.7	18.5	1.9	105	—	2	6	5	22	19	51	1.6	162
Derby	91,823	754	398	33.0	17.4	1.5	35	—	—	2	1	7	16	9	2.5	139
Birkenhead	95,370	783	394	33.0	16.6	1.5	36	—	—	10	6	3	2	15	1.3	129
Liverpool	586,320	4,625	3,544	31.7	24.3	3.6	525	—	134	154	46	20	68	103	4.9	182
Bolton	111,214	961	586	34.7	21.1	1.6	45	—	1	5	3	3	5	28	3.6	162
Manchester	376,895	3,306	2,412	35.2	25.7	3.5	329	—	48	79	16	61	43	82	2.2	179
Salford	211,241	1,725	1,089	32.8	20.7	3.1	164	—	15	68	2	4	20	55	4.0	169
Oldham	130,216	1,009	798	31.1	24.6	2.7	86	—	3	15	6	24	11	27	6.8	207
Blackburn	114,689	877	662	30.7	23.2	2.6	72	—	10	22	—	1	12	27	4.4	208
Preston	101,340	941	711	37.3	28.2	4.1	103	—	5	9	3	19	27	40	3.5	237
Huddersfield	88,670	664	443	30.1	20.1	2.6	57	—	14	8	5	19	5	6	5.2	172
Halifax	78,287	522	478	26.8	24.5	5.3	104	—	75	4	7	3	8	7	9.0	207
Bradford	219,411	1,491	1,030	27.3	18.8	2.1	116	—	20	45	1	9	18	28	2.9	162
Leeds	339,057	2,780	2,037	32.9	24.1	5.3	445	1	219	55	7	49	44	70	1.4	192
Sheffield	310,957	2,599	1,505	33.5	19.4	2.7	209	—	25	59	4	34	19	68	6.4	153
Hull	191,501	1,568	1,005	32.9	21.1	2.8	134	—	24	21	—	37	6	46	5.0	184
Sunderland	127,487	1,089	588	34.3	18.5	2.7	85	—	1	9	2	22	14	37	4.6	153
Newcastle-on-Tyne	155,117	1,478	897	38.2	23.2	2.8	109	—	28	23	8	13	12	25	2.3	154
Cardiff	100,736	1,042	553	41.5	22.0	1.9	48	—	9	3	1	1	16	18	1.6	172

1884-85. While the rate of infant mortality in London did not exceed 144 per 1,000, it averaged 173 in the twenty-seven provincial towns, among which it ranged from 129 in Birkenhead, 139 in Derby, and 140 in Plymouth, to 207 in Wolverhampton, in Oldham, and in Halifax, 208 in Blackburn, and 237 in Preston.

The causes of 1,133, or 2.5 per cent., of the 46,020 deaths registered in the twenty-eight towns during last quarter were not certified, either by registered medical practitioners or by coroners. The proportion of uncertified deaths in London did not exceed 1.2, while in the provincial towns it averaged 3.4 per cent., and ranged from 0.7 and 1.2 in Plymouth and Bristol, to 6.4 in Sheffield, 6.8 in Oldham, and 9.0 in Halifax.

ADULTERATED FOOD.

No fewer than eight shopkeepers in the East End were fined one day last week for selling different kinds of adulterated food. In these cases the excuse made was that the articles were sold as supplied by the wholesale dealers. There is no doubt that, in a very great majority of cases, the offenders are the wholesale dealers; and it is to be hoped that, by prosecuting the retail dealer, he will be led to insist on receiving a warranty of purity from the person from whom he obtains his supply. The wholesale dealer will probably retaliate by saying that in many cases the retailer knows perfectly well that the articles are not supplied as "pure," and that the prices at which they are supplied render this impossible. If this be so, of course the real offender is the retail shopkeeper who supplies as the genuine article what he knows to be more or less adulterated with foreign substances.

OVERPRESSURE ON MEDICAL OFFICERS, DUE TO TRADE DEPRESSION.

Mr. Arthur Hands, medical officer of the Wednesfield district, Wolverhampton, has, in consequence of the large increase in his duties, owing to the depression of trade in the district, expressed to the Board of Guardians his inability to give such attention to his patients as was needed, and has asked to be relieved from the duty of dispensing medicines.

THE METROPOLITAN SEWAGE SCHEME.

The Metropolitan Board of Works has accepted a tender for £460,000, for the execution of works in connection with the intended sewage precipitation operations, at Barking Creek. Public meetings have been held protesting against this step, which affects the health of the neighbourhood of Barking and the purity of the Thames, on the ground that the scheme is ineffectual in itself to reduce the nuisance now existing in the Thames, and that the national importance of the subject demands a more thorough and searching investigation of the whole question.

NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

At the monthly meeting of the North-Western Association of Medical Officers of Health, held on January 6th, at Manchester, Dr. Tatham, Salford, presiding, a paper was read by Dr. Niven, Oldham, on the Infectiousness of Pneumonia. He said that evidences were accumulating that pneumonia, or inflammation of the lungs, was ordinarily a febrile disease, having specific contagion communicated to the patient by means of germs, as small-pox and typhus were communicated. Two distinct micro-organisms had recently been discovered in the bodies of infected persons, and these had been isolated and cultivated; and on the products of the cultivation being inoculated in rabbits and mice, a malady similar to the human disease had been caused. The bearing of the whole inquiry was that the new view of pneumonia might lead to the preparation of a vaccine, having the power to protect anyone inoculated with it against a subsequent attack of this fatal disease.

METROPOLITAN POOR-LAW INFIRMARIES.

At a meeting of the Hospitals Association on Wednesday evening last, Mr. Timothy Holmes, F.R.C.S., in the chair, Lieutenant-Colonel Montefiore read a paper entitled "Some Notes on our Metropolitan Poor-law Infirmaries, and the Importance of Throwing them Open to Medical Science." The speaker thought that every large general hospital should link to itself the Poor-law Infirmary in its own district, and that the hospital should provide the guardians with a list of names of those who had lately passed with honour through the school, from which they might select officers for any vacant medical post; also that the hospitals should authorise any of their full staff to act as consultants to the infirmary, such consultants to receive a fee; that the medical superintendent should inform the staff of the hospital of any cases of more than usual interest that there might be in the infirmary, and arrange for any one person on the senior staff bringing with him a class of students to investigate those cases; and that the guardians be induced to give every assistance to their medical staffs to allow of the due record of cases being taken. He felt sure that, to arrive at any fulfilment of some scheme of that description it would take much time, and a large amount of caution and patience on the part of all who wished to see it brought to a favourable issue; for any combined plan sent up by the guardians to the Local Government Board would frighten that Board, and they would not sanction it. He was of opinion that it was the duty of every individual medical superintendent to do his utmost among his guardians to arouse a wish to improve the medical treatment of the sick, and to add to the present staff of the infirmary for that purpose. A discussion followed.

HEALTH OF ENGLISH TOWNS.

During the week ending Saturday, January 15th, 5,856 births and 4,263 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons. The annual rate of mortality, which in the three preceding weeks had risen from 21.4 to 26.5 per 1,000, declined during the week under notice to 21.4. The rates in the several towns, ranged in order from the lowest, were as follow:—Portsmouth, 17.4; Bradford, 19.3; Sunderland, 19.3; Oldham, 19.8; Derby, 20.0; Brighton, 20.3; Nottingham, 20.9; Salford, 21.7; Bolton, 21.8; Sheffield, 22.4; Birmingham, 22.8; Hull, 22.8; London, 23.0; Birkenhead, 23.0; Huddersfield, 23.8; Halifax, 24.4; Leicester, 24.8; Bristol, 26.4; Newcastle-upon-Tyne, 27.9; Liverpool, 28.2; Norwich, 28.7; Leeds, 28.6; Plymouth, 29.1; Preston, 29.6; Cardiff, 30.4; Blackburn, 30.8; Manchester, 31.0; and the highest rate during the week, 31.6 in Wolverhampton. The death-rate in the twenty-seven provincial towns averaged 24.9 per 1,000, and exceeded by 1.9 the rate recorded in London, which, as before stated, was 23.0 per 1,000. The 4,263 deaths registered in the twenty-eight towns during the week under notice included 485 which were referred to the principal zymotic diseases, against 537 and 475 in the two preceding weeks; of these, 195 resulted from measles, 95 from whooping-cough, 82 from scarlet fever, 48 from "fever" (principally enteric), 34 from diarrhœa, 31 from diphtheria, and not one from small-pox. These 485 deaths were equal to an annual rate of 2.7 per 1,000. The zymotic rate in London during the week under notice was equal to 2.3 per 1,000, while in the twenty-seven provincial towns it averaged 3.1, and ranged from 0.4 and 0.8 per 1,000 in Brighton and Portsmouth, to 5.0 in Leeds, and 5.2 in Huddersfield and in Sunderland. The deaths referred to measles, which had been 244 and 235 in the two preceding weeks, further declined during the week under notice to 195, and were proportionately most numerous in Wolverhampton, Newcastle-upon-Tyne, Halifax, Leicester, and Leeds. The 95 fatal cases of whooping-cough exceeded by 14 the number recorded in the previous week, and caused the highest death-rates in Bristol, Plymouth, Preston, Sunderland, and Huddersfield. The deaths referred to scarlet fever, which had been 80 and 63 in the two preceding weeks, rose again during the week under notice to 82, and exceeded the number returned in any recent week; this disease showed the largest proportional fatality in Blackburn, Sheffield, and Sunderland. The 48 fatal cases of fever exceeded by one the number in the preceding week, and caused the highest death-rates in Birkenhead and Plymouth. The 34 deaths from diarrhœa exceeded those recorded in recent weeks. The fatal cases of diphtheria, which had steadily declined in the four previous weeks from 37 to 21, rose again during the week under notice to 31, and included 18 in London and 5 in Birmingham. No death from small-pox occurred during the week under notice, either in London, or in any of the twenty-seven provincial towns, and only 2 small-pox patients were under treatment in the Metropolitan Asylum Hospitals on Saturday, January 15th. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 7.3 per 1,000, and exceeded the average. The causes of 31, or 1.7 per cent. of the 4,263 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

In the eight principal Scotch towns having an estimated population of 1,299,000 persons, 895 births and 652 deaths were registered during the week ending Saturday, January 15th. The annual rate of mortality, which had been 26.0 and 29.9 per 1,000 in the two preceding weeks, declined again during the week under notice to 26.1, and exceeded by 2.0 per 1,000 the mean rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 16.4 in Greenock, 18.0 in Leith, 20.7 in Edinburgh, 22.7 in Perth, 25.7 in Dundee, 25.7 in Aberdeen, 30.9 in Glasgow, and 33.3 in Paisley. The 652 deaths registered during the week under notice in these Scotch towns included 26 which were referred to whooping-cough, 13 to scarlet fever, 10 to diarrhœa, 7 to "fever," 5 to diphtheria, and 1 to measles; in all, 62 deaths resulted from these principal zymotic diseases, against 63, 73, and 94 in the three preceding weeks. These 62 deaths were equal to an annual rate of 2.9 per 1,000, which slightly exceeded the average rate during the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns during the week under notice were recorded in Edinburgh, Paisley, and Glasgow. The deaths referred to whooping-cough, which had risen in the three previous weeks from 15 to 27, were 26 during the week under notice, of which 18 occurred in Glasgow and 4 in Edinburgh. The 13 fatal cases of scarlet fever exceeded by 1 the number returned in each of the two preceding weeks, and included 8 in Glasgow and 5 in Edinburgh. The 10 deaths from diarrhœa showed a decline from those returned in recent weeks. The fatal cases of fever, which had been 10 and 7 in the two preceding weeks, were again 7 during the week under notice, of which 2 occurred in Glasgow, 2 in Greenock, and 2 in Paisley. The 5 deaths referred to diphtheria showed a decline of 7 from the number in the previous week, and included 4 in Glasgow. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 7.6 per 1,000, against 7.3 in London. As many as 86, or 13.2 per cent., of the 652 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending Saturday, January 8th, 1887, 474 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 28.5 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 15.6; Belfast, 24.9; Cork, 25.3; Drogheda, 38.1; Dublin, 30.4; Dundalk, 13.1; Galway, 30.3; Kilkenny, 50.7; Limerick, 31.0; Lisburn, 29.0; Londonderry, 41.0; Lurgan, 30.8; Newry, 28.1; Sligo, 14.4; Waterford, 25.5; Wexford, 25.7. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.0 per 1,000, the rates varying from 0.0 in Waterford, Newry, Kilkenny, Drogheda, Dundalk, Sligo, Lisburn, and Armagh, to 17.8 in Londonderry; the 23 deaths from all causes registered in that district comprising 9 from measles and 1 from diarrhœa. Among the 107 deaths from all causes registered in Belfast are 1 each from scarlatina, typhus, ill-defined fever, and enteric fever; the 39 deaths in Cork comprise 1 from typhus and 1 from enteric fever; and the 23 deaths in Limerick comprise 1 from enteric fever and 1 from diarrhœa. In the Dublin Registration District, the births registered during the week amounted to 167, and the deaths to 212. The deaths represent an annual rate of mortality of 31.3 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 30.4 per 1,000. Sixteen deaths from zymotic diseases were registered, being 7 under the number for the preceding week, but 16 below the average for the corresponding week of the last ten years; they comprise 6 from scarlet fever (scarlatina), 1 from simple continued fever, 3 from enteric fever, 3 from diarrhœa, 1 from erysipelas, etc. Fifty-seven deaths from diseases of the respiratory system (including 49 from bronchitis and 5 from pneumonia or inflammation of the lungs) were registered, being 4 over the number for the preceding week, but 2 under the average for the first week of the last ten years. The deaths of 15 children (including 11 infants under 1 year old) were ascribed to convulsions. Six deaths were caused by apoplexy, 11 by other diseases of the brain and nervous system (exclusive of convulsions), and 23 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 20 deaths, mesenteric disease 5, and cancer 7. Six accidental deaths were registered, 5 of which were caused by burns or scalds. In 36 instances, the cause of death was "uncertified," there having been no medical attendant during the last illness.

In the week ending Saturday, January 15th, 526 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 31.6 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 10.3; Belfast, 30.2; Cork, 27.9; Drogheda, 25.4; Dublin, 35.6; Dundalk, 13.1; Galway, 20.2; Kilkenny, 16.9; Limerick, 37.8; Lisburn, 0.0; Londonderry, 33.9; Lurgan, 30.8; Newry, 31.6; Sligo, 14.4; Waterford, 48.6; Wexford, 21.4. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.3 per 1,000, the rates varying from 0.0 in ten of the districts to 8.9 in Londonderry; the 19 deaths from all causes registered in that district comprising 4 from measles and 1 from enteric fever. Among the 130 deaths from all causes registered in Belfast are 1 from scarlatina, 2 from typhus, 2 from enteric fever, and 3 from diarrhœa; the 28 deaths in Limerick comprise 1 from scarlatina and 1 from whooping-cough; and the three deaths in Dundalk comprise 2 from diphtheria. In the Dublin Registration District, the births registered during the week amounted to 202, and the deaths to 245. The deaths represent an annual rate of mortality of 36.2 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 35.6 per 1,000. Twenty-three deaths from zymotic diseases were registered, being 7 over the number for the preceding week, but 11 under the average for the second week of the last ten years; they comprise 8 from scarlet fever (scarlatina), 2 from whooping-cough, 1 from cerebro-spinal fever, 3 from simple continued and ill-defined fever, 1 from enteric fever, 7 from diarrhœa, etc. Sixty-five deaths from diseases of the respiratory system were registered, being 8 over the average for the corresponding week of the last ten years; and also 8 in excess of the number for the preceding week; they comprise 47 from bronchitis, 8 from pneumonia or inflammation of the lungs, and 4 from croup. The deaths of 14 children under 5 years of age (including 9 infants under 1 year old) were ascribed to convulsions. Five deaths were caused by apoplexy, 13 by other diseases of the brain and nervous system (exclusive of convulsions), and 17 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 21 deaths, mesenteric disease 3, and cancer 4. Five accidental deaths were registered. In 41 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending January 1st, that the annual death-rate recently averaged 29.0 per 1,000 in the three principal Indian cities; the rates were 19.9 in Bombay, 33.5 in Madras, and 37.5 in Calcutta. Cholera caused 88 deaths in Calcutta, against 54 and 63 in the two preceding weeks, and diarrhœal diseases 39 in Madras; "fever" mortality was considerably greater in Calcutta and Madras than in Bombay. According to the most recently received weekly returns, the annual death-rate averaged 25.3 per 1,000 persons estimated to be living in twenty-two of the largest European cities, and exceeded by but 0.2 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 26.0, and showed a further slight increase upon the rates in preceding weeks; the 463 deaths included 12 from diphtheria and croup, and 11 from "fever." In three other Northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 23.0, and only ranged from 22.2 in Stockholm to 23.5 in Copenhagen; diphtheria and croup caused 16 of the 58 deaths in Christiania, 7 in Copenhagen, and 7 in Stockholm; 3 fatal cases of typhoid fever occurred in Copenhagen, and 3 of scarlet fever in Stockholm. In Paris the death-rate was 23.8, showing a decline from the rate in the previous week; the deaths included 49 from measles, 38 from diphtheria and croup, and 28 from typhoid fever. The 177 deaths in Brussels gave a ratio of 21.2, and no fatal case of zymotic disease was reported. The rate in Geneva was 21.6, and 3 of the 30 deaths resulted from measles. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 21.6, the several rates being 20.6 in Rotterdam, 21.6 in Amsterdam, and 22.5 in the Hague; 5 fatal cases of whooping-cough occurred in Amsterdam, 2 each of "fever" and scarlet fever in Rotterdam, and 3 of measles in the Hague. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 27.3, and ranged from 20.7 in Vienna and 24.8 in Munich, to 32.6 in Buda-Pesth, and 37.8 in Hamburg. Small-pox caused 65 deaths in Buda-Pesth, and 4 in Prague; 26 deaths from "fever" occurred in Hamburg, and the greatest mortality from diphtheria and croup was recorded in Hamburg, Dresden, Breslau, and Prague. The death-rate averaged 24.7 in three of the largest Italian cities, and was equal to 20.6 in Turin, 27.9 in Venice, and 28.1 in Rome; small-pox caused 14 deaths in Rome and 2 in Venice, and typhoid fever 4 in Rome and 3 in Turin. The rate of mortality was 43.0 in Cairo and 31.8 in Alexandria; the deaths from diarrhœal diseases were 102 in Cairo, and 26 in Alexandria; and the fatal cases of typhoid fever 18 in Cairo and 3 in Alexandria. In four of the principal American cities, the recorded death-rate averaged 25.8, and ranged from 20.8 in Baltimore to 30.5 in New York; diphtheria and croup caused considerable mortality in each of these American cities, and the recorded deaths from typhoid fever were 14 in Philadelphia, 8 in Brooklyn, and 4 in Baltimore.

It appears, from statistics published in the Registrar-General's return for the week ending January 8th, that the annual death-rate recently averaged 33.2 per 1,000 in the three principal Indian cities. The rate was equal to 22.7 in Bombay, 39.6 in Madras, and 40.9 in Calcutta. Cholera caused 117 deaths (in the week ending November 27th), showing an increase upon the numbers in the preceding weeks, and diarrhœal diseases 44 in Madras; "fever" mortality was considerably higher in Calcutta and Madras than in Bombay. According to the most recently received weekly returns, the annual death-rate averaged 25.7 per 1,000 persons estimated to be living in twenty-one of the largest European cities, and was 0.8 below the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 29.9, showing a further increase upon the rates in previous weeks; the 522 deaths included 16 from diphtheria, 13 from "fever," and 11 from scarlet fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 20.4, and ranged from 18.2 in Copenhagen to 29.2 in Christiania; diphtheria and croup caused 10 deaths in Christiania, 6 in Copenhagen, and 3 in Stockholm. In Paris, the death-rate was equal to 23.9, and corresponded with the rate during the same week in London; the deaths included 32 from diphtheria and croup, 32 from measles, and 17 from typhoid fever. The 151 deaths in Brussels, of which 6 resulted from croup and 2 from "fever," were equal to a rate of 20.0. The rate in Geneva was 21.6, and no death from zymotic disease was reported. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 23.2, the several rates being 20.9 in Rotterdam, 23.6 in the Hague, and 24.1 in Amsterdam; the deaths in Amsterdam included 6 from diphtheria and croup and 2 from scarlet fever. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 27.0, and ranged from 19.4 in Dresden and 21.5 in Berlin, to 32.4 in Prague and 36.4 in Hamburg. Small-pox caused 29 deaths in Buda-Pesth and 2 in Vienna; and "fever" 26 in Hamburg; the largest proportional mortality from diphtheria occurred in Dresden, Hamburg, and Berlin. The mean death-rate in three of the largest Italian cities was 25.5, the several rates being 22.9 in Turin, 25.0 in Venice, and 28.3 in Rome; small-pox caused 14 deaths in Rome and 4 in Turin; and typhoid fever 7 in Turin and 5 in Rome. The rate of mortality was 43.6 in Cairo and 34.5 in Alexandria; diarrhœal diseases caused 110 deaths in Cairo, and 33 in Alexandria; and 17 fatal cases of typhoid fever were also recorded in Cairo. In four of the largest American cities, the recorded death-rate averaged 25.6, and ranged from 21.1 in Baltimore to 29.0 in New York. Diphtheria and croup showed excessive mortality in New York, Brooklyn, and Philadelphia; and typhoid fever caused 10 deaths in Philadelphia and 5 in Baltimore.

It appears, from statistics published in the Registrar-General's return for the week ending January 15th, that the annual death-rate recently averaged 31.2 per 1,000 in the three principal Indian cities; it was 21.2 in Bombay, 34.3 in Madras, and 41.5 in Calcutta. Cholera caused 107 deaths in Calcutta in the week ending December 4th, against 88 and 117 in the two preceding weeks; "fever" mortality showed a considerably larger excess in Calcutta and Madras than in Bombay. According to the most recently received weekly returns, the annual death-rate averaged 26.3 per 1,000 persons estimated to be living in twenty-two of the largest European cities, and exceeded by 2.2 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 29.1, and showed a slight decline from the rate in the preceding week; the 518 deaths included 14 from "fever," 14 from scarlet fever, and 14 from diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 22.9, and ranged from 20.2 in Stockholm to 23.7 in Christiania; diphtheria and croup caused 9 deaths in Copenhagen, 9 in Christiania, and 4 in Stockholm; 7 fatal cases of whooping-cough occurred in Copenhagen, and scarlet fever caused 3 deaths in Stockholm and 2 in Christiania. In Paris, the death-rate was equal to 25.9, showing a further increase upon the rates in recent weeks, but being 0.4 below the rate for the corresponding week in London; the deaths included 51 from measles, 44 from diphtheria and croup, and 23 from typhoid fever. The 184 deaths in Brussels, of which 3 resulted from diphtheria and croup, gave a rate of 21.7. The usual return for Geneva does not appear to have come to hand. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 25.3, the several rates ranging from 22.5 in the Hague to 29.8 in Rotterdam; the deaths in Amsterdam included 4 from whooping-cough and 2 from "fever," and those in the Hague, 3 from croup and 2 from measles. The Registrar-General's table includes nine German and Austrian cities in which the death-rate averaged 26.3, and ranged from 20.2 and 22.2 in Berlin and Dresden, to 33.7 in Breslau and 33.9 in Hamburg. Small-pox caused 33 deaths in Buda-Pesth, 3 in Vienna, and 2 in Prague; typhoid fever caused 12 deaths in Hamburg, 4 in Prague, and 3 in Dresden; the greatest mortality from diphtheria was recorded in Buda-Pesth, Berlin, Dresden, Hamburg, and Prague. The mean death-rate in three of the largest Italian cities was 24.4, the several rates ranging from 20.7 in Venice to 28.7 in Rome; small-pox caused 20 and typhoid fever 5 deaths in Rome in the week ending November 20th; and of 162 deaths in Turin during the first ten days of December, 9 resulted from typhoid fever. The death-rate was equal to 48.3 in Cairo and 37.4 in Alexandria; diarrhœal diseases caused 110 deaths in Cairo and 38 in Alexandria; 4 deaths from small-pox occurred in Cairo and 2 in Alexandria; and 14 deaths from typhoid fever were returned in Cairo. In four of the largest American cities the recorded death-rate averaged 24.2, and ranged from 14.5 in Baltimore to 29.4 in New York. Diphtheria and croup caused 50 deaths in New York, 19 in Brooklyn, 15 in Philadelphia, and 8 in Baltimore; 9 deaths from typhoid fever were returned in Philadelphia.

MRS. ELIZABETH SALISBURY HEYWOOD bequeathed £10,000 to Owens College, Manchester, for the formation of an endowment in her name to give instruction in the College to women and girls.

MEDICO-LEGAL AND MEDICO-ETHICAL.

ADVERTISEMENT OF THE NAMES OF HOSPITAL STAFFS: AN EXPLANATION.

H. (Manchester) writes: I have much sympathy with "M.D.," whose letter appears in the JOURNAL of January 15th (p. 136), when he complains of the "advertisements" which appear in the daily papers of the names of the members of the staff of various hospitals in this city. Under the pretence of the weekly hospital returns being published, the names of the staff and consulting staff are repeated *ad nauseam*, under circumstances which certainly look like a direct advertisement. "M.D." might have added that the Royal Infirmary and Children's Hospital send their weekly returns, but do not advertise their staff; they are, I believe, the only charities here which do not.

DR. JAMES NIVEN (Oldham) writes: With reference to a letter appearing in the BRITISH MEDICAL JOURNAL of January 15th, 1887, p. 136, signed "M.D.," I beg to inform you that your correspondent has not brought to your knowledge the whole of the facts. Dr. James Ross's paper on bisulphide of carbon poisoning, which was, no doubt, the one your correspondent refers to, was read at a meeting of the Manchester Medical Society, and the subject matter was considered by the members present to be so important that Dr. Ross was requested to make it public. On Dr. Ross asking how that could be done, one of the members suggested that the paper should be published in the *Medical Chronicle*, and advance sheets sent to the daily press, of course with the object of drawing special attention to the contents of the paper. This suggestion was accepted, and was subsequently carried out, with, it is believed, beneficial results. The remarks in your correspondent's letter are, therefore, quite uncalled for.

THE DUTY OF SANITARY OFFICERS TOWARDS MEDICAL PRACTITIONERS.

MR. J. M.—Although a careful perusal of the correspondence between Mr. M. and Mr. F. leaves no doubt upon our mind that Mr. M. is entitled to an explanation from the responsible sanitary authority in reference to the case therein alluded to, our correspondent cannot, we think, fail to see that, in the absence of the medical officer's long delayed answer, we are not in a position to offer an unbiassed opinion on the point in question. At the same time, we consider that he has just cause to complain of Dr. R.'s apparent lack of courtesy to a professional brother in delaying (even under the circumstances stated by Mr. F.) to reply to the letter of inquiry addressed to him as medical officer.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Primary Examination in Anatomy and Physiology at a meeting of the Board of Examiners in Anatomy and Physiology on January 12th, and when eligible will be admitted to the Pass Examination, namely:

H. J. H. Scott, of Melbourne University and King's College, and C. F. Stovin, of London Hospital.

Passed in Anatomy only.

L. D. Gover, A. B. Howe, and S. Yeoman, of St. Thomas's Hospital; W. J. Best, of the London Hospital; E. P. Furber, of St. Bartholomew's Hospital: R. W. Anderson and K. F. T. Buce, of University College.

Passed in Physiology only.

A. H. Bird, of St. Mary's Hospital; C. Robson and E. N. H. Davidson, of St. Thomas's Hospital; J. Naylor, of St. Bartholomew's Hospital; J. K. Bremner, of King's College; T. F. Ricketts, of Guy's Hospital; C. R. Harper, of Middlesex Hospital.

Passed on January 13th in Anatomy only.

E. H. Harden, of University College; A. T. Harrison, of Guy's Hospital; C. E. Judge and R. H. Wellington, of St. Bartholomew's Hospital; L. L. Preston, of Middlesex Hospital; G. C. L. Vintras, of St. Mary's Hospital; J. L. Rubel, of King's College.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGE OF PHYSICIANS OF LONDON AND THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Second Examination in Anatomy and Physiology on January 10th, and when eligible will be admitted to the Third or Final Examination, namely:

F. H. Westmacott, student of Owens College, Manchester; B. P. Viret, R. E. F. Pearse, J. H. Drysdale, E. P. Paton, G. F. Murrell, C. H. Herbert, and E. D. FitzGerald, of St. Bartholomew's Hospital; R. G. W. St. Codd, of Guy's Hospital; C. H. Powers, of St. Mary's Hospital; E. Prada, of King's College; C. N. Lovely, of London Hospital.

Passed in Anatomy only.

W. R. Naylor, of Leeds School of Medicine; E. R. Rouse and B. Neill, of St. Bartholomew's Hospital; C. H. D. Ralph, C. J. Prime, and C. P. Morgan, of Guy's Hospital; H. A. Vernon, of the London Hospital; H. W. Kershaw, of St. Mary's Hospital.

Passed in Physiology only.

A. Hawley, of Birmingham; R. H. Aston, of Leeds; F. H. M. Vander Pant, of Charing Cross Hospital; H. Slater, R. Johnson, and C. F. Beadles, of University College; S. H. Baukes-Price, of Middlesex Hospital; A. R. Lacey, of Guy's Hospital.

Passed on January 11th in Anatomy only.

R. S. Pearson, of Owens College, Manchester; G. H. Dawes, of Sheffield; W. R. Appleyard, of Liverpool; R. F. E. Austin, of Bristol School of Medicine; E. S. Worts and J. Hutchinson, of Guy's Hospital; G. Severs and G. F. Glinn, of St. Mary's Hospital; H. M. Speechly and J. H. Sequeira, of the London Hospital; C. H. Wake, of University College; C. Wiggins, of Charing Cross Hospital.

Passed in Physiology only.

P. T. Naden, A. A. D. Townshend, and R. H. E. G. Holt, of Birmingham; H. J. Carstairs, of St. Thomas's Hospital; F. H. Squire, C. A. Ryde, and H. W. K. Read, of the London Hospital; A. E. Reynolds and G. Carolin, of University College; W. L. Hughes and L. H. Walsh, of King's College; C. H. White, of Middlesex Hospital.

Passed on January 12th in Anatomy and Physiology.

A. S. Dutton, student of St. Thomas's Hospital; P. W. Dove, of St. Bartholomew's Hospital.

Passed in Anatomy only.

J. Cohen and A. Boulton, of Charing Cross Hospital; A. H. Creswell and F. G. Cory, of London Hospital.

Passed in Physiology only.

J. K. Birdseye, of St. Bartholomew's Hospital; R. Hopkins and R. B. Debenham, of London Hospital; W. W. Stocker, of St. Mary's Hospital.

Passed on January 13th in Anatomy only.

D. Lawson, of Middlesex Hospital; S. A. C. Dallas, T. F. Woodhead, and J. E. Bailey, of University College; H. L. Penny, W. Penberthy, and H. P. Cuthbert, of London Hospital; W. H. T. Storrs, of King's College; H. Romer, of St. Thomas's Hospital; W. A. Odling and J. C. Hoyle, of St. Bartholomew's Hospital; J. F. Colyer, of Charing Cross Hospital.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the necessary examinations, were, at a meeting of the Court of Examiners, admitted Members of the College, on January 17th, namely:

A. H. Middleton, M.D.Dub., Shankill, co. Dublin, and J. Murray, M.B.Dub., Norfolk Street, W.C., of Dublin; G. Cranstoun, M.B.Durh., Ludlow, Salop, of Newcastle and St. Thomas's Hospital; M. C. Moxham, L.S.A., Swansea, of St. Bartholomew's Hospital; C. H. Tattersall, L.R.C.P.Lond., Patricroft, of Manchester Royal Infirmary; C. H. Wild, L.K.Q.C.P.I., Bootle, of Liverpool.

Eight candidates were referred for three months, 9 for six months, and 1 for nine months. Four candidates passed in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members.

Admitted on January 18th.

W. M. Yeoman, M.B.Durh., Northallerton, A. Green, M.B.Durh., Gateshead, and B. G. Sumpter, M.B.Durh., Clay-next-Sea, Norfolk, of Newcastle-on-Tyne Infirmary; H. Browne, L.S.A., Cornwall Road, W., of Middlesex Hospital; P. T. Adams, L.S.A., Maidstone, of Newcastle and Guy's Hospital; J. G. Johnson, L.R.C.P.Lond., Lansdown Road, S.W., of St. Bartholomew's Hospital; S. H. N. Harrington, L.K.Q.C.P.I., Montpellier Terrace, Liverpool, of Liverpool Royal Infirmary; J. C. McLearn, M.D.Q.U.I., Highgate, of Dublin; E. Foxton, M.D.Kingston, Brockville, Ontario; J. F. Howitt, M.B.Toronto, of Toronto, Middlesex and University College; J. E. P. Sparrow, L.S.A., Southsea, Hants, of King's College; F. W. Thornton, L.K.Q.C.P.I., Trinity Street, Huddersfield, of Leeds General Infirmary.

Four candidates were referred for three months, and 8 for six months. Six candidates passed in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members.

Admitted on January 19th.

G. H. Spencer, L.K.Q.C.P.I., Turton, Bolton, student of Manchester Royal Infirmary; J. T. C. Williams, L.S.A., Dolgelley, North Wales, of London Hospital; H. Duncan, L.R.C.P.Lond., 8, Henrietta Street, Covent Garden, of St. Thomas's Hospital; W. H. Blake, L.S.A., 8, Brondesbury Villas, Kilburn, and H. H. Brown, The Park, Harrow, of University College; H. E. Crook, L.R.C.P.Lond., Northfleet, Kent, of Guy's Hospital.

Four candidates were referred for three months, and 8 for six months. Seven candidates passed in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise on Thursday, January 13th, 1887.

Bacot, William Rickward, The Cottage, Sudbury, Middlesex.
Ford, Theodore Albert Vores, 31, Beaufort Road, Clifton, Bristol.
Johnson, Reginald Edward, 34, Winter Street, Sheffield.
Wilde, Leonard, Ardwick House, Watford.

MEDICAL VACANCIES.

The following vacancies are announced.

ATHY UNION, Ballylinan Dispensary District.—Medical Officer. Salary, £120 per annum, and £18 per annum as Sanitary Officer, and fees. Applications by January 29th to W. Murphy, Esq., Aughanure, Ballylinan.

BEDFORD GENERAL INFIRMARY AND FEVER HOSPITAL.—Resident Surgeon. Salary, £100 per annum, with apartments and board, etc. Applications by February 3rd to the Secretary.

BELMULLET UNION, Knocknalower Dispensary District.—Medical Officer. Salary, £100 per annum, and £10 per annum as Medical Officer of Health, and fees. Applications by January 26th to A. O'Donnell, Esq., Chairman of the Committee.

BIRMINGHAM GENERAL HOSPITAL, Jaffray Suburban Branch.—Resident Medical Officer. Salary, £150 per annum, with board, etc. Applications by January 29th to Henry Fox, Esq., R.N.

CASTLEREA UNION, Castleplunket Dispensary District. Medical Officer. Salary, £90 per annum, and £20 per annum as Medical Officer of Health and fess. Applications by January 28th to J. L. Cotton, Esq., Longford House, Castlerea.

CHELSEA HOSPITAL FOR WOMEN, Fulham Road, S.W.—Assistant Physician. Applications by January 31st to the Secretary.

COUNTIES ASYLUM, Carlisle.—Junior Assistant Medical Officer. Salary, £80 per annum, with board. Applications by February 5th to Dr. Campbell, Garland's Asylum, Carlisle.

EAST SUFFOLK HOSPITAL, Ipswich.—House-Surgeon. Salary, £100 per annum, with board, etc. Applications by January 26th to the Secretary.

ENNISCORTHY UNION.—Medical Officer, Ferns Dispensary. Salary, £100 per annum, and fees. Applications by January 22nd to Robert Lett, Esq.

EYE, EAR, AND THROAT HOSPITAL FOR SHROPSHIRE AND WALES, Shrewsbury.—Surgeon. Honorarium, £150 per annum for three years. Applications by February 8th to the Secretary.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, £100 per annum, with furnished house, etc. Applications by January 25th to the Secretary, Bagdet Street, Holywell.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Surgeon. Applications by January 29th to the Secretary.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road.—Two Clinical Assistants. Applications by January 29th to the Secretary.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Resident Clinical Assistants. Applications by February 19th to the Secretary.

HULL AND SCULCOATES DISPENSARY.—House-Surgeon. Salary, £150 per annum. Applications by February 1st to R. H. Barker, Esq., Temple Buildings, Bowlalley Lane, Hull.

LAMPETER UNION.—Medical Officer. Salary, £30 per annum, and fees. Applications by January 27th to D. Lloyd, Esq.

LANCASHIRE COUNTY ASYLUM, Rainhill, near Liverpool.—Assistant Medical Officer. Salary, £100 per annum, with board, etc. Applications by February 7th to the Medical Superintendent.

LONDON TEMPERANCE HOSPITAL, Hampstead Road, N.W.—Junior House-Surgeon.—Applications by January 22nd to the Secretary.

NATIONAL ORTHOPÆDIC HOSPITAL.—Surgical Registrar and Anæsthetist. Applications by February 1st to the Secretary.

QUEEN'S JUBILEE HOSPITAL FOR THROAT, EAR, SKIN, EYE, RECTUM, ORTHOPÆDIC, AND SURGICAL APPLIANCE DEPARTMENT, Gloucester Terrace, Queen's Gate.—Applications by January 25th to the Secretary.

RETFORD DISPENSARY.—Surgeon. Salary, £120 per annum, with rooms, coals, gas, and attendance. Applications to the Secretary, West Retford Rectory, Retford.

ROYAL BERKS HOSPITAL, Reading.—Assistant House-Surgeon. Board and lodging. Applications by February 8th to the Secretary.

SCARBOROUGH HOSPITAL AND DISPENSARY.—House-Surgeon and Acting Secretary. Salary, £80 per annum, with board and lodging. Applications by January 26th to the Medical Staff.

ST. PANCRAS AND NORTHERN DISPENSARY.—Honorary Physician. Applications by February 13th to H. P. Bodkin, Esq., 23, Gordon Street, Gordon Square, W.C.

SEAMEN'S HOSPITAL, Greenwich, S.E.—House-Surgeon. Salary, £50 per annum, with board, etc. Applications by January 22nd to the Secretary.

WATERFORD UNION, Kilmeaden Dispensary District.—Medical Officer. Salary, £120 per annum, and £20 per annum as Medical Officer of Health and fees. Applications by January 26th to D. Hickey, Esq., Stonehouse, Kilmeaden.

WORCESTER GENERAL INFIRMARY.—House-Surgeon. Salary, £100 per annum, with board and residence. Applications by February 7th to the Secretary.

MEDICAL APPOINTMENTS.

COURTEEN, R., M.B.Dur., M.R.C.S.Eng., appointed Assistant Medical Officer to the St. Marylebone Infirmary, *vice* H. Larder, M.R.C.S., resigned.

GREENLEES, T. D., M.B., appointed Assistant Medical Officer to the City of London Lunatic Asylum, Stone, near Dartford, *vice* Dr. E. H. Paddison, resigned.

HOBLES, T. G. Fosbrooke Rice, L.F.P.S.G., L.M., L.S.A.Lond., appointed Medical Officer and Public Vaccinator to the Sutton Coldfield District of the Aston Union, *vice* C. Barlow, M.R.C.S., deceased.

LOCK, John Griffith, M.A.Cantab., M.R.C.S., L.R.C.P., L.S.A., L.M., appointed Medical Officer and Public Vaccinator to the Tenby District of the Pembroke Union, *vice* L. G. Leslie, L.R.C.S.Ed., L.R.C.P.Ed., resigned.

MACKENZIE, K. W. Ingleby, M.R.C.S., L.R.C.P., appointed House-Surgeon and Secretary to the Isle of Wight Infirmary, Ryde, *vice* Mr. Foulerton, resigned.

RIDLEY, G. W., M.B., M.R.C.S., appointed Medical Officer to the Newcastle-on-Tyne Dispensary, *vice* W. C. Beattey, M.D., resigned.

ROE, A. Dunville, M.B.Cantab., M.R.C.S., appointed Divisional Surgeon to the Wandsworth Police, *vice* J. H. Hooper, M.D.Lond., F.R.C.S., resigned.

WHITFORD, William, M.D., Honorary Assistant-Physician, appointed Physician to the Stanley Hospital, Liverpool, *vice* D. D. Costine, M.D., J.P., appointed Consulting Physician.

OUR BUTTER SUPPLY.—The Shoreditch Analyst has reported that the result of the analyses of butter he had made revealed some peculiar combinations, one sample containing 90 per cent. of foreign fats, the amount of butter fats not exceeding 3 per cent. This was served as genuine butter, and one shilling and twopence a pound charged for it. Prosecutions are pending.

FIRST AID TO THE INJURED.—Colonel F. Duncan, C.B., M.P., delivered an address to the members of the Shaftesbury Club (Working Men's Club and Institute), at Lavender Hill, on Monday evening. Classes were at once formed; and fifty officers of the Royal Engineers at Chatham will immediately commence a course of instruction under Surgeon-Major McNulty, of the Army Medical Staff.

MEDICAL MAGISTRATE.—Mr. C. B. Plowright, L.R.C.P., M.R.C.S., has been appointed a magistrate for the borough of King's Lynn.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—MEDICAL SOCIETY OF LONDON, 8.30 P.M. Clinical night. Mr. Davies-Colley: Case of Plastic Operation for Ectropium. Mr. Walter Pye: Case of Plastic Operation on Face. Dr. Maguire: Analgesia after Injury to the Head. Dr. Isambard Owen: Case of Tumour of Abdomen. And others.

TUESDAY.—ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M. Mr. Barwell: On widely incising by a Two-Stage Method Hydatids of the Liver. Mr. W. E. Cant: Clinical Observations on "Induration" in the Primary Lesion of Syphilis in Women. (Communicated by Mr. Holmes.)

WEDNESDAY.—BRITISH GYNÆCOLOGICAL SOCIETY, 8.30 P.M. Specimens will be shown. Address on Listerism, by Dr. G. Granville Bantock. Council 8 P.M.

HUNTERIAN SOCIETY. Mr. Croft will explain and demonstrate the method of treating fractures by the immediate application of plaster-of-Paris.

THURSDAY.—OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM, 8.30 P.M. Living and card specimens at 8 P.M. Mr. Nettleship: (1) Atrophy of Optic Nerves with Multiple Congenital Exostoses of Skull; (2) Three Cases of Light Blindness with Peculiar Retinal Changes. Mr. George Cowell: Three Cases showing the Result of Operation for Conical Cornea. Mr. Marcus Gunn: Case of Transverse Calcareous Film of Cornea. Papers.—Mr. P. H. Mules: A Short Record of some Unusual Clinical Cases. Mr. G. A. Berry: On Three Cases of Acute Cerebral Disease with Ocular Symptoms. Mr. W. H. Jessop: Sudden and Lasting Lateral Nystagmus. Mr. W. Lang: Case of Meningitis after Excision.

FRIDAY.—CLINICAL SOCIETY OF LONDON, 8.0 P.M. Address by the President. Mr. Henry Morris: (1) A Case of Calculous Disease of Both Kidneys, with Remarks on the Surgical Treatment of Calculous Kidneys. (2) A Case of Nephro-Lithotomy. Mr. Howard Marsh: A Case in which very Severe Symptoms were due to Four Small Stones in an Atrophied and Movable Kidney; Failure to Detect the Kidney by Lumbar Incision; Discovery by Laparotomy; Successful Removal of the Organ. Mr. W. H. Bennett: A Case of Supposed Nephrotomy for Scrofulous Disease. Living specimens.—Mr. J. R. Lunn: (1) A Boy with Ichthyosis. (2) Peculiar Deformity of the Feet in an Ataxic Patient. (3) A Man with Raynaud's Disease of the Feet. (4) A Case of Myxœdema, with want of Development of the Genital Organs.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement.

MARRIAGE.

RISK—LANGSTON-FADDY.—At St. Luke's Church, Jullandur, Punjab, on December 13th, 1886, by the Rev. Wm. Ellison, Chaplain, Surgeon E. J. Erskine Risk, Army Medical Staff, son of the Rev. J. Erskine Risk, M.A., Vicar of St. Andrew's Chapel of Ease, Plymouth, to Ellie Mary, youngest daughter of Major Langston-Faddy, Retired List, Bengal Army.

DEATH.

SNAPE.—On January 13th, at Chorley New Road, Bolton-le-Moors, Richard Forth Snape, F.R.C.S.Eng., aged 65 years.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

QUERIES.

BLACKHEATHEN writes: I shall be greatly obliged if any of your readers can kindly tell me of a dry bracing locality suitable for a patient who has suffered for some years from a kind of chronic inflammation of the cæcum, originating apparently in tropical diarrhœa, but which now manifests itself by pain and the voidance of a croupous exudation from time to time with the fæces. He is always worse in warm, and especially in damp, weather. Drugs seem to have but little effect, and so I fear that the only hope is to advise a permanent change of residence (from near Blackheath) to some place which is much drier. Brighton has seemed to produce benefit during a temporary stay. Eastbourne I have thought of, and even Davos, but I fear circumstances would not admit of a permanent residence abroad. Indeed, any change at all is much objected to.

WOODHALL SPA.

E. P. WRITES: Will any of the readers of the JOURNAL kindly give me, through its columns, some particulars of this place, especially as to its effect upon children suffering from glandular enlargement?

TREATMENT OF RESTLESSNESS DURING SLEEP.

A MEMBER asks for advice in the treatment of the following case. A boy, about 4 years old, of very excitable temperament, after being asleep a few hours at night, commences rocking his head from side to side, accompanied with moans. I have tried all remedies I can think of, without any success. His health is perfect, and he has been doing this for a year.

THE LATE SEVERE WEATHER.

A SUBSCRIBER writes: It would be very interesting to know whether, during the recent severe weather, any part of England escaped, or nearly escaped, frost and snow. Perhaps some of your correspondents would kindly inform us how far this was so on the South coast, or in any other favoured locality. It was said the Lake District escaped the Arctic weather at first.

DR. J. J. MACWHIRTER DUNBAR (Clapham Common) asks if any member can supply the name of the publisher of Beasley's work on *Stammering*.

ALIQUIS writes: Will any of your numerous readers be so obliging as to give me the address of Surgeon-General Robert Bowen?

BOOKS ON DISEASES OF CHILDREN.

SIR,—Will you or any of your readers kindly inform me what is the best book to read on the dietary and general rearing of young children, including infants under twelve months? I have Chavasse and Semple. What is the best on diseases of children?—Yours, A YOUNG HOME-RULER.

*** An excellent work on the dietary of young children is *The Wasting Diseases of Infants and Children*, by Dr. Eustace Smith (Churchill). Recent works on diseases of children in which questions of dietary are discussed are *The Student's Guide to Diseases of Children*, by Dr. Goodhart (Churchill); *Diseases in Children*, by Dr. Eustace Smith (Churchill); *A Treatise on the Diseases of Infancy and Childhood*, by Dr. J. Lewis Smith (H. K. Lewis).

TREATMENT OF CHRONIC ŒDEMA.

MR. J. W. MEASURES (Todmorden) asks for suggestions as to the treatment of the following case. A lad, aged 19, who has had œdema of the face for six years, has recently suffered from erysipelas, which has increased the swelling. He can scarcely see; eyelids, cheeks, nose, and upper lip being all much swollen. There is no heart-disease, nor albuminuria, nor enlargement of the thyroid.

ANSWERS.

REMEDY FOR LOSS OF HAIR.

SURGEON.—Granville's Percuteur is made by Weiss and Son, Strand, W.C.

OVERCROWDING IN THE COLONIES.

A MEMBER writes: In reply to "Beta's" query in the JOURNAL of October 30th, I would strongly dissuade the ladies from coming out to Australia, and I think I may also add New Zealand. There is absolutely no occupation for them, and they would find it difficult to get employment as governesses at £20 per annum, and work exacted of them being more menial than that of any servant at much higher wages. Their prospects of matrimony would be *nil*.

Another correspondent lately asked for information with regard to Queensland, which has a population of only about 500,000. There is no more dearth of medical men there than in any other part of Australia, but everywhere there is a superfluity. Go to any new gold-field, and I warrant you will find several men not only trying to practise their profession, but also digging. Although New Zealand is about as far from Australia as America is from England, yet men are constantly going to and fro, in order to find an opening. In Victoria, during the past eighteen months, we have had two suicides and one attempt by young medical men out from home. I know men who have practices of £400 and less who would gladly move if they knew where to move to. There are also men on the look-out to take a ship home, but such an opportunity very rarely presents itself.

Money is exceedingly scarce, for all the colonies are passing through a period of commercial depression.

A COUNTRY PRACTITIONER.—There are not the least grounds for supposing that cancer can be caused by the use of German yeast for domestic purposes.

W. S. will find methods of charging vaccine tubes described in the JOURNAL of October 30th, 1886, p. 850; and in that of November 27th, 1886, p. 1071.

NOTES, LETTERS, ETC.

THE RAT POPULATION OF PARIS.

A PERSEVERING statistician of Paris, who has calculated the number of rodents annually destroyed in the metropolitan slaughter-houses and markets to be 1,720,000, roughly computes the rat population of the city to be about two millions and a half.

THE RIDDELL FUND.

	£	s.	d.
Amount already acknowledged	54	1	0
F. Le Gros Clark, Esq., The Thorns, Sevenoaks ..	1	1	0
W. E. C. Nourse, Esq., F.R.C.S., Exeter	1	1	0
Sympathy, March, Cambs	0	5	0
Collected by Dr. Woodman, Exeter:			
Miss E. Lunn, Exeter	1	0	0
W. Easton, Esq., Exeter	0	5	0
Mrs. Nicholson, ,, ...	0	5	0
E. A. Brash, Esq. ,, ...	1	1	0
C. J. Kieland, Esq. ,, ...	1	1	0
Sympathy	0	2	6
J. Gould, Esq., Hatherleigh	1	1	0
W. Pearse, Esq., St. Tudye	1	1	0
J. E. James, Esq., Bridford	0	5	0

ERRATUM.—The paragraph referring to Mr. C. H. Newby, F.R.C.S., which appeared in our issue of January 15th, p. 121, should read: The Queen has graciously permitted Mr. C. H. Newby, F.R.C.S.Eng., of Southsea, to receive and wear the Servian Red Cross, in recognition of his services to the sick and wounded Servians in the late campaign.

FREE-MARTIN.

MR. EDWARD HAXELL writes: With regard to the word Free-martin, I have made inquiries of an old friend of mine, a philologist and zoologist, on the derivation of the word, which may, perhaps, prove useful to your correspondent, "J. D." A note in *Tusser Redivivus*, 1744, says that Martilmasse beef is beef killed about the feast of St. Martin, November 11th, and dried for winter use. Levin's *Manipulus Vocabulorum*, 1570: "Marte" is an ox or cow killed at Martinmas, p. 307. Reference is also made, p. 33, No. 25, in the same work, to *Marte* as "bos saginatus." In Hollybrand's *Dictionary*, 1593: *Martin* is a spayed heifer; and the expression, "St. Martin's Hammer," is said of a woman who has borne twins—that is, "she has had St. Martin's hammer knocking at her wicket." This would appear to be some allusion to the procreative powers of the saint.

Halliwell, in his *Dictionary*, says: "If a cow has twin calves of different sexes, the female is termed a free-martin, and is said never to breed."

The word "martin" appears to be derived from the saint of that name, who was Bishop of Tours. There are many animals called after him besides the cattle which were slaughtered on or about his feast day.

In France, "martin" was a usual name for an ass. One of the falcons in France, Spain, and Italy is called "the bird of St. Martin." In Spain, a heron is called "martineta," and an "eel" in the same language "martina."

Might not "free" mean free from, or exempt from, breeding? St. Martin being apparently from the bit of folk-lore "St. Martin's hammer," a patron saint of twins, and a source of unusual fecundity? The free-martin is not always sterile, for Owen mentions a Mr. Holroyd, of Witham, near Leeds, whose cow had twin calves (bull and cow), which, on being reared, proved fertile one with another; the so-called free-martin having some six or seven calves altogether.

W. WRITES: The question of free-martins was painfully forced upon my notice some years ago. I had been requested to attend a lady in her first confinement. She was a twin, the other child being a boy. At her confinement, all went on well in its early stages, but I was surprised to find that, although she was a tall well-made woman, the pelvis was small and round at the brim—in other words, was a male pelvis. As the child was small, I hoped all would be well; but ultimately the pains seemed quite insufficient to force the head through the brim, and it became a question of craniotomy or forceps. I used forceps; and, after a little trouble, delivered her of a living child. She had puerperal mania, and died, though we could discover no injury to the soft parts, and she had no peritonitis or metritis. An old and experienced nurse remarked to me that most of the cases she had known of a female twin whose companion in the womb was a male had had bad recoveries, and difficulty at the time of their confinements; but she remarked, as a general rule, they had no children.

One of the largest of our Gloucestershire farmers remarked to me, "Of course you never expected her to get over her confinement; why, she was just like a free-martin, had no hips at all." This made me ask more about free-martins; and it seemed to be a very general impression amongst all the farmers that I questioned that the free-martin does not breed, and if by chance one does do so, she generally dies.

Following out this inquiry, I asked my brother, an Australian squatter, for his opinion, as his herds numbered many thousands. And he told me that he had never known one breed, or, if she was in calf, she died; that he always had the free-martins killed as bullocks for station-purposes. That he had no trouble in selecting them, from their general resemblance to the bull. Their heads and necks were that of a male; their hips narrow, and devoid of the large hip-bones; and his experience of seeing very many cut up was that their ovaries were misplaced lower in the pelvis, and resembling the undescended male testes. The position of the ovaries were sufficient to account for barrenness, but where the ovaries were in the right position, then the narrow male pelvis was fatal to the animal.

I should very much like to know what Dr. Jenner found in his examination of the free-martins. He was about very much amongst the Berkeley farmers, and I have no doubt his opinions have been handed down from father to son, and very much influence the prevailing opinion of the farmers of the present day in Gloucestershire.

CHAMBERS FOR YOUNG MEN.

CORRESPONDENT writes: A fine range of buildings, known as Temple Chambers, has just been erected on the Embankment, opposite the Guildhall School of Music, and overlooking the Temple in the rear, being in a line with Bouverie Street, Fleet Street. The three upper floors are now to let, for residential or professional use, in separate rooms or two rooms together, and it is very desirable that medical students, especially those of Guy's and St. Thomas's Hospitals, should be aware of the fact that rooms can be had in a perfectly quiet spot in the middle of London, at a cost of less than ten shillings a week; attendance and any meals are supplied on the same cheap scale. There is a resident secretary, a steward, and a night-porter. The warmed and ventilated corridors, having mosaic fire-proof floorings, are accessible by various lifts always in action; the rooms are fairly large and lofty; and hot and cold baths, etc., are always in readiness. The erection of such buildings will go far to solve the problem of where to lodge our students in London, inasmuch as a near approach to collegiate life, with its social intercourse, is here combined with perfect freedom from the restrictions of those time-honoured institutions, our colleges.

A Qualified Assistant's Wages.

F. T. S. writes: The following advertisement appears this week in a medical paper:

"Wanted, a registered assistant, in-door, total abstainer preferred, to attend surgery in the morning, dispense in the afternoon, attend midwifery, and act as tutor for about three hours in the day to advertiser's two sons, aged 10 and 12. Must be a good accoucheur. Salary, £30, and all fees from midwifery attended by himself. Suit a gentleman who liked an easy life."

If this generous advertiser pays his assistant such a sum, I wonder what he pays his cook, for, doubtless, a physician would have a good retinue of servants. Is it possible that the profession is so overcrowded that any British medical practitioner can be found who would accept such an offer—an offer, to my mind, of abject slavery? To work in the surgery morning and afternoon is surely hard work enough for most men; what, then, must it be with night-work, and giving three hours' instruction daily to two young urchins? How can that suit one who liked an easy life? Thoughts fail me when I try to picture the man who dared to make such an offer to members of his own profession.

Duration of Infectiousness in Rötheln.

Mr. J. Cornbill (Ilfracombe) writes: In the Journal of January 15th, Mr. Lennox Browne inquires how long an interval should elapse before a patient recovered from rötheln may mix with others. The supplement to the *Health Journal* (Manchester) for March, 1884, contains a table and diagram illustrating the duration of the latent period, the fever, and the infectiveness of the exanthemata and some allied diseases. The time from the beginning of the eruption in German measles, till the patient ceases to be infective, is there stated to be fourteen days.

An Easy Method of Diagnosing Rötheln from Scarlatina and Measles.

Mr. T. P. Atkinson (Surbiton) writes: According to Mr. Lennox Browne's opinion, the cases which have occurred at Wimbledon, and been pronounced to be scarlatina, are nothing more than ordinary German measles, or rötheln. I myself had the idea that this might prove to be the case, as I have known instances here where the same mistake has been made. Without doubt, the diagnosis now and then in the very commencement is very difficult; but if, from the high state of fever, sore-throat, etc., there is any doubt as to the nature of the case, it is best to defer giving an opinion till forty-eight hours have elapsed, at the end of which time, if it be simply German measles, the rash will either have entirely disappeared, or very materially diminished, and the temperature become pretty nearly normal.

In rotheln, again, the lymphatics are generally enlarged, but rarely the submaxillary glands. In many cases, the patient is scarcely ill at all, and the tongue is neither coated nor abnormally red. Bearing these points in mind, the diagnosis, I think, becomes much more easy.

According to the conclusions arrived at by the medical officers of public schools, no one who has had an attack of German measles should be allowed to mix with others till two or three weeks have elapsed. No one who has been exposed to the infection should be allowed to mix with others till the lapse of sixteen days after such exposure.

Personation at the Examinations of the Conjoint Board.

A. Y. Z. writes: I am surprised to hear that at the first or elementary examination of the Conjoint Board of the Colleges of Physicians and Surgeons no means are taken to prove the identity of the candidates presenting themselves. Thus, when a candidate first makes application in writing by post, his signature is not attested by any witness, and when he presents himself at the time of examination, he does not place his signature in a college-book; hence, the most open and easy road to the fraud of personation. How often this may take place it is impossible to say, whilst one or two simple precautions would entirely prevent, or, at any rate, make extremely difficult the success of any attempt in that direction.

Pilocarpine as a Galactogogue.

Richard Neale, M.D.Lond., writes: In the letter of your Paris Correspondent, page 80, it is stated that M. Chéron has *discovered* the remarkable effect of pilocarpine on the mammary secretion, and that, until his researches, although "some writers have incidentally mentioned the action of pilocarpine as a galactogogue, still, from a practical point of view, nothing seems to have been published upon the subject."

The value of pilocarpine as a galactogogue is now so well known that I should not have thought it needed the aid of the *Medical Digest* to refresh one's memory. Still, for those that need a reference, Section 1,600, ii, will show that, since Ringer, in 1875, drew attention to the subject, others have confirmed his statement.

Hookless Cysticercus in Man.

Dr. McReddie (Glasgow) writes: Professor Wilhelm von Zehender, in his Bowman Lecture, published in the Journal of December 4th, says: "It is worth noting that this cysticercus without hooks, living in cattle, has never been found in the human body, neither in the eye nor elsewhere." With reference to this statement, I have to say that, in 1873 or 1874, in the N. W. Provinces of India, I found this hookless cysticercus on two occasions in the intestines of natives of low caste, who use the flesh of cattle when they can afford it. I carefully examined the parasites, and preserved them for some time, and have no doubt that, if looked for, the hookless worms will often be found in the natives of India of certain castes.

Erratum.—In the paragraph relating to an increase of salary granted by the Belfast Dispensary Committee, *for* "Mr. Mehany," *read* W. J. Meharry, L.R.C.P. & S.Ed., L.S.A., L.A.H.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Percy Boulton, London; Dr. C. R. Illingworth, Clayton-le-Moors; Mr. W. A. Morris, Mandalay; Dr. J. W. Martin, Sheffield; Mr. R. Caldwell, Colchester; Dr. J. Oliver, London; Dr. J. B. Hamilton, Lucknow; Aliquis; Mr. C. M. Brady, Wigan; Dr. Styrap, Shrewsbury; Dr. W. Whitford, Liverpool; Dr. C. F. Knight, Dublin; Mr. C. H. Newby, Southsea; Dr. W. Allard, Tewkesbury; Mr. H. C. Burdett, London; Dr. F. Fitch, Kidderminster; Dr. J. Davy, Halifax; Dr. Idelson, Berne; Mr. A. M. Paterson, Fallowfield; Dr. J. G. Blackman, Portsmouth; Mr. M. R. Ryan, Chatham; Dr. W. J. Meharry, Belfast; Dr. T. Legaré, Charleston, U.S.A.; Dr. R. Prichard, Cardiff; Dr. Thomas, London; Mr. A. Devonald, Penarth; Mr. N. F. Phillips, Southampton; Mr. E. Powell, Nottingham; Mr. A. Bernard, Liverpool; Mr. Dunn, London; Mr. C. Boyd, London; Surgeon-Major R. Anderson, London; Mr. J. F. D. Donelly, London; Dr. Mules, Manchester; Dr. J. S. Gettings, Walsall; Dr. Covernton, Toronto; Dr. Teevan, Ballarat, Victoria; Deputy Surgeon-General Fox, Colchester; Mr. A. W. Benson, Dublin; The Secretary of the Richmond Hospital, Richmond; Mr. C. B. Plowright, King's Lynn; Dr. John Lucas, London; Dr. A. Forbes, Murwillumbah, N.S.W.; Mr. Lawson Tait, Birmingham; Mr. W. T. Stead, London; Messrs. Burroughs, Wellcome and Co., London; The Honorary Secretary of the Nottingham Medico-Chirurgical Society; Dr. T. Savage, Birmingham; The Secretary of the Statistical Society, London; Mr. R. J. Gilbert, London; The Honorary Secretary of the Hospitals Association, London; Mr. J. H. Parkinson, Sacramento, U.S.A.; Mr. F. A. Southam, Manchester; Professor Fraser, Edinburgh; Mr. H. W. Allingham, London; Dr. Clement Dukes, Rugby; Mr. W. Donovan, Erdington; Mr. A. L. Scott, Wimbledon; Mr. J. B. Gabe, Swansea; Mr. E. Ridgway, Liverpool; Mr. E. Haxell, Brighton; Mr. E. Owen, London; Mr. G. S. A. Wayten, Devizes; Mr. L. B. Richardson, Torquay; Dr. Elisa Bono, Testri Levante; Mr. C. M. Jessop, London; Dr. Sutton, Dover; Mr. F. P. Atkinson, Surbiton; Dr. S. W. Hope, Petworth; Mr. W. Young, London; Mr. J. G. Lock, Tenby; Dr. J. E. Edwardes, London; Dr. Foulis, Wylam-on-Tyne; Dr. Gubb, London; Mr. J. A. Rigby, Preston; Surgeon-Major C. Sibthorpe, Fort St. George; Surgeon-Major R. H. Quill, Woolwich; Mr. James Startin, London; Dr. Whitehead, Denver, Colorado; Dr. R. Rentoul, Liverpool; Mr. W. Berry, Wigan; Dr. E. Clifford Beale, London; Dr. W. Hunter, Edinburgh; Surgeon-General J. E. Tuson, London; Miss Rogers, Truro; Mr. J. Cornbill, Ilfracombe; Mr. W. Parry Jones, Wrexham; Mr. F. T. Simson, London; Mr. J. Mitchell, Goughor; Mr. C. R. Owen, Rushden; Dr. Lowther, Grange-over-Sands; Dr. Parker, Liverpool; Messrs. Perry and Norwood, London; Dr. J. W. Moore, Dublin; Mr. G. Rowlands, Richmond; Mr. S. Murphy, London; Dr. A. Alexander, Streatham; Mr. Gabb, Hastings; Dr. Ashby, Manchester; Mr. M. Cameron, Liverpool; Mr. J. W. Measures, Todmorden; Dr. Noel Paton, Edinburgh; Mr. J. H. Hughes, Ombersley, Droitwich; Dr. Ryan, Chatham; Mr. G. Sergeant, Launceston; Mr. J. M. Menzies, London; Mr. H. Sell, London; Mr. W. H. Spurgin, Maryport; Mr. J. P. Doyle, Dublin; Dr. Poore, London; Mr. Power, Portsea; Mr. T. A. Collinson, Chester-le-Street; Mr. A. D. Roe, London; The Secretary of the Parkes Museum, London; Mr. T. Watts, Frampton-on-Severn; Mr. G. F. Blake, Dublin; Dr. Imlach, Liverpool; Dr. G. R. Macphail, Carlisle; Mr. T. Browning, Rushden; Messrs. Maggs and Son, Yeovil; Dr. J. Rogers, London; Mr. G. Eastes, London; Mr. W. S. Paget, Great Crosby; Dr. Gibson, Edinburgh; Dr. Fraser, Salford; Dr. D. H. Cullimore, London; Mr. E. H. Sullivan, London; Mr. S. J. Moore, Bingham; Mr. R. H. Barker, Hull; Dr. W. Gillibrand, Bolton; Dr. Cary Coombs, Castle Cary; Dr. D. B. Smith, Netley; Mr. J. Mackenzie, Sunderland; Mr. A. H. Allen, Sheffield; Messrs. Atkinson and Philipson, Newcastle; Mr. H. Hemsted, Whitchurch; Mr. H. R. Ruckley, High Wycombe; Messrs. Griffin and Co., London; Dr. Barnardo, London; Mr. D. Christie, Letterkenny; Dr. J. Robertson Day, London, etc.

BOOKS, etc., RECEIVED.

Health at School. By Clement Dukes, M.D. New Edition. London: Cassell and Co., Limited.

The Surgeon's Pocket-Book; an Essay on the Best Treatment of Wounded in War. By Surgeon-Major J. H. Porter. Third Edition. London: Charles Griffin and Co. 1887.

Forbidden Fruit for Young Men. By Major Seton Churchill. London: J. Nisbet and Co., 21, Berners Street. 1887.

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☞ To Contributors.

Our contributors are reminded that prolixity is a great bar to publication, and, in consequence of the constant pressure upon space in every department of the Journal, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to decline or hold over indefinitely a great number of communications, chiefly by reason of their unnecessary length.

AN ADDRESS

ON

THE STATE IN ITS RELATION TO THE MEDICAL PROFESSION.

Delivered at the Tenth Annual Meeting of the Dublin Branch, January 27th, 1887.

By T. W. GRIMSHAW, M.A., M.D., M.Ch.Dub., F.K.Q.C.P.I.,

President of the Branch; Registrar-General for Ireland; Consulting Physician to Steevens's Hospital, Cork Street Fever Hospital, and Orthopædic Hospital, Dublin.

Gentlemen,—Members of the Dublin Branch of the British Medical Association, I have to thank you most heartily for the honour you have done me in choosing me as your President for the year 1887. It is a special honour, coveted by many, to occupy the chair of an important Society during the year of jubilee of the reign of Her Most Gracious Majesty.

I accept the honour you have conferred upon me, not only as a token of your appreciation of me personally, and of my humble efforts to serve my professional brethren, but also as a compliment to the office which I have the honour to hold under Her Majesty's Government. I think I may say that my connection with the British Medical Association and her almost twin-sister the Irish Medical Association, contributed in a great measure to that training in State medicine and public affairs which qualified me to undertake, and I hope in some measure satisfactorily to discharge, the duties which have been entrusted to me by the Government.

However opinions may differ as to the political relations which should exist between the various divisions of the United Kingdom, there can be no difference of opinion as to the relations which the members of the medical profession should bear to one another throughout the different portions of Her Majesty's dominions, and not only throughout the dependencies of the British Crown, but also throughout all the States of the world. These relations should be of perfect unity, and while it is our boast and our pride, as members of the British Medical Association, that we count our numbers by thousands, and that the sun, which never sets on the great British Empire, always shines on our Association in some part of the world, we have still a greater and more noble sensation in that we belong to a profession so united in all parts of the world, that we can meet in International Congress almost where we please, without any very special or permanent organisation being maintained for that purpose. No doubt our profession has its defects, like all other human institutions, but I think we may claim that our form of organisation, our power, our wish, our ability to do good, and the benefits we have conferred on mankind, are not inferior to any, and are I believe superior to nearly all professions in the world.

This universality of the profession and the community of its aims throughout the whole world make it of great importance that we should carefully consider the relations which the profession should bear to the State. I do not purpose here to review the relations which the State and the profession hold towards one another under other governments than our own; this has been done by others, and I may here refer to an interesting address delivered by Dr. (now Sir Charles) Cameron, at the first meeting of the Subsection of State Medicine of the Academy of Medicine in Ireland, at the opening of that Subsection in February 1883. A great deal of valuable information on this subject will also be found in the report on State medicine of the General Medical Council in 1869, where especial attention is given to the Prussian Sanitary Code. There are many other scattered references to this important subject to be found in foreign reports, etc., which it would take long to collect and arrange, and the result of the investigation of which I fear would prove far from satisfactory. I at present, therefore, will confine my remarks to the principal relations between the State and the profession as we find them at home.

I shall use the word State here in its widest sense, and shall use it to include not only the central Imperial power, but also all those smaller local governing bodies to which the Imperial authority has in the more constitutionally governed countries delegated so much of its authority. The State in this sense is represented in our Universities and Royal Colleges, and again in our Local Authorities, who exercise so many functions of administration which affect our comfort, our health, and even the continuance of our lives.

If the State is to act on the universally accepted maxim of promoting the "greatest happiness of the greatest number," it is clear that it must enter into most intimate relations with our profession. We have high political authority for stating that "the health of the people should be the first care of a government," and if this is so, and if *Sanitas sanitatis et omnia sanitas* is ever to become a reality and not merely the motto for the professors of a "policy of sewage," it is manifest that our profession must take a highly important position in the fabric of the State. Does our profession occupy such a position? I am afraid the answer must be that it does not, neither in this nor in any other country that I am aware of. We know that the relations between some of the continental States and the profession are much more intimate than they are here, and that even in some portions of the British Empire—notably India—these relations are of a more substantial nature than they are at home, but in no place does the profession receive that measure of State confidence and public respect to which its great public usefulness entitles it. When we consider the intimate relations which exist between the patient and his medical attendant, and the confidential nature of these relations, which can only be compared to those between the penitent and his confessor, it seems anomalous that the State should repose so little confidence in the profession as a whole. Why is this? I think it is largely attributable to the fact that the State has to deal with the profession as a whole. Now, having regard to the large number of its members, and its *generally* high character for education, humanity, and public spirit, it would appear that the profession is deserving of more confidence from the State than it receives. Why does it not receive this confidence? I think the answer is unfortunately too plain, and it is this: that hitherto the profession of medicine has contained within its ranks such a considerable number of men of inferior education, imperfect professional education, and comparatively low social stamp that the State, dreading contact with such unworthy members, declined to place confidence in a profession which contained them. I am thankful to say that these drawbacks to State confidence have been steadily, though slowly, diminishing, and, I think I may state with confidence, are now likely soon to disappear under the new system upon which we are about to enter.

Many of those who have not given sufficient attention to the question, think that these faults in our profession are owing to defects inherent in the profession itself. This is by no means the case; the fault mainly lies with the State, which has permitted certain authorities, upon which it had conferred great powers, to exercise those powers merely for the purpose of making money, by conferring diplomas certifying to sham qualifications which their holders never possessed.

These diplomas entitled their holders to the privileges of members of the profession in common with those who, after long and arduous study, had obtained qualifications through the high-class universities or superior medical corporations. I say this has been distinctly the fault of the State, from which these miserable traffickers in the sale of diplomas derived their power. The State is not yet free from blame in this matter, for although an Act of Parliament has recently been passed which will, if properly administered, put an end to this disreputable state of affairs, yet, practically, Parliament has refused to protect the public against the grosser forms of quackery. Dr. Bardesly, in his presidental address to the annual meeting of the Association, at Cheltenham, in 1837, said: "It is a humiliating circumstance that in this enlightened country quackery is openly protected by the Government, whilst in almost all the other states in Europe it is prohibited under severe penalties." Yet this is still true after the lapse of half a century, and persons without the faintest knowledge of medicine are allowed to trifle with the health of their dupes, practically free from all penalty. A person who pretends to be wealthy when he is not, and obtains credit by his pretence, is deemed to be a criminal, and prosecuted as an impostor who has obtained money or goods under false pretences; but the person who pretends to a knowledge of medicine, pretends to cure disease, and thereby endangers the health or life of his dupes, incurs no penalty whatever, but is treated in the same privileged fashion as fifty years ago.

The State will in future have no grounds for refusing confidence to our profession on the ground that it contains unworthy members; on the other hand, the profession may look with some suspicion on the State so long as "quackery is openly protected," and the State obtains a portion of its revenue from the sale of quack medicines.

The State has at last secured the profession against the admission of unworthy members, but I am bound to say that successive Parliaments which have dealt with this question have shown but little zeal in solving it, and would probably not have done so, had it not been for the persistent efforts of the British Medical Association, through its Medical Reform Committee, guided by the self-sacrificing and energetic labours of Dr. Edward Waters, who led the medical reformers to victory in 1886, after a fifty years' struggle, during one-half of which he was their active leader. It would not be an useful expenditure of time to trace the history of medical reform in connection with the Association for half a century, but, nevertheless, you will, I think, be interested in a short reference to the subject, which has a connection which few are aware of with an eminent Dublin man.

The Association was but one year old when Dr. Barlow, at the Bristol meeting in 1833, calling attention to this question, said:

"The state of the profession ought to be such, that all its branches should be in harmony with each other, cordially co-operating for the advancement of science and the public good.....But in the present political organisation of the profession, there are many disturbing forces which tend to weaken its energies, and to place individual interests, real or supposed, in collision with those duties which science and humanity enjoin.....The evils to which a complex and discordant state of the profession give rise.....are very generally felt, and must soon engage the attention of the Legislature, which, it is to be hoped, will give them a full and scrutinising investigation. By a forced and unnatural division of offices, the profession has been split into departments, each attempting to pursue a separate course, while the natural unity that characterises the whole has been too much overlooked. Each department has had assigned to it a separate superintendence, the aim of which has been to advance its interests without reference to the other branches, while there existed no institution for regulating and combining the whole, so as to adapt their several energies for their collective well-being and the public good..... What we now need is not a rectification of slight errors, but a general revision of the whole profession, and such an arrangement of it as would render the good of each branch compatible with the whole..... Government of the profession by separate and independent corporations has been fully tried, and has utterly failed. As experience can no longer be pleaded in its favour, it would now be wise to try whether that course which reason and sound policy dictate, might not be beneficially substituted; whether the establishment of one presiding institution in which all minor corporations should be consolidated, might not realise a system of adequate protection and efficient control such as the separate and independent authorities have never yet afforded. By the establishment of such an institution, no revolutionary changes need take place; each department continuing, as now, to exercise its functions to whatever extent the public exigencies might demand; but the adequacy of each branch to its allotted duties could be more effectively insured; collisions at once inconsistent and injurious could be prevented; equality of qualifications in each respective branch be promoted, so as to remove all necessity for partial restriction; freedom be thus given to individuals to practise as interest or inclination might incline; and that harmony be established among the several branches, which the public good, the interests of science, the collective welfare of the profession, and the happiness of the individuals composing it, imperatively demand; an arrangement of the profession which should accomplish these valuable purposes may yet be distant."—(*Transactions of the Provincial Medical and Surgical Association*, vol. ii, p. 28, *et. seq.*, 1834.)

From this time forward until the year 1886, the Association pursued its purpose of insisting on such a measure of medical reform as would secure the abolition of the unseemly competition between licensing bodies, which had tended so much to degrade the profession of medicine, injure the public, and prevent State confidence in our opinion. This important subject was dealt with in many presidential addresses; and at the Bath meeting in 1838, Dr. Macartney, of Dublin, moved the appointment of the first Medical Reform Committee of the Association, the main duty of which was to prepare and present a petition to Parliament on behalf of the Association in favour of medical reform. The petition contained, among other matters, proposals for the appointment of examining boards for each division of the United Kingdom, which reform, the petition stated, would not disturb the "existing grades of the profession." The prayer of the petition was as follows:—

"Finally, your petitioners, confident that the time has arrived when the intervention of Parliament is imperatively called for to give to the medical profession a sound legal constitution, and deeply impressed with the conviction that an adequate and uniform education, with community of rights and privileges, constitutes the only sure basis on which to found such constitution, humbly beg that the necessary legislative enactments may be passed for establishing in each division of the United Kingdom one superintending body, founded on the same principles and governed by similar regulations, through whose examinations, and by whose licence alone, shall admission to the profession be in future attained."—(*Provincial Medical and Surgical Journal*, vol. viii, p. 42, *et seq.*)

It has taken well nigh half a century to carry out the principle of Dr. Macartney's proposal, and it is some satisfaction to us to know that our Branch of the Association may claim retrospectively the credit of having inaugurated the Medical Reform Committee of the British Medical Association. Dr. Macartney's committee seemed to me inclined to go a little too far towards what has been called the "one-portal system," and I believe a compromise has been arrived at by the Act of last year, which, with good administration by the newly constituted Medical Council, should accomplish all that is really necessary for the honour of the profession, and the welfare of the public. It is thus owing to the action of the Association that we have arrived at an arrangement by which, in future, the term "legally qualified medical practitioner" will mean a *bonâ fide* fully qualified medical practitioner, and entitle us to claim the full confidence of the State.

The medical profession has two principal relations to the public; namely, those comprised under the heads of the prevention of disease, and the cure of disease. While the duties under the former head have to be mainly performed towards the public in its collective capacity, those under the latter have to be mainly rendered by individual members of the profession to individual members of the public. While the relative scope of preventive and of curative medicine may be thus respectively defined in general terms, it is clear that preventive medicine must often be practised individually; as, for instance, when we advise as to family hygiene and healthy homes. Curative medicine may also be practised collectively where the poor law medical officer or the medical officer of a hospital or public institution treats large numbers of sick on an organised system of medical attendance. When viewed from a State stand-point this crossing of the functions of the profession in its private and public capacities presents difficulties which must necessarily complicate the relations between the State and the profession.

These difficulties are not insurmountable, though their existence must be admitted by all persons, and indeed, a considerable number of them have been surmounted slowly and by a sort of quiet progressive development through the public medical system of Ireland.

There is no more suitable occasion than that of the meeting of the Dublin Branch of the British Medical Association, for the discussion of the problems of State medicine. Dublin has always been the home of State medicine; I have already pointed out that a Dublin man moved the first formal resolution in the British Medical Association in favour of medical reform, so again when the subject of sanitary reform was prominently brought before the Association by Dr. Jeffreys, the President of the Liverpool meeting in 1839, a strong deputation sent from Dublin by the Irish Medical Association was in attendance; this deputation consisted of Mr. Carmichael, Dr. Jacob, Dr. McDonnell and Dr. Henry Maunsell. The president on that occasion said:

"'Hygeia' was a subject in this country, comparatively speaking, neglected.....and this may be said without detracting from the great merits of those authors who have afforded aid to the student by their writings on this subject, namely, Dr. Southwood Smith, on the *Philosophy of Health*; Andrew Combe, on the *Principles of Philosophy*; R. Dunglisson, on *Human Health*; Alexander Kilgour, on *Hygiene*; Hodgkin's Lectures, (*Transactions of the Provincial Medical and Surgical Association*, Vol. viii); and Garnet Dillon's letters on the Mortality of the Metropolis; and last, though not least in importance, our talented associate now present, Dr. Maunsell's recent pamphlet on *Political Medicine* (see *Dublin Medical Press*, February 6th, 1839).

Dublin still maintained the character gained for it by Henry Maunsell, and although the subject of State medicine was not neglected in presidential addresses at the annual meetings of the Association, it was not until the great Dublin meeting of the Association was held in 1867, under the presidency of Dr. Stokes, that the subject was taken up energetically, and assumed its place in the permanent programme of the Association. At this meeting, Dr. Henry Rumsey

moved his celebrated resolution, which was seconded by Dr. Alexander Patrick Stewart, and carried unanimously, namely: "That this Association do express its decided approval of the plan proposed by Dr. Farr, namely, the appointment of a registration medical officer in every registration district or group of districts, with medico-legal and sanitary functions, and pledges itself to support that measure, as the initiative step to a national organisation for purposes of State medicine."

On this followed another resolution, moved by Dr. A. P. Stewart, and seconded by Dr. Sibson: "That the Committee of Council be instructed to direct their early or special attention to the amendment of the sanitary laws; to invite the co-operation, for this end, of the Council of the National Association for the Promotion of Social Science; and to urge the Branches of this Association to promote the same object by local efforts, by representations to individual members of Parliament, and, if need be, by deputations to Her Majesty's Government." This was also unanimously adopted, and the Joint Committee on State Medicine of the British Medical and Social Science Associations was formed. This Committee, by memorialising the Government of the day (May 22nd, 1868), obtained the appointment of the Royal Sanitary Commission of 1869, upon whose report all important legislation regarding State medicine has since been based. Not only was the report of this Commission the foundation of the present sanitary system of the United Kingdom, but it may be said to have also modified very largely our system of local government, especially in rural districts; in fact, it was to meet the changing state of affairs promoted by this Commission that our old Poor-law boards were converted into Local Government Boards. Thus the present relations between the medical profession and the State, so far as civil duties for the prevention and cure of disease are concerned, may be said to have sprung from the Dublin meeting of the Association.

It is admitted by all political parties and by all classes of the community that the present system of local government in these countries is unsatisfactory. We all know that, by the common consent of all parties, and at an early period, some large measure of local government must be brought under the notice of, and be at no distant date passed into law by, the Legislature. Under these circumstances, it behoves our profession to see that, in any new system which may be established, ample provision is made for an efficient civil medical service in accordance with the main principles laid down by the Royal Sanitary Commission of 1869, and that none of those abuses and imperfections which have marred our present sanitary system (if system we can call it) should be perpetuated.

The recommendations of the Royal Sanitary Commission of 1869, now nearly eighteen years ago, were summarised by me in a paper which I had the honour of reading before the meeting of the British Association for the Advancement of Science at Belfast in the year 1874, as follows:—1. A codification, consolidation, and amendment of existing laws. 2. Convenient areas of administration, with easily workable sub-areas. 3. Uniform local authorities, without clashing of jurisdiction. 4. A complete executive organisation. 5. Constant supervision by the central authority. 6. Security for a certain amount of independence for the local officers from the local authorities.

I then also made certain suggestions which appeared to me at that time suitable for carrying out the recommendations of the Royal Commission. Many things have happened since that time. The laws regarding public health have been codified; an attempt has been made, and in Ireland very successfully, to provide convenient areas of administration; uniform local authorities have not, I regret to say, been yet secured, and here it is, as I have already stated, that all political parties are agreed that amendment is required. I am sorry to say that the complete organisation does not exist anywhere in the United Kingdom except in Ireland, where it really is complete, though possibly not working as perfectly as we could desire. The Central Control is vastly improved compared with what it was in 1874, and in Ireland we have now provincial medical inspectors of the Local Government Board exactly of the class required for the supervision of our State medicine system. I am afraid the sixth point, namely, security for the independence of local officers, has not yet been arrived at anywhere, but the protection afforded by the provincial inspectors in Ireland must have done a great deal in this direction.

I have repeatedly referred to the Public Medical Service of Ireland as a model to be studied by those who wish to construct a perfect system of State medicine. It is quite unnecessary for me to discuss the history and development of this important organisation. Many years ago it was dealt with by my friend the late Dr. Thomas Isler Maunsell, and again has been recently fully discussed and considered from every point of view by Dr. Mapother in his able address in Public Medicine at the Brighton meeting of the Association in August last. It is, however, well that we should keep in our mind's eye, and that the public should know, both here and elsewhere, that we have in Ireland a public medical service which, so far as I know, approaches more nearly to theoretical perfection than that of any other country.

Ireland is divided into 161 unions, each with its central hospital, which hospital has its own medical officers and staff; each of these unions is divided into "dispensary districts;" the old name is still retained, although these districts are really areas for nearly all public medical purposes. Of these districts there are nearly 800, each of which has its medical officers, who—and here is the great superiority of the Irish system—is medical officer of health, medical attendant on the sick poor, public vaccinator, and registrar of births and deaths, thus combining in his own person all the public medical duties of his district. It is unfortunate he is called "dispensary medical officer;" it would be much better he was called "district medical officer," for such he now is. In order to connect this officer with the centre of local government of his district, he is the officer of the board of guardians, which is the rural sanitary authority of the union in which his district is situated; in case his district is in whole or in part situated within the boundaries of an urban sanitary district, he is *ex officio* the officer of the urban sanitary authority. No doubt, in this case, there is that want of uniformity in local authorities, with a possible clashing of jurisdiction which was so condemned by the Royal Sanitary Commission. It is to be hoped that this difficulty will be overcome by impending legislation for local government. Again, in the case of the Rural Sanitary Districts, we have a consulting medical officer of health, and, in Urban Districts, also a similar officer, together with a superintendent medical officer of health. These officers have not hitherto occupied such an important position as, in my opinion, they should hold. They should be at the call of all the district officers for special advice in all difficult cases, and should have a superintending function in all districts, just as the superintendent medical officer now has in some of the urban districts. These officers, it is to be hoped, will, in course of time, be specialists in State Medicine, and largely fill the position suggested by Dr. Rumsey's famous Dublin resolution. There is also, for each union, a superintendent registrar of births and deaths, whose office is at the union workhouse, who collects and takes charge of the returns made by the district registrars. There is also a hospital for the treatment of those cases which cannot be properly dealt with by the dispensary medical officer in the patients' homes. There are many defects in the working of this theoretically perfect system, but these can be removed by improved local administration, which, I am afraid, will not be attained until a reform in our system of local government takes place.

In addition to the local State medicine organisation which I have described, the Local Government Board has recently established provincial medical inspectors, one for each of the four provinces into which Ireland is divided, to look after and superintend all medical matters in his district, thus securing the constant supervision by the central authority so much insisted on by all promoters of sanitary reform. These provincial inspectors have their head in the central office in Dublin. I have watched the gradual development of this service for many years until it has reached its present almost fully organised condition. I have for some years been in contact with nearly all its parts as head of the statistical arm of the State Medical Service of Ireland. I can affirm with considerable confidence that a more complete and efficient State Civil Medical Service does not exist in the world. No one knows its weak points and failings better than I do; nevertheless, I think I may safely say that when these failings so seldom come before the public they cannot be very gross or numerous.

This important service is not nearly so much appreciated as it should be, and consequently is not made sufficiently attractive in pay or position to induce superior men to enter it in sufficient numbers. A "dispensary doctor" is too liable to be looked down upon. It is hard to say why, unless it be that Sir Dominic Corrigan's plan of admitting men to the service only through a special examination was rejected. There can be no doubt that the qualifications required of a dispensary medical officer should be superior to those for any other service, not—I hope my military friends will excuse me—excepting the military and naval medical services. When we contrast the conditions of admission to the medical profession in this country and the state of our public medical service with those described by Dr. Billings in his address in medicine at Brighton as prevailing in the United States of America, we may well be thankful that our profession is free from the freedom which it enjoys among our Transatlantic cousins in that great Republic whose institutions in so many respects are nearer akin to our own than to any others in the world.

Time does not permit me here to refer to the other great medical services of the State in the Army and Navy, but I think many of the remarks I have made may, with little alteration, be applied with truth to those services. There the necessity of the services has made the organisation and control more complete than in the Civil Medical Service, and while the Civil Medical Service requires some militarism introduced into it, to make it more systematic in its working, I think, as a civil servant, I may be allowed to suggest that a little more of the individual responsibility found in the Civil Medical Service might with advantage be introduced into the military medical service.

Besides the points connected with the State medical services with which I have dealt, there is another specially brought forward in Dr. Rumsey's resolution, to which I have already called attention, and which has, indeed, largely served as a text for this address, namely, the proposal of Dr. Farr (*Vital Statistics*, by William Farr, edited by Noel Humphreys, London, 1885, p. 225), to appoint superintending registration officers, who should investigate matters connected with public medicine—such as epidemics, etc., but more especially to act as medical experts at coroners' inquiries. I do not think, in the present day, anyone will be found to advocate exactly Dr. Farr's proposal, but nevertheless I think all the members of our profession agree, and a great number of the public will support them, in the opinion that our present system of conducting medico-legal inquiries is a scandal which should be got rid of. The proceedings in coroners' courts, looked at from a medical point of view, would in many cases be ludicrous, if they were not melancholy in the extreme. I am not an advocate of the principle that coroners should be members of the medical profession; on the contrary, I think coroners should be lawyers, but I am of opinion that there should be regularly appointed medical assessors, not only to coroners' courts, but to all courts of justice where medical evidence is received. I believe this expert medical evidence would be best provided by either the superintendent medical officer of health or by inspecting officers of the Local Government Board. I think it more than probable that the former would be found to be the proper officers for the purpose. I do not propose at present further to discuss this very difficult question. It must, however be borne in mind by all who desire to see the public health preserved and improved, to have the sick poor properly provided for, and to have justice properly administered where medical evidence is essential to the arrival at a correct judicial decision—that changes in local government are the most likely means by which these objects can be secured. We have reason to hope that in the impending changes all these matters will be carefully considered and earnestly dealt with if only our profession, through its public medical bodies, make proper representations in proper time. I hope I may be excused if I may seem to have spent much time in dealing with these points; my apology must be the great importance of the subjects discussed, and the selfish pleasure I take in dealing with questions to which I have devoted a considerable portion of my time and attention, and upon which I can speak with some degree of authority.

We are now approaching a great gathering of the profession in Dublin, which naturally reminds us of the meeting of our Association in Dublin in 1867, when so many of the questions I have been speaking of were in their infancy, and when our Association, though over thirty years old, was small as compared with what it is now. It numbered then less than four thousand, now it is more than twelve thousand strong. The Dublin meeting of 1867 was the greatest ever held up to its time, and it was long before it was surpassed; let the Dublin meeting of 1887, the jubilee year of our most gracious Queen, still further surpass all its predecessors, if that be possible. As President of the Dublin Branch, I can promise our Fellow Associates a hearty welcome when they come to visit us in August of this year.

THE SECRET REMEDIES OF BERLIN.—In the list of "secret remedies" of which the Berlin police have published a series of analyses in the daily press are the following: "Bauer's Consumption Cure" consists of a decoction of malt and apples; "Volkmann's Drunkards' Cure" is a mixture of gentian and lycopodium; "Baretta's Stomach Powder" is a mixture of bicarbonate of soda, with cream of tartar, milk, sugar, sal ammoniac, chalk, and a trace of pepsin; "Harz's Mountain Tea" consists of a mixture of peppermint, lactuca, liquorice, sassafras, lavender, and milfoil.

TREATMENT OF TUBERCULOSIS.—Professor Potain prescribes the following mixture for tuberculous patients: Chloride of sodium, 10 grammes; bromide of sodium, 5 grammes; iodide of potassium, 1 gramme; distilled water, 100 grammes. The above ingredients to be dissolved, and administered in doses of one teaspoonful in a cup of milk every morning.

REPORT

TO THE

SCIENTIFIC GRANTS COMMITTEE

OF THE

BRITISH MEDICAL ASSOCIATION.

THE DURATION OF LIFE OF RED BLOOD-CORPUSCLES AFTER TRANSFUSION, IN ITS BEARING ON THE VALUE OF TRANSFUSION IN MAN.

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THE question of the normal life-duration of red blood-corpuscles may be regarded at first sight as of comparatively little importance, either from a scientific or a clinical point of view. I propose to show in the present paper that such is far from being the case, and that a study of this subject is not only of scientific interest, but is one of prime practical importance when viewed in its relation to the important question of the value of transfusion of blood in man.

Numerous attempts have been made from time to time to ascertain the life-duration of red blood-corpuscles by transfusing the blood of one animal into the circulation of another, with corpuscles of different size or shape, and then endeavouring to note how long the foreign corpuscles remained discoverable in the body of their host. The first attempt of this nature made was by Marfels and Moleschott in 1856 (Virchow, *Archiv*, Bd. xxvii, p. 260, quoted by Panum), who stated that they could recognise the blood-corpuscles of the sheep in the circulation of the frog months after injection, and were hence of opinion that the normal duration of life of the red corpuscles must be a very long one. In the following year, Brown-Séquard (*Jl. de Physiologie*, i, 173-175) made some similar experiments, with somewhat anomalous results; for whilst the corpuscles of dogs and rabbits were recognisable by him months after their injection into fowls, on the other hand, those of the fowl were not to be found in the circulation of dogs or rabbits, even after the lapse of one hour.

It is now certain that the former of these observations were erroneous, since, as we now know from the numerous observations of Panum, Landois, Ponfick, and many others, the method of experiment employed was doomed from the outset to failure, the injection of blood derived from an animal of another species—that is, dissimilar blood—acting as a poison, causing rigors, fever, hæmoglobinuria, and, if in sufficient quantity, suppression of urine, and death; the blood-corpuscles of such blood breaking down, and giving up their hæmoglobin within a few hours after their injection. As may be readily understood, therefore, the success of such experiments has not been very great in throwing light on the life-duration of red corpuscles under normal conditions.

It is thus evident that the only way in which, by means of transfusion, any information can be obtained which will bear on this question of the normal life-duration of red blood-corpuscles is by transfusion of "similar" blood, that is, blood derived from an animal of the same species.

That the corpuscles of such blood continue to live—for a certain time, at least—in the body of their host is to be assumed from the results of some of the very earliest experiments on transfusion, such as those of Dr. Lower, in 1666, in which, by repeated bleedings, followed by transfusions, the whole of the blood of a small dog was completely removed, and replaced by the transfusion through its vessels of the entire mass of blood obtained from a much larger one; the smaller animal, nevertheless, after the operation, remaining apparently in perfect health, although all its own corpuscles must have been entirely lost.

The first observer, however, to make any direct attempt to ascertain the life-duration of such transplanted corpuscles was Panum, in 1863 (Virchow, *Archiv*, xxvii, p. 240). His method was crude and laborious; but, such as it was, it sufficed to furnish him with some data, accurate so far as they went. Panum calculated the number of corpuscles present at any time in the blood by withdrawing a portion of it, and estimating the specific gravity of the defibrinated blood and

of the blood-serum. The difference in the specific gravity of the two he ascribed to the presence of the corpuscles in the former. By withdrawing blood from a dog, and replacing it with an equivalent quantity of defibrinated blood, he succeeded in this way in showing that, two days later, the number of corpuscles which remained was almost unchanged, and that, three days later, the great majority of them still remained within the circulation. It was thus proved that blood-corpuscles were capable of living at least five days after transfusion, in all probability their life-duration being even longer.

It was obviously impossible, by such a crude method as this, to ascertain the further fate of these corpuscles, or determine their life-duration. This could evidently only be done by actual enumeration of the corpuscles, a method of investigation at that time unknown. Even with this, however, the results obtained have not been so definite, as might *a priori* have been expected, the reason of which is not far to seek.

There are only two conceivable ways in which, by means of transfusion, the life-duration of red blood-corpuscles can be determined, namely, either by transfusion after previous withdrawal of some of the animal's own blood, or by transfusion without any foregoing depletion. Both methods are open to fallacies and objections. In the former case, by withdrawing some of the animal's blood before the transfusion is made, we lose the standard by which to estimate the extent of the increase in the number of corpuscles afterwards. Not only is it impossible for us to determine, after the loss of blood, the number of corpuscles which remain, but by our procedure we introduce the fallacy of an increased production. In other words, the regeneration of blood-corpuscles after loss of blood is such a variable process, extending, it may be, over days or weeks, according to the extent of the loss and the condition of the animal, that it would be absolutely impossible for us, in any given case, to state, for example, a week after the transfusion, what proportion of the corpuscles present belonged to the animal itself, and how many, on the other hand, were derived from the blood transfused. The difficulty is one which, from its very nature, it is obviously quite impossible for us to overcome.

It might be thought that in the other method, namely, transfusion without any foregoing depletion, we have at hand a ready means of obviating this objection, and getting rid of the above difficulty, since, under such circumstances, the standard number of corpuscles present, previous to the transfusion, is in no way interfered with, and the duration of the increase in the number of the corpuscles after the transfusion will thus afford an indication of the life-duration of the corpuscles transfused.

This is, indeed, the case, so far as the latter are concerned; but the question then arises (nor is it one to be answered at once) how far the life-duration of such corpuscles can be regarded as affording us a criterion of that of the normal corpuscles; for it must be remembered that, by such a transfusion of blood, we bring about for the time being a condition of plethora of the blood, a condition which in no case can be regarded as normal, but which, on the other hand, all experience proves to be one which the organism strives to rid itself of as speedily as possible. The same argument applies to the state of over-distension produced by the introduction of such large quantities of blood into the vascular system. It is indeed true, as Worm-Müller[1] and Lesser[2] have shown, that large quantities of fluid may be introduced into the vascular system without causing any marked rise in the blood-pressure, or any great disturbance, the injection of fluid, even to the amount of 150 per cent., raising the blood-pressure but little, and that only temporarily; but, on the other hand, all observations go to show that a certain average condition of the blood is constantly maintained, both as to quantity and quality, and any departure from this is rectified as soon as possible. In the case of an excess of fluid, this is got rid of at once by becoming excreted; in the case of an excess of blood-corpuscles, the return to the normal condition can only be effected by an increased activity on the part of those organs of the body normally concerned in blood destruction, and thus the transfused corpuscles are placed under conditions differing considerably from those under which blood-corpuscles normally exist in the circulation. This method of transfusion, however, is the one by which we can arrive at the closest approximation to the truth regarding the life-duration of normal red blood-corpuscles.

It is possible that, by the use of an entirely different method of investigation, our object might be equally well, if not better, attained. The close qualitative relationship which subsists between the destruction of hæmoglobin and the formation of bile-pigments has been now fully established in many of its bearings by a number of observers—Stadelmann, Tarchanoff, and others—but the quantitative relationship remains as yet undetermined. If it were possible for us to estimate accurately the total quantity of bile-pigment daily excreted, we might then, by reference to the probable mode of breaking-up of the hæmoglobin molecule, calculate out what amount of hæmoglobin was daily broken up, and in this way arrive at an estimate as to the number of corpuscles required to furnish this hæmoglobin, and the probable duration of their life. The information thus obtained would probably be more accurate and reliable than that obtainable by any other method. Such a method of investigation has not yet been found practicable, owing to the many difficulties connected with the exact quantitative estimation of the bile-pigments.

Results obtained by Transfusion without Previous Depletion.

The observations already made on the life-duration of corpuscles after transfusion have not been numerous. Worm-Müller (*Transfusion und Plethora.* Christiania. 1875) found, after transfusion of blood in dogs, that two or three days later the number of corpuscles closely corresponded with that previously present *plus* those injected. This condition, however, did not long continue. In a few days, the corpuscles began to diminish in number, and in a few weeks at most they had fallen again to their original number. The greater the quantity of blood transfused, the longer did this process of destruction and removal take; for whilst after the transfusion of 20 to 30 per cent. of blood, the whole of the injected corpuscles were removed in the course of a few days, on the other hand, after the injection of 60 to 80 per cent., their destruction was not complete for a period of two to three weeks. According to these observations, therefore, the longest possible life-duration of corpuscles after transfusion in dogs would be about two to three weeks.

With this estimate, Quincke's[3] observations agree. The life-duration of the red corpuscles in dogs he also judges to be about two to three weeks. His method of investigation was the same, namely, the intravenous transfusion of blood; but instead of enumerating the corpuscles, he estimated the hæmoglobin percentage of the blood. This method of investigation is open to considerable fallacy, especially after transfusion of blood; since, under such circumstances, and especially a week or two after a transfusion, the hæmoglobin percentage and the number of corpuscles do not always necessarily correspond. In my own experiments, it was sometimes found, at the end of a week or two, that the percentage amount of hæmoglobin remained considerably increased, at a time when the number of corpuscles had fallen to the normal, sometimes even below the normal. With this qualification, Quincke's results may be accepted as corroborating the accuracy of Worm-Müller's estimate.

My own experiments go in the main to confirm the accuracy of the results thus arrived at.

The method of investigation employed by myself differed somewhat from that hitherto adopted. The blood, instead of being transfused directly into the circulation through a vein, was introduced indirectly through the peritoneal cavity, the absorption from which, however, mainly through the lymphatics of the diaphragm, is so rapid, that such a method of procedure may almost be regarded as a very slow and prolonged method of intravenous transfusion. In some respects, indeed, it offers for purposes of experiment of this nature some advantages over the direct venous transfusion of blood, since, apart from the greater simplicity with which the transfusion can be made—involving, as it does, a mere puncture through the abdominal wall,—and the entire absence of any risks of danger from the occurrence of embolism, or thrombosis, the absorption of blood from the peritoneal cavity is so steady and continuous, extending over a period of twenty-four or forty-eight hours, that time is given during the absorption for the gradual removal of the excess of fluid from the blood, and hence little or no distension of the vascular system can occur, such as must be present immediately after the intravenous transfusion of large quantities of blood. On the contrary, the serum of the injected blood is removed as it is absorbed, while the blood-corpuscles remain; and thus, with comparatively little disturbance, we are capable of introducing a large excess of corpuscles into the circulation, and in this way bringing about the very condition required for our purpose.

The method is naturally open to the objection that the fact of the corpuscles having been first extravasated into a serous cavity before they can reach the circulation may possibly affect their vitality, and thus probably shorten their life-duration. That a certain number of them suffer a local death within the peritoneal cavity is certain, but this fact affects in no way the vitality of those absorbed; and the results, indeed, prove that their vitality is in no way, or at least to no

[1] *Transfusion und Plethora.* Christiania. 1875.
[2] *Ber des Physiol. Instit.* Zu Leipzig. 1875
[3] *D. Archiv f. Klin. Med.*, Bd. xxv, p. 567; and xxvii, p. 193.

material extent, affected by their temporary sojourn in the peritoneal cavity.

The results obtained in this way, although marked by individual variations in each experiment, presented a sufficient number of features of similarity. Thus after the injection of entire blood, the amount of absorption was found to depend greatly on the rapidity with which coagulation took place within the abdomen; the longer this was delayed, the greater naturally being the absorption, and conversely (Figs. 1, 2). After the injection of defibrinated blood, on the other hand, the amount of absorption was fairly proportional to the quantity of blood injected, and its rapidity fairly uniform throughout the whole period of absorption (Figs. 3, 4).

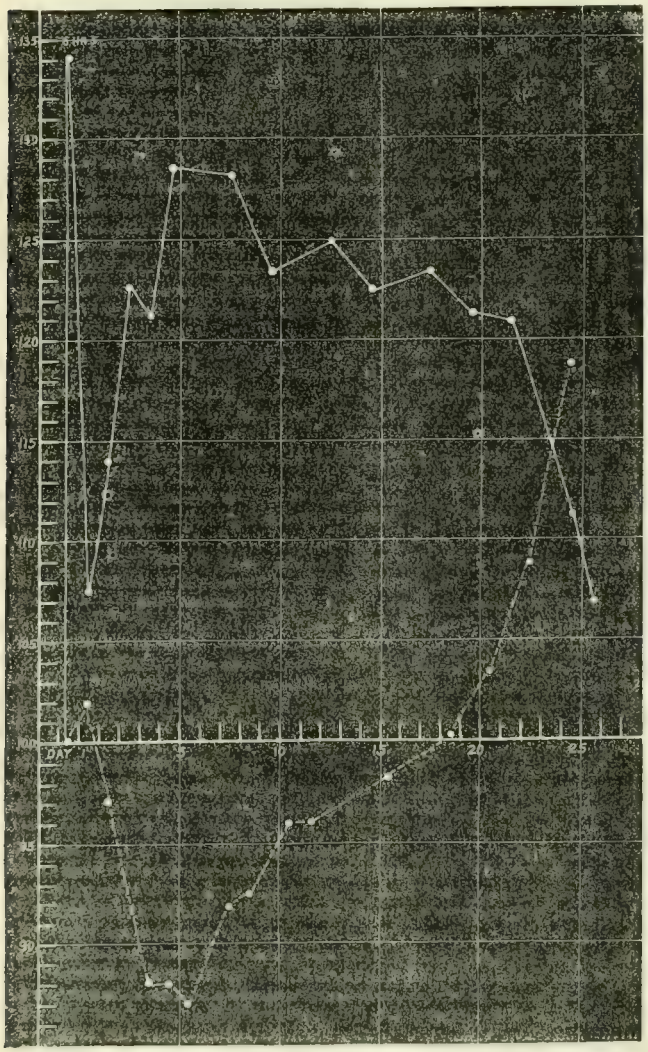


FIG. 1.—*Experiment III.* Entire blood injected to the amount of 92 per cent.

In the case of entire blood, the time taken for the maximum increase in the number of corpuscles to be attained was from three to five days; in the case of defibrinated blood, somewhat shorter, namely, two to three days. This period did not represent the time actually taken for the absorption to be complete; on the contrary, the absorption was probably complete by the end of the first twenty-four or thirty-six hours, the subsequent rise in the number of corpuscles which then occurred being merely due to the removal of the excess of serum from the blood, leaving the corpuscles remaining within the circulation.

From the period of maximum rise, a more or less rapid fall in their number took place, till, at the end of a varying time—depending partly on the extent of the original increase, partly on other circumstances presently to be noted—the number of corpuscles had regained the normal. The time taken for the complete removal of the excess of the corpuscles might, therefore, be regarded as representing approximately the life-duration of those of the corpuscles which had survived longest in that particular case—provided always that the possibility of an increased production of corpuscles in the meantime could be entirely excluded.

When it is stated that the extent of the increase in the number of corpuscles during the first two or three days amounted in some instances to 20, 30, or even 40 per cent. of the number originally present, it will readily be admitted that there could be little doubt as to its nature; that it must have been due to an actual absorption of corpuscles from the abdomen, and in no way the result of any increased production. This latter possibility was further excluded by the fact, that so far from the condition of the animal

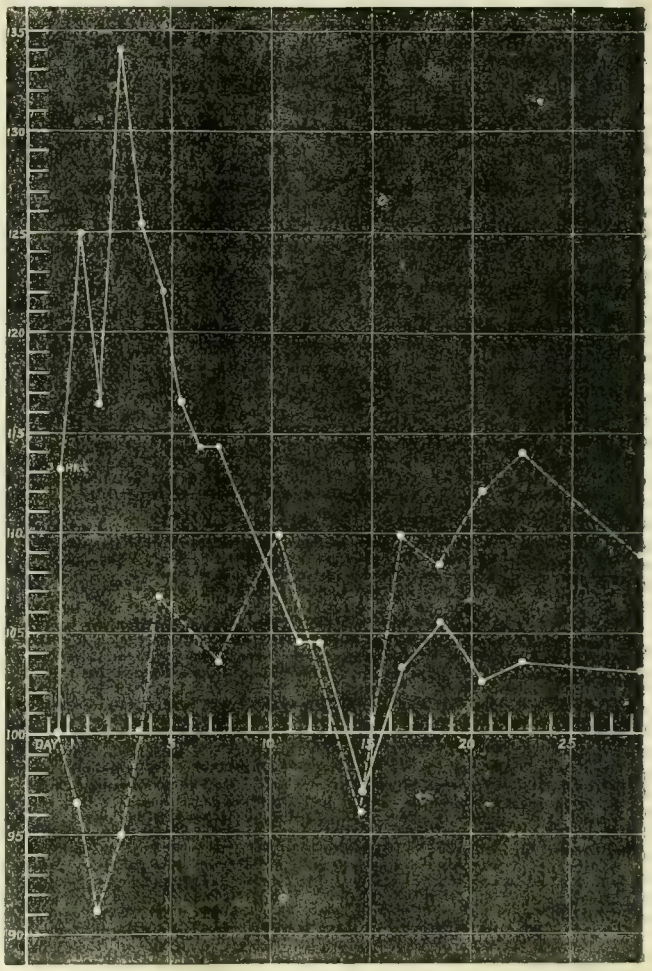


FIG. 2.—*Experiment V.* Entire blood injected to the amount of 70 per cent.

being improved during these early days after the transfusion—as one would naturally expect if an increased formation of corpuscles were taking place—the very reverse was the case, a considerable fall in body-weight almost invariably occurring after the operation, so that the greatest increase in the number of corpuscles was always coincident with the greatest fall in body-weight.

In the case of entire blood, in seven experiments,[4] the time taken for the complete removal of the excess of corpuscles varied from 5 to 26 days. In five of these, the time varied from 14 to 26 days, namely, in two, 26 days; in one, 21 days; in one, 19 days; and in one, 14 days. In the other two, the time taken was 5 and 6 days respectively; but, in both cases, the increase was so slight—owing to the small quantity of blood injected, and the early occurrence of coagulation—that, for the present, they may be disregarded. The life-dura-

[4] The experiments from which these results are obtained have been recorded in detail in my paper on "Intra-peritoneal Transfusion of Blood," etc., *Jl. Anat. and Physiol.*, October 1886, and January 1887.

tion of the injected corpuscles varied, therefore, from 14 to 26 days, or, on an average, about three weeks.

In the case of defibrinated blood, the time varied from 14 to 21

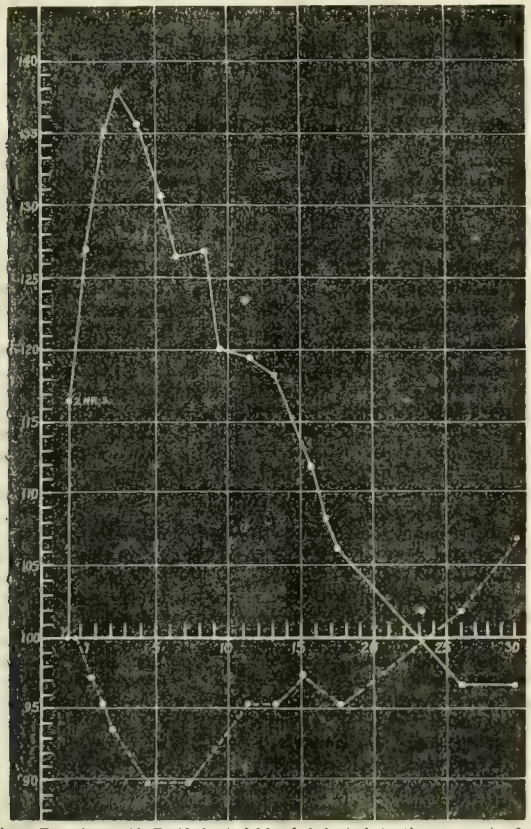


FIG. 3.—*Experiment X.* Defibrinated blood injected to the amount of about 70 per cent. (scale more reduced).

days; on an average, 17½ days. We may, therefore, conclude from these experiments that the longest duration of life of the red corpuscles after transfusion in rabbits is about three to four weeks.

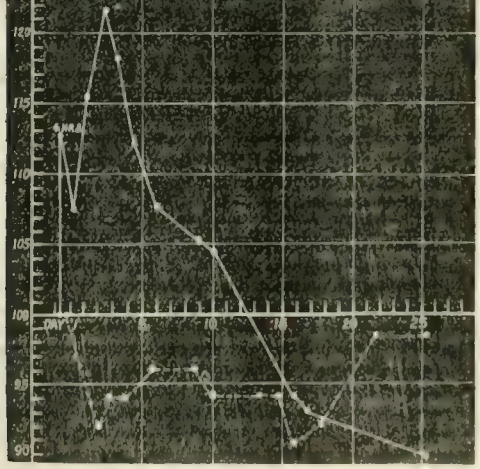


FIG. 4.—*Experiment IX.* Defibrinated blood injected to the amount of about 50 per cent., (scale reduced).

RESULTS OBTAINED BY TRANSFUSION AFTER PREVIOUS WITHDRAWAL OF SOME OF THE ANIMAL'S OWN BLOOD.

Such are the results obtainable by transfusion of blood in the healthy animal, without any previous withdrawal of blood. As already indicated, they are probably more to be relied upon than those obtainable by transfusion in animals which have previously lost some of their blood. In the former case, it is the condition of plethora produced by the transfusion which militates against the accuracy of the results obtained, as applying to the case of the normal red corpuscles; in the latter, it is the loss of the standard by which to judge of the extent of the increase due to the transfusion, as well as the subsequent production of corpuscles, which prevent us from being able to determine afterwards the life-duration and fate of the corpuscles transfused.

Some very interesting results have, however, been obtained in this way, to which it will now be necessary to refer, all the more that attention has never been previously drawn to them in this connection.

Von Ott found (Virchow, *Archiv*, Bd. xciii, p. 125, 1883), in experiments on dogs, that if, after withdrawing one-half to two-thirds of the total quantity of blood present, he replaced this with an equal quantity of .75 per cent. common salt solution (four experiments), the number of corpuscles present reached a minimum, not immediately after the operation, but in a period of time varying from four to nine days later, according to the extent of the original loss, from which time a steady rise in their number took place till the normal was regained, from the seventeenth to the thirty-first day—average, 23 days. That is to say, the time required for the new corpuscles to be formed varied from 13 to 22 days, average 17 days, or, roughly speaking, two to three weeks.

If blood-serum, instead of salt-solution, were injected (three experiments), the minimum was reached earlier, namely, on the second day, but the recovery was somewhat delayed, being not complete till about the twentieth to the twenty-seventh day—average, 24 days; the time required for the restoration of the corpuscles being thus 22 days, or about three weeks.

In other words, the blood practically behaves under these circumstances as if no fluid at all had been injected. For Hünerfauth[5] had previously shown that, after simple loss of blood without any subsequent transfusion, the minimum number of corpuscles was reached in from 1-9 days, average five days, according to the extent of the loss; and the time taken for the return to the normal varied in the case of rabbits from 14-22 days (3 experiments); in the case of dogs, 19-23 days (3 experiments). Lyon (Blutkörperzählungen bei traumatische Anæmie, Virch. *Archiv*, lxxxiv, p. 223, 1881) similarly found that the time required for the return to the normal under such circumstances varied from 19-31 days (4 experiments), average 25 days, the minimum being reached in from 2-6 days, average 4 days. The time, therefore, required for the blood-corpuscles to be completely restored, counting from the period of lowest fall, was, on an average, 20 days. These results may be tabulated as follows:—

Time required for the Blood-Corpuscles to be Restored to their Normal Number after Loss of Blood.

Observer.	Dogs.	Rabbits.	Man.
Hünerfauth	19-23 days (average 21)	14-22 days (average 18)	
Lyon	19-31 days (average 25)	—	14-30 days (average 22)
Von Ott (after subsequent injection of salt solution)	17-31 days (average 23)		
Von Ott (after subsequent injection of blood-serum)	21-27 days (average 24)		

This agrees very closely with the time required for the removal of a large excess of corpuscles from the blood, namely:—

	Dogs.	Rabbits.
Quincke	2-3 weeks	
Worm-Muller ..	2-3 ,,	
Hunter		14-26 days (average 20)

The agreement in these results may be regarded as a mere coincidence. On the other hand, the striking correspondence which they show may be explained more naturally by assuming that, after loss of blood, the return to the normal is effected not so much by an increased production of red blood-corpuscles as by a diminished destruction of those remaining, the time taken for the restoration to their original number probably thus representing approximately the life-duration of the red corpuscles. This is entirely in agreement with what one would be led to expect under the circumstances. The effect of a great loss of blood must be to lessen for the time being the oxidative processes going on

[5] Einige Versuche über traumatische Anæmie Virch. *Archiv*, Bd. lxxvi. 127. 1879.

in the body, and correspondingly diminish the activity of the various organs; and there is every reason to believe that this lessened activity will apply to the processes of blood-destruction, as also, though perhaps to a less extent, to those of blood-formation.

But, further, von Ott also found that if, after withdrawing one-half to two-thirds of the blood, he replaced this with an equal quantity of entire blood obtained from another dog, instead of with salt solution or serum, the result then was not, as might have been expected if corpuscles, after transfusion, continue to live as before—that the restoration in the number of corpuscles was from that time complete. On the contrary, from the day of injection, a gradual fall in their number took place, reaching a minimum on the nineteenth to the twenty-second day after the operation, not on the fourth day, as in the previous cases; and not till then did the gradual return to the normal commence to take place, which was not reached, however, till several weeks later—namely, seventeen and forty days respectively. In other words, so far from the process of recovery being accelerated by the transfusion of blood, the ultimate recovery was very much retarded when compared with the results obtained after transfusion of salt solution or serum.

If we assume that this period of nineteen to twenty-two days, taken for the corpuscles to reach a minimum, represented the time taken for their destruction—and there is little reason to conclude otherwise, since, after the injection of salt solution, the minimum was reached about the fourth day—then we must conclude that it likewise represented the life-duration of the corpuscles—under conditions, be it observed, namely, anæmia, the very reverse of those obtaining after a transfusion of blood into the healthy animal.

These results may be tabulated in the following order.

A. *After Transfusion.*—Time taken for removal of excess of corpuscles.

Worm-Müller	...	average 17 days	(dog)
Quincke ...	...	,, 17 ,,	,,
Hunter ...	...	,, 20 ,,	(rabbit)

B. *After Loss of Blood.*—Time taken for restoration.

Hünerfauth ...	21 days (dog)	... 18 days	(rabbit)
Lyon ...	25 ,, ,,	... 22 ,,	(man)

C. *After Loss of Blood, with subsequent Injection of—*

(*a*) Saline solution:

Von Ott ... ... 23 days

(*b*) Blood-serum:

Von Ott ... ... 24 ,,

D. *After Loss of Blood and Subsequent Transfusion of Blood.*

(*a*) Time taken (*a*) for destruction of the corpuscles transfused:

Von Ott ... ... 21 days

(*b*) And for subsequent recovery:

Von Ott ... ... 29 ,,

Without attaching too much value to the coincidence shown in these results, obtained under such different conditions of the body, and in so many different ways, we are quite entitled to conclude from them that a certain relationship does subsist between the rapidity of blood-destruction after transfusion and that of blood-formation after bleeding; and in the nature of this relationship we may obtain an indication of the normal life-duration of the red blood-corpuscles.

What the nature of this relationship probably is has already been indicated. It will be noted that in most cases the rapidity with which blood-destruction takes place, that is, an excess of corpuscles is removed from the body, is considerably greater than that with which a loss of blood is repaired. It is to be remembered, however, that in the latter case the loss of blood was always extremely variable, and, on the whole, probably greater than the excess produced in the other experiments; a difference which in itself would fully serve to account for the apparent greater rapidity of destruction over formation, apart altogether from the consideration that, in a condition of anæmia, the functions of the body must necessarily be less active than in a condition of plethora.

The evidence thus obtained in so many different ways all points to a period of about three or four weeks as the longest possible duration of life of corpuscles after transfusion. The question then arises, how ar any conclusions deducible from experiments such as these as to the probable life-duration of red blood-corpuscles are applicable to the case of other animals of different species, and especially to the case of man. Since the metabolism of the body must vary very considerably, not only in individuals but still more in different species, may not the life-duration of the red corpuscles differ in the different species? being shorter, for example, in man or in the dog, in whose tissues and organs the metabolism is probably of a more active nature than in the rabbit, where it is less so.

The agreement in the results obtained by Worm-Müller and Quincke, in dogs, with my own obtained in rabbits, does not seem at first sight to lend much support to this view. In the rabbit, the life-duration, on the whole, was somewhat longer than in the case of dogs, namely, three to four weeks, as compared with two to three weeks. It is to be noted, however, that, in the case of dogs, the rapidity with which an excess of corpuscles was got rid of was considerably greater than in the case of rabbits. This is evident, not only from the experiments of Worm-Müller, already referred to, in which quantities of blood, equal to 20 or 30 per cent., were removed in the course of a few days, but is also well brought out by two experiments of my own on dogs, in one of which an increase of 18 per cent. in the corpuscles was got rid of in four days, and in the other an increase of 21 per cent. was disposed of in five days (indicating a life-duration of eight or nine days, dating from the time of transfusion), the fall to the normal at the last being very rapid, and implying in reality a far more rapid destruction of corpuscles than the above figures would at first sight indicate. No such rapid destruction was ever observed in the case of rabbits.

The results of these experiments would, therefore, appear to indicate that the life-duration of corpuscles after transfusion is dependent more upon the activity of the organs concerned in blood destruction—notably, the liver, as we shall see later on—than upon any inherent vitality of the corpuscles themselves, enabling them to resist destruction, and continue in life within the body of their host, for a definite length of time after the transfusion.

This is entirely in accordance with what one would naturally expect, if the morphological nature of the red blood-corpuscles be taken into consideration. For the red corpuscles cannot be regarded as active cells—active, that is, in the same sense as nucleated protoplasts, such as white blood-corpuscles or glandular cells, whose life-duration will be in great part determined by their original store of energy and their functional activity. The red blood-corpuscles, on the other hand, must be regarded as cells, whose function is more passive than active, depending as it does on the special character of their fully-formed periplast, consisting mainly of hæmoglobin. The effect of an excess of corpuscles in the blood must, therefore, be to increase for the time being the amount of metabolism going on in the body, from the very excess of oxygen conveyed to the tissues by the additional number of corpuscles, the effect of which will naturally be to restore the blood, within a very short time, to its normal condition. And, as a matter of fact, we know that such is the case. A condition of plethora of the blood, artificially induced, cannot for any length of time persist. The excess is got rid of as speedily as possible.

These consideration are of some importance; for it is not to be at once assumed that, because in dogs an excess of 20 or 30 per cent. of corpuscles is removed from the blood in the course of eight or nine days—that is, dating from the time of introduction—that therefore the life of the normal red corpuscles may not extend over a longer period. On the contrary, as has been seen, after the introduction of sufficiently large quantities of blood, for example, 70 to 80 per cent., the increase, even in dogs, last sometimes over a period of two to three weeks. Hence, it is more natural to assume that, in the former case, where the excess was removed in the course of eight or nine days, the life-duration of the corpuscles transfused was shorter than normal, than, in the latter case where the increase lasted two to three weeks, to assume the very reverse, namely, that the transfused corpuscles were actually capable of living longer in the circulation of their host than the animal's own corpuscles.

Hence, we may conclude that, in the case of the rabbit, a period of about three to four weeks probably represents the longest duration of life of its red corpuscles—in the case of the dog, a period of about three weeks; and from analogy, a similar period in the case of man. Nor are we entirely dependent on mere analogy for this latter assumption, for, as has already been seen, Lyon found that, after severe loss of blood in man, the time taken for complete restoration of the original number of corpuscles was, on an average, twenty-two days, varying from five to fourteen days after slight losses, fourteen to thirty after severe losses. Since in the other experiments the loss was generally of a severe nature, the average is based on these last figures.

The Rate of Destruction of Red Blood-Corpuscles after Transfusion.

We have hitherto dealt exclusively with the question of the longest possible life-duration of corpuscles after transfusion with the object of arriving at some idea as to their probable duration of life in health. A question of far more practical importance now remains for con-

sideration—namely, the probable life-duration of red corpuscles after transfusion in man.

It will at once be admitted that the life-duration of corpuscles after transfusion of large quantities of blood cannot in any way be regarded as representing the period of time red corpuscles will be likely to remain within the circulation after their introduction in comparatively small numbers, such as alone is possible in the case of man. We have already had ample evidence of this in the case both of dogs and rabbits, in which, as has been seen, the duration of life depended greatly on the extent of the original increase. It now remains to consider this point in more detail.

In order to determine the average life-duration of corpuscles after transfusion in man, what we require to ascertain, if possible, is their average rate of destruction after transfusion; in the first place, under normal, and, in the second place, under abnormal conditions.

Now the chief value of these observations of my own and others already referred to, undoubtedly lies in the light they throw on the rate of destruction of blood-corpuscles in animals, in conditions approximating as nearly to those of health as is compatible with the performance of any experiment at all. In my own experiments, the animals were in good health at the time of experiment. The operation itself involved a mere puncture through the abdominal wall with a large hypodermic needle: and recovery from the immediate effects of the operation was usually complete within the first twenty-four or forty-eight hours. So far as could be judged of from outward appearances, the animals then, in most cases, remained in good health, with this exception, that, while the number of corpuscles remained in excess, there was a greater or less loss in the body-weight, which was usually not completely regained till the return of the blood to the normal. In most cases, therefore, the condition of the animals throughout the experiment might be regarded as a fairly normal one.

The rapidity with which the blood-destruction took place varied considerably, not only in the different experiments, but also in the same experiment at different times. Thus, after the injection of entire blood, the rate of destruction varied from 0.4 to 3.7 per cent., or on an average of all the experiments (seven in number), 1.5 *pro die*; but in several of the experiments, the rate of destruction during the last few days was considerably more rapid, averaging 2.6 *pro die*.

In the case of defibrinated blood, the rate of destruction was more uniform, varying from 2 to 2.6 per cent., or, on an average, 2.3 per cent. *pro die*.

Whilst such was the result with large excesses of blood-corpuscles, varying from 12 to 38 per cent., with very small quantities, on the other hand, the rapidity of destruction appeared to be even relatively greater. It is naturally very difficult to perform experiments of this kind with small quantities of blood, as we must always make an allowance of 1 or 2 per cent. for the fallacies which may be connected with our method of enumeration. In two experiments, however, with entire blood, in which the absorption of corpuscles had been but slight, the increase amounting only to 6 and 8 per cent. by the first day, the return to the normal was effected in two and three days respectively, indicating a rate of destruction of about 3 per cent. *pro die*.

Now, whilst we are not entitled to conclude from results such as these that the life-duration of the corpuscles, that is, the duration of the increase after transfusion, depends solely on the extent of the original increase, varying directly with the latter, on the other hand it is perfectly clear from these experiments that this latter factor is a very important one in determining the former; and, in the same way, it is probable, although this point is not quite so clearly proved, that small numbers of corpuscles are disposed of with a rapidity even relatively greater than is the case with large quantities. In the rabbit, at least, it was found that the average life-duration of the red corpuscles when introduced in small numbers was to be reckoned by a period of days, and not of weeks; and as Worm-Müller's and my own experiments conclusively show, the same statement holds still more true in the case of dogs.

The extent of the original increase is not the only factor, however, determining the duration of life of the injected corpuscles, either in the case of rabbits, or, still less, in the case of dogs. Thus, in some instances in rabbits, the rate of destruction was as rapid as 3 or 4 per cent. daily; whilst in dogs, the rate of destruction appeared to be invariably much more rapid than in rabbits. This is perfectly clear from Worm-Müller's experiments, already referred to, in which quantities of blood so great as 20 to 30 per cent. were got rid of in the course of a few days; as well as from my own on dogs, in one of which an increase of 18 per cent. was entirely disposed of in the course of three days, and in the other of which a fall of 14 per cent. occurred in a similar period of time, the animal in both cases remaining meanwhile in perfect health.

It is thus evident that the activity of the organs concerned in blood-destruction is the second great factor determining the life-duration of transfused blood-corpuscles; and it is equally clear that this factor is of much greater importance in the case of dogs than in the case of rabbits. But still, although less marked in the latter, the influence of this factor was well shown in several instances, notably in one experiment (IX), and in another (V), in both of which there was a more rapid fall than usual in the number of corpuscles, amounting in the former case to 17 per cent. in seven days, and in the latter to 12 per cent. in five days.

What the nature of the process of destruction was could also, in part, be determined from the condition of the fæces at the time of greatest fall in the number of corpuscles. For coincident with, or immediately following, this occurrence, a great increase of the pigments in the fæces was to be observed; an increase which, in view of the fact that the condition of the animals as to food and drink always remained the same (namely, oats and water) could only be explained by the occurrence of an increased destruction of hæmoglobin in the liver, with a consequent increase in the quantity of bile-pigments.

Still better was this condition of the fæces observable in one of the experiments on dogs already mentioned, in which the animal had been kept in a state of nitrogenous balance on a fixed diet. The marked increase in the quantity of pigments in the fæces then observed must have been occasioned by an increased destruction of hæmoglobin; and that such was the case was clearly shown in other experiments by the condition of the liver under similar circumstances, that organ, in well marked cases, being so rich in free iron, that a piece of its tissue became almost coal black on being placed in sulphide of ammonium solution, the normal liver substance giving with this reagent almost no reaction at all, or merely taking on a faint greenish coloration.

From these experiments, therefore, we may conclude that, in the case of the dog, the activity of the liver is of far more importance in determining the life-duration of the red blood-corpuscles after transfusion, than in the case of the rabbit. This is, indeed, what one might expect, when it is remembered what the nature of the process of blood-destruction within the liver is, and how much that process will be affected by the difference in diet in the two kinds of animals. Into this, however, it is impossible here to enter.

This greater activity on the part of the liver in the dog was further shown by another circumstance of some little interest, namely, that in the case of the rabbit an excessive destruction of comparatively slight amount had far more effect on the animal's health than was the case in dogs. In the dog, as has been seen, a destruction of 8 per cent. or 9 per cent. daily had no effect at all on the animal's health. Such a destruction seemed to be, as it were, entirely within the range of the normal activity of the liver. In the rabbit, on the other hand, a fall in the number of corpuscles sufficiently great to give rise to a visible increase in the colouring matters of the fæces, was also associated with, or followed by, a condition of ill-health, as shown by loss of appetite and fall in body-weight. Under such circumstances, *post mortem* examination always revealed that the organ at fault was the liver, as shown by the excess of iron which, in such cases, was always present.

As the result of these observations on dogs and rabbits, we may conclude:—

1. That the duration of life of red blood-corpuscles after transfusion varies considerably in different animals, and in the same animal at different times.

2. That the life-duration depends on two main factors, namely (*a*) the quantity of blood transfused; (*b*) the activity of the organs concerned in blood-destruction.

3. That the process of blood-destruction is probably, under normal circumstances, more rapid in the dog than in the rabbit, and that this is certainly the case after transfusion of blood.

4. That the share taken by the liver in this process of destruction is always considerable, but is always greater in dogs than in rabbits.

5. Since after transfusion of blood in conditions of health the rate of destruction of the transfused corpuscles averages from 2 to 3 per cent. *pro die* in the rabbit, and is considerably more rapid in the case of the dog, to conceive of a condition, therefore, in which after transfusion of a small quantity of blood, for example, 3 or 4 per cent., the corpuscles may remain discoverable for a period of some days, is to conceive of a condition which, in all probability, never obtains; and, while this is true of the rabbit, it will hold still more true of the dog (and, by analogy, also of man), in which animal the process of blood-destruction is normally more rapid.

Changes in the Corpuscles indicating Increased Destruction.

In connection with this last point, the question naturally arose whether the appearances presented by the blood-corpuscles themselves, after transfusion, afforded any indication of the process of blood-destruction which was then taking place. To this point I paid somewhat particular attention, as I was anxious to determine, if possible, whether any value or importance could be attached to the appearance of "Schatten," or "decolorised" and "devitalised" corpuscles, such as are sometimes described as being present in the blood under such circumstances; or whether, in fact, any such bodies were to be observed at all. In these experiments I had ample opportunities for observing such changes in the corpuscles after transfusion, if they were present; but, in all of them, I entirely failed to detect any appearances in the corpuscles which would have justified me in declaring that, in any particular specimen of blood, the destruction of the corpuscles was more rapid than usual. In particular, I can attach little or no importance to the presence of "Schatten," as a normal physiological appearance indicating increased rapidity of destruction of the corpuscles. It was impossible, in any case, to determine which were the normal and which were the transfused corpuscles, any differences in their size being so slight as not to be detectible, and no differences in the appearances presented by the two kinds of corpuscles being observable.

So far from this fact being in any way remarkable, a little consideration will show that it is, on the contrary, in entire agreement with what one would be led to expect. For if we consider that blood-corpuscles, after transfusion, continue to live for any time within the circulation of their host, not merely as foreign bodies, but as corpuscles capable of carrying on the same functions as those already present, then the absence of "Schatten," or other changes in the corpuscles not noticeable in the normal blood, is the strongest possible proof we could possess that, while the transfused corpuscles remain within the circulation, they not only perform like functions, but suffer a like fate with those already present, since we know that the appearance of "Schatten" in the normal blood is entirely the exception, although it is equally certain that a more or less constant destruction of red blood-corpuscles is the rule.

It is only after the introduction of substances into the circulation which act locally on the red corpuscles, for example, tolulendyamin, that marked changes in the corpuscles—"Schatten"—can be observed; but the appearance of such bodies under such circumstances represents in no way the normal process of blood-destruction under physiological circumstances. The effect of the tolulendyamin is to set free the hæmoglobin from the blood-corpuscles, which is then removed in the usual way from the system, mainly through the agency of the liver; whereas, under normal circumstances, the destruction of red blood-corpuscles, and of their hæmoglobin, is mainly, if not entirely, a cellular process, carried out through the direct agency of cells or of secretions formed from cells.

It is, therefore, clear that little or no value can be attached to observations in which for a certain time after transfusion of blood, for days or even for weeks, pale, decolorised, or "devitalised" red corpuscles are described as being present in the blood, the presence of these bodies being sometimes actually regarded as the strongest proof that the transfused corpuscles are still continuing to live and functionate within the circulation!

The Probable Life-Duration of Red Blood-Corpuscles after Transfusion in Man.

Is it possible from these experiments to arrive at any conclusions as to the probable duration of life of the red corpuscles after transfusion in man? The solution of this question is beset with difficulties. In the first place, the quantities of blood transfusible in the human being are so small, relative to the original quantity present, that it is impossible for us, by actual enumeration, to ascertain with any degree of certainty the life-duration of the corpuscles transfused. In the second place, transfusion in man is only performed in conditions of anæmia, in which the functions of the blood-forming or blood-destroying organs, or both, are altered or impaired.

It may be regarded, however, as certain that, in the amount of blood-destruction which daily takes place, and the relative activity of the various organs of the body (liver, spleen, and bone-marrow), man approaches much more closely to the dog than to the rabbit. We may, therefore, assume that in man, as in the dog, the corpuscles after transfusion will be disposed of with a rapidity directly proportional to the quantity of blood injected, and varying with the activity of the organs concerned in blood-destruction, especially the liver.

Since in the dog, as we have seen, blood-corpuscles after transfusion are destroyed at a rate of at least 4 or 5 per cent. daily, and that, too, in addition to the amount of blood-destruction normally going on, we may thus assume that a similar rate of destruction will hold in the case of man. That is to say, if in a person weighing 8 stone (= 112 lbs.), the quantity of whose blood, regarded as one-thirteenth part of body-weight, would be 138 oz., we transfused 6 oz. of blood, (= 4·3 per cent.), the excess of corpuscles would under normal circumstances be got rid of in all probability in a period of from one to two days.

It is not in conditions of health, however, that transfusion of blood in man is had recourse to, but only in conditions of anæmia, produced either traumatically, by loss of blood in an organism previously healthy, or idiopathically, the result of disease. For our present purpose, a clear distinction must be drawn between these two conditions. In the former we have to deal with, it may be, a sudden loss not only of blood corpuscles, but also in the bulk of the blood, the suddenness of this change being in many cases, there is every reason to believe, one of the great elements, if not the main element of danger. Into the discussion of the part played by mere bulk of the fluid in the after recovery after transfusion, I cannot at present enter, as the question is far too wide a one to be taken up in this place. What we are at present concerned with is, to ascertain the probable fate of the red corpuscles transfused, their life-duration after transfusion, and the part they play, if any, in bringing about the ultimate recovery.

Putting aside, therefore, for the present conditions of anæmia traumatically produced, let us consider this question mainly in its relation to idiopathic anæmia. The condition of the blood at any time must be the result of the relative activities of the blood-forming and blood-destroying organs at that particular time. Anæmia may be caused by a deficient blood-formation, in an organism otherwise fairly healthy; and this is the condition exemplified in all probability by cases of simple anæmia, and chlorosis. On the other hand, it may be the result of an increased blood-destruction, which may in turn be due to one or other of two conditions, or both; namely, greater activity on the part of the organs concerned in blood-destruction, or lessened vitality on the part of the corpuscles themselves.

This latter condition is probably a less important factor in the production of anæmia than is oftentimes supposed. In well-marked cases of anæmia the corpuscles will doubtless share in the lessened vitality belonging to all the tissues of the body in general, although probably to a less extent than is generally thought. This lessened vitality in such cases is more a *post hoc* than a *propter hoc*. Probably under no circumstances is the vitality of red blood-corpuscles great, and even in health their duration of life is dependent more on other circumstances than on their own vitality. At any rate, unless we can exclude the possibility of their destruction being due to increased activity on the part of the organs concerned in their destruction, we are not justified in any case in ascribing their more rapid destruction to some weakness of the corpuscles themselves. At least the experiments referred to sufficiently show that after transfusion the rapidity of destruction at different times constantly varies; a result which must be entirely independent of the vitality of the corpuscles themselves, and can only be due, therefore, to variations in the activity of the blood-destroying organs.

So far as my observations at present go, I am therefore inclined to consider that the great majority of cases of anæmia, if not, indeed, all of them, may be referred to one or other of the first two conditions; namely, either to diminished production of blood-corpuscles, or increased destruction. It will be understood that at present we are only dealing with the red corpuscles of the blood, and are purposely taking no cognisance of the condition of its plasma in such cases.

What are the effects *per se* of a diminution in the number of corpuscles of the blood? Experiments on animals teach us that the greater proportion of the corpuscles of the blood may be removed without the animals' condition suffering in any way materially thereby. Thus, in the dog or rabbit, it is possible for us to withdraw $\frac{1}{2}$-$\frac{2}{3}$ of the blood of the body, and replace it with $\frac{3}{4}$ per cent. common salt-solution, without in any way affecting the general health. Unless by examination of the blood, it would be almost impossible for us in such cases to say that the animal was not in every respect normal. And as a matter of fact, we know that by constant repetition of bleedings in animals we are able to improve their condition, so far, at least, as regards increase in body-weight and formation of fat.

Clinically, we have a familiar illustration of this fact in cases of chlorosis. That condition is essentially the result of a faulty formation of red blood-corpuscles, probably in the main induced by a faulty assimilation of iron and consequent deficient formation of hæmoglobin. In such cases, in spite of the fact that the number of corpuscles may be reduced by one-half, one-third, or even more, and the hæmoglobin percentage even still more reduced, the condition of

the patient is far from being a serious one, and is not such as to be the source of any grave anxiety.

But the case is quite otherwise in other cases of anæmia, such as those to which the terms "progressive" and "pernicious" have been applied. When we contrast the absolute pallor of a case of chlorosis, associated as that is with a full-bodied condition of the patient, with the pale, sallow, apparently jaundiced look of a patient suffering from pernicious anæmia, associated as that generally is with a general wasting of the body, it is impossible for us to resist the conclusion that in the two cases we have to deal with two entirely different conditions, both characterised, it is true, by a great deficiency in corpuscles, but with entirely opposite tendencies, the one tending invariably to recovery, the other with almost equally marked tendencies towards a fatal issue.

The former condition we have seen reason to believe to be the result of a deficient formation of blood-corpuscles, arising mainly from deficient amount of iron in the system, and remedied accordingly by supplying the organism with iron. The latter, so far as my observations show, must be regarded essentially as the result of an increased destruction of red blood-corpuscles, mainly on the part of the liver; the condition being entirely unaffected by the administration of iron, for the very reason that the amount of iron present in the system, especially in the liver, so far from being diminished, is actually increased; on the contrary, being only influenced by the administration of drugs—for example, arsenic—which seem to influence in some way, as yet unexplained, the activity of the hepatic cells. It is impossible to state here the evidence on which this conclusion as to the nature of pernicious anæmia is based. It suffices for our present purpose to bring out the fact that there seems to be ample evidence to prove that certain forms of anæmia are due to this increased destruction of corpuscles, whereas others are dependent upon a diminished production.

The importance of distinguishing between these two forms of anæmia, before proceeding to discuss the probable fate of red blood-corpuscles after transfusion, will at once be seen. Such a distinction is absolutely necessary if the operation of transfusion is to rest on a sound physiological basis. We must recognise the nature of the anæmia in each case before resorting to this therapeutic measure, unless our practice is to be guided by mere empirical considerations.

It will be understood that between these two extremes—chlorosis and pernicious anæmia, due respectively to diminished production and increased destruction—all varieties of intermediate forms of anæmia may and do exist, both as regards their nature and their seriousness. The important point, however, to recognise in all of them is this, that the condition of the blood, as regards the number of blood-corpuscles, does not in itself constitute the disease, but must be regarded mainly, if not entirely, merely as the result of disease—of morbid action in some organ or other of the body, in the same way as the wasting of the body in phthisis or in malignant disease is simply the result of morbid processes going on elsewhere. There is this difference in the two cases, that in idiopathic anæmia the morbid process affects specially the organs concerned in blood-destruction or blood-formation, and thus reveals its presence mainly through the changes in the blood.

Transfusion of blood under such circumstances can only act by modifying the nutrition of the body, and this it can only do in one or other of three ways (as before, the red blood-corpuscles alone are taken into consideration); namely, (1) either by the blood-corpuscles continuing to live for a certain time within the circulation, and continuing to perform during that period all the functions of those normally present; (2) by the introduction of a certain amount of oxygen along with the corpuscles at the time of transfusion, and the increased supply of oxygen brought to the tissues while the corpuscles remain in the blood; (3) by the introduction of the hæmoglobin contained in the corpuscles. There is a fourth possibility—namely, that, even if the blood-corpuscles are broken down, they may be used up by the organism as a source of nourishment. But this may be set aside at once, as a brief consideration will suffice to show that the amount of nourishment contained in red blood-corpuscles must be excessively small, formed as they are chiefly of pigment; and since, further, it has been abundantly proved that an animal starves as readily with an excess of corpuscles in its body, supplied to it by repeated transfusions, as if no such transfusions had been made.

1. The foregoing experiments furnish us with sufficient data to enable us to arrive at a tolerably accurate estimate of the life-duration of red blood-corpuscles after transfusion. We have seen how, in the dog, in conditions of health, an excess of corpuscles, amounting to as much as 20 to 30 per cent., is got rid of in the course of a few days, the rate of destruction being as great as 5 or 6 per cent., or even more daily; and we have further seen reason to believe that man will approach very closely to the dog in respect of the activity of his various bodily functions. In man, however, we can rarely transfuse a quantity of blood equivalent to more than 5 or 6 per cent., a quantity probably utterly insufficient to influence in any material way the general mass of the blood, since its destruction under ordinary circumstances may be expected to occur within a day or two at most. But if it be remembered that in cases of pernicious anæmia we are transfusing these corpuscles into an organism whose own blood-corpuscles are being destroyed with undue rapidity, it may be fairly regarded as doubtful whether the introduction of corpuscles under such circumstances can be of the slightest value at all, namely, if the value of the operation is to depend on their continuance in life for some time afterwards. It may, however, be urged that, in other conditions of anæmia, namely, those depending on diminished production, the same argument cannot apply against the efficacy of transfusion, since under such circumstances, as has already been seen, the process of blood-destruction is probably also diminished. This is probably the case, but in such conditions there is little or no occasion for resorting to such an extreme measure. We have seen that the absence of corpuscles does not in itself constitute any immediate danger; we have ample evidence of this in many cases of anæmia in the human subject, in which the corpuscles are reduced to 700,000 or 800,000 per cubic millimètre, without occasioning the slightest disturbance to the patient, excepting of course a sense of weakness with dyspnœa on the slightest exertion, but no disturbance of immediate danger to life. Hence the resort to transfusion under such circumstances is not in many instances called for; we are able in other and simpler ways to effect our purpose of restoring the blood to its normal condition.

2. The increased supply of oxygen conveyed to the tissues by the new blood-corpuscles may be considerable, and may be capable in some way of modifying the diseased processes on which the anæmia depends. But, since this supply is dependent on the corpuscles, and its continuance is co-terminous with their life-duration, it may be considered doubtful whether this consideration alone is of such importance as to justify the performance of transfusion of blood in such cases, especially, as we have seen reason to believe that the deficiency in oxygen supplied to the tissues, as in cases of chlorosis, is not accompanied in itself with any very serious results.

3. Lastly, the only other way in which transfusion of blood-corpuscles can act efficaciously in conditions of anæmia, is by the introduction of a certain quantity of hæmoglobin into the system, which may serve as a stimulus to the blood-forming glands, and thus stimulate them to an increased production of blood-corpuscles.

Of all the possible ways in which transfusion of blood may act, I am inclined to regard this as the one most likely to explain the beneficial effects which sometimes follow that operation. This conclusion is based on the results of my observations on the destruction of blood within the various organs of the body, especially the liver, the spleen, and the bone marrow, and the effect of an accumulation of blood-pigment within these organs on the nutrition of the animal. These observations I hope to record in detail in a later paper. It will suffice here to indicate the nature of the results obtained, so far as they bear on the point at present under discussion.

It was found in all cases after transfusion of blood, that the improvement in the bodily condition which resulted varied directly with the amount of destruction of corpuscles, and consequent accumulation of pigment, which had taken place in the spleen—probably also the bone-marrow—and inversely with that which had taken place in the liver. An accumulation of pigment in the spleen was not only consistent with a condition of health, but conducive to its maintenance; whereas, the reverse was the case in the case of the liver, the accumulation of pigment in that organ being always greatest when the animal's health had suffered most.

This result is easily explained when we consider the further fate of the pigment in the two cases. The spleen is an organ concerned not only in blood-destruction but also in blood-formation, and the accumulation of pigment in that organ will supply it with the very material necessary for the further production of blood-corpuscles. On the other hand, no such double function appertains to the liver. The pigment accumulated in the liver is an effete product, useless for the further purposes of the organism; and its presence there in increased quantity simply indicates that a large quantity of iron has been withdrawn from the system which might otherwise have been made use of.

This distinction is of importance, and will probably be found to explain the beneficial results which sometimes follow transfusions of

blood in the human being. These results depend, not on the continuance in life of the corpuscles transfused, nor, in all probability, on the increased amount of oxygen supplied to the tissues during their life, but on the introduction of a certain amount of hæmoglobin into the system, in the form most fitted for its destruction in those organs of the body concerned both in the destruction and formation of blood-corpuscles. But, since in all cases only a certain proportion of the blood-corpuscles so introduced is destroyed by these organs, the remainder being disposed of by the liver, and those proportions are determined by the relative activities of the two sets of organs, it follows that, in most cases of anæmia, only a small proportion of the hæmoglobin so introduced can be utilised for purposes of blood-formation; and this proportion becomes infinitesimal, and the value of transfusion correspondingly lessened, in those cases of anæmia—for example, pernicious anæmia—which in all probability depend on an excessive blood-destruction on the part of the liver, a destruction evidenced, amongst other things, by the extraordinary amount of blood-pigment found within the liver-cells in that disease.

ETIOLOGY OF PNEUMONIA.[1]

By OCTAVIUS STURGES, M.D., F.R.C.P.,
Physician to the Westminster Hospital.

My sole excuse for accepting your flattering invitation to open this discussion is derived from this: that, two years ago, in conjunction with my friend, Dr. Sidney Coupland, I was engaged for some months in arranging a large number of reports and communications, all of them concerned with the question, What are the efficient causes of pneumonia? to what class of disease is it most allied? From the many answers received, we were able, at least, to collect and formulate the general drift of opinion upon this subject. It is to this general drift of opinion, the product of unbiassed experience, that I would direct attention to-day; in the hope that, by our present discussion, the pathology of pneumonia may be defined somewhat more accurately.

What are the causes of pneumonia? If the question were to be discussed adequately, we should have to linger all the time over the definition. The forms of lung-inflammation are multiform, and the ultimate problem of lung-pathology must be to determine what is the real bond of union between processes anatomically similar, but which in their clinical showing are capable of wide variety. Mine is a far humbler task. It concerns a single form of pneumonia, that which occurs suddenly, as we may say accidentally, to previously healthy persons, and which runs a short, orderly course, ending, in the vast majority of cases, in complete recovery.

In this limitation of the subject, it is important to observe that pneumonia, as we are now looking at it, is not so much—or let me say, is not so often—a disease of the lung, as a disease within it. It is the temporary occupation of the organ by a material which, as a rule, is no further harmful than by its presence. Sudden recovery is as much its characteristic as sudden onset. It follows, therefore, in the nature of things, that of such a process morbid anatomy must always give a very imperfect and one-sided picture. The *post mortem* specimens that we look at concern, for the most part, the exceptional, that is to say, the fatal, cases. Of what may be called the natural and benevolent course of pneumonia, we get actual sight only by rare accident.

Of late years evidence has been accumulating that the sources of pneumonia are in fact more numerous than was supposed by Louis and Andral, even by Sir Thomas Watson and the late Dr. Hughes Bennett. Nevertheless the broad clinical facts regarding the disease remain undisturbed. There is nothing more striking, I think, nothing to the clinical student more attractive, than the absolute suddenness with which the disease fastens upon its victim, at his work or his play, prostrating him there and then as does no other disease of our climes. In such instances, or in many of them, exposure of the body to chill has been so obvious and so immediately connected in time with the illness that follows, that there can be no question as to the relationship. It appears as a "chill disease," and that only; there is little room for suspecting any other agency whatever.

And, having hold of this form of pneumonia, let us cling to it for a little and make what we can out of it before going further a-field, where the way is more devious and the light, perhaps, delusive. This last season—winter and spring—has been full of lessons in pneumonia; it may have taught us nothing new, but it has illustrated and confirmed old teaching. With a season of cold, exceptional not in degree but in duration, the affection has been unusually prevalent, commonest with those most exposed, and attributable in many instances to some definite exposure. With milder weather the disease became less frequent. Putting severity and degree of illness out of the question—and they are, in fact, beside it—pneumonia is caught just as common catarrh is caught. Those who are overtaken by it will recall with regret its precise cause—some error or imprudence—riding without a coat, remaining in wet clothes, and so forth, just as they do with a common cold. And not only is pneumonia caught; there is a certain kind of weather when it is most caught.

Go a step further. I have signalised the familiar pneumonia of direct chill suddenly arresting the full tide of health, because in some modern theories that form of the affection is in some danger of being overlooked. But simple pneumonia has other incentives than chill; causes which are at the least predisposing. Perhaps the best recognised of these is alcoholic excess. Everybody who hears me will recall instances within his own practice, where patients under treatment for delirium tremens, or its equivalent, have developed very insidiously, and it may even be without discovery until after death, a pneumonia which is anatomically quite indistinguishable from the other, of which I have just spoken as having its sole cause in chill following exposure. What part does chill play in such cases as these? Does it play any part? The patient has been carefully watched, and in his bed for many days. Is it not reasonable to suppose that the lung inflammation is here part and parcel of the acute alcoholism: to put the lung, as regards acute drinking, in a similar position to that which the liver occupies in respect of chronic drinking? It seems to me that alcohol is as obviously a cause of acute pneumonia as is exposure. The alcohol must be taken to poisonous excess; the chill must be of some exceptional sort; but it is alcohol in the one case and chill in the other. There is nothing else that we see.

May I take yet a further step, still carrying your assent—to the facts, I mean, not to any conclusion that you may see lurking behind them? There is evidence enough by this time that sewer-gas may cause pneumonia. It may be, no doubt it is, that in certain of these cases there is a weather cause as well, and the part taken by the sewer poison is merely that of cause predisposing. But in many there has been no weather exposure at all, only exposure to the sewer-gas. Not one, but several members of a family are affected, and there can be no reasonable doubt that the efficient cause of the disease is with them in the house. Thus, in addition to its chill origin, simple pneumonia has its source in two forms of poisoning—the alcoholic and the pythogenic.

There is yet another form of simple pneumonia, peculiar only in this, that it is preceded for longer or shorter time by ill-defined symptoms of illness, dyspepsia, loss of appetite, bronchial catarrh, and in children with vomiting and diarrhœa. Sometimes (and especially with the children) these symptoms will have had their origin in some known cause, as, for example, eating to excess of a Sunday's dinner of pork; but for a while no acute illness follows, only the health is broken. There is recurring sickness or diarrhœa, or some bronchial catarrh, and the child—if child it be—is irregularly nursed at home. Presently, and with all the suddenness of chill pneumonia, comes a rigor or a convulsion with burning heat, and the proper physical signs of acute lobar pneumonia and ultimate recovery by crisis.

Observe that this acute attack, running its course, according to rule, in a few days, will conduct the patient to a convalescence which is, in fact, better health than he has known since he first vaguely sickened. And the symptoms from first to last seem all of a piece. The sudden lighting up of inflammation within the lung is like the final answer to some long-continued provocation, while the quick return to health which follows seems to indicate that some morbid material or combination has been destroyed or unloosed in the process. With children this course of events has some parallel in what happens to their elders in the premonitory troubles of gout, gathering to a head in an acute attack, and then suddenly dispersing.

For the rest, several probable sources of pneumonia remain; but it is no longer possible to distinguish predisposing from exciting cause. Every one will admit the near connection between privation and pulmonary inflammation. But with us, unfortunately, want of food often goes along with excess of drink, and it almost necessarily implies exposure. Thus causes get mixed. It is not so everywhere. Starvation is common where the people are not drunken, and where the risks of exposure are comparatively slight. Yet, still pneumonia is a

[1] Read in the Section of Pathology at the Annual Meeting of the British Medical Association in Brighton.

favourite mode of death. In the Madras famine[1] of 1877, for instance, out of 220 persons 30 died of acute and 16 of chronic pneumonia, making 46 in all, or rather over 1 in 5.

Again, it is not a mere attempt at generalisation from what has gone before; it is a statement borne out, as I may remind you, by separate evidence of its own, that overwork, fatigue, mental or bodily, the depression of calamity or bereavement, whatever relaxes the frame or subdues the spirit, favours the advent of pneumonia. It is vain to inquire in what combination such causes act, what is predisposing, and what is provoking. Far more important than any scholastic discussion of that sort is the observation that cases of the kind I am now quoting have a gravity of their own far exceeding that of ordinary chill pneumonia. In the prognosis of this disease very much depends, I am persuaded, upon the circumstances in which it befalls the man. He has been excited and maltreated by an election mob; or he is prostrated by the loss of wife or child; or some prolonged physical exertion, ending in failure, has taken all the strength and all the spirit out of him; or he has been roughly jostled by a fall or other accident. He is not actively ill, but, as we say, "knocked up," "upset," "not himself." By-and-by pneumonia comes, and with it, if not of it, the man dies. In such event—I am quoting realities—the lung-inflammation is eagerly laid hold of, for it is the one definite and tangible feature in the whole illness, and serves to give it a name and a reason. But fairly face the facts, and it is apparent that this fatal kindling of pneumonia has been led up to by a series of vital changes of a deteriorating kind. The local inflammation is, in fact, not primary, but secondary. But it is not so named because the antecedent nervous condition on which it depends, and which determines both its advent and its fatality, is, in the anatomical sense, undefined and undefinable. And so by degrees pneumonia, regarded as a local inflammation, the direct result of accidental exposure, recedes from view, and in its place we have lung-inflammation anatomically similar, but occupying merely a subordinate place in a group of symptoms which only acquire significance in their combination.

It is not to the lung alone that these principles apply. I have always been attracted by the term which joins together, in a common title, "the lungs and the air-passages," as suggesting a unity pervading the whole breathing apparatus. And in speaking of pneumonia as sometimes the result of chill, sometimes the local expression of a general disease of which it is not necessarily the measure, and sometimes the consequence or part consequence of sewer-gas poison or insanitary dwelling, we are in fact enumerating so many forms of inflammation which have their analogies in tonsillitis, in quinsy, and in the sore-throat of ill-drained houses. It may be that the resemblance goes further still, and that, in rare instances, pneumonia, like diphtheria, acquires specific and contagious characters.

I need not here refer to the Collective Investigation Report upon Contagious Pneumonia. The latest communication upon the subject is by Dr. Bruce (BRIT. MED. JOURNAL, May 15th), who regards it "as quite certain"—I use his own words—"that epidemics of pneumonia of an infectious character do occur at rare intervals." Dr. Bruce considers the evidence to this effect as complete, "first, on the side of the patients' histories occurring in groups with definite connections locally; and, secondly, from the proof of active organisms with well-defined characters."

At the risk of being wearisome, I should wish to state very shortly why I hesitate to subscribe to that belief.

With that head of evidence which concerns micro-organisms I leave others to deal. We are not asking whether pneumonia *ought* to be contagious; we are seeking to ascertain whether such is actually the fact. But it must be observed, in reference to Dr. Bruce's contention, that the infectibility he claims for pneumonia is not only rare and occasional, it occurs in circumstances which are of themselves calculated to throw doubt upon its reality. Any disease whatever, in its epidemic prevalence, is certain to suggest infection, whether it be really infectious or not. The spread of pneumonia through a district or a street or a household is no evidence of infection; it is evidence only of epidemic prevalence in that particular area. What is required for proof is that the affection should spread to others when imported into a new place hitherto free of it, and that this should occur with sufficient frequency to override accident. In other words, if pneumonia be really a disease conveyable from person to person, we ought to have some show of that quality in our hospital wards. We have the disease there in every variety; in times of its prevalence, it is no uncommon thing to have two or three or even four cases within a few yards of each other, and yet, so far as I can learn—and I have made some inquiry—there is no single example on record where pneumonia has even seemed to spread from patient to patient in a hospital ward.

[1] Madras Government Medical Reports.

If I might venture to quote my own hospital experience, I would say that while from time to time mere neighbourhood has appeared to me to breed contagion in diseases not commonly supposed to spread in that way (as typhoid fever, for example), no instance of the sort has ever come to my notice in the case of pneumonia during the many years that I have watched its course and character. We may at least say this much, that there is less of positive evidence for the existence of contagious pneumonia than for its origin, whether in part or altogether, from exposure, from fatigue, from want of food, from mental or bodily depression. Giving to such causes, therefore, the pre-eminence they deserve, the question must arise, is it further needful, in order to satisfy the facts, to appeal to this origin from contagion? Let it be remembered that every instance of severe pneumonia occurring in a family brings the liability to suffer from that same affection so much the nearer to the other members of it, and this through agencies more familiar, yet not less mysterious, than are micro-organisms. For consider that, in every such case, superadded to those conditions of dwelling or climate which have already produced the disease, there is now imported anxiety, watching, fatigue, and, with the poor, often privation as well, all by the hypothesis predisposing agencies. And when death enters, this is not all. For it so happens that while these disposing causes are in full operation, there comes in addition that very exposure of the body which I spoke of at the first as the most striking and unquestioned of all the causes of pneumonia. There is the standing motionless and bare-headed at the open grave.

If I say we are at all in the right as regards the disposing causes of this disease—a question I leave for your discussion—we know the world well enough to be quite confident that these causes must often concur; and by their co-operation multiple pneumonia may be explained even when there is no epidemic, and where the micro-organisms are in that harmless and dormant state which Dr. Bruce admits to be habitual with them.

The points thus suggested for discussion I will venture to put thus:

1. What exciting causes of simple pneumonia are there besides exposure; and how far can exciting and predisposing causes be separated?

2. Is there *clinical* evidence sufficient to prove that pneumonia, as such, is actually conveyed from person to person?

3. What weight should be given to the etiology of pneumonia as a factor in prognosis?

4. From the point of view of causation, what is the proper place for acute "idiopathic" pneumonia in nosology?

Dr. DOUGLAS POWELL cordially concurred with most that Dr. Sturges had said. Dr. Sturges observed that the causes of pneumonia were more numerous than they were formerly thought to be; but was it not the case that, in the view of some of us, they had been reduced to one? that wherever pneumonia overtook its victim, whether on the mountain peak, or on exposure to our bitter east winds, or in a drunken sleep by the hedge side, or whilst sniffing at a sewer ventilator, it was equally produced by the implantation and growth within him of a specific germ, the pneumococcus? No one familiar with the researches of Friedländer, of Dr. Dreschfeld, and of others, could question the presence of this organism in pneumonia, or that it could be cultivated on indifferent material, and, by inoculation into certain animals, could reproduce pneumonia; that evidence rested upon the researches of experts, and seemed beyond question. He had charts and notes of eighteen cases of pneumonia, most of which had occurred at the Middlesex Hospital, and a few in private, in all of which his friend, Mr. L. Hudson, had found characteristic pneumococci in the sputa. Most of these cases were ordinary typical cases of pneumonia; some were cases of pneumonia in association with alcoholism, with a catarrhal condition preceding by some weeks, and thus illustrating Dr. Sturges' remarks; and one case showed the fluctuating temperature and hectic type of symptoms, and, later on, the physical signs suggestive of phthisis, although no characteristic bacilli had, up to that time, been found. In all these cases, however, the characteristic coccus had been found. It seemed that the coccus was to be found in all varieties of pneumonia, and that the hopes of clinical physicians, who thought that in the discovery of these organisms a new criterion was found which might further help to separate out and distinguish, if not explain, the more septic forms of pneumonia, were doomed to disappointment. Whether the varieties of pneumonia to be distinguished clinically—idiopathic, septic, wandering, etc.—would ever be explained by complexity or co-operation of organisms, he was not in the least qualified to speculate. It appeared to him that the researches with respect to organisms in pneumonia had been too uniformly successful to be

regarded as conclusive. In pathology, as in therapeutics, the positive results and statements were heard first, and were afterwards qualified by further observation and experience. He thought that evidence was accumulating to show that we were all teeming with rudimentary organisms, and that when certain diseases, within a given range of variation—for example, pneumonia, tonsillitis, acute rheumatism, erysipelas—got the better of us, a culture of such organisms went on to a more definite form characteristic of the special lesion, a form which might, under circumstances, further propagate the disease. In that sense, he would venture, under all reserve however, still to regard the organisms of pneumonia as epiphytic, and the conditions enumerated by Dr. Sturges as more really causative of the disease.

Dr. CHURTON had examined many sections from œdematous lungs, and in some of them had found that, in addition to the albuminous fluid which the alveoli contained, ordinary pneumonia-products existed. Pneumonia was an alteration in the alveoli which might, perhaps, be brought about by more causes than one; the pneumococcus might be a frequent cause without necessarily being the only one. He had never seen a case of apparent contagion either in hospital, dispensary, or private practice. Whatever altered or weakened the capacity of the alveolar walls was a predisposing cause of pneumonia. Predisposing causes might be of long or of short continuance; if short, they must be sharp; great fatigue, great depression, prolonged or severe chill. It was readily intelligible that one part of the lung might be reflexly depressed in nutritive energy, and thus become affected with pneumonia, whether by growth of cocci in the part or by other means.

Dr. HOLLIS considered that until we had more decisive evidence of the part which the pneumococcus played in the causation of the disease, we must still give much weight to the clinical aspects of it, and these would rather lead us to believe in several varieties of the lung inflammation than in any single disorder.

Surgeon-Major BLACK expressed the opinion that pneumonia could be induced by the action of direct cold applied to the body by exposure to weather, as might be seen in military service at home, and in cold colonies, as Canada. In order to reduce the former prevalence of pneumonia in the army, the use of flannel shirts was universally enjoined on service in such climates. This measure had the desired effect, and still continued in force. He wished to point out that the walls of the chest were more easily penetrable by cold than those of the abdomen, in consequence of their being composed of bone, which is a fair conductor, and having a thinner covering of fat, which is a bad conductor, than the latter. He mentioned cases in which pneumonia had been contracted by well-to-do people, who had gone on the roofs of their houses during the winter to attend to the snow, and by visitors to the Exhibitions who had sat in the grounds in the cold evening air, listening to the music.

Dr. COUPLAND remarked that since the pneumococcus had answered to the tests required to establish its pathogenic character, the whole question of the precise relations of bacteria to specific diseases must depend on the solution of the problem in the case of pneumonia. Moreover, the clinical cause of acute lobar pneumonia was very closely allied to that exhibited by other specific diseases, which were now equally claimed to be bacterial,—for example facial erysipelas, a disease, too, which prevailed under meteorological conditions similar to those favourable to pneumonia. It might well be that the true solution was that in all bacterial diseases the microbes were as Dr. Powell suggested, epiphytic, but yet specific and characteristic of the disease.

Dr. MAGUIRE thought that it was highly desirable to consider not merely the action of any particular germ, but also the conditions under which the germ produced its effects. The atmospheric conditions were especially important. He had noted in Manchester a tendency to the occurrence of epidemics of pneumonia at certain periods of the year, particularly in March and April, and again in October. This corresponded to a great extent with what had been described in Munich, and there it had been shown that not only was cold a factor in producing pneumonia, but that there was a distinct and inverse ratio between the amount of pneumonia in the town, and the amount of moisture in the atmosphere, the more moisture the less pneumonia, and *vice versâ*. Because other conditions were concerned in producing croupous pneumonia, however, it by no means followed that the pneumonococcus was not still the actual *materies morbi*. It was undoubted that, in some forms of croupous pneumonia, a micrococcus of peculiar characters was found in the lung, in the blood, and in distant organs, such as the kidney. But to determine whether this was a specific organism, it was necessary to study it not only morphologically, but also physiologically by experiments on animals, and especially was it important to observe the surrounding conditions which might be necessary to allow the germ to produce its effects.

AN EPIDEMIC OF PNEUMONIA: ITS PATHOGENESIS.

By JOHN ADAM, M.A., M.D., DINGWALL.

IN the BRITISH MEDICAL JOURNAL of August 11th, 1883, and May 15th, 1886, papers entitled "Contagious Pneumonia" have appeared, written by Dr. Bruce, Dingwall, in which were detailed the symptoms of twenty-three cases coming under his care during the months of May, June, July, August, and September, 1883. As probably all the cases in this neighbourhood were attended either by Dr. Bruce or myself, a brief account of my cases may not prove uninteresting. Dr. Bruce divides his cases into groups, the relationship between the members of each being such as naturally to lead him to designate the disease "Contagious Pneumonia." On the other hand, of the twenty-four cases attended by me during that year, only two of the patients belonged to the same house, the first becoming ill on March 8th, the other on August 3rd. Dr. Bruce alludes in his first paper to my having suggested the co-existence of influenza as an explanation of the prevalence of the disease. To prevent, therefore, a tedious repetition of more or less identical details, I shall refer more particularly only to those cases where abnormal symptoms were observed.

CASE I.—J. B., aged 28; intemperate; living six miles east from Dingwall, in a straight line; rigor on January 7th; wind north-east, frosty; right lower two-thirds affected, due to exposure; died.

CASE II.—M. C., Dingwall, aged 12; February 2nd, wind north-west, cold; left base, with pleurisy and empyema; recovered.

CASE III.—T. M., aged 14, also a town case; February 13th, wind south-west, cold; right base; recovered. The patient, her aunt, and sister, had all what they termed "feverish colds." In the latter, no further symptoms showed themselves, but in Case III, a delicate girl, a mild, but typical pneumonia, was superadded.

CASE IV.—J. F., 42, lived six miles south-west from town; March 7th, wind north-east, cold; left base; recovery.

CASE V. (*vide supra*).—J. McD., aged 10, living five miles south; rigor; March 8th, left base; wind north-east; cold and stormy; recovery. Two days after the crisis, the temperature again rose, and she had an attack of measles. All the other children had measles also, but without any lung mischief.

CASE VI.—D. McL., aged 6; four miles west. April 2nd, wind west; chilly. Right base; recovery. Of the cases occurring in patients under ten years, this was the only one having a rusty sputum.

CASE VII.—J. M., aged 50; three miles west. April 21st; wind east; frost at night. Right base. Died. Prune-juice expectoration in a debilitated man.

While seven cases occurred during the first four months, as many as fifteen occurred during the next four, and only two during the remaining four months of the year. The prevalence of the disease during May might have been satisfactorily accounted for by the sudden and extreme changes of temperature characterising that month. But the advent of genial weather caused no diminution in the number of cases, as while two occurred in April and four in May, as many as nine occurred in the much warmer months of June and July. Nor did the direction of the wind seem to have any appreciable influence. Coincident, however, with this increase, the occurrence of unusual symptoms began to attract my attention. Catarrh of one or more of the mucous surfaces often preceded, or even accompanied, the pneumonic attack, while numbers of people—chiefly young—in the same neighbourhood, and occasionally in the same house, as those affected with pneumonia, were seized with these catarrhal symptoms, accompanied by pyrexia, but with no signs of pneumonia. During that summer I attended more than twenty of these latter cases, and I am aware that numbers more were similarly affected, without requiring medical advice. In resuming the short notes, those complicated cases will be more particularly alluded to.

CASE VIII.—McA., aged 18; living in town; May 13th; left base. Wind east, mild; frost at night. Recovery. This case is referred to by Dr. Bruce, under heading "Group IV.—Acute Pneumonia in two Lads working together." These lads were assistants in a drapery establishment. They worked together, but lived separately. My patient shared a small, ill-ventilated bedroom with two other lads, neither of whom was subsequently attacked.

CASE IX.—D. McL., aged 70; five miles east; May 14th, right base; wind east, mild; frosty nights. Died; complicated by diarrhœa.

CASE X.—Mrs. U., aged 32; three miles east; May 20th, wind east; right apex and base; recovery. She had sore head, coryza, and vomiting for several days before the rigor.

CASE XI.—B. G., aged 7; four miles east; May 25th, wind west, mild; fine weather: left base; recovery. This boy was delicate, and became ill with what symptomatically might be termed catarrhal fever or influenza. A younger brother was at the same time similarly affected, both the boys suffering from coryza, sore throat, cough, gastric catarrh, and pyrexia. In the younger of the two, no pulmonary disease could be detected, but in his brother there was an unmistakable, though transient, attack of pneumonia.

CASE XII.—John S., aged 45; intemperate; June 6th; wind west; fine; (corresponding to Dr. Bruce's Case XVI); lived about a mile from Case XI. For several days he had what he termed a cold, due to his lying out all night, intoxicated. *Delirium tremens* then set in, accompanied by left pneumonia, and proved fatal.

CASE XIII.—B., aged 13; living in town; June 9th; wind south-west, warm; right base; recovery. Here two boys, living in a small insanitary house, became ill about the same time, the one with influenza alone, and the other with pneumonia superadded. These boys here huddled together in one bed with several other little children, none of whom had pneumonia. In a house on the opposite side of the street, two boys had influenza at the same time. In a house about forty yards distant, a boy, aged 7, was at the same time ill with vomiting, diarrhœa, and repeated attacks of epistaxis, with pyrexia (103° Fahr.). At the same time, I was informed of other children in town being ill with "feverish colds," without having any medical attendance.

CASE XIV.—J. McD., aged 7; one mile north; June 12th, wind north-east, raw and cold; right base; recovery. This boy was also seized with mild catarrhal symptoms, accompanied by pneumonia.

CASE XV.—J. D., aged 18; town; June 15th, wind west, fine and warm; right base; recovery. Here, also, there were unusual symptoms.

All those boys—Case XI excepted—attended the same school, and this fact naturally suggested the possibility of "contagion," but Cases IX, X, XI, and Case XVI—occurring shortly afterwards—all widely separated from each other, and from the town cases, pointed to the operation of some more general cause than "contagion."

CASE XVI.—Mrs. McK., aged 34; four miles south-west; wind west, warm; right base; recovery. She became ill subsequently to two of her children having a sharp attack of fever, attended with sore-throat, vomiting, and diarrhœa. The mother's initiatory symptoms were somewhat similar. The temperature on June 25th was 103.2°. She complained of "stuffiness" of the head and nostrils, had suffused eyes, slight diarrhœa, and cough. June 28th, Temperature was 100.2°. That night, she had a severe rigor, and a sharp pain below the right nipple. A severe attack of pneumonia followed, accompanied by extreme prostration.

The next four cases occurred in July. Cases XVII and XIX were normal cases. In Case XVIII, diarrhœa accompanied basic pneumonia of left side. Cases widely separated. Recovery.

CASE XX.—A town case, aged 60; was an intemperate woman, who died of right basic pneumonia.

CASE XXI.—Mrs. McL., aged 33, living in the same street as Case XX; had a rigor on August 3rd, three days after Case XX. She had well pronounced influenza as a precursor and accompaniment of right-sided pneumonia, and recovered.

CASE XXII (already alluded to).—Mrs. McD.; five miles south, wind east, warm; August 3rd; right base; due to exposure; recovery.

CASE XXIII.—R. McK., aged 19; four miles east; September 12th, wind west, warm; first left pleurisy. Next day, pneumonia of right base, followed by pneumonia of pleuritic side; great dyspnœa; wet cupping; recovery.

CASE XXIV.—H. F., aged 60; four miles south; November 11th, chilly. First seen November 19th, moribund; died next day.

There have thus been detailed three kinds of cases:

1. Typical uncomplicated cases of pneumonia.
2. Uncomplicated cases of influenza or catarrhal fever.
3. Cases of pneumonia, preceded or accompanied by influenza, or catarrhal fever.

Have we here, then, two distinct epidemic diseases, occurring in the same district, and even in the same individual, simultaneously and independently; or does one occur as a complication or sequela of the other? That the outbreak of pneumonia has arisen from some pathogenic agency or organism, usually inoperative or absent, is proved by the fact that this neighbourhood has hitherto been exempt from such epidemics. A certain small number of cases does annually occur, and, of those twenty-four cases, several were, doubtless, due to ordinary causes. Most of the cases occurring during the first and the last four months of the year might be so classed. But in the great majority of the other cases, undoubted abnormal precursory or concomitant phenomena were present, while a large number of people suffered from these symptoms alone. Of the two diseases, the catarrhal fever was much the more prevalent, occurring over wide areas, and followed here and there by pneumonia. The cases of pneumonia also occurred at wide distances from each other, and, with the exception of the boys attending the same school, there was no evidence, and in many cases no possibility, of the disease having been communicated from one to another. And even in these boys the influenza was the primary disease, and in the majority of cases the only one. The epidemic would thus be more correctly designated "influenza" or "epidemic catarrh," to which the subsequent pneumonia would, perhaps, hold an analogous relationship to that held by nephritis or acute rheumatism to scarlet fever, etc.

The above is an abridgment of a paper read some time ago to the local branch of the Northern Counties Branch of the British Medical Association. Since that time, I have been kindly informed by Dr. Mackenzie, Uist, late of Broadford, Isle of Skye, that, during the end of 1882 and the first two months of 1883, that is, previous to the outbreak here, an epidemic of influenza spread all over that island. Thereafter, he attended nearly thirty cases of acute pneumonia, all following, though after a longer interval than in my cases, attacks of influenza. Dr. Mackenzie attributes the pneumonia to the great prostration consequent on the influenza, especially in delicate subjects.

In the address of Dr. Burney Yeo, published in the JOURNAL of June 28th, 1885, in which Dr. Bruce's first paper is alluded to, reference is made to the theory that typhoid fever may be the primary disease in some of those apparent epidemics of pneumonia. Though several of the earlier symptoms in one or two complicated cases here simulated those of typhoid fever, their subsequent development led to the view that the primary disease was influenza, or epidemic catarrh.

AN EPIDEMIC OF PNEUMONIA.

BY R. J. FOULIS, L.R.C.P.ED., L.R.C.S.ED., WYLAM-ON-TYNE,
Medical Officer, Bywell Eastern District, Hexham Union.

DURING the month of December, 1886, I had occasion to report to Dr. Maclagan, medical officer of health, Hexham Rural Sanitary Authority, the prevalence in my district of pneumonia of an epidemic character. The following are a few notes of the outbreak.

Saturday, November 6th, 1886, was the day of an almost unprecedented storm of wind and rain. All day a terrific gale blew from the south-west, accompanied by a deluge of rain. The amount of rainfall may be estimated from the fact that the River Tyne, which flows under Wylam Bridge with an average depth of thirty inches, on that day rose to eighteen feet, showing a rise of fifteen and a half feet. A few days after this storm and flood, six cases of pneumonia occurred simultaneously in the village of Wylam. These were followed every day by fresh cases of the same disease, until at the end of three weeks there were altogether forty cases in Wylam alone. About the same time the disease also appeared at the villages of Horsley and Heddon-on-the-Wall, and the hamlets of Houghton and Blue Bell, all of which places are within a radius of two miles from Wylam. Heddon-on-the-Wall, Houghton, and Blue Bell, are not in the district of the Hexham Rural Sanitary Authority, but as they were in the infected area I have included them in my report. The epidemic continued until the beginning of January, 1887, and has now disappeared. The cases were distributed as follows—the population I mention being that of the census of 1881.

Wylam: population 959; 40 cases, or 4.17 per cent. Horsley: exact population not known, being included in that of Ovingham, 29 cases; Heddon-on-the-Wall, 31 cases; Houghton, 4 cases; and Blue Bell, 11 cases. The population of Heddon, including Blue Bell and Houghton, is 869, and the combined cases 46, or 6.4 per cent. Thus within the area I have mentioned there occurred altogether 115 cases.

Although a few adults were attacked, the incidence of the disease was mainly upon children, and was not confined to those of the poor, but attacked all classes irrespective of their social status. The onset was, as a rule, sudden, without many premonitory symptoms. The pneumonia was of the ordinary croupous variety, with all the usual physical signs, and, on an average, terminated by crisis on the seventh day. A few cases were more protracted; but these occurred in weakly

children, in whom an acute disease might reasonably be expected to run a longer course. Out of the one hundred and fifteen cases, only two proved fatal, or less than 2 per cent.; and it is noteworthy that both these fatal cases occurred in children who were at the time suffering from whooping-cough.

The health of the district at the time of the sudden appearance of the epidemic is interesting. In Wylam there was not a single case of any infectious disease. There was no typhoid, no erysipelas, no tonsillitis, no scarlatina or measles. In Heddon, Houghton, Blue Bell and Horsley, on the contrary, there was an epidemic of whooping-cough, while Wylam was quite free. In spite of that, the pneumonia appeared first in Wylam, and in the other places a day or two later. Wylam is situated on the north bank of the Tyne, quite at the river side, while Heddon and Horsley stand fully one hundred feet higher. The cottages of Wylam would compare, as a rule, unfavourably with those of Heddon and Horsley; but up to a certain date and the influx of strangers, Wylam was a fairly healthy village. Notwithstanding the unsatisfactory condition of many of the cottages, no deaths occurred in Wylam; the two fatal cases occurred, one at Houghton and one at Blue Bell, and in both of these cases the hygienic conditions were not of the best description.

I look upon this outbreak as one of epidemic infectious pneumonia. In some instances, two or three cases occurred simultaneously in the same house. In others, one child was seized, then in a few days another member of the family, and so on until two or three occupants of the same house were attacked. From this it would appear that the pneumonia was of a decidedly infectious type.

As to the origin of the epidemic, it is difficult to assign an exact cause, but the following points are worthy of consideration. The outbreak immediately succeeded a storm of unusual severity; it occurred at a time of year when vegetation was in a state of decomposition; it appeared almost simultaneously in a district entirely free from infectious disease, and in a district where whooping-cough was rife; it went through all stages of severity, from the mildest possible attack to the most severe, thus resembling any other epidemic; it attacked all classes of society; it appeared during a season of great climatic changes; and, lastly, although these climatic changes are still as great and as sudden as ever, it disappeared almost as quickly as it commenced. In some cases where it occurred in the houses of the poor, where bad ventilation, overcrowding, and fæcal accumulation existed, the evidence was in favour of it being of the pythogenic type. But seeing that it also occurred in houses where no such bad conditions existed, and where the sanitary arrangements, ventilation, etc., were perfect, my opinion is that this epidemic was due not to atmospheric or telluric influence alone, but to a combination of the two, dependent upon the storm, and the great climatic changes so prevalent at the time.

A few years ago, an epidemic of pneumonia on a much smaller scale occurred at Prudhoe, about two miles west of Wylam. That outbreak also followed a severe storm of wind and rain in the month of October, but, at the same time as it appeared, there was a prevalence of typhoid fever and malignant scarlatina in the district, whereas the present epidemic occurred without the presence of either of these diseases.

In conclusion, I may mention that, since the subsidence of the pneumonia, two cases of scarlatina, and two cases of remittent fever, have occurred in what I may term the pneumonic district; while two other cases of scarlatina have appeared in another part of the district which was entirely unaffected by the pneumonia.

FIBRO-PAPILLOMATOUS TUMOUR OF THE MALE BLADDER: SUCCESSFUL REMOVAL BY SUPRAPUBIC OPERATION.

By G. BUCKSTON BROWNE, M.R.C.S.Eng.

The removal of tumours from the urinary bladder has of late so much occupied the attention of surgeons, that the publication of the following case needs no explanation or apology.

The patient, Dr. R., aged 64, resident in a town near London, was seen by me throughout, in consultation with Dr. Gage Brown, of London. There was no family history of bladder-disorder. Gout and rheumatic gout existed both on the father's side and the mother's, and the patient himself was gouty. Thirty years ago he had urethritis and orchitis, but never cystitis. He first noticed blood in his urine in February, 1883, and six months afterwards he had a severe hæmorrhage, lasting three weeks. Another severe bleeding occurred in July, 1884, and there have been constant losses of blood ever since, with occasional smart attacks of hæmorrhage. The blood had always been intimately mixed with the urine, not more at the end than at the beginning of the flow. The bleedings seemed to come without "rhyme or reason;" they were not produced by exercise. He saw Sir Andrew Clark, the late Mr. Francis Mason (who sounded the bladder), and others. He is sure that gallic acid in fifteen grain doses controlled the bleeding better than any other styptic prescribed. About September, 1886, he began to have difficulty in holding his water for two hours, and had deep-seated aching pain at the close of each act of micturition. I first saw him on October 6th, 1886. There was much blood in the urine from beginning to end of the stream. The patient had to rise to micturate twice in the night, and could hold his urine for only two hours in the day. Shaking caused no inconvenience. He brought with him a few phosphatic concretions which he had passed.

Examination.—The sound found no stone, only a sabulous spot at the superior fundus of the bladder, and on the patient's right. No chronically retained urine. By the rectum, the finger found all normal. I washed out the bladder, carefully examined the *débris*, but could find no organised material. On October 23rd, he was very ill, and much reduced by severe and constant bleeding and by great vesical irritability; it was evident he must soon sink unless relieved. I had no absolute evidence of a bladder-growth, but the history of the case made me strongly suspect one, and I did not hesitate to advise that the bladder should be explored by the finger introduced from the perineum by means of an incision into the membranous urethra, and asked and obtained leave to remove anything I might find removable, by any means I chose.

Operation, October 26th.—Mr. Charles Moss administered ether. Dr. Gage Brown and Mr. John H. Morgan were present, the latter rendering me his valuable personal assistance. The urethra was opened in its membranous portion upon a grooved staff, and directly the forefinger entered the bladder it encountered a large, wide-based tumour growing from the right side. A piece was twisted off with a pair of straight forceps, but the growth was too large and firm to be removed in this way with forceps, undirected by the finger, and I therefore at once proceeded to open the bladder suprapubically upon the point of an ordinary lithotomy-staff, having first introduced an india-rubber bag into the rectum, and distended it with water. The patient was very stout, and the bladder lay too deeply, and was too full of blood for anything to be seen of its interior, but the tumour lay directly under the finger, and the forceps was with ease accurately placed upon the base of the growth, which was firmly grasped, and then twisted round and round, until the tumour and the forceps came away, no traction of any kind being made. Another small bit of the base required removal in the same way. A soft tube was put into the bladder over the pubes, the abdominal wall above the tube brought well together by two stout silk stitches, and the operation completed. The tube was removed on the second day. On November 7th, the wound was coated with phosphatic deposit. On November 12th, there was cough, with rusty sputa, and the base of the right lung was dull on percussion. This attack of pneumonia tried the patient severely, and was afterwards found to be due to a leaky water-bed. On November 22nd, the wound was healed. In a few days, symptoms of phosphatic concretion in the bladder developed themselves, and, under the influence of ether, I introduced a lithotrite in the ordinary way, broke up the calculous matter, and washed it out through a No. 16 tube. On November 29th, the patient went home. On December 6th, the urine was clear, sweet, and acid, and was easily held for five hours, and the patient has since remained perfectly well, without one unfavourable symptom.

Examination of Tumour, by Mr. C. Stonham, Curator of the Museum of University College. "The basis of the growth is a delicate stroma of connective tissue; scattered through this are numerous small round cells. The villous processes are about one-third of an inch in length, and are covered with epithelium of a spindle shape. A large vessel runs up the centre of each villus, and the vessels seen in the stroma are large."

Remarks.—A suprapubic opening into the bladder is a difficult one to manage after operation, for it is impossible to avoid much wetting of the bed by urine, and, unless great care is taken, the skin about the groins and elsewhere is apt to become excoriated. In this case I found German peat very useful when used in the following manner. It is broken up, well dried, wrapped in a handkerchief, and placed over the wound; the urine is soaked up, and from time to time the wet peat is thrown on the fire, and fresh dried peat put in its place. It is a cheap and useful application. In this case the patient could only occasionally bear a catheter passed into the bladder by the urethra, and fixed there. When a catheter can be worn in

this way without trouble, the healing of a suprapubic vesical wound is much facilitated. When the patient lies on his side, a suprapubic wound is well drained by packing in the ends of a few threads of worsted; these threads are led into a dish, and are separated from the patient's skin by a piece of oil-silk. Apart from the severity of the patient's symptoms, and their complete removal by operation, the case just related is of special interest, because it illustrates the great value of digital exploration of the male bladder as taught and practised by Sir Henry Thompson. Had any tumour *débris* been found in the urine, and if there had been reason to believe that the tumour was large, the suprapubic operation might have been proceeded with at once, without any preliminary perineal one, but nothing was known for certain until the bladder was entered by the finger from the perineum. Had the tumour been small or stalked, it might have been entirely removed without any further incisions. Here, however, this was not the case; but the perineal wound healed by first intention, and never gave the slightest trouble.

LECTURE ON NASAL AND NASO-PHARYNGEAL REFLEX NEUROSES.

By P. McBRIDE, M.D., F.R.C.P.E., F.R.S.E.,

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At the present time no course of lectures would be complete which did not take into account the subject of nasal reflex neuroses; at the same time I have no intention of attempting an exhaustive review of the literature, for to do so would be but to weary you with needless repetition of facts observed by different authors.

The ocasional dependence of bronchial asthma upon the presence of small nasal polypi, not always large or numerous enough to obstruct the nostrils completely, was, I believe, first observed by Voltolini. His observations were confirmed by others, and extended by Schäffer and B. Fraenkel, of Berlin, who found that chronic nasal catarrh might lead to the same result, to wit, bronchial asthma. It was reserved for Hack, however, to electrify the world of medicine by his startling monograph, bearing the sensational title, *Ueber eine operative Radical-Behandlung bestimmter Formen von Migräne, Asthma, Heufieber sowie zahlreicher verwandter Erscheinungen.* (On an Operative Method of treating radically certain forms of Megrim, Asthma, Hay Fever, and numerous other Allied Conditions.) Before giving a brief account of this work, I must remind you of the fact, to which I have before drawn attention, that owing to the observations of Kohlrausch, it is now generally admitted that the mucosa of the inferior turbinated body covers erectile tissue somewhat similar in structure to the corpus cavernosum of the penis. Under certain circumstances and conditions described by Hack and others, this tissue tends to be more or less constantly in a state of erection, and then may give rise to such neuroses as asthma, nightmare, cough, megrim, supra-orbital neuralgia, redness and swelling of the nose and adjacent parts of the face, vertigo and epilepsy. The work in question begins with an exhaustive account of a number of cases in which such neuroses as those mentioned were cured by galvano-caustic destruction of the erectile tissue covering the anterior extremity of the inferior turbinated body. Hack has also traced various neuralgic affections of the face, diffuse headache and flickering scotoma, to a similar source. Indeed, as one reads his work, the impression tends to fix itself upon the mind that destruction of the mucous covering of the inferior turbinated bone and subjacent erectile tissue is a certain cure for all or nearly all those neurotic ailments which have hitherto taxed the skill and care of physicians to their utmost limits. Thus in the section headed "Flimmerscotom," Hack refers to transitory defects of vision, which have been occasionally known to follow the insufflation of irritants; upon these and upon his own observations, which go to show that nasal disease may cause organic changes in the skin of the face, he builds up a theory that by galvano-caustic operations upon the nose, atrophy of the optic nerve may, in some instances be averted. This fanciful hypothesis rests upon the assumption that vaso-motor changes similar to those seen in the skin may eventually produce thickening of the fibrous tissue surrounding the optic nerve, which may then be so pressed upon that its function can no longer be performed. It should not be forgotten in this connection that others—for example, Bresgen—have ascribed the changes in the skin of the face, sometimes found associated with nasal disease, to congestion, due to venous obstruction caused by the tumefaction within the nose. Again, from a single observation pointing to the occurrence of acute inflammation of a joint as a result of the removal of nasal polypi, Hack feels himself justified in classing acute "rheumatic" inflammation of joints among the affections which he proposes to treat by destruction of the nasal erectile tissue. From what I have said you will see that the author in question gives one the idea of having been carried away by enthusiasm towards—if not over—the verge of exaggerating the importance of nasal disease in the production of reflex neuroses.

In the year in which his monograph appeared, Hack had occasion to modify his views, in so far that he then saw reason to believe that, not only the anterior part of the inferior turbinated body, but also its central portion and the middle turbinated body—which Zuckerkandl has proved to contain erectile tissue—may give rise to reflex neuroses. It does seem somewhat strange that an author who could show such a brilliant series of successful cases of diseases which are not usually cured, should, within less than a year of their publication, see fit to modify his views in a detail of such vital importance. At the same time, everyone must admit that Hack has drawn the attention of the profession to a point of very great importance, and that, in many respects, his general views have been confirmed by other observers. Thus, Sommerbrodt has related cases of asthma, megrim, œdema of the face and conjunctivæ, sneezing and cough, due to changes in the nasal mucosa, and it is worthy of note that he also believes that the erectile tissue of the inferior turbinated body is the exciting cause of these phenomena. Not only does this author go so far with Hack, but he has also noticed vaso-dilator changes in the bronchial mucosa, vomiting, and chilling of the surface, with weakened action of the heart—all due to nasal disease, and cured by the galvanic cautery. Further, he has described a case of spasm of the glottis cured by active surgical treatment of the interior of the nose.

Sommerbrodt has described quite a number of cases in which there were all the physical signs of bronchitis, and which were cured by the same means. The most astounding of them is that of a patient, in whom, before surgical interference, there were sibilant rhonchi over the right side of the chest, which, ten minutes after cauterisation of the inferior turbinated body, had all disappeared. It is noteworthy that in these cases of vaso-dilator changes in the bronchi there was no asthma present.

You will see, then, that Sommerbrodt is by no means inclined to dispute the occurrence of nasal reflex neuroses; but he still cannot agree with Mackenzie, of Baltimore, who considers nasal cough to be a very common phenomenon. The last-named author believes that in many persons the posterior part of the inferior turbinated body, when irritated, produces reflex cough. He also considers that the adjacent part of the nasal septum is likewise part of the sensitive area, as he calls it. My own observation leads me to dispute Mackenzie's conclusions, because we rarely see cough produced by the introduction of the Eustachian catheter; but, at the same time, I am not at one with Sommerbrodt, because I think nasal cough is by no means very uncommon. Baber among others has recorded a case in which cough could be caused by pressing upon the left inferior concha, and in which the application of the galvanic cautery to this part diminished the number of attacks. In many cases, I take it, nasal cough is due to secretion falling upon the inter-arytenoid fold from the posterior nares. Hack's observations have been, as I said before, to a great extent confirmed by others in one particular, namely, that most of the neuroses he described have been cured by other observers by purely local treatment of the nasal mucous membrane.

Fraenkel, Schäfer, Baratoux and Hering—not to mention many others—have however shown that they may be due not only to erection of the inferior turbinated body, but also to various hyperplastic conditions of the nose, such as I have described to you in lecturing on hypertrophic catarrh and tumours. The two last-named observers believe that in many cases the reflex neurosis may be due to pressure from whatever cause upon the sensitive septum. Hering also describes cases of respiratory and phonatory spasm of the glottis due to nasal disease; but his elaborate paper is somewhat marred by the fact that he seeks to add functional aphonia to the list of nasal reflex neuroses; for every laryngologist knows that this affection may at times be cured by almost any stimulus applied to any part. Some few observers have, in addition to the neuroses already mentioned, described cases of profuse ptyalism cured by treatment of the nasal mucosa, but, so far as I am aware, few instances of this kind have hitherto been recorded.

Of late, Jacobi has attempted to show that choreic movements of the face, and sometimes even general chorea, may depend upon nasal disease. What he seems to me really to have demonstrated is that we may have nasal catarrh present in a subject who is thus afflicted—a fact we are not inclined to dispute. On the other hand, Fraenkel has cured a case of facial spasm by cauterising the nasal mucous mem-

brane, in which he found various sensitive areas from which the spasm could be initiated by touching them with a probe. In his case, there was very slight catarrh, but nothing further. Having got so far, you will naturally ask: "Is there anything pathognomonic in the neuroses in question, when they owe their origin to the nose?" According to Hack, they are, when due to nasal disease, associated with transitory nasal obstruction, coryza, and paroxysms of sneezing.

It is now time, however, to look at the other side of the question. That certain neuroses such as we have considered do sometimes owe their origin to nasal disease may be considered proved; it is also probable that those conditions which I have described to you under the heading hyperæsthesia of the nasal mucous membrane, namely, hay-fever, rose fever, nervous coryza, including simple erection of the inferior turbinated bodies without coryza, are frequently associated with abnormal conditions of the nose, and are often curable by treatment directed towards the affected part. Notwithstanding all this, there are good and accurate observers with large clinical material at command who have by no means seen their way to accepting nasal disease as *a common factor* of asthma, megrim, etc. Thus, Semon states that, while he has had satisfactory results in cases of severe paroxysmal sneezing, yet in neuralgia, megrim, and asthma, he has not met with similar success. Of four patients, he goes on to say, two suffered from neuralgia of the fifth nerve, one from nervous asthma, and one from megrim. In all four cases, no abnormality except swelling of the inferior turbinated body could be found as a cause of the symptoms; in all four, this was treated as recommended by Hack, and in all four the reflex neuroses remained as before the operation.

Another strong argument against the view that the erectile tissue of the nose has a monopoly in the causation of asthma is furnished by the fact that Tornwaldt states that cough (independent of the secretion running into the larynx), asthma, pain in the sternal region, and headache, may be due to disease of the bursa pharyngea, while cases have been recorded in which the removal of hypertrophied tonsils or naso-pharyngeal tumours have cured inveterate asthma. Again, Sommerbrodt has recorded an example of the same affection relieved by the destruction of four granulations which had their seat in the pharynx.

Now this brings us again to a very interesting question. You will remember that, in discussing the symptoms of granular pharyngitis, I pointed out how variously different persons suffer from this affection. Thus one individual in whom the condition is marked, and in whom, perhaps, we discover its existence accidentally (for example, in examining the pharynx in a case of ear-disease), will assert that all throat-symptoms are absent. Another patient, with one or two small granules in the pharynx, will complain of all sorts of symptoms, and not uncommonly of weakness of the voice. Michel has tried to explain this fact by assuming that the pharynx is of importance as a reflector of sounds produced in the larynx, and that inequalities in its surface will thus require increased exertion of the laryngeal muscles to overcome this mechanical obstacle. I do not think, however, that this hypothesis will explain why the symptoms are sometimes present and sometimes absent, why the symptoms of granular pharyngitis are usually exaggerated if the patient be slightly out of health, and, above all, why they are by no means always in proportion to the actual organic recognisable changes. We must, therefore, I believe, assume that, in those cases of granular pharyngitis where the voice is affected, and where the laryngoscope shows the larynx to be normal, the connection between the objective appearances and the vocal disability is a nervous one; and this is the view expressed by Solis Cohen so far back as 1872.

We must, I suppose, conclude from these facts, which I have endeavoured to lay before you, that, in a certain proportions of cases, such affections as asthma, megrim, neuralgia, and even epilepsy may be due to chronic changes in the nasal mucosa, and can be cured by treatment directed to the affected part. The usual and fashionable method of treatment at present is the application of the galvano-caustic point, or, in other words, an actual cautery. Now this treatment may act in various ways. It may, for example, destroy the terminal filaments of a nerve-twig along which impressions have passed to the nervous centres, and induced the neurosis in question; it may destroy tissues which are too erectile and in this way produce hay-fever, rose fever, and nervous coryza, or it may act just as a counter-irritant of equal severity applied to another part of the body would act; finally, it may be that by stimulating a sensory area separated by but a short tract of nerve-fibres from the centre, it has a much greater effect than a similar irritant applied to a more remote or less sensitive area. Where the neurosis is due to irritation of the nasal mucosa being reflected from this point to the central nervous system, we should expect decided amelioration from the use of cucaine[1] applied to the interior of the nostrils, and this method is said by several authorities to be of diagnostic value when a positive result is obtained.

[1] Rosenberg uses menthol in place of cucaine.

A very interesting question is whether all cases of neuroses which have been cured by application of the cautery to the nose were really nasal in their origin. At first sight, it seems a self-evident truism that if treatment of the nose cures nervous manifestations, the latter are due to changes in the part so treated. When, however, the galvanic cautery is used to destroy the nasal mucosa, we have another factor admitted—we have, then, to do with the question whether a strong stimulus applied to certain other parts may not also cure those nervous phenomena which are said to be often or occasionally associated with the nose. As a matter of fact, Schreiber has related some cases in which paroxysmal cough and supra-orbital neuralgia were cured by the actual cautery applied to the back of the neck. He has further observed that certain neuroses—especially those due to hysteria—could be readily cured by cauterising a healthy nasal mucous membrane. On the occasion when Schreiber described these cases, Naunyn reminded the meeting of the old-fashioned cure for sciatica—namely, cauterisation of the lobule of the ear, and he further alluded to cases of bronchial asthma cured by dilatation of the cervix uteri.

I have admitted that, in a certain proportion of cases, nasal disease is the actual factor in the production of certain neuroses, and, for simplicity's sake, I shall take, as an example, asthma. The meaning of this admission is that I believe that, under certain circumstances, a stimulus carried along the filaments of the fifth nerve which supply the nares may, by overflow, reach the area corresponding to a certain centre, and there set up a molecular change which results in the symptoms of bronchial asthma. Observe that the very admission that there exists a form of asthma which owes its origin to nasal disease carries with it the admission that stimulation of the nasal nerves may cause stimulative, or, what is probably the same thing, molecular changes in the "asthmatic" centre, if I may be allowed the term. If, then, this centre be in a state of what we may call stable equilibrium, it is conceivable that irritation of the nose may make it unstable; but, on the other hand, if it be unstable, it is also conceivable that stimulating the nasal mucous membrane may, by inducing a changed molecular condition, render it stable. It is, therefore, possible that cauterisation of the nasal mucous membrane may prove useful in certain cases of asthma, due to central nervous causes; in other words, that the nasal mucous membrane may be a good point to which to apply a strong counter-irritant. As with asthma, so with the other neuroses, which have been ascribed to nasal disease.

In epilepsy, it is a well known fact that certain sensory impressions, or motor disturbances called auræ, often precede the fit, and it is also known that energetic treatment of the part so affected may abort a paroxysm. Further, if a part of the body be found which, when irritated, gives rise to a paroxysm, then here, too, energetic local means applied to the part in question may tend to diminish the violence and frequency of the attacks. Yet reflex epilepsy is not a very common affection, so far as present knowledge goes. The applications to the seat of the aura are not, as Brown-Séquard remarks, effectual "by barring the way to something going up to the brain; but, on the contrary, in doing just the reverse, that is, by sending an irritation towards, or rather to, the nervous centres." In considering nasal reflex neuroses from this standpoint, one is involuntarily reminded of previous operative attempts to cure epilepsy; of these, I need only name removal of the clitoris, testicles, and occasional resection of other parts.

I fear that my attempt to deal with this difficult subject has but imperfectly succeeded; and I feel that, in my desire to lay before you a critical digest of the matter, I may have imperfectly expressed my own opinions as a lecturer should. I therefore conclude by giving you the views which I at present hold on this important topic.

1. That nervous phenomena manifestly associated with the nose, and producing what I may call the normal nasal reflexes, are frequently due to pathological changes of the nose,—for example, hay-fever, and other forms of nervous coryza, sneezing, and perhaps cough.

2. That other neuroses, such as asthma, megrim, etc., may occasionally owe their origin to nasal or pharyngeal disease.

3. That all neuroses belonging to the second class, cured or relieved by treatment of the nose or pharynx, need not necessarily be due to morbid conditions of these parts, because we may assume that the application of the actual cautery to the naso-pharyngeal mucosa is not less, and may be more effective than cauterisation of other parts which have been known to cure such neuroses.

4. That we have at present no means of knowing in any given case whether asthma, megrim, etc., can be cured by treatment of the nose.

5. That Hack's first work was calculated to raise expectations which are likely to remain unfulfilled.

6. That the weakness of voice, in some cases of granular pharyngitis where the larynx is intact, may be a purely reflex phenomenon, and that in certain cases the application of electricity to the larynx is indicated, rather than destruction of the granulations.

This lecture was delivered during the summer session of this year, and, before committing it to the press, it seems well to consider whether anything of note has been added to the discussion of this very important subject. At the last International Medical Congress, the transactions of which have been but recently received, the discussion on nasal reflex neuroses showed a considerable discrepancy of opinion among various observers, although it seemed to be generally accepted that Hack's view as to the importance of the erectile tissue as a factor in all nasal neuroses, is no longer tenable. It is impossible here to follow the views of all the speakers, but a very interesting case was mentioned by Chiari, in which asthma, due to aortic aneurysm, was relieved by cauterising the inferior turbinated body. E. Fraenkel opposed the view that cauterisation of the nose may cure asthma by acting as a counter-irritant, because he had tried it in the case of a single patient, whose nose was healthy, and who was not benefited; it is hardly necessary to point out how impossible it is to draw any deduction whatever in medicine from one observation. Of recent contributions bearing upon nasal reflex neuroses we need only mention two.

Hack has published an account of a case of exophthalmic goitre, in which the exophthalmos, the hypertrophy of the thyroid gland, and the nervous palpitation were relieved by cauterisation of the mucosa covering the inferior turbinated bodies which was in a state of erectile swelling. As a very useful antidote to those who are inclined to be too active in attacking by surgical operations the noses of those who suffer from asthma and other neuroses, may be mentioned a recent paper by Boecker. This author confines himself to discussing the connection between asthma and nasal disease. He combats many of Hack's conclusions, and, while admitting the occasional connection, thinks that asthma cannot generally be cured by attacking the turbinated bodies. His paper is a long and critical essay, well calculated to shake the credulity of the too credulous.

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16. Schech, *Diseases of the Mouth, Throat, and Nose*, translated by Blaikie, p. 230, *et. seq.*

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ON THE DURATION OF INFECTIOUSNESS IN THE FOLLOWING INFECTIOUS DISEASES: SCARLATINA, SMALL-POX, MEASLES, MUMPS, AND DIPHTHERIA.

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I HAVE been requested by the Collective Investigation Committee to open a discussion upon the duration of infection in certain specified diseases, a subject upon which they are about to start an investigation, and to the elucidation of which they will apply the admirable organisation which has been framed for the purpose of such collective inquiry by our Association.

I do not anticipate much difficulty in obtaining your sympathy with this undertaking. It will probably be sufficient to call attention to its importance, and to show how little has hitherto been accomplished in settling the question of the duration of infection in most of the more common epidemic diseases.

It will be observed that there is no intention of making a complete study of all disorders known to be infectious, nor yet to enter upon the strictly pathological domain as to the nature of the contagium and the mode of its operation.

The possibility of the infection of tubercle has already received the attention of the Committee, and has been made the subject of a special inquiry.

In the present quest, the diseases, whose infectiousness is to be considered, are Scarlatina, Small-pox, Measles, Mumps, and Diphtheria, and the inquiry is limited to the duration of their infectiousness. Nothing is said as to the duration of the latent or febrile periods of these diseases, nor as to any other matters related to the central question about to be addressed to our associates.

A knowledge of the periods of incubation of these complaints is indeed of value in enabling us to answer certain questions relating to infection, such as the period of time that must elapse before a person suspected of having taken a disease can be allowed again to mix with other susceptible persons; but many observations are now on record with respect to this point, especially those made by Dr. Squire and by the Lancashire and Cheshire Branch, and it is probably thought undesirable in any way to complicate the present investigation. It is truly most important that the questions to be addressed to our members should be as simple as possible, and capable of short and definite statement.

And yet, with all this careful limitation of the objects of the inquiry, it is probable that the results to be obtained from it are more practically useful than those of any other investigation that has yet been set on foot by the Committee; with the possible exception of questions relating to prognosis, there are none which medical men are so frequently called upon to answer as those connected with the subject of this paper.

Both the early and the latest limits of infectiousness are involved in these inquiries. With regard to the former, we are asked as to the possible origin of the attack we are called upon to treat, and whether it could have arisen from contact with a patient, in whom the characteristic signs of the disease had not become manifest at the time of meeting; and again, we are expected to say whether risk has already been incurred by other members of a household.

With respect to the later limit of infectiousness also, there are many questions on the part of parents as to how long isolation will have to be kept up, when the invalid may be allowed to travel, for how long a time other children or susceptible persons must be kept apart; and when they may be permitted to return home, if they were absent when attacked; or if they or other members of the family had been sent away, when they may return to school, and so on. On the part of friends, we are asked how soon they may visit a family that has been infected, and whether it is possible for the disease to be conveyed by third parties. Schoolmasters and mistresses ask similar questions, and their confidential medical advisers have to fix safe limits of quarantine.

In replying to this multitude of questions also, the medical attendant not only takes upon himself the responsibility of the consequences that may follow his decisions, but he must take into account the probability that his opinion may clash with that of other medical men, and that he may at any time be challenged to support his views with

adequate evidence by the attendants of other families, or by the medical men resident at the schools to which children may have been sent in obedience to his orders.

That there is danger of this collision, and that there are many and serious differences of opinion on these points amongst medical men, no one will doubt who has had any experience in medical practice. I could myself give instances within my own experience of such clashing of medical opinion with respect to each one of the diseases mentioned in the schedule, but I will content myself with citing one striking example with respect to scarlet fever, taken from Dr. Vacher's able paper "On the Duration of the Latent Period, the Fever, and the Infectiveness of the Exanthemata and some Allied Diseases" (published in the *Manchester Health Journal*, vol. i, p. 170).

He first gives the opinion of Dr. Longhurst (in a communication to the Clinical Society, made January 26th, 1883), to the effect that scarlet fever ceases to be infectious at "the end of the third week from the appearance of the rash, in each ordinary case"; and he then cites other observers, who fix the limit of infectiousness at various periods between five and eight weeks; and then, finally, he quotes from Dr. Cameron, of Huddersfield, who, in a paper to the *Lancet* (December 23rd, 1882), gives cases showing that the disease may be communicated after long periods of time, and after the primary patient was to all appearance well. Dr. Cameron concludes, from an experience of close upon a thousand cases at the Borough Hospital, that "the process of desquamation is seldom completed before the eighth week, is often incomplete at the tenth, eleventh, and even the twelfth week, and is by no means ended at the thirteenth week."

The general public cannot understand the uncertainty that thus prevails respecting a matter that to them appears very simple, and one that should be capable of being answered definitely and readily. It is thus that no little contempt often arises for medical science amongst those whose confidence we seek to win, and, for want of the evidence such as we are now seeking, much opprobrium falls upon members of our profession. For to what does our evidence amount in regard to the several diseases that have been mentioned? Is it not, for the most part, a mere tradition, handed down from father to son, or from one general practitioner to his apprentice, or to his junior in practice? Are there any fixed canons of doctrine on these points to which we can any of us appeal? and are there any archives or collections of facts to which we can refer in support of our opinions?

It is fortunate that we need not answer all these questions in an entirely unsatisfactory fashion; but no credit is due to our textbooks of medicine for our reply. We have a few data at our disposal, collected by individuals, which I propose now to review before you; but scarcely any mention is made of them in the chief books of reference to which we have access in our libraries. Most of these books are either silent on the subject, or, if an opinion is hazarded, it is given without any attempt at proof.

There are, in truth, more attempts at a solution of the problem in what may be called ancient medical literature, than in that published at the present time. Thus, in the recent *Dictionnaire de Médecine*, there is nothing of importance bearing upon our problem, although the question of quarantine for plague, yellow fever, and cholera, is fully dealt with; and much the same must be said of the modern *Dictionnaire des Sciences Médicales*, only that this last also speaks of quarantine for typhus fever and syphilis, and, under the head of each disease, gives a general opinion as to its usual period of infectiveness.

In the old *Dict. des Sciences Médicales*, published in Paris in 1820, on the other hand, an attempt is made to place the subject of quarantine on somewhat of a scientific basis; and, in answering the question, "How long an infected person continues capable of propagating the malady," the principle is laid down that "miasmata (*les miasmes*) communicate their proper nature to all the humours of the body, and especially to those that are excrementitious in their nature." A distinction is therefore drawn between the fevers that are exanthematous and those whose solution takes place by the sputa, by the urine, and by stool. These latter are considered to be no longer menacing from the time of convalescence, when the excrementitious matters resume their normal colour, consistence, and smell; but the organs in those attacked by the exanthemata continue for some time longer to carry on a depuratory office, and thus remain contagious for a longer period. Hence measles and scarlet fever are regarded as contagious, so long as the patient has his skin still reddened, his eyes suffused, and whilst desquamation is still going on; small-pox, also, whilst the traces of the spots have not become pale. Isolation in the graver forms of the exanthemata should, therefore, be continued for at least forty days after the commencement of convalescence. Van Swieten is quoted as regarding nine weeks as not too long after the commencement of small-pox, and the author thinks a similar period necessary after the plague.

We may compare these opinions with those recently given in Buck's work on Hygiene, to the effect that in small-pox three weeks' quarantine is sufficient, or until the separation of the scabs has taken place; and in scarlet fever, that the period of infection begins with the stage of incubation, and lasts through that of desquamation. No mention is made of the period of infection in measles, or the other diseases of our schedule.

There is a similar lack of definite information in Eulenberg's *Handbuch des Gesundheitswesens*. As I have already stated, most of our information on the subject of the duration of infection comes from individuals, but it would be wrong to omit to notice an attempt at collective investigation of the question by a committee appointed at my suggestion by the Lancashire and Cheshire Branch in the year 1872. Mr. Mellor, President of the Branch, was chairman, and Dr. Haddon, honorary secretary.

This committee asked for information under the following heads: 1. Facts suggestive of the period of incubation in certain specified diseases; 2. Evidence of contagion from any case before its full development; 3. Cases showing how long any one or more of these diseases remain personally communicable, apart from clothing and other fomites; 4. Information as to the protective power of any process of disinfection of rooms or clothing.

I venture to append a copy of one of the forms that were sent out at that time:

CASE OF INFECTION.

A. *Relating to Infected Person.*

(1). Disease..... (2). Age..... (3). Sex .....

(4). Supposed origin of the disease, whether from infection or *de novo*; mentioning

(i). The length of time from supposed infection to the outbreak of the disorder, and

(ii). Other possible sources of infection.

(iii). The channel through which the infection is supposed to have entered the system, namely, the stomach, the lungs, a wound, etc.

B. *Relating to the Case from which the Infection is supposed to have Arisen.*

(1). The time before the outbreak of the disease, or after it, at which the infection was communicated.

(2). Whether desquamation had been completed.

(3). Whether disinfection had been practiced. In what manner and to what extent; giving any facts illustrative of the value of any method of disinfection employed, as well as cases showing how soon it is safe or unsafe for the convalescent to mix with his fellows.

Dr. Haddon published two reports of this Committee, one in 1875 and another in 1877, and he was able to give much valuable information on two of the points mentioned—1, on the period of incubation; and, 2, as to the first commencement of infection in different diseases. The information gained with respect to our immediate subject was, however, somewhat meagre. It may be briefly summarised as follows:—

Measles was shown by five cases to be infectious before the appearance of the rash; in two cases, at least two days before that event. In one case, three days before the rash appeared, it failed to give the disease to seven susceptible children.

Scarlet fever was communicated in four cases from twelve to twenty-four hours before the appearance of the rash, and, five weeks after this time, in one case after disinfection, no contagion took place. In two others, however, six weeks after the illness commenced, the disease was conveyed, and, in one of these, disinfection had been carried out at a large fever hospital.

Mumps was communicated in one case one day before the swelling appeared in the gland. In the paper already cited, Dr. Vacher also has given the results of his own large experience, and that of others, and his conclusions drawn from these sources must have great value. They are given in the form of a diagram, which I have slightly modified, so as to mark the infective period before the appearance of the characteristic signs.

It will be seen that Dr. Vacher considers small-pox to be infectious in ordinary discrete cases for five weeks, and in confluent small-pox for eight weeks.

Measles he regards as infectious before the eruption begins to appear, and he cites a case by Mr. Croskey, in which the disease was apparently communicated ninety-six hours, four days, before the rash ap-

peared. The duration of infection is placed at thirty-one days after invasion. In German measles, with careful attention to bathing, the patient may resume his ordinary occupation fourteen days from the beginning of the eruption.

In scarlet fever, "if the patient be not discharged till he is thoroughly peeled (head and feet), till his throat is without the faintish blush, and his discharges are regular, and he has been properly cleansed, there need be no fear of his communicating the disease." The detention of the patient thus varies from one month to seven weeks.

Mumps is considered to be infectious for two weeks after the cessation of the fever, or about three weeks in all. In diphtheria, the whole time from inception to freedom from infectiousness is estimated at thirty-three days in ordinary cases. Dr. Vacher gives similar calculations with respect to chicken-pox, idiopathic erysipelas, typhus and typhoid fevers.

The whole subject has evidently been most carefully considered by him, and I may say that his conclusions are, in the main, confirmed by my own experience. They would form a very safe preliminary code of rules in the management of a convalescent hospital. In the presence of such a work as this, it might, perhaps, be considered that the labours of the proposed committee on the subject would be supererogatory; but, with every respect for the high authority which Dr. Vacher's researches must claim from all who know him, I would submit that the profession needs still more than he has given. It must be possible to refer to many actual cases, and to have them placed in a record capable of being consulted by all interested in the subject. He has given us his own experience and a few cases from other writers, and all this is of great value; but, in a matter of this kind, we need the collective experience of many practitioners, carefully sifted and freed from disturbing influences.

The method adopted by Dr. William Squire is more nearly what is required for our purposes. It is contained in two papers communicated to the Epidemiological Society (*Trans. Epid. Soc.*, vol. iii, 1876), "On the Period of Infection in Epidemic Diseases." The first paper is much taken up with the determination of the period of incubation, on the ground that "infection begins as soon as the disease," and hence that it is important to discover when this takes place. Thus he quotes the opinion of Mr. Marson, that small-pox infection commences with the commencement of the initiatory fever, and a paper by Mr. Thomas Jones, in *St. George's Hospital Reports*, 1875, pp. 230-240, to show that this disease was, in one case, propagated by bed-clothes and linen used by patients "days preceding the eruption." "The original source of infection was a woman, who had been out of the hospital (and so possibly exposed to contagion) exactly twelve days before she was taken ill, and fourteen before the rash" (p. 417). Whether we place entire confidence in this case or not, Dr. Squire is successful in showing by others, that not only small-pox, but measles, whooping-cough and typhus fever, are infectious before the appearance of the characteristic signs. He thus corroborates the evidence of the other authorities we have given. He has, however, very little to contribute to our knowledge of the limits of infectiousness, and there is often a want of definiteness in the language used. Thus, in regard to measles he gives three cases; in two (Nos. 24 and 25) it is noted that "three weeks after it is over" they mixed freely with their convalescent sisters without giving the infection; and in Case 54, a boy returns to his family without doing harm, "three weeks from the height of the rash."

His remarks upon these cases are also somewhat vague; thus he says that, "three weeks from the height of the eruption," in small-pox and measles, suffices for the cessation of personal infection, "allowance being made for delay from complications;" and again, "the analogy of these diseases to chicken-pox and mumps, makes it probable that three weeks would quit convalescents from the fear of carrying infection, unless they are sent direct from the sick-room to the susceptible." In reference to scarlet-fever, several cases are given (Nos. 7 and 8—others on p. 536) showing that it is infectious in the early stages.

In one case, No. 2, infection was given six weeks after its commencement, but nothing is said as to whether disinfection had been practised. In another (quoted from Dr. Elliott at p. 535) infection took place fifty days after, and here it is noted that desquamation had been completed in one of two brothers (nothing is said as to the other), and they had new clothes, but disinfection is not mentioned.

In Cases 1 and 4, infection is given sixty-six days after the commencement of the illness, but in one, there was some otitis, and nothing is said as to disinfection in either case; and at p. 536 a negative result is noted, of freedom from infection forty-five days "after the last seizure."

In diphtheria, a case of direct infection is given (p. 534) after a separation of six weeks, and Sir W. Jenner's cases are noted in which "infection seems to have been particularly active in the fourth and fifth weeks." The possible interference of a sewer-air laden atmosphere as a source of fallacy is also discussed (pp. 537-539). No instances of the later limit of infection in mumps are given.

These are all the instances showing the duration of infectiousness that are to be gleaned from the monographs on the subject, and, with the exception of a few others scattered through medical periodicals, they are all that we have to depend upon to settle the many questions propounded at the outset of this paper. I think it will be admitted that much more than this is needed, and that the Collective Investigation Committee have not intervened without cause. They will assuredly earn the grateful thanks of the profession and of the public if they can collect a series of well-authenticated facts bearing upon the subject.

In conclusion, I should like to make one or two suggestions as to the conduct of this undertaking:

1. As to the machinery for obtaining the required evidence. I think we may assume with confidence that the Subcommittee charged with the duty of preparing the questions to be put to our associates will take care that they shall be as definite as possible, and yet so put as to give a minimum of trouble to those who have to answer them. Wherever possible, they will obtain the successive dates of illness and of infection, and they will avoid all probable sources of error; but I would submit that something more than simple correspondence will be needed in an inquiry like the present, and that personal application to witnesses will, in many cases, be necessary or desirable. Might we not, then, with advantage follow the example of our legal brethren in getting up evidence for trial, and ascertain by personal interview what kind of information will be forthcoming? If there were appointed in each centre one or two young men, who might receive the title of Registrars to the Association, these men might call upon the members of our profession who were most likely to be able to give reliable evidence; and in some cases in which the actual dates of the occurrences had been forgotten, they might elicit them by inquiries from the patients themselves or from their friends. There is doubtless an objection to accepting a narrative of past events without the corroboration of actual dates; but if this difficulty could be overcome by the acquisition of collateral evidence, I feel sure that at once a large mass of important material would be obtained from some of our more observant associates who are in active practice, and we should avoid the danger that now exists: that whilst waiting for a case to arise, the card of questions is laid aside and forgotten, if not lost altogether. There would be some honour attaching to the post of Registrar, and many intelligent young men would welcome the opportunity of distinguishing themselves in such an inquiry, and perhaps some more material reward might be given to those who had been most active in its pursuit.

2. With regard to the objects of the inquiry. The chief object of the Committee will probably be to obtain evidence respecting the personal communication of infection from patient to patient, and accordingly they will so frame their questions that the influence of clothing, and other fomites, and the intermediation of attendants, etc., shall be excluded; but there are some vexed questions relating to this point that it would be well to have answered, if possible. We are quite sure that scarlet fever and small-pox may thus be conveyed by a third party, and that infection from these diseases may be harboured in clothing, etc., for long periods of time; but is this equally true of the other diseases in our schedule? How long will clothing retain infection from measles? and to what extent can diphtheria and mumps be conveyed by third parties? If answers to these questions could be obtained by our Committee, I feel sure it would be a great boon to the public and to the profession. Attention should also be called to the possible intervention of bad drainage and bad sanitary arrangements in diphtheria and scarlet fever, and to the carrying power of milk in these diseases—not merely from human patients, but even, as Dr. Power has shown to be probable, from the cows themselves. Another question of much importance would be the results of Dr. Budd's method of disinfection in scarlet fever, and the possible shortening of the period of infection in cases so treated.

With these suggestions, I leave this subject to the discussion of the Section, only expressing my great regret that I am unable to be present to hear the other papers, and the comments and hints that will arise in the course of their discussion.

TREATMENT OF THE LATER STAGE OF JAUNDICE.—Professor Bartholow recommends salicylic acid in the treatment of jaundice after the cause of the condition has been removed.

CLINICAL MEMORANDA.

A POSSIBLE DANGER ATTENDING THE USE OF PURE TEREBENE.

J. H., aged 56, a chronic asthmatic, suffered from the beginning of December with severe bronchitis, with profuse muco purulent expectoration. On December 21st, he began to take pure terebene (ten drops on sugar, every four hours), with great advantage, the expectoration diminishing to *nil*, and the dyspnœa being much relieved. After the treatment had been continued for three days, the patient was seized with intense pain in the region of the left kidney, shooting into the pelvis and down the left thigh, with blood in the urine, and severe strangury. Cessation of the terebene treatment, together with the use of poultices, and the administration of opium internally, resulted in speedy relief, and left little doubt that the condition was one of intense renal congestion, caused by the terebene.

Birmingham. ALFRED HARVEY, M.B.

A SIX-FINGERED FAMILY.

IN this connection the following quotation may have some interest. It is from John Smith's Berkeley MSS., edited by Sir John Maclean, vol. iii, p. 329:

"Slimbridge. In this parish hath long continued the family of the Knights, men of mean ranke, of whom four lineall generations of well-proportioned men are remembered to have had 5 fingers and a thumbe on each hand. And tradition ascends to former of their ancestors."

The date of this note is upwards of two centuries back. It might be worth while to inquire whether any recrudescence of this peculiarity has occurred in Slimbridge parish in modern times.

JOHN BEDDOE.

THERAPEUTIC MEMORANDA.

RASH PRODUCED BY ANTIPYRIN.

I AM interested in observing a note upon this point, by Dr. Dalby, in the JOURNAL of January 15th. Just recently, I employed the drug in a case of typhoid fever; and, after eight days of its use, the rash appeared, first about the elbows and knees, afterwards extending to the other parts of the extremities, and lastly to the trunk; there were just a few spots on the face. The colour was bright red, but there was no crescentic grouping, and the catarrhal symptoms of measles were wanting. The rash did not begin to fade till the fifth day from its first appearance. This, however, might probably be accounted for by the fact that the drug was not discontinued, though only about half the previous quantity was administered in the twenty-four hours. Altogether, about one ounce of the drug had been given during the eight days before the rash appeared—that is, an average of one drachm per day; afterwards, only half a drachm, the pyrexial symptoms not demanding it; when the rash began to fade, only one dose of fifteen grains in the day was being taken.

Whilst speaking of this drug, I would take the opportunity of alluding to its great value in pyrexial conditions of all kinds, perhaps especially in typhoid. In the case just quoted, which had every appearance of turning out a severe one (the temperature about the end of the first week ranging between 104° and 105°, at all hours, with intense headache and a dry tongue), the drug acted in a most salutary manner, the temperature nearly always falling from 2° to 3° about two hours after a dose of fifteen grains, with free perspiration, relief to the head-symptoms, and generally a good sleep. The temperature usually rises to the previous point, or thereabouts, within five or six hours after taking the last dose, during the height of the fever; and I have found it best to have it noted tolerably frequently (every two hours), and anticipate by giving a fifteen grain dose, whenever it exceeds 103°. About four doses in twenty-four hours will generally suffice. Without claiming for the drug any specific action, it certainly enables you to put the brake on the pyrexial condition, when the latter seems to be the chief element of danger; and this it does with great comfort to the patient, for, besides acting as a free diaphoretic, it is either directly or indirectly a hypnotic, and, I fancy, also a diuretic. W. S. PAGET, M.D.Lond., M.R.C.P.

Great Crosby.

PROFESSOR FLÜGGE, of Göttingen, has been appointed to a newly established chair of hygiene in the University of Breslau.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

NEWCASTLE-ON-TYNE INFIRMARY.

CASES OF REMOVAL OF OVARIES.

(Under the care of Dr. G. H. HUME.)

OF the following four cases, the first two are examples of the removal of unhealthy ovaries on account of pain; the third illustrates the effect upon a large uterine myoma of the removal of the appendages; and the fourth is an example of early ovariotomy, in which the development of the tumour could be traced in an interesting manner.

CASE I.—C. S., aged 23 (admitted May, 1885), had been totally incapacitated for any work for two years. The past year, for the most part, she had spent in bed. Her complaint was of pain in the back and left side, nearly constant, but aggravated before and during menstruation, and so aggravated by exertion as to make any effort next to impossible. Menstruation was irregular and generally profuse. On pelvic examination, the uterus was found to be normal. Behind the uterus was a freely movable and exquisitely tender body, evidently an enlarged and prolapsed ovary. Treatment of various kinds had been used unavailingly before her admission; and, after her admission, bromide of potassium, douches, counter-irritation, as well as tampons and pessaries to replace the prolapsed ovary, were given a persevering trial. No relief was obtained, and therefore it was determined to remove the ovaries. The left was much enlarged, and lying low down in Douglas's pouch. It was studded all over with small cysts, and on section these were found also in the interior of the organ. The right ovary was in the same condition, though of smaller size. The tubes were removed with the ovaries. The patient made a rapid recovery, and has since presented herself. She is quite restored to health, free from pain, and able to work.

CASE II.—M. McC., aged 22, a laundress, was admitted in October, 1885. Five months before, she had been treated in the out-patient department for vaginitis (gonorrhœal?). She had suffered previously from painful menstruation, and, after the attack of vaginitis, the dysmenorrhœa was much worse. She had also constant pain in the intervals. It was felt chiefly in the right iliac region, and radiated to the front and down the inner side of the thigh. She was, in consequence, quite unable to work, and was a complete invalid. On bimanual examination, the right ovary could be felt between the fingers; it was exquisitely tender. After a prolonged but futile trial of various methods of treatment, abdominal section was performed, and the right ovary and tube were removed. The left was found to be quite healthy, and was not interfered with.

The right ovary, which had no abnormal adhesions, was enlarged, densely hard in some parts, and seemed unnaturally vascular. It was surmounted by a thin-walled, balloon-like cyst, of about the size of a hen's egg. This cyst ruptured while the ligature was being applied, and the fluid which escaped was thin and bloody, like menstrual fluid. When section was made of the ovary, a large ragged cavity, containing clot, occupied a great part of the interior. It had no doubt originated in the rupture of a follicle, but the ovarian substance seemed torn up to an unusual extent. The external cyst above mentioned was continuous with this cavity, and was due to the distension by the effused blood of the proper capsule of the ovary. Had the thin wall so formed given way, a hæmatocele would have resulted.

Recovery was uninterrupted, and the patient has since been quite free from suffering, and has returned to work.

CASE III.—M. R., aged 39, was admitted in December, 1885. She was the subject of a uterine myoma the size of a fifth-month pregnancy. For two or three years menstruation had been profuse, and she had been aware of her tumour, and that it was steadily growing. For six months before admission she had at each period suffered from retention of urine. In the intervals between the periods all her troubles ceased, and she had excellent general health. As, however, the growth of the tumour had been continuous, and as it was giving rise to serious inconvenience at the periods, the case was clearly one for removal of the uterine appendages, if that should prove practicable. On opening the abdomen, it was found that the uterus, or the tumour in its growth, had undergone rotation, so that, while the left ovary and tube were brought conveniently to the front, those of the right side had been carried round to the back. On the left side

also a long pedicle existed, making the application of the ligature an easy matter. In this position of the tumour the right appendages could barely be felt; but by dint of persevering in the effort to rotate the mass towards the left, they were brought more within reach. It was then found that the ovary was sessile on the tumour. In consequence of this, and of the depth at which one had to work, it was very difficult to place the ligature sufficiently close to the tumour, and it was impossible, in cutting away the appendages, not to leave a small portion of the ovary on the distal side of the noose. Both ovaries were exceedingly small; the tubes were greatly dilated and fringed out, so that, with their marked congestion, they had a good deal the appearance of cock's-combs.

The patient had just ceased menstruating before the operation, and on the third day after, the flow began again, was very profuse, and was attended by retention of urine. She recovered quickly, and left the hospital between a fortnight and three weeks after the operation. Six months afterwards she was seen and examined. She had not menstruated, had been in excellent health, and the tumour had so shrunk that it was altogether intra-pelvic and movable. The important question arises in connection with this case whether the leaving a small crumb of ovarian substance may not even yet lead to a return of menstruation, and to the loss in whole or in part of the good effects of the operation. There is, so far, no appearance of this untoward result; but such a thing has happened in the experience of others, and the lapse of longer time may be necessary to prove the permanence of present improvement. Whether in those cases in which the leaving of portions of the ovary has been followed by recurrence of profuse menstruation the tube was wholly removed or not, I am unable to ascertain.

Case iv.—E. A., aged 27, was admitted in February, 1886, on account of pain, which she referred chiefly to the vagina and left groin. The pain was of a sickening, bearing-down character, made so much worse by the erect position and by walking as to cause her complete disablement. On examination, a small tumour was found in Douglas's pouch, the shape and size of a duck's egg, movable from side to side, but not admitting of being pushed upwards. At the outer end of it was a tender nodule, which was believed to be the ovary, and the tumour was diagnosed to be a small ovarian cyst. Its removal by abdominal section was recommended and carried out. There was nothing noteworthy about the operation or the satisfactory after-progress of the case beyond the fact that the operation was rather more difficult than it would have been at a later period when further growth had led to the formation of a pedicle, and probably raised the position of the tumour. There was no pedicle, and the ligature had to be applied deep in the pelvis. The interest of the case lies, however, in the examination of the small tumour. It was an example of a true parovarian cyst, developed evidently from the hilum of the ovary, and growing between the layers of the broad ligament. At the one end of the egg-shaped cyst was the shrivelled ovary; at the other end, close to the uterus, was a ring of cartilaginous hardness, studded on the inside by warty excrescences. These, as well as the dark brown colour of the contained fluid, showed the cyst to belong to the papillomatous variety.

ST. BARTHOLOMEW'S HOSPITAL.

A CASE OF PEMPHIGUS CURED BY THE APPLICATION OF THE OLEATE OF MERCURY.

(Under the care of Mr. Harrison Cripps, Assistant-Surgeon.)

[Notes by Mr. Elliot, House-Surgeon.]

The patient, a man aged 57, applied to the skin department, and was admitted into the hospital on May 14th. He had not been feeling well for some time, and during the last few months had been losing flesh, and feeling weak and depressed. He had never had syphilis or any other illness, except rheumatic fever when 14 years of age. Until three months ago his skin was natural; at that time he noticed a few small spots about the body; four weeks later blebs began to appear. These came out in crops, a great many appearing sometimes in one night.

On admission the patient was sallow and cachectic, looking older than his years. He complained of feeling weak and ill, and that the eruption caused considerable irritation. The whole of the body, except the face, was covered with a skin-eruption. Very little healthy skin was to be seen. The eruption presented varied characters: large pigmented patches of irregular shape, and running into one another, formed an almost continuous surface. On the trunk and limbs, situated on this surface, were raised spots, very variable in size, some covered with scales, some with scabs, whilst others had a raw bleeding surface. Here and there were bullæ varying in size from a threepenny piece to that of half-a-crown. The bullæ were most numerous on the arms, back, and thighs; the contents of the bullæ were, in some spots, serum, in others sero-pus.

May 22nd. Since admission he had been taking four minims of liquor arsenicalis three times a day. The right arm had been treated with a 5 per cent. ointment of the oleate of mercury. The arm thus treated was greatly improved, all bullæ having disappeared. The eruption on the rest of the body remained much the same as when admitted. The oleate was ordered to be applied to the left arm.

June 8th. Great improvement had taken place in the left arm; the ointment was ordered to be applied to the right leg. There were no symptoms of mercurialism.

June 21st. For the previous week he had been taking eight minims of liquor arsenicalis three times day. The limbs to which the ointment had been applied were now free from eruption.

June 30th. The ointment was directed to be applied to the rest of the body.

July 8th. The eruption had entirely disappeared from the whole body, nothing being left but pigmented patches, and here and there a few raised hyperæmic spots.

On July 9th he was discharged well. Whilst in the hospital, his temperature varied from normal to 100·5° Fahr.

Remarks.—The disappearance of the eruption in this case was certainly due to the ointment of the oleate of mercury. It was applied by instalments to the whole of the diseased surface, and the disappearance of the skin-eruption strictly followed the local use of the ointment. It seems doubtful whether the arsenic had anything to do with the cure, for during the treatment, owing to an attack of diarrhœa, the liquor arsenicalis was discontinued for a week, nevertheless the disappearance of the eruption continued uninterruptedly during that time on the parts which had been treated by the mercurial ointment.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

January 25th, 1887.

G. R. Pollock, Esq., F.R.C.S., President, in the Chair.

On Widely Incising, by a Two-Stage Method, Hydatids of the Liver. By Richard Barwell, F.R.C.S.—Hydatids of the liver may be treated surgically by—1, puncture with a small trocar; 2, evacuation by a large persistent opening; 3, electrolysis. This last has not commended itself to the judgment of the profession. The author recommended that the first method should always be primarily resorted to, chiefly because it sometimes was curative, for instance, in cases of single barren cyst; but in a large proportion of cases there were numerous daughter or secondary cysts, so that the tumours frequently recurred. Under such circumstances the most efficacious treatment was by a large opening to be kept for some time patent. The object of this paper was to point out the safest way of making such opening. After discussing certain other methods, it was shown that first incising the abdominal parietes, stitching to them the cyst or its surroundings, and then after a few days cutting into the tumour, was a very safe and efficacious procedure. The author recommended certain precautions when the cyst wall appeared so thin that, without them, a needle puncture might cause effusion of hydatid fluid into the peritoneum; some modifications to meet special circumstances were also discussed. The case of a young woman who had a hydatid cyst of the liver which had been punctured eight times, and on whom the author performed the operation just described, was related. After a time eighteen hydatids and the wall of a large mother cyst were passed from the wound. No peritoneal symptoms occurred, and the patient made an easy recovery.—Mr. J. W. Hayward considered that the results of any operation on a hydatid cyst depended more on the contents and position of the cyst than on the method of operation. Most small cysts could be treated by simple puncture with a trocar. The method Mr. Barwell had recommended might perhaps be advisable when the cyst was small and movable, but it was more or less dangerous, as fluid was apt to escape when stitches were made into the parent cyst. For his own part, he preferred an old method of practice, namely, the establishment of union between the cyst and the abdominal walls by the use of caustic potash, and the use, subsequently, of free incision. This had given him satisfactory results. In one case of suppurating hydatid, he had by this means been able to withdraw the parent cyst, and so attain a happy ending. In another case, which at first had done well by this method pyrexia and suppuration in a daughter cys

supervened. The daughter cyst could be punctured, and the contents evacuated, but albuminuria had been established, and the patient gradually sank. A *post mortem* examination showed lardaceous disease and also several other hydatid cysts: one in the spleen, another at the back of the liver, which had perforated the diaphragm and caused suppuration in the pleura. The cyst which had been originally opened was quite healed; the others could not have been reached by any method, and were fatal.—Mr. HOWARD MARSH had practised Mr. Barwell's method of operation, a few days ago, on a large cyst. He had found the peritoneum covering the liver very thin, probably owing to atrophy from the pressure of the cyst, and it did not prove strong enough to hold some of his sutures, which had consequently to be passed through the liver-substance. However, in that way the liver was easily secured in apposition. After a few days, an opening was made into the cyst, and enlarged by the director, a finger passed in, and the contents of the cyst easily evacuated. The progress had been hitherto very satisfactory, but it was too soon to report any decisive result. One point of importance was whether the liver must be secured before the cyst was opened. He thought it unnecessary, and related an urgent case in which he had first evacuated the cyst before securing the liver to the abdominal walls, and in which the results had been very satisfactory.—Mr. HARRISON CRIPPS narrated a case in which he had made an exploratory abdominal incision and found a suppurating hydatid in the liver, which he had enucleated along with its capsule, leaving thereby a large cavity in the liver, into which he had seen another tumour bulging, which proved to be a second cyst. He considered that he should not have detected the second cyst if he had not used a freer incision than would have been possible after treatment with potassa fusa.—Sir DYCE DUCKWORTH did not consider himself competent to pass a judgment on these surgical methods, but thought he had seen good results from all; the varying circumstances of different cases demanded various methods of treatment. He thought it was an interesting question what should be done with the contents of these cysts. Mischief was sometimes done by removing too many of the daughter cysts; they mostly degenerated rapidly and harmlessly. The escape of hydatid fluid into the abdomen did not, in his experience, cause much damage. It sometimes gave rise to urticaria. Another question for the surgeons was, whether to empty the cavity or to leave it to itself with antiseptic surroundings, as was generally done with the pleura.—Mr. WALSHAM begged to remind the meeting that tapping was not without its dangers, for there had been some cases of sudden death during the operation, in which it had been suggested that a vein might have been punctured, and the hydatid fluid thus introduced into the circulation. He had himself not had occasion to need any preliminary operation of stitching the liver to the abdominal walls. He secured the cyst in a safe position by forceps, and emptied it; then syringed it out with a solution of carbolic acid, filled it with iodoform, and inserted a large drainage-tube.—Dr. ANGEL MONEY, in reference to the dangers of puncture, related a case of sudden death during the operation, in which a daughter cyst had got into a vein, and been found lodged in the auricle.—Mr. PEARCE GOULD supposed that no one would attempt an operation such as Mr. Barwell advocated whilst simpler methods, such as puncture, were available. As to removing much or little from the cyst, he quoted the opinion of the late Dr. Fagge, that only a small quantity should be taken away, and said that he could not help thinking there was enough experience to decide such a point. He related two cases under his own treatment. In the first, a woman, aged 40, who had already been tapped twice, he made an incision along the linea semilunaris, and found pre-existent adhesions, so that it was easy to evacuate the cyst, which contained four quarts of pus. The omentum protruded through the wound, showing many aborted cysts. It was washed with a solution of perchloride of mercury, replaced, and no ill consequences ensued. In the second case, there was a large cyst which had been tapped already three times, and reddish serous fluid evacuated. He attempted to stitch the cyst to the parietes, but, at the last stitch, the cyst gave way; he then opened it completely, and found besides the fluid some central soft solid matter of doubtful nature. At a subsequent operation, he was able to scrape away about three or four pints of this, to stop the resulting bleeding, and now the woman was nearly well. That, in fact, was all his experience, and led him to advocate treatment by free incision, as it gave better opportunity for seeing the whole circumstances of the case. He should tap with an aspirator first, then pull out the half-collapsed cyst, stitch it to the abdominal walls, and evacuate the contents. He did not fear this last step, as the walls of the abdomen had such great contractile power.—Mr. MORRIS wished to address himself to one point only, namely, whether it was better, before opening the cyst, to stitch it to the abdominal walls or not. He then enumerated various methods of operation, by potassa fusa (Récamier), by cutting down to the peritoneum, and stuffing the wound till adhesions formed (Graves), by strapping, etc. The method of stitching before opening the cyst was often compared to similar proceedings with the stomach in gastrostomy and the colon in colotomy, but the conditions in those cases were too different for comparison; the stomach generated gas, and altered much in size, and needed only a small opening to be made in its walls; the colon needed a large persistent opening. He saw no objection to Mr. Barwell's plan, but little in its favour. He considered Mr. Cripps lucky in having been able to extract the membrane of a parent cyst without more hæmorrhage, such as had followed the operation in a case Dr. Bright had recorded. In his own practice, he thought it important not to interfere with the parent cyst in any way, to take out as many daughter cysts as possible, and refrain from antiseptic injections, as he had seen a dangerous condition of delirium produced by iodoform.—Mr. BARWELL, in reply, added the sequel to his case; the young woman had come to him about a month ago, with a sinus pervious for some distance, but that had since then completely healed, and she was quite well now. The treatment by potassa fusa he considered tedious and painful. He had been interested in Mr. Marsh's experience of a thin peritoneum, but had himself, as a rule, found it thick in such cases. He thought that any objection to the plan he advocated, on the ground that it was two operations instead of one, was easily met by remarking that the second operation was almost painless, and no anæsthetic was required. He had been glad of the free discussion of the subject, as it had shown him that many surgeons had used the plan he recommended, of which he was previously unaware. Fick, in a recent paper, had advised free incision, but his results were unsatisfactory, owing, probably, to the amount of interference by antiseptic injections, etc. In his own practice, he considered iodoform too dangerous to be of much service.

MEDICAL SOCIETY OF LONDON.

MONDAY, JANUARY 24TH, 1887.

R. BRUDENELL CARTER, F.R.C.S., President, in the Chair.

CLINICAL EVENING.

Case of Plastic Operation for Ectropion.—Mr. DAVIES-COLLEY showed a case of ectropion, following necrosis of the upper jaw, in a lad aged six years. He brought it before the Society as a new operation for the relief of severe ectropion. The lower eyelid showed the granular surface of the palpebral conjunctiva for an extent of three-eighths of an inch from above downwards. The edges of the tarsal cartilage were pared on the upper two-thirds of their extent, and after freeing the lower eyelid by an incision three-quarters of an inch long, made parallel to it, and a quarter of an inch below its free border. The eyelids were then sutured together. Nine months after the operation the sinus had healed up, but the contraction of the parts had considerably drawn down the upper eyelid. A subsequent operation was done for the relief of this symptom, the ultimate result being very satisfactory.

Case of Excision of the Elbow.—Mr. WALTER PYE showed a case of excision of the elbow in a boy aged six years, in which partial excision had been attempted. The lesser sigmoid cavity was left, but had to be removed later on.

Case of Hunterian Chancre of the Lip.—Mr. G. R. TURNER showed a living specimen of Hunterian chancre of the lower lip, complicated by a mushroom-like growth on the chin. The patient had been infected some five months previously, and, about ten weeks since, the site of infection took on fresh morbid development. The inoculation had taken place in two different sites. There were syphilitic sores on the penis, and a suppurating bubo in the left groin, as well as an eruption on the arms.—The PRESIDENT thought that in all probability the lips had been infected by accident by the patient's fingers.—Mr. J. ASTLEY BLOXAM mentioned a case in which two chancres of the lip had occurred in close proximity; he said he had seen three or four hard chancres in the same individual at the Lock Hospital. Such chancres might affect any part of the body, as, for instance, the eyelids, nose, armpit, and lower part of the abdomen.—Mr. HARRISON CRIPPS said he had observed fourteen cases of Hunterian chancre, in unusual situations, during the past year. In one case there was a chancre on the eyelid in a woman, aged 70. The grandchild of the patient was suffering from secondary syphilis, and the patient said that she had contracted the sore from the child.

Case of Plastic Operation for Contraction following Ulceration of he Face.—In 1877, the patient had ulceration of the whole face as high as a transverse line on a level with the infra-orbital foramen. In December, 1886, the mouth was represented by an opening half an inch

wide by a quarter of an inch in the vertical direction. On January 13th, Mr. Bloxam enlarged the oral orifice, and stitched the mucous membrane to the skin with horsehair-sutures. The result was very satisfactory.

Case of Nævus of Hand.—Mr. WALTER PYE showed a girl with a large nævus of the third and fourth fingers of the left hand, which was gradually increasing in size. There was a distinct history of maternal impression in the case.

Case of Colotomy for Scirrhus of Rectum.—Mr. HARRISON CRIPPS showed a successful case; the patient had perfect control over her motions.

Obscure Tumour of Abdomen.—Dr. ISAMBARD OWEN showed a case of abdominal tumour in which the diagnosis was uncertain. He suggested that it might be a case of floating kidney.—Dr. THEODORE WILLIAMS thought that this diagnosis could only have been arrived at by a process of exclusion.

Abnormal Condition of the Pharynx.—Dr. GILBART SMITH showed a man in whom the pharynx was contracted so as to compress the epiglottis into a ring through which the larynx could be seen.

WOLVERHAMPTON AND DISTRICT MEDICAL SOCIETY.

TUESDAY, JANUARY 4TH, 1887.

S. A. SMITH, M.D., President, in the Chair.

Adenoid Bronchocele.—Mr. VINCENT JACKSON showed a girl, aged 14, who had been sent to him on account of alarming symptoms occasioned by a very large adenoid bronchocele. Asphyxia seeming imminent, Mr. Jackson completely divided the very broad isthmus, and removed a small portion. The operation was followed by the complete relief of the symptoms, and by diminution of the size of the tumour to the extent of one inch.

Splenic Leucocythæmia.—Dr. EVANS showed a case of splenic leucocythæmia in a child, aged 12. The spleen extended to the pubes, and occupied the greater part of the left side of the abdomen; it had grown rapidly during the last two months whilst under observation.

Loose Cartilage of Knee-joint.—Mr. VINCENT JACKSON exhibited a large loose cartilage, removed from the right knee of a gentleman, aged 32. Several years before, whilst jumping a hurdle, he severely injured the knee-joint, and was confined to bed for three or four weeks. At that time a small, loose body was detected in the joint; this afterwards slowly increased in size, and caused much annoyance in walking. It was removed by a free incision of the skin and capsule of the joint. Within fourteen days the patient was able to walk with comfort. The operation was performed under carbolic spray, with Listerian dressings; a drainage-tube was kept in the joint for two days.

Multilocular Ovarian Tumour.—Mr. VINCENT JACKSON exhibited a large multilocular ovarian tumour of almost solid character, successfully removed from a woman aged 52. The chief points in the case were that the incision had to be made from the umbilicus to the pubes before the tumour could be got out, and that, owing to tough adhesions connecting it in all directions with the walls and contents of the abdomen, great care was required to prevent any injury to the intestines whilst they were being detached. Moreover, innumerable bleeding points required to be ligatured, including some in the intestinal walls. Rapid recovery took place.

Intestinal Obstruction.—Dr. TOTHERICK read a paper on the difficulties in the way of the diagnosis of this condition, remarking that in that respect age had an important bearing, as in the obstruction of childhood the causes were rarely more than two; namely, intussusception and peritonitis. He, however, related a remarkable case in which all the symptoms of obstruction and peritonitis were present, and ran to a rapidly fatal termination, and on *post mortem* examination neither one nor the other was found, but the cause was discovered to be acute caries of the dorsal vertebræ with commencing purulent formation in the various organs. In aged people also the causes were generally confined to two; namely, impaction of fæces and malignant disease. In middle age any of the causes might be in operation, the most common being impaction, which should be treated by repeated enemata of water or oil. In acute cases in which the diagnosis was uncertain, but the fatal termination sure, exploration by abdominal section was recommended. Of all drugs, opium was the most generally useful, and in cases of impaction, saline aperients might do good. In simple inertia of the bowels from repeated constipation and over-distension he had found faradism very useful.

THE Duke of Cambridge will preside at the forty-second anniversary dinner of the German Hospital, which will take place at the Hôtel Métropole about the last week of April.

ACADEMY OF MEDICINE IN IRELAND.

PATHOLOGICAL SECTION.

FRIDAY, JANUARY 14TH, 1887.

WALTER G. SMITH, M.D., President, in the Chair.

Aspergillus Nigricans.—Mr. STORY exhibited and described microscopic specimens of aspergillus nigricans, which he had removed from the auditory meatus of three individuals suffering from deafness and inflammation of the external ear. He also showed a fourth fungus of an undetermined character, but most probably also one of the aspergillus tribe. Mr. Story stated his conviction that the fungi were the cause and not the consequence of the ear disease—a view which had been advocated by some writers on the subject.—The PRESIDENT said he had seen a few cases of aural fungi. In one of these there was intense pain in the left ear and the meatus was partly blocked up with a white cottony material. A brother of the patient was at the same time being attended by Mr. Swanzy for otomycosis, contracted by lying on hay or damp vegetable matter in the summer time, and he (the President) asked Mr. Swanzy to see his case. It was impossible to resist the evidence that the fungus was the direct cause of the disease. The invasion by it of the deeper tissues had been conclusively proved. He would ask Mr. Story whether in any of his cases he had noticed any special cause which led to the production of the fungus, such as dealing with yeast or any contact with decomposing vegetable matter. The aspergillus, he believed, was not confined to the ear, but was also occasionally found in the bronchial membranes.—Dr. MAPOTHER mentioned that in the year 1880 he himself had an acute attack of otomycosis. He had never suffered, either before or since, from any aural disease. One night he went to bed in a house in the suburbs of Dublin with his hearing perfect; and the following morning he arose almost completely deaf. He bore the affection for one day, and on the next consulted Mr. Swanzy, who, partly with forceps and partly with the syringe, removed a quantity of white cottony material from his ears. The only sensations he had besides the deafness were stuffing and a sort of ramming, as if something like cotton wool was being pushed into both ears. The material removed from his ear was examined by himself and his friend, the late Dr. Richardson, and they both came to the conclusion that it contained aspergillus. Which of the seven or eight different forms it was he could not say; but, as well as he remembered, it was like the first form described by Mr. Story. The shape of the growth resembled the aspergillus, or holy-water sprinkler used in the Roman Catholic Church. After the extraction of the fungi from his ears, and a week's washing with sulphuric acid, they disappeared and never grew again. He had observed that the wall paper of the room, next to which he had slept, was almost completely separated from the wall by damp; and he believed that it was that which produced the fungi. Since the wall had become dry no similar attack of mycosis had occurred to anyone else occupying the room.—Mr. STORY, in reply, said he remembered being consulted by a farmer who, after sitting up all night with a sick cow, had stuffing and pain in his ears next morning, which were found to be caused by aspergillus.

Dermoid Tumour growing from the Corneo-scleral Margin of the Left Eye.—Mr. STORY exhibited a dermoid tumour growing from the corneo-scleral margin of the left eye of a middle-aged man. The tumour was of a pinkish-yellow colour, and had one long hair growing out of its centre. No other hairs could be detected, even with a magnifying glass. The tumour had existed ever since the man's birth, and remained quiescent until two months ago, when it began to grow over the surface of the cornea. It was a flat sessile growth, of a circular shape, four mm. in diameter, half corneal, half scleral. In his opinion, it was to be regarded as a dermoid growth.

Œdema of the Glottis and Bright's Disease.—Dr. CHRISTOPHER NIXON exhibited the larynx and trachea of a patient who had died under his care of what is the custom to call œdema glottidis, occurring in the course of Bright's disease.—After some comments upon the communication by Mr. DOYLE, the PRESIDENT observed that whether or not in Bright's disease the large smooth kidney might, in process of time, change to the small contracted kidney, there was no difficulty in assuming that other cases might occur in which that change did not happen. The point was whether the small kidney ever represented a large kidney which had undergone atrophic change; but that a large kidney might remain so for an indefinite time was no subject of wonder.—Dr. NIXON, in reply, said the point to which the President had referred was a very important one. The forms of Bright's disease which were usually met with were, first, the large white kidney; secondly, the atrophied condition of that large white kidney; thirdly, the primarily sclerotic kidney, or red granular kidney of

Todd; and lastly, a fibroid condition of kidney which occurred as a consequence of certain diseases of the genito-urinary tract, such as old prostatic disease, accompanied by stricture. The evidence did not show that the different forms of kidney which they met with in the disease in question, especially the red granular kidney, were stages of the one process. An important point alluded to by Wilkinson was that 40 per cent. of the cases of small red kidney had not been attended with dropsy; whereas it had been proved by statistics that in 92 per cent. of the cases of large white kidney, dropsy had been a prominent symptom. If the small red kidney were an advanced stage of the large red kidney, it had never been explained why it had passed the primary stage without the occurrence of dropsy. He thought the arguments were strongly in favour of the view that there were three primary forms of Bright's disease—namely, first, the large white kidney which, no doubt, in a certain proportion of cases, underwent atrophy; secondly, the primarily sclerotic kidney, with a character of interstitial nephritis; and lastly, the form of nephritis that was consequential upon prostatic or urethral disease.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, JANUARY 19TH, 1887.

Professor GRAINGER STEWART, M.D., F.R.C.P.E., President, in the Chair.

Diseased Ovaries and Fallopian Tubes.—Mr. SKENE KEITH exhibited, in connection with his paper of which an abstract is given below, specimens of diseased ovaries and Fallopian tubes, removed by operation.

Basal Meningitis—Dr. ALEXANDER BRUCE showed the brain of a child who had died, with general convulsions, in the Sick Children's Hospital. Some time before Christmas the child had been under the treatment of Dr. Carmichael for simple meningitis, from which she made a good recovery, being discharged from the wards apparently well. After the New Year, she again came to the hospital for treatment, and, after a short residence, died. At the necropsy, conducted by Dr. Bruce, the calvarium and dura mater were found intact. The pia mater appeared normal, with the exception of some thickening at the base, about the medulla and posterior part of the cerebellum. The lateral ventricles were distended with fluid, as also the third ventricle and the connecting foramina. The veins of Galen were not distended. Probably the old lepto meningitis had in some way occluded the outflow of cerebro-spinal fluid, and hence the ventricular distension.

Removal of Uterine Appendages.—Mr. SKENE KEITH read a paper on this subject, in which he described twenty-four successful operations. In by far the greater number, the ultimate result had been good. The number of cases suitable for operation had decreased; at least, he and his father, Dr. Thomas Keith, had found that fewer cases reached their hands than formerly. He thought the main factors in inducing the diseased state were laceration of the cervix and certain methods of treatment, which were much in vogue in some quarters. He thought the routine passage of the sound was an important causal element, and he deprecated certain forms of intra-uterine medication. The connection of syphilis and gonorrhœa with the morbid state of the appendages seemed more doubtful. In only one of the cases which he or his father had seen was there any suspicion of gonorrhœa.—Dr. BREWIS congratulated Mr. Keith on his paper, which embodied the views held by many gynæcologists in Edinburgh.—Professor ANNANDALE asked whether Mr. Keith had met with suppuration of the parotid, following on the removal of the appendages.—Mr. KEITH did not think inflammatory changes in the parotid were more common after abdominal section than after other large operations. He had met with a case of inflammation after an operation for hernia. He had never seen suppuration follow.—Mr. CATHCART thought the importance of gonorrhœa as a causal factor had been well established.—Dr. JAMES RITCHIE expressed the opinion that, if the sound had so much influence in inducing the mischief, the cases ought not to have decreased, as the sound was still in general use.

Preliminary Tracheotomy.—Professor ANNANDALE read a note, in which he advocated the general adoption of preliminary tracheotomy in connection with operations about the oral cavity. The minor operation should immediately precede the major. Various instruments had been introduced for the efficient carrying out of the objects aimed at. Among others, he instanced that of Trendelenburg, which was needlessly complicated. The delicate balloon was easily burst, which rendered the apparatus useless. He was in the habit of using a vulcanite tracheotomy tube with india-rubber tubing leading away from the operator to a tumbler containing a ball of cotton wadding soaked with the anæsthetic. The tube was fixed *in situ*, and gutta-percha might be used to prevent the blood entering the trachea. The upper part of the œsophagus should also be plugged, as blood passing into the stomach was apt to induce or, at least, to keep up sickness. The plugging was easily managed with a roll of cotton wadding covered with oil-cloth. A thread should be attached, by which the plug might be withdrawn, when desirable.—Mr. DUNCAN agreed with Professor Annandale as to the advisability of preliminary tracheotomy. He thought there certainly was no need for special apparatus. He was in the habit of plugging the sides of the wound with sponge, to prevent the blood passing into the trachea. He felt that no fixed rules were necessary, as the surgeon would naturally best carry out that method which experience had led him to adopt.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, JANUARY 20TH, 1887.

W. J. CLEAVER, M.B., C.M., President, in the Chair.

Enlarged Spleen.—Dr. LAW exhibited a specimen from a girl, aged 8. Enlargement of the abdomen was first noticed three years before. In another specimen from a man, aged 37, the spleen weighed three pounds and a half. In neither case was there any history of intermittent fever, but there was well marked leukæmia in both.

Foreign Body in Alimentary Canal.—Mr. BALDWIN showed a piece of bone, removed from the rectum of a man, aged 69, two days after it had been swallowed.

Injury to Orbital Tissues: Foreign Body in the Eye.—Mr. SNELL showed a man who had recovered from severe injury to the eyelids and orbital tissues; and exhibited an enucleated eyeball, with a large piece of steel embedded in the optic nerve entrance.

Stethometry.—Dr. CLEAVER showed a new tape for chest measurements.

Deformity of Hand.—Dr. DYSON exhibited a man with a deformed hand. Many years ago he had a tumour removed from the palm of the hand, and very soon after, the connective tissue of the four fingers became immensely distended. This had continued, and gave the hand a large and ugly appearance.

Etiology of Goitre.—Dr. JOSIAH WILLIAMS read a paper, in which he controverted the views of Dr. Thursfield as to the disease being induced by diminished atmospheric pressure and the habit of carrying weights on the head. In South Wales, where both these conditions prevailed, goitre was extremely rare. In Novi Bazor, where Dr. Williams was in 1876, nearly half the population were affected, and yet neither of these conditions was present. He repudiated the idea of snow-water being a cause, since in Lapland and Greenland the disease was rare. He believed in heredity, geological formation of affected districts, with water-impurity, magnesia, lime, iron, and insanitary surroundings as causes. In connection with these points, he quoted from Dr. Giles (of the Indian Medical Service), and Dr. Allen Thomson Sloan.—Remarks were made by Dr. DYSON, Mr. ATKIN, Dr. LAW, Mr. BALDWIN, and Mr. BROWNING.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, JANUARY 14TH, 1887.

C. G. WHEELHOUSE, F.R.C.S., in the Chair.

Persistence of Palsy in Limited Groups of Muscles.—Dr. CLIFFORD ALLBUTT pointed out the frequency with which this occurred in both spinal and cerebral palsies, and held that the theory of its dependence on the particular group of cells affected by the lesion was untenable, at all events in cerebral cases. Considering the muscular movements to be carried on by groups of mechanisms, he thought the will in these cases acted with insufficient power of control, resulting in the unrestrained successive action of the stronger muscles, and consequent spasm, through want of their proper antagonisers. This being a local disorder was best treated by local means, and he recommended the use of elastic bands to assist in counteracting the spasm of the stronger muscles. He also urged the more early and frequent use of tenotomy, to prevent dislocations, and to give rest to the tetanised muscles.—Mr. WHEELHOUSE said that his surgical colleagues had been led to make more extensive use of tenotomy in the treatment of infantile paralysis by the representations of a very skilful instrument-maker, and had been surprised at the results obtained.—Dr. MAJOR thought that, in poliomyelitis anterior, there could be no doubt, from the wasting and altered electric condition of the muscles, that the lesion did select certain groups of cells.—Dr. EDDISON agreed with previous speakers on the advantage of tenotomy.—Dr. CHADWICK

thought the stretching of the stronger muscles, by means of a splint, was more reasonable than cutting tendons.—Dr. CHURTON thought that, in the gradual evolution of the nervous system, the later formed parts might be more delicate than the older, and therefore lesions might produce different effects; tenotomy would relieve the muscle by removing the irritation of its opponents.—Dr. GRIFFITH thought the same theory could not account for cerebral and peripheral paralyses. In lead-palsy there was very little spasm, and he thought deformity arose from the long continuance of parts in the situation in which they naturally fell when some muscles were paralysed, as seen in the cadaver.—Dr. ALLAN had seen excellent results from the use of elastic bands in the practice of Mr. Chauncy Puzey in Liverpool.

Pernicious Anæmia.—Mr. BATES described a fatal case in a patient, aged 49. The principal symptoms were shortness of breath and attacks of vomiting and diarrhœa; there was also an attack of jaundice. At the necropsy the liver was found slightly fatty, and the stomach-walls were very thin, but had not yet been microscopically examined. Death took place after twenty-four hours of unconsciousness. He described another case of the same kind, in which, also, there had been jaundice before death; the stomach, also, was very thin.—Dr. BLACK spoke of the advantage of using alteratives in the treatment of anæmia.—Dr. ALLBUTT referred to the definite character of idiopathic anæmia, as accompanied by extravasations into the retina, and in curable cases remedied by arsenic rather than iron.—Mr. JESSOP spoke of three cases he had seen, in all of which the patients lived in houses much exposed to sewer-gas.—Dr. EDDISON questioned the use of the term pernicious anæmia, as applied to the disease. In every case he had seen the blood-corpuscles were distorted. He thought many were cases of ague or syphilis.

Primary Nerve-Suture.—Mr. HERBERT ROWE had recently sutured the ulnar nerve with a catgut suture, in a case in which both ulnar artery and nerve were divided, soon after the accident. Two days afterwards, there was a diminution of the numbness. In four days the sensation was the same, but there was some slight movement in the muscle. At the end of one month, sensation was but slightly impaired and motion was definite, but not perfect. Shortly afterwards, the man resumed his occupation. Mr. Rowe referred to cases reported by Nélaton and others, in which sensation partly returned at the end of the second day, recovery taking place at the end of a week. In a case of primary suture of the median recorded by Laugier, recovery began on the day of operation. He compared the rapid restitution of function in primary suture with the later development in cases of secondary suture, and referred to a case in which the sciatic nerve was sutured by Mr. Wheelhouse, perfect function being restored only after several months.—Mr. WHEELHOUSE said that nerve-suture was established as a satisfactory operation, whether primary or secondary, but in one case of the latter he had known the effect delayed for three months. Referring to a case described by Mr. Hartley, in which a painful tumour formed over the seat of suture of the median nerve, he said that some of the fibres of the nerve had probably failed to unite, and had become bulbous, and he recommended a second operation.—Mr. JESSOP thought he should, in future, fix by suture more tissues divided than was hitherto the custom. One of the first cases of nerve-suture on record was one in which he had joined the ulnar nerve twelve years after division, first removing a bulbous extremity. On the seventh day after, the patient could localise a touch.

Specimens.—Mr. LAWFORD KNAGGS: Small Carcinomatous Ulcer of Pylorus with very Extensive Secondary Deposits. Mr. C. J. WRIGHT: Pedunculated Fibroma of Labium Ulcerated on Surface. Mr. MCGILL: Hydrocele of the Neck, Removed *Post mortem*. Dr. BARNES: A Drawing of a case of Lichen Circumscriptus; the eruption being caused by wearing flannel. Mr. MAYO ROBSON: Right Fallopian Tube filled with caseous material; Left Fallopian Tube distended with fluid and associated with a small ovarian and parovarian cyst. Both had been removed ten days before from a patient, on account of pelvic pain. She had recovered from the operation.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, JANUARY 7TH, 1886.

H. R. HATHERLY, M.R.C.S., President, in the Chair.

Intestinal Ulcers in Enteric Fever.—Dr. HANDFORD related the case of a man, aged 26, who had died of enteric fever. After recovering from one attack, during the first fortnight of which he was still able to pursue his occupation, he suffered a relapse, which proved fatal. The temperature had never exceeded 105.6°; copious hæmorrhage had occurred on seven occasions. There were several deep recent ulcers in the ileum, one of which had perforated the gut two feet above the ileo-cæcal valve; there were also numerous old cicatrising ulcers from the first attack. There were three small ulcers in the cæcum, but none in the rest of the large intestine. In another case of enteric fever, in a man, aged 41, there were numerous ulcers, both in the small intestine and in the large, from the cæcum to the end of the sigmoid flexure. Dr. Handford called attention to the following features as specially interesting: (1) the shape of the ulcers, which was round, not as usually taught, elongated, with the long diameter in the axis of the intestinal tube; (2) the degree to which the large gut was involved; (3) the great amount of infiltration, as shown by the thickness of the ulcers in every stage. The specimens from both cases were shown.

Congenital (?) Atrophy of Right Kidney.—Dr. HANDFORD showed a specimen of atrophy of the right kidney, probably congenital. The organ weighed only half an ounce. The left one was normal in shape and position, but enlarged and considerably thickened, weighing ten ounces. The specimens had been taken from the body of a man aged 26, who died suddenly.

Fluid from Hydatid Cyst of Liver.—Dr. HANDFORD showed some hydatid fluid which he had removed by aspiration, to the amount of nineteen ounces, from the right lobe of the liver in a woman aged 22. An unusual number of echinococcus-heads could be seen by the naked eye floating in the fluid.

Fusiform Dilatation of the Aorta.—Mr. GIDDINGS showed a specimen removed from a subject who had suffered from complete inability to swallow solids, and also from aphonia. The cavity of the aorta was occupied by a large clot extending into the ventricle, and attached to the musculi papillares and the chordæ tendineæ. This highly organised and largely elastic clot was likewise found in all the other chambers.

Encephalocele in a Fœtus.—Mr. HEELIS showed a fœtus of the seventh or eighth month, which had a small head resting directly on the shoulders, and a posterior encephalocele. The latter contained the cerebellum united by a process of brain-matter to the encephalon below the tentorium. The spinal cord was normal. The aperture by which the cavities of the cranium and the encephalocele communicated was produced by defective union posteriorly of the occipital bone from the foramen magnum to the occipital protuberance, and of the arches of all the cervical and the first three dorsal vertebræ. The bodies of the second to the sixth cervical vertebræ were fused together. The contents of the tumour and the contiguous portion of the brain were too pulpy to admit of a more precise description. The fœtus showed no sign of life after delivery.

The Treatment of Diabetes Mellitus.—Dr. COLLINS read a paper on this subject. After referring to the manner in which the carbohydrates reached the circulation, he defined the part played by the saccharine and amylaceous principles of food; and how in diabetes mellitus there was a want of power to assimilate and make use of the carbo-hydrate group. The clinical features and pathology of diabetes led up to its treatment. Considerable stress was laid on the exclusion of all starchy and saccharine principles of food. Of medicinal agents, opium alone was of any value; alkalies, as salicylate of soda, etc., being practically useless.

REVIEWS AND NOTICES.

ON CANCER OF THE MOUTH, TONGUE, AND ALIMENTARY TRACT; their Pathology, Symptoms, Diagnosis, and Treatment. By FREDERICK BOWREMAN JESSETT, F.R.C.S., Surgeon to the Cancer Hospital, Brompton. With numerous illustrations. London: J. and A. Churchill.

THE Brompton Cancer Hospital must be a prolific field for research in the pathology and treatment of one of the worst scourges of humanity. Whether our knowledge has been materially improved by previous writers amongst the staff of the institution is a matter of opinion; there can, however, be no doubt that Mr. JESSETT has made good use of his opportunities. Although the title only mentions cancer, all malignant growths are included. Part of the work formed the subject of a series of lectures delivered at the hospital.

The author, fairly enough, calls his readers' attention to the want of a single monograph on cancer of the alimentary canal, though the subject has been described in segments in the works of Heath, Butlin, Cripps, and others. The chapters are written very much in the same style as that which prevails in Mr. Butlin's works, excepting that there is more about surgery and less on pathology. The statistical portions have been collected with great care, and the practical surgeon who may not possess either the will or the power to study several standard foreign productions will find in Mr. Jessett's *Cancer*

of the Mouth, etc., some clear and brief descriptions of operations and clinical cases which often form, for all useful purposes, a distinct improvement on the original German version.

There are very few illustrations, notwithstanding the notification on the title-page; indeed, none beyond about a dozen diagrams of lines of incision in operations and methods of applying sutures. All these drawings are, however, useful. The absence of uninstructive pathological drawings, introduced for purposes of padding, is highly satisfactory; and a still better feature is the freedom of Mr. Jessett's pages from useless and repulsive daubs of advanced cases of malignant disease.

The index is well prepared, but the pages of the work are so full of information, and the medical reading public is so jealous of spending time in hunting up facts, that we are of opinion that it ought to be made far more complete. In conclusion, we must congratulate the author on the excellence of his own clinical reports and on the satisfactory character of his operative experience.

Manual of Gynæcology. By D. Berry Hart, M.D., F.R.C.P.E., and A. H. Freeland Barbour, M.A., B.Sc., M.D., F.R.C.P.E. With thirteen lithographs and four hundred woodcuts. Third Edition. Edinburgh and London: W. and A. K. Johnston. 1886.

Drs. Hart and Barbour's *Manual* has already been recognised as a standard text-book for students and practitioners. Its very appearance is familiar in medical libraries; everybody recognises the multiplicity of its illustrations, large and small, literal and diagrammatic, and, above all, motley and heterogeneous in character. At first, this feature repels the reader, but a second glance at the pages of the work shows that the text is carefully prepared, and the style is neither prolix nor over-condensed. The anatomical portion is most instructive, and well supplied with large woodcuts, chiefly representing frozen sections. The authors are especially careful to give correctly the reflexions of the peritoneum. We wish that they would give their own researches on the relations of the ureter, instead of relying on the authority of half-a-dozen German and American writers. Thus the drawings from Hart's, Braune's, and Pirogoff's fine atlases teach the true positions of the bladder in different stages of distension, and do not misrepresent adjacent parts, whilst in Holl's sketch representing the "Relation of Ureters (*sic*) on the Right Side of a Dissected Pelvis" (figure 31 in this work), the bladder, and the vagina as well, is drawn more inaccurately, if possible, than in most current works on systematic and practical anatomy. Luschka's sketch of the levator ani (figure 12) gives a completely erroneous idea of the relations of that muscle to the vagina.

The chapters on physical examination of the pelvic organs are perhaps the best in the book, as compared with other manuals. The explanation of the use of specula is particularly clear. In this edition, the chapters on abortion, retroflexion of the gravid uterus and extra-uterine gestation have been removed and replaced by new matter treating of sectional anatomy, antiseptics, and the relations of micro-organisms to gynæcology, sterility, and abdominal section, and some important pathological drawings have been added. The authors retain the chapter on endometritis, and admit it to be a distinct disease, contrary to the opinion of some contemporary writers. They also consider, like most of the older living authorities, that it may produce grave symptoms. A careful study of their conclusions, in connection with ward and out-patient work, would be highly instructive in these days, when some writers, like Dr. Matthews Duncan, are sceptical about the very existence of the disease, whilst others attribute its alleged pathognomic symptoms to tubal and ovarian disorders.

The nomenclature is generally very correct, thus we find "hilum" and "volsella," true Latin words, instead of "hilus" and "vulsellum" of most text-books. The authors, however, forget that the nominative singular of pubes is not "pubis," a very common mistake. "Cellulitis" is retained, we think quite rightly, as the synonym "parametritis," is apt to be confounded by the beginner with "perimetritis."

This edition is embellished by a valuable index of recent gynæcological literature, contained in the Journal and in other British and foreign serials between 1883 and the end of 1885, in addition to the indices of subjects and authors. Drs. Hart and Barbour's *Manual of Gynæcology* will certainly retain, or rather increase, its old reputation by the improvements and additions which are to be found in its third edition.

The Elements of School-Hygiene for the use of Teachers in Schools. With a Bibliography. By Walter E. Roth, B.A. London: Baillière and Co. 1886. Pp. 88.

The impulse given to school-building and extension by the passing of the Elementary Education Act, the institution of school boards, and the action of the Endowed Schools Commissioners, has elicited an amount of interest in school-hygiene which has called into existence a multitude of small works which may at least serve to keep up discussion, and to foster the degree of interest already aroused.

Mr. Roth's unpretending volume is well suited for the use of those to whom it is addressed. Modestly disclaiming authority or originality, the author touches lightly on everything relating to the ventilation, heating, lighting, and other arrangements of schools, the principles of education and teaching appliances, hours of work and play, dormitories, lavatories, and dress, management of epidemics, etc. Except in his disparagement of the Anglo-German system of gymnastics, and undue laudation of the Swedish method of training without the use of apparatus, there is nothing in the volume with which we are inclined to cavil, and very much to which we can accord our heartiest approval. We would suggest that in the next edition, which we hope will be soon called for, the German term "corpus type," occurring in a quotation from Cohn on page 29, be exchanged for the English equivalent, "long primer."

Not the least valuable feature is the Bibliography, which fills more than a third of the volume, and will be found of the greatest service by any who may be desirous of looking out the literature of the subject, though it would have afforded further facilities had Mr. Roth given references to the several authors from whom he has drawn his materials, acknowledging as he has the fact of quotation and compilation by the free use of inverted commas. But the Bibliography is open to considerable improvement; we fail to understand why several German works are referred to only in French translations, and we miss many papers of the greatest value by Förster, Varrentrapp, and other high authorities. Indeed, the only mention of Ferien-colonien, or Holiday Colonies, is that of a paper read at the Health Exhibition, in which Dr. Willoughby endeavoured to create some interest here in the work to which Varrentrapp devoted his energies during the later years of his life.

Medical Missions: their Place and Power. By John Lowe, F.R.C.S.E. London: 1886.

This book is introduced by a short preface from Sir William Muir, who, after having lately come home from the Lieutenant-Governorship of the North-West Provinces of India, has been elected Principal of the University of Edinburgh, and who has, therefore, had some considerable opportunity of knowing well both one of the most important fields of work, and also one of the most fruitful places of origin of the medical missionary. He strongly approves of medical missions, and specially advocates "the practice of their art by well qualified lady physicians in the Harems and Zenanas of the East" (p. iv), as one of the few methods of introduction to the Mahometans which they will accept.

To criticise the religious side of the book is hardly within our province; that it is the outcome of very genuine Scotch feeling is plain enough. The author, Mr. Lowe, is himself a well qualified surgeon, and has had much experience at Travancore. The point in the book which deserves, in our opinion, special approbation, and which should be brought before both the medical and the missionary world, is, that Mr. Lowe, in the most direct terms, deprecates very strongly "the plan adopted by some Missionary Societies, of giving their students a very partial training in medicine and surgery, and sending them forth as medical missionaries. In no department of service is it more true than in the practice of medicine that 'a little knowledge is a dangerous thing'" (p. 31). The missionary whose intentions are practically entirely religious, but who uses, or rather misuses, a smattering of medicine to ingratiate himself among the unconverted, whatever he may do for or against religion, yet certainly brings no credit whatever upon European medicine, and may get himself or others into very serious difficulties. Mr. Lowe most justly advocates the systematic study of medicine and surgery, and the obtaining of legal qualifications; and then, if any enthusiasm of humanity leads to the application of these to the barbarian world, there is an almost infinite field for the relief of human suffering. The practice of good medicine and surgery, if once pushed upon men's attention, whether by religious enthusiasm or any lower motive, makes its way to favour by the physical comforts and prolonged lives that it brings. Sixty cases of major amputations, without the loss of a life, such as Dr.

Vartan showed the astonished Syrians, evoked honour and unbounded confidence; and some useful practice in Cashmir led the natives to wholesome doubt of their current theory that there are three pulses in each wrist; in the left hand, the pulses showing the diseases of the heart, the liver, and the kidneys; and, in the right, the pulses for the lungs, the spleen, and the other organs. There is still some rational treatment wanted in the Friendly Islands, to get the natives out of their universal habit of quieting delirium by invariably burying the patient alive (p. 169). As a rule, the earnings are in gratitude, but not in cash. The gratitude, nevertheless, may occasionally take the form of a truly royal and imperial fee. Dr. Boughton, in 1636, saved a daughter of the Great Mogul from death, after a severe burn, and the fee was the admission of the British nation to trade with the Empire of the Mogul, and the permission given to the East India Company to set up an establishment on the Coast of Coromandel. That was a fee of historic moment, which no Viceroy should forget.

The hold upon our Indian Empire depends, in a great measure, upon the sympathy we can evoke from the natives by modifying our civilisation to meet their wants, and adopting a genuine courtesy towards what we are tempted to despise too hastily as their prejudices. The Viceregal influence, under Lady Dufferin, has been cast very strongly on the side of some lady doctors in India, and this has been a very important step towards the encouragement to some of the braver and stronger lady practitioners to take up the heavy and abundant duties of an Indian practice. A lady, who had met with some success in one of our northern towns, has exchanged her practice for a still larger one in Bombay; a lady, who, not long ago, was in the first class in the final medical examination of the University of London, has now a high position in Madras; and there are now and then to be seen, in English journals, a notice of the departure of fresh additions to this important band of fully qualified female practitioners. It is hard for the Western world to look at these things with truly Oriental eyes, or they would rate at a much higher value than is the common estimate such attempts to infuse European influences into an alien civilisation or an untaught barbarism. Yet it is the capacity for such infusion that has made and is making the greatness of the English Empire.

NOTES ON BOOKS.

Burroughs' Medical Diary for the Year 1887 (BURROUGHS, Snow Hill Buildings, London), is a neat and handy little pocket-book and diary, which specially provides for matters of interest to general practitioners, including space for daily visits, accouchements, vaccinations, etc. It contains an "alcohol table," almanack for 1886 7, notes of temperatures of baths, classified list of medicines, professional fee table, normal weight for height of children, obstetric calendar, poisons and antidotes, rules for restoring the apparently drowned, tables for spirometry, therapeutical equivalents, chemical relations of morbid urine, and other matters of professional and general interest. The normal price is 4s., but being issued late this year, it is offered at 2s.

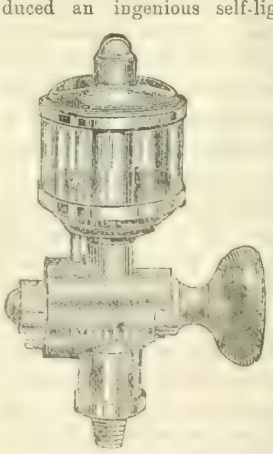
A Manual of Veterinary Medicine and Surgery. By EDWARD COURTENAY. (Baillière, Tindall, and Cox.)—In the opening chapter, the author traces the supposed greater prevalence of respiratory diseases among horses than among other animals, to the existence of the "velum palati," an anatomical arrangement which prevents the horse from breathing through the mouth, except under very exceptional circumstances. We are rather inclined to consider this special arrangement as one particularly favourable to securing the more vital respiratory organs from irritation; the "tidal" air having to traverse a longer course than if it went directly through the mouth, is rendered warmer and more free from solid irritants in its passage. The large nostrils and air-chambers of the head offer an extensive expanse of mucous membrane for this purpose. We think that much of the respiratory disease affecting the horse is due rather to the carelessness of those who have charge of him, than to any anatomical peculiarity in the animal. We notice that an attempt is made to split up the disease called influenza in the horse by distinguishing epizootic cellulitis from it; this is a step in the right direction. We are of opinion that a careful study of this disease would lead to its being divided into three or more distinct affections. That almost obsolete disease, "poll-evil," we find attributed to inflammation in the muscles; it would, perhaps, have been more correct to define it as an inflammation of the small bursa between the lamina of the atlas and the funicular portion of the ligamentum nuchæ. The book would have been of far more value to the student had some hints as to "thermometry" been given; the value of this means of diagnosis is, however, apparently not recognised by the author, yet there can be no doubt that it is of the greatest assistance to the veterinary surgeon who has only objective symptoms to deal with. The book is otherwise very complete, showing, however, throughout a tendency more to the so-called "practical" than to the scientific point of view.

Cookery for our Sick and Invalid Poor. Tinned Meats, Fish, etc., and How to Use Them. (London: Simpkin, Marshall and Co.)—These two excellent little books, published at sixpence, are worthy of all commendation. Their object is to encourage the art of skilled and economical cooking amongst our women. This subject is practically worked out in these manuals from personal experience. Medical men are often at a loss for a cheap and useful little book on cookery for the sick which they can recommend to the poorer classes. They will find what they want in these publications, and there are many households in which economy is a great object, and in which especially invalid cookery needs to be conducted on sound and economical principles, where these small and cheap manuals will be found of great service.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

SELF-LIGHTING GAS-BURNER.

UNDER the title of the "Matchless Burner," the G. K. Cooke Manufacturing Company, 73, Cow Cross Street, London, have introduced an ingenious self-lighting gas-burner. There is a small auxiliary flame, surrounded by a metal globe or mica lantern, so that the gas, when turned down, leaves a tiny flame, which, showing through the mica, can serve, if desired, as a night-light. The flame is so small that it consumes an imperceptible amount of gas, of the value, it is said, of less than a penny a year. We have tried this burner for some time, both as a night-light and in the study, and it appears to be simple, inexpensive, and very convenient to professional men, as well as for ordinary household use. In many wards and sick-rooms, where it is desirable to be able to turn up a light at any moment in the night, without running the risk of awaking the sleepers by striking a match, it will be found particularly useful. In the stable it will not only be found economical in preventing a waste of gas, but will be an element of safety against fire arising from the use of matches. For the same reasons it is also very suitable for public institutions.



STROPHANTHUS HISPIDUS.

DR. RICHARD J. PURDON, Belfast, writes: In the literature concerning strophanthus hispidus, I do not remember seeing any precautions recommended to be observed in making preparations of this drug; therefore, I think the following may be of interest to your readers, especially to those who are practical pharmacists: A short time since, I had occasion to order a small quantity of the tincture from one of our principal chemists, and was surprised to hear that the gentleman who was engaged in preparing it was suddenly affected with severe headache, about the junction of the skin and hairy scalp, which gradually spread to the temples; this was accompanied by double vision, succeeded by impaired sight of left eye, nausea, but no actual vomiting, coldness of extremities, and faintness. He was treated by diffusible stimulants, but it was several hours before the effects passed off. The manager of the compounding department was similarly affected, but in a less degree. Mr. Martindale, I am informed, states that irritation of the mucous membrane is caused by preparing this drug, possibly through inhaling some of the hairs as they are cut off; but, so far as I am aware, he does not mention any effects such as the foregoing. I did not see this case myself; but, on questioning the gentleman referred to, I received the above statements.

MEDICAL MAGISTRATE.—The Lord Chancellor has, on the recommendation of the Lord-Lieutenant, placed the name of Dr. Langdon Down, the President of the Thames Valley Branch of the British Medical Association, in the Commission of the Peace for Middlesex.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JANUARY 29th, 1887.

EPIDEMIC PNEUMONIA.

THERE are many interesting points in the pathology of pneumonia, but they are all comprehended in the fundamental question, What is pneumonia? There could hardly be a better illustration of the revolution of ideas wrought by the progress of scientific investigation than that what was once the type of a sthenic or croupous inflammation should, in these latter days, be deemed by many to be a specific fever. Yet now that this change of opinion has matured, it is easy enough to see how and why it has come about; for pneumonia, although of old explained and apparently disposed of as a croupous inflammation, has nevertheless remained a puzzle, for its behaviour is, in many respects, peculiar. It is, perhaps, less easy to follow, and it is still the best of wisdom to criticise the somewhat extreme limit which is the present range of the pendulum in this matter; the question what, in an etiological sense, is pneumonia, still awaits solution.

Pneumonia has not yet "linked all perplexed meanings." On its very face we see that, although it appears to be an inflammatory disease, yet unlike typical inflammations, in which pyrexia should wait upon the local changes, here we have an inflammation in which the fever is altogether in advance of these, and they may even progress for an appreciable time after the pyrexial energy has altogether abated. In this, and in its suddenness of onset and definiteness of course, pneumonia bears a close resemblance to a specific fever; but such an argument might well be met by one who maintained, for instance, that the pulmonary changes are due to some sudden nerve-storm, and comparisons of much point could be drawn between it and gout or rheumatism in this its method of eruption. Perhaps it would have been more pertinent to have limited the parallel to gout, for the reason that there are those who contend, and with much force, for the malarial nature of rheumatism, and in this respect it is instructive to remember that pneumonia, as Dr. Sturges has insisted, bears much resemblance to quinsy, a disease which of late has been asserted to be, and which there is gradually accumulating evidence to prove to be, one of the several modes of manifestation of the rheumatic x.

The well-known tendency to recurrence in the individual (Andral and Grisolle record examples of as many as fifteen, and even twenty-two, attacks in one person) is another double-faced phenomenon, for though it would indeed be directly opposed to specificity as manifested by some sorts of virus, and is perhaps equally well accounted for by some inherited susceptibility—some unaccommodating want of adaptability on the part of the organ to the changing conditions of its environment—nevertheless, it must also be said that a hypothetical poison of a malarial nature would perfectly account for this peculiarity.

Thus it happens that anyone, even the most conservative in his opinions, may find himself discussing the microbic origin of pneumonia, and even prepared to accept it, from the bare consideration of facts which have long been matters of common knowledge, and altogether abreast of our latter-day acquisitions, which have given this aspect of the disease so forcible an impetus. Now, what are these later advances in knowledge? It is always a satisfaction, and a laudable one, to the so-called clinician, to be able to aid in building the science of medicine. Sir James Paget made a distinct point in his address at the Pathological Society, the other day, when he insisted that the practitioner is as well able to aid science as the worker in the laboratory. Practice, as it is called, is far too humble in this respect; and too often it allows itself to be dragged at the heels of commerce, when its proper position is the commanding one of the most fruitful and deserving scientific labour.

Now, from the results of practice, in other words of experience, it has long been known (1) that pneumonia is liable to occur in series, and to prevail at certain seasons; (2) that it is sometimes so prevalent in localised areas, as to justify the term epidemic; (3) that it appears to be occasionally contagious. As regards the last head, Dr. Daly, to go no further back than 1881, published a remarkable series of cases in one house where a mother and five children all had pneumonia, and only such of those in the house escaped as had, for some reason or other, remained apart from those affected. Other cases, hardly less striking, followed from other sources when this series was reported. All went to show that pneumonia is, under some circumstances, an infectious disease. Closely connected with the question of contagion from individual to individual, comes that of the occurrence of epidemics. We are accustomed, as has already been said, to find pneumonia prevalent at certain seasons, but the two or three cases usually met with may be well explained, drawn as they are in hospital practice from somewhat scattered habitations, by the prevalence of some particular wind, or some sudden atmospheric changes. There are, however, not a few epidemics on record which cannot be thus accounted for. One or two have occurred in Germany—others are those published some time ago in our columns by Dr. Bruce, of Dingwall; and those in this day's JOURNAL, by Dr. Adam (which complete Dr. Bruce's tale) and Dr. Foulis. Observations of this kind unquestionably favour the possibility of a microbic origin of the disease, and it seems not unlikely that the earlier records of cases such as these, together with the general mist of uncertainty which enveloped the subject, may have indirectly given birth to the work of Friedländer and others which has led to the discovery of the pneumococcus.

To some it might appear that the existence of a definite germ and the production of pneumonic changes in some of the lower animals by the introduction of this germ have settled the question and added one more to the daily lengthening tale of parasitic diseases. Such a conclusion is, however, by no means justified. Dr. Sturges does well to remind us that epidemic influence is not the same thing as contagion. What it may mean is still a matter of doubt. It seems possible that its meaning is not constant—sometimes, for example, it might denote nothing more than the accident of a certain number of unstrung and susceptible persons being exposed to the chilling influ-

ence of a cold wind, or of some other telluric disturbance; while at others it might quite possibly indicate the presence of direct miasmatic influences. It is conceivable, therefore, that the disease might at one time be microbic and at another not. The difficulty of this hypothesis, however, lies in the momentous fact that no matter what the cause may be, the characteristic micro-organism is always present. Nevertheless, seeing that pneumonia seems so often to arise quite suddenly as the result of exposure, in people apparently in the best of health, we should, from the clinical point of view, be inclined to conclude that if a particular organism is always an element in the morbid product in the lung it must be because it is of epiphytic nature. The very constancy of its presence may be quite as strong an argument against, as for its potency.

Epidemic influence is a very difficult thing to analyse, as it embraces so many intangible possibilities. Contagion is far less so, because, as Dr. Sturges very properly reminds us, there is no gainsaying the great clinical fact that, as a general rule, to which the exceptions are so rare that they fall within the knowledge of very few even of those whose range of experience is most extensive, pneumonia is certainly not contagious. There is no fact in medicine more sure; and when one comes to think the matter over, and to remember that pneumonia is by no means an uncommon associate of diseases such as typhus, typhoid, measles, whooping-cough, diphtheria, and so on, and that all these may become so modified in individual cases as to expend their chief energy on organs other than those that more habitually suffer, it would not be surprising if now and then some contagious germ should find for once a congenial soil in a pneumonic compost of its own stirring. However this may be, a contagious pneumonia is assuredly so exceptional an occurrence that its explanation must be of like nature, and as such is hardly likely to have much bearing on the pathology of non-contagious pneumonia. There is far more to be said in favour of a miasmatic pneumonia.

We cannot pretend to have discussed the question adequately; it is one that possesses great breadth of interest, but it appears to us that the position held by Dr. Sturges, that pneumonia may arise from a plurality of causes, is that which, with our present light, most commends itself to a sober judgment. This may seem but a tame and commonplace conclusion to the speculative impetuosity of the present day; but the more cautious, on the other hand, will find comfort in the thought that sobriety postpones senility.

WHAT IS LONDON TO DRINK?

Among the heterogeneous mass of subjects passed in review by the President of the Local Government Board in his annual report, that of the metropolitan water supply, affecting, as it does, the health and comfort of over four millions of the inhabitants of London and its suburbs, is or ought to be one of the greatest general interest.

Dr. Frankland's report in Appendix 24 is, on the whole, more satisfactory than usual, especially when we remember how strongly opposed he is to the employment of the Thames and Lee as sources of supply under any circumstances, and incredulous as to the success of even the best methods of filtration in rendering such water really pure and wholesome. It is true that the value of his reports is greatly impaired by the fact of his examinations being made on one day only in each month, but it is impossible to doubt that greater care is now exercised by the companies drawing their supplies from the rivers than was the case ten years ago, when we find that whereas in 1868 no fewer than 23 samples were slightly turbid, 10 turbid, and 7 very turbid, in 1885 the numbers so described were 1, 1, and 0. This is owing partly to improved filtration, and partly to increased accommodation for storage, enabling the companies to take in the supplies only when the state of the rivers is favourable, and to abstain from pumping when the water is turbid from floods. But it would betray an entire misapprehension of the subject to suppose that the mere absence of turbidity indicates freedom from pollution, for the danger lies, not in the presence of suspended particles of clay or sand, but in that of organic matters in a state of solution, from which no water-course into which sewage, crude or clarified, is poured, and on which a large population lives in barges and house-boats, can be free. The water of the Thames companies has in this respect also shown a great change for the better, especially during the last three or four years, as has that of the Lee, though to a less marked degree; the minimum of organic pollution of the river waters, however, constantly exceeds the maximum of that of the Kent and the Colne Valley waters, which, being drawn from deep wells, are in this respect examples of what a potable water should be.

The question of hardness is one of economic rather than of sanitary interest, having no appreciable influence on health, though involving great waste and causing much inconvenience by leading to rapid incrustation of boilers. This, however, can be, to a great extent, overcome by one or other of the softening processes, as Clarke's method, or Porter's improvement of Clarke's, which are employed by the Kent and the Colne Valley companies, the latter, indeed, reducing the hardness to one-fifth of that with which the former contents itself. These processes do not, indeed, remove the sulphates which give rise to what, from its persisting after boiling, is termed the permanent hardness, but Maignen's newly patented process, employed by the Southwark Company, though only for preventing the crusting of their boilers, is said to remove the hardness of both kinds almost completely.

The quantity of the supply in view of future requirements, its quality as regards organic pollution, and the possibility of specific poisoning in the event of an outbreak of cholera, or even of a widespread epidemic of enteric fever, are the points of greatest sanitary importance. It will be long enough before the admission of crude sewage into the Thames is effectually stopped, while its exclusion from the smaller tributaries throughout their entire course will certainly never be attained. Though irrigation and filtration through properly prepared soil is now generally acknowledged to be the best treatment of sewage, yielding an effluent which does not appreciably foul the river into which it is discharged, yet this effluent certainly renders them more or less unfit to be sources of water-supply. At present a population of over a million and a half discharges its sewage, in some state or other, into the Thames.

Much stress is laid by men of the school represented by Drs. Tidy, Odling, and Crookes on the self-purifying power of running streams, and there is no doubt that the water of a river, at some miles below the point of pollution, is often as pure as it was above, that is, as judged by a chemical examination; but though the influence of animal and vegetable life in the removal of organic matter is great, this result must be largely due to mere dilution, partly by purer affluents, and partly by springs rising in the bed of the river itself, together greatly increasing the total volume.

The daily consumption of London is at present between one hundred and forty and one hundred and fifty million gallons, and we must be prepared, before the present generation has passed away, for a supply of not less than two hundred million gallons a day. The amount which may be taken from the Thames is restricted to one hundred and ten million gallons daily, the actual drain on that river being now seventy to eighty millions, so that the limit will be reached within a measurable distance of time. Another thirty millions are taken from the Lee by the East London Water Company, in addition to what the New River Company has already drawn, with the result that, below Tottenham, the river in dry weather consists almost exclusively of the sewage of that town and other areas. The only limit to the extraction of water from the Lee is the maintenance of the navigable canal; but the experience of last year, when the East London Water Company, after drawing ten million gallons from the Thames, had to discontinue the constant service, shows that a limit is fixed by nature if not by law, and that that limit has already been reached. The New River Company, with laudable enterprise, is constantly engaged in sinking wells in the chalk, so as to meet the steadily-increasing demand without having further recourse to so questionable a source as the Lee below the towns of Luton, Hatfield, Hertford, and Ware, which are all drained into that river. Though several of the other River Companies have two or three wells apiece, these are so close to the rivers that they cannot be considered as independent supplies, or as more than an evasion of the law, reducing the volume of the river just as much as if the water were pumped direct from the stream.

The conclusion is irresistible that, whether in search of a larger or a better supply, Londoners will sooner or later be compelled to go further afield, and the sooner the better in every way. Wells sunk in the London basin cannot be depended on, for the reason that the bed of gault underlying the chalk is not continuous, so that while some wells yield copious supplies, others, like that in Kentish Town, have disappointed the expectations of their promoters. The Richmond Vestry again having bored to the enormous depth of nearly 1,400 feet, into a red (Devonian?) sandstone, with scarcely any result, is still boring in happy ignorance as to whether the element ultimately reached will be fire or water.

Putting out of consideration, at least for many years to come, such ambitious and costly schemes as those for conducting the waters of Bala or Ulleswater to the metropolis by huge aqueducts, we would urge the duty of each and all of the Water Companies to commence a series of wells along the line of junction of the tertiaries with the chalk from Thaxted to Hungerford, and thence by Farnham into Kent, to tap the "bourne" of the North Downs, and by impounding reservoirs, to collect the rainfall on the higher lands of Hertfordshire and Surrey, instead of waiting until reduced in quantity by evaporation and absorption, and deteriorated in quality by the addition of sewage, it has found its way to the rivers, where the most careful filtration fails to restore it to its pristine purity.

THE LIVER AND TISSUE-CHANGE.

THE functions of the liver have always been one of the most interesting studies for physiologists, and their disorder one of the most important for pathologists and physicians. Much has been ascribed, both popularly and medically, to disorder of function in this organ, and it must be admitted without sufficient grounds, and until progress is made with its physiology, the disorder of the organ—that is, its pathology—must remain obscure.

Both the chemical estimation of the constituents of the liver-tissue under varying conditions and experimental investigation have thrown light on the physiological processes occurring in the organ. Thus Bernard, as is well known, showed the variation in the quantity of glycogen, and the probable utility of this substance; others have investigated, with some success, the origin of the biliary constituents; and many conjectures have been made as to the functions of the liver as a secretory and destroying organ—one which assimilates and destroys proteid food-stuffs or their decomposition-products, and alters the character of many poisonous bodies after absorption from the intestine. It is in relation to the effect of the liver on nitrogenous bodies that the greatest obscurity still exists. It is known, for example, that the greater part of the nitrogenous foods—proteids— after absorption, pass by the portal blood through the liver, and that nearly all the nitrogen excreted passes out of the body as urea and uric acid in the urine; but the connecting processes which must occur between the nitrogenous intake and the nitrogenous output are still obscure. Part of the connecting transformation has been supposed to take place in the liver, which on this hypothesis—for it is little more than that—changes the nitrogenous waste-products of different tissues into urea. Others have supposed that uric acid is in part manufactured by the kidneys—built up, that is to say, from the atom-complex (nitrogenous and non-nitrogenous) existing in the blood.

Experimental inquiries into liver-function have been conducted chiefly in three ways: first, by comparing the composition of the blood going to, with that coming from, the organ; secondly, by passing a circulating fluid through the excised organ under appropriate conditions, so that the effect of the still living liver-cells on any substance added to the circulating fluid may be estimated by a chemical investigation of the fluid after it has passed through the organ. By this method, Von Schroeder has shown that, in mammals, the liver transforms ammonium carbonate into urea. Thirdly, the blood-supply may be cut off by ligature of the afferent vessels, so that the organ is prevented from performing its normal functions; or the organ may be excised, and, after recovery from the operation, the effect on tissue-change may be estimated by an examination of the excretory products. The third method has been utilised by Minkowski in a series of experiments, which have yielded instructive results, both for the physiologist and the pathologist. The animals experimented upon were geese, birds bearing the operation better than mammals, an additional advantage being that the anastomosis between the portal vein and the vena renalis advehens is very great in these animals.

The results which Minkowski obtained were based on the comparison of a careful analysis of the urine before and after the operation; this is a more accurate method than a comparison of the composition of the urine after the operation with the average composition of the urine of normal geese, because, in the matter of tissue-change, no two animals are exactly alike, so that small differences of composition noticed may lead to erroneous general conclusions. After extirpation of the liver, the animals took but little solid food, and drank a great deal of water; they lived for varying periods, death occurring in a state of collapse in five or six hours, or being delayed for even twenty hours. The body-temperature, it is important to note, was not diminished more than one or two degrees Centigrade, and soon rose to the normal or slightly above it. The author naturally concludes from

this observation that in geese, at any rate, the liver has not so great an influence on heat-production as has been generally supposed.

The examination of the urine gave the most instructive results. In geese, the normal urine is passed as a thick slimy whitish mass, in which are numerous solid bodies, aggregated masses of uric acid crystals and of urates, these constituting the chief nitrogenous excretion in birds. After liver-extirpation the urine becomes greatly increased, watery, and transparent, showing no crystalline solid deposit, though retaining its acid reaction. The increase in the amount of urine is, no doubt, rightly ascribed by Minkowski to the great quantity of water the animals drank; but the absence of solid matter showed that a great change had taken place in the excretory products. These products were carefully estimated by Minkowski, with the following results, which were compared with the analysis of the urine of the animal under a special diet before the operation.

It was found that the total nitrogen was diminished by one-half or one-third. With this diminution of nitrogen, the uric acid which in normal bird's urine exists as minute aggregation, almost entirely disappeared, though it was present in small quantity; while the ammonia, which is in much greater proportion in the urine of birds than in that of mammals, was greatly increased. Thus, with the diminution in uric acid excretion, there was an increase of excretion of ammonia. Taken with the fact mentioned by Von Schroede, that in normal birds the ammonia, when introduced into the organism, becomes almost completely changed into uric acid, that is secreted as such, Minkowski came to the conclusion that ammonia is a normal precursor of uric acid in birds, and that the synthetical change takes place in the liver.

That there must be some other locality for the formation of uric acid is suggested by the fact that it does not entirely disappear from the urine after complete liver-extirpation; in what locality or localities it takes place is at present uncertain; but Dr. Garrod, in his Lumleian Lectures of 1883, brought forward some facts to show that uric acid is formed in the kidney. Minkowski's results, however, show that the greater part, at any rate, of the uric acid in birds is formed by the liver, and not by the kidney as Dr. Garrod supposed.

With regard to the other nitrogenous excreta after extirpation of the ver, it was found that the small amount of urea which exists in normal geese's urine was not affected by the operation. From the fact, moreover, which has been ascertained by other observers, that urea, when introduced into the organism of the bird, is transformed into uric acid, it must be concluded, from the statement just made, that the transformation can only take place in the liver. This conclusion is completely confirmed by an experiment, in which, after injecting urea into the organism of a goose with an extirpated liver, the compound was found excreted unchanged in the urine. Regarding the origin of the small quantity of urea, it is evident that it could not have been formed by the liver, since this organ was absent; its locality of origin is very doubtful.

Leucin and tyrosin are absent from the urine after extirpation of the liver—an interesting fact, because, as is well known, in acute yellow atrophy of the liver (which is, indeed, in most cases a pathological experiment, destroying the function of the liver) these bodies almost completely replace urea in the urine. The processes, however, of nitrogenous excretion evidently differ in mammals and birds; so that future experiments alone can show how far Minkowski's results in birds will obtain for mammals. The author himself is very clear in insisting that much harm may be done to the progress of physiology and pathology by arguing from the results of experiments on one class of animals to those on another.

A new product appears in the urine after liver-extirpation. This is sarcolactic acid, partly free and partly combined with the ammonia. The explanation of the occurrence of sarcolactic acid is connected, Minkowski thinks, with the absence of uric acid. It was suggested as a hypothesis by Von Schroeder, that uric acid was formed by synthesis from ammonium lactate; and the results just mentioned certainly lend support to this view.

The researches of Minkowski, while bringing forward new facts, and especially the fact of the formation of uric acid by the liver of birds, with ammonia as a precursor, give some hope that, by further investigation, both by physiological experiment and by clinical chemical examination, some light may be thrown on the intimate changes in functional and organic disorders of the liver.

We hear that Dr. Rolph Leslie has started with Mr. Stanley on the Emin Pasha Expedition.

Sir Andrew Clark, Bart., M.D., will preside at the sixty-seventh annual court of the Seamen's Hospital Society to be held at Willis's Rooms on Wednesday, February 16th.

Professor Stirling gave the first of a series of three "Museum" Lectures in Owens College, Manchester, on Wednesday, January 19th, the subject being "The Heart." The lecture was illustrated by numerous experiments.

Dr. Dujardin-Beaumetz, in a report to the Prefect of Police, states that last year three Paris residents died from rabies, a fourth case being doubtful. In 1885, there were twenty-one deaths; in 1884, five; in 1883, five; in 1882, nine; and in 1881, twenty-one.

A German inquirer has, it is stated, taken four heads of hair, of equal weight, and then proceeded to count the individual hairs. One (red) was found to contain 90,000 hairs; another (black), 108,000; a third (brown), had 109,000; and the fourth (blonde), 140,000.

Professor Virchow, who has long represented one of the divisions of Berlin in the Reichstag as a Liberal, is to be opposed at the general election now approaching by Field-Marshal Count von Moltke—a battle of giants, in which the cause of Parliamentary government is championed by the pathologist.

A prize of fifty thousand francs is offered by the French Minister of Education for a discovery rendering electricity economically applicable in the shape of heat, light, chemical action, mechanical power, transmission of messages, or treatment of disease. A committee, with M. Bertrand, of the Academy o Sciences, as its chairman, will adjudicate.

Dr. Mariano Semmola, Professor of Experimental Therapeutics in the University of Naples, has consented to deliver one of the "General Addresses" before the International Medical Congress at Washington. He has chosen for his subject "Bacteriology and its Clinical Therapeutics."

The annual general meeting of the National Association for Supplying Female Medical Aid to the Women of India, of which the Countess of Dufferin is president, was held at Calcutta on Wednesday last. There was a large attendance. The funds of the Association, including its branches, amount to over three and a half lakhs of rupees.

A BITE FROM A RABID FOX.

LORD DONERAILE, of Doneraile Court, county Cork, who was bitten a short time ago by a tame fox, which had suddenly become rabid, has gone to Paris to put himself under the treatment of M. Pasteur.

MINUTES OF THE GENERAL MEDICAL COUNCIL.

THE volume containing the collected minutes of the General Medical Council for 1886 has just been published by the General Medical Council. Appendices contain the reports of the visitation of the Universities, and two statistical reports (the second and third) on the destiny of medical students. It can be obtained from Messrs. Spottiswoode through the ordinary trade channels.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE lectures for the present year will be commenced on Monday by John Bland Sutton, F.R.C.S. (Erasmus Wilson Lecturer), who will deliver on that day, and on Wednesday and Friday, three lectures on "Evolution in Pathology." The lectures will commence at four o'clock precisely each day. Dr. Francis Warner requests us to state that the subject of his Hunterian Lectures is "The Study of Nerve-Centres and Modes of Growth." The course will be commenced on February 7th.

IMPORTATION OF BERI-BERI.

THE *New York Medical Record* reports that several cases of beri-beri were recently admitted to the Bellevue Hospital, in that city, from a ship sailing from San Francisco; several of the crew had died on the voyage. Under these circumstances, it is quite possible that cases may find their way to London, and a sharp look-out ought to be kept at the hospitals where sea-faring patients are most often received.

IODOFORM PENCILS.

DR. OSCAR V. PETERSEN, of St. Petersburg, recommends (*Vratch*, No. 51, 1886, p. 908), in the treatment of syphilis, pencils made of 50 or 70 per cent. of iodoform, together with glycerine and gum arabic, and enclosed in a wooden holder. In the case of a chancroid ulcer, the pencil need only be applied to its surface, which then becomes coated with a more or less thick layer of iodoform. The chief advantage of the method is, that the patient remains absolutely free from an unpleasant and tell-tale odour.

JOSE PEREIRA REIS.

O Correio Medico, of Lisbon, announces the death of Dr. José Pereira Reis, Emeritus Professor in the Medical School of Oporto. He was born in Coimbra in 1808, and was appointed to his professorship in 1834. He published a *Formulario geral*, a revised edition of the *Codigo Pharmaceutico Lusitano* of Agostinho Albano, and various other works of a scientific and literary character. He left part of his fortune for charitable purposes, amongst others for the establishment of an asylum for sick children.

A NEW THERAPEUTICAL JOURNAL.

A NEW medical periodical is announced from Berlin, under the title *Therapeutische Monatshefte*. It will contain original therapeutical articles by experienced clinicians and experimentalists, abstracts of papers, and discussions at the various Societies; and reviews and notices of new drugs and modes of treatment. The first number for the current month contains interesting communications by Kohts, Hausmann, Veit, Casper, Liebreich, and others. The editors are Professors Oscar Liebreich, A. Laugaard, and S. Rabow.

POPULAR HYGIENE.

THE National Health Society has organised a kind of health-mission in Paddington. The first meeting is held to-day (January 28th), when Lord Randolph Churchill will preside; Sir J. Crichton Browne will speak on "Health and Education," and the scheme for securing a public recreation-ground for Paddington will be discussed. The meeting will be held at the Paddington Baths, and on the following Tuesday (February 1st), Dr. A. T. Schofield will commence a course of four popular lectures on "Health and Temperance." Ambulance lectures will be given immediately after the lectures, ladies being instructed in sick-nursing, and gentlemen in stretcher-exercises, in separate classes.

RABIES IN CAIRO.

WE hear from Cairo that there is an epidemic of rabies and hydrophobia there; a good many people have been bitten by rabid dogs, and have died of hydrophobia. Others have been sent to M. Pasteur for treatment. M. Piot, veterinary surgeon in Cairo, is preparing to treat patients by Pasteur's method. It is stated that the introduction of the malady is traced to a terrier hound belonging to a European officer at the Abassieh barracks, which has bitten several native dogs. Some five or six thousand native dogs have been destroyed, but it is believed that many rabid dogs still remain.

SMALL-POX IN JAMAICA.

THE small-pox epidemic in Jamaica shows no signs of abatement. Between November 4th and 21st, 1886, 336 cases, of which 37 were fatal, occurred on the island; and of these, 197 cases (35 fatal) were in the town of Kingston. Between November 21st and December 4th, 541 further cases occurred, of which 49 were fatal. Of these, 152 cases and 17 deaths were in Kingston. Altogether, since the commencement of the epidemic on March 12th last, there have been 2,758 cases and 342 deaths on the island; and out of these, 1,439 cases and 242 deaths have been in Kingston.

BOTTLING A STENCH.

AFTER having been closed for some time past, the Church of St. Mary Woolnoth, Lombard Street, was re-opened on December 21st. Owing to the effluvia arising from the vaults beneath the church penetrating into the building itself, it was found to be imperatively necessary that some effectual steps should be taken to remedy the evil, and accordingly the assistance and experience of Mr. F. C. Penrose were called into requisition. Under his direction, the entire surface under the vault-arching has been covered with a system of iron joists and concrete, to receive a layer of asphalte, which has been laid in two thicknesses; so now the stink is fairly bottled and corked, for a time, under the congregation. A little judicious cremation would have been, possibly, a more scientific and reliable proceeding.

DOMESTIC PERILS.

A NOTEWORTHY proportion of violent deaths is attributable to causes which might easily be obviated by attention to certain common-sense precautions. We need do no more than refer to the infant mortality resulting from overlying, of which the Registrar-General recently reported no fewer than thirty-five cases during one week, occurring in children under one year of age. Nothing new can be suggested with a view to lessening the deaths from this cause, although its frequency must ever be a matter for regret. Nor need we do more than allude to the ever increasing number of accidents from gas explosions. A large number of people will always be found foolish enough to search for a leak with a lighted candle. Another equally serious danger is that which attends the use of high-pressure boilers in the kitchen. They are undoubtedly very useful and convenient; but unless thoroughly sound and well constructed, they entail very considerable risk. A week or two ago two fatal accidents were reported to have resulted from the explosion of such boilers. The immediate cause of the accident in both cases was the sudden return of water into boilers, which had become empty in consequence of the water in the pipes being frozen. From the evidence given at the inquests, it would seem that these boilers are so constructed that, given frozen pipes and subsequent thawing, while the kitchen fire was burning—a not improbable association of events—an explosion, terrible in its nature and probable results, was practically inevitable. It was pointed out that several simple contrivances exist for the purpose of

remedying so dangerous a condition of things, but it is to be supposed that none had been resorted to in the cases referred to. It is to be hoped that for the future some regulations may be made and enforced with regard to such boilers. It is not too much to require that no apparatus should in future be allowed to be used which could, under any ordinary—or even extraordinary—circumstances, work such havoc.

PROGRESS OF CREMATION.

WITHIN the last seven days, two cremations have taken place at the crematory erected by the Cremation Society of England, at St. John's, Woking. One of the deceased, a retired London merchant, who was one of the founders of the Society, was 73 years of age. The cremation of his remains took place on Saturday last. The other cremation took place on Tuesday last, the remains being those of a county magistrate, resident at Twickenham, whose age was 71. Owing to a considerable difference in the weight of the two bodies, the weight of the ashes varied very much, those of the first named weighing 4¼ lbs. and the other 5½ lbs. Both bodies were burnt in a shroud. In a report presented at the yearly meeting of the cremationists in Paris, held a few days since, the secretary referred in terms of special satisfaction to the Act which the Chamber of Deputies, on March 30th, passed by a majority of 371 votes against 174, to render cremation optional in France. It appears that the Holy See has prohibited this funeral ceremony in Italy; but its decree will probably remain a dead letter, as cremation is very popular in that country, where no fewer than sixty cremating societies exist. Furnaces have also been built at Geneva, Zurich, New York, San Francisco, and Buffalo. In Germany a petition to the Reichstag for the allowance of cremation has obtained 23,000 signatures. In the Mauritius, several determined cremationists have ordered their bodies, in the absence of proper ovens for the purpose, to be burnt on common pyres; this operation lasts four hours.

THE WALTER MOXON MEMORIAL.

WE would remind our readers that the meeting of the friends of the late Dr. Walter Moxon will be held on Tuesday next, February 1st, at the Royal College of Physicians, at 5 P.M., when the form the memorial will take must be determined. Sir James Paget will move the first resolution, which will be seconded by Sir Andrew Clark. Various suggestions have been made as to the most fitting way of perpetuating Dr. Moxon's memory. Guy's Hospital naturally has the first claim; but Dr. Moxon's circle of friends was so large that it was determined not to confine the subscription-list to the past and present students of that institution. Sir William Jenner consented to act as President of the Fund, and the most respected names in the profession are to be found among the Vice-presidents. Under these circumstances, after providing for a suitable tablet at Guy's, it seems to many a greater honour to the memory of the deceased if a scholarship or medal were founded in connection with the Royal College of Physicians.

SCIENTIFIC MEDICINE IN BERLIN.

SOME important dissertations, recently (1886) submitted to the professors of the Berlin University, are noticed in the *Berliner klin. Wochenschr.* No. 3, 1887. They indicate increased accuracy in various physical and chemical methods, and show the tendency of modern investigators to include even medicine among the "sciences of measurement." Eleven dissertations are briefly reviewed; they have the following titles:—(1) Gossels, W., Nitrates, Animal and Vegetable; (2) Gnerzda, J., Hæmoglobinometry (v. Fleischl's apparatus was used); (3) Nickol, O., The Quantitative Determination of Oxalic Acid in Urine (a new method is given); (4) Ferumaro Kato, Experiments on the Brain of a Frog; (5) Krüger, G., Bloodletting in the Nineteenth Century; (6) Müller, R., Aphasia in Head-injuries; (7) Salzwedel, R., The Prevention of Consumption and Tuberculous Diseases; (8) Gloeckner, H., Carbolic Irrigation of the Uterus, with reference to Carbolic Poisoning; (9) Citron, H., Mucin in Urine; (10) Aronsohn, Ed., Experimental Investigations into the Physiology of Smell; (11) Lowenstein, H., The Influence of Nutrition upon the Urine.

DEPOPULATION OF FRANCE.

M. ROCHARD, Member of the Academy of Medicine, in a lecture given at the Sorbonne on the depopulation of France, showed, by the returns of the last census in the provinces, that the districts where the rates of increase were greatest were in general the poorest, and that rich provinces like Normandy were fast sinking. This falling off of the population, added to increasing foreign immigration, was a serious matter for France; yet the annual death-rate was steadily decreasing, and had fallen from 27.5 per mille at the beginning of the century to 22 per mille. In reference to the question of child-mortality, the lecturer explained that it was chiefly attributable to neglect and insufficient food. He believed that, contrary to the opinion held by Darwinians, it was not the worst constituted children that died, but rather those who were improperly fed, as no constitution could stand insufficient diet. He believed that a stringent system of inspection would do much towards diminishing the death-rate among infants. If the very moderate statement that infantile mortality could be reduced by about 20 per cent. were accepted, the annual increase in the population would then rise from the present figure, which was 2.5 per mille, to 5 per mille. At the present rate, England will, in five or six years, notwithstanding emigration, have as large a population as France.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

A QUARTERLY court of this Society was held on Wednesday, January 12th, at 8 P.M., at the rooms of the Society, 53, Berners Street. In the unavoidable absence of the President, Sir J. Paget, the chair was taken by the senior Vice-President present, Mr. Tegart. A sum of £1,364 was voted for distribution among sixty-three widows and nine orphans on the funds. The expenses of the quarter amounted to £55 8s. 6d. One new member was elected; and four resignations and five deaths were reported. The Secretary stated that during the last year there had been sixteen deaths among the members and nineteen resignations, while only five new members had been elected. Astonishment was expressed by many of the directors that so few members joined, the advantages being so great. Some thought if it could be made more generally known that young men could join on completing their studies when still living within the twenty-mile radius, and that when once a member the membership was not forfeited by removal beyond the radius or even out of the country, many young men would avail themselves of the opportunity of ensuring a slight provision for their widows and orphans.

"THEATRE FLUES."

THE Metropolitan Board of Works had before them, at their last weekly meeting, the superintending architect's report as to the fatal panic at the Hebrew Dramatic Club, Spitalfields, whereby seventeen persons lost their lives. He stated that the building in question was not licensed, and consequently not under the jurisdiction of the Board. The Board's power only extended to places of public entertainment licensed by the Lord Chamberlain or the justices. The premises were brought under the notice of the Board in May, 1885, when a complaint was made to the Board in regard to them. The complaint was referred to the Building Act Committee, and the complainant was informed that the building being unlicensed, the Board had no jurisdiction.—Mr. Ewin, Chairman of the Building Act Committee, moved that the report be referred to the Building Act Committee. He remarked that when the attention of the committee was called to this building, in 1885, he visited it, and reported to the committee that in his judgment the premises were quite unfit for a place of the kind. He thought it was a pity that the Board did not seek powers to deal with a place of that

description. They were advised by the solicitor that they had no power to interfere, and consequently the matter had dropped. However, after what had now occurred, he hoped that the Board would lose no time in endeavouring to obtain powers to deal with places of this sort, and he trusted that the committee might bring up a report to that effect.—Mr. Lindsay thought that the police ought to have been communicated with.—The report of the superintending architect was then referred to the Building Act Committee for consideration. We heartily endorse the hope that no time will be lost in seeking to secure the long and much needed legislative power for dealing with this matter. The demand is more likely to be accorded if sought for at a time when the incidents of this unfortunate disaster, and the cause from which they arose, are fresh in the minds of all.

MEDICAL SERVICE FOR THE VOLUNTEER FORCE.

Sir James Hanbury, K.C.B., Deputy Surgeon-General and Principal Medical Officer of the Home District, in distributing the prizes on Saturday, January 22nd, to the Woolwich Volunteer Medical Staff Corps, pointed out the necessity for a more extended system for tending the sick and wounded in connection with the Volunteer force. He said they had at this moment a Volunteer army of 250,000 men. It was estimated that something like a million had passed through the ranks, of whom half could be called up and made available for service if required. The question was: What medical service had they available for these 250,000? He replied that they had only 600 of the Volunteer Medical Staff Corps. They had also, in each Volunteer regiment, a certain number of ambulance-trained men, who could not be counted on for attendance on the sick and injured at the rear. They had a prospect this year of something like 300 more being added to the Volunteer Medical Staff Corps, thereby making a total of 900; but of these 900, no fewer than 600 were medical students, who, although they would be invaluable for spreading the movement, yet could not be counted upon for service in time of need, as most of them would be in medical practice. What should be the medical service for these 250,000 Volunteers? They should have no fewer than 2,500 Volunteer Medical Staff Corps bearers. They required 84 field hospitals, and about 3,300 hospital attendants to man these field hospitals. The present state of things was unsatisfactory under any circumstances; but it was almost alarming when they considered the present political condition of the Continent. In conclusion, Sir James Hanbury appealed to the members of the medical profession to take this matter up.

DEATH UNDER CHLOROFORM.

The death of a man named Jones, while under the influence of chloroform, occurred at Rhyl last week. The evidence of Dr. Eyton Lloyd was to the effect that, being called to the deceased, he found him suffering from dislocation of the right shoulder, the result of an accident on the previous evening. Various attempts were made to reduce the dislocation, but without success; and having applied all the force he thought he was justified in using, he decided to administer chloroform. As far as could be ascertained after careful examination, the deceased's heart appeared to be organically sound, and chloroform was administered. While the conjunctiva was still sensitive, spasm having relaxed, the dislocation was reduced. The patient had given three deep respirations, when death occurred apparently from syncope. All attempts at resuscitation failed. No *post mortem* examination was made. The chloroform was administered in this case with all due care, and after taking the necessary preliminary precautions. Cases such as this appear, however, to afford additional reasons to regret that the practice of administering ether instead of chloroform is not more generally adopted.

HARVEIAN SOCIETY OF LONDON.

The annual general meeting and conversazione of the Harveian Society was held on Thursday, January 20th, at the Stafford Rooms, Titchborne Street, Edgware Road. From the report of the Council, it appeared that the Society was in all respects as prosperous as its oldest friends—and it has some very old ones—could desire. Numerically and financially, a good average had been maintained, and, owing to the exertions of the retiring Treasurer, Dr. Buzzard, its liabilities had been satisfactorily cleared off. According to annual custom, an address was delivered by the retiring President on returning thanks for the last of the series of complimentary votes to the officers of the year. Dr. Hughlings Jackson's thoughtful and philosophical paper was followed with close and interested attention by a large audience. At its conclusion, the new President, Mr. Edmund Owen, was formally inducted to the chair. The conversazione which followed presented many features of interest, notably amongst these an exhibition of the Welsbach Incandescent Gas Light, by which an extremely brilliant white light of absolute steadiness is obtained. Dr. Edgar Crookshank's series of the best recognised microbes attracted much attention, many of the preparations being of the highest perfection of microscopic staining and mounting. A display of electrical apparatus by Mr. Thistleton, and of surgical instruments by Messrs. Down Brothers, contained many novel appliances which are likely to become popular. A series of original sketches and drawings by the late Randolph Caldecott, and a collection of autotypes, were amongst the most noticeable of the artistic decorations of the rooms.

CENTENARY OF THE PHILADELPHIAN COLLEGE OF PHYSICIANS.

The College of Physicians of Philadelphia celebrated the hundredth anniversary of its foundation on January 3rd. Dr. S. Weir Mitchell delivered a commemorative address in which he sketched the history of the College and the lives of the chief medical citizens of Philadelphia, among whom is numbered Dr. Benjamin Rush, who was characterised by Dr. Weir Mitchell as the greatest physician America has produced, and "next to Franklin, the greatest citizen of Pennsylvania." Edinburgh University was, he said, the parent of the Philadelphian College, though many of the most distinguished among its earlier members owed much to John Hunter. After the address a conversazione was held, and was attended by all the principal persons in Philadelphia. On the following day, Professor Stillé gave another retrospective address, and Dr. Da Costa welcomed a number of distinguished Associate Fellows elected in celebration of the centenary. Finally, after a luncheon had been discussed, and various toasts drunk, Dr. Weir Mitchell brought the procedings to a termination by reciting an ode entitled "The Doctor's Century," from which we may quote the concluding verses as given in the *Philadelphia Medical Times*:

"Perchance, as ghost consultants, we
May stand beside some fleshly Fellow,
And marvel what on earth he means
When this new century's old and mellow.

Take then the thought—that wisdom fades,
That knowledge dies of newer truth,
That only duty simply done
Walks always with the step of youth.

A grander morning floods our skies
With higher aims and larger light:
Give welcome to the century new,
And to the past a glad Good-Night."

DRINKING-WATER AS A CAUSE OF TYPHOID AT PIERREFONDS.

At a recent meeting of the Académie des Sciences, M. Brouardel read a note on an epidemic of typhoid fever which broke out at Pierrefonds in September, 1886. During two months, twenty-three persons from Paris and Versailles came to live at Pierrefonds in three contiguous houses, situated in the Rue du Bourg. Twenty of these persons were attacked with typhoid fever. The water consumed in these houses came from under a stratum of clay, which was covered to the depth of two or three mètres with very porous sand. To get this water, it was only necessary to dig holes in the form of wells. Under these conditions, the neighbourhood of the wells to the leaking cess-

pools insured the permanent mixing of excrementitial matter with the water serving for domestic use. On the other hand, when heavy rains came on, the water from the roofs diluted the matter in the cesspools, carrying it into the surrounding earth. Twenty days after each heavy rain a new centre of typhoid fever broke out in one of the three houses. The water, therefore, appeared really to have been the vehicle of infection. But, in order to demonstrate this fact, M. Brouardel requested Dr. Chantemesse, director of the Bacteriological Laboratory of the Faculty of Medicine, to examine it. In that belonging to the house where five deaths from typhoid fever had occurred, MM. Chantemesse and Widal found the bacilli, considered by Eberth, Gaffy, Artaud, Cornil, and Babes as pathogenic of this disease. They were unable to discover these micro-organisms in the water from any other well in Pierrefonds. With the view of establishing the specific character of these bacilli, the spleen was punctured with a disinfected trocar, in patients suffering from typhoid fever, on the tenth day of the disease. The drops of blood thus obtained gave rise to colonies of bacilli identical with those in the water from Pierrefonds, the noxious nature of which was thus conclusively proved, while at the same time, according to M. Pouchet, it was very free from organic matter. This latter observation shows that the bacilli may live for a long time in the ground. In conclusion, M. Brouardel pointed out the nature of the work which the municipality of Pierrefonds will be obliged to accomplish, in order to prevent the recurrence of similar outbreaks. In France, as in England—although in France much more tardily—polluted drinking-water is being every year more clearly recognised as the most ordinary efficient cause of typhoid fever.

POST-GRADUATE LECTURES.

Since we first began to advise the institution of post-graduate courses for the use of practitioners and advanced students, they have been rapidly adopted in most of the great medical centres, with excellent results. Until lately, the English schools were very deficient in this kind of higher education; and were thus, as indeed they are still, far less attractive to American and Colonial practitioners and students than they ought to be. A scheme of special courses and post-graduate instruction—clinical, scientific, and in laboratories—would tend to make the great centres of teaching in Great Britain more nearly the rivals of the Continental schools than they are now. What is being done in London in this way is good of its kind, but is too fragmentary, and insufficiently organised. A general conference of teachers should be held, to arrange work in each school, including special hospitals of good standing and the special apartments in the great hospitals. They ought to be able to frame a comprehensive scheme of advanced teaching, which if properly advertised at home and abroad, would do much to attract a great number of English-speaking students and practitioners from America, Canada, and Australia. English practitioners would also find in such post-graduate courses the means of bringing themselves well abreast of the most recent developments of medical science. The success of the post-graduate lectures at Edinburgh, Manchester, and elsewhere has led to arrangements being made with the staff of the Leeds General Infirmary to give a course of lectures and demonstrations in Leeds, the chief promoters of which are Drs. J. Fletcher Little (Ben Rhydding), Arthur Roberts (Keighley), and Alfred G. Barrs (Leeds). The following is the syllabus of the course which commenced on January 21st, with a lecture on "Coma and its Causes," by Dr. T. Clifford Allbutt, F.R.S., with demonstration in the wards of Nervous Diseases; January 28th, on "Common Deformities," by Mr. T. Pridgin Teale, demonstration of appliances; February 4th, on "Some of the Common Diseases of the Stomach and Liver," by Dr. Addison, demonstration in the wards; February 11th, on "Intestinal Obstruction," by Mr. Jessop, demonstration in the wards; February 18th, on "Pulmonary Therapeutics," by Dr. Churton, demonstration in the wards and microscopic specimens; February 25th, on "Common Eye Diseases," by Mr. Nunneley, demonstrations on the use of the ophthalmoscope, and cases; March 4th, on "Common Diseases of the Uterus," by Dr. Braithwaite, demonstration of midwifery and gynæcological instruments; March 11th, on "Gunshot Wounds," by Mr. E. Atkinson, demonstration of diseases of the eye, with ophthalmoscope; March 18th, on "Albuminuria," by Dr. Barrs, demonstration on urine tests, etc.; March 25th, on "Causes of Retention of Urine," by Mr. McGill, demonstration in the wards; April 1st, on "Common Diseases of the Pharynx and Larynx," by Dr. Jacob, demonstrations on use of laryngoscope; April 15th, on "Diseases of the Anus and Rectum," by Mr. A. W. Mayo Robson, demonstration of instruments and patients; April 22nd, on "Common Ear Diseases," by Mr. Bendelack Hewetson, demonstration of aural instruments and patients; April 29th, on "Tumours," by Mr. Ward, demonstration on patients; May 6th, on "Injuries of the Head," by Mr. Brown, demonstration of electrical apparatus; meeting of practitioners to arrange the next course.

EFFECT OF IRON ON THE COMPOSITION OF MILK.

Dr. Mendes de Léon has made a number of researches and observations on the supposed effect of taking iron on the composition of the milk secreted. He finds that milk always contains a minute quantity of iron, which differs in different species of animals, cow's milk, for example, being richer in iron than human milk. He gave various preparations of iron to a healthy multipara and analysed the milk, but was unable to detect any increase in the iron it contained, so that it would appear that iron given to the mother does not act on the child by passing into its system, but that it may act by improving the general condition of the mother, and thus causing her to secrete better milk.

COD-LIVER OIL.

M. Carles, Professeur Agrégé at the Faculty de Médecine of Bordeaux, has recently re-affirmed that the cod-liver oil which is lightest in colour is the purest and the most easily assimilated. The deep colour frequently seen in cod-liver oil is owing to more or less putrefied livers having been used. M. Hogg, a Paris chemist, had already stated, in a report read before the Academy of Medicine, that the natural oil obtained from the cod's liver is almost colourless and tasteless; that it smells of fresh fish, and that cod-liver oil, which is brown in colour, has been prepared from livers in a state of putrefaction. M. Lesueur, Chef des Travaux Cliniques of the Paris Faculté de Médecine, confirms these statements, and testifies to the superiority of M. Hogg's cod-liver oil obtained in his fisheries off Newfoundland by a process of his own. M. Lesueur states that this oil contains nearly double the active properties of the cod-liver oil generally sold, and that it is free from the disagreeable taste and odour of these oils. Different preparations have been invented to replace cod-liver oil, but without success.

SCOTLAND.

FACTORY APPOINTMENTS.

Notice has been received from the Home Office that the South Side Factory District of Glasgow, for which the late Dr. E. Watson was certifying surgeon, has been divided between Dr. A. K. Irvine and Dr. Robert Brown, of Pollokshields.

PROPOSED CONVALESCENT HOME FOR FEVER HOSPITAL, EDINBURGH.

The proposal to establish a Convalescent Home in connection with the Fever Hospital has been brought before the Edinburgh Town Council by a subcommittee of the Public Health Committee, and it was ultimately agreed to intrust the Town Clerk to prepare a memorial, with a view to getting the opinion of the City Assessor as to whether it would be legal to apply the city rates for such a purpose. At present, patients have to be discharged from the Fever Hospital before their health has been sufficiently re-established, and it has been proposed that they should have the benefit of a short stay in the country.

SAMARITAN SOCIETY, EDINBURGH.

THE eighth annual meeting of the Edinburgh Royal Infirmary Samaritan Society was held in the Chapel of the Royal Infirmary on Tuesday. The report submitted to the secretary stated that, including the balance of £72 from the previous year, the income for 1886 amounted to £336 3s. 10d., and the expenditure came to £319 1s. 7d., leaving the sum of £17 2s. 3d. to be carried forward. With the limited resources at their disposal, the committee were often obliged to restrict their aid to very small sums in order to go over as many cases as possible. During the year over 3,000 articles of clothing had been given away. The report was adopted, and the committee and office-bearers thanked for their services. In the course of the proceedings, several speakers referred to the advantage which would accrue from the Society being made, as it were, a constituent part of the organisation of the Royal Infirmary.

EDINBURGH UNIVERSITY COURT.

AT a meeting of Edinburgh University Court, held on Monday, the following gentlemen were appointed additional examiners in the faculty of medicine:—Dr. J. O. Affleck, Clinical Medicine; Mr. W. Watson Cheyne, M.B., F.R.C.S.Eng., Clinical Surgery; Dr. G. Sims Woodhead, Pathology; Dr. D. Noel Paton, Physiology; and Dr. C. D. F. Phillips (London), Materia Medica. These appointments are for the current year, but may be made by annual re-appointment for five years. At the same meeting, on consideration of minutes of the Senatus, it was resolved to grant recognition in connection with graduation in medicine in the university (under Section 4, Ordinance 8, Edinburgh), to Mr. Alexander Wood, Teacher of Practical Materia Medica, Western Dispensary, Fountainbridge, Edinburgh, and to Dr. Alexander Bruce, Lecturer on Pathology and Teacher of Practical Pathology, Edinburgh; and to continue recognition (under the same ordinance) to Mr. Peter Young, Lecturer on Midwifery in charge of his teaching rooms. The winter course of Practical Botany by the Professor of Botany and assistants acting under him, was also approved, and the fee fixed at £3 3s.

ASSOCIATION FOR INCURABLES, EDINBURGH.

THE annual meeting of the Association for Incurables, Edinburgh, was held last Monday. The Lord Provost presided. The report submitted showed that, during the past year, 31 male and 25 female patients were admitted to the hospital, which brought the number of inmates up to 108. Of this number, 15 males and 21 females died, and 6 left of their own accord or were discharged, leaving 66 in the hospital at the end of December. The extension of the hospital has now been carried out, and 14 additional patients can now be accommodated. Of the patients treated, there were 27 from Edinburgh, 10 from other parts of Midlothian, 53 from other districts in Scotland embracing 20 counties from Berwick to Caithness and Shetland, and 18 from England, Ireland, and abroad. During the year, new or renewed applications for admission have been made by 82 males and 65 females, whose cases have been under consideration. The financial report shows a serious falling off in the subscriptions, the amount collected being £1,835 14s. 9d., as against £2,061 8s. 9d. for the preceding year, being a reduction of over £225. The legacies received during the year amount to £1,231 10s. The trustees of the late Mr. J. A. Longmore have continued their contribution of £300, which they have made for the last six years. The office-bearers were re-elected.

ANDERSON'S COLLEGE, GLASGOW.

OWING to the incorporation of Anderson's College with the new Technical College, the Medical School is now to be reformed under a new trust. A meeting of the trustees of the college was, therefore, held on January 15th for the purpose of electing nine governors to the new trust of Anderson's College Medical School. There will be altogether thirty governors, the remaining twenty-one being elected by the Medical Faculty, Town Council, Merchants' and Trades' House, and other bodies. The following were elected from Anderson's College:—Messrs. J. B. Kidston (Clerk), T. A. Mathieson, D. C. Glen, Nathaniel Dunlop, Arch. Robertson, W. Cooper, and Drs. J. B. Russell, Turner, and H. Thomson.

UNIVERSITY OF GLASGOW.

THE number of members on the register of the General Council of the University for 1887 is 4,416, being an increase of 202 as compared with the number in 1886. There is reason to suspect that a considerable number of names of members now deceased, probably about 150, still appear on the roll; and, as the powers of purging the register conferred by enactments are very limited, it is highly desirable that representatives of deceased members should make intimation to the Registrar, in order that such names should be removed.

THE TEACHERS' GUILD.

THE branch of the Teachers' Guild of Great Britain and Ireland, which was established in Glasgow a few months ago, has so far had a remarkably successful session. In connection with it, a conversazione was held in the Queen's Rooms on January 14th, which was largely attended. Addresses were delivered by Professor Ramsay, Mr. Campbell, of Tilliechewan, Mr. Caldwell, M.P., and Dr. Kerr, H.M.'s Inspector of Schools. The ordinary fortnightly meetings are devoted to the discussion of educational methods.

GLASGOW UNIVERSITY EXTENSION SCHEME.

THE University Extension Scheme, about which there was so much talk, and of which so much was confidently predicted some months ago, is making very little progress, unless backwards. The movement connected with it, for erecting in the East End of the City a hall akin to Toynbee Hall in the East End of London, has resulted as yet only in the securing of a couple of rooms, one of which has been fitted up as a drawing-room, to which once a fortnight some of the poorer people are invited to spend a social evening. It has not been found possible yet to develop the idea of residence, which is one of the main features of Toynbee Hall.

GLASGOW MEDICO-CHIRURGICAL AND PHILOSOPHICAL SOCIETIES.

AN extra meeting of the Medico-Chirurgical Society was held on January 21st. Dr. J. Crawford Renton, Mr. James Carter, F.R.C.S.E., and Mr. Henry E. Clark occupied the evening. Mr. Carter's paper discussed the comparative anatomy of the seminal vesicles, prostate, and Cowper's glands, and their supposed functions. Mr. Clark initiated a discussion on the diagnosis of scrofulous disease of the kidney, and the advantages and disadvantages of a preliminary nephrotomy, and the position and direction of the nephrectomy wound. He also showed a patient, from whom the left kidney had been removed for scrofulous disease.—The Philosophical Society was also occupied at its last meeting, on the 19th instant, with questions connected with the medical sciences. Dr. Neil Carmichael read a paper on "An Experimental Research on the Artificial Cultivation of Vaccine Lymph." He had attempted, for a period of something like ten years, to cultivate lymph outside the body. As yet, he had been only partially successful. He had, he said, been able to cultivate the organisms in unlimited quantity; and, in a small percentage of cases of inoculation with this lymph, successful vaccination had resulted. But it was evident that the process of cultivation had somewhat lowered the infectivity of the lymph in the human subject. He was continuing his experiments.

LENZIE CONVALESCENT HOME.

THE twenty-second annual general meeting of the subscribers to this home was held on January 18th in Glasgow. The report showed that the number of patients admitted into the home for the past year was 1,515, as compared with 1,563 in 1885, and 1,409 in 1884. As formerly, the patients had been received from the Royal and Western Infirmaries and from the general public on subscribers' letters. During the year the managers considered it necessary to repaint and paper the

home, which was done for the sum of £147 14s. The average stay of each patient was eighteen days. The total expenditure of every description for the year was £1,941 6s. 9d., which gives a total cost per patient of £1 5s. 7½d., or, excluding the sum for painting, £1 3s. 8d. per patient, or 1s. 3¾d. daily for each patient, as against 1s. 4½d. in 1885. The annual subscriptions amounted to £939 8s. 6d., as compared with £962 17s. in 1885, and £970 13s. in 1884. The subscriptions from persons employed in public works, and collections from churches and schools, etc., amounted to £254 19s. 9d., as against £280 15s. 11d. in 1885, and £248 19s. 11d. in 1884. Each guinea subscription entitles the subscriber to recommend one patient for three weeks' residence. The report of the medical officers (Drs. Whitelaw and Stewart) was as follows:—The total number of patients received during the year was 1,515, of whom there came from the Royal Infirmary 340 males and 140 females, from the Western Infirmary 196 males and 148 females, and from the general public, by subscribers' letters, 371 males and 320 females. A large proportion of the males belonged to the ordinary labouring class, while many of the females were domestic servants. During the past year there was an extra number of school children and other young people. The surgical cases included many convalescents from broken bones and from amputations and other operations; and among the medical cases, chest diseases, rheumatism, and general debility predominated. There were three deaths, one a female patient, aged 37, recovering from pleurisy, who had been resident only one week; the second, a man, aged 23, of pulmonary consumption, after four days' residence; and the third, a man, aged 45, who succumbed to erysipelas and general debility. The sanitary condition of the home continues excellent.

A MEDICAL EFFORT TO SOLVE A NATIONAL PROBLEM: MR. AND MRS. ERNEST HART IN GLASGOW.

MR. AND MRS. ERNEST HART, of London, spent a few days in Glasgow, last week, on the invitation of some of the leading citizens, and their visit and its results have attracted much public interest. Mrs. Ernest Hart had been invited to address a meeting of the principal persons in Glasgow interested in works of public usefulness, on the subject of her successful efforts for the relief of some of the difficulties and miseries of the Irish population, by the revival of a number of textile home industries. Many of the leading medical men in Glasgow, including Professor Macleod, Professor Gairdner, Dr. Moore, and Dr. Wolfe (at whose house Mr. and Mrs. Ernest Hart were entertained) took a great interest in forwarding the meeting, which was held at the house of Mrs. Arthur, under the presidency of A. B. MacGrigor, Esq., LL.D., a leading citizen of Glasgow. The simple but earnest and pathetic narrative of Mrs. Hart drew tears from unaccustomed eyes, while it was impossible to withhold a tribute of admiration for the practical ability and unsparing devotion with which a great national object had been so successfully prosecuted by individual effort. It was stated that upwards of 800 families have received the benefit of technical education, and are now employed on the simple but effective plan inaugurated and carried out by Mr. and Mrs. Ernest Hart; about eighty distressed Irish ladies being also employed. A sample series of home-spuns, embroideries, and household fabrics, had been sent for exhibition from the central depôt of the Donegal Industrial Fund (founded by Mrs. Ernest Hart), at 43, Wigmore Street, London. Most of the specimens shown were at once sold; and Messrs. Wyllie and Lockhead have arranged a public sale of the embroideries at St. Vincent Street; and Mr. Macleod of the home-spuns. From a document since circulated by Mr. M'Grigor, with the view of raising further funds for this patriotic and benevolent purpose, it appears that Mr. and Mrs. Ernest Hart have subscribed about £3,000 to the fund, in addition to the three years of work and responsible enterprise involved in founding and carrying on so extensive a system of cottage education and technical production in distant and scattered villages on the almost inaccessible north-west coast. Mrs. Hart was introduced to the meeting by Professor Macleod, and the results of the visit have excited great interest in medical as well as general circles throughout Scotland, where much compassion is felt for the orderly and industrious part of the peasantry, whose sole desire is work and the means of living such as this enterprise affords to them. All the Glasgow papers have leaders endorsing and supporting the work. The *North British Daily Mail* has the following comment, in the course of a leader, on the meeting; the other papers write in similar terms.

"The difficulties which have baffled Governments and statesmen are yielding to the earnest, well-directed, and persevering efforts of a couple of private individuals. It is not the first time in this country that courageous and public-spirited individual initiative has solved the difficulties of the State. Mr. Ernest Hart, a well-known surgeon and social reformer of London, and the editor of the BRITISH MEDICAL JOURNAL, spent some months in Ireland in the spring of 1882 in investigating, in company with his wife, and with the aid of an agricultural expert, the causes and cures of the distress which had yearly culminated in a famine, and in the raising of great national relief funds. The well-known views which he enunciated on the creation of a peasant proprietary were adopted by the Government of the day in some clauses of the Irish Tramways Act, and in the subsequent measure of Lord Ashbourne. And they led also to the purchase and subdivision of the Kildooney estate in Galway. Mrs. Ernest Hart, with his aid and concurrence, set herself to the difficult task of training the peasantry to the exercise of remunerative home industries which can be carried on concurrently with and supplementary to the culture of their small holdings. These holdings, it is well known, are insufficient to support life in many of the districts of Donegal, Connemara, and elsewhere, even if the people lived on them rent free. To occupy the idle months of winter, to employ the women and girls in cottage-industries, to find work for spinners, weavers, dyers, and embroiderers, has been the self-imposed task of Mrs. Ernest Hart. She has succeeded, after four years of unremitting effort, to an extent which is beyond anticipation, and which is full of national promise. The tangible evidence of her success was seen in the products which were shown at Mrs. Arthur's house yesterday, and which will shortly be on public view in Glasgow.....The obstacles to such an effort—carried out among an untrained peasantry, scattered sparsely over districts without railroad communication—have been serious, and at times apparently almost insuperable. But Mrs. Hart has never allowed herself to be baffled, or to despair even in the moments of the utmost discouragement. Her husband has aided her with advice and supplied some thousands of capital, much of which was, of course, consumed at first in educational effort, and in the failures incidental to every such novel and difficult enterprise. Throughout the trying initiatory stages of the enterprise they sought no help. Some thousands of pounds have been needed to carry out the work of "The Donegal Industrial Fund" to its present successful position. It stands now before the world content to be judged by its achievements and by the beauty and commercial worth of its products. Tried by this test alone it is a marvellous success. Mrs. Hart's hope and aim go beyond, however, the industries for which she has provided such successful technical and industrial training. She asks for aid, not only in extending these, but in cultivating others—basket-making, tile-making, glove-making, lace-making are among those which she indicates. Unaided, and by individual effort, she and her husband have achieved a work of which it is difficult to overrate the interest and national importance. She asks for influential backing in extending these benefits. There is a wide field for this practical experiment on a great scale. Restored industry to Ireland would mean the beginning of a great social elevation, which patriots of all parties and of all divisions of the Kingdom would hail with warmest welcome, and should forward with liberal effort.

THE ALLEGATIONS AS TO DUMFRIES ASYLUM.

IT may be remembered that some time ago there occurred in connection with Dumfries Asylum what almost amounted to a public scandal in respect of certain allegations made by a former resident assistant physician, which led to his resignation or dismissal, and which circumstance was considered of sufficient importance to cause the Board of Lunacy, acting on instructions from the Home Office, to institute an inquiry into the matter. In the Commission of Inquiry, Sheriff Guthrie Smith, Sir John D. Wauchope, Dr. Arthur Mitchell, C.B., and Mr. T. W. L. Sponce took part; the Medical Assistant at first put in an appearance by counsel, but ultimately dissatisfied with its proceedings, withdrew from the meeting. The Commission, having terminated the inquiry and considered the whole matter, reports:—1st. That the charge of want of discipline in the Second House of the Crichton Royal Institution has been proved to their satisfaction to be unfounded. The conduct, however, of the late junior Medical Assistant during the time he held that position was shown to have been subversive of discipline. 2nd. That as regards the quantity of food supplied to the patients in the Second House, many of the figures in the letter referred to (the letter by the junior medical officer containing the allegations) are shown to be erroneous, and that the statements in it generally, in reference to the quantity of food and the condition of the patients, are undeserving of confidence. 3rd. That both as regards patients, attendants, and house servants, the food supplies of the Second House have been of good quality, but that the cooking of the food appears to have been on a considerable number of occasions unsatisfactory. 4th. That the estimate of the

cost of the food of the patients in the Second House, given in the letter referred to, is unsupported by facts, and shows an ignorance of the cost of the food of patients in other asylums. 5th. That the charges in the letter referred to against the management of the Second House have been prepared and have been brought forward in a way which deserves strong censure.

IRELAND.

DUBLIN HOSPITAL SUNDAY FUND.

THE amount of the last collection in aid of this fund is announced to be £4,158 0s. 3d.

THE LICENCE OF THE APOTHECARIES' HALL, DUBLIN.

A WELL-INFORMED correspondent writes: The question whether the Apothecaries' Hall of Dublin has had the power to give a licence to practise physic has again come under discussion in connection with the Conjoint Scheme for Ireland. As was stated by a correspondent in the BRITISH MEDICAL JOURNAL for January 8th, the King and Queen's College of Physicians objects to the admission of the Apothecaries' Company to the proposed Conjoint Board for Ireland, chiefly on the ground that the Company has not enjoyed the power to grant licences to practise medicine, but only to practise pharmacy. It must, however, be remembered that the licence of the Apothecaries' Hall of Dublin was a registrable qualification under the Act of 1858 (Schedule A). The very same point now in dispute was raised many years ago, and by a resolution of the General Medical Council on June 2nd, 1863, it was decided "that this Council is of opinion that registered Licentiates of the Apothecaries' Company of Dublin are, as apothecaries, entitled to practise medicine in Great Britain and Ireland." Those who remember the time spent in the discussion of this question during the first four or five years of the Council's existence, will be disposed to regret that the question should be reopened.

MERCERS' HOSPITAL.

THE character this hospital has of late years acquired in Dublin for bad management, and for other circumstances of a more personal nature connected with its administration, seems, unfortunately, to be getting worse. Notwithstanding the recent addition to the Board of a large number of governors, the business, we are informed, is transacted in such a manner as already to have caused some of these gentlemen to resign their position in disgust. The want of funds is no sufficient excuse for the state in which the hospital is. We understand that it has been without an operation-theatre and suitable dispensary accommodation for about two years, and the resident students have to occupy one of the wards. There is hardly any class attending the hospital, and the available number of beds in it is under fifty. Last September, a gentleman who was acting as *locum tenens* for one of the resident pupils, but who, it was stated, was not a pupil of the hospital, made certain charges in writing to the Governors against officials of the hospital. A committee was appointed to investigate these charges, but it did not examine the student who made them, nor any of the witnesses he was prepared to bring forward in support of them. The committee reported the charges were not proved; and a resolution was passed, authorising the Registrar to prevent the person who had the hardihood to make any charges against the management of the hospital from entering it. This extraordinary conduct of the Board caused such a manifestation of public feeling, that it was obliged to pass a resolution asking the corporation to nominate three gentlemen publicly to investigate the aforesaid charges. The corporation acceded to this request, and appointed three of its members, who, however, were induced to hold a private inquiry into the matter. They have reported to the corporation in terms entirely white-washing the hospital, and declaring that its management is "effective and humane," and that every official connected with it is "active and efficient." At the same time that this private inquiry was being conducted a magisterial investigation on oath was going on in one of the Police Courts in connection with the same matter. This was in the shape of a summons against the resident surgeon "for that he did grievously assault and accelerate and cause the death of" a man who had been a patient in the hospital. As this case is still before the magistrate, we refrain from making any further comment upon it at present. It was a most irregular proceeding to publish the result of the private inquiry by the corporation, while a public magisterial one was being held. Whatever may be the decision arrived at by the latter, we fancy it will be viewed with greater respect by the public than that conducted by the corporation.

HOSPITAL FOR WOMEN AND CHILDREN, CORK.

A VERY successful drawing-room concert, in aid of the "Lily Cot" in this institution, was held last week at Mrs. Jackson Cummins', South Mall; and, as a result, a very substantial sum has been obtained for a most deserving object.

NEW ROSS UNION: THE LABOURERS' ACT.

AT a recent meeting of the Vice-Guardians, a letter was read from Dr. Cardiff, requesting payment for inspecting labourers' cottages, at a fee of 10s. 6d. each; and stating that he could enforce the amount, as he notified to the late Guardians his intention to charge at that rate. The late Board were removed by the Local Government Board for refusal to obey orders, and paid Vice-Guardians were appointed in their places. These latter have been informed that the late Guardians considered themselves relieved from the necessity of replying to Dr. Cardiff's notice under Sub-section 2, Section 8, of the Labourers' Act, 49 and 50 Vict., June 25th, 1886, which was passed subsequent to Dr. Cardiff's notice; and also because the sum of 6s. 8d. has since been fixed by the Guardians and approved of by the Local Government Board.

MORGAN DAVIS O'CONNELL, M.D.

DR. O'CONNELL, resident medical practitioner at Kilmallock, died on Monday, January 24th, at an advanced age. In early life, Dr. O'Connell served in the British army as a surgeon. In 1830, he joined the British Legation at Madrid, which helped to suppress the rebellion against Queen Isabella. He served in several engagements in Spain, and was presented by Queen Isabella with the gold medal and clasp of the Legion of Honour, bearing the inscription, "Spain intends to show her gratitude." King Ferdinand also conferred upon him the knighthood of the Order of St. Ferdinand. Dr. O'Connell left the army after his return from Spain, and settled as a medical practitioner in the town of Kilmallock. He has been medical officer of the workhouse and dispensary since they were established many years ago.

ULSTER MEDICAL SOCIETY: ADJOURNED MEETING.

THE adjourned meeting for the purpose of considering the question of house and arterial drainage was held in the Museum, Belfast, on Wednesday evening, January 19th. The President (Dr. Whitla) occupied the chair, and the attendance was again large. Dr. Kevin introduced the proceedings by a paper upon the Pollution of the River Lagan, in which he detailed the various sources of contamination now operating, and combated the idea that the Belfast Main Drainage scheme would obviate the present objectionable condition of the river. He spoke favourably of the proposal of Mr. Gillaland, C.E., to divert the course of the Blackstaff, and place a weir upon the Lagan, near the present Albert Bridge. A general discussion followed upon the whole question, in which Dr. Browne, R.N. (Public Health Officer), Dr. John Moore, Dr. Aickin and others took part. The two evenings devoted to the consideration of sanitary matters have been greatly appreciated by the Society.

THE ASSOCIATION OF GENERAL PRACTITIONERS.

IMPORTANT RESOLUTIONS.

A MEETING of the Council of this Association was held at Exeter Hall on Wednesday, January 19th. The following members were present. C. G. WHEELHOUSE, Esq., F.R.C.S., Leeds, in the chair; Sir W. Foster, Birmingham; Mr. Ernest Hart; Dr. Alfred Carpenter, Croydon; Dr. Danford Thomas; Dr. Crowe, Worcester; Dr. Mickle, Bow; Dr. Steele; Mr. Wickham Barnes; Dr. Alderson; Dr. Gubb; Mr. Walter Pocock; Dr. J. B. Brierley, Manchester; Mr. Walter Marsh; Dr. Maurice Davis; Mr. Major Greenwood; Dr. R. Paramore; Mr. A. D. Roe; Dr. W. Piercy Fox, and the honorary secretaries, Drs. Bott and Verdon. Letters of apology and assent were read from absent members of the Council, including Mr. Jallard, York; Dr. Holman, Reigate; Dr. Smith, and others. Fifty new members were elected, and the following were added to the Council. E. Galton, Esq., F.R.C.S., Brixton Hill; C. Royston, Esq., M.D., Westbourne Park West; R. Lord, Esq., M.D., Notting Hill; F. B. Hallowes, Esq., M.R.C.S., Redhill; H. C. Pope, Esq., M.D., B.S., F.R.C.S., Goldhawk Road West; J. W. Workman, Esq., M.R.C.S., Reading; H. J. Capon, Esq., M.D., Edgware Road West; M. Coates, Esq., M.D., F.R.C.S., Mitcham; T. E. Walford, Esq., M.R.C.S., Reading; J. Manley, Esq., M.R.C.S., West Bromwich; W. Eddowes, Esq., M.R.C.S., Shrewsbury; Hugh R. Ker, Esq., F.R.C.P., Halesowen; W. Winterbotham, Esq., M.B., Bridgwater; De Vere Hunt, Esq., L.R.C.P., Bolton-le-Moors; T. S. Ellis, Esq., M.R.C.S., Gloucester; Priestley Smith, Esq., M.R.C.S., Birmingham; J. S. Bartrum, Esq., F.R.C.S., Bath; J. S. Turner, Esq., M.R.C.S., London; F. Wallace, Esq., L.R.C.P., London.

Mr. WHEELHOUSE said: I must thank you very cordially for placing me in this chair, and I assure you that, so far as it is in my power to aid the objects of this Association as they have been put before me, they shall have my heartiest and most cordial support in every way. We cannot conceal from ourselves the fact that we are living in critical times, when everything, so far as the profession is concerned, appears to be on the point of turning, and it is just at that point of turning when it behoves us, as general practitioners, to see that our rights are not swept away as the tide flows round. I have been a general practitioner all my life. The question was raised during the late election for the General Medical Council, as to whether I was a consulting surgeon, a general practitioner, or what? I have been a general practitioner all my life; I am a general practitioner still, in a somewhat restricted sense, for when I accepted a seat on the Council of the Royal College of Surgeons, it became necessary that I should forego the practice of midwifery, which I had carried on up to that time to its fullest extent, and I was obliged to give up the dispensing of medicines and pharmacy in all branches. Now, with the exception of these two points in the work of the general practitioner, I remain a general practitioner still. I still have a large family practice, and although those amongst whom I live, knowing that my experience is great, and that I have been for a long time at the hard work of general practice, choose every now and then to ask my opinion in consultation, I do not think that that should redound to my discredit. Now, there seems to be a very general feeling throughout the profession that the rights of the general practitioner were likely to go by unheard unless the genoneral practitioners themselves looked after those rights in all the changes which seemed about to come upon the profession. For a very long period of years—I do not like to mention how many, certainly for twenty-five years—I have been working with the Medical Reform Committee of the British Medical Association, in the hope that, by patient plodding, we should after a time, at all events, secure for the profession certain definite rights. Those rights appear now to be within reach of our hand, and if we will only put it out firmly and determinedly to grasp them, we may keep these rights in our hands ourselves. It seems to me that with this very general desire on the part of general practitioners to look after their own rights, some such association as this has become a necessity. When, therefore, I heard it was to be formed, I was glad, and I am quite sure if it be worked assiduously and with judgment, and without temper, that we shall attain many of those ends for which for years past we have been striving. In the first place, it has seemed to me (and that is one of the questions which have been brought forward) perfectly monstrous that, so far as London schools and London educated men are concerned, they have no means of taking an ordinary M.D. degree; and, whilst you are about it, I think you are perfectly right in putting that as one of the points upon the programme for which you contend. I hope the upshot will be that, in the end, we shall obtain a right to that qualification, or some means by which those educated in London may obtain it without having to cross the Channel, or go across the Border to get it, or without going anywhere beyond the limits of London itself. Amongst other things we have been striving for, and one to which I have looked forward all my life, is the hope that we should live—at least, some of us—to see one portal, and one portal only, by which those who enter our profession may be admitted to it. With twenty rival licensing bodies, it would seem, if we were to be guided by the ordinary character of human nature, that there must be a competition which must be unfavourable to the general mass of the profession, in the way in which their examinations are conducted. If possible, I should like one portal for the whole profession. If we cannot have that, I should like, as the nearest approach to it, one portal for England, one for Ireland, and one for Scotland; and I would have those under the guidance of the one examining body, which will be instituted, I hope, in the near future; and each of these kingdoms should make it an absolute necessity that every man who enters the profession should pass through that portal, and should be made to show that he is proficient in the arts of medicine and surgery, which he will be called upon every day of his life to practise. He should also be thoroughly conversant with midwifery and with pharmacy; and I would have the Joint Examining Board, which is authorised to admit him into the profession, charged to see that he was thoroughly, or, at all events, sufficiently, well versed to practise these four branches of the profession with perfect safety to the public; and then, having done that, I would constitute him a general practitioner. I hope that there will be, either by a faculty granted to that same body, or by some modification of existing arrangements, some means by which the general practitioner, if he says, "I don't care to stand upon this same dead level on which I entered," may be able to pass into a higher status. If he be a surgeon, he may desire to obtain his Mastership or Fellowship in Surgery, or something which he may consider an adornment. In the same way, I would have a medical degree within reach, so that everyone who takes medicine in hand may be able to obtain in London a M.D. degree, which shall place him upon an equality with the M.D. obtained either in Dublin, Edinburgh, or any other large European centre. In order to do that, I think, and have thought for a long time, that we should need a very considerable modification in the way in which examinations are conducted. I am one of those who look upon the examinations of the present day as unsatisfactory in more ways than one. I consider they are broken up into many minor matters. A man is called upon to pass too many examinations, and he is called upon to pass them in such a way that he thinks when he has passed any one subject, he may forget it as quickly as he likes, and he will have no more to do with it. That is not the way to mak, a good general practitioner in the future. I would therefore diminish the number of the subjects in which he is called upon to pass examinations. I know that they are not by any means to be depended upon as a correct estimate of a man's capabilities. I have known, in my connection with a large medical school, the best man of his year ignominiously rejected, and *vice versâ*. Well, I think that something, at all events, should be done to try and remedy that defect, which I believe to arise out of the fact that examinations are conducted too hastily, too cursorily. They are conducted in a way which is not fair, if I may so speak, that is not strictly fair either to the student or to the examiner, and I think there are changes in the method of examination which, now that new examination halls are to be erected, may be forced upon the attention of those who constitute the examining bodies. I have been very much grieved at what has taken place with respect to both the College of Surgeons and the College of Physicians in the action they have taken with respect to the Apothecaries' Society. My feeling is, and has been all through my life, that, if we might see those three bodies united, and so united as to constitute the examining body of the kingdom, then the one portal system would be within our reach. But when I saw that, in spite of the desire on the part of the Apothecaries' Society to join heartily in any scheme which may be propounded, its offer was rejected, I felt it was a great blow to all the hopes I had cherished. I felt that each of us ought to put our shoulder to the wheel to bring pressure to bear upon the Councils of the College of Surgeons and the College of Physicians, and, if need be, on the Privy Council itself, to pray that, if possible, this arrangement may not be completed if it is not heartily accepted. If we could see the Apothecaries' Society, the College of Physicians and the College of Surgeons all heartily and honestly united in their endeavour to promote, first, education, secondly, examination, and to give the necessary time for examination, I think we should find that things would go on very much more smoothly hereafter. I think we should find that men would be far more satisfied, both as to the way they were admitted into the pro-

fession, and more obedient to the laws of the profession, than they are sometimes at the present time; and I hope we shall live to see the day when these changes will come about. If we put our shoulders to the wheel now, I think many of these things may be attained. I hope and trust that this Association will be able to put such pressure upon the examining bodies, upon the governing bodies, and upon all the bodies concerned with medical education, that we shall eventually succeed in obtaining that for which I believe every general practitioner has been fighting for a long time.

The copy of a letter addressed to the Privy Council was read, requesting that, in the event of an application being made by the Councils of the Colleges of Surgeons and Physicians to obtain additional powers, an intimation might be forwarded to this Association, stating the earliest time at which it would be proper to make representations, and praying that no new charter or extension of privileges be accorded until such representation has been made.

To this communication Mr. Lennox Peel had replied, to the effect that the intimation asked for would be given.

Dr. ALDERSON moved the following resolution:—"That this Association urgently appeals to the general practitioners of England to give their adhesion and support to the Association by becoming members in furtherance of its important objects, which are briefly as follow: That this Association regards with satisfaction the proposal for securing to the general practitioners of England in the future means of obtaining the M.D. degree in London by reasonable and adequate examination tests." Dr. Alderson thought the success of the Association was assured. He had at first felt a little hesitation in joining it, but this was quickly removed when he saw the names of those gentlemen who had already joined the Council and became acquainted with the real objects of the Association. He then felt it to be an honour to do so. They were most fortunate in having as their president the most representative medical man in the kingdom. It was a great honour to secure as he had done some 8,500 votes of the medical profession. He felt quite certain that no medical man who had the interests of his profession at heart, would mind giving a little of his leisure time, and would consider it well spent in joining the Society. He (Dr. Alderson) felt a particular interest in proposing this resolution, inasmuch as he had not only met with some little difficulty in getting his own degree, but he had been compelled to send a son of his away to Durham. Why, he asked, should London have given her diploma to only thirty-six men during the past year? Could it be that there were only thirty-six students in the whole of London worthy of that degree? The student's career should be progressive. He should not throw his books on one side, but should follow on building up his practice by a continuation of his studies.

Mr. (MAJOR) GREENWOOD said he had great pleasure in seconding the resolution, and expressed the hope that some alteration would take place in London with regard to the granting of degrees. The London University could not in any sense be said to fulfil the requirements of a London university. There were many students who desired to complete their curriculum, after having engaged in practice, who found it impossible now, compelled, as they were, to return to the hospital, and go through the whole curriculum again. He hoped when a new university was instituted, that it would help those who failed to carry out the full curriculum at the present London University.

The resolution was put to the meeting, and carried unanimously.

Mr. WICKHAM BARNES moved the following: "That this Association protests against the exclusion of the Apothecaries' Society from the Conjoint Examining Board of England, as tending to create a division of medical interests to the public and to the profession." He stated that he had inserted two notices in the medical press, asking the members of the Poor-law Medical Officers' Association to express their opinion upon the question. As the result, he had received 200 replies, only one being opposed to the admission of the Apothecaries' Society to the conjoint examination.

Mr. STEELE said he had much pleasure in seconding the above resolution. The action of the College of Surgeons in ignoring the resolution passed at one of its meetings could not be approved. The position of their chairman on the General Medical Council was a protest by the general practitioners throughout England, that henceforth they intended to have some voice in matters affecting their interests. The fact that the Apothecaries' Hall had been omitted from the conjoint scheme, and left to carry out an independent licensing system, showed the necessity for vigorous action on their part.

This resolution was passed unanimously.

Dr. DANFORD THOMAS moved the following resolution: "That this Association claims for the general practitioners of England, Members of the College of Surgeons, and Members or Licentiates of the College of Physicians, a representative voice in the governing bodies of the respective Colleges of which they are the main support." He said this was a matter in which he was specially interested, from his connection with a kindred society—the Association of Members of the College of Surgeons—which had now been working for about two or three years in endeavouring to obtain the right of the representation of Members on the Council of the College. The success which had recently attended their efforts to secure representation on the General Medical Council, and the honour they had in seeing two of those gentlemen who had been elected present, should encourage them to commence work with the view of obtaining the reforms indicated in the resolution. They had now their representatives on the General Medical Council, and they intended to fight, he hoped successfully, for representation on the Council of their College. They had, he thought, met with considerable success with regard to the work they had done in the Association to which he had referred, and he believed the Council would now be willing in some way to meet them. The steps they had taken had, he thought, been to some extent more favourably received than hitherto, and, if necessary, they were determined to take the course pursued by this Association, and petition the Privy Council. They had received a similar reply from the Privy Council, stating that no new charter would be granted to the College until they had had an opportunity of being heard. This Association went further, and said that the Licentiates of the College of Physicians should also have a representative voice in the governing body. That, he thought, was only fair and just. They, as an Association of Members of the College of Surgeons, would do all they could to assist the present Association. He thought it a very just and right thing that they should be represented. They took their diplomas by four or five years of work; not merely by a payment of money, although they did support them considerably from a monetary view, yet he thought if they would only extend to them the arm of friendship, they would be able to support them in a much more important way.

Mr. A. D. ROE seconded the resolution, which was carried *nem. con.*

Sir WALTER FOSTER said, as regards the principle of the resolution, it had his support from the beginning. He believed he was the first member of the profession who publicly announced that that principle was the only one on which the College of Surgeons could hope to flourish. He published a pamphlet entitled "The Political Powerlessness of the Medical Profession," and in that pointed out that the Council of the College would never speak with the full force of authority with which it ought to speak until it rested on the full 16,000 members of which it consists. He believed that was the only principle on which the two Colleges ought to be constituted. Every one who held a diploma from the Colleges had a right to some voice in the body with which he was connected. It was, he contended, wrong for one portion of that body to exclude another. He (Sir Walter Foster) believed that Members and Licentiates were equally interested in the College to which they belonged, as Fellows and others, and he wanted them all to be interested. If they were all interested, they would all be able to speak in the voice of the whole; they spoke now in the voice of the few, and he wanted that altered. He was heartily with them.

Dr. BRIERLEY (Manchester) said he had been asked to propose what was perhaps the most important resolution on the paper. He did so with very great satisfaction. It was—"That this Association asks for a Royal Commission of inquiry into the constitution of the said Colleges as a preliminary to the granting of any charter for the extension of the powers and privileges of these two corporations, separately or in conjunction, unless such charter be framed so as to give to the general practitioners, who compose upwards of 95 per cent. of the profession, a just voice in the governing councils of such corporation or university." Dr. Brierley said he quite agreed with them; they should never forget what infinite good the Apothecaries' Hall had done for medicine in the past, and he thought it was the most ungraceful act that could possibly have been done towards that corporation to exclude her from any new arrangement which might be made. He would have had nothing to do with the resolution if it had been to suggest a new power for the Apothecaries' Hall to confer a further degree. They had, as had been remarked, more than enough already. It was not new powers, but a reconstruction of the old, that was required, and the merging into one scheme. With regard to the College of Physicians he must say he held that qualification in very high esteem. On the other hand, he had the profoundest respect for the licentiateship of the Apothecaries' Society. He thought it was one of the best they had. He did not hold his own university—the University of Edinburgh—quite in such light favour as Dr. Alderson had stated. He did not think its degrees were granted quite so readily. He thought they would admit

that the education was more comprehensive and more complete. A two years' residence was required. The preliminary examination was certainly not quite so good as he would like it to be. It was infinitely below that of the University of London, which he took to be quite equal to any B.A. degree. He thought if they were to follow on the lines of the University of Edinburgh they would not be very far amiss. He had great pleasure in moving the resolution.

Dr. GUBB, in seconding this resolution, said they had passed several resolutions; and, after passing them, the next thing for them to do was to give them effect. It was a very grave measure asking for a Royal Commission, but, if they obtained it, he thought it was extremely probable that it would fulfil their wishes.

The resolution was carried unanimously.

Dr. MICKLE suggested that the two questions—that of obtaining the London M.D. degree for medical students, and the incorporation of the Colleges—should be kept distinct. The burning question was the one of degrees. Everyone who had watched the London schools during the last twenty years knew that the students lay under enormous disadvantages. The Association had already committed itself, in a former resolution, to the support of the obtaining of the M.D. degree, and it seemed to him very undesirable for the Association to do anything which would form an opposition to it. He thought the resolution might be so modified as to imply that no opposition would be given to the granting of the M.D. degree.

Mr. HART said he hoped no one would consent to this proposal, which practically meant selling their birthright for a mess of potage. Now, at a time when the Colleges were asking for new charters, was the time to move for an inquiry into their constitution. The only ground on which the Colleges could go to the Privy Council would be to ask to be allowed to constitute a new university, and the only status the Association had was to go and say, "Yes, we were in favour of that, but the Colleges must remodel their constitution." If they were allowed to establish their new constitution on the present basis, they would be giving them so much added power.

Dr. MICKLE suggested that the two questions should be fought out on separate lines.

Mr. HART said the answer to that was that once the Colleges were allowed to obtain their new powers, they (the Association) had no further *locus standi* in the matter.

Dr. BRIERLEY: I apprehend the very object of this resolution is to prevent any action being taken without its being carefully watched by a Royal Commission, which would consider the whole question.

Dr. STEELE said many persons seemed to be very imperfectly informed as to what the Colleges were asking for. He understood that the College of Surgeons and the College of Physicians jointly asked for one thing. The College of Surgeons were asking for a new charter which should give larger powers, and this his Association was opposing. The Colleges unitedly asked for power to give a M.D. degree. That they, as an Association, would support. The present Association had intimated its intention of supporting the Members who were opposed to the College of Surgeons acquiring further powers while they continued to exclude them from a voice in its affairs.

Mr. MAJOR GREENWOOD said they opposed any charter, for whatever purpose it might be asked, which excluded Members of the College of Surgeons and Members or Licentiates of the College of Physians from their Councils.

Dr. MICKLE withdrew his suggestion, and the resolution was carried unanimously.

Mr. POCOCK moved, and Dr. PARAMORE seconded, the next resolution, which was: "That copies of the foregoing resolutions be forwarded to the Privy Council, with a request for an audience on the above matters; and that due steps be taken to bring them under the notice of the medical corporations, the profession, and the public." This was passed without opposition.

The meeting closed with a vote of thanks to the Chairman, proposed by Dr. MICKLE.

THE CHRIST'S HOSPITAL QUESTION.

IN what we have said hitherto (see the JOURNAL for January 1st and 15th) concerning Christ's Hospital, and the apparent unwillingness of its authorities to take any active steps for its reform, in accordance with the recommendations of the Royal Commission, we have shown there are reasons not limited to the consideration of the welfare of the school and scholars, which make further delay almost unjustifiable. But it may be urged, and with some show of fairness, that the governors of the hospital, as a body, are not called upon to consider the interests or schemes of improvement of any outside charitable body or department of the State, but are concerned solely with the administration of the estate of the hospital, in the best way consistent with the intentions of its founders and benefactors. It would not be difficult to prove that in a matter of such public importance, governing bodies must regard themselves as trustees for the general public weal, and not for the advancement of particular interests. But granting, for argument's sake, that the whole and sole duty of the governors is to govern Christ's Hospital, what can be urged from that point of view in favour of walking still in the old paths, in defiance of public opinion, or what cause can be shown why the scheme of the Charity Commissioners should not be frankly accepted, so far as its main lines are concerned?

The authorities may urge, if they please, that they have long been willing, nay, anxious, to leave London, but that they have never been able to find a suitable purchaser for their property; but the plea will hardly find general acceptance. That for seventeen years nearly five acres of land, the pick of all the sites in the City, should have gone begging is not credible, had any serious attempt been made to dispose of it; moreover, we know how strong is the desire of others to enter into possession. That the privileges of the governors will be affected in any scheme for the reconstruction of the school, is probable enough, and this question of possible limitation of patronage is one which may naturally operate strongly in favour of delay, at any rate, in the minds of some. But it will be found that it is made a special point in the scheme propounded by the Commissioners, that all the existing donation governors will retain their patronage for their lives intact. A more reasonable and a more worthy cause for hesitation is to be found in the fear that in the process of restoration the original features of the Christ's Hospital education will disappear. This would indeed be a grievous pity. It is the special and characteristic excellence of this foundation that it educates and cares for the children of the needier members of the middle class, giving to all opportunities for living and thriving, and for turning their school training to its best account, so that there is no calling or profession which is not open to them if they prove themselves fitted to pursue it. In so doing, Christ's is an Alma Mater to the City, doing noble work which no rate-supported or Board school can ever, or ought ever, to attempt to do; and we can well understand how its governors, to whom its name and fame and usefulness are dear, should prefer to cling desperately to the old cloisters, and the traditions associated with them, rather than that the hospital should even seem to sink into a mere rival of an ordinary educational institution.

We believe the fear to be groundless, and that it will be found on examination that the features of the school which have made it a pride to the citizens of London have been jealously safeguarded. But the very fact that the alterations are to be made at the instance, if not the dictation, of an outside body of Commissioners, instead of coming from themselves as the proper fountain of authority, appears to be galling to some of the governors. It is only in human nature that it should be so; but we may point out that the alternative has been long before their eyes. At least as far back as 1870, it was urged by the party of progress among them that, if they did not set their house in order for themselves, it would be done for them by the Commissioners; and, if the scheme of the latter had in effect ignored the whole spirit in which the hospital has done its work for centuries, and had practically extinguished it in all but name, the authorities would have had only themselves to thank. But that the sentiment of the hospital and the privileges of the governors have been ever tenderly cared for, an inspection of the accepted scheme, a copy of which is now before us, will show.

This scheme has, no doubt, the faults which are inherent to all cut-and-dried pieces of legislation, and many of its details would be found, probably enough, unworkable; but there is sufficient weight of influence among the governors to effect any amount of modification, or even to recast the scheme altogether, provided the two great points are not lost sight of, namely, that the school must be moved out of London, and that the funds will then be sufficient for the education of about double the present number of scholars.

Hitherto, the policy of the hospital authorities has been one of passive resistance, alternating with abortive attempts at impugning the position of the Charity Commission; but this position seems to be impregnable, so far, at least, as their powers of exercising control over about eight-tenths of the hospital funds are concerned. Now the Commissioners cannot afford, for their own sakes, to allow themselves to be kept at arm's-length for an indefinite time. Action of some kind or another must soon be taken, and compulsory action must inevitably be against the best interests of the hospital.

They have shown their willingness to meet the governors more than half way, and the time has surely come for the latter to abandon their Fabian tactics, and to retain their hold over the management of the hospital by at once cordially accepting the principle of the scheme,

and afterwards shaping it on their own lines. This could be done most easily, and with the least possible amount of friction, if the Court of Common Council were to take action on behalf of the citizens in the matter of this great City charity. The aldermen share with the donation governors in the responsibility for the good government of the hospital, and an influential committee, appointed from among them, would be able to play the part of the honest broker between the contending parties, and start the school afresh, with a new lease of usefulness and efficiency.

PROVISION AGAINST ACCIDENT, SICKNESS, OLD AGE, AND DEATH.

THE quarterly meeting of the General and Executive Committee of the Medical Sickness, Annuity, and Life Assurance Society was held on Wednesday, January 19th, at 38, Wimpole Street, the Chairman, Mr. ERNEST HART, presiding. There were present—Dr. R. Lord, Mr. F. Wallace, Mr. Major Greenwood, jun., Mr. E. Bartlett, Dr. F. de Havilland Hall, Dr. J. W. Hunt, Dr. J. B. Brierley (Manchester), Mr. J. Brindley James, Mr. E. Noble Smith, and Dr. G. W. Crowe (Worcester). Dr. W. M. Ord and Mr. T. Vincent Jackson (Wolverhampton) sent messages regretting they could not attend.

After the sickness claims had been reported by the Secretary, and examined, and several proposals for membership considered, the accounts were submitted, together with the auditors' report. These were accepted, and considered highly satisfactory. It was mentioned that the securities for investments (which are kept in a box at the Society's bankers) had been examined and verified by Mr. S. W. Sibley (one of the treasurers), Sir T. Spencer Wells (one of the trustees), and the auditor.

The report for the quarter, showing continued progress in the increase of reserves and the number of members, and high financial prosperity, was then read, and, after a short discussion, received and adopted.

The progress of the Society during the past quarter had been of a steady and satisfactory character. There have been 28 new proposals received, and though this is fewer than the exceptional number (43) last quarter, it is a little over recent averages, and compares favourably with the number (22) in the corresponding quarter of the previous year. Against the increase by new members must be set the loss of 1 member by death, of 1 by withdrawal, and the exclusion of 5 for non-payment, while 4 are at present under suspension for failure to pay the premium due on November 30th. The following is a short summary of the work of the various funds:

Sickness Fund.—To this fund there has been an income from members' payments of £1,122 12s. 2d., against £1,072 6s. 4d. in the preceding quarter, and an expenditure of £475 4s. for sickness pay, against £446 14s. Although the amount of sickness pay is more, there have been fewer members sick than in some previous quarters; but several of the claims have been for very severe and prolonged illnesses. The sickness rate is, however, still well below the expectation under the tables, and has not absorbed one-half of the premium income, so that a very strong sickness reserve fund is being accumulated to meet future contingencies, the amount at the close of the quarter being £6,277 19s. 11d. Care has been taken properly to safeguard this fund by carefully examining every claim, and, where necessary, demanding full proof and certification.

Annuity Fund.—The annuity fund shows an income of £689 12s. 2d. for the quarter, against £540 16s. 9d. in the preceding term, and, as the claims on this fund are of a deferred nature, there has been no expenditure, save allotting the stipulated proportion to the management fund. The increase in income is largely due to the success of the new rule enabling members to secure a return of premiums by an increase in payment. This has aroused a great deal of interest, and caused much correspondence, with the result that 53 members have already made the exchange, and a large number have agreed to do so from the current quarter.

Life Assurance Fund.—The life assurance fund has had an income of £219 6s. 2d., against £205 2s. 6d. in the preceding quarter, without any expenditure, save the deduction for management. This fund, though it continues small, seems to be working out well. At present its growth is restricted by the clause in the Friendly Societies Act limiting the amount that may be assured to £200, and the fact that so many members had already arranged for their life assurance before the Society was founded.

Management Fund.—The income to the management fund has been £218 4s. 6d., against £205 14s. 6d. in the previous quarter, and the expenditure is only £94 4s. 7d., against £116 16s. 11d. It is a remarkably satisfactory feature that the expenditure does not, therefore, grow in proportion to the income, and this quarter less than half the 10 per cent. allowed has been used, the cost being reduced to less than 4½ per cent. Of course, correct deductions cannot be drawn from a single quarter, but the present balance in this fund of £1,196 10s. 6d. is tangible evidence of the result of the care of the Society with regard to its management expenses.

Invested Reserves.—The result of the quarter's work has been a net increase of £1,517 16s. 8d., against £1,393 in the previous quarter, the total worth now being a sum of £14,241 17s. 11d., an increase of £5,212 13s. 9d. for the year lately closed. During the quarter a further investment has been made, £1,500 having been advanced to the Justices of the Peace of the County of Suffolk (Western Division) secured on the police rate of an area with a rateable value of over £600,000. This loan is repayable over a term of twenty years, and is at 3¾ per cent. interest. At the close of the year, and having regard to the bank-rate, a further sum of £1,500 was transferred to deposit, and is now earning a fair rate of interest, pending further investment. This reduced the unproductive capital of the Society—the necessary balance on current account—to £367 2s. 8d. at the close of the year, and as no interest is allotted to the management fund, the assurance funds were really at that time, and are now, in the exceptional position of receiving interest on a larger sum than their total reserves. The investment of a further sum was considered, and it was decided to advance £820 to the Local Board of Kettering, Northampton, for five years, and £600 to the Guardians of Barrow-on-Soar, Leicester, for thirty years, each on the security of the rates, and at 3¾ per cent. interest.

Full particulars, prospectuses, and proposal forms of this Society will be forwarded on application to the Secretary, Mr. C. J. Radley, 26, Wynne Road, Brixton, London, S.W.

CAMBRIDGE MEDICAL GRADUATES' CLUB.

A SPECIAL meeting of the Cambridge Medical Graduates' Club was held in the rooms of the Medical Society of London on Thursday, January 20th, "For the consideration of the pending questions with regard to degrees in medicine."

The chair was taken by Dr. DICKINSON, of St. George's Hospital, one of the vice-presidents of the club. There was a small attendance of members, only twenty-eight being present.

Sir GEORGE PAGET, M.D., K.C.B., moved the following resolution:

"That to establish a second University in London for the purpose of granting medical degrees is either unnecessary or unadvisable."

He said that it was unnecessary, if the degrees were to be granted on a standard of acquirements equivalent to those of the existing University of London, and that it was unadvisable if they were to be granted on an inferior standard; because to lower the distinction would be unjust towards those who, by study and diligence, had obtained these titles from the University of London or other universities which maintained a high standard. It would be injurious also to the interests of the public, and to the advancement of medical science, to lessen the inducements to men of ability to attain the superior knowledge required for the highest distinctions. To establish a second university in London, with the purpose of granting the same or similar titles for a lower standard of acquirements, would be a competition downwards, and be utterly unworthy of such bodies as the Royal Colleges of Physicians and Surgeons. The injurious consequences would be intensified if a medical degree were given on the existing standard of the professional examination of the Conjoint Board, a practice which would in its first effect be unfair towards those who have already passed the same or like examinations, without receiving such degree; and in the ultimate result, by making medical degrees nearly universal in the profession and no longer a distinction, would be utterly destructive to the purpose they have served as inducements to superior attainments in medical science.

The resolution was seconded by Dr. STURGES. Sir HENRY PITMAN, Professor LATHAM, and others, opposed the resolution.

The discussion occupied nearly two hours, and ultimately the resolution was lost, six voting in its favour and fourteen against. Eight members of the club who were present did not vote.

Professor LATHAM then proposed the following resolution, of which he had given notice:—

"That it is expedient that a committee be appointed, whose duty shall be to consider from time to time the regulations relating to degrees in medicine in the University; to receive and consider suggestions for the improvement of medical education there; and to take such action as they deem necessary."

The resolution was seconded by Dr. ABERCROMBIE, and, after a brief discussion, it was resolved to adjourn its consideration to the next general meeting of the club. The meeting ended with the usual vote of thanks to the chairman.

THE MORTALITY AMONG BRITISH TROOPS.

Dr. Robert Lawson, Inspector-General of Hospitals, has recently discussed the mortality from consumption among the troops of the United Kingdom. The paper contained important facts, showing how the mortality of the troops had been lessened in some degree when the men were quartered in ventilated barracks, and, to a larger extent, when the changes were made from cotton to woollen shirts, and from white trousers to cloth. The periods dealt with by Inspector-General Lawson were from 1837 to 1846, and from 1860 to 1884. The mortality from phthisis among the civil male population in England and Wales, between the ages of 15 and 45, in 1838-42, was 4 97 per 1,000 living; in 1860-64 this had fallen to 3.60 ; in 1865-69 it rose to 3.73; from which it had declined to 3.3 per 1,000 in 1875-79, and to 2.81 in 1880-84. With the different distribution of age among the troops the mortality at civil rates would have been, in 1837-46, 5.09 per 1,000 ; and in 1860-64, 3 63 ; in 1865-69, 3.81 ; in 1875-79, 3.21; and, finally, in 1880-84, 2 70 per 1,000. These two sets of ratios differed but little from each other, but the actual mortality among the troops (including half the numbers discharged for phthisis) was very much greater, the ratio per 1,000 in 1837-46 having been 9 38; in 1860-64, 5.77 ; in 1865-69, 4.83 ; in 1875-76, 4.67 ; and in 1880 84, 3.63. In explanation of this great discrepancy, it was to be observed, Inspector-General Lawson remarked that in 1837-46, 83 per cent. of the consumptive cases were retained in the service until they terminated fatally, and only 17 per cent. were discharged ; while in 1860-64 and onwards, about 36 per cent. only were retained until death, and 64 per cent. discharged ; the freedom and relaxation of civil life being more favourable to recovery than the unavoidable restrictions of the service. In addition, up to 1855, most of the troops at home were quartered in permanent buildings in, or in the immediate vicinity of, large towns. The camps at Aldershot, Shorncliffe, Colchester, and the Curragh, in healthy country localities, were then established, in which, in 1860-64, 27 per cent. of the troops were accommodated. But for these changes the mortality from consumption in 1860-64 would have been at least 7.58 per 1,000, instead of 5.77, thus showing a reduction of 1.80 only from 1837-46 for men under the same conditions as to barrack accommodation at both dates, instead of 3.61, as would appear from the actual difference of the ratios.

There was a very general belief that the great reduction of consumption in the army was due to improved ventilation in barracks. This was begun in 1859, and was generally introduced in 1862, and should immediately have begun to show its effects. The mortality from consumption in 1860 62, however, was 5.80 per 1,000, and that of 1864 5.56, a reduction of 0.24 only after two years' full operation of the ventilation ; while in 1865 the ratio was 4.84, a fall three times as great, following the substitution of flannel for linen or calico shirts in 1864; and this low ratio continued with little alteration for the next fifteen years. Up to 1823 the troops wore cloth trousers in summer. That year white linen trousers were introduced instead, which were often put on damp, and without any underclothing. In 1846 a light woollen material was introduced in place of the linen. So far as the records enabled an opinion to be formed, the introduction of the linen was followed by a large increase of deaths from consumption, and the substitution of woollen material in 1846 was followed by an equally remarkable reduction. The reduction of the death-rate from consumption in 1880-84 was a very striking one, and was equally remarkable in civil life as in the army. In the former the death-rate from all causes (among males of the ages already specified) was 9.74 per 1,000 in 1870-74, and it fell to 8.11 in 1880-84, the consumption forming about 35 per cent. of the total death-rate each quinquenniad. Among the troops in 1865-69 the death-rate from all causes was 9.41 per 1,000, and in 1880-84 it had fallen to 7.25, the consumption forming about 44 per cent. of it in each successive quinquenniad. It would thus appear that the causes chiefly concerned in reducing consumption, lately at least, were such as improve the general health. The author of the paper held that the customs and occupations of soldiers unquestionably led to an increase of consumption over the civil population. The civilian, for instance, when actively engaged, put off part of his clothing, while the soldier worked in his complete dress, and when dismissed from parade he often sat with only a cotton shirt on, thus exposing himself to chills which led to mischief. The experience in the Crimean War had led to the greater use of flannel clothing. The beneficent influences at work had extended themselves to the troops on foreign stations, as the mortality was lessened there as well as at home.

THE RECENT ARMY WARRANT.

The British Medical Journal is authorized to state that the rumours which have been circulated in a portion of the press regarding changes in the relative rank of officers of the Army Medical Department, in the distinctions of grade displayed on the uniforms worn by them, in their titles, and other such matters, are entirely without foundation. The Army Warrant, which has been recently issued, while introducing important alterations in the regulations affecting combatant officers, leaves the medical officers in precisely the same position with regard to distinctions of grade and relative rank in the army as they were before its appearance.

GENERAL MEDICAL COUNCIL ELECTION.

We are asked by the Secretaries of the Committee of the successful candidates to state that it is felt to be very desirable to defray the expenses of these candidates at the late election, and funds for this purpose have been started. We understand that Dr. Glover's expenses have already been paid. Subscriptions to the expenses of Sir Walter Foster and Mr. Wheelhouse should be sent to Dr. Robert Saundby, 83A, Edmund Street, Birmingham. As the accounts must soon be closed, subscriptions should be forwarded at once.

THE HENRY TESTIMONIAL FUND.

Donations, promised or received, for the fund for Dr. Alexander Henry, as announced in the British Medical Journal of January 15th and 22nd, £222 15s. 6d.

Third List.

	£	s.	d.		£	s.	d.
Mr. W. L. Burr	2	2	0	Dr. Isambard Owen	1	1	0
Sir Dyce Duckworth	2	2	0	Dr. F. T. Roberts	1	1	0
Mr. J. R. Humphreys	1	1	0	Mr. Lawson Tait	10	10	0
Dr. John McIntyre	1	1	0	Dr. Edward Waters	2	2	0
Dr. P. H. McKellar	1	1	0	Mr. J. F. Woods	1	1	0
Mr. A. C. Maclaren	1	1	0	Employees of British Medical Association (per Mr. F. Barker)	1	1	0
Dr. W. J. Mickle	1	1	0				
Mr. J. T. Musgrave	1	1	0				

Donations should be sent to Mr. Eastes, at 69, Connaught Street, Hyde Park Square, London, W., as soon as possible, as the fund will shortly be closed.

Walter Dickson, M.D., Hon. Treasurer to the Fund.
W. Chapman Grigg, M.D., } Hon. Secretaries
George Eastes, M.B., } to the Fund.

January 26th, 1887.

THE JACOB TESTIMONIAL FUND.

The following are the additional subscriptions received or promised since last week's list appeared.

	£	s.	d.
Amount already acknowledged	201	18	6
Banks, J. T., Dublin	5	0	0
Blaquiere, J. W., Tullow ..	0	10	6
Boyd, M. A., Dublin	1	1	0
Brennan, J., Kiltormer ..	0	10	6
Browne, T. J., Dungannon ..	0	10	6
Browne, J., Dundalk	1	1	0
Carte, W., Dublin	1	0	0
Clark, Sir A., London ..	5	5	0
Clibborn, C. J., Kiltegar ..	1	1	0
Davis, H., Tuam	1	0	0
Delahoyde, O'C. J., Dublin ..	0	10	6
Dundas, G., Moynalty	1	1	0
Elliott, W. A., Dublin ..	1	1	0
Gillespie, J., Clones	1	1	0
Glover, J. G., London	2	2	0
Harley, R. W., Dublin ..	1	0	0
Hatchell, J. W., Dublin ..	2	2	0
Hegarty, J., Clonbur	1	1	0
Jackson, B., Milford	0	10	6
Joyce, L., Letterkenny ..	1	0	0
Kavanagh, G., Kingstown ..	5	0	0
Kelly, J. Bellew, Drogheda ..	1	1	0
Leet, C. H., Rathmines ..	1	1	0
Loverock, R. G., Ballyjamesduff	1	0	0
Lyndon, G. E., Crossdoney ..	1	1	0
Lyon, R., Dublin	1	1	0
Macnamara, M., Corofin ..	1	0	0
Malone, M. J., Limerick ..	1	1	0
Marks, A. H., Dublin	1	1	0
Marshall, G., Markehill ..	0	10	6
Mason, S., Dublin	2	2	0
Mason, T. P., Dublin	2	2	0
McDowell, R. E., Dublin ..	0	10	0
McMunn, A., Ballymote ..	1	1	0
Metge, J., Gorey	1	0	0
Minchin, H., Dublin	1	1	0
Molony, J., Tulla	1	1	0
Molony, D., Cashel	1	1	0
Moone, R. B., Rockcorry ..	1	0	0
Moore, W., Dublin	2	2	0
Norman, C., Dublin	2	2	0
O'Connell, J., Skibbereen ..	0	10	6
O'Connor, F., Limerick ..	0	10	6
O'Connor, G. M., Ballycastle ..	1	0	0
O'Farrell, G. P., Cork	1	1	0
O'Kelly, J., Mountbellew ..	1	0	0
O'Neill, E., Dublin	1	1	0
O'Reilly, R., Dunmore ..	1	1	0
Oulton, H. W., Dublin ..	1	1	0
Peirce, G., Newcastle	1	0	0
Pelly, S. M., Dublin	2	2	0
Pollard, T. M., Dunkineely ..	1	0	0
Porter, Sir G., Dublin	2	0	0
Pratt, J., Markethill	1	1	0
Reardon, T., Donerail	1	1	0
Redmond, J., Dublin	1	1	0
Ringland, J., Lisbane	0	10	6
Slevin, J., Longford	1	0	0
Starkey, E., Ballinasloe ..	2	2	0
Swanzy, H. R., Dublin	1	1	0
Taylor, J., Tandragee	1	1	0
Woodhouse, S., Belfast	1	1	0

Cheques to be made payable to the Honorary Treasurers—Professor Edward Hamilton, 120, Stephen's Green, W., Dublin ; or Dr. Thomas

Purcell, 71, Harcourt Street, Dublin; or any of the Co-Treasurers, or to the Honorary Secretaries—Professor E. D. Mapother, 6, Merrion Square, N., Dublin, and Dr. J. H. Chapman, 122, Pembroke Road, Dublin.

ROYAL COLLEGE OF PHYSICIANS.

THE ordinary meeting of the Fellows was held on Thursday, January 27th, Sir W. JENNER, K.C.B., presiding.

The following gentlemen were admitted to the Membership: G. A. Machonachie, M.D. Aberdeen; J. A. Marston, M.D. St. Andrews; James Reid, M.D. Aberdeen; and F. J. Smith, M.B. Oxon.

The licence of the College was conferred on 85 gentlemen who have passed the required examinations.

In place of the outgoing members of the Council, Dr. Habershon, Sir E. Sieveking, Dr. Blandford, Dr. Sturges and Dr. J. E. Morgan were elected Councillors.

A communication was read from the Metropolitan Counties Branch of the British Medical Association, deprecating the exclusion of the Apothecaries' Society from the Conjoint Board, and advocating the admission of the Members of the College of Surgeons and the Licentiates of the College of Physicians to a share in the government of their respective Colleges.

The quarterly report of the Finance Committee, the annual report of the Examiners, and a report from the Committee of Management as to the staff of the new Examination Hall, were received and adopted.

On the motion of Dr. QUAIN, it was resolved: "That the resolution adopted by the College on June 29th be referred back to the Croonian Committee, to prepare the details of a scheme for carrying it into effect, and to submit such scheme to the College."

On the recommendation of the Council, it was resolved that the title of the Certificate in Hygiene at present given by the College shall be changed for that of a "Diploma in Public Health."

A report from the delegates of the two Colleges to consider and report as to the use which should be made of the unoccupied ground belonging to the Colleges jointly, in the rear of the new Examination Hall, was received and adopted. It recommended that the ground should be utilised for scientific purposes. Sir H. PITMAN gave notice of his intention to move a resolution on this subject at the next Comitia.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1887. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Meetings of the Council will be held on April 13th, July 13th, and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, March 24th, June 23rd, and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary*.

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,
THE VALUE OF HAMAMELIS, THE VALUE OF PURE TEREBENE.

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE, CANCER OF THE BREAST, and the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE, are now closed.

A Report on the CHOREA Inquiry has been prepared by Dr. Stephen Mackenzie; and will be published in the BRITISH MEDICAL JOURNAL as soon as the printing can be completed.

A Report on CENTENARIANS, prepared by Professor Humphry, was published with the JOURNAL of December 11th; a full Report on OLD AGE will follow.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, CANCER OF THE BREAST, and HABITS OF INTEMPERANCE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

SOUTH EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of the above District will take place at St. Bartholomew's Hospital, Chatham, on Friday, February 18th. Gentlemen desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary of the District, A. W. Nankivell, F.R.C.S., St. Bartholomew's Hospital, Chatham, not later than January 29th. Further particulars will be duly announced.—A. W. NANKIVELL, Honorary Secretary, St. Bartholomew's Hospital, Chatham.

EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held, by the kind invitation of Dr. Adams, at Brooke House, Upper Clapton, on Thursday, February 17th, at 8.30 P.M. The chair will be taken by T. Vere Nicoll, Esq. A demonstration of interesting cases of skin-disease will be given by Stephen Mackenzie, Esq., M.D.—J. W. HUNT, M.D., Honorary Secretary, 101, Queen's Road, Dalston.

PROCEEDINGS OF COUNCIL.

AT a meeting of the Council, held at Exeter Hall, on Wednesday, January 19th, 1887, Present,—

Sir WALTER FOSTER, President of the Council, in the chair

Dr. W. Withers Moore, President, Brighton	Dr. O. Grant, Inverness
Mr. C. Macnamara, Treasurer, London	Dr. W. C. Grigg, London
Dr. G. B. Barron, Southport	Dr. Holman, Reigate
Mr. B. Barrow, Ryde	Professor G. M. Humphry, F.R.S., Cambridge
Dr. T. Bridgwater, Harrow-on-the-Hill	Mr. T. Vincent Jackson, Wolverhampton
Mr. H. T. Butlin, London	Mr. T. R. Jessop, Leeds
Dr. A. Carpenter, Croydon	Mr. H. R. Ker, Halesowen
Dr. J. Ward Cousins, Portsmouth	Dr. W. G. V. Lush, Weymouth
Mr. T. W. Crosse, Norwich	Mr. F. Mason, Bath
Dr. G. W. Crowe, Worcester	Dr. F. Needham, Gloucester
Mr. John Dix, Hull	Dr. C. Parsons, Dover
Dr. J. L. H. Down, London	Dr. R. Saundby, Birmingham
Dr. G. F. Duffey, Dublin	Dr. A. Sheen, Cardiff
Dr. W. A. Elliston, Ipswich	Mr. S. W. Sibley, London
Dr. C. E. Glascott, Manchester	Dr. E. M. Skerritt, Clifton
Dr. Bruce Goff, Bothwell	Dr. T. W. Trend, Southampton
	Mr. F. Wallace, London
	Mr. C. G. Wheelhouse, Leeds
	Mr. A. Winkfield, Oxford

The minutes of the last meeting having been printed and circulated, the President of the Council asked if there were any objection to them, and, there being none, the minutes were signed as correct.

Read letters of thanks from Dr. C. M. Chadwick for the resolution passed by the Council in reference to his late father's services, and the esteem in which he was held by the Council.

Resolved: That the letter from Dr. C. M. Chadwick be received and entered upon the minutes.

Read letter from Dr. C. M. Chadwick relative to a portrait of his father for the Council room of the Association.

Resolved: That the President, President of the Council, the Treasurer, Mr. Vincent Jackson, and Dr. Holman be appointed a Committee to draw up an address of congratulation to Her Gracious Majesty on the celebration of her Jubilee, and to suggest any other steps for the celebration of that auspicious event which they may think desirable.

Resolved: That the 115 candidates whose names appear on the circular convening the meeting be and they are hereby elected members of the British Medical Association.

Resolved: That the minutes of the Journal and Finance Committee

be received and approved, and the recommendations contained therein carried into effect.

The minutes of the Journal and Finance Committee contain the report on accounts for quarter ending December 31st, 1886, amounting to £5,306 0s. 4d., and quarterly return, showing the total receipts for the year £22,540.

Resolved: That the minutes of the Premises Committee of November 12th and December 3rd be received and approved, and the recommendations contained therein be carried into effect.

The minutes of the Premises Committee contain the estimates from three contractors for the alteration of 429, Strand, and the recommendation that that of Messrs. Bywater be accepted.

Resolved: That the minutes of the Scientific Grants Committee of the 18th instant be received and approved, and the recommendations contained therein carried into effect.

The minutes of the Scientific Grants Committee contain consideration of application for scholarship, and recommendation that Mr. Watson Cheyne be reappointed for one year.

Resolved: That the minutes of the Arrangement Committee of the 18th instant be received and approved, and the recommendations contained therein carried into effect.

The minutes of the Arrangement Committee contain the arrangements for the annual meeting at Dublin, which will shortly be published.

Resolved: That the minutes of the Committee appointed to consider the future arrangements of business of annual meetings be received, and the further consideration postponed to a future meeting.

The minutes of the Committee appointed to consider the future arrangements of annual meetings made certain recommendations for improvements. The Committee will report in full when complete.

Resolved: That the minutes of the Committee appointed to consider the work of Collective Investigation of the 18th instant be received and approved, and the recommendations contained therein be carried into effect.

The minutes of the Committee appointed to consider the work of the Collective Investigation contain a full report by the Secretary to the Committee upon the work, and a recommendation that the Collective Investigation Committee be requested to report how the work can be carried on at less expense.

Resolved: That the minutes of the Committee for legal restraint of Habitual Drunkards of the 7th instant be received and approved, and the recommendations contained therein carried into effect.

The Habitual Drunkards Committee propose to form a deputation to the Home Secretary, with proposals for amended legislation.

Read report of Committee appointed to consider the subject of founding a society, in connection with the Association, for Medical Defence.

That the report of the Committee appointed to consider the question of a Medical Defence Association be received and approved, and published in the JOURNAL.

The report of the Committee appointed to consider the subject of forming a Medical Defence Society or fund in connection with the British Medical Association will be found below.

Whereupon an amendment was moved

That the consideration of the report be postponed.

The amendment having been put from the chair, the same was declared to be lost.

The original motion was then put, and declared to be carried.

REPORT OF COMMITTEE ON MEDICAL DEFENCE.

IN accordance with the resolutions of the Council, held October 20th, 1886:—

Resolved: That the Committee (to consider Medical Defence) consist of the following gentlemen:—Dr. Holman, Dr. Elliston, Dr. Barron, Dr. Grigg, and Dr. Glascott, with the President of Council and Treasurer *ex officio*.

and

Resolved: That a sub-committee, to consider the proposal for the formation of a Medical Defence Society, be appointed to obtain further information with reference to the constitution and prospects of such a Society, and the nature of the work it will be capable of doing, and to consult with high legal authority on any scheme which may be finally approved of by the Committee, and to report to the Council at the next meeting.

the Committee met on Friday, January 7th, 1887, when the following members were present:—

Sir WALTER FOSTER, President of the Council.	Dr. HOLMAN.
Mr. MACNAMARA, Treasurer.	Dr. GLASCOTT.
	Dr. GRIGG.

Dr. HOLMAN was appointed Chairman.

Report of Provisional Committee, signed by Dr. Danford Thomas and Mr. William Armstrong, was considered, of which the following is a copy:—

TO THE PRESIDENT AND COUNCIL OF THE BRITISH MEDICAL ASSOCIATION.

GENTLEMEN,—As we know that it is your attention to discuss the subject of Medical Defence at your next meeting, we ask leave to bring under your notice some points in connection therewith. We do this with more confidence as some of our committee have been asked by members of the Council to give a clear statement of our suggestions, and also to clear up certain points of doubt and difficulty. The need for some scheme of Medical Defence is daily becoming more urgent, and we would impress upon you the fact that large numbers of your members have expressed themselves most favourable to the taking of some immediate combined action with the sanction and support of the British Medical Association.

We would suggest the following scheme for your consideration:—

1. That a "British Medical Defence Society" shall be formed, which shall take advantage of the organisation, and be strengthened by the support of the British Medical Association, without, however, rendering that Association liable for any of its acts or liabilities.

2. That the Society shall provide legal and other assistance for all members who may be prosecuted or sued for any action done in connection with their work as medical practitioners, always providing that the General Committee approves of such assistance being given.

3. That the Society shall be governed by a General Committee and by branch Subcommittees.

4. That the General Committee shall consist of the President of the British Medical Association, *ex officio*, of one delegate from each Branch of that Association, and also an extra delegate from each Branch for every one hundred members of the Defence Society who are members of that Branch. This Committee shall manage all financial matters.

5. That each Branch Subcommittee shall consist of ten members, one of whom shall act as Local Honorary Secretary. These shall be appointed at the annual meeting of each Branch.

6. In case any member shall desire the assistance of the Society, he shall send in a full report of the case to the Local Secretary, who shall at once call together the Branch Subcommittee; the applicant shall then attend before the Subcommittee with such evidence, documentary and otherwise, as he may think necessary, and, after full investigation, the Subcommittee shall advise him as to whether they would recommend him to place his case before the General Committee or not; if they do, they will report to that Committee that they consider that assistance should be given; if not, it will still be open to the applicant to bring his case directly before the General Committee.

7. That the General Committee shall consider the reports from the Subcommittees or applications from the members; and, if they consider the cases suitable, shall give instructions for such legal and other assistance as they deem desirable to be given to the applicants.

8. That each Branch shall appoint a Solicitor, without salary, who, on a fixed moderate scale of charges, shall report on the evidence taken by the Subcommittee, and give them his assistance.

9. That a standing Counsel in London shall be appointed, who, at certain fixed charges, shall advise the General Committee, when required, as to the evidence taken by the Subcommittee.

10. That the subscription shall be 10s. 6d. per annum. One payment of £5 5s. shall, however, entitle to life-membership of the Society.

11. That the British Medical Association shall make an annual grant to the Defence Society.

12. That the central offices of the Society shall be at the offices of the Association, and that the announcements, etc., of the Society shall be inserted in the BRITISH MEDICAL JOURNAL free of charge.

The objections which the Committee have been asked to meet are chiefly the following:—

1. The difficulty of deciding as to the suitable cases for defence.
2. The effect upon the case of a defendant or prisoner if help were refused.
3. The method of meeting the expense of defending suitable cases.

1. The composition of the branch subcommittees would give them a knowledge of local circumstances, and also of the character and mode of life of the applicant. They would also be able, through the branch solicitor, to make independent inquiries if necessary. The branch solicitor would also make a report on the evidence for presentation to the General Committee. The General Committee, removed from the influence of local partialities or prejudices, and, if necessary, aided by the opinion of their counsel, would have a reasonable chance of arriving at a correct decision as to whether the case ought to be defended or not.

2. It has been suggested that it would be detrimental to a defendant or prisoner if his case having been considered by the Defence Society, assistance were refused. This grievance may be removed either by the Subcommittee advising applicants whether they should lay their case before the General Committee or not; so that a defendant could properly say, if asked, that assistance had not been refused by the Defence Society; or by the Society, in cases where any doubt existed, giving a watching brief to a barrister on behalf of the Society to give any independent aid that he could. If it were known, as it would be, that a really guilty man would not be defended, those few would probably not bring their cases before the Society at all.

3. The provisional committee have ascertained that many solicitors of good repute would charge on a moderate fixed scale if they were appointed legal referees to the branches. It would also be open to the general committee to pay a certain portion of the expenses only, and it is not suggested that they should in any case pay damages; but more especially it is considered that the existence of this Society, with the moral force of the British Medical Association behind it, would do much to diminish the number of actions brought against members of the profession, and proper management from their commencement would prevent a large percentage of those that would be brought from going to trial.

The Committee feel strongly that, without taking any actual responsibility, the British Medical Association can do a great and glorious work in this matter, and trust that you will give these suggestions your earnest and favourable consideration. Signed on behalf of the Provisional Committee,

G. DANFORD THOMAS, *Chairman.*
WM. ARMSTRONG, *Hon. Sec.*

And the following letter from Mr. Upton was read:—

[*Copy.*]

MEDICAL DEFENCE.
14, Austin Friars, London, E.C., December 21st, 1886.

DEAR SIR,—As I have said in conversation, I now confirm my view in reference to the enclosed circular; that it is better to leave it alone than, by trying to improve it, to give thereby a tacit sanction to the general principles which underlie it.

My own view is that if the Council do adopt those principles, they had better at once openly take up the Defence Movement themselves than allow others to practically make use of the Association, and allow it to bear all the responsibility, without the necessary power and control over the proceedings.

I am further of opinion that the proposed experiment has only to be tried, to fail on lines such as those suggested in the circular.—Yours faithfully,

F. Fowke, Esq. (Signed) JAMES R. UPTON.

The Chairman then read to the Committee a memorandum by Mr. Henry Martin Holman, solicitor, of 9, Angel Court, E.C.; also a case drawn to be laid before counsel, and the opinion of Mr. W. O. Hodges, barrister, of 3, Paper Buildings, Temple, which he had obtained for his own guidance.

I have gone carefully through all the papers, Articles of Association of the British Medical Association, and letters which you left with reference to the proposed Medical Defence Fund.

1. The first point to be considered is the legality of such an advance of funds by the British Medical Association to the Defence Fund. The only question of law which this advance appears to touch on is that of "maintenance." On looking up the authorities, I find the following definitions:—

Halliday, in his *Digest*, says: "Maintenance is properly an officious intermeddling in a suit which in no way belongs to one, by maintaining or assisting either party with money, or otherwise to prosecute or defend it."

Smith's *Common Law Manual*, No. 217, eighth edition, says: "The following contracts are illegal.....Contracts whereby a person who has no interest in a matter of litigation agreed to aid in it." (This is called maintenance.)

The question then arises whether a desire for the welfare of the profession is an interest within the meaning of the definition. The Incorporated Law Society prosecute on behalf of the profession both their own members and outsiders, but their proceedings are, I believe, regulated by their Charter, and I find that the National Cyclists' Union have undertaken and do undertake actions on behalf of members and non-members. The Railway Passengers' Protection Association also take up cases in this manner. And their interest is certainly no greater than yours. On the whole, though I think the advance can be made, a counsel's opinion both on this and the following point would settle the matter more satisfactorily.

2. Assuming the legality of such advance to be unquestionable, the second point is whether the Memorandum of Association permits it. I am inclined to think that subsections (*d*) (*e*) of Clause 3 of Memorandum are sufficiently widely drawn to admit of the advance, though the wording is open to question, as it goes round and round.

3. The form or method of the grant is of comparatively small importance—at least at present. Given that it can be made, and is to be made, the solicitor of the British Medical Association would see the matter properly carried through, and the interests of the Association securely guarded. The Association can limit their liability to the grant.

4. The so-called "moral" view in a court of law depends on the legal view. What is lawful is right. But outside this statement the question is a matter of personal opinion, and the supporters and opposers of the movement could put forward innumerable arguments in aid of their respective views. The fact of the Association and the Defence Fund having the same president, would not, I think, affect the case, as it in no way pledges the former.

5. And (lastly) to consider the proposed scheme from the common-sense point of view, and the results of its working as set out in Messrs. Danford Thomas and Armstrong's circular. As the arguments in its favour appear in the circular, it will be sufficient to consider the adverse view of the case.

It seems to me that the working of the scheme as at present drawn up would be productive of much more harm than good. Take the case of a medical man accused of *malpraxis*. What happens? The local committee meet to consider the application for assistance. There is the plaintiff's story and the defendant's story. How can the Committee, without the power to call witnesses or any other facilities which attend the case when in court, take upon themselves to pass a judgment on the case which, whether given rightly or wrongly, leaves them irresponsible, and in the latter case it would cause much mischief. It would be the greatest prejudice to the defendant's case were he or some witness placed in the box, and compelled to admit that the case was not thought a fit one for aid, for the facts remain the same in whatever terms the refusal be couched.

And in a case of doubtful clearness, if the defendant be properly represented, a watching brief seems to be a needless waste of money as his counsel will do all that is possible for him. Nor would it be likely to diminish the number of actions brought, if the persons bringing such charges were aware that there was a fund waiting, so to speak, to be shot at. Then, also, if the Committee, though believing honestly in the statements laid before them, were proved to have given facilities to a rogue to evade the punishment he deserved, such a state of affairs would undoubtedly prejudice the whole of the profession in the eyes of a large section of the public, who do not reason very closely—casting discredit not only on the Defence Fund itself, but also on the British Medical Association on whose support the Fund materially relies.

Another question arising is whether ill-feeling would not be generated among the members of the profession by the scheme. The local Committee, every man acting honestly according to his lights, may be of very different opinions as regards the merits of any case. The defendant may have personal friends as well as those with whom he does not work comfortably on the Committee, and a split on such a matter is not likely to lessen breaches among the profession.

Secondly, supposing the scheme to be modified, and aid only afforded after the decision of the Court has been given. The defendant, under such circumstances, would be in exactly the same position as he is at present, except that he has a hope of pecuniary assistance if successful. And, in this case, the utility of the Defence Fund is not apparent, as the *esprit de corps* of the profession has always caused its members to come forward with offers of as much, if not more, aid than the Defence Fund would afford, and this spontaneously, and without the trouble of committee meetings, reports, and votes of grants.

It is somewhat difficult to thoroughly go into the *pros* and *cons* of a scheme which is merely in embryo; the grant by the British Medical Association being almost the only clearly defined requisite. At least let the Defence Fund be organised and set in working order, and then, after trial, if it proves of real service to the profession, the grant from the British Medical Association might reasonably be applied for, but it is hardly fair to ask the Association to embark its funds in an untried speculation, the odium of which, if unsuccessful, will probably recoil as much on the Association as on any one else. H. MARTIN HOLMAN.

9, Angel Court, E.C.

CASE.

Herewith are sent—

The printed memorandum of the Articles of Association of the British Medical Association.

Circular issued by Messrs. Danford Thomas and Armstrong in favour of the scheme of establishing a Medical Defence Fund.

At a meeting of the Council of the British Medical Association, held on the 20th day of October, 1886, it was (*inter alia*) resolved:

"That a Committee to consider the proposal for the formation of a Medical Defence Society be appointed to obtain further information with reference to the constitution and prospects of such a Society, the nature of the work it will be capable of doing, to consult with high legal authority on any scheme which may be finally approved of by the Committee, and to report to the Council at the next meeting."

And certain members of the Council were appointed and consented to act as such Committee.

The Committee wish to be certain of their position before going thoroughly into the matter, and

Counsel will please advise—

1. Whether the British Medical Association are enabled, under their Memorandum of Association, to make such a grant as is proposed in the circular, and, if so, whether by vote of Council, general meeting, or otherwise.

2. Whether if such grants can be and are made, the British Medical Association and the Defence Society will be held harmless; or whether, by taking up and prosecuting or defending actions of the kind set forth in the circular, they will render themselves, or either of them, liable to a charge of maintenance.

3. And generally on the effects of such proceedings as the proposed scheme entails as regards the British Medical Association itself.

OPINION.

1. I am of opinion that the British Medical Association are not able, under the Memorandum of Association, to make the proposed grant to the British Medical Defence Society, for the reason that such a grant would not come within any of the means by which the objects of the Association can be effected, as set forth in Art. 3 of said Memorandum of Association. Subsection (*e*) is the only clause which can by any possibility be said to enable the British Medical Association to make the proposed grant; but this clause must be construed according to the primary postulates of construction, in connection with those clauses preceding it, and, if this is done, the words "such other lawful things" in subsection (*e*) must have some reasonable limitation put upon them (*In re* German Date Coffee Company, L.R. 20, Ch. D., 169—188), and must be construed to mean such lawful things as are similar or analogous to those mentioned in sub-sections (*a*) (*b*) (*c*) and (*d*); and, if it is read with this limitation, I am of opinion that the proposed grant is not a means in any way similar or analogous to the means stated in the subsections above mentioned. Even if it is a means in aid of the objects of the Association at all, about which I am not at all clear, Article 4 of the Memorandum of Association does not carry the matter any further, but must be read subject to Article 3.

If, notwithstanding the above reasons, the British Medical Association determine to make such grant, it should be made in the way in which the grants of money for the ordinary purposes of the Association are made.

2. I am of opinion that neither the British Medical Association nor the British Medical Defence Society would be liable for maintenance; the British Medical Association, because it is not maintenance to make a grant to assist litigation not actually entered on (Hawk, Pl. of C. Bk. 1, Ch. 83, sec. 12), and for a legitimate object in which that Association is reasonably interested, either by way of a common interest with the person attacked (Hawk, Pl. of C. 7 Ed., p. 396, Findon *v.* Parker, 11 M. and W., 679), or by way of charity (Harris *v.* Brisco, L.R. 17 Q.B.D., 504).

These last reasons apply also to the case of the British Medical Defence Society, and subject to the Society assisting cases coming within the description of interest just above specified, they too would not be liable for maintenance.

3. For the reasons given in (1) of my opinion, I do not consider that it would be advisable for the British Medical Association to make the proposed grant, and for the further reasons that the Council would run the risk of Article 6 of the Memorandum of Association coming into operation, and also the risk of any dissenting member applying to the Board of Trade under Article 5 of the Memorandum of Association. (Signed) W. OLIVER HODGES,

December 1st, 1886. 3, Paper Buildings, Temple.

The following letter from Mr. Upton was then read:—

[*Copy.*]

14, Austin Friars, London, E.C., January 13th, 1887.

DEAR SIR,—I have read the copy opinion of Mr. Oliver Hodges, herewith returned. I had myself intentionally abstained from expressing an opinion whether the proposed grant to the Medical Defence Association infringed the Memorandum of Association of the British Medical Association, because I felt that the point was at least doubtful, and that equally strong grounds existed for the British Medical Association declining to make the proposed grant, without raising the legal point; Mr. Hodges's opinion may be the right one, and, at any rate, there is a great deal to be said in favour of his argument; and, having obtained his opinion, I think that the Committee of which Dr. Holman is the chairman are at liberty to say that the Association have obtained an opinion of Counsel that the Memorandum of Association does not permit the grant in question to be made.—Yours faithfully, (Signed) JAMES R. UPTON.

F. Fowke, Esq.

Subsequently, the opinion of Mr. Hodges, and the various papers relating to the question, have been placed before the Attorney-General, Sir Richard E. Webster, Q.C., M.P., a copy of whose opinion is as follows:—

[*Copy.*]

The Attorney-General's Chambers, 2, Pump Court, Temple, E.C.,

January 15th, 1887.

I have looked through the enclosed papers and opinion, and all I need say is that I entirely concur in the opinion. RICHARD E. WEBSTER.

Your Committee has to report that they cannot recommend the Council to take any steps for supporting a Medical Defence movement, as they are advised that any grant of funds would be *ultra vires* as defined by the Articles of the Association.

H. C. HOLMAN, M.D., *Chairman.*

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Hydatid Cyst of the Liver.—Loss of the Knee-Phenomenon in Diabetes.—Gellé on the Sensibility of the Tympanum in perceiving the Direction of Sound.

At a recent meeting of the Société Médicale des Hôpitaux, M. Guyot related the case of a military officer, aged 24, who had a hydatid cyst of the liver. In September, 1885, the patient complained of excessive fatigue, and of severe pain in the lower part of the chest on the right side. He had complete loss of appetite, pain after taking food, profuse perspiration, with fever at intervals. Percussion revealed dulness in front of the nipple, extending to the edge of the false ribs. On auscultation, pleural friction was heard. There was no cough, nor expectoration; the tongue was very foul. M. Guyot diagnosed pleurisy without effusion and gastro-intestinal disturbance. The symptoms persisted, and the pain (which was very severe in the fore part of the chest) extended to the right shoulder. M. Guyot believed that the case was one of hepatic congestion, and rejected the possibility of tuberculosis. M. Potain examined the patient, and diagnosed pulmonary tuberculosis. He recommended the baths and waters of Amélie les Bains. M. Garnier, of that place, entirely coincided with M. Potain's diagnosis, although he thought there was co-existing congestion of the liver. After the patient had been on milk diet for three months he appeared completely cured. He resumed his profession, but soon fell ill again. There was evidently hepatic congestion, and submucous *râles* could be heard in the chest. On returning to Paris in May, 1886, M. Guyot found the same symptoms as in the previous year. The patient was examined by M. Hanot, who diagnosed diaphragmatic pleurisy, unaccompanied by any liver complaint; he advised a blister, and a course of treatment at Mont Dore. The patient's condition, however, became more and more alarming, and hypodermic injections of morphine were required to relieve the severe pain. Diarrhœa and nervous excitement came on, and the visit to Mont Dore was given up. On fresh examination, M. Millard suspected suppurating cyst of the liver, and advised puncture. In July the patient was seized with attacks of vomiting, fœtid diarrhœa, and aversion to food. M. Guyot made two punctures, which gave issue to pus. Two days later M. Duplay punctured with a large trocar, and drew off 800 grammes of pus mixed with blood. A few days afterwards two thick membranes, accompanied with blood, were passed in the stools of the patient, which M. Guyot considered to be the remains of the cyst. Microscopic examination revealed the presence of hooklets in these membranes. The condition of the patient became more and more alarming, and notwithstanding two transfusions of blood, injections of ether, and a large blister on the epigastric region to arrest the vomiting, which was incessant, the patient died in a few days. M. Guyot thought that if hydatid cyst of the liver had been diagnosed in May, laparotomy might then have saved the patient's life, though, as the cyst reached as far as the convex surface of the liver, the fatal issue was, perhaps, inevitable. At the same meeting M. Ollivier referred to the case of an officer from Tonquin affected with hæmoptysis, night sweating, and diarrhœa. On examination, there were no signs of pulmonary disease, but the liver was enlarged to a third more than its natural size On examining the sputa, M. Ollivier detected the presence of hooklets. It was clear that there was a hydatid cyst of the liver opening into the lung. The patient would not allow the cyst to be punctured, and died.

Professor Bouchard recently drew attention to the loss of the knee-phenomena, as an important element in the diagnosis of diabetes. In a recent article in the *Revue de Médecine*, MM. Marie and Guinon give the results of fresh observations, which confirm the importance of this symptom. They also point out how it may, in certain cases, lead to error. Among the diseases in which the loss of reflex movement is most frequently met with is tabes. If a patient presents the following symptoms: abolition of reflex movement, lightning pains, slight staggering when the eyes are closed, gradual loss of sight, difficulty in micturition, diminution of sexual power, the evidence points to the existence of tabes. If, however, there be sugar in the urine, all these symptoms may safely be attributed to diabetes. It is to such cases that the term pseudo-tabes in diabetes has been given. MM. Marie and Guinon having for a long time sought in vain to find sugar in the urine of patients suffering from locomotor ataxy in M. Charcot's ward, conclude that the phenomenon is sufficiently rare in tabes to warrant the diagnosis of diabetes in all cases where sugar in the urine is found in connection with the above symptoms. It may be remarked that the degree to which the movement is abolished fluctuates with the severity of the disease itself. Aggravation of the malady is followed by loss of the movement, whereas improvement, whether from treatment or otherwise, causes it to reappear. The disappearance of the phenomenon does not indicate a special form of diabetes, and cannot be made the basis for a nervous theory of this disease. It simply shows that the affection has entered on a new phase, being no longer a balance between the incomings and outgoings of the system; the patient is exposed to all the terrible complications of diabetes, which are the most frequent causes of death in diseases of this kind. As regards the prognostic value of the symptom which M. Bouchard has indicated, nothing can be more convincing than the following carefully collected statistics. Out of a first series of 66 patients, 47 retained the power of reflex movement, while 19 had lost it. Of these 47 cases, 2, or 4.25 per cent., were fatal. Of the 19 who had lost the power, 6, or 30.3 per cent., were fatal. In another series of 111 patients, 70 possessed the power of reflex movement, and 41 have lost it; of the 70 cases, 5, or 7.14 per cent. proved fatal, while of the 41 cases in which the power had disappeared, 7, or 14.63 per cent., were fatal. That is to say, the mortality in the cases in which the power of reflex movement had disappeared was more than double that in the others.

When a sound strikes the ear, it is referred to that part of the horizon towards which the organ is directed at the moment of most intense sensation. The knowledge of the fact that the sound-producing body is outside us, and the notion of the direction in which it lies are thus acquired at one and the same time. How is the result obtained? The knowledge as to the side from which the sound comes is furnished by the fact of our hearing it on the right or on the left, and also by the consciousness of the muscular effort required to perceive it. It is necessary, however, that this effort should itself be guided; and this is brought about by the sensibility to sound of the skin of the concha, the side of the neck, and the face. This, at least, is the opinion of distinguished physiologists like Weber, Schneider, and Voltolini. Hartmann and others attribute the perception of exteriority to the sensibility of the tympanum alone. The cutaneous surface of this organ being struck by the sound-wave, gives rise to the sensation indicating its source and direction. This theory has never been contested; but the effort to perceive the direction of sound is probably better explained by the consciousness of the movements of the head and of the body in seeking for its maximum intensity. Dr. Gellé purposely omits examining the part which the concha plays as a screen in this effort, as this has already been well demonstrated by Küss and Duval; but he has been able to solve the remaining problems of this subject through observations on two patients in M. Charcot's wards. The first was a man affected with general anæsthesia of the skin, with trembling and want of equilibrium, but whose intellect, as well as his sight and hearing, remained intact. Anæsthesia was so complete on both sides that a piece of ice placed in the hollow of the ear, produced no sensation whatever; the organ remained likewise insensible to ether spray, and to the infliction of deep wounds with the point of a needle. Both tympana were touched with a needle, the effect being observed through a mirror and speculum. It was found that the membrane might be touched and pricked without the patient's having the least sensation either of pain or of contact. The patient's hearing was good, and he replied perfectly well to questions, whether he was spoken to from before or from behind. Placing himself behind the patient, M. Gellé directed him to close his eyes, and then held a watch within a few inches of his right, and then of his left ear. The tick was distinctly heard by the patient, but when asked on which side, he was unable to say with his eyes closed. The experiment was repeated always with the same result. Hence, M. Gellé concludes that the sensibility of the tympanum plays an important part in the effort to perceive the direction of sound. He pursued his inquiries upon several other patients affected with general anæsthesia, and found that in all those who could distinguish the side on which the watch was placed, the tympanum retained its sensibility. It is evident, therefore, that the tympanum is sensitive to the vibrating sound-waves, and this sensibility gives us the notion of exteriority and of the direction of the sound.

The Sword in Modern Warfare.—Colonel Paul Methuen stated recently, in the course of an address which he gave at Toynbee Hall, that in the Franco-German War only six Germans owed their death to the sword, and that the total number wounded with this weapon, with which the Romans conquered the world, was only two hundred and twelve.

VIENNA.

[FROM OUR SPECIAL CORRESPONDENT.]

Professor Neumann on Reproduction of the Syphilitic Virus.—Professor Nothnagel on Paroxysmal Tachycardia.—Privat-Docenten in the Medical Faculty.

PROFESSOR NEUMANN made at the last meeting of the Imperial Royal Society of Physicians of this city an interesting communication, which is a very important contribution to the doctrine of syphilis. In a paper which he read on the Different Centres of Reproduction of the Syphilitic Virus, he first discussed the opinions of Virchow and Baerensprung as to the anatomical changes which were to be found in parts of the skin and mucous membrane of individuals who had been affected with syphilis. The speaker then communicated the results of his own researches, and said that, after all clinical symptoms of the syphilitic affection had disappeared, he nevertheless met with numerous exudation-cells of a round and spindle-shaped form in the skin and the mucous membrane. These cells, which were very infectious in the recent stage of syphilis, augmented and proliferated very quickly. In the recent stage they could infect healthy individuals if these were deprived of the epidermis. As to the tertiary stage of syphilis the exudation-cells grew and augmented much more slowly, were less infectious, irritated the neighbouring tissue to inflammation in a less degree, and did not spread on other localities when proliferating and augmenting. In a later stage they inclined towards the formation of connective tissue and hypertrophy, and at last underwent a caseous and destructive process. Hence these exudation-cells were always present in the skin and the mucous membrane during the latent state of syphilis, and continually formed a source of danger for the health of the individual. The patients in whom the clinical symptoms of syphilis had already disappeared were, therefore, by no means to be looked upon as cured. Anti-syphilitic treatment should be continued, but as the ordinary remedies like mercury, iodide and their preparations, when continued for a long time seriously affect nutrition, the therapeutical task became very difficult. The speaker illustrated his opinion by some cases which had come under his notice. Among other specimens, Professor Neumann examined the tissue of the cutis of that part of the perineum on which swellings and moist papules were so often observed, taken from individuals who had suffered from syphilis a year before. Though this part did not show any abnormal change externally, he found considerable changes in the microscopical examination. The tissue of the cutis was infiltrated with round cells, the vessels dilated, their endothelial cells as well as their nuclei enlarged; in the adventitia and the perivascular tissues there was a great number of granulation cells; moreover, there were numerous transverse sections of lymphatic vessels. Another interesting case reported by Professor Neumann was that of a person who had been affected, two years ago, with a maculous syphilide, psoriasis palmaris, and papules on the lips, and who had been treated at the speaker's *clinique*. Microscopic examination of the mucous membrane of the lower lip of the individual in question, though outwardly normal, showed, in the subpapillary layer, crowded vegetations of round cells and enlarged papillæ.

In a clinical lecture, recently given at the General Hospital, Professor Nothnagel directed the attention of the audience to a very rare and interesting case of "paroxysmal tachycardia, combined with failure in the heart." On the forenoon of October 6th, the patient, aged 36, was admitted into the hospital, the number of the pulse-beats being at that time 120 in the minute. In the afternoon it was 144; on the next morning 90; during the following day 84 and 82; on October 9th, morning, 82; in the afternoon, 138; on the morning of October 10th, 178; at eleven o'clock the same day 170, and soon afterwards 182; on the morning of October 11th 84, at half-past ten o'clock 176, at four o'clock 132, at five o'clock 144; the next morning at eight o'clock it was 176, at nine o'clock 144, at ten o'clock 146, at eleven o'clock 134, at mid-day 144, at four o'clock 168, in the evening 164; on October 13th it was 92 in the morning, at nine o'clock 88, and soon afterwards from 170 to 180. This acceleration of the pulsations lasted from half-past one till half-past three; at five o'clock the patient's pulse was 96. On October 14th it was 72; on the 15th 76, and so on, the number of the pulsations being again normal. The temperature was normal throughout. The patient was seized with these paroxysmal attacks, without any apparent cause, and they were very variable in duration. On one occasion the paroxysm lasted for two hours, another time about two days; the longest duration was from three to four days; the average duration was from one to one and a-half days. The attacks occurred without any artificial stimulant whatever, such as coffee or tea, nor were they caused by any psychical irritation; they showed no gradual transition, but came on and ceased quite abruptly. The patient happened once to be seized with a paroxysm of 176 beats immediately after laying down a book, the contents of which had not interested him in the least. The attack was accompanied with a feeling of anxiety, but Professor Nothnagel emphasised the fact that this anxiety was not such as was met with in angina pectoris. All the other characteristic symptoms of that affection were absent in the case in question. The attack disappeared quite suddenly, and the patient stated that he had then the feeling "as if something would fall away." The patient further stated that he "sometimes succeeded in suppressing the attack by a deep and prolonged inspiration, especially if he at the same time drank a glass of cold water." Professor Nothnagel told the patient to do this during an attack, and after the patient had swallowed half a glass, Professor Nothnagel was able to state that the number of the pulse-beats had decreased quite suddenly; he felt three slow and large beats, and soon afterwards the number of the beats was again about 180. Professor Nothnagel also made other experiments; he told the patient to swallow a spoonful of common salt; he compressed the crural nerve very strongly, and wound a thread around the upper extremity, but these manipulations produced no effect. The patient himself stated that the draught of cold water had not much to do with the cessation of the attack, but that it was chiefly due to the deep inspiration. Professor Nothnagel remarked that some cases of paroxysmal tachycardia were to be found recorded, but that paroxysmal tachycardia in cases of organic heart-disease were very rare, and that he did not remember any similar case in medical literature. As to the explanation of this phenomenon, the lecturer said that of course there was no doubt that one had to do in such a case with a disturbance of innervation, but that the question as to what nerve-tracts were affected was very difficult to answer. As to the existence of an accellerator-nerve of the heart in the human species, this was still a matter of dispute. Only two nerve-systems could be taken into consideration in the case in question—the pneumogastric and the musculo-motor apparatus in the heart. It was conceivable that there might be some irritation of the cardiac musculo-motor apparatus in the substance of the heart itself; or again, there might be sudden paresis of the vagus. It was very difficult to decide which explanation was correct in this case, but according to the impression the lecturer had received from the observation of one of the attacks, he was rather inclined to the latter view. One might suggest that, in the same way that intermittent paralysis occurred in other motor nerves, such intermittent functional paralysis might also occur in the vagus. Professor Nothnagel thought it very probable that this hypothesis was correct. As to the fact that the patient could stop the attack by taking a deep breath, Professor Nothnagel pointed out that this feature of the case was very remarkable, inasmuch as the pulse was usually quickened by deep inspiration. He offered the following explanation of the anomaly. When a deep inspiration is made, the ends of the vagus in the parenchyma of the lungs are pulled and twisted. This produces an irritation of the sensitive ends of the vagus in the lungs, and, at the same time, a reflex retarding action on the vagus of the heart. The fact that artificial irritations, like swallowing common salt, compression of the upper extremity, faradisation of the epigastrium, and so on, did not produce any effect, could not be looked upon as negativing this theory, as they might not have been sufficiently strong to act suddenly on the vagus. On the other hand, it was known that there were connections between the different fibres of the vagus. There were persons who complained of dyspnœa without suffering from any affection of the lungs or the heart. It was not rare that such individuals suffered from dyspeptic symptoms, and the lecturer had observed in a series of such cases that the dyspnœa disappeared when the digestion was rectified. Hence there existed connections between the vagus of the stomach and that of the lungs, and it was therefore very possible that retarding impulses were transmitted from the pulmonary to the cardiac vagus.

The professorial body of the Vienna Medical Faculty, at its last meeting, discussed the proposed reform of the institution of the "Privat-Docenten." The Minister of Education of Austria, Herr von Gautsch, has, since he took office, surprised the world with a number of circulars, many of which were addressed to the different faculties of the Vienna University. One of them referred to the restriction of the number of students in this Faculty, and to the creation of the so-called *numerus clausus* in the admission of students, a proposition which had been unanimously declined by the professorial body. In his last circular, the Minister asked the professorial body to consider the question as to the reform of the institution of "Privat-Docenten," as he was anxious that this institution should not lose its importance by any lowering of the

standard of scientific distinction required for admission. The professorial body appointed a committee, consisting of Professors Widerhofer, Kundrat, Meynert, and Nothnagel, to deal with the question. This committee proposed to admit to the *venia legendi* only candidates who occupied themselves with the chief branches of medical science, whereas the competitors for the Docentur of the other class should be admitted only exceptionally, and after giving proof of extraordinarily high scientific attainments. The professorial body, however, refused to accept this proposal, on the ground that the measures already in force, if properly carried out, were quite sufficient to protect the faculty against too great a number of Docenten, and that no reform in this matter was needed.

CORRESPONDENCE.

THE ERASMUS WILSON BEQUEST: ANOTHER USE FOR IT.

SIR,—The Council of the College of Surgeons is receiving much good advice about the disposal of its funds, for which it is probably as grateful as men usually are for so cheap a commodity. I venture to join in the agreeable pastime of advising the Council.

Before many years a state of matters will have arisen in the College when the Council will want money; and then there will be cause for regret if it have been all laid out on more show-rooms, or on research laboratories, or on whatever other forced and trumped-up project they had been led into. The College cannot go on for ever as a privileged corporation; one day, and at no distant period, it must become a true academical faculty, the Alma Mater of English practitioners, not in name only, but in reality. Nothing will smooth the way for that rather painful transition so much as the possession of trust funds, by means of which the Council of the day will be able to inaugurate their new duties with credit and dignity to themselves.

By spending the Wilson Bequest on more shelves and cases of pickles and bones, or on new species of bacteria, or on new triumphs of pharmacology (quixotine, ephemerine, universine, opportunine, and so on), the Council may seem to be discharging in a worthy manner the responsibility which so great a benefaction naturally brings with it. But their successors on the Council will have something more practical to think about than the "endowment of research" or than the pulling down of barns in order to build greater. It would be good news for Edinburgh, for Cambridge, and for Manchester, to hear that so potent a force as two hundred thousand pounds had been dissipated in that otiose and luxurious manner. If all the stir about a metropolitan degree in medicine is not to end in talk, there must be a beginning made in the hard work of imparting organisation, co-ordination, solidarity, or whatever else it be, to the system of education which alone gives genuine value and concrete significance to a university title. For that purpose the Councils of the two Colleges will want all the money they have got. It will take years to "square" all the conflicting interests; the hand of adversity will have to be heavier still upon the private hospital schools of London before they consent to let the students go. But no one can mistake the drift of things; and the Council of the College of Surgeons may perhaps reflect that their successors are more likely than themselves to find a good use for the Wilson bequest, or for the major part of it.—I am, etc.,

January 24th. SENEX.

THE PETITION OF THE MEMBERS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND TO THE PRIVY COUNCIL.

SIR,—Without attempting at present to give a detailed analysis or a final calculation of the signatures to this memorial received by us, we may state that up to date we have over 4,000 names of M.R.C.S.Eng. appended to it, and that each post still brings in numbers of signatures, in reply to our issue of copies of the petition. Already, therefore, you will see that our demand is most strongly supported by Members of the College, and should carry enormous weight with the Privy Council. Of course, however, we are still desirous of receiving additional names to add to the petition, though its success appears to us now assured. As our time is just now so much occupied in the reception and arrangement of these forms, perhaps you will excuse any further details for the present.—We are, Sir, your obedient servants,

WARWICK C. STEELE,
WM. ASHTON ELLIS,
Hon. Secs. Association of Members of Royal College of Surgeons of England

Western Dispensary, Westminster, January 26th, 1887.

THE HOSPITAL FOR WOMEN, LIVERPOOL.

SIR,—In your report of Mr. Lawson Tait's presidential address at the Gynæcological Society on January 12th, it appears he made some remarks on what has occurred at this hospital during the past year. With Mr. Tait's opinions on these matters I am not concerned, but with some of the statements which he brings forward as facts I have, with your permission, something to say.

1. It is not a fact, as Mr. Tait asserts it to be, "that the questions raised against the surgical practice of the Liverpool Hospital for Women, during the year 1885, were settled one way or the other on oath in a court of law."

2. It is not a fact that these questions were settled on evidence obtained by a full inquiry by the committee of the hospital. There was no such inquiry by the committee of the hospital.

3. It is not a fact that "these questions were partially, if not wholly, settled in favour of the challenged surgical practice of the hospital by an independent inquiry committee appointed by the Medical Institution." On the contrary, the questions were settled by this independent inquiry committee entirely against the practice of the hospital. It is worth noting that, in this same presidential address, and in the same page (147) of your JOURNAL, Mr. Tait makes two opposing statements as to the value he places on this same document, the report of the inquiry committee of the Liverpool Medical Institution. In Paragraph 4 from the top of the left hand column, page 147, he says, "these questions have all been decided in favour of the staff," "partially, if not wholly, by an independent inquiry committee appointed by the Liverpool Medical Institution." At nearly the end of the third paragraph from the bottom, in the right hand column of the same page, Mr. Tait proceeds to say, "In spite of Sir Spencer Wells, the report of the hospital committee is eminently satisfactory, so much so that I think it ought to be placed permanently on record in the pages of our *Journal*. Otherwise it will be a lost document." "There also, and as a contrast, should appear the report of the inquiry committee of the Medical Institution, a document as impotent and colourless where it ought to have been effective, and as wrong where it ought to have been right, as it is possible for it to be." Does Mr. Tait then mean to say that a document, which he describes as "impotent and colourless where it ought to have been effective, and as wrong where it ought to have been right, as it is possible for it to be," is still strong enough to have settled these disputed questions of surgical practice "partially, if not wholly, in favour of the medical staff," as he has already said it did? If so, why does he think this marvellous document only worthy of preservation in the *Journal of the British Gynæcological Society* as a contrast to the "eminently satisfactory" report of the hospital committee? It can hardly fit both conditions. Even Mr. Tait, who is generally credited with the possession of a tolerably thick skin, must feel the horns of the dilemma on which he has impaled himself.

4. When Mr. Tait says "the trouble was started by the consulting medical officer making a complaint to an outside body, that he was not consulted for such operations, and that they had risen from 86 in 1884 to 166 in 1885," he makes three distinct mis-statements of facts.

(*a*) It is not a fact that the trouble was started by the consulting medical officer making a complaint to an outside body. The complaint was made to the committee of the hospital itself.

(*b*) It is not a fact that the complaint was the rise in number of abdominal sections from 86 in 1884 to 166 in 1885. It was of the enormous increase in Table 3 of the operations styled "removal of the uterine appendages." The total number of complete removals in 1884 was 31, as against 96 in 1885.

(*c*) It is not a fact that "the consulting medical officer complained that he was not consulted in these operations," but that Law 39 as regards consultations was systematically disobeyed in the very great majority of abdominal sections.

5. It is not the fact that "the committee of the hospital selected a number of specialists and wrote to them all for opinions, and with one exception, arising out of Dr. Angus McDonald's death, they obtained answers."

The list of these specialists, according to Mr. Tait, contained the names of Sir Spencer Wells, Dr. Thomas Savage, Dr. Thomas Keith, Mr. Knowsley Thornton, Dr. Bantock, Dr. Aveling, Mrs. E. Garrett Anderson, M.D., Professor Simpson, Dr. Fabricius, Professor Hegar, and Mr. Tait. "From all they received answers entirely confirming the views of the medical staff of the Liverpool Hospital for Women, with the exception of Sir Spencer Wells." Thus writes Mr. Tait.

This, however, is not a fact, for the committee obtained no answer from Dr. Thomas Keith, nor from Mr. Knowsley Thornton, neither of

these gentlemen having received any communication from the committee. It may, of course, be purely accidental, but it, nevertheless, is a fact, that both these eminent men happen to hold views opposed to those who agree with the disputed practice at the Liverpool Hospital for Women. Dr. Keith's letter to the *Liverpool Daily Post* appeared in your JOURNAL last week. Dr. Matthews Duncan, whose name is not on Mr. Tait's list nor on the list given in the report of the Hospital Committee, although he was written to, also sent a reply declining then to give any opinion on the questions addressed to him by the honorary secretary. He now writes to me thus :—

DEAR DR. GRIMSDALE,—I, in reply to your note of yesterday, state that I give no support to the challenged practice of the Shaw Street Hospital, and have no sympathy with the special opinions of its defenders. The science and the practice are both faulty. Of this statement you may make any use you like, and I heartily wish you success in your efforts in favour of good gynæcology.—Yours truly,

January 13th, 1887. J. MATTHEWS DUNCAN.

6. It is not the fact that I published Sir Spencer Wells's reply in the Liverpool daily papers. Some correspondence between the honorary secretary of the hospital and Sir Spencer Wells was published in the *Liverpool Courier* of October 15th, with this heading, "The Hospital for Women: Opinion of Sir T. Spencer Wells. The editor of the *Lancet* has furnished us with a copy of the following correspondence, which will appear in that Journal to-morrow." Then follows my letter to the editor of the *Lancet* and the correspondence before mentioned.

7. It is not the fact that it was published in the Liverpool daily papers or anywhere else, before it reached the honorary secretary of the hospital, as Mr. Tait alleges.

The secretary of the hospital received Sir Spencer Wells's letter on October 4th or 5th, and it was not published in the *Lancet* or the *Liverpool Courier* until October 15th.

These are some of the mis-statements of fact made by Mr. Tait in his presidential address, delivered before the British Gynæcological Society on Wednesday, January 12th, 1887.—I am, etc.,

THOMAS F. GRIMSDALE, Consulting Medical Officer to the Hospital for Women, Liverpool.

January 25th, 1887.

THE QUEEN'S JUBILEE.

SIR,—The proposal to found another special hospital for the treatment of diseases of the throat, ear, skin, eye, rectum, etc., is not likely to meet with general approval. There already exists in London a number of special hospitals devoted to the treatment of these diseases, in addition to the facilities afforded by all the general hospitals. As a consequence, it is a notorious fact that many of the patients seeking relief at these special hospitals do not belong to the class of the indigent poor, for whose relief alone money is subscribed by the public.

If, however, it is thought advisable to commemorate the Queen's jubilee year by the foundation of a Queen's Jubilee Hospital, there is a class of cases for which, it seems to me, hospital accommodation is required. I refer to cases of chronic, but curable, diseases, such as spinal abscess, suppuration, and other diseases, of joints.

Although cases of spinal abscess, especially in adults, were formerly practically incurable, we have now ample evidence that, if the cases are treated strictly aseptically from first to last, a very large proportion will recover completely. Unfortunately, the time required for cure is long, on an average eight to ten months, and sometimes much longer; and this lengthy treatment can be carried out only in exceptional cases, and with great inconvenience in a general hospital. The aim of these hospitals is to do the greatest good to the greatest number, and, if a considerable proportion of the beds is occupied for months by these chronic cases, the efficiency of the institution is seriously impaired, and cases requiring urgent treatment have to be rejected for want of room. Hence, one of two things usually happens: either the cases are not admitted at all, the abscess is allowed to burst, and the patient ultimately loses his life from prolonged suppuration, and its consequences; or, if the patients are admitted, they are only kept in, and treated aseptically, till the discharge becomes slight, and then they are dismissed and relegated to the out-patient department. In most of these cases, the whole benefit of the stay in hospital is undone, and the patient goes steadily down hill. For, however efficient the apparatus employed to give support and fixation to the diseased part, the home surroundings and hygienic conditions are, as a rule, wretched, and the food unsuitable in quality and deficient in quantity, while the patient, as soon as he is discharged from the hospital, may have to earn his living. And, more serious than these, are the risks to the continuance of strict aseptic treatment; the patient finds it inconvenient to come to the hospital on the day he is told, and the dressings are left on too long; or he finds the wound uneasy or itchy, and takes off the dressings with the view of giving relief; or when he comes to the hospital, especially if it be a large hospital, his wound is not dressed by the surgeon or the house-surgeon, but, it may be, by some dresser who has had insufficient experience of antiseptic work. For one or other of these reasons, when a patient is dismissed from hospital before his wound is completely and thoroughly healed, fermentation, as a rule, ultimately occurs, and he is very little better off than if he had never been taken in at all. I am constantly meeting with such cases, more especially in the case of children, where patients present themselves with septic and suppurating wounds who have been in other hospitals for some weeks, and have then been sent out to be treated as out-patients. I do not at all mean to imply that this is any fault of the surgeon in charge of the case, or of the hospital at which it was treated; it results entirely from the fact that, in a general hospital, one cannot allow any large number of beds to be occupied for an indefinite time by the same cases. It is no exaggeration to say that there is a pressing necessity for an institution where patients, provided their diseases are curable, can be kept as long as is necessary, and treated strictly aseptically; and that, if such an institution existed, many lives would be saved which are now lost.

In speaking of spinal abscess, it must not be supposed that I mean that that is the only—or, indeed, the chief—class of cases for which this sort of accommodation is necessary. It is equally required for other chronic but curable cases, as, for example, for diseases of joints. The same remarks apply to advanced joint-disease as to spinal abscess; and it may be added, further, that excision, which is not always good practice, would not be so often resorted to were it not that it is necessary to shorten the stay of these cases in hospital.

A great deal more might be said in support of this suggestion, but I think I have said enough to show why I hope that the energies of those who wish to promote a "Queen's Jubilee Hospital" may be expended in the direction which I have indicated, rather than on the foundation of a special hospital, for which there is no public necessity.—Yours faithfully, W. WATSON CHEYNE.

59, Welbeck Street, W., January 22nd, 1887.

SIR,—Everywhere we hear of public bodies and professions busying themselves in promulgating and arranging some scheme for celebrating the jubilee of our Queen. Why should not the British Medical Association, as a body, unite in celebrating the year by some act of public utility and benevolence? Kindly permit me to make a suggestion, and if it meets with your approval you can bring it under the notice of the profession with your accustomed authority and influence. I think all must admit that the Royal National Life-Boat Institution has unexceptionable claims on the collective bounty of any body of men, and is an institution of general and imperial interest. There is nothing sectarian in its object, its utility and its necessity are beyond doubt, and the annual results of its labours unquestionable. Many hundreds of lives are saved yearly through its instrumentality, and it is supported entirely by voluntary contributions. My suggestion is that the members of the Association should unite and forthwith contribute such a sum—to be presented to the Institution—as will defray the cost of one, two, or three life-boats, one for each division of the kingdom if possible. The cost of building and fully equipping a ten-oared life-boat is £650, and a suitable boat-house about £350 more; total, £1,000. So that a sum of £3,000 subscribed would cover the total cost of three new life-boat establishments. Now there are 11,299 members in our Association, and if all subscribed even five shillings the amount required would be nearly reached, but then I should say without much doubt that very many would give ten or twenty shillings each. So that in any case we should enable the Institution to make a suitable and welcome addition to the existing fleet of boats under its supervision, and which they would undertake to maintain.

A small committee nominated by yourself might carry out a details, or, with your consent and approval, subscriptions might be sent direct to the Association Office, and simply acknowledged in the JOURNAL weekly, and finally handed over after the lapse of three months to the officials of the Royal Institution, who would carry out the remainder of the plan.—Yours very faithfully,

Ampthill, Jan. 24th. W. ARNOLD THOMSON.

MEDICAL MAGISTRATE.—Mr. Robert Roberts, Surgeon of the Festiniog Slate Quarries Hospital of Isallt, Blaenau, Festiniog, took the oaths as a Magistrate of the County of Merioneth at the recent Quarter Sessions.

THE PROPOSED NEW DEGREE FOR MEDICAL STUDENTS.

SIR,—Will you allow me to add one more letter to the correspondence on this subject, and to make one more suggestion on it? Dr. Richardson, of Torquay, asks why the Scotch Colleges are doing nothing in the matter—a very pertinent question, and one of the greatest importance to them. Doubtless, the difficulties standing in the way of the creation of a new University for Edinburgh are well-nigh insurmountable, and the new degree-granting body for London will not be instituted without much opposition. I therefore throw out the following suggestion: The King and Queen's College of Physicians of Ireland obtained the right, under a Charter of William and Mary, to confer on its licentiates "the degree, rank, and title of Doctor of Physic." This charter was afterwards made perpetual by William III. Now, why should not the London and Edinburgh Colleges of Physicians each obtain a similar charter, empowering them to confer a similar degree, but on their members only? Such a degree might entitle the recipient to use the prefix "Dr.," but not the affix "M.D.," and would, therefore, not clash with any existing degree. The new degree would be conferred on any licentiate who, after the expiration of at least one year from the date of his licence, passed the examination for M.R.C.P. A suitable hood would be designed to distinguish the possessors of this doctorate from the M.D. graduates. The degree would be retrospective; but this would hardly be felt as a grievance by the licentiates, as, exclusive of the Fellows, who are almost invariably graduates, there are probably not more than 500 members in both colleges, and many of these hold the M.D. also.—Yours faithfully, L.R.C.P.

AMBULANCE WORK.

SIR,—As one of the authors of *Questions and Answers upon First Aid to the Injured*, I am pleased our little work has received notice at your hands in the JOURNAL for January 8th, page 68; all the more so, as we are quite in agreement with the remarks made as to its being unnecessary to teach physiology in courses of ambulance lectures. Both Mr. Martin, of Huddersfield, and myself discourage it in every possible way, and never ask a question on such subjects in the examinations we conduct. So long, however, as these subjects are retained in the syllabus, we felt bound to touch upon them in our book. This must be our apology. I am sorry the reviewer did not see his way to say that there are only four out of the forty-seven pages devoted to this teaching. He might also have quoted some of the questions upon the practical part of ambulance work, and, further, might have mentioned, I think, with approval, how very strongly we insist upon the temporary nature of the aid rendered and the absolute necessity that exists for securing proper medical assistance. It was a pity to present the worst and weakest features in the book—a portion not approved of by its authors—as the sole portion worth noticing, and that for the purpose of condemning it. As for the physiology taught ruining the St. John Ambulance Association, surely such fears are groundless. The facts mentioned are taught over and over again in far greater detail in numberless physiology classes and lectures to school-boys, Young Men's Christian Associations, etc., and in many elementary physiologies which have been written for the public, and not for professional reading; *vide* Huxley's *Physiology*, 3s. 6d. (this I think is the price) as an example. In fact, our main objection to the amount of physiology taught in ambulance lectures is its small amount and absurdly imperfect character. Mr. Martin and I never teach the names of bones or arteries; we confine ourselves, as far as possible, to the question "There is an injury, how will you deal with it until the surgeon comes?"

Hoping that in justice to us, and to prevent our being misjudged by the profession generally, you will kindly permit the insertion of these remarks in the JOURNAL, and that you will not look upon them as written in a carping spirit against the full liberty, on the part of your reviewer, to express his opinion, but rather of regret that he had not time or inclination to dip deeper, and look a little on the better features of our work.—I remain, faithfully yours,

January 14th, 1887. JOHN W. MARTIN.

SIR,—I have read in the JOURNAL of January 8th the review of three books on Ambulance Work with deep regret, for such remarks, as *Punch* says, "though true, would have been better unsaid." I know Dr. Martin very well, and he has examined eight classes that I have had the pleasure of instructing, and I must say that his examinations are thoroughly practical and most fairly conducted, and he does not question the pupils he examines on any of the questions you refer to in your review of his book on *Questions and Answers upon First Aid to the Injured*. Dr. Martin's book, *Questions and Answers*, etc., was based on the original book on First Aid first issued by the St. John Ambulance Association, and not upon their present book issued to classes, which is thoroughly practical.

The main objects of the St. John Ambulance Association are three, namely: 1. To instruct persons how to stop bleeding until the medical man arrives, and by so doing probably save life. 2. In case of fractures or broken bones, to temporarily fix the limbs until the medical man arrives, and by so doing relieve suffering; and, 3, in cases of drowning or suffocation, to instruct persons how to perform artificial respiration until the medical man arrives, and by so doing save or restore life.

I am sure the above objects must commend themselves to every medical man; and any society endeavouring to carry out such objects ought to receive the support of every medical journalist. The St. John Ambulance Association are doing good work all over the country, and its certificated pupils are, from my own personal knowledge, daily saving life and relieving suffering, and therefore I trust, in the interests of the above Association, you will publish this letter, and oblige, yours respectfully, F. J. ROBERTS-DUDLEY.

Enville House, Stalybridge, January 10th, 1887.

*** We can hardly understand Dr. Roberts-Dudley's remarks in justification of his friend Dr. Martin's publication. If such questions are never asked (even by the author himself) as Dr. Martin has published in his catechism, what is the value of the book?

DR. GEORGE HARLEY'S REMARKS ON HEPATIC PHLEBOTOMY, ETC.

SIR,—In the course of the "Remarks on Hepatic Phlebotomy," by Dr. George Harley, published in the BRITISH MEDICAL JOURNAL, January 15th, the following sentence occurs:

"If these common-sense precautions be taken, I think it is very unlikely that any such untoward accident as that which Dr. Boyes Smith tells us befell him would be likely to occur—namely, that his patient died in a state of collapse, from hæmorrhage into the abdominal cavity, within a few hours after his exploring the liver for an abscess."

Without entering into the question raised by Dr. Harley, I hope you will kindly permit me, through the medium of your columns, to state that the case above alluded to did not occur in my practice at all. I spoke of it as one that had been mentioned to me, and, in doing so, I knew that I could rely on the accuracy of my informant. The fact of the case not having been under my own treatment I distinctly mentioned in the course of my remarks on Dr. Harley's paper, read at the Brighton meeting of the British Medical Association.

I refrain from making any further comments on Dr. Harley's paper, and leave to the judgment of our professional brethren the unseemly insinuations that he has chosen to put forward regarding "Messrs. Smith, Alexander, Ryan, and Quill,"—"all army men."—I am, Sir, yours, etc., DAVID B. SMITH.

Netley, January 18th, 1887.

QUALIFIED ASSISTANTS.

SIR,—Having had no experience of unqualified assistants, I am unable to compare them with their qualified brethren; but I can see in the letters in the JOURNALS of January 8th and 15th, a tendency to wander from the real question, which I take to be, Shall a legal status be given to unqualified men? Of course, the younger assistants, really students about to take qualifications in the usual way, are out of the matter now in hand. The typical unqualified man has either gained a knowledge of the profession in an irregular way as a dispenser, or has gone through more or less of the "full curriculum," which is so often announced in his advertisement. If the former—I suppose few persons will plead for him to have a definite legal status—on what grounds and by what methods is he to get it? If the latter, why has he not passed an examination?

A student of such habits—ordinary industry and moderation in drink, for instance—as would make him tolerable as an assistant, can surely get through the tests which procure for him a single qualification. If a man systematically wastes his time and drinks, or if he marries prematurely while a student, is he likely to be a valuable helper in general practice? But Mr. Napper and "Probe" say these unqualified men are the best assistants. Then suppose all those of us who must have help in our practices regularly employed these irregular practitioners, what becomes of the hundreds of young men who have just qualified? There must be a large proportion who have never had a pupilage (thanks to some great mistake in modern medical education), and who know very little of the fine arts which are necessary to success in the profession. As they cannot all begin as junior part-

ners, very many get just this help in learning the details of practice as qualified assistants. There are foolish fellows who presume on their school knowledge, who despise the often dull work of general practice, and make themselves disagreeable—one month's notice gets rid of them. It happens that I have seen two such men; they had long been unqualified assistants, and the honour of a diploma was too much "top-hamper" for them to carry steadily.

One great difficulty we have with the qualified men is that they are not likely to stay unless they can have constant increase of salary, or some other benefit in prospect. Can they be blamed for this?

During the fifteen years in which I have had to employ an assistant, several men have come and gone—most of them with real regret on my part as they were useful, well behaved, and knew their work; men whom I looked upon as friends; but they required and deserved pay beyond that which the practice would supply, something better than the 4 per cent. which a man told me he had had as an unqualified assistant in the north.

I have never sent to my patients a man whose education, having never been tested in any way, is a variable quantity—tacitly representing, as a "doctor," one who may have learnt his profession from the very practical atmosphere of a chemist's shop. It is somewhat significant that this movement to legitimise irregular practitioners, arises at the same time as that which is to provide a fictitious "degree" for London medical students.

If parents will send their sons to suitable schools, the matriculation examination will become less formidable, with all the advantages students now have; the subsequent tests at Burlington House can be easily passed by fairly diligent and able men. No others deserve a degree, which is a very different thing from a license. Fairly diligent and able men can obtain a living as dispensers; that is, however, no argument for giving such persons a regular professional standing.—Believe me to be, Sir, yours truly,

CAREY COOMBS, M.D.LOND.

Castle Cary, January 17th, 1887.

SIR,—Now that the discussion with regard to the employment of unqualified assistants appears to monopolise much of the space of the JOURNAL, deciding upon their merits and endeavouring to find a loophole whereby their grievances may be aired and their existence ensured, I deem it my duty, in the interests of the public, especially the labouring classes, to expose the unprofessional conduct of those medical men who harbour such charlatans. Why do some practitioners speak in their favour and denounce the duly qualified men? Simply because they are to be had cheap. Secondly, they can be provoked with impunity, and used for the most menial work. A correspondent of yours states they can be safely trusted to mix with the family circle—no doubt a great concession. Not because their morals are above par are they safe in the "family circle," but because the "family circle," well knowing their unfortunate and menial position, prefer keeping such men at a very respectful distance. In fairness to the public, is it right that a spurious article should be palmed off on them when they are paying for the genuine one? Would such a condition be tolerated in the legal or any other profession? How often do we read of chemists being fined for keeping unqualified assistants to do their work, and even solicitors struck off the rolls for allowing their unqualified assistants to take their place? Those medical men who stand forth so boldly in favour of allowing their unqualified assistants to visit and attend cheap midwifery for their gain should receive the censure and punishment of the Medical Council, as the Incorporated Law Society inflicts on their licentiates.

And with regard to the much-to-be-pitied unqualified assistants, I venture to assert that at least 50 per cent. of these have never seen the inside of an hospital. How can any sane man reason that unqualified men are more fitted for practice than duly qualified men? True, they can talk to patients, especially the poor and uneducated, in their own language and make themselves understood; but yet how do their principals acquire the art of addressing patients? Even the unqualified must start at some period. I recollect not long since an unqualified assistant left a patient in labour for nearly fifty hours (a transverse presentation with the arm protruding through the vulva) waiting, as he said, for "Denman's Spontaneous Evolution," and too proud to send for his principal. I could enumerate several cases where lives and limbs have been lost by the stupid diagnosis and treatment of ignorant assistants. How can you expect an unqualified man to diagnose between a case of colic and strangulated hernia? an example where delay is fatal.

In conclusion, I consider it is now high time that unqualified assistants, whose pretension to knowledge is unproven, should receive their *congé*, and those respectable practitioners with extensive cheap practices and dispensaries who employ the "strictly moral, steady, and reliable" unqualified assistants, receive the verdict of the Medical Council, and by it, no doubt, the status of the profession will still be maintained.—I am, yours, etc.,

L.R.C.P., Lond.

LICHEN CIRCUMSCRIPTUS.

SIR,—In the valuable letter on this disorder, which appears in the JOURNAL of Jan. 22nd, my friend Dr. Payne states that I "regard it as an eczema." Allow me to point out that, in the section on Diseases of the Skin, which I contributed to Fagge's *Principles and Practice of Medicine*, this curious affection, Lichen circumscriptus (*v.* circinatus, *v.* annulatus, *v.* marginatus, *v.* gyratus), is placed, not in the chapter on Eczema, but in that on papular forms of chronic superficial dermatitis, and under the head of Lichen. After describing what I believe to be a local dermatitis from sweat, which has often been included under the same name, Lichen circumscriptus, I go on to say: "But apart from this, it must be admitted that there is a distinct though somewhat rare circumscribed papular dermatitis which, from the shape of its patches, and from their spreading at the edge, while the centre returns to its natural condition, reminds one of spots of tinea. .....The areæ of the circles present a yellowish tint, and are sometimes covered with branny desquamation. When several circles combine, they form irregular lines, and the eruption has been called Lichen gyratus, by Biett and Cazenave."

I agree, therefore, with Dr. Payne, that it is not a parasitic disease, a form of tinea; and that it is not a glandular disease, a form of seborrhœa sicca.

As to the name, it would be better if every definable recurrent assemblage of symptoms and anatomical changes could be known by a single name, distinctive, meaningless, and capable of adjectival inflection. Unfortunately the binominal system of Linnæus was applied to nosology, and reform is slow and difficult. Dr. Payne's proposed name "circinaria," would be very suitable for a new disease, but Lichen circumscriptus is not new. If it turns out, after all, parasitic, we must call it a form of tinea; if Dr. Duhring and other American physicians are right, we must call it a form of seborrhœa; but for the present, priority is the only rule to follow, and therefore Willan's Lichen circumscriptus is, I think, the name to keep to.

The difficulty of improving nomenclature is evident, by considering that we have no single definite name for such important anatomical structures as the lymphatic glands, the aortic and the pulmonary valves, for such familiar histological elements as connective tissue corpuscles, or for such definite and common diseases as enteric fever and lobular, catarrhal, or broncho-pneumonia.—I am, etc.,

Harley Street, January 24th, 1887. P. H. PYE-SMITH.

TREATMENT OF THYROID CYSTS.

SIR,—After reading a paper on the above subject at the Clinical Society on January 14th, Dr. Felix Semon—who was present, but did not take part in the discussion—mentioned to me that he thought someone had previously adopted the method of stitching the cyst wall to the skin; but as he could not give me more exact information without reference, he would write and tell me if it were so. The following information, to me quite new, which he was kind enough to communicate by letter is so important that I feel I ought to ask you to give it publicity:—

"I find on reference that the proposal was made and acted upon not less than thirty years ago by the younger Chelius (*vide* Chelius's *Handbuch der Chirurgie*, vol. ii., 1857, p. 463), and that it has been referred to since with approbation by Bardeleben and Lücke (in *Pitha u. Billroth's Chirurgie*, Band iii, Abth. I, Lieferung 6. p. 83), and mentioned by myself in Heath's *Dictionary of Surgery* (vol. ii, p. 619)."—I am, etc.,

A. W. MAYO ROBSON.

January 23rd, 1887.

LIEBIG'S EXTRACT.—Some time since, an action was brought in Brussels against English dealers in extract of meat to prevent them from using the title of "Baron Liebig's Extract," or from placing the photograph of the late Baron Justus von Liebig on their jars, or in any way using the name or title of Baron Liebig. The action was brought by the Liebig's Extract of Meat Company, and was successful. The English dealers thereupon took the case into the Court of Appeal. Judgment was given recently, confirming the decision of the Tribunal of Commerce, and condemning the English dealers, who were defendants in the action, to pay damages, and also restraining them from making any further use of Liebig or Baron Liebig, or of the photograph, this right being declared to be the exclusive property of the Liebig's Extract of Meat Company.

MEDICO-LEGAL AND MEDICO-ETHICAL.

ATTENDANCE OF MEDICAL WITNESSES AT ASSIZE COURTS.

MR. CHARLES M. BRADY, writing from Wigan, complains strongly of the practice of the borough magistrates in binding over medical men who may be witnesses before them, to appear "day by day" at the assizes until the case with which they are associated comes on for hearing. This often necessitates the medical witness travelling from Wigan to Liverpool daily, and often for many days in succession, before his evidence is required. Mr. Brady points out the great inconvenience that arises, not only to the medical witness himself, but also to his patients, and he suggests that as the distance is only half an hour by rail, and there are frequent trains, the witness might be excused a daily visit to Liverpool, and await a telegram or special call. Indeed, Mr. Brady, by way of public protest, went so far, in a recent case, as to refuse to be bound over *de die in diem*, with what result we do not know. In doing this, he acted boldly, if not wisely, and ran the risk of a committal for contempt.

The medical witness in many criminal cases is often the most important witness, and it is absolutely necessary to secure his attendance at the assizes. This being the case, if he is required to be present in court day after day, he should be adequately remunerated for so doing, or, as Mr. Brady suggests, paid a sufficient sum to enable him to employ a locum tenens to look after his patients. We should not feel justified in recommending Mr. Brady to persevere in his determination not to be "bound over" in the usual way, as legal difficulties might arise of a kind that would be unpleasant to himself. The process of binding over witnesses *de die in diem* is to ensure their attendance at the time they are required; but very often, by arrangement with the officials of the court, the unpleasantness complained of by our correspondent may in great measure be avoided. A *de die in diem* telegram from the friendly solicitor or police inspector will generally apprise the witness when his case is about to come on, and when his evidence is required, and thus prevent unnecessary journeying to and fro.

When we suggest this, we say all we can in mitigation of what must be, at the least, a great trial of patience and temper, besides pecuniary loss. The ordinary medical witness is paid at the rate of one guinea a day, *de die in diem*, till the case comes off; and if, as Mr. Brady states, the practice prevails at Wigan of "compelling medical men to attend at each Liverpool assizes as witnesses for at least a week, to the almost entire neglect of their patients," he certainly does not complain without reason of the unnecessary attendance imposed, and of the inadequate remuneration received.

FEES TO EXPERT WITNESSES.

AN interesting and important point has been raised in America. Dr. F. H. Darby, a well-known practitioner residing at Morrow, near Cincinnati, and the President of the Miami Valley Medical Association, was called upon to give evidence in a trial for murder. When called, he stated that he would testify to all matters of fact within his knowledge, but would refuse to give expert testimony unless ensured an adequate fee. He accordingly replied to all questions of fact, but refused to reply to a question involving expert knowledge unless the fee was ensured; he persisted in this refusal and was committed to gaol for contempt of court. The case is to be carried to the Supreme Court, but meanwhile Dr. Darby remains in prison. The point raised is whether a medical witness, having been called to prove matters of fact, can be compelled, on continuance of his examination, to express opinions on or draw inferences from the facts.

HEALTH ASSURANCE *v.* PROVIDENT DISPENSARIES AND CLUBS.

W. FLEMING PHILLIPS, M.B. (18, Oxford Street, Southampton) writes: I see that "M.B." has been favoured with one reply to his inquiry about "a provident dispensary for those above the class of working men"; but if he had read what has appeared from time to time in the JOURNAL for some years past in regard to health assurance, such an inquiry would have been needless. At present, I need only refer him to the last article on the subject in the BRITISH MEDICAL JOURNAL for December 4th, 1886, page 1135, and if he should desire further information, I will gladly give it him.

Compared with provident dispensaries and the like, the superior advantages of health assurance to all concerned are so obvious, that no unbiassed and intelligent person can fail to see them, and it is not too much to say that if health assurance had been generally adopted thirty years ago, we should not now be plagued with the retribution of the clubs, the out-patient department of hospitals, and the grievous train of free dispensaries. These institutions are now, however, in possession of the greater part of the field of practice among the industrial and, so-called, lower middle classes, and the question is, how to get rid of them and establish health assurance in their stead. This can best, or at least most rapidly, be done by combination, a simple and efficient device which it seems the profession has yet to learn. Every medical man, however, who adopts health assurance, and endeavours to introduce it among his *clientèle* does something to check, or even to reduce, the evil; and if, at the same time, he uses his influence to teach the people with whom he comes in contact the great advantages, both to them and to the profession, of health assurance over any other system, the change will gradually be brought about.

If the great bulk of the profession could only see what I have been striving to show them (and some, I am glad to say, do now see it) that the uniform fee of provident institutions is as pernicious as it is unnecessary, and that there is absolutely no reason why the benefits of medical providence should be confined to any class, or why the payments should be limited to four, or six, or even sixty shillings a year, a brighter day would dawn for us and for the community, whose health it should be alike our duty and our interest to conserve.

But how can health assurance take the place of the medical departments of friendly societies and clubs? By the managers of these institutions ceasing to receive the contributions for medical attendance, and framing a rule that every member shall enter into the arrangement of health assurance with a medical man to be chosen by the member himself. There is every reason why the subscriptions for sickness benefit should be uniform, and every reason why the payments should not be uniform for the benefits of medical attendance; and health assurance not only enables the medical attendant to protect himself from imposition, but also makes the relation between him and his client immediate and direct, to the great advantage of both. The profession have too long suffered from the tyranny and injustice of the provident arrangements made by the laity for medical aid. It is quite within the power of the profession to make this change whenever it may please them to do so, and without the establishment of any wasteful and cumbrous organisation like that of provident dispensaries. The only association likely to be useful would be an association for the promotion of health assurance. Meanwhile, individual action, though somewhat slower, is not less sure, and paves the way for combination if required.

I take this opportunity to add a word of protest against the recent application of the title "sick assurance" to the system known as health assurance. In clubs, and all the other provident medical institutions which health assurance supersedes, prevention is disregarded, or ignored; health assurance, on the contrary, is exactly what its name implies.

MEDICAL ATTENDANCE ON THE FAMILIES OF HOMŒOPATHIC PRACTITIONERS.

L.R.C.P.—The special point involved in the question submitted by our correspondent is somewhat difficult. Although there is no ethical rule, within our knowledge, directly bearing thereon, we are of opinion that he will act in the true spirit of ethical propriety and professional etiquette by attending the lady as the wife of a legally qualified medical man, notwithstanding that her husband, from an orthodox point of view, is a professionally erring one. We would therefore advise "L.R.C.P." to attend her in accordance with the following rule laid down in the *Code of Medical Ethics*, chap. ii, sect. 2, rule 1, page 53, namely: "All legitimate practitioners of medicine, their wives, and children while under the parental care, are entitled (not as a matter of right, but) by professional courtesy, to the reasonable and gratuitous services—railway and like expenses excepted—of the faculty resident in the immediate neighbourhood whose assistance may be desired," etc.

"FETCHING THE DOCTOR" AND PAYING THE FEE.

A MEDICAL man practising in Salford recently sued a woman for professional fees. The plaintiff's statement was that he was called in to attend her during her sickness, which lasted about a fortnight. Defendant disputed the debt on the ground that neither she nor her mother had sought the advice of the medical man.—The Judge: You did not send for him then?—The Defendant: Not at all.—The Judge (to plaintiff): You will have to prove that the defendant called in your services.—Plaintiff: I only know that I was sent for and attended the woman.—The Judge: But that does not make her liable. You had better withdraw from the case. Plaintiff: This is a most extraordinary decision, your honour.—The Judge: If you don't choose to withdraw, I shall have to non-suit you, and allow the woman's costs.—Plaintiff: But what is to be done in a case of this kind?—The Judge: I don't sit here, sir, to teach you your business. The case will be withdrawn.

*** As we have often said, the right to recover payment for medical attendance depends on contract, express or implied, and if disputed, a contract must be proved. In the present case, proof seems to have been wanting; but if the witness can be found and will corroborate the plaintiff, he will no doubt succeed eventually. In cases where medical attendance is requested by a messenger, it would be well to get the request ratified at the time by the patient or person responsible, so as to be able to prove that the contract was made with him. This might easily be done in the course of conversation, without giving offence, and would obviate the risk of future difficulty.

BEQUESTS AND DONATIONS.—Mr. Alderman Thomas Rose, of Manchester and Stretford, engineer and insurance manager, bequeathed £10,000 to the Manchester Royal Infirmary and Dispensary, £5,000 to the Salford and Pendleton Royal Hospital and Dispensary, and £2,000 to St Mary's Hospital, Manchester.—The British Hospital for Incurables has received £500, less duty, under the will of Miss Jane Donaldson.—The Norfolk and Norwich Hospital has received £500 under the will of Mrs. Harriet Hayward.—Mr. Thomas Lockerby, of Addiscombe, Surrey, bequeathed £100 to the Royal Infirmary, Glasgow.—Miss Fanny Halsey, of Little Gaddesden, Herts, bequeathed £100 to the West Herts Infirmary, Hemel Hempstead.—The Hospital for Women, Birmingham, has received £100 under the will of Mrs. E. Smith.—The Rev. Le Grix White has given £100, and "A Lady" fifty guineas, to The Queen's Jubilee Fund of the Cumberland Infirmary.—Colonel F. R. Waldo Sibthorp and Mr. C. H. de Seysa have each given £50 to the Charing Cross Hospital.—Sir Julian Goldsmid, Bart., M.P., has given £50 to the Central London Throat and Ear Hospital.

INDIA AND THE COLONIES.

INDIA.

The Health of Calcutta.—The report on the health of Calcutta for the third quarter of 1886, by Dr. Simpson, health-officer of the town, contains some matters of no small interest both from a scientific and sanitary point of view. The mean temperature of July, August, and September was lower than the average for the preceding twenty-four years. The humidity of the atmosphere throughout the quarter was greater than the average of the preceding twenty-four years. The barometric pressure was also higher. Food was cheaper than usual. Not only were the markets of the town carefully inspected, but the drug-shops and dispensaries were regularly visited, and all medicines found in a decayed state were destroyed. The total number of deaths registered under the head of fevers amounted to 847, the average of the preceding ten years being 936. The history of cholera during the quarter is full of interest. The total of deaths from this disease amounted to 230, a number higher than all the corresponding quarters of the last ten years, the decennial mean being 141. The greatest mortality from cholera during the quarter was in July, when it reached 95. It is interesting to note that the health-officer traces this to the arrival in that month of a number of infected pilgrims. We are glad to see this fact noted, more particularly as of late years there has been a disposition evinced in India not only to minimise, but entirely to deny that the movement of pilgrims and other bodies of men from infected localities is a factor in the propagation of cholera. The health-officer, it is satisfactory to see, was able in this instance to trace the disease to its starting-point, and to put his finger on the house in which the disease broke out; and he gives in his report a plan of the Bustee in which that house was situated. At page 225 of his recently published *Lectures on Tropical Diseases*, Dr. Maclean asks the question, "Is cholera a child of dirt?" After showing the close relationship between dirt and cholera in India, Dr. Maclean goes on, at p. 227, to say: "Nor, in this connection, can we shut our eyes to a fact as notorious as any fact can be—that, when cholera is in movement in Europe, it finds out cities and quarters of cities where the reign of dirt is supreme." Here, slightly abridged, is Dr. Simpson's description of the Bustee in which this outbreak originated. Its great importance is our excuse for its length. "The disease broke out in the hut No. 61 H. 1, which is situated well within the Bustee, and approached by a passage which is about four feet wide at first, gradually narrowing to a little over two feet. The hut occupies an area of two cottahs, twelve chittacks (equal to an area of 1,998 English square feet). The hut is divided into twelve compartments which open to a very limited court." The privy is described as common to the twelve compartments, its position is shown on the plan, and the washings from it "flow directly through a grated gully into the underground drain, also marked on the plan." Between compartments 10 and 12 is the well, "which, having no parapet, is subject to contamination from the surface drainage of the compartments, as well as from a surface drain immediately to the east; the drain leading from the privy joins a sewer on the north side of the hut. This sewer, when opened, was found to be nearly half full of sewage deposit. Let us now look how the disease spread. 1. A boy, aged 3½, in compartment No. 11, was the first attacked. He was taken ill on July 22nd, survived till the 25th, when he became worse and died. 2. A boy, aged 5, in compartment No. 12, took ill on the 24th and died next day. 3. A girl, aged 12, living in compartment No. 3, seized on the 27th and died on the 29th. 4. A woman, aged 30, fled in terror from compartments 4 and 5, where she lived with her sisters, to No. 6, distant 180 feet, a hut which occupied only 18 square feet. To this hut the scene of cholera was now changed; she was taken ill the day she fled and died at night, July 27th. 5. This woman's boy, aged 1 year and 2 months, was attacked after his mother's death; seized on the 30th, and died on July 31st. 6. Then the woman's sister, aged 35, was seized on the 30th, and died on August 1st. 7. A second sister took ill and recovered. 8. The woman's daughter, aged 10, who had helped to nurse her mother, brother, and aunts, was also attacked, but recovered." The health-officer details the measures adopted to check the disease; these were of the usual kind, and need not be specified. Here then, in this, the starting point of cholera, according to Dr. Simpson's report, were the following conditions: 1. A well with water hardly better than sewage; 2, drains with deposit in them emitting offensive gases; 3, filth both inside and outside the hut; 4, overcrowding of huts in the Bustee; 5, overcrowding of people in the huts. Dr. Simpson adds: "These conditions are to be found in most Bustees, and in an intensified form in those where cholera most frequently appears. *They are all preventible.*" (The italics are ours.) The health-officer has the following passage, which supports in a remarkable way, not only the facts and opinions urged by Dr. Maclean in his published Lectures (*vide* Lectures XII and XIII), but, above all, the too often overlooked labours of the late Dr. Snow. We must quote the passage in full: "Sometimes it is said that well-water in the Bustee-lands is not used for drinking purposes. This may be true in cases where the filtered supply is laid on within the compound, or where it is close at hand; but when the nearest hydrant is at a distance of 100 or 200 yards or more, it is reasonable to suppose that the well-water is occasionally taken for drinking. At all events, the well-water is constantly used for washing utensils, for cooking purposes, and for personal ablution. One sees the inhabitants, while bathing, cleansing their teeth and washing their mouths with well-water, which is always impure (*vide* Maclean, p. 226), and if, as sometimes must be the case, contaminated with cholera poison, is dangerous in the extreme." Again, "The recourse had to polluted well- and tank-water is, without doubt, a very fruitful cause of disease." In the concluding paragraphs of this report, the health-officer dwells on the condition of the underground drains, and the accumulation of sewer gas in them; on the filth of the huts and their surroundings, and the consequent pollution of the air; also on the effects of overcrowding. In another part of this most valuable and instructive report, the measures pressed on the attention of the Municipal Commissioners for remedying this terrible state of matters are described. We commend the above facts to the careful consideration of those who are never weary of sneering at sanitarians who seek to show that cholera is indeed "a child of dirt."

Mortality in the Punjab Province.—The official returns of the death-rate in some of the Punjab towns show that the mortality rate has been very high there. In the week ending November 20th, at Peshawur it was 104 per mille, at Palwal 74, at Umritsur 69, at Sonapat 64, and at Batala 60. The excessive death-rate at Peshawur was due to the prevalence of small-pox. There were two deaths from hydrophobia in the province during the week.

NAVAL AND MILITARY MEDICAL SERVICES.

OUR INDIAN TROOPSHIPS.

There are few who know much more about the fleet of transports that maintain the circulation of troops between England and its Eastern possessions than the fact that from the large number of soldiers sent out to India on board each of them on every voyage, and the equally large number of troops and invalids brought back from that country to England, as reported from time to time in the journals of the day, the transports must be vessels of enormous size; and even of those who have actually made a voyage on one or other of them, not many, perhaps, are aware of such matters as the cost of their maintenance, or are acquainted with the details of their management, and of the work done by them. Information on these particulars has been lately sent to us by Retired Brigade-Surgeon W. Curran, A.M.D., in an article entitled "The Inner Life and Economy of a Troopship." From this paper it appears that the fleet consists of five transports, each of which has a registered tonnage of 4,173 tons, while the nominal tonnage stands at 6,000 tons. Each of the five transports—which respectively bear the names of the *Crocodile*, *Euphrates*, *Jumna*, *Malabar*, and *Serapis*—is of 700-horse power, and the cost of the construction and equipment of the whole fleet amounted to £1,043,200, or to a sum, taking the average, of £208,640 for each vessel. To these sums must, however, be added a further charge of £880,577, for steam-tenders and boats for use in connection with the transports at Alexandria and Suez, and for the construction of the Suez Hospital, making a total outlay at starting of £1,204,854. It can be readily imagined that the current expenses, which chiefly fall on the Indian exchequer, of maintaining these five leviathans in repair, and of working them during the trooping and invaliding seasons, amount to a very considerable sum. Each vessel, while on its voyage, consumes about thirty-five tons of coal daily, part of this fuel being used for the distilling apparatus which produces on an average twenty-eight tons of distilled water *per diem*. The establishment of officers and men employed for working and for the service of the ship, when the full complement is on board, comprehends 18 officers and 245 subordinate officers and men, their daily pay amounting to about £20. The distance between Portsmouth and Bombay is stated to be 6,130 miles—3,168 miles from Portsmouth to Suez, and 2,962 from Suez to Bombay—so that, taking the average speed of these ships, including delays,

at eight knots and a half an hour, as given in the paper, the average length of the voyage will be thirty days, and this is what it is usually found to be.

Brigade-Surgeon Curran mentions that the vessel in which he went out to India, the *Jumna*, had on board 1,650 persons "all told," but that the transport in which he lately returned to England—he does not mention which of the transports is referred to—only carried about 750 persons on board, so that there was unusually ample accommodation for the married officers and for the soldiers' families. He gives an interesting account of the homeward voyage, which appears to have been a very pleasant one. Each officer pays 3s. 6d. a day towards his messing, and this covers the cost of all the meals, with a pint of claret and one pint bottle of beer or porter. The food is described as abundant in quantity and excellent in quality. Twenty tons of ice are put on board each transport before the vessel leaves Portsmouth, and it appears that this is sufficient for use on the return as well as on the outward voyage. Extras of all kinds can be got by officers and their families, within certain limits, at moderate charges. Among the incidents of the voyage mentioned were the following. "We had the usual 'fire-alarms,' during which the bell was rung furiously, the deck was drenched with water, the engines stopped, and bugles were heard sounding through all the hatchways. This 'alarm' was followed, at a decent interval to enable all hands to recover their equanimity, by a 'collision' drill, and this by a 'man-overboard' drill, and the steam launch was manned on this occasion." There was only one death during the voyage, and the manner in which the funeral was conducted is thus described. "The master-at-arms and his subordinates having wrapped the body in canvas, the engines stop, the bell is tolled, and the flag is lowered. As soon as the head of the procession emerges from the lower deck, the chaplain commences the service of the church, and accompanies the body till it rests on the small stage previously prepared for its reception, before an open gangway on the port side. As soon as this is completed, a nod or a gesture from the first lieutenant causes the stage to be slowly hoisted into the air, and as gently deposited in the sea; the body, which has been previously shotted with this view, no sooner touches the water than it disappears through a trap-door that has been specially provided for this contingency. The engines revolve as heretofore, the flag resumes its place at the main peak, and a few bubbles on the surface of the deep are all that meet the fond gaze of the afflicted relatives, or the furtive glance of the more curious or unconcerned spectator."

There is one observation of the writer which can hardly be passed by without notice. "If," he observes, "I ask myself what struck me most in this teeming hive of humanity, it was—well, the blooming appearance, voracious appetite, and general friskiness and vivacity of our so-called 'invalids.' The 'sick' officers—about fourteen in number of our party—as they were facetiously called, were, as a body, the healthiest, cheerfullest, and least sickly-looking of their companions. They were, in short, the life and soul of our party; and," Dr. Curran concludes, "I was more than ever confirmed by their conduct in the estimate, or, rather, in the suspicion with which I have long regarded military medical certificates of all kinds, whether the same are given at home or abroad." Is there not a tinge of hasty generalisation and injustice to his professional colleagues in this concluding remark?

PROFICIENCY EXAMINATION FOR VOLUNTEER MEDICAL OFFICERS.

T. H. R. writes: I wish to endorse fully all that "Acting-Surgeon" writes in the JOURNAL of January 15th regarding the proficiency examination of volunteer medical officers. As regards the suggestion that one of the three organisations might authorise a course of lectures, why should not the Volunteer Ambulance Department do it? It has a considerable number of trained instructors, and also, I have reason to believe, possesses a considerable sum of money, which has been lying dormant for years. Let this be drawn upon, and a course of lectures for volunteer medical officers to prepare them for the proficiency examination started. At present there is great uncertainty as to the exact requirements for the examination, but I am sure if any one of these departments would put themselves in direct communication with the Army Medical Department, a complete epitome of all that is required could be very quickly procured.

A COMPARISON OF THE ARMY AND NAVY MEDICAL SERVICES.

SIR,—Again the time has come round, and the various medical departments are advertising for candidates for their respective services. Before, therefore, it is too late, and in order to give a straightforward statement, we have drawn up a tabular statement of facts as they actually exist in the sister services, the navy and army. Only the most important have been shown, and in as concise a manner as possible. In addition to this, the changes to bring the services more on a par involve no extra expenditure at all. In order, therefore, that candidates for the naval service may not enter that service ignorant of the facts of the case, will you let your influential paper be a means of bringing these facts before them, at a time when many are hesitating between the two services. Many points which might have been touched on, such as the complete professional isolation, etc., have been omitted, and only the really important one brought forward, especially clauses 1, 2, and 5.—We are, Sir, your obedient servants,

"PORTSMOUTH AND PLYMOUTH."

Naval Medical Service.	Army Medical Service.
1. In the navy there is half-pay. This in itself is not much, but what it involves is bad. Half-pay time does not count at all for promotion, and only one-third time for pension. Half-pay also involves a loss of places on the list; one officer having less half-pay than another, passes over the head of his senior on promotion to Fleet-Surgeon. This also means that it requires from twenty-one to twenty-three years in the navy to complete the so-called twenty years' time for promotion, and the same (less one-third) for pension. It is, therefore, a delusion to imagine that after twenty years you will get the promotion or pension. Half-pay is often forced on an officer.	1. No half-pay as a service, all time counts, and, after twenty years in the army, an officer is certain of his promotion or pension, and has not to wait varying times, or be passed over by his juniors because of half-pay.
2. Leave in the navy is only fourteen days for each complete year's foreign service, and one day for each month. No sick leave is granted in the navy, but after forty-two days in a Home Hospital the officer is on half-pay. Many officers have lost much time through illness in this way.	2. Leave can be had up to seventy days in the year. There is also "sick leave" granted, very different to the mean way of behaving to a sick naval officer.
3. The general physical discomfort of life on board ship, especially in smaller ships in hot climates, for periods up to four years and over. This is inseparable from the service, and no pay can compensate for the discomfort of this to a man who has not been brought up to it.	3. Always in good quarters on shore.
4. In the navy it is not at all uncommon for a fleet-surgeon (ranking with a senior surgeon-major, and brigade-surgeon) who has been twenty-three years in the service, to have to do duty day and day about with a junior surgeon just joined, which means he is confined to the ship every other day.	4. Imagine a senior surgeon-major or brigade-surgeon doing alternate duty with a junior surgeon, and then never not confined to a ship.
5. Have no control over, or power of dealing with, the petty officers and men of the Sick Berth Staff, afloat or ashore. This is especially bad in the large naval hospitals, where the whole nursing, etc., is done by the Sick Berth Staff; their own officers having no control over them, but having to send them off to ships for punishment.	5. Have complete control over their own men of the Army Hospital Corps in every way.

*** We publish this tabular statement as we have received it from officers holding a superior position in the naval medical service, but we do so with reserve; as the alleged facts concerning the Army Medical Service appear to be imperfectly stated. For example, the *Army List* shows a number of army medical officers on temporary half-pay, and when it is said that "all time counts, and after twenty years in the army an officer is certain of promotion or pension," it should be specified that it must be all full-pay service. The limit of leave of absence for officers in the army is sixty-one, not seventy, days, but to this must be added "provided the officer can be spared." The army surgeons are, no doubt, ordinarily "in good quarters on shore," but when on active service, as recently in Egypt, and as now in Burmah, the quarters can hardly be designated as good. Senior surgeons-major and brigade-surgeons are liable to be called upon by the army regulations to do precisely the same duties as junior surgeons, and, judging from letters we have received, are not infrequently employed in such duties. We have, on various occasions, as is well known, made strenuous efforts to get improvements effected in the position of the medical officers of the Royal Navy, and we strongly deprecate there being any difference in the treatment of the medical officers of the two sister services, but we do not think any statement of the supposed or real advantages possessed by either service is likely to advance the interests of the other, unless the contrast is based upon an accurate and thoroughly complete exposition of all the facts concerned in the comparison.

HERR VON BERGMANN, Professor of Surgery in the University of Berlin, has just declined an invitation to be chief surgeon to the Willig's Hospital in St. Petersburg. This institution, a palatial structure, and fitted with all imaginable appliances, owes its origin to the private physician of Alexander I., who devoted his fortune to its establishment.

HOSPITAL AND DISPENSARY MANAGEMENT.

OXFORD EYE HOSPITAL.

At a meeting of the Committee of this new hospital, which includes the Very Reverend the Dean of Christ Church (chairman), Sir Henry W. Acland, K.C.B., the Reverend the Warden of Keble, the Deputy Mayor, the Reverend Dr. Paget, and Dr. Tuckwell, held on December 15th, it was decided unanimously: 1. That it be a first charge on the subscriptions to the Eye Hospital to provide for the care of out-patients at the existing dispensary (which is about to be transferred to other premises), and that such patients be admitted free of all charge save only the cost of their medicines. 2. That the available balance of subscriptions be used to pay the whole or part of the charge for the admission of in-patients to the Middle Class Homes at 33 and 36 Wellington Square, the proportion of the cost, if any, to be paid by the patient, to be determined in regard to the circumstances of each case. Mr. R. W. Doyne was unanimously appointed Surgeon to the Eye Hospital.

A HOSPITAL FOR WOMEN EMPLOYED IN MINES.

The establishment of a hospital for women working in mines was discussed at a public meeting held last week in the Masonic Hall, Redruth, when the following medical men were present. Drs. Permewan, Harris, Erskine, Harris-Bickford, and F. Hichens, with Messrs. Hutchinson and Carlyon. The chairman drew attention to the immense assistance the Miners' Hospital of Redruth had been to the miners of the neighbourhood, and now came the question whether they could not start a hospital in connection with the mine women. The idea had been started some two years ago by Mr. Carlyon, but at that time was impracticable. Attention was called to the fact that some 874 women were employed in the mines in the district, and 433 women in the tin-streams. The average wages these women received was 25s. to 35s. per month, and those employed on the stamps, 14s. to 20s. per month. Under the circumstances, therefore, they were in need of some extraneous help in times of sickness.

In the course of a slight discussion which followed, Dr. Permewan said the object of having the hospital was, that primarily it would be for women employed in mines, but he suggested that it should be conducted on the same lines as the Miners' Hospital; not for mine women alone, but for any single woman in distress. It would be well if the women's hospital could be attached to the Miners' Hospital, but there were difficulties in the way which he thought were insurmountable. He concluded by moving that a hospital for women is urgently needed, and that efforts be made to obtain subscriptions to carry out the scheme.

A discussion ensued as to the probability of Lord Robartes allowing a wing to be added to the Miners' Hospital for the Mine Women's Hospital, but it was stated his Lordship would be averse to such a step. The claims of both Camborne and Redruth as sites for the proposed hospital were strongly urged.

Colonel Fludyer proposed that a hospital be started for women employed in the mines only. He thought that scheme ought to be tried first. Camborne was a town of 15,000 inhabitants, situated in the richest parish in England, and yet it had no hospital of any kind.

This was carried by a large majority, and a committee of gentlemen from Camborne and Redruth appointed to consider details. It was announced that Mr. J. C. Williams had promised £100 a year towards the hospital.

GREAT NORTHERN CENTRAL HOSPITAL.

The report presented at the last half-yearly meeting of the General Council, held on January 14th, states that during the half-year ending December 31st, 1886, 154 patients were admitted into the hospital, and 16,480 attended for advice and treatment in the out-patient department, 1,364 of these being cases of accident. The pressure on the accommodation in both departments has been so great that many patients had to be refused admission for want of room. In consequence of the insufficient funds in hand for the new hospital, arrangements have been made with the contractors to proceed with one block only, which will contain sixty beds, with sufficient accommodation for the necessary staff. This will cost £20,000. The accommodation for out-patients will still remain very inadequate, and larger funds are needed to justify the Committee in proceeding with the out-patient buildings, which will involve a further outlay of £4,500. Of the £24,500 required for this part of the work, only £5,400 has been received or promised. The finances of the hospital show a falling off.

OBITUARY.

W. HORSCRAFT WATERS, M.A.

We have to record the sudden death of Mr. Waters, Senior Demonstrator of Physiology in the Owens College, Manchester. The sad event took place during the night of Thursday, January 20th. On that day Mr. Waters attended to his ordinary duties in the Laboratory, and appeared in his usual health. A gloom was cast over the whole College when the event became known, and, in token of the great respect in which he was held, the lectures in the Medical School were suspended on Friday.

Mr. Waters was only thirty-two years of age. He was educated in London, and early in life he spent some time with a view to become an architect; but he also showed a distinct bias for scientific pursuits, and chemistry was one of his favourite studies. In 1875 he entered at Christ's College, Cambridge, obtaining an open scholarship in natural science, and graduated in the first class in the Natural Science Tripos of 1878. Professor Foster, of Cambridge, immediately thereafter appointed him one of the Demonstrators of Physiology, a position which he held until 1882, when he was elected Demonstrator of Physiology in Owens College, under Professor Gamgee. In the summers of 1879 and 1880 he studied under Kühne and Ludwig; and in Ludwig's laboratory he completed a research on the vaso-motor nerves of the frog. He was afterwards appointed Assistant-Lecturer on Histology. In the interval between the resignation of Professor Gamgee and the appointment of Professor Stirling, Mr. Waters delivered the winter courses of lectures on Physiology, and had the entire direction of the department.

Mr. Waters was beloved by all who knew him, and highly esteemed by students and colleagues alike; and the more one knew of him, the stronger did his sterling good qualities appear. An enthusiastic student of science, he had a particular aptitude for the construction of ingenious devices for rendering difficult problems more easy of comprehension; while his knowledge of physiology in its various branches was both accurate and extensive. Whatever he undertook, he did thoroughly well, and his manipulative dexterity was such as few experimenters attain to.

RICHARD FORTH SNAPE, F.R.C.S.Eng.

We regret to record the death of Mr. Richard Forth Snape, which occurred at his residence, Chorley New Road, Bolton, on January 13th. Mr. Snape took up his abode in the town about forty years ago, and some years afterwards became for a time one of the honorary surgeons to the infirmary and dispensary. He early took an interest in the question of the health and long hours of employment of young children and young persons in cotton mills. Along with several other gentlemen, he promoted a demonstration of the inhabitants of the town in favour of petitioning the legislature to pass an efficient Bill for shortening the hours of labour in factories. At the meeting on January 25th, 1847, at which this resolution was adopted, Lord Ashley (afterwards Earl of Shaftesbury) was present. Mr. Snape had for many years before his decease held the post of certifying factory surgeon. He was a staunch Conservative and an ardent member of the Church of England, but abstained from any active share in public affairs, his professional duties requiring most of his time and attention. As a practitioner he was ever anxious to keep himself informed as to the latest discoveries. The kindliness of heart and unaffected simplicity which distinguished Mr. Snape had won for him a large circle of friends, who have heard of his death with sincere regret. He leaves a widow and three sons.

ROBERT DUNLOP TANNAHILL, M.D., F.F.P.S.G., & L.R.C.S.E

Dr. Tannahill, who has been in medical practice in Glasgow for nearly forty years, died on January 12th, at Lenzie, after a lingering illness. He began his professional work as a ship-surgeon, and afterwards settled down first in Kilmarnock, and ultimately in Glasgow. He obtained the Edinburgh license in 1840, the Fellowship of the Glasgow Faculty in 1851, and graduated M.D. of Aberdeen in 1854. In Glasgow he was physician to the Royal Infirmary, afterwards surgeon to the Lock Hospital, and later to the Maternity Hospital and Old Man's Asylum. For ten years he was one of the Faculty examiners. He had retired from active work for nearly a year before his death, which occurred at the age of 76.

A Reuter's telegram from Buenos Ayres states that the epidemic of cholera has greatly abated in Krubuse.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

DETENTION IN WORKHOUSES OF PAUPERS SUFFERING FROM CONTAGIOUS DISEASE.

SIR,—Since the repeal of the Contagious Diseases Acts our workhouse has had to receive women suffering from contagious disease. We are now experiencing the results of the foolish step taken by the misguided class of individuals who were instrumental in the abolition of these humane and preventitive measures.

I have always held that the guardians are not empowered under the 30 and 31 Vic. c. 106, sec. 22, to detain such persons in the workhouse, venereal diseases not coming within the meaning of the Act, such disease only being communicated by the will of the parties suffering from it and not like zymotic diseases without intention.

The guardians of the Medway Union, being anxious to prevent the spread of the disease, asked the Local Government Board for their opinion. The latter replied "that they were not prepared to advise the guardians to detain persons suffering from venereal disease."

There is no law at present to prevent diseased women leaving the workhouse at will and returning the next day if they think proper, as we are obliged to re-admit them whenever they apply. Surely some short Act of Parliament should be passed to empower Boards of Guardians to keep them until they are certified by the medical-officer as recovered, or what will be the results? The master has the power of detaining paupers forty-eight hours under certain circumstances, but destruction of property and broken windows would be the consequence.

I know some medical officers have detained venereal cases against their will, and consequently are liable to an action at law.—I am, Sir, yours, etc.

WALTER BUCHANAN, Medical Officer, Medway Union, etc.
Chatham, Jan. 24, 1887.

THE HOUSES OF PARLIAMENT.

THE insanitary condition of the Houses of Parliament, which has prevailed for more than forty years, and which has been the subject of much comment and protest, has, it may be hoped, been now remedied. Since 1873, when the metropolitan low level sewer was put down through Westminster, and the Palace sewer was connected with it, the Palace sewer and its main branches have been periodically converted into a series of sewage reservoirs; and from these the foul gases, pressed out by the presence of the accumulated sewage, found their way into the Houses of Parliament, where, if there had long since broken out an epidemic of fever, no one acquainted with the facts would have been surprised. The state of things at last became so intolerable, that Parliament had no alternative but to refer the subject to a Committee of the House of Commons. The Committee recommended to Parliament that the plan proposed by Mr. Phillips, a gentleman of large practical experience, on the Shone hydro-pneumatic system, should be adopted, and their recommendations have been substantially carried into effect. Briefly described, the new works consist in improving the gradients of the main sewer and its principal tributaries, in reducing the sizes of the sewers, in providing superior flushing appliances (Shone's automatic hydraulic flushing ejectors) for the sewers, at a considerably reduced expenditure of water; in providing an improved method of ventilating the main sewers; in forming proper connections between the drains and the main sewers, and giving extraordinary facilities for inspection at the junctions; in severing absolutely the large tunnel-like connection between the Palace sewer and the metropolitan low level sewer by means of a dam within the former sewer, and in dispensing with the big cumbrous penstock and flap valve arrangements connected therewith, and substituting for them a small 12-inch iron sewer with sluice and reflux valve; in providing, in case of need, improved automatic arrangements for permitting the Palace sewage and rainfall to flow into the metropolitan low level sewer by gravitation, on the principle heretofore adopted, independently altogether of the ejector system, but without the possibility of the foul gases from the metropolitan low level sewer getting into the Palace sewer; in preventing the hot water and steam from the boilers, etc., from passing into the drains and sewers, and providing a separate and independent outlet for the same into the Thames; and in providing means whereby the sewage and rainfall proceeding from the Houses of Parliament shall flow uninterruptedly therefrom both in dry and wet weather, irrespective of the height at which the metropolitan low level sewer is discharging sewage, or sewage and rainfall in combination. The cost of the works in round figures is a little over £11,000. Perhaps the lesson in improved sanitation may not be lost upon legislators. Mr. Isaac Shone, the engineer, in a pamphlet descriptive of the old and the new main drainage works at the Houses of Parliament, points out that there are salutary legislative enactments having for their object the reduction of fatal accidents in mines and on railways to a minimum, but, in point of numbers, the deaths which occur annually directly traceable to railway and mining accidents are small as compared with the number of deaths which take place every year due directly or indirectly to foul drains and sewers. Because, however, the deaths from the former sources are generally sudden and violent, their character raises public interest, whereas the deaths from the latter cause are to a large extent unknown to the public, and on that account public attention is not aroused with regard to them.

UTILISATION OF SEWAGE.

A plan for the utilisation of sewage, proposed, it is said, by Mr. Astrop, claims the merit of rapidly converting into dusty particles the precipitated sludge of ordinary town sewage. The process may be briefly described as the receiving, into a tank, of the sludge partially solidified by natural and artificial precipitation, the drawing off the superfluous water by attraction into vacuum, the rapid drying and pulverisation of the residuum into a portable yield which, it is claimed, retains a percentage of fertilising properties sufficient to render the commodity of horticultural and agricultural value. It is stated that the sewage of Walthamstow, amounting to 300,000 gallons daily, could be dealt with by Mr. Astrop's machine working one day in the week.

HEALTH OF ENGLISH TOWNS.

IN the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons, 5,640 births and 4,043 deaths were registered during the week ending Saturday, January 22nd. The annual rate of mortality, which had been 26.5 and 24.1 per 1,000 in the two preceding weeks, further declined during the week under notice to 22.8. The rates in the several towns, ranged in order from the lowest were as follow:—Derby, 15.0; Norwich, 15.2; Brighton 15.5; Birkenhead, 18.2; Leicester, 19.0; Oldham, 19.1; Sheffield, 19.3; Salford, 19.8; Bradford 20.2; Bolton, 20.9; Hull, 21.5; London, 21.8; Nottingham, 22.3; Sunderland, 22.5; Portsmouth, 23.1; Birmingham, 23.7; Huddersfield, 24.3; Blackburn 24.6; Cardiff, 24.9; Wolverhampton, 25.2; Bristol, 25.9; Newcastle-upon-Tyne, 26.2; Liverpool, 26.4; Halifax, 26.4; Leeds, 28.4; Manchester, 30.1; Preston, 32.7; and the highest rate during the week, 33.8 in Plymouth. In the twenty-seven provincial towns the death-rate averaged 23.7 per 1,000, and exceeded by 1.9 the rate recorded in London, which, as before stated, was 21.8 per 1,000. The 4,043 deaths registered in the twenty-eight towns during the week under notice included 146 which were referred to measles, 92 to whooping-cough, 62 to scarlet fever, 33 to "fever" (principally enteric), 26 to diarrhœa, 23 to diphtheria, and not one to small-pox; in all, 392 deaths resulted from these principal zymotic diseases, against 475 and 485 in the two preceding weeks. The zymotic death-rate was equal to 2.2 per 1,000. In London the zymotic rate was 1.9, while in the twenty-seven provincial towns it averaged 2.5 per 1,000, and ranged from 0.0 in Birkenhead, in Bolton, and in Halifax, to 4.6 in Preston, 5.1 in Leeds, and 5.8 in Huddersfield. The fatal cases of measles, which had been 235 and 195 in the two preceding weeks, further declined during the week under notice to 146, and caused the highest death-rates in Newcastle-upon-Tyne, Wolverhampton, Liverpool, Leeds, and Huddersfield. The 92 deaths referred to whooping-cough showed a decline of 8 from the number in the previous week, and were proportionally most numerous in Leeds, Manchester, Norwich, and Huddersfield. The fatal cases of scarlet fever, which had been 63 and 82 in the two preceding weeks, declined again during the week under notice to 62, and caused the highest death-rates in Norwich, Sheffield, and Plymouth. The 33 deaths referred to different forms of fever showed a decline of 15 from the number in the preceding week, and caused the highest proportional fatality in Cardiff. The 26 deaths from diarrhœal diseases showed a decline from recent weekly numbers. The fatal cases of diphtheria, which had been 21 and 31 in the two previous weeks, declined last week to 23, and included 13 in London, 2 in Liverpool, 2 in Portsmouth, 2 in Manchester, and 2 in Preston. No fatal case of small-pox occurred during the week under notice, either in London or in any of the twenty-seven provincial towns, and only 4 small-pox patients were under treatment in the Metropolitan Asylum hospitals during the week ending Saturday, January 22nd. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 6.6 per 1,000, and was slightly below the average. The causes of 93, or 2.3 per cent. of the 4,043 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, January 22nd, 848 births and 591 deaths were registered in the eight principal Scotch towns having an estimated population of 1,299,000 persons. The annual rate of mortality, which had been 29.9 and 26.1 per 1,000 in the two preceding weeks, further declined to 23.7 during the week under notice, but exceeded by 0.9 per 1,000 the mean rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 9.7 in Perth, 15.8 in Leith, 16.8 in Dundee, 21.2 in Greenock, 22.6 in Aberdeen, 23.1 in Edinburgh, 27.7 in Glasgow, and 30.8 in Paisley. The 591 deaths registered during the week under notice in these Scotch towns included 64 which were referred to the principal zymotic diseases, against 94 and 71 in the two preceding weeks; of these, 20 resulted from whooping-cough, 16 from scarlet fever, 8 from measles, 8 from diphtheria, 7 from diarrhœa, 5 from "fever," and not one from small-pox. These 64 deaths were equal to an annual rate of 2.6 per 1,000, which slightly exceeded the mean zymotic death-rate during the same

period in the twenty-eight large English towns. The highest zymotic death-rates in the Scotch towns during the week under notice were recorded in Aberdeen, Perth, and Glasgow. The fatal cases of whooping-cough, which had been 27 and 25 in the two preceding weeks, further declined to 20, of which 14 occurred in Glasgow, 3 in Edinburgh, and 2 in Aberdeen. The deaths referred to scarlet fever, which had been 13 in each of the two previous weeks, rose during the week under notice to 16, and included 9 in Glasgow, 3 in Aberdeen, 2 in Edinburgh, and 2 in Paisley. The 8 fatal cases of measles showed a further decline from recent weekly numbers, and included 7 in Glasgow. The deaths from diphtheria, which had been 12 and 5 in the two previous weeks, rose again during the week under notice to 8, all of which occurred in Glasgow. The 7 fatal cases of diarrhœa were fewer than in any recent week. The deaths referred to different forms of fever, which had been 7 in each of the two preceding weeks, declined during the week under notice to 5, and included 2 in Edinburgh, and 2 in Dundee. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 6.8 per 1,000 during the week, against 6.6 in London. The causes of 70, or nearly 12 per cent., of the 591 deaths registered in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending Saturday, January 22nd, 485 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 29.1 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 25.8; Belfast, 23.2; Cork, 30 5; Drogheda, 33.8; Dublin, 31.5; Dundalk, 17.6; Galway, 16.8; Kilkenny, 16 9; Limerick, 37.8; Lisburn, 24.2; Londonderry, 33.9; Lurgan, 51.3; Newry, 24.6; Sligo, 38.5; Waterford, 30.1; Wexford, 38.5. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.0 per 1,000, the rates varying from 0.0 in ten of the districts to 16.0 in Londonderry; the 19 deaths from all causes registered in that district comprising 9 from measles. Among the 100 deaths from all causes registered in Belfast are 2 from scarlatina, 3 from whooping-cough, and 3 from diarrhœa. The 4 deaths in Dundalk comprise 1 from enteric fever. In the Dublin Registration District, the births registered during the week amounted to 219, and the deaths to 218. The deaths represent an annual rate of mortality of 32.2 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 31.5 per 1,000. There were but 15 deaths from zymotic diseases registered, being 19 below the average for the corresponding week of the last ten years, and 8 under the number for the week ended January 16th; they comprise 4 from scarlet fever (scarlatina), 1 from whooping-cough, 1 from diphtheria, 1 from ill-defined fever, 6 from diarrhœa, etc. The number of deaths from diseases of the respiratory system registered is 51, being 14 under the number for the preceding week, and 7 below the average for the third week of the last ten years; 41 of the 51 deaths were caused by bronchitis, and 6 by pneumonia or inflammation of the lungs. The deaths of 17 children (including 11 infants under 1 year old) were ascribed to convulsions. Twelve deaths were caused by diseases of the brain and nervous system (exclusive of convulsions), and 20 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 25 deaths, mesenteric disease 5, and cancer 3. Ten accidental deaths were registered. In 45 instances, the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending January 22nd, that the annual death-rate recently averaged 32.2 per 1,000 in the three principal Indian cities; it was 20.8 in Bombay, 33.4 in Calcutta, and 41.3 in Madras. Cholera caused 94 deaths in Calcutta in the week ending December 11th, against 117 and 107 in the two preceding weeks; the deaths in Madras included 57 from diarrhœal diseases; and "fever" mortality showed a considerably larger excess in Calcutta and Madras than in Bombay. According to the most recently received weekly returns, the annual death-rate averaged 29.7 per 1,000 persons estimated to be living in twenty-one of the largest European cities, and exceeded by 3.9 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 31.7, and exceeded the rate in preceding weeks; the 564 deaths included 20 from "fever," 11 from diphtheria, and 7 from small-pox. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 23 3, and ranged from 21.7 in Stockholm to 24.2 in Christiania; diphtheria and croup caused 15 deaths in Copenhagen, 7 in Stockholm, and 6 in Christiania; 3 fatal cases of scarlet fever were also reported in Christiania. In Paris, the death-rate was equal to 25.6, differing but slightly from the rate in the previous week, but exceeding by 2.6 the rate for the corresponding week in London; the deaths included 47 from measles, 37 from diphtheria and croup, and 24 from typhoid fever. The 176 deaths in Brussels, of which 4 resulted from "fever," gave a rate of 33.0. The usual return from Geneva does not appear to have come to hand. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 24.1; the several rates ranging from 21.4, in the Hague, to 28.1 in Rotterdam; the deaths in Amsterdam included 5 from diphtheria and croup, and those in Rotterdam 4 from scarlet fever. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 26.4, and ranged from 21.4 and 21.6 in Berlin and Dresden, to 35.3 in Breslau, and 36.4 in Hamburg. Small-pox caused 31 deaths in Buda-Pesth, "fever" 20 in Hamburg, and scarlet fever 11 in Buda-Pesth; diphtheria and croup showed the largest excess of mortality in Dresden, Hamburg, Prague, and Buda-Pesth. The mean death-rate in three of the largest Italian cities was 28.3, the several rates ranging from 26.8 in Rome to 29.7 in Venice; small-pox caused 13 deaths in Rome and 1 in Venice, diphtheria 6 in Rome and 9 in Turin, and "fever" 6 in Turin and 5 in Rome. The death-rate was equal to 40.9 in Cairo, and 37.6 in Alexandria; diarrhœal diseases caused 100 deaths in Cairo and 53 in Alexandria; 14 deaths from typhoid fever occurred in Cairo, and 4 from diphtheria in Alexandria. In four of the largest American cities, the recorded death-rate averaged 25.6, and ranged from 16.6 in Baltimore to 28.0 in New York. Diphtheria and croup caused 41 deaths in New York, 30 in Brooklyn, 28 in Philadelphia, and 5 in Baltimore. 11 deaths from typhoid fever were recorded in Philadelphia, and 1 in Baltimore.

PROFESSOR HALLA, editor of the *Prager Vierteljahrsschrift*, died on January 12th at the age of 73.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the Diploma were admitted Members of the College at a meeting of the Court of Examiners, on January 20th, namely:

H. Hebblethwaite, Bradford, C. Nicholson, York, and R. W. Green, Leeds, students of Leeds General Infirmary; F. H. Taylor, Pyeland Road, N., and R. Hitchings, South Hackney, of London Hospital; M. G. Yunge-Bateman, Folkestone, L. H. Brown, Stamford Hill, C. S. Simpson, West Kensington, T. W. Turtle, Woodford, Essex, F. T. Frost, Bromley, J. S. Grose, Wadebridge, Cornwall, Lewis Powell, Crouch End, N., H. E. Charles, Swansea, and J. F. Rymer, "Pevensey," Croydon, of Guy's Hospital; W. Balgarnie, Scarborough, of St. Bartholomew's Hospital; J. Beadle, Middleton-in-Teesdale, and J. J. W. Farr, Earl's Court Road, of Charing Cross Hospital.

Four candidates were referred for three months, and 11 for six months. Three candidates passed in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members.

Admitted on January 21st.

H. Gravely, L.S.A., Lewes, Sussex, A. P. Blenkinsop, L.R.C.P.Lond., 30, Hilldrop Crescent, N., W. R. Garrould, L.R.C.P.Lond., The Gables, Willesden Park, and E. R. St. Clair Corbin, M.B.Lond., 200, Stanhope Street, N.W., students of University College; J. Walls, L.S.A., Chapel Green, Wigan, of Manchester Royal Infirmary; A. L. Marshall, L.S.A., Leicester (of Cambridge (Addenbrooke's Hospital); R. W. Walsh, L.S.A., Shadwell, E., W. H. B. Brock, Lincoln, and C. P. Crouch, 35, Fellows Road, Hampstead, of St. Bartholomew's Hospital; E. B. Harris, L.S.A., Stoke Newington, S. Bueno de Mesquita, St. Mark's Street, E., and A. H. Williams, 9, Park Road, New Cross, of Guy's Hospital; H. P. Helsham, L.R.C.P.Lond., 35, Kirkdale, Sydenham, and L. A. Bidwell, L.S.A., 34, Lea Terrace, Blackheath, of St. Thomas's Hospital; J. D. Staple, L.S.A., Bayswater, of Westminster Hospital; R. J. Hamilton, 1, Princes Road, Liverpool, of the General Infirmary, Liverpool.

Two candidates were referred for three months, 9 for six months, and 1 for nine months. Five candidates passed in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members.

Admitted on January 24th.

T. A. V. Ford, L.S.A., Clifton, Bristol, G. C. FitzGerald, M.B.Camb., West Dulwich, students of St. Thomas's Hospital; W. M. Abbot-Anderson, M.B.Durham, Endsleigh Gardens, G. McShane, L.R.C.P.Lond., Southsea, F. P. Kitson, L.R.C.P.Lond., Maitland Park Villas, N.W., and J. Hamel Clapham, of University College; E. G. Browne, L.R.C.P.Lond., 24, Bernard Street, W.C., and W. A. Evelyn, L.R.C.P.Lond., 16, Vincent Square, S.W., of Cambridge and St. Thomas's Hospital; E. T. Cook, L.S.A., Southsea, Hants, and W. R. Duncker, L.R.C.P.Lond., 79, Finsbury Park Road, N., of St. Bartholomew's Hospital; R. Bullock, L.R.C.P.Lond., Warwick, W. A. Loxton, L.R.C.P.Lond., 45, Belgrade Road, Birmingham, of Royal Infirmary, Manchester; J. F. Taylor, L.S.A., Blackheath, and H. T. Evans, Tredegar, of the London Hospital; H. B. B. Greene, Cheltenham, of Belfast, Dublin, Glasgow, and Westminster Hospitals; H. M. Brownfield, Rotherhithe, of Guy's Hospital; E. H. Hicks, L.S.A., Folkestone, of St. Mary's Hospital; W. Griffith, L.S.A., Highgate, of Melbourne, University College, and Middlesex Hospital.

Two candidates were referred for three months, and 10 for six months. Five candidates passed in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members.

Admitted on January 25th.

T. F. Parry, L.K.Q.C.P.I., Liverpool, student of Liverpool Infirmary; H. J. Wheeler, L.R.C.P.Lond., 21, Abingdon Villas, W., H. E. Mann, L.R.C.P.Lond., 59, West Cromwell Road, Kensington, and G. De V. Belson, L.R.C.P.Lond., 6, Albion Street, W., of St. George's Hospital; W. D. Calvert, L.R.C.P.Lond., Colchester, and J. A. Jones, L.R.C.P.Lond., Port Talbot, of London Hospital; J. Telfer Calvert, L.R.C.P.Lond., King's Road, Rochdale, of St. Thomas's Hospital; A. E. Vidler, L.S.A., Rye, Sussex, of St. Bartholomew's Hospital; A. M. Jolly, L.R.C.P.Lond., 4, Oppidans Road, of University College; R. B. Sidebotton, L.R.C.P.Ed., Manchester, of Manchester Royal Infirmary, and Middlesex Hospital; D. T. Key, L.S.A., Trinity Square, S.E., of Guy's and Westminster Hospitals; T. F. Holloway, L.R.C.P.Lond., West Kensington Park, and W. A. Slater, L.S.A., Green Lanes, N., of Guy's Hospital; F. C. Brodie, L.S.A., of Middlesex Hospital.

Two candidates were referred for three months, 3 for six months, 1 for nine months, and 1 for twelve months. Eleven candidates passed in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At meetings of the President and Fellows held on Friday, January 7th; and Friday, January 14th, 1887, the following Licentiates in Medicine of the College, having complied with the by-laws relating to membership pursuant to the provisions of the Supplemental Charter of December 12th, 1878, were duly enrolled as Members of the College.

W. Frazer, F.R.C.S.I., Lic. Med. 1848, Dublin; W. Frazer, M.D. Univ. Dubl., Lic. Med. 1885, Elmhurst, Bournemouth (by examination); J. A. Hanrahan, Lic. Med. 1871, Woodville, Hollymount, Co. Mayo; G. P. L'E. Nugent, M.B. Univ. Dubl., Lic. Med. 1885, Dublin (by examination).

At a quarterly examination for the certificate in Sanitary Science, held on Thursday and Friday, January 13th and 14th, the following candidate was successful:

W. Riddle, M.B. Univ. Dubl.

At the monthly examinations for the licences of the College, held on Monday, Tuesday, and Wednesday, January 10th, 11th, and 12th, the undermentioned candidates were successful.

For the Licences to Practise Medicine and Midwifery.—T. S. Campion, Dublin; H. G. Hughes, Holyhead; H. J. Matthews, Dublin; F. W. Monsell, Dublin; D. J. O'Loghlin, Ennistymon, Co. Clare; T. F. Parry, Liverpool; T. H. Wilson, Londonderry.

For the Licence to Practise Medicine only.—W. H. Haslop, Oldham, Lancashire; J. Schofield, Hawkshead, Lancashire.

For the Licence to Practise Midwifery only.—T. A. Connellan, Carrick-on-Shannon; T. Corkery, M.D., R.U.I., Bruree, Co. Limerick; W. E. MacFeeters, M.D., R.U.I., Raphoe, Co. Donegal.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise on Thursday, January 20th.

Arnold, Francis Sorell, M.R.C.S., 2, Bradmore Road, Oxford.
Blaker, Edward Spencer, M.R.C.S., 30, Marmora Road, Honor Oak, S.E.
Braddon, William Leonard, M.R.C.S., Upton-upon-Severn.
Lake, Richard, L.R.C.P., M.R.C.S., 6, Smith Square, Westminster

MEDICAL VACANCIES.

The following vacancies are announced.

ATHY UNION, Ballylinan Dispensary District.—Medical Officer. Salary, £120 per annum, and £18 per annum as Sanitary Officer, and fees. Applications by January 29th to W. Murphy, Esq., Aughanure, Ballylinan.

BEDFORD GENERAL INFIRMARY AND FEVER HOSPITAL.—Resident Surgeon. Salary, £100 per annum, with apartments and board, etc. Applications by February 3rd to the Secretary.

BIRMINGHAM GENERAL HOSPITAL, Jaffray Suburban Branch.—Resident Medical Officer. Salary, £150 per annum, with board, etc. Applications by January 29th to Henry Fox, Esq., R.N.

CHELSEA HOSPITAL FOR WOMEN, Fulham Road, S.W.—Assistant Physician. Applications by January 31st to the Secretary.

COUNTIES ASYLUM, Carlisle.—Junior Assistant Medical Officer. Salary, £80 per annum, with board. Applications by February 5th to Dr. Campbell, Garland's Asylum, Carlisle.

EYE, EAR, AND THROAT HOSPITAL FOR SHROPSHIRE AND WALES, Shrewsbury.—Surgeon. Honorarium, £150 per annum for three years. Applications by February 8th to the Secretary.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Aural Surgeon. Applications by February 9th to the Secretary.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road.—Two Clinical Assistants. Applications by January 29th to the Secretary.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Surgeon. Applications by January 29th to the Secretary.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Resident Clinical Assistants. Applications by February 19th to the Secretary.

HULL AND SCULCOATES DISPENSARY.—House-Surgeon. Salary, £150 per annum. Applications by February 1st to R. H. Barker, Esq., Temple Buildings, Bowlalley Lane, Hull.

LANCASHIRE COUNTY ASYLUM, Rainhill, near Liverpool.—Assistant Medical Officer. Salary, £100 per annum, with board, etc. Applications by February 7th to the Medical Superintendent.

LIVERPOOL INFIRMARY FOR CHILDREN.—Assistant House-Surgeon. Applications by February 8th to the Honorary Secretary.

LIVERPOOL NORTHERN HOSPITAL.—Assistant House-Surgeon. Salary, £70 per annum, with board, etc. Applications by February 7th to the Chairman of the Committee.

NATIONAL ORTHOPÆDIC HOSPITAL.—Surgical Registrar and Anæsthetist. Applications by February 1st to the Secretary.

NORTH RIDING INFIRMARY, Middlesboro'-on-Tees.—House-Surgeon. Salary, £100 per annum, with board, etc. Applications by February 2nd to the Secretary.

ROYAL BERKS HOSPITAL, Reading.—Assistant House-Surgeon. Board and lodging. Applications by February 8th to the Secretary.

ROYAL PIMLICO DISPENSARY.—Attending Medical Officer. Applications by February 7th to the Secretary, 104, Buckingham Palace Road, S.W.

ST. BARTHOLOMEW'S HOSPITAL.—Assistant Physician. Applications by February 8th to W. H. Cross, Esq.

ST. PANCRAS AND NORTHERN DISPENSARY.—Honorary Physician. Applications by February 13th to H. P. Bodkin, Esq., 23, Gordon Street, Gordon Square, W.C.

SANITARY ASSURANCE ASSOCIATION.—Chief Medical Officer. Applications by January 31st to the Secretary, 5, Argyll Place, Regent Street, W.

WORCESTER GENERAL INFIRMARY.—House-Surgeon. Salary, £100 per annum, with board and residence. Applications by February 7th to the Secretary.

MEDICAL APPOINTMENTS.

ANDERSON, J. O., M.D., appointed Examiner in Clinical Medicine to the University of Edinburgh, *vice* B. Brom Brunwell, M.D., resigned.

CAUSH, D. E. N., L.D.S. Dubl., appointed Honorary Surgeon-Dentist to the Brighton, Hove, and Preston Dispensary, *vice* W. L. Poundall, L.D.S. R.C.S. Eng., resigned.

CHEYNE, W. Watson, M.B., F.R.C.S., appointed Examiner in Surgery to the University of Edinburgh, *vice* J. D. Gillespie, M.D., resigned.

DEANE, Edward, L.R.C.P., M.R.C.S., late Assistant House-Surgeon, appointed House-Surgeon to the Royal Berks Hospital, *vice* G. A. Shackel, resigned.

GREENE, George Edward Joseph, L.R.C.S. and L.K.Q.C.P., Admiralty Surgeon, Medical Attendant Coastab., and Surgeon Irish Lights, Kilmore, appointed Medical Officer for Ferns Dispensary, Enniscorthy Union.

GREENLEES, Thomas Duncan, M.B.Edin., Second Assistant Medical Officer, the Counties Asylum, Carlisle, appointed Assistant Medical Officer to the City of London Asylum, Stone, Dartford.

HILL, H. Gardiner, M.R.C.S., L.S.A., appointed Senior Assistant Medical Officer, Surrey County Asylum, Cane Hill, Purley, *vice* D. G. Thomson, M.D.Edin., resigned.

HURFORD, Charles, L.R.C.S.I., and L.M., L.R.C.P.Edin., appointed Surgeon to the Epping Union House, Epping, and Medical Officer and Public Vaccinator to the No. 5 District of the Ongar Union, Epping.

HUTCHINSON, A. Cayley, M.B., C.M., appointed Honorary Medical Officer to the Brighton, Hove, and Preston Dispensary, *vice* G. A. Bluett, M.D., resigned.

LITTLE, A. N., M.R.C.S., L.S.A., appointed Third Assistant Medical Officer to the Worcester County and City Lunatic Asylum.

PARRY-JONES, W. R., L.R.C.S., L.R.C.P.Ed., L.S.A.Lond., appointed Medical Officer to the Rhosddu Lodge, N. U. Order of Oddfellows, the Bridge House, Golden Lion, and Bowling Green Tontine Societies, and the Wrexham and District Colliers Tontine Society.

PATON, D. Noel, M.D., appointed Examiner in Physiology to the University of Edinburgh, *vice* Richard Caton, M.D., resigned.

PATRICK, Robert, M.D.Dur., M.R.C.S., appointed Certifying Surgeon under the Factories Act, Bolton District.

PHILLIPS, C. D. F., M.D., appointed Examiner in Materia Medica to the University of Edinburgh, *vice* W. Murrell, M.D., resigned.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—MEDICAL SOCIETY OF LONDON, 8.30 P.M.: Dr. J. Langdon Down (Third Lettsomian Lecture): On some of the Mental Affections of Childhood and Youth.

TUESDAY.—PATHOLOGICAL SOCIETY OF LONDON, 8.30 P.M. Mr. Bland Sutton: Genito-Urinary Diseases of Animals. Mr. D'Arcy Power: A Neglected Point in the Pathology of Colles's Fracture. Dr. Griffith: Extra-uterine Fœtation. Mr. Bruce Clarke: Subperitoneal Rupture of Bladder. Dr. Barling: Tubercular Tumour of Brain. Mr. Bilton Pollard: Multiple Perforative Necrosis of Skull, of Tubercular Origin. Dr. W. Edmunds: Horny Growth on the Hand.

WEDNESDAY.—OBSTETRICAL SOCIETY OF LONDON, 8 P.M. Specimens will be shown. Dr. Gibbons: Case of Unilateral Galactorrhœa. Annual Meeting: Election of Officers and Council. The President (Dr. Potter) will deliver the Annual Address.

THURSDAY.—HARVEIAN SOCIETY OF LONDON, 8.30 P.M. Mr. G. Buckston Browne: The Position and the Value of the Operation of Internal Urethrotomy. Sir W. MacCormac: The Suprapubic Operation in its application to Stone in Children.

FRIDAY.—WEST LONDON MEDICO-CHIRURGICAL SOCIETY, 8 P.M. Living Specimens.—Mr. Keetley: (1) A Case of Arterio-Venous Aneurysm of Cavernous Sinus (?) after treatment by Compression; (2) A Case of Cholecystotomy. Card Specimens.—Mr. H. Percy Dunn: (1) A Large Intussusception from a Child; (2) Tuberculosis of the Spleen from a Child of three months; (3) Extensive Rupture of the Duodenum following a Kick from a Horse. Papers.—Dr. Thudichum: On the Nature and Operative Treatment of Hypertrophies and Tumours of the Nasal and Pharyngeal Cavity. Dr. Campbell Pope (for Dr. C. Suckling): A Case of Acute Multiple Neuritis following Diphtheria, and one of Unilateral Progressive Facial Atrophy.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 5s. 6d., which should be forwarded in stamps with the announcement.

BIRTHS.

BALDING.—On January 24th, at Dane House, St. Albans, the widow of Mortimer Balding, M.D.Cantab. (who died on November 23rd, 1886) of a son.

BECK.—January 25th, at Fitzroy House, Botanic Avenue, Belfast, the wife of Dr. Fred E. Beck, of a daughter.

OMAN.—At 4, Strada Mezzodi, Valletta, Malta, on January 18th, the wife of N. Oman, Esq., M.D.Edin., of a daughter.

MARRIAGES.

JESSOP—ROGERS.—On January 27th, at St. Pancras Parish Church, by the Very Rev. the Dean of Gloucester, assisted by the Rev. J. E. Rogers, Vicar of St. Peter's, Tunbridge Wells, Edward Jessop, M.R.C.S., L.R.C.P., of Bridgegate, Retford, to Ada, youngest daughter of Thomas Arnold Rogers, of 23, Endsleigh Street, Tavistock Square.

PRAIN—THOMSON.—At Calcutta, on January 24th, David Prain, Surgeon, I.M.S., to Margaret, second daughter of the Rev. W. Thomson, M.A., Minister of Bellelvi, N.B.

SIMON—WILLANS.—On January 26th, at Christ Church, Lancaster Gate, by the Rev. Canon Fleming, B.D., assisted by the Rev. F. C. Cursham, M.A., Vicar of Cropwell Butler, Notts, Robert M. Simon, M.B., M.R.C.P., of 41, Clarendon Road, Edgbaston, Birmingham, to Emily Maud, younger daughter of William Henry Willans, Esq., of 23, Holland Park, Kensington, and Big Clyffe, Seaton, Devon. No cards.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY...10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthal. mic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY...9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, M., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

QUERIES.

DR. A. H. F. CAMERON (10, Sheil Road, Liverpool) is anxious to obtain information as to the working of *crèches*, or day-nurseries, during the last two years, and what effect the depression of trade has had on the attendances. Any information on the general subject will be thankfully received.

THE M.R.C.S. EXAMINATION.

VINDEX writes: A friend of mine recently presented himself for the final examination in surgery. At the *viva voce* examination he was asked to measure for a truss, a feat which he could not perform, as he was neither a tailor nor an instrument maker. He answered five out of six questions in the paper, "spotted" all the pathological specimens shown, and also the "cases." The result was that he has been "referred for six months." The Secretary of the College of Surgeons will not give any definite explanation of this unfortunate event, though my friend is anxious to know if his want of skill with the measuring-tape unfitted him for the duties of a surgeon. The fairness of such an examination I leave to your readers' judgments.

ANSWERS.

STAMMERING.

SURGEON HENRY S. JACKSON, R.N., informs us that Mr. Beasley forwards his book on stammering on application to him at his residence Green Bank House Hall Green, near Birmingham.

DRY BRACING LOCALITIES IN ENGLAND.

BRIGADE-SURGEON R. W. ORTON (Newcastle-under-Lyme) writes: "Blackheathen" might, perhaps, induce his patient to visit Bournemouth, and remain there for some few weeks at least. In a case with which I am acquainted, the patient suffered from painful and irregular evacuations, with hæmorrhoids from time to time, all probably attributable to biliary derangement, if nothing worse, and arising from residence in tropical climes. He was so unwell before winter set in, that he determined to try a milder clime, and went to Bournemouth in November, and stayed till the middle of December. He derived considerable benefit from it, and the good effect has, so far, been lasting. It was sunny, and the soil so quickly dried, that exercise was practicable except when it was actually raining.

DR. LUCAS (Ramsgate) writes: I should advise "Blackheathen" to recommend to his patient to try the climate of Bournemouth, or Torquay or Bath, or a winter trip to India, staying at Cairo *en route* on the return.

DR. J. P. WILLS (Bexhill, near Hastings) writes: In reply to "Blackheathen," I would draw his attention to Bexhill, near Hastings. It is as dry, or drier, than Eastbourne, equally bracing, but not exposed in the same way to the east winds, and while it enjoys the same amount of sunshine as Hastings, it is not at all relaxing. The soil is, for the most part, Tunbridge Wells and Ashdown sand, and the neighbourhood abounds in pretty walks and drives. I should be happy to give "Blackheathen" further particulars.

DETECTION OF TUBERCLE BACILLI.

CAREY COOMBS, M.D., writes: In addition to the instructions given by Dr. Hamill in the JOURNAL of January 15th, I would recommend that the magenta solution be held over the spirit lamp for two or three minutes, while the cover glasses are immersed. Fifteen to twenty minutes are needed for effectual staining when the magenta fluid is cold. The washing in distilled water is not of importance, and the immersion in dilute nitric acid should not exceed ten minutes; two or three minutes will usually be enough. I have employed chrysoidin hitherto, acting on the instruction given by Dr. Gibbes in 1882, but this is not material. After drying the cover-glass, I have usually dipped it in absolute alcohol, dried it once more, and dropped on it either dammar varnish, or balsam softened in chloroform. The whole process need not occupy more than half an hour, of which only fifteen minutes are taken up in the manipulations.

Mr. Watson Cheyne tells me that it is better to omit the use of alcohol before the balsam is placed on the cover-glass. I have a $\frac{1}{12}$ immersion with which the spores in the bacilli can be seen; but, in well stained preparations, the bacilli can be seen with a good $\frac{1}{4}$ inch, with B or C eyepiece. The substage condenser is most useful in work of this kind. Mine consists of two plano-convex lenses in a brass mount, which slips into the ring on the under side of the stage.

D. H. G. writes: Thanks to Dr. H. Gibbes, "M.B." will find the staining of tubercle bacilli very simple, and only occupying about ten minutes. Procure from Beck and Beck, Cornhill, a bottle of their double stain (cost one shilling) with full directions on it, but I would advise the fluid being at once warmed in the watch-glass over the spirit-lamp. I have also found it best to spread with a needle the sputum over the cover-glass evenly as thin as possible; if rubbed between two glasses it is apt to be lumpy.

PULSATILLA.

MR. GERARD SMITH writes with regard to the advice of Dr. Brunton to use pulsatilla for orchitis, that in his text Dr. Brunton says under "Pulsatilla" that "its therapeutic value is not great," and that it is "supposed to be a disphoretic and emmenagoge"; but, in his *Indexes of Diseases and Remedies*, he gives pulsatilla in small doses for epididymitis (not orchitis only, as I had supposed). As a fact, a large section of the profession have used this drug successfully for many years in orchitis; but, never having heard of a report of such success in the JOURNAL, I thought it well to call the attention of the readers to it. I may mention that pulsatilla also inflames, or at least acts specifically upon the ovaries, producing pain and throbbing, with dysmenorrhœa, for which disorder it is often found to give great relief.

HOOKLESS CYSTICERCUS IN MAN.

DR. JOHN LUCAS (Ramsgate) writes: With reference to this subject, I desire to note that I have noticed these in Upper Burmah, in Europeans as well as in natives, and ascribed it to the eating of affected beef.

A CORRESPONDENT writes: In reply to "Aliquis" in the last JOURNAL, I would suggest that any letter under cover to Sir C. R. McGrigor, Bart., '25, Charles Street, St. James's Square, London, would be duly forwarded to Surgeon General R. Bowen.

ANOTHER CORRESPONDENT writes that a letter addressed to care of Director-General, A.M.D., to be forwarded, would find Surgeon-General R. B. Army lists do not give any information about officers on non-effective list.

E. MAUER.—There is not, so far as we learn, any good ground for stating that the degrees of the Royal University of Ireland are at all above the standard to which ordinary medical education does, or ought, to conform.

J. P. D.—A regulation of the same nature as that which our correspondent criticises is very usually enforced at learned societies.

NOTES, LETTERS, ETC.

ALOPECIA.

F.R.C.S. writes: With reference to a letter from "M.D." in the JOURNAL of January 15th, perhaps my personal experience of lanoline would be of interest. My age is about 72, and my hair, which is generally nearly black, became much thinner during the past year than it had usually been. From excessive brushing, the scalp became affected with seborrhœa capitis, which easily yielded to the ung. hydr. precip. alb, prepared with lanoline. As soon as the skin became healthy the hair has grown freely, and become a comparatively thick crop. [It is always desirable to specify Liebreich's lanolin; some of the lanolin in the market is badly prepared, and has an offensive smell.]

SIX-FINGERED PERSONS.

W. E. C. NOURSE, F.R.C.S. (Exeter) writes: Instances of six-fingered persons seem to be not rare. Many years ago I attended in her confinement a patient who, before she saw her child, inquired whether it had six fingers. She said that several of her relations (I now forget which) had this peculiarity. The child had a supernumerary little finger on each hand. I removed the extra fingers with scissors almost immediately, as, if done at once, as soon as the infant's life is sufficiently vigorous, very little pain is felt, and the operation, done by incision, not ligature, is trifling, and leaves almost no mark. A few miles from this patient's residence, I noticed a man with supernumerary thumbs.

THE ORIGIN OF HEPATIC PUNCTURE AND PHLEBOTOMY AS DIRECT CURATIVE AGENTS.

DR. D. H. CULLIMORE (Welbeck Street) writes: In a previous communication, published in May last, as well as in some remarks made at the Brighton meeting of the Association, I stated that in my opinion the credit of introducing hepatic puncture and phlebotomy into European practice is due to Dr. George Harley; and to this opinion, notwithstanding the recent letters of Drs. Ryan, Quill, and Buxton, I am still inclined to adhere. As regards puncture, it is necessary to understand the subject, to draw a line of demarcation between puncture for the purposes of exploration in cases of suspected abscess or hydatid disease, as practised with varying fortunes since Murray, in Bengal, suggested its use in 1842; and puncture as a direct curative agent when there is no suspicion of these latter affections. To this *ipso facto* curative operation I proposed, in May last, the name of hepatic acu-puncture, in contradistinction to hepatic exploration—the proper term, when abscesses, hydatids, or gall stones are sought for. It is to the operation of exploration that all writers previous to Harley refer; for though curative effects are said to follow its use, it was invariably in search of pus that the operation was originally had recourse to. Even yet the difference is not understood. Thus Dr. Buxton says, when probing with the aspirator for abscess, though unsuccessful in hitting the abscess, there was a decided diminution in the size of the liver. This being so, then the credit of puncturing the liver as a curative agent (hepatic acupuncture) is due to Dr. Harley, who says: "As soon as the liver is not only enlarged but hardened, owing to the pressure to which its inflamed tissues are subjected, as the result of engorgement and confinement within its inelastic capsule, I know of no more effectual way of giving relief than by puncturing the capsule of Glisson." The practice of puncturing by the Chinese is at least somewhat mythical, and so little understood, that it has no bearing on the question. Dr. Gordon, in his work on *Chinese Medicine*, does not mention it. It is not to be found in the Chinese reports. Dr. McCrea never heard of it, and does not think it is done in China, and Dr. Johnstone says he never punctured the liver in that country.

As regards phlebotomy, the state of affairs is similar, good results followed depletion previous to the publication of Harley's case, but they would appear to be always incidental to, and associated with, probing for abscess. Dr. Harley, on the other hand, practised it as a direct curative operation, as evidenced by the nature of the case operated on, the long trocar used, the quantity of blood taken away, and also the theory on which it was based; namely, the absence of communication between the vessels of the liver, and those of the adjacent integuments. Thus, one of the cases mentioned by your correspondent was clearly of this character, while with regard to the others, the nature of the cases (acute hepatitis), the many punctures and the small quantity of blood taken away, seem to show that in them also abscesses were suspected. If Dr. Maclean therefore taught and practised depletion as a curative agent, apart from the incidental withdrawal of blood, the fact should be made plain, for few are aware that he did so. Even Dr. Moore, in his late work, gives the credit to Dr. Harley.

CHLORIDE OF AMMONIUM *v.* EXPLORATORY INCISIONS IN INFLAMMATORY DISEASES OF THE LIVER.

W. ALEXANDER, M.D., Brigade-Surgeon, writes: Such was the heading of a communication from me which appeared in the JOURNAL of December 4th, 1886, inviting the attention of the profession to a method of treatment of inflammatory enlargements of the liver, which had proved eminently satisfactory in Southern India and Burmah, where such conditions are common, and also in this country in my own hands.

The method of treatment is not new, neither do I claim to be the originator of it; but that it is not generally known in this country is, I think, a fact.[1] I quoted from records published in the *Monograph* by Dr. Stewart, adding my own testimony to the efficacy of the treatment so carefully described by him, which, if faithfully followed, would render exploratory incisions, tapping, or puncture with trochar, in the majority of cases, as unnecessary as undesirable. I can see nothing in my letter which Dr. George Harley should object to, neither can I see anything in it which would justify him in considering that it, in common with others he refers to, was written solely for the purpose of depriving him of the credit of being the first who ventured to employ "hepatic phlebotomy" as a remedial agent.

The subject matter of my letter differed widely from that expressed by the other "army men" to whom Dr. Harley refers in his paper of January 15th, and it would appear to me evident (possibly because it was in small type) that he did not read it, else he would have seen that in it there was no allusion either to him or his mode of procedure, and would have hesitated to assert that Dr. Boyes Smith, and Surgeons Alexander, Ryan, and Quill, all army men, had fallen into the error of confounding his operation with others he speaks of. I venture to hope that it was not that petty jealousy which is so prevalent, and which renders the profession of medicine so contemptible in this country, which caused Dr. George Harley to write so contemptuously of fellow workers in medicine and seekers after truth, refraining from giving them either the title which they hold in common with himself, or the rank conferred on them in the public service, contenting himself by describing them as "army men."

That my remarks on the treatment of hepatic affections by the use of chloride of ammonium should have been so misunderstood or misinterpreted, I am at a loss to understand. I will leave to others to justify and explain their own statements if they consider it desirable, contenting myself by remarking that I heard the operation of relieving congestion of the liver by tapping discussed in Southern India more than a dozen years ago, when it was put in practice as a remedial agent by "army men"; but whether the operation fell into disuse after the introduction of the chloride of ammonium treatment I am unable to say.

[1] In the BRITISH MEDICAL JOURNAL of October 9th, 1886, a case of cirrhosis of the liver is recorded in which an eminent physician in London suggested hydrochlorate of ammonia, in conjunction with beer at lunch and grog at night.

SUNSHINE AT UNDERCLIFF (ISLE OF WIGHT) AND KEW IN 1886.

MONTHLY summary of bright sunshine at the Undercliff compared with that recorded at Kew.

	Undercliff. Hs. Ms.		Kew. Hs. Ms.
January	59 43	.....	43 30
February	60 21	.....	32
March	137 23	.....	74
April	172 20	.....	135 30
May	153 57	.....	150
June	242 43	.....	257
July	222 56	.....	201
August	167 58	.....	149
September	200 54	.....	179 30
October	107 29	.....	73
November	73 01	.....	44
December	80 25	.....	76 30
	1679 10		1415

Note.—It should be borne in mind that the foregoing tables contain the record only of bright sunshine, and do not include days which might otherwise come under the head of bright and sunny days—haze or mist or the passing of a light cloud arresting the power of the recording-instrument.

With regard to the Undercliff, some allowance must also be made, in consequence of its falling into shade between 6 and 7 in the evening during the summer months, and thus depriving the instrument of a considerable amount of sunshine, which would otherwise be recorded in fine weather. There is also the same loss from the sun rising in the morning behind the high ground of Dunnose.

UNQUALIFIED ASSISTANTS.

QUALIFIED writes: I hope you will allow me the favour of some space in your JOURNAL to make a few remarks concerning a letter signed "Probe," which appeared in the JOURNAL of January 15th.

If this gentlemen's ideas were put into practice, we might as well at once dispense with all qualifying examinations, which it would appear from the writer's remarks are not only useless, but also absolutely prejudicial to a practical knowledge of our profession, and inaugurate a happy era of wholesale homicide.

Perhaps "Probe" has reasons of his own for disparaging men who "have distinguished themselves in legally qualifying examinations," and the "Doctor of Medicine," the "polished scholarly man," and the others of whom he speaks with such contempt, were acting as covers to professional ignorance. Certainly if his knowledge of medicine is as limited as that of the English language, there was every reason why the "industrious" assistants should bring their superior "competence to bear in comparison of his inferior attainments;" and the "polished scholarly man" might well be excused for being unable to read one of the prescriptions of this ungrammatical scribe. The petty and trivial tone of "Probe's" letter shows itself most in the concluding lines, in which he leaves the reader to infer that he prefers unqualified to qualified assistants, on the ground that the latter would soon, by their superior knowledge, deprive him of such patients as he happened to have.

EXPERIENTIA writes: The question as to whether unqualified men are in future to act as if qualified is one that will be decided shortly, and, with very little doubt, in the negative. No doubt vested interests will be respected, but it is not going too far to say that unqualified practitioners will cease to exist with the present generation. Would it not, therefore, be well to revive the old system of pupilage? My own experience is much in its favour. I began my career as a pupil, and when I entered the schools in Dublin, I could bleed from vein or artery, cup, leech, administer an enema, extract teeth, tap a hydrocele, put up a fracture, etc. Moreover, the diagnosis and general treatment of scarlet fever, smallpox, measles, typhoid and typhus fevers, were all familiar to me; I saw little of them after as a student. In return for all this information, I dispensed all my master's medicines at the dispensaries, poor-house, and fever hospital under the Irish poor-law system. Thus each received a *quid pro quo* without any pecuniary considerations. Without a pupil, my master would have had to keep a salaried dispenser, for although as a private practitioner he had nothing to do with drugs, yet, as medical officer under the poor law, he was responsible for the dispensing in the various establishments referred to, and my services were considered quite an equivalent for the instruction I received. As it happened, I was forced to acquire the art of dispensing by spending a few hours daily for a short time in the "surgery" of a friend, but in English practice such a preliminary step would be needless, as most general practitioners dispense their own medicines, and could consequently instruct their pupils in the art.

Unqualified Medical Practice in Glasgow.

J. J. writes: Amongst the numerous letters on unqualified practice which have lately appeared in the columns of your valuable JOURNAL, I have seen none commenting on a form of that evil which prevails here to a considerable extent. I refer to the employment, by the medical officer of health, of unqualified men in medical inspection. These men, sanitary inspectors, in addition to their ordinary duties, examine sick persons, diagnose cases, and remove them to the fever hospital without putting any medical man to the trouble of seeing or certifying. Now this system may be convenient and cheap, but I submit that it is not just to the poor portion of the public, on whom alone it is practised, nor to the profession, neither is it worthy of a rich and enlightened community like Glasgow to effect the paltry saving of a medical fee by the encouragement of unqualified practice in what appears to me to be one of its worst forms.

A Qualified Assistant's Wages.

E. B. S. writes: I quite agree with your correspondent, "F. T. S.," in his remarks on the advertisement in a medical paper from a physician, for a qualified medical assistant who, in addition to working morning and afternoon in the surgery, and doing midwifery at night, was expected to act as tutor to the advertiser's two children, for three hours daily, for the handsome remuneration of £30 per annum and half midwifery fees. I am pleased to think that this generous physician will be some little time filling up the vacancy in his household. As I notice that an advertisement, evidently from the same person, was in a medical paper of December 4th, 1886. Here the advertiser makes it a *sine quâ non* that the assistant should be a university man in addition to his other qualifications. Surely no words are too strong to condemn offers to a qualified (university) member in our profession of a salary which an ordinary plain cook would refuse with scorn.

Treatment of Bilious Headache.

Dr. C. R. Illingworth writes: Speaking from a bitter personal experience of bilious headache, I find the biniodide of mercury the best remedy. I give a quarter of a grain in pill at bedtime, or during the day, and repeat it in four or six hours if necessary.

The Poisonous Meal near Carlisle.

Dr. Richard Lowther writes: It may not have occurred to those engaged in the investigation of this case to direct their attention to the brine or liquor in which the salt beef was boiled to ascertain the absence of septic germs or bacilli in that fluid. Books on cookery state that the pickle will keep good for a considerable time, and may be repeatedly used to pickle meat, providing it be boiled up occasionally, and a little salt added. If the pickle or liquor had become tainted from age, or inattention to the above instructions, is it not possible it might teem with septic bacilli, which would make the meat highly dangerous? We know that the temperature of boiling water is not sufficiently high to destroy certain septic germs in certain stages of their development.

Singular Example of Arrest of Development.

A Correspondent sends us the following notes of a case which came under his notice.

When a student in connection with a maternity hospital in Scotland recently, he was called to attend an out-door midwifery case. The patient was a multipara, and after a short first stage, extending about fifty minutes or an hour, a very powerful uterine contraction brought the child into the world, and this was followed, almost without a pause, by the expulsion of the placenta. The mother believed herself to have reached full time, and the size and weight of the infant were only to a very slight extent less than those of an average child born at full time. The limbs were perfectly developed, and the head and face were normal, except that the right side was possibly a little larger than the left. The thorax and abdomen, however, presented a rather singular appearance. The sternum was totally absent, and the ribs, whilst quite normal behind, only came forward to what should have been the vertical line of the nipple. The integuments of the thorax also stopped short at that line, so that the thoracic cavity was quite open in front. The lungs were collapsed, and occupied the back part of the chest. The heart was in the usual fœtal position, and beating vigorously, and its action could be thoroughly observed. The diaphragm was incomplete in front in the neighbourhood of the middle line. The abdomen was still more patent than the thorax, its integuments coming forward only to the anterior superior spinous profess of the ilium below, and the end of the false ribs above. The chief abdominal viscera were well developed with the exception of the bladder and the pelvic portions of the sexual apparatus, which were either entirely absent, or so small as to escape detection. The liver was of large size, and its "ligaments" so much lengthened, that it rested between the thighs of the child. The anus was absent, and no traces of external genito-urinary organs were to be seen. The body, with the placenta attached, was laid close to the fire, and for the long period of sixty-five minutes, without any other visible sign of life, the heart continued to pulsate, growing slower and more feeble until at length it stopped. It is much to be regretted that it was found impossible to obtain the body for examination.

H. R. Ruckley.—The suggestion has been handed to the managers of the meeting.

Erratum.—In announcing the appointment of Mr. Oliver as Junior House-Physician to Charing Cross Hospital in the JOURNAL of January 8th, the name was erroneously given as "W. Pye Oliver" instead of "C. Pye Oliver."

Erratum.—Dr. James Blake desires to call attention to an error in his memorandum on the Open-Air Treatment of Consumption, which was published in the JOURNAL of January 15th. The death-rate from consumption of the Indian children in California when brought up in the ways of civilised life is given as 5 per cent. instead of 65 per cent.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Edwardes, London; Dr. F. Warner, London; Dr. Creighton, London; Dr. R. J. Orton, Newcastle-under-Lyme; Mr. T. Horne, Stockton-on-Tees; Mr. E. T. Thompson, Coventry; Mr. A. Stewart, Stoke-on-Trent; Mr. S. J. Moody, Bingham; Dr. A. F. Bampton, Plymouth; Mr. F. W. Chandler, Derby; Dr. Pye-Smith, London; Dr. Balfour, Edinburgh; Mr. R. Clement Lucas, London; Dr. J. Lucas, Ramsgate; Dr. C. J. White, Rochester; Dr. S. Dickey, Belfast; Dr. J. Carrick Murray, Stranraer; The Secretary of the Sanitary Committee, Exeter; Dr. J. Langdon Down, London; Dr. H. H. Ashdown, Edinburgh; Dr. Joseph Rogers, London; Mr. A. Lloyd, Rhyl; Mr. R. L. Head, Wimbledon; Dr. A. Teevan, Ballarat, Victoria; Mr. J. E. Gabb, Cheltenham; Mr. W. N. Risdon, South Norwood; Mr. J. F. Herring, Atherstone; Dr. Philips, Edinburgh; Dr. Goodhart, London; Mr. W. Buchanan, Chatham; Dr. H. Hamilton, London; Dr. Horace Dobell, Bournemouth; Staff-Surgeon A. W. Russell, Kingstown; Mr. W. A. Evans, Wolverhampton; Dr. Oman, Valetta, Malta; Mr. W. Smith, Edinburgh; Dr. J. Beddoe, Bristol; Mr. A. C. Dutt, Morpeth; Professor Stirling, Manchester; Mr. F. W. Gregson, Blackburn; Mr. A. F. Mickle, London; Dr. E. B. Smith, Twickenham; Mr. E. Deane, Reading; Mr. W. Sykes, Mexborough; Mr. G. Smith, London; Dr. C. Haig Brown, Godalming; Mr. R. A. Doyne, Oxford; Dr. H. J. Branfoot, Brighton; Mr. W. Blackett, London; Mr. M. Jackson, Barnstaple; Dr. W. E. Steavenson, London; Dr. Brailey, London; Dr. H. Orfeur, Torquay; Dr. Hoogenstraaten, Batavia; Mr. W. A. Thomson, Ampthill; Dr. Maxwell, Woolwich; Mr. R. B. Ruddock, Clifton; Mr. O. Andrew, Clifton; Dr. J. P. Wills, Bexhill; Mr. R. Pool, Shrewsbury; Dr. J. W. Moore, Dublin; Dr. Grant Bey, Cairo; Dr. E. Clifford Beale, London; Captain D. Brander, Pitgaveny, N.B.; Dr. M. D. Makuna, Treherbert; Mr. R. C. Harrison, Ealing; Mr. R. Greene, Berry Wood; Dr. J. Blake, London; Mr. F. R. O'Grady, Swinford; Dr. J. Johnstone, Bolton; Mr. W. E. C. Nourse, Exeter; Mr. H. C. Barnett, Fremantle, West Australia; Mr. H. S. Jackson, Walmer; Mr. J. McLemon, Glasgow; Mr. Watson Cheyne, London; Mr. George Eastes, London; Mr. Lennox Browne, London; Mr. A. C. Dixey, Dover; Dr. T. Pike, Malvern; Dr. G. Harley, London; Mr. J. G. Shea, Chesterfield; Mr. J. Wykes, London; Mr. R. Middlemore, Birmingham; Mr. G. Greene, Kilmore; Dr. T. Clark, Minehead; Dr. Maguire, Wolverton St. Mary; Mr. A. Packman, Sheffield; Mr. W. Jones Morris, Portmadoc; Mr. Whitehead, Manchester; Mr. R. Savage, London; Surgeon L. T. Nash, Dublin; Dr. Tatham, Salford; Messrs. Cassell and Co., London; Dr. H. Tomkins, Leicester; Dr. Coombe, Maldon; Dr. T. F. Grimsdale, Liverpool; Messrs. Street and Co., London; Mr. J. Musworth, Liverpool; Mr. A. W. Mayo Robson, Leeds; The Secretary of the Great Northern Central Hospital, London; Mr. W. L. Cullen, Hawick; Dr. Willoughby, London; Mr. E. Haxell, Brighton; Miss J. Bourne, Coventry; Mr. O. R. Travers, St. Leonard's-on-Sea; Surgeon-General Bowen, Wellington; Mrs. E. Eaton, Leamington; Mr. A. Thomson, Huntley; Messrs. Burroughs, Wellcome, and Co., London; Mr. W. S. Watson, London; Mr. J. Robertson, Edinburgh; Mr. W. H. Greening, London; Mr. W. P. Kiall, Bristol; Dr. D. W. Aitken, Edinburgh; Mr. F. P. Atkinson, Surbiton; Mr. A. G. Barrs, Leeds; Mr. A. H. Griffith, Manchester; The Honorary Secretary of the Association of Members of the Royal College of Surgeons, London; Mr. C. Franklin, Putney; Mr. O. Hehner, London; Dr. Railton, Manchester; Dr. Barnardo, London; Mr. P. S. Price, Treorky; Mr. Shirley Murphy, London; The Executive Committee of the Jacob Testimonial Fund, Dublin; Mr. M. Thompson, Lincoln; Dr. Grimshaw, Dublin; Mr. A. E. Blacker, Bristol; Dr. F. E. Beck, Belfast; Mr. J. Wright, Stonebridge, etc.

BOOKS, ETC., RECEIVED.

Massage as a Mode of Treatment. By William Murrell, M.D., F.R.C.P. Second Edition. London: H. K. Lewis. 1887.

What to do in the Cases of Poisoning. By William Murrell, M.D., F.R.C.P. Fifth Edition. London: H. K. Lewis. 1887.

Researches upon the Venoms of Poisonous Serpents. By S. W. Mitchell, M.D. and Edward T. Reichert, M.D. Published by Smithsonian Institute, Washington City. 1887.

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☞ To Contributors.☜

Our contributors are reminded that prolixity is a great bar to publication, and, in consequence of the constant pressure upon space in every department of the Journal, brevity of style and conciseness of statement greatly facilitate early publication. We are compelled to decline or hold over indefinitely a great number of communications, chiefly by reason of their unnecessary length.

PRESIDENTIAL ADDRESS
ON
THE RELATION OF PATHOLOGY AND THERAPEUTICS TO CLINICAL MEDICINE.

Delivered before the Clinical Society of London, on Friday, January 28th.

By W. H. BROADBENT, M.D.Lond., F.R.C.P.,
Physician to St. Mary's Hospital; Consulting Physician to the London Fever Hospital.

Gentlemen,—I should be little worthy of the honour which you have conferred upon me in electing me president of this Society, did I not feel grateful for the confidence you have placed in me, and take pride in the high position to which your kindness has raised me. It has always impressed me to run down the simple list of presidents of the great medical societies, a place in which is an unimpeachable title of honour; and if I have had any ambition beyond that of doing my duty, it has been that I might some day leave my name on one or other of those honoured rolls. But however great my pleasure in realising this ambition, it is with no feeling of elation that I take this chair; rather is it with a sense of responsibility almost oppressive in degree, and a fear lest I should fail adequately to fill this position, and to represent the Society.

But I have already said more than enough of myself, and, after all, the progress and fortune of this great Society do not depend upon the president of the hour. Its basis is sound, its work is substantial, and it has an inherent vitality which will carry it over any stumbling block created by my shortcomings. It is unnecessary in this, its twentieth year, to explain the objects or justify the existence of the Society as a separate organisation. It is equally unnecessary to vaunt its usefulness, which is acknowledged on all hands, but I may for a moment foreshadow the further service it is destined to render to medicine. This Society represents the medical man at work in the relief of suffering and the cure of disease. Whatever, then, may advance our knowledge of disease; whatever may assist us in the recognition of all its forms and stages when present; whatever may enable us to foresee its approach and detect its causes—these, and all that may aid us in preventing, resisting, and curing disease, are the subjects which engage our attention.

Now it seems to me that we are at a very interesting and important period in the development of medical knowlege, and that the immediate future is pregnant with discoveries bearing on the treatment of disease. Pathology, for a long time occupied mainly in the examination and record of results, has long ceased to be content with this, and has advanced far in the study of processes. But these processes are none other than the diseases which we watch at the bedside. While morbid anatomy was the goal of the pathologist, pathology and therapeutics advanced on parallel lines, and seemed as if they could never meet; indeed, the *post mortem* table appeared only to demonstrate the absurdity of the attempt to combat disease. Now, however, pathology and therapeutics join hands. But morbid processes have beginnings and causes, or, if we are not allowed to use this word, antecedents. Some of these can only be ascertained by observation and inquiry, the results of which must often take the form of statistics, as, for example, with regard to the influence of heredity, of climates, of habits, of food; but many morbid processes can be started at will, and this permits of exact knowledge of the initial causes, and minute investigation of the succession of changes from beginning to end. Experiment, then, the chief instrument of exact science, enters the service of medicine. Experimental pathology has, in effect, never been much behind experimental physiology, and both are actively contributing to our knowledge. Experimental inquiry, however, not only occupies itself in the investigation of physiological processes and in the production and elucidation of morbid phenomena, but also in the examination and determination of influences which check, control, and counteract disease. All these lines of research are being enthusiastically pursued by zealous and able men, especially young men; knowledge comes crowding in from every side in perplexing abundance; and, sensibly or insensibly, practical medicine is coming more under the influence of science and of scientific methods.

But no idea can be formed from the separate and isolated contributions by physical, chemical, physiological, pathological, and experimental science, which help medicine, now here, now there, now in the comprehension of morbid processes, now in the application of remedial measures—no idea can be formed of the flood of light which will be thrown upon the theory and practice of medicine when all these sciences have completed their survey of the body in health and disease, and meet in the explanation of the operations of which it is the seat; when, say, the chemistry of nutrition and of the secretions is as well known as the rate of travel of nervous impulses; when the mode of action of drugs is as clear to our minds as the interchange of gases in respiration. We are very far from any such ideal as yet; but we have instances in which the convergence on one point of knowledge from various sources, apparently irreconcilably apart, is beautifully illustrated. What can be more fascinating, for example, than the combination, for a given end, of the considerations brought to bear in recent cerebral surgery, of which such brilliant examples have recently been furnished by Hughes Bennett and Godlee in co-operation, and others? We have symptoms which the physician, largely through the insight and work of Hughlings Jackson, refers with confidence to a cerebral tumour. This is localised with precision through the experimental investions of Hitzig and Ferrier. These and earlier investigations, again, having taught that portions of brain can be removed without danger to life; Lister's antiseptic precautions—themselves the outcome of scientific experiment in a totally different field—make the trephining of the skull and the excision of the growth comparatively safe; and, by a last refinement introduced by Victor Horsley, advantage is taken of the anæmia of the cortex during morphine-sleep, found years ago by Durham, to diminish the hæmorrhage during the operation.

Whatever the knowledge of the day may be, and whether it has been reached by scientific investigation or has as yet only the sanction of experience, it is through the physician or surgeon that it is brought to bear on individual cases. And here let me repudiate and protest against the idea that there is any antagonism between scientific and practical medicine or any incompatability between practical skill in the treatment of disease and love of knowledge for its own sake. It is contradicted throughout the history of medicine. The medical man ought to be animated by the scientific spirit and, for the most part, is. It is true that a knowledge of men and women may lead to success in practice, as well as a knowledge of disease, and that the weakness, frailty, and folly of mankind constitute a mine of wealth to the unscrupulous man who obtains power and opportunity to exploit them by a medical degree, but so it is in all professions, and it need not make us doubt that the practice of medicine is fundamentally scientific. Nor need we concern ourselves with such instances; they are unworthy of our attention as individuals, and we may be sure that the very last place to which the triumphs of the charlatan will be brought for criticism will be this Society.

The medical man, as I was about to say, is the intermediary who gathers up and applies for the benefit of the patient all the knowledge available at any given period, and whatever is most essential to individual members of the profession in the exercise of this function is the most worthy of the attention of this Society. This, unquestionably, is diagnosis. I have heard distinguished lawyers in confidential after-dinner chat parody Danton's noted phrase about audacity, and say that the first condition of success at the bar is good animal spirits, the second good animal spirits, and the third good animal spirits, adding that a little knowledge of law is not amiss. In more serious mood, I should reply to the question, "What is most important at the bedside"—diagnosis! diagnosis! diagnosis! But diagnosis is a word of deep meaning—thorough knowledge. It is no diagnosis at all to say that such and such is a case of valvular disease of the heart, or even that it is a case of aortic or mitral disease, obstructive or regurgitant. We must be prepared to estimate the degree of obstruction or the amount of regurgitation, to say whether the valvular change is probably stationary or likely to be progressive, to measure the effects on the cardiac muscle and cavities, and to judge in what direction and in what degree lethal tendencies are developing themselves. It is no diagnosis again to say that a man has hemiplegia; we must localise and specify the lesion which has given rise to the paralysis. But the lesion is itself only an incident in some general morbid tragedy which is

being acted in the body, and this must be read from the beginning. Diagnosis, moreover, embraces a knowledge, not only of the seat and character of the disease, but also an appreciation of the condition of the patient in relation to the attack. Is the disease merely the winding up of a bankrupt constitution?—a mode of dying rather than a cause of death? or is it, on the other hand, a necessary though violent readjustment of the organism to the environment with which it had been long getting out of harmony, or a defensive reaction against some powerful disturbing influence? The problems presented are often of the highest degree of complexity, and we cannot too diligently cultivate our powers of observation, aiding the senses by the instruments with which science has furnished us, and bringing everything, as far as possible, to the test of measurement and the balance. With regard to this, however, I need say nothing; every meeting of the Society gives proof of the zeal with which morbid phenomena are watched and recorded, and of the acumen with which they are discussed and criticised. It is sometimes objected that the cases read here are usually such as are rare and exceptional, and therefore of little practical use; but the exceptional cases of to-day are the common ones of to-morrow. There is no one who has for many years been in the habit of noting all he sees, who cannot look back to cases which he did not at all understand at the time, but which are now perfectly clear. And I would remind my hearers of the profound saying of Sir James Paget, "That an exception to one rule is only an example of another rule as yet unknown." The explanation of an exceptional case may thus be the revelation of a new law.

It is not so easy to deliver my mind on the subject of treatment. On looking through our *Transactions* the reproach that we give attention to everything but treatment might seem to be well founded. This reproach, it is true, could not be addressed to the surgeons. Surgery *is* treatment. Medicine may be or may not; and, as a physician, I am tempted to envy my distinguished surgical predecessor the splendid record of improvements and advances which have marked his term of office. I cannot hope that my reign will compare with his in this respect, although I trust the physicians and general practitioners will be stimulated to a generous rivalry with the surgeons. One reason why we seem to lag behind them is that our results are less tangible than theirs. We may, and we do, check the ravages of phthisis in the individual as in the community; we may beat back for years the advance of renal disease; we may deprive locomotor ataxy of its qualifying adjective "progressive"; but these and like instances, which are our most genuine triumphs, cannot well be put into the form of cases. Many such diseases, indeed, deadly as they are, get a worse character than they deserve through our reticence, and young practitioners are often astonished to find the fulfilment of their gloomy prognostications so long deferred. I wish it were more easy to exemplify the results of successful resistance to disease, and it would be a great advantage if we could have brought within the ken of the Society some of the minor ailments which so constantly come before us. A certain proportion of them are early stages or forerunners of serious disease, and others, which we can only look upon as functional derangements, inflict more misery upon the patient than cancer itself. They are, therefore, supremely worthy of our attention. It would be difficult, I admit, to convey the fine distinctions, on which so much depends in giving an account of such affections; but well-observed individual cases would be far more instructive than the generalized descriptions which are given in treatises. An opening would be afforded also for the discussion of many unsettled questions. The mental depression, for example, which is often clearly traceable to functional derangement of the liver (to employ a term sanctioned by the authority of Murchison)—is it a reflex disturbance or inhibition of some nerve-centre, or is it the effect of a blood-impurity acting as a poison to the brain like alcohol or opium? or is it a local or general derangement of the cerebro-spinal circulation? It is an every-day experience that a dose of blue pill will relieve the mind, clear the complexion, and relax the arterioles. Now, in many cases of obstinate and severe melancholia there is every reason to believe that the cause is outside the nervous system; and if we could, in the familiar examples of low spirits and irritable temper, trace accurately and minutely the way in which the initial gastro-hepatic disorder produces its effects upon the nervous system, and the exact process by which these are reversed, we might understand and prevent or remedy the more serious overthrow of the mind seen in melancholia. It is not a final explanation, discharging us of all responsibility in searching out the cause, and rendering futile all efforts in the direction of cure, to find a family history of insanity. The hereditary tendency to melancholia may be indirect, and capable of defeat, just as hereditary tendency to apoplexy may be traceable to family gout, which can be prevented from developing its evil effects in individual members.

Whether we find such an opportunity of considering the forms and phases of diseases, to which I have just alluded, or not, I hope we shall not lack cases illustrating the effects of remedies, and by remedies I here mean drugs.

Nursing, care, appropriate food and stimulants do much for our acute cases; diet, clothing, climate, hygiene, are powerful remedial agencies in chronic disease, and we cannot too closely study the surroundings of the patient, or direct too minutely the management of the sick room; we cannot inquire too carefully into the habits and mode of life which have led to chronic ailments or give instructions too detailed as to the means by which the injurious influence of past errors may be counteracted in the future. Were we to neglect these particulars, we should in effect ignore the first principle of rational treatment—"the removal of the cause"—and wilfully leave an insuperable obstacle in the path of recovery. But when we have attended to everything of this kind, we should be shorn of our strength, were we debarred from bringing to the aid of sufferers the powerful remedies we hold in our hands. In acute disease they often turn the scale in favour of the patient, as, for example, when death is averted in enteric fever by a timely dose of opium or quinine, or when the distended right heart is relieved by a calomel purge. In chronic affections, again, even if the patient is prepared to renounce his self-indulgence and forego his pleasures, or to neglect his business and abandon his ambitious schemes—and how often is he unwilling to do the one, or unable to do the other?—the long chain of evil consequences would be very slowly unwound, whereas we can often snap it almost at a stroke.

I shall venture to assume that scepticism, in the evil sense of disbelief in medicinal agencies, is extinct. I shall not, at any rate, argue the question, but take it for granted that we have confidence in the drugs we employ and believe we have abundant evidence of their good effects. Were this not so, few of the men now before me would consider the medical profession worthy of their adoption as the work of their lives. We look to quinine in ague, to mercury and iodide of potassium in syphilis, to iron in most forms of anæmia for effects as certain, and as constant as chemical reactions. These and similar examples, of themselves, or the single instance of the multifarious benefits obtainable from the administration of opium and its alkaloids, would justify us in asserting that we are able to modify profoundly and beneficially the course of disease. It is only want of knowledge of the morbid process on the one hand, and of the mode of action of the drug on the other, which prevents our having the same certainty in a thousand other instances. In proportion as our investigation of the cases which come before us is thorough, and our aim and object in the employment of medicines are clear, definite and precise, in that proportion will our confidence in the uses of drugs be firm and will continue to increase.

With regard to the effects of remedies, however, we have, for the most part, only the testimony of experience, pure and simple, and our experience is a very insecure anchorage for belief, and a very feeble agency in carrying conviction to the minds of others. A man's own experience will, for himself, outweigh that of any number of others, and a single instance in which his own observation contradicts, or appears to contradict, the concurrent testimony of the rest of the world will overthrow his belief in that testimony. In the complicated phenomena of disease again, it must often happen that all the facts are not known, and the experience of one case may not apply in another apparently similar, which unsettles confidence. When, however, he has an explanation which commends itself to his judgment, adverse facts often make little impression. Hence the sway of theory: whether we will or no, we refer the action of remedies to some theoretical cause, and it is because we have not always confidence in our theory, and not because we have any doubt about our facts, that we sometimes appear to falter in our testimony in regard of therapeutics.

The remedy for this is a knowledge of the mode of action of drugs, and it is to discoveries in this direction that I alluded when, in an earlier part of this address, I said that we stand at an important period in the development of medical science. Already we employ digitalis with greater confidence and discrimination from the light which experiment has thrown upon its action on the arteries and heart, and nitro-glycerine, amyl nitrite and the nitrites have actually come into use on the ground of their experimentally demonstrated effects in relaxing the arterioles, and have proved to be of immense benefit. We have also introduced into practice, on experimental evidence, substances which directly and constantly bring down the temperature of the body. Enormous importance attaches to the investigations which are in progress on all hands, and I would refer particularly to Dr. Sydney Ringer's experiments, showing the influence of minute proportions of soda, potash, and lime salts, on the action of

the heart, which bring into evidence once more the radical differences which exist between substances commonly regarded as all but identical. Soda and potash, for example, are, for the most part, looked upon simply as two alkalies, which may be employed almost indifferently, the only exception recognised being, perhaps, that potash is the better solvent for uric acid and more of a diuretic, whereas their alkalinity is almost the only property they have in common; when regarded as medicines their relations with the organic constituents of the body and their influence on muscular contractility are totally different; they are found in different structures, and a minute proportion of any potash salt injected into a vein paralyses the heart, while soda salts have no such effects.

But while the mode of action of drugs is engaging attention, and great discoveries are bound to come before long, the progress made as yet is only small; and although the eagerness with which new remedies, which come accredited by science, are seized upon by the profession is a hopeful sign—there is danger of present injury from their employment. It is a tremendous piece of knowledge that a given drug will certainly lower the temperature, but this does not by any means warrant its indiscriminate administration in pyrexia. There is the further question, by what processes the temperature is reduced, and what concomitant effects are produced. Quinine, salicine, salicylic acid and its compounds, antipyrin and like substances, aconite, and many other drugs, agree in diminishing the body-heat, but this is the only effect they have in common. There is positive peril in acting simply on the knowledge that the temperature can be lowered. Are we certain, to begin with, that a high temperature is always mischievous? May we not, in checking it, be interfering with defensive or readjusting processes? Are we to assume that Nature does not know what she is about when she sets the heat-regulating mechanism for a higher level whenever things go wrong in the economy? To take a practical example. In enteric fever, in which the long-protracted pyrexia becomes in itself a distinct danger by its effects on the nervous system, by disintegration of the muscular fibres of the heart and the glandular structures, and by the strain on nutrition, I am convinced of the utility of systematic cold bathing, by my own observation as by the testimony of such men as Brand, Liebermeister, Cayley, and Tripier (of Lyons); but I think, from what I have seen, that the repression of body-heat by means of salicylates, antipyrin, and the like in this disease is very dearly bought. Nor can I see what we have to gain by suppressing the short sharp fever, say, of pneumonia. Even with regard to the employment of salicine and the salicylates in rheumatism—remedies which came to us straight from the laboratory, and whose mode of action is expounded in chemical formulæ by Dr. Latham—I think it well to raise a warning note. Properly employed, salicine and the salicylates almost rob acute rheumatism of its terrors and dangers, but given in routine fashion, as we should give an effervescing mixture, they have seemed to me capable of doing serious harm. At any rate, I have seen deaths in rheumatic fever, of a kind quite new and strange to me, after prolonged administration of salicylate of soda every four and six hours. The pain and fever had never yielded, the drug had been continued in hope of this result, till, in course of time, warning was given by delirium, the pulse became more frequent and extremely weak, what has looked like a modified hyperpyrexia has set in, with flushed face and hot perspiring skin, and the patient has rapidly sunk, the temperature, however, never rising above 105° Fahr.

I come back, then, to my point that, in order that we may employ antipyretics, or remedies of any kind, with confidence, we must know exactly how the effects produced are brought about. With regard to this we are, however, only on the threshold of an inquiry which must go more deeply into the relations between physiological processes and the substances which modify them than, as yet, we have any conception of, for our information is superficial. Now it is an axiom in science that for every action there is an equivalent expenditure of energy. It is not by its mere presence in the blood or in the nervous centres, or in the gland structures that a poison or remedy produces its effects; there is some dynamic agency at work. In the case of such bodies as the powerful organic alkaloids, this can scarcely have any other source than chemical change in the substance itself, while, in the case of inorganic salts, it would seem that they condition reactions between other substances. We know that carbonic oxide proves fatal by combining with the hæmoglobin to the exclusion of oxygen, so that the blood corpuscles are no longer available as carriers of oxygen to the central nervous system, and the anæsthetic gases and vapours act much in the same way, their safety consisting in the fact that the higher centres concerned in the mental operations and sensation succumb to the privation of oxygen before the lower centres, which are the seats of the vital reflexes, and that they are easily displaced by oxygen when this is again freely supplied. Here the proportion of the anæsthetic agent is comparatively large, and the mode of operation is physical rather than chemical, the vapour-density actually counting in the comparative effects of different anæsthetics.

I might name other actions more or less capable of explanation, but it is such effects as those produced by aconite, atropine, morphine, and prussic acid, in which a fraction of a grain will give rise to profound disturbance or destroy life, that we need to understand. Twenty years ago or more, when science was not prepared to answer, nor I qualified to put, such questions as those relating to the action of poisons and remedies, looking at the fact that all powerful alkaloids contained nitrogen, and that all, or nearly all, the constitution as well as the composition of which was known, belonged to the class of amides, imides, and nitrites, in which an ammonium radicle had been robbed of successive atoms of hydrogen, I conceived the idea that this departure from a stable type gave rise to a chemical tension capable of producing effects when brought into presence of the chemical tension which seemed to me to be required for the explosions of nerve-force.

It occurred to me that prussic acid—the most deadly of poisons, and, at the same time, almost the simplest of organic substances—offered the best possible chance of ascertaining the exact mode of action of, at any rate, one drug.

Hydrocyanic acid is composed simply of a single molecule each of carbon, hydrogen, and nitrogen—there is no room for complex changes. The hypothesis I entertained was that, when it reached the nerve-centres, and under the influence of the chemical operations concerned in the evolution of nerve-force, the dislocating influence of nitrogen found its opportunity, and the nascent carbon and hydrogen flying apart, appropriated the oxygen needed by the nerve-cells, death resulting from the consequent arrest of activity of the centres in the medulla necessary to life. I cannot say that I proved my point, but I have met with no more satisfactory explanation since, and I met with facts which have never failed to interest men when I have related them. For instance, prussic acid is not a deadly poison to frogs. Many times I injected as much as ten minims of the pharmacopœial solution (one minim of which was fatal to a rat) under the skin of a frog, and as long as he was allowed to hop about in the room he appeared to be no worse for it. If, however, even at the end of half an hour I put him under a bell-jar with other frogs, the prussic acid he exhaled sent the whole lot into a state of torpor. My interpretation was that the evolution of nerve-force in the frog was not attended with sufficient chemical energy to explode a HCN molecule. Another curious fact which turned up was that nitroglycerine, which proved fatal to rats, apparently by paralysing the nerve endings like curare, was a convulsant of terrible energy when administered to frogs.

For a full comprehension of the action of remedies we must know and understand the chemical actions and reactions which are taking place in nutrition, secretion, and disintegration; the chemical changes which attend and condition the evolution of nerve-force and muscular action; the modification of the chemical processes which result from the administration of a drug, and the change in the composition of the drug itself, through which the energy is evolved by means of which it produces its effects. The future of therapeutics is thus in the womb of chemistry. What microscopy has been to anatomy and pathology, chemistry will be to physiology and therapeutics. Anatomy and pathology are the statics of medical science, physiology and therapeutics the dynamics; microscopy, therefore, represents the statical, chemistry the dynamical department of medical investigation. The microscope reveals the ultimate structure of tissues, the methods by which they are developed, and the changes which take place in them in disease; chemistry deals with the forces and operations by which the structures are built up or destroyed and with the actions and reactions of the atoms and molecules which enter into their composition, and will ultimately extend our ideas as much beyond their present scope as the microscope has enabled us to advance beyond the knowledge of the old anatomist.

I cannot invite the relation of researches and the discussion of speculations on the mode of action of remedies in our meetings here, but I do not think I have gone beyond the scope of the Society's aims in speaking of them, since the moment views and investigations are brought to the test of observation at the bed-side and can be embodied in cases, they may be brought before us. This, I acknowledge, I should earnestly desire to encourage.

I can, indeed, refer to contributions of my own in the *Transactions* of this Society, insignificant it is true, in which I tested the hypothesis that substances closely allied chemically, ought to have a similar action on the system, or that any diversity in their operation should

be capable of explanation on chemical principles by experiment with the iron group of metals and with the arsenic group of bodies. I may perhaps be allowed to say, incidentally, that if the medical men and pharmaceutists, who devoted so much time and pains a while ago to devising methods for administering that intractable body, permanganate of potash, had been familiar with my paper and with observations long antecedent to mine, they might have been spared much trouble by the information that it is the manganese itself, and not the latent oxygen they vainly thought they were getting into the system, which acts as an emmenagogue, and that the chloride and sulphate of the metal can be administered as easily and as freely as the corresponding salts of iron.

But I must recall myself and you from the contemplation of future powers to the consideration of our present duties. What we have to do is to observe and record; to watch to-day with a mind instructed and guided, but not biassed, by the results of yesterday; to bring the experience we gather, without reserve, before the Society for the information of others, submitting our views and conclusions to the judgment of our colleagues, and bringing an open mind to the appreciation or criticism of cases which they contribute in their turn. As iron sharpeneth iron, we shall put a finer edge on each others' faculties, and render our individual and collective diagnosis more certain, clear, and deep.

Diagnosis will not lose in importance as knowledge increases or becomes more easy. If we knew all that is to be known of the action of remedies, it would only render diagnosis more important than ever, just as every improvement in the accuracy and power of artillery makes the aim of the gunner of greater consequence. A bad gun—to continue a simile employed before—badly directed, may hit the mark; a good one could not by any possibility; so precision in the employment of remedies would only make failure more certain and disastrous if the diagnosis were wrong.

I have been brought irresistibly back to diagnosis, since from it all treatment must flow; and now I conclude, as I began, by thanking you for the honour you have done me in entrusting to me the duties of President of this Society, assuring you that to them will be devoted my best energies.

LETTSOMIAN LECTURES

ON

SOME OF THE MENTAL AFFECTIONS OF CHILDHOOD AND YOUTH.

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Lecture III.

Infantile Mania.—Melancholia and Delusions.—Moral Insanity.—"Idiots Savants."—Variations in the Mental Condition.—Epilepsy and Catalepsy.—Physical Deformities.—Associated Diseases.—Rate of Growth.—Diagnosis of Idiocy.—"Backward Children."—Deferred or Absent Speech.—Morbid Anatomy.—Treatment of Feeble-mindedness.

Infantile Mania.—Infantile mania occasionally occurred in quite young children—acute maniacal attacks, in which the patient destroyed everything within reach, or crept under tables and sofas to hide, screaming and biting and scratching anyone who approached. When the attack subsided the conduct was good, but in a few days the violent mania recurred.

Melancholia and Delusions.—Cases in which there were well marked delusions of suspicion, the ordinary trust and unsuspiciousness of childhood being replaced by painful mistrust, were occasionally met with. In some cases the delusions were associated with melancholia. He related the case of a girl, herself ill-favoured in appearance, who in a maniacal attack attempted to burn her brother, of whose beauty she was jealous. About three years subsequently she became epileptic, and became later on the subject of epileptic dementia. It was highly probable that the maniacal paroxysm which manifested itself in homicidal mania was really masked epilepsy. As puberty approached, attacks of mental aberration assumed a special character; there was frequently unnatural introspection, and a critical hyper-conscientiousness became prominent. Five cases, three boys and two girls, were quoted in illustration; they were all very good and studious children, but between 11 and 13 years of age they became moody, had conscientious scruples as to their motives, being anxious not only as to whether they had told the truth, but whether they had done so in such a way as to convey to others the precise idea in their minds. These cases caused great anxiety at the time, and occasionally led to a permanent break-down, but if the climacteric period of puberty was tided over, might do well. It was important to guard against suicidal impulse. Care should be taken to be quite sure that there was no sexual deviation, and to treat it, if present, not as moral wrong, which would inevitably lead to further mental disquietude and peril, but as a physical evil. These deviations were to be recognised by the following group of symptoms: supra-orbital headache, dilated pupils, a brown-umber areola surrounding the eyes, an averted look and a statuesque bearing which even alone was often conclusive; occasionally the statuesqueness resembled a minor cataleptic state.

Moral Insanity.—Moral insanity was met with in childhood and youth—cases of purposeless theft, purposeless lying, and purposeless mischief. The subjects of this condition were sometimes intellectually bright, and had an amount of address which made them extremely troublesome to their friends. More frequently moral insanity was associated in children and youths with some (it might be a very slight) amount of mental backwardness. The manifestations of moral insanity in such cases, said Dr. Down, are multiform. I have seen a boy who had brought from school sixteen watches without being discovered by the sufferers, or the principal of the school, and this was so cleverly done as for a long time to elude detection. Another was dismissed from school because he persisted in getting on the roof, and putting pillows and other articles of bedding down the chimneys of neighbouring houses in the terrace, or in filling the pillar-boxes with stones. Another would beg sufficient money during the morning in the streets to enable him to travel backward and forward by the Underground Railway the whole of the remainder of the day. A still more dangerous form is a tendency sometimes met with of setting fire to articles of furniture, often where it would be perilous to themselves as well as others. Many forms of low cunning are developed in backward boys, by associating them with others with more wit, who are also bullies, the feebler one calling to his aid lying, theft, and deceit, to compensate for his lessened intellectual vigour. Again and again I have seen the moral sense developed in boys of this class when they have been removed from the bullying to which they had been subjected, and submitted to appropriate training. In all the cases I have met with of moral insanity, there has been marked antecedent neurotic history.

"*Idiots Savants.*"—This name has been applied to children who, while feeble-minded, exhibit special faculties which are capable of being cultivated to a very great extent. One youth was under my care who could build exquisite model ships from drawings, and carve with a great deal of skill, who yet could not understand a sentence, who had to have his food dissected for him, and who, when writing to his mother, copied *verbatim* a letter from *The Life or Captain Hedley Vicars*, by Miss Marsh, although it had not the slightest appropriateness in word or sentiment. Another has been under my care who can draw in crayons with marvellous skill and feeling, in whom, nevertheless, there was a comparative blank in all the higher faculties of mind. Extraordinary memory is often met with, associated with very great defect of reasoning power. A boy came under my observation who, having once read a book, could evermore remember it. He would recite all the answers in *Magnall's Questions* without an error, giving in detail the numbers in the astronomical division with the greatest accuracy. I discovered, however, that it was simply a process of verbal adhesion. I once gave him Gibbon's *Rise and Fall of the Roman Empire* to read. This he did; and, on reading the third page, he skipped a line, found out his mistake, and retraced his steps. Ever after, when reciting from memory the stately periods of Gibbon, he would, on coming to the third page, skip the line and go back and correct the error with as much regularity as if it had been part of the regular text. Later on, his memory for recent reading became less tenacious, but his recollection of his earlier readings never failed him. Another boy can tell the tune, words, and number of nearly every hymn in *Hymns Ancient and Modern*. Often memory takes the form of remembering dates and past events. Several children under my observation have had this faculty in an extraordinary degree. One boy never fails to be able to tell the name and address of every confectioner's shop that he has visited in London—and they have been numerous—and can as readily tell the date of every visit. Another can tell the time of

arrival of all the children at an institution, and could supply accurate records in relation to it if needed. Another knows the home-address of every resident who comes under his observation, and they are by no means few. The faculty of number is usually slightly developed with feeble-minded children, while memory is fairly well developed; and yet I have had under my observation cases where the power of mental arithmetic existed to an astonishing extent. One boy, about twelve years of age, could multiply any three figures by three figures with perfect accuracy, and as quickly as I could write the six figures on paper; and yet, so low mentally was he that, although having been for two and a half years in the almost daily habit of seeing me and talking to me, he could not tell my name. Another boy, who has recently been under my observation, can multiply two figures by two figures; while another can multiply rapidly two figures by two, and a short time since could multiply three figures by three figures, but since an epileptiform attack has lost this faculty to some extent. None of them can explain how they do it; I mean by what mental process. It has appeared to me, however, when by rare chance they have made a mistake, and some hesitation has arisen, the plan has been to clear off the multiplication of the higher figures first. Improvisation is an occasional faculty. I had a boy under my care who could take up a book, pretending to read—an art he had not acquired—and improvise stories of all kinds with a great deal of skill, and in any variety, to suit the supposed tastes of his auditors. Memory of tune is a very common faculty among the feeble-minded; they readily acquire simple airs, and rarely forget them. I have had one boy under my observation who, if he went to an opera, would carry away a recollection of all the airs, and would hum or sing them correctly. In none of the cases of "idiots savants" have I been able to trace any history of a like faculty in the parents or in the brothers and sisters, nor have I had any opportunity of making a necropsy, except in one instance. This was in the case of a boy who had a very unusual faculty, of which I have never since met another example, namely, the perfect appreciation of past or passing time. He was 17 years of age, and although not understanding, so far as I could gather, the use of a clock-face, could tell the time to a minute at any part of the day, and in any situation. I tried him on numberless occasions, and he always answered with an amount of precision truly remarkable. Gradually his response became less ready.....his health became enfeebled, and the faculty departed. At a necropsy I found that there was no difference in his cerebrum from an ordinary brain, except that he had two well-marked and distinct soft commissures..... All these cases of "idiots savants" were males; I have never met with a female.

Variations in the Mental Condition.—The congenitally feeble-minded were liable to deviations from their normal mental state. They might become the subjects of acute and chronic mania, of acute and chronic melancholia, and of dementia. While maniacal, the taciturn might become loquacious, or traces of unaccustomed mental quickness might appear; occasionally while suffering from the delirium of fever, children who had never been heard to speak made use of well-formed sentences. The congenitally feeble-minded were remarkably free from chorea and hysteria; cases of chronic and persistent inco-ordinated movements occurred, but he had not met with the acute cases so common in a general hospital, or in a hospital for children. This was probably owing to their lessened emotional life. The rare occurrence of hysteria was due to the same reason.

Epilepsy and Catalepsy.—Epilepsy, the lecturer continued, is a very common complication of feeble-mindedness. Of the whole number that have come under my observation, 24 per cent. have been at some period of their lives epileptic. This appears to be a very large average, and indicates to what a great extent the treatment of idiocy is the treatment of epilepsy. Dr. Kerlin, of Pennsylvania, states that "from an examination of the history of 300 imbecile children between the ages of 5 and 16, I find that sixty-six, or 22 per cent., are now epileptics." The percentage is so near my own as to confirm very materially my observations. My cases, however, are not within equally narrow limits as to age, but range from 2 years to 40. Dr. Kerlin further confirms my observations as to the important neurotic antecedents of feeble-minded children, when he states that 52 per cent. have in their antecedents the history of the epileptoid family of diseases. A large number fall under the developmental class, and are often associated with a history of eclampsia at first dentition. I have frequently observed attacks come on during second dentition, followed by an interval of freedom until the evolution of puberty. Epilepsy often appears for the first time at puberty, and subsequently ceases. Occasionally the status epilepticus supervenes, with the worst possible results. Catalepsy is met with among the feeble-minded, but always in my experience associated with impure habits.

Physical Abnormalities.—Lessened common sensation, defective co-ordination, diminished sense of taste and smell, imperfections of sight and obtuseness of hearing had been mentioned as physical defects frequently present in the feeble-minded. They were very prone to eczematous eruptions in the flexures of the joints and behind the ears. Dr. Laycock many years ago had called attention to the prevalence of ear abnormalities in people of a degenerate type, and my own observations, said the lecturer, coincide with his. Lobules absent, lobules adherent, helices defective, and the entire pinnæ misshapen or shrunken, are very common among the congenitally feeble-minded. The implantation of the ear is often too far back, giving an exaggerated facial development. I have had under my observation very remarkable examples of webbing, both of toes and fingers, in all cases associated with adherent lobules of the ears. The development of the hair offers some anomalies; some are hirsute over their entire bodies, and 11 per cent. have the eyebrows continuous over the nose. I have before referred to the deformations of the mouth, and the importance I attach to these in diagnosis. The tongue as a muscular organ is very ill co-ordinated, and this is one factor in the absence or defect of speech which is so characteristic of the feebleminded. In a number of cases, taken without selection, of an age when speech would be expected, 26 per cent. may be regarded as being entirely dumb, and 30 per cent. with speech indistinct, while not more than 28 per cent. speak fluently; the remaining 6 per cent. speak a little and distinctly, but with a small vocabulary. With such retarded development, it is not astonishing to find that puberty is postponed on an average two years. Mastication is often defective, partly from carious teeth, and partly from a want of persistent voluntary effort. Deglutition is often hurried, and ill-masticated food is bolted. Rumination occasionally occurs. Three well-marked examples have come under my notice; in one of the cases I found the œsophagus distinctly pouched. They all eructated their food, and then placidly re-masticated the mass. Excepting when asleep, these were the quietest times of their lives, being ordinarily restless and impatient. The whole process of feeding very closely resembled that of the ruminants. Reference was next made to the tendency to swallow unusual things, such as pebbles and neckties, and to the occasional occurrence of death from intestinal obstruction produced by impacted masses of hair. Muscular power was distinctly deficient. The organs of reproduction were ill-developed; among females the ovaries were commonly small, and among the males, in 8 per cent. of those aged 14 the testes were either undeveloped or undescended. If the investigation had been confined to congenital cases, the percentage of defective generative organs would without doubt have been much greater. A marked characteristic of the nervous system was defective reflex functions; there was a proneness to constipation, and it was extremely difficult to produce emesis by any ordinary dose. The same thing applied to the absence of cough and expectoration when they were the subjects of phthisis, for it was not uncommon for a feeble-minded patient to pass through all the stages of this disease without the slightest cough. Their vaso-motor system, on the other hand, was very sensitive; they were prone to gastric intestinal trouble from sudden change of weather, from bolting their food, from taking too much food at a meal, from too great predominance of meat as an article of diet, or from the presence of electrical disturbance.

Associated Diseases.—Occasionally feeble-mindedness was associated with disseminated sclerosis; more frequently, however, with pseudo-hypertrophic paralysis, of which Dr. Down had seen few examples not characterised by some amount of intellectual lesion. Diseases of the kidneys and liver were extremely rare, on account of the discreet and temperate habits which such patients were accustomed to lead under medical guidance; rheumatism was very exceptional, because, probably, they were not exposed to bad weather. Putting aside the diseases of childhood, diseases of the brain and of the lungs were the chief causes of death. Epilepsy, which was a very frequent complication, caused considerable mortality among the feeble-minded. Dr. Fletcher Beach had found that about 2½ per cent. of the average daily number of inmates of the schools at Darenth died from epilepsy, or more than the mortality of London from all causes whatever. The prevalence of phthisis as a cause of death among the feeble-minded varied very much with the nature of the soil on which they resided. Dr. Langdon Down's earlier observations made on 1,000 feet of Wealden Clay yielded a mortality of 39.8 per cent. of the general mortality, while more recent experience on a gravel soil showed the deaths from phthisis to be only 12 per cent. of the general mortality; thus confirming the result of Dr. Buchanan's well-known researches. Nothing was more remarkable than the readiness with which feeble-minded children succumbed to acute disease of any form, or than the way in which they were injuriously affected by climatic changes. Before

the introduction of the clinical thermometer the principal indication of deviation from health was loss of appetite.

Rate of Growth.—Feeble-minded children were shorter and lighter than the normal standard. Dr. Shuttleworth had correctly stated "that the relative rate of growth of the two sexes of idiot children follows the same rule as that of normal children, and is subject to the same variations at the age of puberty;" this rule was that boys were the taller and heavier, except at about the twelfth, thirteenth, and fourteenth years.

Diagnosis of Idiocy.—The profound cases, the lecturer said, are not difficult to diagnose, especially if associated with microcephalism, or with marked asymmetry of cranium. The congenital class is that which has to be considered in early life. There is a marked want of muscular power, as indicated by the inability to support the head and to use the hands for prehension. The eyes look out as if on an objectless world, and the attention is not arrested by the usual expedients to excite recognition in infants. To the most loving endearments there is no responsive smile, and the infantile cooing is replaced by a wailing cry. The instinctive process of feeding is often acquired with difficulty, and indicates, what I have long observed, that there is no predominance of instinct in idiocy. On the contrary, so far as instinct itself is concerned, the young animal is on a higher platform than an idiot baby. The latter would not search out the source of the maternal supply nor make successful efforts to regain the nipple if once out of the mouth. Later on there is a marked indisposition to make muscular effort, there is no responsive leap when the feet are allowed to touch the ground, and when taken in the hands the scapular muscles offer no resistance, and the arms helplessly extend themselves over the head. There is no disposition to crawl, but rather to lie on the back in an irresolute way. Still later the power of standing is deferred, and walking is an accomplishment which may never be attained.

In congenital idiots the physical deviations, such as the deformed cranium, the vaulted palate, and ill-developed ears, were of use in diagnosis, as were also the ethnic characteristics, especially the Mongolian type, which was so significant of congenital mental incapacity. In the developmental class the prow-shaped frontal bone was highly typical. The accidental class did not usually present grave deviations of conformation; except in the paralysed sub-class they were fleet and mobile, mischievous and irritated by constraint. Their mischievous pranks alternated with shrill and unmeaning cries. They were rarely able to speak, and filled up the intervals of their mobile mischievousness by blowing bubbles with saliva on their lips. The important diagnostic feature was that they lived entirely in a world of their own; their attention could not be arrested, except by diverting them into new channels by a more attractive trail; but they had usually great intensity of purpose, and succeeded in getting their own way. Slavering, which was a very common sign among the members of the three classes, arose sometimes from inattention, or from a hyperæmic condition of the salivary glands, from a prognathous jaw, from a small or weak lip, from inco-ordinate movements of the tongue, or from a combination of two or more of these conditions. Automatic movements—rotatory movements of the head on its axis, of the body from side to side, or from back to front, or rhythmical movements of the fingers before the eyes were very commonly present.

"*Backward Children.*"—It was very important that the condition of the large number of boys and girls who develop tardily (*enfants arriérés*) should be distinguished from that of idiots. Their state gave rise to much solicitude, and the prognosis depended very much on a right appreciation of their condition, as they responded very much to proper training. The most useful test, which was suggested in the first instance by Dr. Charles West, was—Can we in imagination put back the age two or more years and arrive thus at a time perfectly consistent with the mental condition of our patient? In the case of a backward child there was no difficulty in saying what period of life would be in harmony with his state. If, however, he be an idiot, no imaginary antedated age would correspond with the condition.

Deferred or Absent Speech.—Lesions of speech often constituted a basis of great interest and importance for a diagnosis. The absence of speech at five or six years of age was in itself a matter for grave anxiety. It was usually referable to one of three causes: (1) complete deafness or slight congenital defect of hearing; (2) defect of conformation in the tongue, palate, or lips; (3) defective mental power. Speech, when it existed, was often echo-like. Cases were mentioned; to the question, "How are you to-day?" came the immediate reply, "To-day;" while to "Are you a good girl?" the response was "Girl." Sometimes the whole question was repeated. The treatment of these cases was often successful. Often speech was a later development than the capacity for understanding spoken words; but gesture-language frequently took the place of spoken language in the feeble-minded.

Morbid Anatomy.—A fertile field for the investigation of the morbid anatomy of idiocy is opened up, the lecturer continued, by the inquiries of Hitzig, Jackson, and Ferrier into the localisation of function, and by improved microscopy aided by the use of staining agents. A very prominent characteristic is the diminished weight of the encephalon. Sometimes the diminution is very great, as in the microcephalic or Aztec variety. I have had the opportunity of examining several; but the most complete example was the brother of the boy described by Professor Marshall in the *Transactions* of the Royal Society. The brother in question was for some years under my care, and was an extremely good example of the susceptibility to education of even most unpromising cases. He acquired language, read books with simple words, amused himself with pictures, and much enjoyed life. He was very agile, but always rested himself by placing his hands upon his knees, and, when he ran, he did so with his head far in advance of his body, in a simian-like manner. He had a copious gesture-language, which he had adopted before he acquired speech; and when he spoke, he opened and shut his eyes and shook his head in a manner very suggestive of one of the quadrumana. He died at the age of eighteen. His mother had only given birth to two children, and they were both, as I have said, microcephalic. There was a history of extreme alcoholic intemperance on the part of the father, who died prematurely therefrom. The boy was 56 inches in height, and weighed only 39 lbs. He died from phthisis, with caseous deposit in his lungs, and with more recent disseminated tubercle. His head measured 15 inches in circumference. Its antero-posterior curve was 8 inches; its bilateral curve 8 inches; its antero-posterior diameter 5 inches, and its bilateral diameter 3.9 inches. The encephalon with its membranes weighed 15 ounces. The cerebrum was 4.2 inches long, 3.9 inches wide, and 1.8 inches high. It was attenuated in the occipital region in length, width, and depth. The departure from the ordinary course of development arose, in all probability, at an early period in the history of the germ. The convolutions which were best developed were those of the frontal, parietal, and temporal regions; while those less so were the orbital, but especially the occipital region. The central lobe, or island of Reil, was represented only by a slightly elevated prominence. Gratiolet laid great stress on the supra-marginal lobule as characteristic of man; in this brain, however, the whole was reduced to the smallest possible size, while the bent fold was disproportionately large. Certainly the conformation is not explicable by reference merely to retarded growth, and lends, therefore, no countenance to the arguments of those who regard microcephalic brains as due simply to synostosis. In this case the sutures of the cranium remained with remarkable distinctness. The defect was one of development, and not of growth merely. The evidence of this is derived from the modification of the cerebral convolutions and the simplicity of their form. While all the parts of the perfect human cerebrum were represented, they, in a large number of cases, rivalled in simplicity the quadrumanous type. Like the brain described by Professor Marshall, the simplicity of arrangement was not equal throughout the whole of the convolutions, and here again some additional proof was offered of the arrest in development not having taken place at a definite period of embryonic existence. On comparing this brain with that of his brother, it was noticed that while the parietal region remained the same, the frontal exceeded it in size. How far this was the result of the physical training to which he had been submitted one can only surmise..... Comparing his convolutions with those of the ourang and chimpanzee, they appeared to be less complex, the convolutions being smoother and less disturbed by secondary sulci. The absence of a well-defined supra-marginal lobule, the absence of the second connecting convolution, the simplicity of the bent convolution, the presence of the calcarine lobule, the absence of the accessory fold which unites the lobule of the second ascending fold to the superior marginal lobule, were all characters which approximated it to the quadrumanous brain. On the other hand, the want of symmetry, the presence of several of the external connecting folds, the absence of an operculum, the position from which the bent fold took its rise in reference to the fissure of Sylvius, the complete absence of the two internal connecting convolutions, and, lastly, the complete junction between the calloso-marginal and the middle temporal or uncinate convolutions were characters essentially human. Cases of extreme asymmetry of the brain were not infrequent, the most frequent site of want of development being the occipital lobe. Hypertrophy of the brain was not infrequently met with. A very remarkable case was related of a huge cranium with all the sutures so completely ossified that, had it oc-

curred with a microcephalic cranium, it would have been a strong argument in favour of the causal influence of premature synostosis in microcephalism. In another case, that of a remarkably stolid imbecile, aged 15, the cranium was remarkably and uniformly thickened, and the brain weighed sixty-two ounces; the entire surface of the encephalon presented a blanc-mange appearance, in great measure obscuring the outline of the convolutions, which had great simplicity. The opacity appeared to be due to the presence of lymph in the subarachnoid space, in the meshes of which lymph limpid serum was contained. The substance of the brain was very tough, and the cineritious portion pale. In looking back over the notes of necropsies, nothing was more striking than the frequency with which extreme pallor was mentioned. Absence, more or less complete, of the commissures was met with; in 2 per cent. of the cases examined the corpus callosum, and in 8 per cent. the soft commissure, had been almost absent.

Treatment of Feeble-mindedness.—The treatment of various phases of feeble-mindedness resolved itself into medical and physical, and training both moral and intellectual. Early training was of importance in preventing the growth of bad habits. The two great hindrances to the early and successful training of feeble-minded children were: first, the advice constantly given by medical men to wait till the age of seven or fourteen years, as the case might be. I know, said Dr. Down, nothing of cataclysmal improvements, such as are here indicated. The opinion and advice have no bases in experience. The septennial periods here referred to are periods of anxiety and peril; they are not periods of sudden leaps from mental feebleness to mental vigour; they are, on the contrary, developmental crises full of danger, periods when wreck of what mental power exists is liable to take place.....The other great mistake in the medical advice which is often given is the insistance to the mother that her child should not mix or be trained with children like himself, but with more intelligent children.....The most successful training is effected with the child's equals; in this way a healthy emulation is established. Intelligent children will not take part in the amusements and games of feeble-minded ones.....The outcome of an attempt to train the feeble-minded child with others more intelligent than himself is infallibly to make his life solitary, and to accentuate the condition which it is of the greatest importance to correct.....The first thing to be done is to rescue the feeble one from this solitary life, to give him the companionship of his peers, to place him in a condition where all the machinery shall move for his benefit, and where he shall be surrounded by influences of art and nature calculated to make his life joyous, to arouse his observation, and quicken his power of thought. The basis of all treatment should be medical. Success could only be secured by maintaining the patient in the highest possible health. This was very well indicated by the intellectual torpor which followed or accompanied declension of health, and the lessened intellectual vigour which was met with in cold weather. A very liberal dietary was of great importance to maintain cerebral nutrition, which, as was evidenced by the pallor of the grey matter, was probably always defective. It should contain a fair quantity of nitrogenous elements, and be rich also in phosphatic and oleaginous constituents. Green vegetables were very essential, as in their absence there was a great tendency to become scorbutic. Farinaceous food, as represented by the so-called corn flours, should give way to the more plastic elements of nutrition found in semolina, entire wheat flour, or macaroni. Bedrooms and sitting-rooms should be spacious and well ventilated, and especially well warmed. The skin should be kept in healthy function by frequent sponge and other baths, not only for the sake of the individual health, but for the health and comfort of their associates. The exhalation from the skin of feeble-minded children was *sui generis*. It was of great importance that their residence should be on gravel soil, and with well-made walks, that no opportunity might be lost for outdoor exercise. Warm clothing was essential, to prevent as much as possible the disastrous effects of climatic changes. Dr. Fitch, of Elwyn, Pennsylvania, found that over 50 per cent of the deaths were from disease of the lungs and air-passages. Dr. Down's experience was that on a clay soil 64 per cent., while on a gravel soil 44 per cent. of the mortality was from that cause. Physical training ought to form an important part of the education. The feeble muscles must be nourished by calling into exercise their functions, as well as by massage and by galvanism. Automatic movements must be replaced by voluntary, commencing with very simple movements; and want of co-ordination must be overcome by judicious physical training, carried out in great detail, so that every voluntary muscle and every system of muscles might be called eventually into action. Little progress was made in speech until co-ordinated movements in their limbs were attained. Finger lessons must precede tongue lessons. By these means the patient was brought into practical relation with the external world, and reasoning power was initiated. Since moral training was of great importance, the patient must simultaneously be taught to subordinate his will to that of another, and that right-doing brings pleasure, and that wrong-doing is followed by its deprivation. Corporal punishment should be strictly forbidden, and in no case should the punishment interfere with the hygienic treatment. Nothing was worse than the deprivation of food for an offence, which might even be due to want of food, and removable by its administration. The intellectual training must be based on a cultivation of the senses. Lessons of the simplest kind at first, and gradually cumulative, should be given in the estimation of the qualities of form and relation of objects by the sense of touch; of colour, size, shape, and relation by sight; of sound by the ear; and of other qualities of objects by their taste and smell. Nothing must be left to the imagination. The concrete must be taught, not the abstract. The physical powers must be cultivated synchronously; they must be taught to dress and undress, to acquire habits of order and neatness, to walk with precision and to handle with tact. The defective speech was best overcome by a well-arranged plan of tongue gymnastics, followed by a cultivation of the purely imitative powers, teaching at first monosyllabic sounds which had concrete representatives. The use and value of money where shops were not accessible, was best taught by instituting a shop furnished with the usual appliances of sale; one patient acting as the customer and another as the trader. It was desirable to supplement the house and school by gardening and farming operations; by the lathe, the fretwork machine, the carpenter's bench, and, for the more advanced in education, the printer's shop. For girls, Kindergarten occupations and the various elegancies of needlework must be the outcome of persevering endeavours, while music and dancing may for all alternate with dramatic entertainments, which are most useful in appealing both to the eye and the ear. Care should be taken that the physical should interchange with the intellectual training. It was of the greatest importance that the teacher should keep clearly in view that his primary object was to make the pupil self-helpful, and, as far as possible, a useful member of the community; in this way more was done than by any other means. Mere *memoriter* knowledge was of little value; everything which made the patient practically useful made him proportionately happy.

ABSTRACTS OF THE
ERASMUS WILSON LECTURES
ON
EVOLUTION IN PATHOLOGY.

Delivered at the Royal College of Surgeons of England, January and February, 1887.

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Lecture I.—Suppression of Parts.

Huxley's Laws.—In his lectures last year, Mr. Bland Sutton endeavoured to show that the three laws formulated by Professor Huxley, as expressions of the principles concerned in evolution, in so far as relates to anatomical details, were equally applicable to pathological anatomy. The first law—There has been an excess of development of some parts in relation to others—was illustrated under the term hypertrophy. In the present course, attention would be devoted to the second law: Certain parts have undergone complete or partial suppression.

"*Os Centrale.*"—Recent researches in morphology indicated that, in the human carpus, an ossicle had been suppressed. In the manus of a very large number of vertebrates, beginning with the tailed amphibians and passing upwards to primates, we find a bone known as the "os centrale" was wedged in between the proximal and distal row of the carpus. This bone excited a great deal of interest when Henke, Reyher, and Rosenberg drew attention to the occurrence of a temporary nodule of cartilage, representing the os centrale in the human fœtus. This has since been abundantly confirmed. The interest was also quickened when Gruber, Turner, and others reported

examples of the os centrale in the adult human carpus, taking equal rank with the normal carpal ossicles. It was clear that, in this case, the os centrale represented a suppressed element in the carpus. How far the suppression had been carried was difficult to decide, for Weidersheim had observed that the axolotl might have two and even three ossa centralia.

Pineal Body.—Among suppressed structures, the pineal body was to be classed. The recent investigations of de Graaf and Spencer showed that it was the rudiment of a median eye, still represented in lizards in miniature. It was probably an organ of functional importance in the extinct amphibia of pre-tertiary periods. So far as mammals were concerned, it was to be regarded as a suppressed organ, and, like such structures in general, might become the seat of aberrant growths. Thus Weigert had described a teratoma of this body, and cysts had been recorded by Virchow and Drs. Wilks, Charlewood Turner, and Silcock. The origin of this body as a hollow diverticulum from the thalamencephalon led to the expectation that cysts might occasionally be found in its interior.

Third Incisor.—One of the clearest instances of suppression, and, at the same time, one capable of the clearest possible demonstration, was connected with the disappearance and occasional re-appearance of a third incisor tooth in man. The fact was first announced by Albrecht (now of Hamburg), and had been abundantly confirmed by anatomists in this country. On comparing the teeth of mammals with those of a shark, it was at once seen that, whereas in the former the teeth were restricted to certain very definite regions, in the latter they were almost universally distributed in the mouth. It was thus clear that, in the evolution of the human species, a great number of teeth had been suppressed, and the papillæ in the neighbourhood of the teeth-territories might be regarded as potentially teeth. The papillæ occasionally asserted their ancestry by giving rise to supernumerary teeth, which might vary from a perfect enamel-covered tooth to a tiny conical mass of dentine. There were good reasons for believing that some forms of odontomata, and multilocular cystic growths of the jaws, were to be explained as originating in rudimentary germs of those teeth which had become obsolete during evolution, and that the third incisor was the last in order of suppression.

Mesonephros and Paroöphoron.—The doctrine of rudimentary organs in relation to cysts found a full illustration in the history of the mesonephros (Wolffian body). Mr. Shattock's observations on the congenital form of cystic kidney showed that this affection was due to dilatation of scattered mesonephritic remains in the renal tissue (retention cysts); cysts of the paroöphoron (tissue of the hilum of the ovary) originated in fragments of the same organ, as well as encysted hydrocele and the innocent variety of general cystic disease of the testis. In this instance the chain of events was instructive and suggestive. (1) In fish we had the pronephros and mesonephros (head, kidney and Wolffian body) functional. (2) In amphibia they became suppressed; but the mesonephros was rudimentary, and in relation with the ovary in the female, and the testis in the male, a metanephros or true kidney being the persistent renal organs. In mammals, the mesonephros (Wolffian body) was a temporary structure, but in remnants occasionally remained in connection with the kidney, testis, and ovary, and now and then led to destruction of these organs by developing as cysts.

Urachus.—The urinary bladder was the dilated portion of the allantois which was originally connected with the hind-gut; passing from the summit of the bladder was a band of fibrous tissue, familiar as the urachus; this urachus, or pedicle of the allantois, occasionally retained its patency even to the umbilicus; in other cases it might dilate and retain a communication with the bladder, giving rise to the so-called bifid bladder. Sometimes it dilated unequally, the cysts remaining of very small size. In rarer cases cystic tumours originating in this structure attained a very large size, and proved fatal. The last case to be considered was of interest, inasmuch as it was not only an example of suppression, but the rudimentary organs exhibited a reversion to an ancestral function. The prostate, with its sinus pocularis and glandular recesses, was developed from that portion of the Müllerian duct, which, in the female, furnished the upper part of the vagina and the cervix uteri. These parts of the female reproductive organs corresponded to that section of the oviduct which secreted, in oviparous vertebrates, the shell. The recesses of the prostate in adult men lodged small bodies formed of animal matter, containing carbonate of lime. Thus, as the prostate, with its glandular alveoli, was developed from the same segment of Müller's duct as the shell-forming section of the oviduct of birds and reptiles, and, as in them it was engaged in depositing carbonate of lime in animal matter, so man had in his prostate a witness testifying to common ancestry with the feathered tribe, low down among oviparous vertebrates.

SUBSTANCE OF SOME REMARKS CONCERNING CASES OF VALVULAR DISEASE OF THE HEART, KNOWN TO HAVE EXISTED FOR OVER FIVE YEARS WITHOUT CAUSING SERIOUS SYMPTOMS.[1]

By Sir ANDREW CLARK, Bart., M.D., LL.D., F.R.S.,
One of the Teachers of Clinical Medicine in the London Hospital.

After assenting to the request of the Committee that I should open the discussion upon which we are now entering, I found myself much embarrassed in determining the plan which I should follow in dealing with the subject. At least two plans were possible. One was to treat the subject from a historical and literary point of view; the other, from a personal and empirical one. Now, in respect of the former plan, it would have involved an undertaking so large, so varied, and so complex, that, with the time at my disposal, it would have been impossible to carry it to a successful issue. Furthermore, this side of the subject has been already so ably handled by Gairdner, of Glasgow, by Clifford Allbutt, by Broadbent, by Dyce Duckworth, and other observers, that, according to the present state of knowledge, little more remains to be done. It became, therefore, plain that, to deal with this subject in any fresh and useful manner, I could deal with it only from the personal and empirical stand-point; and this, in fact, is the plan which I have pursued in order to collect and collate the information which it will be my privilege to lay before you. Now, for the right understanding and proper use of this information, it is necessary that I should explain the precise steps which I have pursued in acquiring it.

It has always been my habit to enter in case-books a record, more or less complete, of the history, symptoms, signs, and treatment of the great majority of patients who consult me at my own house. Every examination is made upon a uniform plan; and, whatever may be the matter with the patient, every physiological system is interrogated for the discovery of evidences of disorder or of disease. The results of these examinations have been collected into two series of case-books; the former ends in 1872, the latter begins in 1873. For the purpose of this inquiry, I have chosen the second series of case-books, extending from 1873 to 1886; and I have examined each case in the fifty-three volumes to which at present this series extends. From all the cases related therein, I have extracted particulars of the history of patients who, consulting me for some definite complaint, and manifesting no symptom of cardiac disease, were found to have chronic valvular lesions of the heart. Many of those particulars I have arranged, crudely and imperfectly I know, in a tabular form, and printed copies of it are already in your hands.

Before considering further the information thus acquired, it is necessary that I should give you some cautions as to the use of it. The table is, on many points, plainly incomplete, and, in some ways, it is probably inaccurate; and, considering the conditions under which this information is collected, I am unable to see in what manner we may succeed in wholly ridding it of such defects. For, even with a very high sense of duty, there is a necessary limit to the time which can be given to each case; and whilst sometimes the physician may be too hurried and worried for fine and accurate observation, the patient is too irrelevant, garrulous, and inaccurate to supply the facts necessary to a just conclusion. But, making all allowances for inaccuracies and even faults on both sides, a residue of trustworthy facts will remain, sufficient to satisfy you that the table is full of interest and information, and capable of affording help in some of the difficulties of practice.

On the other hand, I must say a word or two in explanation of the care which I have taken to make the table as accurate, as complete, and as useful as I was able. In selecting cases to be placed upon the table, I excluded all instances of mere murmurishness; all inconstant and intermittent murmurs; all murmurs which were doubtfully endocardial; all murmurs occurring within the pulmonary and tricuspid areas; and all murmurs, of whatsoever kind, in patients who, independently of cardiac examination, had subjective or objective symptoms of heart-disease.

Now, out of those fifty-three volumes so examined and sifted, I have discovered, extracted, and tabulated 684 cases in which there existed chronic valvular disease of the heart, the presence of which

[1] Read in the Section of Medicine at the Annual Meeting of the British Medical Association at Brighton.

was not indicated by symptoms, and did not sensibly interfere with health; and, if I were to add to this number the instances which I have not recorded, the instances which I have failed to discover, and the instances which I have met with in consultation with other medical men, the number would be raised to a thousand. As an outcome of the experience of one person, this is a very considerable result; but if we were to add to it the experience of other practitioners, and, more especially, if we were to take into account the probable numbers of persons who, with chronic valvular heart-disease, are too well to come within the scrutiny of the physician, it will conclusively appear that there exist multitudes of persons, with chronic valvular disease of the heart, who not only suffer no inconvenience therefrom, but are also capable of discharging the duties and enjoying the pleasures of life.

Before proceeding further, I will call your attention to the diseases or the disorders for which those 684 persons, having valvular heart-disease, sought medical assistance. Arranged in the order of frequency, they are as follow:

Dyspepsia	275	Gastro-hepatic catarrh	4	Exophthalmic goitre	1
Rheumatism	57	Lumbago	3	Diabetes	1
Nervousness	45	Cerebral disease	3	Myxœdema	1
Headaches	35	Nasal catarrh	3	Fatty tumour	1
Bronchitis	23	Gastric ulcer	3	Mammary tumour	1
The gouty state	22	Colic	3	Epigastric tumour	1
Eczema	17	Hepatic congestion	3	Phlebitis	1
Vertigo	17	Gall-stones	3	Boils	1
Neuralgia	17	Malaria	3	Urticaria	1
Catarrhal diarrhœa	12	Erysipelas	2	Cerebral congestion	1
Melancholia	10	Pseudo-hypertrophic paralysis	2	Diphtheritic paralysis	1
Acne	9	Aphasia	2	Paralysis agitans	1
Albuminuria	8	Otitis	2	Writers' cramp	1
Anæmia	8	Tinnitus	2	Renal hæmorrhage	1
Pulmonary congestion	7	Consolidation of lungs	2	Choroiditis	1
Hepatic catarrh	7	Fibroid phthisis	2	Ozæna	1
Renal calculus	6	Chr. pharyngitis	2	Laryngeal catarrh	1
Epilepsy	5	Pyloric catarrh	2	Chronic pneumonia	1
Embolism of arteria centralis retinæ	4	Renal inadequacy	2	Dysentery	1
Influenza	4	Vesical catarrh	2	Perityphlitis ch.	1
Phthisis	4	Chill	1	Jaundice	1
Constipation	4	Osteo-arthritis	1	Capsular hepatitis	1
Colonic catarrh	4	Struma	1	Dysmenorrhœa	1
				Menorrhagia	1

Arranged according to physiological systems, and in the order of frequency, it will be seen that, of those 684 persons, 326 were suffering from disorders or diseases of the digestive system; 134 were suffering from disorders or diseases of the nervous system; 61 were suffering from rheumatic affections; 47 were suffering from disorders or diseases of the respiratory system; 30 were suffering from affections of the skin; and 23 were suffering from gout.

And now I venture to say that, with all their drawbacks, known and unknown, the facts which I have laid before you, and the facts which have been laid before you by other observers, are sufficient, not only to justify, but to require, in the interests of practical medicine, a systematic, critical, and exhaustive study of the whole subject. To make this inquiry fruitful in practical issues, we need information which cannot be accurately supplied by consulting practitioners; we need the detailed facts of family and personal histories, of personal peculiarities and habits, and of the general conditions of health and occupation. This knowledge, and much more knowledge of incalculable value to medicine, is in the possession of the general practitioner, and he must be urged to still greater acts of self-denial, in order that this knowledge may be placed at our command.[1]

ON THE PROGNOSIS OF CERTAIN CASES OF VALVULAR DISEASE OF THE HEART.

Remarks made after the Reading of the above Paper,

By W. T. GAIRDNER, M.D., LL.D.,
Professor of Medicine in the University of Glasgow.

Having been asked to take a part in this very important discussion, and having the advantage of following an elaborate statement by such a distinguished authority as Sir Andrew Clark, I may as well save the time of the meeting by recognising the distinction which he has drawn between "impressions" and positive facts. As the latter are of much greater relative importance where time is necessarily limited, I may also, perhaps, with advantage, state in general terms that, as regards his "impressions," my experience in general, not, perhaps, in every detail, but still sufficiently for the present purpose, may be taken as at one with that of Sir Andrew Clark. I must not, however, omit to state that I am not less than overwhelmed and amazed at the extent, and even the minute detail, of the record he has submitted to us, out of the abounding treasury of his case-books. I believe there are very few men who, having only a fractional part of his vast experience to go upon, would have been able to produce the details of that experience in a such a well-ordered fashion. I cannot deal with these details on the present occasion. They require careful and deliberate study. Moreover, I sympathise entirely with a remark he has made upon them, that, after all is done, it is to the general practitioner that we must look for further progress in knowledge as to the prognosis of long-drawn-out cases of cardiac disease. With whatever amount of attention he may note, or even record, the facts, the consultant is in a position which deprives his record of much of its value. He cannot follow up his cases. Of those that die soon, he often knows something to the end. Of those that live long, and especially of those that get apparently well, he commonly knows nothing except by the merest accident. Hence, his experience is biassed, as it were, by circumstances over which he has absolutely no control, and which tend to familiarise him with the unfavourable side of the question. The same, or nearly the same, applies to the hospital physician. It is only the general practitioner who is the lifelong friend of his patients, and can give us the facts of which we are at present in search. But my experience happens to present at least one feature of some importance, in respect of which it is, perhaps, not too much to say that I am probably alone in this room. I doubt if there is anyone else now present, and perhaps not many even beyond this meeting, who can say that he wrote down his opinions on this subject twenty-five years ago, and produced cases in support of them; and further, who is able now to take up the parable as regards some of these very same cases, and to give some sort of account of them to this meeting. And as I have this very peculiar, if not unique, position in reference to the subject of our debate, perhaps I had better confine myself, in what remains of my time, to dealing with these comparatively few, but really most important, hard facts, leaving "impressions," for the most part, out of the statement. One sentence, however, I should like to quote from what I wrote in 1861, because it is to this, or something like it, that Sir Andrew Clark must have alluded in his kindly and far too complimentary remark, that I had treated the subject more fully and completely than he could attempt to do. This I would entirely and emphatically disclaim; but it is, nevertheless, true that I used these words, which I think now to be quite as fully borne out by a more lengthened experience as they were at the time they were written. "The tendency of half-instructed auscultators is to over-estimate the importance of the murmur as a fact, and to under-estimate it as a means of investigation; to pay too much attention to the mere existence of the sound, and too little to the circumstances in which it occurs. And from this springs another tendency, which is, to take too grave and sombre a view of cardiac murmurs generally, and especially of such as are loud and obtrusive." (*Clinical Medicine*, Edinburgh, 1862, p. 561.) The instances I adduced at that time, with a few others closely related to them, will afford me the materials for what remains to be said now.

Case I. (*Clin. Med.*, p. 562).—To this case I have nothing to add. It was that of a physician of some distinction, who, while attending Laennec's clinique, had discovered a cardiac murmur in himself, referable, as the event proved, to the aortic valve. He made himself very unhappy about it for a time, until he got by habit to disregard it, and even, perhaps, to be unconscious of its existence, although it was known as a tradition to all his intimate friends at the time of his death. He died, between 60 and 70 years of age, of tubercular peritonitis, and I (then a young man) was asked to open his body. The aortic valves were glued together, and their segments firmly incorporated for about a third of an inch, near their insertions, still leaving a sufficient current for the blood (in one never plethoric), but amply accounting for the murmur. The heart was not even enlarged, nor was there anything to show that the disease had in any way shortened life.

Case II. (*Ibid*, p. 562).—This also is the case of a medical practitioner, who, in 1861, had been for "half a life-time," in all probability, the subject of a mitral regurgitation. He had, in early adult life, an attack of acute pulmonary œdema, which he himself considered to have been, so far as observation goes, the starting-point of the cardiac lesion. At this time (1861), he was what might be fairly called a middle-aged man, in very active practice in a country town and extensive district; holding also a hospital appointment, and doing much medico-legal and other duty, as well as general and surgical practice. Several very threatening attacks (one or more of them of angina-like character) occurred after my account of him in 1861 was written; but he still survives; still, in a modified way, practises his profession; and, according to his last statement to me personally, and all the in-

[1] The elaborate tables by which the paper was illustrated, together with the conclusion of Sir Andrew Clark's remarks, will be published next week.

formation available up to this date, is "as well as he ever was in his life." What is still more interesting and remarkable, the murmur, after being followed up from time to time for several years, was found to have disappeared; and this many years ago, though long subsequent to the record of 1861.

CASE III. (*Ibid.*, p. 563).—This "young and active man" (in 1861) certainly survived for many years the discovery of an aortic murmur, of which very full details are given from my notebooks at that date, but he has been lost sight of, and I have quite recently ascertained that he is dead; my authority for this single fact being the friend and stalwart companion whom I found walking with him over highland hills shortly before the record of 1861, and who told me that he was a capital pedestrian, and very good company, and showed no trace at that date of any infirmity appreciable to one who was with him. Another case mentioned incidentally in the same page, but not so fully recorded, was more or less under observation for some years; but unhappily the subject of the murmur committed suicide; and nothing is known further of the circumstances in detail, except that he went to India, held a public appointment, and returned home again without apparent or very troublesome cardiac disease.

CASE IV. (*Ibid.*, p. 565).—This case is one of very great interest, because there is reason to suppose that the murmur may probably have been congenital. It was detected at an early period of life, and verified by me as a very singular clinical fact when the young man had barely emerged from being a schoolboy. The boy's uncle was a much respected and excellent country practitioner, not far from Edinburgh; and Dr. George Balfour (whose high authority on such subjects is well known to you) was intimately cognisant of the facts of the case almost, if not quite, from the time of my introduction, and until the patient's death, which happened only a few years ago, in his 47th year. There was some doubt, from first to last, as to the precise nature and point of origin of the murmur, but none at all as to its intensity and its rushing or roaring character; significant, it might be supposed, of a great disturbance in the current of the blood. The account I have given of it in detail as in 1861, requires to be qualified by the statement that it was not always exactly the same in its apparent localisation, being sometimes adjudged more like an aortic, sometimes more like a pulmonic, obstructive murmur; but at one time, very many years afterwards, I was able to recognise the facts recorded in 1861 as being still present. This man was twice married, had children by both his wives, and, somewhat to my surprise, managed to get his life insured in two first-class offices, after very full statements of all the facts from the medical point of view. He died certainly not of directly cardiac, but of cerebral, symptoms, which may very well, however, have been secondary to a cardiac lesion. For many years, and certainly up to his second marriage (when I was called upon to make a formal statement about him for the consideration of the insurance offices), he professed to be perfectly well, and to have no cardiac symptoms of any significance whatever. Dr. Balfour writes to me that "he suffered more during the last few years of his life from breathlessness and bronchial attacks, but he never had dropsy, not even œdema of the lower limbs. About a month before his death, he was seized with an epileptic attack while at his place of business; he recovered perfectly, and kept well for a day or two, after which violent and never-ceasing headache set in, and he died somewhat suddenly about a week after his first attack. I looked upon the case as one of embolism, with subsequent softening. His father refused a *post mortem* examination, as he thought his widow would not like it. She told me that, if I had asked herself, I would have got an examination, as her husband made her promise that, if I asked it, I was to have his heart.

CASE V.—The last case is certainly of very peculiar—I had almost said of unique—interest; but I happen to have seen several, at least two, cases more or less closely resembling it, which, therefore, I will here call Cases V. and VI. In both of these there was reason to suspect that the murmur was congenital, and that it may have been the consequence of a malformation rather than of what is commonly termed valve-disease. In both of them it was detected during the period of childhood or adolescence; and one of these patients has lived into full manhood, and, so far as I know, is in fairly good health now, although, as he is a rather retiring, shy man and never consults me, I have not ventured for many years to ask him about it. This I know, that he shoots over a moor in autumn, and, so far as appears, has no breathlessness or other indication of cardiac trouble. Yet the murmur in this case was, and probably is, not less striking than in Case IV., and of nearly the same kind. It was discovered by my predecessor, Professor Macfarlane, and brought under my notice soon after my becoming professor in Glasgow in 1862. At that time, moreover, the boy was subject to turns of lividity, which inspired some uneasiness at times, and was also very slightly choreic, to the extent of occasional momentary twitches of the muscles of expression. Of both of these symptoms, so far as I have lately observed, he has nearly, if not quite, got rid. At all events, it may be quite distinctly affirmed that neither of them has ever assumed the proportions of a disease since he grew up.

CASE VI. is that of a young boy still at school, seen with the late Dr. Scott Orr. He can scarcely be hindered from playing cricket and going in for all the sports proper to his age.

CASE VII.—This case is not to be found in my *Clinical Medicine*, but is referred to incidentally, and with all the details necessary, in the article on Angina Pectoris in Reynolds's *System of Medicine* (1st edition, vol. iv, p. 685.) There was evidence (though not of a very precise kind, I admit) of valvular disease leading to hæmoptysis in 1852; and, in 1872, well-marked aortic regurgitation, with all the usual sequelæ, existed, leading to a fatal result about five years afterwards, and therefore nearly a quarter of a century after the first alarm. In the interval, he had been able to carry out several arduous pedestrian tours in Switzerland, and to discharge the ordinary duties of a parish clergyman in a populous place.

CASE VIII.—This is a very remarkable, if not unique, case of tricuspid obstruction, the facts of which, along with the heart, were submitted by me to a numerously attended meeting of the Medicine Section of this Association in London, in 1873. The *post mortem* appearances then demonstrated, and which evidently corresponded with what was recognised during life as "an auricular-systolic murmur over the tricuspid orifice, absolutely uncomplicated and free from the suspicion of mistake" (see *Clin. Med.*, p. 602), were a growth about the size of a small walnut, arising from the endocardium of the right auricle, and so placed as to fall over, in the manner of a ball-valve, into the tricuspid orifice, whenever the flow of blood was towards the ventricle; thus accounting perfectly for a very prolonged murmur, "beginning immediately after the second sound, continuing throughout the pause, and then going on *crescendo* up to the first sound, at which it stops abruptly" (p. 603). These facts were constantly present during a lengthened period of observation; as also a remarkable undulation in the jugular veins, which, indeed, had been the chief fact to attract the patient's attention; otherwise he was wonderfully well, "of firmly-built frame, tolerably active, and neither livid nor dropsical." This man lived for more than five years after these clinical facts were carefully noted, and probably for more than double that period from the commencement of the disease (which may, indeed, even have been congenital, as no accurate data could be obtained about it). He died at about 25 years of age, or more, of acute pneumonia; and it could not be ascertained that this had any very appreciable connection with the cardiac lesion, inasmuch as the heart showed no deformity of any kind, nor was it in any degree abnormal in size or in the proportion of its various cavities.

CASE IX. was submitted by me to the Clinical and Pathological Society of Glasgow (see *Glasgow Medical Journal*, September, 1879, page 224). The interest of the case is chiefly as bearing on the prognosis of that common form of valvular disease, mitral stenosis, and it differed in no essential particular from others, which have led me to the conclusion that, in comparison even with other forms of valvular disease, and especially with the regurgitations, the fatal prognosis of this form of disease has been immensely exaggerated by some considerable authorities. This subject, however, I have no time to deal with adequately at present, and I will only say that, although this lady (Case IX.) suffered more or less all her life, so much that there is at least a fair presumption that the disease may have been congenital; and although the mitral orifice after death was found to be smooth, contracted as from very old lesion, with vegetation, and so small as not to admit the little finger, she had been able to grow up to mature womanhood, had married, had borne a considerable family without accident, and finally had had to encounter a great deal of mental distress from her husband becoming insane, and an inmate of an asylum. She was seen by me for the first time, in a very extreme state of cardiac suffering, and she died soon afterwards. It was only after her death, and the revelation of these facts at the *post mortem* examination, that I was able to learn that her ordinary medical attendant had always been puzzled to account for her symptoms (not hearing any murmur), and had tried to satisfy her that her disease was "nervous," and the heart in reality sound.

CASE X. may be taken as another, bearing somewhat in the same direction, but adduced among many similar cases of mitral stenosis to illustrate the fact that the apparently first symptom, or at least distinctly appreciable symptom, of this lesion, years after it has been in existence, may be a cerebral attack, which, nevertheless, is distinctly and unmistakably related to the cardiac disease through em-

bolism. In this instance the patient was, as the sequel showed, distinctly of a rheumatic constitution, and had passed through several confinements before she was known to be the subject of a cardiac valvular lesion, which was first discovered in hospital, in the course of the investigations in connection with an attack of hemiplegia. The case has been carefully recorded as to the pathological phenomena by Drs. Coats and Middleton, the clinical facts being furnished by myself (see *Glasgow Medical Journal*, April, 1879, pages 258 and 310).

The bearing of such instances as some of those I have submitted to you, on life-assurance, is too obvious to require commentary; and anything like an adequate dealing with so vast a subject is precluded by the limits imposed on me, even were I in a position otherwise to undertake it. I will, therefore, close with a record, in his own words, of three interesting cases communicated to me by Dr. Wallace, of Greenock, Examiner in Surgery in the University of Glasgow, which may, I think, very well stand for a sample of the kind of information that may be expected from senior family practitioners of good standing and large experience, when your Committee begins its operations.

"Mr. R. B., merchant and sugar-refiner, consulted me, about the year 1855, as to whether he was likely to be accepted for life-insurance by any of the leading offices. He came to me as a personal friend, telling me he was afraid there was something wrong with his heart, as he felt a curious pulsation in his neck when he lay down in bed at night. On examination, I found that there was a loud bellows-murmur, synchronous with the systole, and audible at the base and along the aorta and the great vessels in the neck. There was no increase of the impulse, but the vessels at the root of the neck pulsated visibly. He had no discomfort beyond the feeling described. He was otherwise vigorous, and was, besides, active and temperate in his habits. He never had rheumatism. His father, however, was rather a rheumatic subject, and was known to have had disease of the heart when 30 years of age, but was able to lead an active and useful existence for nearly fifty years after, dying, it may be said, of decay of nature, at the age of 85. Mr. R. B. had most probably the valvular affection long before coming to me. Be that as it may, his life was accepted by a good office, which, however, charged the premium for a man twelve years older than the applicant. After this, Mr. R. B. led a busy life, and had a good deal of domestic as well as business trouble. He was, however, always apparently calm and composed, and seldom made any complaint of his lot. So far as I know, he kept in excellent heart till within the last six months. He died about two months ago, at the age of 64. Whether his death was entirely due to the heart affection or not, I cannot say. But a gentleman, whose case I will presently give you, told me to-day that he had been informed R. B. died from the effects of a fall from the top of an omnibus a few weeks previously. R. B. was married.

"The case just referred to is that of P. C., now aged 51. He had an attack of rheumatic fever when 11 years of age, when the heart was touched. He was bred an accountant, and has led a very active life, taking a leading part in local and imperial politics. When 26 years of age, he was examined in London for life-assurance, and was then told by the medical man he had an affection of the heart, but that the constitution would get accommodated to it. He was taken at the ordinary premium. He has twice been under my care for attacks of rheumatic fever, and of great severity. He occasionally complains of rheumatic pains; but, from being up to the best way of warding off the fever, he keeps, on the whole, in good health, and can address large public meetings, night after night, without experiencing any inconvenience or discomfort. He is unmarried, and a strict teetotaller. He allowed me to examine him to-day, when I found the impulse and rhythm normal, and no extension of the præcordial dulness; but there is a mitral regurgitant as well as an aortic onward murmur, both being well marked, and in no way changed from what I found them to be about twenty years ago. The murmurs must have existed now for forty years. His father was drowned at sea. His mother died from myelitis at the age of 77.

"A third case worth noting is that of H. M., a Custom House officer. He is now 55 years of age, and unmarried. He retired with the rank of surveyor, about six months ago. When 11 years of age, he had an attack of rheumatic fever of great severity. When convalescent, he was seen, in consultation with the regular family attendant, by your predecessor, Dr. Macfarlane, who then told Mr. M.'s mother that the boy's heart was affected. He was brought up first in a merchant's office, and then entered the Custom's service as an indoor officer. He has been active and regular in his habits. He has had two severe attacks of rheumatism, for which I attended him; and I know that, when in Hull about twelve years ago, he had also a severe attack. He was, notwithstanding, always able to return to business, but, when appointed surveyor a few years ago, he found the night-work telling upon him unfavourably. He, therefore, made up his mind to retire, more particularly as the superannuation allowance was nearly as high as he was likely to get. He complains occasionally of rheumatic pains in change of weather, and has at such times some uneasiness in the præcordial region. He manages, however, by taking a run to Buxton now and then, to keep himself in tolerable condition, and he enjoys life fairly well. I examined him on Saturday, and found the state of the heart just as I found it more than twenty-five years ago. There is a blowing sound synchronous with the systole at the base, and along the aorta, and also a blowing sound synchronous with the systole at the apex. The impulse and rhythm are normal, and there is no increase of the præcordial dulness. I may add that his father died from a fever at a comparatively early age, and that his mother is still alive and hale, at the age of 86."

THE DOME-TROCAR AND ASSOCIATED INSTRUMENTS IN PARACENTESIS, ASPIRATION, TRANSFUSION, OVARIOTOMY, AND TUNNELLING THE ENLARGED PROSTATE.[1]

By SIMON FITCH, A.M., M.D.Edin., Halifax, Nova Scotia.

The dome-trocar comprises a series of instruments upon which I read a preliminary paper at the International Medical Congress at Philadelphia, in 1876, and which was published in the *Transactions* of that Congress; and I desire now to bring this more fully before the British Medical Association.

The progress of surgery during the past half-century is well illustrated by the achievements of the trocar in detection, diagnosis, and cure of diseases which previously were occult or obscure, and intractable. Fifty years ago, paracentesis was hardly practised, except in cases of fluid distension of the abdomen, bladder, or scrotum, after other means of relief had failed, and then it was a clumsy and unvalued procedure. The old trocar, with triangular point and big head, entered a cavity abruptly, endangering the interior, then the split cannula, pushed onwards over the bulging occiput, would often catch some bit of the three-cornered margin, and fail to go in properly, or, in entering, would tear or split up the edges of the aperture, and, upon being withdrawn, would leave a jagged punctured wound, indisposed to heal.

But, now, paracentesis is called upon both to detect and treat some of the most serious diseases to which the body is liable; such as hydrothorax and empyema, hydropericardium, septic deposits in the abdomen, intrapelvic and lumbar abscesses, intractable retention of urine, hydatids and abscesses of the liver and kidneys, strangulated hernia, hurtful effusions within or about the joints, hydrocephalus, and spina bifida; and the surgical management of these diseases is more critical, in consequence of the sensitive and vital character of the organs and textures involved, as the lungs, the heart, the abdominal viscera, the pelvic organs, the great joints, the spinal cord, the brain. In dealing with such diseases, in such parts, none of the instruments now in use are equal to what is required of them. Paracentesis now, with or without aspiration, with or without injection, is commonly done either with a single tubular trocar, having an unsheathed point dangerous to the interior of the cavity entered, or with a trocar, solid or tubular, guarded by an outer cannula, difficult of insertion, and, when inserted, only comparatively less dangerous than the point itself.

What, then, would be a perfect trocar? How far have recent improvements brought it towards perfection? What further changes are required to realise the ideal instrument?

The perfect trocar should be (1) easy of insertion, the point entering by incision rather than puncture, and having a guard following with certainty, without catching or dragging the margin of the aperture; (2) harmless when inserted, so that it shall not injure the interior of the cavity or adjacent parts: (3) safe as a probe or sound for internal exploration; (4) adaptable to every form of exhausting and injecting apparatus; (5) competent to give uninterrupted exit and entrance to fluids; (6) certain to leave a simple incised wound ready to heal.

Appreciation of paracentesis and improvements in the trocar seem to have commenced in 1850, when Sir James Simpson reduced the large head of the trocar to the same circumference as the shaft, so that it should stretch the orifice less; and as the cannula could then be advanced without spreading, he omitted the split in the end, and published his employment of a long slender trocar of this kind, with

[1] Read in the Section of Obstetric Medicine at the Annual Meeting of the British Medical Association at Brighton.

an exhausting syringe attached, as a means of diagnosis in various internal enlargements, especially in pelvic tumours and abscesses, and thus advanced the idea which Dieulafoy subsequently developed into his admirable aspirator.

The happy thought of having the cannula itself pointed, so as to penetrate independently of the stylet, was first conceived by Fergusson, who, in 1853, contrived a pen-like tubular needle, for the injection of perchloride of iron, in the treatment of nævi and aneurysms. In 1858, Dr. Alexander Wood adapted this instrument to the subcutaneous injection of morphine. Shortly afterwards, Sir Spencer Wells enlarged this little tubular trocar for ovarian tapping, and made the edges of the pointed end sharp for one half the circumference of the tube. This instrument, superior in many respects to the old trocar, has still this fault—that the protecting cannula is outside of the puncturing tube. Now, if the distal margin of this outer cannula be made thin, to wedge in more easily, it will be cutting and dangerous when within the cavity. If, on the other hand, the terminal margin be blunted, it will be liable to carry before it the sac, or the wall of the cavity; as, for instance, in tapping for hydrocele, or for retention of urine, if the tunica vaginalis, or the bladder, be not very tense, it is oftentimes extremely difficult to get the outer cannula pushed in; and in empyema, with a thick and tough pleura, so much force is sometimes required to urge the entrance of the outer cannula as to endanger detachment of the membrane from the ribs; and in paracentesis, for the diagnosis, or the temporary relief of ovarian dropsy, if the outer cannula do not follow the inner tube quite into the sac, or if, in entering, it catch and lacerate a fragile sac, more or less of the cystic fluid will escape into the abdominal cavity, which is one, if not the chief, cause of the fatality which sometimes follows this simple operation. But should injection be attempted with an imperfect introduction of the protecting tube, whether that be the split cannula of the old trocar, or the outer cannula of the tubular trocar, the result may be very disastrous. I have seen intense peritonitis occasioned by tincture of iodine thrown into the abdomen in such an attempt to inject an ovarian cyst; and Syme, in his *Principles of Surgery*, third edition, p. 406, deprecates a like faulty injection for cure of hydrocele, remarking, "If the fluid is allowed to remain in the cellular substance, it gives rise to violent inflammation, and soon terminates in sloughing of the scrotum."

I had on many occasions encountered embarrassments similar to the above, and, in common with others, tried to obviate the uncertainty of entrance of the outer cannula by cutting down to the immediate investment of the fluid to be evacuted, or the cavity to be entered, that I might at least see whether the outer cannula actually passed in or not, until it occurred to me to reverse the relation of the tubes to each other, so as to have the guard inside the trocar. And while in Edinburgh in 1871 I had a double tubular trocar made by Gardner upon the following plan:—The outer cannula has the distal end pointed, the pointed part being in shape and thinness as nearly as possible like a lancet, only, of course, concavo-convex so as to closely fit the inner tube, the edges very sharp and convex in outline (if concave, they cut less easily), rise from the point to the opposite side of the cannula, not abruptly (which was a grave fault of the instruments first made for me), but by an acute angle, not more than 25° for the largest size, and only 10° or less for the aspirator sizes. Constructed thus, the outer cannula will, without preliminary incision of superimposed tissues, enter by a clean semicircular cut, and penetrate to any required depth; the outer cannula having entered, then the protecting tube being inside of it may be advanced into the interior of the cavity with absolute certainty of entrance, and without a possibility of even touching the margin of the aperture or any of the textures through which the outer cannula has passed. Instruments of this description were likewise made, under my direction, by Messrs. Krohne and Sesemann in 1871, and the largest, or ovarian, size is more or less known in England; but the aspirator sizes seem to have been overlooked. Thus, Mr. Alfred Goodrich, in the BRITISH MEDICAL JOURNAL, August 8th, 1874, says, "In emptying a cavity with the aspirator, the operator is often alarmed by finding the instrument filled with blood, arising from the walls of the collapsing cavity being forcibly sucked against the sharp point of the needle;" and he proposes, as if the idea was his own, that the trocar consist of two tubes, the outer one pointed, the inner one not so. But in the same journal a fortnight afterwards, Mr. George Brown, of the North-Eastern Hospital for Children, referring to Mr. Goodrich's suggestion of a trocar guarded by an inner tube, observes, "The idea is not original; we have had one in constant use for more than twelve months, which was supplied by Messrs. Krohne and Sesemann." Well, the trocar, of which Mr. Brown speaks, is one of the kind just described as made, under my direction, by Messrs. Krohne and Sesemann in 1871, three years before this correspondence. If other changes in construction of the trocar are declined, let this principle at least be accepted, to have the puncturing cannula outside, so that the guard inside shall enter with certainty and with ease.

Nevertheless, this instrument is not perfect; for although the safe entrance of the guard-tube is assured, yet, after entrance, the open end of this same tube is itself very objectionable, especially in the aspirator trocar, where it must be made thin to avoid bulk. In the August numbers of the JOURNAL just quoted, a correspondence appeared in reference to a successful paracentesis of the pericardium, where Mr. Shingleton Smith, upon whose patient the operation was performed, deplores the risk which accrues, not only from the point of the aspirator-needle in the cavity of the pericardium, as the fluid is drawn off, but also from the sharp edge of a protecting cannula rubbing against the pericardium, or coming into contact with the beating heart; and about the same date the *Lancet*, under head of "Medical Facts," observes that, "In tapping of the chest, when the fluid has been evacuated by the exhausting apparatus, the lung, in expanding, may strike against the sharp and hard cannula. To prevent this, M. Béhier, of Paris, uses a tube of soft metal to be introduced into the ordinary cannula, which, when the pleura is emptied, bends down against the parietes of the chest, and the lung does not suffer." But a tube of soft metal cannot be drawn very thin, so if it is large enough to be permeable, it is too bulky to enter a sufficiently small cannula, and if used within a pointed tubular trocar, it would, upon bending down, leave the point exposed. Perhaps enough has been said upon the danger of the unguarded point, and the disadvantages of the open cannula.

I will now describe a very important modification of the bi-tubular trocar, by which the inner guard, whilst sheathing the point without touching the tissues penetrated, is deprived of the hurtful edge of its open end. Retaining my first improvement of having the outer cannula the perforating one, I have had the distal end of the inner tube closed over by a rounded or dome-shaped roof, so that, when it is projected beyond the cutting point of the outer cannula, the two tubes fit closely together, and the end of the combined instrument feels perfectly smooth, and may be safely used, as a probe or sound, within the cavity penetrated, as the abdomen, thorax, bladder, joints, and even the pericardium, without danger of wounding viscus or organ, puncturing blood-vessels, or even scratching or abrading the lining of the cavity. When the perforating cannula enters a cavity, there can be no escape of the contents till the dome is advanced to guard the point, then there is disclosed a fenestra, or oval aperture, cut out of the lower wall, and one third of each side wall of the inner tube, through which fluids may be freely evacuated and injected; the distal termination of the fenestra is at the base of the dome, which is either solid or floored over so that no substance can lie there, while at the proximal boundary a curved lip projects over one-third of the fenestra to prevent obstruction; the fenestra thus guarded, and being, moreover, on the under side, cannot be stopped by the wall of the cavity coming into contact with it, nor by any floating fragment falling upon it. When this instrument is introduced to empty a sac which proves to be multilocular, it may, without withdrawal, be instantly changed from trocar to sound and *vice versâ*, so as to define and puncture cyst after cyst, while it occupies and plugs the one aperture by which it first entered.

The different sizes have each some peculiarity adapting it to its special work. The largest, or ovarian trocar has the proximal end bent down into a hollow handle, to conduct the fluid, through an india-rubber tube, into a receiving vessel; and a thumb-rest enables the one hand, holding the instrument, to sheath and unsheath the point at will. Sir Spencer Wells's hooks may be attached to this trocar; or the long light clamp-forceps, made for me, catch and retain the sac very securely, and, held in the hand with the trocar, accommodate themselves to the varying distances to which the trocar enters, and, after withdrawal of the trocar, close up the aperture and prevent leakage, and then help to pull out the slippery cyst through the abdominal incision; in oöphorectomy and ablation of the uterine appendages, they will effectually hold the parts to be removed.

The clamp-forceps, eight inches long, and as light as consistent with the required strength, have, for their grasping parts, stout rings with transverse furrows and ridges on their opposing faces, which, when the blades are closed, interlock, and the sac or part held cannot slip, as from ordinary forceps, nor tear out, as from hooks or forceps with teeth; three needle-like points catch the part to be held, and retain it within the grip of the rings until the blades are clamped, which is instantly done by a graduated coupling, worked by a slide on the handle. The late Dr. Washington L. Atlee used both these

instruments, the dome-trocar and the clamp-forceps, in all his ovariotomies during the last three years of his life.

The trocar for paracentesis abdominis is similar to the ovarian trocar, only smaller, and without the thumb-rest. The next smaller size is the dome-trocar-catheter, for tunnelling the intractably enlarged prostate, not only relieving the bladder at the time, but giving permanent release from recurring retentions. This instrument is a long dome-trocar, the terminal third curved less than a common catheter or sound; the dome with its fenestra resembles the end of a metal catheter, and is mounted upon a strong steel spring, which adapts itself to the curve of the outer cannula, and when this catheter-end is pushed out, it occludes the point of the outer tube which, for

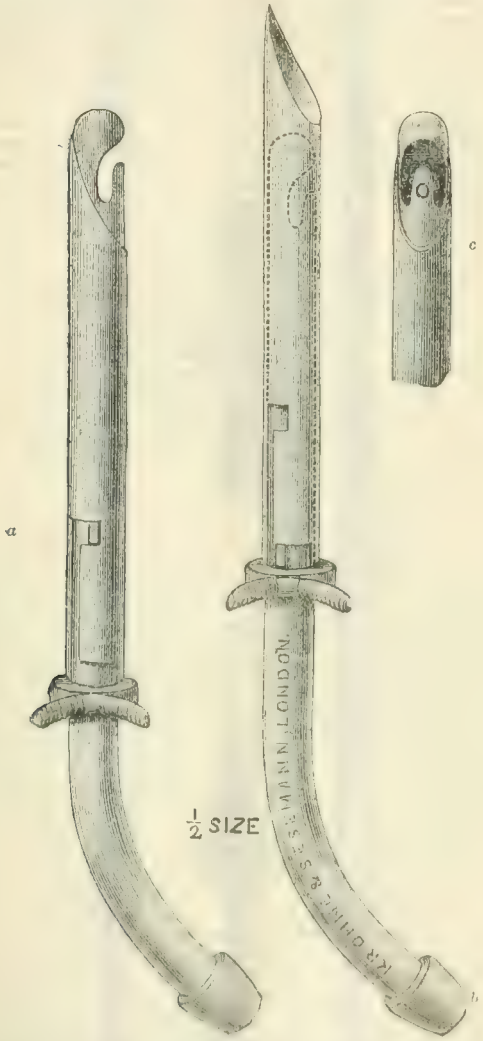


Fig. 1.—Fitch's Ovariotomy Trocar. The cutting point is on the outer tube, the inner or drainage tube is continuous, and terminates in a dome-top, which thoroughly guards the cutting point, and serves as a probe, when, through one cyst, a second and third one has to be punctured. The side opening in the second tube is also guarded by a projecting tongue from preventing a membrane being drawn into the opening when syphon action has been established. *a* shows the inner tube being pushed forward to guard the sharp point; *b* the cutting point is exposed, and the trocar ready for use; *c* shows the front view of the guarded opening of the inner tube.

additional security has a slight dorsal protuberance, so that it cannot catch or scratch the lining of the urethra; it is virtually a catheter within a tubular trocar. The mode of operating is this: the instrument, with the dome protruding, is introduced by the urethra, till arrested by the enlarged prostate; when, the left forefinger being in the rectum to define and steady the parts concerned, the pointed outer cannula is advanced, and passes easily through the gland into the bladder; then the inside catheter is slid forwards, and enters the bladder with certainty, again occluding the point, and the urine is discharged, as through an ordinary catheter; a thumb-screw now fixes the protruded dome, and the instrument may be retained in the bladder twenty-four hours, or until the perforation is sufficiently patulous, as shown by the instrument moving easily in it; then it may be withdrawn, and a full-sized metal catheter introduced twice a day, or oftener, till the new channel is cicatrised and permanently established. This instrument will also be found most efficient for tapping the bladder from the rectum, and for discharging noxious intra-peritoneal fluids, and washing out the peritoneal cavity, through the retro-uterine *cul-de-sac*; and made with a larger curve, will be available in suprapubic lithotomy, perforating the bladder from

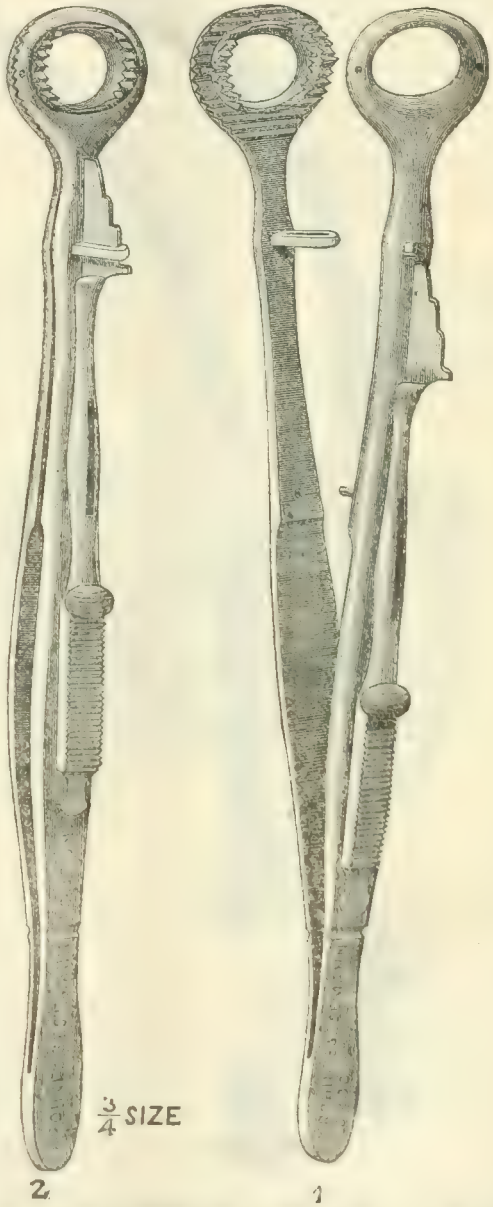


Fig. 2.—Forceps for seizing and holding the cyst. It can be locked by means of a wedge-shaped sliding-bolt.

within outwardly, remaining in the wound as a guide for the further steps of the operation. (Full details upon the construction and action of this catheter-trocar may be found in the *New York Medical Journal* for February, 1882.)

Transfusion may, I think, be easily and well done with a short dome-trocar of suitable size, attached to each end of an india-rubber

tube, a foot long; one trocar is inserted into the supplying vein, and, when the trocar at the other end of the tube fills, it is introduced into the receiving vein, and the operation is complete. The trocar being closed, and opened at its distal end by retraction and projection of the dome, there can be no inclusion of air, and there is no need of valve or stop-cock. As soon as the lancet-end is inserted, with the convex side towards the operator, the dome is protruded, sheathing the point and opening the fenestra; then this guarded tube may be pushed into the vein as far as required, and so accurately fills the aperature by which it entered, that no ligature is required. Thus, time—so valuable in this operation—is saved, disturbance of the vein

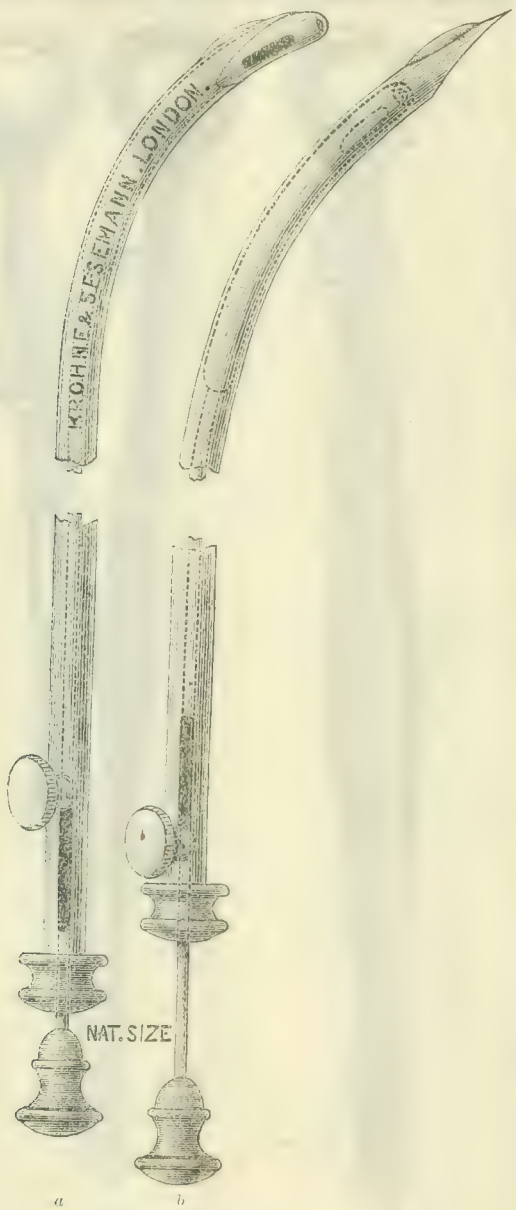


Fig. 3.—Cutting prostatic catheter—*a* with the cutting-point guarded; *b* with the cutting-point exposed.

is avoided, and injury to the interior of the vein need not be apprehended. If mediate transfusion is performed, a glass syringe, with the piston removed, and the nozzle inserted into an india-rubber tube, armed with one trocar, is a suitable reservoir into which the blood may be caught as by ordinary venesection, or the blood may be defibrinated by whipping, and strained into the syringe; with the ordinary precautions, the trocar is then inserted, and the piston need not be replaced, for sufficient and more steady propulsion is obtained by merely elevating the syringe. I have done the operation in this way with great ease upon the cadaver, where the veins are more flaccid and collapsed than in the living subject.

The smallest sizes, or aspirator dome-trocars, are the most important of the series; these all have their proximal orifices funnel-shaped, to fit the aspirator-attachment. Two, of different calibres, are very long, for emptying deep cavities and for exploratory sounding; two,

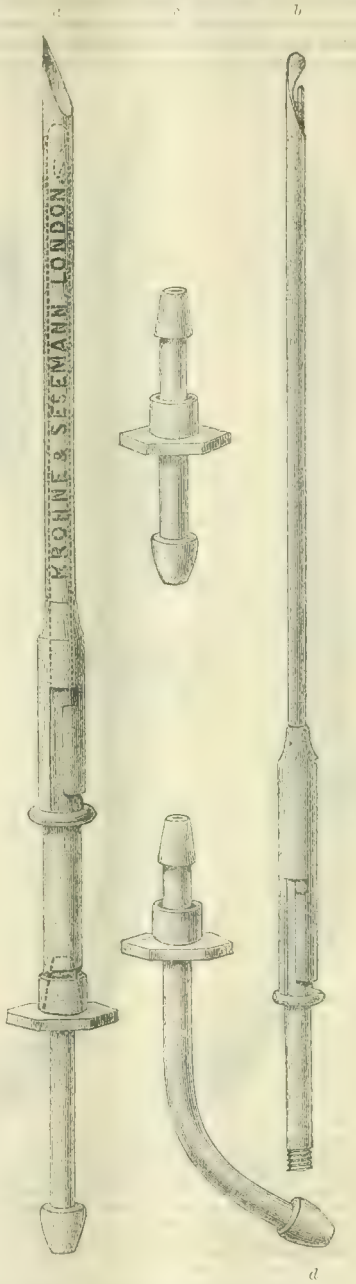


Fig. 4.—Guarded aspirator needle, on the same principle as the ovariotomy trocar—*b* shows the inner tube, with dome top and guarded eye; *c* and *d* are a straight and a curved terminal, to which are screwed, by means of a collar, needles of various sizes.

shorter and stouter, for tapping the thorax, liver or kidneys, and for transfusion; and one, still shorter and very fine, for hydropericardium, hydrocephalus, spina bifida, and strangulated hernia. This form of aspirator-needle enters without boring or rotatory movement, then, guarded by the dome, its touch is harmless, and it may be employed

where the ordinary needles or trocars would be inadmissible; for example, in aspirating the bladder with it, we may draw off the last drops of urine, as with a catheter, and search the interior of the viscus, as with a sound; in operating for hydatids, the protruded dome may stir up and dissever the parasites, while the aspirator is extracting them through the same instrument. In tapping the thorax, there is no danger of hurting the pleura or the lung; and in paracentesis pericardii, the dome-guarded needle will not injure, more than a smooth probe, the interior of the pericardium, or the beating heart. (Dr. Roberts, in his book on *Paracentesis of the Pericardium*, designates this dome-needle as the most perfect instrument for the purpose, p. 53.)

A close-fitting india-rubber ring on the trocar, slid down to near the surface of the part entered, will conveniently indicate the distance to which the instrument is inserted or retained. To examine deep-seated bone, and to search for shot or other foreign substances, we may insert a dome-needle with the point projecting, till we reach the proper depth; then, advancing the dome, we have a probe with which to make exploration, without entrance of air or exit of blood.

The aspirator-attachment deserves attention; by it either of the dome-needles or smallest trocars may be connected with any exhausting and injecting apparatus, without moving the apparatus or the trocar, and without twisting the connecting tube. It is a hollow metal cylinder, two inches long, with a nozzle at each end, one nozzle bulbous, the other conical; the bulbous nozzle having been previously inserted into the free end of the flexible tube of the apparatus, the connection is effected in a moment, when required, by pushing the conical nozzle into the funnel-socket of the dome-needle, and the ring-nut clasps the coupling into an impervious joint. The cylinder of one of the attachments is curved, to prevent sharp bending of the india-rubber tube where the instrument is used with a simple exit-tube, or with the syringe in mediate transfusion.

The handy aspirator is a very portable and inexpensive apparatus, which I now use almost universally, to the exclusion of every other form of aspiration; it is like a Higginson syringe, but with treble thickness of all the walls, which gives strong resilience and powerful suction to the bulb, and impossibility of sharp bending, or of collapse to the tubes. In emptying a cavity with it, the bulb is firmly compressed in the hand till the trocar is inserted; then the compression is relaxed, and the flow, thus initiated, continues by mere syphon-action, unless the fluid be very thick; but if it be necessary to quicken the current, by occasional or repeated working of the bulb, then the india-rubber tube between the bulb and the trocar should be pinched with the thumb and finger at each compression of the bulb, to prevent possibility of regurgitation. Either exhaustion or injection may be effected by attaching the trocar to the end of one or other tube of the apparatus. The trocar-needles for the handy aspirator, if it be desired to lessen their cost, may have their proximal ends bulbous, to be inserted directly into the orifice of the india-rubber tube, without intervention of the aspirator-attachment. (Vide *New York Medical Journal*, November, 1877.)

The larger trocars are made of German silver, with the cutting part of steel; the trocar-catheter has the dome or catheter-end of silver, the perforating cannula of thin steel; the aspirator-trocars have both cannulæ of thinnest steel tubing, without seam; the aspirator-attachment is steel, its conical nozzle brass. The best material for the connecting tube between trocar and exhauster is pure india-rubber, so thick that it cannot collapse. When used without exhauster, the india-rubber exit-tube should have the middle expanded into a bulb, to be used for the ordinary emptying of cavities, and for aiding the current in transfusion, whether direct or mediate; but there should be no joints between the bulb and the tube, and no valves to impede the easy flow of fluids, or to whip the blood in transfusion; and there should always be, near the end of both connecting-tube and exit-tube, a bit of glass tubing, through which the current may be observed, or its absence noticed.

To clean these trocars and needles, the inner tube is fully retracted, and then revolved as far as it will go, when the several parts are easily pulled asunder. The trocar-catheter is taken apart by unscrewing the button on the proximal end of the instrument, and then drawing out the dome and spring through the distal end of the outer cannula.

Messrs. Tiemann and Co., of New York, have perfectly made these instruments for me; and Messrs. Krohne and Sesemann will have all of them made with careful accuracy.

The dome-trocar will, I think, be found—(1) easy of insertion; (2) harmless when inserted; (3) safe as a probe or sound for internal exploration; (4) adaptable to every form of exhauster and injector; (5) competent for uninterrupted passage of fluids; and (6) certain to leave only an incised wound, ready to heal, thus realising the requirements demanded of a perfect trocar.

ON THE PRACTICABILITY OF ESTABLISHING AN ARTIFICIAL FISTULOUS OPENING IN THE HUMAN SUBJECT BETWEEN THE GALL-BLADDER AND THE DUODENUM.[1]

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Duodeno-Cholecystostomy.—This term is applicable to the operation of uniting the gall-bladder and the duodenum with an opening for the passage of the bile. The process which I have proposed for effecting this consists in connecting their walls by a single loop of suture, which shall attach their surfaces by adhesive inflammation, and cut an opening between their cavities, passing away in the intestinal canal. If there exists any disintegration of the tissues of the sac, extirpation would be proper. Should such degeneration not be present while the cystic and common ducts can be freed from obstruction, cholecystotomy would be warranted. But if there is permanent occlusion of the common duct without obstruction of the cystic duct, then duodeno-cholecystostomy is the appropriate operation.

This proceeding is simplified by the dilated condition of the sac, which brings it into close proximity to the duodenum, and facilitates the passing of a needle with a silk thread to unite their walls by moderate constriction.

In my autopsic lecture, reported in the *Southern Medical Record* for March 20th, 1885, will be found a description of the demonstration of this process on the human subject. This attachment is illustrated in the accompanying modification of Hinke's plate, Fig. 1.



Fig. 1.—L. The gall-bladder. D. Duodenum with attachment. M. The colon partly removed. N. Severed suspensory ligament, with liver and stomach.

In my first series of experiments on dogs, a circular row of catgut-sutures was applied around the elastic ligature, connecting the walls of the gall-bladder and the duodenum. But it was observed afterwards that sufficient inflammation ensued from a single stitch of silk thread to unite the walls, while it cut an opening between their cavities.

In case of an incision into the sac for the removal of its solid contents, this may be closed by Lembert's suture, separate from the loop for attachment, or may be secured to a corresponding incision in the duodenum, dispensing thus with the loop for effecting a communication. Other modifications will be noted in referring to my second series of experiments on dogs at the close.

Inflammation of the tissues of the gall-bladder seeks relief in the direction of the duodenum; and my observation of the ulcerative opening of the gall-bladder into this canal, directed my investigations originally to effecting a direct communication between them. This result is well shown in the accompanying copy of Jeançon's cut, Fig. 2.

[1] Read in the Section of Surgery at the Annual Meeting of the British Medical Association at Brighton.

The operation of Winiwarter, uniting the gall-bladder to the colon, and afterwards to the small intestine, by suture, opening the gut on the fifth day, and puncturing the opposed surfaces through the incision, failed to realise the advantages expected from this cholecystoduodenal outlet. Yet his procedure demonstrates the great tolerance of the structures for similar operative procedures, and there were no complications from the coils of intestine, the constriction of its lumen, or regurgitation of contents into the gall-bladder; hence these not likely to occur in attaching the sac to the duodenum.

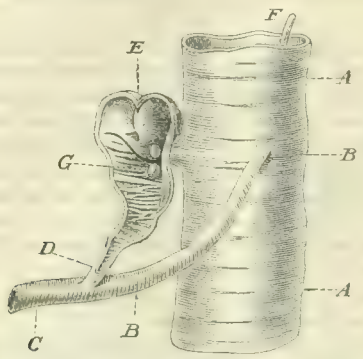


Fig. 2.—Copy of plate from Jeançon. A A. Section of duodenum. B B. Common bile-duct. C. Hepatic duct. D. Cystic duct. E. Excised wall of gall-bladder. F. Probe in ulcerated opening. G. Two small gall-stones.

Dr. George Harley says that "the triumph of operative surgery would be to establish an artificial fistula between the gall-bladder and the duodenum. For then, not only would the pent-up bile be removed, but the disturbances arising from the non-admittance of bile into the intestines likewise be, at the same time, overcome. I am not quite sure," he remarks, "if in these days of antiseptic surgery, the operation is not practicable; for I can see no reason why the adjacent surfaces of the gall-bladder and duodenum should not be eroded by potassa fusa, and speedily stitched together" (*Diseases of the Liver*, p. 1110).

This process presents difficulties which do not hold against the plan of uniting the walls by a loop of suture, which shall unite their surfaces by adhesive inflammation, while it cuts through the tissues, and gives a passage for the bile. Some other process may, however, be found preferable to either, and it rests with surgeons to adopt that which proves best.

As Harley's book on *Diseases of the Liver*, containing this suggestion, appeared prior to the publication of my proposition in *Gaillard's Journal*, he is justly entitled to priority of publication. But it is due to the facts of the case to state that his work had not been read, nor was I even aware of his suggestion when my paper was published.

It is proper, also, to state that I did not then know of the operation of Winiwarter, though it was recorded in 1882 in a foreign journal, and published in October, 1884, in the *American Journal of Medical Sciences*. His procedure, however, is entirely different from the measure suggested by Harley, and from that process which I have proposed for carrying the bile into the duodenum.

My experiments on dogs were undertaken to verify a predetermined method of making an opening from the gall-bladder into the duodenum, and it only remains to test its applicability to man for this operation to be adopted.

In the *Centralblatt für Chirurgie* of June 12th, 1886, we find an abstract of the practical investigations of Golzi, touching the operative surgery of the gall-bladder, and the establishment of a cholecystointestinal fistula. He considers the possibility of uniting the gall-bladder and duodenum by suture; the probability of such connection leading to derangement of the contents of the gall-bladder from the entrance of any alimentary substances; the prospect of disorder to the alimentary canal from the continuous entrance of bile; the feasibility of keeping open a fistulous communication without disturbance of the digestion.

Experiment proved the practicability of attaching the gall-bladder and duodenum by suturing an orifice in each, so as to secure separately the mucous and the serous membranes in apposition. The operation led to no trouble, either in the gall-bladder or duodenum; but slight disturbance resulted from the constant entrance of bile at first, and eventually the ductus choledochus became dilated so as to afford a new reservoir for the bile.

I reported a series of experiments on dogs, intended to show the aim and end of this process for connecting the gall-bladder with the duodenum, in the *Atlanta Medical and Surgical Journal* for September and October, 1884. All these have an important bearing on the proposed operation in the human being, but, as space does not admit of full details, I will only give some account of the sixth of the series, on August 20th, 1884. In the first experiment upon this animal an incision was made below the right costal arch into the abdominal cavity, and a loop of silk thread was passed through the approximated walls of the gall-bladder and duodenum. The second laparotomy on the same subject, eight days afterwards, verified their firm union by adhesive inflammation. A third was undertaken after the complete restoration of the animal, on February 4th, 1885, with a view to reopen the communication, if it had been obliterated by the lapse of so long a time; and also with the intention of ligaturing the common bile-duct, as as to prevent the escape of bile by the natural channel. But, unfortunately, the dog died from imprudent administration of the sulphuric ether as an anæsthetic, though it had borne it well on the previous occasions.

The two stages of this operation, the passing a single stitch of silk through the respective walls (Fig. 3), and their intimate union from the adhesive inflammation of their serous surfaces (Fig. 4), are represented in the accompanying drawings.

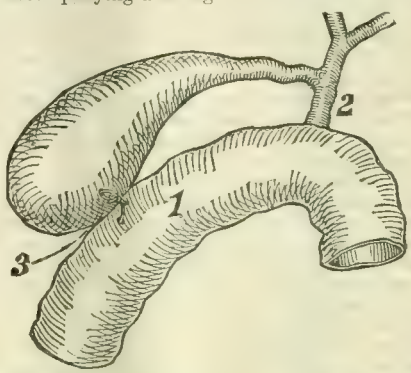


Fig. 3.—View of relations in the dog. 1. Duodenum with pyloric curve. 3. Attachment by stitch to gall-bladder. 2. Common, cystic, and hepatic ducts.

The necropsy presented a firm septum between the gall-bladder and duodenum, with a well marked depression, indicating that an opening had been made by the thread in cutting its way through into the intestine, which would doubtless have continued to give a passage to the bile had the common duct been ligatured. There was no obstruction to the passage of bile in either duct, as, prior to incising the sac, the duodenum was opened, and upon pressure on the gall-bladder, the bile was seen to pour out at the orifice of the common

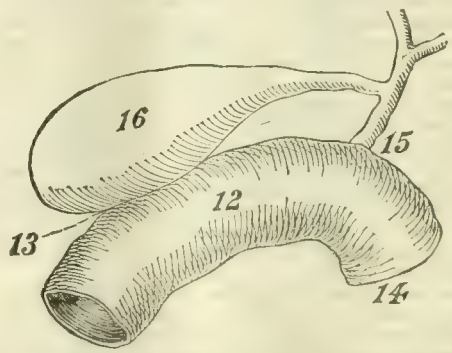


Fig. 4.—Union by adhesive inflammation. 12, 14. Duodenum and pyloric extremity. 16, 15. Gall-bladder and ducts. 13. Agglutination of walls of gall-bladder and duodenum.

duct. It is therefore clear that the various ducts escaped the inflammation propagated from the suture to the serous investments of the attached walls. An important phase of this necropsy was the absence of any evidence of extensive peritonitis. The contained viscera had not contracted adhesions to each other or to the parietes of the abdomen; and there was no attachment at the line of hare-lip sutures that closed the external wound with the needles penetrating through the skin, the subcutaneous tissue, and the peritoneum.

It will be observed that this animal survived the first operation and the second exploratory laparotomy, being entirely restored within one month, and continued in a healthy condition, completing five and a half months, when its death occurred from an overdose of the anæsthetic.

I have preserved some specimens from the necropsies of other animals that died at varying periods after the use of the elastic ligature for attaching the gall-bladder and duodenum in this first series of experiments. One of these specimens was taken from a dog, whose death occurred on the fourteenth day following the operation, and shows the fistulous communication between the gall-bladder and duodenum from the cutting out of the elastic ligature which united their walls, and the firm adhesion of their surfaces surrounding this opening, induced by the inflammatory action set up in their serous investments from the traumatic irritation of the ligature in doing its work. This result is illustrated by the cut, in which the gall-bladder

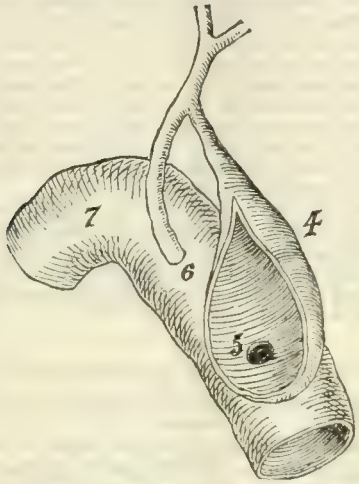


Fig. 5.—Posterior view of attachment. 4. Excised gall-bladder. 7. Curvature of duodenum. 6. Entrance of common duct. 5. Artificial opening through their walls.

is laid open, so as to display the opening in the septum formed by the agglutination of the two adjacent walls.

In this case the well knotted elastic ligature was found lying loose within the sac, having been liberated by cutting its way through the tissues. This observation led subsequently to securing the knot of the loop, whether elastic or simple silk, in close contact with the wall of the duodenum, which promoted the detachment and passage of it into that canal.

Another specimen, from a dog that died on the eleventh day after attaching the gall-bladder and duodenum with the elastic ligature, presents an opening between their cavities. Fig. 6 represents the

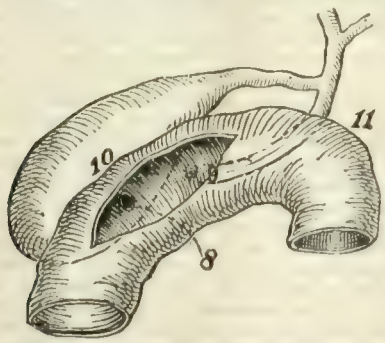


Fig. 6.—Incision in duodenal wall. 8. Fistulous communication of cavities. 9. Entrance of common duct. 10. Adhesion of surfaces forming septum. 11. Pyloric curvature of duodenum.

wall of the duodenum laid open, and shows the natural orifice of the duct as well as the artificial opening in the septum.

A report of my second series of experiments on fifteen dogs appeared in the *Atlanta Medical and Surgical Journal* for September and November, 1885. It will be observed that the results of attachment of the gall-bladder to the duodenum by a single stitch of white silk suture thread are the intimate and firm union between their serous surfaces by adhesive inflammation of the tissues, and the formation of a fistulous opening through this septum, which affords a communication between their cavities, thus affording an outlet for the bile artificially when the discharge is promoted by the natural channel.

In repeating this measure of attaching the gall-bladder to the duodenum by a single loop of suture silk, that was applied in Case 6 of the first series of experiments, 5 deaths occurred respectively in 18, 20, 24, and 48 hours, and in 20 days after operation. I resorted, in some instances, to ligation of the common bile-duct on the same occasion, as illustrated in the Fig. 7. But death

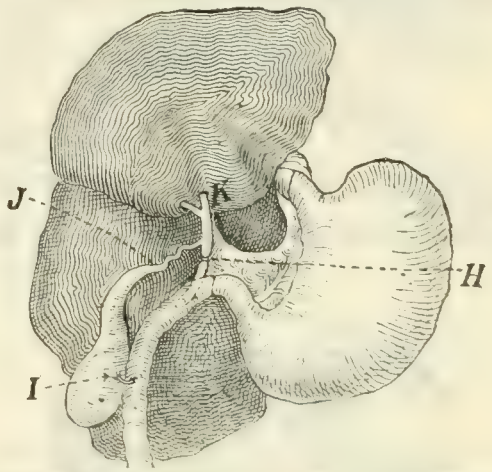


Fig. 7.—Modification of plate from Cloquet. The duodenum is drawn up with the liver. I. Knotted loop, attaching it to gall-bladder. J. The cystic duct. K. Hepatic ducts. H. Ligation of common bile-duct.

ensued early in all these subjects, with extravasation of bile into the hepatic structure, and, in one case, there was exudation through the diaphragm into the thoracic cavity.

In four cases of attachment of the gall-bladder and the duodenum by a single loop, the common bile-duct was also ligatured at the same time with catgut, and fatal results ensued respectively in thirty-six, forty, and fifty-six hours, and in three and a half days afterwards. In one case of securing the gall-bladder and the duodenum together by suture of the circular margin of an opening, made in the walls of each with a shoemaker's punch, while the common bile-duct was left free, death occurred in thirty-six hours.

In two similar operations, with ligation of the common bile-duct, death resulted in twenty and twenty-two hours respectively. The fatality attending the ligation of the common duct before another outlet for the accumulation of bile was secured, induced me to undertake these experiments for effecting an immediate communication between the gall-bladder and duodenum, which process is well illustrated in Fig. 8.

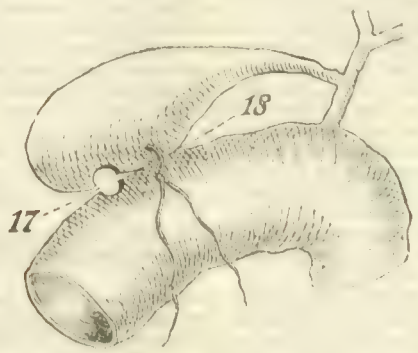


Fig. 8.—Immediate communication of cavities. 18. Temporary attachment of walls. 17. Circular excision from each by punch.

The gall-bladder was secured temporarily in contact with the duodenum by a ligature passed through their walls, and a fold of each was excised with the punch, thus leaving a round aperture into their

cavities. The margins of these openings were united in two cases with a continuous catgut suture (Fig. 9), and in one with interrupted

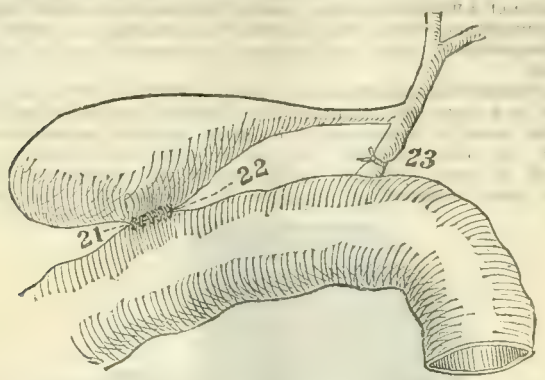


Fig. 9.—Exterior view of operation by punch. 21-22. Stitches in margin of aperture through walls of gall-bladder and duodenum. 23. Ligation of common duct.

suture of Snowdon's iron-dyed silk, as exhibited in Fig. 10. In the two

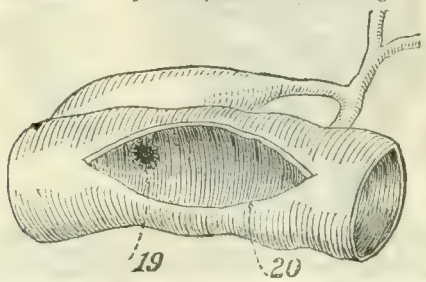


Fig. 10.—Result of direct opening in walls. 19. Orifice with sutured margin. 20. Incision into duodenum.

cases in which the common duct was ligatured, the necropsies showed some yielding of the suture around the circular openings in the walls, and hence escape of bile into the peritoneal cavity. It was inferred that the contractile tissue of the duodenal canal led to the closure of the orifice made by the punch, as is sometimes observed in the perforations of small balls in gunshot wounds of the intestines, which prevented the passage of the bile directly from the gall-bladder into the duodenum, so that it was forced out between the stitches. With proper precautions, in the removal of a larger portion of tissue from the duodenal wall, so as to make allowance for its contractility, and the union of the margins by Galy's suture, instead of the ordinary continued or interrupted suture, success is likely to follow this operation, and it may be used to separate a circular disc of their walls in cases not demanding immediate communication.

Only three dogs of the fifteen in this series of experiments survived the primary operations, and I sought, by secondary experimentation on these, to test the practicability of turning the bile entirely into the artificial channel, which there was sufficient grounds to conclude had been made by the silk loop cutting an opening through the attached walls. The object of re-opening the abdominal cavity was to ligature the common duct, which remained open in each of these cases; but the adhesions of the duodenum with the lower surface of the liver completely shut out any view of the ducts, so that only the touch could be used in attempting to pass the ligature. As a consequence of this uncertain guide in the proceeding, failure resulted in my own efforts, and in those undertaken, at my request, by a colleague, to secure the common duct.

In a second laparotomy, one month and three days after the primary operation upon one of these subjects, death took place within forty-eight hours.

Another animal, that underwent a second laparotomy one month after the attachment of the gall-bladder and duodenum, survived this, and at the expiration of a like period, was subjected to a third opening of the abdomen. The wall of the duodenum was incised, and there was a cicatricial depression in the septum, indicating that an opening had recently existed, into which a trocar passed with slight resistance, re-establishing the communication with the cavity of the gall-bladder. This dog died four days subsequently, two months and four days having elapsed from the primary operation.

The third, that resisted the attachment of the gall-bladder and duodenum, was, at the expiration of twenty-five days, submitted by my colleague, Dr. W. D. Bizzell, to a second operation, and he verified the firm union of the walls of the gall-bladder and duodenum around the point of suture. He felt assured that an opening existed through this septum for the flow of bile, and attempted, without effect, to ligature the common duct.

The abdominal cavity of this animal was opened for the third time two months subsequently, when it was corroborated by a number of medical men present, that a strong attachment existed between the gall-bladder and duodenum, while it was inferred that the sac was drained by an artificial outlet into the duodenal canal. After tearing loose some of the adhesions, with a view to expose the common duct, another fruitless attempt was made to pass a ligature around it. This dog died ten days after the third laparotomy, and the necropsy showed a free communication between the gall-bladder and duodenum, from the action of the single loop of silk thread passed through their walls more than three months previously. There was also found to exist a solid compact union of their walls around this aperture, resulting from the adhesive inflammation set up between their serous surfaces, which had been brought in contact by the loop of suture. It was ascertained, by exploration, that the ductus choledochus communis was pervious, but that one of the branches of the hepatic duct had been ligatured by mistake, and that there was partial disintegration of the parenchymatous structure of the corresponding lobe of the liver, which most probably led to the fatal result.

It is evident that the preservation of this artificial communication between the gall-bladder and duodenum for three months and five days, while the natural outlet was open, affords strong ground for belief in the maintenance of such an outlet for the bile, when obstruction of the common bile duct exists, as in cases requiring surgical interference in the human subject.

FIFTY CASES OF OVARIOTOMY.

By SKENE KEITH, M.B., C.M. Edin., F.R.C.S. Ed.

The point of greatest interest in my second series of fifty cases of ovariotomy, is to be seen in the diminished number of tumours which had been tapped before operation. Only eleven of the number, or 22 per cent., had been treated in this way, as against 32 per cent. in the first fifty. This is most satisfactory, and I hope to be able to show, ere long, that the tapping of an ovarian tumour by anyone other than the surgeon who is to have charge of the case, is as rare in Scotland as it has been for some years in England.

The advance which has been made in abdominal surgery, since the operation of ovariotomy was established by Sir Spencer Wells in the south, and by Dr. Keith in the north, is shown very distinctly by comparing the death-rate of those who have begun their abdominal surgery in the last few years, with the mortality in the first fifty cases of ovariotomy, of several of the older operators. In Dr. Keith's first fifty completed operations there were ten deaths; advancing a stage of rather more than ten years, we find that beginners still had a heavy death-list. Thornton, Bantock and Tait having nine, fourteen and nineteen deaths respectively in their first fifties. A second stage onwards of about seven years, and Mr. Meredith and myself are able to show less than one-third the number of the deaths of the surgeons already mentioned. What is the reason of the greatly diminished number of deaths? One of the most important, and one of which little notice has been taken, is that the operations are less severe than they used to be. Twenty-five years ago, when it was almost a crime to remove an ovarian tumour, the unfortunates who had them, were allowed to live as long as possible: and, when it was certain that their lives were worth little, they were then, and not till then, handed over to the surgeon, almost as to the executioner. In the *Edinburgh Medical Journal* of August 1864, Dr. Keith mentions that he had refused to operate on three cases only up to that time, and that one of these died in forty-eight hours, another in a week, and the third three weeks after being first seen by him. A second and most important factor in the production of the diminished death-rate is the principle of perfect cleanliness of Lister. Even those who scoff most, would never think of putting a dirty finger, or sponge, or instrument into the abdomen, yet this regular and systematic use of the nail-brush is the direct outcome of Lister's antiseptics.

Increased experience is not to be lost sight of. Now, no one ought to do abdominal surgery unless he has watched others at work, and one ought not to hear it gravely suggested, as I have, when there

was some doubt as to whether the peritoneum had been opened or not, that the layers of the abdominal wall ought to be counted. This is hard to believe, but it is a fact. The intra-peritoneal treatment of the pedicle has probably something to do with our present success; though I have little doubt that almost, if not quite as good results could be got with the clamp, if proper care were taken to dry the stump, and to prevent septic matter reaching the wound or the peritoneal cavity. The real objection to this instrument is, that the wound cannot heal in its whole extent by first intention. Drainage saves the lives of some. It is strange how the use of the tube was struggled against, long after it had been adopted in general surgery. All manner of objections were made. It was said to be the cause of hernia, and that there was danger of omentum entering the holes and becoming strangulated. Both these objections were directed not to the proper but to the improper use of the instrument. It is quite conceivable that a tube as thick as one's thumb may weaken the abdominal wall, or that holes made to suit such a tube might allow omentum to enter; but such a one is far too large, and I was much surprised when first shown a Keith's tube of this size. We have also better instruments, and we know better how to take care of our patients after operation. The routine practice of giving so much opium so many times a day is gradually giving place to the more enlightened plan of using the drug in suitable cases, and with some definite object, though some have gone to the opposite extreme, and say that they never order it under any circumstances. These are the chief reasons why fewer women die after ovariotomy than used to die; yet, although the mortality of specialists is reduced to a small percentage, the general mortality after ovariotomy in this country is probably nearer 30 than 20 per cent. Some time ago I heard of an obstetrician having five deaths in succession after this operation.

It is interesting to watch how even in the comparatively short history of ovariotomy, methods of treatment have been tried, found wanting, discarded, and then, after a few years, again brought forward; or how great stress has been laid on one particular part of the operation, how it is next thought to be of little importance, and how, again, it is written about and made much of. For example, about twenty years ago Dr. Keith used often to wash out the peritoneal cavity with warm water; five years ago I saw this practice carried out in America, and now it has been taken up by English abdominal surgeons as one of the most recent advances. The length of the incision has been again pushed into prominence. Many years ago Sir Spencer Wells showed that the mortality was greater when a long, rather than a short, incision had been used. The natural explanation of this is that a longer incision is required when the tumour is badly adherent, and when it cannot be much diminished in size either by the trocar or by breaking down with the hand. The following sentence from the *Lancet*, nineteen years ago, shows this pretty conclusively. "In the case of single, or nearly single, unattached cysts nothing could be simpler than the operation, and in several the cicatrix is not more noticeable than the umbilicus."

The number of broad ligament or parovarian cysts is much under Mr. Tait's average of 10 per cent., though in his last list of cases the number had gone up to eighteen in the hundred. Here the proportion of these cysts is decidedly under 10 per cent., and the majority of these are cured by tapping, abdominal section being required only in exceptional cases. Malignant cysts of the parovarium do not seem to flourish in this part of the world. It remains a mystery why surgeons will not even try to cure these cysts by simple means—a trocar and cannula not larger than a No. 4 or 5 catheter is all that is required.

To make my list of abdominal sections complete, as I believe that this the only way of giving a correct idea of the work which is being done, eighteen cases of the removal of the uterine appendages, one case of hysterectomy, four exploratory, or incomplete, operations, with

No.	Date.	Sent by	Age	Adhesions, etc.	Weight.	Residence.	Result.
51	Sept., 1885	Dr. Wilson	38	None	17½ lbs.	Hospital	Recovered
52	Nov. ,,	Dr. Mackenzie, Stornoway	28	None; papilloma; three months pregnant; tapped twice	42 ,,	,,	,,
53	,, ,,	Dr. Turnbull, Kelso	34	Parietal and omental	21 ,,	,,	,,
54	Dec. ,,	Dr. Keith	34	None	25 ,,	Private	,,
55	,, ,,	Dr. Gemmel, Airdrie	26	None; burst cyst; chronic peritonitis	12 ,,	Hospital	,,
56	,, ,,	Dr. Shearer, Paisley	42	None	19 ,,	,,	,,
57	,, ,,	Dr. Fergus, Glasgow	62	None	37 ,,	,,	,,
58	,, ,,	Dr. Thomson, Harbottle	56	None	17 ,,	,,	,,
59	,, ,,	Dr. J. A. G. Balfour	38	Very vascular and extensive parietal, and to colon	57½ ,,	,,	,,
60	Jan., 1886	Dr. Allan, Dumbarton	28	Universal; twisted pedicle; both ovarian; tapped once	54½ ,,	,,	,,
61	,, ,,	Dr. Gordon, Juniper Green	19	None; burst semi-solid, with chronic peritonitis; tapped once	22 ,,	,,	,,
62	,, ,,	Dr. Keith	23	Pelvic; burst cyst; twisted pedicle	18 ,,	Private	,,
63	,, ,,	Dr. Charlesworth, Kelso	26	,, ,, ,,	14 ,,	Hospital	,,
64	Feb. ,,	Dr. Cuming, Belfast	36	Omental; papilloma; both ovaries	28 ,,	,,	,,
65	,, ,,	Dr. Charlesworth, Kelso	49	Omental; burst semi-solid, with chronic peritonitis	26 ,,	,,	,,
66	,, ,,	Dr. Bruce Low, Helmsley	30	None; tapped once	33 ,,	,,	,,
67	,, ,,	,, ,, ,,	30	None; broad ligament cyst; tapped once	32 ,,	,,	,,
68	March ,,	Dr. Somerville, Galashiels	70	Omental; burst cyst	21 ,,	,,	,,
69	,, ,,	Dr. Orr, Tayport	46	None	12 ,,	,,	,,
70	April ,,	Dr. Watson, Alnwick	46	Parietal; phlegmasia dolens; parotid bubo	22 ,,	Private	,,
71	May ,,	Dr. Smith Shand, Aberdeen	40	Parietal	13½ ,,	Hospital	,,
72	,, ,,	Dr. Blandford, Stockton-on-Tees	41	Omental and pelvic; extensive enucleation; both ovaries; drained; tapped once	17½ ,,	,,	,,
73	,, ,,	Dr. Finlayson, Glasgow	40	None; both ovaries	20 ,,	Private	,,
74	,, ,,	Dr. Cameron, Innerleithen	29	,, ,,	17 ,,	Hospital	,,
75	June ,,	Dr. Keith, from Belfast	43	Omental; extensive to colon and enucleation in pelvis	10 ,,	Private	,,
76	,, ,,	Dr. Macfarlane, Kilmarnock	27	Parietal	17 ,,	Hospital	,,
77	,, ,,	Dr. Bannerman	21	None; ovarian and parovarian cysts removed	5 ,,	,,	,,
78	,, ,,	Dr. Peddie	28	Parietal and omental; both ovaries	18 ,,	,,	,,
79	July ,,	Dr. Haggart, Aberfeldy	26	Pelvic; omental and to bladder; both ovaries	17 ,,	,,	,,
80	,, ,,	Dr. Linton	51	Extensive enucleation; adhesion to intestine and right ureter; drained	30 ,,	,,	,,
81	,, ,,	Dr. Cruickshank, Nairn	55	To bladder	16 ,,	,,	,,
82	Aug. ,,	Dr. Keith, from Glasgow	45	Parietal	18 ,,	,,	,,
83	,, ,,	Dr. Keith, from Belfast	43	Slight pelvic; both ovaries	22½ ,,	Private	,,
84	,, ,,	Dr. Patterson, Bridge of Allan	20	To colon	23 ,,	Hospital	,,
85	,, ,,	Dr. Spence, Burntisland	50	Parietal; tapped once	9 ,,	,,	,,
86	,, ,,	Dr. George Dickson	59	None	16 ,,	Private	,,
87	Sept. ,,	Dr. Frew, Galston	34	Parietal, omental, intestinal, and in pelvis; twisted pedicle; two tumours; drained	10 ,,	Hospital	,,
88	,, ,,	Dr. Scott, Musselburgh	30	To bladder and colon	14½ ,,	,,	,,
89	,, ,,	Dr. H. A. Peddie	26	None; dermoid; both ovaries; fibroid uterus in pelvis	5½ ,,	,,	,,
90	,, ,,	Dr. Morris, Kennoway	22	Pelvic; both ovaries	18½ ,,	,,	,,
91	,, ,,	Dr. Keith	52	None; fibroid in pelvis	17 ,,	Private	,,
92	,, ,,	Dr. Dickson, Dunkeld	42	Dermoid	6 ,,	Hospital	,,
93	,, ,,	Dr. Kynock, Greenlaw	65	None	12 ,,	Private	,,
94	Oct. ,,	Dr. Campbell, Dundee	25	Parietal; burst colloid; chronic peritonitis; tapped once	19½ ,,	Hospital	Died; septicæmia
95	,, ,,	Dr. Bonthron, West Linton	61	Extensive parietal, to colon and mesentery	18½ ,,	,,	Recovered
96	,, ,,	Dr. Cruickshank, Nairn	25	Omental	30 ,,	,,	,,
97	,, ,,	Dr. Kirkwood, Largs	32	None	16 ,,	Private	,,
98	Nov. ,,	Dr. Hay, Leslie	28	Both ovaries	18½ ,,	Hospital	,,
99	,, ,,	Dr. Fraser, Berwick	44	Very extensive enucleation	9 ,,	,,	,,
100	,, ,,	Dr. Howden, Haddington	46	Semi-solid, entirely extra-peritoneal; both ovaries	17 ,,	,,	,,

one death and one fatal case of the removal of a uterine fibroid must be added, bring up the total of cases where I have opened the abdomen to 131, with six deaths. At present, a smaller death-rate accompanies the operation of ovariotomy than that of the other abdominal sections, This is seen at once from the figures already given—3 per cent. for ovariotomy, 10 per cent. for all other cases—or even more markedly when we compare Mr. Tait's last list of removal of ovarian and parovarian tumours with what one knows of his results in other abdominal operations. During one of the two years when this long list was being made—the only one for which I have seen the report of the Birmingham Women's Hospital—the abdomen was opened fifty-six times by this operator in that hospital. Out of these fifty-six operations, eight were fatal, or, in other words, one woman out of every seven died, on whom Mr. Tait that year performed abdominal section in the hospital. These results have certainly not helped to destroy my fear of the peritoneum, nor, to use Mr. Tait's own words, do they justify me in opening that sacred sac very much as one opens one's pocket.

The incomplete or exploratory operations consisted of two cases of ovarian tumours, where I expressed the opinion that it would probably be impossible to remove the growths; but, as on each occasion I had travelled a long distance to see the patients, and as both were very anxious to have something tried, exploratory incision was advised. In the fatal case, the growth was found to be a multilocular tumour, so adherent as to defy removal, and in addition there were cancerous masses in the omentum and mesentery. The second case occurred in an old lady, aged 75. The tumour weighed fully thirty pounds, and at least one-half of its anterior surface was covered by adherent intestine. An incision was made to see if the adherent bowel could be separated easily or not. Unfortunately—or perhaps fortunately—the intestinal adhesion was very vascular; and, taking into consideration the age of the patient, who had attained to five years beyond the time allotted to man, I determined to empty the sac and close the wound. The contents of the sac were too viscid to flow through the trocar; the opening was therefore enlarged, the contents emptied, the interior of the cyst washed out with warm water, and the opening closed round a large rubber drainage-tube. The sac suppurated, giving rise to almost no disturbance, rapidly closed, and in a few weeks the old lady was able to be downstairs, and is now quite well. The two other cases were not begun as exploratory operations. In one, I entirely failed to remove the uterine appendages, and all that was done was to separate the uterus from its close connection to the tissues over the sacrum. Strangely enough, this has relieved the woman of her backache, though in other respects she has not improved. The last case was one of a large semi-solid ovarian tumour, surrounded by ascitic fluid. Following our usual custom, the ascitic fluid was drawn off, and examined microscopically. No evidence of malignant disease was found in it, although when the abdomen was opened, cancerous masses were seen, not only on the surface of the tumour, but also on the peritoneum and on the liver. In such a case, no good could have resulted from the removal of the tumour, so the wound was closed. The poor woman lived for eight or nine months. I think it right to make a distinction between cases which are begun as exploratory and those which, from error in diagnosis or other cause, have to end as such. For diagnostic purposes no operation has been required, and there has been no mistake in diagnosis.

A SUCCESSFUL CASE OF PARTIAL EXCISION OF THE LARYNX, ON ACCOUNT OF INTRA-LARYNGEAL EPITHELIOMA.

WITH REMARKS,

By LENNOX BROWNE, F.R.C.S.Ed.,
Senior Surgeon to the Central London Throat and Ear Hospital.

[The Notes of the case are abridged from the record of Mr. WILLIAM HILL, M.B.Lond., Registrar and Pathologist to the Hospital.]

G. W., aged 61, occupied in a timber yard, applied at the hospital as an out-patient, on November 1st, 1886.

History.—He had first noticed hoarseness of voice, and occasional tickling cough, about two years ago; he had never suffered pain, or anything approaching inconvenience in breathing, except when hurrying to catch a train or omnibus. Gargles, etc., failing to give relief, he was advised by his family attendant, Dr. Gordon, of New Cross, to apply at this hospital.

The patient was a hale looking man for his age, 5 feet 6 inches in height, and weighing 166 pounds. The cause of his hoarseness was at once revealed on examination with the laryngoscope, which showed that while both vocal cords were congested, the left cord was immobile and ulcerated at its posterior portion. There was at that time but little thickening of the left ventricular band, and of the tissues of the left laryngeal boundary of the pharynx, as is seen by reference to Fig 1, which was drawn six weeks after his first applying at the hospital.

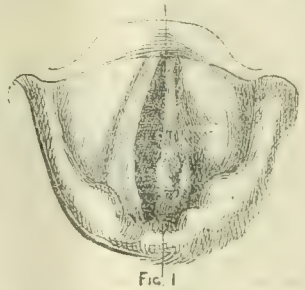


FIG. 1

Laryngoscopic appearance prior to operation.

There was neither then, nor indeed at any period, involvement of the cervical glands, nor was there any constitutional symptom pointing to malignity. There did not appear any outgrowth projecting sufficiently to justify attempts at removal of a portion for the purpose of microscopic investigation. As the patient admitted having suffered from gonorrhœa some twenty-five years previously, it was decided to submit him to a course of biniodide of mercury, in view of the possibility of a venereal cause for his trouble. This treatment was pursued for six weeks, applications of a solution of sulphate of copper being also made to the larynx twice a week. Under these measures the patient expressed himself much relieved, but there could be no doubt that the ulceration was extending, and there was decided diminution in weight; for on December 13th he weighed only 160 pounds, a loss of 6 pounds in six weeks. It was therefore decided by Mr. Lennox Browne, after consultation with his colleagues, to attempt removal of the diseased half of the larynx, and the patient was admitted into the "Adelina Patti" Ward on December 13th. The operation was performed on the morning of the 15th, Mr. Carmalt Jones administering chloroform, Dr. Dundas Grant, Messrs. Percy Jakins and Hill assisting. Dr. Orwin (prevented from rendering active aid through temporary disablement of the hand) and Dr. Gordon were also present.

The operation, which lasted an hour and a half in all, may be conveniently divided into four stages.

1. A high tracheotomy between the second and third rings, and the introduction of Hahn's tampon-cannula, consisting of a tube surrounded by compressed sponge. This was first dipped in a solution of corrosive sublimate (1 in 5,000).

2. An interval of twenty minutes for expansion of the tampon; anæsthesia being maintained by the administration of chloroform through the tracheal tube.

3. *Thyrotomy.*—The median incision was extended from just above the tracheal opening to the lower margin of the hyoid bone, and all the tissues were carefully divided on a director until the thyroid cartilage was reached. The soft parts over the thyroid and cricoid cartilages were rasped sub-perichondrially, the raspatory being kept so close that the perichondrium was literally peeled away from the cartilage, whilst its relation to the superficial soft parts remained undisturbed. The separation was carried back by this means as far as the median line of the boundary between the larynx and pharynx; no scissors, knife, or other instrument than the raspatory was used. A horizontal incision over the hyoid bone, as recommended by Hahn, was not necessary, the vertical one proving amply sufficient, but part of the hyoid attachment of the thyro-hyoid muscle was severed; the much ossified thyroid cartilage was then divided by cutting forceps along its centre; the wings were separated by retractors, and the growth was seen to be confined entirely to the left half of the larynx, which portion it was decided to remove.

4. *Laryngectomy* was effected by (*a*) further careful and thorough separation of the attachments to the pharynx by raspatory, knife-handle, and finger-nail; (*b*) division of the thyro-hyoid membrane, as close as possible to its thyroid attachment; (*c*) division of the left superior horn of the thyroid cartilage at its root by cutting pliers; (*d*) division in the median line of the cricoid cartilage, before and behind, with pliers; (*e*) the divided half of the larynx was then separated from the first ring of the trachea, and a few nicks only were necessary to remove it entire.

The following points regarding the operation are worthy of note. Hæmorrhage, the extent of which is usually described as serious, was, in point of fact, quite trifling; only two small vessels required torsion in the second stage of the operation. Not only were no vessels searched for, as recommended by most writers, but none of any size were exposed, this happy circumstance being doubtless due to the use of the raspatory in preference to scalpel or scissors, and also to keeping so close to the cartilage. The soft parts were little disturbed in consequence. Mr. Lennox Browne expressed himself as indebted to Mr. Henry Morris for the hint to adopt this procedure and to it he attributed a very large measure of the success of the operation in its immediate and subsequent circumstances. The slight oozing which ensued after the removal of the diseased portion of the larynx was checked by a light application of the galvano-cautery along the margin of division. This procedure was also adopted for the purpose of destroying any possible fragments of diseased tissue not removed. The left ary-epiglottic fold was divided close to the cartilage of Wrisberg, and the thyro-hyoid membrane close to its thyroid attachment, with the view of impairing as little as possible the action of the epiglottis. The success of this plan was completely shown in the ease with which deglutition was effected three days later. No spray was used; but antiseptic precautions were adopted by the operator, assistants, and nurses first bathing their hands in a solution of the perchloride of mercury (1 in 5,000), and by the cleansing and rinsing of all instruments and sponges in a similar preparation.

The dressings of the wound consisted in dusting with iodoform for two days, and packing with corrosive sublimate gauze. On the third day, iodol was substituted for iodoform, and within the week this was discontinued, the sublimate gauze only being used. All dressings, except adhesive plaster, were dispensed with after the thirteenth day.

The progress of the case was, till the eighth day, characterised by no event except of a favourable nature. The temperature rose to 101° Fahr. on the night of the operation, but after that it was hardly a degree above normal. There was slight bloody expectoration for twelve hours, and some slight pulmonary congestion and bronchitis; but the patient was cheerful, and at no time was pain complained of. The indications of pulse and respirations being equally favourable, the tampon-cannula was removed in thirty hours, and an ordinary tracheotomy tube substituted; this was also removed at the expiration of seventy-two hours, and the patient breathed freely through the natural passages.

Up to this time liquid nourishment had been administered night and morning, poured from a jug into an œsophageal tube, with a funnel orifice. The food consisted of one pint of beef-tea, two eggs, two ounces of port wine, and two grains of Bullock's pepsine powder for each meal. The only discomfort experienced by the patient was that of thirst, which was allayed by small portions of ice; but, until the third day, he was not allowed to drink any fluid by the mouth. Seventy-eight hours after the operation, the patient was ordered a mutton chop to eat, according to the treatment of Hahn, who, for obvious reasons, recommends solid food as the first to be given by the mouth. The patient was able to sit up in bed, cut up his food, and eat it with relish. During all this time the weather had been very unfavourable, and early on the morning of the eighth day, which was exceptionally raw and cold, the patient's breathing became difficult and laboured, the temperature rose from 99.4° to 101.2°, the pulse from 100 to 112, and the respirations from 20 to 32. Unfortunately, the nurse, although recording these observations, did not recognise their importance, and the patient was not seen until this change had lasted over two hours. He was then found to be breathing with much difficulty and distress; respirations and pulse were hardly to be counted, and the condition was one of alarm. It was evident that the upper air-passages were blocked, and though some benefit resulted from the introduction of a feather into the trachea, Mr. Lennox Browne decided to re-insert the tracheal tube through the original opening in the windpipe, which, happily, had not closed. Mustard and linseed poultices were applied to the chest, and steam constantly generated in the ward. The state of the patient was for two or three days one of great anxiety, but, afterwards, all again went well. On Christmas Day, the eleventh from the operation, he had turkey and champagne for dinner, and from that date convalescence was uninterrupted. He "got up" for the first time on the seventeenth day after operation. The tracheal tube was removed on the twentieth day, that is, on January 3rd. His weight was then 148 lbs., being a loss of 12 lbs. since the operation.

January 17th, that is, the thirty-fourth day, tracheotomy-wound quite closed, but, though ample granulation has taken place, union of the upper portion is incomplete. This is due to the fact that, in consequence of inability to keep the edges of the soft parts whence the cartilages were removed on a level with those so supported, the skin on the left side has become inverted. For the rest, the patient speaks with a wonderfully good though rough voice; it is distinctly phonetic, and he thinks it is "at least as good as before the operation." His strength and general health have been well maintained, and he looks and feels well. His weight is the same as a fortnight ago. The laryngoscopic appearance at this date is represented in Fig. 2. The

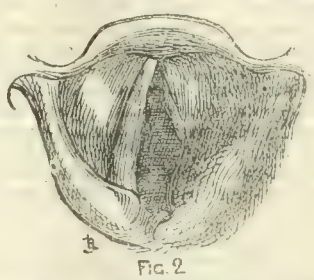


Fig. 2.

Laryngoscopic view, five weeks after operation

right vocal cord moves freely, but is still somewhat congested; the structures on the left side of the glottis move slightly towards the median line in phonation; the epiglottis acts perfectly, and is not in the least out of position.

January 29th. Wound granulating well, and nearly closed.

Pathological Report.—The *macroscopical* description need be but brief, as the accompanying sketch (Fig. 3) gives a clear indication of



Fig. 3.

Internal aspect of removed portion (life-size).

the parts removed, and of the extent of the disease. The growth was seen to spring from the ventricle, and not from the vocal cord, as had been diagnosed on laryngoscopic examination, in this respect resembling several cases reported by other surgeons. The extent of the

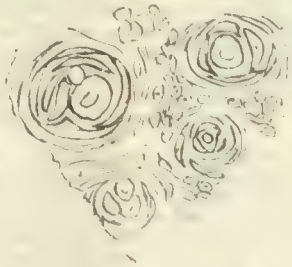


Fig. 4.

Microscopical appearance of superficial section of growth.

disease was also far greater than had been suspected prior to operation, and in this respect the case illustrates the very foreshortened view, with sometimes consequently incomplete diagnosis, to be obtained by

looking into the larynx from above. Generally, the naked-eye evidences were those of epithelioma.

Microscopical Appearances.—The portion removed was placed in spirit, immediately after the operation, and, a few days later, a shaving was cut by hand with a razor from a portion of the growth projecting from the ventricle. (Fig. 3, A.) The structure of this superficial unstained shaving is shown in Fig. 4; it presents the appearance of a typical squamous epithelioma, the nests being remarkably abundant. After the specimen had remained in spirit twenty-five days, a pyramidal portion (base, a quarter of an inch square; depth, one-third of an inch) was removed from the spot whence the shaving had been taken. (Fig. 3, A.) This was sectionised and stained in hæmatoxylin, and was seen, under the microscope, to consist of a dense connective tissue stroma, with great increase of nuclei and cellular infiltration, and of a large number of solid cylinders of an epitheliomatous character, the outermost layer of cells being composed of the columnar variety, enclosing a core of polygonal cells. This condition is shown in Fig. 5. Only one or two distinctly squamous nests were observed near the

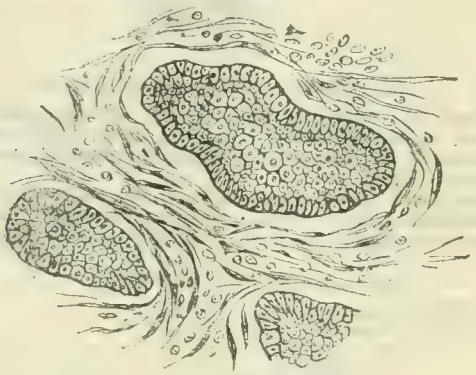


FIG. 5.

Microscopic appearance of growth from deeper section.

surface. The bulk of the growth was, therefore, an epithelioma of the columnar-celled variety, with squamous characters predominating near the surface. Taking into account the fact that the ventricle of the larynx is lined with columnar epithelium, it is not to be wondered that the growth exhibited these characters. In shavings taken from the extreme edge of the portion of the larynx removed, neither nests nor cylinders could be detected; and the same satisfactory negative evidence was afforded by repeated microscopic examination of two fragments removed for that purpose at the time of operation, from the margin of the structures left behind.

REMARKS BY MR. LENNOX BROWNE.—When, eight years ago, the late Dr. Foulis, of Glasgow, showed at the Medical Society the patient from whom he had successfully extirpated the whole larynx four months previously, for "papilloma and spindle-celled sarcoma," I ventured to express a doubt whether that operation would ever yield beneficial results commensurable with the immediate danger of its performance, the very short extension of life, and the discomfort of an artificial larynx to those who survived long enough to wear one; and I drew attention to the superiority of the statistics of tracheotomy to those of the radical operation. Dr. Foulis's was the eighteenth complete extirpation, and the second which survived more than nine months, for his patient lived a year and a half, and death ultimately resulted from phthisis. Since that time, complete extirpation has been frequently performed, and there are now fully one hundred recorded cases. The results, however, have not improved, and the operation has been abandoned by many who formerly performed and advocated it.

The operation of partial laryngectomy stands so far on a much more favourable footing, and the brilliant results of Eugene Hahn and other German surgeons have established it as one of far less immediate fatality than complete extirpation, and affording average periods of immunity from recurrence even of the more serious forms of malignant disease, which promise to be almost, if not quite, equal to those provided by tracheotomy. The success of Hahn's operation recently performed in London on an English patient has naturally attracted much attention. Mr. Butlin very shortly afterwards had a similar operation; and he was the first English surgeon to adopt the procedure; the result of his case was quite successful so far as immediate recovery was concerned, though with but partial restoration of voice on account of the necessity for removal of a portion of the cords in the retained half of the larynx.

The case now recorded is at present satisfactory in the two-fold aspect of immediate recovery and of restoration of voice. I am, however, very far from forgetting the warning which I gave a few weeks ago at the Clinical Society, that this operation cannot be considered as established until a period of life has been attained equal to the average of two and a half years to be procured by simple tracheotomy in epithelioma.

Recurrence must, in the nature of things, be always anticipated; and we have yet to see what sort of history our cases will have in this respect. It is earnestly to be hoped that care will be taken in the selection of subjects for this operation, as otherwise discouragement will be given to its performance where other circumstances would be favourable. It is indicated in unilateral and intra-laryngeal epithelioma, and in recent non-infiltrating sarcoma. It is useless in pharyngo-laryngeal epithelioma, in which the larynx is invaded from the pharynx, and whenever there is implication of the cervical glands and structures adjoining the larynx. It is always possible, if on division of the thyroid cartilage the disease is seen to have extended beyond the limits suspected by prior examination, for the surgeon to desist from removal and to be content with having performed tracheotomy.

A REMARKABLE CASE OF PRIMARY SYPHILIS.

BY A. MARMADUKE SHEILD, M.B., F.R.C.S.,
Assistant-Surgeon to Westminster Hospital.

A RESPECTABLE single woman, aged 32, came to me on December 1st. She was well nourished. On the right cheek, just above the angle of the mouth, was a round prominent sessile growth about the size of a florin. It was livid in colour, quite devoid of pigmentary change, and irregularly excavated in the centre by superficial ulceration. A thin non-purulent discharge exuded from the ulcerated surface. The growth infiltrated the tissues of the cheek, but not with the hardness of cancer. The submaxillary lymphatic glands were greatly enlarged, forming a series of manifest almond-shaped swellings, which reached from the angle of the jaw to the symphysis. They were not painful or inflamed, and, though firm in consistence, lacked hardness and fixation. There was no sore throat, or any sign of eruption on the skin.

Towards the end of September, 1886, she observed a small pimple on the cheek, like a "gnat-bite." She picked it frequently, causing it to bleed. About the middle of October, her mistress remarked on its appearance, so she concealed it with sticking-plaster. By the end



of October, the sore was as large as her "finger-nail." She now sought the advice of a chemist, who twice applied "strong caustics." After this treatment it became very painful, and increased greatly in size. The opinion of medical men was now sought. Some said the growth was "lupus," others pronounced it to be cancer, and nitric acid was freely applied; but the growth continued to increase. Taking all the circumstances of the case into consideration, the woman was at once placed upon full doses of mercury, and a very dilute mercurial ointment was applied to the sore.

On December 8th, exuberant granulations had spread round superficially, causing the mushroom-like appearance familiar in malignant growths.

On December 15th, the sore was better, and there was a decided syphilitic eruption over the body and neck, which the patient noticed first on December 10th. The rash consisted mainly of papules and tubercles of a dark "coppery" hue, covered by slight scaly desquamation. The gums were affected by mercury.

The accompanying photograph, kindly taken at this time by my friend Mr. Fitzgerald, of Folkestone, shows the site and condition of the growth.

The improvement continued, and on December 31st, the sore had nearly healed, its former site being represented by a red and depressed scar, covered in the centre by a dark scab. The eruption on the skin was nearly gone. There were some white mucous plaques on the under surface of the tongue. The throat was congested.

This case is of interest and importance to practitioners, on account of its rarity and the difficulties which surrounded the early diagnosis. The dark colour of the woman's complexion suggested the possibility of melanosis. Resemblance to epithelioma was also close, but the condition of the glands was a great aid to differential diagnosis. They lacked hardness and fixity, yet exhibited markedly the multiple indolent enlargement of syphilis. It is unusual to find primary sores on the skin of the face. Probably, in instances like the present, some abrasion of surface, as a scratched pimple, becomes accidentally inoculated in various ways, as by kissing, or conveyance of the virus on the finger. No doubt the application of caustics to this sore greatly increased its size, modified its appearance, and enhanced the difficulty of diagnosis. The vascularity of the parts involved, and the loose connective tissue of the cheek allowing of luxuriant cellular exudation, are other explanations of the uncommon size and appearance of the chancre in the case under consideration. When primary sores occur in curious positions, the history of contagion is wanting or unreliable. The diagnosis from malignant disease is often so doubtful that a positive opinion is impossible. A careful examination and consideration of the condition of the neighbouring lymph glands is, I believe, the surgeon's principal aid in arriving at an early and correct conclusion.

EXPERIMENTAL INVESTIGATIONS ON LEPROSY:

By BEAVEN RAKE, M.D.Lond.,
Medical Superintendent of the Leper Asylum, Trinidad.

Its Non-communicability to Animals.

This paper forms part of a Government report on leprosy in Trinidad. It is a digest of experiments performed on animals during the past two years. Though the results are practically *nil*, they may, perhaps, be not entirely without interest, seeing that the question of the contagion of leprosy appears not yet to have died out.

The methods employed have been four in number: 1. Scarification of the skin and application of material scraped from leprous ulcers; 2. The introduction of portions of leprous tubercles beneath the skin; 3. Vaccination with lymph taken from lepers; 4. Feeding the animal on tubercles and enlarged glands, and viscera obtained *post mortem*.

It will be found that all these methods have been equally ineffectual. The second method, by introduction of tubercles beneath the skin, appears to be the most crucial. The most characteristic product of leprosy is here chosen: a cutaneous tubercle, notably one in which the microscope shows quantities of bacilli. As soon as possible after removal from the living body, a portion of this tubercle is introduced beneath the skin of the animal selected, and the skin fastened over it by sutures. The leprous material is thus brought into close relation with the tissues of the animal in such a way as to encourage, if possible, multiplication of the bacilli. To favour this still more, the subcutaneous tissues are lightly scarified before introduction of the tubercle. I can, perhaps, better illustrate this by selecting from the list two illustrative animals, a cat and a fowl.

Observation xviii. January 1st, 1885.—Tubercles were excised from the face of J. J., aged 16, and shown microscopically to contain bacilli. The hair having been cut short, a small incision was made over the nape of a cat's neck, and the skin being lifted up, two small pieces of tubercle were introduced. The incision was closed with two silk sutures.

January 3rd. There was some swelling at the site of incision, and the two sutures were removed. Laudable pus escaped, which showed some bacilli on staining.

January 4th. There is no further escape of pus. At the site of incision there is thickening about the size of a marble.

January 8th. There is still considerable thickening. The cat has managed to rub the neck, and there is a discharge of serum. Staining showed no bacilli in this.

January 11th. There is a firm cicatrix. The thickening beneath the skin is less.

January 22nd. A subcutaneous thickening, about the size of a millet-seed, is to be felt.

February 5th. A lump, about the size of a pea, is to be felt beneath the skin of the back near the haunch.

February 16th. No lump is to be felt in either situation, and the hair has grown again at the site of incision.

Observation xxvi. March 12th.—The cat was again vaccinated with pus from the vaccine pustule of L. C., aged 10 (tub.), and pure lymph from J. M., aged 19 (anæsth.). A scab had formed by the 23rd.

April 13th. The cat was accidentally poisoned. Dissection showed the subcutaneous tissue at the sites of the inoculations and vaccinations perfectly normal. There was no trace of thickening. The lungs were healthy, and all the other viscera normal. Magenta showed no bacilli in the heart muscle, or in blood from the heart.

Observation xxiii. February 7th, 1885.—More tubercles were removed from the face of J. J., and again shown to contain bacilli. Incisions about three-quarters of an inch long were made about two inches behind each wing and under the left wing of a fowl, and pieces of tubercle about half an inch square and one-eighth of an inch deep were introduced beneath the skin, the subcutaneous tissue being lightly scarified. In consequence of the thin parchment character of the skin, it could be easily raised from the subjacent tissues, and the edges of the incisions sewed together with silk sutures, with little or no hæmorrhage. The skin was left on the pieces of tubercle, and the raw surface was placed downwards in order to favour, as much as possible, adhesion to the tissues of the fowl. The tubercle could be easily slipped about beneath the skin, and its dark colour made it readily recognizable.

February 8th. The incisions are dry, and there is no redness.

February 10th. The incisions are uniting well. Through the translucent skin there appears to be a little white deposit on the tubercles.

March 5th. The sutures are still in, but the edges of the incisions are quite united, and the cicatrices are inappreciable. The tubercles are about the same in size and position, except that the one behind the right wing is attached to the skin and superficially ulcerated. Another tubercle about three-quarters of an inch square and one-eighth of an inch deep (in which again bacilli were found) was introduced beneath the right wing, and three silk sutures were put in. The incision again healed by primary union.

March 18th. Small pink desquamating nodules, about one-eighth of an inch in diameter, were found on the eyelids. These had, however, disappeared by April 10th.

April 10th. The tubercles beneath the wings are in about the same state. The other tubercles behind the wings were not found. From this date till the end of the year, the fowl was fed at frequent intervals with tubercles from living subjects, and portions of viscera and enlarged glands obtained *post mortem*.

Observation xxxiv. April 21st.—The fowl was vaccinated beneath the left wing with lymph from A. A., aged 7 (anæsth.). The lymph did not take.

May 11th. The tubercles beneath the wings are about the same size, and freely movable.

October 9th. The fowl laid an egg. Magenta showed no bacilli in the area of examination.

December 28th. Beneath each wing is a small black nodule about a quarter of an inch in diameter, the skin being freely movable above them. The fowl is plump and in good plumage.

The nodule beneath the left wing was excised, and found to consi of a capsule of false membrane surrounding a mass composed of caseous material and much pigment. Magenta showed a few bacilli scattered amongst the caseous *débris*, rather more in the membranous capsule, but none in the blood or serum from the neighbourhood of the inoculated tubercle, or in the blood from the breast. This fowl is still under observation.

A considerable difference is here noticeable between the results in a mammal and a bird. In the former, the tubercle appears first to have disintegrated. It was then probably partly thrown off, as shown by the bacilli found in the pus two days after inoculation, and partly absorbed, as shown by the gradually decreasing subcutaneous nodule. *Post mortem* examination, three and a half months later, showed no remains of it. In the latter, on the other hand, no absorption appears to have taken place. The tubercles remained quietly beneath the skin, the incisions healed by primary union, and one of these tubercles, when removed eleven months later, was found to have undergone caseous degeneration and to be surrounded by a capsule of false membrane, beyond which no bacilli were found.

It must be noted, with reference to these two animals, that they

had other opportunities of becoming leprous. The cat was vaccinated three times from three different lepers, and the fowl was vaccinated once, and, in addition, was fed on a quantity of leprous material. On no occasion was any vaccine vesicle observed. It would appear that cats, fowls, and guinea-pigs are insusceptible to the virus of cow-pox. As to the fowls which were fed on leprous material, far from suffering from it, they became plump and in good plumage. Inoculation with scrapings from leprous ulcers gave equally negative results, the scarifications drying immediately and scabs forming.

So far, then, I have been unable to find even the localised growth of leprosy-tubercle described by Neisser, much less any general infection after inoculation.

I have a number of animals still under observation, and I hope to extend these experiments further by the aid of cultivation.

THE DISTRIBUTION OF THE LEPROSY BACILLUS.—This paper is based on 420 observations made without selection on 185 lepers who have been under my care in the past two years. The condensed results are given in three tables. To preserve uniformity, for the sake of comparison, the same method of staining, a modification of Ehrlich's, was pursued throughout; magenta being used, without a contrast stain, in order to save time. Table I gives a general analysis of the occurrence of bacilli in the total number of slides examined. It will be seen that they were numerous in fifty-six, generally diffused in twenty-one, and few in twenty-three; or, in short, that they were found in one hundred out of four hundred and twenty observations, or nearly 24 per cent. In fourteen observations they were doubtful, and in three hundred and six observations none were found.

Table II is arranged to show the relative occurrence of bacilli in the various forms of leprosy occurring in the one hundred and eighty-five patients examined. A great preponderance of bacilli in tuberculated cases will be observed. Thus, of the sixty-two patients in whom bacilli were found, forty-one were tuberculated; in twenty-eight of these the bacilli were numerous. In sixteen more the disease was mixed, in thirteen the bacilli being numerous. This leaves only five anæsthetic cases in which bacilli were found.

This is still further borne out in Table III, which shows the material in which bacilli were found. Out of one hundred successful searches, in fifty-nine observations the bacilli occurred in the juice squeezed or scraped from fresh tubercles. In this connection it may be noted that twenty-seven observations on material taken from vaccine vesicles, or pustules in lepers, tuberculated, anæsthetic and mixed, failed to show bacilli in any of them. This is a point of interest with reference to the alleged communication of leprosy by vaccination.

Thirty-four observations were made on the blood in the different forms of leprosy, but in no case were bacilli found. In twelve of these observations the blood was examined during the fever accompanying a fresh outbreak of tubercles, but these observations were equally unproductive. Next to tubercles, the femoral glands and larynx were most fruitful in bacilli, the former showing them in thirteen cases, the latter in eight. In the testes they were only found twice, as also in the median nerve.

I do not wish to claim these observations as being in any way conclusive. Errors of experiment are so easily made, that one series of observations is not enough to decide the localisation of bacilli in leprosy. The figures may, however, give a rough idea of the distribution of bacilli in the different forms of leprosy and in the various tissues and organs. If bacilli are as common in the viscera as some writers seem to think, they are, at any rate, much harder to find by the ordinary methods; for whereas magenta showed them very frequently in juice scraped from tubercles, it never undoubtedly showed them in scrapings from kidney, liver, spleen, or brain. In the four cases in which bacilli were found in phthisical lungs and sputum, it may fairly be doubted if they were not tubercle bacilli. This point I hope to be able to decide by cultivation in similar cases in the future.

TABLE I.—*Showing the Proportion of Observations which yielded Bacilli to the Total Number of Observations.*

Numerous	56
Generally diffused	21
Few	23
Doubtful	14
None	306
Total	420

Present in $\frac{114}{420}$, or nearly 24 per cent.

TABLE II.—*Showing the Proportion of Patients in whom Bacilli were found, to the Total Number of Patients examined.*

	Tub.		Anæsth.		Mixed.		Total.		Grand Total.
	M	F	M	F	M	F	M	F	
Numerous	19	9	—	—	10	3	29	12	41
Generally diffused	5	2	3	1	1	—	9	3	12
Few	4	2	1	—	2	—	7	2	9
Doubtful	2	—	5	—	—	—	7	—	7
None	15	6	60	22	8	5	83	33	116
Total									185

Present in $\frac{62}{185}$, or $\frac{1}{3}$ of the patients examined.

TABLE III.—*Showing the Relative Occurrence of Bacilli in the various Fluids and Tissues which yielded them.*

	Numerous.								Generally Diffused.								Few.								Grand Total.
	Tub.		An.		Mix.		Total.		Tub.		An.		Mix.		Total.		Tub.		An.		Mix.		Total.		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Juice of tubercle	18	8	—	—	7	2	25	10	5	7	—	—	1	—	6	7	6	3	—	—	2	—	8	3	59
Discharge from suppurating tubercle	—	1	—	—	4	—	4	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5
Discharge from ulcer	—	—	—	—	1	—	1	—	—	—	—	1	—	—	—	1	—	1	—	—	—	—	—	1	3
Discharge from pustule	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	2
Scraping from larynx	1	—	—	—	3	1	4	1	2	—	1	—	—	—	3	—	—	—	—	—	—	—	—	—	8
Scraping from femoral gland	1	2	—	—	3	—	4	2	—	1	—	1	—	—	—	2	1	—	1	1	2	—	4	1	13
Scraping from phthisical lung	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	1	1	3
Phthisical sputum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	1
Scraping from exuberant granulation-tissue	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	2
Scraping from testes	—	—	—	—	1	—	1	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	2
Scraping from median nerve	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	1	—	—	—	1	2
Total																									100

OUTBREAK OF ENTERIC FEVER IN AN ISOLATED CLUSTER OF HOUSES AT MEXBOROUGH.

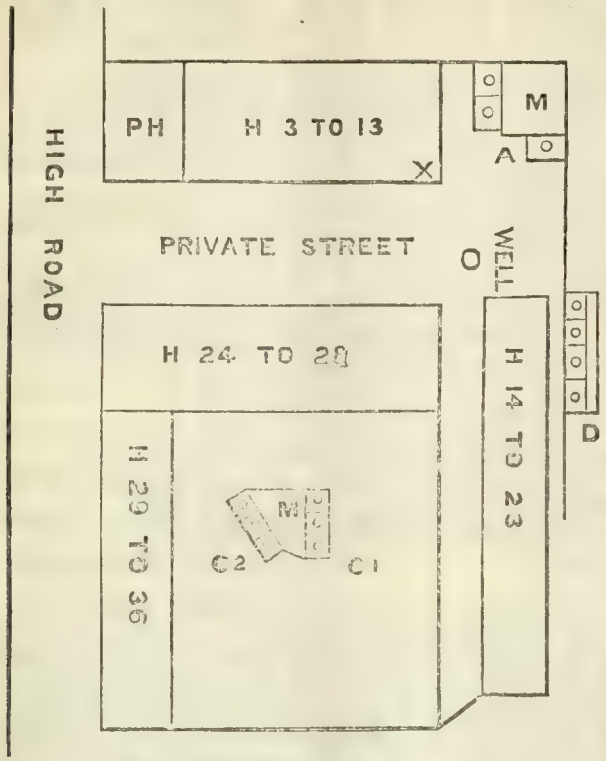
BY WILLIAM SYKES, M.R.C.S., L.R.C.P.Ed.,
Medical Officer of Health.

THE following history is, I think, interesting, because it supplies: (1) some data as to the time required for the development of the effective enteric poison in excrement; (2) a good example of an outbreak of the fever traced to fæcal exhalations alone; and (3) an example of modification in the type of the disease, when caused by air-pollution only.

The following is a rough plan of the houses affected.

Up to November 26th there had been no cases of enteric fever in these buildings for six months. On that date, No. 13 (marked with cross in plan) hitherto unoccupied, was taken by E. D., a collier, aged 26, who was not feeling well at the time. He had come from the house of a brother-in-law in a neighbouring village, where he had

been lodging, and this brother-in-law had himself died of enteric fever some days before.[1]



P. H.—Public House.
H. 3 to 13.—Houses 3 to 13, using privies A.
H. 14 to 23.— ,, 14 to 23, ,, D.
H. 24 to 28.— ,, 24 to 28, ,, C 1.
H. 29 to 36.— ,, 29 to 36, ,, C 2.

On December 1st, diarrhœa set in, and he was confined to his bed with a very severe attack of enteric fever. The wife was directed to disinfect each dejection before emptying the bed-pan, but the disinfectant supplied was, unfortunately, only a small bottle of Condy's fluid, and it is probable that even this was inefficiently used—anyhow, the whole of the patient's excrement, disinfected or not, was emptied into the open ashpit maked "A" on plan.

On December 30th, A. H. (female) aged 8, at No. 3, who used the set of privies "A," sickened, as did also E. D. (female) aged 15, and R. J. (male) aged 6, both living on the opposite side of the road, and using the privies marked "C 1," on plan. It seems however, that there was double possibility of infection, since the two latter children being playfellows of A. H. accompanied her (after the manner of their class) to the privies "A," while she in turn made use of their privy.

P. R. (male), aged 21, living in the same house as E. D. (No. 26), sickened during the first week of the new year, as did also a child at 27, both using privies "C 1," previously used by the child A. H.

After this there was a week's lull, with no fresh cases, but on January 9th or 10th there were three new patients, one, a youth aged 16, living at No. 8, and using privies "A.," the others, a man aged 26 (living at 25), and using "C 2," and the father of the girl A. H., using "A." On the 14th, there were three others (at Nos. 9, 8, and 13 respectively), using "A;" on the 17th, 19th, and 20th, a fresh case per day in the row, using "A;" and one on the 16th, in the one using "C 1." On the 21st, three cases (at Nos. 7 and 9); and on the 22nd one (at No. 8), all using "A."

Up to this time there had not been a single case in the cross-row using privy "D;" but on the 22nd, a child, aged 6, sickened at No. 20, and she owned that she and a companion out of row "A," had used the privy "A" frequently, and as lately as the day before her attack. The houses fronting the street, using privy "C 2," have also not had a single case up to the present. The public-house at the end of row "A," having a separate privy, has also escaped. There have been a total of twenty-two cases in the rows "A" and "C 1" (fifteen in "A" and seven in "C 1").

The water-supply of the whole block is from a single source—a moderately deep well, with pump, marked on plan. The milk-supply also is a common one.

During the first week in January, two isolated outbreaks of the disease occurred; the one in a house of a row standing twenty or thirty yards away from the one infected, the other in a row a quarter of a mile off. In the first instance, a father and three children were affected; the former had to pass the privy and open ashpit "A" twice a day in going to and from work; the children's favourite amusement was jumping on and off a wall by the same place. It is only fair to say, however, that the water-supply was the same with the infected block, but this was the case with twenty more houses of this second collection where no fever occurred. In the other isolated instance, the water-supply was far from the house, but the people in question were employing and using the same open privy as a servant, the sister of A. H., who actually slept at home (No. 3), and used privy "A." Curiously enough, there had been scarcely any complaint of illness or inability to work in this girl, whose excrement must have been certainly infectious.

REMARKS.

1. *Period of Inactivity of Poison.*—Enteric excrement was emptied into privy "A," possibly from November 26th, certainly from December 1st. The first secondary case occurred on December 30th. From this period of twenty-nine days, the period of incubation of the disease in the person affected must be subtracted. This would give a probable period of inactivity of the poison of from seven to fourteen days. In the persons using privy "C 1," allowing that the first three cases were infected by accidental visits to "A," the second batch of cases appeared about twelve days after the first; but as the girl A. H. had previously used this privy, there is introduced an element of uncertainty. The first isolated case mentioned also commenced only one or two days later than A. H. and her friends, so that it seems safer to ignore the evidence of "C 1," and simply say that the period of latency in the poison, and incubation of disease in the person affected, were together in the case of the patient using "A," from twenty-nine to thirty-five days.

2. *The Period of Year, etc.*—The outbreak took place during an almost continuous "storm" of frost and snow; the excrement, the *fons et origo mali*, being emptied into a badly-drained open ashpit fully exposed to the frost, etc.

3. *Other possible Causes of Infection.*—These are thrown almost out of court by the fact that, while the milk and water supply were common to four rows of houses, two almost entirely escaped, the circumstances common to the rows infected and not affecting the others being a common usage of privies into which poisonous excrement had passed. Section II of privy "C," being separated from Section I by an unusually wide yard, might be looked on as a separate building.

4. *Type of Disease.*—Except in the case of the man first affected and his wife (? poison by water in him; in her, constitutional proneness) and the child at No. 3, most of the cases were of the type called "ambulatory." There was with most of them severe diarrhœa and headache, with only moderate temperatures, and not very severe constitutional disturbance.

[1] The cause of this original case was obscure, as there were no other cases in the village—the man himself, however, attributed the attack to drinking the water supplied to the horses down the pit, as did E. D.

CLINICAL MEMORANDA.

THE DURATION OF INFECTION IN SCARLATINA: A CAUTION.

IN Dr. Ransome's paper on the Duration of Infectiousness in certain Infectious Diseases, the weighty authority of Dr. Vacher is quoted in regard to the duration of infection in scarlatina, to the following effect: "If the patient be not discharged till he is thoroughly peeled (head and feet), till his throat is without the faintest blush, and his discharges are regular, and he has been properly cleansed, there need be no fear of his communicating the disease." The following case will show that this statement must be received with some reservation. A child, aged 10, was brought from a cottage to an infectious hospital with a mild but distinct attack of scarlatina. The case did well, and, four weeks afterwards, on visiting the hospital, I examined the child, and, finding no evidence of desquamation of any kind (there had been a very little) or any congestion remaining in the throat, I intimated that I could see no reason why, after proper cleansing and disinfection, she should not be sent home. In order, however, to make assurance doubly sure, the practitioner who was attending her kept her in the hospital for a fortnight more, when she was sent home,

having been first washed repeatedly from head to foot, and all her clothes having been also washed, boiled, and put through the disinfecting oven. The child was put to sleep, as had been the practice previous to her illness, with a younger sister, who was attacked five days afterwards with scarlatina. The only conclusion to which I could come, in default of any other obvious mode by which the infection could be traced, was that the throat, though free from any obvious evidence of continuing mischief, was really still sufficiently impregnated with infection to communicate it to a child who was possibly in a particularly susceptible condition, and who was most favourably placed for inhaling as full a dose of it as it could well take. Probably had it not been brought into such close relationship, no harm might have been done.

Although no blame of any kind rested on any of those who had charge of the case, the effect of this unfortunate *contretemps* was, I need scarcely say, prejudicial not only to the repute of the hospital, but also to the credit of isolation in any form. The effect which it had on myself was to make me resolve invariably to caution the friends of convalescents from scarlatina to be particularly careful in exposing young persons who had not had the disease to the possibility of inhaling the breath of the convalescent, even after a six weeks' isolation, and when free from all obvious traces of infection. With such a case before us, can we wonder at the difficulties in preventing the spread of scarlatinal infection in elementary schools?

FRANCIS T. BOND, M.D., Gloucester.

SURGICAL MEMORANDA.

INCISION IN TONSILLITIS.

I AM induced to remark on the above subject from the fact that I have found free incisions of more avail in quinsy than in any other kind of inflammation. It is a disease little amenable to ordinary methods of treatment. It is attended by an extraordinary, and in some constitutions, a very serious amount of suffering; and yet it is a local affection, and within easy reach. One book in my possession recommends opening the abscess when suffocation is imminent; another says that puncturing the swelling may be tried. The necessity of the former of these recommendations is at once obvious; but I would be inclined to anticipate this critical state, which occurs after prolonged fever and suffering. As to puncturing, I do not know that I have found it of any service at all. A large incision, however, seldom fails in my experience, to modify the course of the disease almost at once. A case I had a little time ago serves to illustrate this. I was called in the evening to see a patient who was said to be speechless and to have "lock-jaw." His snowy-white tongue, his pulse and temperature indicated high inflammatory fever. I opened his mouth, cautiously inserted a bistoury, and made a good long incision in the most prominent part of the swelling. Free venous bleeding ensued for some minutes, and soon after it ceased the patient was asleep. In the morning, in reply to my question, he expressed himself as being "quite well." All the symptoms—constitutional and local—had vanished.

I have the greatest possible respect for the internal carotid artery, and no person can have a greater dislike for needless operations than I have. Here, however, there is a distinct object to be gained by operating, and, as regards the vessel in question, a vertical incision in the region of the tonsil cannot injure it, especially as in this complaint the swollen gland tends to push the artery outwards.

CHARLES MACLEAN, M.B., late Demonstrator of Anatomy,
Damess, Lairg. University of Aberdeen.

CASE OF PENETRATING WOUND OF BRAIN IN A YOUNG CHILD: RECOVERY.

I WAS sent for about 3 P.M. on the afternoon of January 28th, 1886, to see the child of Sergeant W., Royal Highlanders, which had fallen over, while standing on a chair, on to the point of an upright copper paper file with heavy metallic base. The weight of the child and the impetus of the fall had caused the file, which was seven inches long, to penetrate the right side of the occipital bone near its junction with the petrous portion of the temporal, a little below the level of the external orifice of the ear.

Dr. Trotter, who happened to be passing, very kindly came in and removed the file, shortly before my arrival, and the file is distinctly proved to have penetrated more than three inches into the brain, in a direction somewhat upwards and forwards; it was removed with very considerable difficulty. When I saw the child, it was in a state of profound collapse; but the breathing was stertorous. At this time, the pupils of both eyes, when tested, partially answered the stimulus of light. The child had vomited once or twice. I directed the child to be kept in absolute quiet, and not to be lifted even for necessary purposes, but, after a time, to get a little milk given on a sponge.—7 P.M. No alteration; passed water once, and vomited twice since morning; could not swallow anything.

January 29th. Passed a quiet night, and the breathing is gradually becoming less stertorous and more natural. Insensibility not so profound, and moves the right arm to the forehead from time to time. Was able to swallow a little milk towards the afternoon. Directed the parents to give nothing but this, and in small quantities from time to time.

January 30th. Passed a quiet night, and towards morning recovered consciousness to some extent, and asked for a drink. No heat of head or sign of inflammation.

January 31st. Slight flush on left cheek, but doing well. To be kept very low and perfectly quiet. Enema given with good results.

February 2nd. Child much brighter, but internal strabismus of left eye was present, and some loss of power, with diminution of temperature of left arm. Besides this, there was some spasmodic "eversion" of the ring and little fingers of this hand.

February 4th. As the bowels had not acted for some time, three grains of calomel were placed on the back of the tongue.

February 5th. Bowels acted freely. Child still confined to bed, though wanting to get up and run about. No meat allowed.

February 7th. Strabismus entirely gone. Temperature of left arm normal, and all symptoms of "paresis" disappeared.

February 8th. Recovery seems now complete, though as a precautionary measure the child is kept quiet and rather low.

Perth. F. R. WILSON, M.B., Brigade-Surgeon.

FRACTURE OF UPPER CERVICAL SPINE: RECOVERY.

A LADY, mistaking the door at the head of a secondary staircase for that of a dressing-room, fell the whole depth of about twenty steps. On examination immediately after the accident, in addition to numerous contusions, and a Colles's fracture of the left forearm, the chief complaint was of intense pain at the back of the neck, radiating over the region supplied by the sub-occipital nerve. No deformity could be detected; but the slightest movement of the head in any direction so intensified the pain, that any attempt to ascertain the existence of crepitus was rendered impossible, as also by the rigid condition of the whole of the muscles of the cervical region. After the lapse of ten days' strict rest, the pain having in some measure subsided, and at the patient's earnest wish to be conveyed home, she was permitted, with due precautions, to get up. It was during this time that, on some involuntary movement, a sudden and audible click occurred. Careful examination failed to elicit this symptom at the first trial; but, on the following day, distinct crepitus was produced by fully extending the head, and, at the same time, making lateral pressure on the posterior segment of the atlas.

At this stage, Mr. Savory examined the case; and, after some difficulty, succeeded in producing very distinct crepitus. He fully agreed in the opinion formed as to the presence of a fracture in the upper cervical spine, probably the atlas. For obvious reasons, it was not deemed advisable to examine the case more critically, with the view of ascertaining its exact site and extent. After a rigid and tedious rest of ten weeks, recovery seemed assured, principally by the voluntary, and in part unconscious, movements of the head.

There was never any form of paralysis or loss of power of the sphincters, or pyrexia; neither did the crepitus again occur after its artificial production by Mr. Savory. Sandbags proved the most efficient and comfortable means of maintaining the head and neck in a state of absolute rest, followed by an india-rubber air collar during convalescence; but the almost constant state of rigidity of the cervical muscles proved, perhaps, the most efficient splint, and to this end the passive state of the patient in great part contributed through a very long and anxious period.

London. G. H. HAMES, F.R.C.S.Eng.

OPHTHALMOLOGICAL MEMORANDA.

GLASSES "A DOUBLE FOYER."

IN connection with Mr. Oldham's note in the JOURNAL of January 22nd, on "Glasses with Double Focus," it may be a boon to many of my colleagues to draw attention to a mode of grinding these that I sometimes prescribe.

It is simply this: A spectacle-glass of the focal length required for near work is first taken. Then a concave face is ground out on its

upper part, so as to reduce the strength of this portion of the lens to that required for seeing accurately at a distance. For convenience, a portion only of the reducing lens is usually ground, so that the area of the distance-glass is bounded below by a semi-circular edge, slightly raised as compared with that above it.

In this way the unsightly horizontal line made by the junction of two separate lenses is entirely avoided, and it becomes scarcely noticeable that the glasses are different from those ordinarily worn for presbyopia. It is needless to say that such an improvement is greatly appreciated by the patient.

W. A. Brailey, M.D., 16, Orchard Street, W.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

STANLEY HOSPITAL, LIVERPOOL.

ANKYLOSIS, HYPERTROPHY, AND EXTREME LATERAL CURVATURE OF THE CERVICAL AND UPPER DORSAL VERTEBRÆ FOLLOWING ACUTE RHEUMATISM, SUCCESSFULLY TREATED BY MECHANICAL MEANS.

(Under the care of Robert Jones, M.R.C.S., Honorary Surgeon.)

H. F., aged 11, while on a visit to friends at Manchester, fell into a pond and omitted to change his clothing for some hours. In two days he was attacked by acute rheumatism, and suffered in almost every joint. In the sixth week it was noticed that his neck became somewhat contracted and rotated towards the left side, whilst its slightest movement, manipulative or voluntary, gave him much pain. When the fever abated, the neck still remained awry, and the patient was sent home to Ripon. The neck, however, continued to get worse, and in seven months his doctor took him to a large northern infirmary, where he remained an in-patient for some weeks. He was discharged without any attempt being made at reducing the deformity. For the following two years and a half he underwent no treatment.

On October 8th, 1885, he was sent to me from Ripon in a condition of very unusual deformity (Figs. 1 and 2). The angle of the right



FIG. 1.



FIG. 2

jaw rested on the sterno-clavicular notch, the face looking almost parallel to the left shoulder. On first inspection, it suggested the appearance of extreme wry-neck. The muscles at the front of the neck were, on the contrary, atrophied from desuetude. It was impossible to obtain even a remote sensation of yielding on trying to elevate the side of the face. The right pupil was widely dilated, and the eye was examined by my colleague, Dr. Karl Grossman, who pronounced the fundus healthy, and the dilatation due to pressure on the sympathetic. For mechanical reasons the little patient's articulation was indistinct, and his respiration sometimes very hurried. On examining him from behind, the bodies of the cervical vertebræ were observed to be enormously hypertrophied, especially to the left side, resembling in appearance a large enchondroma. The tumour was painful on pressure. The vertebræ were ankylosed as low as the fifth dorsal.

The patient was admitted into the Stanley Hospital, and the treatment consisted in a carefully-adjusted process of graduated leverage. The first stage was occupied by insinuating paper wedges between the jaw and sternum, the wedges increasing in thickness so soon as the slightest yielding became perceptible. By the end of the first fortnight the neck had moved sufficiently to enable us to place around his neck a paper stock. His dyspnœa completely left him, his pupil became normal, and his articulation much improved. The nurse was now instructed to exercise the boy's neck as frequently as she could without giving rise to any pain. Towards the end of the third week the patient could raise or depress his chin to the extent of nearly two inches. This rapidly improved, and by the middle of November there was ample room to place a Thomas's leather collar around his neck. The rotatory deformity remained, however, in abeyance, and the face still looked towards the left shoulder. To remedy this defect, I devised an iron framework to surround the head and allow of suitable oblique traction upon the deformity (Fig. 3). The cervical collar was retained whilst the framework remained, so that rotation could not be gained at the expense of flexion. The edges of the framework were roughly serrated by a few blows with a hammer, so that bandages need not slip. The iron was held *in situ* by means of a plaster waistcoat. This waistcoat fulfilled a double function. The patient carried his spine badly, and we placed him in what Mr. Bernard Roth would call a "key-note" position, that is, the position of least obvious deformity, and the waistcoat partially maintained it. The nurse frequently assisted the apparatus by gradual twisting exercises. After wearing the instrument a fortnight, the boy was much improved, and on December 24th he was discharged from hospital, wearing the collar, having been an inmate for a little over two months. At the time of his discharge he had very complete voluntary power over extension and flexion, and could bring his chin opposite the sterno-clavicular notch, and rotate it upwards of four inches to the left.



FIG. 3.

On his return to Ripon he was taken ill, and failed to continue his exercises, so that, on his re-admission into the Stanley Hospital, on April 9th, his radius of rotation was much diminished. Under proper treatment, however, he soon improved, and, on his discharge, presented the appearance delineated in Fig. 4. This case seemed to be very hopeless at first; but, after consultation with my colleagues, Messrs. Sheldon and Smith, it was decided that a mode of treatment should be adopted which would in no way jeopardize the patient's safety; the leverage used was consequently of a very harmless kind. The patient's impaired articulation and respiration, apart altogether from the hideous and painful characters of the deformity, proved the urgent necessity for remedial action. The principle which underlies the treatment of deformities of this type consists in maintaining any advantage gained; hence the value of stocks and wedges. Manipulative exercises without this precaution are simply useless. As soon as the position of the neck is improved ever so slightly, wedge it in that position, so that it cannot gravitate into the old deformity. I have mentioned that the upper dorsal vertebræ were ankylosed. They were also slightly incurvated, the right shoulder being about three inches higher than the left. When the patient was told to stoop, none of the spinous processes of the ankylosed vertebræ projected, a symptom I have on other occasions witnessed and pointed out. I have to thank Dr. Owen for the

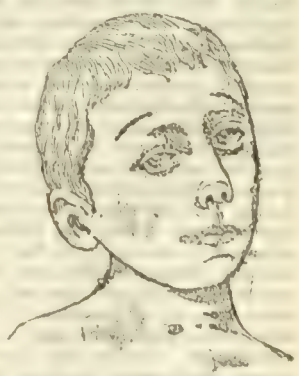


FIG. 4.

interest he took in this case, and for the excellent photographs from which the diagrams are taken.

ST. MARY'S HOSPITAL, LONDON.

A CASE OF SALICYLIC ACID POISONING.

(Under the care of Sir EDWARD SIEVEKING.)

[Reported by Mr. A. P. LUFF, House Physician.]

C. W., aged 55, was admitted at 2.30 P.M. on November 3rd, 1886. She had been treated by a medical man for sub-acute rheumatism, and had been ordered 15 grains of salicylate of soda every four hours, but by a mistake on her part, had been taking double doses of the salicylate mixture. The first dose was taken at 12 A.M., November 2nd, and the last dose at 5 A.M., November 3rd, and during this period of seventeen hours, the patient had taken 120 grains of salicylate of soda.

On admission, the patient complained of a buzzing noise in the ears, some headache, and great deafness (she was naturally slightly deaf); the pupils were extremely contracted; the urine contained a large quantity of salicylic acid and albumen, about $\frac{1}{10}$th of the latter depositing after boiling the urine with a little nitric acid. A saline purge was administered.

November 4th. All the symptoms had considerably abated. The urine still contained a large quantity of salicylic acid, and a trace of albumen.

November 5th.—The urine contained a moderate amount of salicylic acid, but no albumen.

November 6th. The urine was quite free from salicylic acid and albumen. The buzzing noise in the ears, the headache, and the extreme deafness, had gone. The pupils had resumed their normal size.

The patient was discharged a few days later, quite well.

Remarks.—The case is of interest as demonstrating the time taken for the elimination of the salicylic acid from the system.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 1ST, 1887.

Sir JAMES PAGET, Bart., F.R.S., F.R.C.S., President, in the Chair.

Diseases of the Genito-Urinary Organs in Animals.—Mr. BLAND SUTTON exhibited some specimens illustrating diseases of the genito-urinary organs in animals. The first specimen consisted of the kidney of a sloth which had lived in the Zoological Gardens twelve years. Occupying the pelvis of the kidney were two calculi; one was small, and weighed 2 grains, the other weighed 12.8 grains. Chemically they were found to be composed principally of oxalate of lime. Although renal calculi were not uncommon in domesticated animals, they seemed to be excessively rare in wild ones. A remarkable case of distension of the vaginal, cervical, and uterine cavities of a hog-deer was described; the uterus of an agouti was also shown, in which some pieces of placenta and fœtal membranes had been retained. Inflammation and suppuration of the mucous membrane (suppurative endometritis) had resulted; the pus made its way along the left cornu and Fallopian tube, and an abscess formed in the ovary which ruptured into the peritoneal cavity, giving rise to fatal peritonitis. Details of a case of inflammation of the oviduct of a fowl were related. The bird during life laid eggs of very small size, and without yolk. When the bird was killed, the infundibulum of the oviduct was found adherent to the ovary, so that the ova could not fall into the duct, but the albumen at the same time secreted by the oviduct became coated with shell, and was laid on a small yolkless egg. The intestines were matted together by inflammation. A pelvis of a baboon was shown, with the viscera *in situ*. The uterus presented a severe retroflexion. During life the animal exhibited well marked symptoms, which were attributed to the condition of the uterus. Some remarks were made regarding the existence of ripe ova, and mature follicles in the ovary of the human fœtus, and in those of the embryos of various and diverse species of mammals.—The PRESIDENT thought that it was difficult to overestimate the value of researches, such as those which Mr. Sutton was so ably conducting, owing to the light which might be thus thrown on the whole processes of pathology. The cases illustrated the influence of the conditions under which human life now existed, in animals not born into those conditions. In man it was difficult to distinguish between the operation of heredity and of external conditions; in animals of wild species, the influence of heredity, which could never be excluded in men, could be completely excluded. It was of greatest interest, under these circumstances, to trace in them the occurrence of diseases which were encountered in man. He inquired whether there was any material differences in the diseases noted in wild animals dying just after importation, when they might be regarded as in their wild state, and those observed after they had been subject to confinement and town influences.—Mr. BLAND SUTTON, in reply, said that when an animal was imported, it either became acclimatised, or died within twelve months.

Pathology of Colles's Fracture.—Mr. D'ARCY POWER drew attention to the large proportion of fractures of the lower end of the radius in which the lower fragment was comminuted into the joint. He believed that, from a pathological standpoint, this variety of fracture was more common than the simple form ordinarily described; and he held that, without dissection of the injured part, it was often impossible to distinguish the simple from the comminuted fractures, since the deformity might be identical. He related the case of a man, aged 39, who fractured his wrist, and sustained such other injuries that he died. During life, and even after death, when a more careful examination could be made, the wrist presented the symptoms of an ordinary Colles's fracture, and it was only upon dissection that the true nature of the injury was apparent. The lower end of the radius was seen to have undergone a very complete crushing, the wrist joint being implicated in more than one place. Since the occurrence of this fracture, Mr. Power had examined several other cases which appeared to be of the ordinary type, but which, upon dissection, proved to be in reality comminuted. He exhibited the six specimens before the Society. He had also collected details of cases in which, after almost identical injuries, a fairly useful joint had resulted. He concluded his paper by observing that although the pathological interest attaching to these cases was great, he believed that the clinical importance was but small, since it was difficult to distinguish between the two classes in the first place, and when that was done the final result appeared to be almost equally good. In examining the specimens preserved in the various pathological museums in London, Mr. Power had only found twenty-five cases of simple fracture, as against thirty-two, in which, the lower fragment of the radius being comminuted, the fracture had extended into the joint, thus bearing out the observation of Mr. Clement Lucas that pathological specimens showed a very large proportion of comminuted fractures.—The PRESIDENT asked what was the character of the accident in these cases and how the patient fell.—Mr. GILBERT BARLING mentioned that the only three cases of Colles's fracture he had had opportunity to examine had presented three different conditions. In one there was an impacted fracture; in another there was a comminuted fracture involving the wrist joint. In the third case there was neither impaction nor comminution. Though it was interesting to know that in Colles's fracture there might be these three conditions, he feared that the difficulty of treating the fracture was not made less by this knowledge.—In reply, Mr. POWER said that in all the cases of the class he had described it appeared probable that the violence was indirect. He agreed with Mr. Barling that the observation was of purely pathological interest.

Extra-uterine Fœtation.—Dr. GRIFFITH showed a specimen of early pregnancy in the fimbriated extremity of a Fallopian tube, with large extra-uterine hæmatocele; also specimens of decidual casts from the uterus, discharged in cases of tubal pregnancy. The patient, who had been under the care of Dr. Matthews Duncan, was a nullipara, aged 32; the catamenia had been absent four months; she suffered from morning sickness, severe right iliac pain, and metrostaxis. The usual signs of early pregnancy were present, and a small, rounded, not tender, swelling was found on the right side of Douglas's pouch. Eight days before her death, she passed a decidual cast; and three days later, after a severe attack of pain, she became collapsed, and remained so until her death. A large hæmatocele had formed, filling the pelvis, and extending into the hypogastrium, in which the blood was coagulated and shut off from the general peritoneal cavity by recent adhesions between the omentum and small intestines, illustrating the usual anatomy of hæmatoceles, if the patient survive the effusion of blood for a few days. Dr. Griffith stated that, in spite of what had recently been written to the contrary, the large majority of effusions of blood, of considerable size, in this region, were intra-peritoneal and true hæmatoceles, whilst the large subperitoneal effusions, or hæmatomata, described by Mr. Lawson Tait and others, were, for the most part, a new disease produced in abdominal operations, involving the broad ligaments, and were due to a vessel being left insecure in the broad ligament, leading to a sudden or gradual distension of it with blood. The decidual casts were probably diagnostic of extra-uterine fœtation, and were easily distinguished, by their size and thickness, from the menstrual casts of so-called membranous dysmenorrhœa.

Both tubes presented similar appearances of past disease, the outer third of each being dilated and the mucous membrane partially destroyed; the inner two-thirds of each tube appeared healthy, but on microscopical examination the mucous membrane was found to be nearly destroyed, only a thin layer of the deeper part remaining, and the columnar epithelium had disappeared from all parts. These conditions were probably the result of past destructive inflammation, and were sufficient to account for the arrest of the blood in the entrance of the tube. The muscular wall of the tubes was thickened, as were the walls of the vessels.

Rupture of the Bladder.—Mr. BRUCE CLARKE exhibited a specimen and drawing of rupture of the bladder in an unusual situation. The rupture was at the apex; the peritoneum was not torn.—The PRESIDENT observed that the muscular walls looked very unhealthy.—Mr. RIVINGTON asked whether tunicary herniæ were present. Such herniæ, he observed, occurred most commonly in the neighbourhood of the urachus or ureters, and it therefore seemed not improbable that in this case the rupture had occurred at the site of such a hernia. He also inquired what direction the extravasated urine took, and whether the peritoneum actually gave way.—Mr. BRUCE CLARKE replied that the peritoneal coats had not given way, and that there was no extravasation of urine.—Mr. HURRY FENWICK had noticed several tunicary herniæ in the specimen in the posterior wall. He quoted Mr. Rivington's statistics as regards the position of the rupture; out of 100 cases, the rupture was situated on the posterior surface in 88. He mentioned a case upon which he had made a necropsy. The patient was a boy, who died after lithotrity. There was a vertical rent on the posterior surface of the bladder, just behind the intervertebral bar; it traversed the entire thickness of the muscular wall, but did not implicate the peritoneum; death was due to pelvic cellulitis. The rupture had probably been made by the evacuator used with undue violence in a contracted bladder. The case was an illustration of an entirely new class of violence affecting the posterior wall; a uniform fluid pressure acting from within, and yet tearing the viscus vertically and posteriorly; the posterior part of the bladder was predisposed to fatty degeneration and inflammatory softening more than any other. The occurrence of such patches as determining the seat of rupture was, he thought, not sufficiently recognised.—Mr. RICKMAN GODLEE inquired whether, in the case mentioned by Mr. Fenwick, the rupture might not have been produced by the lithotrite.—Mr. HURRY FENWICK thought not, for the rupture was vertical and posterior; it was most probably due to overdistension of a contracted bladder.

Tubercular Tumours of Brain.—Mr. GILBERT BARLING exhibited two tubercular cerebral tumours, preserved in the collection of the late Dr. Russell, of Birmingham. The specimens were removed from a boy, aged 12, who had been admitted into the Birmingham General Hospital, for ascites and anasarca, due to Bright's disease, on August 16th, 1859. On September 4th the boy had two epileptiform fits; similar fits, limited to the right side, subsequently occurred, and were followed by partial right hemiplegia, with jerky movements in the left limbs. The boy became comatose, and died. At the necropsy, a tumour the size of a walnut was found in the upper part of the left cerebral hemisphere, at the junction of the anterior and middle lobes; it separated readily from the surrounding brain substance, was very well defined, and the brain was not softened. There was a similar smaller tumour in the middle lobe. No tubercle was found elsewhere in the body. The pericardium was adherent. Microscopical sections stained by Ehrlich's method showed that the tumours for the greater part of their extent had become caseous, and numerous bacilli were to be seen.—Dr. OWLES inquired what was the condition of the kidneys.—Dr. NORMAN MOORE believed that tubercular tumour rarely occurred in the brain without some tubercle elsewhere; the probability was that in all cases of tuberculosis in children, where the pericardium was affected at all, it was possible to find evidence of tubercle in it. The question, how long the bacilli retained their vitality in such tumours was of great interest. Cases of tubercular tumour of the brain sometimes terminated in tubercular meningitis, but more often perhaps became quiescent.—Mr. BARLING, in reply, said that the record of the condition of the kidneys was careful, and did not point to the existence of tubercle in those organs.

Tubercle of the Skull leading to Perforation.—Mr. BILTON POLLARD showed the vault of a skull, in which there were four perforations, produced by tubercular disease of the bone. The specimen had been taken from a female child, aged 10 months, when she first came under Mr. Pollard's care at the North-Eastern Hospital for Children. At that time there were four chronic abscesses on the skull, for which no cause could be assigned. They were opened, and found to be situated directly over the bone. Caseous material and granulation tissue was scraped away from each. In the course of a few weeks the smallest abscess healed without causing perforation of the bone, but the others remained fistulous and a fifth abscess formed over the occipital protuberance. This was treated like the others, and ran a similar course. Four months later sequestra, involving the whole thickness of the skull, were removed. Three of the abscesses then healed soundly, but that over the occipital protuberance never quite healed. After the removal of the sequestra, the child rapidly wasted, and two months afterwards she died. There were a few patches of caseous tubercle in the lungs, and the bronchial glands were caseous; the mesenteric glands were enlarged. The skull presented four perforations, the borders of three of which were smooth and healthy, but there were signs of disease still present along the upper border of the perforation in the occipital bone. Mr. Pollard had examined some of the granulation tissue and one of the pieces of bone, which had been removed, but, though they showed the microscopical structure of tubercle, he had failed to detect any tubercle bacilli in them. There were no signs of syphilis of the skull. Volkmann (*Centralblatt f. Chirurgie*, 1880, p. 3) had described similar cases, which he considered of tubercular origin.—Mr. GILBERT BARLING said that he had recently seen a case which was almost identical. The patient was a child less than twelve months old. When it came under treatment there were four collections of pus in connection with the skull. In addition there was a cyst as large as the fist in the back. This was opened and was found to contain two small sequestra from the vertebræ; the patient died of meningitis following this operation. At the *post-mortem* examination it was found that there were circular lesions in the bones of the skull, each one containing a sequestrum embedded in granulations, but leaving a layer of bone between it and the dura mater. It would probably be necessary to make a protracted search for the bacilli in such a case.—Mr. W. G. SPENCER had seen a case of tuberculosis of the skull in Volkmann's *clinique* at Halle. The patient was a woman aged 40, who had long suffered from the condition described by Volkmann under the name of tuberculosis of the skin. This involved the scalp leading to suppuration and to depressed scars. There was no doubt that the case looked more like extensive syphilitic diseases of the skull, but tubercle bacilli were found in the material scraped from the ulcers, as well as in the cutaneous lesions of "tuberculosis of the skin."—Mr. ARTHUR BARKER showed a specimen of tubercular disease on the inner aspect of the skull; it had been obtained from the body of a boy who died of extensive caries of the spine. At the necropsy there was no evidence of intra-cranial disease, and the brain was not diseased; close to the greater wing of the sphenoid bone was a patch of caseous material between it and the dura mater. The bone was in a condition of rarifying osteitis.—Dr. THEODORE ACLAND commented on the difficulty of finding bacilli in tubercular disease of bone.—Dr. DAWSON WILLIAMS observed that material from such cases produced, when inoculated, typical tuberculosis in guinea-pigs.—Mr. ANTHONY BOWLBY agreed that Mr. Pollard's specimens were not syphilitic. He argued that the failure to discover bacilli did not prove that they were not there, but that they were few in number.—Mr. POLLARD said that the case was probably an example of tubercular periostitis. Volkman had recorded eleven cases altogether.

Horny Papilloma of Hand.—Dr. WALTER EDMUNDS showed a specimen which he considered to be an example of horny papilloma; it grew on the back of the hand of a woman, aged 75. It had originated in the scar of a burn sustained seventy years earlier.—Mr. BLAND SUTTON suggested that it was in reality a horny epithelioma.—The PRESIDENT observed that the appearance of the ulcerated surface was that of an epithelioma.—Dr. EDMUNDS said that it did not extend beneath the level of the skin.

Card Specimens.—Mr. HURRY FENWICK: Carcinoma of Prostate.—Mr. TARGETT: Extra-peritoneal Rupture of Bladder.

CLINICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 28TH, 1887.

W. H. BROADBENT, M.D., F.R.C.P., President, in the Chair.

President's Inaugural Address.—This was delivered by the President, and will be found reported fully at page 253 of this week's JOURNAL. A vote of thanks to Dr. Broadbent for his address was proposed by Dr. G. JOHNSON, seconded by Mr. S. W. SIBLEY, and carried unanimously.

Calculous Disease of both Kidneys, with Remarks on the Surgical Treatment of Calculous Kidney generally.—Mr. HENRY MORRIS read notes of this case. A woman, aged 40, was sent to Mr. H. Morris at the Middlesex Hospital on June 15th, 1886, by Mr. Nunn, for the

purpose of undergoing an operation for calculous disease of the right kidney, associated with a purulent fistula of long standing in the right loin. The patient was very ill at the time, had passed several small calculi, and complained of severe pain in the right loin, and frequency of micturition. Within a few days some pain had also been felt in the left loin. There was a history of albuminuria of long standing. On June 18th, the right kidney was explored through an incision in the loin. The tissues round the kidney were condensed, indurated, and tenaciously adherent to the renal capsule; the kidney was small and hard. On cutting into the kidney, several small calculi and some fragments of pyogenic membrane, but no pus, were removed. The operation was followed by no relief, and more intense pain was experienced on the left side. Partial and then complete suppression of urine followed, and the patient died comatose on June 23rd. At the *post mortem* examination the left kidney was found very large and white, and with a great increase of cortical substance. It contained two cysts filled with pus, in one of which were about two hundred small calculi. Numerous other calculi were scattered through the kidney. The right kidney was small, hard, and contracted, and one or two minute calculi were found scattered in its substance. There was no calculus in either ureter, and no other cause of ureteral obstruction present. It was argued from such a case as this that the surgeon might be easily misled by clinical symptoms, and also by abdominal exploration, to operate upon the wrong kidney—namely, one which, though the seat of a calculus, was not the organ exciting the present symptoms, these symptoms being caused by the second kidney having become calculous after it had undergone hypertrophy owing to previous long-standing calculous disease in the first. Such cases were not favourable for operation, and differed vastly from the more numerous cases which were cured or relieved respectively by nephrolithotomy and nephrectomy.

Successful Nephrolithotomy.—Mr. HENRY MORRIS also read a paper on this case. A man, aged 42, who for ten years had been suffering from symptoms pointing to renal calculus, was sent to Mr. Morris by Dr. George Johnson, on May 4th, 1886. He was admitted into the Middlesex Hospital on May 12th, and operated upon on May 15th. A rough rounded calculus, weighing 23½ grains, was removed through an incision in the loin from the right kidney. There was no pus in the kidney. After the operation, no urine whatever escaped by the wound, but blood in decreasing quantity was passed in the urine for some days. The wound healed by direct union. The patient sat up on the sixteenth day, and was discharged perfectly well at the end of the third week after the operation. For a long time prior to coming under notice, he had taken very large quantities of brandy and laudanum to relieve pain; these were entirely discontinued from the time of the operation, as all his pain ceased from that time. He had been seen several times since he left the hospital, and was still in good health and passing perfectly natural urine.

A Case in which very Severe Symptoms were due to two Small Stones in an Atrophied and Movable Kidney; Failure to detect the Organ by an Anterior Lumbar Incision; Discovery by Laparotomy; Successful removal of the Kidney.—Mr. HOWARD MARSH described this case. E. D., aged 25, unmarried, was admitted into St. Bartholomew's Hospital on June 29th, 1886, with well-marked symptoms of stone in the left kidney—constant pain, severe exacerbations, frequent micturition, and pus and blood in the urine. As no improvement followed rest and medical treatment, it was determined to explore the kidney. For this purpose, an incision, suggested by Mr. Willett, and which had several times been found highly advantageous for the removal of large kidneys, situated exactly half-way between the spine and the middle line in front, and vertical in direction, was made through the abdominal wall and fascia transversalis. The kidney, however, could nowhere be found, though a wide search was made. On a subsequent occasion, the abdomen was opened in the middle line, and the hand passed in. The kidney was now easily detected, but found to be movable and atrophied. No stone, however, could be felt. The kidney was then removed by the ordinary lumbar incision. The patient made a bad recovery. On opening the kidney after removal, two small stones were found in one of the calices. The author drew attention to the important fact that, though the symptoms were very urgent, the stones on which they depended were of very small size. He pointed out that, though the incision in the axillary line was ordinarily adopted for the removal of a large kidney, the posterior lumbar incision was preferable for the purpose either of mere exploration or the removal of a stone from the kidney; and he discussed the means that might be adopted for the detection and removal of small renal calculi. He also raised the question how far the symptoms in the present case might have been due to the fact that the kidney was freely movable.

Supposed Nephrotomy for Scrofulous Disease.—Mr. WILLIAM K. BENNETT gave particulars of this case. L. F., a married woman, aged 37, was admitted into St. George's Hospital, under the care of Dr. Champneys, on December 25th, 1885, on account of abdominal tenderness, painful micturition, and a reniform swelling on the left side of the navel, which rapidly increased, and by January 8th extended into the left loin. On January 14th, there was a sharp rigor, fluctuation became manifest in the mass, and a considerable amount of pus appeared in the urine, which was neutral in reaction, and up to this time had only been slightly turbid. Exhausting vomiting set in, and the case was transferred to Mr. Bennett's care, who, on February 3rd, laid open the tumour freely through the left loin, whereupon a large quantity of curdy, partly caseating discharge poured out, with a foul urinous odour. On the finger being introduced into the cavity, it entered what was apparently a disorganised scrofulous kidney, there being a large sac with irregular imperfect septa formed, so far as could be judged, by the undestroyed calices running in the usual direction. At the inner aspect was a pouch-like off-shoot, which was thought to be the dilated ureter. Great relief followed the operation, the patient was progressing favourably in every respect; the abscess contracting rapidly until February 18th, when lung-complications set in, of which she died on February 28th. *Post mortem examination.*—There was a small wound in the left loin, leading into a sacculated abscess of small size, at the inner and anterior part of which lay the kidney, absolutely intact, not having been involved in the operation at all. The organ, on being cut open, was found in a condition of scrofulous disease, but had not broken down to any extent. Difficult as might be the differential diagnosis of renal and peri-renal abscess, Mr. Bennett was unacquainted with any case in which doubt had arisen, after free incision, as to the situation of the disease. In his case, so exactly in every way did the cavity resemble the interior of the kidney at the time of operation, that no surgeon could have doubted that the kidney had been laid open. Had the patient survived, as she might have done but for the occurrence of lung disease, the abscess would certainly have healed, and the case probably have been recorded as a successful instance of nephrotomy for scrofulous disease. As it seemed not impossible that similar sacculated abscesses might have been opened by other surgeons under the impression that the kidney had been incised, Mr. Bennett thought the case not without interest in connection with the statistics of the results of treatment of scrofulous kidney by incision.

In consequence of the lateness of the hour, the discussion on these papers was postponed until the next meeting.

Living Specimens.—Mr. GODLEE showed a man in whom both superior maxillary bones had been removed for epithelioma of the hard palate.—Mr. C. R. LUNN showed four cases: 1. Raynaud's disease affecting the feet; 2. Myxœdema; 3. Peculiar deformity of the foot in an ataxic patient; 4. Ichthyosis.—Mr. R. W. PARKER exhibited a patient having an unusual form of hare-lip.—Mr. MORRIS showed cases illustrative of successful nephrolithotomy, together with calculi removed from the kidney in four other cases.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, JANUARY 27TH, 1887.

E. NETTLESHIP, F.R.C.S., Vice-President, in the Chair.

Treatment of Conical Cornea.—Mr. COWELL showed three patients with conical cornea treated with transverse incision, which he preferred to vertical incision. Books said that conical cornea was commonest in women; this was not his experience. Two of his patients had asked that the second eye might be operated upon, so pleased had they been with the results.—Dr. BRAILEY believed it to be more common in women. He always made a vertical incision, but lately he had simply grooved the cornea vertically, and then put a stitch through, bringing the grooved edges together.—Mr. HIGGENS had found it commonest in women, and it was much more common in hypermetropic eyes; after operation the sight was much improved by a convex lens.—Mr. MCHARDY had seen it only in quite young men. He preferred trephining to removing an elliptical flap; but, in favour of the latter, there was less pain and retention of aqueous fluid. The horizontal incision was preferable to the vertical.—Mr. ANDERSON CRITCHETT observed that anterior synechia probably followed in 50 per cent. of the cases, and iridectomy was necessary. He therefore commenced by a very small iridectomy; ten days later, he made a similar one outwards, and then removed an elliptical portion.—Mr. LANG thought the incision should be wider than the size of the pupil, and thus adhesion between the iris and cornea could be avoided. He made a short ellipse, nearly circular.—Mr. HARTLEY agreed with the last speaker, and had been struck with the apparent length of cicatrix in the cases

shown.—Mr. COWELL claimed no originality for the operation; it presented fewer inconveniences than others. He never used suture; it set up irritation. The two surfaces of the cornea adapted themselves better if the incision was not too short.

Calcareous Film of Cornea.—Mr. MARCUS GUNN showed a living specimen of transverse calcareous film of both corneæ. The left eye had defective vision, and originally squinted. The chief features of interest were the causation and treatment. The man was a blacksmith, and had been exposed to blasts of cold air as well as to great heat. The vision in the right eye was still fairly good. Mr. Gunn proposed to scrape away the calcareous matter. There had been no keratitis or iritis. There was no family history of gout or rheumatism. The film reached to the extreme inner edge of the cornea, but did not slope. In these two features it differed from those shown by Mr. Nettleship.

Choroidal Hæmorrhage.—Mr. W. H. JESSOP read the sequel to the case of large semicircular hæmorrhage. The eye had recovered with perfect vision, and without a scotoma. He concluded that the extravasation had probably occurred into the nerve-fibre layer.—Mr. QUARRY SILCOCK said that the case of large hæmorrhage shown by him at the last meeting, had resulted in a white patch of choroidal atrophy, which therefore justified his calling the case choroidal rather than retinal hæmorrhage.

Detachment of Retina.—Mr. W. LANG showed a case of central detachment of the retina of obscure origin in a widow, aged 63, a sempstress.

Exostoses of Skull, with Atrophy of Optic Nerves.—Mr. E. NETTLESHIP showed a living specimen of congenital multiple symmetrical exostoses of the skull, with post-papillitic partial atrophy of the optic nerves. The boy, aged 12, was much undergrown, but fairly healthy and intelligent. There were very large and perfectly symmetical smooth exostoses in the temporal and mastoid regions and on the outer wall of each orbit, laterally, at or near the situation of the anterior and posterior fontanelles in the middle line. The coronal suture could be felt as a groove on the temporal and anterior median exostoses. At the sides of the root of the nose there was a gap between the nasal processes of the frontal and of the superior maxillary bones, but the central ridge formed by the nasal bones was normal. Numerous large veins emerged from or passed into the gap on each side of the root of the nose; and others were seen in the temporal regions. The eyes were too wide apart, the orbits being separated apparently by expansion of the median bones. When the mouth was opened the lower jaw was dislocated forwards, but without causing inconvenience; probably the shape of the glenoid cavity was much altered. The roof of the palate was very high and narrow anteriorly; with this exception, the facial bones seemed to be quite natural. The smell and hearing were good. There was no other deformity. Both the optic discs were pale, with clear evidence of former inflammation. The left showed more change than the right. Vision defective—right, 14 J.; left, 16 J.; less than $\frac{5}{60}$ with either. The refraction was hypermetropic. 3,5 D. He could read better with the aid of + 3 D. The head was of its present shape at birth, but the bosses had become less conspicuous as he had grown. The sight had been in its present state all his life, so far as could be ascertained. There were no other cases in the family.

Unusual Clinical Cases.—Dr. MULES (Manchester) gave a short account of the following: 1. Pseudo-sarcoma of iris. A case of solitary gummatous tumour of the iris simulating sarcoma, in a child aged 13 months. There was no iritis or other appearance of syphilis. The growth was dispersed by mercurial inunction in seven weeks, leaving the eye normal. 2. A deep and extensive crescentic ulcer of the cornea (Wecker's malignant ulcer), with splitting of the corneal layers to the apex, permitting the passage of a probe (a very rare condition) occurring in a man aged 54, arrested by scraping and iodoform. The case was a crucial one, and Dr. Mules pointed to it as proof of the efficacy of scraping and antiseptics. 3. A second case of corneal ulcer in a man, aged 56, suffering from Graves's disease. The ulcer was painful, and was complicated by posterior synechia. All minor treatment failed, and the cornea being in imminent danger of destruction, the lids were united over four-fifths of their length. The pain was at once relieved, and the ulcer healed rapidly without further treatment. The interest of this case was accentuated by the record of corneal losses from Graves's disease recently published. 4. A case of double auto-extraction, the result of accident, in a man aged 67, with retention of useful vision in both eyes. 5. Extraordinary foreign body retained in globe: a dart from "puff and dart," encapsuled for eleven days. 6. Scleral hernia from direct violence on the front of the eye; media transparent. Papilla with an irregular margin of sclera, forced out and destroyed; central artery reduced to white lines; vein retaining its normal patency. It was believed that this was the only case in which this accident had been observed.—Mr. G. A. BERRY had seen the case of exophthalmic goitre referred to by Dr. Mules, and the result was most satisfactory. Was it necessary to pare the edges before bringing the lids together? He had lately seen an analogous case with good results, in which the edges were left alone.—Mr. CRITCHETT mentioned the case of a lady who had nine months previously been shot through one eye, and, on enucleation, the dart was found to have passed partly out of the eye, and was lying in the orbit.—Mr. HIGGENS referred to the crescentic ulcers; they were more amenable to treatment by eserine and bandaging than by any other method of treatment.—Dr. BRAILEY thought that cases where there was no infiltration of the base of the ulcer did best with eserine; where there was infiltration, the galvano-cautery was very useful.—Mr. MARCUS GUNN said that in one case of fairly clear, greyish, serpiginous ulceration, extending half round the entire cornea, he had employed the galvano-cautery with success.—Mr. SIMEON SNELL spoke highly of the value of quinine when given in two grain doses three or four times a day.

Three Cases of Acute Cerebral Disease with Ocular Symptoms.—Mr. G. A. BERRY read this paper. His first case was one of acute ophthalmoplegia externa in a little girl, aged 2½. There was a history of gastro-enteric catarrh five months before admission. The present illness began three weeks ago with cough and headache. Ten days before, something was noticed wrong with the sight. There was almost complete ptosis of both eyes, with absolute divergence of the eyeballs, in fact, a condition of almost complete ophthalmoplegia externa. The child was mentally very apathetic; once she had a severe screaming fit; the knee-jerks were absent. After treatment by iodide of potassium for two weeks, distinct improvement in the general condition began, and the ophthalmoplegia was less marked. There was a scrofulous condition of one finger. The pathology of ophthalmoplegia was reviewed; perhaps the condition was dependent on tubercular disease about the ocular nuclei. The second case was one of megrim associated with spasm of convergence, in a girl aged 18. The possibility of hysteria being the cause was considered. On one occasion the patient had an attack of apparently insurmountable conjugate deviation of the eyes to the left. Extraordinary abnormalities of the temperature of the body were observed. The corpora quadrigemina or the cortex might be the seat of nervous lesion. The third case was one of recurrent attacks of bitemporal hemianopia. The patient was a man, aged 53, who had suffered from headache and drowsiness. Both temporal halves of the fields of vision were extremely defective up to about 5° from the points of fixation. On six occasions, at intervals of about one week, and for three or four days, vision became affected, and the temporal fields of vision were dimmed or obliterated, whilst at the same time the heart's action was markedly slower than during the periods of intermission of the ocular symptoms. Pressure on the chiasma in an anteroposterior direction might be the cause of the hemianopia.—Dr. GOWERS said the cases were difficult. He agreed with Dr. Berry that it was highly probable that different cases of ophthalmoplegia externa had different pathological lesions, and were not all due to degenerative changes, especially judging from what was known of ophthalmoplegia interna. For instance, loss of light-reflex, usually attributed to degeneration, might pass away even in tabes. Where recovery took place, the lesion could not be a destructive one, though there might be some nutritional change. With regard to the first case, he doubted whether it could be due to distension of the aqueduct, or to a simple tubercular lesion. Distension of the aqueduct was frequently met with without paralyses of the ocular muscles. Sudden lesions were generally vascular; thrombosis was common in children; in this case it was probable that a thrombus had occurred in the artery leading to the ocular centre. The second case, he agreed was not one of hysteria. Divergent strabismus was conclusive against hysteria. As to the third case, no doubt internal hydrocephalus was an occasional cause of pressure on the chiasma, and blindness. He referred to a case where, first the decussating, and afterwards the non-decussating fibres of the chiasma were affected by the distension of the third ventricle.—Mr. WARREN TAY referred to one of Mr. Hutchinson's cases, in which recovery took place.—Dr. SHARKEY could not accept the tubercular theory in the first case; many acute cases resembled tubercular disease and got well, but there was no good evidence of recovery after tubercular disease of the brain. In one case, he had found a diffuse inflammation of the cerebral ganglia when there had been sudden onset. He would regard the present case as of that nature rather than as a case of thrombosis.—Mr. BERRY, in reply, thought a vascular lesion in the first case very probable. He had, however, seen a case of ophthalmoplegia externa due to inflammatory lesions. Spasm of convergence was, in his experience, uncommon, paralysis being by no means rare.

METROPOLITAN COUNTIES BRANCH: HERTFORDSHIRE DISTRICT.

WEDNESDAY, NOVEMBER 24TH, 1886.

J. SYER BRISTOWE, M.D., F.R.S., President, in the Chair.

Gall-stones.—The PRESIDENT related the case of a woman, aged 38, who had been long liable to "spasms," commencing in the left hypochondriac region; jaundice, varying in intensity, had been present for twenty years. When admitted into St. Thomas's Hospital, there was a hard tender swelling, the size of the palm of the hand, on the right side of the abdomen; the swelling involved the skin to an increasing degree during the following twelve days, and incision then showed that it contained pus; eight days later, small friable biliary concretions, not larger than coriander seeds, began to escape by the wound. About a month after the first operation, the concretions having been up to this time passed daily, the sinuses which then existed were slit up, and were found to contain much more of this biliary gravel and a large number of friable calculi; though a very large quantity of these concretions were removed, large numbers of calculi, varying in size from masses one-third of an inch in diameter to grains the size of pepper-seeds, continued to escape from the wound, as many as fifty being discharged in one day; gradually the number thus passed diminished, and ceased altogether sixteen weeks after the first operation. She left the hospital shortly afterwards greatly improved in health, but with a small weeping sinus. In commenting on the case, Dr. Bristowe referred to the long duration of the symptoms, and to the nature of the concretions expelled, which were not ordinary gall-stones; they had the characters observed in concretions forming in the gall-ducts, and he thought it probable that the abdominal abscess originated in ulceration of the common or hepatic duct. The beginning of the illness might be attributed to an attack of catarrhal jaundice, leading to permanent thickening and stricture of the lower end of the common duct, in consequence of which condition, permanent but variable jaundice supervened, associated with general dilatation of the hepatic ducts, with a tendency to a retention of bile in them and to the deposition of its solid constituents. In conclusion, he referred to the large proportion of cholesterine found in stones in the gall-bladder, though cholesterine was present in the bile in very minute proportions; and pointed out that concretions formed in the ducts generally consisted of the solid constituents of the bile, with little or no cholesterine. He was inclined to think that the bulk of the cholesterine in the stones found in the gall-bladder was derived, not from the bile, but from the secretions from its mucous surface.

Treatment of Fever.—Dr. SIDNEY PHILLIPS read a paper on some points in the treatment of fever. The importance of keeping up as far as possible the force of the heart's action was pointed out, not only on account of its importance as the central organ of the circulation, but in order to keep up the arterial tension; and it was suggested that the albuminuria of fevers might sometimes result from the slackening of the blood-current, Charcot having shown that albuminuria might result from delayed blood-flow through the kidneys. Reference was made to the main indications for antipyretic treatment, these being mainly the anticipation and reduction of hyperpyrexia, and the securing of intermissions or remissions in the course of the fever by therapeutic agents, if they should not occur spontaneously. The value of quinine, salicin, antipyrin, and antifebrin, was discussed, and charts were exhibited showing the action of these drugs and that of baths on the temperature. The local application of ice to the cardiac region was also alluded to.

Foreign Bodies in Air-Passages.—Mr. F. C. FISHER related two cases of foreign bodies in the upper part of the air-passages.

PATHOLOGICAL SOCIETY OF MANCHESTER.

WEDNESDAY, JANUARY 19TH, 1887.

J. DRESCHFELD, M.D., F.R.C.P., President, in the Chair.

Discussion on Diseases of the Hip-joint in Children.—Mr. G. A. WRIGHT opened the discussion, and after reference to a few points in the anatomy of the joint, he proposed five headings as the subjects for debate, premising that he took for granted the tubercular nature of the complaint. 1. The seat of the primary lesion was held to be nearly always in the bone as an articular ostitis, or affection of some part of the epiphysis, the epiphysial line or the calcar femoris. The relation between the anatomy of the joint and the seat of the lesion was discussed, and the question of the effects of injury alluded to. A case of synovitis was mentioned as being the only instance in over a hundred cases examined. 2. It was almost impossible to determine the frequency of primary acetabular disease, though the existence of pelvic mischief could usually be ascertained. 3. Necrosis of the femur was said to be present in about 17 per cent., of the acetabulum in about 22 per cent., of cases that had reached the stage of abscess. Total epiphysial necrosis and the question of diastasis were discussed. The mere removal of sequestra was held to be insufficient, on the ground that the specimens showed tubercular ostitis round the sequestrum cavity, and this would be left behind. The difficulty of finding the presence of sequestra without section of the bone was also pointed out. 4. The probability of recovery of the bone in the specimens shown was decided against on the ground that no specimen showed any sign of repair except one in which the whole epiphysis had been removed by natural processes, hence it was observed that until this occurred relapses were probable even if temporary quiescence was procured. 5. On pathological grounds the conclusion was that excision was the proper treatment. Between fifty and sixty preparations were shown to illustrate the various features of hip disease and the points indicated in the address.—Mr. F. T. PAUL (Liverpool) agreed with Mr. Wright in placing the origin of the disease most frequently in the bone, and, from repeated microscopical examination of typical cases, considered that pulpy disease of the joints was always tubercular. He regarded it as a primary rarefying or tubercular ostitis, commencing in the neighbourhood of the joint, and secondarily involving the synovial membrane. He did not think that in the hip-joint the simple removal of sequestra was sufficient, but believed rather that, since the mischief so frequently began in the head of the bone, the proper treatment was to excise the head and neck only at an early stage, an operation which was frequently followed by primary union and a movable joint. In the later stages, excision was very unsuccessful, and he preferred expectant treatment.—Mr. A. W. STOCKS thought that the characteristic position of the limb in incipient hip-joint disease, and the favourable result of early and judicious treatment without operation, combined with the fact that forcible distention of the joint in the dead subject produced a similar distortion, threw a good deal of doubt upon the theory that hip-joint disease commenced, as a rule, in the substance of the bone.—Dr. WILLIAM THORBURN said that Mr. Wright had proved the osseous lesions to exist in such cases as he thought required excision; but, he would ask, what was the proportion of cases excised to those treated without operation? and whether Mr. Wright held that the lesions were similar in the large number of cases which it is possible to cure by rest, etc.?—Mr. WRIGHT, in reply, said that the fixed position of the limb in abduction and flexion occurred as soon as the mischief reached the joint; but, so long as the interior of the bone alone was involved, it did not occur; this corresponded with the "latent period" so often seen, and was confirmatory of the view that the bone lesion was primary. The proportion of cases excised to those seen was about 1 in 6. There was no reason to suppose that the excised cases differed in pathology, but only in the stage at which they were seen, and in the possibility of carrying out efficient treatment.

GLASGOW OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, DECEMBER 22ND, 1886.

SAMUEL SLOAN, M.D., F.F.P.S., President, in the Chair.

Battledore Placenta.—Dr. GLAISTER showed a typical specimen of battledore placenta.

Effects of Injury in Twin-Pregnancy.—Dr. GLAISTER showed a placenta and fœtus illustrating the effects of such an accident. The mother, when three and a half months' pregnant with twins, had a severe fall, which caused the death of one of them. The fœtal remains showed signs of *post mortem* inflammatory action, one of the feet being found attached to the body by a lymph deposit in form of a band, as well as other lymph formation. The placenta was divisible into two portions; one, the larger, containing ordinary healthy placental tissue, and the smaller being markedly white. There was one chorion and one amnion.

Maceration of Fœtus.—Dr. ROBERT POLLOK exhibited an example of maceration of a fœtus.

Basilysis versus Craniotomy.—Dr. W. L. REID exhibited the head of a fœtus which he had extracted after basilysis, and a discussion ensued as to the respective merits of basilysis and cranioclasm, or craniotomy. The balance of opinion was against basilysis.

Private Obstetric Practice.—Dr. J. K. KELLY then read a paper on "A Review of Thirteen Years' Private Obstetric Practice," in which he said he had attended in the years 1873-85, 2,823 confinements, at which 2,868 children were born. The maternal mortality had only been 17, or 1 in 166; 5 of these were due to causes unconnected with parturition, thus reducing the true childbed mortality to 1 in 235.2. Taking the last six years alone, his maternal mortality had only been

1 in 411. In 762 primiparæ, the mortality had been 8, or 1 in 95.2; and in 2,061 pluriparæ, 9, or 1 in 229; but in his last six years' practice, he had attended 284 primiparæ without a death, and 949 pluriparæ with 3 deaths. After eliminating premature twins and triplets, he had 2,669 children born at full term; of these, 57 were still and 14 died shortly after birth, thus giving an infantile mortality of 1 in 37.5. Dr. Kelly also gave details of his practice in various complications accompanying or following delivery.

WEDNESDAY, JANUARY 26TH, 1887.

Incubator.—The PRESIDENT exhibited a model of the incubator in use at the Maternity Hospital.

Early Fœtal Specimens.—Dr. MURDOCH CAMERON exhibited a fœtus at the sixth week with membranes; and also a fœtus at the fourth week with amnion, chorion, and remains of umbilical vesicle.

Private Obstetric Practice.—The discussion on Dr. J. K. Kelly's paper was opened by Mr. J. STUART NAIRNE, who thought Dr. Kelly fortunate in having had no cases requiring other means than the use of straight forceps for delivery. He could not believe such an amount of distensibility as that observed to be compatible with a healthy pelvis. The lumbo-sacral joint allowed—not certainly a dilatation—but an adjustment of the fœtus to the pelvis.—Dr. PARK objected to "bad nursing" being scheduled as a cause of maternal death, and to Dr. Kelly's wholesale condemnation of ergot.—Dr. REID thought it was dangerous to apply the straight forceps at the brim.—Dr. ABRAM WALLACE said that attention had before now been drawn to luxation of the lumbo-sacral articulation. He did not think the pelvis capable of such distension as Dr. Kelly contended for.—Dr. OLIPHANT believed moderate perineal ruptures healed very well without stitching, and Dr. RITCHIE mentioned that Mr. Lawson Tait objected to stitching immediately after labour, as being apt to give rise to fistula.—The PRESIDENT said that the last quotation had reference to ruptures of the posterior vaginal wall into the rectum. He did not reckon rupture of the "fourchette" a rupture of the perineum, as that occurred in nearly every case. When the tear went within two and a quarter inches of the anus, it should be stitched immediately and thoroughly; *a fortiori*, this should be done when the tear passed through the anus. He thought straight forceps inadequate for use at the pelvic brim, and that the double curved instrument should always be used. He had observed distensibility of a marked kind in only one case, and in it a binder had to be worn after labour, in order to enable the patient to walk comfortably.—Dr. J. K. KELLY, in replying, adhered generally to the positions contended for in his paper.

Obstetrics and Gynæcology at Berlin and Vienna.—Dr. GEORGE HALKET then read a paper on the "Obstetrical and Gynæcological Cliniques of Berlin and Vienna," and exhibited the obstetrical and gynæcological instruments in common use at the latter place.

REVIEWS AND NOTICES.

BERICHT ÜBER DIE ALLGEMEINE DEUTSCHE AUSTELLUNG AUF DEM GEBIETE DER HYGIENE UND RETTUNGSWESEN. BERLIN, 1882-3. Herausgegeben von Dr. PAUL BOERNER. Breslau, Schottländer, 1885.

REPORT ON THE GERMAN EXHIBITION IN HYGIENE AND THE SAVING OF LIFE, HELD AT BERLIN IN THE YEAR 1882-3. Edited by (the late) Dr. P. Boerner. In 3 vols., containing 1,800 pages and 400 illustrations.

[FIRST NOTICE.]

WE leave the perusal of these magnificent volumes with feelings of deep regret that a more permanent use was not made of the still larger collections brought together at the International Health Exhibition at South Kensington in 1884, and that our authorities could not be induced to follow the admirable example of retaining all that was specially worthy of commendation, to form the nucleus of a permanent museum and institute, to which all might resort. Unfortunately, it was resolved by the counsellors of the Prince of Wales that the surplus funds of the Exhibition should be vested in trustees and thrown into hotch-potch, and they have been appropriated—with singular injustice we think—to meet the deficit of the subsequent Inventions Exhibition. As usual, biological science has been the only victim. The promoters of the Berlin Exhibition from the first determined not to award any prizes, mainly because, as they expressed it, such an exhibition had far higher aims than the advertising of manufacturers and their wares, but also because they felt the difficulty of comparing the merits of different systems, and feared that such awards might reflect unfairly on subsequent improvements. The forty gold medals which their Majesties the Emperor and Empress afterwards placed at the disposal of the committee were not to be attached as prizes to particular exhibits, but to be conferred as recognitions of merit and marks of honour on individuals. The exhibition was essentially national, and excepting in the Hungarian department, which was, however, completely distinct and under a separate committee, the exhibitors were almost exclusively from Germany and the German provinces of Austria. The idea of a critical and scientific report which should be a retrospect and a survey of the present state of hygiene in Germany, and that of the formation of a permanent museum, has been carried out in the present volume. It is of less value than the series of hand-books which were published by the Council of the Health Exhibition, but it is particularly useful in connection with the permanent museum.

In the spring of 1882, when everything was ready, a fire broke out in the annexes, which had, from motives of economy, been built of wood, and consumed the entire edifice, with the greatest part of its contents. Before long, however, the committee, encouraged by the Emperor and other influential personages, determined on the erection of a new building, into the construction of which nothing but stone, iron, and glass should enter, and the exhibition was at length opened by the Crown Prince in October, 1883.

In the introductory essay, which gives the story of the Exhibition, the editor, Dr. Boerner, makes some very suggestive observations on the recent progress of hygiene in England, France, and Germany, as influenced by national characteristics. In France, the extreme centralisation by which prefects and mayors act under the immediate direction of the Ministry of the Interior, has, he says, stifled all local effort, and destroyed all sense of personal responsibility, so that the sole motive power is derived from Paris. In England, on the other hand, the spirit of local independence is so strong, and the public interest in these matters so active, that no such results can follow the various attempts at centralisation that have been made, from time to time, since the passing of the Poor-law Act in 1834; besides which, Englishmen are fully satisfied that such interference is never employed, as in France, in the interests of one or other political party. In Germany, though the influence and example of England have been considerable, the true principles of local self-government have, he maintains, been better understood since the time of Gneist, than in any other country; and he adds that the care of the public health has always been associated with the practice of medicine. The idea, as expressed by the Baron L. v. Stein, that "the function of the physician is an official and public one, and that, consequently, the members of the medical profession should act under a common guidance, and constitute an independent though integral part of the organisation of the State," has long imbued all social legislation in Germany. This character, and the influence which it should command, have happily been of late years fully justified by the high education and scientific training of German medical men, who, not without severe struggles in the past, have acquired, in association with the local authorities, the control not only of sanitary matters but of every organisation for the relief of misery and the prevention of crime, necessitated by the rapid growth of the great centres of population.

As Germany received from England her first lessons in local self-government, so, he adds, she has followed her example in sanitary engineering. The sewerage of Frankfort, Hamburg, Danzig, and Berlin, and the introduction of public supplies of pure water in all the principal cities of the Empire have marked an era in the history of German life; and while his countrymen may justly claim to be the teachers of the world in the fields of scientific research, they may willingly acknowledge themselves as the scholars of Englishmen in its technical applications.

A short paper of a popular character on the relation between physiology and hygiene, or how "to live in culture after nature," and one on the teaching of hygiene in higher schools, are followed by a description of the Pavilion of the Imperial Board of Health, and of the laboratory for bacteriological investigations, by Drs. Sell and Löffler. These contain a full account of the methods of examination and cultivation, and being illustrated by a number of figures of the apparatus employed they constitute a complete monograph on the subject. Of like value are the next two sections, one by Dr. Wolfhugel, and others on the apparatus used in the physical, chemical, and microscopical examination of earth, air, and water; and one by Dr. Lowenhorz on the Meteorological Pavilion and meteorological instruments

exhibited. R. Fuess, of Berlin, showed a number of self-registering apparatus, including a rain-gauge, an instrument for indicating the fluctuations of the ground-water; an anemograph designed by Professor Dornstein, for recording the ever-varying pressure of the wind; a barograph, in which the pencil is mounted on an ingeniously compensated balance, one arm of which carries a horseshoe-magnet, which, embracing the tube of the barometer, follows the movements of a smaller magnet floating on the mercurial column. Another barograph, remarkable for its simplicity and low price (fifteen shillings), devised by Dr. Dörffel, of Berlin, but made by MM. Richard, of Belleville, Paris, is constructed on the principle of the aneroid, the pencil being connected by cranks with a series of exhausted metal cylinders. But the masterpiece in this department was, beyond question, the barograph of Dr. F. C. G. Müller, of Brandenburg, made by Wanke, of Osnaburg. It is far too complex for detailed description, but the essential feature is that, by a double automatic mechanism, worked by a pair of electro-magnets, the cistern is raised or lowered, so that the height of the mercurial column in the tube remains practically constant, varying only between the terminations of two platinum wires, differing in length by only 0.05 millimètres. Whenever, by the rise of the mercury, both wires are submerged, or by its fall both are parted from it, one or other of the magneto-electric machines is brought into action, and the cistern is lowered or raised accordingly. One machine registers these movements by a pencil on a drum, and the other is connected with a bell which indicates audibly, by different tones, each rise or fall of the mercury.

The report on foods is mainly from the pen of Dr. J. König, whose analytical labours in this department are well known. It gives, among much valuable information, some curious glimpses into the art of colouring and flavouring wines; but the most important contribution is, perhaps, the account of Becker's system of cooking, accompanied by an excellent description and sectional drawings of the apparatus. The method consists in the exact regulation not only of the temperature at which each article is to be cooked, but of the actual quantity of heat to be supplied in a given time, while all loss of the nutritive constituents, flavour, etc., is avoided, and the contents of the several chambers can be kept at any desired temperature, and without deterioration, for many hours. The saving in fuel is estimated at 50 to 60 per cent., and the product of the same amount of raw materials at 33 per cent. more than in the usual forms of cooking ranges employed in hotels, public institutions, on passenger steamships, and in military kitchens. So perfect are the arrangements for preventing the escape of heat, that the loss from the water bath does not exceed 1° C. per hour. When carried on a military train, the heat may be supplied, as on board steam-ships, from the engines. A similar apparatus, exhibited by David Grove, of Berlin, seems to combine almost equal efficiency with even greater simplicity.

Dr. Adolf Baginsky, who has acquired a world-wide reputation on everything affecting the welfare of children, and Dr. Guttmann pass in review *crèches* and day nurseries, noticing with special commendation that connected with the spinning-mills at Linden, near Hanover, though expressing their disapproval of the employment of mothers in factory work. To this section is referred the discussion of the arrangements of the numerous dairy companies and model farms represented at the Exhibition, the different kinds of preserved milks and of milk foods for infants, the analyses of which show, as compared with human milk, a deficiency of fat, an excess of carbo-hydrates, and a proportion of proteids ranging from 8 per cent. in Nestlé's to 15 per cent. in Frerich's. A set of plain rules for the feeding and management of infants, drawn up by the reporters and editor for circulation among the mothers of the poor, well merit translation and adoption elsewhere.

School hygiene, including the construction, arrangements, and furnishing of schools and appliances for teaching, is treated at some length by Dr. Baginsky, and a number of the best patterns of desks are figured.

In the section on clothing, a very good account of the mechanism of the foot and the rational form of boots, by Dr. Beely, occupies a disproportionate space. Baths and bathing are discussed by Dr. Lassar, who, besides descriptions, plans, and statistics of the public baths at Bremen and elsewhere, gives one of an inexpensive character, designed by himself, for small towns and villages.

Charitable institutions, as asylums, orphanages, public kitchens, etc., are sketched by Mr. Albrecht; "Ferien-colonien" receive a passing notice; but the greatest interest attaches to the work of the societies at Berlin, Breslau, etc., for the relief of the homeless, of whom, in the capital alone, over 300 are nightly provided with supper, bed, breakfast, baths, and (if necessary) medical relief, any whose cases are serious being afterwards transferred to the hospitals. Other benevolent associations provide meals at cost price to those who can pay, and gratuitously to such as from illness or other circumstances are unable to do so.

The subject of prisons and reformatories is introduced by M. Volkmann with a historical account of the practice of different countries from the earliest times of the labours of Beccaria, Howard, and other philanthropists, and of the physical and moral influences of prison life. He discusses the silent system devised by Pope Clement XI., and tried for a short time at Auburn, in New York; the classification of prisoners first adopted early in this century in Switzerland; the Irish, or progressive system; and lastly, in greatest detail, the Pennsylvanian or cell system, which, originating with the labours of the Quakers, has, with more or less modification, been adopted throughout Western and Central Europe. This is followed by full descriptions of the construction, heating, ventilation, sanitary arrangements, and administration of the principal prisons and reformatories of Germany, with numerous plans, sections, and other illustrations.

Dwelling-houses, lodging-houses, and barracks, are handled by a Berlin architect, F. O. Kühn, who gives a set of rules drawn up by the Institution of German Architects; plans and elevations of Dr. O. Kuntze's double houses of three stories or flats, for as many families on each side, as well as of larger blocks of tenements for the working and middle-classes, at Dresden, Munich, Hamburg, and other towns. He next discusses the sanitary arrangements of buildings in general, the materials for foundations, walls, and floors, heating, lighting, and so forth. An interesting chapter is devoted to plans of buildings for smaller industries, in which several workshops are associated on each floor, and the various exhibits of fire-proof materials for floors and windows, shutters, lifts, etc., are described and figured. The chapter on barracks is chiefly devoted to a description of those at Albertstadt, near Dresden, for 7,000 men of all arms.

Medical History of the Troops in the Bombay Command for the year 1885. By Surgeon-General W. A. Thomson, M.B.

The average annual strength in the command during the year was 11,650. The number of admissions into hospital was 17,005, and of deaths, 280; the number of invalids sent home was 338. The admission and death-rates per 1,000 of strength, 1,471.1 and 24.03, exceed the corresponding rates of the previous year by 44.2 and 5.01. The invaliding rate was, however, lower by 2.51.

There are some points of considerable interest in this report. We observe with regret that there were 2 cases of suicide among officers and 10 among non-commissioned officers and soldiers—a large number as it appears to us; as no remark is made on the subject, we suppose the number is not considered above the average. In the case of the officers, nothing is said of their habits; the verdict, in both instances, was unsound mind. Three of the suicides among the non-commissioned officers and soldiers were men of intemperate habits, and 2 of them had misappropriated money to supply drink; in 2 no motive could be discovered. One man hanged himself after having been for some time in attendance on a dying patient, which is supposed to have had a depressing effect on his mind; another shot himself because "he was not liked in his regiment." The act in another case was committed under the influence of melancholia, brought on, it was thought, by a long habit of self-abuse, aggravated by much indulgence in atheistical literature.

Diarrhœa, dysentery, hepatitis, and abscess of the liver caused 1,070 admissions and 43 deaths. Dysentery caused 324 admissions and 33 deaths, yielding the annual rates of 28.4 and 2.89 respectively. This death-rate from dysentery is above that now seen in returns from India under modern treatment, but we observe that the bad climate of Quetta, which yielded the highest admission and death-rate from this disease, is mainly responsible for the increase. Yet we must not forget that, under the old system, a death-rate of 33 from dysentery, in a force numbering 11,650, would have been regarded as a mere flea-bite at a time when, as Maclean has recorded, a force of 1,098 men gave 2,497 admissions, with 104 deaths from dysentery and its sequels.

Diarrhœa furnished 560 admissions with only 2 deaths.

Hepatitis and abscess of the liver, with 186 admissions, gave 8 deaths, a ratio of 16.3 and 0.70. The Poona Circle furnished a large proportion of hepatic cases. The Deccan has always been noted for the prevalence of liver-affections (acute congestion and suppurative inflammation), due no doubt to the variations of temperature to which that large region is subject. But the death-rate from hepatitis and abscess of the liver was largest in the Quetta district, which gave a death-rate of 2.48 per 1,000.

Enteric fever caused 88 admissions and 30 deaths; the admissions

were 75 per 1,000, 8 per 1,000 above the ratio of the last five years. The mortality in 1884 was nearly equivalent to 1 death in every 3 cases, nearly 34 per cent. The enormous importance of enteric fever as a cause of sickness, invaliding, and death in India is year by year becoming more apparent, and with it the folly and obstinacy of those who, in the face of evidence enough to satisfy all real seekers after truth, denied the existence of this disease there altogether. In the case of one medical administrative officer, an attempt was made to fortify his position, as to the non-existence of enteric fever, by the stupid plan of indirectly punishing executive medical officers by certain marks of his displeasure, when they had courage enough to enter as "enteric" a case of fever presenting the most unequivocal symptoms of that disease. The Surgeon-General gives a most interesting account of the apparent causation of the disease at different stations, with remarks on the clinical characteristics and diagnosis of certain cases, which we regret will not bear abridgment to any good purpose. Not without good reason, he praises the executive medical officers for the pains taken to give an accurate diagnosis of their cases, by no means a easy task considering the important part which malaria plays in complicating the symptoms.

Cholera caused 131 admissions and 35 deaths, giving the annual rates of 11.2 and 7.30, which both exceed those of the previous year by 5.0 and 2.45 per 1,000 respectively. This very valuable report contains some interesting observations on the climate of Quetta. The number of troops there has been reduced, and the most satisfactory results have followed the establishment of a sanatorium, to which healthy troops are sent to keep their health, and another to which sick men can be quickly sent to regain health.

There are some other interesting points in this report to which we purpose to return on a future occasion. Meanwhile, we thank the author for much that will repay the careful study of sanitarians.

NOTES ON BOOKS.

On Sanitary Science. An Introductory Lecture by Dr. E. SEATON. Reprinted from Vol. xv *St. Thomas's Hospital Reports.*—In a thoughtful and suggestive address, Dr. Seaton takes occasion to protest against the practice of speaking of sanitary science as a speciality, not only because it includes subjects as diverse as analysis, house-drainage, and bacteriology—in all of which no one man could expect to be an expert—but because of the narrow and one-sided conception it tends to foster in the public mind, in which it is identified with improved drainage and water-supply, and personal and domestic cleanliness. Whereas, though the connection of certain diseases with filth, and the importance of cleanliness to health, have found their strongest advocates in the ranks of medical men, the notion that cleanliness alone can ward off small-pox, scarlatina, etc., and so far supersede the weightier duties of isolation, disinfection, etc., is fraught with the greatest danger, and, indeed, is one of the strongest arguments of the opponents of vaccination. The most thoughtful of men are the readiest to admit the mystery that surrounds the origin and propagation of infectious disease, which can only be solved by patient research based on wide scientific knowledge, and conducted on the recognized methods of scientific investigation.

On Irritable Brain and Congestion of the Brain in Children, with special reference to the Relation which they bear to Meningitis. By W. H. DAY, M.D., Physician to the Samaritan Hospital for Women and Children. (London: Baillière, Tindall, and Cox.)—This is a reprint of a paper read before the Medical Society of London in 1886. The author draws a distinction between the symptoms of simple cerebral irritation and those of slight congestion. He has observed marked symptoms of cerebral irritation in the children of neurotic parents. Dr. Day gives notes of cases in which distinct cerebral symptoms, combined with fever, were diagnosed early, and checked by appropriate remedies. Cold sponging was found to be the best means of lowering the temperature. In some of the cases, in which the rise of temperature was most marked, the best results were obtained.

BAD MEAT IN LEICESTER.—On Wednesday, January 20th, a cow-keeper at Leicester was sentenced to one month's imprisonment for having in his possession the carcase of a beast which was proved by Dr. H. Tomkins, the medical officer of health, to be unfit for the food of man. The meat was dressed in all respects as if intended for sale when seized, and the signs of disease, as far as was possible, had been removed therefrom. The magistrate committed the defendant to prison, without the option of a fine.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

SIR HENRY THOMPSON'S VALVULAR ASPIRATOR FOR LITHOTRITY.

THE instrument hitherto used for this purpose by Sir Henry Thompson, while exceedingly effective in action, has one objection, namely, that the circular brass plate which closes the glass receiver and holds the tap and evacuating catheter (see Fig. 1) requires, in order to

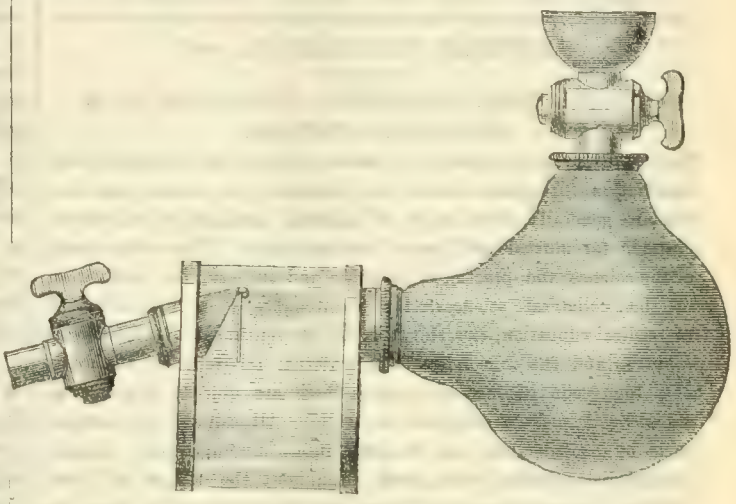


FIG. 1.

make it fit accurately, a leather "washer," which, after use for a short time, is apt to become deranged, and to permit air to enter. In hot climates this occurrence is, it appears, more frequent than in our own. Hence Sir Henry has suggested a form of glass which can be attached to the brasswork by two small tubular openings, rendering the large washer unnecessary. The glass receiver is also narrowed in the waist, like an hour-glass, the lower half of which receives the fragments, and thus the current of water is directed in a straight line into the india-rubber bottle above their level (see Fig. 2). We may add that this

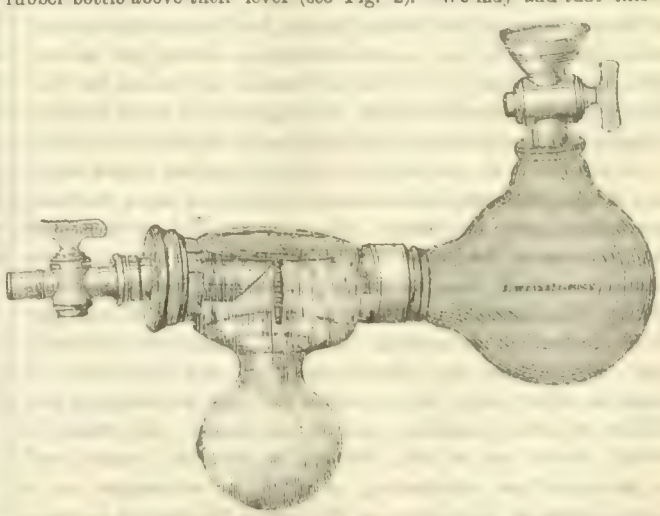


FIG. 2.

form renders the vessel stronger and less liable to break, while its adaptation to a hot climate is complete. It is made by John Weiss and Son, 287, Oxford Street, W., and 62, Strand, W.C.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 5th, 1887.

OUR COLONIAL BRANCHES: FORMATION OF A BRANCH IN CANADA.

THE continuous extension of the membership of the British Medical Association throughout India, the Dominion of Canada, and the Colonies generally, is a source of universal satisfaction, and affords grounds for mutual and hearty congratulation. The advancement of the science and practice of medicine and surgery, the cultivation of the collateral sciences, the maintenance of a high standard of medical education, the elevation of the sentiment of professional dignity, and the consolidation of fraternal relations on the basis of a high code of medical ethics—these are objects common to all medical men throughout the world. All can aid in realising them by confederation and frequent intercommunication. Among the English-speaking races, and throughout the empire of Great Britain, the common ties of blood and the loyalty which binds the inhabitants of the British Empire together by an indissoluble tie, give a special significance and power to every effort to cultivate these common objects on the same platform, and by a federated brotherhood. The facilities which the BRITISH MEDICAL JOURNAL afford in an increasing degree for carrying out these objects, and for enabling our most distant brethren in the greater Britain beyond the sea to share in the labours, the triumphs, and the social interests of the profession in the British Empire, have been yearly more and more appreciated by our colonial colleagues. During the last few years, the membership of the British Medical Association has thus been spread throughout the world. So long, however, as the JOURNAL remains the sole recruiting agency and the only tie binding our professional brethren to the Association, the full privileges and largest usefulness of this great medical federation are not realised; hence we cannot too cordially invite our colonial fellow-members to form themselves into Branches of the British Medical Association, in order to possess themselves of all those advantages which such local associations confer. The formation of a Branch unites the whole of the local profession in bonds of brotherhood. It affords means of frequent meeting, opportunities for clinical exposition, and incitements to research, which never fail to produce the most advantageous conditions of social friendship and mutual regard. It creates in every district an ethical tribunal, a scientific society, and a medico-political organisation, of which the advantages are at least as great in the Colonies as they are in the heart of England. The first need of every body of medical men scattered over a newly-settled country, or gathered into its growing cities and towns, is a means of social union, an opportunity for scientific discussion, and, if need be, facilities for bringing to decision questions of personal hardship suffered at the hands of the State or of individuals, or for settling such personal and professional difficulties as unhappily from time to time occur.

The advantages of organisation are early felt in the youngest communities, and never cease to be important in the oldest. The organisation of the British Medical Association is essentially democratic, just as the organisation of its Branches is in all essentials autonomous. The council of each Branch is elected by a free vote of all its members. The president and chief officers change by electoral choice each year. The meetings may be few or many, the Branch whole and undivided, or subdivided into districts, according to the wishes of the members and the needs of the locality. The pages of the JOURNAL afford to all the Branches the opportunity of a systematic record of their proceedings and the means of addressing what is now practically the whole body of the educated and intelligent practitioners of Great Britain. The by-laws by which each Branch is governed, subject to certain general regulations which time and long experience have shown to be advantageous, are capable of very large modification to suit the needs and wishes of the Branch; while the influence which the British Medical Association has gathered in its long years of growth by the efforts of the many able, eminent, and self-sacrificing men who have guided its councils, and raised it to great power in the profession and in the State, is always at the command of any of its Branches in response to every legitimate appeal. This influence is felt not only in the decision of social and ethical questions affecting individuals, but in appeals addressed to Municipalities, Governments, and States. There are few circumstances arising in the medical polity of any colonial dependency which have not some direct relation to precedents existing in the previous history of Great Britain or of some other part of the Empire; and the Parliamentary and scientific Committees of the British Medical Association have now a recognised influence in the councils of all the great bodies of the State. Looking back over the last few years, we have had the satisfaction of welcoming a Branch at Jamaica, founded in 1877, which numbers 39 members; Branches in Adelaide and South Australia, with 69 members; in Melbourne and Victoria, with 104 members; in Sydney and New South Wales, with 112 members. The three last mentioned Branches were formed simultaneously in 1880. Still more recently, a Branch has been formed at Madras with 69 members, another in British Guiana with 21 members, and we have the immediate promise of the formation of Branches at Ceylon; at St. John's, New Brunswick; and at Cape Town, Cape of Good Hope. We are glad to hear that an application has just been received from a number of our medical brethren resident in Halifax, N.S., who are proposing to form what will be the first Branch of the British Medical Association in the Dominion of Canada. Among the names of the applicants are Deputy Surgeon-General Cattell, P.M.O., A.M.D.; Surgeon-Major Babington, A.M.D.; Surgeon Deeble, A.M.D.; Hon. Dr. Parker; Drs. Black, Cunningham, Wickwire, Somers, Slayter, Milsom, Campbell, Sinclair, Curry, Cameron, and Chisholm; Surgeon Browne, A.M.D.; Drs. Reid, Cowie, Dodge, Lindsay, Grier, and Hackett, many of whom are original members of the parent Association; the Honorary Secretary of the movement is Dr. W. Tobin, Halifax, N.S. All medical practitioners who are legally qualified to practise in the colony are eligible for election, whether they hold diplomas from licensing bodies in the United

Kingdom or not. It is, of course, understood that the membership of the Association, which can always be secured by direct application, suitably endorsed, to the Council of the Association seated in London, is distinct from the membership of the Branch. We urge, however, all members of the Association, resident in localities in which a Branch is seated, to apply for membership to the local Secretary of the Branch, for nothing gives greater vitality to membership of the Association than active participation in the privileges and duties of membership of the Branch. We feel a peculiar interest and satisfaction in the movement to form branches of the British Medical Association in the Dominion of Canada. When Sir Andrew Clark paid a visit to Canada, he took occasion, at our request, to put before some of the leading members o the profession there the advantages of a union of the Canadian profession with their brethren in England, through the medium of the British Medical Association; and the profession in England will see with great satisfaction that the accomplishment of this object is about to be commenced by the formation of the proposed Branch. We venture to hope that the material, social, and scientific advantages of membership of the Association may commend themselves very extensively to our medical brethren in Canada. We can promise that our pages will be readily opened to contributions from our colleagues in the Dominion; no visitors are more welcome at the annual meetings of the Association, which are held at a convenient season in the autumn, than our brethren across the sea. In heartily welcoming the new Canadian branch, we also express the hope that a large accession of members throughout the whole Dominion may accrue to the Association, and that a net-work of Branches will be formed which will constitute a true medical federation uniting the whole profession in Great Britain and in Canada in the closest bonds of social, scientific, and fraternal intercourse.

THE CAUSES AND TREATMENT OF FEEBLE-MINDEDNESS.

THE scientific study of idiocy and its treatment is a very recent development; for even when Dr. Lettsom wrote at the beginning of this century, more attention was given to the deaf, dumb, and blind, than to the weak-minded. Dr. Lettsom himself spent much time and attention on social and general medical subjects, but in his *Tracts* we find no notice of idiots or imbeciles. Dr. Down has in the lectures which we are now publishing provided so ample a supply of facts, that one feels inclined to complain that so much matter should have to be compressed into three lectures. The lecturer is one of the few successful physicians who is not so oppressed by his practice that he cannot afford to share his experience with his professional brethren. He has vast experience of idiocy in every relation, and he has done good service in thus giving us the advantage of his life's work. Nearly all the records are from his personal experience, and in many cases we see how fallacious it is to follow the light of Nature and not the light of experience in matters medical. These lectures will serve to shatter many professional, and more lay, idols in respect to idiots.

In the first lecture Dr. Down returns to the old ethnic idea about idiocy which he propounded about twenty years ago, and we are quite willing to admit that the idea that degenerate men of the Indo-Germanic races resemble the Malayans or the Negroes is worth retaining and testing. The idea is very pleasing and satisfying, but is not proven. What about the idiots of these lower races, and where are we to stop? It was a favourite fancy of former times that certain men resembled dogs, cats, wolves, and other lower animals, and that such men had canine or feline peculiarities. These ideas have been given up with advancing knowledge, and it is only in our comic papers that we see the resemblances between statesmen and animals elucidated. As we said, it is a very seductive idea that partially developed men resemble partially developed races, but there is a fallacy, for though we find in the development of the human embryo periods at which it has piscine or canine attributes, yet the embryo never goes on to become a fish or a dog. Though our author refers to this old theory of his, yet for a working classification he makes a fresh departure, and we think this is much more satisfactory. He calls it his etiological classification, and it is as follows: congenital; developmental; and accidental idiocy. This is very simple and comprehensive. The congenital class needs subdivision, for it contains not only those who, coming of nervous stock, are nervously weak, but also those who, from one cause or another, come into the world deformed in brain or skull, and with defective mind. In considering each of the groups, Dr. Down gives both the chief mental and bodily characteristics met with in typical cases. Among the congenital idiots there are found the majority of the patients who are recognised from early years, even by their parents, as being idiotic, from the smallness or malformation of their heads, and the evident defect of senses or intellect. It is interesting and instructive to hear that this class provides a very fair proportion of cases which are greatly improved by training. One would have expected that such cases were hopeless from the outset, but experience corrects our preconceived notions. When considering the causes of congenital idiocy, Dr. Down discusses again the relationship of the vaulted narrow palate to mental weakness. He confirms his earlier experience, that this is a very common but not a constant accompaniment of congenital idiocy. It is found, so say the dentists as well as the medical men, in families that are steadily degenerating, so that the palate may be seen to contract with the increasing feebleness of the family.

The other forms of mental weakness are considered in order, and the fitness of including under the heading of this paper the mental disorders of youth as well as those of infancy, is seen when the cases of developmental idiocy are considered, for every asylum-physician, and probably most medical men in general practice, are familiar with the cases of instability met with in families in which insanity and grave neuroses are present.

There are many children who, under the most favourable conditions, may not only be reared, but educated; but the majority of these break down at one or other of the critical periods of development; such cases are full of hope, yet full of heartbreak; they may be steered safely over the shoal of dentition, to be upset in the rapids of education, or wrecked on the coast of adolescence.

After this interesting class we have the accidental cases; and here, again, we find many instances of very great personal study and experience. In this class are many interesting and even bright-looking children, who, from one accidental cause or another, seem to have been prevented growing into intellectual and moral strength; and many of these cases, though so pleasing in appearance, are the most unsatisfactory of all; they are the very apples of Sodom, bright and pleasing to look upon, but full of bitterness. These cases, we are told, gain little by education or training, and seem to be as untameable as they are incurable.

Much as we should like to go through all the lectures in detail, we can only direct our readers to their interest and importance, and point out a few of their more special points in passing. Many of our old beliefs are shaken when, in the second lecture, the causes of the various forms of idiocy are studied. Instrumental labour appears to be less dangerous than prolonged labour, and if there be loss of animation and artificial respiration needed to restore life, the danger of mental weakness is very great.

Mothers constantly attribute the mental weakness of their children to the use of sleeping draughts by the nurses. Dr. Down cannot support this idea, but he startles us by saying that he thinks immense harm is done by the production of erethism by nursemaids. For humanity's sake we hope this is not true. Our lecturer is very fully impressed by the idea that the mental state of the parents at the time of the begetting is of great importance, and he shows the danger to the offspring of worry and distress during pregnancy.

That disparity in age of the parents is of little moment we can readily admit. After what Galton has written (which Dr. Down quotes), it is rather unfortunate that, in studying the frequency of idiocy among the children of professional men, the clergy should come out so far ahead of the rest, and, at the same time, that they should come out at the bottom in reference to distinguished offspring. We were also astonished to find how small an amount of evidence is forthcoming, either from Dr. Down or from Dr. Shuttleworth, as to the idiocy produced by inherited syphilis. Well-marked cases are not infrequently seen, and it seemed probable that they were not uncommon; but Dr. Down doubtless is more correct than were our impressions from a few affirmative cases. The question of consanguinity is once more discussed, and it is left much as before, the opinion of our author being that mere blood relationship has nothing to do in producing idiocy, but that, given inherent weakness, the intermarriage will tend greatly to increase this.

Besides the classes of idiots, the points of diagnosis and the interesting study of the causes, there is a general summary of the subject of "idiots savants," and also of moral idiots, several good illustrative cases being given, which show clearly enough to the medical mind how certain persons, belonging to insane families, never can grow to their full moral stature. The laws of society have been slowly developed, and in some persons there is no possibility of their understanding the simpler, let alone the more complex, regulations which society requires; so we get certain so-called wicked or dissolute persons who are ruled by their mad nature.

Nothing could better show the advance which has taken place in the treatment of idiocy than the paragraphs on this subject which close these lectures. They are ably and feelingly written, and point to the great work which has been begun, but which has plenty of scope for fuller development among the lower orders. Nothing can be worse than the way in which, at present, some poor weakminded children are herded with chronic lunatics, learning from them the common vices of depraved weakmindedness.

DR. BRISTOWE ON EXAMINATIONS.

At the present time, when there is some chance that an important practical step may be taken in the regulations of medical education and the granting of a new medical degree, owing to the joint action of the Colleges of Physicians and Surgeons, it is of unusual importance that the opinions of the best judges should be clearly before the world. We are very glad, therefore, to see that Dr. Bristowe has republished an important address, which was delivered at the annual meeting of the Metropolitan Counties Branch of the British Medical Association last June, and which subsequently appeared in our columns, but has been somewhat overlooked in the multifarious criticisms of the subject that have since then been put forward. It is a course which is deserving of all the more cordial welcome, inasmuch as it is always distasteful to the eminent author to press his views upon the world in however courteous a manner. The republication is only undertaken in obedience to a feeling of duty, and at the urgent request of others deeply interested in the matter. He touches first on the general system of school education of boys; and, though he by no means advocates the old-fashioned training in Latin and Greek and mathematics, yet he heartily supports some classical training, with the inclusion, or at least alternative, of the study of modern languages, and more especially of English, as well as of the rudiments of the exact sciences. In the professional education, he feels strongly the duties of the medical schools to their pupils, and does not hesitate to say plainly "that many of our medical schools neglect their duty to their pupils' parents and to the public. They are too apt to allow students to determine for themselves how they shall work, and whether they shall work at all."

It is hard enough, certainly, to settle how long students shall be kept in leading-strings, and when they shall be allowed to go their own way. For a great majority of cases (though not, perhaps, for all) we should agree with Dr. Bristowe that a vigorous quasi-paternal despotism is the best form of government. But that is not the part of the question that mainly concerns us now, but rather his remarks on the examination system, and its possible extension and improvement. He admits that "many years ago" he considered examinations as the best tests of knowledge; but that is an opinion that experience has modified, if not reversed; they must, he now believes, be considered as evils, but necessary evils. If he were asked how their bad influence could be reduced to a minimum, he would say by having fewer of them, by having them in the hands of teachers of experience, and by making them cover a wider area.

The last point is of considerable importance, for the shorter an examination is, the more likely is a single accident to make or mar the success of the candidate, and this has been shown now and then in an almost ridiculous fashion in some medical examinations. In this respect it is striking to compare the length of the examination under various examining bodies. For instance, in the older English universities, the minimum time for the examinations necessary to obtain a M.B. degree (without counting the time spent upon the thesis) is about sixty hours, of which five or six are spent in *viva voce*. That is more than twice as much time as is required for the conjoint examinations of the Royal Colleges of Physicians and Surgeons of London, and the results may fairly claim at least a more careful elimination of accident. The method is far more troublesome to the examiners, and though at the older universities long usage and etiquette with a certain amount of filial devotion to an Alma Mater, induce learned men and capable examiners to undertake many more wearisome examinations for very small fees, that is not likely to be the case in the London Colleges. If the examinations, then, are to be made more careful, either there must be more public spirit, or else more money must be paid.

And lastly, to what practical conclusions does a general survey of

medical education and examination tend in the matter of this new degree, for the right to grant which the Royal Colleges have resolved to apply? To three points mainly. First, that the minimum qualification in knowledge and in time of study which is held at present sufficient for the qualifications of L.R.C.P. and M.R.C.S. is not enough as basis for the new degree; and secondly, the additional requirements which must be fulfilled by all who seek this degree should be mainly two, namely, proof of some better preliminary knowledge of the sciences of nature and language, and also a longer professional training—perhaps a year longer—than is required for the present qualifications; and thirdly, that, if the titles of M.B. and M.D. be asked for and granted as this new degree, it would be best to give the M.D. degree after some examination not exactly similar to that of the M.B. degree, but either for a thesis or for some more exhaustive examination in some branch of science or literature. The value of some form of thesis, the large experience of France as well as of Oxford and Cambridge, abundantly confirms as a means of directing a young man's energies to some small point within his grasp. In these suggestions as to the new degree, we cannot help cordially sympathising with Dr. Bristowe. It certainly would destroy nearly all the value of the new degree if it were to be given on as easy terms as the minimum qualification of the two London Colleges, and the best way to make it worth having is to insist on a little better preliminary education and a little longer professional study. The Queen's Speech gives notice of a possible measure of reform of the Scotch Universities this session; and any alteration which such a university authority as Mr. Balfour may bring in with regard to them is sure to tend towards making the conditions and standards in all subjects more strict, and less subject to misuse, and in so far will help to shift some part of the mass of Scotch students to London, where they will undoubtedly find their clinical material, and perhaps their convenient degree. At the same time, it must be remembered that this new degree is very far from having been as yet obtained, and is not so very likely to be obtained without some close scrutiny and questioning from so keenly academical a Premier as Lord Salisbury, Chancellor of the University of Oxford.

Major-General A. de C. Scott, R.E., has been appointed by Mr. Ritchie, President of the Local Government Board, to the post of Examiner of the London Water Supply, which office was formerly held by the late Colonel Sir Francis Bolton, C.B.

The annual meeting of the Hunterian Society will be held on Wednesday, February 9th, at 8 P.M., in the theatre of the London Institution, Finsbury Circus, E.C., when the oration will be delivered by Dr. Galabin. This meeting is open to all practitioners.

We understand that a meeting of the Committee of the Senate of the University of London appointed to consider the advisability of reforming the constitution of the University of London, was held on Wednesday. Among those present were the Vice-Chancellor (Sir James Paget), Lord Justice Fry, Professor Carey Foster, Mr. Hutton, Mr. Fitch, Dr. Quain, Dr. Pye-Smith, and Mr. Osler. The report of the Committee was discussed for a considerable time, and the Committee adjourned to meet again at an early date.

CREMATION.

The Leicester corporation has appointed a special committee to consider the advisability of establishing a crematory at the corporation cemetery; it is computed that about one hundred thousand bodies are interred in the stiff impervious clay of this the only burial ground for the town. The leading citizens and medical men have, it is stated, signed a memorial in favour of the establishment of the crematory.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

The next quarterly meeting of this association will be held at Bethlem Hospital, St. George's Road, S.E., on Wednesday, February 23rd, at 4 P.M., when it is proposed to discuss the question "Whether there is sufficient reason for the use of strong clothing and side-arm dresses." Dr. Percy Smith will read a communication on "The Results of an Epidemic of Typhoid Fever in the Insane."

THE CARRIAGE-TAX.

Sir Edward Grey, Bart., M.P., has given notice that he will move a resolution in the House of Commons for the repeal of the carriage-tax, on the ground that it is a tax on industry, and, by depressing the coach-building trade, throws large numbers of skilled workmen out of employment. Mr. Anderson, when he asked a question in this sense on Monday last, did not receive much encouragement from Mr. W. H. Smith, but possibly Mr. Goschen may be more compliant.

MILK ADULTERATION.

The defences made by milk-vendors, when charged before magistrates with selling milk "not of the nature and substance demanded," are often at least ingenious, if not always accurate. A magistrate, the other day, called upon one of these offenders to explain, if he could, how the water found by the various analysts got into the milk. His reply was that he could only account for it on the supposition that "some of the hot water got in while the boy was thawing the cans." The magistrate (Mr. Paget), however, was incredulous, and imposed the penalty of 20s., with 12s. 6d. costs.

THE OPHTHALMOLOGICAL SOCIETY.

The chief feature of the last meeting of the Ophthalmological Society was the remarkable and probably almost unique case of symmetrical exostosis of the skull shown by Mr. Nettleship. Mr. Berry contributed a valuable paper on three cases of acute cerebral disease, interesting alike to the physician and ophthalmic surgeon, his first case, in particular, one of ophthalmoplegia externa in a child, being of extreme interest, and the comments of Dr. Gowers on this case form by no means the least important part of the evening's work. Dr. Mules detailed some clinical cases interesting either for their rarity or their unusual results; and Mr. Cowell initiated a brief discussion on the treatment of conical cornea.

PEA-SOUP FOGS IN PARIS.

The pea-soup fogs which astonished and disgusted the Parisians last Saturday and Sunday are, in all probability, examples of the power of coal-smoke to produce these unpleasant meteorological phenomena. Paris could point the finger of scorn at London as long as wood and charcoal were almost exclusively used for domestic purposes; but now that coal has so largely replaced them, the dense fogs, which are really coal-smoke fogs, develop on the banks of the Seine as thickly and as odiously as on the banks of the Thames.

THE LONDON UNIVERSITY AND THE QUEEN'S JUBILEE.

Much discussion has taken place among the graduates of the University of London as to the best means of celebrating the jubilee of the University, which is contemporaneous with the jubilee of the Queen. A banquet, an evening reception, a volume recording the early history of the University, are among the suggestions which have been made; but we believe that the latest proposal, and one which has met with much approval, is that Her Majesty, as Visitor of the University, and as having graciously opened the new building, should be invited to allow a bust of herself to be placed in the

theatre; such a memorial, it is thought, would fulfil the double object sought. It is proposed that H.R.H. the Prince of Wales should be invited to unveil the memorial, and that on this occasion a reception would be held, at which addresses might be delivered by the Chancellor (Lord Granville), the Vice-Chancellor (Sir James Paget), and others, commemorative of the occasion.

LIFE-ASSURANCE FOR ABSTAINERS.

SEVERAL life-insurance companies have instituted a section for abstainers only, with the result that the bonus to the teetotallers has been considerably larger than that to the general section. The Blue Ribbon Company, however, has been established to secure abstainers the whole of the pecuniary benefits accruing from habits of temperance. This Society has just issued its third annual report. A dividend of 5 per cent. has been declared. The directors report that the number of policies discontinued, through the insured ceasing to be total abstainers, has been but trifling. We are glad to note a formal declaration that the policies are not voided when alcoholic drinks are temporarily taken medicinally, under doctors' orders.

THE PREVENTION OF LAMP-ACCIDENTS.

AN accident has occurred to a woman living at Seaham Harbour from the explosion of a lamp. This accident, like so many of its kind, resulted from the unfortunate woman blowing down the glass chimney to put out the flame. It is to be hoped, in view of the alarming number of accidents from this cause, that the manufacturers of cheap lamps will issue to the retail trader, to be given with each lamp bought, a paper containing the few simple precautions which are necessary to prevent such disasters. It would be better still if the foot of the lamp were so constructed as to allow of two or three words of caution being indelibly impressed in a prominent position upon the lamp itself.

THE HUNTERIAN SOCIETY.

THE following is the list of proposed officers of the Hunterian Society. *President:* Henry Gervis, M.D. *Vice-Presidents:* W. Talbot King, M.D.; T. Rowing Fendick, Esq.; G. E. Herman, M.B.; G. J. B. Stevens, Esq. *Treasurer:* H. J. Fotherby, M.D. *Trustees:* H. J. Fotherby, M.D.; D. de Berdt Hovell, Esq. *Librarian:* P. L. Burchell, M.B. *Orator:* R. Clement Lucas, B.S. *Secretaries:* F. C. Turner, M.D.; J. Poland, Esq. *Council:* T. E. Bowkett, Esq.; F. M. Corner, Esq.; J. S. E. Cotman, Esq.; E. G. Gilbert, M.D.; G. B. Hicks, Esq.; P. Horrocks, M.D.; T. Mark Hovell, Esq.; P. H. Pye-Smith, M.D.; Stephen Mackenzie, M.D.; W. Rivington, M.S.; R. G. Tatham, Esq.; C. J. Symonds, M.S. *Auditors:* G. E. Herman, M.B.; W. Tay, Esq.; T. R. Fending, Esq.; R. C. Lucas, Esq. *Library Subcommittee:* James Greenwood, M.B.; W. Talbot King, M.D.; Walter Rivington, M.S.; W. C. Toulmin, Esq.

CLINICAL SOCIETY OF LONDON.

AT the last meeting of this Society the new President, Dr. Broadbent, took the chair for the first time, and delivered an inaugural address, which will be found at another page of to-day's JOURNAL. Dr. George Johnson proposed a hearty vote of thanks to Dr. Broadbent for his address; the proposition was seconded by Mr. S. W. Sibley, and carried with applause. The President reminded the Society of one of its rules, namely, that which prescribes that the readers of papers shall not occupy more than ten minutes of the time of the meetings. The application of this rule is likely to add crispness to reports which, in the multiplicity of details which they narrate, seem often to wander from the special points that they would teach. Papers dealing with renal surgery, by Messrs. Morris, Marsh, and Bennett, were then read, and the discussion thereon was postponed until this (Friday) evening, when it will be the first business of the meeting. Abstracts of those papers will be found in our report of the last meeting, at page 281.

OBSTETRICAL SOCIETY OF LONDON.

THE annual meeting of this Society, for the election of officers, was held on Wednesday, February 2nd, Dr. J. B. Potter, President, in the chair. Dr. O'Meara exhibited a fœtus showing congenital hypertrophy of the bladder, with impermeable urethra. This excited a discussion on the question of renal secretion in fœtal life. Dr. J. Phillips showed a three-chambered heart from a dicephalous fœtus; and Dr. Horrocks exhibited an infant, aged one week, with spina bifida. An interesting account of a case of unilateral galactorrhœa was read by Dr. R. A. Gibbons. The discussion was adjourned till the next meeting. Dr. M. Handfield Jones and Mr. E. S. Tait having been appointed scrutineers, the result of the ballot was declared by the President. The following officers were elected for 1887. *Honorary President:* Arthur Farre, M.D., F.R.S. *President:* *John Williams, M.D. *Vice-Presidents:* Peter Lodwick Burchell, M.B.; *William Frederick Cleveland, M.D.; *Robert Cory, M.D.; Charles James Cullingworth, M.D. (Manchester); George Ernest Herman, M.B.; *William Stephenson, M.D. (Aberdeen). *Treasurer:* Alfred Lewis Galabin, M.A., M.D. *Chairman of the Board for the Examination of Midwives:* *James Watt Black, M.D. *Honorary Secretaries:* Francis Henry Champneys, M.A., M.B.; *Percy Boulton, M.D. *Honorary Librarian:* *Alban Doran, F.R.C.S. *Other Members of Council:* Frank Argles; Rayner W. Batten, M.D. (Gloucester); Edward Burd, M.D. (Shrewsbury); J. Matthews Duncan, M.D., F.R.S.; Arthur Guy Elkington (Surgeon-Major); Walter S. A. Griffith, M.B.; Peter Horrocks, M.D.; *Jamieson Boyd Hurry, M.D. (Reading); *Robert Nichols Ingle, M.D. (Cambridge); Evan Jones (Aberdare); *Montagu Handfield Jones, M.B.; *Arthur H. N. Lewers, M.D.; *George Lowe, F.R.C.S. (Burton-on-Trent); William Appleton Meredith, M.B., C.M.; *John Phillips, B.A., M.B.; Arthur Roper; Amand J. McC. Routh, M.D.; Edward W. Tait. Those gentlemen to whose names an asterisk is prefixed were not on the Council or did not fill the same office last year. The reports of the Treasurer, Honorary Librarian, and Board of Examiners of Midwives, were then read and adopted, and the out-going President delivered the annual address. He noted that the Society now numbered 761 Fellows, the largest number of any medical society in London. The financial condition of the Society was very satisfactory. Dr. Potter observed that it was to be hoped that Government would take the qualification of midwives in hand. The Society had, however, by its own efforts done much to improve the quality of midwives, who were so largely employed by the poor.

DIPHTHERIA AT EALING.

AN outbreak of diphtheria, which at one time appeared to be spreading with serious rapidity, has recently occurred at Ealing. There has been a tendency in this case, not uncommon in times of epidemic, to exaggerate the real facts, which, as furnished to us by the medical officer of health, are as follows. About noon, on January 22nd, Dr. Patten was called to see two children, living nearly a mile apart; both presented symptoms of diphtheritic sore-throat. About the same time, Dr. Patten's partner, Mr. Warwick Steele, had a similar experience in quite another part of the district, but no opportunity of comparing notes offered itself until January 24th, when they found that each had two well-defined cases of diphtheria under treatment. At that time no sanitary defects could be detected in the houses of these patients. Dr. Patten subsequently communicated with other practitioners in his district, and ascertained that there were some twenty cases of diphtheritic sore-throat in all; some well-defined, some doubtful, and about equally proportioned. A most noticeable fact was at this time ascertained, namely, that a very large majority, about eighteen out of twenty of the cases, had obtained their milk from one dairy. This dairy was inspected, with the result that, although its arrangements were not thought to be perfect, there seemed no obvious defect which could possibly be considered to account for the mischief. Dr. Patten suggested the propriety of closing the farm, but the proprietor pointed out that about one-tenth o

the general milk-supply found its way to Acton, where no diphtheria occurred. Dr. Corfield subsequently, at the instance of the medical officer of health, inspected the farm, and pronounced its dairies and its cattle to be perfectly free from all suspicion of diphtheritic contagion. Five deaths occurred, all being among those first attacked. The cases, which were widely scattered, were almost exclusively limited to the wealthier classes, and to those who had drunk milk from this particular dairy. In all, not more than thirty-five persons are known to have been attacked in a population of 20,000; and only one person in each house was attacked. We hear that an inquiry will be held by the Local Government Board. The chief features of the outbreak were its extreme suddenness, wide distribution, and limited intensity.

THE GENERAL MEDICAL COUNCIL.

THE first session of the General Medical Council, as enlarged by the Medical Act of 1886, will commence on February 15th. There is a great deal of work to be got through, and we understand that some of the newly-elected members will lose no time before taking a prominent part in the business of the Council, for they have already given notice of a motion with regard to the desirability of reviving the apprenticeship system. The Council will be called upon at once to make arrangements for carrying out certain of the provisions of the Act of 1886; it will, for instance, be necessary to draw up the regulations under which the Inspectors of Examinations are to act, and to assign salaries; for these posts it is likely there will be no lack of candidates, and the selection of the most suitable persons will probably be no easy task. The conditions under which colonial and foreign degrees and diplomas shall be admitted will be another matter which must be settled. The appointments of Examiners in Surgery to act at the Society of Apothecaries of London, and at the Apothecaries' Hall of Ireland, which will be rendered necessary if the Colleges persist in their refusal to admit these two bodies to the Conjoint Board in England and Ireland respectively, will doubtless lead to a prolonged debate, in which the direct representatives of the profession will be able to take part with emphasis and authority. The duty of the Council with regard to unqualified assistants who practise in "branch dispensaries" under circumstances which render them practically independent of the qualified practitioners who yet act as the legal "cover," will probably also be discussed. Altogether, it will be seen that there is every likelihood that the coming session will not only have important business to transact, but will have before it controversial topics, which are almost sure to be debated at great length.

THE BRIGHTON MEETING.

THE local treasurer's statement of the Reception Fund of the annual meeting of the Association, held at Brighton in August last, has been published, and shows most satisfactory results. All the subscribers had the option of the return of one-fourth of their donations out of the surplus. Ninety-one out of 212 subscribers availed themselves of the option, being 25 per cent. of £644 19s., amounting to £161 4s. 9d. From the residual surplus a present of plate was made to the Mayor of Brighton of the value of £70, in acknowledgment of the great liberality and courtesy which he had shown in the reception of the Association. A donation of £30 was presented to the Royal Medical Benevolent College at Epsom; a donation of £20 to the British Medical Benevolent Fund; a donation of 10 guineas to the Brighton Dispensary. A present of plate, of the value of £89 12s. 7d., was made to the President of the Association, Dr. Withers Moore, thus disposing of the excess balance, which amounted to £381 7s. 4d. The South-Eastern Branch and the profession in Brighton may be warmly congratulated on the complete success of the meeting and on the large liberality which placed funds so ample in the hands of the Executive. As to the final disposal of the considerable balance left over, it need only be said that that was a matter which purely concerned those whose generous liberality had provided the funds, and the recognitions made of the great services of the Mayor and of the President for the year were graceful and well-deserved acknowledgments of the generous services rendered. Some will regret that the surplus was not devoted to the establishment of a permanent memorial for the benefit of medical science of this most interesting and successful scientific meeting; but, after all, this is a matter of purely local concern, and as to which the wishes of those concerned were most properly consulted.

FLORENCE AND ITS SANITATION.

FLORENCE is bestirring herself with commendable zeal in the matter of improved sanitation. The Florentine Hygienic Society has determined to institute an inquiry into the causes of typhoid fever in the city, and a Commission has been formed, of which Dr. Boncinelli is the President, for the purpose of collecting the materials necessary for such an inquiry. Dr. Boncinelli has appealed to his colleagues practising medicine in Florence, urging them strongly to aid him and contribute to the investigation which so much concerns the public health, and for this purpose he has sent them forms of a series of questions to be filled up with the peculiarities which fall under their special observation in the cases of typhoid in their practice. The questions put are in relation to personal inattention as to the patient and the family, their locality, residence, chamber, customary food, water used for drinking, water-closets, cesspools, the character of the house and surroundings. The sewers have been flushed successfully, and a committee is being formed to further the complete sanitation of the city, with the following definite purposes:—(1) To urge the examination of the wells; (2) to agitate for the permanent flushing of the sewers by turning the Arno through them; (3) to have the cesspools looked after; (4) to furnish indications to visitors of the hotel and lodgings which have been and may become properly drained and supplied with drinkable water; and (5) to have a competent sanitary engineer sent for to examine the sanitary condition. These proposals are hygienically excellent, and if only they are carried out with efficiency Florence will soon acquire for itself a higher sanitary reputation.

NATIONAL HEALTH SOCIETY.

ON Friday evening, January 28th, a meeting was held at the Paddington Baths, to inaugurate a course of Health Lectures to be given by Dr. A. T. Schofield, under the auspices of the National Health Society (44, Berners Street, W.) The meeting was largely attended, and the audience representative of every grade of society, showing how general is the interest in the all-important subject of Health. In the absence of Lord Randolph Churchill, who was detained in the House of Commons, the chair was taken by the Rev. J. C. Ridgway. Among the gentlemen on the platform were Sir Crichton Browne, Sir Spencer Wells, Dr. Priestley, Dr. Thorne-Thorne, Mr. F. Treves, Rev. Dr. Clifford, and Mr. Shirley Murphy. After some introductory remarks by the chairman, Sir Crichton Browne addressed the meeting, dwelling on the importance of the work of the National Health Society in its efforts to prevent the origin and spread of disease by imparting knowledge, through such lectures as Dr. Schofield's, to all classes. Sir C. Browne also remarked that a special feature of these lectures would be the avoidance of technical terms and complicated expressions, and he went on to draw a favourable comparison between the physical condition of Englishmen and any other nation in the world. Sir Spencer Wells pointed out that the average length of life was two years longer now than it was fifty years ago; this he attributed to efforts at sanitary reform, such as those of the National Health Society. Mr. F. Treves said the National Health Society was strictly a missionary society, inasmuch as it appealed to individuals. In this he was supported by Dr. Thorne-Thorne, who said it was essentially the work of ladies to go among the poor, and to impress upon them both personal and general sanitary principles.

The Rev. Marshall Treddle and the Rev. Dr. Clifford spoke warmly in favour of the scheme of the proposed Paddington Park. Dr. Schofield then announced that the lectures would take place at the baths at 8 o'clock on the following evenings: February 1st, Prevention of Disease; February 4th, Eating and Drinking; February 8th, Use and Abuse of Stimulants; February 10th, The Mind and its Culture. Each lecture was to be followed (at 9 o'clock) by an ambulance lecture and demonstration; either course might be attended separately or together. After a vote of thanks to the chairman, the meeting separated.

RABIES.

THE *Gazette* of Tuesday publishes an Order in Council, made on January 31st, in place of the Rabies Orders of last year. The following are the special regulations of local authority as to dogs. Any local authority may make, from time to time, such regulations as they think fit for the following purposes, or any of them: (*a*) For providing for the muzzling of dogs, except when securely attached to or kept within a kennel, stable, house, building, or other like place; (*b*) For providing for the keeping of dogs under control (otherwise than by muzzling) by the owner or person in charge thereof in such manner as may be prescribed by such regulations; (*c*) For providing for the seizure and detention of stray dogs or of dogs not muzzled, or of dogs not being kept under control in the manner prescribed by such regulations, and for the recovery by the local authority of the expenses incurred by them in respect of the detention of any such dogs from the owners thereof; (*d*) For providing for the seizure, detention, and disposal, including slaughter, of dogs being at large and affected with or suspected of rabies, or being or having been in the same kennel, stable, house, building, or other place, or in the same pack, or otherwise in contact, with dogs affected with rabies, or being or having been otherwise exposed to the infection thereof; (*e*) For prohibiting or regulating the holding of shows or exhibitions of dogs, and the exposing of dogs for exhibition or sale thereat.

SCOTLAND.

ARBROATH INFIRMARY.

AT the half-yearly meeting of the Arbroath Infirmary, a legacy of £100 was announced from the late Misses Marnie, of Deuchar, near Brechin. The legacy was added to the endowment-fund, which now amounts to £9,718 10s. 10d.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.

THE Pathological Section of this Society has arranged to hold a discussion on Cerebral Abscess, on the evening of Friday, February 11th, at 8 o'clock. The discussion will be opened by Dr. William Macewen, and gentlemen from Edinburgh and London are expected to take part. All medical men are invited to be present.

CEREBRAL SURGERY.

PROFESSOR GREENFIELD, in a patient recently under his care in the Edinburgh Royal Infirmary, who presented somewhat obscure cerebral symptoms, made the diagnosis of abscess in the anterior part of the left temporo-sphenoidal lobe. At his request, Mr. Francis M. Caird trephined, and evacuated two ounces of fœtid pus from the brain. The wound was completely healed in eighteen days, and the man had regained his health. We hope to publish full notes of this important case next week.

THE MEDICAL SCHOOL FOR DUNDEE.

THE proposal to establish a medical school in Dundee daily assumes a more practical aspect, and the committee has already a sum of £18,000 in hand. Of this, £6,000 has been given by a family, of which one of the members had promised £1,000. The donation is made by the family in memory of their deceased father. It has been resolved to add to the committee all the members of the medical profession resident in Dundee, and the medical practitioners resident in the various burghs in Forfarshire, as well as the Provost and magistrates of Dundee. A subcommittee has been appointed to prepare a public appeal for subscriptions, so that there seems a fair prospect of the scheme being carried into execution.

PASTEUR'S TREATMENT OF HYDROPHOBIA.

ON Saturday last Dr. Hime, Medical Officer of Health for Bradford, delivered a lecture in the new Veterinary College, Edinburgh, on the subject of Pasteur's treatment of hydrophobia. He discussed the subject fully, describing the method of inoculation and demonstrating on a rabbit how it is performed. He was listened to attentively by a large number of veterinary students and others. The meeting was presided over by Mr. Williams, Principal of the College.

TREATMENT OF MILITARY SICK IN A CIVIL HOSPITAL.

ALTERATIONS at present being made in the Castle of Edinburgh have rendered it necessary to make some arrangement for the treatment of serious cases of illness occurring in the garrison. Such cases, it has been arranged, will be received into the ordinary wards of the Royal Infirmary and will there be treated by the physicians and surgeons on the Infirmary staff in the same way as ordinary patients, while less serious cases will be treated at Leith Fort and Piershill.

MEDICAL EXAMINATIONS IN EDINBURGH.

AT the examination held in Edinburgh, in January, for the triple qualification of the Royal Colleges of Physicians and Surgeons, Edinburgh, and Faculty of Physicians and Surgeons, Glasgow, thirty-five candidates passed the first professional examination, twenty-four passed the second, and thirty-seven passed the final examination, receiving the L.R.C.P. and S.E., and L.F.P. and S.G. Among the thirty-five who passed the first professional examination, we observe the names of two lady candidates.

EDINBURGH EYE, EAR, AND THROAT INFIRMARY.

THE annual meeting of the managers of the Eye, Ear, and Throat Infirmary was held last week. The report stated that, during the past year, the number of patients treated for diseases of the eye was 1,210, of whom 14 were treated in the institution; 849 persons were treated for diseases of the ear, of whom 13 were operated upon, and received the necessary accommodation; 159 were treated for diseases of the throat. As the above statement shows, this institution not only offers the ordinary benefits of a dispensary, but also furnishes indoor accommodation in special cases. The income for the year was £122, and the expenditure £99. The report was adopted, and the medical officers re-elected.

AN APOLOGY.

UNDER this heading, we referred in the JOURNAL of January 22nd to what seemed to be a satisfactory settlement of certain unfortunate differences that had arisen between Professor Rutherford and his senior assistant, Dr. Ashdown. We regret to learn that the "incident" is not yet terminated, as may be seen from the following remarks made by Professor Rutherford to his class, which are reported in the *Scotsman* of January 29th: "Most of you have seen a remarkable article in a periodical which has placed me in a false light. I am not now prepared to make any statement such as I think I ought to make to my students for the purpose of explaining what my position really is, and why it was that I was led to sign an apology containing some statements which certainly I demurred very much to. It would, perhaps, have been better had I acted in some other way. I beg to point out that it is perfectly well known to me that those now acting in opposition to me are most anxious that such a tornado should be raised that it would be rendered difficult or impossible for me to address you. I am sure, if you knew all the circumstances involved in this unfortunate matter, I should have a considerable amount of sympathy. I should hope that you will not play into the

hands of others, to render it impossible for me to continue to do those duties which, of course, I am anxious to do in order to help you as much as I can. The time will come, I have no doubt, when all these facts of the case are known. Until that time I hope you will suspend your judgment."

EDINBURGH HOSPITAL FOR SICK CHILDREN.

THE annual meeting of the subscribers to the Royal Hospital for Sick Children, Edinburgh, was held last week. The annual report stated that the total number of cases treated during the year was 6,930, of which 6,092 were treated at the dispensary, 649 in the hospital, and 189 were vaccination-cases. The number of cases in which cures were effected was 318, and the deaths numbered 74. The report announced that, notwithstanding increased subscriptions, they had been obliged to draw upon the legacies for their ordinary expenditure. The total income for the year was £2,680, of which £2,121 was from subscriptions, and £377 from donations. The legacies amounted to about £700, and the expenditure to £2,859. The usefulness of the hospital for the study of diseases of children was commented on. The City Hospital having taken up all fever-cases, this hospital is now able to devote all its appliances to the study of the diseases of childhood. The report was considered most satisfactory, and the officials and collectors were re-elected.

IRELAND.

MERCER'S HOSPITAL.

THE magisterial investigation of the charge brought against the resident surgeon of this hospital, referred to in the JOURNAL of January 29th, has resulted in that official having been returned for trial. His personal bail has been accepted.

HOUSE OF INDUSTRY HOSPITALS.

DR. THOMAS DONNELLY has been appointed assistant-physician and pathologist to these hospitals, in succession to Dr. Joseph O'Carroll, promoted full physician. Dr. Donnelly is a distinguished graduate in Arts and in Medicine of the University of Dublin. He is also a medical officer of one of the northern dispensary districts of the city.

BELFAST MAIN-DRAINAGE SCHEME: REPORT.

THE committee of ratepayers appointed to consider this scheme in its relation to the question of the pollution of the River Lagan, have issued a report, in which they state their opinion that, if the scheme of the Corporation be carried into effect in its present shape, the Blackstaff and the Lagan will continue to be contaminated with sewage. They urge the adoption of the plans of Mr. Gilliland, and "feel compelled to offer their most strenuous opposition to the Bill in its present shape."

THE SAMARITAN HOSPITAL, BELFAST: ANNUAL MEETING.

THE annual meeting of this institution was held on January 27th, the Mayor of Belfast presiding. The report showed that the majority of the patients had contributed sums sufficient to cover the expenses of their treatment. The medical report, read by Dr. W. K. McMordie, stated that 1,122 patients had been treated during the year, of whom 148 were in-patients. The total number of visits paid by extern patients was 5,866. It is intended to build a wing to the hospital, in order to provide a lying-in department.

HEALTH OF DUBLIN: QUARTERLY REPORT.

DURING the December quarter, the births registered in the Dublin Registration District numbered 2,342, or 26.5 per 1,000; and the deaths 2,350, or 26.6. Zymotic diseases caused 318 deaths, a number somewhat above that recorded in the previous quarter. Over 32 per cent. of the total mortality from this class of diseases occurred from scarlet fever, which caused 103 deaths. To fever 63 deaths were due; whooping cough, 23; cerebro-spinal fever, 6; diarrhœa and dysentery, 92; and only 2 to measles. The mortality from diseases of the respiratory system was comparatively low, and comprised 410 deaths, which included 270 from bronchitis, 65 from pneumonia, and 18 from croup. The deaths of 203 children were attributed to convulsions. Phthisis caused 274 deaths, being 26 above the average, mesenteric disease 59, and cancer 60.

FEES TO MEDICAL OFFICERS FOR EXAMINING LUNATICS.

AT a recent meeting of the Armagh Board of Guardians, the following resolution was adopted: "Resolved that, at a special meeting of the Board of Guardians held this day, the Board are of opinion that in each case where a medical officer is called in by two magistrates to examine a dangerous lunatic, a fee of one guinea is quite sufficient. The Board recommend that the magistrates adopt a uniform fee of one guinea, and that a copy of this resolution be sent to each magistrate in the union."

BELFAST HOSPITAL FOR SICK CHILDREN: ANNUAL MEETING.

THE annual meeting of this charity was held on January 28th, in the hall of the Young Men's Christian Association, Belfast. R. G. Dunville, Esq., D.L., presided, and there was a large attendance. A letter was read from the Hon. R. T. O'Neill, M.P., urging that a convalescent home should be established in connection with the hospital. The annual report showed that the work of the hospital during the past year had maintained its usual high average. The ordinary income for the year 1886 amounted to £976 15s. 3d., and the expenditure to £971 17s. 10d. The balance in the treasurer's hands was £808 13s. 4d., as compared with £603 15s. 11d. on December 31st, 1885. Dr. Byers read the medical report, which showed that 329 intern patients had been treated during the year, of whom 183 were medical, and 146 surgical. In the Extern Department 8,694 patients had attended, their treatment involving 14,795 visits. There were 3 deaths during the year. The clinical classes for students had been largely attended. Dr. McCaw, one of the attending physicians, on retiring by rotation, had been unanimously re-elected.

ULSTER EYE, EAR, AND THROAT HOSPITAL: ANNUAL MEETING.

THE annual meeting of this charity was held at the hospital, Clifton Street, Belfast, on January 26th, under the presidency of the Mayor of Belfast. The report showed 1,789 patients had attended during the past year, of whom 180 were intern patients. The total number of visits of patients at the extern department was 6,549. Of the 1,789 patients 1,031 contributed to the funds, while 758 were free. Of the 180 intern patients 56 were free. The finances were reported as being in a satisfactory state. The total receipts for the past year were £550 6s. 5d., and the total expenditure £541 14s. The debt to the bank was only £18 7s. 4d. A review of the work of the institution since its foundation in 1871 showed that 36,945 patients had attended at the extern department and 2,367 had been admitted as in-patients. The institution was becoming more and more self-supporting, the receipts from patients having risen to the very satisfactory average of £414 0s. 6d. per annum. In order to provide day rooms for the use of the patients, it was proposed to build a new wing to the hospital. Dr. M'Keown read his sixteenth annual report, which showed, among other items, that 46 cataracts had been extracted during the year, with gratifying results. The number of cataract operations performed since the opening of the institution was 500. Dr. M'Keown stated, with justifiable pride, that in his hospital had first been performed the extraction of pieces of metal by means of a magnet and the new operation for cataract by intra-capsular injection—both great advances in ophthalmic surgery which have been almost universally adopted.

MEDICAL ATTENDANCE ON THE INDUSTRIAL CLASSES.

THE Committee appointed at a recent meeting at the Society of Arts, over which Sir ANDREW CLARK presided, has already begun to apply itself to the consideration of the important subject in hand. The following resolutions, which may be said fairly to cover the whole question, were unanimously passed at the meeting referred to.

First resolution, proposed by TIMOTHY HOLMES, Esq., F.R.C.S.:

"That, in the opinion of this meeting, the future medical attendance on the poorer classes ought to be conducted on the principle of sick-assurance."

Second resolution, proposed by W. BOUSFIELD, Esq., Chairman of the Metropolitan Provident Medical Association:

"That the attention of the governing bodies of hospitals and other public authorities be called to the necessity for some check on the indiscriminate provision of medical treatment at hospitals and dispensaries."

Third resolution, proposed by Sir T. SPENCER WELLS, Bart.:

"That a Committee be now appointed, with power to add to their number, for the purpose of reporting on the subject of assurance as applied to the treatment of the sick."

At the first meeting, the Committee did little more than get themselves in order, and take advantage of the power given them to "add to their number."

The Committee decided at this meeting to adopt the name of "Medical Attendance Organisation Committee."

The following is a complete list of the present members of the Committee:—*Chairman:* Sir T. Spencer Wells, Bart. *Medical:* Dr. J. Ford Anderson, Dr. F. H. Alderson, Mr. E. C. Barnes, Mr. M. G. Biggs, Sir Andrew Clark, Bart., Dr. Alfred Carpenter, Dr. M. Corner, Dr. A. D. Ducat, Mr. W. G. Dickenson, Dr. J. Grey Glover, Dr. Alex. Grant, Dr. John Gordon, Mr. Ernest Hart, Mr. H. Nelson Hardy, Mr. Timothy Holmes, Mr. G. E. Keele, Dr. Alfred Meadows, Dr. W. M. Ord, Dr. H. Campbell Pope, Dr. Gilbart Smith, Dr. J. C. Steele, Dr. Walter Smith, Mr. G. Stoker, Dr. W. E. Steavenson, Dr. Dunbar Walker. *Lay:* Sir T. Fowell Buxton, Bart., Mr. W. Bousfield, Mr. W. G. Bunn, Rev. Canon Erskine Clarke, Mr. H. N. Hamilton-Hoare, Lieutenant-Colonel Montefiore, Mr. F. D. Mocatta, Mr. Claude G. Montefiore, Rev. George S. Reaney, Mr. C. J. Radley. *Secretary:* Mr. W. G. Bunn, 5, Lamb's Conduit Street, London, W.C.

At the second meeting, the following suggestions were submitted for the consideration of the Committee, and approved:

That the inquiry be divided into two parts. Part I. To prepare a scheme for medical attendance on the industrial classes in the metropolis, that shall be self-supporting, and acceptable to the medical profession. Part II. To consider the influence of the hospitals as at present conducted upon such a scheme, with suggestions for the reform of the out-patient departments.

Part I. The general principle of the plan. Is it to be entirely, or partly, based on the principle of assurance? After the principle has been settled, the following points have to be considered: (*a*). Wage limit, or any other qualification for membership; (*b*) benefits; (*c*) rates of contribution; (*d*) general rules.

At this meeting a memorandum of suggestions for remodelling the scheme of the Metropolitan Medical Provident Association was read by Mr. ERNEST HART. In this paper Mr. Ernest Hart dealt, in the first place, with the general basis of the question, showing that, as a commercial and self-supporting enterprise, the effort of the Metropolitan Provident Medical Association has, in a measure, failed, and that its true aspect is now that of bringing medical aid (in their own locality) within the reach of those not fairly able to obtain it in the usual manner. Although this may be done on a self-supporting basis, it will not be an independent one, since the general practitioners who co-operate must obviously give their services on special terms, which will be below those ordinarily in vogue. It follows in equity, therefore, that there must be a defined wage limit, as it is obvious that the co-operation of the general practitioner will not be obtained—or, at all events, retained—if he find the plan is made a means of procuring his services for his present clients at much reduced rates. Mr. Ernest Hart next dealt with the evils of the dispensary system or the creation of a series of dispensaries, with premises, showing that this plan could not be carried out without considerable outlay, the funds for which, it has been seen, cannot be obtained. The objections to this system were also stated to be the following:—

1. Each dispensary must be fitted up and opened at considerable expense, while it also involves a continuing responsibility for the establishment expenses.

2. The existing system of taking one-half the revenue to meet the cost of drugs and dispensing and establishment charges seriously encroaches on the payments to medical men, and in the case of the general practitioner, who is already bearing establishment expenses of his own, which he probably cannot reduce, offers few or no compensating advantages.

3. When dispensaries are established, the medical staff must necessarily be limited, and thus the work must be undertaken by a few of the local practitioners to the exclusion of all the others—a system which naturally evokes the covert or overt hostility of many of those who may hold they have a right to be considered.

4. If the dispensary does not obtain a large number of members, it is necessarily carried on at a loss, and this often provokes canvassing or touting for members. Such canvassing is against the principles of the medical profession, and could not be carried on by practitioners as individuals without great loss of professional status; therefore it is unjust to other men when it is carried on by an institution.

5. Where a dispensary is successful with a limited number of medical officers, it frequently creates the evil of patients crowding and waiting which is complained of in hospitals, though in a lesser degree.

The remedy for these evils was stated to be the formation of a series of "Local Medical Clubs." To these all practitioners of fair repute should be invited to affiliate themselves. It was pointed out that it was very difficult to apply the principle of assurance alone to medical attendance, as experience had proved it could not be surrounded by the checks, without which the risk rate must be out of proportion to the rates of contribution. Under any circumstances, the assurance principle does not provide a fair means of dealing with the sickly and diseased persons, nor does it make provision for relieving the hospitals of those who are sick and in immediate need of aid, but have not assured. To meet this, it was necessary to have, side by side with assurance, a system of moderate ready-money payments. These would be just, if a wage limit made it clear that the privilege would only be extended to those whose circumstances warranted it. This would rescue the poor from bad speculative dispensaries, and put them in true relationship with respectable local practitioners; it would diminish the attendance at hospitals, which would not then "pay," owing to the loss of time and cost of travelling frequently requisite; and finally, it would enable the hospitals reasonably to refuse gratuitous treatment in the majority of cases, on the ground that local aid was well within the reach and means of the applicant.

At the third meeting, a paper was submitted by Mr. W. BOUSFIELD, Chairman of the Metropolitan Provident Medical Association. After tracing the history of the Association, Mr. Bousfield proceeded to comment upon the valuable criticisms and plan for a series of medical clubs of Mr. Ernest Hart, printed subsequently. While containing many important truths, they did not, in his opinion, meet all the requirements of the case. Probably a modification of the present dispensary system of the Association, together with the addition of a wage limit and more power of management in the hands of the medical staff, would, in the majority of districts, answer best; while the practice of advice and medicine being given only at the houses of the medical men could be adopted, where circumstances or the wishes of the medical staff required it.

It was pointed out that there were several modes of payment, and that it was essential that these payments should *(a)* be within the means of the persons to whom it was intended to apply, and *(b)* that they should be, as far as possible, sufficient to remunerate the medical attendant for his skill, care, and time. The most obvious ways of payment were: (1) by the provident or assurance principle; (2) by moderate ready-money payments; or (3) by a combination of the provident and ready-money system.

The experience of the Association gave examples of Nos. 1 and 3.

1. A fixed rate of weekly or monthly contributions paid in health and sickness, and intended to secure to the members the whole of the promised benefits.

Example.—Branch A. Has 600 members' cards, or about 2,000 persons entitled to treatment.

Monthly Contributions.	
Single Cards	6d.
Man and Wife...	10d.
Children under 14 years	1d.
Number of Attendances in 1886.	
At the Dispensary	6,096
At Members' Homes	1,254
Midwifery Cases	57

Paid to Medical Staff.			
For Attendance	...	...	£131
For Midwifery...	...	...	£41

In considering this result, we ought to remember that those seen at the dispensary are in sections of twenty or thirty at one sitting.

3. A combination of the provident and ready-money system, by means of a small fee paid each time a member applies for treatment or medicine, in addition to a regular rate of contribution.

Example.—Branch C. Number of members, cards 700, or about 2,000 persons. Number of prescriptions for the three months before the introduction of a charge of 1d. upon each prescription made up, about 2,500. For the three months after, about 2,200. Amount received in pence, about £9 per quarter. Estimated saving in cost of drugs, about £2 per quarter.

These representative illustrations show that the small extra fee for medicines in Plan 3 acts as a slight check upon the number of attendances, though there has been no complaint that it discourages the enrolment of new members, or prevents those who really require treatment from applying for it.

The principle of assurance in one of these two forms appears the best means of dealing, as a system, with the ordinary medical treatment of the working classes; and it probably secures larger payments than could be obtained in any other way, and with less friction. It also promotes habits of thrift and independence.

The following rates were suggested as a basis for discussion. Single men and women, earning 30s. per week and under, 6d. per month, with 1d. upon each prescription made up. Families with joint earnings of 50s. and under, man and wife 1s. per month. Each child under 14 years, 2d. per month; not charging for more than 4 children in one family. One penny upon each prescription. Children over 14 years of age to join as single persons.

As to the erection of a series of medical clubs, it was pointed out that the principle could only be carried out in its integrity at provident dispensaries, where the medical men can see their dispensary patients on the dispensary premises, and where the drugs can be obtained. In many cases it would be extremely inconvenient for the dispensary patients and private patients of a medical man to be in attendance at his house at the same time, and this of itself would prevent the co-operation of many medical men.

In districts where the medical men have no objection to the dispensary patients going to their houses, it would be advisable to establish a small drug store, which could be done at a very little expense, and which also might be used as an office for the enrolment of members and receiving contributions, the dispenser acting as local secretary or collector. It will be seen that without some arrangement of this kind, the payment of a small fee upon each prescription would be impossible.

After considerable discussion, the following resolution was carried unanimously. "That any future plan for the medical treatment of the working classes should be conducted upon the principle of assurance, with a small fee at each attendance, or upon each prescription made up."

Special terms should, however, be arranged for the admission of persons requiring immediate treatment, who should be compelled to join, and be expected, within one month of recovery, to continue as ordinary members, with the sanction of the medical officer under whom they wish to be registered.

It has been desired that the Committee shall meet every alternate Tuesday, each meeting of the Committee to commence at 4, and terminate at 5.30.

All communications intended for the Committee, should be addressed to the Secretary.

THE MOXON MEMORIAL.

A MEETING of the friends of the late Dr. Walter Moxon was held at the Royal College of Physicians on Tuesday, February 1st, to consider the question of perpetuating his memory by some suitable memorial.

Sir WILLIAM JENNER took the chair at 5 o'clock, and was supported by the Treasurer and Registrar of the College (Sir Dyce Duckworth and Sir Henry Pitman). Letters were received from Sir Andrew Clark, Sir Joseph Lister, and Dr. Wilson Fox, expressing regret that they were unable to attend.

Sir WILLIAM JENNER opened the proceedings by explaining that the object of the meeting was to raise some visible sign, which should be a lasting memorial of one now passed away, who was honoured for his scientific and professional work, esteemed for the zeal with which he advanced the best interests of the profession, and universally respected for his high and unsullied character as a man.

The first resolution:

"That, in the opinion of this meeting, it is desirable to express by public memorial the widespread appreciation which exists of the high character and remarkable personal qualities of the late Dr. Moxon, and especially of the services he rendered in advancing medical science, and in otherwise promoting the highest interests of the profession,"

was moved by Dr. WILKS. He said that as he grew older, he was conscious of the ranks of the profession growing thinner around him, and it remained for the few to hand down the names of those who had gone before. It was difficult for him to speak of Dr. Moxon, whom he had known as a pupil, but any one who had met him was ready to admit that he was no ordinary man—not merely such a one as by perseverance and industry might become a success in his profession. These qualities he had and more. He was a burning and shining light that dazzled men by his brilliancy, so that his companions often ceased to converse and preferred to listen. He threw a halo around every subject he touched. Succeeding the speaker in the Chair of Pathology, he soon mastered every detail in that science. Then passing to the Chair of Materia Medica, he at once threw a new interest around a very unattractive subject. He was able to strike sparks out of rhubarb and senna leaves. In practice he endeared himself both by his manner and acumen, and, in treating patients, his wit was constantly seen. Only the other day he heard the story of a hypochondriac clergyman, who had consulted Moxon. When the patient returned home, his wife wanted to know what the doctor called his complaint. On this point the patient was a little doubtful, so it was determined to send his son down to inquire. When the son arrived Dr. Moxon said he could not remember the particular case, but if the son chose to look in his note-book, he might there see for himself Moxon's candid opinion. The son looked and found, "A lanky parson with nothing the matter with him." The diagnosis was taken home and the patient was cured. Moxon took pains in everything he did. At the College of Physicians his influence was soon felt, and he made strong friends. How gratifying it was to the friends and relations to see the esteemed President at his grave as a mark of respect to his memory, the speaker well knew. Two things they had to commemorate: Moxon's great genius and high scientific contributions to medicine, and his great personal worth, his pure heart, upright conduct, and general integrity. Many illustrious men died without evoking this feeling. We were there to do honour to his head and heart.

Sir JAMES PAGET, in seconding the resolution, said that Dr. Wilks had left little for him, who knew personally so much less of Dr. Moxon, to say. For he had never seen Dr. Moxon at his work at Guy's Hospital, but this slighter acquaintance made the impression he had formed of him perhaps the more remarkable. He knew Dr. Moxon only by repute, by his work, and by occasionally meeting him at societies or in consultation, but it was impossible to know him even in that way without being impressed by his mental and moral worth. His mind was of a kind which gave free play to imagination, yet went on progressing towards the truth. To him it seemed at first strange and difficult to understand how this should be so till he learned that there was always present a most perfect appreciation of facts. At a consultation the beginning was illuminated, but the end was full of the most practical decisions for the patient's good. In society the charm of his wit was most fascinating. In the profession there never was a question but that what he intended to do was always the best according to what he had conceived to be right. It was right that such good work should be recorded and that a memorial should be raised which generations after would respect.

Dr. PAVY moved the second resolution, to the effect that subscriptions be invited, and that an influential subcommittee be appointed to decide on the most suitable form of memorial. He expressed a hope that part of the memorial fund should be devoted to perpetuating Dr. Moxon's memory at Guy's Hospital.

Sir DYCE DUCKWORTH seconded the resolution, and said that he had known the late Dr. Moxon for twenty-four years, and had often visited him when at work at Guy's. He had the highest appreciation of his character and work. He thought the memorial might be divided between Guy's and the College of Physicians.

Dr. BRAXTON HICKS and Mr. SIDNEY TURNER proposed that Mr. R. C. Lucas be Treasurer, and Dr. G. N. PITT and Mr. W. A. Lane Secretaries to the Fund.

The TREASURER OF GUY'S HOSPITAL proposed a vote of thanks to the President for presiding, and to the Council for the use of the College, which Mr. DURHAM seconded, and to which Sir WILLIAM JENNER briefly replied.

THE JACOB TESTIMONIAL FUND.

THE following are the additional subscriptions received or promised since last week's list appeared.

	£	s.	d.
Amount already acknowledged	278	13	6
Paget, Sir Jas., Bart., London	2	2	0
Martin, J. W., Sheffield ..	0	10	6
Fayrer, Sir J., London ..	1	0	0
Barker, A. E., London ..	2	2	0
Jones, H. Macnaughton ..	2	2	0
O'Farrell, G. P., Cork	1	0	0
O'Kelly, J., Mountbellew ..	1	0	0
Fergus, S., Blackwatertown ..	0	10	0
Patterson, R. D., Caledon ..	0	10	0
Mulcahy, P., Ballinamore ..	1	1	0
Bradshaw, R., Carrick-on-Shannon	1	1	0
Brennan, M. A., Tubbercurry	1	0	0
McDowel, E. C., Sligo.. ..	1	1	0
Ross, W., Riverstown.. ..	0	10	0
McDowell, R. E., Dublin ..	0	10	0
Moore, R. B., Rockcorry ..	1	0	0
Glover, J. G., London.. ..	2	2	0
Walsh, P. C., Frenchpark ..	1	1	0
Delany, M., Garristown ..	1	0	0
Symes, W., Skerries	0	10	0
Adrien, E. W., Balbriggan ..	0	10	0
McDermott, L. N., Foxford ..	1	0	0
Kenny, J. B., Killeshandra ..	0	10	6
Quinlan, D., Castletownroche	0	10	6
Martin, W. J., Dublin.. ..	1	0	0
O'Donovan, J., Kingstown ..	1	0	0
Dillon, V. P., Strokestown ..	1	0	0
Harrison, J., Roscommon ..	1	1	0
Cochrane, E., Roscommon ..	0	10	0
Connihan, J. F., Kilrush ..	1	1	0
Wilmot, S. G., Kingstown ..	1	1	0
Waters, E., Chester	2	2	0
Frazer, W., Dublin	2	0	0
Hamilton, W., Boyle	0	10	0
O'Donohoe, M., Castlerea ..	0	10	0
Shannon, P., Dublin	1	0	0
Swan, T., Abbeyleix	2	0	0
Lane, A., Coleraine	1	1	0
McDonnell, R.	2	2	0
Doake, S., Dromara	0	10	6
Barbor, T., Carlingford ..	0	10	0
Taylor, E., Monaghan	1	1	0
Donaldson, R., Monaghan ..	0	10	6
Swan, W., Monaghan	1	1	0
Hobart, N. J., Cork	1	1	0
O'Dea, P. St. L., Ennistymon	1	1	0
Brown, L., London	1	1	0
Crawford, Sir T., D.G., A.M.S.	1	1	0
Wells, Sir T. Spencer, Bart., London..	2	2	0
Lyndon, T., Wicklow	0	10	0
Langan, J., Edgeworthstown	0	10	0
Swartt, T. W., Ballymahon ..	1	1	0
Wilson, T., Edgeworthstown..	1	1	0
Macnamara, R., Dublin ..	1	1	0
Bowman, Sir W., Bart., London	2	2	0
Roe, W., Dublin	1	1	0
Keelan, M., Dunleer	1	0	0
McDonnell, H., Dundalk ..	1	1	0
Jones, J., Drumeonrath ..	1	1	0
Callan, M., Ardee	1	1	0
Wilson, J., Barronstown ..	1	0	0
Blake, R. M., Ravensdale ..	1	1	0
McBride, J., Forkhill	0	10	6
O'Hagan, P. J., Castlebellingham	0	5	0
Moore, T. J., Ardee	1	1	0
Mackery, G. J., Waterford ..	1	1	0
Mackery, W. L., Waterford ..	1	1	0
Murphy, R., Carrick-on-Suir..	1	1	0
Graves, R., Dungarvan ..	0	10	6
Reynett, J. R., Portlaw ..	0	10	6
Williams, J. W., Ardmore ..	0	10	6
Roe, St. G. J., Coolaney ..	0	10	6
Stewart, W., Portadown ..	1	0	0
Palmer, J. M., Armagh ..	0	5	0
Allen, J. G., Keady	0	5	0
Carre, F., Letterkenny ..	1	1	0
Welsh, J., Ballyshannon ..	1	1	0
Christie, D., Carrigart.. ..	1	0	0
Smyth, S., Mountcharles ..	0	10	0
Warnock, H. T., Donegal ..	1	1	0
A Friend, Donegal	0	10	0
Collins, J. V., Laghey	0	10	0

Cheques to be made payable to the Honorary Treasurers—Professor Edward Hamilton, 120, Stephen's Green, W., Dublin ; or Dr. Thomas Purcell, 71, Harcourt Street, Dublin ; or any of the Co-Treasurers, or to the Honorary Secretaries—Professor E. D. Mapother, 6, Merrion Square, N., Dublin, and Dr. J. H. Chapman, 122, Pembroke Road, Dublin.

FURNEAUX JORDAN TESTIMONIAL FUND.

SECOND LIST.

	£	s.	d.
Coleman, J. M., Esq., Wolverhampton	5	5	0
Browne, H. Langley, Esq., West Bromwich	3	3	0
Foster, R. H., Esq., Knowle..	3	3	0
Johnson, G. J., Esq.	3	3	0
Pemberton, Oliver, J.P., F.R.C.S.	3	3	0
Pemberton, C. L. H., Esq., Banbury	3	3	0
Bradley, J. P., Esq.	2	2	0
Lewis, Christopher, Esq. ..	2	2	0
Millington, Wm., M.D., Wolverhampton	2	2	0
Owen, D. C. Lloyd, Esq., F.R.C.S.I.	2	2	0
Wilson, Wright, Esq.	2	2	0
Bond, Francis, M.D., Gloucester	1	1	0
Ellis, H. D'Arcy, Esq., Brierley Hill	1	1	0
Evans, A. P., Esq., West Bromwich	1	1	0
Foxwell, A., M.D.	1	1	0
Gaunt, J. P., Esq., Alvechurch	1	1	0
Gettings, Jno. S., Esq., Chase Town	1	1	0
Gibb, E., Esq.	1	1	0
Grinling, J. C., Esq.	1	1	0
Harmar, J. R., Esq.	1	1	0
Harmar, J., Esq.	1	1	0
Haycraft, Professor B. ..	1	1	0
Johnston, A. K., Esq... ..	1	1	0
Martin, J., Esq., Huddersfield	1	1	0
Moore, C. W. B., Esq., King's Norton..	1	1	0
Neale, J. Breward, Esq., London	1	1	0
Price, E., Esq., Dudley ..	1	1	0
Robinson, Edmund, M.D. ..	1	1	0
Sanders, Chas., Esq.	1	1	0
Saundby, Robert, M.D. ..	1	1	0
Simon, Robert, M.D.	1	1	0
Standish, Thomas, Esq., Cradley	1	1	0
Underhill, Frank, Esq. ..	1	1	0
Van Vestraut, —, Esq. ..	1	1	0
Windle, Professor B. C. A. ..	1	1	0
Whitehouse, J., F.R.C.S., Sunderland..	1	1	0
Whitehouse, John, Esq., Newcastle-on-Tyne	1	1	0
Wood, Horatio, Esq.	1	1	0
Weston, S. L. Darby, Esq., Handsworth	1	1	0
Young, T. B., Esq., Halesowen	1	1	0
Fowler, Walter, F.R.C.S., London	0	10	6
Lawrence, S. C., Esq.	0	10	6
Westwood, H. O., Esq., North Devon	0	10	6
Sunderland, Wm., Esq., Thaxted, Essex	1	1	0

Subscriptions may be sent to the undersigned.

T. H. BARTLEET, Honorary Treasurer, 27, Newhall Street, Birmingham.

BENNETT MAY, 81, Edmund Street, } Honorary
JORDAN LLOYD, 22, Broad Street, Birmingham, } Secretaries.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1887. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Meetings of the Council will be held on April 13th, July 13th, and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, March 24th, June 23rd, and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,
THE VALUE OF HAMAMELIS, THE VALUE OF PURE TEREBENE.

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE, CANCER OF THE BREAST, and the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE, are now closed.

A Report on the CHOREA Inquiry has been prepared by Dr. Stephen Mackenzie ; and will be published in the BRITISH MEDICAL JOURNAL as soon as the printing can be completed.

A Report on CENTENARIANS, prepared by Professor Humphry, was published with the JOURNAL of December 11th ; a full Report on OLD AGE will follow.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, CANCER OF THE BREAST, and HABITS OF INTEMPERANCE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held, by the kind invitation of Dr. Adams, at Brooke House, Upper Clapton, on Thursday, February 17th, at 8.30 P.M. The chair will be taken by T. Vere Nicoll, Esq. A demonstration of interesting cases of skin-disease will be given by Stephen Mackenzie, Esq., M.D.—J. W. HUNT, M.D., Honorary Secretary, 101, Queen's Road Dalston.

STAFFORDSHIRE BRANCH.—The second general meeting of the present session will be held at the London and North Western Hotel, Stafford, on Thursday, February 24th, 1887. The President, Dr. W. G. Lowe, will take the chair at 3 30 P.M. —VINCENT JACKSON, General Secretary, Wolverhampton, January 31st, 1887.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.—The February meeting of this Branch will be held in 198, Union Street, Aberdeen, on Wednesday, February 16th ; the President, Dr. Urquhart, in the chair. Business : 1. Minutes ; nomination of new members, etc. 2. Ballot for the admission of four new members. 3. Demonstration of a new arrangement for obtaining the various applications of electricity in a convenient form for medical and surgical purposes, by Professor Ogston. 4. On the Uses of Iodol, by Dr. John Gordon. 5. Experiences with Dr. John Reid's new local anæsthetic, Drumine, by Professor Ogston. 6. Motion by Dr. Edmond to consider the advisability of forming a post-graduate course in Aberdeen. 7. Exhibition of foreign body, and the patient from whom it was removed from the eye by electro-magnet, by Dr. Mackenzie Davidson.—ROBERT JOHN GARDEN, J. MACKENZIE BOOTH, Honorary Secretaries.

SOUTH EASTERN BRANCH : WEST KENT DISTRICT.—The next meeting of the above District will take place at St. Bartholomew's Hospital, Chatham, on Friday, February 18th, at 3.30 P.M. ; Walter Buchanan, Esq., in the chair. The dinner will take place at the Sun Hotel, Chatham, at 6 P.M. Charge 6s. 6d., exclusive of wine. Gentlemen who intend to dine are earnestly requested to signify their intention to the Honorary Secretary of the District, A. W. Nankivell, Esq., St. Bartholomew's Hospital, Chatham, not later than February 16th. All members of the South-Eastern Branch are entitled to attend this meeting, and to introduce friends. Papers to be read :—1. Dr. H. L. Jones : "On some disorders confounded with Chronic Rheumatism." 2. G. Hartridge, Esq. : "On Refraction," illustrated with practical demonstrations. 3. A. W. Nankivell, Esq. : "The Causes and Treatment of Retention".—A. W. NANKIVELL, Honorary Secretary St. Bartholomew's Hospital, Chatham.

GLASGOW AND WEST OF SCOTLAND BRANCH.—This Branch will hold its annual general meeting in the Western Infirmary, Glasgow, on Friday, February 11th, at half-past two P.M. After the usual private business, Professor G. H. B. Macleod will show and describe some interesting surgical cases. Professor McCall Anderson will show some interesting medical cases, including probably (1) one of loud musical murmur, audible without the stethoscope; (2) purpura rheumatica; (3) pericardial, pleuritic, and peritoneal effusion; (4) tinea favosa epidermidis. Dr. Joseph Coats will show a series of sixteen preparations illustrating the Pathology of Myoma of the Uterus (Uterine Fibroid), and will make some remarks on the subject. He will also illustrate the structure by microscopic preparations. Tea and coffee will be served in the dining-room of the Infirmary from 2 till 2.30 P.M.

DUBLIN BRANCH: ANNUAL MEETING.

THE tenth annual meeting of this Branch was held in the King and Queen's College of Physicians, on January 27th, at 4 P.M. Professor E. H. BENNETT, President of the Branch, occupied the chair. There was a very large attendance, and amongst those present were the President and the Vice-President of the King and Queen's College of Physicians; the President and Vice-President of the Royal College of Surgeons; Sir B. Walter Foster; Sir Robert Jackson, C.B.; Sir George H. Porter; Rev. Dr. Haughton; Sir Charles Cameron; Dr. Kidd; the Registrar-General; Dr. Atthill; Professor E. Hamilton; Professor Cunningham; Professor Mapother; Professor William Thornley Stoker; Brigade-Surgeon Joynt; Dr. Macan; Mr. Henry Gray Croly; Dr. Walter Smith; Dr. John William Moore; Dr. Wheeler; Dr. Jacob; Dr. Duffey; Dr. Collins; Surgeon-Major Corben; Dr. More Madden, etc.

The minutes of the last annual general meeting, and of the special general meeting at which it was decided to invite the Association to hold this year's annual meeting in Dublin, were read by the Honorary Secretary, Dr. W. C. Neville, and confirmed.

Report of Council.—The following is an abstract of it:

"In presenting their report to your tenth annual meeting, your Council have the satisfaction of knowing that upon the chief subject considered during the past twelve months, they have already had the advantage of securing from a specially summoned general meeting, an unanimous ratification of the decision they had themselves previously come to—a decision, viz., in favour of inviting the Association to hold this year's annual meeting in Dublin. In the total number of members (182 this year, as compared with 164 for 1886) your branch shows signs of a progressive prosperity. The Association has gained 25 and the branch 18 new members during the year. It is, however, only natural to anticipate a still larger accession of new members within, as well as without, Leinster, during the next few months. One of the first subjects with which they had to deal, was brought under the notice of your Council by a circular letter from the Hon. Sec., East Anglian Branch, recommending "the formation of a special fund for the defence of members of the Association, against whom legal proceedings might chance to be taken"—a fund which, from its very comprehensive objects, must needs be a correspondingly large one. To this communication your secretary returned the following resolution, explaining at the same time that it had been unanimously adopted:—"The Council of the Dublin Branch, British Medical Association, is of opinion that the formation of a special fund for the defence of members of the Association against legal proceedings is inadvisable." About the same time the Council had under consideration a communication from the East York and North Lincoln Branch of the Association, advocating the payment by the Association of the travelling expenses of the representatives of the branches attending the meetings of the General Council. In answer to this communication the secretary sent the following resolution:—"That the question of payment of the representatives of the branches having been frequently under the notice of the Council of Dublin Branch, as well of the branch itself, and it having been constantly decided that it is advisable to leave the payment of such expenses to the several Branches, the existing Council sees no reason for now altering so carefully considered an opinion." The report then directed attention to the steps taken to have removed a grievance of Irish graduates and licentiates practising in England, due to a regulation of the English Local Government Board, that "any practitioner desiring to act as a public vaccinator in England must produce a certificate of having been instructed in vaccination at one of the educational vaccination stations named in the regulations of the Local Government Board for England," all of which stations are situated in England or Scotland. With regard to the action then taken by the Council in the name of the Branch, and more especially to the communication addressed at the same time to the Local Government Board of England (given *in extenso* in the ninth Annual Report), the Council have the satisfaction of now reporting that the grievance has been acknowledged; and, so far as is consistent with the existing law, removed, by the recent action of the Local Government Board appointing Dr. Montgomery, Secretary Vaccine Department, L.G.B., Ireland, subject to their orders, to "give certificates of due qualification in the practice of vaccination to any person or persons, after due instruction or examination by him in the said practice at the public vaccination station at No. 45, Upper Sackville Street, Dublin." "Your Council feel that they cannot conclude their report for the past year without publicly acknowledging the Branch's indebtedness to the universities, the medical and surgical Colleges, the Apothecaries' Hall, and the Academy of Medicine for their cordial co-operation in inviting and in preparing for the reception of the Association next August. The value of the assistance thus freely given it would be impossible to exaggerate, and with its aid your Council cannot but look forward to a most successful and enjoyable annual meeting."

Dr. FINNY, Vice-President of the College of Physicians, moved, and Dr. CORLEY, Vice-President of the Royal College of Surgeons, seconded the adoption of the report. The resolution was unanimously adopted.

New President.—The Registrar-General for Ireland, Dr. GRIMSHAW, having been duly elected, then took the chair as President of the Branch for the ensuing year.

Vote of Thanks to Outgoing President.—On the motion of the President of the College of Physicians, Dr. J. LITTLE, a cordial vote of thanks to Dr. Bennett for the manner in which he had filled the chair during the past year, was proposed.—Sir R. W. JACKSON seconded the resolution, and it was carried with acclamation.—Dr. BENNETT briefly expressed his thanks.

President's Address.—The PRESIDENT then delivered his inaugural address, "On the State in relation to the Medical Profession," which was published in the JOURNAL of January 29th.

The Teaching of Pathology.—Dr. WILLIAM THOMSON moved: "That the Council be requested to take such steps as may be necessary to bring before the various teaching bodies of Dublin the necessity of providing suitable instruction in pathology." The licensing bodies here and elsewhere required that students should have a knowledge of pathology, but they had hardly any opportunity of acquiring it, unless by going either to Edinburgh or to Germany.—Professor CUNNINGHAM, in seconding the resolution, said that, as far as anatomy and clinical instruction were concerned, the Dublin school was ahead of that of Edinburgh; but in 1831 a chair of pathology was founded in Edinburgh, and, during the last ten years, systematic instruction had been given there in practical pathology, under all its modern aspects.—The resolution was supported by Dr. G. KIDD, and unanimously passed.

Meetings of the Branch.—Dr. KNIGHT moved that quarterly meetings of the Branch were essential for carrying on the work of the Association.—The motion was not seconded, and fell to the ground.

Officers and Council.—President: T. W. Grimshaw, M.D. *President-Elect:* E. D. Mapother, M.D. *Vice-Presidents:* W. Moore, M.D.; J. K. Barton, M.D. *Council:* Lombe Atthill, M.D.; John T. Banks, M.D.; E. H. Bennett, M.D.; J. H. Chapman, F.K.Q.C.P.I.; A. H. Corley, M.D.; George F. Duffey, M.D.; E. Hamilton, M.D.; R. A. Hayes, M.D.; J. W. Moore, M.D.; Walter G. Smith, M.D.; Sir Wm. Stokes, M.D., F.R.C.S.I.; H. R. Swanzy, M.D. *Representative on the Council of the Association and Parliamentary Bills Committee:* George F. Duffey, M.D. *Honorary Secretary and Treasurer:* William C. Neville, M.D.

The proceedings then terminated.

The Annual Dinner.—In the evening, the annual dinner was held in the hall of the King and Queen's College of Physicians; Dr. Grimshaw presiding. Among those present were Lord James Butler; Sir Redvers Buller, V.C., Under-Secretary for Ireland; Judge Boyd; and other distinguished persons. Covers were laid for sixty.

NEW SOUTH WALES BRANCH.

A GENERAL meeting of this Branch was held in the Royal Society's room, Sydney, on Friday, November 5th, 1886, at 8.15 P.M. Present: Dr. KNAGGS (President), Drs. Clubbe, W. Chisholm, Hinkins, Fiaschi, Quaife, O'Reilly, Maher, Watson, Ellis, Chambers, Rowling, Muskett, West, Parker, Worrall, Brady, Roth and Crago.

The minutes of the previous meeting were read and confirmed.

The PRESIDENT announced the death of Dr. W. F. Mackenzie since the last meeting of the Branch.

Dr. QUAIFE proposed and Dr. ROWLING seconded "That a letter of condolence be written by the President to Mrs. Mackenzie."—Carried.

The PRESIDENT reported that the sub-committee appointed to deal with the subject of "Tests of Vision in the Mercantile Marine Service" had brought up a report which would be forwarded to the

Marine Board and the Colonial Secretary, as set forth in the resolution.

Dr. ROWLING read some notes on "A case of Varicose Veins over the whole surface of the body." The patient was exhibited and examined by the members.

Mr. HANKINS proposed and Dr. PARKER seconded, "That a subcommittee of three be formed to examine and report fully upon this case. That Drs. Knaggs, Quaife, and Rowling form such subcommittee." Carried.

Dr. ELLIS explained a case of Fracture of the Patella.

A discussion ensued, in which Mr. Hankins, Drs. Roth and Knaggs took part.

Dr. MUSKETT read a paper on a case of "Unusual site for Hydatid Cyst; an addition to the recognised varieties of intra-scrotal disease."

Dr. CHAMBERS read some clinical notes on three cases of general interest: (1) Umbilical hernia, with removal of eighteen inches of omentum. (2) Malignant disease of kidney. (3) Fibro-cellular disease of parovarium; and exhibited drawings of each case.

Mr. HANKINS said he quite agreed with Dr. Chambers's remarks as to the effects of the hot winds on surgical cases of all classes. With regard to the second case mentioned, he (Mr. Hankins) had had a somewhat similar case under his care in hospital.

OXFORD AND DISTRICT BRANCH.

A GENERAL meeting was held at the Radcliffe Infirmary on January 26th. Dr. GRAY, the President, and twenty-two members were present, and one visitor.

New Members.—The following were elected members: E. Cotterell, M.R.C.S., Bicester; Francis Gotch, M.A., B.Sc.Lond., Oxford; A. Thomson, M.B.Edin., Oxford; E. Vavasour Hemingway, M.R.C.S., Steeple-Aston. The following names were proposed for ballot at the next meeting: J. Maunsell, M.D., Woodstock; R. J. Kerby, M.D., Herbert G. Lee, M.D.St.And., Thame.

Collective Investigation of Disease.—Dr. ISAMBARD OWEN introduced the subject of Collective Investigation of Disease. He explained the object of the movement, and the means by which that object was attained. The principal drawback was the expense of printing and providing the forms. Dr. Owen showed specimens of the various forms used in the investigation, and directions for carrying on the work. A committee of two (Dr. Darbishire and Mr. G. F. Wilson) was appointed to direct the work in the Branch.

The Accommodation of the Eye, and its Influence on Glaucoma and other Diseases.—Mr. DOYNE read a paper on this subject, in which he propounded a theory of accommodation of the eye, giving a double action to the ciliary muscle, the annular fibres being called into play in near, and the longitudinal in distant, vision. The annular and longitudinal fibres were thus placed in antagonism. The various bearings of this theory on pathological conditions of the eye were gone into.

Vaginal Extirpation of the Uterus for Malignant Disease.—Mr. COTTERELL read a case of this disease. The patient was 48 years of age, and had a large cauliflower growth in the vagina, connected with the cervix. Extirpation of the uterus was performed by Schröeder's method. The patient made a rapid recovery, but recurrence occurred in the vaginal walls in ten weeks. There was no family history of cancer.

Specimens.—Dr. COLLIER showed a specimen of abscess of the round ligament, and of a liver and spleen from a case of leukæmia.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Pinet on the Antiseptic Action of Salol.—Richardière on the Effects of the Sudden Discontinuance of Morphine in Morphiomaniacs suffering from Pneumonia.—Linear Atrophy of the Skin.—Jaral on the Treatment of Strabismus.

M. QUINQUAUD recently presented the following communication from M. Pinet to the Société de Biologie. The salicylate of phenol, or salol, was discovered by M. V. Nencki. It appears as a white powder, insoluble in water, but soluble in alcohol. It has an aromatic odour, and, according to the author, has no taste. Experiments have been made with salol by M. Nencki, who attributes to it the same antiseptic properties as those of salicylic acid, whether it be employed in the form of powder or in an oily solution. Ten cubic centimètres of septic fluid produced by the putrefactive fermentation of the muscles of a frog steeped in water, were put into a test-tube, and set aside for comparison. This liquid, which was very turbid, exhaled the special odour of putrefaction, and contained a considerable quantity of all the bacteria ordinarily met with in putrefactive fermentation. Ten cubic centimètres of the same fluid were put into tubes containing respectively five, ten, fifteen, and twenty centigrammes of salol in powder. A second series of tubes was prepared, each containing a like amount of the same septic liquid, but with corresponding weights of salicylic acid in powder instead of salol. The tubes were allowed to stand for a few hours, when it was found that the liquid in tube No. 2, which contained fifty centigrammes of salicylic acid to one hundred grammes of the mixture, although still a little turbid, was notably clearer than the liquid in the first tube, which was set aside for comparison. The microscope revealed but very few bacteria, with little movement. The others were inert at the bottom of the preparation, the micrococci having lost their Brownian movement and their refraction. The putrid odour had almost entirely disappeared. The liquid in tubes Nos. 2, 3, 4, and 5 presented the same characteristics. At the end of twenty-four hours the liquid in tube No. 2, which contained salicylic acid in the proportion of one-half per cent., was found to be absolutely clear, and entirely free from putrid smell. The same was found to be the case as regards Nos. 3, 4, and 5. The liquid in the tubes containing the salol was found at the end of six days to be quite as turbid as the primitive liquid. The odour of putrefaction, although somewhat masked by the odour of the salol, was nevertheless distinct. On the third day, there appeared on the surface of the liquid a grey pellicle, which, when examined with the microscope, was found to contain a large quantity of micrococci, and an infinity of bacteria and monads. Following up these experiments, it was found that salol in powder, in doses of 10 per cent., in no way hindered the development of putrid fermentation. From this it will be seen that salol and salicylic acid are far from being equally antiseptic, since five centigrammes of salicylic acid in ten cubic centimètres of putrid liquid arrested fermentation, while one gramme of salol in ten cubic centimètres of the same putrid liquid, had no such effect. The oily solution of salol employed under the same conditions produced like results. Finally, it in those tubes in which the salol had remained without effect, and in which the liquid was turbid and had a putrid odour, five centigrammes of salicylic acid were placed, the liquid was found, after twenty-four hours, to be clear, and to have lost all smell. As regards the anti-microbic action of salicylic acid, the following observation is mentioned. In a case of dental caries causing excessive pain, the author, by the advice of Professor Vulpian, applied to the affected part a paste, formed of salicylic acid and water. A first application of this paste brought about a notable diminution of pain; a second, two hours later, caused entire cessation of the pain within a few minutes. This observation is interesting, as it appears to indicate that the pain was in some way connected with the presence of microbes in the dental cavity.

At a recent meeting of the Société Médico-Pratique, M. Richardière said that an interesting side of the question concerning chronic morphine-poisoning seemed to have been overlooked—namely, its influence on the course of acute diseases. It is now admitted that, in morphinism, the fits of delirium tremens are analogous to those in alcoholic patients. These attacks have been observed in simple cases of morphinism after sudden discontinuance of the drug, but only exceptionally in the course of acute diseases. The frequency of this delirium in morphinism has been observed during an attack of pneumonia; but this, according to M. Richardière, is not the only effect attributable to the same cause. A case had recently come under his observation in which the influence of morphine was altogether different, but quite as well marked. The patient, a physician in one of the suburbs of Paris, had contracted the habit whilst suffering from a painful affection of the stomach, and it had now become inveterate. In consequence of fatigue and exposure in attending his patients during several nights in succession, he caught a slight cold, with sore throat. A few days later, after further exposure, he had fever and headache, together with pain in the right side. During the day he grew worse, and had several fits of coughing. The following night he had rigors, and complained of oppression. Tubular breathing was heard in the lower half of the chest on the right side, and there was marked dulness on percussion in the same region. The fever was intense; the respiration was laboured, superficial, and very frequent. The expectoration was yellow and much thinner than in typical pneumonia. The weakness and irregularity of the heart's action, and the excessive rapidity of the pulse, made the prognosis very grave. The

oppression became intense; the respirations numbered from 60 to 70 in the minute. The patient had frequent attacks of suffocation of a degree of severity exceeding anything M. Richardière had ever seen in pneumonia, and bearing a striking resemblance to those of asthma. In his efforts to breathe, the veins in the patient's neck became swollen and his face violet in colour. At last, after a series of fruitless attempts, he succeeded in expanding his chest, and respiration began again, but was extremely frequent and hesitating. There appeared to be only one explanation of these attacks. M. Richardière knew that the patient was in the habit of taking morphine, having already treated him for large abcesses in the legs, which were caused by the injections, and he thought, therefore, that the sudden privation of the habitual stimulant might count for something in the production of these attacks of coughing, which were very different from those which occur in the broncho-pneumonia of adults. The patient was young, vigorous, and of sanguine temperament. The heart contracted badly, probably on account of the inability of the left ventricle to force the blood into the lungs, which had become in part impermeable. Bleeding seemed to be clearly indicated, and accordingly from 500 to 600 grammes of blood were withdrawn. An expectorant draught was given, together with an injection of morphine. The next day the symptoms were unchanged; but after another injection of morphine, the dyspnœa somewhat diminished. Blood was again drawn to the amount of from 400 to 500 grammes. During the evening the patient's state seemed to be worse; the respirations were 70 in the minute; the pulse was thready and more rapid than on the previous evening. The face was of a violet colour and the extremities were cold. The patient seemed to be past hope, but, as a last resource, subcutaneous injections of ether were made every two hours, together with three fresh injections of morphine. On the following morning there was a notable improvement, and in spite of subsequent recrudescence, the patient finally recovered. Although the attacks of dyspnœa in this case presented only an asthmatic form, M. Richardière thinks they should be attributed to chronic morphine-poisoning; and he believes that a fatal attack was only prevented by recourse to the stimulant for which the system was craving.

Dr. Laverube has taken linear atrophy of the skin for the subject of a thesis, in which he discusses the lesion from an etiological point of view. The condition is very common in pregnant women, and for a long time was looked upon as a proof of former pregnancy. It has now, however, been demonstrated that it may arise from many totally different causes. Linear atrophy is characterised by the more or less complete disappearance of the elements of the skin. It is not a process of cicatrisation, because there is not, strictly speaking, any loss of substance, but only a new arrangement of the elements of the skin, with partial absorption of them. Linear atrophy is most frequently found in pregnancy, but even here it is not constant; statistics show, in fact, that it is wanting in about 8 per cent. of such cases. The lines are to be seen not only on the abdomen, but also in the lumbar and gluteal regions, on the thighs, and on the breasts, where they radiate from the nipple. The latter cannot be said to be pathognomonic of pregnancy, any more than those of the abdomen. The abdominal scars have been noticed in ascites, in cases of peritoneal tumour, cysts of the ovaries, anasarca, and in general development of adipose tissue. They may also be found about the knee and elbow in typhoid fever; they resemble those of pregnancy, and run in a direction perpendicular to the axis of the limbs. MM. Auboger, Bouchard, and Manouvrier have observed that the occurrence of these scars in typhoid fever is a symptom of grave import, as the disorder in such cases generally assumes an ataxo-adynamic form. Very often there were other affections of the skin, such as eschars and abscesses. On the other hand, there was usually an increase in the physical growth of the patient in typhoid fever; and this, together with the nervous changes, might be looked upon as the cause of the scars. The author also mentions two cases in which similar marks appeared in hysterical patients. M. Thaon had seen them on the back of a child suffering from caseous pneumonia followed by pneumothorax. The occurrence of the scars in patients suffering from nervous diseases proves that the lesion, in all cases where it is not produced by overstretching, must be attributed to trophic disturbance of the skin. From a diagnostic point of view, it may be remarked that, when the scars run perpendicularly to the axis of the limb, they point, in the adolescent, to typhoid fever, or perhaps to a chronic affection of the joint below. Up to the present time, linear atrophy of the skin has been met with on the ankle only in typhoid fever.

At a recent meeting of the Académie de Médecine, M. Javal gave an account of his method of treating strabismus. The affection must be dealt with according to circumstances, so that, while tenotomy alone would sometimes be proper, in other cases it should give place to optical treatment, carried out by means of various instruments which he described. M. Javal divides strabismus into two categories, in one of which there is myopia, whilst in the other there is a certain degree of hypermetropia. In the former kind, the strabismus may be either convergent or divergent. The convergent form is the rarest, and is easily cured by the employment of concave glasses; the divergent is consecutive to the former, and is cured in the early stage by means of the optical instruments described. At a more advanced period, recourse must be had to tenotomy, and the movements of the muscles of the eye must be attentively watched. Strabismus with hypermetropia is convergent; it may be congenital, and it is more difficult to cure the more nearly it dates from the time of birth. At first intermittent, it afterwards becomes permanent. It is only in the latter case that an operation is indicated; as long as the affection is not definitively established, care should be taken not to interfere otherwise than by the optical method of treatment, which in cases of accidental strabismus is quite sufficient to effect a complete cure. In certain rare cases, a radical cure may, with patience, be obtained even where an operation would seem quite justifiable.

LIVERPOOL.

[FROM OUR SPECIAL CORRESPONDENT.]

Hospital Sunday, 1887.—Banquet and Presentation to Dr. Costine and Mr. Sheldon.—Death-rate of the City in 1886.—Work of St. John Ambulance Association at the Exhibition.—Medical Appointments.

THIS year we have again been most unfortunate in having wretched weather on Hospital Sunday, January 9th. After snowing all night, a thaw set in during the morning, and the roads were ankle-deep in slush. As a consequence, places of worship were not half filled; and, in more than one church and chapel no collection at all was made, by reason of the smallness of the congregation. Last year, as already mentioned in your columns, the collections showed a decrease of close upon £200, as compared with 1885. This year, owing to the improved commercial outlook, it was hoped that there would be a marked increase in the Sunday receipts. But, so far as is at present known, the result has been very poor, in spite of there having been collections at many churches on the following Sunday. It is anticipated that this will have the good effect of inducing the committee to alter the date to a more favourable season of the year, as has already been suggested more than once. Hospital Sunday was established in Liverpool about fifteen years ago, being followed almost immediately by the institution of Hospital Saturday; and, since then the medical charities of the city have been benefited to the extent of close upon £140,000. This fact is in itself sufficient justification for the general opinion that every opportunity of increasing these contributions to our hospitals should be taken advantage of.

On the 14th of last month a banquet was held at the Adelphi Hotel in honour of the founders of the Stanley Hospital, Dr. Costine and Mr. Sheldon. The hospital was commenced in a very humble way, and has had to contend with innumerable difficulties. Mainly owing to the energy of its original promoters, it has now become one of the most important hospitals in the city. The founders, having served for twenty years on the staff, now become members of the consulting staff. The banquet was presided over by Mr. J. Kellett Smith, and was a great success. In the course of the evening, portraits in oil of the founders by Mr. Wilson Mackenzie, were formally presented to Dr. Costine and Mr. Sheldon; and both gentlemen, in accepting them, requested the Committee to have the paintings hung in the board-room of the hospital.

During the week ending with New Year's Day, the rate of mortality was equal to 32.3 per 1,000, or about 50 per cent. above the ordinary rate. The highest temperature during this fatal week was 46.3°, and the lowest 24.4°, or a mean of 34.9°. The coldness of the weather and the prevalence of measles and scarlatina sufficiently account for these unusually high figures. Although the medical officer's full report is not yet to hand, a few facts in regard to the death-rate during the past year are of interest as showing a most encouraging improvement in the sanitary condition of Liverpool. The death-rate for the four quarters of the year was respectively: first quarter, 26.6 per 1,000; second quarter, 20.1 per 1,000; third quarter, 24.1 per 1,000; and fourth quarter, 24.2. The rate for the whole year was 23.7 per 1,000. This is exactly the same as the rate for 1885, but 2.9 per 1,000 less than the average rate for the ten years, 1876 to 1885, and 7.1 less than the average rate for the ten years, 1866 to 1875. The deaths from zymotic diseases amounted to 2,212, being the lowest number that has been recorded since 1860, 311 less than in 1885, and 757 below the average of the last ten years.

A tabular statement of the number of registered cases of accidents and diseases in which "first aid" was rendered by pupils of the St. John Ambulance Association at the International Exhibition, Liverpool, 1886, from March 26th to November 18th, shows that the number of accident cases in which relief was rendered was 211, and the number of cases of disease 37, making a total number of cases relieved of 248. The class of accident which furnished most cases was that of slight injury—bruising, etc.—of the body and limbs, the number of these cases reaching a total of 162.

Dr. Barr has been elected Honorary Physician to the Northern Hospital in succession to Dr. Caton, now Physician to the Royal Infirmary. Dr. Briggs has been appointed an Honorary Medical Officer to the Women's Hospital, Shaw Street, in the place of the late Dr. Lupton. Dr. Whitford and Mr. Robert Jones, late Honorary Assistant Medical Officers, have been elected Physician and Surgeon to the Stanley Hospital, in succession to Dr. Costine and Mr. Sheldon.

LIVERPOOL HOSPITAL FOR WOMEN.

Annual Meeting of Governors.

The annual general meeting of the governors and subscribers of the Liverpool Hospital for Women was held on Thursday, February 3rd, 1887. The chief business of the meeting was to receive the committee's report, and to "re-elect the honorary medical staff."

A circular letter, signed by several gentlemen interested in the hospital, had previously been addressed to the governors and subscribers, in which reference was made to the report of the committee appointed by the Liverpool Medical Institution (see British Medical Journal, December 11th, p. 1195). In this report, the opinion was expressed that sufficient care and discrimination had not been exercised in the selection of cases for operation, and that in many instances the gravity of the symptoms was not such as to have justified an abdominal section of any kind. The writers of the circular letter expressed the opinion that, under the circumstances produced by this report, there was no other course left to the governors and subscribers than to refuse to re-elect Dr. Imlach. Another circular letter, expressing a contrary opinion, signed by three other gentlemen, was also circulated, and both parties invited governors and subscribers to send proxies.

The meeting, at which the President of the Hospital, Mr. T. A. Bushby, took the chair, was very largely attended, many ladies being present. The Chairman delivered an address; and the annual report was read by Mr. Malcolm Guthrie, recently appointed to the post of Secretary to the Hospital. Considerable discussion took place on the report, and the rule relating to consultations was made more stringent. Each member of the medical staff was then separately proposed and seconded. The result of the voting was, that all the members of the staff were re-elected, with the exception of Dr. Imlach.

The committee for the ensuing year was appointed, but Mr. T. A. Bushby resigned the presidency of the hospital.

The meeting then concluded, after having lasted two hours.

CORRESPONDENCE.

ETIOLOGY OF PNEUMONIA.

Sir,—Will you kindly afford me space for a few remarks on the etiology of pneumonia, and the discussion thereon as reported in the Journal of January 29th. Dr. Sturges, in his strikingly able and lucid opening, summarily dismisses the long established division of causes into "predisposing" and "exciting." Long before even germs were heard of such a classification was the invariable rule. Why should it be abandoned now? Is it not from an instinctive feeling that it really dimly foreshadowed Pasteur's great discoveries? Translate "predisposing" into preparation of the soil, and "exciting" into sowing of the seed, and you have exactly the conditions postulated by those who believe in the parasitic origin of this and other kindred diseases.

Dr. Sturges' causes, then, I hold to be almost all predisposing causes. Take one, "chill," which is apparently the furthest removed from the germ theory of origin. Why should chill cause pneumonia? We need not try to discuss the problem as Pasteur has once for all settled the question by his wonderful experiment of lowering the temperature of a fowl, and so making it susceptible to the germ poison, to which in ordinary circumstances it was insusceptible. In like manner his researches into the diseases of the silkworm have for ever disposed of such terms as "epidemic," "miasmatic," etc. And so, also, the fact of germs possessing different grades of infective power, the virus being attenuated at one time and exaggerated at another, is amply explained by others of his demonstrations, including, as they do, the whole theory of vaccination in the newer and larger sense of the Jennerian term.

But I should not have troubled you with this *réchauffé* of researches so classical as those of the great modern Aristotle, even though they seem, but, I am sure, are not, forgotten in London, if I did not wish to take the opportunity of protesting against the germ theory of disease explaining all the causes of disease, and hence that a knowledge of this action is all that is required in the cure and prevention of disease. Medicine in its truest sense is not revolutionary, but evolutionary. While I am thoroughly convinced as to the parasitic origin of many diseases, I hold strongly that the predisposing causes should be studied and understood by physicians and surgeons. They are every-day causes, their removal depending on a thorough knowledge of physiological therapeutics. While strict science is advancing in the seclusion of the laboratory let us not neglect our great art—the art of careful nursing, dieting, and regimen, and the skilful application of Nature's manifold remedies, if not for the cure, at least for the alleviation and prevention, of disease.—I am, etc., William Bruce.

CREMATION IN NEW SOUTH WALES.

Sir,—I write to remove some slight misconception which appears to have arisen with reference to the Cremation Bill introduced by me, and passed by the Legislative Council of New South Wales.

Unhappily it is not yet law, as stated in the kindly notice of it in the Journal of October 16th, for though it was carried in the Upper Chamber by a large majority, in some of the divisions by nearly three to one, and was sent to the Legislative Assembly (the analogue of the House of Commons in this colony), the press of business there was so great, that it did not come on for discussion by the latter body before the session terminated. Had it done so, it would have passed without difficulty; for though there are, as might be expected, a few who are violently and unreasonably opposed to it, at least 75 per cent. of the House are in its favour, and when the new session commences in a few weeks' time, it will, no doubt, quickly go through.

With regard to the site, before a licence is granted, it is only necessary that the applicant should satisfy the governor, if he is not the owner in fee simple of the land on which he proposes to erect the crematorium, that he has the written consent of the owner, or, in the case of a cemetery, of the authorities having charge of it. No other consent is required, except the approval of the Board of Health, which acts for the entire community.

As to the condition under which a body may be cremated, the writer of October 16th kindly says they "are interesting, and it is evident that the Legislature in Australia has more or less closely followed the rules formulated by the Cremation Society of England." This was hardly the case, for I was unable at the time to obtain a copy of the rules of the Cremation Society, which I had never read; and, therefore, in drawing the Bill, I had to depend on my own ideas as to what conditions would most fittingly meet the circumstances of the colony, and those portions of Clause 5, as quoted by the British Medical Journal, were the result.

The article says: "Unless an attested memorandum is left with the authorities, cremation is forbidden." This is incorrect, as the provision really is that the next-of-kin or executors may, should they so desire (the conditions as to the cause of death having been complied with), direct the body of their deceased friend to be cremated, though he may have expressed no opinion on the subject himself. But out of consideration for the feelings of hypersensitive relatives, cremation is forbidden if any one of the next-of-kin or executors object, unless the deceased person has left a memorandum directing that his body shall be cremated. If such a memorandum has been left, the Bill provides that it shall be the duty of the executors to carry out the wish expressed in it, even though some of the immediate friends may not willingly consent. It is true that no penalty is attached to a disregard of the wishes of the deceased in this particular, but this was an intentional omission on my part, as I considered, in this early stage of the custom, it was in its interest that no persons should have the opportunity granted them of becoming martyrs under it, whilst, at the same time, it gave the executors a moral support in carrying out the wishes of a deceased person in regard to cremation, which will, I am convinced, prove most useful.

I may say that a very large number of persons are strongly in favour of cremation, and that it is probable that the custom will become very general in New South Wales on the passage of the Act. Some hundreds of persons, male and female, have expressed to me their intention of leaving a memorandum directing that their bodies are to be disposed of by cremation.—I am, Sir, yours faithfully,

John Mildred Creed, M.R.C.S.,
Member of the Legislative Council of New South Wales.

Sydney, December 16th, 1886.

THE LIVERPOOL HOSPITAL FOR WOMEN.

SIR,—The points on which Dr. Grimsdale criticises my address are of extremely small importance, and I cannot take up your valuable space concerning most of them, further than to say that my treatment of these particular issues was based on a mass of documentary evidence which is quite open to the inspection of anyone desirous of seeing it, including Dr. Grimsdale, and, if it be found that I have said anything which that evidence does not justify, I am quite ready to withdraw it, and to make an apology for it. But, as the matter stands, I can only reiterate what I have said in every particular.

But Dr. Grimsdale evades the issue which I have with him, and that is his own attitude in the witness-box. On that question I have no need to depend on indirect evidence, for I was an ear-witness. Dr. Grimsdale ought really to read my address with a little more care. If he will do so, he will find that his longest and most important paragraph of criticism (3) is totally unnecessary. For it was the Report of the Hospital Committee, and not that of the Inquiry Committee, which I wished to be placed on permanent record. He will find that the larger and more important Report of the Hospital Committee includes the less important document issued by the Liverpool Institution Inquiry Committee. Of the existence of this Hospital Committee Report there can be no doubt, because I possess a printed copy of it; and it has been largely commented on in newspapers, both lay and professional. Are we to believe seriously Dr. Grimsdale's astonishing statement that this Report has been issued by the Committee of the Hospital, a responsible body, without any inquiry? I imagine that this statement will give rise to considerable surprise. Certainly, if Dr. Grimsdale is correct, it is a most astonishing thing.

Finally, as to the omission of the names of Mr. Knowsley Thornton and Dr. Matthews Duncan, I am not responsible for that; the facts I gave as supplied to me by the authorities of the hospital, and the names I gave as I got them. The letter of Dr. Matthews Duncan is extremely characteristic, for I find that Dr. Duncan's views are warped by a belief which I respect as honest, but regard as wholly mistaken and most unfortunate for "good gynæcology." This belief is to the effect that the majority of women who give a detailed, sequent, and consistent story of pelvic suffering, "have nothing the matter with them." This has passed into a by-word, and has immensely diminished Dr. Duncan's sphere of usefulness in the practice of medicine.—I am, etc.,

LAWSON TAIT.

Birmingham, January 29th, 1887.

SIR,—Mr. Lawson Tait might readily concede Dr. Grimsdale's twelve points, for they leave the main question untouched.

Dr. Grimsdale nominated the Inquiry Committee, and is bound to defend their course of action; but, in a circular against my re-election, recently issued broadcast by an influential lay friend of Dr. Grimsdale, local opinion as to its competence and independence is summed up as follows: "It is further urged that the Inquiry Committee was not specially qualified to form correct opinions upon the matter of inquiry; that it was composed of friends of Dr. Grimsdale who had denounced Dr. Imlach's practice, and were, therefore, prejudiced; that the opinions of the members disqualified them for forming a favourable opinion of Dr. Imlach's work; that *ex post facto* inquiries are useless; that for personal causes and divergencies of professional opinion the whole movement was a persecution of Dr. Imlach." The report is regarded as a doleful and halting paraphrase of a letter by Sir Spencer Wells, which, being of a confidential nature, should not have been published without the sanction of the committee to whom it was addressed, and Mr. Tait's opinion of it is the most favourable one I have heard.

My "science and practice" are the outcome of the teaching of Dr. Matthews Duncan. It was from him that I learned to disdain the frivolous and spurious uterine pathology that is still so prevalent, though for the true pathology I had to search in Bernutz's *Memoirs*. His present pupils can judge the value of the removal of the diseased uterine appendages, for recently Dr. Duncan has, I believe, recommended this operation in St. Bartholomew's Hospital, and their subsequent experience of the inutility of other methods of relief will confirm their judgment.

There is a thirteenth protest which Dr. Grimsdale has forgotten. Mr. Lawson Tait thinks that Dr. Grimsdale ought to be called upon to resign. The bitter struggle in which Sir Spencer Wells indulged in his early career at the Samaritan Hospital terminated in this manner, but I trust it may be avoided in our hospital. Whether I go or stay, Dr. Grimsdale is bound, after twelve months of vindictive criticism, to submit his vaunted methods of cure to the proof. In August he denounced abdominal section for pelvic hæmatocele in a court of law; but three days ago it was performed, with his sanction, in hospital by a colleague, and had he not insisted upon a delay of three weeks, I believe the result would have been even more satisfactory.—Yours faithfully,

FRANCIS IMLACH.

February 2nd.

DISAPPEARANCE AND RETURN OF THE KNEE-JERK IN DIABETES.

SIR,—For the last two or three years I have invariably tested the knee-jerk in cases of diabetes, and I have found its absence a constant rather than an exceptional symptom, both in chronic and favourable, as well as in short and bad, cases.

Last spring a woman, aged 65, coming of a gouty family, was under my care, suffering from capillary bronchitis. The more common evidences of diabetes were absent, but the urine was of high specific gravity, and persistently saccharine; the sight of the right eye was much impaired, and, upon ophthalmoscopic examination, atrophy of the optic disc was found; added to this, the knee-jerk on each side was entirely lost. I therefore could not doubt that the case was one of true diabetes mellitus. The prognosis appeared bad, but, notwithstanding a condition of great exhaustion, the patient recovered from the bronchial attack, and, under strict dieting, she greatly improved in health and strength.

A few weeks ago I found that the knee-jerk was easily obtainable on both sides, and that the urine was free from sugar. She has now been eating bread, potatoes, and farinaceous foods for several weeks, and there is no reappearance of saccharine urine. The condition of the right eye remains unchanged.—I am, etc.,

THOMAS F. RAVEN, L.R.C.P.

Broadstairs, January 25th, 1887.

*** It is right to state that this letter was received before the appearance of the letter of our Paris correspondent, in the JOURNAL of January 29th, where Professor Bouchard's observations on the same subject are given in some detail.

DANGERS OF CONVALESCENT HOMES.

SIR,—I should like to call attention to a danger which inevitably, in one form or another, attends a sojourn at convalescent homes. A patient of mine, a girl, aged 8, convalescent from a rather severe attack of diphtheria, was sent to a convalescent home on the south coast for three weeks. Four days after her return she again became indisposed, and three days later had a rash which was unmistakably variolous. Notwithstanding the immediate vaccination and isolation of the other children, two of them, twelve days after, developed the same malady, though in a light and modified form.

The moral of the occurrence seems to be that, if residence in a convalescent home can be dispensed with in favour of some other means of obtaining a change of air, it would be to the advantage of the patient. From ignorance or indifference on the part of patients or their friends the gravest risks may be, and often must be, incurred at such institutions—risks which the authorities are necessarily unable to control or prevent.—I am, Sir, yours, etc.,

ALFRED S. GUBB, L.R.C.P., etc.

DEGREES FOR SCOTCH MEDICAL STUDENTS.

SIR,—In reference to Dr. L. B. Richardson's very appropriate inquiry in the JOURNAL of January 22nd, as to what the Scottish colleges intend doing to enable their Licentiates to obtain a M.D. degree on a similar ground to that which the English colleges are now endeavouring to obtain for their Licentiates, may I ask if it would not be possible for the Scottish colleges to make some arrangement with the University of St. Andrews in the matter? St. Andrews is not a teaching university, and its degree, if granted, would not interfere financially with the other Scottish universities.

Might not then a charter be obtained by that university, to grant, say after five years' private practice and a modified examination, its M.D. degree to those Licentiates of the Scottish Colleges who hold their diplomas in medicine and surgery?

This would meet the requirements of most Licentiates who wished for a M.D. degree, and at the same time would not be unfair to those who, working straight for a M.D., can obtain it at once.

It will be most unfair if the Licentiates of the English colleges are enabled, after a modified examination, to call themselves M.D., whilst we who have passed equally severe examinations at the Scottish colleges are unable to do so.

Trusting the Scottish colleges will look to the interests of their Licentiates, and take the matter up at once, I am, yours faithfully,

A. CROSBEE DIXEY, M.R.C.P.Ed., L.R.C.S.Ed.

Dover, January 25th.

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

Staff-Surgeon E. V. de Meric has been promoted to be Fleet-Surgeon; his commission as Surgeon dates from November 16th, 1866, and as Staff-Surgeon from March 16th, 1878. He was Staff-Surgeon of the *Iris* during the operations in the Eastern Soudan at Suakin in 1884-85, and has the Egyptian medal.

The good-service pension of £100 a year, vacant by the death of Sir James Salmon, M.D., has been awarded to Inspector-General Sir William R. E. Smart, K.C.B., M.D. Sir William has seen long and distinguished service; he was engaged in the China war in 1841-42 (medal); in charge of the Naval Brigade Hospital during the Crimean war in 1854-55 (medal with clasp for Sebastopol, and Turkish medal, and Knight of the Legion of Honour); had charge of the Royal Naval Hospital at Hong Kong, and was promoted for general services during the operations in China in 1857-58 (clasp); received a testimonial from the French Government for his services to the Imperial Navy; nominated K.C.B.; appointed Honorary Physician to the Queen; and awarded Sir Gilbert Blane's gold medal.

The following appointments have been made at the Admiralty during the past week: Thomas H. Atkinson, Fleet-Surgeon, to the *Vernon;* Fleetwood Buckle, Fleet-Surgeon, to the *Brilliant;* Solomon Kellett, Staff-Surgeon, to the *Cordelia;* Herbert M. Ellis, Staff-Surgeon, to the *Valorous;* Valentine Duke, Staff-Surgeon, to the *Calliope,* from January 25th; Alfred Cropley, Surgeon, to the *Calliope;* Alexander W. M'Leod, Surgeon, to the *Invincible,* from January 25th; Alfred M. Page, Surgeon, to the *Monarch;* George Smith, Surgeon, to the *Hercules;* H. A. Woods, Fleet-Surgeon, to the *Victoria and Albert;* A. G. Delmege, Staff-Surgeon, to the *Osborne;* R. J. Barry, Staff-Surgeon, to Portsmouth Dockyard; H. T. Cox, Staff-Surgeon, to the *Duke of Wellington,* additional; Frederick W. Stericker and Alfred J. Pickthorn, Surgeons, to the *Alexandra;* Martin H. Atock, Surgeon, to the *Nelson;* James H. Dane, Surgeon, to the *Bacchante,* additional; Alfred E. Weightman, Surgeon, to Chatham Hospital; Charles H. Upham and Daniel J. P. M'Nabb, to Plymouth Hospital; Alfred T. Rimell, Surgeon, to the *Excellent,* additional; Charles Strickland and Hamilton E. Earle, Surgeons, to the *Duke of Wellington,* additional; James M. France, Surgeon, to the *Indus,* additional; John Menary and Walter G. Axford, Surgeons, to the *Royal Adelaide,* additional; George H. Foott, Surgeon, to the *Revenge,* additional; William Spry, Surgeon, to the *Swinger,* additional, and, when recommissioned, to date February 1st; Richard E. Biddulph, Surgeon, to the *Boscawen,* to date February 1st; Richard A. Fitch, Surgeon, to the *Sphinx,* additional, and, when recommissioned, to date February 1st; Samuel C. Browne, Surgeon, to the *Cambridge,* to date February 1st.

Deputy Inspector-General Ducald M'Ewan, M.D., has been promoted to be Inspector-General; he is also appointed Honorary Physician to the Queen, *vice* the late Sir James Salmon.

THE MEDICAL STAFF.

Surgeon-Major M. B. Major, on arrival from England, is appointed Senior Medical Officer at the Station Hospital at Cannanore, in the Madras command.

Surgeon-Major J. Fraser, M.D., doing general duty in the Eastern District, Madras, has been appointed Senior Medical Officer at the North Station Hospital, Secunderabad.

Surgeon J. M. Reid, M.D., who is serving in the Bombay command, has been appointed Honorary Surgeon to the Sind Volunteer Rifles.

Surgeon-Major J. G. Rogers, M.B., has been nominated Companion of the Distinguished Service Order, for his services during the operations in the Soudan. Surgeon-Major Rogers served through the Afghan war of 1878-80 (medal); in the Egyptian war in 1882, including the battle of Tel-el-Kebir, for which he was promoted to be Surgeon-Major, besides receiving the medal and clasp, and the Egyptian bronze star; during the Nile Expedition in 1884-85 as Principal Medical Officer with the Egyptian army (clasp); and in the operation under Sir Frederick Stephenson in 1885-86. In 1885, the Khedive bestowed upon him the Third Class of the Order of the Osmanieh.

Brigade-Surgeon F. Ferguson, M.D., and Surgeon-Major D. C. W. Heather, on arrival from England, are directed to do general duty with the Hyderabad Subsidiary Force, Madras.

Surgeon-Major W. J. Campbell, doing duty at the General Hospital, Rangoon, is appointed Senior Medical Officer at the Station-Hospital, Thaetmyo, Burmah.

Surgeon-Major R. D. Bennett, Senior Medical Officer of the Station-Hospital at Thaetmyo, is to do duty at the General Hospital, Rangoon.

Surgeon P. A. Hayes has been brought on the strength of the British Forces in the Bombay command from January 5th, the date of his arrival at Bombay.

THE INDIAN MEDICAL SERVICE.

Surgeon C. H. Beatson, Bengal Establishment, is appointed Medical Officer to the 10th Bengal Lancers, *vice* A. M. Crofts.

Surgeon-Major A. J. Willcocks, M.D., Civil Surgeon of the Second Class, is directed to officiate as Civil Surgeon of the First Class, and to be in medical charge of Benares, during the absence on leave of Surgeon-Major W. R. Hooper, or till further orders.

Surgeon G. Shewan, Bengal Establishment, is appointed to be Civil Surgeon of the Ruby Mines District, Burmah, from November 1st.

Surgeon J. T. W. Leslie, Bengal Establishment, has leave of absence, on medical certificate, out of India with the necessary subsidiary leave.

Surgeon W. H. Quicke, Bombay Establishment, is appointed to officiate in medical charge of the 3rd Native Infirmary during the absence of Surgeon A. F. Sargent on furlough, or till further orders.

Surgeon-Major A. Stephen, M.B., Bengal Establishment, is confirmed in his appointment as Sanitary Commissioner in the Punjab.

Surgeon-Major D. Wilkie, M.B., Bengal Establishment, is also confirmed in his appointment as Statistical Officer to the Government of India in the Sanitary and Medical Departments.

Surgeon D. Mullen, M.D., Bengal Establishment, is appointed Residency Surgeon, Meywar, *vice* Surgeon W. Beatson, whose services have been permanently placed at the disposal of the Government of Bengal.

Surgeon-Major H. B. Purves, Bengal Establishment, has been granted an extension of leave for six months, on medical certificate.

Surgeon-Major E. B. Ruttledge, Bengal Establishment, Civil Surgeon of the second class, is transferred from Benares to Etawah.

The services of Surgeons-Major R. H. Batty and J. F. Keith, M.D., and of Surgeon W. G. H. Henderson, all of the Bombay Establishment, are replaced the disposal of the Commander-in-Chief.

The services of Surgeons M. A. T. Collie, M.D., and J. B. Eaton, M.B., of the Bombay Establishment, are placed at the disposal of the Government, in the Civil Department.

Deputy Inspector-General of Hospitals, W. W. Rawes, late of the Madras Establishment, died at Bath on January 29th, in the 71st year of his age.

THE VOLUNTEERS.

Surgeon and Honorary Surgeon-Major Joseph Frain, of the 3rd Durham Artillery, has resigned his commission, which dates from November 7th, 1864, but he did not join the 3rd Durham till October 1st, 1877; he is permitted to retain his rank and uniform.

Acting-Surgeon G. H. Harvey, M.B., of the 1st Kent Artillery, has also resigned his appointment, which bore date April 6th, 1881; as has also Acting Surgeon Henry Horton, of the 1st Worcester Artillery, which he joined October 1st, 1877, his commission bearing date January 31st, 1877.

Surgeon G. R. Barnes, of the 3rd Surrey Rifles, has been granted the honorary rank of Surgeon-Major.

Acting-Surgeon E. F. G. Morris, who joined the 1st Hereford on September 19th, 1883, is now appointed Second Lieutenant in that corps.

Acting-Surgeon T. O. Wiley, of the 5th (Isle of Wight Princess Beatrice's) Volunteer Battalion of the Hampshire Regiment (formerly the 1st Isle of Wight), has resigned his appointment, which dates from June 14th, 1884.

Acting-Surgeon W. A. F. Bateman, of the 5th Surrey, is promoted to be Surgeon.

ARMY SURGEONS AND PRIVATE PRACTICE.

Surgeon-Major W. Allan May (Belize, Honduras) writes: With regard to your correspondent, Dr. Jenkyns' remarks, I do not intend to make any public disclaimer. I would merely wish to enclose the accompanying copy of a letter from the brother of one of my patients. The lady was in 1883 suffering from hysterical fits, and Mr. Hunter, the head of the firm in which Dr. Jenkyns is either partner or assistant, was called in in consultation with me; he approved of my treatment, and suggested no change whatever. A day or two after, I was again asked (by the brother "Fred" mentioned in enclosed letter) to consult with Mr. Hunter, and I consented; this second consultation never took place, the reason given being "that Mr. Hunter refused to consult, but would take entire charge of the case, as he had a medicine in his shop which would soon cure her." Comment on this is superfluous. I naturally said, on hearing this, that I would never meet Mr. Hunter, and I ceased from that time to recognise his or any of his firm's existence.

Furthermore, I am strongly of opinion that any medical man who keeps an open shop for the sale of perfumery and fancy articles and medicines, is not entitled to any recognition whatever, professionally, from other medical men who carry out their profession as a profession, and not as a trade.

*** The insertion in the columns of the Journal of our Honduras correspondent's letter will probably be more effective than any local "public disclaimer." Be that as it may, if the reason stated to have been given for refusing assent to a second consultation in the case be a fact, we need scarcely remark that such conduct would more than justify our correspondent in ceasing to recognise him as a professional brother. That a firm of legally qualified practitioners should, in these days, "keep an open shop for the sale of perfumery and fancy articles and medicines," is to our mind incomprehensible, and calls for disciplinary action by their respective Colleges, whose attention might be called to the matter.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Friday, January 28th.

The following Bills were brought in and read a first time: Sir E. Birkbeck and Mr. Quilter: Bills for better securing the purity of beer.—Mr. Mayne: Bill to regulate the importation, manufacture, and sale of butter substitutes.—Mr. Pyne: Bill to provide for the better housing of the working classes.—Mr. Chance: Bill to amend the law relating to the superannuation of officers and servants in pauper lunatic asylums in Ireland.—Mr. W. Redmond: Bill to provide for open spaces and public recreation grounds in Dublin.—Mr. W. Corbet: Bill to alter and amend the law relating to private lunatic asylums in Ireland, and to make other and more suitable provisions for paying patients.

Monday, January 31st.

Employers' Liability; Accidents to Workmen.—In answer to Mr. Broadhurst, Mr. W. H. Smith said it was the intention of the Government to propose legislation this session on the subject of employers' liability for injuries to their workpeople.

The Carriage Tax.—Mr. Anderson asked the First Lord of the Treasury if he had considered a recent communication addressed to him on the subject of the Carriage Tax and the Gun Tax.—Mr. W. H. Smith: The hon. gentleman will realise that it is quite impossible for the Government to state the provisions of the Budget before it is introduced.

Tuesday, February 1st.

The Contagious Diseases Acts in Egypt.—In reply to a question from Mr. H. J. Wilson on the operation of these Acts in Egypt, Mr.

STANHOPE said they had no information at the War Office concerning it. He would ask the general officer commanding in Egypt to report to him upon the subject.

Army Medical Officers.—Dr. TANNER has given notice that he will ask the Secretary of State for War whether officers of the Army Medical Staff, who obtain the greatest number of marks at the competitive examination for commissions in the public services, are placed junior and therefore inferior in position to those who, obtaining a fewer number of marks, seek commissions in the other branches of the public services: whether all medical officers are allowed to reckon one year on half-pay in their service, if caused in and by the service, as full-pay towards retirement, and whether, in the case of officers of the Royal Engineers, towards promotion as well as retirement: whether the commissions of gentlemen joining the Indian Medical Service are dated from the period of joining at Netley, and whether those for the Army Medical Department are dated from the period when the course of instruction at Netley closes: and, whether such regulations practically make the Indian medical officers the seniors of the others by four months or more, and if this continues throughout their career until they reach the administrative ranks.

OBITUARY.

WILLIAM BROWN, F.R.C.S.E.

WE have to record the death of the oldest member of the profession resident in Edinburgh, Mr. William Brown, F.R.C.S.Ed., who died on January 20th, in his ninety-first year. Born in Edinburgh in 1796, he was educated there, and as far back as 1817 obtained the Fellowship of the Royal College of Surgeons there, of which, at the time of his decease, he was the oldest Fellow. He entered upon practice in Edinburgh, where held various appointments; for fifty-two years he was surgeon to the Orphan Hospital; he was an examiner, a member of Council, and a president of his College. He was also a member of the staff of the New Town and Royal Public Dispensaries. In his earlier years he contributed various papers to medical journals, and in later years he published some papers of a biographical character. What, however, rendered the deceased most known in Edinburgh, was the warm interest he took in the Medical Missionary Society, of which he was President continuously for nearly forty years, having been elected to it in 1849; and so well preserved was his health, bodily and mental, that on his ninetieth birthday he presided over the annual meeting of that Society.

Mr. Brown's death may almost be said to have been hastened by the death of his wife only three weeks before his own, after a married life of about forty-seven years.

By the profession, by the public at large, and especially by the Edinburgh Medical Missionary Society, the deceased will long be remembered as a skilful practitioner, and a kindly, upright, and unostentatious man.

FERGUS FERGUSON, L.R.C.S.ED., L.S.A.LOND., J.P.

THE death is announced, at the ripe age of 81, of Mr. Fergus Ferguson, who claimed to be the oldest practitioner of Bolton, where he was universally known and esteemed. The deceased gentleman was born on October 18th, 1805, in the parish of Houston and Killelan, in Renfrewshire. He received his early education at the Bolton Grammar School, where his parents had removed when he was yet a child. He afterwards studied at Edinburgh, where he obtained the diploma of L.R.C.S. in 1830, becoming L.S.A.Lond. in 1853. Mr. Ferguson was twice married. His life was one of continued usefulness and activity. In 1856 he was elected an Alderman in the Liberal interest, and early in his career as a Town Councillor he strove to improve the sanitary condition of the town, the closing of cellar dwellings being one of the first measures which he succeeded in carrying through. Parks, recreation grounds, and similar boons for the people found in him an earnest and powerful advocate. It has been said of him by one to whom he was best known, that he evinced an earnestness in the cause of sanitary reform certainly unexcelled by any member of the borough since its incorporation. His labours in the cause of education were not less strenuous.

In 1866, Mr. Ferguson was elected Mayor of Bolton, and in 1869 he was placed upon the Commission of the Peace. He was a strong advocate of temperance, and supported a local movement for the closing of public-houses on Sundays. He declared at a public meeting in 1872 that he had been a total abstainer for thirty-five years. In 1887 he laid the foundation stone of the Children's Hospital.

HENRY KENNEDY, M.B., F.K.Q.C.P.I.

ONE of the most familiar faces at the meetings of the Academy of Medicine in Dublin, and in the reading-room of the College of Physicians, has been removed by the death, on Monday, January 31st, of Dr. Henry Kennedy, at the age of 75 years. We do not remember ever having been at a meeting of a medical society in Dublin at which he was not present, and at which he did not either read a paper or make a speech. Although his remarks were often discursive, they were always delivered with such emphasis and with such cheeriness and good temper, in addition to being based on long experience and much reading, that they were listened to with respect. Dr. Kennedy was, as we have said, a frequent contributor to the literature of the Dublin Medical Societies; and, in consequence of this, perhaps, it was remarked some years ago that abroad the best-known medical man in Dublin was Henry Kennedy. His most important works were his Observations on Paralytic Affections during Infancy, published in the *Medical Press* in 1841, and continued in the *Dublin Journal of Medical Science*. In these papers he first described the peculiar affection since termed "essential paralysis," "acute infantile spinal paralysis," and now "acute anterior polio-myelitis." He also wrote a small monograph on Fatty Heart, which was published in 1880; but the great majority of his numerous contributions were too often hurriedly written, and consequently ephemeral. A large number of these papers were on Fever, a subject Dr. Kennedy paid much attention to from having been connected as physician for several years with the Cork Street Fever Hospital. He was also physician to the Whitworth Hospital and to some charitable institutions, but was never on the staff of any of the clinical hospitals of Dublin.

Dr. Kennedy was a believer in the identity of typhoid and typhus fever, and held strong views not in accord with the teachings of the day on other medical and pathological subjects. But, apart from any "peculiarities" (of which, indeed, he exhibited fewer than most men who had reached his age), he was a most cheery, amiable, and universally respected man. Possessed of wonderful activity of mind and body, he was a general favourite, and will be long missed in the circles in which he was so familiar. The late Dr. Denham, whose obituary we also publish this week, and Dr. Kennedy were old and intimate friends, and it is remarkable that both should have died from the same cause—paralysis—within four days of each other.

JOHN DENHAM, M.D., F.R.C.S.I.

WE have to record, with deep regret, the death of this much respected member of the profession. Born in the north of Ireland in 1806 he had reached a goodly age; and during the course of his long and honoured life, he had acquired the esteem of all his professional brethren who knew him, and the regard of a large circle of friends. Dr. Denham was educated in Belfast, and studied his profession in Dublin. He graduated in the University of Edinburgh in 1831, and took the license of the Royal College of Surgeons in Ireland the following year. After having taught anatomy for some years in Dublin, he began to practise midwifery in that city. He was one of the first members of the old Obstetrical Society of Dublin, and some twenty years ago he filled the post of Master of the Rotunda Lying-in Hospital for the usual period of seven years. He was a man of the most amiable, genial and hospitable disposition, and his evenness of temper and hopeful character carried him through troubles which would have wrecked the happiness of many less evenly balanced minds. In addition to being a President of the Obstetrical Society, Dr. Denham was President of the Royal College of Surgeons in Ireland in 1873-74, and was also for many years a member of the Council of that College. Three years ago he retired from practice; and in order to show the high regard in which he was held, he was presented with a testimonial on the occasion by his lay and medical friends.

CHLORODYNE POISONING.—A married woman, living at Ramsgate, who had for a course of years become addicted to the excessive taking of drugs and drink, has met her death through taking an overdose of chlorodyne. It was stated at the inquest that the room of the deceased, which was in a filthy condition, contained nearly one hundred empty chlorodyne bottles.

CHLOROFORM POISONING.—The death of a young man named Greenyer from an overdose of chloroform has occurred at Stoke Newington. Being troubled at times with neuralgia, he was in the habit of taking chloroform to alleviate the pain. Dr. White stated, in his evidence at the inquest, that when he was called to the deceased, he found his lips congested. A bottle containing an ounce and a half of chloroform was found between the bed and the mattress. He gave it as his opinion that the deceased died from an overdose of chloroform and a verdict in accordance with this was returned.

INDIA AND THE COLONIES.

INDIA.

THE GENERAL HOSPITAL AND THE LATE FIRE AT MADRAS.—The resources of the General Hospital at Madras were severely taxed on the occasion of the recent great and calamitous fire in that city. The first cases were brought into the hospital at 6 P.M., and by midnight there had been admitted in the wards 83 natives and 2 Europeans, in addition to 29 conveyed to the dead-house. Sheets and clothing of every kind were torn up for dressings, and carron oil was made by the gallon out of every available oil in store. Honorary Surgeon Lawrence was among the first to volunteer help; Surgeon Pope, Dr. Nailer, Surgeon-Major Thompson, Brigade-Surgeon Sibthorpe, and Surgeon-Major Allison, soon followed, and laboured hard until the whole of the cases had received treatment. The thanks of the Government were expressed to the medical staff.

AMONG the various schemes suggested for celebrating the Queen's Jubilee in Calcutta, that which it is stated is likely to meet with the greatest support is the building of a Victoria Hospital for Women.

DR. KEESS, OF MADRAS.—Brigade-Surgeon James Keess, M.D., Senior Physician to the General Hospital, and Principal of the Madras Medical College, has retired from the public service. Dr. Keess entered the subordinate medical service as a student in 1848, and soon showed himself to be possessed of exceptional natural gifts. In 1853, he won by competition the office of Demonstrator of Anatomy. Acting upon the advice of Lord Harris, then Governor of Madras, he obtained two years' furlough, came to England, and entered as a medical student at King's College. He subsequently obtained the diplomas of M.R.C.S. and M.R.C.P., and graduated M.D. in the University of Aberdeen. He was, on his return to India, appointed to the Garrison Surgeoncy, with the Anatomy chair in the Medical College; and filled, up to the time of his retirement, the post of acting senior physician to the General Hospital, and Principal of the Madras Medical College. Dr. Keess is succeeded by Brigade-Surgeon Alexander Porter.

CANADA.

THE MEDICAL SCHOOLS OF TORONTO.—We see with great pleasure that the *Canadian Practitioner* has taken up the question of the consolidation of the medical schools of Toronto, with the view of placing them on a permanent footing, and of bringing them into direct relation with the management of the General Hospital of the University Senate and of the College Faculty. In order that the confederated universities should work in thorough harmony with the medical teachers, and that the examinations should be brought into unison with the progressive advance of medical education, it is most desirable that the faculty of the medical schools should be represented on the University Senate; and the plan proposed certainly appears to afford the basis for bringing the medical schools in Toronto up to the higher level of the educational platform. The medical students have addressed a petition to the Medical Council of the College of Physicians and Surgeons of Ontario, asking that the recent amendment to the Imperial Act, affecting students who intend obtaining their licence in Great Britain, and subsequently registering with the College of Physicians and Surgeons of Ontario, may not be made retrospective. Their requests appear to be moderate and reasonable, and will, no doubt, receive just consideration from the Medical Council.

ONTARIO MEDICAL COUNCIL.—It is reported that the Medical Council of Ontario proposes to refuse to register diplomas obtained in Great Britain or Ireland, and to compel all persons holding such diplomas to submit to an examination before the Council. All persons registered in the United Kingdom have been entitled to registration in Ontario without undergoing further examination. The reason for this retrograde step is stated to be that many students of medicine from the province, after graduating in one of the universities, travel to England, where they spend one year in further study, and obtain an English qualification, on the strength of which they claim registration on their return to Ontario. As the Ontario Medical Council does not, we are informed, refuse to permit men to practise after a three-years' curriculum, it is not clear that the new regulation is framed in the interest of the public. The new Medical Act (1886) permits the registration of colonial diplomas in this country on and after next June, yet this is the epoch chosen by the Ontario Medical Council to impose a vexatious regulation. What name must be applied to such a course? It is not reciprocity, for the province withdraws a privilege at the moment that the Old Country grants a privilege; perhaps it is to be styled retaliation. Has not La Rochefoucauld a maxim to the effect that the surest way to turn a friend into an enemy is to do him a service?

AUSTRALIA.

THE Senate of the Adelaide University has decided to adopt regulations for extending the course of instruction in the Medical School, so as to provide complete training for degrees in medicine.

BARON VON MUELLER makes an appeal to the practitioners of the far inland districts of Australia to forward specimens of plants, for the purpose of assisting in the study of the geographical distribution of Australian plants, and perfecting the botanical system. He believes that many new plants may yet be collected in many of the central regions, and that medical as well as botanical knowledge may thereby be benefited.

IN an action against Dr. J. M. Rose, of Melbourne, for malpractice and negligence in the treatment of a case of injury to the hip-joint, a verdict for the plaintiff for £500 was given by the jury, although the judge summed up in favour of Dr. Rose.

A SUM of £8,000 has been placed upon the estimates for the erection of a physical laboratory at Sydney University.

THERE is considered to be little chance of passing the Bill to amend the Public Health Act this session. The Council of Melbourne University are endeavouring to arrange for the nomination, on the recommendation of the University, of two physicians and two surgeons to the Melbourne Hospital, as clinical teachers at the hospital; but the Government, to whom an appeal was made, have declined to interfere in the matter. The present arrangements are a hardship on the students, who are unable to obtain the authorised clinical teaching at Melbourne which is required to render their course of study complete, in view of British requirements, and for recognition of the degrees by the General Medical Council.

THE Select Committee of the Legislative Council of New South Wales for the purpose of inquiring into the state of the law in relation to the registration of births, deaths, and marriages in that colony, of which the Hon. J. M. Creed, L.R.C.P., is Chairman, has issued an interesting and valuable report, of which a copy has been forwarded to us. To this report we shall refer in another issue. It demonstrates that the existing system of registration of births and deaths affords inadequate security against crime, and makes important recommendations, which are of considerable professional as well as public interest.

AMBULANCE WORK IN NEW ZEALAND.

AMBULANCE WORK IN NEW ZEALAND.—AT the annual meeting of the St. John Ambulance Association, Christchurch, New Zealand, a branch of the English St. John Ambulance Association, initiated by Dr. Hacon, substantial progress was reported. Classes for both ladies and men had been held and well attended. Similar classes had been renewed at Kaiapoi. At Lincoln and at Pleasant Point branches had been opened and classes formed. Dr. Hacon expressed his satisfaction with the knowledge acquired by the various candidates, which he said reflected credit both on the lecturers and on the pupils, and must eventually be of great service to the community at large. It was suggested that the time would soon come for forming a New Zealand St. John Ambulance Association, instead of continuing to be merely a branch of the English association.

MEDICO-LEGAL AND MEDICO-ETHICAL.

NEAVE *v.* HATHERLEY

A CASE arising out of the lunacy action, Neave *v.* Hatherley, tried at some length before the Lord Chief Justice for several consecutive days in the months of July and August last, came before his lordship on Saturday last. It will be remembered that this was an action brought by a lady against a medical man, who had certified that she was of unsound mind. The defendant gave evidence to show that she was at the time of unsound mind, and the jury found that she was not, but that the defendant—the medical man—was not guilty of negligence in certifying that she was so. The verdict was for the defendant, and it was upheld. The Master, upon taxation, had given the defendant the main costs of the trial—that is, the costs of the witnesses on the question of unsoundness. The plaintiff appealed from that decision.

The Counsel for the Plaintiff, on Saturday, January 29th, argued that, as the defendant had failed on the issue of unsoundness, the

plaintiff ought to have the costs on that, the great issue. In the result,

Lord Coleridge said no doubt the jury had found for the plaintiff on the question of insanity, but the Master was quite right in thinking that the witnesses called by the defendant, the medical man, were most material on the issue of negligence, on which he had succeeded, and that, therefore, he was entitled to these costs.

Mr. Justice Denman concurred, observing that this evidence was material on the substantial issue in the case—that of negligence—on which the defendant had succeeded, for it went to show that the lady had so behaved as to make it probable that any medical man who saw her would consider her to be insane. It threw, therefore, great light upon the real question, the state of the medical man's mind at the time he gave the certificate, and the grounds on which he gave it.

Appeal accordingly dismissed, with costs.

BENEFIT SOCIETIES AND SICK PAY.

At the Clerkenwell County Court on Tuesday a case came before his Honour, Judge Eddis, in which a man, named Lane, sued the secretary and trustees of Lodge 26 and 46 of the Loyal United Friends' Benefit Society, held in Clerkenwell, for five weeks' sick-pay to him. The evidence showed that the plaintiff had been a subscribing member, and, falling sick, was entitled to the benefits, and the defence submitted was that there was a rule to the effect that if the total worth of the lodge did not reach a certain amount the full sick benefit could not be paid. Plaintiff said he was not aware of this rule, and the reply of the secretary was that due notice had been given, and a meeting of members had decided it. His Honour said such a rule would be invalid if 39 out of 40 members had assented to it, and the fortieth had not. There was a distinct rule that any alteration of rules should be printed in the next ensuing quarterly statements. This had not been done, and, therefore, the alleged alteration was invalid. Men paid into these benefits societies for benefits in times of necessity—in fact, bought benefit, which they had a right to receive; therefore, their interests should be protected in every possible way. Verdict was entered for the plaintiff, with costs.

FEES TO MEDICAL WITNESSES.

A special meeting of the Wigan Medical Society was held on January 27th, Dr. Berry, J.P., President, in the chair, for the purpose of considering the present procedure in binding over medical witnesses to attend at assize and sessions courts, and the inadequate fees paid for the great loss of time involved. After some discussion upon the hardships entailed upon medical men by being compelled to attend as witnesses at these courts held in Liverpool for a number of days before their particular case was disposed of, and attention having been called to the fact that the scale of fees (namely, one guinea per day) was fixed thirty years ago by the then Lord Chancellor, when that sum was of much more value than at present, and there were not the same facilities for the saving of public time, the following resolutions were unanimously adopted:

1. That it is most desirable that some alteration be made in the present procedure of detaining medical men as witnesses for a number of days at assize and sessions courts, and that adequate remuneration be allowed them for their loss of time.
2. That a subcommittee, comprising the President, Vice-President, Secretary, and Messrs. Barnish and Brady, be appointed to consult counsel and take the necessary steps towards calling the attention of the Crown to this grievance.
3. That a report of the proceedings of this meeting be sent to the medical journals for publication.

LOWE *v.* FOX.

An appeal from an order of the Court of Appeal reversing a decision of the Queen's Bench Division, by which that division had set aside a judgment of Mr. Baron Pollock for the defendant, and had ordered a new trial, came before the House of Lords on Monday last. The plaintiff appeared in person, and the Solicitor-General (Sir Edward Clarke) and Mr. R. O. B. Lane represented the respondent. The appellant, Mrs. Lowe, brought an action against the defendant, the superintendent of a private lunatic asylum in which she had been confined, to recover damages for wrongful detention in that asylum. The action came on for trial at the Winter Assizes for Somersetshire in 1885, before Mr. Baron Pollock and a special jury, when the learned judge held that there was no case against the defendant, and directed a verdict for him. But the Queen's Bench Division, consisting of Justices Grove and Denman, granted a new trial, on the ground that there was some evidence fit to be laid before the jury. Upon appeal, however, the Court of Appeal reversed the judgment of the Divisional Court, and reaffirmed the judgment of Mr. Baron Pollock. The questions now raised had reference chiefly to the validity of the order under which the appellant was confined, and as to whether a certain letter of her husband to the respondent was or was not a proper order of discharge within the meaning of the Act of Parliament. Their lordships, upon the conclusion of the arguments for the appellant, dismissed the appeal with costs.

MEDICAL PRACTICE AND THE WORKING CLASSES.

A Member desires information regarding the systems in vogue for affording medical and surgical relief to the working classes in the mining and manufacturing districts in this country, in America, and on the Continent.

London, W., writes: I am about to start a medical club for the working classes, and shall be glad if some member having experience of the same will kindly give me a hint on the subject, especially as to scale of members' payments. A few rules applicable to the formation of such a club will be esteemed a favour, and can be forwarded to me at the office of the Journal.

MIDWIFERY ENGAGEMENTS.

J. H. H. writes: Will you be good enough to give me your opinion as to whether I can recover my fee in a county court in the following case; it is important to me, because the same thing has been done before, and will continue, unless I can recover by a legal process.

I was engaged to attend a primipara in the usual way, about the beginning of December, when I was informed that the confinement was expected at the end of January. I made my usual entry of engagements, and inquired about the nurse, etc., and in fact a *bonâ fide* engagement was entered into with the mother of the patient; and on January 19th I heard the case came off a fortnight since, and none of the friends have since communicated with me in any way. I am most anxious to have a test whether the fee in such cases is recoverable or not; because I feel sure I am only engaged in case of necessity,—if the nurse cannot manage herself. Therefore an answer in the Journal will much oblige.

*** The right to recover fees depends on the bargain that was made. We know of no general custom in the profession under which a promise could be implied to pay, although no services were in fact required or rendered. If anything was said at the time of accepting the engagement as to payment of a fee irrespective of attending, there might be evidence of a bargain; but without such evidence an action would probably fail. Before bringing it, the circumstances which could be proved should be stated fully to a competent lawyer, and his advice should be followed.

"FETCHING THE DOCTOR."

A "Country Doctor" writes: The right to recover payment for medical attendance depends on contract express or "implied." Surely the continuing in attendance implies contract. Supposing in the Salford case the medical man had not claimed for the first visit, but for all subsequent ones, could he not have recovered? Case: a message was left at my house to see Mrs. A., living at the house of her son-in-law, whom I afterwards sued for £9. The judge almost immediately stopped the case, ordering defendant to pay, and allowing me full costs, remarking that it would not be tolerated that a medical man should stand on his steps quibbling as to whom he should look to for payment; and further, that my continuing in attendance with defendant's knowledge implied contract.

*** If a medical man continues without objection to attend a patient, there is no doubt evidence of a contract to pay his ordinary fees, but the question still remains, "With whom is such contract made?" In the instance quoted, the evidence of a contract by the defendant seems weak; and, unless more was proved than is stated to us, the plaintiff was very fortunate in winning his case. Many judges would have decided against him.

HOSPITAL AND DISPENSARY MANAGEMENT.

HOSPITALS AND THE JUBILEE.

At a public conference held in Paddington Vestry Hall on January 25th, Mr. Edmund Owen, referring to Mr. Judge's proposal to devote part of the fund to be raised to commemorate the Queen's Jubilee to the purchase of the canal basin, and of the ground on which dust is now shot and sorted, spoke strongly of the injurious influence of these dust yards on the air of the wards of St. Mary's Hospital; clouds of dust continually entered the hospital, producing a sickly and unwholesome smell. He expressed surprise that the Medical Officer of Health for Paddington showed no disposition to take action to obtain the removal of the dust business from so populous a neighbourhood.

GLASGOW DENTAL HOSPITAL.

The second annual report of this hospital states the number of patients as 6,825, and in no fewer than 1,374 cases the operations had been directed to the preservation of the teeth. The total income was £141 8s. 6d., but it was less than the expenditure by £27 6s. 4½d. During the year £64 had been received in the shape of students' fees.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE TRUE DEATH-RATE OF LONDON DISTRICTS DURING THE FOUTH QUARTER OF 1886.

In the accompanying table (specially prepared for the BRITISH MEDICAL JOURNAL) will be found summarised the vital and mortal statistics of the forty sanitary districts of the Metropolis, based upon the Registrar-General's returns for the fourth quarter of 1886. The mortality figures in the table which we have prepared relate to the deaths of persons actually belonging to the respective sanitary districts, and are the result of a complete system of distribution of the deaths occurring in the institutions of London among the various sanitary districts in which the patients had previously resided. By this means alone can reliable data be secured upon which to calculate correct rates of mortality.

During the fourth quarter of 1886, the births recorded in London were 32,500, equal to an annual rate of 31.4 per 1,000 of the population, estimated to be 4,149,533 persons. The London birth-rate in the corresponding period of the two preceding years, 1884 and 1885, was 33.3 and 32.8 per 1,000 respectively. The birth-rate in the various sanitary districts showed the usual wide variations, the age and sex distributions of the populations differing greatly. In Kensington, St. George Hanover Square, and St. James Westminster, where a large proportion of the population consists of unmarried persons, chiefly domestic servants, the birth-rates were exceptionally low; while in Fulham, Shoreditch, Bethnal Green, St. George Southwark, and Rotherhithe, where the population contains a large proportion of young married persons, the birth-rates showed an excess.

The 19,167 deaths registered in London during the quarter under notice were equal to an annual rate of 18.5 per 1,000 of the estimated population, which was below that recorded in the corresponding quarter of any year on record, and as much as 3.3 per 1,000 below the mean rate in the fourth quarter of the ten preceding years 1876-85. The lowest rates of mortality among the forty sanitary districts last quarter were 13.3 in Plumstead, 14.4 in Kensington, 14.5 in Lewisham, 14 7 in Hammersmith, 14.8 in St. Martin-in-the-Fields, and 15.5 in St. George Hanover Square, and St. James Westminster. The rates ranged upwards in the other districts to 25.0 in Holborn, 25.1 in St. Saviour Southwark, 25.5 in St. George-in-the-East, 25.9 in Stepney, and 27.6 in St. George Southwark. During the quarter under notice, 2,017 deaths were referred to the principal zymotic diseases in London; of these, 644 resulted from measles, 373 from diarrhœa, 310 from scarlet fever, 253 from diphtheria, 234 from different forms of "fever" (including 5 from typhus, 215 from enteric or typhoid fever, and 14 from ill-defined forms of fever), 202 from whooping-cough, and one from small-pox. These 2,017 deaths were equal to an annual rate of 2.0 per 1,000, which was slightly below that recorded in the corresponding quarter of 1885. The lowest zymotic death-rates during the quarter under notice, in the forty sanitary districts, were returned in the Strand, Woolwich, St. James Westminster, St. George Hanover Square, and Plumstead; the highest in Rotherhithe, Poplar, Mile-End Old Town, Stepney, St. George-in-the-East, and Bethnal

Analysis of the Vital and Mortal Statistics of the Sanitary Districts of the Metropolis, after complete distribution of Deaths occurring in Public Institutions, during the Fourth Quarter of 1886.

Sanitary Areas.	Estimated Population middle of 1886.	Births.	Deaths.	Annual Rate per 1,000 Living. Births.	Deaths.	Principal Zymotic Diseases.	Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric Fever.	Simple and Undefined Fever.	Diarrhœa.	Deaths of Children under one year of age to 1,000 Births.
LONDON	4,149,533	32,500	19,167	31.4	18.5	2.0	2,017	1	644	310	253	202	5	215	14	373	144
West Districts																	
Paddington	111,135	687	461	24.8	16.6	2.6	73	—	32	9	14	2	—	5	—	11	143
Kensington	186,584	997	669	21.4	14.4	0.9	40	—	13	1	8	8	—	2	—	8	156
Hammersmith	90,008	670	330	29.9	14.7	1.4	32	—	8	5	5	3	—	1	—	10	124
Fulham	56,361	650	291	46.3	20.7	2.4	34	—	2	9	6	—	—	7	—	10	149
Chelsea	97,716	811	471	33.3	19.3	1.6	39	—	7	3	8	5	—	6	1	9	152
St George, Hanover Square	88,176	424	340	19.3	15.5	0.8	17	—	6	1	5	—	—	2	—	3	116
Westminster	56,484	458	254	32.6	18.1	1.4	20	—	2	6	2	4	—	3	—	3	131
St. James, Westminster	28,174	136	109	18.0	15.5	0.6	4	—	—	2	2	—	—	—	—	—	132
North Districts																	
Marylebone	150,884	1,091	677	29.0	18.0	1.5	55	—	16	8	5	9	—	4	—	13	137
Hampstead	53,758	342	214	25.5	16.0	1.3	17	—	3	2	4	4	—	2	—	2	129
St. Pancras	241,557	1,849	1,141	30.7	19.0	1.8	109	—	33	15	8	32	—	14	1	16	137
Islington	319,824	2,394	1,244	30.1	15.6	1.3	103	—	5	18	22	14	1	20	1	22	126
Hackney	224,768	1,668	950	29.8	17.0	2.7	154	1	51	42	21	5	—	19	2	13	141
Central Districts																	
St. Giles	41,348	299	250	29.0	24.3	3.0	31	—	9	3	3	5	—	5	—	6	110
St. Martin-in-the-Fields	15,721	83	58	21.2	14.8	1.8	7	—	3	—	—	2	—	—	—	2	84
Strand	30,114	174	140	23.2	18.7	0.4	3	—	—	1	—	—	—	2	—	—	184
Holborn	31,625	220	197	27.9	25.0	2.0	16	—	3	2	1	3	—	1	1	5	205
Clerkenwell	69,172	581	361	33.7	20.9	1.8	31	—	7	6	6	2	—	3	—	7	151
St. Luke's	52,000	459	265	35.4	20.4	1.5	20	—	3	1	8	1	—	—	—	7	139
London City	41,655	215	248	20.7	23.9	1.4	15	—	6	1	5	1	—	3	—	1	209
East Districts																	
Shoreditch	125,508	1,147	648	36.7	20.7	2.1	65	—	14	19	6	2	1	8	1	14	146
Bethnal Green	129,895	1,251	788	38.7	24.3	4.3	139	—	70	21	12	4	1	14	—	17	172
Whitechapel	68,345	591	413	34.7	24.3	2.5	43	—	23	6	7	—	—	2	—	5	186
St. George-in-the-East	46,403	408	295	35.3	25.5	4.0	46	—	19	6	1	4	—	2	—	14	167
Stepney	58,630	506	378	34.6	25.9	4.0	58	—	16	9	1	13	—	11	—	8	182
Mile End Old Town	111,607	973	563	35.0	20.2	3.6	99	—	47	17	5	8	—	9	—	13	121
Poplar	173,343	1,552	922	34.9	20.7	3.4	153	—	101	12	7	5	—	10	1	17	151
South Districts																	
St. Saviour, Southwark	27,525	234	172	34.1	25.1	1.7	12	—	—	4	5	—	—	1	—	2	184
St. George, Southwark	59,329	557	408	37.7	27.6	2.2	32	—	9	9	3	22	1	1	—	11	196
Newington	117,870	1,026	583	34.9	19.8	1.8	53	—	18	11	5	8	—	5	—	6	149
St. Olave, Southwark	10,502	91	57	34.8	21.8	1.5	14	—	1	1	1	—	—	—	—	1	176
Bermondsey	88,770	796	468	36.0	21.2	2.7	60	—	28	6	9	3	1	—	—	13	157
Rotherhithe	40,958	301	236	38.3	23.1	3.2	33	—	21	2	—	1	—	3	—	6	166
Lambeth	276,731	2,169	1,203	31.5	17.4	2.0	135	—	31	22	23	16	—	15	5	25	131
Wandsworth	265,826	2,119	1,057	32.0	16.0	1.6	109	—	13	16	13	20	—	16	—	12	153
Camberwell	236,001	1,846	961	31.4	16.4	1.1	66	—	5	10	8	6	—	11	1	25	145
Greenwich	148,545	1,244	697	33.6	18.8	1.4	52	—	18	4	11	8	—	4	1	9	124
Lewisham	56,080	417	203	29.8	14.5	1.4	19	—	—	2	4	2	—	1	—	10	194
Woolwich	36,871	329	181	35.8	19.7	0.4	4	—	1	—	—	—	—	1	—	2	149
Plumstead	78,730	645	261	32.9	13.3	0.8	15	—	—	1	1	1	—	2	1	9	118

Green. Compared with the preceding quarter, the fatality of whooping-cough showed a decline, while that of each of the other zymotic diseases showed an increase. Only one death was referred to small-pox in the metropolis during the last three months of 1886, against 8, 9, and 2 in the first three quarters of that year; this fatal case belonged to Hackney, and was recorded in the Metropolitan Asylum Hospital at Deptford. Measles showed increased prevalence during the quarter under notice, and was proportionally most fatal in Paddington, Bermondsey, Rotherhithe, and in most of the East districts. Scarlet fever showed the highest proportional fatality in Shoreditch, Mile-End Old Town, Hackney, and Bethnal Green; diphtheria in Bethnal Green and Paddington; whooping-cough in Wandsworth and Stepney; and enteric fever in Hackney, Bethnal Green, Fulham, and Stepney.

Infant mortality in London last quarter, measured by the proportion of deaths under one year of age to registered births, averaged 144 per 1,000, against 136 and 135 in the corresponding periods of 1884 and 1885. Among the various sanitary districts, the rates of infant mortality were lowest in St. Martin-in-the-Fields, Lewisham, St. Giles, St. George Hanover Square, and Plumstead; while they showed the greatest excess in St. Saviour Southwark, Whitechapel, St. George Southwark, Holborn, and London City.

HEALTH OF ENGLISH TOWNS.

During the week ending Saturday, January 29th, 5,933 births and 3,734 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons. The annual rate of mortality, which in the three preceding weeks had declined from 26.5 to 22.8 per 1,000, further fell during the week under notice to 21.1. The rates in the several towns, ranged in order from the lowest, were as follow:—Derby, 11.1; Birkenhead, 13.9; Salford, 16.2; Wolverhampton, 17.4; Brighton, 17.7; Bolton, 19.0; Hull, 19.1; Leicester, 19.3; Sheffield, 19.6; London, 19.6; Bradford, 19.8; Nottingham, 19.8; Birmingham, 20.1; Huddersfield, 21.4; Sunderland, 22.1; Oldham, 22.2; Portsmouth, 22.7; Leeds, 23.1; Halifax, 23.1; Preston, 23.5; Norwich, 24.2; Plymouth, 24.4; Newcastle-upon-Tyne, 25.9; Cardiff, 25.9; Liverpool, 26.1; Blackburn, 26.4; Manchester, 27.9; and the highest rate during the week, 30.6, in Bristol. The death-rate in the twenty-seven provincial towns averaged 22.3 per 1,000, and exceeded by as much as 2.7 the rate recorded in London, which, as before stated, was only 19.6 per 1,000. The 3,734 deaths registered in the twenty-eight towns during the week under notice included 371 which were referred to the principal zymotic diseases, against 485 and 392 in the two preceding weeks; of these, 130 resulted from measles, 76 from whooping-cough, 54 from scarlet fever, 41 from diarrhœa, 37 from "fever" (principally enteric), 33 from diphtheria, and not one from small-pox. These 371 deaths were equal to an annual rate of 2.1 per 1,000. The zymotic rate in London during the week under notice was equal to 1.9 per 1,000, while in the twenty-seven provincial towns it averaged 2.3, and ranged from 0.0 and 0.4 in Derby and Brighton, to 3.6 in Preston, 4.2 in Leeds, and 5.2 in Huddersfield. The deaths referred to measles, which had declined in the three preceding weeks from 235 to 146, further fell during the week under notice to 130, and were proportionately most numerous in Hull, Bristol, Leeds, and Huddersfield. The 76 fatal cases of whooping-cough also showed a further decline from recent weekly numbers, and caused the highest death-rates in Preston, Huddersfield, and Halifax. The deaths from scarlet fever, which had been 82 and 62 in the two preceding weeks, further fell during the week under notice to 54; this disease showed the largest proportional fatality in Preston, Sheffield, and Salford. The 41 fatal cases of diarrhœa showed a slight increase upon the numbers returned in recent weeks. The deaths referred to different forms of fever, which had been 48 and 33 in the two previous weeks, rose again to 37 last week. The 33 fatal cases of diphtheria showed an increase of 10 upon the number in the preceding week, and exceeded those recorded in any recent week; 22 occurred in London, and 3 in Manchester. No death from small-pox occurred during the week under notice, either in London or in any of the twenty-seven provincial towns; and only one small-pox patient was under treatment in the Metropolitan Asylum Hospitals on Saturday, January 29th. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 5.3 per 1,000, and was considerably below the average. The causes of 90, or 2.4 per cent. of the 3,734 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

In the eight principal Scotch towns, having an estimated population of 1,299,000 persons, 848 births and 616 deaths were registered during the week ending Saturday, January 29th. The annual rate of mortality, which had declined from 29.9 to 23.7 per 1,000 in the three preceding weeks, rose again during the week under notice to 24.7, and exceeded by 3.6 per 1,000 the mean rate for the same period in the twenty-eight large English towns. The 616 deaths registered during the week in these Scotch towns included 19 which were referred to whooping-cough, 18 to measles, 15 to scarlet fever, 10 to diarrhœa, 7 to diphtheria, 6 to fever, and not one to small-pox: in all, 75 deaths resulted from these principal zymotic diseases, against 71 and 64 in the two preceding weeks. These 75 deaths were equal to an annual rate of 3.0 per 1,000, which exceeded by 0.9 the mean rate during the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns during the week under notice were recorded in Dundee, Paisley, and Glasgow. The deaths referred to whooping-cough, which had declined in the three preceding weeks from 27 to 20, further fell during the week under notice to 19, of which 16 occurred in Glasgow. The 18 fatal cases of measles showed a marked increase upon recent weekly numbers, and included 15 in Glasgow. The deaths referred to scarlet fever, which had been 13 and 16 in the two previous weeks, were 15 during the week under notice, of which 12 occurred in Glasgow, and 3 in Dundee. The 10 fatal cases of diarrhœa differed but slightly from recent weekly numbers. The deaths from diphtheria, which had been 5 and 8 in the two preceding weeks, were 7 during the week under notice, and included 5 in Glasgow and 2 in Edinburgh. The 6 fatal cases of fever exceeded by 1 the number in the previous week, and included 3 in Glasgow. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 6.4 per 1,000, against 5.3 in London. As many as 80, or nearly 13 per cent., of the 616 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending January 29th, that the annual death-rate recently averaged 31.8 per 1,000 in the three principal Indian cities; it was 21.6 in Bombay, 36.7 in Calcutta, and 40.1 in Madras. Cholera caused 63 deaths in Calcutta in the week ending December 18th, against 117, 107, and 94 in the three preceding weeks; "fever" mortality showed a considerably larger excess in Calcutta and Madras than in Bombay. According to the most recently received weekly returns, the annual death-rate averaged 27.4 per 1,000 persons estimated to be living in twenty of the largest European cities, and exceeded by 6.3 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 29.1, and showed a decline from the still higher rate in the previous week; the 518 deaths included 12 from diphtheria, and 10 from scarlet fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 21.3, and ranged from 15.5 in Stockholm to 23.0 in Christiania, and 24.7 in Copenhagen; diphtheria and croup caused 13 deaths in Copenhagen, 12 in Christiania, and 3 in Stockholm; 6 fatal cases of whooping-cough occurred in Copenhagen, and 6 of scarlet fever in Christiania. In Paris, the death-rate was equal to 26.1, and showed an increase upon the rate in the previous week, exceeding by 4.3 the rate for the corresponding week in London; the deaths included 37 from measles, 29 from typhoid fever, and 23 from diphtheria and croup. The 193 deaths in Brussels, of which 9 resulted from diphtheria and croup, gave a rate of 23.3. No returns from Geneva have been received since the beginning of this year. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 25.6, the several rates ranging from 23.9 in the Hague to 27.3 in Rotterdam; "fever" caused 2 deaths in Amsterdam, and scarlet fever 3 in Rotterdam; while whooping-cough showed prevalence in each of these three cities. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 28.9, and ranged from 19.9 and 23.0 in Munich and Berlin to 35.5 in Buda-Pesth, and 37.5 in Trieste. Small-pox caused 29 deaths in Buda-Pesth, 4 in Vienna, and 2 in Prague; diphtheria and croup showed the largest excess of mortality in Hamburg, Dresden, Buda-Pesth, and Prague; and 27 deaths from "fever" were recorded in Hamburg. The death-rate was equal to 33.2 in Rome (in the week ending December 11th), and 34.0 in Venice in the first week of January; the deaths in Rome included 26 from small-pox and 8 from typhoid fever, and 9 deaths from small-pox were recorded in Venice. In Cairo and Alexandria the death-rate was 45.9 and 34.9 respectively; diarrhœal diseases caused 107 deaths in Cairo and 35 in Alexandria; 17 deaths from typhoid fever occurred in Cairo, and in Alexandria the deaths included 6 from whooping-cough and 2 from small-pox. In four of the largest American cities the recorded death-rate averaged 25.0, and ranged from 19.6 in Baltimore to 29.5 in New York. Diphtheria and croup showed considerable mortality in each of these American cities; measles caused 61 deaths in New York, small-pox 4 in Brooklyn, and typhoid fever 11 in Philadelphia.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Derby.—In Dr. Iliffe's report for the year 1885 there is matter for congratulation as well as for serious consideration. There were 1,620 deaths registered during the year, making a death-rate of 18 per 1,000, as against 18.3 per 1,000 in 1884. The deaths from zymotic diseases amounted to 132, being at the rate of 1.4 per 1,000. There were 423 deaths of children under one year of age, making the infant mortality, as measured by the proportion of deaths to registered births, 13.8 per cent. These figures show that, while the general and zymotic death-rates are the lowest yet recorded for Derby, the infant mortality has not diminished; and that, however much Derby has to congratulate itself on its lessened death-rate by means of proper sanitary provisions, there are yet considerable improvements to be carried out, and several deleterious agencies to be removed, before the borough can abate its sanitary activity. The number of deaths from zymotic diseases was 132, 43 of which were from diarrhœa, 41 from whooping-cough, and 27 from measles. Only one case of diphtheria was reported during the year. The question of building a permanent infectious hospital has been much discussed, but apparent without any practical result.

Hanley.—Dr. Swift Walker sends a thoroughly straightforward report of the vital statistics of this borough for the year 1885. He duly considers the age-incidence of the mortality, as well as the causes to which the deaths were referred. The number recorded for the year was 1,002, a decline on former years, and was equal to 19.1 per 1,000. Of these 380, or 37.9 per cent., were infants under one year, making it evident that a very marked excess of infant mortality still prevails in Hanley. Zymotic diseases caused 143 deaths, or a rate of 2.7 per 1,000. A fatal case of small-pox was recorded, but, considering the severe epidemic that prevailed all over the district, Dr. Walker considers that the borough escaped very easily. Nineteen cases were reported, many having been imported from neighbouring districts, probably through relatives visiting persons suffering from the disease. It is stated that great success attended the voluntary notification of zymotic diseases, and by this means no fewer that 90 cases were visited, disinfectants supplied, and instructions given to prevent the spread of contagion.

SCARBOROUGH.—In no year previous to 1885 has Dr. J. W. Taylor been able to present so favourable a report under the heading of zymotic diseases. Only one death was recorded from enteric fever; and, as that is above all others the disease which depends on defective sanitary arrangements, Dr. Taylor may well be congratulated on the low death-rate from this cause. The impression is by no means given by his report, however, that he is satisfied with the state of the town. Not only was there a diminution in the total number of deaths, compared with 1884, but also a very decided decrease in the deaths of infants, especially in the third or summer quarter. Dr. Taylor is, of course, not indifferent to the effect of a low death-rate in increasing the attractions of a popular health-resort like Scarborough, but he judiciously avoids undue enthusiasm in the matter. This moderation is the more commendable in view of the favourable criticisms of the Local Government Board inspector after an official visit. Calculating upon the permanent population alone, and excluding the deaths of visitors, the rate was 16.6 per 1,000 for all causes, and 0.7 for zymotic diseases. Dr. Taylor gives a summary of the weather during the year, and completes his report with a reprint of the table of precautions issued by the sanitary authority in respect of scarlet fever.

MIDDLESEX AND HERTFORDSHIRE COMBINED.—Dr. C. E. Saunders prefaces his report for 1885 with an admirable summary of his experiences of the decennial period of 1876-1885. He shows that the saving of human life in these districts alone has been at the rate of 180 lives annually, the death-rate having been reduced from 18.6 per 1,000 in 1876 to 16.4 in 1885. Zymotic diseases have always been the first point of attack. Dr. Saunders thinks it would be difficult to over-estimate the value of work done in this direction, or the necessity of still further exertions. He also urges the importance of combatting other causes of preventable disease, and enters at some length into the question of the housing of the working classes. The reports from the various districts testify to much good and systematic work. Dr. Saunders is fortunate in gaining an appreciation of his services on the part of the public, who manifest an increasing interest in sanitary work. Zymotic sickness was mostly prevalent in mild form, the death-rate for these diseases being only 1.1 per 1,000. An outbreak of small-pox at Pinner deserves notice. The first case occurred in a beer-shop, and was removed to Highgate Hospital. The keeper of the house took the disease; he declined to be moved, and the house remained open for purposes of trade. Three other cases subsequently occurred, one of which terminated fatally. Dr. Saunders thinks that some powers are needed to close a house of public resort under such circumstances. These cases happened soon after the new railway station was opened, and very shortly afterwards scarlet fever broke out in the same neighbourhood. Bringing secluded villages—such as Pinner used to be—into more direct communication with other places, is not, in Dr. Saunders's opinion, an unmixed good, and he says that Bank holidays almost invariably bring some infectious disease into one or other of his districts.

BARNSLEY URBAN AND RURAL DISTRICT.—During the past year, Dr. M. T. Sadler has made serious efforts to deal systematically with infectious diseases, with a view of checking their spread. He reports that the rural district has no means of obtaining information respecting the existence of non-fatal cases of infectious diseases, beyond that which can be afforded by the school attendance officer. In the borough, since the close of 1884, the Council offer a small fee for every certificate by a medical man of such cases. By this means information was obtained of 4 cases of small-pox, 18 of enteric fever, 94 of scarlatina, 2 of diphtheria, and 108 of measels. In the case of small-pox, the notices received were of the greatest value. All occurred between May 8th and June 1st, and were traced to one large lodging-house. The patients were removed to the fever ward, the guests at the lodging-house carefully watched, and the spread of the disease entirely prevented. Scarlatina was so widely prevalent when notices were first received,—the very serious epidemic of 1884 having only slightly abated,—that no very effective action was possible. Dr. Sadler is of opinion that measles is so infectious, even before the eruption makes it certain what it is, that it is a matter for consideration whether it is advisable any longer to ask for medical report of this complaint. The comparative coolness of the summer and autumn had a favourable effect on the public health, by causing an important diminution in the number and severity of the cases of diarrhœa. There were 25 fatal cases of this disease in the borough against 60 in 1884, and 11 in the rural district. Scattered cases of enteric fever cropped up about the district, but they were not traceable to any common cause, except that in Cudworth the defective water supply was probably in some degree to blame. The death-rate for Barnsley was 21.9 per 1,000, which, though in excess of England and Wales generally, is lower than that of the two preceding years. The zymotic rate also shows a decrease, the deaths numbering 117, or 90 less than in 1884, and yielding a death-rate of 3.77. The mortality statistics of the rural district are equally favourable, the rate of 17.8 per 1,000 being lower than any since 1881. Dr. Sadler has everything to encourage him in the work, as the Urban Sanitary Authority is by no means indifferent to improvements, and since 1860 it has spent on sanitary matters alone upwards of £220,000.

CHOLERA IN BOSNIA.

CHOLERA seems to have disappeared from Mediterranean ports and places that are in communication with our own shores, but the disease still lingers in Northern Bosnia and along the valley of the Save. Several cases have occurred in villages in that locality during the past six weeks, but it is to be hoped that before the hot season sets in, with its tendency to increase existing insanitary conditions, the disease will have been stamped out of the neighbourhood.

MEASLES AT NEWFOUNDLAND.

IT is reported that an outbreak of a peculiarly virulent form of measles has occurred among the inhabitants of Saint Pierre and Miquelon, a couple of twin islands about ninety miles in extent, situated off the Newfoundland coast. One thousand children out of a total population of 5,700 have suffered from the disease, and several deaths occur daily, either from its immediate effect or from secondary complications. Between December 23rd, 1886, and January 14th, 1887, thirty-two children had died. The three naval surgeons who are acting there in the emergency are being very hardly pressed; they are obliged day and night to visit some 250 patients in the wind, snow, and sleet. Sometimes in the same day the temperature falls from 35 or 36 degrees to 5 or 6 degrees.

THE ASYLUMS BOARD AND ITS MEDICAL OFFICERS.

AT the last meeting of the Metropolitan Asylums Board, the Rev. Darby Reade, as Chairman of the Hospital Ships Committee, presented a report on a reference respecting the retention of the services of both the superintendent and assistant medical officers of the ships (Drs. Birdwood and Childe), in face of the fact that there is no small-pox in the metropolis. The Committee expressed an opinion that it was absolutely necessary that the services of a medical man, specially experienced in the treatment of small-pox and of proved administrative ability, should be retained at the Hospital-Ships, but that the services of the assistant medical officer might be dispensed with. After some discussion, Sir E. H. Currie gave notice that he would move, at the next meeting, the dismissal of the junior superintendent of the three engaged at the three establishments now virtually empty —Hampstead, Stockwell, and the Hospital-Ships.

ASSOCIATION OF PUBLIC SANITARY INSPECTORS.

THE annual banquet of the Association of Public Sanitary Inspectors, which will take the form of a "Jubilee celebration," will be held at the Guildhall Tavern on February 5th, on which occasion its venerable president, Mr. Edwin Chadwick, C.B., will be supported by, among others, Earl Fortescue, Major-General Sir Andrew Clarke, G.C.M.G., C.B.; Sir W. Guyer Hunter, K.C.M.G., M.P.; Sir Robert Rawlinson, C.B.; Sir Saul Samuel, K.C.M.G.; Captain Douglas Galton, C.B., D.C.L.; Mr. W. E. H. Lecky; Dr. Robert Giffen; Dr. B. W. Richardson, F.R.S.; Dr. Alfred Carpenter; Dr. F. J. Mouat; and Mr. George Godwin, F.R.S.

GOVERNMENT MEDICAL APPOINTMENTS.

A MEMBER asks for information as to what public appointments in the Government service are open to medical men—of course army and navy excepted—and how they are obtained. He refers to appointments of inspectors of vaccination, and Poor-law inspectors, and asks for any information about these as to vacancies, and where application is made for them.

*** This question has often been answered in the columns of the JOURNAL. The principal medical appointments of the kind mentioned by our correspondent are the medical inspectorships of the Local Government Board. These are absolutely in the gift of the President of the Board for the time being, and have latterly been conferred upon the medical officers of health of local sanitary authorities. There are only a few of these appointments, and vacancies seldom occur.

T. A. C.—Assuming that the children vaccinated are not further distant than two miles from a public vaccination-station, the Local Government Board would disapprove this procedure; no grant would be given to the vaccinator, and, if the facts were reported to the Board, a communication would be addressed to the Guardians protesting against the vaccinator's action.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—January 27th, 1887. Admitted Members.

G. A. Maconachie, M.D. Abe d., 27, Granville Park, S.E.; J. A. Marston, M.D. St. Andrews, 56, Nevern Square, S.W.; J. Reid, M.D. Aberdeen, Windsor Castle; F. J. Smith, M.B. Oxon., 7, West Street, Finsbury, E.C.

Admitted Licentiates.

A. G. Andrews, Poplar Hospital, East India Road, E.; J. D. C. Ballance, 56, Harley Street, W.; C. Barlow, 3, Aspinall Street, Prescot; G. A. Barr, Newport, Isle of Wight; E. A. Barton, University Hospital, W.C.; G. de V. Belson, 6, Albion Street, Hyde Park, W.; A. P. Blenkinsop, 39, Hilldrop Crescent, Holloway, N.; R. A. Bostock, South Camp, Aldershot; F. Boxall, 19, Oakley Square, N.W.; H. K. Bradbury, 9, Hill's Place, Regent Circus, W.; F. C. Brodie, Middlesex Hospital, W.; E. G. Browne, 24, Bernard Street, Russell Square, W. C.; H. T. Bulstrode, St. Thomas's Hospital, S.E.; H. J. Butler, New Wortley, Leeds; L. C. Calthrop, Cheal, Hornsey Lane, N.; J. T. Calvert, 37, Osborne Terrace, Clapham Road, S.W.; W. B. Calvert, 51, Sewardstone Road, Victoria Park, E.; B. Clark, London Hospital, E.; F. G. Connolly, London Hospital, E.; W. B. Cosens, 43, Philpot Street, Mile End, E.; A. H. L. Cox, 14, Milman Street, Bedford Row, W.C.; H. E. Crook, Northfleet; R. G. Cross, 29, Compton Terrace, Highbury, N.; J. W. Dalgleish, 31, West Parade, Newcastle-on-Tyne; H. A. Debenham, Stepney, E.; W. Downing, 60, Varna Road, Birmingham; C. F. Downman, Newmarket; C. Drinkwater, King's College, W.C.; H. Duncan, 8, Henrietta Street, Covent Garden, W.C.; W. R. Duncker, 79, Finsbury Park Road, N.; J. S. Edye, Army Medical Staff, Colchester; W. A. Evelyn, 16, Vincent Square, Westminster, S.W.; G. E. Fitzgerald, 9, Shrewsbury Road, Westbourne Park, W.; P. W. Fraser, 27, Gaisford Street, Kentish Town, N.W.; B. Furnivall, St. Bartholomew's Hospital, E.C.; W. R. Garrould, Willesden Park, N.W.; H. S. Hall, 61, Bradshawgate, Leigh, Lancashire; G. E. Haslip, 3, Whitehall Place, Gravesend; H. P. Helsham, 28, Charlwood Street, Pimlico, S.W.; S. F. Holloway, 5, Osman Road, W.; H. W. Husbands, 19, Wellington Park, Clifton, Bristol; T. Iredale, 7, Midland Road, Headingley, Leeds; W. C. Jarvis, 298, Southampton Street, Camberwell, S.E.; J. L. Jeaffreson, 3, Park Crescent, Stoke Newington, N.; J. G. Johnson, 108, Lansdowne Road, Clapham, S.W.; J. A. M. Joly, 4, Oppidans Road, Primrose Hill, N.W.; J. O. Jones, 12, Cambridge Terrace, Islington, N.; F. P. Kitson, 13, Maitland Park Villas, Haverstock Hill, N.W.; F. H. Knaggs, 111, Disraeli Road, Putney, S.W.; W. Lansdale, 64, Chelsham Road, Clapham, S.W.; W. A. Loxton, 46, Bath Row, Birmingham; W. H. McKague, 50, Burton Crescent, W.C.; G. McShane, 2, Shaftesbury Road, Southsea; H. E. Mann, 59, West Cromwell Road, Kensington, S.W.; F. G. S. G. Martin, 105, Haverstock Hill, N.W.; M. Maxwell, 9, Hunter Street, Brunswick Square, W.C.; F. R. Miller, 44, Frederick Street, Gray's Inn Road, W.C.; J. Moore, 11, Gotha Street, Victoria Park Road, E.; G. F. E. Morgan, 73, Southwark Bridge Road, S.E.; W. V. Morgan, Glen Marteg, Streatham Park, S.W.; W. T. Mould, 44, Fairholme Road, Kensington, S.W.; M. C. Moxham, 1, Crescent Street, Thornhill Square, N.; J. E. Nihill, Newcastle-on-Tyne; G. W. Ord, Streatham Hill, S.W.; G. A. Pedley, 9, Terrace, Camberwell, S.E.; H. S. Peeke, 102, Sinclair Road, Kensington, W.; W. H. Pepler, 1, Redburn Street, Chelsea, S.W.; C. L. Pinniger, 6, Blessington Road, Lee, S.E.; E. E. Powell, Stoke Road, Guildford; C. T. Quiller, 19, Orlando Road, Clapham, S.W.; W. J. Roalfe-Cox, Hermitage, Streatham, S.W.; A. Rosenau, Bath, Kissengen, Germany; J. S. W. E. Sharman, 3, Oak Villas, Norwood, S.E.; H. Stott, 1, Carlton Villas, Colney Hatch, N.; P. C. H. Strickland, 5, Montague Street, Russell Square, W.C.; E. H. Thane, 15, Montague Street, Russell Square, W.C.; S. R. Thompson, Glenmore House, Dulwich, S.E.; C. Trow, 21, Endsleigh Street, Tavistock Square, W.C.; E. R. Tweed, 14, Upper Brook Street, Grosvenor Square, W.; A. E. Vidler, 13, Clapton Square, E.; G. Wale, West Kent Hospital, Maidstone; A. W. H. Walker, Hampden Club, St. Pancras, N.W.; R. J. Wheeler, 21, Abingdon Villas, Kensington, W.; R. H. W. Wilbe, 21, Finchley Road, N.W.; W. Wilson, Hollies, Cleveland Road, Wanstead, E; J. Wreford, 260, Clapham Road, S.W.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the necessary examinations for the Diploma were admitted Members of the College at a meeting of the Court of Examiners, on January 26th, namely:

Messrs. H. W. Husbands, L.R.C.P.Lond., 19, Wellington Park, Clifton, student of Bristol Infirmary; J. Malpas, L.R.C.P.Lond., H.M. Dockyard, Pembroke Dock; F. G. S. G. Martin, L.R.C.P.Lond., 105, Haverstock Hill, N.W.; A. P. de Carvalho, L.S.A., Ludlington Place, N.W.; E. A. Barton, L.R.C.P.Lond., 8, Lexham Gardens, W., of University College; G. A. Barr, L.R.C.P.Lond., 10, Milner Street, Cadogan Square, of St. George's Hospital; G. E. Haslip, L.R.C.P.Lond., 3, Whitehall Place, Gravesend; H. A. Debenham, L.R.C.P.Lond., Heath House, Stepney; W. C. Jarvis, L.S.A., 298, Southampton Street, S.E.; and Percival Smith, 87, Harley Road, N., of London Hospital; W. V. Morgan, L.R.C.P.Lond., Glan Marteg, Streatham Park, and J. Leslie Jeaffreson, L.R.C.P.Lond., 3, Park Crescent, Stoke Newington, of St. Bartholomew's Hospital; S. A. M. Copeman, M.B.Cantab., 134, York Road, S.E., of Cambridge and St. Thomas's Hospital; R. A. Bindley, 56, Highbury Hill, N., of Guy's Hospital: H. H. Norton, Biddenden, Kent, and C. C. Vacey Lyle, L.R.C.P.Lond., 45, Maryland Road, W., of St. Mary's Hospital.

Four candidates were referred for three months, and eight for six months. Four candidates were approved in Surgery, and, when qualified in Medicine and Midwifery, will be admitted Members of the College.

Admitted on January 27th.

T. Phillips, L.S.A., Newcastle Emlyn, South Wales; W. J. Gilpin, L.S.A., The Grove, Bedford; J. N. Lewis, L.S.A., Mount Pleasant, Swansea; C. C. Sen, L.R.C.P.Lond., Hanwell, N., students of University College; J. Wreford, L.R.C.P.Lond., 260, Clapham Road, S.W.; W. B. ozens, L.R.C.P.Lond., The Vicarage, Dudley; J. G. Rusher, L.S.A., Finsbury Park, and J. A. Going, L.S.A., Wanstead, of the London Hospital; T. G. Davey, L.S.A., Helsham, Cornwall, and T. Iredale, L.R.C.P.Lond., Leeds, of St. Bartholomew's Hospital; C. T. Quiller, L.R.C.P.Lond., 19, Orlando Road, Clapham Common; G. F. A. England, L.S.A., Winchester; G. W. Ord, L.R.C.P.Lond., Streatham Hill, S.W.; H. P. Hawkins, L.S.A., Vincent Square, Westminster; H. A. Sansom, L.R.C.P.Lond., 84, Harley Street, W.; W. J. R. Cox, L.R.C.P.Lond., The Hermitage, Streatham; B. de B. Carey, L.S.A., Guernsey, of St. Thomas's Hospital; A. W. H. Walker, L.R.C.P.Lond., Hampden Club, N.W., of Manchester Royal Infirmary; W. F. Pridham, L.S.A., Cromwell Crescent, S.W., of St. Mary's Hospital; A. H. Wilson, M.D., Dartmouth South, Boston, Mass., U.S.A., of Dartmouth and Harvard Universities; M. W. Oldham, L.S.A., Souham, Warwickshire, of Guy's Hospital; A. J. Macnab, L.R.C.P.Lond., Philbeach Gardens, S.W., of King's College.

Two candidates were referred for three months, three for six months, one for nine months, and one for twelve months.

Eight candidates passed in Surgery, and when qualified in Medicine and Midwifery, will be admitted Members of the College.

Admitted on January 28th.

E. E. Powell, L.R.C.P.Lond., Guildford, and H. S. Peeke, L.R.C.P.Lond., Kensington, students of St. George's Hospital; E. B. Ormerod, L.S.A., Robe Town, South Australia, and C. M. Hill, L.R.C.P.Lond., Halifax, Yorks, of St. Bartholomew's Hospital; L. Wilde, L.S.A., Watford, of Newcastle and St. Thomas's Hospital; C. P. Oliver, L.S.A., Maidstone, of Charing Cross Hospital.

Three candidates were referred for three months, eight for six months, and one for nine months.

Seven candidates passed in Surgery, and when qualified in Medicine and Midwifery, will be admitted Members of the College.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise on Thursday, January 27th.

Gilpin, William John, The Grove, Bedford.
Hawkins, Herbert Pennell, 89 Vincent Square, Westminster.
Lewis, John Nicholls, 8, Granby Street, Hampstead Road.
Ormerod, Edward Booth, 7, Lawn Terrace, Blackheath.
Prowse, John Skardon, 18 Earl Street, Cambridge.

MEDICAL VACANCIES.

The following vacancies are announced.

COUNTIES ASYLUM, Carlisle.—Junior Assistant Medical Officer. Salary, £80 per annum, with board. Applications by February 5th to Dr. Campbell, Garland's Asylum, Carlisle.

DONCASTER GENERAL INFIRMARY AND DISPENSARY.—House-Surgeon. Salary, £100 per annum, with board, etc. Applications by February 21st to W. Clark, Esq.

EYE, EAR, AND THROAT HOSPITAL FOR SHROPSHIRE AND WALES, Shrewsbury.—Surgeon. Honorarium, £150 per annum for three years. Applications by February 8th to the Secretary.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Aural Surgeon. Applications by February 9th to the Secretary.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Resident Clinical Assistants. Applications by February 19th to the Secretary.

LANCASHIRE COUNTY ASYLUM, Rainhill, near Liverpool.—Assistant Medical Officer. Salary, £100 per annum, with board, etc. Applications by February 7th to the Medical Superintendent.

LISMORE UNION.—Medical Officer, Tallow Dispensary. Salary, £117 per annum and fees. Applications to Mr. William Carey, Honorary Secretary, Square, Tallow. Election on February 7th.

LIVERPOOL INFIRMARY FOR CHILDREN.—Assistant House-Surgeon. Applications by February 8th to the Honorary Secretary.

LIVERPOOL NORTHERN HOSPITAL.—Assistant House-Surgeon. Salary, £70 per annum, with board, etc. Applications by February 7th to the Chairman of the Committee.

RATHDRUM UNION.—Medical Officer, Wicklow Dispensary. Salary, £110 per annum and fees. Applications to Mr. John Chapman, Honorary Secretary. Elections on February 5th.

ROYAL ALBERT HOSPITAL, Devonport.—Honorary Surgeon. Applications by February 18th to the Chairman of the Selection Committee.

ROYAL BERKS HOSPITAL, Reading.—Assistant House-Surgeon. Board and lodging. Applications by February 8th to the Secretary.

ROYAL PIMLICO DISPENSARY.—Attending Medical Officer. Applications by February 7th to the Secretary, 104, Buckingham Palace Road, S.W.

ST. BARTHOLOMEW'S HOSPITAL.—Assistant Physician. Applications by February 8th to W. H. Cross, Esq.

TUNBRIDGE WELLS GENERAL HOSPITAL.—Resident House-Surgeon and Secretary. Salary, £100 per annum, with board, etc. Applications by February 16th to the Secretary.

WORCESTER GENERAL INFIRMARY.—House-Surgeon. Salary, £100 per annum, with board and residence. Applications by February 7th to the Secretary.

MEDICAL APPOINTMENTS.

BARRON, Hunter, M.D., C.M., M.R.C.S., L.R.C.P., appointed Medical Officer to Christ's College, and the Convent of the Good Shepherd, Finchley, N., *vice* W. Phelps, M.R.C.S., resigned.

BICKERTON, T. H., M.R.C.S., appointed Ophthalmic Surgeon to the Liverpool Royal Infirmary.

COOMBE, Robert Gorton, jun., M.R.C.S., L.R.C.P.Ed., L.S.A., appointed Medical Officer, Public Vaccinator, and Registrar of Births and Deaths to the Southminster District of Maldon Union, *vice* Arthur Latty, L.R.C.P.L., M.R.C.S., resigned.

EARLE, P. M., L.R.C.P., L.R.C.S., appointed Surgeon to the Retford Dispensary, *vice* V. O. Taylor, L.R.C.P., L.R.C.S., resigned.

KELLY, T. W., M.R.C.S., appointed Resident Clinical Assistant to the City of London Hospital for Diseases of the Chest.

MURRAY, J., M.B., B.Ch., appointed Junior House-Surgeon to the London Temperance Hotel, *vice* A. Primrose, M.B., C.M., resigned.

O'DONOHOE, F. G., L.R.C.S.Irel., appointed Medical Officer of Castle Plunket Dispensary, in the Castlerea Union, *vice* M. O'Donohoe, L.K.Q.C.P.Irel., resigned.

RITSON, R., M.A., M.R.C.S., appointed House-Surgeon to the Seamen's Hospital, Greenwich, *vice* C. S. Spong, B.Sc.Lond., resigned.

THOMAS, B. Wilfred, M.R.C.S., L.R.C.P.Lond., appointed Surgical Registrar and Anæsthetist to the Royal Orthopædic Hospital, *vice* Henry F. Baker, F.R.C.S., resigned.

MCKENNA, T., L.F.P.S.G., L.R.C.P.Edin., appointed Medical Officer to the Athy Union, *vice* A. Hobson, M.D., resigned.

KEMBLE, Arthur C., L.R.C.P., L.R.C.S., L.M.Edin., appointed Surgeon to the Roman Gravels and Wotherton Lead Mines, *vice* T. L. Macartney, L.R.C.P., L.R.C.S., L.M.Edin., resigned.

KEMBLE, Arthur C., L.R.C.P., L.R.C.S., L.M.Edin., appointed Medical Officer and Public Vaccinator to the Northern District of the Forden Union, Shropshire, *vice* T. L. Macartney, L.R.C.P., L.R.C.S., L.M.Edin., resigned.

RYLE, R. J., M.A., M.B., M.R.C.S., appointed Honorary Physician to the St. Pancras and Northern Dispensary, *vice* E. J. Edwardes, M.D., resigned.

SHAW, Lauriston E., M.D., M.R.C.P., appointed Medical Registrar and Demonstrator of Practical Medicine to Guy's Hospital.

WOODHEAD, G. Sims, M.D., appointed Examiner in Pathology to the University of Edinburgh, *vice* Sidney Coupland, M.D., resigned.

WE are informed that the Council of the Sanitary Institute, at a recent meeting, discussed the Bill for the sanitary inspection of houses drafted by Mr. M. H. Judge, and passed a resolution to the effect that, in the opinion of the Council, the measure was impracticable.

MEDICAL SCHOOL IN DUNDEE.—Principal Paterson, of the Dundee University College, has announced the receipt of a donation of £6,000 towards the fund for establishing a medical school in Dundee. A donation of £12,000 was lately made by Mr. Thomas Cox to found a Chair of Anatomy, so that a sum of £18,000 is now in hand. An appeal is to be made for further subscriptions.

THE DANGERS OF FOOTBALL.—Another death from injuries received in a football match is reported; a boy aged nine, whilst at play at Irvine, received a kick on the loin which resulted in inflammation of the bowels, to which he succumbed after remaining in an unconscious condition for several days.

FOOD EXHIBITIONS.—The necessary capital of 100,000fl. for the International Food Exhibition at Amsterdam has been subscribed. The buildings will cover an area of 6,500 square mètres. An International Exhibition of Popular Food and Cookery will be opened at the end of the present month in Leipsic.

SUPPRESSION OF DRUNKENNESS IN BELGIUM.—In Belgium, most stringent measures are proposed for the suppression of public drunkenness. The Ministerial Bill provides that every person found drunk in a public place shall be punished by fine and imprisonment; that the same punishment is to be inflicted on every publican convicted of having served drink to an intoxicated person or to children; and that debts incurred for drink taken in a public-house shall not be recoverable.

POISONING BY SEWER-GAS.—Mr. Sheriff Lees, of Glasgow, recently had before him a case in which a tenant, who had occupied a house for two or three years, experienced and repeatedly complained of offensive smells. Only slight repairs were made, which did not improve matters. No steps were taken to ascertain the condition of the drains. The tenant became seriously ill in December, 1885, when it was discovered that she was suffering from a form of blood-poisoning which is often caused by sewer-gas. The Sanitary Officer found that there was a defect in one of the soil-pipes within the tenement. The tenant raised an action of damages against the landlord, in which Mr. Sheriff Lees held her entitled to the full sum claimed in name of damages, with expenses; but, as she had not removed her furniture till the term, he found her liable for the half-year's rent.

CREMATION IN RUSSIA.—ON December 26th, in the neighbourhood of the small town of Vetlianka, on the right bank of the Volga, the body of the deceased Lama of the Calmuck people was cremated. For seven days, the body of the Lama, seated in an iron arm-chair, was exposed in the Khouroul to the gaze of his followers. It was then placed on a sort of esplanade, and what may be called a brick oven was constructed around the deceased. This was filled with combustibles, which were ignited to the strains of Calmuck music, and the cremation was completed in the presence of a large audience, many of whom were Russians. The late Lama was exceedingly popular, and he is the last of his rank, as the Russian Government has decided to suppress this priestly office.

ST. JOHN AMBULANCE ASSOCIATION.—The final reports of the work done at the two ambulance stations which were established by the St. John Ambulance Association at the Colonial and Indian Exhibition and the Liverpool International Exhibition respectively, show that at the former 701 persons suffering from accident or sudden illness were treated, of whom 41 were removed to their own homes or to hospitals, and at Liverpool 248 persons received aid, of whom 11 were taken to hospitals. Mr. H. P. Potter, F.R.C.S., acted as honorary surgeon at the Colonial and Indian Exhibition, and Mr. F. T. Paul, F.R.C.S., occupied a similar position at the Liverpool Exhibition, whilst Mr. J. Furley was the honorary manager and director.

LANOLINE IN ECZEMA.—Professor Widerhofer gives the following method of treatment as excellent for eczema: "Let the seat of the affection be rubbed with soap and wet flannel till a lather is produced, then wiped dry, then wrapped round night and morning with linen thickly smeared with lanoline having 5 per cent. of bismuth subnitrate added. Lanoline salve is readily tolerated by the skin (in the case of little children especially), on account of its forming very heavy fatty acids; whilst other fats (and vaseline) form very light fatty acids on coming in contact with the skin, and in children the skin is very sensitive to fatty acids."

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—MEDICAL SOCIETY OF LONDON. Mr. Lennox Browne: Excision of half the Larynx. Mr. Stephen Paget: Cases of Parotitis after Abdominal Operation. Mr. Hugh Smith: Rupture of Aneurysm into Pericardial Cavity.

ODONTOLOGICAL SOCIETY, 8 P.M. President's Inaugural Address. Communications by Messrs. A. S. Underwood, E. S. Betts, Storer Bennett, C. D. Davis, J. Ackery, W. H. Coffin, L. Matheson, C. Robbins, and Willoughby Weiss.

TUESDAY.—ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M. Mr Cant: Clinical Observations on Induration in the Primary Lesion of Syphilis in Women (communicated by Mr. Holmes). Dr. Hebb: A Case of Actinomycosis Hominis (communicated by Dr. Sturges).

WEDNESDAY.—BRITISH GYNÆCOLOGICAL SOCIETY, 8.30 P.M. Specimens will be shown by Mr. Bland Sutton, Dr. Fancourt Barnes, and others. Dr. Charles E. Fitzgerald: On the Use and Abuse of Pessaries.

ROYAL MICROSCOPICAL SOCIETY, 8 P.M. Presidential Address, by Rev. Dr. Dallinger, F.R.S., on Recent Optical Improvements in the Microscope, and the Operation of the Darwinian Law amongst the Minutest Organisms.

EPIDEMIOLOGICAL SOCIETY OF LONDON, 8 P.M. Mr. John Moir: Statistics of Small-pox Cases in the West Ham Hospitals during the Epidemic of 1884 and 1885. Dr. John Macpherson: A Memorandum on Notices of Cholera in India before 1817.

FRIDAY.—CLINICAL SOCIETY OF LONDON, 8.30 P.M. Nephrolithotomy; discussion on papers read at the last meeting by Mr. Henry Morris, Mr. Marsh, and Mr. Bennett. Dr. Hughlings Jackson: A Case of Crural Monoplegia from Sub-cortical Disease. Dr. Carrington: A Case of Rheumatic Hyperpyrexia. Living Specimens—Dr. A. H. Robinson: A Case of Charcot's Joint Disease.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement.

MARRIAGES.

CHEYNE—SERVANTÉ.—January 29th, at Christ Church, Gipsy Hill, by the Rev. R. Allen, Vicar, assisted by the Rev. C. W. Servanté, brother of the bride, W. Watson Cheyne, M.B., F.R.C.S., of 59, Welbeck Street, W., to Mary Emma, only daughter of the late Rev. William Servanté.

POLAND—DENHAM.—At St. George's Church, Edinburgh, on January 31st, by the Rev. Archibald Scott, D.D., Minister of the parish, John Poland, F.R.C.S., of St. Thomas Street, S.E., third son of R. H. Poland, Esq., Eliot Vale, Blackheath, to Mary Roberts, youngest daughter of James Glover Denham, Esq., Castle Terrace, Edinburgh.

DEATHS.

MASSEY.—On January 29th, at Greek Street, Stockport, Thomas Massey M.R.C.S.E., aged 66 years.

MYRTLE.—On February 2nd, at 348, Oxford Road, Manchester, Andrew Scott Myrtle, jun., M.D., aged 24 years.

STARTIN.—On January 26th, at Surbiton Hill, the wife of James Startin, of 17 Sackville Street, Piccadilly, aged 37.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY ....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthal. mic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY ....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, M., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

QUERIES.

W. S. would feel obliged to any gentleman who would kindly inform him of the best and quickest way to charge glass capillary vaccine-tubes from a child's arm who has been vacciuated.

MR. J. F. HERRING (St. Mary's, Atherstone) asks if any member will oblige him with the loan of the BRITISH MEDICAL JOURNAL of February 22nd, 1879. The copy shall be promptly returned.

F. W. would be glad of any information as to the climate of Buenos Ayres, and its suitability for a consumptive patient.

MR. THOMAS HORNE (Stockton-on-Tees) writes: I want to find an interesting lecture which was reported in the BRITISH MEDICAL JOURNAL, I think some two or three years ago, dealing with "Memory," either primarily or intercurrently, and illustrating the idea that for every fresh fact stored in an already full memory, one of the old ones made way.

My memory has failed me as to the author—I had the impression it was Dr. Moxon, but my search has failed to corroborate me.

L.R.C.S.I., L.K.Q.C.P. writes: Having heard that the Local Government Board has appointed a medical instructor of vaccination in Dublin, whose certificates will be recognised by the English and Scotch Medical Examining Boards, I would be glad to know if those Irish qualified men practising in England, who hold vaccination certificates, granted after the usual course of instruction (one month) by the public vaccinators of the North and South Dublin City Dispensaries, prior to Mr. Alex. N. Montgomery's appointment, can hold English public vaccinations without undergoing a further course of instruction in one of the recognised stations in either divisions of the kingdom?

*** So far as we know, the question has not been raised before, and we would recommend our correspondent to write at once to the Local Government Board on the subject.

"SHIPS' SURGEONCIES."

"VOYAGEUR" asks for information as to the best means of obtaining a ship's surgeoncy, and also for a few details as to the life of a surgeon on board.

TREATMENT OF OBSTINATE CONSTIPATION.

O. R. T. asks for advice in the treatment of the following case: A young lady, aged 24, suffers from the most obstinate constipation, of some years' duration. He has given everything he can think of, including arsenic, belladonna, nux vomica, aloes, cascara sagrada, dieting, electricity, stimulating liniments, rubbing, etc.; but nothing seems to do any good, and she has constantly to resort to enemata.

REMOVAL OF SCALP.

DR. C. R. OWEN (Rushden) asks for suggestions as to the treatment of the following case: Elizabeth B., aged 13 years, whilst at work on October 31st, 1886, in a sewing-machine room in a steam shoe-factory, was stooping down to reach an article which had fallen under the machine. Her back hair, which was long and loose, was caught in a spindle, the revolutions being at the rate of 120 per minute. The hair was twisted rapidly around the shaft, "which was about six inches from the floor," and the head being forcibly held down, she was completely scalped.

I saw her a few minutes after the accident, and found her suffering from shock. There was very little hæmorrhage. A stimulant was administered, and she was carried home. I found the hair and skin of the head removed from above the eyebrows in front, to the occipital protuberance behind, and along a line passing on each side close above the ears. Both parietal bones were bare, the aponeurosis and most of the occipito-frontalis muscle being torn away. Warm water dressing, and afterwards a weak solution of iodine, was applied. In a few days the wound began to granulate, and looked very healthy; soon afterwards, I commenced grafting, but this was not successful, the grafts coming away with the pus during cleansing, although strapped down.

The peculiar feature of the case is that the large portions of bone exposed have desquamated, in three thin shell-like pieces; and now the whole scalp is covered with granulations. Lately I have been applying sulphate of zinc lotion, and I have begun grafting again. As this will be a long and tedious case, the granulating surface being so large, I should feel obliged if any medical man having had similar experience could suggest any further treatment.

I might add that the patient soon got over the shock, and that the temperature varied between 100° and 102° for about a week. She now gets up daily, and is gaining strength.

ANSWERS.

DRY BRACING LOCALITIES IN ENGLAND.

DR. T. BRITTON (Harrogate) writes: I am surprised to see that no one has recommended Harrogate to "Blackheathen" as a dry bracing place, suitable for such a case as he mentions. The places named are certainly dry, but not bracing; now Harrogate is both, and suits well cases coming from tropical climates.

THE PRIMARY EXAMINATION FOR THE FELLOWSHIP OF THE COLLEGE OF SURGEONS.

NEMO.—A candidate for this examination should prepare himself as much as possible in the dissecting-room, or at least in a museum where ready-made dissections are displayed. Condensed works are very unadvisable; any good manual on practical anatomy, read with a systematic work like that of Quain or Gray, will answer the purpose. Practical instruction in physiology is less easy to obtain; the handbooks of Foster, Kirkes, or Power should be read, and the candidate must acquire a little practical knowledge of histology.

THE LATE SEVERE WEATHER.

DR. J. CARRICK MURRAY writes: I will give a short summary, for the past three months of the weather in Stranraer, N.B. We had our first frost on the mornings of November 4th and 5th, then a slight snow-shower on the 17th, which melted as it fell. December 1st and 2nd, one shower of hail each day; 3rd, snow in the morning, which was gone on the morning of the 4th; 7th, hail showers; 13th to 21st, frost; on 19th, one inch of hail fell, and remained till 22nd, when rain melted it; 8 th and 31st, frost morning and night. On December 27th,

when over Britain there swept a severe and fatal snow storm, we had clear bright sunshine, with a temperature of 45° in a sunny bedroom without a fire.

January	4th, 1887	..	Snow	..	1 inch in depth.
,,	5th ,,	..	,,	..	3½ ,,
,,	6th ,,	..	,,	..	3½ ,,
,,	7th ,,	..	,,	..	4½ ,,
,,	8th ,,	..	,,	..	4 ,,
,,	9th ,,	..	,,	..	3 ,,
,,	10th ,,	..	,,	..	2½ ,,

January 11th, rain. Snow gone by 12th. On 14th, 15th, 16th, and on the 18th, we had slight degrees of frost.

Foregoing represents all our frost and snow since October 22nd till January 23rd, 1887. During these three months there have been sixty-four days on which the sun shone, forty-four are entered as bright sunshine; on November 23rd we had dense fog, and some on 25th and 27th, this from the heat of the soil. Wind was *nil*, or from north-west to south on sixty-one days. From north to south last on thirty-two days.

During the twenty-one months I have resided here it has never been wet all day, so that one could walk out a part of each day. The rainfall for last twelve months was 40 inches. Two or three burns run through the outskirts swiftly to the sea, but are covered over in the town, which is some twelve feet above high-water level. The air of Stranraer is essentially marine. The town extends in a semicircle for a mile around the south-west corner of Lock Ryan, the embankment along which makes an excellent broad walk. Beyond the town and embankment there is a seaside road and a parallel country one, each extending for miles at nearly sea-level, with walks on sand, beach, or grass.

The town of Stranraer has 6,000 inhabitants, no manufactories, and is yet unknown except to travellers passing over to Ireland; hence, although probably every tenth householder could let a room or two, the sophistication of seaside lodgings is still unknown. In three months, if acceptable, I will give another summary of the winter weather from to-day's date, in this favoured place, where the weather, according to my finding, has been even more favourable than in Devonshire. We are only tried by strong west winds, highly charged with ozone, for which we ought to be grateful.

Miss M. Barlow (Colwyn Bay) writes: In answer to the query in the Journal of January 22nd concerning the weather, I may say we, in Colwyn Bay in Wales, have had no snow since Christmas, and very little frost. During the last week it has been spring-like weather, with lovely blue sky, and sunshine has more or less prevailed all the time. There have been no fogs this year, nor indeed during the winter. The snowdrops are bursting into blossom, and a few primroses and wallflowers are to be found.

Dr. T. Clark (Minehead, Somerset) writes: Minehead has nearly escaped from both frost and snow. Snow fell on December 26th, 1886, to about an inch, but was all gone by twenty-four hours. The thermometer fell to its lowest point on the first night of this year—28° Fahr., 4° of frost. By my house, built in an exposed situation, camellias, cleanthus, eucalyptus, geraniums, and calceolarias are looking healthy and well, having had no covering or shelter. From eight to ten days, I have seen in some gardens crocuses, gentianas, violets, etc. in ful bloom.

Colleges and their Licentiates.

If the gentleman who issued the advertisement which a correspondent has sent us were a Fellow instead of a Licentiate, the College would probably consider its dignity sufficiently affected to take active steps. But apparently the Councils of the Colleges care more for the dignity of a particular class than that of the profession at large. The former they are eager to preserve by close discipline; to the latter they are singularly indifferent. Pressure from the Licentiates at large, who have their own dignity to preserve, would effect a change for the better. But not until all ranks of the Members and Licentiates are represented in the governing bodies of the Colleges are we likely to see College Councils equally alive to the duty of maintaining and preserving the dignity of all classes, and of resenting and preventing by disciplinary measures the injury done by unprofessional courses of conduct in one class as much as in another. It is sometimes maintained that the Colleges would suffer in dignity by such representation; we think the effect would be exactly opposite.

Cucaine in the Removal of Lipoma.

Mr. W. W. C. Robson, M.R.C.S.—Cucaine hydrochlorate may be used for the removal of a small fatty tumour, in the following manner. Three minims (one-eighth of a grain) of a 4 per cent. solution must be injected subcutaneously over the tumour, the needle of the syringe being in the same direction as the proposed line of incision; this must be followed by a second injection of three minims, at a point opposite to the seat of the first injection. If the anæsthesia is not complete in five to ten minutes, as tested with the point of a scalpel, another injection of three minims may be made. The time to perform the operation is ascertained by testing the sensibility with a fine point. A fourth injection may be necessary. If the tumour is pendulous, one of the injections may be made into its summit.

Cucaine hydrochlorate may be obtained pure from any large chemist, Corbyn, Stacey and Co., Savory and Moore, W. Martindale, etc. See our advertising columns.

Infectivity of Cancer.

An Anxious and Poor Household.—There is no reason to suppose that any danger attends the use of bedding, blankets, or bed-hangings previously used by a patient suffering from cancer. Woollen articles soiled by discharges may be stoved in a disinfecting oven, subsequently washed in a solution of soap, to which carbolic acid (about one ounce to a gallon) has been added, and then dried in the open air.

NOTES, LETTERS, ETC.

The Pharmacopœia of the London Lock Hospital.

Mr. Howard Mallins, assistant secretary, writes: While thanking you for your notice of our *Pharmacopœia* lately published in the Journal of January 1st, I desire to draw your attention to page 8, on which you will observe the "Pasta Ricordi," under the sub-division of "Causticæ," and to add that the only hypodermic injection used is that stated on page 19.

Erratum.—In Dr. Mapother's remarks on Otomycosis in the Journal of January 29th, p. 213, *for* "Sulphuric acid," *read* "Sulphurous acid lotion."

Unqualified Assistants.

Assistant writes: Perhaps a few words from a "Qualified Assistant" might not be without value in the present debate on assistants. I have had some years' experience in many parts of England as a qualified assistant; my experiences, perhaps, are not strange to many readers of your Journal, but I may be able to say something new.

Owing to competition from unqualified men, we suffer both in pocket and reputation—in pocket because we are forced by circumstances to accept terms totally inadequate for our services, and totally at variance with what should be expected from our expenses in obtaining qualifications. Our reputation often comes to grief through the acts of men such as the assistant who waited for help from the defunct "Denman" mentioned in the Journal of January 29th. Outsiders fail to see the difference in such cases, and apply the Virgilian motto —*Ex uno disce omnes*—to all assistants.

I lately took an assistantship in a northern town, where my predecessor was an unqualified man. He had never attended a hospital, dissecting-room, or course of lectures on any subject, but had been a chemist several years since. He was registered as a chemist, but that was all, went by the title of "Dr.," and was rather indignant if not so termed. I was told that I would be succeeded by another qualified man, as they could be had for as little money, or perhaps less money, than an unqualified man suited to the post.

Now we who have worked hard, got qualified—spending from £400 to £600 or more in so doing—and spent say four or five years of unproductive work, are no better off than men who never paid a shilling in fees. Can we be expected to tolerate such things, and look on while the Medical Council refuses to come to our help? One of two things must be done, and that soon: either abolish lectures, hospitals, etc., and establish an examining board which will not require certificates of lectures and hospital attendance, or else abolish unqualified assistants, and protect those who hold diplomas.

An association of qualified assistants might help us, if all joined it and concurred in boycotting unqualified men. We might not do much for some years, but in process of time, when some of us are principals, we will be able to stick to our traditions, and employ none but qualified men.

Could not the Journal devise a plan for the above, and help those who deserve help?

Scrutator writes: The letters that have appeared from time to time on the above subject do not deal with the great abuse the employment of unqualified assistants sometimes leads to. No reasonable person would object to their limited employment under proper control, but when a medical man places his name on a door some miles away from his home, and is represented by an unqualified "practitioner," how can any proper supervision take place? In this village, a practitioner residing four miles away carries out this "practice," and on the strength of a connection formed by a predecessor many years ago when no doctor resided here, he holds a large club, worked wholly by the said assistant, the principal's visits being only occasional. This assistant signs certificates to put members on and off their club, and even examines them on entrance to the club, and then in direct defiance of the rules of the order this is connived at by the committee, who keep to the letter of the Friendly Societies' Law, by having the regular practitioner nominally appointed to the office, and "undertaking all responsibility," or professing to do so.

One of your correspondents (January 1st) speaks of "a short way of dealing with these gentry;" but if the person alluded to had only been wary enough to write a death-certificate on plain paper, it would have been accepted by the registrar, and no one the wiser. A gipsy woman consulted me recently, and complained that she had lost a child under this assistant's care. She mentioned, however, that his employer once saw the child, without dismounting from his horse, by looking through the window of the cart in which the child lay; and that a death-certificate, regularly signed, was forthcoming afterwards.

Diagnosis of Rötheln.

Mr. Howard Orfeur (Torquay) writes: When passing through an epidemic of rötheln some years since, I observed several things which have never been mentioned when the diagnosis has been written about in the Journal. First, when there was a large surface of the body covered with the eruption, it looked rather oily; secondly, the edge appeared raised; thirdly, the trunk was generally covered with a uniform rash, beyond which appeared large spots or islands of the rash lessening towards the extremities; fourthly, considering the amount and intensity of the rash, the patient was not so ill as he would have been had it been measles or scarlet fever.

The Jubilee Memorials.

M.D. writes: Among the several plans I have seen mentioned, I have been sorry not to see one for the building and endowing a hospital or home for incurables, or one or more convalescent homes. Surely, Sir, no object could be more worthy, and none more fitting, to mark one of the brightest and best characteristics of our good and loyally loved Queen, her noble charity to, and ever heartfelt sympathy with, the sorrow and suffering of her poorest subjects.

I need not point out, in the pages of a medical journal, the crying need of such institutions. Is there a medical officer to a hospital whose heart has not again and again ached with pain when he has had to send from his care, because the bed was wanted for some more urgently acute case, some poor fellow crippled for life, or some poor creature with an ever painful incurable disease, and then to go back to a squalid home of poverty and discomfort, because there was no such home as these to receive them? I cannot but think that it only needs the aid of some such powerful pen as your own to induce the proper people to take the matter up, and carry it to a successful issue; and I believe there is not a medical man in the United Kingdom who would not give according to his means, and many who would gladly become local honorary secretary to collect funds. I will gladly do so.

Climates of Winter Health-Resorts.

Dr. Augustus H. Bampton (Plymouth) writes: Mr. C. Roberts advocated in the Journal of December 4th the record of the early appearance of plants and flowers, in order that the climates of the different health-resorts might be compared. During the week ending January 22nd I have seen primroses in bloom both at Totnes and Plymouth. Under the circumstances, a primrose is a primrose, and something more. It is a blooming "record of the current atmospheric conditions, and sums up or registers all the past meteorological and geological

conditions to which it has been exposed." In short, it indicates that, during the late winter months, the climate of South Devon has been comparatively mild and genial. *Verbum sap*, or rather, *primula sap*.

A Resuscitated "Corpse."

More than one case of premature burial is reported to have happened of late in France. A short time ago there was an instance of this in the north of France; and now it is reported that at Carpentras, in Vaucluse, an old man, whose death had been certified, was about to be transferred to his coffin, when he suddenly sprang up in his grave-clothes and asked for drink. It is stated that the man had been for twenty-four hours in a lethargic or cataleptic fit, and his friends and the local authorities concluded that he was dead. The man's resuscitation was, however, of brief duration, for it is stated he had been nearly frozen to death during his "wake," and died in real earnest shortly after having received the refreshment he demanded. Commenting on these facts, the Paris correspondent of the *Daily Telegraph*, to whom we are indebted for their recital, suggests that some of the local authorities in small French towns could not do better than go through a short course of instruction in morbid anatomy, taking the researches into the physiology of life and death of their famous Bichat as a text-book.

Examining Board in England by the Royal College of Physicians of London and the Royal College of Surgeons of England.

The following papers were set at the First Examination, Part I, held on Tuesday, January 4th, 1887.

Chemistry, including Chemical Physics.—Section I.—1. Explain what is meant by the diffusion of gases. According to what law do gases diffuse? The relative densities of marsh-gas and carbonic acid gas being eight and twenty-two, what are their respective diffusibilities? 2. What is understood by the term latent heat? A pound of ice at 0° C. is placed in a pound of boiling water, and the mean temperature of the water is found to be 10° C. What is the latent heat of water?

Section II.—3. Write a brief sketch of the properties of sulphur. How is sulphuretted hydrogen prepared, and what are its distinguishing chemical characters? Ten grammes of sulphuretted hydrogen are burnt in air. What products, and how much of each by weight, are formed? (S=32; O=16; H=1.) 4. What are the chief properties of iodine? How is it prepared from kelp? State carefully what occurs when iodide of potassium is added to solutions, respectively, of (*a*) mercuric chloride, (*b*) mercurous nitrate, (*c*) lead nitrate, (*d*) silver nitrate, and (*e*) chlorine water. Give equations. 5. Describe the oxides, chlorides, and iodides of mercury, and give their formulæ. How are the oxides prepared, and how are they acted on by dilute hydrochloric acid?

Section III.—6. What is the composition of cyanogen, and what are its properties? How can the following bodies be obtained from potassium ferrocyanide: carbon monoxide, cyanide of potassium, prussic acid? 7. What are the relations between marsh-gas (methane), chloroform, methylic alcohol, and formic acid? Describe how you would obtain marsh-gas from acetate of sodium. Give equations. 8. Describe the constitution of the fats and oils. Some beef-fat is boiled with a dilute solution of caustic potash: describe in detail what happens, and the properties of the bodies formed.

Note.—This paper also applied to candidates for the Licence of the Royal College of Physicians of London.

Anatomy.—1. Describe the sensory nerve-supply to the skin of the face and scalp. 2. Describe the dissection required to expose the deep epigastric artery. 3. Give the origin, course, insertion, actions, relations, and nerve-supply of the pyriformis muscle. 4. Describe the œsophagus, and give its situation, relations, arterial and nervous supply. 5. Enumerate the muscles acting on the shoulder-joint. Give their actions and nerve-supply. 6. Give the course, relations, and tributaries of the superficial and common femoral veins.

Physiology.—1. Explain and illustrate the action of the nervous system on the arteries. 2. Describe the minute structure of the spinal cord. 3. What is the structure of a capillary blood-vessel and a venule? Contrast the character of the blood-flow in these with that in an arteriole. 4. Describe the structure and functions of the skin. 5. Mention the fats which are usually taken as food. How are they digested? What is their probable destination? 6. State the composition and properties of glycogen? Where does it occur? How may it be prepared?

Candidates were required to answer at least four of the six questions in Anatomy and Physiology, and one in each section in Chemistry.

Flexions of the Uterus in connection with Tight Lacing.

Mr. C. M. Jessop writes: I cordially agree with both your correspondents on this subject; but I venture to think that the baneful habit of tying four or five heavy petticoats round the waist has a great deal to answer for. Whatever pressure stays may exert is supplemented by tight strings to hold up an unnecessary weight of petticoats, so that, however loose stays may be, the tight strings are the real evil to be combated. Besides this pressure, there is undue heating of the pelvic viscera from this monstrous accumulation of clothes on the wrong part of the body. The chest is the portion of the body which requires warm clothing, and just the part which seldom is properly protected.

To my mind, there seems no reason why nether garments, in the shape of warm pantaloons (opening behind), should not be suspended by properly adjusted braces from the shoulders, a warm barrel-shaped waistcoat (or stays) to allow of rib-expansion, and over all, the usual dress. I hope this is not too radical a change to be entertained.

The Carriage Tax.

X. writes: I do not think the proposition in the Journal of January 15th will meet the case, for where days are long and roads heavy, two horses are required. Why should not all four wheel carriages for medical men be charged at one guinea each if the tax is retained? I for one have two over four hundredweight, one of which I only require for health's sake in bad weather, and a two wheel in addition. The guinea licence for brougham from October to Christmas is practically useless, as it does not provide for the cold weather in the early part of the year. What with licences and income-tax at eightpence, we are heavily charged on our daily bread.

The Edinburgh College of Physicians and its Licentiates.

A correspondent forwards us a cutting from a weekly paper, from which it appears that the Royal College of Physicians of Edinburgh has been aroused to express to one of its Licentiates the deep regret of the Council that "any Licentiate of the College should have recourse to such unprofessional methods of procedure," whereupon the recusant Licentiate publishes the letter, banters the College, and adds in conclusion; "I beg to state that it is my intention to continue my unprofessional methods of procedure as long as possible."

A Year's Fire-Record.

The report submitted by the Superintendent of the Metropolitan Fire Brigade to the Metropolitan Board of Works shows that during the year 1886 there were in the metropolis 136 fires in which human life was endangered, and of these, 31 originated in the upsetting of oil-lamps. The number which occurred through the explosion of gas was 28. The persons whose lives were imperilled in the fires referred to numbered 175, of whom, however, 126 were saved; the number of lives actually lost in fires in the metropolis during the year being 49. The list of wounds and other injuries suffered by the men during 1886 was, as usual, very heavy; but the nature of the work, and the way in which it was always carried out, involved a certainty of numerous accidents. There had been during the year 524 cases of ordinary illness and 90 injuries, making a total of 614 cases, of which many were very serious, and 2 resulted in death. The total number of calls, including those for actual fires, supposed fires, chimney-fires, and supposed chimney-fires, has been 4,511, or more than 12 a day. The substitution of telephones for telegraphs which is being carried out as far as possible, has proved a great advantage.

The Treatment of Restlessness during Sleep.

Dr. John Lucas (Ramsgate) writes: With regard to the advice sought by "A Member," in the Journal of January 22nd, I would suggest to him to advise the parents of the little boy under his care to try recourse to a light, easily assimilable, solid or semi-solid meal, just before sending him to bed, for a week or a fortnight. The *rationale* of this dietetic treatment is founded on the physiological effect in producing cerebral anæmia, which, we know, is a *sine quâ non* for normal sleep, which in the case of his little patient is evidently interfered with by tension and fulness in the cerebral arteries. Should this fail, or should there be itching about the anus and nose, with or without a vigorous appetite, I should be inclined to suspect the existence of worms, and with this view would advise the trial of one or other of the anthelmintics. Recently I was asked by a general practitioner in London to see with him a girl, aged 14, with symptoms somewhat akin to that of "A Member's" patient, for whom I recommended, through the family medical attendant, the adoption of the first-named plan, which immediately produced the desired result, though various medicinal means prescribed by him and others had been in vain; which fact, I should note, no doubt indicated to my mind the above condition and course of treatment for its relief, or possibly I should myself also have erred in failing to recognise the true nature of the case.

Hepatic Phlebotomy and Puncturing the Liver's Capsule as Remedial Measures in Hepatic Diseases.

Surgeon-Major Ryan, M.D., writes: In a second article on the above subject in the Journal of January 15th, Dr. George Harley declares that it is to him almost inconceivable how any educated man could possibly have fallen into the error of confounding the operations on the liver, which he claims to have originated, with accidental hæmorrhage attending hepatic exploration, in the one case, and Chinese acupuncture in the other. I imagine that anyone who will take the trouble to refer to my letter published in the Journal of December 4th, page 1135, will be equally at a loss to conceive, in view of the statements therein contained, how Dr. Harley finds himself in a position to maintain, as he apparently does, that abstraction of blood from the liver, as a therapeutic measure, had never been had recourse to until performed by himself. In my communication, I distinctly stated that, acting on the suggestion thrown out by Professor Maclean in his lectures, supported by some further experience of the effect of accidental hæmorrhage during exploration of the liver for abscess, I had resorted to the abstraction of blood from the liver in two cases of hepatitis with a most satisfactory result. The hæmorrhage in these cases was not accidental. Blood was designedly and deliberately withdrawn with a view to relieve the engorged condition of the organ. I should be much surprised to find that I was the first to act on Dr. Maclean's suggestion. It may be gathered from the communication just referred to that I was under the impression that such was not the case. I am certainly of opinion that the credit of having first suggested the direct abstraction of blood from the liver as a therapeutic measure belongs to Dr. Maclean. In my letter, I quoted literally from the notes of his lectures taken at Netley (which I have now before me), and the opinion that "the plan seems worthy of a further trial," is his, not mine.

Dr. Harley seems to think that the correspondents who have commented on his paper are anxious to deprecate the employment of hepatic phlebotomy in acute hepatitis. I for one am not anxious to do so. I believe that the operation may be resorted to with great advantage in certain cases; but I should hesitate to advocate its employment as a routine method of treatment in all cases of hepatitis. It is, so far as my small experience of it enables me to judge, unattended with danger, and most distinctly efficacious; but it is quite conceivable that, indiscriminately and carelessly employed, it may lead to undesirable results. In other words, it may be abused, as venesection and other therapeutic proceedings of undoubted efficacy have been. My experience of acute hepatitis certainly inclines me to believe that in perhaps the majority of cases, the affection is quite amenable to judicious treatment of the ordinary kind. I can to a considerable extent confirm what Brigade-Surgeon Alexander says (Journal, December 4th, p. 1134) with regard to the efficacy of chloride of ammonium, first used in hepatic inflammation by Surgeon-General Stewart. This remedy is, I think, too little known among practitioners in England. Apart from its action in acute hepatitis, I have found it of signal benefit in the dyspeptic symptoms attending chronic enlargement of the liver.

Dr. Harley asserts that his operation of puncturing the liver's capsule in chronic congestive hypertrophy has nothing in common with Chinese acupuncture. I am disposed to differ with him. The theory held by the Chinese to explain the efficacy of acupuncture in painful affections of internal organs appears to have been that such affections were caused by the pressure of air pent up in the tissues of the part. The puncture gave exit to the air; hence the relief. The idea is, in fact, similar to our own of "relieving tension" by puncture.

The experience of acupuncture of most British practitioners is no doubt confined to its use in sciatica, lumbago, and orchitis. Now Dr. Harley, while protesting that his operation has no connection whatever with acupuncture, unconsciously betrays the fact that he derived the first suggestion for his operation from the known effects of acupuncture in some of those cases. Dissatisfied, he tells us, with the usual routine methods of treatment in chronic con-

gestive hypertrophy, he reflected on its pathology, and came to the conclusion that "*first nearly all the pain* and a great deal of the discomfort in cases of hepatic congestion is directly due to the pressure to which the recently inflamed and still congested hepatic tissues are subjected, from their being confined within a strong inelastic fibrous capsule; and secondly, from knowing that immediate relief follows upon the puncturing of other equally unyielding fibrous coverings (when their contents are in a state of acute or subacute inflammation)," it occurred to him "that cases of congestive hepatic hypertrophy might be equally advantageously treated by puncturing the capsule of Glisson; as cases of orchitis are treated by puncturing the tunica albuginea; or acute sciatica by puncturing the distended sheath of the nerve; or a painful whitlow by puncturing the tense unyielding fascia over the inflamed part of the finger" (JOURNAL, November 13th, 1886, p. 900). Surely at least two out of the three "puncturings" referred to in this quotation would be ordinarily called acupuncture. I am unable to agree with Dr. Harley "that the mere fact of acupuncture being performed (by the Chinese ?) with gold or silver needles in painful affections," and his operation "being performed with trocars and cannulæ in a diseased state of the organ, which is anything but painful (?)" leads necessarily to the conclusion that "the two forms of operative procedure are entirely distinct." The respective methods of Dr. Harley and the Chinese are no doubt different, but it by no means follows that "they have nothing whatever in common, either as regards nature or design." I fancy most people will be apt to think they have a good deal in common. Neither can I agree that there is a remarkable absence of pain in the condition which Dr. Harley describes as chronic congestive hypertrophy. Indeed he himself in his first article gives as one of its symptoms "a dull pain all over the hypochondriac region;" and in one of the cases in which he employed puncture of Glisson's capsule, he says: "The tenderness on pressure, of which the patient had previously complained, had disappeared after the operation." Allusion is also made to the pain in the words which I have italicised at the beginning of the quotation from his first article. My experience is, that the condition in question is often attended by very considerable pain and tenderness, though not perhaps of an acute kind.

In making the foregoing remarks, I have not the slightest wish to deprive Dr. Harley of the merit of having discovered independently (as I have no doubt he did), and brought prominently before the profession, therapeutic measures which are doubtless destined to prove of great use in dealing with certain affections of the liver, but from the facts within my knowledge it is impossible to admit his claim to originality.

SURGEON-MAJOR QUILL, M.D., writes; In his paper on Hepatic Phlebotomy, which appeared in the JOURNAL of January 15th, Dr. Harley has mentioned my name among those who ventured to criticise a former paper of his on the same subject; I beg therefore for a little space for a brief reply.

If Dr. Harley will refer to my letter which appeared in the JOURNAL of December 4th, he will find these words: "For years past Professor Macleau has, by precept and practice, impressed upon us the benefit frequently to be derived from direct depletion of the liver." Now I shall be glad to learn from Dr. Harley what the difference is between hepatic phlebotomy and direct depletion of the liver? In the absence of any difference (and so much I think I may assume), it is plain that the charge which Dr. Harley brings against me of "inconceivably confounding two distinctly different forms of hepatic surgery" utterly crumbles away.

When Dr. Harley has more experience of hepatic surgery (outside the physiological laboratory), he will find that, much as he may desire it, he will not be able to abstract any quantity of blood he pleases from a diseased liver. He will find the possibility of abstracting twenty ounces of blood from a liver in a state of acute inflammation to be quite exceptional; five or six ounces is the most he will, as a rule, be able to obtain, and very frequently not even one ounce: yet let him not be disheartened, for much benefit will accrue to his patient, though he has been unsuccessful in depriving him of a considerable quantity of blood.

ETIOLOGY OF GOÎTRE: A CORRECTION.

DR. JOSIAH WILLIAMS writes: In the report of the Sheffield Medico-Chirurgical Society in the JOURNAL of January 29th, is an abstract of my paper on "Etiology of Goître" which requires a slight correction. The report says: "In South Wales, where both these conditions prevailed, goître was extremely rare. In Novi Bazar, where Dr. Williams was in 1876, nearly half the population was affected, and yet neither of these conditions was present." What I said was that, "In Novi Bazar we had a diminished atmospheric pressure, it was true, but that the practice of carrying weights on the head was not anything like so common in Novi Bazar as in Wales. On reaching a still higher altitude—Seinitza, on the Servian frontier—few cases were present, probably not more than 2 per cent."

COMMUNICATIONS, LETTERS, etc., have been received from:

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BOOKS, ETC., RECEIVED.

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The Croonian Lectures on some Points in the Pathology of Rheumatism, Gout, and Diabetes. By P. W. Latham, M.A., M.D., F.R.C.P. Cambridge: Deighton, Bell, and Co. London: G. Bell and Sons. 1887.

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Thirteenth Annual Report of the Secretary of the State Board of Health of the State of Michigan for the Fiscal Year ending September 30th, 1885. Lansing, Michigan: Thorp and Godfrey. 1886. Two Copies.

Year-Book of Treatment for 1886. London, etc.: Cassell and Co., Limited. 1887.

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The Science and Art of Obstetrics. By Theophilus Parvin, M.D., LL.D. Edinburgh: Young J. Pentland. 1887.

Year-Book of Pharmacy and Transactions of the British Pharmaceutical Conference. 1886. London: J. and A. Churchill. 1887.

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REMARKS
ON
A CASE OF CEREBRAL ABSCESS, WITH OTITIS, SUCCESSFULLY TREATED BY OPERATION.

By W. S. GREENFIELD, M.D., F.R.C.P.,
Professor of General Pathology and Clinical Medicine in the University of Edinburgh.

THERE are, so far as I am aware, only three cases on record of cerebral abscess due to otitis which have been successfully treated by trephining. One of these was that of Dr. Gowers and Mr. Barker, published in the BRITISH MEDICAL JOURNAL of December 11th, 1886. Of the other two, by Schondorff and Trückenbrod respectively, I have not seen the record, but am indebted to my colleague, Dr. McBride, for the references.

The following case presents many points of interest, and, as will be seen, it has the advantage or disadvantage of having been treated in ignorance of any previous case of the kind, and is therefore an independent contribution to the solution of a very important question. As a case of cerebral abscess, the course and symptoms were in several respects unusual.

William M., aged 26, an india-rubber worker, was brought to my wards in the Royal Infirmary at 10.30 P.M. on December 31st, 1886, in a semi-comatose condition. His friends stated to Dr. F. T. King, resident physician, that he had been in good health till ten weeks before, when he began to suffer from cold in the head and cough, and at this time for a few days he complained of deafness in the left ear. (The patient has since absolutely denied that he had ever suffered from deafness.) In about three weeks he recovered from the cold, but did not return at once to work. Then for a month he was fairly well, and went back to work; but about a fortnight ago, he began to suffer from headache, and became heavy and dull. He soon began to vomit his food. The bowels were constipated throughout. During the week before admission, the headache and vomiting had become much worse, and up to that date he had vomited almost everything. The vomiting, however, had ceased on the day that he first came under notice. The headache, which at first prevented him from sleeping much, had recently diminished in intensity, and he had become more torpid, and had slept a great deal. There was no delirium, and he could always be roused to answer questions rationally. He was well-nourished before the illness, but had lost much flesh during the past three weeks. There was no history of chilliness or shivering, nor of photophobia or noises in the ear. His family history was good, and the patient himself (a widower, with one child living) was a strong, healthy man, and had always been temperate. He had never had syphilis, but had had scarlet fever when a child.

State on Admission.—The patient's face was thin and very pale, and he lay in a torpid condition, with eyelids almost closed and mouth open. When spoken to, he answered slowly, with slurred speech, but quite intelligently. He would not trouble himself to recall events, and did not want to be bothered. He complained of pain in his head, but said it had been much more severe. He said his sight had become dim. There was no photophobia; the pupils were equal, and somewhat contracted; they reacted normally to light. There was some rolling of the eyeballs, but no strabismus. There was no twitching of the facial or other muscles, and no loss of motor power of the limbs. There were sordes on the lips and teeth; the tongue was dry and cracked transversely; the abdomen was markedly retracted; there was no pain on pressure; the skin was moist; temperature 97°; pulse 68, of fair volume but slightly irregular; the respirations were 20, easy, shallow; the heart and lungs were normal.

January 1st, 10 A.M. The patient slept steadily during the night, and was not delirious. He was rather less torpid this morning. The pupils were natural, but the left one was distinctly larger than the right. The condition otherwise was the same as on the previous night. 11.30 P.M. There had been one natural motion during the day, but no urine had been passed. Sixteen ounces of urine were drawn off; it was acid, clear, with a specific gravity of 1029, and no albumen. The urine dribbled from the catheter without any force of stream. Patient was more torpid than on the previous evening, and markedly more so than he had been in the morning. He complained of pain in his head, and lay on his face, with the forehead resting on the pillow. There was no rolling of the eyeballs, nor strabismus, but there seemed to be very slight ptosis of the left eyelid; the pupils were equal and natural; there was no twitching of muscles, and the motor power of the limbs was normal. The tongue was brown, dry, cracked, and coated with sordes. The patient slept with his mouth wide open. The pulse was 68, slightly more irregular than before, of good volume, but low tension. The respirations were 20, regular and natural.

January 2nd. (These and the subsequent notes, if not by myself, are by Mr. Walter S. Colman, M.R.C.S., who was temporarily in charge of the ward in the absence of Dr. King.) 8.30 P.M. The patient was quite quiet, but very torpid; he often turned on his face, and resisted being moved. It was difficult to get any replies. His mouth was wide open, his cheeks hollow, and he had a stupid expression. There was no paralysis of the limbs; no ptosis or squint. The pupils were dilated with homatropine. O. S. Right eye, disc pale, edge fairly clear; left, disc of dirty white colour, with radial striation. No dipping of vessels was made out. The pulse was 64, regular, and fairly compressible. The temperature, which had been taken every four hours since his admission, had not varied from 97°. The tongue was still covered with sordes, and the breath was very foul; the breath sounds were feeble all over the back of the chest.

January 3rd. I saw the patient for the first time. (Owing to indisposition, I had not been able to visit the Infirmary, and the case had been considered throughout to be one of tubercular meningitis at an advanced period.) The condition was still as described. The patient appeared much emaciated, lay continually on the right side or on his face, with knees and thighs flexed; only now and then giving a short answer when repeatedly addressed, and then either turned on to his face and buried his forehead in the pillows or remained quite unconscious. There was no paralysis of the face, limbs or eyes, unless slight weakening of the left sixth nerve. There was no deviation of the tongue, so far as could be judged, but it was almost impossible to get him to protrude it. The lips and tongue were covered with sordes and aphthæ. On ophthalmoscopic examination, the left papilla was found to be greatly swollen, cloudy and grey, the edges being completely blurred. There was no hæmorrhage or exudation. The right eye could only be examined with the greatest difficulty, owing to the constant efforts of the patient, when roused, to turn his eyes and head towards the pillow. It appeared slightly ill-defined at the (apparent) lower margin, but elsewhere was clear.

From the condition of the patient, it appeared to me that if the history of the onset of the illness were accurate (and in the absence of any history of injury to the head), it was improbable that the case was one of tubercular meningitis, and that the most probable condition was one of either tumour or abscess, with a very strong preponderance in favour of abscess. I need not at the moment discuss the grounds of this view. There was no definite history of ear trouble, and no discharge from the ear. I therefore requested Mr. Colman to make special inquiries from the friends upon this point, and to ask Dr. McBride to examine the ears.

9 P.M. The patient was much more torpid, and still tended to turn on to his face. There was now distinct ptosis of the left eyelid; he had passed urine involuntarily.

January 4th, 9 A.M. He had been restless during the night, but in the morning was more torpid, passing urine involuntarily; otherwise, there was no change; the temperature was still subnormal. 12 P.M. He was more restless, and did not answer questions; pulse 112, temperature 98.2°.

January 5th. At 10 A.M., Mr. Colman made the following note. "In much the same condition mentally; is able to swallow very little nutriment; nutrient enemata ordered." I saw the patient at 12 noon, and found no marked change in his condition. The torpor continued, and he could only occasionally be roused. The ptosis of the left eye was more marked, and the left pupil was distinctly dilated; the tongue deviated somewhat to the right; there was no other paralysis; there was intense optic neuritis in the left eye, but none in the right.

January 6th. The patient was in much the same condition, but the paralysis of the left third nerve was more pronounced. The ptosis was complete; the eyeball appeared to move but little in any direction, so far as could be judged; there was marked dilatation of the pupil. The condition indeed suggested paralysis of the fourth and sixth nerves also; the conjunctiva of the left eye appeared somewhat reddened and insensitive. On testing the sensibility of the face, over one or two patches on the left side, especially one over the malar bone, the patient gave no sign of being pricked, whilst evidently feeling

elsewhere, but it was extremely difficult to draw any definite conclusion as to the condition of the fifth nerve. The optic neuritis was very intense in the left eye, but the right appeared quite natural. On examining the left ear, I now found for the first time an extremely small quantity of dirty brownish red fluid oozing from it, so small that it had not previously been observed. The temperature was still subnormal.

There now appeared to me to be every probability in favour of the diagnosis of abscess; and, for reasons which I shall afterwards discuss, it appeared to me that the evidence was in favour of the abscess being situated in the left temporo-sphenoidal lobe, and that if so, it had extended forwards and inwards, so as to occupy a position near the front, and towards the inner aspect of the lobe. In the condition of the patient I had no hesitation in deciding to attempt the exploration and, if possible, the evacuation of the suspected abscess, and without delay. Unexpected obstacles, however, arose. I was anxious to get Dr. McBride's opinion upon the condition of the ear, and, owing to some misunderstanding, he had not received my communication. The general condition of the patient had, if anything, improved; he took nourishment better, and there was no obvious immediate risk, beyond the fact of the frequent sudden onset of acute softening in such cases.

January 7th. The patient got out of bed several times yesterday afternoon and evening, and once got out and micturated on the floor, and then got in again. He was much more torpid this morning. There was paralysis as yesterday.

Dr. McBride examined the ears, and found a small perforation of the left membrana tympani. The right ear was normal. On examination of the eyes, I found the optic neuritis still very intense in the left eye, the right being entirely free. The patient could be got to put out his tongue better; it deviated slightly to the right. The pulse was 84, regular, moderately full. At the base of both lungs, especially the left, there was now some dulness, and the breathing was very feeble; there was no crepitation.

The condition of the patient did not appear to me to warrant any further delay in operation, if it were to be done with any prospect of success; but owing to a series of coincidences, I was unfortunately unable to obtain the assistance of any of my surgical colleagues, either on that day or the following morning.

January 8th. I saw the patient at noon. He could be roused to answer questions occasionally. The condition of the eye was much the same, except that the left pupil was now completely dilated and inactive to light; the movements of the eyeball almost none. My colleague, Mr. Francis M. Caird, who happened to be in the Infirmary, was good enough to respond to my urgent summons, and saw the patient with me at 1 P.M. It was decided to trephine as nearly as possible over the supposed seat of the abscess, which, as I have said, I believed to involve the anterior part of the left temporo-sphenoidal lobe, and to explore deeply in that position. Of the operation, which was performed at 2 P.M., Mr. Caird has been good enough to write the following account:

"In perforating for abscess in the anterior part of the temporo-sphenoidal lobe, the temporal region was selected, and a vertical incision about two inches in length was made, the fibres of the temporalis divided, the periosteum turned aside, and the pin of the trephine applied about one inch and a quarter behind the external angular process, and nearly one inch above the zygoma. The disc removed consisted entirely of temporal on its outer and lower aspect, of temporal, parietal and a small spur of sphenoid on its inner aspect. The upper half, internally, was deeply grooved by what seemed a branch of the middle meningeal artery. The exposed dura mater bulged forward and felt tense; it did not pulsate. The inner two-thirds had a yellowish appearance, as if lymph lay beneath. On incision and reflection of the dura mater, some lymph-like adherent matter was scraped away, and a Graefe's knife was passed for at least half an inch directly inwards, when fœtid pus welled up. A pair of sinus forceps was inserted and expanded, and a drainage-tube put in; this had pulsation given to it, and was accordingly withdrawn for a short distance. About two ounces of pus escaped. An antiseptic dressing of carbolic gauze and sublimate wool was applied."

5 P.M. When roused the patient was partly conscious, but very drowsy. He attempted to answer questions, but his replies were inarticulate. The left eye was intolerant of light; he closed it firmly when a candle was brought near. Both pupils were somewhat dilated and contracted to light. He attempted to removed the dressings with the left hand, and muttered inarticulately at times, and then relapsed into unconsciousness again. The pulse was 98, regular, and tolerably full. The breathing was 17, regular, not deep, and occasionally sighing; temperature 97° F.

10 P.M. He was extremely restless, and still tended to lie on his right side, and to bury his face in the pillow. The pulse was 120, quite regular, and full; temperature 98.4° F.

January 9th. He had had a restless night, with intervals of sleep, talking incoherently, and trying to remove the bandages, in which he succeeded once. He was very much more intelligent, and answered questions correctly. He complained of pain in the region of the operation. He knew the time of day, saying he had had no breakfast. He thought he had just come into the hospital, and that it was a week before the New Year. The ptosis was almost gone. There was no obvious strabismus. The left pupil was dilated and insensitive to light. There was no twitching or convulsion. He now lay on the left side, and did not bury his head in the pillow. The wound was dressed by Mr. Caird, at 12 noon. About two drachms of pus escaped when the wound was opened. Boracic lotion injected into the ear caused an increased flow of pus from the opening in the dura mater. There was no pain in the region of the wound. All restlessness had gone.

During the rest of the day the patient continued quite comfortable, and slept a good deal. In the evening the pulse was 86, regular and full; the temperature, which previously had been subnormal, was now 98.4°. He talked quite intelligently and distinctly.

Next day, January 10th, the improvement continued. He had slept quietly and soundly. The ptosis had disappeared; the left pupil was now more contracted than the right, and reacted to light, but rather sluggishly. There was no strabismus, and the deviation of the tongue was much less. The articulation was quite distinct. When the wound was dressed, there was very little discharge. The drainage tube was removed, and a new one, two inches in length, was inserted. No pain was felt. On ophthalmoscopic examination, Mr. Colman found the left disc grey, with its edge blurred, and most of the vessels distinctly traceable at the edge; the swelling had largely subsided, and the disc was little larger than the right. There was no hæmorrhage or exudation. Vision with the left eye seemed to have been quite acute since the patient recovered consciousness.

On January 11th, the improvement continued; there was very little discharge from the wound, and it had lost its offensive odour; there was no pain. I found that the optic neuritis had almost entirely subsided. The left pupil was irregular in outline.

It is unnecessary to detail the subsequent progress of the case. On January 13th it was found that fluid injected into the ear no longer issued from the wound. The eye improved very rapidly, and on the 20th there was very little trace of the previous optic neuritis. The tube was removed on the 23rd, and the wound had closed completely by the 25th. The patient was kept in bed till the 30th, although allowed to sit up in bed from the third day after the operation. The temperature continued normal, or subnormal, as it had been throughout. The patient had no mental symptoms at any time after the operation; indeed, he proved to be very intelligent. He gave a full account of the onset of his illness, of which he remembered every particular up to three or four days before the New Year, after which he could recollect nothing. The only important difference in his account from that given by his friends was, that he stated that he had not had any illness until three weeks before the New Year, and that he absolutely denied ever having suffered from deafness, pain in the ears, or discharge from the ear. He had no shivering at the onset of his illness, or during its course, but he sometimes felt rather hot. The feeling of heaviness in the eyes and forehead, and a tendency to sleep, were the chief subjective symptoms. Even when at work he would lay his head on the table and sleep. In view of the difficulties which attend the diagnosis of cerebral abscess, especially where there is no definite history of ear-disease, I have thought it preferable to detail the course of the case, rather than to discuss all the points raised by it. But a few remarks upon the case, especially as to diagnosis and treatment, may be desirable. As regards the diagnosis of cerebral abscess, it was in the first instance largely grounded upon the general facts of the case, the condition of the patient, which closely resembled that which I had observed in other cases, and the probable exclusion of other diseases. This view was confirmed when distinct sanious, purulent discharge from the ear was observed, although it was only seen once, and in very small quantity. I need not, therefore, discuss these points more fully, although several questions of much interest are raised.

But as regards the localisation of the probable abscess, something must be said. It is, of course, well known that the commonest position for abscess secondary to otitis, is in the middle lobe of the cerebrum, and that it frequently lies in close proximity to the roof of the tympanum. But there are frequent departures from this rule, and, moreover, the size and direction of the abscess are very variable. I

was at the time impressed, perhaps unduly, by the two most recent cases of cerebral abscess which had been under my care, in one of which the abscess was in the frontal lobe, and I had much regretted that no operation was performed in that case.

The most definite signs of involvement of nerves, which were, indeed, very unusual, suggested the probable extension of inflammation to the inner aspect of the front of the temporo-sphenoidal lobe. Simple pressure in that position might have involved the third nerve, but would, in all probability, have caused obstruction in the cavernous sinus, and possibly thrombosis, of neither of which was there any evidence. Inflammation of the dura mater, and consequent pressure upon the third nerve, and inflammatory œdema of the sheath of the left optic nerve, would suffice to produce the nerve-symptoms.

I am well aware that there are sources of fallacy as regards both of these conditions. Unilateral optic neuritis, or optic neuritis occurring much sooner or more intensely in one eye than the other, may occur, though very rarely, from intracranial disease in various positions. Here, again, I was much influenced by the close resemblance to two cases which I had observed, in which neuritis, which was at first, and for some time, unilateral, had developed as a result of direct involvement of the sheath of the nerve in an adjacent inflammation. The rapid subsidence after the operation appears to confirm this view of its causation.

Again, as regards the third nerve, the mode of development of the paralysis strongly suggested direct irritation, followed by compression of the nerve-trunk. If it had been due to general pressure upon the nerve-trunk from distension of the brain, the sixth would have almost certainly been involved first. Whether the fourth and fifth were also involved at a later period, it is almost impossible to say. But there was no sufficient direct evidence of either.

As regards the position in which the operation was performed, I may state that, having indicated the probable site of the abscess, I left to Mr. Caird the decision as to how to reach it. I was not aware of any previous case of operation for an abscess in that position, nor, indeed, of any successful case—having, by some mischance, overlooked the case recorded by Dr. Gowers and Mr. Barker, nor did I hear of it until a week later. From the size of the abscess, and from its communication with the tympanum, there is little doubt that it might have been reached much further back. I cannot concur in Mr. Barker's suggestion as to the proper position for exploration; but the present does not appear to be a suitable occasion for the discussion of that point.

P.S.—February 7th. Patient continues in good health; still slight purulent discharge from left ear. Dr. Argyll Robertson was good enough to examine the eyes on February 2nd, and reports: "Right eye, fundus normal; left, disc a little pale and flat, and not quite sharply defined at margins, especially to nasal side. Retinal vessels about normal in size and not tortuous. Fundus otherwise normal."

AN ADDRESS

ON

INTERNAL DERANGEMENTS OF THE KNEE-JOINT AND THEIR TREATMENT BY OPERATION.

Read before the Edinburgh Medico-Chirurgical Society.

By THOMAS ANNANDALE, F.R.C.S.E., F.R.S.E.,
Regius Professor of Clinical Surgery in the University of Edinburgh.

THE general title of this paper is simply employed for the sake of convenience, and because it has been usual to class under this term, first suggested by Hey, certain symptoms in connection with the knee-joint, the causes of which were not always explainable. Our increasing pathological and clinical knowledge of these and other conditions is, however, leading to a better distinction and treatment of this series of symptoms; and it is with the hope of assisting in this advance that I wish to record the results of my experience.

Three years ago, I read to this Society a short paper (afterwards published in this JOURNAL for April 18th, 1885), giving an account of a new operation for the relief of a displaced semilunar cartilage. The good result obtained in this case encouraged me to operate in other cases of knee-joint derangement which had failed to be cured by the usual methods; and having now opened the knee-joint in seven cases, an opportunity has been afforded me for practically studying the internal conditions causing the symptoms complained of. An eighth case under my care, but operated upon by Dr. Cotterill, is an addition to this practical experience. I would here remark that these eight cases do not include the several instances in which I have opened the knee-joint for the removal of one or more "loose cartilages."

The eight cases may be divided into three groups:

1. Displacements of the semilunar cartilage.
2. Growths in the interior of the joint.
3. Growths from the bone protruding into the joint.

I. *Displacement of Semilunar Cartilages.*—In this group there were four cases, three affecting the internal cartilage and one the external.

CASE I (already published).—A miner, aged 30, was admitted on November 1st, 1883, with well-marked symptoms of displacement of the internal semilunar cartilage of the right knee-joint, which had resisted various forms of treatment. My operation for fixing the cartilage by opening the joint, replacing the displaced structure, and stitching it in its proper position by means of catgut sutures, was performed on November 16th. In seven weeks the bandage and splints were removed, and movements of the joint practised. The patient was examined in April, 1884, when he was found to be completely cured of his symptoms, and all the movements of the joint were perfect.

CASE II.—U. B., aged 32, a gardener, was admitted on November 23rd, 1885. He had suffered from symptoms of displaced internal semilunar cartilage of the right knee for one year, and he attributed his symptoms partly to constant kneeling at his work and partly to a twist of the joint. As ordinary treatment failed to relieve, and as he was unable to follow his employment, the usual operation was performed. When the knee-joint was opened, it was seen that the affected cartilage had been almost entirely torn away from its anterior attachments, and was folded backwards upon itself, lying towards the inter-condyloid notch. It was drawn into position, and stitched there by catgut sutures. The splint was retained for six weeks, when it was removed, and movements of the joint practised. This case also was completely successful, and the patient was seen six months afterwards, when he was actively engaged at his work.

CASE III.—J. G., aged 35, a miner, was admitted on July 19th, 1886, suffering from symptoms similar to those in the last two cases, which had existed for about nine months. The knee affected was the right one, and there was no distinct history of an injury. The usual operation was performed on July 21st, and the patient was dismissed, with the splints still applied, on August 24th. He returned at the end of a month, when the splints were removed, and movement of the joint ordered. Six weeks after, he again returned, when it was found that his symptoms were greatly relieved, and the movements of the joint were natural, except that he could not flex the knee to quite the full extent; otherwise the limb and joint were perfectly right. In this case the internal semilunar cartilage was found to be only partially separated from its anterior attachments.

CASE IV.—U. U., aged 28, a soldier, admitted November 4th, 1886. Six months before admission, he was running quickly down some stairs, when he fell, his left knee receiving a severe twist. He was carefully treated in the military hospital for several weeks, and at the end of this time he could walk a little, but only with the injured limb in the straight position. When he tried to bend the knee, he felt something "give" in the joint, and it became locked, but by a little manipulation and movement of the joint, he could relieve the symptom. There was tenderness over the position of the external semilunar cartilage, and in certain movements of the joint the cartilage could be seen and felt to be displaced. The operation for replacing and fixing the cartilage was performed upon November 11th, and he was dismissed with the splints retained upon December 13th. He returned at the beginning of January of this year, when the splints were removed, and movement of the joint ordered. On February 2nd the patient was walking with a strong and useful leg. The movements were not yet perfect, but the old symptoms had entirely disappeared.

The conditions found in these four cases confirm the following facts, which have been already more or less recognised by surgical authorities.

1. That one or other of the semilunar cartilages—most frequently the internal one—is liable to be displaced, and to cause more or less interference with the movements of the knee-joint.

2. That this displacement may be slight—as is most common—or severe, and that the amount of displacement depends upon the extent of separation of the attachments of the cartilage.

3. That it is the anterior attachments of the cartilage which are most frequently separated.

In my former paper, I expressed the opinion that the displacement might take place suddenly, as in the case of a twist or wrench of the joint causing some separation of its attachments, or by a more gradual separation, as in the case of certain employments, especially those in which much kneeling is required; and I still think that this opinion is correct.

Mr. Henry Morris (Holmes's and Hulke's *System of Surgery*, vol. i) uses the terms "median" and "marginal" displacements of these cartilages. In an important paper upon this subject (see *Edinburgh Medical Journal* for December, 1886, and February, 1887), Dr. Scott Lang, from a thorough and sound study of the anatomy of the knee-joint and its movements, endeavours—and, in my opinion, succeeds in his endeavours—to explain how and why the semilunar cartilages are displaced, and he further strengthens his views by references to cases clinically observed. He specially points out that displacement of the internal semilunar cartilage may occur when the leg is rotated outwards, and that when the external semilunar cartilage is displaced, it is from rotation of the leg inwards. Accordingly, he suggests as an assistance to the treatment of this injury, that when the internal cartilage is affected, the patient should keep the toes directed inwards, and in the case of the external cartilage, the toes should be kept outwards.

In all four cases, the diagnosis of the condition was arrived at, before the operation, by a study of the symptoms, which were those usually described as characteristic of this accident; but I have met with other cases in which it was almost impossible to say positively what the exact condition causing the symptoms was. Fortunately, a careful exploratory incision into the joint in doubtful cases which are causing trouble, and which resist other treatment, will, as a rule, not only determine the cause, but admit of its removal. Perhaps the most important consideration in connection with my reported cases is the successful treatment of them by operation. This is a distinct advance in connection with the treatment of displaced semilunar cartilages; and I think that, from the experience of these cases, I am justified in advocating the operation which was described in my former paper, always provided that the condition is seriously interfering with the comfort and usefulness of the patient, and has failed to be cured by milder measures.

Let me briefly state the steps of the operation. An incision is made along the upper edge of the tibia, on the side corresponding to the cartilage displaced, and it should extend from the border of the ligamentum patellæ outwards or inwards, according to the cartilage affected, for a distance of about three inches. The tissues having been divided, and the synovial membrane exposed, all vessels should be secured before the joint is opened. This having been done, the synovial membrane is incised in the same direction as the external wound, and the parts examined. A blunt hook is then inserted, and hooked round the anterior margin of the displaced cartilage, which is in this way brought into its proper position, and held there while two or three interrupted catgut-sutures are passed through it and the periosteum and fascia, over the edge of the head of the tibia. In this way, the cartilage is firmly secured in its proper place. The edges of the external wound are then brought together by sutures, and the dressing and a splint applied.

II. *Growths in the Interior of the Joint.*—In this group there were three cases, two of them examples of fatty growths, the third of myeloid sarcoma.

Case v. Miss ——, aged 21, came from England to consult me in January, 1886, on account of an affection of her right knee. About one year before, she had twisted the joint, and ever since had suffered more or less from pain and stiffness in it. Several slight attacks of synovitis had also occurred in the same knee, and had been treated by rest, counter-irritation, and support. No permanent relief having been obtained, she sought my advice in regard to the joint. On examination, little was to be seen externally; there was some fulness on the inner side of the ligamentum patellæ, near the position of the internal semilunar cartilage, and there was also tenderness upon pressure over this point. The joint could not be moved freely, and the patient complained of a "catch" when she tried to bend or extend it. The condition made her limb weak, and prevented her from taking any active exercise. The case had many of the symptoms usually present in displacement of the internal semilunar cartilage, but they were almost constant, and there was no very decided locking of the joint. As she urged me to do something to relieve the condition, and as other treatment had failed, I suggested an incision over the position of the semilunar cartilage. This incision was made in the usual way; and, upon opening the joint, it was found that the cartilage was in its proper position, but that a small mass of fatty and fibrous texture was lying over the inner and anterior margin of the cartilage where the fulness existed. This growth was connected to the synovial membrane, and was movable, and could be drawn forward. It was the only abnormal condition observed, and it was evidently the cause which interfered with the free movements of the joint. Having seized the growth with forceps, I drew it forward, and stitched it to the periosteum on the upper edge of the tibia, so as to fix it, and prevent its passing between the joint surfaces. The wound healed well, and she sat up at the end of a fortnight. She was advised to begin careful movements of the joint in another week; but as she was very sensitive to pain, and did not carry out my instructions thoroughly, I gave her chloroform a month after the operation, and freely moved the joint. After this she made rapid progress, and in another month was able to walk well. Since then she has married, and she recently wrote me that since two months after the operation, her knee has been perfectly well, strong and free in all its movements.

Case vi.—M. P., aged 40, admitted on March 27th, 1886. About a year before admission, he fell and hurt his left knee, and ever since the joint has been painful, and liable to constant interference with its movements, the patient describing the condition as a sudden "locking" of the joint. Externally, the joint appeared normal, and no displacement of the semilunar cartilages could be detected. Having to be out of town, I asked Dr. Cotterill to take charge of the case, and he, on April 26th, made an incision, as in the former case, and, on opening the joint, found a condition very similar, except that the growth was larger. Having ligatured the base of the growth with catgut, the greater part of it was cut away, and the stump stitched to the periosteum and fascia, over the margin of the tibia. The wound healed without trouble, and the splints were removed, and movements of the joint ordered on June 10th. He returned to show himself last December, when the result was seen to be perfect as regards the movements of the joint.

Case vii.—Mrs. D., aged 33, admitted on February 11th, 1886. Eighteen months before admission, she began to suffer from occasional pain in her right knee. Sometimes she could walk well, but at other times the joint was stiff and its movements interfered with. On examination, a movable body could be detected upon the outer side of the joint, close to the position of the external semilunar cartilage during some positions of the joint. Pressure and manipulation caused the body to disappear.

On February 16th, an incision was made along the line of the external semilunar cartilage, and the joint was opened. This cartilage was found in its proper position, but, close to it and attached to the synovial membrane, was a small tumour, the size of a horse-bean. The neck of the tumour having been ligatured with catgut, the growth was removed, and the wound in the joint closed. Microscopic examination proved it to be a well-marked example of myeloid sarcoma.

On March 14th, the wound being healed, she was allowed to begin movements of the limb; and, shortly after, she left the hospital with good movement in the joint.

These three cases, in two of which the condition was attributed to injury, are good illustrations of the condition of tumour in the knee-joint. They further illustrate that such a condition may seriously interfere with the movements of this joint; and, again, they illustrate the good results obtained by a careful operation for their removal.

The symptoms met with in these cases, although in some points resembling those caused by a displaced semilunar cartilage, were sufficiently distinct. The symptoms produced by a growth in the interior of the joint will probably vary according to its mobility, size, and position. If the growth has a loose or long attachment, allowing it to change somewhat its place, the symptoms present will scarcely differ from a case of movable cartilage, which retains some attachment to the synovial membrane; but, when the growth is more fixed and causes inconvenience, as in the two first cases related, the characteristic symptoms will be that the stiffness and interference with the joint movements are constant or almost constant. Also, there will generally be a fulness at some point of the joint, and the position of this fulness is likely to be most frequent at one or other side of the ligamentum patellæ.

In regard to treatment, I think that the experience of these three cases, taken with that of several recorded cases presently to be referred to, justifies my opinion that these growths should be removed by operation when the condition is seriously impeding the joint-movements, or causing painful symptoms, and when ordinary treatment has failed to give relief. In advising an operation, it must be understood that no other disease of the joint exists. An exception to this is simple synovitis, which is often present in all the conditions described in this paper, and which need not interfere with the operation. A little point connected with the removal of these growths is that experience proves it is only necessary to remove the loose por-

tion of the growth, if its nature is simple, or it may even suffice, as in Case v. to draw it away, when small, and secure it with a stitch, so that it will not pass between the joint-surfaces and interfere with their free movements.

In the *American Medical Record* for June 26th, 1886, there is an interesting paper on this subject by Dr. R. F. Weir. Dr. Weir records two cases of his own and one of his colleague, Dr. Bull, in which tumours were removed from the knee-joint. In one case, the tumour was composed of "vascular connective tissue, rich in fat and connective-tissue cells." In the second case, the growth was a "fibro-sarcoma," and in the third the growth was a "giant-celled sarcoma." Weir also refers to other cases published by Simon, Volkmann, König, and Lauenstein. Barwell (*International Encyclopædia of Surgery*) mentions that he removed two fatty growths from the knee, one being situated upon each side of the ligamentum patellæ. He expresses the opinion that some of these growths are formed in the subsynovial tissue, and gradually bulge into the joint. Volkmann, under the term "lipoma arborescens articulorum," has described a condition of multiple fatty growths having their origin in connection with the fringes of synovial membrane.

III. *Growth from the Bone protruding into the Joint.*

Case VIII.—Miss H., aged 55, was seen with Dr. P. A. Young and Dr. Gibson, of Portobello, at the beginning of last year. She had suffered for several months from pain and stiffness in her right knee, and latterly she found that the movements of the joint were interfered with by something "catching in the inside of the joint." An examination showed slight chronic synovitis, and upon the outer edge of the patella a small hard body was felt, apparently firmly attached to the synovial membrane. But owing to the synovial thickening, it was difficult to decide whether or not it was connected to the bone. In the movements of the joint the edge of the patella came in contact with this body, causing great pain. After consultation, it was agreed to remove this body, and I accordingly made an incision parallel to the outer edge of the patella, and opened the joint. It was then seen that the body was an outgrowth from the articular surface of the femur, and was firmly attached to the bone. By means of a chisel the base of the growth was cut through and the body removed. It was an outgrowth such as is so commonly met with as a result of chronic rheumatic arthritis, and was half an inch in length and about a quarter of an inch in diameter at its base. The patient made a good recovery; the wound was soundly healed at the end of a month, and in three months she was able to walk well, and was much improved. During the winter she has suffered from further attacks of rheumatic inflammation in this joint, which has caused some pain and stiffness, but she is able to use the joint and limb usefully, although there is still a little "jerking" in it.

It is well known how commonly outgrowths of chronic arthritic origin cause interference with the movements of this and other joints, and it cannot be said that such cases are very favourable for operative interference; but still I think that, in cases where a single and distinct growth is causing much pain or stiffness, the question of an operation may be taken into consideration, and the case just recorded proves that the removal of such a growth may be successfully performed, and may also, even if not perfectly relieving the symptoms, improve them. It is not an operation that I would wish to urge very strongly, and the general condition of the patient, the condition of the joint, and his or her wishes—the question having been properly explained—would influence me in advising its performance.

Lastly, in opening the knee-joint for the removal of growths, the incision will be best made over the position of the growth, if it can be felt. Should its exact position not be determined, and the case be one suitable for operation, I would suggest that the incision advised for the fixing of the internal semilunar cartilage be employed, as it was found very convenient in the three cases reported.

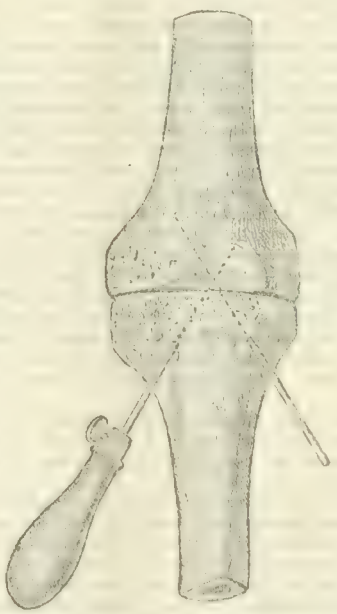
A Walking Maniac.—Dr. Zenner, in a recent lecture at Cincinnati College, referred to John Snyder, of Dunkirk, whose marvellous feats of walking have interested the medical profession as well as the public. Dr. Zenner said that to him the man seemed perfectly rational, and was certainly not an impostor. During the forty-eight hours that he was watched by students of the Ohio Medical College, he walked all but seven hours, and did not lie down at all. He says it does not rest him, but makes him tired and uncomfortable, to sit down. The disease, then, is not in the walking, but in the uncomfortable sensation on account of which he walks. Weston walked 5,000 miles in one hundred days; but this man has walked almost 25,000 miles in five hundred days, and is no more tired than when he began. His gait was such as to cause the least possible fatigue.

REMARKS
ON
A METHOD OF FIXING THE BONES IN THE OPERATION OF EXCISION OF THE KNEE-JOINT.

By W. MORRANT BAKER, F.R.C.S.,
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There are few surgeons, probably, who will not admit that the maintenance of the proper position of the bones by means of splints only, after excision of the knee-joint, is a difficult matter, or who would not be glad to have additional means at their disposal for effecting that object; and many—and I would include myself in the number—are disposed to believe that the difficulty referred to is the chief element in the want of success so frequently met with in obtaining sound and speedy union of the resected surfaces, and an ultimate satisfactory recovery.

It was with the object of securing the parts in a more reliable and direct manner than splints could accomplish, that I determined, many years ago, to try some kind of suture or other appliance attached to the bones; and, after consideration, it seemed to me that the method recommended by Mr. Bickersteth (*Trans. Med. Chir. Soc.*, vol. xlvii, p. 113), in certain cases of non-union and of compound fracture of bones, would be, probably, the best for fixing the resected surfaces of the femur and tibia. In September, 1872, I had an opportunity of carrying the idea into practice, and with a result as good as I could wish.



Femur and tibia, the articular ends of which have been resected and fastened together in the manner described in the text.

Case I.—A barman (S. W.), aged 26, was admitted into St. Bartholomew's Hospital, under my care, on August 6th, 1872. Eight years previously, he had received an injury to the knee, and to this he attributed his subsequent troubles. At the time of his admission there were all the usual signs of advanced disease of the knee-joint, into which a probe could be passed through one of the sinuses in the neighbourhood. Taking into consideration the patient's general condition, which was that of a delicate man, somewhat emaciated from the effects of long-standing joint-disease, as well as the condition of the knee, I did not feel justified in recommending any other treatment than amputation of the limb, although I promised to excise the joint, if, at the time of the operation, and on further exploration

under chloroform, the local conditions warranted my so doing. The patient, however, and his friends absolutely refused to entertain the idea of amputation, and I therefore proceeded to excise the knee-joint, making a semilunar flap and removing the patella, about a month after his admission into the hospital.

The bones were found in good condition, hard and vascular; and having placed the sawn surfaces of the femur and tibia in as exact coaptation as possible, I inserted on each side a steel pin or awl, pushing it in obliquely upwards for three inches or thereabouts, through the head of the tibia, and into the lower end of the femur, St. Andrew's Cross fashion (see Figure).

The awl with which I performed this part of the operation had been purposely constructed with a movable handle; and, after the insertion of each pin, the handle was removed. The proximal ends of the pins were left projecting from the level of the skin by about an inch and a half; the distal ends were left buried in the lower end of the femur. A splint was, of course, applied (I think, in this instance, a McIntyre's); and the limb was swung after the patient's return to bed.

I watched the progress of this case for a short time with some little anxiety, although feeling confident that the pins could do no harm; but all anxiety soon ceased when it was found that the case progressed after the fashion of a simple fracture. There was neither pain, heat, redness, nor swelling; the discharge from the wound was trifling, the greater part of the wound healing by first intention; and, a few weeks after the operation, in changing the splint for some cause which I have now forgotten, I was astonished at finding that the patient, instead of feeling pain or dread during the process, was taking the weight of his limb off my hands by the action of its own muscles. One steel pin was removed between four and five weeks and the other about seven weeks after the operation.

Between two and three months after the operation, the splint was removed, and the limb supported only by a pillow.

The patient left the hospital convalescent, and with firm, apparently bony ankylosis, returning to show himself a month or two afterwards. At this time (the exact date I have not preserved), the tissues around the knee were still not quite sound; but, although somewhat thickened in many parts, they were not tender. A few small sinus-tracks were still open, and from one of these, it was said, a tiny scale of bone had come away. On one side, the track of the pin could not be found; a small tubercle in the skin apparently representing the point at which it had entered. On the other side, the small track was still open. The leg was almost perfectly straight, and the ankylosis was apparently bony. The patient could walk firmly and well with a thick-soled boot, and without the slightest pain or discomfort. His general health was excellent.

I heard nothing more of this patient until January, 1879, more than six years after the operation; when, in reply to a letter asking for a report of the state of his limb, I received the following note, "The operation you so kindly performed upon my leg, while in St. Bartholomew's Hospital, has proved very successful. It healed up shortly after I came home, and I have been enabled to follow my occupation as barman ever since. I am happy to say I do not feel any pain in my knee."

Case II.—The second case in which I employed steel pins in excision of the knee-joint was that of a boy, about 10 years old, who was admitted, under my care, into the Evelina Hospital for Sick Children.

In this instance, probably from being too careful in remembering the softer bone-texture with which I had to deal, and in my endeavours not to thrust the pins too far, I did not thrust them in far enough; as a consequence, probably assisted by some movement of the limb, the pins were found quite loose two or three days after the operation, and were then removed. The case, therefore, scarcely deserves record in the present list; although, read in another way, it may be fairly taken as an additional piece of evidence of the need of some such method as that which is here advocated, inasmuch as, without the pins, notwithstanding all the care we bestowed on him, the boy did not leave the hospital with a sound limb until eighteen months or more after his admission. I have seen him many times since, and he has a good useful limb, with the bones firmly ankylosed; but in the hospital, he was for many months an opprobrium to us, and it seemed over and over again as if nothing could save the limb from amputation.

Cases III, IV, and V were also cases under my care in the Evelina Hospital. I have not the detailed notes at hand, but it may be mentioned that they were boys aged from 8 to 12, and that the operation was performed in the usual manner, the patella being removed, and steel pins inserted through the articular ends of the tibia and femur. Two of the three were completely successful, the wounds quickly healing, and both boys leaving the hospital with perfectly straight limbs, and with the bones in a state of apparently osseous ankylosis.

The third case ultimately did well, but the pins did not retain their hold, and the patient was for several months in hospital. I have seen him, many years after the operation—indeed, within the last year (1886). He has a strong well-grown limb, and is able to walk firmly on it, with only the limp due to the stiff knee and the slight shortening. The limb is somewhat curved, but any tendency there may be to increased deformity is overcome by his continuing to wear a leather and steel support.

In passing, I may remark that the tendency to curvature in old cases of excision of the knee is not confined to those in which the ankylosis stops short of osseous union, at all events in young subjects. If no strong well-fitting apparatus is worn, deformity is apt to occur even when one cannot doubt that there is continuity of bone at the excised part of the limb. Taking this into consideration, with the fact that there may be little or no tendency to increased deformity under similar circumstances, in a fully grown subject, I am disposed to believe that the curving of the limb is best explained, in the young, by assuming an irregularity of growth at the epiphysial lines, rather than a giving way or yielding at the line of osseous union.

Case VI.—In December, 1878, a boy, aged 14, came under my care at St. Bartholomew's Hospital, in the absence of my late colleague, Mr. Callender, who had excised his knee-joint a few weeks previously. The case had done well, and bade fair to be successful in every way, until the third week after the operation, when the boy began to suffer a good deal of pain, especially from starting of the limb at night, together with high temperature and general constitutional disturbance. The splint had lost its hold on the limb, and obviously required changing. Under these circumstances I determined to try the effect of inserting steel pins into the bones, after the fashion adopted in my previous cases of recent excision, if I found, on examination of the limb, that no union existed between the bones. The patient was, therefore, placed under chloroform; and, finding no union between the resected bones, I inserted two steel pins, and applied a fresh splint. The next day, the boy was much better; he had suffered little or no pain, and had passed a good night, and from this time onward had no recurrence of the special symptoms, for the relief of which the bones were pinned together. It is of course impossible to say how much good was done respectively, in this case, by the change of splint and by the pins. The special point, however, to which I wish to draw attention, is in the fact that between three and four weeks after the operation, securing the bones in this fashion has been found a safe and serviceable measure.

Although the further progress of this case, as might be anticipated, was very slow, the lad ultimately left the hospital convalescent; and when I last saw him, many months afterwards, the leg was in a good position, and on its way, apparently, to be a sound and useful limb.

Case VII.—A boy (W. W.), aged 9, was admitted in August, 1877, into St. Bartholomew's Hospital, under my care, with strumous disease of the knee-joint, of two years' duration.

September 12th, 1877. At this date, the knee-joint was excised, steel pins being inserted in the usual manner.

September 26th. The wound had united well. Both pins were removed to-day.

October 27th. The limb was placed on an ordinary wooden back-splint with foot-piece.

January 20th, 1878. The bones were apparently firmly united. The patient could bear some weight on the leg in standing.

February 22nd, 1878. He left the hospital, wearing a thick-soled boot and plaster-of-Paris case on the knee. There was still a sinus on the inner side.

This case illustrates well the necessity of wearing some apparatus, on the part of young subjects, after excision of the knee-joint, until the period of growth is completed, even when the ankylosis appears bony. This boy was lost sight of for a long time; indeed, until he returned to the hospital in the present year (1886), nine years after the excision, complaining that his leg was gradually bending, and therefore getting shorter. He said that for some time he wore an apparatus given him when he ceased attending at the hospital; but, feeling his leg quite well and strong, he left it off after some months, and had worn nothing of the kind since. Even now, with the leg bent to an angle of 45°, he could bear weight on it practically as well as on the other; but the gradually increasing shortening from the flexion led him to apply for relief. The ankylosis seemed quite bony, and the limb had grown well in proportion to the rest of the body.

The patient having been re-admitted at about the time of my leaving town for the autumn vacation, my colleague, Mr. Bruce Clarke, kindly

undertook the management of the case, and removed a wedge-shaped piece of bone at the site of the old excision.

The patient has done well; but there has been a good deal of delay in the re-union of the bony surfaces, on account of the impossibility of bringing them well together, even after the removal of the wedge of bone.

Case VIII.—A girl (M. O.), aged 11, was admitted into St. Bartholomew's Hospital, under my care, on January 11th, 1878, on account of long-standing disease of the right knee-joint. The leg, it was said, had not been straight since she was 18 months old, when she fell, bending the leg under her. The patient was admitted into the hospital five years since, on account of the leg having been "drawn up;" but she managed to get about on it until nine months ago, since which date it has been so painful, and so much bent, that she has not been able to use it.

When admitted into the hospital, the leg was swollen, hot, painful, and tender, partially flexed on the thigh, and somewhat displaced outwards, as if there had been a partial traumatic luxation. There was not much eversion or displacement backwards. Slight movement could be effected at the knee, but it caused much pain.

January 30th. Excision was performed at this date in the usual manner, and two steel pins were inserted. The bones were found very soft; the cartilages were ulcerated, and the ligaments softened. The synovial membrane was thickened. No pus was present in the joint.

February 9th. The patient was doing well.

February 13th. One steel pin was removed, as it had become quite loose. (No note has been preserved of the date at which the other pin was removed.)

March 12th. There had been some bagging of pus on the outer side of the wound.

March 28th. At this date, the splint was removed. The wound was almost entirely healed, and there was tolerably firm union of the bones. The patient's general condition was good.

April 24th. Union seemed to be osseous. The patient walked about on crutches, a wooden back-splint having been applied to the leg.

May 20th. The patient could bear weight and walked well on the right leg. Very little discharge from the wound. General condition good.

June 21st. The patient wore a thick-soled boot, and walked well (shortening of limb only about half an inch). The leg was very slightly flexed.

The only cases of excision of the knee which, in my experience, have proved fatal after the use of steel pins are two; and in neither of these, to the best of my belief, were the pins the cause of the bad result; but it is right they should be recorded.

One case (Case IX) was that of a young man, aged 21, who was admitted into the hospital under the care of one of my colleagues, on account of disease of the knee-joint of two years' duration. Excision was performed January 1st, 1879. Steel pins were inserted at my own suggestion in the usual manner; but, from some cause or other, they lost their hold very soon, and, therefore, did little or nothing in the fixation of the limb. The case did badly from the first. On the second day after the operation, the temperature was 102° F., and of the third day 103° F.; pulse 132. Without any real relief from the urgent symptoms, the patient died about a fortnight after the operation with symptoms of osteo-myelitis and septicæmia. I have no note of the date at which the pins were removed, but I presume it must have been within two or three days of the operation.

The result of this case will be probably taken in different ways by different observers. Had it been the first case in which pins had been inserted, it is not unlikely that one would have attributed to them, in part, the untimely result. Inasmuch, however, as nothing but good has, in my experience, followed their employment in all the other cases in which they have been used, I am not disposed to believe that the calamity was more, in this case, than a coincidence. Indeed, I am sure now, from increased experience, that the employment of the pins, so far from adding to the number of calamitous results by causing osteo-myelitis or the like has, in many instances, by promoting speedy and sound union of the bones, prevented it.[1]

Case XI.—The only other case of excision of the knee which has, in my experience, been followed by death after the use of steel pins was that of a woman (H. B.), aged 41, who was admitted into St. Bartholomew's Hospital on March 13th, 1879, on account of chronic but extremely painful disease of the knee-joint. She had been previously a patient in the hospital, and had been treated by the usual methods, but without marked relief. At her urgent request that something should be done, and as everything, with the exception of her age, seemed in favour of excision, I performed this operation on March 29th, 1879, under carbolic spray, and with the other details of the Listerian system.

So far as the operation was concerned, all went well (excepting the fact that the spray seemed too strong a solution of carbolic acid, and was changed for a weaker in the course of the operation); the bones, although ulcerated on the joint-surfaces, were hard and otherwise good, and came well and evenly together. They were fixed in the usual manner by steel pins. After the operation, too, the wound went on perfectly, with no local trouble of any kind. But the general constitutional condition was bad from the time of the operation. The patient seemed never to recover from the shock. Vomiting, which was naturally attributed, at first, to the anæsthetic, was frequent, for several days; and with gradually increasing weakness, but without active symptoms and without rigors or sweating, the patient sank and died on the seventh day after the operation.

The *post-mortem* examination, which was made by Mr. Butlin, then surgical registrar, disclosed nothing which would account for death, excepting in the condition of the kidneys.

Post-mortem Examination.—"Bones. No sign of inflammation at seat of operation. Thorax. No abnormal fluid in serous cavities. Heart flabby; otherwise heart and lungs normal. Abdomen. No abnormal fluid in peritoneum. All organs fairly healthy, excepting kidneys. Right kidney, 6½ ounces, large and granular; capsule stripped off with much difficulty. Left kidney, 4½ ounces, also granular."

I can find no account in the notes of the condition of this patient's urine before operation, but I have no reason to doubt that the usual examination was made, and that nothing considered worthy of note was found.

Case XII.—A boy (H. S.), aged 9½, was admitted into St. Bartholomew's Hospital, under my care, February 10th, 1879, on account of disease of the knee-joint of three and a half years' duration. The leg was flexed, with slight displacement backwards and much eversion; the synovial membrane much thickened. The patient had been an inmate of the hospital for the same disease a few months before, but no real improvement in the knee was effected by the various methods of treatment adopted.

February 15th, 1879. Excision of the diseased knee was performed at this date in the usual manner. Gant's splint was applied; two steel pins were inserted.

February 21st. There had been much oozing of blood, or blood-stained fluid, from the wound; but the patient's general condition was very good. The temperature had been raised somewhat.

March 22nd. Since the last note the wound had proceeded satisfactorily, the daily notes recording nothing worthy of special remark. One pin was removed to-day; union appeared tolerably firm.

March 27th. The second pin was removed.

April 5th. The leg was taken off the splint. The patient could raise it easily off the bed by its own muscles. The limb was laid on a pillow.

After the above date, the union of the wound superficially was delayed by some suppuration, which ultimately led to discharge of pus just below the scar of the operation-wound on the front and inner aspect of the limb; but the union of the bones was not apparently interfered with, and it was noted, June 18th, that the union seemed to be bony.

I have seen this lad at intervals down to the present time (November, 1886). He walks well and firmly, with only a moderate amount of shortening of the limb, although he is of quite an average height or more for his age. He wears a leather and steel apparatus by my advice, as there is still a tendency to curvature of the limb at the site of the excision when he leaves it off. So far as can be made out by examination, however, the union is bony.

Case XIII.—A young woman (E. D.), aged 17, admitted into St. Bartholomew's Hospital on April 4th, 1882. She had lately recovered from an attack of small-pox. During this attack it was said the leg became painful and flexed. The right knee was now swollen and slightly flexed. Great pain was caused by any movement of the limb. A McIntyre splint was applied, and other usual measures were adopted for securing rest to the inflamed joint.

April 17th. The splint was changed.

April 25th. The joint was now distended with fluid, and there was much heat of the surface. A fluctuating painful swelling was now present below and to the inner side of the patella.

[1] The above remarks as to any possible danger in the employment of the pins were written some years since. At the present date, the number of cases within my own experience in which they have been used, both by myself and others, with only good results, is so large, that any defence or warning regarding them may seem unnecessary.

May 26th. The knee was in much the same condition, with great pain, and no sign of improvement in any respect. The joint was obviously disorganised. The patient was very anxious for relief.

May 29th. Excision was performed at this date. Two steel pins were inserted.

June 6th. The temperature was somewhat raised, especially at night, but the wound was healing well. The patient was of an extremely irritable and restless disposition.

June 30th. At some date (not preserved) since the last note, one pin had been removed. The second pin was removed to-day.

July 4th. Wound nearly healed throughout. Very little discharge.

July 11th. Wound now quite healed. The leg perfectly straight.

At about this time, namely, six or seven weeks after the excision, this patient walked across the hospital square without support from crutch or stick.

August 9th. A strong leather splint had been applied since the last note. The patient was quite well, and at this date left the hospital.

This patient (having been married in the interval) was re-admitted into the hospital, in 1885, on account of debility, and some minor troubles, following her first confinement. The leg was found perfectly straight, although for a long time she had ceased to wear a splint or other apparatus. With the exception of the effect of the stiff knee, she could walk as well as ever.

Case xiv.—A girl (E. S.), aged 11, was admitted into St. Bartholomew's Hospital, under my care, on May 26th, 1884.

Excision of the right knee had been performed at another hospital five years ago, and had been apparently successful at the time; but, subsequently, the knee became much bent. Of late, she had been an inmate of the Cripples' Nursery, Regent's Park, under the care of Mr. Henry Baker, at whose request I admitted her into St. Bartholomew's Hospital.

When admitted, there was firm, apparently bony, ankylosis at the site of the old excision, the tibia being at about a right angle with the femur.

June 11th. Re-excision was performed at this date; a wedge-shaped piece of bone being removed, and two steel pins inserted.

June 12th. The patient had slept well.

June 17th. The patient had slept well every night since the operation, and had suffered very little pain.

June 24th. One pin, which had been rather loose for two or three days, was removed at this date (thirteenth day). The other pin was removed on the nineteenth day after the operation.

July 5th. The splint was changed to-day.

July 18th. The splint was removed to-day. The patient was able to raise her leg from the bed by its own muscles, without other help and without any pain. The bones seemed firmly united.

July 22nd. The external wound was nearly healed; the good position of the limb is maintained. The patient could lift her leg easily.

August 4th. The patient left the hospital to-day.

The foregoing cases form the whole number of those in which I have employed steel pins in fixing the bones after excision of the knee-joint.

Although the insertion of the steel pins is a very simple procedure, a few details regarding it are worth noting; some of them are important.

The absolute weight, as well as the leverage of the bones, is so great that as much precaution as possible should be taken, in order to prevent or relieve any strain on the pins after their insertion. In other words, the pins should not be considered as substitutes in any way for splints, or for the best splints obtainable; nor will they necessarily compensate for what may be termed bad carpentry in section of the bones. The great objects in view in sawing the bones are, of course, (1) to remove as little as possible consistently with removal of the disease; and (2) so to cut the bones that, with the limb straight or ever so slightly flexed, the cut surfaces shall be evenly apposed throughout their whole area, so far as the comparative size of the resected surfaces will permit; and it is when the position of the bones satisfies these conditions, and after they have been supported, as far as possible, in the right state of apposition by splints and padding, that the pins should be inserted. The test, moreover, to be employed for the right position of the bones should be not the general outline of the limb, or even of the knee, as seen through the integument, but the examination of the cut bones themselves; and that this may be carried out, the introduction of the sutures in the integumental flaps should be the last step of the operation. A few extra minutes employed in adjusting and securing and testing the firmness of the bones are well spent if, as is frequently the case, their expenditure will save weeks or months in the subsequent healing.

At first thought, it seems easy so to resect the articular ends of the femur and tibia as to permit the sawn surfaces to lie exactly in co-aptation one with the other, as they do when the operation is performed experimentally on two bones which have been removed from the body (see Figure). But everybody who has performed excision of the knee knows that, in many cases, this is not so. Removal of the joint-surfaces leaves the soft parts at the back of the knee intact; and inasmuch as these do not retract or shorten, to any great extent, they may, by being unduly long, offer an impediment to the even co-aptation of the resected surfaces; or, from their state of contraction, they may, in just the opposite way, prevent the same result, by being too short. Hence, in either case, the great value of any means of securing the resected bones which will not only prevent lateral displacement, but which will, at the same time, keep them in contact over a great part of their sawn surfaces in opposition to the tendency of the soft parts behind to keep them apart, either by being too long or too short. Of course, for many reasons needless to be mentioned, all strain must be avoided, even if by force it could be overcome, and prevented by the mere strength of the pins from separating the bones. What is here referred to as resisted by the pins is merely that resilience of the soft parts which, slight as it may seem, no splint will absolutely overcome, except with the help of such bandaging or strapping as will probably be itself unbearable.

As the steel pins are constructed for the special purpose of perforating bone, the points are not very well adapted for piercing the skin, and I have usually punctured the latter with a fine scalpel before their introduction.

The pins have been usually left *in situ* until they have become loose, that is, for a period varying from a few days to several weeks in different cases; and, beyond a trifling ulceration of the skin now and then around the point of insertion, no ill effects locally have ensued. They can, as a rule, be withdrawn, when loose, by a few turns between the finger and thumb, or the handle may be re-applied for this purpose. Ordinary well tempered steel has answered the purpose so well that I have not thought it necessary to use anything else; but possibly it would be an advantage if the pins were silvered, as they become somewhat rusty after a few weeks' residence in the tissues. The tracks made by them have, however, always in my experience been healed soundly within a reasonable time after their withdrawal.

I may add that the plan of fixing the bones which I have here recommended has been adopted by several of my colleagues at St. Bartholomew's Hospital, and with success similar to my own. Mr. Willett has of late, after perforating the bone with the steel pins, withdrawn them, and substituted bone pins (of about the size of knitting-needles), cutting these off at the level of the bone, and allowing them to remain permanently *in situ*. He tells me he is well satisfied with the result, and has hitherto had no subsequent trouble from the presence of the pins within the bones.

Although the plan of securing the bones in excision of the knee-joint by means of steel pins resembles, to some extent, that of the insertion of silver or other sutures which has been so frequently tried by various surgeons, I venture to think that it is much more effectual. The quick union of the bones and the comparative freedom from pain and other troubles which I would claim as the results of the treatment by pins, depend largely, I believe, upon the avoidance, by means of them, of even those slight movements between the bones which metal sutures will not altogether prevent.

Guy's Hospital.—The appeal recently made for funds by the Governors of Guy's Hospital has, so far, brought in a sum of £47,800.

The Dangers of Overhead Wires.—A letter has been addressed to the Metropolitan Board of Works by the Vestry of Kensington, suggesting the advisability of introducing a clause into a Bill before Parliament, making it compulsory for all telegraphic and telephonic wires to be laid underground, wherever, in the opinion of the Board, it is necessary for the public safety, and giving the Board entire control over the erection of all overhead wires as to their structure, maintenance, and continuance. The matter was referred to the Works and General Purposes Committee.

Tavistock Cottage Hospital and Dispensary.—It was decided, at a meeting of the Tavistock Dispensary, held on January 25th, to establish a cottage hospital in connection with the dispensary, and that the joint institution be named the Tavistock Cottage Hospital and Dispensary. A special committee was appointed to take the matter in hand.

Meteorological Exhibition.—The Council of the Royal Meteorological Society have arranged to hold at 25, Great George Street, S. W., an exhibition of marine meteorological instruments and apparatus, from March 15th to 18th.

ABSTRACTS OF THE

ERASMUS WILSON LECTURES

ON

EVOLUTION IN PATHOLOGY.

Delivered at the Royal College of Surgeons of England, January and February, 1887.

By JOHN BLAND SUTTON, F.R.C.S.,
Assistant Surgeon to the Middlesex Hospital.

LECTURE II.—SUPPRESSION OF PARTS—(*continued*).

Supernumerary Vertebræ and Half-Vertebræ.—In this lecture an attempt was made to explain certain malformations of the spinal column, especially the occurrence of half-vertebræ and supernumerary vertebræ, as being due to the full development of mesoblastic somites, which in the ordinary course became suppressed. The type of the process was taken from the green turtle. Professor Kitchen Parker had found that, in the early stages of this chelonian, the vertebral column had fifty-one somatomes, but the adult only forty-one. Careful comparison of the stages showed that seven segments aborted in the neck, and three in the caudal series. This suggested an ancestry from forms with a much longer tail, and neck not unlike a Plesiosaur. That similar suppression occurred in mammalia and man was exceedingly probable, for supernumerary vertebræ were by no means infrequent in the various regions of the spine; besides, the disposition of the cervical nerves indicated that within approximately recent periods one element at least had undergone suppression in that section of the column.

With regard to half-vertebræ. Quite a number of cases had been placed on record in which one-half of a vertebral centrum, with its transverse process, lamina, and spine had been wanting. On the other hand, instances of one, two, three, and even four, half-vertebræ too many, had been described. Examples of human fœtuses with tails had been recorded by competent observers, and in these cases the tail was composed of notochord, surrounded with muscular tissue. The only satisfactory manner of explaining such cases was to believe that, in the embryo, more mesoblastic somites were formed than were utilised in the formation of the permanent vertebræ; but, in some instances, the somites normally suppressed went on to full development. Occasionally, however, the suppression exceeded its usual limits, and a diminution in the vertebral segments resulted. Reference was made to Cope's observation on the skeleton of *Eryops megalocephala*, an extinct batrachian exhumed from the Permian formation of Texas. In this animal, each vertebral body was normally composed of two lateral pieces. This discovery seemed to show that, in the bilateral nuclei composing the odontoid process of the mammalian axis, we had an example of the retention of a very primitive character.

Sacral and Coccygeal Tumours.—In this section, the lecturer adduced additional evidence in support of the view that the various congenital tumours of the sacrum and coccyx belonged to four classes: (1) sacral spina bifida (often falsely called lipomata); (2) tumours originating in the post-anal gut. These were often called congenital sacral sarcomata, and were supposed by many to originate in Luschka's coccygeal body. This structure, however, with its pedicle, was really the persistent remnant of the terminal section of the gut, hence the gland and the tumours had a common origin; (3) cystic tumours originating in the neurenteric canal (rectal dermoids); and (4) parasitic fœtuses of various degrees, from a more or less perfect child to an ill-shapen conglomeration of mature tissues, fingers, toes, bones, gut, etc. A good deal of collateral evidence was adduced from various sources, commencing with the *Siphonophora* and working upwards to man, in order to show that a single ovum might give rise in some cases to two embryos; that is to say, the medullary folds in some cases failed to fuse, and each remaining distinct gave rise to a more or less separate individual; and this had actually been witnessed in an amphibian.

The Ovary.—The ripening and suppression of ova in the fœtal ovary, not only of man, but of many mammals, was next described, and it was argued that this wholesale suppression of ova indicated an ancestry from forms which had been, like fish and amphibians, in the habit of producing a very large number of offspring. Now, as the environing conditions had changed, such enormous production was useless, and would be harmful, the ova were quietly suppressed in the follicles. Collateral evidence was furnished by supernumerary mammæ, for these clearly indicated not only that man's ancestors produced a greater number of offspring than at present, but that the male shared with the female the duty of giving suck to the young. The existence of additional mammæ so frequently in the male was another link in the chain of evidence that vertebrates were descended from hermaphrodite ancestors. The lecturer was further of opinion that the curious arterial communication between the subclavian and external iliac arteries, by way of the internal mammary and deep epigastric arteries, was to be accounted for by regarding it as a remnant of a row of mammæ originally extending along the thorax and abdomen.

SUBSTANCE OF SOME REMARKS CONCERNING CASES OF VALVULAR DISEASE OF THE HEART, KNOWN TO HAVE EXISTED FOR OVER FIVE YEARS WITHOUT CAUSING SERIOUS SYMPTOMS.[1]

By Sir ANDREW CLARK, Bart., M.D., LL.D., F.R.S.,
One of the Teachers of Clinical Medicine at the London Hospital.

[*Continued from page 261.*]

I PROCEED now to call your attention to some of the "afternoon cases," which are not included in the tables; and I shall confine myself to relating some broad facts in the history of a few patients who illustrate, in a signal manner, the long duration of heart-disease without characteristic symptoms, and the importance to the public of a sound judgment concerning the course which such cases are likely to pursue.

CASE I.—In the early part of 1842 the house-governor of one of the largest London hospitals, being about to marry, petitioned the committee for rooms wherein to dwell with his wife, and proceeded to insure his life. The office refused to accept the insurance upon any terms; and in reply to the urgent questions of the candidate, who averred that in the whole course of his life he had never been ill, said that he had a serious disease of the heart in the form of mitral regurgitation. To the further question of the proposer, whether he would live six months, the reply was that he might. Then the house-governor, with the characteristic inaccuracy of patients, informed the committee that he had a mortal disease of the heart, that he could not live six months, and that he withdrew his application for rooms. The committee considered the matter, and fearing that the house-governor might die suddenly in the wards, they superannuated him; and, furthermore, believing that he had but a short time to live, they superannuated him on full pay. In 1854, this gentleman, one of my earliest patients, consulted me for indigestion, and I discovered that he had a loud rasping systolic murmur, heard not only in the mitral area, but all over the left side of the chest. Beyond the symptoms of indigestion, due to the patient's indiscretions, he exhibited no other evidence than the murmur of the existence of cardiac disease. Without being particularly careful, he continued to live, work, and enjoy life until 1874, when, at an advanced age, he died of an attack of acute bronchitis. Thus, for thirty-two years after having been condemned to die of heart-disease, he continued to enjoy more than average health, to discharge the duties of a town rectory, and to draw his full pay from the hospital.

CASE II.—Mrs. W., whom I have often seen with Dr. Leddard, came first under my observation when she was a young woman, over twenty years ago. She consulted me for indigestion and uric acid gravel; but I found that she enjoyed average health, that she was in nowise hindered in the course of her ordinary life; and that she had no complaints which could be justly ascribed to disease of the heart. Nevertheless, this organ was seriously affected; it was greatly enlarged, and probably adherent to the pericardium. There was a loud systolic murmur in the mitral area, and there were both direct and regurgitant aortic murmurs. The ventricles, however, were sound; there was a moderately full, and doubtfully dicrotic pulse; the bases of both lungs were free; there was no enlargement of the liver; the urine was of normal density, and free from albumen; and the patient was not conscious of distress of breathing or of palpitation. Twice since first I examined her, this lady has had bronchitis and pulmonary congestion; three or four times she has had gastro-hepatic catarrh, and lithiasis, and now and again she has complained of fugitive "rheumatic" pains. But on the whole she has had comfortable health; and although I have not seen her within the last two years, I am informed that there is no sensible change in her condition, and that she is able to pursue a useful and an enjoyable life.

[1] Read in the Section of Medicine at the Annual Meeting of the British Medical Association at Brighton.

CASE III.—Miss W., now about 38 years of age, consulted me some sixteen years ago for neuralgia, with subcutaneous extravasations of blood, and a bizarre condition of the whole nervous system. She made no complaint of her heart, nor of any symptom plainly connected therewith. But the heart was much hypertrophied; its action, although moderate in frequency, was tumultuous, and there were loud double murmurs within both the mitral and the aortic areas; indeed, the sound of the basic reflux was almost as loud as any that I have ever heard. The pulse was dicrotic, and the cervical veins did not completely empty themselves during inspiration. Since then this patient has suffered at various times from nerve-storms, and has been seen by Sir James Paget, Sir Joseph Lister, Dr. Wilson Fox, and Dr. Leadam. I examined her a few weeks ago. The heart was in the same condition as when I examined it sixteen years before; and the patient declared not only that she had no complaint to make concerning it, but also that she was in excellent health.

CASE IV.—Fifteen years ago, I was consulted about Mr. G. B. by his family, who had been recently told that he had serious heart-disease, and that his life must be necessarily of short duration. The mother, having no hope of her son's recovery, merely asked me by what means his life could be as long as possible preserved. The lad, then about sixteen, was dark, florid, moderately well nourished, and healthy-looking. To my inquiries about his ailments he had but one reply. He suffered nothing, and was quite well. The heart, however, was much enlarged; a loud systolic *bruit* was heard in the mitral area; there were direct and regurgitant aortic murmurs; the impulse of the heart was diffused and heaving; the cervical veins were rather full, and the pulse was somewhat jerking and collapsing. I recommended the patient to be sent, in due time, to the university, and to follow a simple regular occupied life. After much conflict of opinion and prolonged opposition, this recommendation was eventually followed. The lad passed through his university career in safety, and took at last a good degree. Some time after this I was again consulted as to the future course which the patient should pursue. Knowing that he had theological leanings, and was of a religious habit of mind, I recommended the Church. Accordingly he went to a theological college, passed his examinations with success, was ordained to a curacy in the north of London, and settled down into a busy life. In the course of more years of study and of work, the patient suffered occasionally from indigestion; and twice, having a cold at the time, from a little congestion of the lungs, with streaks of blood in a catarrhal expectoration. This gentleman, once doomed to perpetual rest and idleness, is now incumbent of one of the largest parishes in England, and continues to pursue an active, a useful, and a comfortable life.

CASE V.—Some years ago I was consulted by a wealthy midland merchant, about fifty years of age, who told me that his local advisers, having discovered that he was the subject of some grave heart-disease, urged him to relinquish his business, to retire into the country, to abstain from exercise as well as from occupation, and to follow the ways of an invalid life. He told me, furthermore, that in following this counsel he would have to pass from affluence to privation, and that he was nervous, depressed, and ill. After a careful examination, I could discover in the patient no evidence of disease beyond a loud, even, systolic, mitral murmur. The ventricles were strong, and acting steadily about seventy times in the minute; a good volume of blood was passing through the radial pulse; there was no congestion about the bases of the lungs, no enlargement of liver, no enteric catarrh, no material alteration of the urine, and none but subjective troubles of the general health. To my question how long he had felt ill, the reply was clear and conclusive. He had felt ill only since he was told that he had heart-disease; before that, he was full of activity, enjoyment, and health. I then recommended the patient to practise a careful dietary, to take only moderate exercise, to resume his business, to indulge in occasional recreation and change, and to discontinue the digitalis and aperients which he had been taking since the discovery of his disease. I have twice heard of this patient since he followed my counsel, and I was told that he was well.

CASE VI.—Eight years ago I was summoned to see Mr. H. T., over seventy years of age. Four months before the time of my visit, he had a bad cold, and was seen and examined by a medical man in the country. This gentleman told him that he had serious heart-disease, that his life was in danger, that he must live on one floor and take no exercise, that he must not strain or lift weights, or suddenly rise from the recumbent to the erect position, that he must have light food every three hours, and that he must take plenty of alcoholic stimulants. He added that his family had persecuted him into the following of this regimen, that ever since he had been losing flesh, strength, colour, and comfort in life, that his sleep had deserted him, that his feet were swelling, and that his family, now themselves alarmed, wished to hear what I had to say and advise.

The patient had mitral and double aortic disease, a moderately hypertrophied heart, a jerking frequent pulse, and some basic pulmonary congestion. There were, in addition, a loaded tongue, nausea, flatulence, constipated bowels, turbid urine, a faintly yellowish dry skin, oppressive headache, and a very irritable temper.

I directed the patient to have three simple nutritious meals a day, to return to the moderate use of sherry, to drink little liquid, to sponge with warm water and clothe warmly, to drive daily, and to potter about in the park as much as his strength would permit, to join in the family life, and to take every night for a week a quarter of a grain of calomel, followed in the morning by a small dose of sulphate and phosphate of soda in a quarter of a pint of hot water. I am not sure that the medicine contributed much to the patient's recovery, but it is beyond doubt that the diet and the restoration to freedom did, for, in about a month, the patient had regained his former condition, and regarded himself as well. Two months ago I again examined this patient. The heart was just in the same condition as before, but restored to the ordinary freedoms of his eighty years, he was without complaint, and satisfied with his life.

Now, you will have noticed that, in all the cases selected for illustration, I have recommended the patients to return, in a more or less modified degree, to a strict observance of the physiological conditions of life as respects diet, clothing, exercise and occupation. And, in the great majority of cases of chronic valvular disease of the heart, this recommendation is not only just in itself, but necessary to what is best and most enduring in curative results. But here a word of warning is necessary, for it is not at all times justifiable, or even safe, that such a recommendation should be given. When the heart is irritable, frequent, intermitting or irregular; when the murmurs vary in character and intensity; when there is any suspicion that recent changes have been occurring in the interior of the heart; and, more especially, when there is any febrile disturbance of the system, it is necessary that the patient should be kept at rest and fed upon the lightest food. For it will not be safe—it will, indeed, be full of the gravest peril—to permit a patient having valvular disease accompanied by such conditions, to indulge in any of the ordinary freedoms of health. Of many cases that I remember illustrative of this danger, I shall mention only one, which I saw last year with Dr. Henderson. A young girl about 16 was discovered to have considerable mitral regurgitation, and, there being a suspicion that at least some part of it was of recent origin, she was kept exceedingly quiet and carefully fed. After a time, however, she was taken to a consulting physician, who, upon examination, said that he did not regard the affection as of serious moment, and advised that she should resume her studies and return to the freedom of ordinary life. In a fortnight she began to flag; the heart became frequent and irregular; the general health rapidly failed; and in a month the child had all the symptoms of endocardial fever, from which, after various accidents and long suffering, she died.

I now proceed to bring before your notice, in relation to the general subject under discussion, another fact which may be regarded as worthy of further inquiry and of closer consideration. It is this: that organic murmurs of the heart, once firmly established, and even lasting for some years, may eventually disappear. I shall select again from my own experience several illustrations of this occurrence. But, in the first place, let me remind you of what happens in respect of the mitral murmurs associated with chorea. It is now beyond doubt that many of these are produced by organic changes in the valves; and that, of the changes so produced, the great majority, together with the murmurs indicating their presence, eventually disappear. I can recall to mind many cases of this kind which have happened within my own experience—and, indeed, I can remember but a few instances in which the mitral *bruit* of chorea has continued to be clearly heard after ten years from the time of its appearance. It is, therefore, to be believed that destructive changes, arising not from degeneration but from inflammation, may be so completely repaired as to leave behind no clinical evidence of their former existence.

And in the second case I must also remind you of what sometimes happens in the young, to mitral valves (I am not quite sure about aortic valves) injured by the local processes of rheumatic fever. There has been, as we shall suppose, conclusive evidence of an attack of simple endocarditis; the fever subsides; the patient recovers, and his restoration to the freedoms of health is conditioned and qualified by the existence of a loud systolic murmur. You lose sight of the patient for a year or two, and when next you examine the heart, you fail to discover any conclusive evidence of its unsoundness; what has

exactly happened you do not know. It may be that the exudation upon the valves has been removed, or it may be that it has become, through lapse of time, so contracted, hard and smooth, as to be no longer capable of producing a murmur, or of influencing adversely the cardiac action. But, anyhow, the murmur is gone, and nothing remains to tell the story of former disease.

But these recoveries from valvular inflammations are not confined to the young; they happen sometimes in the old; and I shall now furnish you with a few illustrations of both.

Case vii.—Twelve years ago I saw, with Dr. Murray, in Portland Place, a young lady, about 17, who was suffering from a severe attack of rheumatic fever. A few days after I first saw her, she had an attack of endocarditis, accompanied by increased swelling in the joints. The attack was severe, and the constitutional disturbance prolonged. Eventually, however, the patient regained her health, although for two or three years longer she continued to have loud systolic mitral and aortic murmurs. Examined a year ago the patient was found to be in good health, and every trace of the cardiac murmurs had disappeared.

Case viii.—Some years ago I was summoned, by Dr. Reid, of Highbury, to give my opinion about the case of a boy, who was suffering from severe mitral incompetency. Dr. Reid had become anxious about the case, and was discussing with me what should be the future of the patient and upon what lines he should live.[1] We agreed upon these points; but when I gave the opinion that the murmur was likely to disappear, my colleague was disposed to dissent. Nevertheless, in a year or two the murmur did entirely disappear; and I owe to Dr. Reid's frankness and kindness the opportunity of being able to acquaint you with the fact.

Case ix.—In 1860 I attended Dr. G. during an attack of rheumatic fever, complicated by severe endocardial inflammation. After four months' illness, the patient recovered; but for some years—I know not exactly how many—he had loud systolic aortic and mitral murmur. In 1871, he was carefully examined by Dr. Herbert Davies, who, discovering no evidence of the existence of heart-disease, certified the life for ordinary insurance.

Case x.—Twelve years ago the late Dr. Anstie summoned me to see a connection of his, and to consider with him whether she was in a fit state to undergo an operation for hæmorrhoids. Mr. Curling met us in consultation. The lady was about forty-two years of age, married, very nervous, and the subject of recurring rheumatic attacks. It was supposed that in one of these attacks the endocardium had become affected. At any rate, there was a distinct regurgitant aortic murmur, and the first sound within the mitral area was exceedingly rough. Five years afterwards, no murmur was to be heard, and the valvular sounds were clear and well pronounced.

Case xi.—Eleven years ago I saw, with Dr. Oppenheim, a gentleman, aged 74, suffering from gouty endo-pericarditis. The physical signs were well marked, and there was considerable local and constitutional distress. He recovered in two months; but there remained, with some habitual distress of breathing, systolic, aortic, and mitral murmurs. After three years, neither Dr. Oppenheim nor I could discover any material change in the sounds of the heart, both murmurs having entirely disappeared.

I could cite many other cases to illustrate the disappearance of murmurs originating in rheumatic inflammation of the valves; but as this point in our present discussion is a subsidiary one, I shall content myself with the cases already related or adverted to, and proceed to consider some of the practical applications of the facts which I have in various ways brought before your notice.

[*To be concluded in our next issue.*]

PERSISTENT VOMITING AS A CAUSE OF EAR-TROUBLES.

By CHARLES ATKIN, F.R.C.S.,
Lecturer on Anatomy, Sheffield School of Medicine.

As far as I am aware, vomiting is not usually included in the list of causes occasioning catarrh of the middle ear. It is well known that aural affections frequently complicate general wasting diseases, especially in their final stages. The pharyngeal muscles waste along with the rest of the body, and the sufferer's last days are aggravated by distressing tinnitus and vocal reverberation. This last symptom is most annoying. Whenever any movement occurs in the throat, nose, or mouth, the sound is conveyed to the tympanum up the unduly patent Eustachian tube, causing an unnatural ringing and roaring noise in the ears.

[1] The case was read in full at the Brighton meeting.

Wasting of the "constrictor sacculi pharyngis" and undue patency are sufficient, in many cases, to account for the symptoms complained of, but a further cause appears to have been lost sight of—that is, impaction of minute particles of regurgitated food or mucus in the tubes during the act of vomiting.

In the simple act of vomiting the contents of the stomach are not infrequently ejected through the nostrils, and the tubal orifice may easily become plugged. Should the act be repeated constantly, as often happens in renal and cerebral affections, the plug of mucus may be driven still further up till it becomes lodged at the narrowest part—at the junction of the cartilaginous portion with the bony part of the tube.

With the exception of Von Tröltsch's classical case, in which a grain of barley was discovered *post mortem* impacted in the pharyngeal orifice of the Eustachian tube, I know of no others where foreign bodies have been supposed to have gained entrance into the auditory apparatus through the pharynx.

The following case is interesting, as the patient accurately described his symptoms from the outset. During a violent fit of vomiting, in which some of the contents of the stomach poured out of the nostrils, he felt as if his right ear suddenly became plugged. He endeavoured to ease the dull tickling sensation by inserting his little finger in the external meatus, but with no result. When I saw him next morning he was slightly deaf, and complained of his voice reverberating in his ear, and of a continuous throbbing, which he said felt "like a pulse in the ear." The drum was unaffected. Though instructed how to perform Valsalva's method, he derived no benefit, and could not force any air into the right ear, though he felt it in the left distinctly. Swallowing, yawning, coughing, sneezing, sometimes seemed to ease him for a minute or two, but the worry soon returned. Some days after the left ear went in exactly the same way, and I found that he could not hear the watch at half the proper distance. At this time the right drum appeared to bulge slightly below and behind, and the sense of having a drop of fluid in the ear seemed to depend on the position the head was held in. Whether any fluid ever gained entrance into the cavity of the tympanum, or whether it was simply retained secretion, is impossible to say. As the patient was rapidly dying from an abdominal sarcoma, it was not considered justifiable to resort to any operative procedures for the restoration of the patency of the tube. The symptoms, therefore, persisted, the tubes remaining blocked to the last. Without any leading questions, the patient distinctly attributed the numb feeling in his ears to the vomiting. Deafness was not complained of, and no doubt he might have heard the watch had it not been for the subjective aural sensations which drowned all faint sounds.

A man with locomotor ataxy, after an unusually severe series of "gastric crises," noticed that he was deaf. Roaring noises in the ears were complained of, with stiffness behind the lower jaw. The throat was not inflamed, and Politzerisation failed to move the drums, which were apparently healthy. Examination with the fork showed that the fault lay in the conducting apparatus. When seen a few weeks later, both drums were perforated, the man expressing himself easier since the ears began to run. Since then the tubes have been kept open, and the perforations have healed. In this case the blocking of the tubes was not due to inflammatory congestion as far as could be made out. A subacute inflammation did take place, but owing to the patient's irregular attendance, its course was not accurately watched. It may fairly be urged that his neurotic condition may have influenced the ear-affection, for neuralgic pains and tinglings in the face and head were constantly complained of.

The suddenness of the onset in both cases, and the absence of the usual cause of increased flow of blood to the middle ear, or of any irritation of the tensor tympani muscle, make it probable that the persistent vomiting had something to do with the causation of the distressing tinnitus and partial deafness.

A CASE OF POISONING BY DUBOISIN.

By CHARLES M. CHADWICK, M.A., M.B.Oxon., M.R.C.P.,
Honorary Physician, Leeds Public Dispensary.

As cases of poisoning by duboisin are somewhat rare, the following may be of interest.

On July 13th, at 11 A.M., H. J. H., aged 75, consulted Mr. T. Pridgin Teale with reference to his eyes. H. J. H. is suffering from slow-forming senile cataract, and on several occasions atrophine has been used for purposes of examination. On this occasion, however, two discs, each containing 1-200th of a grain of sulphate of duboisin, were placed in the eyes. Very shortly afterwards, patient complained

of slight giddiness, became very fidgetty, and was advised to remain sitting. In about twenty minutes, the pupils being fairly but not fully dilated, the necessary examination took place, H. J. H. standing during the proceeding. A few minutes later, he experienced a decided feeling of weakness and loss of control over the legs, great dryness of mouth, with exceedingly bitter taste. Fancying, however, the fresh air would do him good, he refused to remain, and elected to walk home. He had not gone far before it was evident that persons in the street regarded him as decidedly "under the influence of liquor"; his speech became husky and indistinct; he walked, talked and behaved like one slightly intoxicated. Later, when at home, the symptoms progressed; complete inability to stand without assistance, or to recognize the position of objects, partly due, no doubt, to paralysis of accommodation, but also due to visual hallucination. For example, the patient would suddenly sit on the ground, imagining a chair was ready to receive him; drop a glass in mid-air instead of placing it on the table; and grasp in the air above his head for his watch which had been taken from him. With difficulty he was got to bed, constant attendance being necessary to keep him quiet; there was incessant movement, with carphology, a suspicious way of glancing beneath the bed-clothes and behind the back. A few moments, when left to himself, sufficed for the whole room to be upset; towels, brushes and shoes were placed in the bed, and boots on the dressing-table; this entertainment ended by a somewhat severe fall on the floor, whence he was unable to raise himself without assistance.

This incessant activity was accompanied by a flow of words, sentences strung together without any apparent connection, a return of memory to things which happened years ago; throughout, an air of fun and humour, the symptoms those of childishness rather than any attempt at violence.

The pulse was slow; the patient, entirely ignorant of what was the matter with him, imagined it was quite dark, whereas it was a bright summer afternoon. Four hours after the commencement, a small injection of morphine was given, and the patient became quieter, dosing apparently for a few seconds at a time. Three hours later he obtained an hour's quiet sleep, and, after some light nourishment, three hours' sleep, after which his mind appeared quite clear again. He was entirely unconscious of all that had passed; a feeling of weight in the head and general upset lasted for several days. The urine, before and after, was normal. The thoughts which such a case as this gives rise to are shortly these: It is known that children bear belladonna better than adults. Do advancing years gradually increase the susceptibility? Eight cases reported by Mr. Nettleship in 1879 would appear to indicate this. Secondly, was the poison absorbed entirely by the conjunctival mucous membrane? The bitter taste in the mouth might possibly be due to a referred sensation. Thirdly, does this susceptibility in old age point to an unpronounced pathological condition, which is liable to result, after a time, in that condition of atrophy and degeneration which is popularly known as "softening of the brain"? And, fourthly, does belladonna poisoning, which resembles so closely acute alcoholism and post-epileptic delirium in most of its symptoms, ever give rise to those outbursts of violence—so frequently destructive to life, and so invariably succeeded by entire ignorance of a deed, perhaps of the ghastliest description—which render the medico-legal aspect of many so-called criminal cases so profoundly interesting?

A CASE OF RHINOLITH.

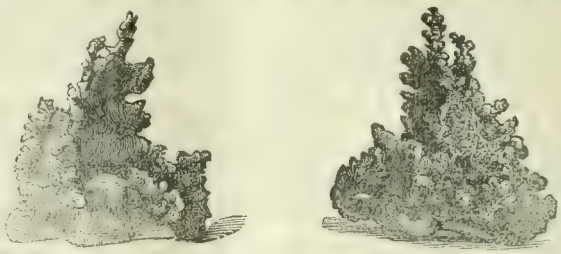
By AUGUSTUS F. CLAY, M.R.C.S.,
Casualty Surgeon, Queen's Hospital, Birmingham.

Nasal calculi are so extremely rare that, so far as I can ascertain, only forty-six cases have been published since this condition was first described in the year 1502. The following case is worthy of record, especially when the size of the stone and its probable lengthy formation are taken into consideration.

Robert F., aged 47, married, has had an unusually healthy life, and has never suffered from rheumatism or gout. His mother informs me that when he was two years of age he was thrown from a wheelbarrow on to his face, and for many years subsequently he had an unpleasant discharge from his nose. As long as the patient himself can remember, his breath was offensive to others, and this was especially so when he caught cold. He has never had any difficulty in breathing. During the past two years he has complained of almost incessant frontal headache, and there has been a perceptible deviation of his nose towards the left side. When being examined, there was marked tenderness, but no local pain otherwise, and none in his ears. No discomfort had been noticed from epiphora. There was considerable bulging of the right cheek and nostril, and the septum nasi was obviously deflected to the left. From a casual glance, the patient's appearance suggested that a tumour growing from the antrum had extended inwards. From the anterior nares a brown substance could be seen in the inferior meatus; and this, when examined with a probe, was found to be rough and hard. The left side was free to the passage of air; but the right was completely blocked, the mucous membrane being very much tumefied.

The patient was placed under chloroform, and an attempt was made to pass a small pair of curved polypus-forceps around the foreign body; but, until a few irregular projections had been broken off, and the stone pushed a little backwards, no firm hold could be maintained. Having at length got a secure grasp, by a steady traction, with slight rotatory movement, the bulk of the body was brought away, and the few remaining particles were then removed with Lister's drainage-forceps. Hæmorrhage was inconsiderable, and no necrosis could be detected. The nostril was syringed out three times daily with corrosive sublimate solution (1 in 1,000), and in a week's time the swelling of the mucous membrane had almost completely subsided. The discharge ceased; but the septum remained unaltered, although the removal of the external bulging of the nostril considerably improved the patient's general appearance.

The stone, as the accompanying woodcut shows, was shaped some-



what like an isosceles triangle, the surface being particularly irregular. The length of the stone was one inch and a half; the base a little less. The weight, when dried, was 110 grains. On cutting into its base, the stone had every appearance of having originated around a cherry-stone, although only half its shell remained, and that was much altered in its physical characters.

The history of the fall from the wheelbarrow is interesting, inasmuch as it was the cause of attention being drawn to the discharge from the nose, which, in my mind, was evidently due to the introduction of the cherry-stone some time prior to the accident.

NOTE ON THE CULTIVATION OF BACILLUS ANTHRACIS.

By HENRY TOMKINS, M.D., B.Sc. San. Sci. Dip.,
Medical Officer of Health, Leicester.

In the month of July last an outbreak of splenic fever, in a village a few miles from the borough of Leicester, afforded me an opportunity of making some cultivations of the bacillus anthracis. In addition to the loss of a number of cattle, several men—butchers, labourers, and others, having the handling of the carcasses—became infected, and one man lost his life therefrom.

By the kindness of Dr. A. Moore, officer of health for the county, I was enabled to obtain some of the fluid from the pustules of a patient suffering from the disease. At the time this was taken, the man was beginning to convalesce, and had passed the acute stage. A drop of this fluid examined and stained showed bacilli present in scanty numbers, mixed with a number of ordinary micrococci. Cultivations were made both in a tube and on plates. In the first series the bacillus anthracis was present in fair number, but the micrococcus was still more abundant. In the second series of cultivations made from the first, the bacilli were much diminished in number, whilst the micrococci were proportionately increased. And in the third series of cultivations the bacillus anthrax had quite disappeared, the whole growth apparently being taken up by the micrococcus. From this it would seem that the bacillus anthracis, when cultivated, may under certain conditions be killed or choked off, as it were, by another micro-organism, the one in this case probably being the ordinary micrococcus met with in suppuration.

The origin of this local outbreak has not with certainty been ascer-

tained, but suspicion fell upon a tanyard where foreign hides are manipulated, and the washings, etc., from which ultimately find their way into a brook to which the cattle had access.

Within the last few weeks other animals have died upon the same farm, amongst them a horse, which had been in the field where the carcasses of the former animals were buried in the summer.

THERAPEUTIC MEMORANDA.

A POSSIBLE DANGER ATTENDING THE USE OF OL. PINI SYLVESTRIS.

DR. HARVEY'S note on "A Possible Danger attending the use of Pure Terebene," in the JOURNAL of January 29th, reminds me of two cases of strangury, which occurred in my practice from the use of ol. pini sylvestris in November last.

W. B., aged 75, suffering from chronic bronchitis, with mucopurulent expectoration, was ordered five-drop doses of the ol. pini sylvestris in the form of an emulsion, every three hours. There was a marked improvement, the dyspnœa being relieved and the expectoration diminished. On the second or third day, however, the patient complained of pain in the renal region, extending into the pelvis and the right thigh. This was accompanied by severe strangury.

D. S., a man, aged 56, suffering also from chronic bronchitis, was treated with similar doses of the drug in the same form. He complained, in a couple of days' time, of painful micturition and bloody urine.

In both these cases the drug was at once stopped, and the symptoms disappeared in a few days' time without any special treatment. There is no doubt in my mind that these symptoms were caused by the ol. pini sylvestris, although administered in such small doses.

St. Helens. ALFRED M. HYNES.

SURGICAL MEMORANDA.

DISLOCATION OF THE HUMERUS REDUCED BY RIGHT-ANGLE TRACTION.

H. B., aged 32, a strong muscular man, 5 feet 11 inches in height, whilst skating on January 17th, 1887, fell with his right arm extended, and dislocated his shoulder. He was seen by me about half an hour after the accident, when I found the head of the humerus below the glenoid cavity. I had him placed sitting in a chair, and steadied by an assistant; then raising the arm to a right angle, and grasping it firmly above the wrist with my right hand, pressing it close against my side, I steadied the scapula with the palm of my left hand on the acromion process, at the same time pressing the head of the humerus with my fingers. I maintained steady traction for eight or nine seconds, when the bone easily slipped into its proper place.

If this case had been treated by the usual method, it would have taken a much longer time, and greater exertion in overcoming the resistance of the deltoid and other muscles in so strong a man. This is the first time I have tried the right-angle traction, and I am certainly pleased with the result.

Rushden. C. R. OWEN.

OBSTETRIC MEMORANDA.

COMPLETE INVERSION OF THE UTERUS.

ON Sunday, November 14th, about 7 A.M., I was fetched to a woman, aged 26, who had, at 6 A.M., been delivered of a live male child, with the help of a midwife. I found the patient suffering severely from shock, and almost insensible. I immediately palpated the abdomen, and found what I expected, namely, no uterus. On exposure, I found my suspicions only too true, for there was the uterus completely inverted and protruding beyond the orifice of the vagina, as a rather shiny turgid tumour, larger than the head of a fœtus at full term, and with the placenta attached to the extent of a crown piece. The hæmorrhage was very slight. Stimulants such as were available were applied, the pulse being almost imperceptible, and all other signs of complete collapse present. I sent for my partner, and then peeled off the placenta, and commenced to try to reduce the tumour, by grasping it with both hands, and squeezing it in order to diminish its bulk. When I found it giving, I proceeded to replace the fundus by pushing it gently with my fingers in the shape of a cone, until I found that they were grasped by the os; the rest then was simple, and the womb was replaced in about fifteen minutes. On my partner arriving, we injected ether into the arm (15 minims), which appeared to revive the patient almost instantly; then we injected 30 minims of chloroform, and also some gin, all into the two arms. There was no hæmorrhage, and the patient, who was in a moribund condition, gradually revived. Her progress towards recovery was very gradual, but never arrested, and at the month she was out and about (being a workingman's wife, she, of course, would not listen to my advice to rest, etc.). She feels no inconvenience or pain whatever; has no discharge, and is as well as ever she was. This is her third child; the first was delivered with forceps. The second was unassisted, and the placenta was retained two hours.

The great rarity of cases of complete inversion prompts me to send a short outline of this case, as does also the really wonderful effect of the subcutaneous injection of the ether and chloroform.

Sidcup, Kent. FRANK SHAPLEY.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

BRISTOL GENERAL HOSPITAL.

EVISCERATION OF THE EYEBALL, WITH INTRODUCTION OF SILVER ARTIFICIAL VITREOUS.

(Under the care of W. P. KEALL, M.R.C.S., Surgeon, Bristol General Hospital; Surgeon, Ophthalmic Department, Bristol General Hospital; Lecturer on Operative Surgery, Medical School, University College, Bristol, etc.)

THE two following are examples of a modification of evisceration of the eyeball, as performed by Dr. Mules, of Manchester, inasmuch as a hollow silver ball was used, instead of the glass globe recommended by him.

CASE I.—T. S., a boy, aged 6, was admitted on May 3rd, 1886, suffering from opacity and staphyloma of the cornea of the left eye; the operation was performed on the day of admission, in the usual way, that is to say, by cutting, with a pair of curved scissors, a circular incision through the sclerotic, just outside the sclero-corneal junction, scraping out the whole of the contents of the eyeball with a Volkmann's sharp spoon; the sclerotic was then incised in the horizontal direction about 5 millimètres on either side, and the largest sized hollow silver ball that could with ease be introduced was enclosed in the sclerotic, which was accurately stitched together with fine silk, using very small curved needles, held in Sand's American needle-holder. The conjunctiva was in like manner stitched over the whole, only in the contrary, that is, the perpendicular direction, so as more effectually to close the wound.

Previous to the operation, the conjunctiva, lids, eye-brows, and surrounding parts were purified with carbolic lotion, 1 in 20, and before introducing the ball, the interior of the sclerotic was also swabbed out with the 1 in 20 lotion, and dusted with powdered iodoform; the metal ball itself having, of course, been thoroughly purified, and the other usual antiseptic precautions taken, with the exception of the spray. The eye was afterwards dressed with a pad of boracic lint moistened with the carbolic lotion.

The evening temperature was 99° F. On the next day the lids, which were swollen and œdematous, were washed with carbolic lotion and dressed with boracic ointment, a little iodoform being dusted into the eye. The temperature in the morning was 97° F.; in the evening 98.6° F.

On May 6th, the lids were still swollen, but there was little pain, except when touched. The temperature, which was 98.6° F. in the morning, and 99° F. in the evening, was never above normal after this date.

On May 13th, the swelling of the lids was almost gone, having disappeared from the upper lid for some days, but there was still a slight protrusion of the mucous membrane of the lower lid. On being told to look across the room, he opened both eyes, and the ocular conjunctiva of the left side was seen to be slightly swollen, and pressure

through the upper lid on to the silver ball did not cause pain. He sat up playing with toys and seemed very comfortable.

On May 30th, about four weeks after the operation, he received a heavy blow on the left eye, by falling against an iron bedstead, in a scuffle with some other children, producing the usual ecchymosis of the tissues in and around the orbit; from this he recovered, with no more inconvenience than an ordinary black eye.

CASE II.—C. D., aged 53, a labourer and a hard drinker, was admitted on June 4th, 1886, suffering from severe purulent (gonorrhœal?) ophthalmia of the left eye, and slight conjunctivitis of the right eye. Notwithstanding the energetic treatment adopted, the details of which need not be entered into here, although the right eye recovered after a moderately severe attack, the left went on to sloughing of the cornea, protrusion of the iris, and the contents of the eyeball were about to escape. The operation was performed, in a similar manner to that in the first case, on June 28th, about twenty-four days after the patient was admitted.

On July 2nd, there was considerable œdema of the lids; the parts were dressed with boracic acid lotion.

On July 4th, the œdema was less; the upper lid was considerably swollen; the conjunctival stitches were removed.

On July 12th, the conjunctiva over the eyeball was still slightly red, and there was a slight discharge which stuck the lids together; the movements of the eyeball were very good, and there was no pain. From this date the recovery was uninterrupted.

REMARKS BY MR. W. P. KEALL.—Although there has not yet been a case recorded in which the fragile glass ball has been broken by a blow on the blind eye, it was recognised as far back as the meeting of the Ophthalmological Society in March, 1885, when Dr. Mules exhibited his case, that such an accident was quite possible, and that the result would be a sclerotic filled with broken pieces of glass; and this was regarded as a serious objection to the operation. In his reply, he said that "the wearer should be warned that, if such an accident occur, enucleation is imperative. I do not think removal of the fragments should be attempted" (*Trans. Ophthal. Soc.*, vol. v, p. 204).

When, in March last, I suggested that a hollow metallic ball—say silver or gold—should be substituted for the glass, the proposition was met by three objections: 1. That the tissues would not tolerate the presence of the metal. 2. That a blow severe enough to crush the glass would bulge in the metal, and that accident would be as bad as smashing the glass. 3. The expense would be too great. As to the toleration of the silver by the living tissues I felt very little doubt, having had considerable experience of the operations of suturing fragments of bone in fractures of the olecranon (*Bristol Med.-Chir. Journal*, 1884) and of the patella, as well as in stitching together the pillars of the ring in hernia with pure silver wire, in all of which the wire was left in, and remains to the present time without producing the slightest irritation. These cases, which were shown at a meeting of the Bristol Medico-Chirurgical Society, November 10th, 1886, have justified that conclusion, more especially that of the man C. D. (Case II), who was on the verge of *delirium tremens* when admitted into the hospital, and has been in the same condition since he went home. Further, at the time of operation, the eye eviscerated was in a condition of panophthalmitis, and the other was only recovering from a similar but slighter attack. Secondly, as to the injury inflicted by a blow. The lad, T. S., whom I exhibited at a meeting of the Ophthalmological Society in June last (*Trans. Ophthal. Soc.*, vol. vi) is a very good example, for he actually did receive a blow from falling against an iron bedstead, which would probably have broken the glass; at all events, it gave him a pretty severe "black eye," but no further harm. However, if the metallic ball had been bulged in, it would have been a very different matter to have had to make an incision through the sclerotic, remove the damaged silver ball, and introduce a fresh one, instead of an attempt to extract the spiculæ of broken glass had such an accident occurred to a person wearing the glass ball. Thirdly, as to the cost. It can scarcely be conceived that any reasonable cost should be an objection; but as the silver balls used, although they were made specially for me (by Messrs. Down Brothers) cost only four shillings each, the price can be only a very small objection.

A JOURNAL of Hygiene and Climatology, called the *Midi Médical*, has been founded at Nice, under the direction of Dr. Onimus.

THE Red Cross Society of Vienna has issued an appeal to all well-to-do persons, requesting them to let the Society know whether, in the event of war, they would be willing to take charge of wounded soldiers. Replies are in each case to specify how many soldiers could be received and cared for gratuitously.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 8TH, 1887.

G. R. POLLOCK, Esq., F.R.C.S., President, in the Chair.

Clinical Observations on "Induration" in the Primary Lesion of Syphilis in Women. By W. E. CANT, F.R.C.S. (Communicated by Mr. HOLMES.)—The following results are founded on about 3,300 cases examined in the Royal Albert Hospital, Devonport, during a period of six and a half years. In contradistinction to the generally accepted fact that in men induration is, as a rule, well marked, it is so in women far less generally. The induration which is described as being circumscribed, limited to the base of the sore, and clearly marked off from the surrounding tissues in men, is in women about as often as not diffused a considerable distance into the tissues around, often very widely, not sharply defined from the surrounding tissues, nor circumscribed in the base of the sore itself. The most typical form of primary sore, with its induration resembling a disc of cartilage set in surrounding soft structures, described as being frequent in men, is seldom met with in women. Every variety as to the degree of development of the induration is met with in women; but there is a large proportion in which it is very slight (about one-third). In some of these slight cases it is impossible to affirm that there is any thickening at all present, and there is a small number in which none exists throughout the whole course of the sore. Induration is present in the early stage of the sore only in a small proportion of cases. The time of its occurrence in the course of the sore varies greatly; it may occur at almost any period of its course. It becomes most marked and developed towards the middle and latter part in many cases. Tables of cases of primary sores, grouped according to their clinical character, and showing, "when first apparent," "characters at earliest period," etc., and also of five cases of infecting primary sore in which there was no induration, were appended to the paper.—Dr. DRYSDALE congratulated Mr. Cant on his paper, which he thought particularly valuable, as the subject with which it dealt had become somewhat confused. He agreed that induration was much less common in women than in men. He thought we ought not to speak of "hard sores," but of "the primary lesions of syphilis," of which some were hard and some soft. It was less easily traced in women, because in their case the primary lesion was often trifling; it caused little or no pain, and they did not remember anything about it. The primary lesions in women were not different from the primary lesions in men, except in so far as they were affected by the tissues in which they occurred. Those for instance in the lip were wooden in hardness. He had been a pupil of Fournier, but he quite expected to hear what Mr. Cant had said. Vigo in 1510, and Fallopius about 1555, had noticed the hard tissue round the sore, and from that time much stress had been laid upon it; but it was to be remembered that in experimental inoculation the primary lesion had very little hard tissue round it; it was a mere papule. He could have wished to hear more of their position. For his own part, though he knew that there had been hard sores on the os uteri observed in Fournier's *clinique*, he had never himself found one, nor on the vagina.—Mr. HARRISON CRIPPS was of opinion that the induration or non-induration was a question of locality; it depended on the anatomical nature of the tissues affected; induration was found in erectile tissue, and in the lip; and in the lip, induration often followed injuries which had nothing to do with syphilis. He had seen a case of chancre of the finger, in which there was no induration, but which was followed by well-marked constitutional syphilis. He had noticed several similar cases since then, and his impression was that primary lesions, except on the lip and penis, were not indurated from beginning to end.—Mr. HOLMES said that in his opinion this paper was one of the highest value, for it differed from almost all the teaching on the matter of syphilis, inasmuch as it was not an indistinct record of memories, but a distinct record of facts. Such opinions as were stated in the paper were summaries of facts. And it was a matter, too, of great importance that these seventy-two cases which Mr. Cant had tabulated were under close clinical observation from the very beginning of the disease; the time of inoculation could be determined within a day or so, not on statements of the patients, but by medical observation, and the time, method, and extent of the induration also determined accurately, and the test of symptoms of constitutional syphilis could be closely applied. The conclusions were not the results of impressions such as many had been guided by. They certainly agreed with what he had gathered from his own comparatively very small experience. He could not help expressing his regret that

the conditions under which Mr. Cant had worked were no longer possible, that the Contagious Diseases Act, in fact, had ceased to exist. They had contributed as much to sound morals as to sound health, and, as the paper had shown, to sound knowledge.—Mr. R. W. PARKER wished to ask Mr. Cant one question—namely, if induration was not the test of a chancre, what was the test? How much was due to filth and pus, and how much to a specific virus?—Dr. DRYSDALE begged to be allowed to remark that, in saying that sores which caused syphilis were not all indurated, he did not admit that what were commonly called soft sores were causes of syphilis. They were different and easily recognised lesions, and people made few mistakes about them.—Mr. CANT, in reply, said that as regards the position of the primary lesions, a tabulated record would be found among the papers he had laid before the Society, giving the details of the cases. In reply to Mr. Cripps, he would remark that several indurated sores were found on the buttocks, and that, in fact, he had found no difference as to induration when the sore was in erectile tissue and when it was not. In two cases they had been on the os uteri; in one case on the vaginal wall. In reply to Mr. Parker, he would only say that he had not proposed to enter into a discussion of the characteristics of syphilis, but to relate facts, and he thought it would be best not to depart from that intention.

A Case of Actinomycosis Hominis. By R. G. HEBB, M.D. (communicated by Dr. STURGES).—W. H., aged 11, was admitted into Westminster Hospital on March 18th, 1886. He had suffered for a month previously from pain in the limbs, diarrhœa, vomiting, and "feverishness." On admission, the most prominent symptoms were those of lung-consolidation and pleural effusion, for which he was tapped twice. Soon afterwards, pyæmic symptoms developed, and the patient died on June 2nd. The *post-mortem* examination disclosed abscesses of the brain and meningitis, pneumonia, excavation of the lungs, and suppurative pleuritis. A large vegetation was found on the wall of the right auricle of the heart, and in the liver an abscess and many areas of caseation. On microscopical examination of the liver, there were found numerous pigmented cells, many of which formed the centre for the departure of radiating filaments. The conjunction of these two factors gave rise to the appearance of a definite organism, for which the name of actinomyces was adopted. In the brain and lungs, collections of cocci only were found.—Dr. STURGES wished to express his thanks to Dr. Hebb for the trouble and care he had spent on this difficult subject. Many of his hearers would remember a case in which Dr. John Harley had made a very interesting attempt to show that, in a case very similar to the present one, the pathological alterations were the result of degenerative tubercle. That had not been a view widely adopted, and it was inadmissible in the present case. He wished only to remark on the clinical points of the case. The patient, a boy of 11, was the youngest subject in whom these microscopical appearances had been found. He was admitted under his care for what looked like simple pneumonia. His temperature, after the time that the pneumonia might have cleared up, rose to 106.2°; hectic and wasting came on, and subsequent indications of a hepatic abscess, for which they had made exploratory punctures, but had reached no fluid. They had now three cases starting from the lungs, in which the symptoms were so similar that he thought it might be possible to diagnose the affection during life, and, though it was impossible to stop it, they might yet learn how to prevent it. The other two cases were related by Professor Israel in the *Archiv für Chirurgie*, and by Dr. Skerritt, of Bristol, in the *International Journal of Medical Sciences*. In these other two cases the disease was slower in its course, lasting about six or seven months, whereas their case did not last more than three and a half months.—Dr. C. T. ACLAND said the case in which he had discovered actinomyces, in specimens from a patient of Dr. John Harley, was the first recorded in England. He considered that the disease was not as rare as Dr. Sturges and Dr. Hebb seemed to suppose. He had himself seen four cases. In cattle, actinomycosis was a well-known disease; whether the rosettes to be found in their tissues were mycelium or not, was doubtful; whether they were the cause of the disease, was also doubtful. He thought the organisms in Dr. Hebb's microscopical specimens, which had been shown that evening, whatever they were, were not the origins of the disease; for they had too little inflammation about them. There were, possibly, various species of the actinomyces; for, though his own drawings agreed with Dr. Skerritt's, they did not agree with Professor Israel's or Dr. Hebb's. By Dr. Hebb's courtesy, he had been given some of the diseased tissue to examine, but had not been able to find any organisms in it.—Dr. HEBB did not wish to prolong the discussion unnecessarily. He had only brought three specimens, but he had many others. There could be no doubt about the existence of these radiating tufted organisms in this case. He quoted a case brought forward by Professor Vocchetta, in the *Veterinary Journal of Milan*, which was quite similar to his, and was supposed to be a sarcoma of the lower jaw.

OBSTETRICAL SOCIETY OF LONDON.

ANNUAL MEETING, WEDNESDAY, FEBRUARY 2ND, 1887.

J. B. POTTER, M.D., F.R.C.P., President, in the Chair.

Specimens.—Dr. AMAND ROUTH's specimen, which was shown at the last meeting of the Society, was reported by Mr. ALBAN DORAN and Dr. W. S. A. GRIFFITH to be "a fibroid growing from the undeveloped horn of a uterus unicornis."—Mr. F. A. T. O'MEARA showed a fœtus with the bladder so dilated and thickened that it nearly filled the abdominal cavity. The urethra was impermeable.—Dr. J. PHILLIPS, Dr. MATTHEWS DUNCAN, and Dr. W. S. GRIFFITH remarked on this specimen.—Dr. JOHN PHILLIPS showed a dissection of a fœtal heart with two auricles and one ventricle, taken from a dicephalous monster.—Dr. HORROCKS showed an infant a week old suffering from spina bifida. The cyst had contained fifty ounces of fluid.—Dr. M. H. JONES made remarks on the case.

A Case of Unilateral Galactorrhœa.—Dr. GIBBONS described this case. A lady, aged 23, who had ceased nursing for six weeks, complained of constant running of milk from the left breast. After her first confinement, she had nursed for five months with both breasts, after which she had to give up on account of weakness; and an abscess formed in each breast, and discharged for eleven months. After this, her second confinement, she at first nursed with both breasts; but the milk disappeared from the right one, and she continued with the left one only for four months, and then discontinued, as it was thought that her milk disagreed with the child. Menstruation had not reappeared; there was no reason to suspect pregnancy; and there was no uterine disease. Although she was anæmic, the milk was of good character, and the amount that flowed was twenty ounces in twenty-four hours. The author then enumerated the various remedies which he had used, without result, to arrest the secretion of milk; these included arsenic, iron, strychnine, iodide of potassium, belladonna, bromide of potassium, quinine in large doses, opium, compression of the nipple, galvanism, faradism, rest, and a dry diet. Menstruation appeared eleven months after the birth of the child, being preceded by a gradual diminution of the flow of milk, which continued over the second period, then ceased altogether, and the patient's condition became one of natural health. The author drew attention to the following facts: 1, that the galactorrhœa was unilateral; 2, that the milk was of normal quality and quantity; 3, that there was no stimulus of nursing or of the genital organs; 4, while resisting all treatment, it ceased spontaneously on the occurrence of menstruation. Authors were quoted as to the value of certain drugs in galactorrhœa, and cases were given illustrative of treatment by galvanism and faradism. Reference was made to the experiments of Roehrig to determine whether the nervous or vascular element had the greater influence over the secretion of milk, and resulting in favour of blood-pressure as the chief factor. Sinéty was also quoted; and, in conclusion, the author remarked that he had failed to find any case similar to the one brought forward.—It was proposed and seconded that the discussion of this paper should be postponed till the next meeting of the Society.

Annual Meeting.—The Treasurer's report was adopted on the motion of Mr. DORAN, seconded by Dr. CLAPHAM, as were also the report of the Honorary Librarian, on the motion of Dr. HERMANN, seconded by Dr. KEELE, and that of the Midwifery Board, on the motion of Dr. PLAYFAIR, seconded by Dr. MALINS. It was proposed by Dr. J. WILLIAMS, and seconded by Dr. W. Black, and carried, that an alteration in the law regarding the meetings of the Society in January and October be made so that these meetings shall be held on the first Wednesday in each month, unless, for some reason, the Council should alter it—for example, on account of the first day of the New Year falling on a Wednesday. The scrutineers (Drs. M. H. Jones and E. S. Tait) declared that the list of officers and Council, as proposed, had been adopted.—The PRESIDENT delivered the annual address, an abstract of which is given below, for which a vote of thanks was proposed by Dr. MATTHEWS DUNCAN, and seconded by Dr. CLEVELAND.—A vote of thanks to the retiring officers and Members of Council was proposed by Dr. TAIT, and seconded by Dr. DAWSON.

Presidential Address.—Dr. POTTER first congratulated the Society on its prosperous condition. The number of Fellows at the close of last year was 736, and, although 40 Fellows had been lost to the Society by death or erasure, at the present time they numbered 761, which was the largest number since its foundation. Financially, the same prosperity could be reported, and the Library had had an increase

of 156 volumes. The Midwifery Board had become so popular that in the past year 102 women had come up for examination, 80 of whom were found qualified to receive the Society's diploma, and 390 midwives were now on the register. If the Society had no other work to show, it might well be proud of having taken in hand this duty, so long neglected by the State. A great many interesting specimens had been shown, and 20 important papers had been read at the meetings. These were reviewed by the President, who then reminded the Fellows that, if there were no striking novelties in treatment to record, the function of the Society was to maintain a judicial attitude, and, while assisting real progress, to check or arrest it when it tended to danger. One of the highest points that we should aim at was the prevention of disease, and, while the improved records of our lying-in hospitals showed advance in obstetrics, this had not received the same attention in diseases of women. The more frequent induction of premature labour and timely use of the forceps had greatly reduced mortality; but in our present state of knowledge we were not prepared to accept abdominal section as an alternative to craniotomy in all cases, still holding to the English axiom, "the safety of the mother before that of the child." In chloroform and frequent use of the forceps we had means of preventing laceration and sloughing of soft parts, thus rendering far less common the miserable after-effects of lingering labour. The prevention of diseases of women had not received the same attention—the effects of cold, damp, imprudence, and want of care at the menstrual periods; the effects of excessive child-bearing, abortions, the prevention of impregnation, and many other causes of disease, deserved and required careful consideration, and he who could prevent the occurrence of diseases of women would be a greater benefactor to his race than the operator, however skilled he might be, who treated them. The tendency now seemed to grow more and more surgical, until to some minds abdominal section and the removal of internal organs seemed the panacea for all the evils that woman was heir to. To the indiscriminate use of these procedures we could not give our adhesion, and especially did we object to the heroic surgical treatment of hysteria, that chameleon disease which still claimed so much sympathy and treatment at our hands. Even statistics on these matters, however carefully tabulated, had to be received with caution; the distinction between cases that had recovered or become well and those that could be truly said to have only just escaped death, or had lived, too frequently with their suffering unrelieved, had not always been clearly shown. In estimating these matters, much must depend on character; a reputation for truth and logical precision was of more permanent value here than the statement of brilliant results that would not bear the test of investigation. If he had spoken strongly on this matter, it was owing to the fear that some might be apt to forget the sacredness of human life in their zeal for operating, and this must be his excuse.—The President next gave a short biographical record of the Fellows of the Society who had died during the past year. He then, before quitting the Presidential chair, expressed his sense of the consideration and courtesy which he had always received during his term of office, and congratulated the Society on the selection of his successor.

MEDICAL SOCIETY OF LONDON.

MONDAY, FEBRUARY 7TH, 1887.

R. BRUDENELL CARTER, F.R.C.S., President, in the Chair.

Case of Littre's Hernia.—Mr. EDMUND OWEN read the notes of a case of Littre's hernia. The patient, a man aged 57, was admitted with a femoral hernia on the left side about the size of a walnut. The rupture had been down a week, and had caused pain during the last two or three days, and the bowels had not been open for four days. There was vomiting, not fæcal in character, with some prostration. Ice was applied, and, after a time, the symptoms of strangulation disappeared. The site of the hernia, however, became tender; an abscess formed, which, on being incised, gave exit to pus and fæcal matter. The patient's bowels had acted regularly since his admission, and the constitutional symptoms were very mild.—Mr. OWEN alluded to the confusion which existed in the nomenclature of this form of hernia, and said that he himself preferred to call it "partial enterocele."—The PRESIDENT agreed with Mr. Owen that it was undesirable to ticket operations or diseases with the names of persons, a custom which caused confusion and uncertainty.—Mr. FREDERICK TREVES expressed doubt as to the correctness of the diagnosis, which he did not think was borne out by the symptoms. He thought that he had been able in certain cases to trace the formation of abscess to the use of ice, and he had, therefore, discarded this method of treatment. He suggested that "Richter's hernia" would be a better name for this particular form of rupture.—Mr. STEPHEN PAGET mentioned the case of a lady who had an incarcerated hernia, in which an abscess of considerable size followed the free use of ice as an application.—Mr. WALTER PYE thought ice should be used with caution. He did not think that the term "partial enterocele" explained itself sufficiently.—Mr. JAMES BLACK suggested that ice might intensify the condition of shock which accompanied peritonitis.—Mr. OWEN, in reply, said that the symptoms in the case he had brought forward corresponded exactly to those described as belonging to this form of hernia. He acknowledged that caution was desirable in applying ice, and it might certainly tend to increase shock.

Parotitis after Injury or Disease of the Abdomen or Pelvis.—Mr. STEPHEN PAGET read a paper on the above. He pointed out the importance of studying the various links in the morbid chain, as they demonstrated relations between distant organs which were not visible in health. He had collected 101 cases of parotitis following injury or disease of the abdomen or pelvis, of which fifty were due to injury or disease or temporary derangement of the generative organs. He alluded to the various explanations which had been offered of the sequence, none of which was quite satisfactory.—Mr. ALBAN DORAN said it was very important to ascertain the starting point of this form of parotitis. He did not think the connection between the generative organs and the parotids, as exemplified in the old-fashioned metastasis of mumps, was satisfactorily proved. He suggested three explanations of the phenomenon.—Mr. MEREDITH asked whether the parotitis which sometimes followed ovariotomy occurred on the same side.—Mr. STEPHEN PAGET, in reply, said that the records made no mention of the side affected.

Rupture of Aneurysm into Pericardial Cavity.—Mr. HUGH SMITH read notes of a case in which an aneurysm of the third portion of the arch of the aorta had burst into the pericardium with an immediately fatal result.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, JANUARY 12TH, 1887.

WALTER DICKSON, M.D., R.N., President, in the Chair.

Preventive Inoculations.—EDWARD F. WILLOUGHBY, M.B., read a paper on this subject, which was, he said, in some sense a continuation of one he read last May on the Variolæ of Man and Beast. There were two characters by which a large class of diseases was distinguished from all others—namely, the spontaneous extinction of the morbid process within a limited, often definite, time, and the immunity against subsequent infection, more or less lasting and complete, which followed one attack. The two phenomena were doubtless closely connected, but till lately no rational explanation had been even proposed. On the latter, however, rested the whole idea of protective inoculations; and it was of the utmost importance that clear and correct conceptions of their nature and relations should take the place of the confused notions that at present prevailed. The first condition of a preventive inoculation was that the virus used should be derived, directly or indirectly, from the disease it was intended to avert. "Diseases distinct but antagonistic," to use Mr. Fleming's expression, were unknown to pathologists. Cow-pox protected against small-pox only because it was small-pox modified by having passed through the cow. The second condition was that the disease must be one that did not recur. All non-recurring diseases were, or were presumed to be, bacterial; but the converse did not hold good, for some bacterial diseases ran on indefinitely, as tuberculosis and septicæmia; and others, as diphtheria, typhoid, and cholera, conferred no immunity. Consequently, there could in these be no such thing as preventive inoculation. Preventive inoculations might be divided into four orders—namely, methods of (1) Inoculation, (2) Vaccination, (3) Attenuation, and (4) what for want of a better term he would call Neutralisation. The first and second had as yet been applied only in the case of the varioloid diseases, and he would repeat from his former paper the principles on which they were based. They were: 1. One attack of variola, of the kind proper to any animal, protects the individual against infection by, or inoculation of, the same. 2. Inoculation of any animal with the virus of its own variola produces a milder form of the same disease, but affords a protection similar to that conferred by an attack contracted by ordinary infection. 3. Any variola inoculated in an animal other than that whose proper variola it is gives rise to a peculiarly modified form of the disease, attended by little constitutional disturbance, merely local eruption, and no danger to life, such modified disease being no longer communicable to any other animal of the same or of different species, except by direct inoculation (cow-pox is such a modified form of small-pox). 4. This modified disease afforded a considerable degree of immunity against infection by

any means whatever with the variola whence it was derived, either to the animals whose variola was the original source of it, or to others capable of being infected in any way thereby. The first method, or that of inoculation, was open to the grave objection that, however great the immunity conferred and small the risk incurred by the individual, the disease was unchanged and infectious; and the practice of small-pox inoculation and of ovination had always been found to raise the total mortality from the respective diseases. Jenner's operation was as yet the only instance of the application of the second method, though there was no reason why some animal should not be found to play for the sheep the part that the cow did for man; and it seemed probable, from Dr. Klein's experiments, that the disease at a farm at Hendon, which he would call "Cameron's disease," stood in precisely the same relation to scarlatina as cow-pox did to small-pox, and might possibly be employed in the same way. If so, it would be a vaccination in every sense. The third class comprised the so-called attenuations of M. Pasteur, in which it was alleged that the cultivation of the bacilli in artificial media, under certain conditions, lessened their virulence; so that inoculation with them produced, as in the first method, a milder form of the disease. To minimise the risk, M. Pasteur generally used attenuations of two degrees of virulence, the weaker affording protection against the stronger, and this against the disease itself. This method was open to the same objections as the first; and also to the more serious one that, it being impossible to standardise the attenuations, they sometimes failed to confer any protection, and at others caused the death of the animal. For this reason they could never be used in the case of man; and, except under special circumstances, could not be recommended even for domestic animals. The fourth method consisted in the inoculation of the products of the development of the bacilli without the bacilli themselves. It was well known that all low forms of life, such as those concerned in fermentation, putrefaction, etc., as well as bacilli secreted or caused to be formed in and from the fluids in which they grew, contained chemical products; and that in some cases, as alcoholic fermentation, when these accumulated to a certain point, the further development of the organisms was arrested; and, doubtless, something analogous to this occurred, and to some extent explained the spontaneous extinction of the febrile process in the so-called zymotic diseases, though it would not of itself explain the subsequent immunity, since such products could not but be eliminated in the course of a few weeks at the longest. However, Dr. Salmon, of the Bureau of Animal Industry in connection with the Agricultural Department of the United States, had found that, while pigeons were peculiarly susceptible to the poison of swine-plague, he could, by employing inoculations of sterilised cultivations of the bacilli in artificial media, render them perfectly insusceptible. Culture fluids, heated to 143° F. for several hours, were so far sterilised that they failed to develop in fresh gelatine solutions. Four pigeons, inoculated two or three times at intervals of a fortnight or more with such sterilised fluids, were but slightly indisposed after each operation. Finally, these birds, together with one that had received a much smaller dose seven weeks previously, and a control bird inoculated with the gelatine only, were each inoculated with .75cc. of a virulent culture of swine-plague, a dose that had invariably proved fatal to others. The results were most remarkable: the control bird died in twenty-four hours; that which had received the insufficient dose fifty days previously died in forty-eight hours; while the other four birds were absolutely unaffected. Cultivations from the blood of the two that died developed the specific bacilli in abundance. Dr. Salmon, therefore, inferred that the products of the development of the bacilli of any such disease so modified the constitution of the bioplasm of the tissues as to render it incapable of affording a pabulum for the bacilli; which, if they did not cause the death of the animal, led to the cessation of the morbid process; and, secondly, that since cells to which a special character had once been imparted tended, as in the case of carcinomata and other neoplasms, to transmit it to those to which they gave rise in the act of proliferation, this inability to support the growth of the particular bacillus might persist for many years; but that, since they might tend to revert to their original character, the individual might sooner or later become again susceptible. That such was the case was well known; as also that, in some persons, the insusceptibility was so soon lost as to be practically unattained, and that very mild attacks, like that of the pigeon that had received the smallest dose, failed to afford appreciable protection. This method, Dr. Willoughby thought, promised results of incalculable importance, and might have the widest application to the diseases of man and beast. It was merely necessary to identify the specific bacillus to find a suitable medium for its cultivation, and to determine its thermal death-point, or to remove it by the Pasteur-Chamberland filter. The method was entirely free from the objections to which inoculations and attenuations were open, the phenomena induced being those of a poison, whatever it be, actually antagonistic to that of the disease. Dr. Willoughby urged that investigations on these lines should be at once undertaken in respect of all infectious diseases of cattle.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, FEBRUARY 3RD, 1887.

EDMUND OWEN, M.B., F.R.C.S., President, in the Chair.

Internal Urethrotomy.—Mr. BUCKSTON BROWNE read a paper on the value and position of the operation of internal urethrotomy. He briefly traced the history of the operation, giving to Professor Syme the credit of teaching that the secret of success in dividing a stricture was to cut freely through it, and to Sir Henry Thompson that of showing that this could be done by the milder operation of internal rather than external urethrotomy. He then deprecated the use of all machinery in the internal division of a stricture, and urged that the proper instrument was one which was practically a long knife. He believed that a feeling which existed against the operation in certain quarters was due to (1) the possibility of very serious consequences after the operation in unpractised hands, and (2) the indiscriminate employment of the operation. The dangers of the operation, and the means of avoiding them, were then pointed out. While showing that in the treatment of stricture, internal urethrotomy should be the exception and not the rule, he pointed out that in certain conditions of stricture the operation was most desirable, and in some indispensable. It was of especial value in prostatic enlargement in cases in which the constant use of a catheter was impeded by a stricture. Advanced age was no bar to the operation. Mr. Browne also called attention to the use of internal urethrotomy in the treatment of perineal abscess when co-existing with urethral stricture. He distinguished perineal abscess from extravasation-abscess, and showed how the former did not at first communicate with the urethra. He showed that a prompt internal urethrotomy prevented the abscess-cavity from communicating with the urethra, but that if the abscess was opened only, urine issued by the wound in a few days.—Mr. HURRY FENWICK considered that the immediate value of internal urethrotomy was not the main question. All forms of operative interference gave immediate relief, and the statistics of mortality in each were nearly the same. The position which internal urethrotomy would take depended on the amount of permanent benefit it conferred.—Mr. MANSELL MOULLIN thought hard cartilaginous strictures were much better laid open fully, and treated after Symes's method. He failed to understand why a catheter should be tied in except in cases of hæmorrhage.—Mr. LOCKWOOD was accustomed to perform internal urethrotomy for penile strictures, and found that afterwards the deeper complicating strictures often disappeared, or were amenable to simple forms of treatment. He was anxious to hear Mr. Buckston Browne's opinion on the question of the so-called "reflex strictures."—Mr. BRUCE CLARKE entirely agreed with Mr. Lockwood. Internal urethrotomy was admirably adapted for the treatment of penile strictures, but for deep strictures it was unquestionably a dangerous operation, and external urethrotomy, though more tedious, was greatly to be preferred. The class of impassable strictures was best treated by Wheelhouse's operation.—The PRESIDENT pointed out the extreme value of the paper, especially that part referring to the treatment of perineal abscess.—Dr. ALDERSON and Dr. BAYFIELD also spoke on the paper.—In reply, Mr. BUCKSTON BROWNE stated that he did not believe in a penile stricture causing spasmodic stricture lower down; if another existed lower, he would divide that too. He was accustomed to tie in a catheter after operation, as he found nothing else so useful in preventing hæmorrhage. Serious renal complications might arise if the stricture was imperfectly divided.

Suprapubic Lithotomy.—Sir WILLIAM MAC CORMAC stated at the commencement of his paper that his wish was to invite discussion on the present position of the high operation for stone, and the place it was likely to occupy in the future as a recognised surgical procedure. The text of his paper was the case of a boy, aged 7, from whom he had lately removed a mulberry calculus, and in whom recovery was remarkably rapid and satisfactory. The history of the operation was briefly given, and the steps of the modern method, together with the arguments for and against suture of the bladder, afterwards were described in detail. Much difference of opinion had existed as to the benefit of distending the bladder and rectum separately; experiments made by the author showed that, when the bladder alone was distended, the peritoneal reflection was somewhat but not sufficiently raised; distension of both rectum and bladder was required to obtain the maximum elevation of the peritoneal reflection. The usual indi-

cations for the performance of the high operation were the presence of large stones in a contracted bladder, calculus projecting into the urethra, encapsuled and very hard calculi, cases in which the stones were very numerous, foreign bodies which could not be broken up or extracted, ricketty deformity of the pelvis, and ankylosis of the hip-joint. Owing to the present high mortality, the operation must be reserved for cases of large stones, or for those in which lithotrity and perineal lithotomy were for some reason inapplicable.—Dr. KEEGAN thought lateral lithotomy was so successful that it must, as a rule, be employed. He approved of not teasing out the fatty tissue over the bladder, but preferred to make a clean incision.—Mr. BUCKSTON BROWNE said that Sir William Mac Cormac had immortalised himself in the annals of surgery during the past year; he was the first surgeon who had ever successfully sutured the bladder after intraperitoneal rupture. The chief practical point before the meeting was the question of vesical suture after suprapubic lithotomy.—The PRESIDENT confessed himself a lover of the old operation of lateral lithotomy. Suture of the bladder must remain at present a moot question; he did not think the use of a permanent catheter in the bladder after the operation could be recommended.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, JANUARY 26TH, 1887.

G. GRANVILLE BANTOCK, M.D., President, in the Chair.

President's Address.—The PRESIDENT began his address by tracing, at length, the history of Listerian surgery, and dwelt upon the extreme opinions held by its advocates and the legal persecution in Germany and Austria of surgeons and midwives who declined to employ the antiseptic precautions prescribed by Listerians. He also spoke of the manner in which practical experience had discredited the system. Dr. Bantock then referred to his own part in the history of this question. Listerism was introduced into the practice of the Samaritan Free Hospital by Mr. Knowsley Thornton, in the autumn of 1877. In the beginning of 1878, glowing reports came over from Germany as to the superiority of thymol over carbolic acid, for which it was substituted, as being less irritating whilst equally efficacious; and Dr. Bantock performed his first operation with this substance after the Listerian method on February 13th of that year. On March 13th, 1878, Dr. Bantock performed the sixth ovariotomy in which this method was adopted, and the result was fatal. That was not promising. Then he resorted to Listerism "pure and simple," using absolute phenol, and paying the greatest possible attention to all details. The second case, done under this system, died of acute pulmonary congestion, while everything within the peritoneum was in a perfectly satisfactory condition, possibly through the chilling effect of the spray (?) The fourth case, in which there was very broad attachment, requiring nine ligatures, died from septicæmia. Nowadays, the lecturer would enucleate the tumour in such a case, and probably drain. The fact, however, remained that death was due to septicæmia. Dr. Bantock then summarised the results up to his thirty-sixth Listerian case (the seventy-second of his total number). Out of the 36, he lost 8, giving a mortality of 22 per cent. as against 26 per cent. in his first 30 cases, and 20 per cent. in the 6 cases done with thymol. In the first 30 cases, 5 out of the 8 deaths were due to causes over which the Listerian method, with all its pretensions confirmed, could not be expected to exercise any control. The death under thymol was due to septicæmia. Of the 36 Listerian cases, 1 died of genuine septicæmia, and in 3 the death might fairly be attributed either to the chilling effect of the spray, or the poisonous effect of the carbolic acid. In the thirty-sixth case, the patient had been tapped ten times; the tumour weighed 51 lbs., and was adherent to the whole extent of the anterior abdominal wall, as well as extensively to the omentum. Within twelve hours, the temperature rose to over 103°, and, in spite of repeated sponging with iced water, it steadily went up to over 107°, the patient became delirious, and no urine was secreted. By means of the ice-pack, the symptoms were subdued, and, at the end of twenty-four hours, the urine again began to flow, at first in very small quantity, and afterwards abundantly. The patient, during convalescence, presented all the symptoms of acute nephritis. That case threw a flood of light on the thirty-third case of this series, a fortnight previously, in which the patient died, in twenty-six hours, with somewhat similar symptoms. *Post mortem* examination revealed acute congestion of the kidneys as the sole apparent cause of death. The lecturer was now on the horns of a dilemma; for if, as was contended by the advocates of this system, he was protecting his patients from septicæmia by the use of carbolic acid, he was at the same time exposing them to danger of poisoning by the self-same substance. From that time, therefore, he began to reduce the proportion of carbolic acid in the spray and solutions to 1 in 50, 1 in 60, 1 in 80, and lastly to 1 in 100, which he reached in July, 1880. The results of that long-continued experiment were communicated to the Royal Medical and Chirurgical Society in a paper in which abundant evidence was given of the effects of carbolic acid upon the kidneys, and of its action in the production of hyperpyrexia. He gave a summary of his own experience, and declared that the whole question was one of cleanliness, which, after all, was the true secret and merit of Listerism. The first result of the reading of that paper was a reply by Dr. Bantock's own colleague, which partook more of the nature of an independent statement than an attempt to question or explain away his results and conclusions, a statement which was marred by personalities, and had been followed up by personal hostility. Though advised by his friends not to go against the stream, Dr. Bantock called to mind the old adage, *Magna est veritas et prævalebit*, and determined to carry out his experiment to its ultimate results, until he should be either convinced of his error, or confirmed in his faith. The lecturer then referred to the treatment which he had received at the hands of certain Fellows of the Society above mentioned, and complained of having been misrepresented by the author of an article entitled "Simple and Aseptic Ovariotomy," published in the JOURNAL of May 20th, 1882. Dr. Bantock proceeded to give the true facts of his experience in the year 1881, which had been misrepresented. He had performed 35 ovariotomies in the hospital, of which 7 died, a mortality of 20 per cent., instead of 30 per cent., as stated by the writer of the article; 2 died from hæmorrhage (slipping of pedicle, etc.); 2 from shock within ten hours; 1 died from obstructed intestine on the seventh day; and 2 died from what he would call septicæmia, one of these dying through the too early removal of the drainage-tube, while the serum was still red. Thus of the 7 cases, 2 only had any bearing on the question under discussion, yielding a mortality of 6 per cent. Dr. Bantock paid no attention to the strong opinion of a committee of his hospital, but, believing that he was in the right way, continued to dispense with "full antiseptic precautions"—a phrase which only meant Listerism—paying, however, the strictest attention to cleanliness. The result was a total mortality in his practice, since that time, of 7 per cent. Listerism was still the order of the day, though its adherents were gradually falling away one by one. It was a remarkable fact that Mr. Tait and himself had been without any intercommunication of ideas, working in the same direction, at the same time, and that they had arrived at the same conclusion. Statistics were being appealed to with the view of demonstrating the superiority of the Listerian method. Statistics might, however, be manipulated. An animated correspondence had arisen two years ago, between Mr. Lawson Tait and Mr. Knowsley Thornton, on the latter announcing that he had just then completed 75 cases of ovariotomy in the Samaritan Hospital, without a death. It would be remembered that Mr. Tait challenged Mr. Thornton to produce his private results. That challenge had not been accepted. Why? Because, as was seen from his recently published table, that mortality was as high as 13.5 per cent. Again, Mr. Thornton contended, in his recent paper, that his results showed a progressive improvement. Yet his table showed that in the first 100 cases the mortality was 9 per cent., in the second 5 per cent., but in the third 7 per cent. That difficulty was, however, got over by simply dividing the 300 cases into two groups of 150 each. By that means he arrived at 7 per cent. for the first group and 6 per cent. for the second. That was not a fair way of stating the case. Dr. Bantock had denounced the practice of going to the register of a hospital and abstracting the results of a colleague's practice without that colleague's consent, and before the results had been published by himself or by the authorities of the hospital. Circumstances, however, now compelled him to do that which he had denounced, because he could not allow his opponent to fight him at an advantage. In the year 1886 Mr. Thornton had thirty-two cases of ovariotomy, of which six died, giving a mortality of 18.7 per cent., while all of Dr. Bantock's, twenty-five in number, had recovered. How would the writer of the article on simple and aseptic ovariotomy interpret these facts? Dr. Bantock used the writer's own words. If, in the same institution, at the same time, by operators of equal experience, the same operation with antiseptics was followed by a mortality of 18.7 per cent., and without antiseptics was followed by no mortality at all, the fact deserved very serious consideration. Dr. Bantock would not pursue the parallel. He would mention the fact that for the last three years (1884-5-6) the mortality in the Samaritan Hospital with antiseptics was 10.6 per cent., while that without was only 4.2 per cent. Such then was the irony of fate! He did not care now to inquire how these patients died under the Listerian system, because he deemed it only fair to mete out to others the measure that was meted out to him. True, that was a very unscientific way of dealing with such a subject.

A bare statement of results—as, for instance, of the number of cases with the number of deaths—afforded no information on such a question as this. With the statement that of his last 100 cases, bringing down his results to the first week of the present year, the mortality was only 4 per cent., that of the last 60 cases only one had died, and that the last 50 had all recovered, Dr. Bantock closed the reference to his own work.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, JANUARY 21ST, 1887.

SEPTIMUS GIBBON, M.B., in the Chair.

Purification of Rivers.—Dr. C. E. SAUNDERS read a paper "On Legislation for the Purification of Rivers and its Failure," in which he traced the abortive attempts at legislation up to the time of the passing of the Rivers Pollution Prevention Act of 1876. He showed that, in eight years, legal action to enforce provisions of this Act had been taken only in fifty-six cases; in these, twenty-six orders had been made to restrain pollution, but a great number of such orders had never been actively enforced. Of the twenty-six orders, twelve had been obtained at the instance of two authorities. Out of the fifty-nine County Court Circuits in England and Wales, in only twenty-seven had proceedings been taken; in fourteen of them there had only been one case each. No fewer than nineteen out of the fifty-six cases, were prosecutions against the Sanitary Authority, the very persons to whom the exclusive carrying out of the Act was entrusted. Dr. Saunders considered that trade interests militated against any effective legislation, and deprecated making manufacturing pollutions the chief object of prevention, these being, in his opinion, of far less consequence, from a health point of view, than sewage-pollutions. He, however, quoted the opinions of the Rivers Pollution Commissioners, which showed that "there is not one trade pollution which cannot be kept out of the streams altogether, or so purified before admission as to deprive it of its noxious character; and this without unduly interfering with manufacturing operations, but even, in some instances, with a distinct profit to the manufacturers." Some streams were so filthy that they were unfit for even manufacturing purposes, and the value of clean river water in such cases was estimated by manufacturers at from £50 to £1,000 a year. The author urged the importance of attacking the very filth-beginnings of rivers—sewage ditches—and pointed out the good effects this would have on general sanitation, as well as on river purity, especially adhering to the old view that diphtheria was largely, if not entirely, a filth disease. He next gave the heads of a Bill which had been drafted by Mr. Willis Bund, which it was intended to introduce into Parliament at the earliest opportunity. This Bill made it obligatory on the Sanitary Authority to prosecute offenders against its provisions; and, if the Sanitary Authority failed to institute a prosecution, or, having instituted it, failed to carry it on with due diligence, any person having a legal right to make complaint might apply to the Judge of the County Court for leave to prosecute, in the name and at the cost of the Sanitary Authority. Dr. Saunders then sketched the machinery by which any future Act should be carried out, and advocated the establishment of a Central Authority with the sole function of attending to river purification, looking to the Medical Officers of Health of the various districts for detailed and periodical information.—In the discussion which followed, Drs. GIBBON, SWETE, WOODFORDE, and others, took part.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, JANUARY 19TH, 1887.

LLOYD OWEN, F.R.C.S.I., President, in the Chair.

Fracture of Spine.—Dr. SUCKLING showed a youth, aged 18, who at the end of last September had fallen twice upon his back. When seen four days after the second fall, he was unable to stand, but could move his legs when in the recumbent position; he was unable to turn over in bed, had girdle-pains in the upper lumbar region, and shooting pains over the iliac bones. There was no anæsthesia, no paralysis, and no bladder-trouble; but the first and second lumbar spines were prominent, and great pain was elicited on light percussion over them; the right cremasteric reflex was lost. The temperature varied from 99° to 102° for a week after admission. Under treatment by a plaster-jacket, these symptoms had now almost entirely disappeared. Dr. Suckling considered that there had been a fracture through the arches of one or more of the lumbar vertebræ, with irritation of the last dorsal and first lumbar nerves.

Meckel's Diverticulum.—Mr. A. F. CLAY showed a specimen of Meckel's diverticulum from a girl aged 13. She had swallowed a number of plum-stones, for the removal of which she had taken strong purgatives. When first seen, ten days after taking the stones, she was suffering from peritonitis and obstruction. Mr. Clay opened the abdomen in the middle line, and found a quantity of purulent fluid in the peritoneum, the intestines being matted together. The peritoneum was washed out, and a distended piece of intestine opened, and stitched to the wound; the patient died from exhaustion thirty-six hours after the operation. At the *post-mortem* examination, a Meckel's diverticulum was found with its ligament attached to the mesentery; a piece of the ileum below this had got under the loop, and was firmly strangulated, ulceration and perforation having taken place.

Dermoid Cyst of Ovary.—Dr. MALINS showed an ovarian cyst containing a quantity of oily material, which solidified on its removal from the body, and a mass of hair.

Enlarged Ovary.—Dr. MALINS also showed an enlarged and cystic ovary from a patient, aged 25. Both these cases had been subjected to operation, and both had recovered without a bad symptom.

Vesical Calculi.—Mr. HASLAM showed twelve uric acid calculi weighing altogether an ounce and three-quarters, that had been removed from the bladder of a female subject in the dissecting-room of Queen's College. The bladder was much hypertrophied, but nothing was known of the previous history of the case.

Acute Peritonitis in its Medical Aspect.—Dr. FOXWELL read a paper on this subject.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, JANUARY 7TH, 1887.

J. B. BRADBURY, M.D., President, in the Chair.

Injury to Thorax.—Mr. FRANCIS showed, for Mr. SUNDERLAND, of Thaxted, a patient who had recovered from a severe crushing injury to the thorax. Three years previously he was crushed between a traction engine and its tender; when seen a few hours afterwards, he was in a condition of great collapse, with considerable hæmoptysis. The sternal end of the left clavicle was dislocated behind the manubrium sterni, and the cartilages of the first six or seven ribs of the left side were separated from their attachment to, or fractured just outside, the sternum, and driven behind that bone. The shoulders were drawn back, and confined by a figure-of-eight bandage, but the hæmoptysis continued for a few days, and there was emphysema of the whole of the front, back, and side of the chest on the left side, with irregularity in the heart's action. He was able to resume work fifteen weeks after the accident. The original deformity remained, and the sternal end of the clavicle could be plainly felt behind the manubrium, but there was no evidence of pressure on the trachea, œsophagus, or large vessels.

Formation of Thrombi in Pulmonary Vessels.—Mr. GRIFFITHS showed specimens of lung illustrative of thrombosis and embolism, and the results produced thereby. The first was a specimen of a cavity occupying the upper lobe, where the large branches of the pulmonary vessels were closed by thrombi; the second, one in which thrombosis had occurred in consequence of incomplete resolution after an attack of pneumonia on the right side; the third, a series of infarctions of different ages from the same case, in which left cardiac disease and carcinoma of the cervix uteri were the chief anatomical lesions.

Macro-Glossia.—Mr. FRANCIS read the notes of a case of macroglossia, which had been under the care of Professor Humphry in Addenbrooke's Hospital. W. M., male, aged 5 months, was admitted on September 1st, 1886. The tongue was too large at birth, and had been gradually increasing in size ever since; the protruded part measuring 1¼ inches long in the middle line, and 1½ inches broad at the base, and being symmetrically enlarged in all its dimensions. There were two deep antero-posterior furrows on the surface, parallel with the edges of the tongue, and meeting just behind the tip. There was no evidence of glossitis; and no hæmorrhages in the mucosa; there were no teeth, no deformity of the lower jaw, no evidence of lymphangiectasis of any description elsewhere, nor any deformities. There was no history of mental disease, nor deformities, nor struma in the family. The child died suddenly, a week after admission; the temperature, which had been irregular before, suddenly rising to 108° F. There was a little difficulty in swallowing, but no interference with respiration. On microscopic examination it was found that the papillæ were much enlarged, abnormally vascular, and covered with a thick layer of cuticular cells. The submucous lymphatics were enlarged here and there, and the lymph-canalicular system of the muscle-bundles were especially dilated, but no cysts or hæmorrhages were seen.

Mobility of Tongue.—Mr. WHEWAY exhibited a case of remarkable

power of retraction of the tongue. It could be pushed up behind the soft palate, and the tip could be made to touch any part of the post-nasal region, including the edge of the septum nasi. On looking into the mouth, no tongue was to be seen. The floor of the mouth was formed by the under-surface of the tongue, with the blue lingual veins and the papillæ of the submaxillary ducts. Breathing was not interfered with. This command over the muscles of the tongue had resulted from long-continued efforts to touch with the tongue the irritable mucous membrane in chronic pharyngitis. Mr. Wherry thought that the case explained the old records of imposture, in which much pity and money had been obtained by ingenious beggars exhibiting the mouth without a tongue.

Examples of the Communication of Diphtheria.—Dr. ANNINGSON described three epidemics and several isolated cases of diphtheria which had occurred in his experience. The former illustrated the tendency of the poison to cling to localities and reappear at certain periods with special force, as well as the influence of school assemblage in favouring the spread of the disease. One interesting feature was the sudden explosion of the disease, after a period of quiescence, among the girls attending school, while the boys, with one exception, escaped; and that case was explained by the boy having been exposed, out of school-hours, to the same influence as the girls. —Dr. ANNINGSON also related some apparently unexplained cases of diphtheria in lonely detached houses which afterwards could be traced to rain-water used for drinking, which had been contaminated by the droppings of domestic birds; also an instance where the converse seemed to have occurred in the infection of pools by human discharges. —A discussion followed, in which Dr. BRADBURY, Dr. LATHAM, and Mr. GRIFFITHS took part.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, FEBRUARY 2ND, 1887.

Professor GRAINGER STEWART, M.D., President, in the Chair.

Treatment of Empyema.—Dr. AFFLECK showed a patient cured by resection of five ribs. In September, 1885, she had suffered from pleurisy with effusion, for which she was tapped. The result was unsatisfactory, and she was admitted into Dr. Affleck's ward in June, 1886, with an empyema, discharging externally by one or more sinuses, and internally into a bronchus. As the constant discharge was sapping her strength, and there was no history of phthisis, Dr. Affleck transferred her to Professor Annandale's wards, where Mr. Cotterill performed resection of five ribs. The wound had healed well, and breath-sounds were now distinctly audible over the upper part of the affected lung.—Dr. RUSSELL showed an infant which he had successfully treated for empyema by puncture and drainage.—Mr. JOHN DUNCAN showed two cases of empyema. In the first, he had resected eight ribs from the third downwards, the portions of ribs being removed through one incision. The patient made an excellent recovery, interrupted merely by the formation of an abscess in connection with one of the ribs, for the relief of which an additional portion of bone had to be removed. In the second case, he resected one rib in order to make room for the drainage-tube. He had found that resection of one rib offered great advantages over simple incision, as the tube was not liable to pressure from the adjacent ribs falling together. Besides interfering with drainage, such pressure always caused severe pain.—Mr. FRANCIS CAIRD showed a child, who had previously been treated by drainage. When first seen by him, there was more than one sinus; the case was completely cured by resection. He recommended the use of a metallic tube, which obviated the difficulty mentioned by Mr. Duncan.

Multiple Cutaneous Tumours.—Dr. P. H. MACLAREN showed a lad, aged 19, suffering from multiple cutaneous tumours, scattered almost universally over the surface of the body. At first, he thought it was a case of molluscum fibrosum, but section of the tumour showed them to be sebaceous. Such cases were extremely rare, and the cause had not been well ascertained.

Compound Comminuted Fracture of the Upper and Lower Jaws.—Mr. COTTERILL showed a patient who had sustained a compound comminuted fracture of the upper and lower jaws. The face was much disfigured; the superior maxillary bone was split across horizontally, the angular process was shattered, the malar was fractured in several places, the hard palate was divided antero-posteriorly, and the lower jaw was broken close to its angle. Only such portions of bone as had no connection with periosteum were removed; if even loosely connected, they were left. The teeth were wired together so as to fix the palate, and the bones were brought into as perfect apposition as possible. The man made an excellent recovery. The case illustrated well the extraordinary vitality of the bones and tissues generally about the face.

Specimens—Empyema.—Dr. WOODHEAD showed a portion of chest wall and an empyematous cavity, with lung *in situ*. The cavity had reached to behind the clavicle. Between the two layers of thickened pleura there was a curious septum of tubercular formation, with a layer of fatty tissue on each side.

Cases of Sudden Death.—Dr. LITTLEJOHN showed the aorta and aortic cusps from three cases of sudden death, probably due to valvular incompetence, though in two of the cases the valves were little altered. He also showed the respiratory apparatus, stomach, and intestines of a patient who had died from swallowing two ounces and a half of Bowe's liniment, death being probably due to the irritant action of the ammonia.

Alterations in Stumps.—Mr. H. A. THOMSON showed two stumps in which there was evidence of growth after the date of operation. In the first, there were manifest signs of regeneration of nerves; in the second, from a child, there was marked growth of bone.

Internal Derangements of the Knee-joint.—Professor ANNANDALE read a paper on internal derangements of the knee-joint, which is published in full at page 319 in this day's JOURNAL.—The PRESIDENT congratulated Mr. Annandale on his paper, which was distinguished by that precision which characterised his operative proceedings.—Dr. HADDEN strongly advocated the use of manipulative methods for the reduction of detached cartilage. He thought this department was left too exclusively in the hands of bone-setters.—Mr. DUNCAN thought the manipulative methods were capable of only limited application. There was no question that serious damage was inflicted by their indiscriminate adoption. The various forms of retention-apparatus were, however, of more value, and a certain number of patients would always prefer such measures to operation. He dwelt on the diagnostic value of the "tender spot," midway between the ligamentum patellæ and the internal lateral ligament.—Mr. COTTERILL said the semilunar cartilages were normally possessed of a certain range of movement. The condition of detachment simply meant an exaggeration of this.—Dr. SCOTT LANG and Dr. CAVERHILL also took part in the discussion.—Mr. ANNANDALE, in reply, defended the operative procedure. He thought retention-apparatus was too much in vogue in the South.

ACADEMY OF MEDICINE IN IRELAND.

OBSTETRICAL SECTION.

FRIDAY, JANUARY 7TH, 1887.

T. MORE MADDEN, M.K.Q.C.P.I., in the Chair.

Ovarian Tumour.—Dr. MACAN exhibited part of an ovarian tumour which had been developed between the layers of the left broad ligament. On opening the abdomen, the tumour came into view. It was punctured, and a large quantity of fluid escaped, and then the tumour partly collapsed; but he found it impossible to pull it out. He found that it extended along the uterus to the iliac region, and filled the whole of the broad ligament. It seemed to be unilocular, and therefore he only removed the part of it which he now showed, leaving about a third of the tumour behind. He removed the peritoneal covering, and tried to enucleate; but adhesions rendered that impossible. The woman had hardly any rise of temperature until the second or third week after the operation, when she had slight pyrexia. She was now apparently quite well. Dr. Macan also showed specimens of ovaries removed for menorrhagia due to fibrous tumours; and a specimen of a retro-peritoneal tumour which he had removed by laparotomy.

Treatment of Vaginismus.—Dr. MORE MADDEN read a paper on the treatment of vaginismus, which, he said, was generally caused by neuromata in the area of distribution of the superficial perineal branch of the pudic nerve. Many cases could be cured by forcible dilatation of the vaginal canal and stretching the pudic nerve, combined with general sedative treatment. In some instances, Sims' or Emmet's operations might be necessary. In conclusion, Dr. Madden pointed out that, even in the worst cases, the disease did not necessarily prevent impregnation.—Dr. FRAZER said he could confirm the remark as to the possibility of pregnancy occurring without vaginal intercourse.—Dr. S. MASON said a little rest, and painting the orifice with nitrate of silver, were sometimes very effectual. It was not always necessary to remove the hymen; but, when that was done, it was always well to make a lateral incision in order to expand the orifice. —Dr. MACAN said he had met with only a few cases of vaginismus. There were two classes of cases; namely, one in which there was some local cause for the trouble, and the other in which the most careful examination could detect no local cause. In the latter class, the

cause was nervous; and whether excision of the hymen would cure it was doubtful.—Dr. More Madden, in reply, said the main features of his treatment in such cases were rest, dilatation, and nerve-stretching.

Case of Porro's Operation for Rupture of the Uterus.—Dr. S. Mason read a paper on a case of rupture of the uterus, of which the following is an abstract. On November 5th, 1886, a patient was admitted to the labour-ward, Coombe Hospital, who had been in labour with her third child for more than three days. Her two previous labours had been difficult and tedious, the child in each case being still-born, though labour was completed by the natural efforts. A clear history could be obtained of the uterus having ruptured twenty-six hours before the patient's admission to hospital. On opening the abdomen, the child was found lying directly behind the abdominal wall, and was easily extracted; the placenta was in the lumbar region, surrounded by blood and meconium; and the uterus was situated posteriorly, small, and well contracted, with a rent in its lower part extending completely through the cervix. The uterus was then removed, the pedicle formed by the cervix being secured by a Keith's clamp and a transfixion-needle, and the abdomen was closed by silk sutures. The patient rallied well after the operation, and seemed to be progressing favourably for about ten hours, when she suddenly commenced to vomit, and died. *Post-mortem:* signs of recent and extensive peritonitis were found in the abdominal cavity. The portion of uterus enclosed in the clamp was torn through to the lower extremity of the anterior lip of the cervix. The bladder was uninjured. The pelvis was that described as the oblique pelvis of Nægelé, complicated by projection downwards and forwards of the last lumbar vertebra.—Dr. Smyly said the great difficulty with which Dr. Mason had had to contend was the poisoning either of the uterus or the peritoneum. There had been a considerable lapse of time since the accident, and the child had died; and the escape of gas from the abdomen proved that the uterus and peritoneum had been poisoned.—Dr. Macan observed that Porro's operation in itself seemed a very simple one. The indication for it seemed to be that such infection existed that it would be a good thing that the woman should be made incapable of bearing children. On the other hand, if the peritoneum was not infected, Sänger's operation was preferable, on the ground that it left the woman capable of bearing children. The comparative mortality after the two operations was now almost the same.—Dr. Mason, in reply, said the woman's pelvis was extremely small. If any great time had elapsed after delivery, Porro's operation was better than Sänger's; but where the rupture was very recent, the latter gave a better chance of recovery.

REVIEWS AND NOTICES.

Anatomy and Physiology in Character. By Furneaux Jordan, F.R.C.S. London: Kegan Paul and Co. 1886.

Mr. Jordan has given us a little book which is very briskly written, and may serve to interest and amuse a leisure hour for many people and perhaps to offer a few hints to an anatomist. Mr. Jordan is emphatically a man of the age; he finds it difficult to imagine caring for any other period than the second half of the nineteenth century. He has a hearty and outspoken belief in our own times, in the progress we are making and are sure to make, along with an almost indiscriminate contempt for the past, "an age of supernaturalisms which arose in the babyhood of peoples, and survive only because they are instilled at the babyhood of individuals." But what is this progress, if properly understood? "It is a chapter in historical physiology," for "it is merely for convenience that we isolate certain groups of physiological facts, and call them Sciences, as we do when speaking of the moral sciences, and others," for "these are secondary sciences, and mere darkness and confusion would follow the forgetting that the primary and underlying science is physiology." Witchcraft was thought much of among the abominations of past times; "education is the modern witchcraft," as able to modify to some slight extent the most powerful factor of our constitution, which is heredity; and we cannot but conclude from Mr. Jordan's premisses that education in physiology must be the underlying influence, as well as the culminant power, with which one man can influence another.

To turn to human character, what do we find there? We find, on reflection, that more than a third of men and women are shrews, less than a third are non-shrews, and the remainder are of an intermediate type, of which Mr. Jordan "has nothing to say." The poverty of the modern English language, though it has a larger vocabulary than any other except possibly Chinese, has obliged Mr. Jordan to take up these old-fashioned words, much against his will. He does not give any definition of his terms, but paints a lively picture of the shrews, male and female. The female shrew, to begin with, is commonplace; "she resembles," as he phrases it, "women generally much more than she differs from them." She has hardly any emotion in her; "Love is merely preference, hatred is merely dislike, jealousy is only injured pride." She is "in all her passions passionless." She is fidgetty, superficial, self-important, and ill-bred. Mr. Jordan draws most of the traits from that dreary borderland of gentility that hangs about the edges of the "upper classes." The non-shrew is emotional, passionate, it may be, for good or evil, but a far more potent element in society, with a will and a heart. Mr. Jordan's attention was drawn to these great fundamental types by a method that a more commonplace observer (and Mr. Jordan is determined never to be commonplace) might have let slip—namely, by reflection upon the characteristics and constitutions of those of his hospital patients whom their husbands had assaulted. There could be no doubt they were shrews, and they had not only mental but bodily characteristics. The great point was they had little hair in the eyebrows or on the head, thin skins mostly pink and white, and for the most part rounded backs. This was very different from the non-shrewlike Cleopatra or Lady Godiva, who had, we know, abundant hair, and, we may assume, abundant eyebrows. They were non-shrews emphatically, and held themselves doubtless upright, as non-shrews, we are told, should do, and, we may add, always have done if we may judge from the Venus of Milo and the Eros of Praxiteles.

It would be a great pity if Mr. Jordan's flashes of intuition of the nature of men and things were taken too seriously, and it would be absurd if every dashing generalisation were criticised with judicial severity. It is beside the mark in such writings to notice that he has misunderstood the Roman empire, and misquoted Wordsworth. His book gives a stimulus to discussion and observation, and more observation is wanted in the study of temperaments. It is only a touch of self-satisfaction that sometimes shows itself that makes it tempting now and then to ask Mr. Jordan a few simple questions, such as might have been put to him by a man whom he is obliged, after all, to pronounce a shrew—Socrates.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

HOCKIN'S "LIQ. PODOPHYLLIN."

Although the value of podophyllin as a cholagogue has long been recognised, much difficulty has been experienced in prescribing it in a liquid form. Many patients cannot take pills, and prefer having a mixture. The new preparation contains a quarter of a grain in a drachm, and is miscible not only with water, acid and alkaline solutions, but also with infusions and tinctures. It is active in very small doses, and undoubtedly supplies a long felt want. It is prepared by Messrs. Hockin, Wilson and Co., of Duke Street, Manchester Square, London.

IMMISCH'S CLINICAL THERMOMETER.

The clinical thermometer, introduced some years ago by Mr. Immisch, as is well known, has the same form as a small watch, and the temperature is registered by a pointer, which traverses a dial marked in degrees. The instrument is very sensitive, and the fear had been expressed that, in the act of withdrawing the instrument and reading the dial, the pointer would already have begun to recede. In order to meet this objection, a slight addition has been made to the instrument; at the handle, where the winder is fixed in a keyless watch, there is a small milled head; by pulling this out, which can be easily and instantaneously done in withdrawing the instrument from the axilla, the needle is fixed, and remains immovable, until it is relieved by pushing back the milled head. From some observations we have made with one of the new instruments, the addition seems to be a distinct gain, adding very materially to the facility with which the thermometer may be used, and the accuracy of the observations made with it.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 12th, 1887.

THE LUNACY ACTS AMENDMENT BILL, 1887.

THE new Lunacy Bill was read a second time in the House of Lords on Monday last—only a few days after the opening of Parliament, and almost before copies of the Bill were obtainable by those members of the public interested in the subject. It remains to be seen whether this celerity is the presage of a quick and safe passage through the Houses of Parliament of this, the third Lunacy Bill in three successive years, those of 1885 and 1886 having been withdrawn after the resignation of the Government each year in the month of June.

In general terms, the present Bill contains some new provisions, but follows the lines of the Bill of 1886, in the latest form assumed by the latter. The present Lord Chancellor acted wisely in thus availing himself, as he generously confessed, of the fruits of the labours of his predecessors in office. The subject has been much debated and discussed, from various points of view, during the past two years; and numerous alterations of the regulations originally proposed in the preceding Bills were found necessary as those in charge of the Bills gained a fuller knowledge of the facts; a Bill, embodying many new suggestions of a fundamental nature, would certainly lead to renewed and prolonged controversy.

It is not our intention now to take up those points of detail in the Bill which appear to be open to exception, and with regard to which some modification or amendment seems to be either desirable or necessary; but one or two fundamental parts of the Bill demand some notice. With respect to the placing of private patients in hospitals, asylums, etc., magisterial or judicial intervention is a cardinal principle of this Bill, as of its predecessors, and constitutes one of its most marked departures from the present law. It was his invincible repugnance to a similar provision in the Bill of 1885, involving the withdrawal of the insane of the middle and upper classes from the control of their families and friends, that led the late Lord Shaftesbury to tender his resignation of the chairmanship of the Board (new and old) of Commissioners in Lunacy which for upwards of fifty years he had held with honour to himself and large benefit, directly to the insane, and indirectly to the general public. This provision also has been consistently opposed by the Commissioners in Lunacy, on the ground that the probable results would be that in many cases the lunacy would be concealed, that curable persons would be retained at home until the chance of recovery had dwindled or disappeared, or that they would be sent out of the country beyond the reach of friends, and outside the range of any protection derived from our laws. Nevertheless, the feeling of distrust, and the fear that the liberty of the subject may be improperly infringed by designing and malevolent persons, under the present lunacy law, is strong in some sections of the public. True it is that this is partly due to exaggerated or prejudiced statements and mis-statements. True it is, also, that it is partly occasioned by ignorance of the existing provisions made by law for the visitation, examination, inspection, and official supervision of all lunatics in public and private asylums, and of the safeguards already provided against unjust and malevolent confinement of persons sane but alleged to be lunatic. Yet the fear and distrust to which we have referred are such that they must, to some extent, be taken into account in any proposed legislation; and the necessity for legislation in lunacy, in other directions, has been urged in these columns on several occasions. It is probable that the magisterial intervention proposed in the Bill, or something analogous thereto—some intervention by a recognised public functionary—would be needed in order to allay the fears of that section of the public, which, on this subject, is perturbed in mind. What is necessary, therefore, is to devise provisions adapted to satisfy any feeling that may exist on this point, and at the same time minimise the delays in treatment, and other disadvantages that may accrue therefrom to the subjects of insanity, many of whom will still suffer detriment in order that the few may be protected from a danger which, if not entirely hypothetical, is certainly exaggerated. With certain exceptions, no person can, under the Bill, be received or detained as a lunatic in any asylum, lunatic-hospital, or licensed house, or as a single patient, unless under an order made by a judge of county courts, stipendiary magistrate, or justice of the peace. Important points in which this Bill differs from the preceding one, are that, except in cases where he has satisfied himself that it would be prejudicial to the alleged lunatic or dangerous to the public, the judge, magistrate, or justice who has been petitioned to make an order for the reception of a lunatic, as above, shall give the alleged lunatic notice thereof; may have a personal interview with the alleged lunatic, if he thinks it necessary or desirable; and shall have such interview, if required to do so by the latter. It is not, however, made at all clear how the justice is to "satisfy himself" that the above notice need not be sent in a given case; nor how he is to be assured that the alleged lunatic does not require him to grant a personal interview; nor what is to constitute a sufficient expression of such requirement.

In the debate on the second reading, Lord Herschell is reported to have stated that he would regard with some apprehension the regulation as to the intervention of the magistrate, if it were not permissive. By the Bill, however, magisterial intervention is made compulsory; visitation of the alleged lunatic by the magistrate being permissive, but becoming compulsory on the demand of the alleged lunatic. Except as to the last point, this much resembles the provision of Lord Herschell's own Bill; and it would seem, therefore, that his lordship inclines now somewhat to the Commissioners' view, already referred to above. In contrast with the requirement of magisterial intervention in private cases is the relaxation, under the Bill, of the existing requirement for such intervention in pauper cases. Merely ministerial functions exercised by a justice will, by and in themselves, afford only defective protection to pauper or non-pauper.

The Lord Chancellor necessarily referred to the subject of private asylums, and accurately described the effect the Bill would have

in leading to a gradual decrease in the number of licensed houses. The Bill will have a powerful influence in that direction; for under it, no fresh private asylums are to be started; no increase is to be allowed in the number for which existing asylums are licensed; and public authorities are encouraged to provide accommodation for private patients in, or in connection with, existing public asylums, thus bringing the public purse and resources into competition with private enterprise. This competition already exists, and, heightened by the operation of the Bill, is calculated to decrease the number of licensed houses. The Lord Chancellor is reported to have stated that "there were 4,440 licensed houses, and the patients therein had increased by 8.5" [per cent. last year, we suppose is meant]. This is quite erroneous; the number "4,440" refers to the total number of patients in all the licensed houses in England and Wales; these houses themselves being about a hundred in number. The increase in the number of patients in these licensed houses noted in the last Lunacy Blue-book for the preceding year, was about one and a half per cent. only. And it may be as well to add here that only about three-eighths of the private patients (including criminals) registered in the Blue-book are in private asylums (licensed houses).

THE LIVERPOOL HOSPITAL FOR WOMEN.

THE annual meeting of the "subscribers, donors, governors, and friends" of this hospital recently held, was naturally the scene of lively discussion. As not infrequently happens in heterogeneous assemblies, animated by various sentiments, and imperfectly informed as to the subject-matters, the decisions arrived at were the outcome of passion rather than of reason. Nothing could be in better or more judicial spirit than the opening speech of the chairman, Mr. T. A. Bushby. Having traced briefly the history of the late proceedings in connection with the operations performed by Dr. Imlach, he emphasised the difficulty that must embarass a tribunal chosen by accident more than for any special competency, in its endeavour to adjudicate upon a controversial question of science and practice. He quoted the following passage from the remarks made in the JOURNAL of January 18th: "The governors cannot be expected to pass a definite and conclusive judgment upon an operation new to surgical science, not yet adequately known even to the medical profession, and one which has not emerged from the storm of opposition let loose by ignorance and prejudice, as well as by less blameable motives." And this question of science and practice seems at the present moment to be so intricately mixed up with personal considerations, that a decision free from objection can hardly be expected. A calm perusal of the report of the meeting leads to the conclusion that the question of science and practice has been overwhelmed, or kept out of sight by the personal considerations involved. The whole question may be stated briefly thus: Is the operation for removal of the uterine appendages justifiable? Has the action of Dr. Imlach in advocating and practising this operation been justifiable? The general answer from all sources, endorsed by the governors, to the first question, is in the affirmative. The answer of a majority of the governors to the second question is in the negative. That is to say, in their view it has been wrong for him to do that which is in itself right.

The Chairman showed to what extent personal feelings were mixed up in the affair in these words: "I might have unfolded.....the curious private history (and guidance afforded to your committee) during the recent troubled times; I might have explained the incongruous personal relations of the different members of the staff, and the consequent difficulties about consultations, and have shown that the committee were at no period prepared to have given either countenance or effect to the idea that the practice of the hospital was contrary to, or in advance of, the scientific opinion of the day."

It would have been well had the meeting acted in the wise spirit evinced in these words. On the question of re-electing the staff arising, first, Dr. Briggs, a new member, was elected unanimously; secondly, Dr. Burton, who had been on the staff since the formation of the hospital, and who was pointedly accused by Mr. S. B. Bacon of being "the originator" of the quarrels, was elected by 13 votes to 9; thirdly, when the case of Dr. Imlach's re-election came up, it was negatived by 17 to 16 votes. A poll was demanded; and (it seems hard to believe, but so it was) the matter was decided by proxy votes, as at a shareholders' meeting of a public company, and the numbers were—for Dr. Imlach, 137; against, 312. No comment is necessary upon such a mode of deciding a scientific or even a personal question. It settles nothing. It only proves the animus and activity of the canvass for proxies. As Mr. Malcolm Guthrie, the new Secretary and Treasurer, said, "The character of the meeting was ridiculous, because proxies had been sent out by some persons asking for the power to vote without having heard the speeches. It was like hanging Dr. Imlach first and trying him afterwards."

It will be a consolation to Dr. Imlach to know that condemnation inflicted in this way can have no possible weight with his professional brethren, or with the disinterested public. He is passing through a storm of obloquy, raised artificially by persons not in a position to judge either him or the surgical operation with which his name is honourably associated. He will, we doubt not, before long find this proxy-judgment reversed by a more competent tribunal, and be reinstated in a position in which he will find opportunity for ample vindication of his personal character, and for the advancement of science, in the cause of which he has suffered so much and so unjustly.

ANTIFEBRIN.

THIS new drug appears to possess certain advantages which render it worthy of more extended trial. Drs. Cahn and Hepp, whose report may be found in the *Centralb. f. d. Klin. Med.*, 1886, No. 33, have just published a second and more elaborate report on antifebrin in the *Berliner Klin. Wochenschr.*, 1887, Nos. 1 and 2, the more important facts of which are here reproduced.

Antifebrin is acetanilide or phenylacetamide, and has the formula $C_6H_5NHC_2H_3O$. It is produced by the action of heat upon aniline acetate, one molecule of water being driven off. It is a light crystalline powder, very stable in composition, undergoing distillation without alteration, and being unaffected at the ordinary temperature by acids or alkalies. It melts at 113° C., and boils at 292° C. It is almost insoluble in cold water, requiring 160 parts for its solution, but is soluble in 95 parts of hot water, and easily soluble in alcohol, ether, brandy, or strong wine. It may be conveniently administered suspended in water, as it has no bad taste, but only a slight and not unpleasant sensation of burning, and patients evince no aversion to it, even after its administration for a long time.

The action of this drug in reducing temperature is most certain;

it never fails to lower it by several degrees. It is four times as strong as antipyrin in its effects, is very cheap, does not cause vomiting, and rarely causes any rigors, as the temperature subsequently rises again. Moreover, it causes no cerebral disturbance, and the appetite even improves under its use. In a few cases, some degree of cyanosis of the face and limbs was observed; this, however, always disappeared (without any symptoms of shivering as it faded off), and the authors paid very little attention to it. Indeed, they complain that certain remarks in some chemical advertisements have been exaggerated in this particular, in order to favour the sale of antipyrin, and distinctly state that the above appearance was not more frequently observed than after other antifebrile agents, far less than after kairin. To call it "aniline poisoning," as has been done, is quite unjust.

The drug was used in twenty-four cases of fever, and always lowered the temperature. Fifteen grains given in the morning is the favourite daily dose with Drs. Cahn and Hepp. The temperature begins to fall in about an hour, and continued to fall for about three hours longer; it then gradually rose again; as the temperature fell, the skin reddened, and there was perspiration; the pulse became less frequent, and the arterial tension was increased. In some cases, during the period of intermission, there was much thirst, followed by increased urination and gentle sleep.

A further series of cases, sixty in number, included twenty-nine of typhoid fever, six of erysipelas, two of croupous pneumonia, four of acute rheumatism, six of phthisis, two of pleurisy, two of pyæmia, and two of septicæmia. Liebermeister has taught us that quinine is more energetic in its effects if given coincidently with the natural daily remission in fevers, and this is also the case with antifebrin. A dose given early in the day has a far more potent effect than if given in the evening. A good dose at one time is far better than small doses frequently repeated, and in high fever the latter treatment is useless at first. But, if the temperature be brought to the normal by a good daily dose (fifteen grains) for two or three days consecutively, it will be found that small doses of two or three grains daily will often suffice to keep it low afterwards.

As to the limit permissible, the authors themselves repeatedly took one or two grammes a day without the least effect; and one young man, who was suffering from diarrhœa, took three grammes (forty-six grains) daily for a week without the least discomfort. Indeed, Fürbringer and Reise raised the dose boldly to over ninety grains daily without harm—a dose certainly equivalent to five drachms of antipyrin. Thus there is no cause for disquietude with the moderate doses recommended, but it is always advisable to study the individual susceptibility.

But one of the chief advantages of antifebrin over antipyrin is the freedom from vomiting after it, and patients who usually had retching or even vomiting attacks after antipyrin, took antifebrin without any discomfort. No irritation of the urinary passages was observed; in some cases of albuminuria, the albumen disappeared during the use of the drug, in others not till the patient was free from fever. Again, shivering was rarely seen after antifebrin, whereas it is a common result after antipyrin. The subsequent rise of temperature is often temporarily higher than the normal elevation, but this is a common result after all energetic agents on the temperature; especially after the use of dioxybenzols in general, for example, resorcin, kairin, and particularly thallin; also after antipyrin, and even after cold baths.

The patients feel much better after antifebrin, and the mind is cleared to a remarkable extent. This is best noticed in typhoid cases.

Another advantage of antifebrin is the rise of arterial tension, together with lessened frequency of the pulse. Even when directly injected into the veins of animals, antifebrin never causes lowering o the arterial tension. This was established by experiments in Professor Schmiedeberg's laboratory. At the same time the increased diuresis caused by antifebrin is distinct evidence of its favourable effect upon the circulation.

No specific action of this drug is claimed as against any disease in particular; the chief experiences of Cahn and Hepp related to typhoid.

From all this it appears that, as said above, antifebrin is evidently a powerful antifebrile agent worthy of further trial. It is no doubt unfortunately true that the action of these aniline derivatives is of a more or less evanescent character, but this may be compensated to a great extent by giving them in appropriate repeated doses. It may be added that Lépine (*Semaine Médicale*, 1886, p. 473) calls this agent a "nervine," and finds that it relieves the peculiar pains in "tabid" subjects.

Sir T. Crawford, Director-General of the Army Medical Department, is announced to preside at the annual distribution of prizes to the Volunteer Medical Staff Corps on February 25th.

The election of an Assistant-Physician at St. Bartholomew's Hospital, to fill the vacancy caused by the resignation of Dr. Wickham Legg, will take place on February 24th.

At the half-yearly matriculation examination of the University of London held last month, 447 candidates passed; of this number, 49 were women.

The Council of the Society of Medical Officers of Health is about to take into consideration the various Acts of Parliament having relation to sanitary administration, and will give attention first to the Public Health Act, 1875.

The one hundredth general meeting of the Queen's College Medical Society will be held at the Grand Hotel, Birmingham, on Wednesday, February 23rd; the President, Mr. A. F. Clay, in the chair. Sir Walter Foster, M.D., will deliver an address, after which he will be entertained at supper.

At the recent examination of medical students at St. Petersburg, fifty-four ladies obtained the medical diploma. The thirty-eight female students who have entered their names for the next examination will be the last to be admitted to the Russian School of Medicine for Women, that establishment being about to be closed after an existence of fourteen years.

POST-GRADUATE LECTURES AT BIRMINGHAM.

Dr. Robert Saundby commenced on Wednesday last a course of post-graduate lectures on Bright's disease in the library of the Birmingham Medical Institute. They will be continued on the three successive Wednesdays.

"INTER-HOSPITAL" FOOTBALL.

Great interest always attaches to the inter-hospital football-matches. Guy's Hospital Medical School is the holder of both the Association and Rugby Inter-hospital Cups. In the first round of this year's inter-hospital Rugby matches, Guy's met the London Hospital, and the game resulted in a draw. In the second round, Guy's drew University, and the game was played on Tuesday last at Richmond, in the presence of a large company. During the first period of the game,

Guy's scored one try and one minor point, to one minor point. After change of ends, Guy's increased their score by two goals, three tries, and three minor points. Eventually, University were beaten by two goals, four minor points, to one minor point. At present, Guy's is the only hospital which has won the cup four times.

THE REFORM OF THE UNIVERSITY OF LONDON.

We understand that another meeting of Lord Justice Fry's Committee of the Senate of the University of London was held on Wednesday last; the same members were present as on the last occasion. The draft report was again under discussion. Certain modifications have been introduced, and we believe that the revision is now in so forward a state that probably only one more meeting will be necessary. The report will then be presented to the Senate, by whom it will be further discussed.

HYDROPHOBIA AT NOTTINGHAM.

A labourer, named Priestland, aged 30, has died from hydrophobia in the General Hospital, Nottingham. The deceased, who was bitten some time ago on the forefinger of the right hand by a strange dog which ran into his house pursuing a cat, was taken ill on February 2nd, and died on February 4th. It will be remembered that, owing to a serious outbreak of rabies in December last, the authorities of Nottingham issued a stringent order with regard to the muzzling of dogs, and this order is at present in force.

THE MOXON MEMORIAL.

A meeting of the subcommittee appointed to determine the form of memorial best adapted to perpetuate the memory of the late Dr. Moxon was held at the Royal College of Physicians on February 8th, and was very fully attended. Sir Joseph Lister proposed, and Sir Andrew Clark seconded, the following resolution, which was carried unanimously: "That the fund raised by subscription be devoted to the foundation of a scholarship or medal to be awarded by the Royal College of Physicians, and to the erection of a memorial of him at Guy's Hospital."

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The Library of the College will be closed on Saturday, Monday, and Tuesday, February 12th, 14th, and 15th for the purposes of the Hunterian Oration and Dinner. The Oration will be delivered by the President, William Scovell Savory, F.R.S., in the Theatre of the College, on Monday, February 14th, at 3 o'clock P.M. precisely. The dinner will be held in the Library on the same evening. Professor Walter H. H. Jessop, F.R.C.S., will deliver a course of three lectures on The Intraocular Muscles on Wednesday, Friday, and Monday, February 16th, 18th, and 21st, at 4 o'clock P.M. each day.

DEATH OF DR. HENRY DAUBENY.

Intelligence has reached us of the death of Dr. Daubeny, who, twenty-five years ago, was a well-known London practitioner, but who, through failing health, the result of overwork, left the metropolis about that time for the English colony of San Remo. There his health improved, and he acquired a medical practice among the English visitors, which grew steadily in importance and extent. Dr. Daubeny was a connection of the D'Aubigné family, and a cousin of General Sir C. Daubeny. At the grave, the Syndic of San Remo paid a high tribute to the deceased's character, and to his public spirit and activity on behalf both of the Italian residents and the English visitors.

POISONED BY TINNED MEAT.

The death of a child, aged 17 months, due, it is supposed, to eating tinned meat, has occurred at Newton Stoney, near Salisbury. The facts stated at the inquest were that the father of the child purchased a tin of preserved mutton, which was partaken of by his wife, the deceased, and a Mrs. Sheers. Two days after, the mother became very ill, and on the following the child and Mrs. Sheers were attacked by sickness and vomiting. A medical practitioner was sent for, and found them suffering from severe irritation of the stomach due to poison. The child, after a fortnight's illness, expired from gastritis, due, in the opinion of the medical attendant, to the consumption of injurious food. The other patients recovered.

CHLORAL-POISONING.

A sad case of chloral-poisoning recently occurred at Carlisle, resulting in the death of Mr. Arthur Woolnough, a medical assistant. Some time previously, the deceased had been thrown from his trap, and since then had kept the house. Having sent for some chloral, he measured out a quantity of it, and having mixed it with some hot brandy, drank the mixture and went to bed. The caretaker, who called to waken him about ten o'clock in the evening, found that he had evidently been dead for some time. Mr. Woolnough, it appears, was in the habit of taking chloral occasionally.

THE CHARTER OF THE NEW MEDICAL UNIVERSITY IN LONDON.

A meeting of the delegates of the Royal College of Physicians and of the Royal College of Surgeons was held at the private residence of the President of the latter body on Wednesday evening. The draft of the charter for which it is proposed to apply was under discussion, and the solicitor to the College of Surgeons was present. The attendance was large; and we understand that, although the meeting lasted about three hours, not much progress was made, owing to the great complexity of the questions involved.

COMPARATIVE VIRULENCE OF TUBERCULOSIS AND SCROFULA.

At a recent meeting of the Académie des Sciences, M. Arloing made some remarks on the virulence of tuberculosis and scrofula. He had already shown that pulmonary tuberculosis infected guinea-pigs and rabbits, while true glandular scrofula had no effect on the latter animal. M. Arloing now inquired whether the virulence of scrofula might not be increased to such a degree as to permit the infection of both these animals. Experiment proved that the passage of scrofula through two generations of guinea pigs did not increase its virulence in respect to the rabbit, and did not perceptibly modify its action upon the guinea-pig itself. The organism of the guinea-pig, on the other hand, augmented the virulence of the weakened tuberculous virus. This fact shows that there is a decided difference in the two diseases, although it has not yet been proved that they are caused by two distinct kinds of virus.

MEDICAL NOMENCLATURE.

After the reading of Mr. Edmund Owen's paper at the Medical Society, on Monday, February 7th, there was some discussion on this subject. The President deprecated the practice of applying proper names to pathological conditions. This observation had reference to the term "Littre's hernia," often incorrectly written "Littré's hernia." Dr. Hare also spoke on the same subject. The practice is open to great abuse, especially when extended to surgical operations. It is least objectionable in anatomy, where structures, spaces, and canals have been made, as it were, monuments of their discoverers. On the other hand, purely descriptive names would be liable to frequent change, excepting in anatomy; for Scarpa's triangle will remain a space best distinguished by that name as long as our race exists, whilst purely pathological terms are very subject to alteration, that they may be brought into harmony with new theories. A name is a symbol, a denomination, and not a definition. Hence the instinctive tendency to apply proper names to operations and pathological conditions. It is also certain that proper names are generally the simpler. In this respect, "Eustachian tube" and "Emmet's operation" will always be preferred to "oto-pharyngeal tube" and "trachelorraphy." The simplicity of proper names will, in fact, ever prove an obstacle to the

universal adoption of a system which, in most but not all respects, is made logical and scientific. The most serious objection to proper names employed in this manner, is the liability to change of such names through patriotic motives, as a comparison between any French and English text-book will amply prove.

EPIDEMIC OF DIPHTHERIA AT EALING.

THERE is every reason to believe that the epidemic of diphtheria at Ealing has been successfully arrested. No case of true diphtheria is known to the medical officer to have occurred in the district since January 27th. Twelve or fourteen cases of a very serious nature have come under his notice, and among these there have been eight or nine deaths. Those originally attacked suffered from a very acute type of the disease. There is as yet no positive evidence of the exact cause of this sudden outbreak, but there is a strong presumption that milk was the vehicle of infection, for out of some thirty cases which came to the knowledge of the medical officer, twenty-eight were, it is said, persons whose milk-supply come from the same dairy. The Local Government Board have instructed Mr. Power, one of their medical officers, to investigate the cause of the outbreak. Later reports bring the total number of deaths up to twelve.

CREMATION IN NEW SOUTH WALES.

THE Bill introduced by the Hon. Mildred Creed, L.R.C.P.Ed., M.R.C.S.E., in the Legislative Council of New South Wales, provides for the establishment of crematoria, and sets out the requirements which the licensed applicants for crematoria must fulfil, and establishes the conditions of cremation. (1) No permit is to be issued by the registrar except upon the receipt of a certificate from a legally qualified practitioner who had been in previous medical attendance for at least four days; (2) a certificate after *post-mortem* examination; or (3) a coroner's inquest. Relatives may object to cremation in cases where it is not directed by the deceased himself. No persons having any pecuniary interest will be permitted to give, or join in giving, a certificate under penalty of felony, punishable by penal servitude for a term not exceeding ten years. The Bill was introduced in a speech by Mr. Creed, in which he gave a very able summary of the well-known hygienic and other arguments in favour of the regulation of cremation, which in the Colonies, as elsewhere in the British Empire, is not an illegal process, but requires legislation for its regulation.

MSTERDAM FOOD EXHIBITION.

IN connection with the exhibition of articles of food to be held at Amsterdam from June to September, 1887, the following prizes have been offered :—A prize of 500 francs with gold, silver, and bronze medals for a handbook of cookery for use in schools to meet the requirements of life in Holland at the present time. A prize of 500 francs, with gold, silver, and bronze medals, for a popular essay on the three following subjects: 1. The relation of the nutritive value and average market prices in Holland of the chief articles of food. 2. The influence of methods of preparation of the chief articles of food on their nutritive value. 3. The simplest criteria of the soundness of articles most generally used, to which the Committee recommend the addition of a graphic tabular statement showing the chemical composition, price, and nutritive value of various articles of food. Intending competitors should first communicate with Mr. A. Van Duyl, Food Exhibition, Singel 451, Amsterdam.

A CONGRESS ON CREMATION.

AN International Congress of societies and private persons interested in cremation will be held at Milan in the month of September, 1887. The programme of the Congress will include (1) a general statement of the progress of cremation among different nations; (2) a proposal for constituting an International League of Cremation Societies; (3) a proposal for international legislation, regulating the removal of bodies from one country to another, and the methods of cremation and conservation of the ashes, from the point of view of public hygiene and of legal medicine; and (4) other subjects of direct collateral interest connected with cremation. An Exhibition will at the same time be held of plans, models, and designs, books and literature relating to crematories, and all other matters connected with cremation. Among the Honorary Presidents of the Congress are MM. Cantoni (Pavia), Crocq (Brussels), Koechlin-Schwartz (Paris), Moleschott (Rome), Sir Henry Thompson (London). Dr. Malachie, of Milan, is the President, and Dr. Pini Caëtan the Secretary, to whom all communications should be addressed. The preliminary list of members of the Congress is already extensive.

WELL-DISTRIBUTED COMPLIMENTS.

THE Jubilee Festival of the National Hospital for the Paralysed and Epileptic was held on February 9th. The Lord Chancellor presided at a dinner at the Holborn Restaurant, where many ladies were present. The Lord Chancellor, Canon Duckworth, and Colonel Duncan, M.P., dwelt on the benefits conferred by the hospital on suffering humanity; and Sir J. Crichton Browne, in an extremely happy speech, paid a just tribute to the medical and surgical staff of the hospital. "We recognise," he said, "that we have represented on the staff ripe experience and judgment by Dr. Ramskill and Dr. Radcliffe, the subtle insight of genius by Dr. Hughlings Jackson, the gift of minute observation by Dr. Buzzard, the power of practical sagacity and lucid expression by Dr. Bastian and Dr. Gowers, the spirit of brilliant enterprise and discovery in Dr. Ferrier, the capacity for laborious research by Dr. Ormerod and Dr. Beevor, and exquisite manual dexterity by Mr. Adams and Mr. Victor Horsley." The prodigious strides made in the study of the functions and diseases of the nervous system were, he thought, well exemplified by the fact that not one page of the well-known treatise by Dr. Ross, of Manchester, which extended to 2 000 large octavo pages, could have been written twenty years ago. A large proportion of this great mass of new facts had been contributed to science by the staff of this hospital. The toast was drunk with much enthusiasm. The financial position of the Hospital appears to be exceptionally satisfactory.

SAFETY OF PLACES OF PUBLIC ENTERTAINMENT.

SIR J. M. GAREL-HOGG, M.P., the Chairman of the Metropolitan Board of Works, has introduced a Bill to confer powers on the Board for inspecting theatres and music-halls. Should it become law, it will, it is hoped, tend very largely to diminish such disasters to life and limb as that which recently occurred in the East End. The Bill applies to and includes any house or other place of public resort which is kept open for the public performance of stage plays under a patent or a licence; also any house, room, or other place of public resort containing a superficial area for the accommodation of the public of not less than 500 feet, which is kept open for dancing, music, or other public entertainment of the like kind under the authority of a licence of Quarter Sessions. The Bill provides for an annual inspection with a view of ascertaining whether the structure of the buildings is efficiently maintained for the safety of the public frequenting them; also whether the regulations and appliances for the protection of the public from fire are observed and kept so as at all times to be immediately available. An annual certificate, for which a fee will be charged, is to be obtained, and the same penalty will attach to opening without a certificate as now follows the opening without a licence. No structural alteration is to be made in any theatre or music-hall without the consent of the Board under a penalty of £50, and the Board will be at liberty to prescribe any alterations therefrom. The Board will also be empowered to make regulations for any theatre or music-hall as to the appliances to be provided for protection from fire, and the condition in which they are to be maintained; as to the keeping of the gangways and staircases free from seats, persons standing, or any other form of obstruction; and as to the provision of oil lamps or candles in the building or in

the exit corridors for use in the event of the extinction of gas. For not complying with any of these requirements the penalty may be £10 for each day of opening. And these and other penalties are to be paid to the Board, and applied by them towards the expenses of carrying the measure into execution.

TEA, COFFEE, AND COCOA.

THEINE, caffeine, and theobromine, the active principles contained in tea, coffee, and cocoa respectively, have for a long time been considered identical in their physiological action; while the drinks which contain them have each a special action. Tea, for example, while acting as a cerebral stimulant, is of more service than coffee in restoring the system to the normal condition after hard mental or bodily work. The difference between it and coffee is probably partly to be explained by the researches conducted last year by Mays, and published in the *Therapeutic Gazette*, by which he showed that the action of theine differed markedly from that of caffeine. Thus theine acts as a local anæsthetic when injected subcutaneously. The effect is limited to a small area round the point of injection, and is unaccompanied by any general disturbance. Theine was, in fact, given daily for some time to a man, without any untoward effects being noticed. Mays suggests that the local anæsthetic action of theine may be utilised in the treatment of different forms of neuralgia, and of local pain in muscles. In these cases it would be best to administer it hypodermically. In the frog, Mays has found that theine affects sensation chiefly, and afterwards produces tetanus, while caffeine has no such action. The different action of theine and caffeine may account for the varying effects which are sometimes noticed after the administration of so-called "caffeine," for commercial "caffeine" may consist of caffeine alone, of theine alone, or of both caffeine and theine. Further work on this point is very necessary, and will no doubt be forthcoming.

RAG-SORTERS' DISEASE.

MM. SCHULTZ, Krannhals, Herrgaven, and Radecki recently communicated to the Medical Society of Riga facts concerning an epidemic which broke out among the female rag-sorters in a paper factory at Ligat. On April 25th, one of them was attacked; on the 28th, seven succumbed to the disorder. The first symptoms were tremors, high temperature, and general *malaise*. There was loss of appetite, headache, dyspnœa, weak pulse, and cough accompanied by moderate expectoration. When the disorder proved fatal, the temperature fell, the pulse became weaker, and cyanosis and collapse ensued. *Post-mortem* examination showed rapid decomposition of the tissues, with mediastinal, pleural, and pericardial effusion, and enlargement of the bronchial glands and the spleen. M. Krannhals studied these lesions from a histological point of view, and discovered microbes of three different kinds in the blood—some like the bacilli described by Koch as occurring in œdema, some arranged in rows, and others having the appearance of cocci. The microbes were most numerous in the parenchyma of the lungs, in the bronchial tubes, and in the cellular tissue of the mediastinum. The fluid of the pleural effusion injected under a dog's skin caused malignant œdema and death in three days. Cultivation of these products in Agar-Agar proved the identity of these micro-organisms with the microbes of malignant œdema as described by Koch and Hesse. M. Krannhals therefore considers that the epidemic described is analogous with malignant œdema.

THE GENERAL MEDICAL COUNCIL AND THE MEDICAL SCHOOLS.

THE General Medical Council, during the summer session last year, discussed the advisability of making a visitation of the medical schools analogous to the visitations of examinations which have been made for many years. Two questions immediately arose as to the powers of the Council to make such a visitation of schools; in the first place doubts were raised whether the Council had power under the Medical Acts to call on the medical schools to receive the visitors, and in the second place whether it was authorised to apply its funds to such a purpose. The first question was brought into immediate prominence when the Committee which the Council had appointed, began to make inquiries at the medical schools; most of the schools expressed their willingness to receive their visitors, but St. Bartholomew's Hospital declined to receive them in their official capacity. The Committee subsequently obtained leave to take counsel's opinion on the two points raised. The Acts contain no clause which would give the Council the power to compel the schools to submit to visitation, and in the absence of express statutory enactment it seems in the highest degree improbable that the Council possesses such a power, or would be able to enforce it. On the other hand, there is no enactment which expressly forbids the Council to spend money on the visitation of schools; the Act of 1858 empowered it to obtain information as to the courses of study and examination, and to apply its funds to the execution of the Act; the interpretation of its duties seems to have been left to the Council. For our own part we consider the visitation of schools by the Council would be an idle waste of money.

ART IN ITS RELATION TO MEDICAL SCIENCE.

IN the current volume of *St. Thomas's Hospital Reports*, there is an article by Mr. William Anderson, Assistant-Surgeon to St. Thomas's Hospital, which gives a most interesting outline of the history of art in its relation to medical science. Mr. Anderson is one of the many accomplished members of the medical profession whose art studies form the relaxation and chief pleasure of a laborious scientific career. Few, however, have ever combined in an equal degree the accomplishments of an anatomist and surgeon with those of profound erudition, conscientious research and refined artistic taste. Mr. Anderson's great work on the *Pictorial and Glyptic Arts of Old Japan* is unique in European literature, and we are glad to see that its high merits have recently been fully recognised by such important organs of opinion as the *Quarterly Review* and the *Times*, as well as by the leading art and literary journals on the continent. On the subject of Japanese pictorial art he may justly claim to be the first living authority, and he has been the pioneer in the study of the pictorial arts of the great schools of the far East, which possessed, until recently, masters like Kanaoka, Motonobu, Tanyu, Okio, Hokusai, and Sosen. The works of these artists, which are still rare in Europe, may fairly compare with those of Cimabue, Velasquez, Snyders, and Landseer. In the present article, Mr. Anderson reviews the services rendered by art to science in the elucidation of anatomy and pathology. Beginning with a reference to the anatomical studies of Leonardo da Vinci and Raphael, he passes on to the great work of Vesalius, *Humani Corporis Fabrica*, which was illustrated by the pupils of Titian; to the Amsterdam folio on the anatomy of the human body, by Bidloo; to the *Tabulæ Anatomicæ*, and other anatomical works of J. Casserius and Spigelius, illustrated by Fialetti; to the finely illustrated *Osteographia*, of Cheselden; the *Tabulæ Sceleti*, of Albinus; and the *Anatomia Uteri*, of William Hunter. Of all these, in their historical succession, Mr. Anderson gives a condensed but luminous account, bringing his narrative down to the lithographic work of Jacob, Léveillé and Beau, the drawings of Ford, and the admirable engravings of William Bagge. The interest of the paper is heightened by an excellent series of reproductions of the characteristic illustrations from each of the principal works mentioned, taken from copies in the possession of Dr. James F. Payne, of St. Thomas's Hospital, whose library is rich in examples of the finest illustrated works of the old anatomists. In our time the work of accomplished artists is too costly to be easily obtainable for the illustration of technical books in our own or any other profession, but the admirable processes of photographic reproduction, which are now common, and which have recently undergone great improvements, open up the promise of effective illustrations, which will redeem the present century in some measure from

reproach in this regard. Mr. Anderson's paper is one of considerable interest, and might well be republished in a more convenient and permanent form.

SPRING FLOWERS AND CLIMATE.

We have received several communications relative to the early blossoming of plants as indicative of the mildness of certain localities, chiefly in the south-west of England, some of which we published last week. Of course the general conclusion is a safe one that any flowers which blossom early at one place and late at another indicate a milder climate at the one than the other; but it must be borne in mind that all kinds of flowers are not equally trustworthy and available for phenological purposes. Some plants, such as the dandelion, chickweed, groundsel, and several species of veronicæ blossom all the year round; and others, having formed their buds before the winter, such as the primroses and cultivated violets, are ready to burst into blossom on the slightest provocation, and, indeed, often blossom in the autumn months. Annuals, again, cannot be trusted, as their blossoming depends largely on the time of the sowing of the seed; and this is true also of biennials, such as the wallflower and Brompton-stock, because those which come up slowly and in the autumn are necessarily later flowerers than those which come up in the spring. Garden plants, of which there are many varieties, such as roses and tulips, are not available, as their blossoming is liable to all sorts of aberrations, dependent on other conditions than those of climate. Most of our early flowering bulbous plants, such as snowdrops and crocuses, are hardly more trustworthy agents for determining our English climate, as their blossoming is more nearly related to the autumn than the winter or spring climatic condition. If we examine the lists of flowering plants sent in (and similar lists are no doubt appearing in many local papers), we shall find that nearly all of them come under some of these classes, and they are, therefore, not to be implicitly relied on, and least of all the primrose, whose early blossoming in October, and any subsequent period, is more indicative of the climate of last year than of the present time; moreover, it grows under conditions of exposure to sun and shelter from cold blasts which are not fairly representative of a district. The plants to be observed for phenological purposes should be perennial or woody, and the earliest of our native plants, or rather trees, suitable for this purpose, is the common hazel, noting the first appearance of its catkins in their dusty (pollen) condition, the average date for which for all England is January 31st. Following this are the almond, blackthorn, red currant, wild cherry, etc. The survival through the winter, at Minehead, of geraniums and calceolarias in an open situation, as stated by Dr. T. Clark, is evidence of a different kind than that of the early blossoming of our common plants and trees, and reminds us of the enviable climate of the south of France, and of the winter delights of Dr. Bennet's Italian garden. The camellia, clianthus, and eucalyptus have survived the winter in the neighbourhood of London under favourable conditions, and are in a flourishing condition in the Channel Islands.

INFECTION AND DISINFECTION.

Much harm has undoubtedly been caused by the implicit belief the general public place in the many disinfectants which are now advertised, and we can sympathise with the efforts Dr. Robson Roose has made to correct some of the erroneous opinions which are held as to their utility. Disinfectants have, in great part, replaced the "charms and philtres" of past ages; but for many it may be said that these "vain chemical libations," as Mr. John Simon designates them, are of no more value than the supposed means of protection against infectious disease whose place they have taken. In an article Dr. Roose has contributed to the February number of the *Fortnightly Review*, he points out that deodorization and disinfection have nothing in common; that disinfection must be capable of preventing the development of a living virus which is given off by persons suffering from infectious disease, and which would otherwise possess the power of multiplying in some other susceptible persons with whom it may come in contact. The mere creation of an odour which overpowers some other odour, or the use of a material which only retards decomposition, has no claim to be trusted to destroy or modify the virus of infective diseases. The writer endeavours to enforce his argument by explaining the nature of the material upon which the disinfectant is required to act, and to make clear what is meant by the infective processes. It may be hoped that some good will come by the publication in a widely-read periodical of an article which protests against too much reliance being placed upon so-called disinfectants. The large sums of money which are now spent annually upon worthless chemical agents, and the neglect of proper precautions which are allowed to be superseded by them, is matter for serious regret. To some of Dr. Roose's statements we might, perhaps, take exception; but they do not affect the main argument of his paper, which we trust will be taken to heart by its many readers.

DEATH OF PROFESSOR SCHROEDER.

Not Germany alone, but science and humanity have sustained a grievous loss by the premature death of Professor Schroeder, of Berlin. The sad news comes too suddenly and too late to afford adequate opportunity to give an account of his career and achievements that could at all do justice to his great personal worth and splendid scientific work. His first public appointment, we believe, was that of assistant to Professor Veit, of Bonn. The work he did there was so conspicuous for merit, and earned him such high esteem, that his ultimate translation to Berlin, the centre of German scientific activity, was accepted with general approval at home and abroad. It is needless to say how highly he was esteemed in this country. His presence will be remembered by many of our members at the Liverpool meeting, when he read a valuable clinical paper, marked by the purest spirit of science and healthy experience, on the amputation of the uterus for cancer. His work on *Obstetrics* has been translated into English. It is a model of terseness, yet full of well-digested information, and is an accepted authority as a text-book; but the book gives a very inadequate idea of his labours. Scattered through the periodical press of his country are numerous memoirs of the highest value, which form the basis of fruitful inquiry by others. These we cannot now pretend to enumerate. Schroeder had for some time past been in indifferent health; his heart was affected. He could ill endure the work which his public and private duties, pursued as they were with, to himself, unrelenting enthusiasm, entailed. He died at the early age of 49, in the zenith of his fame. The profession in this country will, we are sure, endorse the vote of sympathy with his family, passed at the meeting of the British Gynæcological Society on Wednesday night. Dr. Barnes and Mr. Lawson Tait bore testimony to their estimation of his great scientific achievements; and Dr. Bedford Fenwick expressed in touching terms the esteem and affection for his personal character inspired by the more than courtesy—the kindness and help with which he welcomed unknown and youthful strangers who came to study. This last touch showed the man was good as well as great; his loss is, therefore, a source of double sorrow. Happy are we that a great part of him survives in his work.

HYSTEROGENIC ZONES ON THE MUCOUS MEMBRANES OF HYSTERICAL SUBJECTS.

Dr. L. Lichtwitz, of Bordeaux, following up the researches of Gaube on hysterogenic zones on the external surface, and of Blau-Fontenille on lethargogenic and lethargo-inhibitory zones in hysterical subjects, has shown that not only the external, but also the mucous, surfaces of the body present in certain hysterical subjects areas, the touching of which induces attacks either of a convulsive or a hypnotic character. This may be important in case examination with the nasal speculum, the laryngoscope, or other instruments is required. In some cases it was found that even cucaine did not prevent an

attack. Dr. Lichtwitz points out the importance of knowing the spots where inhibition or arrest of convulsions can be produced, in case of the accidental induction of an attack. According to his observations, there is no accessible part of the mucous membrane which may not be the seat of "hysterogenic zones," the most usual place being the nares. In one of his cases, one side of the nostril evinced spasmogenic, and the other lethargogenic properties.

POISONING BY HERRING-ROE.

In the *France Médicale* a case is related in which a man was poisoned by eating three hard-roed herrings. The symptoms were a feeling of oppression, vomiting, burning sensation in the œsophagus and stomach, very violent abdominal pains, and dysentery. The attack lasted about forty-eight hours, and could be traced only to the herrings. Cases of this kind are by no means rare. It has long been known that caviare (sturgeon-roe) and the ova of pike, barbel, perch, and other fish have frequently given rise to symptoms of poisoning in Russia. M. Goertz, a Russian physician, treated three cases of this kind in one family; the patients had eaten hard-roe, while the other members of the family who ate the soft-roe experienced no inconvenience. Dr. Münchemeier, of Munich, in 1875 reported three cases of poisoning after eating barbel-roe. These cases, which were very severe, were treated with ice and tincture of opium and saffron. Professor Naunyn reported a similar case in Berlin in 1884. Among the numerous cases reported in Russia, herrings appear to have been the cause in only one. According to Huselmann, accidents of this nature, due to caviare of bad quality, are frequent and sometimes fatal among the poorer classes in Russia. It is impossible, according to him, to say exactly what the poisonous element is, and it is useless to hide one's ignorance by attributing all the effects to ptomaines. In these cases, as in poisoning by mussels, oysters, and other fish, the idiosyncrasy of the individual must be taken into account.

THE DIGESTION OF MILK.

M. Reichmann, of Warsaw, has recently made several experiments on the digestion of milk in the human stomach. The subject was a young man, aged 22, in robust health. The experiments were made by means of the stomach-pump, with unboiled, as well as alkaline and boiled, milk. The results were as follows: 300 cubic centimètres of unboiled milk are evacuated by a healthy stomach four hours from the time it has been taken, although the regular digestion is completed three hours afterwards. Coagulation of the milk takes place about five minutes after ingestion, and does not depend on increase in the quantity of acid, but on another agency, possibly the fermentation of rennet. During the digestion of 300 cubic centimètres of milk, the contents of the stomach show the greatest average degree of acidity (32 centimètres per cent.), at the end of an hour and a half. This acidity is owing, when digestion begins, to the presence of lactic and hydrochloric acid; the latter only appears three quarters of an hour after the ingestion of milk. Half an hour after taking the milk, the quantity of peptones is increased, and remains so for an hour and a half, after which time it becomes perceptibly less. Boiled milk (heated at from 16° to 26° C.) was taken into the stomach; 300 cubic centimètres were digested in two hours and a half; the acid contents of the stomach disappeared in three hours. After the ingestion of boiled milk, peptonisation which, in that case is more energetic, begins sooner, and the clots and caseine are not so thick as when unboiled milk is given. Experiments with alkalised milk have shown that alkalisation of milk prevents the peptonising action of gastric juice. One hundred cubic centimètres of milk, alkalised by means of bicarbonate of soda, leave the stomach entirely at the end of two hours. Alkalisation does not prevent milk in the stomach from coagulating under the influence of rennet. In conclusion, M. Reichmann says that the result of all his experiments on one person entirely coincided with nine previous experiment he had made.

SCOTLAND.

An influential meeting of the Glasgow Merchants' House unanimously agreed to ask the Government to make the Glasgow Royal Infirmary Medical School a college of Glasgow University.

AMBULANCE WORK IN EDINBURGH.

What has been a most successful session of ambulance work of the Denniston Ladies Ambulance Class has just come to an end. The lecturer was Dr. J. Francis Sutherland (of Her Majesty's Prison Service), and the class was, we believe, the largest which has been enrolled, numbering 167. An examination, held by Professor A. Wallace, of Anderson's College, Glasgow, was largely attended, and sixty-two ladies were successful in receiving the certificates of the St. Andrew's Ambulance Association, while for written examination, one lady obtained a gold cross and two ladies silver crosses, which were kindly given by a gentleman. The services of Dr. Sutherland and the Secretary were warmly acknowledged, and the former was further presented with a valuable collection of instruments.

PRESENTATION TO SIR DOUGLAS MACLAGAN, M.D.

On Monday, a most interesting meeting was held in the Freemasons' Hall, Edinburgh, at which a bust and picture of himself was presented to Professor Sir Douglas Maclagan, M.D., F.R.S.E. The movement began about the time that the Queen was pleased to confer the dignity of knighthood on Dr. Maclagan, and was intended as an expression of the affection and esteem in which he is held by the public and his professional friends. The appeal of the Committe met with a hearty response, and it was determined that a bust of Dr. Maclagan should be executed by Mr. Hutchison, R.S.A.; and, further, that a likeness of the Professor should be painted by Mr. Reid, R.S.A. The result has in each case been highly successful, and a warm vote of thanks to both artists was passed at the meeting. The Lord President Inglis was called to the chair, on the motion of Sir Alexander Christison, Bart., and had the pleasant task of making the presentation. This he was peculiarly qualified to do by the fact that he and Dr. Maclagan entered the High School of Edinburgh together in 1819, and have ever since been intimate friends. In an appropriate speech, he sketched briefly Dr. Maclagan's career, and dwelt on the many-sided aspects under which he is so well known, as the professor of jurisprudence, the teacher of clinical medicine, the sweet singer, the poet, the volunteer, the member of the Queen's body-guard, and the earnest supporter of every movement to render the lot of humanity brighter, happier, and better. In particular, he referred to what may almost be called the perennial brightness of character and disposition which made Sir Douglas Maclagan wear his years so lightly as to seem even yet only in the prime of his vigour. In conclusion, Lord Inglis interpreted the feeling of the meeting rightly when he wished Sir Douglas Maclagan a long life of usefulness. With regard to the picture, it is understood to be specially intended for Miss Maclagan, and this was noticed by Professor Maclagan, when in a short speech, characterised by deep feeling, he acknowledged the gifts and the good wishes of the meeting, and said that he had no words to express the depth of his feelings on the occasion. One point in Lord Inglis's remarks had previously been noticed in the Journal, that Sir Douglas Maclagan, at present President of the Royal College of Physicians, Edinburgh, was some years ago President of the Royal College of Surgeons there; this is not by any means a common occurrence, but what may be said to be unique is that his father, also, had the honour of being President of both of the Colleges. An interesting feature was the number on the platform of distinguished men whom Professor Maclagan could remember as schoolfellows, among whom were Lord President Inglis, Lord Moncrieff (Lord Justice Clerk), Dr. Peddie, and Mr. Wm. Blackwood. There were also present various representatives of the profession, of the College of Physicians, of the Senatus Academicus, and of the leading citizens.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.

A GREAT amount of activity is being displayed this session by this society, the senior medical society of Glasgow, extra meetings being frequent. The formation of sections for different branches of medicine and surgery has proved of the utmost value, as has been shown by the greater variety and interest of the communications. Thus, on January 28th an extra meeting was called to hear a paper from Dr. Alexander Robertson on Voluntary and Involuntary Catalepsy, and to see a patient of Dr. McVail's, with displacement of the heart backwards and to the right. The last meeting, held on February 4th, was devoted to gynæcology. It being the first meeting arranged by the obstetrical section, Dr. Stirton, the Vice-President, delivered an introductory address. Some very interesting specimens were brought forward by Dr. Carter, who showed frozen sections of a woman who died during extra-uterine pregnancy, and Dr. W. H. Reid, who exhibited a new uterine dilator and an inverted uterus with fibroid attached to both fundus and cervix. The next meeting is called for this day (Friday), when a discussion on the pathology and treatment of cerebral abscess will be opened by Dr. William Macewen, and continued by Dr. Thomas Barr, Mr. A. E. Barker (London), Dr. Joseph Coats, and Professor Greenfield. The discussion will be adjourned till February 12th, and then concluded.

HEALTH OF GLASGOW.

DR. RUSSELL'S report, laid before the Town Council on January 24th, 1887, states the deaths of children from infectious disease in the preceding fortnight to be 75, instead of 63 of the preceding period, of which 34 were from whooping-cough, 24 from measles, and 17 from scarlet fever; from enteric fever 4 deaths had occurred. The number of cases of fever registered was 26 in place of 23, 16 of which were enteric fever, 8 typhus, and 2 undefined; seven of these cases of typhus fever formed a group, the story of which was interesting. About October 31st, 1886, the wife of a man living in a three apartment house in Ann Street, Port Dundas, fell sick. On November 26th, a child fell ill, and so, at about a fortnight's interval, did the remaining members of the family in pairs; only the husband escaped. The occasional medical attendant was also attacked. A pawnbroker's assistant was found to be suffering from typhus, and as he was employed in the neighbourhood of Ann Street, inquiry was instituted. It was then found that as the fever closed in upon the poor people, and gradually cut off their income, and increased their outlay, they had pawned numerous articles of clothing between November 3rd and December 28th. The medical man and the pawnbroker had sickened on December 24th. In Belvedere Fever Hospital, at the date of Dr. Russell's report, there were 250 cases of scarlet fever, 90 of measles, 44 of enteric fever, 17 of whooping-cough, 4 of erysipelas, 2 of typhus, and 1 of chicken-pox; in all, 408 cases, as compared with 482 on January 3rd, and 193 at the corresponding period last year. At the same meeting of the Town Council, notice of motion was given by the convener of the Health Committee that he would move, at the next meeting, that it be referred to the Health Committee to inquire and report as to what arrangements could be made to obtain a few small open spaces for children's playgrounds in different parts of the city. The desirability of appointing stations for street-children engaged in the sale of newspapers, and of placing them under the supervision of the police, was before the Council, owing to a letter from Mr. Quarrier, of the Orphan Homes. It was referred for consideration to the Magistrates' Committee.

ABSORPTION FROM THE MUCOUS MEMBRANE OF THE URINARY BLADDER.

THE question as to the occurrence of absorption through the mucous membrane of the urinary bladder has often been considered both at the bedside and in the laboratory, but the results have hitherto been sufficiently discrepant to leave room for more exact work on the subject. The latest contribution towards a solution of the problem bears the mark of exact, scientific observation, and seems to us largely to settle the matter. In the current number of the *Journal of Anatomy and Physiology* there is a paper on Absorption from the Mucous Membrane of the Urinary Bladder by Dr. Herbert H. Ashdown, late senior demonstrator of physiology in the University of Edinburgh, in which a critical summary of the work already done is given, and a series of carefully conducted experiments is reported. The observations were made on rabbits and dogs, and consisted essentially in the analysis of results obtained by the intravesical injection by the urethra of substances possessed of known physiological properties or readily estimated chemical reactions. The author divides his experiments into three groups:—(1) Those in which the drugs administered have a sufficiently distinct physiological action of their own to indicate their presence when absorbed into the system; (2) Those in which the renal elimination of the drugs given can be readily demonstrated; (3) Those in which the quantitative analysis of a solution of known chemical composition can be conducted after it has remained for several hours in the bladder. The results of the triple series are strikingly similar, and appear to justify Dr. Ashdown's conclusions. These are:—(1) That absorption of a very large series of chemical substances does take place from the mucous membrane of the urinary bladder when in a perfectly healthy condition; (2) That the urinary constituents themselves—those substances eliminated by the kidney, as effete products of the system—are absorbed from the bladder in varying proportions, this applying more especially to the water and urea, but also, though to a less extent, to the inorganic solids; (3) That the degree of distension of the bladder plays a most important part in increasing or diminishing the rapidity of such absorption; (4) That regular rhythmical contractions take place in the muscular wall of the bladder; that these contractions are largely influenced by the degree of distension of the bladder, being most marked with a moderate amount of distension of the viscus, and but feebly marked in slightly distended or in over-distended conditions; and that the character of these contractions is largely affected by the nature of the fluid contained in the bladder.

THE "INCUBATOR" OR "ARTIFICIAL MOTHER."

THE chances of natural death in all newly-born children are, it is well known, greatly increased in proportion to their immaturity, and though a few cases have been recorded in which children born at the sixth month have survived, they are so rare that they scarcely affect the generally received rule that children under seven months will probably not live. Of late years efforts have been made to apply to these premature children those methods which have proved so successful in this country and elsewhere in the artificial rearing of chickens. At maternity hospitals, in large towns such as Paris, Dublin, and Edinburgh, specially constructed machines have been for some time in use for this purpose. The apparatus so employed is known as an "incubator;" that term, however, is a misleading one, for an incubator is used for hatching, a process entirely distinct from the rearing of the brood so produced. A more suitable name would be that by which it is designated in poultry phraseology, namely, "the artificial mother." Not long since, a patient in the out-door department of the Glasgow Maternity Hospital, was delivered of triplets, and, as the children were premature—probably about six and a half months—they were immediately removed to the hospital, where they were placed in an incubator, which had recently been received from Paris. This apparatus, which was invented by Dr. Auvard, of that city, is of simple construction, consisting of a wooden box, divided into two compartments, an upper and a lower, which freely communicate with one another. In the upper one the premature children are placed, while the lower is occupied by hot bottles, which serve to raise the temperature to the requisite degree. The inlet for fresh air communicates with the lower compartment, and the cold air passes over the hot bottles, and is thus warmed before reaching the children; the outlet for vitiated air is connected with the upper compartment. The air in the incubator is kept moist by means of a wet

sponge, which is placed in the lower compartment, and a thermometer is placed inside for the regulation of the temperature of the air contained in the upper compartment. Of the three children treated in this incubator, one died at the end of the first day, and a second one at the end of the sixth day. The third survived, and left the hospital with the mother at the end of ten days. Since then, it has been ascertained that it continues to thrive. With children so young, and with the inherent delicacy that belongs to all cases of plural births, this, the first attempt made at the Glasgow Maternity Hospital to rear immature children, cannot be regarded as a test case, but the experience gained in the matter has, we understand, been of great importance, as it has revealed several defects in Dr. Aurard's apparatus. It requires constant attention to keep up the temperature, while its size is quite inadequate to furnish the necessary amount of air required for the healthy rearing of the child placed in it, and the necessary removal of the infant from the warm atmosphere of the incubator into the ordinary temperature of the room at feeding times and on other necessary occasions, is a very serious drawback. There is probably a good deal to be learnt as to the proper construction of these incubators before they become a real help, just as was the case in the early attempts at poultry rearing. A very heavy mortality followed the first efforts in that direction, and it was shown that erroneous ideas as to the temperature required, and faulty construction of the apparatus, which did not provide for free escape of all heated and foul air from the interior, were the causes of failure. Attention to these points led to that success which it is to be hoped may yet be attained in the "artificial mothers" constructed to aid tender humanity.

IRELAND.

Dr. John Bryan, of Pettigo, Donegal, has been appointed a Justice of the Peace for that county.

NEW HOSPITAL AT KEADY.

A hospital has recently been opened at Keady, county Armagh, of which Dr. Allen has been appointed medical superintendent. A concert in aid of the funds was recently given in the Town Hall, and was very well attended.

THE APOTHECARIES' HALL OF DUBLIN.

The Governors and Court of the Apothecaries' Hall of Dublin have addressed to the General Medical Council a very full commentary on the statement issued by the King and Queen's College of Physicians.

BARRINGTON'S HOSPITAL, LIMERICK.

This institution has for some time past been badly off for want of funds, and a committee was recently appointed to obtain subscriptions so as to place the hospital out of debt. It is satisfactory to learn that contributions have flowed in, and up to the end of last week upwards of £400 had been obtained.

THE BELFAST MEDICAL STUDENTS' DEFENCE ASSOCIATION.

A meeting of this Association was held at the Queen's College, Belfast, on January 1st, Dr. Henry O'Neill presiding. A long discussion took place relative to the opening of the Belfast Union Hospital to the students for clinical study. This hospital contains 1,200 beds, and affords a splendid field for observation, but, owing to various difficulties, it has not hitherto been utilised for clinical teaching. The opinion of the students was strongly in favour of having the hospital thrown open, and a resolution to this effect was carried. It was determined to hold a *conversazione* at an early date.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

The opening meeting of a new society, formed from among the students of the medical school of the above College, under the name of the Scientific Association, was held in the Albert Hall of the College on February 2nd. Sir Charles Cameron was in the chair, and there was a large attendance of medical men and students, including four ladies who are at present pursuing medical studies in Dublin. Mr. Alexander Fraser, Professor of Anatomy in the College, having been chosen President of the Association, delivered an inaugural address. He spoke chiefly of what, in his opinion, true science was, and referred to the aid it had given to anatomy and to other departments of medicine and surgery. If the Society which they had formed had an educational influence in instructing them in reading Nature for themselves, then it would, he said, have fulfilled their intention. A vote of thanks to the President was proposed by Professor Cunningham, seconded by Mr. F. Alcock Nixon, and carried unanimously. Mr. Wheeler proposed "That, having regard to the renown of Dublin surgery and surgical schools in the past, societies of this kind ought to be encouraged as a help and incitement to students to maintain that high reputation." He said that the Council of the Royal College of Surgeons were unanimous in their desire to encourage the Association, and to help it in every way they could. Referring to the more or less brief existence of similar societies in connection with the College school of which he had experience, he offered some advice as to the manner in which this society should be conducted, with a view to its being more long-lived than its predecessors. Mr. William Thomson seconded the resolution. After excellent speeches from Dr. Foot and Mr. Wm. Thornley Stoker, and a vote of thanks to the visitors, the proceedings terminated.

HEALTH OF BELFAST: ANNUAL REPORT.

At the meeting of the Belfast Town Council, held on January 1st, the following report regarding the health of the town during the year 1886 was presented by the health officer, Dr. Browne, R.N. "The report on the public health of Belfast for the past year contains several points of great interest. There has been no epidemic of zymotic disease during the year. The death-rate from all causes has been more than 4 per 1,000 less than in the preceding year. The death-rates from diseases of the lungs and from zymotic affections have been considerably lower. It is satisfactory to observe that no fatal case of small-pox has been registered here for more than three years, and that only 21 cases of typhus fever have been registered by the Registrar-General for Ireland as fatal in 1886. Enteric fever showed an increase of 36 fatal cases over the two preceding years, but the 86 cases registered cannot be considered an epidemic of that serious affection. The fatalities from diarrhœa were very much alike in the last three years—209, 206, and 234 respectively. Scarlatina shows 29 deaths fewer than in 1885, and 82 less than in 1884. Measles shows only 22 deaths as against 591 in 1885, when there was a very fatal epidemic. Whooping-cough also shows a considerable diminution of fatality when compared with the two preceding years. The deaths from phthisis and other diseases of the lungs have been very great during the last four years, showing an average of 2,214 deaths per annum, or a rate of about 9 persons in every 1,000 in our population." On the whole, this report is satisfactory so far as preventable diseases, strictly so called, are concerned. The enormous mortality from phthisis cannot, however, be regarded as wholly inevitable, and it is quite an error to attribute it, as is so often done, solely to the damp and variable climate of the North of Ireland. Rather are the large mills and factories, inducing an unwholesome mode of life in corrupted air, largely the true root and cause of this malady. We cannot do without our manufactures, but much may be done to prevent the development of phthisis amongst factory operatives by such wise measures as the prevention of overcrowding, thorough ventilation, and the provision of a suitable dietary. Means should also be adopted in the mills for preventing the workers going suddenly from the hot, damp atmosphere of such departments as the spinning-room into the cold frosty air of a wintry night.

MEDICAL OFFICERS AND THEIR POSITION IN THE ARMY.

We have received further communications on the subject of the position of medical officers as affected by the recent Army Warrant, and are informed that, notwithstanding the announcement made in the British Medical Journal of January 29th that the position of the medical officers remains unchanged, the matter is still regarded with much doubt and anxiety. We have therefore made further inquiries, and are again assured that though, for some occult reason not explained, the phrase "relative rank" is officially abolished, no change is contemplated, as we before stated, either in the distinctions of grade, in the position, or in the titles of the medical officers of the army. Surgeons-general of the Medical Staff will still appear in the Army List as ranking with major-generals, deputy surgeons-general as ranking with colonels, and so on with all the various grades down to surgeons ranking with captains, while the corresponding distinctions of rank will be worn on the uniforms precisely as they are worn at the present time. It may be well to have a question put on the subject in the House of Commons to set all doubts at rest.

THE JACOB TESTIMONIAL FUND.

The following are the additional subscriptions received or promised since last week's list appeared.

	£	s.	d.
Amount already acknowledged	335	18	0
Bowman, Sir William, Bart., London	2	2	0
Roe, W., Dublin	1	1	0
Keelan, M., Dunleer	1	0	0
McDonnell, H., Dundalk ..	1	1	0
Jones, J., Drumconrath ..	1	1	0
Callan, M , Ardee	1	1	0
Wilson, J., Barronstown ..	1	0	0
Blake, R. M., Ravensdale ..	1	1	0
McBride, J., Forkhill	0	10	6
O'Hagan, P.J.,Castlebellingham	0	5	0
Moore, T. J., Ardee	1	1	0
Carre, F., Letterkenny ..	1	1	0
Welsh, J., Ballyshannon ..	1	1	0
Christie, D., Carigart	1	0	0
Smyth, S., Mountcharles ..	0	10	0
Warnock, H. T., Donegal ..	1	1	0
A Friend, Donegal	0	10	0
Collins, J. V., Lahey	0	10	0
Barbor, T., Carlingford ..	0	10	0
Mackesy, G. T., Waterford ..	1	1	0
Mackesy, W. D., Waterford ..	1	1	0
Murphy, R., Carrick-on-Suir	1	1	0
Graves, R., Dungarvan ..	0	10	6
Reynett, J. R., Portlaw ..	0	10	6
Williams, J. W., Ardmore ..	0	10	6
Roe, St. G. J., Coolaney ..	0	10	6
Stewart, W., Portadown ..	1	0	0
Palmer, J. M., Armagh ..	0	5	0
Allen, J. G., Keady	0	5	0
Cuming, J., Belfast	2	2	0
Howes, G. E., Dunlavin ..	1	1	0
Cranny, J. J., Dublin	1	1	0
Gibson, W. J., Contarf ..	1	0	0
Russell, J., Thurles	1	0	0
White, T. K., Kilshcelan ..	0	10	0
Powell, B. C., Roscrea ..	1	1	0
O'Brien, R., Clonmel	1	1	0
O'Ryan, A., Carrick-on-Suir..	1	0	0
Burke, T. Hamilton, Dublin..	1	0	0
Meldon, A., Dublin	1	1	0
Wharton, J. H., Dublin ..	2	2	0
McCallum, J., Eglinton ..	1	0	0
Jacob, D., Maryborough ..	2	2	0
O'Connell, M., Maryborough	1	1	0
Norton, A. Trehern, London..	1	1	0

Cheques to be made payable to the Honorary Treasurers—Professor Edward Hamilton, 120, Stephen's Green, W., Dublin; or Dr. Thomas Purcell, 71, Harcourt Street, Dublin; or any of the Co-Treasurers, or to the Honorary Secretaries—Professor E. D. Mapother, 6, Merrion Square, N., Dublin, and Dr. J. H. Chapman, 122, Pembroke Road, Dublin.

CONJOINT EXAMINING BOARD OF ENGLAND AND WALES: PROPOSED EXCLUSION OF THE APOTHECARIES' SOCIETY.

At the recent ordinary meeting of the Bath and Bristol Branch of the British Medical Association, C. Gaine, Esq., President, in the chair, the following resolution, proposed by Dr. Broom and seconded by Mr. Ewens, was carried unanimously:—

"That this meeting is of opinion that the exclusion of the Apothecaries' Society from participation in the Conjoint Examining Board of England and Wales will, under the provisions of the recent Medical Act, 1886, lead to one or other of the following consequences, either of which is equally to be deplored in the interests of the public and of the profession, and especially of the general practitioners of England and Wales. (*a*) Extinction of the Apothecaries' Society in the highly improbable, if not impossible, case of their not receiving the legal powers which the Act contemplates, to appoint surgical examiners recognised by law, a result which would be disastrous to the whole profession and to the public, seeing that the powers of the Apothecaries' Act alone avail to protect the profession against the practice of a large body of unqualified practitioners, and especially of visiting and prescribing chemists; or (*b*) in case the Apothecaries' Society receive such powers of giving a surgical examination and surgical licence, legally registrable, the creation of a new class of surgical and medical practitioners throughout England and Wales, contrary to the intention of the Legislature and the wishes of the profession, legally entitled to medical and surgical titles, who would compete with the existing Members of the College of Surgeons and the Licentiates of the College of Physicians, and that a copy of this resolution be forwarded to the Metropolitan Counties Branch, and to the Presidents of the Royal College of Physicians and the Royal College of Surgeons."

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

An ordinary meeting of the Council was held at the College on Thursday, February 10th. In accordance with a recommendation by the Court of Examiners, it was decided to request the Committee of Management (under the Conjoint Scheme) to consider and report to the two Colleges on the advisability of extending the rule by which, under the old regulations, candidates obtaining 14 out of the 15 marks required to pass the Examination in Surgery were admissible to re-examination after a period of three, instead of six, months' additional study, to those candidates examined in Surgery under the regulations of the Examining Board in England by the Royal College of Physicians of London and the Royal College of Surgeons of England.

The second report of the Committee on the extension of the College premises was presented. This Committee consists of Sir James Paget, Bart., Chairman, Mr. J. Marshall, Mr. Lund, Mr. Hulke, Mr. Durham, Mr. Bryant, Mr. Heath, the President, and the Vice-Presidents.

The first report of the Committee, dated December 6th, 1886, and relating to the practicability of adding a wing to the museum, having been approved and adopted by the Council on December 9th, 1886, whereby the Committee were authorised to consider and report to the Council on the much larger question of extending generally the college premises, the Committee subsequently held two meetings, on January 7th and 22nd, 1887, and agreed to the following as its Second Report to the Council, namely: "The Committee, with a view to carrying out an extension of the college premises in regard to the museum, library, and workrooms, have had under their consideration additional plans prepared by Mr. Salter, together with approximate estimates, showing the cost of the several proposed additions to the college buildings, amounting in the aggregate to £53,700; and having considered the same, the Committee have to submit to the Council for approval the following recommendations, namely:

"1. That the college premises be extended in the manner proposed in the first report; but that the alterations thereby occasioned be carried out gradually, and be subject to such modifications in matters of detail as the Council, on the recommendation of the Committee, may hereafter approve.

"2. And that the Committee be authorised to make arrangements for the erection, with as little delay as possible, of an additional museum, as shown in the plans, on the ground occupied by the back premises of Nos. 43 and 44 Lincoln's Inn Fields, abutting on Portugal Street, and for the construction of an additional storey to the main building of the college to accommodate the new workrooms, at an approximate cost of £10,000 for the new museum and £5,000 for the new workrooms.

"The Committee reserve to a future report the remaining questions referred to their consideration by the Council.

"James Paget, Chairman."

The Council elected a Committee, consisting of Sir James Paget, Sir Spencer Wells, and Mr. Marshall, with the President and Vice-Presidents, to confer with representatives of the Association of Fellows and the Association of Members on the subject of the first resolution passed at the meeting on November 4th.

Mr. H. G. Howse was elected a member of the Court of Examiners, in place of Professor Humphry, resigned.

A communication was read from the Registrar of the College of Physicians, informing the Council of the appointment of the President (Sir William Jenner), the Treasurer (Sir Dyce Duckworth), and the Registrar (Sir Henry Pitman), to confer on the question of the best means whereby the two Colleges, acting conjointly, might duly celebrate the Jubilee year of Her Majesty's reign. [The Council of the College of Surgeons had appointed its President and two Vice-Presidents as a Committee for this purpose, at its last meeting.]

A communication was received from the College of Physicians, inviting the College of Surgeons to associate itself with the former College in granting the Diploma of Public Health. The invitation was accepted by the Council, and it was referred to the Committee of Management to devise a scheme for carrying out the arrangements necessary for the purpose, and to report thereon to the two Colleges.

A communication was received from Mr. R. Handfield Jones, forwarding the resolution, with relation to degrees for medical students, passed by the St. Mary's Hospital Medical Society, which has already been published (see British Medical Journal, January 15th, p. 127).

The next meeting of Council will be held on March 10th.

THE DUBLIN SANITARY ASSOCIATION.

THE annual general meeting of this Association was held on February 3rd in the rooms of the Royal Dublin Society. Dr. GRIMSHAW, Registrar-General for Ireland, President of the Association, took the chair. An abstract of the report of the committee having been read by Dr. E. MACDOWEL COSGRAVE, one of the Honorary Secretaries, its adoption was moved by the Vice-President of the Royal College of Surgeons, Dr. A. H. CORLEY, and seconded by Dr. J. W. MOORE, Registrar of the College of Physicians. A great blot on the sanitary state of the city was brought prominently forward, namely, the existence within it of numerous private slaughter-houses, in consequence of the use of the corporation *abattoir* not being compulsory, owing to its being situated outside the city boundary. It was stated that the case was clearly one for the intervention of the executive government, and a resolution was adopted calling on the Public Health Committee of the corporation to take such steps as may be necessary to compel the use of the *abattoir*, and to enforce the closing of slaughter-houses.

The PRESIDENT then delivered an address, in the course of which he dwelt upon the high rate of infant mortality in Dublin. He said that in the case of babies under one year old, he found that, out of every 1,000 children born in Dublin, about 170 die before they reach the end of their first year of life. In London, the corresponding number is 154; in Birmingham, 167; in Manchester, 176; in Edinburgh, 135; in Glasgow, 151; and in Belfast, 147. Of children under five years old, we find that the rate of mortality in Dublin is 81 per 1,000 of those living at that age, while in all Ireland it is only 34 per 1,000. In London, where the danger to child life is greater than in Dublin, it is only 67 per 1,000. Closely connected with this question, there is a reference to the deaths by burning. The great majority of these deaths occur in children, and are much greater in number than many suppose. During the ten years 1871-80, there were 4,376 deaths caused by "burns and scalds" in Ireland, being 21.3 per cent. of all the deaths from violence, and at the average rate of 438 a year. Of these 4,376 deaths, no fewer than 2,751, or 63 per cent., were in children under five years of age, and must, therefore, have been largely owing to carelessness or neglect on the part of parents and others in charge of the children. The suffering indicated by these figures is incalculable. It is not merely those who die, but many of those who survive the effects of burning, who endure these sufferings. It is only those who have personally had to deal with burnt children who can really appreciate the terrible sufferings of these little ones. This terrible waste of the lives of the little ones is mainly to be found among working classes, and no doubt is the result of "poverty, hunger, and dirt," and all the insanitary conditions connected therewith. An investigation of the distribution of the death-rate of children in 1886 among the various social classes in Dublin, shows that the mortality among children under five years of age is very unevenly distributed; in the particular division of the "general service class," which includes "labourers, porters, hawkers, etc.," it rises to 112.1 per 1,000, while among the professional and independent class it is but 16.5. "Is it not," continued the President, "a melancholy result that, among all the great towns in the United Kingdom, Dublin alone presents an increased death-rate, after having for ten years enjoyed, in common with other cities, the advantages of improved sanitary laws, and the opportunities for improved administration? We are, however, not without some set-off against this deplorable state of affairs, for during the past three years there has been a manifest improvement. It would be out of place for me to discuss the many questions connected with local government which are now before the public; but it is our duty as sanitarians to watch closely any measure of local government which may be brought forward, and see that all the old evils are not re-enacted. Let us hear no more of urban sanitary districts and rural sanitary districts, just as if the laws of health are not the same in both. No doubt the by-laws required for carrying out sanitary work in great towns are different from those required in country districts; but so also do great towns differ from one another, and, still more, the great towns differ from small towns, and country villages differ from purely rural districts. Yet, according to the sanitary statutes, all great towns and all small towns, because they are urban sanitary districts, have the same laws, and all country districts and villages, because they are in rural sanitary districts, are subject to the same laws, all other local considerations having, in the wisdom of Parliament, been sunk into insignificance to suit the technicalities of bill-drafters, and to preserve the privileges of local authorities."

RELATION OF THE SEX OF CHILDREN TO THE AGE OF PARENTS.

THIS subject has attracted the attention of several physiologists, obstetricians, and statisticians. One result, often quoted in German works, is the establishment of what is known as the Hofacker-Sadler law, which is expressed as follows: When the husband is older than the wife, more boys are born than girls; when the ages of the parents are about the same, the births of males are slightly in minority; and when the wife is the older, there is a distinct majority of female children. Professor Kisch, of Prague and Marienbad, in preparing a work on Sterility in Women, tested the value of the Hofacker-Sadler law by taking statistics from some such publication as the *Almanach de Gotha*, where a rich assortment of family histories, ages, and marriages are to be found of far more reliable nature than similar material derived from humbler ranks. Out of 556 marriages in regnant or aristocratic European families, there were 1,972 births. The births included 1,023 boys and 949 girls. Hence, Dr. Kisch finds the sexual ratio, by which he signifies the proportion of boys to girls, to be 107.7. The figures always refer to the boys.

The following statistics display the relation of the age of the husband and wife to the sex of the children:

Relative Age of Husband and Wife.	Male Births.	Female Births.	Sexual Ratio.
Husband 1 to 5 years older than wife ...	294	283	103.8
,, 6 to 10 ,, ,, ,, ...	327	306	106.8
,, 11 to 15 ,, ,, ,, ...	190	167	113.7
,, 16 or more ,, ,, ,, ...	138	118	122.1
,, of same age as wife	34	42	80.9
Wife older than husband	40	38	105.2

Dr. Kisch finds that these statistics do not precisely tally with the Hofacker-Sadler law. If the husband be older than the wife, the average of excess of male births will, according to these tables, be greater than when calculated from the average of all births in all marriages. He makes the sexual ratio to be 111.8 in the former case, but 107.7 when marriages of men and women of all relative ages are counted. The ratio is found, on close calculation, to be less easy to determine than would at first appear. When the husband is from 1 to 5 years older than the wife, the excess of male children will be trifling, nor will the excess be marked when he is from 6 to 10 years the senior. The sexual ratio rises, however, with a bound when the husband's seniority exceeds 11 years, and reaches its greatest height when he is more than 16 years older than his wife.

These statistics, however, demand a second table, which it is strange to think has not been prepared before. In this table the absolute age of the wife is noted. It refers only to cases from the same source as the first table, when the husband is the elder.

Age of Wife.	Male Births.	Female Births.	Sexual Ratio.
15 to 19	280	287	97.6
20 to 25	595	513	116.0
26 to 32	74	69	110.1

Thus, when the wife is very young, that is to say, under twenty years of age, and the husband older, there will be no excess of male births, but the contrary will be the case. The excess of male births, on the other hand, will be most marked when the husband is the elder and the wife is from twenty to twenty-five years of age. The sexual ratio falls a little, though distinctly, when the husband is the senior and the wife is from twenty-six to thirty-two years of age.

As a result of the facts which may be gleaned from the above tables, Dr. Kisch modifies the Hofacker-Sadler law, so that it reads thus: When the husband is at least ten years older than the wife, and when at the same time the wife is within the age of highest reproductive power (twenty to twenty-five), there will be a very distinct excess of boys born over girls. This excess will be marked, but less distinct, when the husband is at least ten years older than his wife and she is over twenty-six. When the husband is older than the wife and she has not attained the age of highest reproductive power, the female births will be in excess. This excess of girls born over boys is most marked when husband and wife are of the same age. Yet when the wife is the older there is a distinct excess of male births. Dr. Kisch admits that both his own and Hofacker's statistics are not extensive enough to warrant very decided scientific conclusions. His interesting paper is published in the *Centralblatt für Gynäkologie*, January 22nd, 1887.

A SECOND DANIEL LAMBERT.—A man of the following extraordinary dimensions and weight has just been buried at Tipton. Height, 6 feet 1 inch; weight, 40 stone; girth of waist, 100 inches. He measured 20 inches round the calf of the leg.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1887. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Meetings of the Council will be held on April 13th, July 13th, and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, March 24th, June 23rd, and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary*.

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,
THE VALUE OF HAMAMELIS, THE VALUE OF PURE TEREBENE.

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE, CANCER OF THE BREAST, and the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE, are now closed.

A Report on the CHOREA Inquiry has been prepared by Dr. Stephen Mackenzie; and will be published in the BRITISH MEDICAL JOURNAL as soon as the printing can be completed.

A Report on CENTENARIANS, prepared by Professor Humphry, was published with the JOURNAL of December 11th; a full Report on OLD AGE will follow.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, CANCER OF THE BREAST, and HABITS OF INTEMPERANCE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held, by the kind invitation of Dr. Adams, at Brooke House, Upper Clapton, on Thursday, February 17th, at 8.30 P.M. The chair will be taken by T. Vere Nicoll, Esq. A demonstration of interesting cases of skin-disease will be given by Stephen Mackenzie, Esq., M.D.—J. W. HUNT, M.D., Honorary Secretary, 101, Queen's Road, Dalston.

STAFFORDSHIRE BRANCH.—The second general meeting of the present session will he held at the London and North Western Hotel, Stafford, on Thursday, February 24th, 1887. The President, Dr. W. G. Lowe, will take the chair at 3.30 P.M. —VINCENT JACKSON, General Secretary, Wolverhampton, January 31st, 1887.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.—The February meeting of this Branch will be held in 198, Union Street, Aberdeen, on Wednesday, February 16th; the President, Dr. Urquhart, in the chair. Business: 1. Minutes; nomination of new members, etc. 2. Ballot for the admission of four new members. 3. Demonstration of a new arrangement for obtaining the various applications of electricity in a convenient form for medical and surgical purposes, by Professor Ogston. 4. On the Uses of Iodol, by Dr. John Gordon. 5. Experiences with Dr. John Reid's new local anæsthetic, Drumine, by Professor Ogston. 6. Motion by Dr. Edmond to consider the advisability of forming a post-graduate course in Aberdeen. 7. Exhibition of foreign body, and the patient from whom it was removed from the eye by electro-magnet, by Dr. Mackenzie Davidson.—ROBERT JOHN GARDEN, J. MACKENZIE BOOTH, Honorary Secretaries.

SOUTH EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of the above District will take place at St. Bartholomew's Hospital, Chatham, on Friday, February 18th, at 3.30 P.M.; Walter Buchanan, Esq., in the chair. The dinner will take place at the Sun Hotel, Chatham, at 6 P.M. Charge 6s. 6d., exclusive of wine. Gentlemen who intend to dine are earnestly requested to signify their intention to the Honorary Secretary of the District, A. W. Nankivell, Esq., St. Bartholomew's Hospital, Chatham, not later than February 16th. All members of the South-Eastern Branch are entitled to attend this meeting, and to introduce friends. Papers to be read:—1. Dr. H. L. Jones: "On some disorders confounded with Chronic Rheumatism." 2. G. Hartridge, Esq.: "On Refraction," illustrated with practical demonstrations. 3. A. W. Nankivell, Esq.: "The Causes and Treatment of Retention."—A. W. NANKIVELL, Honorary Secretary, St. Bartholomew's Hospital, Chatham.

WEST SOMERSET BRANCH.—The spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, March 3rd, at 5 o'clock; dinner at 5.30. The subject settled by the Council to be discussed after dinner is the Etiology of Phthisis. Dr. Isambard Owen, secretary of the Collective Investigation Committee, will attend and open the discussion, and members having any communication to bring forward should send early notice to W. M. KELLY, M.D., Honorary Secretary.

SOUTHERN BRANCH: ISLE OF WIGHT DISTRICT.

THE ordinary meeting was held at Yelf's Hotel, Ryde, on Thursday, January 27th, 1887, Dr. ALLAN WATERWORTH in the chair; thirteen members present. The minutes were read and confirmed.

Retirement of Mr. Barrow.—The SECRETARY read correspondence with Mr. Barrow. It was proposed by Dr. GROVES and seconded by Dr. ROBERTSON, that a letter be written to Mr. Barrow, expressing regret at his retiring from the Branch, which he had been instrumental in forming many years back. Carried unanimously.

New Member.—It was proposed by Mr. GREEN, seconded by Surgeon BARNES, that Mr. J. D. Davies, of Ryde, be elected a member. Carried.

Conjoint Examining Board and the Apothecaries' Society.—A communication was then read from the Metropolitan Counties Branch relative to the question of the examining bodies and the Apothecaries' Society. It was proposed by Dr. GROVES, seconded by Dr. ROBERTSON, and carried unanimously, "That this meeting is of opinion the Apothecaries' Society is entitled to be entrusted, conjointly with the Colleges of Surgeons and Physicians, with the regulation of the examinations admitting to practice."

BATH AND BRISTOL BRANCH.

THE third ordinary meeting of the session was held at the Museum and Library, Bristol, on Wednesday evening, January 26th, C. GAINE, Esq., President, in the chair. There were also present forty-five members and three visitors.

New Member.—H. Lane, Esq., M.R.C.S., Bath, was elected a member.

The Apothecaries' Society.—Resolutions were proposed by Dr. BROOM, seconded by Mr. EWENS, and unanimously adopted, against the exclusion of the Apothecaries' Society from the Conjoint Examining Board of England and Wales. It was decided to send copies to the Metropolitan Counties Branch, and to the Presidents of the Royal College of Physicians and the Royal College of Surgeons.

Communications.—1. Mr. DOBSON communicated A Successful Case of Removal of a Large Fibroid Tumour by Supra-vaginal Hysterectomy, which was discussed by Dr. AUST LAWRENCE.

2. Dr. SWAYNE read a paper entitled Ought Craniotomy to be Abolished? which led to a discussion, in which Dr. AUST LAWRENCE and Mr. EWENS took part.

3. Mr. SCOTT read the Clinical Notes of a Successful Case of Double Ovariotomy, upon which Dr. AUST LAWRENCE and Mr. DOBSON made some remarks.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.

THE fourth meeting of the session was held, by the kind invitation of Dr. Mickle, at Grove Hall, Bow, on Thursday, January 20th. Present, thirteen members and visitors. The chair was taken by CORNELIUS GARMAN, Esq.

Dr. C. R. WALKER showed a patient suffering from locomotor ataxy, who had suffered from a perforating ulcer of the foot.

Mr. MAJOR GREENWOOD, Jun., showed a patient suffering from optic atrophy.

Dr. MICKLE showed a very interesting series of patients, suffering from insanity produced by, or associated with, epileptiform convulsions, and followed up his demonstration with some instructive clinical remarks.

The usual votes of thanks closed the proceedings.

ASSOCIATION OF PUBLIC SANITARY INSPECTORS.—At the fourth annual dinner of the members of the Association of Public Sanitary Inspectors, presided over by Mr. Edwin Chadwick, C.B., Sir R. Rawlinson observed that the sanitary inspector of the present day had not a very exalted position; he owed his appointment to persons whose property he had to inspect, and if he offended his patrons he was threatened with vengeance. He trusted that, in time, we should have inspectors who would not be subject to this improper influence, and then there would be effectual and proper sanitary inspection. The Chairman, in responding, said that, from the experience gained in a number of instances, he believed that sanitary engineers might undertake to further reduce the death-rate of London by five in a thousand. Mr. Jerram, the chairman of the council, stated that the Association had now 250 members in all parts of the country.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Rectal Injection of Gases in Diseases of the Lungs.—M. Charcot's Diathesis of Contracture.—The Cultivation of the Bacillus Tuberculosis.—Hydatid Cyst of Lungs.—Transplantation of Tendon from Animal to Man.

At a recent meeting of the Biological Society, M. Morel commented on M. Peyrou's experiments on the effects of the rectal injection of sulphuretted hydrogen in dogs, and compared the doses with those employed in the treatment of tuberculosis. One hundred and fifty cubic centimètres of a saturated solution of sulphuretted hydrogen were injected in two doses at intervals of three minutes. Symptoms of poisoning began to be manifested within two minutes, and death took place in ten minutes. Another dog died quickly after two injections of the same strength, given at intervals of twelve minutes, while two others, in whom only very small quantities of the gas, or large quantities very much diluted, had been injected, experienced only slight inconvenience, and rapidly recovered. M. Peyrou concludes that sulphuretted hydrogen is harmless only when injected in small doses. With regard to these experiments, M. Morel observed that the quantities injected were enormous, being ten or fifteen times as great as those employed in man; and, supposing the dog to be four times lighter than man, the dose injected in the dog was really forty or fifty times as great as that employed in man. M. Morel then described in detail the mode of proceeding in the treatment of tuberculosis. The patient should be placed on his back in a position to allow free expansion of the intestines, and the operator must carefully note any resistance to the entry of the gas, so as to allow absorption to take place during the operation. The breathing should be watched, especially when the pulmonary lesions are extensive, as any deficiency in respiration will make the elimination of the gas correspondingly difficult. Moreover, the substance used in the above experiments on the dog is not the same as that employed in pulmonary affections. In the latter case, the gas which is injected is a mixture of carbonic acid and sulphuretted hydrogen, and possesses properties very different from those of sulphuretted hydrogen alone. When intestinal irritation takes place, it is because the gases are not properly mixed. M. Peyrou injected into the dog 25, 35, 90, and even 100 cubic centimètres of sulphuretted hydrogen dissolved in a considerable quantity of water. In man, the quantity injected is not more than 25 cubic centimètres. M. Morel then described an apparatus for making these injections, the chief objects aimed at in its construction being to prevent any atmospheric air from mingling with the sulphuretted hydrogen and carbonic acid, to moisten the gaseous mixture, and to prevent too great distension of the intestine.

M. Charcot has given the name "diathesis of contracture" to a special nervous state which is neither contraction nor paralysis, but partakes somewhat of both. M. Berbez was led in the following manner to observe the frequency of the "diathesis of contracture" in hysterical subjects. M. Charcot, in a lecture on the intermittent lameness caused by the more or less complete local arterial anæmia of a limb, attributed to local obstruction the stiffness and more or less durable contracture induced in the muscles. In order to verify this hypothesis, he applied Esmarch's bandage to M. Berbez, and to several of his assistants, without being able to obtain contracture. During the application of the bandage to the right arm, for example, the patient was made to hold a dynamometer, and the muscles were fatigued by successive pressure, until the instrument marked but 5 or 6 degrees. In these experiments contracture never took place. The result was altogether different when the operation was practised on hysterical subjects. At the first turn of the bandage nearly all the patients were seized with contracture. This peculiarity suggested to M. Charcot that local obstruction in the circulation was not the cause of the phenomenon; in fact, the experiment was varied in different ways, and the result was the same in nearly all the patients. The bandage was at first applied from the ends of the fingers to the wrist, then to the elbow, and finally as far as the lower end of the deltoid. In three cases contracture preceded the bandage in its spiral course up the arm. It was then applied to the middle of the forearm and leg, contracture being produced as before. Constriction alone seemed to cause contracture; but, to make sure of this, the constriction was made as complete as possible, and the bandage allowed to remain for a few minutes. Little by little the stiffness decreased, until the muscles became thoroughly limp. The local anæmia caused by the constriction, when maintained for a long time, seemed to cause the contracture to disappear. Contracture produced by the bandage almost always ceased when the bandage was removed. In two instances, however, the phenomenon became general throughout the body, and in one subject only on the right side, after the removal of the bandage. Contracture invaded within a few minutes both the arms and legs of a young girl, to whose right forearm constriction was applied. Massage was done at once and caused the rigidity to disappear completely. The phenomenon was sought for in all the hysterical patients in the ward and in those who came for consultation, and it was found to be extremely frequent. Out of seventy cases examined, contracture was induced in fifty-two, nineteen of these being men and thirty-three women. It was also found that in this respect the patients were capable of a kind of education. Those in whom contracture could not at first be produced were found, after repeated trials, to exhibit very decided muscular rigidity. The tendency was much increased by stimulating the tendons to action by percussion and by provoking direct muscular irritability, together with reflex excitement of the spinal cord before the application of the bandage. The "diathesis of contracture" was often found in patients who had never suspected its existence. A few, however, had observed that after throwing a stone they remained fixed in the same attitude, being, as it were, congealed; generally, however, the phenomenon was not discovered until sought for by the physician. It was also found that contracture was easily provoked in other ways than by the bandage, as, for example, by vigorous massage of the muscles, repeated shocks of the tendons, stretching the upper and lower limbs, faradisation of the muscles or nerves, magnetism, and also by simply rubbing the skin. The bandage acts more rapidly only because it unites in itself all these different modes of excitation. On the whole, it is possible to provoke in patients while awake contracture altogether similar to that produced in hypnotism. As the intensity of excitement required to produce the phenomenon varies in different patients, its appearance in cases of injury will depend on the severity of the latter. The knowledge of the "diathesis of contracture" in a patient may, therefore, serve to clear up many obscure points.

At a recent meeting of the Paris Biological Society, M. Nocard stated that the researches which he had made in conjunction with M. Roux showed that ordinary broth, gelatinised with gelatine or with gelose, was one of the best media for the cultivation of the bacillus tuberculosis, if from 6 to 10 per cent. of glycerine be added to the broth. It was much superior to gelatinised blood, recommended by Koch, and was much superior even to serum with peptone and sugar, which was recommended last year by M. Nocard. The cultivations were not only richer and more abundant, but they developed much more rapidly, eight days being sufficient to produce a very thick layer of micro-organisms. The tubercle-bacillus may be cultivated under these conditions not only in a liquid, but also in a solid medium. MM. Nocard and Roux's discovery is not only of considerable theoretical interest, but also of great practical importance. It is well known how uncertain was the cultivation of tubercle-bacilli in serum, and how long a time it took to obtain a result. This made experimental researches on this micro-organism, from a pathological point of view, almost impossible; but, with this new medium of cultivation, they become easy, and investigators may undertake researches that were before impossible, especially as, in a medium solidified with gelatine or gelose, they will be able to isolate the tubercle-bacillus from others that may be present in the same substance.

At a recent meeting of the Société Anatomique, M. Varnier showed a hydatid cyst of the lungs. For three days before admission to M. Duguet's ward, the patient had been troubled with stitch in the side; there was dulness on percussion at the back only; there was no fever. Eight days afterwards, a puncture gave issue to a clear crystalline liquid containing hydatid hooklets. The next morning the patient began to expectorate hydatids, together with clear liquid and blood, and hydro-pneumothorax was developed. An operation for empyema was done, but nothing escaped. On the following morning, however, the *débris* of hydatids were found in the dressing. A month later the patient died, and *post-mortem* examination showed miliary tuberculosis of recent date in both lungs. As the patient's antecedents were excellent, M. Varnier said it was possible that infection had taken place through the wound. The sac was situated at the base of the left lung, and was separated from the incised chest-wall by only a very thin portion of the lung. M. Cornil said that, having punctured in a similar case, his patient suddenly died, suffocated by a vomica of the serous liquid. He thought it was best to await, in such cases, the spontaneous rupture of the cyst, which was produced in a less sudden manner. M. Touffier had had an opportunity of observing a case of hydatid cyst of the lung, for which nothing was done.

The patient expectorated hydatids during a whole month, and ended by dying of hectic fever through prolonged suppuration. M. Cornil recalled in this connection the case of a woman who had been cured of a hydatid cyst of the liver, and who had afterwards been re-admitted with hectic fever. The necropsy revealed a suppurated hydatid cyst of the lung, with superficial necrosis of the ribs.

The *Journal de Médecine* contains a note by M. Peyrot on the transplantation of tendon from an animal to man. The patient, a boy, aged 14, entered the Hôtel Dieu in October, 1885. Six months previous to that date, he had received a wound on the palmar aspect of the first phalanx of the left middle finger, near the groove between the first and second phalanx. The flexor tendons were completely divided, and the finger was forcibly drawn back by the extensors. Simple suture of the two ends was out of the question, on account of the great length of time that had elapsed since the infliction of the injury. On October 30th, an incision was made over the first phalanx in its palmar aspect, extending into the palm of the hand for a distance of about 4 centimètres. The ends of the tendon having been found with some difficulty, a piece of flexor-tendon 33 millimètres in length was taken from the hind paw of a young dog, and united to the vitalised ends of the divided tendon by three stitches of catgut. The incision itself was brought together by two rows of stitches; a deep one, near the transplanted tendon, in order to form a sheath, and a superficial one, in the skin. The operation was done with the most minute antiseptic precautions. When the first dressing was removed, ten days after the operation, it was found that there had been no suppuration; but unfortunately union had not taken place. There was, however, no sloughing, and the wound healed well. When the patient left the hospital on January 4th, 1886, he had regained the use of all the fingers of the injured hand, though the movements were still feeble. In a similar case in a child aged 2½ years, the transplanted tendon (the tendo Achillis of a cat) was completely eliminated three weeks after the operation. M. Peyrot considers that, as a general rule, transplantation should be had recourse to only in cases of real loss of substance, or when the length of time which has elapsed since the injury has produced a definitive separation of the two ends of the tendon.

NEWCASTLE-UPON-TYNE.

[FROM OUR OWN CORRESPONDENT.]

Report of Special Committee to consider the Management of the Infirmary.—The Clinical Society.—Site for the College of Medicine.

THE Special Committee appointed by the Governors of the Infirmary to inquire into the management and financial position of the institution, after several conferences with the House-Committee and medical staff, presented their report at the last meeting of the governors. The Committee first inquired into the method adopted in the admission of patients, and with regard to emergency cases, suggested that the governing body should consider the advisability of establishing a ward for persons able to pay the whole or part of the cost of their maintenance; with respect to the Magdalen Ward, the Committee was of opinion that the Poor-law guardians should contribute something towards its maintenance. They also advised the removal of the children's cases to the Children's Hospital. The report recommended considerable alterations in the dietary; for example, the use of skimmed milk, the giving of porridge instead of bread for breakfast, the use of rabbits instead of chickens, and the extraction of a larger proportion of nutriment from the materials used in making soup, by cooking at a lower temperature. Dr. Walker, of this city, and analyst for Carlisle, having analysed a sample of beef-tea sent from the Infirmary, reported that the amount of albumen and hæmatin was much below what it should be; a specimen of beef-tea which he had made himself containing nearly six times as much; the whole of the albumen was in an insoluble form, and added that the beef-tea should not be used for enemata. Having made careful inquiry into the experience of the Sunderland Infirmary, as regards its working as a free hospital, the Committee, with the unanimous support of the medical staff, recommended that the system of admission by letter should be done away with, and the Infirmary made free. The Committee recommended that the systematic instruction of the nurses should be placed under the care of an honorary medical officer responsible to the House-Committee with regard to medical expenditure, antiseptics, instruments, etc. The suggestions were that this should be placed under the control of the House-Committee; that all orders for appliances should be signed by the House-Governor; that a separate account should be kept of the expenditure of each Honorary Surgeon and Assistant-Surgeon; that the House-Governor have charge of the medical stores; and that no instrument exceeding the value of £5 should be ordered without the sanction of the Committee. Amongst other recommendations contained in the report were: to charge each student in medicine a fee of £5 5s. for the use of the institution; to provide board and lodgings only for House Physicians and Surgeons, and the abolition of resident students; to limit the appointment of the Honorary Staff to a term of seven years; to place all elections to vacant posts at the Infirmary in the hands of an Election-Committee; the exclusion of venereal cases; and the total abolition of the casual out-patient department. These are the principal suggestions contained in the Report. Should they be carried out in their entirety, a complete change will be made in the working of the Institution. When the Report comes into the hands of the medical staff, however, many of the recommendations will no doubt undergo modification. Such questions as the closing of the casual department and lock-wards are open to considerable debate. The limitation of the term of office of the honorary staff to seven years would be a serious matter for the institution, unless it is understood that the staff will be eligible for re-election at the end of that period. The proposal to have an Election-Committee seems to me a good one, always provided that the medical staff are members of the Committee.

The usual monthly meeting of the Clinical Society was held last week. Several new members were proposed for election. Dr. Bramwell showed two cases of Colles's fracture treated with a splint of his own invention. He also showed, for Mr. Maynard, a case of traumatic aneurysm of the anterior tibial artery. Dr. Mearns showed a kidney removed *post mortem*, which contained numerous calculi, and gave the history of the case. Two specimens of malignant disease of the tongue were also shown. Dr. Purdie read a paper on the Clinical Aspects of Bright's Disease, a discussion following. The annual banquet of the Society is to be held on March 17th, and a large number have already signified their intention of being present.

At a meeting of the Schools and Charities Committee of the Corporation, a communication was received from the College of Medicine, offering to purchase a site for the new College. The committee agreed to accept the terms, so that before long we may hope to have a building worthy of its name and purpose.

CORRESPONDENCE.

☞ TO CORRESPONDENTS. ☜

OUR correspondents are reminded that prolixity is a great bar to publication, and, with the constant pressure upon every department of the JOURNAL, brevity of style and conciseness of statement greatly facilitate early insertion. We are compelled to return and hold over a great number of communications, chiefly by reason of their unnecessary length.

THE MEMBERS' PETITION TO THE PRIVY COUNCIL.

SIR,—As the Association of Members of the Royal College of Surgeons is now taking the preparatory steps for the immediate presentation to the Privy Council of the petition which you kindly noticed in your JOURNAL a month ago, it may interest your readers to know that we have obtained the large number of 4,590 signatures of members of the College to the same. The old taunt of the Council of the College that "some members" only were desirous of this change in the election, etc., of the Council, is thereby set at rest once and for all; for this is a very large proportion indeed of the whole number of M.R.C.S., and much larger than it seems at first sight, the calculation of the officials of the College as to the number of its own members being hopelessly at fault.

We find, and till the other day we had accepted, the statement as gospel, that the College Calendar gives a "list of members" totalling 17,040; and most men would have thought that that was very nearly accurate. But, upon reading three weeks ago that the College authorities had only sent out 987 polling papers to its Fellows, whose numbers appear in the calendar as 1,124, it occurred to us that a similar discrepancy between the actual and the official numbers of the members also might exist. Nay, we expected, as we have found, a still greater difference; for, whereas the Fellows are honoured with what calls itself an "alphabetical register," the poor members are put off with a "list." The distinction is most subtle; however, it may be presumed that the word "list" was chosen as not committing its promulgators to an endorsement of the accuracy of its contents.

Now, we have gone most carefully through the *Medical Register* for 1886, published only four months before the last College Calendar, and find that the number of members of the College upon it is only 11,821, which, to allow for errors in calculation, we will call 12,000; that is to say, five-seventeenths, or nearly one-third, of the mem-

bers exist, in this world at least, only upon that list, or in the imagination of its compilers. They have existed, it is true, but the College clings fondly to their memory, and mutters still, like Wordsworth's peasant child, "We are seven"—ten thousand.

That our calculation is in the main correct is proved by an analysis of a sample of this "list." On page 89, we find 98 names of members: of these, only 61 are to be found in the *Medical Register*, to which we must add 2 who qualified in the interval between its publication and that of the calendar, thus leaving 37 names of members whose ghosts still linger round the College walls, awaiting the burial of their diplomas.

We trust that you will pardon this digression, but it is of importance with regard to the influence so large a number of signatories should exercise. That out of 12,000 M.R.C.S.'s, of whom a good 2,000 are inaccessible, 4,600 should have actively identified themselves with this movement by their signature, should carry great weight with the profession and with the Privy Council.

We may, in conclusion, add that each signature is by a *bonâ fide* M.R.C.S., for we have checked each in the *Medical Directory* for 1887, and thus eliminated not only men who had signed before, but also those few who signed in error, not holding the College qualification. We hope later to be able to give you a few local and other details of the signatures.—We are, your obedient servants,

WM. ASHTON ELLIS,
WARWICK C. STEELE,
February 9th. Hon. Secs. Association of Members of
Western Dispensary, Westminster. Royal College of Surgeons.

DEGREES FOR SCOTCH LICENTIATES.

SIR,—Referring to Dr. Crosbee Dixey's letter, in the JOURNAL of February 5th, I am very strongly of his opinion; and I think his suggestion "for the Scottish Colleges to make some arrangement with the (non-teaching) University of St. Andrews, in the matter" of granting "its M.D. degree to those Licentiates of the Scottish Colleges who hold their diplomas in Medicine and Surgery," is particularly well-timed, seeing that the English Colleges are just now so busy in endeavouring to obtain for their licentiates and students the degree of M.D. A charter, giving the necessary powers to the University of St. Andrews, can, I have no doubt, easily be obtained to confer the degree of M.D. on all licentiates of five years' standing, after a modified examination. Licentiates of more than fifteen years' standing, who wished for the degree, should, under existing circumstances and with certain conditions, obtain it without any examination. I trust sincerely that something practical will be done at once; and that the Scotch Colleges shall not allow their neigbours in England to out-flank them by obtaining for English licentiates a coveted distinction which Scotch licentiates (equally entitled) cannot obtain. Licentiates must not lie merely looking on, and trusting to luck; they must agitate, agitate, agitate, until the matter be satisfactorily settled for them.—Yours, etc., L.R.C.P. EDINBURGH.

February 7th, 1887.

UNQUALIFIED ASSISTANTS.

SIR,—For several weeks past letters have appeared in the JOURNAL respecting unqualified assistants. There is now no necessity for any assistant, or anybody else, to remain in that position. Hospital practice and lectures are useless; registration-money thrown away. All that is necessary is to go to Dublin, enter for a six months' course at the Coombe Hospital, for decency's sake stay a week or two, return home, and for a corresponding short time return to Dublin at the end of six months. You then pay the fee, and bloom at once into a full grown L.M.Ch. (Dub.). Be always careful about the Dub. Tell everybody you are qualified, attend clubs, sign death certificates L.M.Ch. (Dub.), which will be accepted by the local registrar. If anyone doubts your qualification, show them the license (in Latin and on parchment, I believe), and, if properly framed, what class of working man is there who will not believe in the qualification? So you see, Sir, that unqualified assistants may easily be a thing of the past.—Yours truly,

Alfreton, January 31st, 1887. JOHN J. BINGHAM.

*** As to the allegation regarding the *bonâ fides* of the certificates granted by the authorities of the Coombe Lying-in Hospital, the attention of the licensing bodies who recognise these certificates may very properly be called to the statement made by our correspondent. The Local Government Board for Ireland recognises the certificate granted by the Rotunda and by the Coombe Lying-in Hospitals as a separate certificate in midwifery, which medical officers of dispensary districts in Ireland are required to hold. Without questioning the value of the instruction to be obtained by a regular attendance on the practice and lectures of these hospitals, such official recognition of their diplomas gives them, as is evident, a misleading importance. The diploma of neither hospital is a registrable qualification. A local registrar of deaths, therefore, should not accept the holder of such a diploma as a person qualified under the Medical Act to give a medical certificate of death. The acceptance of such a certificate is clearly illegal, and is unknown in Ireland. It would be well that the Registrar-General for England should caution his local officers against the committal of any such irregularity, and call their attention to the strict observance of the official regulations. It is therein laid down (Reg. 37, p. 39) that it is "the duty of a registrar to inform himself whether the medical men practising in his neighbourhood are duly registered." If a deputy or *interim* registrar has any doubt as to a qualification given in a medical certificate of death being a registrable one, he is bound to refer the question to the Registrar-General.

SIR,—In view of the correspondence which has been going on in the JOURNAL, consisting of more or less *ex parte* statements, it occurred to me that a few episodes of my own career as an unqualified assistant—now, fortunately, a thing of the past—might point a moral, if they do not adorn a tale. Beginning as an apprentice to a medical man at the age of fifteen, I rapidly passed through the bottle-washing stage to the more dignified, it also more responsible, post of dispenser. I do not think I was less careful than most lads of my age, but, from sheer lack of knowledge, I occasionally substituted pulv. ipecac. co. for pulv. ipecac.; and the same reason must be accepted as an excuse for a few injudicious and involuntary mistakes which occurred in my hands as occasion arose. So far as I am aware, however, my mistakes were never directly and palpably fatal.

As years went by, I naturally took to obstetrics and visiting, and ultimately acquired no small amount of experience, quite free from any anatomical or physiological complications. In common honesty, I am bound to confess that I cannot look back without sundry qualms on the disastrous results of some of my earlier attempts: women who died undelivered; fractures which ultimately required amputation; eye-affections which neither zinc nor alum would relieve. But why harrow my feelings unnecessarily? Suffice it that from seventeen years of age I was often saddled with the responsibility of serious medical and surgical cases, not infrequently without any assistance from my principals, who generally signed the death-certificates in blank. I was, it is scarcely necessary to say, profoundly ignorant of anatomy, and, *a fortiori*, of medicine and surgery; and the result of several years' experience has been to make me a bitter and irreconcilable enemy of the unqualified assistant. His social status depends simply and purely on his manners and education. If these be good—and not infrequently they are so—he may be admitted into the family circle on very comfortable terms. Under any circumstances, however, it is a grinding slavery, with more work and less pay than the cook, who, under adverse circumstances, may be his only sympathiser and *confidante*.—I am, yours, etc., M.R.C.S.

ABSENCE OF PATELLAR-TENDON REFLEX IN DIABETES.

SIR,—Last week a patient of mine died of diabetes mellitus. His age was 80, and he had suffered for over four years. In addition to the ordinary symptoms of the disease, there was absence of the knee-jerk in both legs, which Dr. Raven referred to in his case. It had not returned five weeks before his death. In addition, there were other symptoms which point to the neurogenic origin of the disease; namely, girdle-sensation at the level of the epigastrium, asthenopia, unequal pupils (a few days before death they were equal), darting pains in both legs, and *tache cérébrale* well marked in the arms, but in the legs absent. Two days after this, vaso-motor irritability was well-marked in both legs, due I believe to the application of hot-water bottles to the feet which had increased the cutaneous circulation.—Yours, etc., JOHN BROWN, L.R.C.P.Lond.

Bacup, February 7th, 1887.

HEPATIC PHLEBOTOMY.

SIR,—Your having given prominence to a letter from the pen of Dr. Boyes Smith, in the JOURNAL of January 29th, in which he criticises the wording of my second paper on Hepatic Phlebotomy, and Puncturing the Liver's Capsule, as curative procedures, which appeared in the JOURNAL of January 15th, in a manner not alone detrimental to me, but even to the reputation of gentlemen of the Army Medical Department, to which he himself belongs, I have to request you kindly to give equal prominence to this rejoinder.

To me it seems not improbable that it is due to the fact of Dr. Smith's feeling himself unable, by reference to authorities, to substantiate the assertions he made against my first paper—namely, that

neither of the two of the above-named curative operations had any title to be considered as new—that he has fallen back upon the reprehensible legal expedient, sometimes adopted by advocates with a weak case, of roundly abusing their opponents. For he makes the two following accusations :

First, that I have intentionally attributed to him the personal responsibility of the fatal case of hæmorrhage, after exploring the liver for pus, to which he referred at the Brighton meeting.

Secondly, he asserts, or rather insinuates, that, by the use I made of the words "all of them army men," I intended to disparage the professional attainments of our army medical brethren.

To both of these insinuations I give a most emphatic denial ; and will now proceed to show that they are as ungenerous as unjust, and quite unworthy of their parentage. For while in the first case, as will be immediately seen, I treated the greatest of the mistakes he committed in his Brighton speech with considerate reticence, in the second I did nothing more than parody his own words, with a complimentary, instead of a derisive, intent. Here are the proofs.

Dr. Boyes Smith said he thought it his duty to take exception to my remark that, contrary to the erroneous teaching of our schools, the liver was an organ which could be penetrated without danger, if the instrument of the operator was introduced in proper situations, and that it was untrue that hepatic phlebotomy was a new operation. Quite the contrary he asserted was the case ; for, not alone had all army medical probationers, while at Netley, been for years past taught how to perform it, but it was an operation that had been long practised by our Indian *confrères* in the East. Nay, more, he even asserted "that it was perhaps the most ancient operation in the world, having been performed by the Chinese many centuries ago." This quotation I take from the report of the discussion at the Brighton meeting (published in the JOURNAL of November 13th), lest it should appear to some of your readers almost too startling to be true. With such knowledge in my possession, then, does Dr. Smith imagine that, if I had been so ungenerously minded as to desire to disparage his medical learning, I had not in the above statement ample materials at my disposal ? Surely not ; for the origin of such a remark can, to my way of thinking, only be accounted for by supposing that he, like many others, in the heat of debate, said something quite different from what he intended. It was this view of the case that restrained me from commenting upon it, and it is only on account of Dr. Smith's having said that I intentionally misrepresented his statements, that I allude to it.

Now to the point. Dr. Smith, in his letter to you, asserts that he distinctly mentioned that the fatal case of hæmorrhage after exploring the liver for abscess did not occur in his own practice. If he did so, how comes it that the following passage occurs in a letter addressed to me, on August 18th, by his own personal friend, Professor Maclean, to whom he sent a full report of the discussion immediately after the meeting ? A copy of the letter now lies before me, and in it Dr. Maclean writes : "I have only to say that your method and mine seem to be two different things. No consideration would induce me to deal with the liver in the manner Dr. Smith describes, seeing that I was an eye-witness to fatal hæmorrhage (in exploring for abscess, G. H.) from the use of an instrument such as you are said to recommend, the patient dying—not, as in Dr. Smith's case, in a 'few hours,'—but in less than half an hour." How, I ask, does Dr. Maclean fall into the same error as I did, if Dr. Smith said so distinctly that the case did not occur to him personally ? I leave this for Dr. Smith to explain. All I know is, that at the meeting he so mixed up hepatic exploration, hepatic phlebotomy, puncturing of the capsule, and Chinese acupuncture, that it was difficult for me to unravel his true meaning. I am still patiently waiting for him to furnish me with reliable data, not only as regards hepatic phlebotomy being commonly practised in India, but why, how, and when Chinese doctors bleed the livers of their patients, as he assserts they do, and have done for ages.

Now I come to the consideration of the second accusation, namely, that my use of the words "all army men" implies that I place but little value on their opinions. Allow me to assure Dr. Smith that I not only am too often brought into professional contact with army surgeons, but have the pleasure of reckoning too many of them among my personal friends not to be quite as able and as willing as he, or as any other person is, to acknowledge their merits. And, moreover, I am quite as cognisant of the fact as he assumes to be, that among civil as well as among military medical men there are to be met with different degrees of inherited intelligence, as well as different degrees of professional attainments. And it was solely on account of his having asserted that "all army men" had not alone been taught how to perform hepatic phlebotomy, but for years been in the habit of practising it on their patients in the East, that I called special attention to the fact that the writers of the letters I found it necessary to comment upon, in consequence of their confounding the two new operations with two entirely different old ones, were "all army men." I did so lest the fact should escape the notice of the reader, and he might, from the nature of the mistake committed, be led to suppose that the writers of the letters I commented upon were men in the possession of no special liver knowledge. For, to my way of thinking, the very fact of men supposed to have a special acquaintance with liver surgery confounding the two new methods of treatment (hepatic phlebotomy and puncturing the capsule of Glisson) with exploration of the liver for pus, when attended with accidental hæmorrhage, and the somewhat mythical Chinese operation of liver-bleeding and liver-acupuncture, is strong presumptive evidence that my methods are entirely new. Had it been otherwise, their experiences of them, one might have expected, would have taught them how all four operations differ completely from each other as regards their nature and design.

After these, to me as compulsory as unpleasant, criticisms of Dr. Smith's letter, I now venture to call his attention to another communication, also from an army man (Dr. Cullimore) in the JOURNAL of January 29th, which gives ample evidence that there are among army men those who have not only given attention to the literature of hepatic diseases, but can write with authority upon them from being able to quote scriptory statements in support of their views. Unfortunately for Dr. Smith, however, Dr. Cullimore's literary researches and conclusions are as completely against him as they are in direct accordance with my published opinions.

Lastly, I have to refer to a letter of Dr. Alexander's, also published at page 251 of the JOURNAL, for to him I owe an apology for having unwittingly placed his name along with those whose letters I commented upon. When I explain how I fell into this error, I feel sure Dr. Alexander will believe that it was solely on account of his letter having been printed close to, and in the same small type as those I wrote about. The mistake occurred thus. No sooner had I read the letters criticising me than I sketched out a draft reply, and, for the sake of brevity, omitted writing in the names of the authors of the letters. Forty-eight hours elapsed ere I again found time to attend to the article, and, having to post it the same night, I wrote out the fair copy for the printer straight off ; and, from somewhat hurriedly glancing over the pages of the JOURNAL to get the names of the men I was replying to, from my eye catching the heading of Dr. Alexander's letter, I erroneously imagined he was one of those I had been writing about, and consequently, without further thought, added his name to theirs. Now that he has called my attention to the mistake, all I can do is express my extreme regret at having unintentionally blamed him for errors he was perfectly guiltless of.—Faithfully yours, GEORGE HARLEY.

January 29th.

P.S.—Since the above was in the hands of the printer, two additional important letters have appeared in the JOURNAL of February 5th from the pens of Surgeons-Major Ryan and Quill. But, as I do not wish to take up unnecessarily space in the JOURNAL, or waste the time of your readers, I refrain from replying to them until I am furnished with the full particulars of Dr. Ryan's operations, as well as receive an authoritative account of the Chinese liver-surgery, about which there seems to be considerable ambiguity, seeing that Dr. Smith speaks of it as if it were a process of phlebotomy. But how blood can be withdrawn, by a solid needle, from an organ free in a cavity—as the liver is in the abdomen—is to me an enigma. In order to save Dr. Ryan, or any other correspondent, repeating what is already known of Chinese acupuncture in general, I venture to call attention to Dr. Cullimore's letter in the JOURNAL of January 29th, and also to one from me on the same subject in the *Medical Press* of June 9th, 1886, in which it will be seen that I have myself called attention to the Chinese pent-up-wind theory, so that what is now really wanted is an authoritative description of the Chinese mode of performing their liver-operations ; and so soon as I am put in possession of reliable data I shall have much pleasure in commenting upon it.—G. H.

SIR,—I have just perused letters from Dr. Cullimore and Brigade-Surgeon W. Alexander in the JOURNAL of January 29th, and wish to state that my object in writing on this subject was more to support the feasibility of hepatic puncture and to add my experience, obtained from clinical observation, of the benefit to be derived in cases of chronically inflamed and enlarged livers by puncture with the aspirator needle, than to proffer any claim for originality or support any particular individual. I unhesitatingly admit that my operations were at first undertaken to hit off abscess of the liver, but, finding good

results from probing, I became more keen in puncturing the liver's capsule. When I had little or no suspicion of an abscess, I certainly did not call the operation "hepatic puncture," nor had others before me when they unsuccessfully punctured with the ordinary trocar and cannula; but this I do maintain that I did practise puncturing the liver's substance in chronically enlarged states of that organ, and with great benefit, not expecting or being sure of finding an abscess. I as freely admit I have never practised hepatic phlebotomy—that is, the withdrawal of venous blood from the liver to the outside of the body by means of a needle or cannula, but could well imagine such an operation would be attended with good results. Were I to lay claim to any originality for an operation in this region, it would be in 1874, in washing out the cavity remaining after extraction of pus from the liver by carbolic acid lotion. I was then led to do so on finding re-accumulation of pus after two aspirations, but after a third and a thorough washing out by reversing the action of the aspirator, the patient never showed a bad symptom, and I certainly had never seen or heard of any such method before. But there seems to be a hobby for new forms of disease and new methods for its relief, among which I might mention right angle traction in dislocation of the shoulder: I may say that mode of reduction has been practised in the army for many years, and is a most excellent one in many cases; personally, I have to thank the late Surgeon-Major Turnbull, then of the 21st Hussars, for reducing a dislocation of my right shoulder by that means at Lucknow in 1874 after a fall when hunting.

To conclude, my object in again writing has not been controversial, but to support the practice of hepatic puncture as a feasible and safe operation, and thus help to aid our common cause—the relief of suffering humanity.—I am, etc., JOHN RUXTON, M.D.

Blackpool, January 31st, 1887.

DR. SKENE KEITH'S STATISTICS OF ABDOMINAL SURGERY.

SIR,—Dr. Skene Keith has gone out of his way to make several mistakes in his paper, and one, which amounts to misrepresentation, requires correction. In the BRITISH MEDICAL JOURNAL for May 15th, 1886, I published a series of one hundred and thirty-nine consecutive operations for the removal of ovarian and parovarian tumours without a death. That constituted the whole of my experience in such cases from January 1st, 1884, to December 31st, 1885. Dr. Skene Keith says "during one of the two years when this long list was being made—the only one for which I have seen the report of the Birmingham Women's Hospital—the abdomen was opened fifty-six times by this operator in that hospital. Out of these fifty-six operations eight were fatal, or, in other words, one woman out of every seven died on whom Mr. Tait that year performed abdominal section in the hospital." This is what Dr. Keith says "is what one knows of his results in other abdominal operations." But Dr. Keith might easily have learned a great deal more if he had been so disposed. He could have got the report for 1885 showing sixty-seven operations with two deaths, and the figures for 1886 giving fifty-six operations with two deaths, a mortality for these two years of less than one in thirty. He might also have taken the trouble to look at my paper, which I know he had in his possession, for I sent him a copy of my first series of one thousand cases of completed abdominal sections. 1884 was the most unlucky year I ever had in hospital practice, and it is strange that it is the only year for which Dr. Skene Keith has been able to unearth any information. The unfavourable results of that year are given in detail in the report, and their explanation is simple, though it does not mend the facts. Four of the eight deaths were due to my inability to complete the operation on account of malignant disease—against such a run of conditions we are helpless. Three of the deaths were hysterectomies, and if I could have seen Dr. Thomas Keith do a hysterectomy, I might have saved those three women. But I have not yet been able to see Dr. Keith operate, though, in spite of that, I have got over my difficulties with hysterectomies and now have results as satisfactory as his.—I am, etc., LAWSON TAIT.

Birmingham, February 5th, 1887.

THE PREVAILING EPIDEMIC OF DIARRHŒA.

SIR,—I have been waiting to see, in your pages, an explanation of the present unusual epidemic of diarrhœa. During the past six weeks I have seen over fifty severe cases, mostly characterised by a low temperature (95° to 97° F.), extreme fluidity of discharge, persistence for several days, collapse, vocal hoarseness, intense thirst, cramps in the lower limbs, vomiting, weak, thin and slow pulse. Generally there has been little abdominal pain. The patients have ranged from 2 to 86 years of age, have been of different habits of life, and have resided in localities widely apart in the west and north-west districts. In one household four of the eight were attacked. In another, every member suffered. The milk-supply was from a variety of sources, and the only common conditions appeared to be the water-supply, and the atmospheric and other allied environments. Several of those attacked never drank water, unless in tea or coffee, or in cooked food.

Probably your columns will afford information on the extent over which this unwonted winter epidemic has manifested itself, and throw light on the cause or causes.—Your obedient servant,

NORMAN KERR, M.D.

42, Grove Road, Regent's Park, London, N.W.,
February 5th, 1887.

ADULTERATED MILK AS A CAUSE OF INFANTILE DIARRHŒA.

SIR,—Permit me, through the medium of your columns, to direct the attention of your readers, and more especially the medical officers of health, to a probable source of danger to infantile life at this season of the year.

It is a well-known fact that at this time cattle are being fed principally on turnips, and that this method of feeding has the effect of producing in the milk of cows a peculiar taste disagreeable to the majority of people. In order to destroy this peculiar flavour in milk, cowfeeders and dairymen are in the habit of adding a certain proportion of nitrate of potash. The amount added is small, and doubtless harmless to adults, but I am satisfied it is not so to infants, and especially to those susceptible to disorders of the alimentary tract during the period of dentition. A number of cases of infantile diarrhœa has directed my attention to this matter, these cases being intractable until such time as the cow's milk was replaced by condensed milk, or some other variety of infants' food.

I consider this matter of some importance, and should like to draw the attention of public analysts to this common and well-known adulteration. Nitrate of potash has been used as a poison to children. Dr. Littlejohn has ably shown with what extreme virulence it acts as an irritant poison in such cases.

I shall be glad to hear if any of our members have met with intractable diarrhœa among children at this season, and if they can trace the cause to this form of adulteration.—I am, yours, etc.,

Edinburgh, February 4th. ALEX. J. SINCLAIR, M.D.

WARD COUSINS'S PRIZE, 1887.

SIR,—Will you kindly allow me space to reply to the numerous communications I have received upon this matter?

1. The conditions of the prize have already been published several times in the JOURNAL (*e.g.* December 4th, p. 1121).

2. The subject is not hampered by any restrictions or definitions; but the essayist can exercise his own skill and judgment in any direction that he selects.

3. The Council have requested Mr. Lawson Tait, Dr. Clement Godson, and Dr. Grigg to act as judges; and the decision of these eminent gentlemen must command the approbation of all the members of the Association.—I am, yours truly,

Portsmouth, February 1st, 1887. J. WARD COUSINS.

NAVAL AND MILITARY MEDICAL SERVICES.

ARMY MEDICAL SCHOOL, NETLEY.

THE fifty-third session of the Army Medical School was brought to a close on Monday last, when a large assemblage gathered in the lecture-theatre of the Royal Victoria Hospital at Netley, to witness the distribution of prizes to the successful students by General Sir D. M. Stewart, recently Commander-in-Chief of the Forces in India. The company included Sir Joseph Fayrer, Sir T. Crawford, Surgeon-General Sir Thomas Longmore, Surgeon-General Murray, Inspector-General Dr. Macdonald, R.N., Deputy Surgeon-General Boyes Smith, Professor Aitken, Colonel Bell, Surgeon-General Maclean, Sir Dyce Duckworth, and Canon Duckworth.

Sir THOMAS LONGMORE read the usual correspondence, including the awards according to the subjoined lists of surgeons on probation in the Medical Department of the British Army who were successful at both the London and Netley examinations. The prizes are awarded for marks gained in the special subjects taught at the Army Medical School. The final positions are determined by the marks gained in London added to those gained at Netley, and the combined numbers are shown in the lists which follow:

	Combined Marks.
F. J. Morgan	5785
W. H. Horrocks[1]	5783
C. H. Hale	5657
H. C. Thurston	5476
B. H. Scott	5316
W. C. Poole	5261
O. R. A. Julian	5058
G. Raymond	5056
E. A. Burnside	5032
T. C. McCulloch	5020
A. B. Hinde[2]	4951
A. Y. Reily	4886
J. W. Cockerill	4851
J. Ritchie	4796
H. St. G. Hore	4795
S. Macdonald	4741
E. Corcoran	4679
A. C. Watson	4628
E. W. Gray	4621
D. Steill	4605
L. E. A. Salmon	4552
G. A. Wade	4519
J. Minniece	4489
R. H. Penton	4475
M. P. Holt	4442
W. L. Gray	4390
E. G. Browne	4341
J. C. Morgan	4262
H. J. Pocock	4247
G. Hilliard	4230
C. R. Elliott	4193
C. A. Young	4179
J. W. Bullen	4150
C. J. Weir	4140
B. J. Inniss	4123
R. C. Thacker	4112
W. N. Murphy	4109
S. F. Clark	4073
E. M. Hassard	4039

[1] Gained the Herbert Prize of £20, with the Montefiore Medal and prize of 20 guineas, and also the Martin Memorial Gold Medal.
[2] Gained the Parkes Memorial Bronze Medal.

Surgeons on probation in Her Majesty's Indian Medical Service who were successful at both the London and Netley examinations :

	Combined Marks.
R. J. Macnamara[1]	5898
H. W. Pilgrim[2]	5741
G. B. French	5449
F. W. Thomson	5372
E. H. Brown	5312
C. N. Bensley	5114
S. H. Henderson	5072
G. C. Hall	5053
B. B. Grayfoot	4949
D. W. Scotland	4939
C. R. M. Green	4923
R. H. Castor	4865
J. H. Sellick	4819
T. E. Dyson	4814
E. C. Hare	4636
F. C. Clarkson	4573
J. G. Jordan	4547
J. D. M. Swinburne	4533
H. M. Morris	4467
A. R. P. Russell	4441
J. Morwood	4359
F. G. Maidment	4275
E. A. W. Hall	4108
J. T. Blancard	4088
J. P. Doyle	3947

[1] Gained the prize in Pathology, presented by Professor Wm. Aitken, F.R.S.
[2] Gained the Montefiore Second Prize.

General STEWART, after distributing the prizes, addressed a few words to the students, remarking that the present system was open to some objection in not providing for a medical officer to be attached to each regiment. It would be advantageous to adopt such a system, as the surgeons would get to know the men better. He also gave a word of warning to medical men against delegating their duties to others.

Sir T. CRAWFORD offered a hearty congratulation to the successful students, and pointed out that the plan suggested by General Stewart was in operation in times of war. It was a simple matter of money, and if they could persuade some future Chancellor of the Exchequer to give them a grant of £40,000 a year, it could be adopted at all times.

General STEWART said it was carried out in India now.

Sir JOSEPH FAYRER announced that a letter had been received from Dr. Waring, who recently retired from the Madras Service, presenting to the Army Medical School at Netley his medical library, which he had been collecting for many years, consisting of 350 separate works, in 600 or 700 volumes. Sir Joseph Fayrer said it was one of the finest collections of Materia Medica in existence.

The proceedings closed with the customary vote of thanks, and the visitors were afterwards entertained at luncheon by the medical staff in their mess-room.

THE HEALTH OF THE NAVY.

THE statistical report of the health of the Navy for the year 1885 has just been issued as a blue-book. The returns for the total force disclose what is considered a satisfactory condition. The yearly ratios of sickness, invaliding, and deaths were substantially less than those of the preceding year ; and not only have the increases which that year exhibited disappeared, but, beyond this, reductions are shown in comparison with the averages of late years in nearly every instance. On the home station a reduction in the amount of venereal diseases, compared with 1884, has again been manifest, "though the ratios remain far in excess of those experienced during the last years of the enforcement of the Contagious Diseases Acts. The last year's reduction in what appears to be the concurrent disease, scabies, has again turned into a considerable increase."

MEDICAL SERVICE FOR THE VOLUNTEER SERVICE.

REGIMENTAL-SURGEON writes : Sir James Hanbury's appeal to the medical profession to supply the wants of the medical service of the volunteer force, can be met by indicating some of its present internal defects. In order to obtain the same efficiency in the regimental system of the Volunteer Medical Service, as in other branches of the service, the War Office authorities should enforce the same requirements, and extend the same privileges.

1. The regimental surgeon should be required, before the second inspection of his corps, after he has obtained such appointment, to pass the examination of proficiency. At present this is optional.

2. The regimental surgeon who attends the Medical Staff School of Instruction, and obtains a certificate of proficiency, should receive pay and allowances. At present he must defray his own expenses at Aldershot.

3. The establishment of a corps should include an ambulance sergeant and corporal, a transport sergeant, and at least two drivers. At present these are only provided through the enterprise of certain corps.

4. At the annual inspection the report should require the presence of the surgeon of the corps in command of proficient stretcher-bearers, to the number of not less than two, or more than four, per company.

At present, inspecting officers generally ignore ambulance equipment.

MEDICO-LEGAL AND MEDICO-ETHICAL.

"A HARD CASE."

B. A. writes : A middle-aged solicitor, whose wife I have attended for some years, and who was in the habit of paying for that attendance without demur, now suddenly claims exemption, on the ground that her father is a physician (well known and successful). My patients are seized from above by the consultant, from below by the private and provident dispensary; I have to contend against a host of retired naval and military medical men, who with a pension to fall back upon, appear to practise for amusement ; if the small balance that remains to me is to be attended for nothing, how am I expected to live ?

*** The case of "B. A.," as represented in his letter is, no doubt, a hard one, and may well induce him to exclaim, "how am expected to live?" In regard, however, to the especial wrong meditated by the solicitor in question, we may venture to assure our correspondent that the position assumed in behalf of the wife, as a daughter of a well-known and successful physician, is not only, under the circumstances, unfair, but legally indefensible. Should he, therefore, after being made acquainted with the following rule, extracted from the *Code of Medical Ethics*, second edition, page 53, Ch. ii, Sect. 2, rule 1, persist in claiming exemption under the plea referred to, it would be well to test the point in a Court of law, and thus endeavour to teach the lawyer and others of like illiberal mind, a wholesome lesson of simple justice, and of professional morality.

"All legitimate practitioners of medicine, their wives, and children while under the paternal care, are entitled (*not* as a matter of *right*, but) *by professional courtesy*, to the reasonable and gratuitous services—*railway and like expenses excepted*—of the faculty resident in their immediate neighbourhood, whose assistance may be desired. In the case, also, of near relatives who are more or less dependent upon a professional brother (other than wealthy), it will likewise be well, at his request, to forego or to modify the usual fee. On the other hand, a son or daughter altogether independent of the father—or the widow and children of a practitioner left in affluent or well-to-do circumstances—should be charged as ordinary patients—unless feelings of friendship, or other special reasons, render the attendant practitioner averse to professional remuneration ; in such case the rule need not apply. Moreover, if a wealthy member of the faculty seeks professional advice, and courteously urges the acceptance of a fee, it should not be declined—*for no pecuniary obligation ought to be imposed on the Debtor, which the Debtee himself would not wish to incur.*"

A SELF-INFLICTED THROAT WOUND.

SIR,—Although similar cases are on record, this one may be worth recording, as probably there is no department of science in which an exception to a rule plays a more important part than in medical jurisprudence. For, in the jurists' hands, exceptions are often the lever by which justice is asserted or defeated. An education, therefore, in the rule when it embraces the exception, gives to evidence an authoritative value, while hard and fast dogma from the witness-box often leads to compromise and disaster.

The case is that of a male patient, J. B., aged 70, admitted to this asylum December 28th, 1886. Shortly, the previous history, as quoted from the medical certificate of admission, is "that he has been suffering from great mental depression for the last month, and at last inflicted a deep wound on his throat with a razor, causing great loss of blood." This wound, which gives its interest to the case, is on the right side of the throat, and extends from about the angle of the jaw to within a few lines of the middle line of the neck, and on the level of the hyoid bone, whose great wing forms the floor of the deepest part of the wound at this extremity. Its direction is from behind forwards. At its commencement it is a clean incision, but hacked and irregular at its termination anteriorly, probably from the corrugation of the loose skin here, or from deflection of the edge of the weapon from contact with the hyoid bone, which most probably saved the box of the larynx. It being stitched before admission, all that can be said as to its depth is that, although the windpipe and large vessels escaped, the structures subjacent to the skin were well exposed.

The patient is right-handed. He held the razor, which was a blunt one, in his right hand, and cut from behind forwards. His object, he says, was not to do away with himself, but to relieve the great pain in his head, which, with the bluntness of the instrument, may account for the depth of the wound. The *modus operandi* is described by himself, and, from corroborative collateral testimony, we have no reason to doubt him.

County Asylum, Morpeth. J. CUMMING MACKENZIE, M.B.

THE Sanitary Board of Constantinople has decided, with the sanction of the Porte, to suppress quarantine on all arrivals by land or sea, and substitute medical inspection in its stead.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Monday, February 7th, 1887.

Lunacy Acts Amendment Bill.—The LORD CHANCELLOR, in moving the second reading of this Bill, said the clauses included no controversial matter, with the exception of one point which he would mention hereafter. It was agreed that it was of serious importance that legislation on this subject should be carried out. The total number of lunatics was 80,126, which was an increase of 452 on the previous year, making the smallest increase for the last twenty-seven years in proportion to the population. There were 4,440 licensed houses, and the patients therein had increased by 8.5. With regard to the gradual decrease of licensed houses, he thought it right to adopt the views generally entertained with respect to their gradual decrease. With regard to the matter of controversy, the Commissioners refused to accept the conclusions of their lordships, and emphasised the view the late Lord Shaftesbury entertained as to the introduction of some judicial authority to examine persons who were to be confined in a lunatic asylum. That subject, he held, had passed beyond the region of controversy, and he believed, having regard to the state of public opinion, no alteration of the law would be satisfactory that did not make further provision for the liberty of the subject. There had been a very strong opinion abroad—whether exaggerated or not, he would not say—that it was possible, without any proper investigation at all, for designing persons to take away the liberty of their fellow-subjects by the instrumentality of the present lunacy law. It would be impossible, therefore, to amend the law adequately without taking notice of the state of public feeling. The question of importance was as to what degree the judicial interference should take place. It was a subject of controversy whether the magistrate should be directed to see the alleged lunatic. He proposed that there should be served on the alleged lunatic a notice that if he pleased to appear before a magistrate he should be brought before him. If the alleged lunatic was sane enough, he would understand this notice, and avail himself of it. The noble and learned lord concluded by moving the second reading of the Bill.—Lord HERSCHELL entirely sympathised with the noble and learned lord's desire to save the Bill from controversy as far as possible. The regulation as to the intervention of the magistrate if it were not made permissive, appeared to require further consideration.—The Earl of MILLTOWN reiterated his hope that the Legislature might see fit to vest all lunatic asylums in public bodies, and to do away with all private asylums; and read an extract from a letter which he had received from the late Lord Shaftesbury, dated April 16th, 1885. The writer said that he had not changed by one hair's-breadth his opinion of the danger which beset all private asylums, and of the necessity of placing the whole care of lunacy on a public basis; but that that could not be done by permissive legislation, and the enactment must be compulsory. The powers at present possessed by the Lunacy Commissioners were utterly inadequate.—The Bill was then read a second time.

Lunacy Bill.—The LORD CHANCELLOR, in moving the second reading of this Bill, said it was simply a Bill to codify the Acts of Parliament dealing with the subject of lunacy, and in the event of the Bill, which their lordships had just read a second time, going to the other House, it might be possible to refer both the codification of the existing law and the new Bill together to a Committee, so that the new Bill might be incorporated with the other measure, and the whole law in regard to lunacy be reduced to one statute.—The Bill was then read a second time.

HOUSE OF COMMONS.—Friday, February 4th.

Lunacy.—MR. W. CORBET asked whether it was intended to introduce the Lunacy Acts Amendment Bill, which passed the House of Lords and was read a first time in that House last session.—MR. STUART WORTLEY: The Lord Chancellor has introduced into the House of Lords an Amendment Bill and a Consolidation Bill. Both of these were circulated this morning.

Monday, February 7th.

Artisans' Dwellings and Prison Sites.—In reply to Mr. J. ROWLANDS and Captain PENTON, Mr. MATTHEWS said that he had offered the sites of the prisons mentioned in the Report of the Royal Commission on the Housing of the Working Classes to the Metropolitan Board of Works, but they had not seen their way to purchase them for artisans' dwellings. During the last few days he had received offers, one for the larger site (Coldbath Fields) which was under consideration, and which he hoped might result in the accomplishment of these two objects. The offers he had received included the buildings upon the sites.

Tuesday, February 8th.

Contagious Diseases Hospitals.—Mr. ACLAND asked the First Lord of the Treasury whether the annual grant towards the expenses of hospitals for contagious diseases in certain garrison towns had been withdrawn, and whether any other measure of maintaining them was proposed; and, if not, what it was intended to substitute for these institutions; and whether the managers of other hospitals had shown great unwillingness or had entirely refused to admit cases of contagious disease.—Mr. STANHOPE replied that Parliament would be asked to vote a sum of money in aid of beds in local civil hospitals affording accommodation for lock patients, and he was at present in communication with the authorities of certain garrison towns, with a view to ascertain to what extent co-operation might be expected on their part. He believed that the managers of some hospitals had objected to admit patients of this class, but he had no positive knowledge on the subject.

Rabies among Dogs.—In reply to Mr. H. S. Wright, Mr. MATTHEWS stated that the rabies order of 1887 gave full power to local authorities to make provisions for the muzzling of dogs, or for keeping them under control in the manner directed in the regulations made by local authorities. The Government did not propose to take any further steps at present.

M. Pasteur's Treatment.—In reply to Mr. Coghill, who asked whether the Government intended taking any steps to found an institution in London similar to M. Pasteur's in Paris, for the gratuitous treatment of persons who had been bitten by mad dogs, Mr. MATTHEWS stated that a committee was at present investigating M. Pasteur's system of treatment of persons bitten by mad dogs. When their report was presented, the Government would give it careful consideration.

OBITUARY.

VINCENT AMBLER, F.F.P.S.Glas, L.S.A.

MR. VINCENT AMBLER, who died suddenly at the age of 54 on Sunday morning, February 6th, distinguished himself before qualification as an assistant-surgeon in the Crimea, where his skill and attention to the wounded gained for him the friendship of His Royal Highness the Duke of Cambridge. On settling in London, he became professionally connected with several diplomatic bodies, being Physician to the household of the Chinese Legation, Physician in Ordinary to the Japanese Legation, Physician to the Persian Embassy, and also the officially recognised private medical attendant of several Oriental princes and ambassadors in London. He was in consequence decorated as Knight Commander of Santa Rosa and Grand Knight Commander of the Ancient Order of the Lion and Sun. Mr. Ambler was, at his death, Senior Physician to the National Hospital for Diseases of the Heart and Paralysis, Soho Square. He was one of the early leaders of the Volunteer movement.

Mr. Ambler was well known in society as a gentleman of great hospitality and artistic tastes. He possessed a fine collection of pictures. The circumstances of his death were remarkable. About two years ago, he was seized with dyspnœa after some slight shock or strain. He placed himself under the care of Dr. B. W. Richardson, who discovered a thoracic aneurysm, bulging to the right of the sternum, and pulsating violently. Spasmodic dyspnœa with occasional dysphagia lasted for some time, then disappeared; the pulsation ceased, and hardly a trace of the thoracic swelling remained. Mr. Ambler, on convalescence, returned to hard work and to his social duties, though ready to face death at any moment. On Friday, January 28th, the spasmodic dyspnœa recurred, followed by violent spasms of coughing. The tumour appeared once more, pulsating violently, and the right side of the thorax increased markedly in measurement. Early last week his health improved, and he returned to work. On Saturday, February 5th, he came home in the evening apparently quite well. He awoke at about eight o'clock on Sunday morning, and took tea in bed. One of his sons was in the room, and was asked by his father to go downstairs to fetch a book. He did as he was requested, and returned at once, and found his father, as he believed, asleep. Not liking to disturb him, he took up a book and began to read. He soon observed that his father looked very pale, so he called in his mother and sister. Dr. Richardson was immediately sent for, and found that life was extinct.

Mr. Ambler leaves a widow and five children. He was a member of the British Medical Association.

UNIVERSITY INTELLIGENCE.

THE GEORGE THOMPSON FELLOWSHIP.

THE following are the conditions and regulations regarding the George Thompson Fellowship in Medicine, a Fellowship of the yearly value of about £100, founded by Mr. George Thompson, of Pitmedden, to enable a Graduate in Medicine of the University of Aberdeen to pursue further studies and researches at some other British or foreign School of Medicine or hospital.

1. The Fellowship shall be tenable for two years, but for the second year on condition that the Senatus Academicus is satisfied, on the Report of the Medical Faculty, that the holder of the Fellowship has made good use of the first year.

2. The Fellowship shall be awarded after the last term of the Graduation in Medicine for the year, and shall be open by competition to all those who, in that year or in the preceding year, have passed all the examinations for Medical Graduation in the University.

3. The holder of the Fellowship shall be bound to reside for the first year entirely abroad, at such place or places as shall be approved by the Senatus, on the recommendation of the Medical Faculty; and for the second year of tenure chiefly abroad or in London; and for the last three or four months of the year, should it be deemed desirable, at Aberdeen.

4. Before the final payment is made, the holder of the Fellowship must submit a Thesis, embodying the results of his studies and researches since his appointment to the Fellowship, which shall be deemed satisfactory by the Senatus on the Report of the Medical Faculty.

5. The holder of the Fellowship shall not at the same time hold any other Fellowship or other Foundation in this University or from any other source, and shall not be engaged in teaching or as a Medical Practitioner.

6. The holder of the Fellowship shall give notice to the Senatus not later than May 1st whether he desires to hold the Fellowship for the second year.

The Examination for the Fellowship will be held early in the month of July, and candidates are required to intimate, in writing, to the Secretary of the Medical Faculty, the subjects in which they desire to be examined, not later than fourteen days before the date fixed for the examination. The Examination will be conducted partly in writing, partly orally, and partly practically, in such proportions as may be arranged by the Examiners. The Examination will be confined to three of the subjects of the Medical Curriculum arranged in the following groups, any group to be selected at the choice of the candidate: 1. Botany, Chemistry, Natural History.—2. Natural History, Physiology, Botany.—3. Chemistry. Medical Jurisprudence, Physiology.—4. Anatomy, Physiology, Pathological Anatomy.—5. Physiology, Anatomy, Chemistry.—6. Materia Medica, Chemistry, Physiology.—7. Pathological Anatomy, Physiology, Chemistry.—8. Surgery, Anatomy, Pathological Anatomy.—9. Medicine, Materia Medica, Pathological Anatomy.—10. Medical Jurisprudence, Chemistry, Materia Medica.—11. Midwifery and Diseases of Women and Children, Physiology, Pathological Anatomy.

The Examination for the first award of the Fellowship will be held early in July next, and is open to all who will be Graduates of not more than two years' standing at the July term of Graduation.

HOSPITAL AND DISPENSARY MANAGEMENT.

HOSPITAL SATURDAY FUND.

THE following is a detailed list of the awards made from the Hospital Saturday Fund to the seventy-five hospitals, fifty-seven dispensaries, and other institutions, as given in the *Charity Record*: Charing Cross, £162 11s. 1d.; King's College, £175 13s. 8d.; London, £586 3s. 8d.; Middlesex, £276 3s. 8d.; North-West London, £81 1s. 1d.; Great Northern, £58 7s. 10d.; Royal Free, £168 5s. 8d.; St. George's £267 8s. 10d.; St. Mary's, £224 17s. 1d.; University College, £204 8s. 8d.; West London, £131 17s.; Westminster, £208 0s. 1d.; French, £40 11s. 7d.; German, £115 19s. 10d.; Italian, £27 17s. 6d.; Poplar, £71 10s. 6d.; Seamen's, £111 11s. 2d.; Miller's, £70 3s. 5d.; Deaconesses (Tottenham), £80 6s. 8d.; Metropolitan Free, £38 1s 6d.; Brompton, £589 13s.; City Road (Chest), £96 1s. 9d.; North London, £176 12s. 11d.; Victoria Park (Chest), £288 14s. 2d.; Royal National, £108 4s. 10d.; Belgrave, £14 9s. 6d.; Cheyne, £27 3s. 6d.; East London, £80 11s.; Evelina, £1 4s. 6d.; Hospital for Sick Children, £129 0s. 2d.; North-Eastern, £63 7s. 5d.; Victoria, £51 0s. 10d.; Paddington Green, £40 13s. 7d.; Home and Infirmary for Children, £56 2s. 10d.; Hospital for Hip Diseases, £16 12s. 10d.; Chelsea, £40 12s. 6d.; Hospital for Women, £46 15s. 7d.; Grosvenor, £23 15s. 4d.; New, £33 8s. 10d.; Royal for Children, etc., £79 0s. 11d.; Samaritan Free, £56 3s. 8d.; British Lying-in, £16 15s. 10d.; City of London Lying-in, £22 8s. 2d.; General Lying-in, £25 14s. 2d.; Queen Charlotte's Lying-in, £34 12s. 6d.; Dental, £29 6s. 5d.; National Dental, £31 11s.; St. John's, £82 7s. 6d.; Hospital for Skin Diseases, £45 15s. 10d.; Royal London Ophthalmic, £17 4s. 7d.; Royal Westminster Ophthalmic, £73 2s. 11d.; Royal South London Ophthalmic, £54 13s. 4d.; Western Ophthalmic, £24 12s. 4d.; Central London Ophthalmic, £50 9s. 1d.; Royal Orthopædic, £89 0s. 8d.; City Orthopædic, £50 0s. 3d.; National Orthopædic, £58 8s. 11d.; Hospital for Epilepsy, etc., £46 15s. 3d.; West End, £56 18s. 5d.; National for Heart, etc., £75 5s. 8d.; Cancer, £115 5s. 5d.; St. Saviour's, £40 12s.; Lock, £103 8s. 1d.; St. Mark's, £61 3s.; Gordon, £33 19s. 4d.; St. Peter's, £48 2s. 7d.; London Fever, £29 16s. 4d.; Throat and Ear, £73 6s.; Throat, £81 19s. 7d.; London Homœopathic, £82 4s. 5d.; London Temperance, £73 6s. 2d.; Invalid Asylums, £30 2s. 11d.; St. John's, Twickenham, £10 7s.

THE GLASGOW EYE INFIRMARY.

THE annual meeting of this institution was held on January 28th. The annual report showed that the number of new cases treated in 1886 was 9,562. The total for the year is made up, however, to 13,701 by the inclusion of 4,139 whose names remained on the books of the institution at the end of 1885. Of these there were dismissed cured by ordinary treatment 5,933, and by operation 1,089, dismissed relieved by ordinary treatment 1,486, and by operation 143, dismissed as incurable 26, dismissed with advice 13, dismissed as irregular 4, and died 1, while 4,956 remained on the books at the end of 1886 to swell the numbers for 1887. The number of house-patients was 983, as against 857 in 1885, of whom 612 were males, and 371 females. The average weekly number was 54.61, and the average residence per patient eighteen days. The number of students was 41. Early in the year a new addition had been built and alterations effected in the old house. The hospital now affords 104 beds for patients, with an air space of 1,430 cubic feet. The cost of the additions was £5,800. The ordinary income in 1886 was £2,593 16s. 2d., and the ordinary expenditure £2,675 13s. 5d. The sums placed by patients in the donation-boxes reached £93 8s. 10d.

DORSET COUNTY HOSPITAL.

AT an annual meeting of the Governors of the Dorset County Hospital, held on January 27th, important alterations in the constitution of the governing body were proposed. The constitution of the Managing Committee, upon which the medical staff is not, we believe, represented, presents the further anomaly that the five incumbents of the Dorchester parishes are *ex officio* members; the number of elected members being twelve. At the meeting a resolution altering the constitution of the committee, so as to give it a more representative character, was carried by a large majority. One of the committee proposed to add to one of the rules the following words: "But no member of the hospital staff shall be eligible to sit as a member of the committee whilst holding such appointment." As one of the subsequent speakers, Mr. Ruegg, well observed this was a piece of absurd tautology, inasmuch as a member of the hospital staff ceasing to hold such appointment, ceased to be a member of the hospital staff. We are informed that this resolution had its origin in the following circumstances: some difficulties had arisen between the house-surgeon and the matron who had been recently appointed; the matron eventually sent in her resignation, whereupon one of the committee gave notice of motion for a fresh appointment to the office of house-surgeon. The physician to the hospital, in order that the medical view of the case should be represented to the committee, paid the subscription necessary to qualify him for a seat on it as a vice-patron. The motion was eventually withdrawn, but was re-introduced, and matters were in this state when the annual meeting was held. The resolution transcribed above appears to have been so evidently in opposition to the general feeling of the meeting that it was withdrawn. All the circumstances, however, are another example of the baneful effects of excluding the medical staff from the managing committee; if the staff had been represented upon the committee, as is the case in every well-managed hospital, the present difficulties would probably never have arisen in Dorchester.

GLASGOW ROYAL INFIRMARY.

THE report of the managers of the Royal Infirmary for the year 1886 has just been issued. During the year, the number of admissions was 4,817, against 4,945 for 1885. Of these, and of 128 remaining in the institution from 1885, 4,834 were treated to a conclusion, against 4,943 the previous year. The deaths numbered 437, against 487, showing a mortality of 9 per cent., against 9.8. The deaths within 48 hours of admission were 123, and thus the mortality, excluding these, is reduced to 6.6 per cent., against 7.5 in 1885. The daily average residents numbered 486, against 503, and the average residence per patient was 35.63 days, against 36.30. 1,346 non-resident accident cases were treated in the wards, against 1,247. The smallest number of residents at one time was 400, and the highest 536. In the medical dispensaries, 12,532 cases were treated, and in the surgical dispensaries 14,023, making a total of 26,555, against 23,732 in 1885. In the dispensary for special diseases, there were 997 throat cases, 2,098 cases of ear disease, 630 diseases of women, 1,436 diseases of the skin, 1,160 diseases of the teeth, and 32 cases of disease of the eye (a recent additional department). The total number treated was 39,250, against 37,170 in 1885. The cost of each fully-occupied bed was £49 9s. 2½d., and the average cost of each patient treated to a conclusion £4 19s. 5½d. The financial report shows a total ordinary income of £18,183 3s. 6d., and a total ordinary expenditure, £24,037 18s. 10d., the excess of ordinary expenditure over ordinary revenue being £5,854 15s. 4d. The ordinary revenue shows a decrease of £202 2s. 8d. compared with the previous year. The extraordinary receipts (legacies, etc.) amount to £6,467 4s. 9d., and the extraordinary expenditure to £346 16s. 0d. The total income is thus £24,650 8s. 3d., and the total expenditure £24,384 14s. 10d., showing a balance of total receipts over expenditure of £265 13s. 5d. The managers propose to proceed, as soon as the weather permits, with the erection of the Nurses' Home, for which plans have been prepared and estimates taken. The expense will be about £6,000, for which one special contribution of £500 has been received. The managers refer to their effort to obtain a clause in the Universities Bill, empowering the erection of the Infirmary into a college of the University of Glasgow, and they deem this subject one of great importance in the interests both of the patients and students.

GLASGOW SICK CHILDREN'S HOSPITAL.

THE fourth annual report of this hospital shows an increasing amount of good work done among the children of the poor. The cases admitted number 458, against 394 in 1885. The large number is due to the fact that the beds on the medical side, not being fully occupied, were made available for surgical cases, and also to the fact that there had been no necessity to close any of the wards on account of infectious disease. The number of operations performed was 134, many of which were of great gravity. The deaths numbered 35, five being within twenty-four hours of admission. Deducting these, the mortality was 6.8 per cent., as against 8.8 in 1885, being the lowest mortality yet reported. The ordinary income was £140 8s. 1d. short of the ordinary expenditure, which amounted to £2,158 4s. 7d., against £2,122 3s. 11d. in 1885. The directors hope shortly to be able to proceed with the erection of a dispensary.

GLASGOW ASSOCIATION FOR THE RELIEF OF INCURABLES.

THE annual meeting of this Association was held in Glasgow on January 27th. The following is an abstract of the annual report: "The home can now accommodate 114 patients, and every bed is usually occupied. At the close of 1885, the number of patients in the home was 93, and, at the end of 1886, there were 113. During the year, 42 were admitted; 15 died, the number of deaths being the same as in the previous year; seven patients left of their own accord, of whom one was placed on the out-door pension-fund. The out-door pensioners at the end of 1885 were 157, and at the close of 1886 they numbered 173. Since its formation, twelve years ago, the Association has given pecuniary assistance to 606 out-patients, and admitted to the home, from its opening in 1876, 269, making a total of 875. The increase in the number of patients for the past year exceeds 20 per cent. The income for maintenance purposes in 1886 has been £4,918 19s. 4d. This falls short by £38 17s. 3d. of the expenditure, which has amounted to £4,957 16s. 7d.

THE FINSBURY DISPENSARY: AN UNUSED BEQUEST.

THE committee's report, read at the annual general meeting of this dispensary, showed that during the year 15,912 new cases had been treated at the dispensary, with a total attendance of 35,366; and 3,151 patients had been attended at their own homes. The deaths during the year had numbered 174. The committee finds that a large number of patients flock to the institution from the neighbouring parishes of Hoxton, Shoreditch, and Haggerston, where there has been no dispensary during the last 106 years similar to the Finsbury and other dispensaries in the metropolitan districts. It was found that in 1871 a gentleman left £10,000 for the establishment of a soup-kitchen and cottage hospital in the parish of Shoreditch, but up to the present time no site had been obtained by the trustees. The committee, therefore, thought that such a building, when erected, might provide waiting and consulting rooms and surgery which could be adapted as a dispensary for three or four hours daily, by the trustees obtaining the consent of the Court of Chancery. The report having been adopted, a vote of thanks to the chairman closed the proceedings.

INFIRMARY MEDICAL OFFICERS AND CLINICAL WORK.

CELTAN writes: During the past month or two, there has been some discussion on the advisability of utilising workhouse-infirmaries for purposes of clinical instruction, and schemes have been proposed by poor-law officers, and the project has been warmly approved in the JOURNAL. Whilst there is no doubt that a certain amount of clinical instruction may be gained in the wards of infirmaries, I cannot help thinking that those who avail themselves of any opportunities that may in the future be afforded them, will be considerably disappointed, and will not find infirmaries such mines of material for observation and research as is usually supposed. Though resident in an infirmary, I usually seek interesting material for study in the various special hospitals, which I find are by no means overcrowded with anxious searchers after knowledge.

The present seems a suitable opportunity to bring under your notice the kind of clerical work required by the Local Government Board of medical officers. It is the duty of the medical officer to every infirmary and workhouse to enter daily in the medical relief book the names of all patients admitted, their ages, date of admission, diseases, numbers of diets, and what extra diets, if put on extras. When a patient is discharged, the medical officer must write in the book the date of discharge, and where discharged to, and, when a patient dies, the date on which he died, and state the fact. He must also write the numbers of the patients' diets and extras, if ordered, and the date, on the patients' bed-cards; and, after copying these into the book, must place his initials on the bed-cards opposite each article ordered. When changes are made in diets, or extras ordered or taken off—and there are several such changes daily in a large institution—the medical officer must first make the alterations on the bed-cards with the date, and afterwards copy them into the medical book, and, at the same time, initial the changes on the bed-cards, to show that they are copied. Every week, or every month, according to the plan of the medical relief book, he must carry forward the names, ages, dates of admission, names of diseases, diets, and extras of all patients in the institution, and place his initials opposite the name of each patient. The latter, in a large institution, means writing your initials several hundreds of times. The other books kept by the medical officer require little attention, and are not worth mentioning. In many institutions, writing his initials in the medical relief book, and changing the diets in the wards visited by him, is the only part done by the medical officer; the real drudgery falls on the assistant medical officer, and in some better arranged places it is done by a clerk.

The object of all this is simply to show a correct return of all diets and extras supplied to patients, as ordered by the medical officer, and so act as a check on the steward who supplies the provisions from the stores. It is, no doubt, a check to a certain extent, as far as the quantitative supply of provisions goes, but it is no guarantee of the quality of provisions, which is equally important. So far as I can see, the supervision of the quality of provisions supplied to poor-law institutions is practically *nil*, and allows of any amount of jobbery being practised.

There is no doubt that there should be uniform dietary tables, for both officers, servants, and inmates, in all metropolitan poor-law institutions; and there should also be a Government inspector of provisions, who has a thorough knowledge of the work, and is competent to make analyses. This is, however, digressing. It will be easily understood that the clerical work required of medical officers is of the simplest kind, requiring no knowledge of accounts, and is about as mechanical drudgery as could be found for anyone. In institutions where there is not a dispenser, the assistant medical officer dispenses, and has to keep another set of books, namely, the drug account-books. He must enter all drugs and medical and surgical appliances received, keep an account of the quantities dispensed and what remains in stock, make out the order for all new drugs, etc., required, and submit it to the board; and make a list of the number of bottles of medicine dispensed daily for the yearly return to the Local Government Board.

To keep the books and dispense takes, on an average, fully four hours daily, and what is most irritating is the fact that these four hours a day are entirely wasted; you are busily employed at work from which you can learn nothing, and which, with a little practice, could be done by any ordinarily intelligent individual; and, of course, there is not that time available for examining patients which there otherwise would be.

It is surely high time such changes were made as would relieve medical officers from doing the kind of work I have indicated, and which could so easily be done in other departments, thus allowing more time for purely medical and surgical work. As affairs stand at present, if clinical assistants be appointed in infirmaries, they will, no doubt, have to take their full share of such mechanical drudgery. Whether it is expedient to appoint unpaid clinical assistants is open to question. It appears to me to be but the first step in obtaining gratuitous medical work for poor-law institutions; and the profession as a body is certainly not at present, nor likely to be in the future, in such a flourishing position as to warrant the encouragement of extending the practice of doing work for no remuneration, which has already been carried far beyond the bounds of prudence and justice.

MR. WILLIAM LANE, M.R.C.S.Eng., of Hawkshead, has been placed on the Commission of the Peace for Lancashire.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

HEALTH OF CORK.

THE monthly report for January, presented to the Town Council at their last meeting, is as follows: During the four weeks ending January 22nd, the births registered in Cork amounted to 156, and the deaths to 168, including 33 which occurred in the workhouse. The annual mortality gives a total ratio of 27.2 per 1,000 inhabitants, and, excluding the deaths in the workhouse, a death-rate of 21.41. The infantile mortality was 2.75, and from infectious diseases 0.4. There were only 3 deaths from infectious diseases during the month, all of which occurred from typhoid fever.

THE OUTBREAK OF ENTERIC FEVER AT MEXBOROUGH.

THE epidemic continues to spread, and there are now over forty cases, with one death. The course of the disease bears out our correspondent's theory as to its origination in fæcal exhalations. There is great poverty and much overcrowding, but the medical officer's hands are tied, since there is in the Mexborough Urban Sanitary District and the Doncaster and Rotherham Unions no place to which a single patient can be removed. As the nature of the first case was at once perceived, the whole of this outbreak might have been prevented, had there been in the district one small fever hospital.

It is only a few weeks ago that a female tramp developed enteric fever at one of the Mexborough lodging-houses, and was compulsorily retained there, since there was no place to which she could be removed. The usual ineffective precautions of supplying disinfectants and ordering destruction of excrement were taken, but Mr. Sykes, the medical officer of health, has much reason to believe that a large proportion of the patient's dejections were emptied into the badly-constructed open privy used for the whole of the tramps frequenting the house. We wonder how many mysterious outbreaks of enteric fever throughout England will be caused by tramps infected in this privy?

On Tuesday last a meeting of the inhabitants of Mexborough was held to form a jubilee memorial. The medical officer of health was present, and made a fervent and touching appeal for the inauguration of a small hospital both for fevers and accidents, each class of cases to be dealt with in separate isolated wards. His resolution was carried, but much prejudice must be overcome before the hospital can be built. The cost of such an epidemic as this in money alone should be a powerful argument, to which the least instructed in such matters should be pervious.

SANITARY REGISTRATION OF BUILDINGS BILL.

A SPECIAL meeting of the Council of the Sanitary Assurance Association was held on January 31st for the final revision of the above Bill before presentation to the House of Commons. The new measure was adopted by the Council, and in the absence from England of Dr. Farquharson, M.P., it was decided to ask Mr. C. C. Lacaita, M.P., to take charge of the Bill in the House of Commons.

The Bill, as introduced in 1886, consisted of ten sections, and made the sanitary registration of all buildings compulsory in towns of 50,000 inhabitants and upwards. The new Bill consists of seventeen sections, and is to apply to all towns or districts of 2,000 inhabitants, but it is to be compulsory only in the case of schools, colleges, hospitals, asylums, hotels, and lodging-houses. An important feature in the new Bill is that the local authorities would be required to keep a sanitary register, in which any building certified in accordance with the proposed Act must be registered, so that a stranger visiting any district would be able to ascertain, at the office of the local authority, whether any particular house was or was not certified as in a satisfactory sanitary condition. The new Bill would, no doubt, be acceptable to sanitary experts, seeing that all persons entitled to certify must first obtain a licence from the Local Government Board, and provision is made for the appointment of examining boards. Persons entitled to sign certificates would be designated licentiates in sanitary practice.

HEALTH OF ENGLISH TOWNS.

IN the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons, 5,846 births and 3,470 deaths were registered during the week ending Saturday, February 5th. The annual rate of mortality, which had declined from 26.5 to 21.1 per 1,000 in the four preceding weeks, further fell during the week under notice to 19.6. The rates in the several towns, ranged in order from the lowest, were as follow:—Nottingham, 13.5; Brighton, 13.7; Norwich, 16.3; Birkenhead, 17.1; Salford, 17.7; Derby, 17.8; Leeds, 18.3; London, 18.4; Hull, 18.6; Leicester, 18.6; Sunderland, 19.3; Cardiff, 19.5; Bristol, 19.6; Portsmouth, 20.4; Bolton, 20.4; Birmingham, 20.7; Liverpool, 20.8; Sheffield, 20.8; Halifax, 21.7; Newcastle-upon-Tyne, 21.9; Oldham, 22.2; Huddersfield, 24.3; Wolverhampton, 24.5; Blackburn, 24.6; Preston, 25.0; Bradford, 25.3; Manchester, 26.3; and the highest rate during the week, 28.4, in Plymouth. In the twenty-seven provincial towns the death-rate averaged 20.6 per 1,000, and exceeded by 2.2 the rate recorded in London, which, as before stated, did not exceed 18.4 per 1,000. The 3,470 deaths registered in the twenty-eight towns during the week under notice included 111 which were referred to whooping-cough, 104 to measles, 54 to scarlet fever, 40 to "fever" (principally enteric), 29 to diphtheria, 27 to diarrhœa, and 2 to small-pox; in all, 367 deaths resulted from these principal zymotic diseases, against 392 and 372 in the two preceding weeks The zymotic death-rate was equal to 2.1 per 1,000. In London the zymotic rate was 1.8, while in the twenty-seven provincial towns it averaged 2.3 per 1,000, and ranged from 0.5 in Nottingham and in Cardiff, to 3.5 in Bristol and in Liverpool, 4.1 in Plymouth, and 4.9 in Blackburn. The fatal cases of whooping-cough, which had declined in the three preceding weeks from 95 to 76, rose again during the week under notice to 111, and caused the highest death-rates in Bradford, Sunderland, and Plymouth. The deaths referred to measles, which had declined from 235 to 131 in the four previous weeks, further fell during the week to 104, and were proportionately most numerous in Bristol and Newcastle-upon-Tyne. The 54 fatal cases of scarlet fever corresponded with the number in the preceding week, and caused the highest death-rates in Salford, Sheffield, and Birkenhead. The deaths referred to different forms of fever, which had been 33 and 37 in the two preceding weeks, further rose during the week under notice to 40, and were proportionally most numerous in Plymouth. The 29 fatal cases of diphtheria showed a decline of 4 from the number in the previous week, and included 16 in London, 3 in Portsmouth, 3 in Liverpool, and 2 in Preston. The 27 deaths from diarrhœa were fewer than those recorded in any recent week. Small-pox caused one death in Manchester and one in Blackburn, the first registered in any of the twenty-eight towns since the beginning of this year. The Metropolitan Asylum Hospitals contained only one small-pox patient on Saturday, February 5th. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 4.5 per 1,000, and was considerably below the average. The causes of 75, or 2.2 per cent. of the 3,470 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, February 5th, 756 births and 495 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,299,000 persons. The annual rate of mortality, which had been 23.7 and 24.7 per 1,000 in the two preceding weeks, declined during the week under notice to 19.8, a lower rate than in any week since the end of October last. Among these Scotch towns, the rate was equal to 12.2 in Leith, 14.6 in Perth, 16.5 in Dundee, 17.1 in Paisley, 17.1 in Greenock, 17.5 in Edinburgh, 21.3 in Aberdeen, and 23.7 in Glasgow. The 495 deaths registered during the week under notice in these Scotch towns included 66 which were referred to the principal zymotic diseases, against 64 and 75 in the two preceding weeks; of these, 23 resulted from whooping-cough, 12 from measles, 10 from "fever," 8 from scarlet fever, 7 from diphtheria, 6 from diarrhœa, and not one from small-pox. These 66 deaths were equal to an annual rate of 2.6 per 1,000, which exceeded by 0.5 per 1,000 the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic death-rates in the Scotch towns during the week under notice were recorded in Greenock, Paisley, and Glasgow. The fatal cases of whooping-cough, which had declined from 27 to 19 in the four preceding weeks, rose again during the week under notice to 23, of which 17 occurred in Glasgow, 3 in Edinburgh, and 2 in Paisley. The 12 deaths from measles showed a decline of 6 from the number in the previous week, and included 9 in Glasgow and 2 in Aberdeen. The fatal cases of fever, which had been 5 and 6 in the two preceding weeks, further rose during the week under notice to 10, of which 5 were recorded in Glasgow, 2 in Edinburgh, and 2 in Greenock. The 8 deaths referred to scarlet fever showed a marked further decline from recent weekly numbers, and included 4 in Edinburgh, and 3 in Glasgow. The 7 fatal cases of diphtheria corresponded with the number in the preceding week, and included 4 in Glasgow. The 6 deaths from diarrhœa were below those returned in recent weeks. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 5.3 per 1,000, against 4.5 in London. The causes of 76, or more than 15 per cent., of the 495 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

IN the week ending Saturday, January 29th, 456 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 27.4 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000:—Armagh, 5.2; Belfast, 27.6; Cork, 22.7; Drogheda, 21.1; Dublin, 27.5; Dundalk, 8.7; Galway, 26.9; Kilkenny, 12.7; Limerick, 39.1; Lisburn, 14.5; Londonderry, 35.7; Lurgan, 30.8; Newry, 17.6; Sligo, 36.6; Waterford, 27.8; Wexford, 17.1. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.6 per 1,000, the rates varying from 0.0 in Waterford, Galway, Wexford, Dundalk, Lisburn, Lurgan and Armagh to 10.7 in Londonderry; the 20 deaths from all causes registered in the last-named district comprising 5 more from measles and 1 from diphtheria. The 119 deaths from all causes registered in Belfast comprise 1 from measles, 1 from typhus, 1 from diphtheria, 2 from simple continued fever, 4 from enteric fever, and 5 from diarrhœa; among the 35 deaths in Cork are 1 from diphtheria, 1 from enteric fever and 2 from diarrhœa. In the Dublin Registration District, the births registered during the week amounted to 181—95 boys and 86 girls—and the deaths to 191—92 males and 99 females. The deaths represent an annual rate of mortality of 28.2 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 27.5 per 1,000. Fifteen deaths from zymotic diseases were registered, being 19 below the average for the corresponding week of the last ten years, and equal to the number for the week ended January 22nd; they comprise 6 from scarlet fever (scarlatina), 1 from typhus, 4 from whooping-cough, 1 from ill-defined fever, 2 from enteric fever, etc. Forty-nine deaths from diseases of the respiratory system were registered, being 2 under the number for the preceding week, and 18 under the average for the corresponding week of the

last ten years; they comprised 36 from bronchitis and 6 from pneumonia or inflammation of the lungs. The deaths of 20 children under 5 years of age (including 13 infants under 1 year old) were ascribed to convulsions. Two deaths were caused by apoplexy, 12 by other diseases of the brain and nervous system (exclusive of convulsions), and 14 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 25 deaths, and mesenteric disease 5. Five accidental deaths were registered. In 35 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

In the week ending February 5th, 439 deaths were registered in the sixteen principal town districts of Ireland. The average annual death-rate represented by the deaths registered last week in the same towns was 26.4 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 10.3; Belfast, 23.0; Cork, 34.4; Drogheda, 25.4; Dublin, 28.8; Dundalk, 30.6; Galway, 13.4; Kilkenny, 25.4; Limerick, 29.7; Lisburn, 9.7; Londonderry, 23.2; Lurgan, 30.8; Newry, 14.0; Sligo, 28.9; Waterford, 13.9; Wexford, 34.2. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.5 per 1,000, the rates varying from 0.0 in ten of the districts to 5.3 in Londonderry; the 13 deaths from all causes registered in that district comprising 3 from measles. Among the 99 deaths from all causes registered in Belfast were 1 from scarlatina, 1 from typhus, 2 from enteric fever, and 1 from diarrhœa; and the 22 deaths in Limerick comprised 1 from typhus and 1 from whooping-cough; and the 6 deaths in Drogheda comprised 1 from scarlatina. In the Dublin Registration District the births registered during the week amounted to 201—95 boys and 106 girls—and the deaths to 201—95 males and 106 females. The deaths represent an annual rate of mortality of 29.7 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the death-rate was 28.8 per 1,000. Fifteen deaths from zymotic diseases were registered, being 20 below the average for the corresponding week of the last ten years, and equal to the number for the preceding week; they comprise 4 from scarlet fever (scarlatina), 1 from typhus, 3 from whooping-cough, 1 from diphtheria, 1 from enteric fever, 2 from diarrhœa, 1 from dysentery, etc. Fifty-three deaths from diseases of the respiratory system were registered, being 4 over the number for the preceding week, but 14 below the average for the corresponding week of the last ten years: they comprised 31 from bronchitis, and 11 from pneumonia or inflammation of the lungs. The deaths of 24 children (including 16 infants under one year old) were ascribed to convulsions. Two deaths were caused by apoplexy, 5 by other diseases of the brain and nervous system (exclusive of convulsions), and 17 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 24 deaths, mesenteric disease 5, and cancer 5. Seven accidental deaths and 1 case of suicide were registered. In 32 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending February 5th, that the annual death-rate was recently equal to 34.0 in Madras, and to 34.5 in Calcutta. Cholera caused 49 deaths in Calcutta, showing a considerable further decline from recent weekly numbers; and the deaths referred to "fever" were 61 in Madras and 77 in Calcutta. According to the most recently received weekly returns, the annual death-rate averaged 26.7 per 1,000 persons estimated to be living in twenty of the largest European cities, and exceeded by no less than 7.1 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 34.3, showing an increase upon the rates in previous weeks; the 610 deaths included 21 from "fever," 15 from small-pox, and 13 from diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 22.9, and ranged from 19.9 in Christiania to 24.1 in Stockholm; diphtheria and croup caused 11 deaths in Copenhagen, 7 in Stockholm, and 4 in Christiania; 4 fatal cases of scarlet fever were reported in Stockholm, and 5 in Christiania. In Paris, the death-rate was 25.3, and exceeded by 5.7 the rate that prevailed in London in the corresponding week; the deaths included 38 from measles, 19 from diphtheria and croup, and 8 from typhoid fever. The 204 deaths in Brussels, of which 10 resulted from diphtheria and croup, showed an increase upon the numbers in recent weeks, and were equal to a rate of 26.1. No returns have come to hand from Geneva since the beginning of this year. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 23.5, the several rates ranging from 19.2 in the Hague, to 27.3 in Rotterdam; the deaths in Amsterdam included 3 from whooping-cough and 3 from measles; and 2 fatal cases of measles were recorded in the Hague. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 26.8, and ranged from 14.5 in Dresden and 23.2 in Berlin, to 33.7 in Buda-Pesth and 41.0 in Trieste. Small-pox caused 26 deaths in Buda-Pesth and 6 in Prague; typhoid fever 17 in Hamburg, and scarlet fever 11 in Vienna; diphtheria and croup showed the largest mortality in Hamburg, Dresden, and Prague. The death-rate was equal to 29.5 in Rome and 29.1 in Venice; the deaths in Rome included 19 from small-pox and 5 from typhoid fever, and in Venice 7 deaths resulted from diarrhœal diseases and 1 from small-pox. In Cairo the death-rate was 39.3, and in Alexandria 38.6; diarrhœal diseases caused 84 deaths in Cairo and 37 in Alexandria; the deaths from typhoid fever were 14 in Cairo and 3 in Alexandria. In four of the largest American cities the recorded death-rate averaged 25.6, and ranged from 20.8 in Baltimore to 29.7 in New York. Diphtheria and croup caused 40 deaths in New York, 14 in Brooklyn, 22 in Philadelphia, and 13 in Baltimore; 11 deaths from typhoid fever occurred in Philadelphia and 5 in Baltimore.

INDIA AND THE COLONIES.

INDIA.

A new hospital, erected by the members of the Scottish Presbyterian Mission from funds collected in England and elsewhere, was opened by the Maharana of Oodeypore on January 28th.

Indian Troops in Burmah.—The *Madras Mail* states that the 16th Madras Infantry has lost severely since its departure from Vizianagram. During the four and a half months the regiment has been in Burmah, one officer has been killed, one severely wounded, and one invalided. Of the native ranks, five have been killed, thirty-five have died of disease, forty have been invalided to Rangoon, and there are nearly 150 men now sick.

MEDICAL NEWS.

Royal Colleges of Physicians and Surgeons, Edinburgh, and Faculty of Physicians and Surgeons, Glasgow.—The triple qualification examinations were held in Edinburgh in January, with the following results.

Passed first examination.

A. P. Coates, Cork; J. C. Fenwick, Durham; F. St. J. Lawrence, India; E. Cooke, Durham; J. Round, Dudley; J. Buck, Whitby; Mary Anne Smith, Bacup; Evelne Ada Cargill, London; B. A. Hamp, Wolverhampton; E. Barber, Sheffield; G. Vert, Haddington; W. G. M'Evoy, Poona; J. M. O'Dwyer, Cork; O. W. Morgan, Ceylon; D. R. Taylor, Edinburgh; E. G. Salt, Norfolk; H. M'N. Smith, Nova Scotia; J. Stobo, Bothwell; W. B. K. Richards, Bucks; D. Ross, Lochinver; T. Bland, Penrith; A. M. Ford, Glasgow; T. F. Southam, Cheshire; T. Johnson, Kilwinning; J. H. Bennett, Bombay; D. D. Blair, Edinburgh; W. Alston, Lancashire; W. A. Irwin, County Cork; J. B. Frain, Durham; P. Power, County Cork; W. M. Fox, Cork; T. Burnside Lowe, Clones; F. A. Day, Melbourne; J. Ryan, County Limerick; T. Ireland, Bonn.

Passed second examination.

F. St. J. Lawrence, India; W. R. M'Master, Omagh; M. E. Leicester, London; T. Underwood, Bury; W. G. M'Evoy, Poona; W. E. Fellowes, Birmingham; W. Tiplady, Durham; A. M. Neatby, London; G. C. Peachey, Calcutta; R. L. Caunter, Cornwall; D. Barry, County Cork; C. D. Roe, County Mayo; A. M. Williams, Staffordshire; E. Cooke, Durham; J. Adams, Melbourne; W. K. Lochhead, New South Wales; J. Brown, County Donegal; J. M'Cartney, Ayrshire; W. Marris, Leicestershire; E. A. Simeon, Delhi; D. R. Bowen, Glamorgan; W. B. Rothero, Queenstown; T. Harling, Stockton-on-Tees; J. F. Nelly, Gort, Ireland.

Passed third examination and admitted L.R.C.P.Ed., L.R.C.S.Ed., and L.F.P. and S.Glas.

W. Tiplady, Durham; W. H. Karney, Madras; J. C. Carlyle, Toronto; J. Hay, Wishaw; J. O. Pinto, Bombay; R. A. Daniel, Wexford; H. O. Hughes, Merionethshire; E. R. Kavanaugh, London; W. G. M'Evoy, India; F. Primrose, Nova Scotia; E. F. Hogan, County Clare; C. W. J. Chepmell, Paris; J. A. Kerr Wilson, North Gower; J. S. Swindell, Surbiton, near Kingston; W. F. Garrett, Penzance; V. E. Nazareth, East Indies; F. P. Mandell, Cologne; J. Darbyshire, Denbighshire; R. Collier, Coatsworth-Toronto; F. A. H. Gainford, Darlington; S. T. Browne, Madras; J. F. Netly, Gort, Ireland; F. A. Sweetnam, Cork; H. W. M'C. Hayes, Bangalore; M. M. Hannon, County Clare; W. F. Dickson, Old Cumnock; J. G. Merrison, Ontario; H. L. Gordon, Calcutta; H. C. Hughes, Carnarvonshire; A. T. Wills, Wolverhampton; A. R. French, Bandon; C. D. Stewart-Clackmannanshire; L. S. F. De R. Norman, India; J. A. Calderwood, Ayrshire; F. H. Douglas, Donaghadee; J. Reid, Tillicoultry; and E. Ryan, County Limerick.

University of London.—Preliminary Scientific (M.B.) Examination. January, 1887.

Pass-List.—Entire Examination.—First Division.—H. A. Ballance, King's College and private tuition; C. Coles, St. Bartholomew's Hospital; A. D. Davies, University College, Cardiff, and London Hospital; J. H. Dow, Owens College and private study; A. Y. Fullerton, University College, London, and University of Sydney; H. W. Gibson, University College and private study; W. J. Harris, University College; J. H. Parsons, University College, Bristol, and private study; T. M. J. Powell, St. Bartholomew's Hospital; A. G. Rider, University College and Plymouth Chemical Laboratory; A. W. Sheen, University College, Cardiff; G. S. S. Smith, Wesleyan College, Taunton, and St. Thomas's Hospital; A. C. Ta'Bois, University College and Private study; W. F. Umney, Merchant Taylors' School and St. Thomas's Hospital; A. Whitfield, King's College and School; C. D. Whittaker, B.A., private study.

Second Division.—R. Clegg, Owens College; J. B. H. Dawson, St. Mary's Hospital, King's College, and private tuition; R. G. Rowe, University College; J. G. Wilson, London Hospital and private study.

Two Subjects of the Examination.[1]—F. A. Arnold (c., p.), Hartley Institution and St. Bartholomew's and London Hospitals; A. R. Badger (c., b.), King Edward's High School, Birmingham, and St. Bartholomew's Hospital; R. T. Bakewell (c., p.), University College and private study; C. B. Braithwaite (c., p.), Guy's Hospital; E. B. Carter (c., b.), private study and tuition; W. F. Colclough (c., p.), Guy's Hospital; S. J. Daly (c., p.), St. Bartholomew's Hospital; H. O. Davies (c., b.), St. Bartholomew's Hospital; J. C. M. Given (p., b.), University College, Liverpool; B. W. N. Gowring (c., b.), St. Bartholomew's Hospital; F. O. Grant (p., b.), University College and private tuition; D. R. Green, (c., p.), University College and private study; E. Huntley (c., b.), Lewisham Park School and Guy's Hospital; S. H. Mitchell (c., p.), St. Thomas's Hospital and private study; S. H. Rentzsch (c., p.), King's College; B. G. Seton (c., p.), University College and private study; A. G. Tribe (c., p.), St. Paul's School; P. McK. C. Wilmot (c., p.), Guy's Hospital.

One Subject of the Examination.[1]—J. J. E. Biggs (c.), Proprietary School and University College, Cardiff; J. E. Briscoe (p.), private study; J. J. Brown (p.), Guy's Hospital; J. R. Buckley (p.), Owens College; W. T. Davies (b.), University College, Cardiff, and London Hospital; F. Ede (p.), University College and private tuition; H. Finley (b.), University College; J. H. Fisher (c.), St. Thomas's Hospital; R. T. Gilmour (p.), St. Mary's Hospital and Epsom College; R. C. Gully (b.), St. Bartholomew's Hospital; E. L. Gut-

[1] The subjects taken up by these candidates are indicated by initials after the name: c. = Chemistry; p. = Physics; b. = Biology.

teridge (P.), Guy's Hospital; R. James (P.), University College, Cardiff, and private study; G. P. Gerome (C.), Sutton Coldfield Grammar School and Mason College; F. Johnson (P.), St. Bartholomew's Hospital: W. S. Langworthy (P), University College; S. Nesfield (P.), Owens College and private tuition; P. Northcote (B.), St. Bartholomew's Hospital; H. T. Parker (C.), St. Bartholomew's Hospital; W. Penberthy (P.), London Hospital; A. E Reynolds (P.), St. Bartholomew's Hospital and University College; H. B. Rowbotham (P.), Mason College, Birmingham, and private study; H. Slater (B.), University College; R. Smith (B.), Owens College; C. B. P. Spencer (C.), Guy's Hospital; C. Sturge (B.), University College; T. M. Tibbetts (P.), Bourne and Mason Colleges, Birmingham; H. E. Tracey (P.), St. Bartholomew's Hospital and private tuition; T. S. Vincent (P.), Mason College, Birmingham, and private study; W. L. Wainwright (C.), St. Thomas's Hospital; C. S. Wallace (C), Haileybury College and St. Thomas's Hospital; R. H. Way (P.), University College and private tuition; L. Williams (B.), University College and private study; J. Williamson (P), St. Bartholomew's Hospital and private tuition.

MEDICAL VACANCIES.

The following vacancies are announced.

AYSGARTH UNION.—Medical officer. Salary £40 per annum, and fees. Applications by February 12th to W. E. M. Winn, Esq., Askrigg, *vid* Bedale.

BIRMINGHAM AND MIDLAND EYE HOSPITAL.—House Surgeon. Salary, £100 per annum. Board and furnished rooms.

BIRMINGHAM GENERAL HOSPITAL.—Two House-Surgeons. Applications by February 26th to Henry Fox, Esq., R.N., House-Governor.

CHELSEA HOSPITAL FOR WOMEN, Fulham Road, S.W.—Three Clinical Assistants. Applications by February 17th to the Secretary.

DONCASTER GENERAL INFIRMARY AND DISPENSARY.—House-Surgeon. Salary, £100 per annum, with board, etc. Applications by February 21st to W. Clark, Esq.

GLAMORGANSHIRE AND MONTMOUTHSHIRE INFIRMARY AND DISPENSARY, Cardiff. Ophthalmic Surgeon. Applications by March 15th to the Secretary.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Resident Clinical Assistants. Applications by February 19th to the Secretary.

LEEDS UNION.—Assistant Medical Officer. Salary £100 per annum, with board, etc. Application by February 21st, to Jno. King, Esq., Union Offices, East Parade, Leeds.

PRESTON AND COUNTY OF LANCASTEE ROYAL INFIRMARY.—Senior House-Surgeon. Salary, £100 per annum, with board, etc. Applications by February 28th to R. F. Easterby, Esq., Fishergate, Preston.

ROYAL ALBERT HOSPITAL, Devonport.—Honorary Surgeon. Applications by February 18th to the Chairman of the Selection Committee.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road, E.C.—Junior House Physician. Salary, £50 per annum, with board, etc. Applications by February 26th to the Secretary.

TUNBRIDGE WELLS GENERAL HOSPITAL.—Resident House-Surgeon and Secretary. Salary, £100 per annum, with board, etc. Applications by February 16th to the Secretary.

WEST HERTS INFIRMARY, Hemel Hempstead.—House Surgeon and Dispenser. Salary £100 per annum, with board, etc. Applications by March 2nd to the Secretary.

MEDICAL APPOINTMENTS.

ALLINGHAM, H. W., F.R.C.S., appointed Surgeon to the Great Northern Central Hospital, *vice* G. H. Makins, F.R.C.S., resigned.

ARMITAGE, J. A., B.A., M.B.C.M.Edin., appointed Joint Surgeon to the Wolverhampton Orphan Asylum.

BRODIE, F. Cardew, M.R.C.S., L.R.C.P., L.S.A., appointed House-Physician to the Middlesex Hospital.

CARTER, T. E., M.B.Lond., M.R.C.S., appointed Surgeon to the Stanford and Rutland Infirmary.

CHAMPNEYS, Francis Henry, M.A., M.B.Oxon., F.R.C.P.Lond., appointed Consulting Physician to the General Lying-in Hospital, York Road, Lambeth.

COSGRAVE, E. MacDowell, M.D., M.K.Q.C.P., appointed Physician to Heytesbury Street Industrial School, *vice* Walter Smith, M.D., F.K.Q.C.P., resigned.

HALPIN, J. H., L.R.C.S.I., L.&L.M.K.Q.C.P.I., appointed Medical Officer to the Rathdrum Union, *vice* G. H. Halpin, L.R.C.P.Edin., L.R.C.S.I., resigned.

KENNY, M. J., L.R.C.S.I., L.R.C.P.Edin., appointed Medical Officer to the Lismore Union, *vice* William Hanan, M.D., deceased.

ROE, A. L., L.K.Q.C.P.I., L.R.C.S.I., appointed House-Surgeon to the Hull and Sculcoates Dispensary, *vice* P. W. G. Canning, L.R.C.P.Ed., L.R.C.S.Ed., deceased.

SHORT, T. S., M.B., M.R.C.S., appointed Resident Medical Officer to the Jaffray Suburban Branch, Birmingham General Hospital, *vice* Mr. L. J. Bateman, resigned.

SPENCE, J. B., M.A., M.B., Assistant Physician Royal Edinburgh Asylum, appointed Medical Superintendent of the Ceylon Asylum.

WHARRY, H. G. O., M.R.C.S., L.S.A., appointed House-Surgeon to the Scarborough Hospital and Dispensary, *vice* K. Frazer, B.A., M.D., resigned.

YARROW, G. E., M.D., L.R.C.P., appointed Surgeon-Accoucheur to the City of London Lying-in Hospital, City Road, E.C., *vice* P. L. Burchell, M.B., F.R.C.S., resigned.

DENTISTS' CHARGES.—Judge Bacon decided, in a case which came before him on Wednesday, that a guinea an hour was a reasonable charge for a dentist to make.

HOSPITAL FOR INFECTIOUS DISEASES AT GLOSSOP.—Some opposition was raised, at a recent meeting of the Glossop Board of Guardians, to the erection of the proposed hospital for infectious diseases. On a vote being taken, however, there was a substantial majority in favour of the new hospital being proceeded with.

PATENT MEDICINES IN RUSSIA.—It is reported that the Russian Government has drawn up a schedule of no fewer than eight hundred proprietary pharmaceutical preparations, the importation of which into Russia has been forbidden. The number scheduled gives some idea of the magnitude of this curious industry.

PRESENTATION.—Dr. Howell Thomas has been presented by the working men of Swansea, among whom he has laboured for twenty-four years, with an address and a purse of 160 guineas. Sir H. Hussey Vivian, Bart., undertook the presentation. In acknowledging the gift, Dr. Thomas announced his intention of giving 100 guineas to the Swansea Hospital, and 60 guineas to local benevolent institutions.

MANCHESTER MEDICO-ETHICAL ASSOCIATION.—The annual meeting of this Association was held on January 28th. The report of the committee showed continued prosperity, with a steady increase of funds. The following resolution was passed: "That the Manchester Medico-Ethical Association expresses its approval of the action taken by the Apothecaries' Society of London to obtain admission to the Conjoint Examining Board for England, together with the Royal Colleges of Physicians and Surgeons of London." The following gentlemen were elected office-bearers and members of committee for the year. *President:* H. Simpson, M.D. *Vice-Presidents:* H. Ashby, M.D.; W. H. Barlow, M.D.; S. Buckley, M.D.; J. M. Pierce, M.D. *Treasurer:* D. Lloyd Roberts, M.D., F.R.S.Edin. *Secretaries:* J. Broadbent, Esq.; A. Wahltuch, M.D. *Committee:* H. A. G. Brooke, M.B.; J. C. Clarke, M.B.; F. H. Collins, M.D.; J. Hewett, Esq.; A. Emrys-Jones, M.D.; J. Foster, Esq.: H. P. Ilderton, Esq.; S. H. Owen, M.D.; G. H. Pinder, Esq.; T. C. Railton, M.D.; W. J. Sinclair, M.D.; W. Walter, M.D.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—MEDICAL SOCIETY OF LONDON. Dr. Leopold Servais, of Antwerp, will read a report on two cases of enormous Tumours of the Face, treated by Removal of both Superior Maxillæ.

TUESDAY.—PATHOLOGICAL SOCIETY OF LONDON, 8.30 P.M. Dr. Hale White: On the falling out of Teeth in Tabes Dorsalis. Mr. D'Arcy Power: Intermuscular Synovial Cysts. Dr. Hyla Greves: Endothelioma of Dura Mater. Dr. Semon, for Dr. Jacob: Syphilitic Hyperplastic Laryngitis. Dr. Hadden: Mitral Aneurysm in a Child. Mr. Shattock: Ectopia Vesicæ. Mr. Clutton: Retro-pharyngeal Abscess. Mr. Gould: Horny Growth on Penis. Mr. Godlee: Adeno-sarcoma of Tongue with Calcifying Nodule in Centre. Card Specimens.—Dr. Hadden: Perforation of Large Intestine in Enteric Fever. Mr. Fenwick: Renal Carcinoma. Dr. Mott: Myxo-fibroma compressing the Spinal Cord. Mr. Clutton: Congenital Abnormality of Lower Lip with Cleft Palate.

THURSDAY.—PARKES MUSEUM OF HYGIENE, 5 P.M. Mr. C. E. Cassal: Food Adulteration and Analysis.

HARVEIAN SOCIETY, 8.30 P.M. Mr. Sedgwick: Notes on the Collapse of Cholera. Dr. Sidney Phillips: Some Points in the Treatment of Fever. Dr. A. H. N. Lewers: The best means of Dilating the Cervix Uteri.

FRIDAY.—SOCIETY OF MEDICAL OFFICERS OF HEALTH, 7.30 P.M. The Council will present reports on subjects referred to them. Mr. C. E. Paget: A Practical Illustration of the Protective Influence of Vaccination.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTH.

KAYE-SMITH.—On February 4th, at Battle Lodge, Dane Road, St. Leonard's-on-Sea, the wife of E. Kaye-Smith, of a daughter.

MARRIAGE.

LAWSON—BURNS.—On February 8th, at the Bute Arms Hotel, Rothesay, N.B., by the Rev. A. N. Sutherland, M.A., Rothesay Free Parish Church, James Burnett Lawson, M.D., to Danieltina Sarah Campbell Lizzie, adopted daughter of Richard Burns, Esq., Almond Bank, Ballabouston, Glasgow.

DEATHS.

FOOTE.—On February 3rd, at Crofts House, Rotherham, Yorks, Harry D'Oyley Foote, M.D., M.R.C.S.E., L.M., in the 53rd year of his age. Friends will please accept this, the only intimation.

PROSSER.—On January 30th, at Bromsgrove, Roger Prosser, M.R.C.S., aged 51 years.

UNDERHILL.—On February 1st, Emily Margaretta, the beloved wife of William Lees Underhill, surgeon, of Tipton.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY.....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's—1 30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M: North-west London; Chelsea Hospital for Women.

FRIDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY.....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, M., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

QUERIES.

U. S. C. wishes to learn the names of the lines of steamers or sailing ships, if any, where the surgeon does not dine or have any of his meals in the saloon with the passengers in the usual way, but messes with the ship's officers.

ANSWERS.

DR. HADDON'S letter has been forwarded to the committee in question. The paper referred to was only received four weeks since.

W. G.—We should think not.

INCOME-TAX ABATEMENT.

SCOTIA asks what expenses in making the income-tax returns may be deducted from one's gross income. May the cost of maintaining horse, carriage, and groom be deducted?

*** "Scotia" can get the information he requires by writing to the Income-Tax Repayment Agency, 16, Artesian Road, London, W.

THE PERCUTEUR IN ALOPECIA.

M.D. LOND. asks how the percuteur is applied in alopecia. He has two cases under treatment, one alopecia areata, the other in a young man of 30, where the hair has been falling out since a severe attack of typhoid fever three years ago.

*** We have referred this letter to Dr. Mortimer Granville, who writes: I have no experience of the use of stimulating percussion of the skin, with a view to revive the activity of the hair-bulbs. I can, however, readily believe, from what I know of this method of treatment as applied to other purposes, that it may be effective in some cases of alopecia. The forms of the affection in which I should anticipate good results would be those in which the cause of the loss of hair was either lowering of the circulation in the parts, or diminution of nervous energy in the skin. In the one case blood would be drawn to the surface partly by direct excitation, and partly by vaso-motor stimulation; in the other case the nerve-state would be changed. I should use a brush of the sort Weiss supplies with my percuteurs, either of blunted wire (the finer sort) or of hog's bristles, a high speed, not less than 88 in the second, the brush being applied lightly at a right angle to the surface, and passed over the part until the skin is well reddened. Ten minutes will suffice for the application, and I should think it might with advantage be repeated every second day for a fortnight or three weeks. The treatment of such cases is quite out of my way, and to "M.D." belongs the credit of finding the remedy, if it be one; but I am quite inclined to think it may be an efficacious mode of treatment, and from what I know of the use of the percuteur in the treatment of acne, considered in relation to its power of producing factitious urticaria in certain nerve-states, the manner of its application will probably be something like that I have suggested. The percuteur is now a recognised mode of treatment in this country, in America, and in the Colonies, and my confidence in its value, in appropriate cases, has not been diminished, but rather increased, by experience, since I introduced it to the profession, now some ten years ago.

NOTES, LETTERS, ETC.

INCISION OF THE TONSILS IN ACUTE TONSILLITIS.

DR. F. R. HUMPHREYS (Haverstock Hill) writes: With regard to Dr. Maclean's communication in the JOURNAL of February 5th, I had lately, within fourteen days, six bad cases of the above disease. In each case—and they were all women—I incised both tonsils, ordering gargles of warm water, to be followed by applications of ice internally, and iced water externally.

I find the best plan is to pierce the tonsil with a narrow blade, keeping the point directed inwards, and cut inwards.

In all the cases there was great relief; in one, a nursing mother, she appeared well on the day following. Cinchona and chloride of potash were given as medicines.

DR. H. LAIRD PEARSON (Rock Ferry) writes: Allow me just a few lines to endorse Dr. Maclean's remarks, in the JOURNAL of February 5th, with regard to the benefits to be obtained from lancing the tonsil in quinsy. It was the second attack in my patient, the first one having ended in suppuration. In this case the incisions—two in number—were made with a view to evacuating pus, suspected to be present. After the operation the tonsil was left in such a painful condition, disabling the patient from swallowing even liquids, that I feared I had done more harm than good; but the relief following the application of a 4 per cent. solution of cocaine was so sudden and permanent, that the patient refused to believe that the turning-point was brought about by the knife, and not the "painting." In my future cases of tonsillitis the cocaine application will be the preliminary step to an early resort to the knife.

DR. W. WYLIE (Skipton) writes: The plan I now adopt in quinsy is to make free incisions with a curved bistoury into the gland from above, downwards, and I have invariably given my patients relief. Only a short time ago a gentleman expressed himself so much better after this plan of treatment, having suffered on two previous occasions from this complaint, that he told me he should have the knife used early, in case he ever had another attack; and I feel quite sure the operation shortened his misery very considerably.

THE JACOB TESTIMONIAL.

AN OLD DISPENSARY DOCTOR writes: The Jacob testimonial has so far been very successful in attracting the support of large numbers, but a large number of the subscribers are, I observe, men from the metropolis. The class from whom evidence of gratitude is incumbent have not yet come forward in their numbers. I fear that false shame prevents many from giving such sums as five and ten shillings, and yet it is the men from whom more can hardly be expected who hold back, though they are the very men who have profited most from the

labour of brain, tongue, and pen, exerted in their behalf by Dr. Jacob. If every man now at present receiving their vaccination fees of 2s. per case, instead of 1s.—and this boon is very much due to Dr. Jacob—would give even the smaller subscription, it would make a handsome sum, and these offerings of grateful hearts would be more acceptable to the receiver than larger sums coming from them by a fear of being thought shabby. I hope, therefore, to see soon, as an appendix to the list, a long list of 5s. subscribers.

ROTUNDA HOSPITAL.

A STUDENT writes: As so many medical students from London go to Dublin to attend the practice at the Rotunda, it may be well for them to know exactly what they are to expect. A fourth year's student, who has just obtained his diploma, goes off to Dublin to complete his obstetric studies before going into practice; he thinks that there he will see more cases, and will be allowed to do for himself those operations in midwifery which were forbidden to him at home. If a student goes to Dublin thinking this, he will be woefully disappointed; both the intern and extern midwifery department are conducted under the most strict supervision, and even less latitude is granted to the student at the Rotunda, than to one at any of the London hospitals.

Each student has his days on duty, when he is expected to attend any cases occurring in the wards, or in houses in the surrounding neighbourhood; unless the case be perfectly normal, he is obliged to send for assistance; if it be in the wards, one of the assistant masters is called, who, if any operation, however slight, is indicated, sends for the master, and only operates in his absence; if the case occur outside, the clinical clerk is sent for, who, in like manner, has to send for the assistant master, if any interference is required. This is the invariable practice, and a student from London, however well qualified, who has held various appointments at home, may attend cases for six months from the Rotunda, and never once have the chance of even putting on the forceps. Both the intern and extern midwifery departments are very large, and opportunity is afforded of seeing a great deal; but of practising and perfecting, nothing. The authorities say this system is perfectly just, and no one will dispute their right to act as they think best, but the practice is quite contrary to the expectations of students, and it is a hope for actual practice in midwifery operations which induces most men to go to Dublin. A careful student would learn more midwifery at one of the London hospitals than he would in a similar time at the Rotunda, and it would cost him less. At 9.30 in the morning the master (Dr. A. V. Macan) goes his round: first into the labour wards, and here valuable hints may be gathered from him as to palpation of the abdomen of the pregnant woman, as an aid to diagnosis of the position of the child; palpation of the abdomen after delivery is also insisted upon, and the principles and practice of aseptic midwifery are daily discussed. About 11.30 the master reaches the gynæcological wards, and then passes on to the surgery, where the gynæcological cases are examined each on her back, in the German fashion, with the legs raised on suitable props; the examinations are made first with one hand, then with the other, and the superiority of this method over the side position is apparent to those who have tried both.

If a student be lucky he will be allowed to examine one, or, at most, two cases during the morning. Later on in the morning the extern gynæcological cases are seen by the assistant masters, Dr. Fleming and Dr. Alfred Smith, and here the student has a good opportunity of examining and making himself familiar with every class of case; this is undoubtedly one of the most valuable departments of the hospital. Three days a week, in the afternoon, a special class in gynæcology and gynæcological operations, where students operate themselves, is held by Dr. Fleming; this is a most admirable institution. The conclusion which is forced upon one is the great superiority of the gynæcological over the midwifery department, as a means of teaching and training future medical practitioners.

LADY PHARMACISTS IN THE STATES.

THE Court of Appeals at Louisville, United States of America, has, it is stated, affirmed the right of a woman to dispense medicines after passing through the ordinary courses required. The case was that of Miss Bessie White *v.* the State Board of Pharmacy. Miss White was the first woman who ever applied in Kentucky for a certificate to dispense medicines. The State Board refused to issue a certificate, although she had paid a fee, exhibited a diploma, and offered to stand any examination the board might make. She sued out of a writ of mandamus before a Louisville court, to compel the Board to issue the certificate, and the writ was granted. The higher court now affirms this judgment. The right has been admitted in this country without dispute.

YELLOW FEVER.

DR. C. R. ILLINGWORTH writes: A study of the symptoms and morbid anatomy of yellow fever point, in my opinion, to an origin similar (except in the organs attacked) to that of scarlet fever, measles, diphtheria, etc., namely, the growth and development of micro-organisms in the tissues and blood. In all there is the production, sooner or later, of profound spanæmia, coming on rapidly in those of malignant or hæmorrhagic type. The line of treatment, therefore, for the prevention of the disease would seem, from this view, to be germicidal. In the first stage of the disease itself I would also suggest similar measures, followed, as the urgent symptoms subside, by hæmatinic remedies, for the restoration of that colouring matter upon which all these low forms of life seem to feed.

My experience in epidemics of scarlet fever, measles, and whooping-cough, has satisfied me that the biniodide of mercury will answer every purpose as a germicide in the diseases due to micro-organisms generally. I prescribe it dissolved in excess of potassic iodide. In yellow fever I should say it would be best given with carbolic acid in minim doses in an effervescing mixture. Thus: ℞ Potass. bicarb. 3ii; acid. carbolic. gr. vi-viii; sol. hydrarg. bichlor. ℥ss-℥vi; potass. iodid. gr. x-xv; ether. chlor. ℥j-℥ii; aquam ad. ℥vi. Et ℞ Pulv. acid. citric gr. xx; mitte vi tales. Signetur: A sixth part to be taken, with one powder added, every two, three, or four hours, whilst effervescing.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Arnison, Newcastle-on-Tyne; Mr. W. R. Buckell (Cheltenham); Mr. J. Campbell, Coundon; Dr. W. F. Grant, London; Dr. W. Jelly, London; The Secretary of the Royal Medical and Chirurgical Society, London; Mr. H. Fox, Birmingham; Dr. W. Wylie, Skipton; Dr. H. L. Pearson, Rock Ferry; Dr. Sutherland, London; Dr. P. C. Smith, Motherwell, N.B.; Dr. J. Braithwaite, Leeds; Mr. J. T. Jones, London; Messrs. Burroughs, Wellcome, and Co., London; The Secretary of the Parkes Museum, London; Mr. A. D. Davidson Swansea; Mr. J. D. McCaw, Portglenone; Dr. Ferrier, London; Dr. Gubb, London; Dr. Cullimore, London; Messrs. Grace, Bristol; X. Y. Z.; Dr. V. Idelson, Berne; Mr. C. F. Cuthbert, Gloucester; Dr. F. R. Humphreys, London; Messrs. J. and A. Churchill, London; Dr. J. Niven, Oldham; Dr. A. T. Myers, London; Dr. H. Jones, London; Dr. V. Poulain, London; Dr. T. S. Shore, London; Surgeon-Major G. S. Hall, Allahabad; Surgeon-General Gordon, London; Brigade-Surgeon R. Waters, Allahabad; Dr. W. W. Kelly, Taunton; Mr. S. W. North, York; Professor D. J. Hamilton, Aberdeen; A Member; Dr. Cosgrave, Dublin; Dr. Playfair, London; Mrs. Anne Whyte, London; Mr. Lawson Tait, Birmingham; Dr. P. Boulton, London; Dr. Norman Kerr, London; Dr. Spence, Edinburgh; Mr. R. L. Jameson, Shangkin; Dr. S. W. Smith, Pershore; Mr. H. G. Wharry, Scarborough; Dr. J. Hamilton, Aberdeen; Dr. N. Whitmarsh, Hounslow; Mr. E. G. Dutton, Plystack; Dr. W. Downie, Glasgow; Dr. F. P. Atkinson, Surbiton; Mr. A. de C. Scanlan, Hong Kong; Dr. J. Magill, London; Mr. F. A. Hallsworth, Atherstone; Dr. A. J. Sinclair, Edinburgh; Dr. Martin, London; Dr. J. Ryan, Rochdale; Mr. R. W. Carter, Weymouth; Dr. H. C. Taylor, Davos Platz; Dr. Duke, Dublin; Mr. Walsham, London; Dr. Sykes, Mexborough; Dr. Ward Cousins, Portsmouth; The Secretary of the Medical Faculty, University of Aberdeen; Dr. W. Dickson, Upper Norwood; Dr. Patten, Ealing; Mr. W. Eassie, London; Mr. G. L. Rich, London; Dr. Bargay, Lyme Regis; Dr. J. C. Mackenzie, Morpeth; Professor Annandale, Edinburgh; Dr. Brailey, London; Mr. Southam, Manchester; Dr. E. M. Crookshank, London; Dr. M. Granville, London; Dr. Styrap, Shrewsbury; The Secretary of the Food Exhibition, Amsterdam; Dr. J. Lucas, Ramsgate; Dr. J. W. Moore, Dublin; Our Paris Correspondent; Mr. A. Craigmile, Birkenhead; Mr. J. Davies, Berriew; Dr. Goodhart, London; Mr. A. Sheild, London; Dr. S. Garlick, Oldham; Dr. Rees, London; Mr. J. Frain, Newcastle; The Secretary of the Association of Members of the Royal College of Surgeons of London; Mr. W. F. Haslam, Birmingham; Dr. Murrell, London; Professor Ogston, Aberdeen; Mr. H. Scott, London; Mr. Barrett, Hinckley; The Secretary of the University of London; Mr. D. Macrae, Dingwall; Mr. J. Keddie, Manchester; Dr. R. Barnes, London; Mr. S. Benton, London; Mr. Wood, London; Mr. O. R. Travers, St. Leonard's-on-Sea; Mr. Brodie, London; Mr. J. Brown, Bacup; Dr. Alderson, London; Dr. Tatham, Salford; Our Newcastle Correspondent; Mr. R. Carter, Stamford; Mr. R. Clement Lucas, London; Dr. Markham Skerritt, Bristol; Dr. L. B. Richardson, Torquay; Dr. Beatson, Glasgow; Dr. Macpherson, London; Dr. S. Martin, London; Dr. Cosgrave, Bolton; Mr. J. F. Bridgwood, Stafford; Mr. C. Roberts, London; Mr. E. J. Acworth, Ealing; Dr. Curran, London; Mr. H. Horton, Bromyard; Mr. G. F. Masterman, Stourport; Dr. Willoughby, London; Mr. Simeon Snell, Sheffield; Mr. A. Rae, Stonehouse; Mr. A. H. Baines, Birkdale; The Honorary Secretary of the Society of Medical Officers of Health, London, etc.

BOOKS, ETC., RECEIVED.

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THE HUNTERIAN ORATION
ON
SURGERY IN ITS RELATION TO SCIENCE.

Delivered at the Royal College of Surgeons of England, Monday, February 14th, 1887.

By WILLIAM S. SAVORY, F.R.S.,
President of the Royal College of Surgeons of England; Surgeon to St. Bartholomew's Hospital.

No word of defence can be needful for the form in which English surgeons have chosen to celebrate the memory of Hunter; but an apology may be offered by one who now attemps the task of speaking of him. The duty of reviewing in this place the life and work of Hunter has been so often and so ably performed, that it seems to me I can do little else than incur failure by any effort to tread in such familiar footsteps. But although tempted, as I may have been, by this and other reasons, to turn aside into some less known path, yet a natural sense of loyalty to the great surgeon and of responsibility to the trust I have accepted has constrained me, and so Hunter in his work must be again the subject of what is called with oppressive grandeur, the Hunterian Oration.

Surgeons with one voice have proclaimed the supremacy of Hunter above all who have ever studied surgery. Students of science have acknowledged him to be among the chief of those who have in any age advanced human knowledge. Yet, although his claims have been often examined, and many students and surgeons have been engaged in the task, his greatest title to the high place he holds is not always recognised, perhaps not even always understood. May I stand excused then for asking once more and attempting to answer the question—What has Hunter done?

It has been well said that when we attempt to estimate the achievements of the foremost men of past ages, too often we see them only in eclipse. A large part—it may be much the larger part—of what they did is too often hidden from us. The proportion of sudden, or what may now appear as sudden discoveries, may be seen though from afar; they may still strike us even from a distance. But we can now no longer adequately appreciate the conditions under which the pioneers of knowledge laboured. In the light of the present day it is difficult to realise the darkness of past times, or to measure fairly the part they played in dispelling it. We may diligently trace the course they took, and become familiar with every step of it, and yet fail to understand that they not only trod, but actually made the way.

But was Hunter a great discoverer—I mean in the ordinary sense of the word? For we speak of discoveries in science, sometimes forgetting that all real progress involves discovery. What are the particular discoveries then or improvements in the art of surgery, which are now recalled by the mention of his name? We quote at once, as an instance, the operation for aneurysm, known to all as the Hunterian, and then—we pause. What else shall be declared upon which his fame particularly rests?

Any one, indeed, who has but a passing acquaintance with the works of Hunter can speedily furnish a long list of important papers in which many new and valuable facts are revealed, and knowledge largely increased, not only in anatomy and physiology, but in pathology and surgery. More than one or two of these would alone suffice to establish the author's claim to ability and industry of no common order; but in none of them can be pointed out, I think, any particular discovery in surgery from the loss of which Hunter's fame as a surgeon would materially suffer.

But let us go farther. As a surgeon, was Hunter pre-eminently skilful in practice? Was he, beyond all other surgeons of his time, sagacious in diagnosis, or successful in treatment? Was he even dexterous in operation? I do not know where to find the evidence upon which these questions can be answered in the affirmative; indeed, on the latter point there is evidence to the contrary.

Or, once more, was he a learned man in his profession, as the phrase is commonly understood? Was he, as we say, a "well-read" man? Was he fully informed of the labours of others? I fear it must be admitted that the testimony in favour of this belief is very slender too.

The introduction of the operation for aneurysm which bears his name was indeed a great step onward. In taking it he gave ample proof of rare foresight, which could proceed only from sound apprehension of some important facts in pathology and surgery, and a masterly grasp of some of the leading truths of physiology. Yet we bear witness to Hunter's fame when we acknowledge that even this grand discovery, among the chief in surgery, adds comparatively little to it.

What more, then, did Hunter achieve? What was he, therefore? Wherein consists his greatness? He was, and is, beyond and above all surgeons, a philosopher in surgery. His idea of the subject of his thoughts was far more adequate than that of other men. He was supreme in the scope and method of his work. He understood much better than those around him how to engage in the interpretation of Nature; he knew best how to approach and to disclose Truth. For he not only understood that the problems which lay immediately before him were, of all, the most complex and difficult to solve, but he could see also that they were not isolated, but dependent ones. He saw in the necessary relation in which they stood to others the only means by which they could be worked out; and on this understanding he resolved to investigate the questions he desired to answer.

But consider for a moment what, with the light in which Hunter then stood, that resolution involved. Remember how often, in more recent times, have able men doubted the doctrine, hesitated to accept the idea of that intimate relationship between the various forms of life—of their continuity, of that harmony of plan, of that unity of design, which Hunter not only clearly conceived, but so accepted as a vital truth that he made it the foundation of all his labours; and, after all, the only sure test of genuine and thorough belief is the work which comes out of it. This was the principle on which Hunter never wavered; it was the star that guided him—without haste, without rest—through all the work of his life.

But observe, I pray you, further, how Hunter proceeded in his work, for this is eminently characteristic of the man. He is not fond of starting propositions, which are then supported by arguments and made plain by illustrations; but his practice is to demonstrate in their order, without comment or dissertation, the facts which reveal knowledge. His habit appears to be, not to say to us, "I am convinced of this, and I will tell you why there can be no doubt about it," but rather to place the premisses before us—sometimes, it may be, with indifference, certainly without regard to effect, or any attempt at direction. His purpose appears to have been uniformly not to support a conclusion, but rather to make way for one. This, I think, is inscribed on the proudest monument of his genius—his Museum. May I ask you, only for a few moments, to look once more at it?

The passion of Hunter for collecting is well known; it has often been the subject of comment. His Museum included, not only, to use the words of Professor Flower, "illustrations of life in all its aspects, in health and in disease; specimens of botany, zoology, palæontology, anatomy, physiology, and every branch of pathology; preparations made according to all the methods then known; stuffed birds, mammals and reptiles, fossils, dried shells, corals, insects, and plants; bones and articulated skeletons; injected, dried and varnished vascular preparations; dried preparations of hollow viscera; mercurial injections, dried and in spirit; vermilion injections; dissected preparations in spirit of both vegetable and animal structures, natural and morbid; undissected animals in spirit, showing external form or waiting leisure for examination; calculi and various animal concretions; even a collection of microscopic objects, but it extended "to minerals, coins, pictures, ancient coats of mail, weapons of various dates and nations, and other so-called 'articles of vertu.'" Yet I do not doubt that, notwithstanding the apparently miscellaneous character of a great part of his Museum, this vast collection was very far from being what could be called an empirical one. Save in material, it had nothing in common, as some would suggest, with an old curiosity shop. For myself, I believe that even the objects found there, which appear most foreign to the subject of his thoughts and work, were not introduced from mere idle fancy; but for the purpose, either at once clearly or dimly seen, or, if otherwise, at least conceived possible, of throwing light, in some way, upon the great questions of which his mind was full. I submit that this view is worthier than the prevailing one of the character of Hunter; and it is fortified by evidence of the strongest kind. Look at that section of his museum which, as Professor Flower truly says, is most characteristic of the man—that which is called, and I venture still to think, well called, the physiological. Had it been somewhat more fragmentary than it was when he left it, had not a fuller light been thrown on the truth it illustrates by the masterly labours of Von Baer, the brilliant exposition of Milne Edwards, and the thoughtful volumes of Carpenter, how much longer would the great

idea, that governs this unrivalled series, have remained concealed? Nay, even still, how often in the comments made on it, is this idea unheeded or overlooked? It is a magnificent collection of comparative anatomy, or, as we may speak now, of morphology. It sets forth the variations in form which the different organs undergo in different species, or in the same species under different conditions. But, above all, it introduces us, in the happiest way, to the study of comparative physiology. It demonstrates the great law of progress from the general to the special; the law of evolution from the simple to the complex; the principle of elaboration, and advancement of function by division of labour. Or, again, as Professor Flower admirably puts it—and need I apologise for quoting him here in reference to the Museum?—it throws "light upon one of the great biological problems, classification; which, when rightly interpreted, means nothing more or less than a statement of the order in which living beings have been evolved from one another." I know not, indeed, whether Hunter ever formulated this idea. He has not laid down the law in explicit terms. I can find no distinct expression of it in any sentence he has written which has reached us. But, then, hasty generalisation was no habit of his mind. I do not doubt that, in some large degree, he grasped it; and had he lived on, as the truth became established, he would have made it plain to all. When his labour ceased, he was working out the great idea. But by such glimpses as we thus obtain of the character of his mind and the method of his inquiry; of the way of his genius to begin the search for the truths he sought at the furthest outposts, and from thence, so to speak, to work inward and upward—I cannot regard the possession of any facts or illustrations, which he was enabled to collect, but had not time to place, as wanton or purposeless, or even merely curious. To me, they are wonderful; but withal most suggestive, that the great mind of Hunter was not only far in advance of his own age, but is hardly overtaken by this.

The same method of work is plain in Hunter's labours in surgery. He was ever searching for principles, but strove to reach them only through facts. Facts always first; but never facts only. From facts to principles. He understood that all progress mainly depends on the power of grouping and uniting for some new purpose, facts that have been discovered independently, and that are daily being revealed, yet with little or no reference to the principles they are found to support.

And here, again, after a careful examination of Hunter's work in surgery, it is necessary to pause and review it in relation to the knowledge of his time. Then I think we are impressed, not so much by the actual advance he made in the art, as by the degree in which, through the character of his work, he raised surgery to the level of a science. I would almost venture to say that he effected more by the nature of the questions which he set than by the answers which he worked out. Surely his conception of surgery, of its possibilities in the future, of its relation to the sciences, of the plan—the only sure one—upon which it could be advanced, went very far beyond that of any surgeon before him—shall I say has gone far beyond that of most surgeons after him? But if he could thus estimate the task before him, what shall we say or think of Hunter as we watch him, with unexampled diligence and patience, pondering over the preface? Never turning a page of the great book of Nature, which he had set himself to read, until each sentence before him had been duly weighed, and all that he could learn from it had been secured. But this was not enough. He not only saw that surgery, to be soundly established, must rest upon pathology, but that the language of pathology required an interpreter: that its problems could be solved only by the light of physiology. Where in any work before his—nay, where in any since—shall we find such a union of physiology and surgery? In the pages of Hunter, but there I think only, are they found, as they should be, literally woven into one. We study his chapters on the Blood, on Inflammation, and on Gunshot Wounds, and acknowledge that nowhere else are the principles of pathology so supported and illustrated by the facts and truths of physiology. Yes; as no one before him had given proof of so clear and ample a conception of the relation of surgery to natural science, so in no one since has it borne such fruit. Hunter not only saw more fully than anyone who preceded him the way in which the art of surgery, through a knowledge of physiology, could be advanced, but he possessed the happy power of working to far better purpose upon this understanding than any of his successors. Nay, more. The same power of mind which gave him a larger grasp of surgery, raised him to a loftier view of the science on which it is founded. He knew better than other men in what direction to look, and when he turned his eyes thither he could see farther.

So now, as we stand upon higher ground on this side of it, we can discern, I think, the idea which pervaded Hunter's work. He saw that surgery, in his time, was but a rude empirical art consisting of little else than a knowledge of many facts which stood in no visible relation to each other, and of many more opinions which, for the most part, had no relation, or but a very distant one, to any facts whatever. That surgery should be raised from a collection of such creeds to the rank of a science; but this could be only by founding its practice upon sound principles. The discovery of some at least of these principles was Hunter's final aim. But these principles could not be reached by guessing; they could be approached only through the orderly investigation of facts. But then an explanation of these facts themselves could be only through the truths of physiology. The signs of disease could be understood only by him who had studied the laws of life and health. An intelligent interpretation of the one could be only in proportion to a previous knowledge of the other. But the problems of life and health are presented to us in man in their most complex form—in a form so difficult, that even Hunter could not solve it. They must be reduced to simpler terms through a study of the lower forms of life. Thus, with the ultimate aim of relieving human suffering, Hunter studied the phenomena of motion in plants. Nay, he went farther—to crystals and other forms of inorganic matter—and he says: "The better to understand animal matter, it is necessary to understand the properties of common matter, in order to see how far these properties are introduced into the vegetable and animal operations." Note the characteristic thought at the end of the sentence. He does not start with a denial or an assumption, but he is anxious to "see how far."

If it must be said that in his attempt to grapple with the crucial problem of life Hunter failed, it must be acknowledged that he failed only in the task where none have hitherto succeeded. And the weakness be exhibits here appears chiefly in the fact that he encountered this, the greatest of all questions before him, not always according to his wont, by careful, patient, and impartial investigation of the facts which lead up to it. But it must be confessed that the dominant idea of a living or vital principle was too ready to do duty for causes that were to him then, as they are to us now, obscure. Yet, even here, where Hunter is tried by the severest of all tests, one cannot but observe in what favourable contrast he stands to others who have attempted to solve the problem; how determined he is, for instance, to depend for the most part on experiment, and how comparatively trivial has been the advance in actual knowledge of the subject since his time. Recently we have learnt, indeed, to recognise more fully the play in the living body of the common forces or forms of force of nature; and hence we have been led to suppose that the forces peculiarly vital may hold the same relation to them as they do to each other; that all the distinctive phenomena of vital action may depend on the transformation of force with which elsewhere we have become in effect more or less familiar. But beyond this attempt to see, as Hunter put it, how far the common forces of nature are concerned in the phenomena of life, and the reasonable conjecture that has hence arisen of the relation of the vital within us, and the forces around us, how much farther have we gone? Yes; Hunter stood before the crowning mystery of life, and could not raise the veil. But, then, to whom amongst the sons of men has it been yet given to draw it aside? Let the darkness which, after another century of thought and work, still enshrouds the subject be the comment on Hunter's reflections on the nature of life.

Now perhaps the question may be worth asking, How far is it practicable, in the present day, to turn to good account the priceless legacy which Hunter has left us in the record of the plan on which he studied surgery? How far is it possible to follow now, at however great a distance, the example which he set? Or to put it thus. Supposing Hunter to have lived in our day, could the range of his work have been still as ample? How much of what he did depended, for its scope, on himself; how much on the scanty state of knowledge of his time? If Hunter lived amongst us now, his grasp of natural science and of surgery would, of course, be very different from what it was in the last century. It is common to remark that knowledge in this, as in other directions, has increased so largely that the relation in which any man can stand to the whole of it must be very different now from what it was a hundred years ago.

As knowledge advances, and the sum of it accumulates, the share which any one man can appropriate must of necessity gradually grow less, and become a smaller fraction of the whole. There can be no help for this or remedy, save in a corresponding advance in the development of the human mind. What reflection is more familiar to us than that on the progress of knowledge? But is the power of apprehending it greater now than it was in the days of Plato or Aristotle? This must mean that, as the world goes on, the attainments of even the foremost in intellectual power must become more partial. Who now would dare to talk of taking all knowledge for

his province? It involves the fact of greater individual incompleteness. In the old days, the best men could be more on a level with the knowledge of their time. Thence every year onward places even these farther below it, and the great law of division of labour prevails. Yet for this there is a gracious law of compensation. For while, on the one hand, there is now so much more to be seen, on the other, the master minds of previous ages have made it much easier for us to see. For by the establishment of principles, the outcome of their labours, we are raised, as it were, upon the shoulders of our ancestors, and the horizon of our vision is more comprehensive than theirs. For as facts accumulate and principles become moulded out of them, not only does the apprehension of these principles enable us, except for special purposes, to dispense with many facts, but such expansions of knowledge have a value far beyond this. Principles are the means by which important facts are fixed and registered. They are means by which our knowledge of the facts they embrace are secured and made available for the future. Disconnected, isolated facts—facts which are not orderly arranged and assimilated into principles, are in constant danger of dying out. Very grievously, I imagine, has the practice of medicine and surgery suffered from this loss. It is painful to think of the multitude of facts which must have been known to the older physicians and surgeons that either have been, or are being, from time to time, mislaid by us. Many of these, no doubt, in the course of knowledge, have become worthless, being superseded by others, but many too had probably a value that now we can neither appreciate nor understand.

Let us look at this matter more closely in its relation to surgery. What place should physiology, for instance, occupy in the study of surgery? I am not speaking now of physiology as a chief instrument of education (a very different matter), but I ask what share it should receive of the time and attention of the student of surgery? Some knowledge of physiology is essential to the surgeon. This statement, I suppose, will be generally accepted. At all events, those who may think otherwise will hardly care to say so in good company. But then how much of physiology is needful for the surgeon? What parts of it may safely be left alone? I would answer shortly, that the principles of physiology should be thoroughly understood by the surgeon, and with these, perhaps, what may be called the leading facts.

For instance; with reference to the circulation, it seems to me that every surgeon should understand the function and mode of action of the heart, arteries, veins, and capillaries; but I do not think that every surgeon need be able throughout his life to state the facts and observations upon which the conclusions are based. I think he should understand the meaning of the capillary circulation and its relation to the other parts of the circulatory system, and the conditions by which the pressure of the blood is regulated; but I should not think it necessary for him to be able always to follow the impressive series of facts through the vegetable and animal kingdom upon which these conclusions are founded. Thus he takes advantage of great principles which have been established on a multitude of facts; and, by intelligent study of a few weeks, he may be spared many months of what might, perchance, prove to him tedious detail.

So with respiration. He should understand, I think, not only the mechanism of the process in man, but the principle on which a respiratory organ is constructed; which are the essential and which the accessory parts. But he need not be called upon to remember always the various forms of the respiratory apparatus in the animal kingdom.

So with digestion. He should, I think, understand what is known of the function of different portions of the alimentary canal, and of the organs accessory to it; but he need not be able to recognise at a glance through the microscope a particular section of every part of it.

Now assuming, as we have done, that some knowledge of physiology is necessary to the surgeon in ordinary, have his labours in this science, if properly directed, been extended, do you imagine, by its advance? I should say, on the contrary, that they have not only been reduced and shorn of many difficulties, but that, if only his studies be conducted with moderate judgment, he can now acquire much more than formerly upon far easier terms.

If any doubt exists in the mind of any one of what has thus come of the enunciation of principles, or of what I would call leading facts in physiology, let him look over the history of our knowledge of the great subject of development. Of what a mass of hard, dry, almost unintelligible statements it formerly consisted. Now, I do not mean to say that our present knowledge of this subject is free from all intricacy; but as much that was mysterious and doubtful has become clear and plain, I appeal to all who have studied it whether the task has not only been made far more agreeable and profitable, but whether it is not now easier to get it all "up," as the phrase is, in a shorter period of time?

And farther, this applies not only to the surgeon properly so-called, not alone to one who studies physiology only as a means to an end, but it applies also to those who would study physiology, as Hunter did, with the pure view of its advance. That which occupied Hunter years to unravel may now be gathered up in a few days, and from the point so readily reached, the work may still be carried on. The field of labour, the ground which has to be upturned is, happily, now no longer the same; but what change is called for in the method of work? what improvement can be suggested of the plan which Hunter pursued?

Now, while for the scientific surgeon a knowledge of the principles and leading facts of physiology will suffice, for the practice of surgery a knowledge is required not only of the principles of surgery, but of as many facts as possible and of detail of every kind. But, although in the practice of surgery, acquaintance with every fact and familiarity with every detail is of importance, inasmuch as it may be useful in some degree in promoting recovery or alleviating distress, yet in surgery as in physiology and other sciences, and for the same reason, a knowledge of principles must be always paramount, and it is only by their discovery and establishment that its advance will be secured.

Principles are in the practice of surgery what grammar is to language. Men may talk without grammar, speak even good English without knowledge of grammar, and men may practice surgery with little or no knowledge of its principles, just as a mariner may sail in familiar waters without compass or quadrant. But what if strange difficulties should arise?—and is it unusual in surgery to encounter them? What when we pass, as often we are driven, from the well-worn track of every-day experience!

Surely, the great lesson which Hunter taught and teaches, the example he set in the study of surgery was never more needful than it is now, when every year the strain in this direction becomes more urgent. I think, from the time of Hunter to the present, we can trace his influence upon the scientific study of surgery through a long line of distinguished men; but the improvement of surgery as an art is not altogether favourable to the progress of surgery as a science. For, as the art of surgery advances, and skilful management of detail involves more and more of every surgeon's care and time, the study of principles is in danger of being neglected. There may be less of science because there is more of art. And then the art of surgery is—apparently, at least—the more immediately important. Its application to practice is more obvious and, to the general view, more useful. Above all, it leads to an end by a shorter path and easier steps. To study surgery as a science, and to master its principles, makes a far larger demand on the intellect, and involves higher and rarer qualities than to acquire technical skill in the form, not only of mere manual dexterity, but also in that of familiarity with routine. In a word, the knowledge of the art of surgery means far less expenditure of that which most men are most loth to yield than a study of the science, and secures always a more immediate and usually, in one sense, a more substantial return. Hence, it is popular, and is likely to become still more so. This may be, from a certain point of view—which is not the finest—of temporary advantage to particular surgeons, but, in the highest sense, it is bad for surgery.

Moreover, the truth is, that science is never able to accomplish much when held in bondage by the immediate wants of life. Its investigations are successful only when they are pursued with indifference to the uses to which they may be applied.

This suggests, then, a question for the future, the answer to which seems to be hardly an encouraging one. As in each successive year facts and details in every direction—all of more or less immediate importance in the practice of surgery—accumulate, less and less time and attention are likely to be spared for the study and apprehension of its principles, to say nothing of the neglect of the sciences upon which these principles are founded. Is not surgery itself, then, as a science, it may be asked once more, in danger from the extension of surgery as an art? I can imagine there are some who will admit that this is so with very sinister complacency. But what would Hunter have said to it? And, unfortunately, in the present tendency of affairs, what he does say and teach is likely to become unheeded, for it can hardly be expected that the study of his works will survive the decline of scientific education.

The law of division of labour is oftentimes appealed to in this matter, but I venture to think this is not, or at least ought not to be, a case in point. It is often said that as surgery advances, and the art grows more extensive, it becomes more impracticable for any one to entertain the whole of it. Thus then, first of all, the study of sur-

gery as a science must be set aside by practical men, and then the art must in turn be broken up, the several portions of it being assigned to different practitioners. Now with regard to what is called specialism, let me say at once that I have no word to utter in disparagement of that form of it which consists in a man, first of all, studying and duly qualifying himself in the principles and practice of surgery as a whole, and then, at length, devoting his attention more especially to the cultivation of some particular department of it. This is not the form of specialism against which I would protest. In my humble opinion, it is in no way an unworthy one, and, if it were, it is by no means frequent. It is no illustration of the law of division of labour, as commonly understood, for excellence is not here obtained solely by exclusiveness. But the kind of specialism which should be denounced, and which it is to be feared is not very rare, is that which consists in the practice of some particular portion of surgery without adequate attainment in, or continued study of, surgery as a whole. This is a form of exclusiveness detrimental, I think, to the progress of surgery, and, therefore, to our profession, both from a scientific and social point of view, and to the public. This I take to be a false application of the law of division of labour, which in manufacture and in many branches of skilled labour is so advantageous, and even inevitable, for ease, rapidity, and cheapness of production; and by which every day human hands are being superseded by machinery. The law of division of labour is, indeed, generally recognised and very useful here, but it is not known, and has no place, in the noblest science or in the highest art.

While, then, we contemplate the genius of Hunter in his works, he has left us an example which is not altogether out of our reach, in his conception of the subject, and his idea of the plan of studying it. His view of surgery was more comprehensive, far worthier than that of others. Had he lived with us, would his views, do you suppose, have become narrower, would they have been less remote from specialism? Is it now no longer practicable to study surgery as Hunter studied it?

Aye; but to study surgery as Hunter studied it means more than this. For he was great, not only in his understanding, in his apprehension of the nature of the task which lay before him, or in his appreciation of the difficulties of research, but he was great in the spirit with which he encountered them. His patience in ascertaining facts, in investigating questions of every kind, seems to have been well-nigh inexhaustible. It was certainly no habit of his mind to take anything for granted, or, when he could help it, to accept any statement at second-hand. And this was the more remarkable in a man whose mind was ever on the alert for the larger truths beyond to which facts are but the stepping stones. For the titles of his various papers very often convey no adequate notion of their contents. He writes on some fact in natural history which is carefully and accurately described. But very soon it is used in illustration of some principle which is forthwith expounded, or in evidence of some original view which is then set forth, or in suggestion of some further research. Thus the fact, of which only the title speaks, becomes the text of a very valuable discourse.

Yet Hunter has also remarkable in this, that the ideas which constantly occupied his mind and on which he was always at work still left him with the keenest eye for every novelty which his labours incidentally disclosed, although it lay altogether outside the current of his thoughts. Thus, in addition to the progress he made in the main subject of his labours he was always accumulating a multitude of what, for the time being, were isolated facts. In this way he must have added largely to his wealth of knowledge.

If there is any point clear in the character of Hunter's work it is that it was real, genuine, thorough. It may be said, indeed, that this must be true of all good work; but not, I think, in the degree in which it is obvious in his. He is never content with a cursory glance or a superficial view. Even when questions arise in the course of some inquiry which, so far as that end is concerned, may be lightly disposed of, Hunter almost invariably dwells on them, sometimes at such length and so exclusively, as to suggest that he has forgotten the purpose on which he set out. But it is evident that he could not bear to go on his way passing by so much that was undone. This gives a singular character to many of his papers. Much of the apparent want of skill in arrangement and exposition, and the seemingly purposeless way in which oftentimes statements of facts are scattered through his writings, is, I think, due to embarrassment from the riches he had gathered.

And the singleness of purpose with which he worked is made evident, not only in the actual result of his labours, for no human being with divided interests could rival such achievements; but in the record, as we have it, of the life he led. He gave not only the whole of his time—yes, the whole of it in no mere conventional sense—and all his great powers, his mind and body alike, to the one object of his life; but to this he sacrified all that he possessed, all that he could gain. To this he devoted without stint or scruple, his money, his friendships, all his other interests. What any other man would have considered impossible he made practicable. And this to no personal end. Careless of all reward save that which was to him paramount—the discovery of truth.

A noteworthy point in the character of Hunter appears to me to be found in the relation which, in him, thought bore to action. He combined in himself, in a very eminent, I had almost said in a singular degree, the power of conception and of execution. He not only saw much farther, but he was able to do much more than most others. He saw, as Bacon saw, and the idea was probably as original with him as with Bacon, that the systematic and thorough examination of facts was the first thing to be done in science, "and that till this had been done faithfully and impartially, with all the appliances and all the safeguards that experience and forethought could suggest, all generalisations, all anticipations from mere reasoning must be adjourned and postponed; and further, that sought on these conditions, knowledge, certain and fruitful, beyond all that men then imagined, could be obtained." But he went immeasurably farther than the great prophet of science in putting his conceptions to the proof in imperishable work on the lines he had laid down. "I only sound the clarion," said Bacon proudly, "but I enter not into the battle." Hunter sounded a clarion the echoes of which are reverberating still, but he entered into the battle also, was always found where the blows fell thickest and we are in possession of the spoils. In his museum there is, at once, the clearest evidence of the idea and the richest fruits of execution. Bacon, we know, has been compared to Moses on Pisgah surveying the promised land, and Newton to Joshua, who began to take possession of it. But Hunter saw the Canaan of surgery, and took possession of it too.

The mode in which Hunter conducted his investigations in physiology and surgery reminds one of the scientific work of an engineer in laying siege to some fortress. He begins by examining in every way he can, the character of the defences; he studies, by every means in his power, its strength of resistance; he measures, to the best of his ability, the difficulties before him. Then, when all this is done, and in nowise previously, he draws out deliberately the plan of attack; arranges the whole scheme of action and works steadily, patiently, and persistently upon the lines so laid down. It may seem to those who look on in ignorance, that time and force are wasted in such elaborate care and toil. But all this means that each step forward shall be well assured; and that there shall be no risk of having to fall back. Ever ready to take advantage of surprises or of dashing assaults, he does not reckon upon these, or allow any part of his design to be made dependent on their success. He goes in to win, not by chance, but by method, and the flag of his country at length floats upon the battlements, not as the trophy of the courage of a forlorn hope, but in triumph of scientific forethought and calculation.

The study of Hunter in his work is instructive, in view not only of what he was, but also of what he was not. What Hunter's acquirements were when he commenced the study of anatomy is not quite clear, and cannot be determined with precision now; but this, at least, may be considered certain—that he could not, at that time, have been called a man of good general education; and it appears certain also that never, at any subsequent period of his career, could he have devoted any care or time to attainments in literature. One result of this defect in him is evident, not only in the absence, in all he wrote, of that which is termed style, but even in the want of power of lucid expression. He cannot always say clearly what he means. His thoughts are too frequently involved in obscurity and confusion.

Very much has been said and written on the rival claims and opposing merits of science and literature; but surely to very little purpose. To compare or contrast the advantages of literature and science—to discuss their relative value even as instruments of education—appears to me to be as futile as to consider the relative advantages, or proportionate value, of the forces of nature. Each has its place, its power, and its claims. Each by itself is incomplete, defective. But they are in their purpose correlative, each supplying that which the other lacks, and together, but together only, making the circle of knowledge and education complete. When the champion of science thinks lightly of attainments in literature, or the master of letters speaks with disdain of scientific knowledge, each, I take it, shows only that he cannot appreciate what he does not understand. It is perhaps the most conspicuous instance of the evil of that one-sidedness which springs from the inevitable division of labour; of the want of sympathy which is too common in distinguished men with any kind of work outside their own. It is indeed natural and necessary that men

should become chiefly interested in that which is the daily occupation of their life, that they should prefer, before every other, their own pursuit. But it is unfortunate that we should grow so indifferent, as we commonly do, to the claims of branches of knowledge that we do not possess; and it is still worse if, instead of devoting any spare time at our command to their study, we employ it in denouncing the effort, or in expressing contempt for them. In the example of Hunter, one passes over with impatience the numerous disquisitions in which attempts have been made to prove the enormous advantage that Hunter derived from want of education; how much less a man he would have been had he learnt more in his boyhood. No doubt very much depends on the nature of the subjects taught, and still more on the method of instruction. But I confess that to me it seems the education, of whatever kind, must indeed be a very bad one, which is not better than none at all. My conviction is that if Hunter had received a good general education in early years, he would have been all the better for it. He would have lost nothing; his mental powers could have been in no way impaired, but on the contrary enhanced. He would have recorded the result of his labours in better order, with more light and greater effect; and we should have had the advantage of a clearer revelation of his thoughts.

But all this is very far from saying that Hunter was not, in the strictest sense, an educated man. He was not, indeed, a scholar. If the subtle rendering of a Greek poet or the skilful turning of Latin verse be the sole test of culture, he gave no sign of it. Of ancient lore he was sadly destitute. In the *literæ humaniores* he could have had no place. But if a transcendent knowledge of nature and her ways, if a firm and ample grasp of her noblest truths, be accounted education; if the devotion through a lifetime of gigantic intellectual powers and of a truly loving heart to the reverent study of God's works be culture, then Hunter, though not a man of letters, was surely a highly educated man.

I do not think that we can now obtain a closer view of the character of Hunter and of his habit of work than that which is afforded by his letters to Jenner. How entirely destitute they are of any trace of literary skill. Even after some correction, how clumsily and awkwardly they are for the most part expressed; evidently not a passing thought bestowed on their composition. But how they always struggle, often how straight they go, to the point. Always full of the subject of his work, they must thoroughly reflect the disposition of his mind at the time he wrote them. Careless of all form, and of everything else, save to get out of Jenner some information he wanted; now seeking directly for some knowledge which he believed Jenner to possess; now suggesting some inquiry that Jenner might make for him; sometimes plainly dictating the method of it; then begging boldly for some animal or other specimen which he coveted; occasionally only a word of persuasion or encouragement, or even an attempt at bribery, lest Jenner should grow weary of well-doing. All outside matters, whether public or private or domestic, ignored, except at rare intervals, when it is comical to see, as anyone may easily, that a sense of unbecoming neglect of these small ceremonies strikes him, and then we are surprised by some polite sentence in conclusion. Once, indeed, there is an attempt to console Jenner for some disappointment in love by the assurance "I shall employ you with hedgehogs." But the whole correspondence tells a simple tale of indefatigable industry, of unquenchable energy, of singleness of purpose and unbounded sacrifice; of determination, heedless of cost and difficulty and all else, to seize every possible opportunity of accumulating knowledge.

The fame of Hunter, after all, falls far short of him. It may, without exaggeration, be said that he is really greater than to most men, even to most surgeons, he appears to be. And the reason of this is not far to seek. Neither the genius nor the labour of Hunter is of a kind that at once strikes the inquirer, or can be readily understood by the student. He made no startling discovery, in the popular acceptation of the term, which can be discerned at a glance and appreciated by everyone. As we follow, one after another, the successive, or oftentimes, as they really were, the simultaneous works of Hunter, we may remark the absence of any apparently great intellectual feats; we are never dazzled by the brilliancy of particular achievements. We may, indeed, say of very much of what he did that it might have been produced by any very intelligent, thoughtful, and industrious man devoted to his subject. With regard to separate portions of it, we can very rarely go beyond this, and exclaim, as a famous author tells us that he did, as he threw down his pen over one of his own passages, "By Jove, that is a stroke of real genius." In this respect, Hunter will not compare favourably with some far below him in scientific rank. His work, in order to be fully appreciated, must be studied throughout. It is not, of course, of uniform excellence; but Hunter's fame does not rest altogether on any particular part; indeed, it may be said that any particular part might be withdrawn without any material loss to our estimate of his power. We might select examples of it to illustrate his ability in this or that direction, as, for instance, his skill in inquiry, to his researches on the increase of temperature in inflammation, and his experiments on the transplantation of the cockspur, and on the growth of bones; his sagacity, to his inference, from the character of their contractility, that the arteries are muscular; the soundness of his judgment, to his reflections on the coagulation of the blood. But I venture to think that no separate fraction of his work will enable us to grasp his conception of the plan on which surgery should be studied, or the progress which, in a few short years, he actually made in its execution. It is only after a review of the whole of his vast labours, in their mutual relation—not merely after a study of the merits of his numerous papers, each taken by itself—but in an attempt to apprehend the scheme to which, as it appears to me, all his labours were subservient, that we are, in any measure, able to realise the strength of Hunter's genius.

Then as the chief merit of his work is not of a character to catch at once the eye, even of one who searches for it, so his subject is not one of widespread or popular interest. I can well imagine that, of all men who have achieved greatness, Hunter requires to be studied with most diligence. The more so because of the absence of all literary skill. And there can be no doubt that he shared the fate of all those who have been, like him, in advance of their time. He was so far beyond his contemporaries as to be, for the most part, out of their reach and therefore they left him alone. And even his successors have not always found him out. It may indeed be said to have been almost by an accident that, in association with the possession of his Museum we have periodically a festival in honour of his memory. Yet, even with all this, how much time is devoted at the present day to the study of his works? Nay, dare I ask the farther question here, Can every one of us who call ourselves surgeons say that he has read them?

Such then, at least in the eyes of one who, though from afar, has long and earnestly looked up to him, was John Hunter. Beyond all cavil, if the word have any meaning for us, a man of genius; a man supremely endowed with powers and faculties for the discovery of truth. With little education at the outset of life, without the advantage of the schools, he found himself face to face with the deepest and most mysterious problems of Nature. And he was forthwith able to take full measure of the magnitude of the task. It seems never to have occurred to him that he could snatch an answer by surprise; that a solution could be reached by any short or sudden means. But his survey assured him that upon one plan only, but by that abundantly, could success be made certain. So with patience, which of itself has been called genius, he went back to the beginning. It was genius, too, and that of the highest order, to discern at so vast a distance, where that beginning lay. But there he placed himself and from that point went forward only when he had made each footstep sure. Who shall say that his imagination was not fertile or that he faltered in the use of it? Yet no seductive theory tempted him into undue haste; and though sometimes drawn aside by a specious speculation, he seems hardly ever to have been lost in an unsound conclusion. And when he fell the treasures he had won were found not only in the multitude of facts he had garnered, or even in the principles, which by virtue of the facts he had discovered, were made plain; but also in the very plan and purpose of his work. For, from the height on which at length he stood, not only can the path he trod be clearly traced, but the highway thence-forward is disclosed. So is the greatness of John Hunter to be estimated not only by what he discovered, but rather by the lesson and example of his work. Truly it may be said of him that he did much. Truly it may be said of him that he showed how much more is to be done.

"He, being dead, yet speaketh"—still speaks to us as no other man before or since has spoken. But when and where can his voice be heard most plainly? Are the spirits of those who have shaken off "this muddy vesture of decay" permitted to revisit the scenes of their earthly labours? Can they still be with us on our way? If the soul of this mighty son of science is ever in our midst, surely his favourite haunt must be now within these walls—in the Museum which will soon almost surround us—at once his most graphic and glorious monument. The memory of Hunter, like the memory of the greatest men of every age, is imperishably enshrined. Art, in her noblest efforts, has striven to make his form familiar to us. His name is stamped in indelible characters on the records of human progress. But, before all, he lives in and draws the breath of life from his own immortal works; and of these, none can be so truly a memorial of the very man as this; no other can so resemble him, can possess so

much of him, can tell so fully of what he was; can so perpetuate him in the vast store of facts, in the purpose for which they are set forth, in the illustration of principles, in the suggestion of truths beyond those it can show, above those it can reach; in all this, I say, no memorial, however majestic, can rival our Museum. The foundation of this with his own hand and his whole heart he laid; it has grown and still is growing from his strength, and it must be made for ever worthy of his name.

ABSTRACTS OF THE

ERASMUS WILSON LECTURES

ON

EVOLUTION IN PATHOLOGY.

Delivered at the Royal College of Surgeons of England, January and February, 1887.

By JOHN BLAND SUTTON, F.R.C.S.,
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Lecture III.—Atavism.

Definition of Atavism.—By atavism is understood a tendency in the offspring to resemble its grandparents or remote ancestors, rather than its parents. The lecturer thought that few competent to form an opinion would deny that, in the embryological history of an animal, we read a brief epitome of its ancestry—in fact, its evolution. This being so, atavistic phenomena, in so far as they concerned anatomical details, fell under three headings: 1, persistent fœtal conditions; 2, the attainment of a functional condition by structures usually suppressed in the course of development in a particular animal; 3, malformations, or spurious atavism.

1. *Persistent Fœtal Conditions.*—Under this heading might be included the various forms of cleft palate. In fish, the nasal and oral chambers of man were represented by a common cavity. In birds and lizards, the division was only partial, the roof of the mouth being cleft posteriorly; in young kangaroos, the uvula remained for a long time bifid. The funicular pouch of the peritoneum which preceded the descent of the testicle was another instance. In the human subject, it was no uncommon event for the funicular process to remain unclosed, on one side or the other, for a long period after birth, or even to persist unclosed throughout the lifetime of an individual; in the very many species of mammals dissected by the lecturer, he had never yet found one with the process shut from the peritoneal cavity. In some cases, the recess would be very shallow, and admit the thumb; in others, long and slender, and only allowing of the passage of a probe. Reference was also made to the researches of His on the mode of development of the pinna from six tubercles budding from the margins of the first two clefts. The facts were used to illustrate and explain the mode of origin of branchial fistulæ in the external ears and congenital foramina in the lobules, as well as to explain the mode by which supernumerary auricles arose in connection with malformed pinnæ, and additional auricles in the neck.

2. *The attainment of a Functional Condition by Structures normally suppressed.*—This form was illustrated by reference to the case of the os centrale, described in the first lecture, and used throughout as the type of suppression. In the fœtus, this element of the carpus was represented by a nodule of cartilage, which usually undergoes suppression during embryonic life. Occasionally, however, it grows, attains functional proportions, and takes rank with the normal carpal ossicles. One of the purest examples of this process was furnished by a lobster. Notwithstanding the extraordinary differences in the various appendages, the swimmerets, chelæ, antennæ, and eyestalks must be regarded as modifications of a common type. This was illustrated in a striking manner in a rock lobster, described by A. Milne-Edwards. On one side there sprouted from the centre of the cornea an antenna. Such cases as this had a parallel in man and mammals. A great number of cases had been recorded where a growth of wool, hair, etc., had sprouted from a piece of skin on the conjunctiva. Developmentally the conjunctiva must be regarded as modified integument, hence these cases were examples of reversion.

3. *Spurious Atavism.*—Twenty years ago, anyone dealing with questions of this nature, and considering them as reversions to lower or ancestral types, would have been regarded in an unfavourable light. At the present time, there was a danger of running to the opposite extreme, for it was customary, when an abnormality presented itself, to find a corresponding condition in a lower form, and then to declare it to be a reversion. A good illustration of this was furnished by the so-called congenital contraction of the stomach. Why this was termed "congenital" it was difficult to understand, for no one who had described examples of this malformation had found it in a fœtus or young individual. In the various type-cases described in the lectures, the atavistic characters were either persistent fœtal conditions, or repetitions of adult features in some closely-allied form. The contracted stomach was in no sense a persistent fœtal character, for at no stage did it in the human subject present a division as indicated in these specimens, and for a similar stomach we should be obliged to descend to the specialised viscus of the ruminant. The phylogeny and ontogeny of the stomach were eloquent in proving that it was as unscientific as it was unreasonable and illogical to regard a contracted stomach as a reversion. It was necessary to be careful to avoid confusing physiological types with reversions. A nævus was histologically like the comb of a cock; but to regard a nævus over the anterior fontanelle of a child as a reversion to a cock's-comb would obviously be absurd. It was necessary to bear in mind that reversions were repeated forms which were not palæontologically remote, or systematically far distant; for, in the majority of instances, the parts last to be suppressed were those most frequently atavistic. The difficulty of deciding between reversions and malformations was illustrated by those large hairy moles, which occasionally cover a large part of the body, and the hairy patches seen in spina bifida occulta. The former the lecturer regarded as due to the persistence and subsequent growth of the lanugo, this being truly atavistic; the latter was the result of irritation of the cord and nerves in the immediate neighbourhood of the spina bifida. The similarity of this to the tuft on the head of the Polish fowl, and the underlying encephalocele, as pointed out by Virchow, was referred to.

Polydactylism.—This was briefly considered, and the chief characters of the condition indicated. It was pointed out that supernumerary fingers and toes, except in a few instances, were not to be regarded as atavistic, but examples of a tendency inherent in all kinds of axes, whether of limbs, tails, or vertebral column to bifurcate, not only in man, but in all vertebrata, even the lowest.

In concluding the course, the lecturer pointed out that at the present time, when a description of the histology of a morbid structure appears to mark the finality of pathology in the minds of many, this branch of medical science ran a chance of being hampered by a wealth of details. Efforts should be made to trace out general laws whereby the accumulation could be regulated. For this purpose Comparative Pathology, studied from the stand-point of Evolution, offered every inducement to those who had the time, opportunity, or inclination to prosecute its study.

SUBSTANCE OF SOME REMARKS CONCERNING CASES OF VALVULAR DISEASE OF THE HEART, KNOWN TO HAVE EXISTED FOR OVER FIVE YEARS WITHOUT CAUSING SERIOUS SYMPTOMS.[1]

By Sir ANDREW CLARK, Bart., M.D., LL.D., F.R.S.,
One of the Teachers of Clinical Medicine at the London Hospital.

[*Concluded from page 327.*]

Such, then, are the facts which I have selected for the illustration of our subject; and now arise the questions which give interest and importance to those facts, which call for further study, and which require of us that they shall be put forth to use and increase. What inferences can we draw from them? To what uses can we apply them? In what ways can we turn them to account in resolving some of the difficulties inseparable from the prognosis and the treatment of heart-disease? What was there in the histories, the habits, the occupations, the environments, the general conditions, of those six hundred persons with diseased hearts, which exempted them from the secondary consequences of valvular lesions? Can we discover the *differentiæ* between those who suffer and die and those who do not suffer and live? And, if we can discover them, how shall we employ them, that those who are still well shall be preserved in health, and that those who have begun to suffer shall be relieved?

Hitherto I have been dealing with facts; now I must content myself with impressions. But then they are clinical impressions, which have passed through the ordeal of a long and varied experience, which have been subjected to the limitations, corrections, and qualifications of enlarging knowledge and increasing critical discernment, which in process of time are transfigured into maxims, and which become at last, for most of us, our trustiest guides in difficult circumstances.

[1] Read in the Section of Medicine at the Annual Meeting of the British Medical Association at Brighton.

But neither the occasion nor the circumstances will permit me to enter upon any systematic and critical examination of the questions emerging from our present inquiry. All that it is possible, with any just prospects of advantage, to submit to your consideration, is a narrow and general statement of the impressions and conclusions which I have collected from a study of the cases tabulated or related for the purpose of our discussion.

Now, for the most part, it could be said of those persons who, having valvular heart-disease, were engaged in the ordinary business of life, and doing well therein, that they had average general health; that they were in even circumstances; that they were moderately careful livers; that they had sound ventricles and vessels with a quiet regular circulation; that a fair volume of blood passed through the smaller arteries; that there were no secondary congestions; and that there was no special liability to catarrhal or to rheumatic affections.

But there were some considerable and curious exceptions to this statement, and they were met with exclusively among cases of mitral regurgitation. In these cases, although no complaint was made against the heart, nor of any symptom directly arising from its disturbance, there was extreme cardiac irregularity, and the subjects of it were nervous and always ailing persons. One of these cases, a lady, still living, and seen on more than one occasion by Dr. Wilks and Dr. Wilson Fox, has been under my observation for nearly thirty years. I examined her a few months ago, when she had entered the eighty-fifth year of her age. Her only complaints were want of appetite, general pains, and weakness. The heart was extremely irregular in time, force, and rhythm; there was a loud but varying mitral systolic murmur; and the impulse of the heart against the chest was weak and diffused. But the arteries were sound; the cervical veins were free; there were no secondary congestions; the urine was of normal constitution; the feet never swelled; and, except for the symptoms complained of, the patient was well. Even of those symptoms, it may be said, with the strictest accuracy, that they were neither better nor worse than they had been for ten years before.

Another case of this kind occurred in a gentleman of great mental activity, and closely occupied with engineering works of the highest importance. I first examined him over twenty years ago, and at that time his condition closely resembled the condition of the lady whose case I have just related. He was a very careful and regular liver, but took little or no physical exercise. Seven years ago, he began to have "palpitation storms," which recurred at irregular intervals of three or four months, which begat no obvious evil consequences, and which, to the last, left the kidneys, liver, and lungs free from abiding change. He died recently, in his eighty-third year, of an acute gastro-enteric catarrh.

A moderately careful study of the histories of the cases which I have tabulated makes it plain that there are some conditions which favour, and some which disfavour, continued exemption from the secondary consequences of valvular lesions of hearts.

Among the circumstances which favour exemption from the secondary consequences of valvular lesions, I mention a rational obedience to the laws of health, the following of a simple, regular, occupied, and moderately active life, early hours, a tranquil mind, a disciplined control of the emotions and the will; regular, but neither too frequent nor too full, supplies of fresh nourishing food; extreme moderation in the use of tea, coffee and alcoholic beverages; the temperate use of liquids of every kind, avoidance of sudden and violent forms of exertion, of hurry and worry, of prolonged tension of mind, and of serious and depressing cares or fears. It is true that many of these conditions are beyond human control, and that, together, they frame an ideal of life to which few can attain. But it is not less true that serious endeavour, if unhindered by physical self-consciousness and self-distrust, may accomplish them in a measure sufficient to strengthen the whole nature, and to get from them all the good that they can give.

The circumstances or conditions which disfavour exemption from the consequences of valvular lesions are numerous and easy to be understood. Some act directly upon the heart, others act through a related physiological system, many act through the state of the general health, and all of them capable of exercising an adverse influence upon this organ, when once in action, seldom cease to act. Chief among the disfavouring circumstances, I specify irregularity of life, excesses and irregularities of eating and drinking, the too generous use of alcoholic beverages, the intemperate use of liquids in themselves harmless, the abuse of tea, coffee, and tobacco, excessive and insufficient exercise, anxious introspection and self-distrust, undisciplined emotions, prolonged and serious cares, inattention to the excretory functions of the body, and a sedentary, self-indulgent life.

To many persons—perhaps even to some in this assembly—these statements and suggestions may seem too trite or too trivial to call for radical consideration and discussion. But to me at least it seems otherwise; for when I reflect that there are conditions of health; that it is in long-continued petty violations of them that chronic troubles take root; that it is the little eatings and drinkings and doings of the ever-recurring daily life, which, after their kind, make for health or disease; and that eventually it is at least quite as much through the skilful management of hygiene as through the skilful management of drugs that disorders are overcome and health established;—I confess that these small statements assume a great importance. To eat and drink and do what you desire, so long as no sensible inconvenience follows the indulgence, is a very pleasant and a very popular prescription; but, if I can read aright my experience of medicine and of life, there is no prescription fraught with greater or with surer peril. The true and lasting effects of errors in habits, and in the uses of food and of alcohol, seldom become manifest until long after those errors have been begun. It often happens, indeed, not only that there is nothing in your feelings to make you aware that you are taking too much or doing what is wrong, but that there is something in your feelings which makes you believe that your health is becoming exceptionally good. Look at some young and generous liver, who eats to the limits of his appetite, and drinks to the fulness of his desire. In his well-nourished body, in his rosy face, in his animated expression, in his vivacious manners, in his rampant spirits, in his hardy habits, in his unceasing activities, and in his scorn of what *he* calls excess, you seem to see the embodiment of the health and strength of which, sometimes smiting his breast, he will proudly boast. But, if you will wait and watch, you will find, before fifty comes upon him, that in a crippled heart, or in thickening arteries, or in a shrinking kidney, or in an indurating liver, he is already paying the price of pleasures which he knew not were forbidden. How was he to know that they were forbidden? Not by nature; for his sensations, his feelings, his desires all misled him. How then? Why, only by the carefully-collected empirical experience of medicine, which can accommodate the law of the race to the individual who in some measure traverses it, and which can guide him in safety through difficulties which neither personal experience nor personal reflection can fully solve.

And now, turning to another side of our subject, let me ask concerning a given case of valvular heart lesion; say, for example, a case of mitral regurgitant disease;—What are the conditions which, assuming on the part of the patient, obedience to properly adjusted rules of health, would justify us in permitting him to continue the ordinary duties and enjoyments of life, in sustaining an application for life assurance, in sanctioning marriage, and in speaking favourably of his prospects of longevity. Well, according to my experience and judgment these conditions are as follow:

a. Good general health.
b. Just habits of living.
c. No exceptional liability to rheumatic or to catarrhal affection.
d. Origin of the valvular lesion independently of degeneration.
e. Existence of the valvular lesion without change for over three years.
f. Sound ventricles of moderate frequency and general regularity in action.
g. Sound arteries with a normal amount of blood and tension in the smaller vessels.
h. Free course of blood through the cervical veins.
i. Freedom from pulmonary, hepatic, and renal congestion.

Here it must be said, as a matter of course, that the conditions of a favourable prognosis would differ for different valves, and for each valve according to the character of the lesion. A comparatively small "loading" might justify assurance in a favourable case of mitral regurgitant disease, whilst no "loading," however heavy, for a time however short, would warrant acceptance of a case of regurgitant disease of the aortic valves. If in the former case the risks to be incurred were to be reckoned as one, then in the latter case the risks to be incurred would have to be reckoned as a thousand. The person with aortic, might possibly live as long as the person with mitral disease; but there would be such small security for the transaction that, considering the possibilities of disaster, it could not be regarded as other than a reckless speculation.

But now I must no longer encroach upon your patience and time. Several distinguished physicians are to follow me; and from their collective experience as well as from their critical judgments, you will hear much that I am unable to tell you, much that all of us need to know, and much that will crown with authority, whatever may be the just results of this interesting and important discussion.

Let me conclude with the following propositions, in which are

(Continued on page 379.)

Cases of Valvular Lesions of Heart, without definite Cardiac Symptoms. Sir Andrew Clark's Case-Books, Series II (1873 to 1886).

No.	Case Bk. Series 2. Volume	Page	Age. 1–20	20–40	40–60	60–80	80–100	Sex. Male	Female	Status. Single	Married	Valvular Lesion. Mitral. Direct.	Regurg.	Double.	Aortic. Direct.	Regurg.	Double.	Probable Cause.	Duration in Years. Unknown.	Probable.	Known.	Habits of Life.	General Health.	Disease for which Relief was Sought.
1	1	41			56				F		M					n		?			13	Temperate	Good	Pharyngeal catarrh.
2	1	51			33				F	S					nn			?			13		Fair	Headache.
3	1	53			38				F		M				n			Rheumatic fever				,,	Nervous	Nervousness.
4	1	93			42				F		M				nn			?			—	?	Poor	Disease of left lung.
5	1	97			33				F		M	n						?			—	Temperate	Fair	Gastric catarrh.
6	1	107			25				F		M						nn	?			—	Free	Poor	Nervousness.
7	1	112			48				F		M				nn			?			13	Temperate	Fair	Dyspepsia.
8	1	123			42				F		M	nn			nn			?			13	?	Poor	Nervousness.
9	1	183	20		41				F	S					n			?			13	Regular	,,	,,
10	1	246			42			M		S			n					?			12	Generous	Fair	Dyspepsia.
11	1	333		21				M		S		nn						?			10	,,	,,	,,
12	1	351	19					M		S		n			nn			?			—	?	Poor	Nervousness.
13	1	352	17						F	S							nn	Rheumatic fever			6	Temperate	Fair	Embolism of arteria centralis retinæ.
14	1	364		29					F	S							n	?			7	,,	,,	Dyspepsia.
15	1	370			58			M			M	n			n			?		20	—	?	Poor	Debility.
16	1	377			58			M			M				nn			Gouty state	n		—	Moderate	Fair	Embolism of arteria centralis retinæ.
17	1	405				67			F		M						nn	?	n		—	?	?	,,
18	1	457					91n		F		M	n			n			?			13	Temperate	Fair	Dyspepsia.
19	1	473		35				M			M	n						?			19	Moderate	,,	Lumbago.
20	1	477			49				F		M				nn			?			10	Temperate (careful)	Ailing	Chronic rheumatism.
21	1	502		21					F	S		nn						?	n		—	Temperate	Poor	Dyspepsia.
22	2	81		31					F	S			n		n			?	n		—	,,	Fair	Neuralgia.
23	2	109			42				F		M		n		n			?			6	Careful	Poor	Ulcer of stomach.
24	2	131				61			F		M				n			Arthritism			11	Generous	Fair	Dyspepsia.
25	2	163			52				F		M				n			?	n		—	Moderate	,,	,,
26	2	173			74				F		M						n	?			12	Generous	,,	Gouty state.
27	2	191		28					F	S					n			?	n		—	Always eating	Poor	Indigestion.
28	2	237	?	?	?	?	?	M			M				nn			?	n		—	Generous	Fair	Gastro-hepatic catarrh.
29	2	263	17						F	S					nn			?	n		—	Careful	Good	Acne.
30	2	275			48			M			M	n						?	n		—		Poor	Dyspepsia.
31	2	329				60			F	S					nn			Malarial fever			5	,,	Fair	Eczema.
32	2	343				61			F		M				n			?			7	?	Poor	Dyspepsia.
33	2	387		36				M		S					n			Rheumatic fever			8	Careful	Fair	,,
34	2	439			54				F		M				n			?	n		—	,,	Ailing	,,
35	2	473		32					F		M	nn						?	n		—	?	Fair	,,
36	2	508	19						F	S		n						?	n		—	?	?	,,
37	3	47		30					F		M	n						?			—	?	Poor	,,
38	3	49			45			M		?	?	n						?			12	Moderate	,,	,,
39	3	107		36				M			M						nn	?			8	,,	Fair	,,
40	3	131			47			M		?	?	n						?			6	?	Poor	Gouty state.
41	3	169		32				M			M				n			?	n		—	?	Fair	Lumbago.
42	3	174			54			M			M				n			Rheumatism			8	Generous	Poor	Rheumatism.
43	3	217		31				M			M		n					?			6	Moderate	Delicate	Dyspepsia.
44	3	224		28					F		M				n			?	n		—	,,	Fair	,,
45	3	265				60			F		M		n					?			8	Generous	Poor	Colonic disease.
46	3	309			50				F		M	n						?			11	?	Fair	Dyspepsia.
47	3	339			58			M		S					nn			Rheumatic fever			28	Moderate	,,	,,
48	3	355			53			M		?	?		n					?			13	?	Poor	Nervousness.
49	3	356	17						F	S			n					?			9	Careful	Fair	Dyspepsia.
50	3	458		32				M			M				n			?			10	Moderate	,,	Nervousness.
51	3	456			51				F	S			n					?			14	,,	Fair	Dyspepsia.
52	3	477		38					F		M		nn					?			9	,,	,,	,,
53	3	487	15						F	S					nn			?			8	Careful	,,	Anæmia.
54	3	491				63			F		M				n			Gout	n		—	Generous	,,	Gouty state.
55	3	497		32				M			M		n					?			12	Temperate	,,	Dyspepsia.
56	4	6			43			M			M	n						?			12	Generous	,,	Locomotor ataxy.*
57	4	21	19					M		S					n			?	n		—	?	,,	Dyspepsia.
58	4	35		37					F	S					n			?	n		—	?	,,	,,
59	4	41				63		M		?	?				nn			Gouty state			10	Generous	,,	Gastric catarrh.
60	4	63		23					F	S			n					?			12	Careful	,,	Dyspepsia.
61	4	95			58			M		?	?				n			Gouty state			10	Generous	,,	Gouty state.
62	4	99			54			M		?	?		n					?	n		—		,,	Gastro-hepatic catarrh.
63	4	177			52				F		M				n			Rheumatism			9	?	,,	Rheumatism.
64	4	163			42				F		M	nn						?		8	—	?	Poor	Gastric catarrh.
65	4	213			44				F		M	n						?	n		—	?	Fair	Dyspepsia.
66	4	223			61			M		?	?	n						?	n		—			
67	4	343		32				M		?	?						nn	?			8	Generous	,,	,,
68	4	347			65			M			M				n			?			13	,,	,,	Gouty state.*
69	4	377			51			M			M		n					?	n		—	,,	,,	Dyspepsia.
70	4	397			50				F		M				n			?	n		—	?	Good	Neuralgia.
71	4	465		27				M			M		n					?			11	Generous	Delicate	Dyspepsia.
72	4	467			57				F		M	n						?	n		—	,,	Good	,,
73	4	479		38					F		M				n			Rheumatism	n		—	Moderate	Fair	Rheumatism.
74	4	505				61			F		M			nn				?			9	Generous	,,	Dyspepsia.
75	5	1			53				M		M	n						?	n		—	,,	,,	Acne.
76	5	19		37				M			M				nn			?		8	—	,,	,,	Dyspepsia.
77	5	39			49			M		S		n			n			?			6	?	,,	Pericyphilitis.
78	5	105	?	?	?	?	?		F		M				n			?	n		—	?	?	Rheumatism.
79	5	107		31				M		?	?						n	?			6	?	?	Dyspepsia.
80	5	171		33					F	S		nn						?			10	Careful	Fair	Neuralgia.
81	5	199		35				M			M		n					?			17	Generous	Nervous	Dyspepsia.
82	5	219			56			M			M	n						?	n		—	,,	Fair	,,
83	5	269			58			M			M				n			Rheumatism			10	?	,,	Nerve troubles.
84	5	371			48				F		M	nn						?	n		—	?	,,	Influenza.
85	5	387			61			M		?	?		n					?			8	?	,,	Cerebral disease.
86	5	401			45			M			M		n					?	n		—	Generous	,,	Dyspepsia.
87	5	479			42				F	S			n					?			10	?	,,	,,

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No.	Case Bk. Series 2. Volume.	Case Bk. Series 2. Page.	Age. 1–20	20–40	40–60	60–80	80–100	Sex. Male.	Female.	State. Single.	Married.	Valvular Lesion. Mitral. Direct.	Mitral. Regurg.	Mitral. Double.	Aortic. Direct.	Aortic. Regurg.	Aortic. Double.	Probable Cause.	Duration in Years. Unknown.	Duration in Years. Probable.	Duration in Years. Known.	Habits of Life.	General Health.	Disease for which Relief was Sought.
88	6	153			51			M		?	?		nn				nn	Gout			12	Generous	Fair	Renal calculus.
89	6	255			60			M		S	M		n			n		?		n				Hepatic catarrh.
90	6	329			67				F	S					n			?			6	,,	,,	Diarrhœa.
91	7	54		35				M		S	M				n			?		n		Careful	,,	Dyspepsia.
92	7	90		28					F	S	M		n					?				?	,,	
93	7	132		38				M		?	?		n					?		n		?	Poor	Colonic dyspepsia.
94	7	152			50			M		?	?		n					?			8	?	Fair	Dyspepsia.
95	7	262				68		M			M		nn					?			10	Generous	,,	Headaches.
96	7	270	17						F	S			n					Rheumatism			8	?	,,	Dyspepsia.
97	7	284		39					F		M					n					9	?	Good	
98	7	300		34					F		M	n						?			6	?	Delicate	,,
99	7	328	18						F	S						n		?		n		?	Fair	Cephalalgia.
100	7	356	19						F	S			n					?			8	Careful	,,	Dyspepsia.
101	7	362		32					F	S						nn		?			11	,,	Good	
102	7	390		34					F		M					n		Rheumatic fever			6	?	Fair	Rheumatism.
103	7	414	17						F	S						n		?		n		?	,,	Cephalalgia.
104	7	514			45			M			M		n					?			7	?	Delicate	Nervousness.
105	8	138			49			M		S				n			n	Rheumatism		n		Moderate	Fair	Dyspepsia.
106	8	144				65		M			M					n		?			8	Simple	,,	
107	8	188			52			M		?	?		n					?			9	?	Poor	
108	8	198		30					F	S			n					?		?		?	Fair	Neuralgia.
109	8	208				69			F	S							nn	?			12	Generous	,,	Dyspepsia.
110	8	236				70			F		M					n		Gout			20		Good	
111	8	296			47			M		?	?		n					Lithiasis			10	,,	Fair	,,
112	8	342			58				F		M		nn					?			12	?	,,	Debility.
113	8	391	?	?	?	?	?		F	S						n		?			8	Generous	,,	Dyspepsia.
114	8	401		33				M		S				n				?			10	,,	,,	
115	8	457		29					F		M					n		?		?		?	Poor	Melancholia.
116	8	473		36				M		?	?					nn		?				Irregular	Fair	Dyspepsia.
117	8	491			41			M			M					n		?				Generous	,,	Nervousness.
118	8	497			53				F	S						n		?				?	,,	,,
119	8	505			45				F		M					n		?			11	Generous	,,	,,
120	9	4		30					F	S			n		n			?		n		?	Poor	Dyspepsia.
121	9	10			54			M		?	?	n						?		n		?	Fair	Neuralgia.
122	9	31			40			M		S			nn					Rheumatic fever			Many years	Generous	,,	Bronchial catarrh.
123	9	104			52			M		S						n		?			23	,,	,,	Nervousness.
124	9	144	18					M			M					n		?		?		?	?	Dyspepsia.
125	9	410			40			M		?	?		n					?		?		?	Good	
126	9	464				63			F		M					nn		?			15	Generous	Poor	,,
127	9	509		24				M		?	?		n					?		?		?	?	Phthisis.
128	10	18			54			M			M		n					?			12	Moderate	?	Diarrhœa.
129	10	42			50			M			M		n					?			8	Generous	Good	Dyspepsia.
130	10	80			46				F		M		n					?				Careful	,,	Constipation.
131	10	130			54				F		M					n		?			5	,,	?	Vertigo.
132	10	162				62			F	S						n		?			10	Generous	Fair	,,
133	10	176		38					F		M					n		?			7	?	,,	Malaria.
134	10	182				60			F		M		n					?		?		?	,,	Dyspepsia.
135	10	287		25				M		S			n					?			6	?	,,	Bronchial catarrh.
136	10	295			48			M		?	?		n					?				Temperate	Fair	Dyspepsia.
137	10	299		29					F		M	nn						?			Many years	?	?	
138	10	321			58			M			M		n					Rheumatism			Several years	,,	Fair	,,
139	10	361		35					F		M					nn		?					,,	,,
140	10	363	11					M		S						n		?			6	Careful	,,	,,
141	10	379	14						F	S						n		?				,,	?	Bronchial catarrh.
142	10	481			42				F		M		n		n			?				,,		
143	10	493		29				M		S			n		n			?			Several years	,,	Poor	Albuminuria.
144	11	18		30					F	S			n					?			6	,,	Good	Cephalalgia.
145	11	64			52				F	S					n			?		?	10	,,	Fair	Dyspepsia.
146	11	133				65		M			M					n		?				,,	,,	Gall-stones.
147	11	170				72		M			M		n		n			?			8	,,	?	Dyspepsia.
148	11	181	18					M		S						nn		?			7	,,	Delicate	Bronchial catarrh.
149	11	214			49			M			M		n					?		?		?	Fair	Dyspepsia.
150	11	228				60			F		M		n		n			Gout			Several years	,,	,,	
151	11	283			42				F		M		n					?		?		Generous	,,	Gout.
152	11	316		37				M			M		n					?		?		Careful	Delicate	Dyspepsia.
153	11	321		24					F	S					n			Rheumatism			Several years	,,	Fair	,,
154	11	334			66				F		M				n			?		?		,,	,,	Rheumatism.
155	11	335			46				F		M						nn	Rheumatism				,,	,,	Dyspepsia.
156	11	352																			Several years	,,	,,	Rheumatism.
157	11	359			49				F		M						n	?		?		?	Poor	Dyspepsia.
158	11	381			57			M			M		n					?			Several years	Generous	Fair	Gall-stones.
159	11	307				64			F		M					nn		Gout			10	Temperate	,,	Eczema.
160	11	425		21					F	S			n					?			Several years	Careful	,,	Dyspepsia.
161	11	456		26				M		S					n			?			8	?	,,	Bronchial catarrh.
162	11	465			58			M			M						nn	?			Several years	Temperate	Good	Vertigo.
163	11	471		33					F		M		n					?				?	Fair	Neuralgia.
164	11	479		30					F	S			n					?				?	,,	Dyspepsia.
165	11	483		30				M			M						nn	?			Several years	Careless	Bad	Epilepsy.
166	11	489		23				M		S			n					?			6	Careful	Good	Pulmonary congestion.
167	13	3		32					F	S			n					Rheumatism			8	,,	,,	Dyspepsia.
168	13	75		30					F		M		n		n			Rheumatic fever			14	,,	Fair	,,
169	13	123		28				M			M		n					?			8	,,	Good	Eczema.
170	13	163			53				F		M				n			?			8	Generous	Fair	Dyspepsia.
171	13	267			42				F		M					n		?			10	Careful	Delicate	,,
172	13	293		20					F	S						n		?			8	?	Fair	,,
173	13	303			59				F		M					nn		?			Several years	?	,,	Cephalalgia.
174	13	325		23				M		S						n		?		?		Careful	,,	Rheumatism of right arm
175	13	337		26				M		S						n		?			10	,,	,,	Otitis.
176	13	407			52				F		M					n		?				,,	Good	Constipation.

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No.	Case Bk. Series 2. Volume.	Page.	Age. 1—20	20—40	40—60	60—80	80—100	Sex. Male.	Female.	State. Single.	Married.	Valvular Lesion. Mitral. Direct.	Regurg.	Double.	Aortic. Direct.	Regurg.	Double.	Probable Cause.	Duration in Years. Unknown.	Probable.	Known.	Habits of Life.	General Health.	Disease for which Relief was Sought.
177	13	413	—	25	—	—	—	—	F	S	—	—	—	—	nn	—	—	?	—	—	7	Careful	Fair	Dyspepsia.
178	13	419	—	32	—	—	—	M	—	—	M	—	n	—	—	—	—	?	—	?	—	Generous	,,	Rheumatism.
179	13	455	—	29	—	—	—	—	F	S	—	—	—	—	n	—	—	?	—	—	6	Careful	,,	Urticaria.
180	13	467	—	—	56	—	—	—	F	S	—	—	—	—	nn	—	—	?	—	—	Several years	,,	,,	Sclerosis.
181	13	495	—	25	—	—	—	M	—	S	—	—	n	—	—	—	—	?	—	?	—	,,	,,	Enteric catarrh.
182	13	501	—	—	—	68	—	M	—	—	M	—	n	—	n	—	—	?	—	—	8	,,	,,	Erysipelas.
183	14	140	18	—	—	—	—	—	F	S	—	—	—	—	n	—	—	?	—	?	—	Generous	,,	Dyspepsia.
184	14	191	—	34	—	—	—	—	F	—	M	n	—	—	—	—	—	?	—	—	6	?	,,	,,
185	14	209	—	—	—	60	—	M	—	—	M	—	n	—	—	—	—	Gout	—	—	10	Generous	,,	Gouty state.
186	14	257	—	33	—	—	—	M	—	S	—	—	n	—	n	—	—	Rheumatic fever	—	—	8	?	,,	Pulmonary congestion.
187	14	309	—	39	—	—	—	M	—	—	M	—	—	—	n	—	—	?	—	?	—	?	,,	Dyspepsia.
188	14	345	—	—	55	—	—	—	F	—	M	—	—	n	—	—	—	?	—	?	—	Careful	,,	,,
189	14	393	14	—	—	—	—	M	—	S	—	—	n	—	—	—	—	?	—	?	—	?	,,	,,
190	14	477	—	—	46	—	—	—	F	S	—	—	—	—	n	—	—	?	—	?	—	Careful	,,	Enteric catarrh.
191	14	491	—	32	—	—	—	M	—	S	—	—	—	—	n	—	—	?	—	—	9	,,	Delicate	Nervousness.
192	15	63	—	—	42	—	—	M	—	—	M	—	—	—	n	—	—	?	—	—	Several years	Temperate	Fair	Headaches.
193	15	229	—	—	—	62	—	—	F	—	M	—	—	—	n	—	—	?	—	?	—	?	Delicate	Nervousness.
194	15	253	—	—	45	—	—	—	F	—	M	—	n	—	n	—	—	Rheumatism	—	?	—	?	Bad	Rheumatism.
195	15	261	—	—	58	—	—	M	—	—	M	—	—	—	n	—	—	?	—	?	—	?	Fair	Liver congestion.
196	15	287	—	30	—	—	—	M	—	—	M	—	n	—	n	—	—	?	—	—	10	?	Poor	Headaches.
197	15	445	—	—	48	—	—	M	—	—	M	—	n	—	—	—	—	Gout	—	—	7	Generous	Fair	Lithiasis.
198	15	459	—	—	—	68	—	—	F	—	M	—	—	—	n	—	—	Osteo-arthritis	—	—	?	?	,,	Headaches.
199	15	463	—	—	50	—	—	M	—	—	M	—	nn	—	—	—	—	?	—	—	6	?	,,	Bronchitis.
200	15	471	—	23	—	—	—	—	F	S	—	—	—	—	n	—	—	?	—	—	?	?	,,	Dysmenorrhœa.
201	15	488	—	—	57	—	—	M	—	—	M	—	n	—	—	—	—	?	—	—	Several years	?	,,	Cerebral.
202	15	509	—	—	40	—	—	M	—	—	M	—	n	—	—	—	—	?	—	—	8	Temperate	,,	Dyspepsia.
203	15	514	—	—	—	67	—	—	F	—	M	—	n	—	—	—	—	?	—	—	Several years	,,	,,	Melancholia.
204	16	1	—	—	58	—	—	M	—	—	M	—	n	—	—	—	—	?	—	—	10	Careful	,,	Bronchial catarrh.
205	16	45	—	38	—	—	—	M	—	—	M	—	—	—	n	—	—	?	—	?	—	?	,,	Dyspepsia.
206	16	62	—	—	56	—	—	—	F	S	M	—	—	—	nn	—	—	Gout	—	—	7	Generous	,,	,,
207	16	82	—	38	—	—	—	—	F	S	—	—	nn	—	—	—	—	?	—	—	Several years	Careful	,,	,,
208	16	98	—	31	—	—	—	M	—	S	—	—	n	—	—	—	—	?	—	?	—	?	Delicate	Chill.
209	16	109	—	36	—	—	—	M	—	—	M	—	n	—	—	—	—	?	—	—	8	?	Fair	Neuralgia.
210	16	135	—	37	—	—	—	—	F	—	M	—	n	—	—	—	—	?	—	—	11	Temperate	,,	Nervousness.
211	16	154	—	—	45	—	—	—	F	S	—	—	—	—	—	—	n	Gout	—	?	—	Generous	,,	Erysipelas.
212	16	167	—	—	57	—	—	—	F	—	M	—	—	—	—	—	n	,,	—	—	6	Temperate	,,	Gouty dyspepsia.
213	16	187	—	—	41	—	—	M	—	S	—	—	n	—	—	—	—	?	—	—	Several years	?	Poor	Melancholia.
214	16	289	—	—	51	—	—	—	F	S	—	—	n	—	—	—	—	?	—	—	,,	Careful	Fair	Dyspepsia.
215	16	301	—	—	—	66	—	M	—	—	M	—	n	—	—	—	—	?	—	—	6	Generous	,,	Headaches.
216	16	377	—	—	—	68	—	M	—	—	M	—	—	—	n	—	—	?	—	?	—	Temperate	,,	Bronchial catarrh.
217	16	391	—	—	—	68	—	—	F	—	M	—	n	—	n	—	—	?	—	—	Several years	,,	,,	Melancholia.
218	16	414	—	30	—	—	—	M	—	S	—	—	—	—	nn	—	—	?	—	—	,,	,,	,,	Nervousness.
219	16	431	16	—	—	—	—	—	F	S	—	—	—	—	n	—	—	?	—	?	—	?	,,	Otitis.
220	16	437	—	31	—	—	—	M	—	S	—	—	n	—	—	—	—	?	—	?	—	?	Delicate	Nervousness.
221	16	467	—	33	—	—	—	M	—	S	—	—	n	—	—	—	—	?	—	—	Several years	Generous	Good	Constipation.
222	16	501	—	30	—	—	—	M	—	—	M	—	n	—	—	—	—	?	—	?	—	?	Fair	Dyspepsia.
223	17	11	—	30	—	—	—	—	F	—	M	—	—	—	n	—	—	Gout	—	10	—	Generous	,,	Neuralgia.
224	17	15	—	—	48	—	—	—	F	—	M	—	n	—	—	—	—	?	—	—	Several years	,,	,,	Gout.
225	17	66	—	—	—	60	—	—	F	—	M	—	—	—	n	—	—	?	—	—	,,	?	,,	Headaches.
226	17	67	—	—	44	—	—	M	—	—	M	—	—	—	n	—	—	Gout	—	—	11	Generous	,,	Renal calculus.
227	17	69	—	35	—	—	—	M	—	—	M	—	—	—	n	—	—	?	—	—	Several years	,,	,,	Dyspepsia.
228	17	75	—	30	—	—	—	M	—	S	—	—	n	—	n	—	—	?	—	?	—	Abstemious	,,	Nervousness.
229	17	85	—	28	—	—	—	—	F	S	—	—	—	—	n	—	—	?	—	—	Several years	Careful	Good	Headaches.
230	17	87	—	37	—	—	—	—	F	S	—	—	—	—	n	—	—	?	—	?	—	,,	Fair	Eczema.
231	17	142	—	—	50	—	—	—	F	S	—	—	—	—	n	—	—	?	—	—	Several years	?	,,	Dyspepsia.
232	17	154	—	20	—	—	—	—	F	S	—	—	—	—	n	—	—	?	—	—	,,	Careless	,,	Gastric ulcer.
233	17	168	—	—	53	—	—	M	—	—	M	—	n	—	—	—	—	Gout	—	—	,,	Generous	,,	Dyspepsia.
234	17	196	—	—	54	—	—	M	—	S	—	—	—	—	n	—	—	,,	—	—	,,	,,	Poor	Spinal sclerosis.
235	17	217	—	38	—	—	—	M	—	—	M	—	n	—	—	—	—	?	—	—	,,	Moderate	Fair	Dyspepsia.
236	17	226	—	32	—	—	—	M	—	S	—	—	n	—	—	—	—	?	—	?	—	?	,,	Melancholia.
237	17	234	—	33	—	—	—	—	F	S	—	—	—	—	n	—	—	?	—	?	—	Careful	,,	Dyspepsia.
238	17	277	—	—	43	—	—	—	F	—	M	—	—	—	n	—	—	?	—	—	Several years	,,	,,	Migraine.
239	17	333	—	37	—	—	—	M	—	S	—	—	n	—	—	—	—	Gout	—	—	,,	Careless	Bad	Dyspepsia.
240	17	335	—	38	—	—	—	—	F	S	—	—	n	—	—	—	—	?	—	—	,,	Careful	Delicate	Enteric catarrh.
241	17	342	—	—	—	73	—	—	F	—	M	—	—	—	n	—	—	?	—	—	,,	?	Fair	Bronchial catarrh.
242	17	428	—	—	57	—	—	—	F	—	M	—	—	—	n	—	—	?	—	—	,,	?	,,	Headaches.
243	17	442	—	22	—	—	—	—	F	S	—	—	—	—	n	—	—	?	—	—	,,	?	Poor	Dyspepsia.
244	18	5	16	—	—	—	—	—	F	S	—	—	n	—	—	—	—	?	—	?	—	?	Good	Eczema.
245	18	139	—	—	42	—	—	—	F	—	M	—	n	—	—	—	—	?	—	?	—	?	,,	Vertigo.
246	18	171	—	28	—	—	—	M	—	S	—	—	n	—	—	—	—	?	—	—	Several years	?	,,	Cephalalgia.
247	18	329	—	—	—	60	—	M	—	S	—	—	n	—	—	—	—	?	—	—	10	Generous	Fair	Dyspepsia.
248	18	421	—	—	52	—	—	—	F	S	—	—	n	—	—	—	—	?	—	—	Several years	?	,,	Neuralgia.
249	18	422	—	32	—	—	—	—	F	—	M	n	—	—	—	—	n	?	—	—	,,	?	,,	Rheumatism.
250	18	474	—	—	57	—	—	—	F	S	—	—	—	—	—	—	n	?	—	?	—	?	,,	Dyspepsia.
251	18	505	—	33	—	—	—	M	—	—	M	—	n	—	—	—	—	?	—	?	—	?	?	Melancholia.
252	19	67	—	21	41	—	—	—	F	—	M	—	—	—	n	—	—	?	—	—	Many years	?	Poor	Dyspepsia.
253	19	123	—	—	40	—	—	M	—	—	M	—	—	—	n	—	—	?	—	—	Some years	Moderate	Fair	,,
254	19	139	—	—	49	—	—	M	—	S	—	—	n	—	—	—	—	?	—	?	—	?	,,	Nervousness.
255	19	160	—	22	—	—	—	—	F	S	—	—	n	—	—	—	—	?	—	?	—	?	,,	Dyspepsia.
256	19	182	—	—	—	62	—	—	F	S	—	—	—	—	n	—	—	?	—	—	Several years	Temperate	Poor	Sclerosis.
257	19	188	18	—	—	—	—	—	F	S	—	—	n	—	—	—	—	?	—	?	—	?	,,	Bronchial catarrh.
258	19	218	18	—	—	—	—	—	F	S	—	—	n	—	n	—	—	?	—	—	Several years	?	Weak	Anæmia.
259	19	231	19	—	—	—	—	—	F	S	—	—	n	—	n	—	—	?	—	?	—	?	Poor	Dyspepsia.
260	19	234	17	—	—	—	—	M	—	S	—	—	n	—	n	—	—	?	—	?	—	?	,,	,,
261	19	302	—	—	47	—	—	M	—	—	M	—	n	—	n	—	—	Gout	—	—	Several years	Generous	,,	Vertigo.
262	19	305	—	—	—	63	—	—	F	S	—	—	n	—	—	—	—	?	—	?	—	Moderate	Fair	Dyspepsia.
263	19	342	—	24	—	—	—	—	F	S	—	—	—	—	n	—	—	?	—	—	8	Careful	,,	,,
264	19	344	—	30	—	—	—	—	F	S	—	—	n	—	—	—	—	?	—	—	Several years	,,	Delicate	,,
265	19	345	—	—	45	—	—	M	—	—	M	—	n	—	—	—	—	?	—	—	10	,,	,,	Nervousness.

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No.	Case Bk. Series 2. Volume.	Page.	Age. 1—20	20—40	40—60	60—80	80—100	Sex. Male.	Female.	State. Single.	Married.	Valvular Lesion. Mitral. Direct.	Regurg.	Double.	Aortic. Direct.	Regurg.	Double.	Probable Cause.	Duration in Years. Unknown.	Probable.	Known.	Habits of Life.	General Health.	Disease for which Relief was Sought.
266	19	347	19						F	S		n						?	?		—	Careful	Fair	Dyspepsia.
267	19	354			55			M			M		n-		-n			Rheumatism			6	,,	,,	Rheumatism.
268	19	380		28					F	S			n-		-n			?	?		—	,,	,,	Neuralgia.
269	19	403				60		M			M		n					?	?		—	,,	,,	Dyspepsia.
270	19	439		38				M			M		n					?	?		—	?	Poor	,,
271	19	448			42				F		M				n			?	?		—	Careful	Fair	Cephalalgia.
272	19	465		26					F	S			n		-n			?			8	,,	,,	Dyspepsia.
273	19	466			58				F	S					n			?			Several years	Moderate	,,	Gastric catarrh.
274	19	475		33					F	S			n-		-n			?			6	Careful	,,	Dyspepsia.
275	19	480			55				F		M				n			Rheumatism			Several years	,,	Poor	,,
276	19	501		37					F	S			n-		-n			?			,,	,,	,,	,,
277	20	9			44			M			M				n			?	?		—	Free	,,	,,
278	20	44			45				F		M				n			?			8	Irregular	,,	Melancholia.
279	20	52			53			M			M		n-		-n			?	?		—	Generous	Good	Hepatic catarrh.
280	20	59			52				F		M				n			?			7	Moderate	Fair	Ozœna.
281	20	62				65		M			M		n					?			Several years	?	Poor	Cerebral disease.
282	20	69				63			F		M				n			?			,,	Careful	Fair	Colonic dyspepsia.
283	20	78				70			F		M				n			?	?		—	Fanciful	Poor	Dyspepsia.
284	20	83			56				F	S					n			Gout			Several years	Generous	Fair	Eczema.
285	20	108			58			M			M		n					?			,,	?	,,	Dyspepsia.
286	20	154		25				M		S			nn-		-n			?			,,	Moderate	,,	Nervousness.
287	20	166				60			F		M		n					Rheumatic fever			,,	,,	,,	Rheumatism.
288	20	167		24					F	S					n			?			,,	,,	,,	Dyspepsia.
289	20	175		23				M		S						n		?	?		—	,,	,,	,,
290	20	179				63			F	S					nn			Gout			Several years	Careful	Delicate	Paralysis agitans.
291	20	222			55			M			M		n-		-n			?	?		—	,,	Fair	Dyspepsia.
292	20	250		35					F		M				n			?	?		—	Generous	,,	,,
293	20	278			54				F		M				n			?	?		—	?	Good	Vertigo.
294	20	301			45			M			M		n-		-n			?			Several years	Moderate	Fair	Melancholia.
295	20	313			52			M			M		n					?	?		—	?	,,	Cephalalgia.
296	20	356				63		M			M		n					?			6	Careful	,,	Bronchial catarrh.
297	20	358			49			M			M						n	?	?		—	?	,,	Dyspepsia.
298	20	362		23					F		M				n			?	?		—	?	?	Hepatic catarrh.
299	20	399	11					M		S			nn-		-n			?			Several years	Careful	Good	Dyspepsia.
300	20	448		29					F		M		n-			-n		?			,,	,,	Fair	,,
301	20	458			58			M			M		nn					?			,,	Careless	Poor	Albuminuria.
302	20	488				67		M			M		n					?			6	,,	,,	Vertigo.
303	20	492				60		M			M	n						Rheumatic fever			Several years	Careful	Fair	Dyspepsia.
304	21	6			52			M			M		n-			-n		?			10	,,	,,	,,
305	21	64		37					F		M	n						Rheumatism			Several years	,,	,,	Rheumatism.
306	21	91			45			M			M		n					?			,,	?	,,	Melancholia.
307	21	92			54			M		?	?		n					?			,,	?	,,	Dyspepsia.
308	21	94		34					F		M		n					?	?		—	Moderate	,,	,,
309	21	96				63		M			M		n					?	?		—	?	?	Coryza.
310	21	104		32				M			M		n					?	?		—	?	Poor	Vesical catarrh.
311	21	117			48			M			M			n				?			7	Careless	,,	Bronchial catarrh.
312	21	137	16					M		S			n					?	?		—	?	?	,,
313	21	195				66		M			M		n					Rheumatism			Several years	Generous	Fair	Dyspepsia.
314	21	199		33				M		S				n-			-n	?			,,	Careful	,,	,,
315	21	209			56			M			M		n					?			,,	,,	,,	Coryza.
316	21	218			46			M			M	n						?			,,	,,	?	Dyspepsia.
317	21	230					84	M			M	n						?			,,	Simple	Fair	Constipation.
318	21	242			69				F		M		n			-n		Gout			,,	Generous	,,	Dyspepsia.
319	21	276		34				M			M		n					Rheumatism	?		—	?	,,	Rheumatism.
320	21	310			42			M			M				n			?			Several years	Careful	,,	Dyspepsia.
321	21	322			47			M		S			n					?			,,	Moderate	,,	,,
322	21	328			40			M			M		n					?			,,	?	,,	,,
323	21	341		37				M			M	n						?			,,	?	,,	Vertigo.
324	21	349				63		M			M		n					?	?		—	?	,,	Dyspepsia.
325	21	369			42			M		?	?		n					?			Several years	?	,,	,,
326	21	390		21				M		S					n			?	?		—	?	?	,,
327	21	410			48			M			M				n			?			Several years	?	Fair	,,
328	21	428		32				M		S			n					?			,,	?	,,	,,
329	21	489				60		M		?	?				n			?			,,	?	,,	Nervousness.
330	22	22			42			M		S							n	?	?		—	?	,,	Dyspepsia.
331	22	57		26				M		S			n					?	?		—	?	?	Phthisis.
332	22	86		29				M		S			n					?			8	?	Fair	Dyspepsia.
333	22	112			56			M			M		n					?	?		—	Free	Poor	Albuminuria.
334	22	133			52				F	S		n						?	?		—	?	Fair	Diarrhœa.
335	22	160				64		M			M		n					?			10	Careful	Delicate	Dyspepsia.
336	22	174			42			M			M		n					?			Several years	Free	Fair	,,
337	22	209			46				F		M				n			?			10	Careful	,,	,,
338	22	265			46			M			M		n					?			Several years	Moderate	,,	Vertigo.
339	22	301			40				F		M		n-			-n		?			?	?	Poor	Dyspepsia.
340	22	307		22					F	S			n					?	?		—	?	Good	Tumour of breast.
341	22	314				66			F		M		n-			-n		?			Several years	?	Fair	Rheumatism.
342	22	334		26					F	S							nn	?	?		—	Careful	Good	Hemicrania.
343	22	352		31				M					n					?			6	Moderate	Fair	Eczema.
344	22	374		29					F	S			n					?			Several years	,,	,,	Nervousness.
345	22	381			56				F		M		n					Rheumatism			,,	,,	,,	Rheumatism.
346	22	425			48				F		M				n			?			8	?	,,	Cephalalgia.
347	22	460		35				M		S						n		?			Several years	Moderate	,,	Dyspepsia.
348	23	53			50				F		M	n			-n			?			,,	?	?	,,
349	23	106			49			M			M				n			?	?		—	?	Bad	Chronic pneumonia.
350	23	336		22					F		M				n			?	?		—	Moderate	Fair	Dyspepsia.
351	23	405		29				M		S						n		Syphilis			6	,,	Good	Pulmonary congestion.
352	23	447			47				F	S							n	?			Several years	Careful	Fair	Lumbago.
353	24	60				70		M			M		n		-n			?			Some years	Free	Poor	Pulmonary congestion.
354	24	98			49			M			M				n			?			Several years	Careful	Fair	Myxœdema

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No.	Case Bk. Series 2. Volume.	Page.	Age. 1–20	20–40	40–60	60–80	80–100	Sex. Male.	Female.	State. Single.	Married.	Valvular Lesion. Mitral. Direct.	Regurg.	Double.	Aortic. Direct.	Regurg.	Double.	Probable Cause.	Duration in Years. Unknown.	Probable.	Known.	Habits of Life.	General Health.	Disease for which Relief was Sought.
355	24	102			53				F		M				n			Rheumatism			Several years	?	Good	Rheumatism.
356	24	146			50				F		M				n			?	?		—	?	Fair	Bronchitis.
357	24	162			54				F		M				n			?	?		—	?	Good	Fatty tumours.
358	24	170			41				F	S			n					?			Several years	Careful	,,	Neuralgia.
359	24	175			52			M			M						n	?			,,	?	?	Dyspepsia.
360	24	185	18					M		S				n				?			,,	Careful	Good	Pulmonary congestion.
361	24	188				60		M			M	n						?			Some years	Moderate	Fair	Enteric catarrh.
362	24	234		39					F		M	n						?			,,	,,	,,	Rheumatism.
363	24	242			56				F		M		n-		-n			?	?		—	?	,,	Albuminuria.
364	24	259				73		M			M		n-		-n			Gout			Several years	Generous	Good	Dyspepsia.
365	24	271			57			M			M		n-		-n			?	?		—	Free	,,	,,
366	24	298			56			M			M		n					Gout	?		—	Moderate	Fair	Pulmonary congestion
367	24	306		33				M			M						n	Rheumatic fever			Several years	,,	,,	Rheumatism.
368	24	317			42			M			M		n					?	?		—	?	,,	Dyspepsia.
369	24	319		36				M		S			nn					?			Several years	Moderate	Poor	,,
370	24	349				63			F		M		nn					Gout			,,	Free	Fair	Gout.
371	24	446			50			M			M		n-		-n			?			,,	?	,,	Dyspepsia.
372	24	470			55				F		M		n					Gout			,,	Generous	Nervous	Bronchial catarrh.
373	24	474		37					F		M				n			?			8	Careful	Fair	Menorrhagia.
374	24	499		35				M			M	n						?			Several years	Irregular	Poor	Dyspepsia.
375	25	11		28					F	S		n						?			,,	?	Fair	,,
376	25	28	17					M		S		n-					-n	?			,,	?	,,	Renal calculus (?).
377	25	93		26				M		S			n					?	?		—	?	Poor	Dyspepsia.
378	25	128		33				M			M		n					?			Several years	?	Fair	,,
379	25	134			46				F		M		n					?			,,	?	Good	,,
380	25	147			57				F		M	n						?			,,	?	,,	Rheumatism.
381	25	210				60		M			M		n					Rheumatism			,,	?	Fair	,,
382	25	224		28				M		S			n					?	?		—	?	Good	Sciatica.
383	25	250			52			M		S		n						Rheumatism			Several years	Generous	,,	Rheumatism.
384	25	336			50			M			M		n					?	?		—	?	?	,,
385	25	403		30				M		S			n					,,	?		Several years	Liberal	Fair	Hepatic congestion.
386	25	428		29					F	S					n			?	?		—	?	,,	Debility.
387	25	468		32					F	S			n					?			Several years	Careful	Poor	Cephalalgia.
388	25	469		35					F	S		n						?			,,	?	Fair	Dyspepsia.
389	25	498		26				M		S			n-		-n			?	?		—	Careful	Good	,,
390	26	34			56			M			M		n					?	?		—	Ascetic	,,	,,
391	26	39			57				F	S			n					Rheumatism	?		—	?	Fair	Rheumatism.
392	26	77		37					F	S		n						?			Several years	?	,,	,,
393	26	164	15					M		S							n	?	?		,,	?	Poor	Epilepsy.
394	26	193		26				M		S					n			?	?		—	?	Fair	Nervousness.
395	26	203			49			M			M						n	?	?		—	?	?	Cephalalgia.
396	26	253		27				M			M						n	?	?		—	?	Fair	Dyspepsia.
397	26	282		21				M		S			n					?			Several years	Careful	Nervous	Nervousness.
398	26	319			54			M			M						n	?			,,	?	Poor	Bronchitis.
399	26	341			54			M			M	n						?	?		—	?	?	Vertigo.
400	26	360				70		M			M			n				Gout			Several years	?	Fair	Dyspepsia.
401	26	408			42			M			M				n			?	?		—	?	,,	,,
402	26	471		20				M		S			n					?	?		Several years	Careful	,,	,,
403	26	486		24					F		M	n					n	?	?		—	?	,,	,,
404	26	509		37					F		M			n				?	?		Several years	Careful	Delicate	Debility.
405	26	52		33					F		M		n					?	?		—	?	Fair	Dyspepsia.
406	27	9		29				M		S			n					?			Several years	?	Bad	Epilepsy.
407	27	25			55				F		M		n					?	?		,,	?	Nervous	Nervousness.
408	27	80			41			M		S							n	?	?		—	?	?	Rheumatism.
409	27	127			56				F		M						n	?	?		—	?	Fair	Dyspepsia.
410	27	244			49			M			M		n-		-n			Gout			Several years	Generous	,,	Eczema.
411	27	282		27				M		S		n						?	?		—	?	,,	Cephalalgia.
412	27	356		39				M			M						n	Rheumatism			6	Generous	,,	Gout.
413	27	381		27				M		S			n					Syphilis			Several years	Free	Delicate	Phlebitis.
414	27	411			50				F		M				n			Rheumatism	?		—	?	Fair	Rheumatism.
415	27	480		30					F	S					n			?	?		—	Careful	,,	Dyspepsia.
416	28	11			48			M			M		n					?			Several years	?	,,	Cephalalgia.
417	28	26			40				F	S			n					?	?		—	?	Delicate	Jaundice.
418	28	96			50				F	S					n			Gout	?		—	?	Fair	Rheumatism.
419	28	106				63		M			M				n			?	?		—	?	?	Gout.
420	28	175				63		M			M		n					,,	?		—	?	,,	Chronic pharyngitis.
421	28	176		21					F	S			n					?	?		—	?	,,	Dyspepsia.
422	28	200			52			M			M						n	Rheumatic gout	?		—	?	,,	Gout.
423	28	208		31				M		S			n-		-n			?	?		—	?	?	Bronchitis.
424	28	273		39				M			M		n					?			Several years	?	Good	Vertigo.
425	28	308			40				F	S			n					?	?		—	?	Fair	Acne.
426	28	309		34				M			M		n					?	?		—	?	,,	Dyspepsia.
527	28	360		23					F	S					n			?	?		—	?	Delicate	Phthisis.
428	28	385				70		M			M		n					?	?		—	?	Fair	Capsular hepatitis.
429	28	493			56			M			M		n					?				Careful	,,	Retinal hæmorrhage.
430	29	95			46			M			M		n					Rheumatic fever			9	,,	,,	Rheumatism.
431	29	119			50			M			M		n					Rheumatism	?		—	Regular	,,	Renal inadequacy
432	29	182				65		M			M		n					?	?		—	?	Delicate	Pyloric catarrh.
433	29	230			56				F		M		n			n		?	?		—	?	?	Gall-stones.
434	29	242			45				F		M		n					?	?		—	?	?	Dyspepsia.
435	29	260		24				M		S			n					?	?		—	?	?	Dysentery.
436	29	261			49			M		S			n					?	?		—	?	?	Cystitis.
437	29	262				62		M			M		n					Gout	?		—	Liberal	Fair	Gout.
438	29	265				74			F		M		n-		-n			?	?		—	?	Delicate	Aphasia.
439	29	285		25					F	S		n-					-n	?			Several years	Careful	Fair	Nervousness.
440	29	418		25					F	S		n						?	?		8	,,	,,	Dyspepsia.
441	29	436			50				F		M		n-		-n			?	?		—	?	?	,,
442	29	502				63		M			M		—		nn			Gout			Several years	Simple	Fair	Gout.
443	30	31				61		M			M		n-		-n			,,			,,	?	,,	,,

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No.	Case Bk. Series 2. Volume.	Case Bk. Series 2. Page.	Age. 1—20	20—40	40—60	60—80	80—100	Sex. Male.	Sex. Female.	State. Single.	State. Married.	Valvular Lesion. Mitral. Direct.	Mitral. Regurg.	Mitral. Double.	Aortic. Direct.	Aortic. Regurg.	Aortic. Double.	Probable Cause.	Duration in Years. Unknown.	Duration in Years. Probable.	Duration in Years. Known.	Habits of Life.	General Health.	Disease for which Relief was Sought.
444	30	35			55			M			M		n		n			Rheumatism	?		—	Moderate	Fair	Rheumatism.
445	30	48			41				F		M				n			?	?		,,	?	,,	Dyspepsia.
446	30	78			27			M			M		nn					?	?		,,	?	,,	
447	30	81			42				F		M				n			?	?		—	Careful	,,	
448	30	195			29			M		S			n					?	?		—	,,	,,	Vertigo.
449	30	158			21			M		S			nn					?			Several years	?	,,	Dyspepsia.
450	30	161			28			M		S			—		n		?	?			—	Liberal	,,	Acne.
451	30	208			40			M		S			n			n		?			Several years	Careful	,,	Nervousness.
452	30	273				78		M			M		n					?	?		—	?	,,	Epilepsy.
453	30	370				61		M			M		nn					Gout	?		—	Free	Disorder'd	Gout.
454	30	480			45				F		M		n					?	?		—	?	Fair	Dyspepsia.
455	30	494			50				F		M		n					?	?		—	?	,,	Gastro-hepatic catarrh.
456	31	16			40				F		M		n					?	?		—	Careful	,,	Dyspepsia.
457	31	28			47				F		M		n			n		?			Several years	Free	Bad	Alcoholism.
458	31	34			35			M			M		n					?	?		—	Moderate	Fair	Diphtheritic paralysis.
459	31	47			28			M		S			n					?			Several years	Free	Delicate	Vertigo.
460	31	57			25				F		M		—		n			?	?		—	?	Fair	Dyspepsia.
461	31	85			46				F		M		—		n			?	?		—	?	Poor	,,
462	31	129			35				F		M		—			n		?	?		—	Careful	Fair	Nervousness.
463	31	187			48			M			M		n					?	?		—	?	?	Dyspepsia.
464	31	258			22				F	S			—			n		?	?		—	Careful	Good	Pseudo-hypertrophic paralysis.
465	31	287			23			M		S			—			n		Rheumatism			Several years	,,	Fair	Rheumatism.
466	31	291			39			M			M		n					?	?		—	?	?	,,
467	31	355			33			M			M		n		n			Syphilis			Several years	Free	Fair	Eczema.
468	31	398			31				F		M		n					Rheumatism	?		—	Careful	,,	Rheumatism.
469	31	472				71		M			M		n					?			Several years	?	,,	Dyspepsia.
470	31	489			25				F		M		n					?			,,	Careful	Ailing	,,
471	31	499	18					M		S			n					Rheumatic fever			3	?	Poor	Epilepsy.
472	31	503			42			M		S			—			n		?	?		—	Free	,,	Bronchial catarrh.
473	31	505			55			M			M		n		n			?	?		—	,,	,,	Alcoholic dyspepsia.
474	31	506			53			M		?	?		n					?	?		—	?	?	Cerebral congestion
475	32	5			32			M			M		n					?	?		—	?	?	Diarrhœa.
476	32	55			42				F		M	n						?	?		—	?	Delicate	Nervousness.
477	32	131			58			M			M		n					?	?		—	Free	Fair	Dyspepsia.
478	32	173			30				F	S		n						?			Several years	?	Delicate	Exophthalmic goitre.
479	32	225			24			M		S			n					?			,,	?	Fair	Diarrhœa.
480	32	235			45				F	S			n					?			,,	Careful	,,	Dyspepsia.
481	32	313			49				F	S		n						?	?		—	?	Poor	Rheumatism.
482	32	383	14						F	S			—			n		?	?		—	?	?	Acne.
483	32	443			50			M			M		n					?	?		—	Liberal	Fair	,,
484	33	31			23				F	S		n						?	?		—	?	,,	Colic.
485	33	33			32			M			M		n			n		?	?		—	?	Poor	Dyspepsia.
486	33	93			57			M			M		—		n			?	?		—	?	,,	Rheumatism.
487	33	363			59				F		M		—			nn		?	?		—	?	?	Dyspepsia.
488	33	411			48			M		S			n					?	?		—	Generous	Delicate	Fibroid phthisis.
489	33	447			42				F	S			n					?	?		—	Careful	Fair	Cephalalgia.
490	33	449				67		M			M		n					Gout	?		—	?	,,	Gout.
491	33	457			45			M			M		n					?			Several years	Generous	,,	Dyspepsia.
492	34	21			52			M			M		n					?	?		—	?	,,	,,
493	34	33			55				F	M		n						?			Several years	Generous	,,	,,
494	34	79			50				F		M		n			n		?	?		—	?	,,	,,
495	34	155				60		M			M		n					?	?		—	?	Poor	Gastric catarrh.
496	34	329		24					F	S			n					?	?		—	?	Fair	Acne.
497	34	361		35				M			M		n					?	?		—	Generous	,,	Choroiditis.
498	34	413			58				F		M		n					Rheumatism			Several years	Free	Poor	Hepatic catarrh.
499	34	431		23					F	S			—			n		?	?		—	?	,,	Dyspepsia.
500	35	41		31					F	S			n					?	?		—	?	,,	,,
501	35	95			48			M		?	?	n						Rheumatism	?		—	?	Fair	Rheumatism.
502	35	159			41			M			M		n		n			,,	?		—	?	,,	Colic.
503	35	277			44				F	S		n						?	?		Several years	?	Delicate	Cephalalgia.
504	35	371				71		M			M		n			n		?			—	Generous	Fair	Dyspepsia.
505	35	373				65		M			M		—				n	?			10	Free	,,	Renal inadequacy.
506	36	83			60				F		M	n						Rheumatism	?		—	Generous	,,	Rheumatism.
507	36	235			35				F		M	n				n		?	?		—	?	,,	Dyspepsia.
508	36	357				63			F		M		n			n		?			8	Generous	Nervous	Hepatic congestion.
509	36	385			54			M			M		nn					?			Several years	,,	Poor	Gastro-hepatic catarrh.
510	36	433		21				M		S			n					?			6	Moderate	Fair	Nervousness.
511	36	437		27				M		S		n						?	?		—	?	?	Dyspepsia.
512	37	41			50				F	S			n			n		Rheumatism			Several years	Generous	Fair	Rheumatism.
513	37	47		29					F		M		—				n	?	?		—	?	,,	,,
514	37	153					81	M		S			n			n		?			Many years	Generous	,,	Nervousness.
515	37	199				62			F	S			n					?	?		—	,,	,,	Dyspepsia.
516	37	—			34			M			M		n					Rheumatism			Several years	Moderate	Delicate	Rheumatism.
517	37	345			49				F	S			n					?			,,	,,	,,	Diarrhœa.
518	37	351			59			M			M		n					?			,,	Generous	Fair	Influenza.
519	37	417		27					F		M		n					?			,,	Moderate	,,	Dyspepsia.
520	37	433			42				F		M		n					?	?		—	?	?	Neuralgia.
521	37	483		21					F	S			—			n		?	?		—	Moderate	Delicate	Dyspepsia.
522	38	53		29					F	S			n			n		Rheumatism			Several years	?	Fair	Rheumatism.
523	38	95		32				M			M		—				n	?	congenital (?)			Careful	Delicate	Debility.
524	38	117			45				F		M		n					?	?		—	Generous	,,	Diabetes.
525	38	209				67		M			M		n			n		Gout			Several years	,,	Fair	Gout.
526	38	255				71		M			M		n				n	?			,,	Ascetic	?	Bronchitis.
527	38	285	18					M					—			n		?	?		—	?	Fair	Acne.
528	38	303		22					F	S			—			n		?	?		—	Moderate	Delicate	Debility.
529	38	469				72		M			M	n						?			Several years	?	,,	Eczema.
530	39	29				68		M			M		n					Gout				Careful	,,	Nervousness.
531	39	41		33					F	S		n						?			,,	Generous	,,	Dyspepsia.

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No.	Case Bk. Series 2. Volume.	Case Bk. Series 2. Page.	Age. 1—20	Age. 20—40	Age. 40—60	Age. 60—80	Age. 80—100	Sex. Male.	Sex. Female.	State. Single.	State. Married.	Valvular Lesion. Mitral. Direct.	Mitral. Regurg.	Mitral. Double.	Aortic. Direct.	Aortic. Regurg.	Aortic. Double.	Probable Cause.	Duration in Years. Unknown.	Duration in Years. Probable.	Duration in Years. Known.	Habits of Life.	General Health.	Disease for which Relief was Sought.
532	39	83	—	—	57	—	—	—	F	—	M	—	n	—	-n	—	—	?	—	—	Several years	Generous	Fair	Cephalalgia.
533	39	137	—	36	—	—	—	—	F	—	M	—	n	—	—	—	—	?	—	—	,,	,,	,,	Nervousness.
534	39	209	—	—	—	60	—	M	—	—	M	—	—	—	n	—	—	?	—	—	,,	?	,,	Albuminuria.
535	39	267	—	—	—	60	—	M	—	—	M	—	—	—	n	—	—	?	—	—	,,	Generous	Good	Dyspepsia.
536	39	319	—	—	45	—	—	—	F	S	—	—	—	—	n	—	—	?	—	—	,,	?	Delicate	Tinnitus.
537	39	349	—	21	—	—	—	M	—	S	—	—	—	—	—	—	n	Rheumatism (?)	—	—	,,	Very generous	Fair	Rheumatism.
538	39	395	—	27	—	—	—	M	—	S	—	—	n	—	—	—	—	?	?	—	—	Moderate	,,	Nervousness.
539	39	404	—	27	—	—	—	M	—	S	—	—	n	—	—	—	—	?	—	—	Several years	,,	Delicate	Dyspepsia.
540	39	475	—	—	59	—	—	—	F	—	M	—	nn	—	—	—	—	?	—	—	,,	?	Fair	,,
541	40	99	—	—	50	—	—	M	—	—	M	—	n	—	—	—	—	?	—	—	,,	Moderate	,,	Cephalalgia.
542	40	135	—	—	50	—	—	—	F	S	—	—	n	—	—	—	—	Rheumatism	—	—	,,	,,	,,	Acne.
543	40	189	—	—	—	76	—	M	—	?	?	—	—	—	nn	—	—	?	?	—	—	—	,,	Epileptoid disease.
544	40	251	—	—	27	—	—	M	—	S	—	—	n	—	—	—	—	?	?	—	—	—	,,	Dyspepsia.
545	40	345	—	—	35	—	—	—	F	—	M	—	n	—	—	—	—	?	?	—	—	Generous	Delicate	,,
546	40	353	—	—	51	—	—	M	—	—	M	—	—	—	—	—	n	?	?	—	—	?	,,	,,
547	40	443	—	—	—	60	—	—	F	—	M	—	n	—	-n	—	—	Arthritis	?	—	—	Very careful	Good	Osteo-arthritis.
548	40	507	—	—	29	—	—	M	—	S	—	—	—	—	n	—	—	?	—	—	Several years	Generous	Delicate	Dyspepsia.
549	41	243	—	—	43	—	—	M	—	S	—	—	n	—	—	-n	—	?	?	—	—	Careful	Poor	Phthisis.
550	41	293	—	—	30	—	—	—	F	S	—	—	n	—	—	—	—	Rheumatism	—	—	Several years	Generous	Delicate	Dyspepsia.
551	41	310	—	—	—	60	—	—	F	S	—	—	—	—	n	—	—	?	—	—	,,	Moderate	Fair	Indigestion.
552	41	387	—	—	—	61	—	M	—	—	M	—	—	—	—	n	—	Rheumatism	—	—	44	Generous	,,	Rheumatism.
553	41	391	—	36	—	—	—	M	—	—	M	—	n	—	—	—	—	?	—	—	Several years	,,	,,	Dyspepsia.
554	41	395	—	38	—	—	—	—	F	S	—	—	n	—	-n	—	—	?	?	—	—	—	,,	Neuralgia.
555	41	440	—	—	41	—	—	M	—	—	M	—	n	—	—	—	—	?	?	—	—	—	Very free	Poor	Albuminuria.
556	41	445	—	26	—	—	—	M	—	S	—	—	n	—	—	—	—	?	?	—	—	—	Generous	Delicate	Laryngeal catarrh.
557	41	451	—	27	—	—	—	M	—	—	M	—	n	—	—	—	—	?	?	—	—	—	,,	,,	Vertigo.
558	41	453	—	—	54	—	—	M	—	—	M	—	n	—	-n	—	—	Rheumatism	—	—	Several years	?	Good	Rheumatism.
559	41	476	—	—	56	—	—	—	F	—	M	—	n	—	—	—	—	,,	?	—	—	—	,,	Sciatica.
560	41	479	—	—	—	63	—	—	F	—	M	—	n	—	-n	—	—	,,	—	—	Several years	?	,,	Hepatic catarrh.
561	41	481	17	—	—	—	—	—	F	S	—	—	—	—	n	—	—	?	?	—	—	—	Delicate	Pulmonary congestion.
562	41	489	—	—	58	—	—	M	—	—	M	—	n	—	-n	—	—	Rheumatism	—	—	Several years	Careful	,,	Rheumatism.
563	42	66	—	—	48	—	—	M	—	—	M	—	—	n	—	—	—	Rheumatic fever	—	—	,,	?	Weak	Consolidation of lung.
564	42	143	—	30	—	—	—	M	—	—	M	—	n	—	—	—	—	?	?	—	—	Free	Nervous	Nervousness.
565	42	145	—	—	48	—	—	M	—	—	M	—	n	—	—	n	—	?	—	—	Several years	Abstemious	Fair	Headaches.
566	42	191	—	23	—	—	—	—	F	S	—	n	—	—	—	—	—	?	—	—	,,	?	,,	Dyspepsia.
567	42	197	—	—	46	—	—	—	F	—	M	—	n	—	-n	—	—	Gout	—	—	,,	Generous	,,	Gout.
568	42	217	—	—	40	—	—	M	—	—	M	—	—	—	n	—	—	?	—	—	?	Free	,,	Dyspepsia.
569	42	225	—	29	—	—	—	M	—	—	M	—	n	—	—	—	—	Gout	—	—	Several years	Generous	Fair	Eczema.
570	42	265	—	24	—	—	—	M	—	S	—	—	n	—	—	—	—	Rheumatic fever	—	—	,,	,,	Delicate	Rheumatism.
571	42	283	—	—	41	—	—	—	F	—	M	—	n	—	—	—	—	?	—	—	Several years	Moderate	Fair	Dyspepsia.
572	42	319	—	—	—	61	—	M	—	—	M	—	n	—	—	—	—	?	—	—	?	Generous	Delicate	Nervousness.
573	42	341	—	—	41	—	—	M	—	—	M	—	n	—	—	—	—	Rheumatism	—	—	?	Free	,,	Hepatic catarrh.
574	42	375	—	—	45	—	—	M	—	—	M	—	n	—	—	—	—	?	—	—	?	Generous	Good	Dyspepsia.
575	42	381	—	—	—	64	—	M	—	—	M	—	n	—	—	n	—	?	—	—	Several years	?	,,	Bronchial catarrh.
576	42	387	—	—	55	—	—	M	—	—	M	—	—	—	—	n	—	?	—	—	?	Generous	Fair	Dyspepsia.
577	42	432	—	27	—	—	—	M	—	S	—	—	n	—	—	—	—	?	—	—	?	Careful	,,	Nervousness.
578	42	447	—	—	42	—	—	M	—	—	M	—	n	—	-n	—	—	?	—	—	?	Generous	,,	Albuminuria.
579	42	450	—	—	46	—	—	—	F	S	—	—	n	—	—	—	—	?	—	—	Several years	Careful	,,	Dyspepsia.
580	42	467	—	30	—	—	—	M	—	—	M	—	n	—	—	—	—	?	—	—	?	?	Feeble	,,
581	42	489	—	39	—	—	—	—	F	—	M	—	—	—	n	—	—	Rheumatism	—	—	Several years	Generous	Fair	Rheumatism.
582	43	29	—	28	—	—	—	—	F	S	—	—	n	—	—	—	—	?	—	—	,,	Moderate	Weak	Bronchial catarrh.
583	43	157	—	—	42	—	—	—	F	—	M	n	—	—	—	—	—	?	—	—	10	Free	Bad	Melancholia.
584	43	171	—	32	—	—	—	—	F	S	—	—	n	—	—	—	—	?	—	—	?	Moderate	Fair	Dyspepsia.
585	43	173	—	—	62	—	—	—	F	—	M	—	n	—	—	—	—	?	—	—	?	?	,,	Tinnitus.
586	43	179	—	—	65	—	—	M	—	—	M	—	n	—	—	—	—	Rheumatism	—	—	Several years	Moderate	,,	Rheumatism.
587	43	197	—	—	59	—	—	—	F	—	M	—	—	—	n	—	—	?	—	—	6	Generous	,,	Nervous debility.
588	43	309	—	29	—	—	—	—	F	S	—	—	nn	—	—	—	—	?	—	—	5	Careful	,,	Dyspepsia.
589	43	347	—	—	66	—	—	M	—	—	M	—	n	—	—	—	—	Rheumatism	—	—	Several years	,,	,,	Vertigo.
590	43	391	—	—	49	—	—	M	—	—	M	—	n	—	—	—	—	?	—	—	,,	,,	,,	Dyspepsia.
591	43	475	—	24	—	—	—	M	—	S	—	—	n	—	—	—	—	?	—	—	?	?	Delicate	Bronchial catarrh.
592	43	493	—	32	—	—	—	—	F	—	M	—	n	—	—	—	—	?	—	—	?	,,	Good	Dyspepsia.
593	44	55	—	—	48	—	—	M	—	—	M	—	—	—	n	—	—	Gout	—	—	Several years	Generous	Fair	Eczema.
594	44	62	—	—	43	—	—	M	—	S	—	—	n	—	—	—	—	?	—	—	?	Careful	Delicate	Dyspepsia.
595	44	109	—	25	—	—	—	—	F	S	—	—	n	—	—	n	—	Rheumatism	—	—	,,	,,	Fair	Rheumatism.
596	44	111	—	—	40	—	—	—	F	—	M	—	—	—	—	—	—	,,	—	—	?	Generous	,,	,,
597	44	130	17	—	—	—	—	M	—	S	—	—	n	—	—	—	—	?	—	—	?	,,	Weak	Struma.
598	44	145	—	28	—	—	—	—	F	—	M	—	n	—	—	—	—	?	—	—	?	Liberal	Fair	Colic.
599	44	176	—	—	40	—	—	—	F	—	M	—	n	—	—	—	—	?	—	—	Several years	?	,,	Dyspepsia.
600	44	191	—	—	—	69	—	M	—	—	M	—	n	—	-n	—	—	?	—	—	?	Moderate	,,	Pyloric catarrh.
601	44	231	17	—	—	—	—	—	F	S	—	—	—	—	n	—	—	?	—	—	?	Generous	,,	Neuralgia.
602	44	341	—	—	40	—	—	—	F	—	M	—	—	—	n	—	—	?	—	—	Several years	Moderate	Delicate	Headaches.
603	44	343	—	20	—	—	—	—	F	S	—	—	n	—	—	—	—	?	—	—	?	?	,,	Nervousness.
604	44	475	—	34	—	—	—	M	—	S	—	—	n	—	—	—	—	Rheumatism	—	—	Several years	Generous	Fair	Sciatica.
605	44	493	—	—	55	—	—	M	—	—	M	—	n	—	—	—	—	?	—	—	?	?	Delicate	Dyspepsia.
606	44	497	—	—	48	—	—	M	—	—	M	—	n	—	—	—	—	?	—	—	?	Generous	Fair	Influenza.
607	45	13	—	—	—	64	—	—	F	S	—	—	n	—	-n	—	—	Gout	—	—	Several years	Careful	Delicate	Gout.
608	45	16	—	—	—	69	—	—	F	—	M	—	—	—	n	—	—	?	—	—	?	?	Fair	Dyspepsia.
609	45	18	—	—	42	—	—	—	F	—	M	n	—	—	—	—	—	?	—	—	Several years	?	,,	Diarrhœa.
610	45	27	—	38	—	—	—	M	—	S	—	—	—	—	—	—	nn	?	—	—	?	Moderate	Good	Enquiry.
611	45	35	—	—	—	60	—	M	—	—	M	n	—	—	—	—	—	?	—	—	Several years	Careful	Fair	Dyspepsia.
612	45	93	—	25	—	—	—	—	F	S	—	—	—	n	—	—	—	?	—	—	?	,,	,,	,,
613	45	129	—	26	—	—	—	—	F	S	—	—	n	—	-n	—	—	Rheumatism	—	—	Several years	,,	Delicate	Rheumatism.
614	45	138	—	—	52	—	—	—	F	—	M	—	n	—	—	—	—	?	—	—	?	Generous	Fair	,,
615	45	201	—	—	54	—	—	M	—	—	M	—	—	—	—	n	—	Rheumatism	—	—	?	?	Feeble	,,
616	45	308	—	—	—	61	—	M	—	—	M	—	n	—	—	—	-n	?	—	—	?	Generous	,,	Neurasthenia.
617	45	375	—	—	48	—	—	M	—	—	M	—	n	—	—	—	—	Gout	—	—	Several years	,,	Good	Eczema.
618	45	389	—	—	50	—	—	—	F	—	M	—	—	—	—	—	n	?	—	—	,,	,,	Fair	Headaches.
619	45	403	—	—	43	—	—	M	—	—	M	—	n	—	-n	—	—	Gout	—	—	14	,,	,,	Dyspepsia.
620	45	413	—	—	60	—	—	—	F	—	M	—	n	—	—	—	—	Arthritis	—	—	?	,,	Good	Rheumatism.

Note.—One n indicates murmur of moderate intensity. Two nn means very loud. A line connecting one column with another means that the sounds indicated concur.

No.	Case Bk. Series 2. Volume.	Page.	Age. 20–30	30–40	40–50	50–60	60–80	80–100	Sex. Male.	Female.	State. Single.	Married.	Valvular Lesion. Mitral. Direct.	Regurg.	Double.	Aortic. Direct.	Regurg.	Double.	Probable Cause.	Duration in Years. Unknown.	Probable.	Known.	Habits of Life.	General Health.	Disease for which Relief was Sought.
621	45	427			57					F		M		n-		n			Gout			Several years	Generous	Good	Dyspepsia.
622	45	503		26						F		M		n-		n			?			6	?	Fair	,,
623	46	19			70				M			M		n					?			?	Careful	,,	,,
624	46	34			51				M			M		n					Gout			?	,,	,,	,,
625	46	83		26						F		M		n					?			?	Generous	Good	Neuralgia.
626	46	115			75				M			M				n			Arthritis			Several years	?	,,	Aphasia.
627	46	177		27					M		S			n					?			?	?	Delicate	Dyspepsia.
628	46	352			64					F	S		n						?			Several years	?	,,	Epigastric tumour.
629	46	363		29					M		S					n			Rheumatism			?	?	Fair	Rheumatism.
630	46	389								F		M							Gout			?	Generous	,,	Headaches.
631	46	395							M		S			nn-		n			Rheumatic fever			Several years	Moderate	,,	Rheumatism.
632	46	418		23					M		S			n-				n	?			,,	Regular	Feeble	Dyspepsia.
633	46	425			66				M			M		n					Gout			,,	Careful	Ailing	Renal calculus.
634	46	450		32					M		S			n					?			,,	Generous	Fair	Dyspepsia.
635	46	478			53				M			M		n					?			8	Careful	,,	Writer's cramp.
636	46	481			42				M			M						n	?			?	Generous	,,	Nervousness.
637	47	29								F	S			n					?			?	Simple	Delicate	Consolidation of lung.
638	47	51			60				M			M		n-		n			?			Several years	Generous	Fair	Dyspepsia.
639	47	75		37					M		S			n					Rheumatism			?	Moderate	,,	Nervousness.
640	47	55		36						F	S			n					?			?	?	,,	Boils.
641	47	75		35						F		M		n					?			?	Moderate	,,	Dyspepsia.
642	47	81			51					F		M		n					Rheumatism			?	Careful	,,	Rheumatism.
643	47	153		24					M		S			n					?			?	Moderate	,,	Hepatic catarrh.
644	47	181			47				M			M	n						?			Several years	Generous	,,	Dyspepsia.
645	47	225	15							F	S			n-				n	?			,,	Careful	Weak	,,
646	47	241	19							F	S		n						?			,,	,,	Delicate	Ulcer of stomach.
647	47	307		26						F		M		n					Rheumatism			?	,,	?	Rheumatism.
648	47	321		31					M		S					n			?			?	Free	Fair	Nervousness.
649	47	375		24						F	S			n		n			?			?	?	,,	Nasal catarrh.
650	47	445		26					M		S			n				n	?			?	?		Albuminuria.
651	48	29			50				M			M		n					?			Several years	Generous	Ailing	Headaches.
652	48	43		33					M			M		n					?			?	Moderate	,,	Dyspepsia.
653	48	131			65				M			M		n					Rheumatic fever			Several years	Generous	,,	,,
654	48	257			70				M			M		n					?			?	?	,,	Chronic gastritis.
655	48	289		55					M		S			n					Rheumatism			?	Generous	,,	Chronic bronchitis
656	48	408		42						F		M				n			Rheumatic gout			?	?	Good	Headaches.
657	48	439		32						F	S			n					?			?	Careful	Fair	,,
658	48	449		44					M		S			n					?			?	Generous	Ailing	Dyspepsia.
659	48	499		31					M		S					n			?			?	?	Fair	Malaria.
660	48	505		23						F		M		n-		-n			?			Several years	?	Ailing	Headaches.
661	50	23		27					M			M		n					?			?	?	,,	Diarrhœa.
662	50	69			62					F		M		u					Gout			Several years	Generous	Fair	Eczema.
663	50	171		25					M		S		n						?			?	Careless	Ailing	Colitis.
664	50	323		23						F	S		n						?			?	Careful	,,	Dyspepsia.
665	50	329			68				M			M		n-		-n			Gout			5	Generous	,,	Albuminuria.
666	51	83		48					M			M							,,			Several years	,,	,,	Eczema.
667	51	135			63				M			M		n-				-n	?			,,	,,	,,	Vertigo.
668	51	203		34					M			M		n					?			?	Careful	Fair	Dyspepsia.
669	51	271		24						F		M		n					?			?	?	Ailing	,,
670	51	307			50				M			M		n					?			?	Moderate	,,	,,
671	51	473			46				M			M	n						?			,,	,,	Good	,,
672	51	521		38						F		M		n					?			?	Careful	Ailing	,,
673	52	163			60					F	S			n					?			?	Abstemious	Good	Influenza.
674	52	257		33						F		M				n			Rheumatism			Several years	Generous	Ailing	Dyspepsia.
675	52	373		36					M			M		nn					?			?	Free	,,	Albuminuria.
676	52	451			60				M			M						n	?			15	?	?	Dyspepsia.
677	52	495		58					M			M				n			?			?	?	Ailing	,,
678	52	521			68					F		M		n-		-n			?			?	Generous	Fair	Eczema.
679	53	81			60					F	S			nn					Rheumatic fever			45	Careful	Good	Dyspepsia.
680	53	91			61					F		M		n					Rheumatism			?	Generous	,,	,,
681	53	133		27						F	S		n						Rheumatic fever			9	?	Fair	,,
682	53	149			44				M		S			n					Gout			Several years	Generous	Good	Eczema.
683	53	171			47				M			M		n-				-n	?			30	Careful	,,	

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summed up the chief points which I have submitted to your consideration.

1. That there are many persons with long-standing valvular disease of the heart, engaged in the active business of life, who without any symptom of heart-disorder have enjoyed good health and have reached an advanced age.

2. That the mitral regurgitant murmurs so often encountered in chorea, for the most part disappear within eight or nine years of the attack.

3. That valvular inflammations, and their effects arising in the course of rheumatic fever, do sometimes disappear, and leave behind no clinical evidence of their former existence; and that this occurring for the most part in the young, also occurs sometimes in the middle-aged.

4. That the signs of valvular defects arising out of the degenerative changes of middle life do also, on rare occasions, disappear, and that, when circulatory and respiratory disturbances accompany their commencement, they sometimes subside, and permit of apparently complete re-adjustment.

5. That as there must be in the histories, habits, occupations, and surroundings of patients with valvular disease conditions which, in one case, bring about secondary disorders, and, in another case, exempt it from them, it is desirable that the respective *differentiæ* should be discovered, and made capable of application to practice.

6. That any systematic and critical study of this subject likely to lead to practical issues could be undertaken only by the Collective Investigation Committee, and not by it, unless actively assisted by experienced general practitioners who possess, in a special manner, the knowledge necessary to the end in view.

7. That a joint inquiry of the kind proposed, conducted with due patience, discrimination, and accuracy would greatly extend our knowledge of the natural history of diseases of the heart, and largely increase our means of assisting those who suffer from them.

Dr. Clifford Allbutt.—I shall allude preferably to my impressions rather than to facts. We all know that rheumatic fever and its consequences fall very heavily upon young people, and therefore young

people supply a good many cases of the kind. But, given an adult heart, there can be no question that the heart which has suffered the lesions of the rheumatic kind during the period of growth, will grow so as to bear the pressure of the lesions in a way that no heart after that period can offer. When development is complete, of course growth is necessarily incomplete. Under favourable circumstances, however, we know that the heart does change to a very remarkable extent, and a very extraordinary amount of readjustment can take place. At the Leeds Infirmary, we had a man who had pursued his work for thirty years with one of these rheumatic lesions. I was called to a similar case at Doncaster, where my patient had been in the habit of doing a good deal of horse-riding. He was said to be then breaking up from the effects of heart-disease. I found him with effusion into one pleura, his legs were swelling, and he had a mitral murmur. We made out, however, that his swelled legs were due to gouty phlebitis, his effusion into the pleura was decidedly pleuritic; there was no dilatation of the heart, and within six weeks he was again hunting. He died some ten or fifteen years subsequently. Now, I cannot tell you how important dietary considerations are in cases of this sort. Tobacco is important, tea is important; but, above all, alcohol. I am perfectly certain that people who take a liberal quantity of wines and spirits, do much to weaken the ventricles. The action of tea and tobacco is more transient, and after dropping the habit, the inconveniences tend to disappear, but alcohol seems to have a direct and pernicious influence on the heart substance. Often, by simply giving up rich living, wines and the like, a murmur will disappear, and the general health improve. It has very properly been remarked that the mere noise of a murmur is nothing, and I certainly am of opinion that these very noisy, musical murmurs really do not signify very much. If you turn a tap a little way, the water rushes out with a great noise, but if you turn it right on full, the noise ceases, although a much larger quantity of water is passing. The important points seem to be as to the position of the apex and as to dilatation, together with changes in the circulation generally. I think you will mostly agree with me, that in those cases where the heart-beat is "murmurish" we may have a serious amount of regurgitation, whilst the more noisy ones may go on for years. Now, as to the diseases of valves, I think there is little doubt that mitral disease from rheumatic fever may disappear; at any rate, people who have them for years do not get any displacement of the heart. As to the aortic murmur, this requires to be considered. I think that, as a rule, the aortic valves are not attacked unless the damage to the heart is severe. In most cases it begins at the mitral, and goes on to the aortic, so you have a double mischief. As regards life assurance, I may say that I have passed persons with mitral disease under certain restrictions, but I cannot say this of aortic disease, for in this case you are never sure that your man may not die suddenly, so that a certain amount of care is requisite. I certainly think that a person who has aortic regurgitation ought to be informed of it, or, at any rate, a member of his family should be warned of the liability to die suddenly. If a person has a mitral regurgitant murmur from rheumatic fever which has lasted for some years, and there are no important signs of dislocation of the heart, I am in the habit of recommending these cases to be taken as invalid lives. I would suggest that they should be put on the early payment system, so that all the premiums are paid before 30 or 35.

Dr. BRISTOWE: I have no doubt that organic murmurs do occasionally disappear. Not very long ago a gentleman consulted me about the condition of his heart. He had had rheumatic fever some years before, and had been told to consider himself the victim of heart disease. At this time, business matters had worried him, and made him feel very poorly, and this had called his attention to the state of his heart. I examined him, but found no murmur, nor any sign of disease, though of the fact that he had had cardiac lesion there could be no doubt. Next, as regards the duration of life with definite evidence of heart disease. I will begin by making a remark or two upon the question of life-assurance. When cases came to me in which I discovered murmurs, I rejected them on that account; but, during the last few years, I have been inclined to accept patients of this kind; certainly, I have admitted two or three of them. When I find a mitral systolic murmur extending over many years, and I find that the second sound is not accentuated, and the apex is in its place, I think I am justified in admitting them; at any rate, I can say that, as time has gone on, I have become more and more convinced that we have organic murmurs which do not imply discomfort or shortening of life. I have picked out a few cases which correspond to Sir A. Clark's afternoon cases. A clergyman, aged 52, came to me not long ago who was then suffering from aneurysm of the transverse arch of the aorta, with pressure on the trachea. His history was this: at six years of age he had rheumatic fever, followed by mitral disease. He was looked upon as an invalid, but having much energy of character, he went to college, and had lived on well until quite recently; so for nearly forty years he had been perfectly healthy. I saw another gentleman, aged 45, whose life, twenty years before, had been declined on account of heart disease. He had several times been examined since, all the medical men reporting the existence of disease. On examining him, I found a systolic mitral and some murmur at the aortic orifice. He, however, had no consciousness of disease, not even breathlessness. I never saw this patient again. I know a medical man at the present time in whom, nine or ten years ago, a mitral systolic murmur was discovered. He is still alive and conducting an active practice. Some time since, a gentleman, aged 65, called on me with symptoms of angina pectoris. He had a mitral murmur dating from twenty years previously, but had always enjoyed good health with the exception of these anginal symptoms. In another instance, a schoolmaster consulted me; he was about 40 years of age. He made no particular complaint about his heart, but he had a musical systolic murmur over the sternum. He did not know that there was anything wrong with his heart, nor that he had had rheumatism. He subsequently ascertained that he had a severe attack of rheumatic fever with pericarditis, the nature of his illness having been concealed from him. I may tell you that I reassured him, and he is still a perfectly healthy man. About fifteen years ago, I was asked to see a nephew of mine who had suffered slightly from rheumatism, and he had a systolic murmur. He is now seven or eight and twenty, and a short time since, when he was about to marry, and wished to insure his life, I examined him, and found the murmur as loud and musical as ever. Now, with respect to obstructive mitral disease, I remember a woman, in good health, with one of the best murmurs of the kind I have ever heard. I should like to echo the sentiment that has been expressed several times to-day to the effect that the character and loudness of the murmur are really of very little importance in the question of prognosis. As to the treatment, I am sometimes inclined to think it is a pity there are physicians; many persons would lead a happy life enough but for them. Now I think it is quite time enough for persons to discover that they have heart disease when they begin to feel the effects of it. We should endeavour to keep up the health of the patient, and enable them to continue useful members of society. It is related of Dr. Murchison, seven or eight years before his death, that he found out that he had aortic regurgitation. He consulted as to what he should do, and he determined to go on enjoying himself as well as he could under the circumstances. It is certainly what I should endeavour to do under the circumstances, and it is what I recommend to patients. I do not believe that I have heart disease. I certainly hope I have not, but under no circumstances would I allow Sir Andrew Clark, or anybody else, to examine me for the purpose of finding it out.

Dr. LEECH (Manchester): I have noticed, in hospital practice, how many cases of heart-disease come to us without any history of origin being discoverable. I find among my notes one case of mitral disease and aortic stenosis, after scarlet fever, where health was not sensibly impaired. Many cases of cardiac disease, beginning in early life, do live to a good old age. Aortic disease is certainly more apt to terminate earlier than the other variety; but I had a clergyman under my care for the last twelve years, who says he is now as well as ever he was in his life. We must be guided in our prognosis by the condition of the heart itself. Curiously enough, the tracing which I took of the pulse presented a perfectly normal character, intimating that the circulation was carried on as usual. I had a case of mitral stenosis about twelve years ago, with as plain a murmur as ever I heard in my life. I saw the patient twelve months ago, and then no murmur was present; possibly this may depend on the state of the circulation. In many cases where the murmur disappears, it is possibly because the physical factors have altered. Now, whether we advise patients to exert themselves or not, I believe it to be a bad plan to advise patients to keep perfectly quiet, since it affects the general health; but I am not prepared to go to the other extreme. I certainly consider that overfeeding is one of the very greatest faults for persons suffering from cardiac disease. I cannot think it is a proper thing to recommend to an insurance company any patient with a cardiac murmur.

Dr. BOWLES: To the general question I shall have little or nothing to say, except that I agree with what has been said; but there are some points a little different to the line which has been taken to-day. I think, as members of the Collective Investigation Committee, we must not ignore temporary murmurs; and I am particularly desirous that we should be exact and clear as to the terms of the matter in hand. I can call to mind, about twenty-seven years ago, a woman I went to see one night, with a feverish excitability of the nervous system which I did not understand. I examined her heart, and found

a considerable *bruit*. I gave her a dose of Dover's powder, and left her. I saw her in the morning, and she had had a miscarriage, and was getting all right again, and the murmur had disappeared. I have since directed my attention to temporary murmurs. I knew a gentleman, on whom I made a *post-mortem* examination the other day, who had a mitral murmur—without, however, any particular symptoms. Eventually, he had an attack of kidney disease, and was confined to bed; then the murmur, which had been previously noticed, disappeared. At the *post-mortem* examination, I found there was a little puckering of the mitral valve, and a little hole, about the size of a pin, through the valve. Reference was made to some cases in which murmurs had existed, and had gone away. I remember one such case, a boy of 15, who had had rheumatic fever with great disturbance of the heart's action. He eventually went to Cambridge, went through the usual athletic sports, ran races, etc., without inconvenience, yet the murmur and irregularity were still present. Ten years afterwards, I examined him again; there was not a trace of murmur, and the man was as sound as possible. In relation to the aortic regurgitations, I cannot help thinking we have rather overestimated their importance. I know a man who, fifteen years ago, had extensive heart-disease with dropsy, and yet he eventually got quite well. I have several more cases of the same kind, which time will not allow me to narrate. As to failure of the heart's action, I have known one gentleman for fifteen years with regurgitant heart-disease; he improved, and is now hard at work.

Dr. Frank Donaldson, of Baltimore, U.S.A.: I propose, Mr. President, to trespass only a few minutes upon the time of this Section. Sir Andrew Clark's valuable and very suggestive paper opens up for discussion three important points in connection with heart-disease: 1, the pathological significance of cardiac murmurs; 2, their prognostic importance; and 3, the question as to the insurability of individuals in whom such murmurs are found. We have all seen cases showing that the mere existence of cardiac murmurs may not result in serious disability of the heart. Sir Andrew Clark's report of no fewer than 682 such cases is of great value, in giving support and confirmation to the now generally accepted view that Laennec, and subsequently the pathological school, greatly exaggerated the unfavourable prognostic value of heart-murmurs. We consider that it is an admitted fact that no murmur can exist without a physical cause. Nature, in fact, so regulates in health the circulation within the heart that the blood moves noiselessly; (1) the systole of the heart giving the propulsive force, (2) the normal consistence of the blood, and (3) the size of the several orifices through which the blood passes, are adapted to secure this end. Modify any one of these physical factors, and you may have abnormal sounds or murmurs. In the cases under discussion, we must omit the consideration of murmurs of a hæmic character, now generally admitted not to be merely functional, because a material lessening of the number of blood-globules is an alteration of the physical construction of the blood. In the 682 innocuous murmurs that Sir Andrew Clark has spoken of, most of them were systolic as to time, and located over the mitral or aortic area. Aortic stenosis and mitral insufficiency were the lesions diagnosed. I do not for an instant question that these two prominent heart-lesions may be so slight as to cause but little or no inconvenience, and yet give audible evidence of their existence. Not only is this true, but, in cases of incompetency and resulting regurgitations, ordinarily the loudness of the murmur is in inverse proportion to the size of the new opening. It is a well known physical fact, that the friction caused by the flow through a small orifice is greater than through a larger orifice. Dr. Todd, years ago, said that the disappearance of a regurgitant mitral murmur was of serious import, because it showed the increase of the patency of the valve. But it is not the less true that the blood, by the force of the ventricle, is thrown and pressed against all portions of its internal surface. Is it not now admitted by pathologists that, as the result of impaired nutrition or degeneration, as well as by exudative endocarditis, thickening of the connective tissue under the endocardium results at other points besides the valves? The papillary muscles, as well as the other muscular structures of the heart, become degenerated; the chordæ tendineæ become less elastic, and, indeed, thickened and shortened. Resulting from these altered conditions causing abnormal friction as the blood circulates, we may have, and do have, intraventricular murmurs without having any valvular disease. Stenosis of the internal orifices and imperfect closure and adaptation of the segments of the valves, are not the only lesions capable of producing murmurs. Not only is the distance between the valves very small, but the points of which we have been speaking are between the valves. Such being the case, the differential diagnosis of these murmurs becomes frequently almost impossible if attempted to be made simply from the morbid sounds. By the aid of the rational symptoms, and those of a subjective character, approximative diagnoses may be ventured upon. Exercise in even slight valvular disease not only increases the intensity of the murmur, but causes increased frequency of the heart's beat, and some dyspnœa. As the patient advances in life, the deficiency of cardiac force makes the slight flow more evident in its effects. The sphygmograph gives us valuable assistance in testing the nature of these several murmurs. From the close observation of a number of cases in hospital practice, as well as in life-insurance examinations similar to those mentioned by Sir Andrew Clark, I have been convinced that many of them were cases of non-valvular intraventricular murmurs. I frankly acknowledge that I have learned to pay less attention to the murmurs, and more to the size and position of the heart, and, above all, to the signs of weakness of the heart's walls. I look more and more to the physical signs of degeneration and dilatation. One word more in reference to the insurability of persons with cardiac murmurs. I endorse the general course pursued, which is that even slight visceral disease may prevent a man from living out his expectancy, and consequently the insurance company ought to have the benefit of the doubt, and not the applicant.

Dr. Oliver, of Newcastle-upon-Tyne: Next to aortic obstruction, I regard, of all the other forms of cardiac disease, that in which disease is located at the mitral orifice, as the one most consistent with prolonged life. And of the two forms of lesion met with here, I should say mitral stenosis is more favourable than mitral regurgitation. Coming from a centre where cardiac disease is very prevalent, we see a large number of cases of mitral stenosis, very frequently, too, among people, often under the age of puberty, from whom no history of rheumatism or rheumatic fever can be obtained, but only one of scarlet fever or measles. In such, nature evidently adapts herself to the effects of the lesion in two ways. There occurs in many of them a toning down of the whole circulation, and of the system generally, so that you find puberty is retarded, and, later on, when you see the patient at the age, say, of 20, he looks more like a lad of 15 or 16. In such, the heart is small; particularly is this true of the left ventricle; and quite in keeping with the smallness of the heart is the diminished size of the body generally—a body which frequently shows other indications of malnutrition in the ricketty shape of the chest, etc. But all cases of mitral stenosis do not exhibit this dwarfing of the individual; many patients so affected are plump and full-sized. Nature, in them, has risen to the occasion, and the result is that you find behind the obstructing lesion dilatation, with thickening of the walls of the left auricle, a thickening of its muscular walls, and a strengthening of the endocardium, thickening, too, of the walls of the pulmonary veins, and hypertrophy of the right ventricle. With this increase of power behind the lesion, and time given for the contracting forces to act upon the slightly increased amount of blood in the left auricle (for the auricle contracts in the period of pause which is the longest in the rhythms of the heart, and it will be admitted, too, that the auricle in such cases acts earlier) a sufficiently large amount of blood is squeezed through the contracted orifice into the ventricle, and by this means the circulation is effectively maintained. Such individuals often suffer but little, if at all, for years. And much of what I have said here will apply to mitral regurgitation. So long as compensation is maintained, life is, on the whole, pleasurable. As for the combination of aortic stenosis and mitral regurgitation, of that I can speak hopefully. Many patients thus affected, whom I saw years ago, are now following their daily avocations (frequently hard work) without any, or next to no, cardiac disturbance whatever. But of all forms of cardiac disease, that which is regarded as extremely fatal, and that which, at least, so frequently appals us by the rapidity with which a fatal termination is reached, I think the place will be given to aortic regurgitation. And yet I know of cases where, when the individual and external conditions are favourable, this disease is quite compatible with longevity. We are asked to give illustrations of cases. I would briefly mention three. The first is that of a young joiner, aged 26, who was under my care six years ago, for the effects of aortic disease, due to scarlet fever, not rheumatic fever. He made a good recovery, and, for the last six years, has regularly followed his occupation, never having been obliged to give up work. He is pale, is not breathless, suffers only occasionally from palpitation on exertion; and yet in him is the most marked aortic regurgitation, judging from the audibility of the diastolic murmur in the vessels of the neck, and the water-hammer character of his pulse. But his pulse is never higher than 64, and a sphygmographic tracing of it shows high arterial tension. Another case is that of a labourer, aged 38 years, who is the subject of aortic regurgitation; his heart is much enlarged; the apex beat can be seen and felt between the sixth and seventh ribs. Yet what is the history of the case? Twenty years ago he had a severe attack of rheumatic fever, which

laid him aside for several months. Two years after this another attack occurred. Fifteen years ago he was carefully examined by a medical man, who told him he had heart-disease. For all these years this man had followed his occupation—not so hard lately, he admits, as formerly—without in the least having suffered from the effects of this lesion. His only complaint is that he suffers from flatulence, and a sense of fulness after eating. His pulse varies from 70 to 74; a tracing of it shows the tidal wave carried above the percussion, indicating, therefore, firm arterial tension. And if I might be allowed to quote a third case, it is that of a manager of a public-house, whom I was asked to see a year ago, as he was suffering from gout. His urine, beyond being extremely acid, was healthy. On asking to examine his heart, he laughed, and told me I would find something there, as years before he was told he had a peculiar affection of the heart, which, he said, was spoken of as "double action." To my astonishment I found aortic and mitral regurgitation, great heaving of the chest and vessels of the neck. And what was his history? Twenty-four years ago he met with an injury whilst in Edinburgh, for which he was taken to the infirmary, and his fractures treated under the direction of Professor Syme. On his recovery he was examined by Drs. Heron Watson and Gillespie, as well as others, and was afterwards, on account of his heart, made the subject of a clinical lecture in the theatre of the infirmary. His pulse is under 70, and is anacrotic and, from the day on which he was told that he had a heart-affection, he had suffered no inconvenience from it whatever. From a review of the life history of the above cases, therefore, and of others that have done well under treatment, or lasted more than five years without any serious symptoms, I am inclined to think that, all things being equal—good home, good food, regular rest, and temperance in the use of alcohol—the occupation of the individual has influenced but very little the after history of the case. For all that, however, we must regard rest as very essential. And yet, at the present time, I know of a few young ladies who, a few years ago, were under my care, some for mitral stenosis, others for mitral regurgitation, who, in winter, skate a good deal, and, at private and public dances, dance every waltz on the programme; and, in the summer months, spend much of their time playing lawn-tennis, without suffering any inconvenience whatever. Speaking now of girls, these are the hopeful cases whose development has gone on; menstruation has not been retarded, as in the other stunted individuals. In fact, as the result of the advent of puberty, there has been sent through the whole system an influence making for increased nutrition or development concurrently with the establishment of menstruation. As for aortic disease, however, the cases that do well are those where the pulse ratio remains from 60 to 74, or thereabouts, where, with a slowly, regularly acting heart, the pulse tracing shows heightened arterial tension. Theoretically, this is not what we expect, but, with a hypertrophied left ventricle behind or below the lesion, and the peripheral arteries in a state of good tension, I see in these a means whereby the circulation can be effectually carried on, and the growing wants of the system supplied. For such a condition in all forms of heart-disease, slow pulse, good tension, and good nutrition of the heart, I strive to get by treatment, and, when I obtain it, the patient ceases, at least for the present, to be an object of anxiety to me.

Sir ANDREW CLARK: In replying, I will confine myself to three things. First, with respect to life-insurance, I defined my position very clearly, that I did not feel myself at liberty to enter upon the subject; but, as it has been taken up, I may say something about it. I have nothing to do with any life insurance office, but I frequently have submitted to me cases for arbitration. First of all, the mitral disease shall have existed independently of degeneration in the heart; secondly, that it shall have existed for two years; thirdly, that the ventricles shall be in good order; fourthly, that the arteries shall be sound; fifthly, that there is no persistent basic congestion nor recurrent hepatic congestion; that the patient should not be liable to colds which hang about him; and, finally, that his general health shall be good. Under these circumstances, I am prepared to say that the mitral disease will not shorten life. My second remark is this: We have been told how very important it is not to tell patients of any disease of the heart, and I gave cases in which the disease arose apparently from the information. I must recall that the attitude of the public towards us obliges us sometimes to do so. Patients are only too pleased to find out a mistake or an omission on our part. I am of opinion that it is the duty of a medical man, when he discovers any sort of injury, to deposit that knowledge with some discreet friend, with whom shall rest the responsibility of its use. Dr. Bowles has said that it would have been better for me to include in my tables cases of murmurs heard within the pulmonary area. Now, what would have been the result of that? Many of you would have said directly these tables do not show the existence of the very valvular lesions the existence of which it is necessary to prove. Two things are well worth remembering: that, with the existence of aortic injury, it may be said that the valvular affection is to be considered, not in relation to the murmur at all, but in relation to the state of the ventricles and to the general health of the patient.

HERNIA OF THE CÆCUM.

By FREDERICK TREVES, F.R.C.S.,
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HERNIA of the cæcum, although not actually common, is certainly not rare. It has been met with in the umbilical, inguinal, and femoral regions; is most frequent in the first-named situation and most uncommon in the last. In the umbilical district it is associated, so far as I know, only with that variety of rupture known as the congenital umbilical. This rare hernia is met with at the time of birth. The coverings of the sac are formed from the tissues of the cord, and into that structure the protrusion originally extends. The condition depends upon a defect in the closure of the visceral plates, a defect that seems to be often consequent upon some imperfect development of the bowel. There is a time in the history of the formation of the gut when the cæcum lies without the future abdominal cavity. It then enters that cavity and, performing nearly a circuit in the abdomen, finally reaches the right iliac region. In the congenital umbilical hernia, the cæcum is often found arrested at the umbilical aperture. It occupies the rupture. The rupture is provided with a perfect peritoneal sac, and the cæcum lies free within it as would any segment of the small intestine. I have met with and operated upon three examples of this hernia (*Lancet*, 1881, record of one of these cases). In two the sac contained the caput coli, and in the third it was mainly occupied by a large Meckel's diverticulum. With this form of cæcal protrusion, I do not propose to deal further, but to limit my remarks to the herniæ that occur in the inguinal and femoral regions.

I shall describe two examples of this rupture in the situations named, and shall deal mainly with the question of the sac. There is a remarkable statement that seems to have attached itself to this condition. It is to the effect that the cæcal hernia has no sac. This statement occurs, with one or two exceptions, in all the modern text-books in English and French that I have specially consulted. It appears to have been handed down from one manual to another as a species of entailed property. I shall endeavour to show that cæcal ruptures are, except in a few instances, always provided with a sac, and that the gut lies clear within the interior of that sac. I believe also that there is little or no evidence to show that the cæcum may descend into the scrotum or crural region entirely bared of peritoneum, and unaccompanied by any diverticulum from that membrane. Further, I doubt if the *hernie akystique* of the French has any existence, so far, at least, as cæcal ruptures are concerned.

Among the early reported cases of cæcal hernia is one recorded in 1732 by Arnaud (*Dissertation on Hernias*, pt. 2, obs. xvii.) that may here be noticed. It concerned a man of 60, who had had a scrotal hernia for twenty years. The tumour had a circumference of twenty-seven inches, and reached to the middle of the thigh. For some years he had had occasional attacks of colic. At last the rupture became incarcerated, and on the fifth day herniotomy was performed. The sac contained the ileum with the cæcum and colon—some ten inches in all. "The intestines were adherent to the hernial sac and to each other, and were even gangrenous at several points.....I employed one hour and a quarter in dividing the adhesions and bridles which connected the colon to the hernial sac. At last, being at a loss what method to follow in order to finish the operation, I resolved to cut away the whole mass of the protruded intestines close to the internal ring.....The ileum, the cæcum, and the beginning of the colon were twisted together, the colon having passed over the ileum towards the inner side and the ileum towards the outer side, and both of these intestines had contracted strong adhesions with the edges of the inguinal ring." The patient made a good recovery, a permanent fæcal fistula, however, resulting. Scarpa, in commenting upon this case, maintains that the adhesions were natural, and that there was an imperfect sac. The description, however, more closely accords with the view that the adhesions were the result of the local peritonitis that is frequently associated with this form of hernia.

With regard to the question of sac or no sac, I may in the first place point out that the anatomy of the parts concerned would fully support the view that the cæcum, when herniated, may be provided with a complete sac, and lie free within it, as would any loop of the smaller bowel.

In my Hunterian Lectures on the Anatomy of the Intestinal Canal and Peritoneum, delivered at the Royal College of Surgeons in 1885, I pointed out the following facts bearing upon this matter. In opposition to current views, I stated that I had never found the posterior surface of the cæcum uncovered by peritoneum; I had never found it attached by areolar tissue to the iliac fascia; and I had not met with a single example of a meso-cæcum. These statements were founded upon the examination of 100 fresh bodies. Other points were these: in the great majority of instances the apex of the cæcum corresponds with a point a little to the inner side of the middle of Poupart's ligament; in a number of cases the cæcum hangs over the pelvic brim; in 18 per cent. it is lodged entirely within the pelvic cavity. In every instance, out of 100 examinations, the cæcum was free and entirely invested by peritoneum. The line of reflection of the peritoneum from the posterior wall of the cæcum on to the posterior abdominal parietes varies. It is usually placed between a line on a level with the summit of the iliac crest, and another on a level with the anterior superior spine. Those who are impressed with the orthodox description of the cæcum, will scarcely believe that the average measurement in a vertical line along the back of the colon from the tip of the cæcum to this reflection of peritoneum is four inches. In one quite exceptional case it was eight. The mobility of the cæcum is great, and depends upon two conditions, upon the length of intestine that extends between the tip of the cæcum and the reflection of the peritoneum, or upon the presence of an ascending meso-colon. In eleven instances the cæcum could be made to touch the liver, or any part of the left side of the pelvis. In some of these specimens it may well have occupied a hernia on the left side. In one case the tip of the cæcum could be made to touch the xiphoid cartilage, and in several instances this mobile piece of intestine could be drawn down the thigh to the level of the great trochanter.

With these anatomical conditions it is easy to conceive a hernia of the cæcum unattended by any pecularities as regards the sac. The statement that the cæcal hernia has no sac, or an incomplete one, can be traced back at least as far as Scarpa's celebrated treatise on hernia. This work was published in 1809, and here I think the statement—in its present form—takes its origin. Authors previous to this time had spoken of sacless cæcal herniæ. Thus, Chopart and Desault (*Traité des Maladies Chir.*, t. ii, p. 195), writing in 1796, state that they had seen the cæcum lying bared of peritoneum under the integuments of the scrotum. Sernin (*Journ. Gén. de Med. par Sedillot*, t. xvi, p. 302) had met with a like condition, and had indeed introduced the term "entérocéle akystique." Scarpa took up the following position. He owned that the free and movable portion of the cæcum may form the contents of a hernia in the groin, may lie in a clear sac, and be susceptible of ready reduction. He gives a case of this form, and an excellent illustration of the parts when exposed (Plate vii, Fig. 1). With regard to other forms he writes thus: "In dissecting several of these herniæ, I have found that the cæcum with the appendix, and the beginning of the colon in descending through the internal ring into the scrotum, not only relax the natural bridles which connect these intestines to the os ilii and to the psoas muscle, but likewise that these intestines in descending draw after them into the scrotum, that part of the great sac of the peritoneum to which they are naturally united opposite to the right side. Consequently, the hernial sac within which these intestines are contained, is formed of the same identical portion of the great sac of the peritoneum, which in the sound state lined the ilio-lumbar region.....Whence it happens that on opening the hernia the intestines are found adhering to the hernial sac in the same manner as they were united to the great sac of the peritoneum within the abdomen in the right ilio-lumbar region." He supports this statement with cases, and some admirable illustrations. I cannot say, however, that these figures serve to prove the point. They show that the herniated cæcum may have only a partial sac, and be covered by peritoneum only on its anterior aspect. No anatomist could say that they show an arrangement of the peritoneum, that would be normal were the gut lying in the iliac fossa instead of in the scrotum (Plate vii, Fig. 2)." In the chief case it is stated that "the appendix was, in several places, in continuity with the hernial sac." The figure shows this; but it cannot be said that an adhesion of the appendix to the peritoneum of the iliac fossa in several places is a normal condition.

Pelletan (*Clinique Chirurgicale*, Paris, 1810); Hesselbach (*De ortu et progressu herniarum*, Würzburg, 1816); Cloquet (*Recherches sur les causes et l'anat des hernies*, Paris, 1819), and others, all adopted Scarpa's view of the state of the sac in cæcal hernia, namely, that it was partial only in the majority of cases. Lawrence, in his famous *Treatise on Ruptures* (5th edition, London, 1838), accepted Scarpa's explanation entirely. He went further, however, and described a cæcal hernia without any sac at all. A few years later, the *System of Surgery*, by Chelius (London, 1847), appeared in English. In that work it is simply said with reference to cæcal hernia, that "there is not any sac." From Chelius to the present text-books of surgery is only a step.[1]

Lawrence's case of cæcal hernia without a sac requires notice. It is reported in the following words: "A man, aged 45, had laboured under scrotal hernia for several years, without wearing a truss. He was attended by a surgeon in this city, in consequence of symptoms of strangulation, which had existed for three days. The usual means to afford relief were employed without success; hence an operation was deemed necessary. A careful dissection was made through the various coverings to the gut, but no sac or peritoneal coat could be found. In searching for a sac, an opening was made into the cæcum, from which fæcal matter escaped; until this occurred, the operator could not know that he had opened the intestine, as the coats were thickened and greatly changed in appearance. That the passage of the contents of the bowels might be quite free, the lower margin of the internal oblique and transversalis was divided. In the space of thirty-six hours fæcal discharges took place through the wound, but the patient died three days after the operation. On examination after death, the hernia was found to consist of the inferior and posterior parts of the cæcum, which could not originally have been covered by peritoneum to the usual extent. The portion of intestine had passed behind the peritoneum, between the spermatic cord and the cremaster muscle. The appendix and the junction of the ileum with the cæcum were close to the internal ring, and it was in this situation that the peritoneum was reflected from the walls of the abdomen to the cæcum."

To prove his point, Lawrence makes an anatomical assumption which some may not be disposed to allow. It is difficult to understand how the tip of the cæcum, that is usually wholly covered by peritoneum, could have bared itself of that membrane, and yet have shown such a reflection as is described. The case better accords with some such theory as this. The free end of the cæcum is protruded into a hernial sac. It inflames. Its walls are thickened, and become adherent to the sac; the latter is obliterated. Apart from all explanation, the case is not so clear that it can be said to prove the existance of a sacless hernia. It is, however, the best reported case of this supposed condition with which I am acquainted.

One specimen, however, must be mentioned in connection with this matter. It is in the museum of St. Bartholomew's Hospital (No. 2,115), and is thus described: "Inguinal hernia, combined with hydrocele of tunica vaginalis. The hernia is situated behind the enlarged tunica vaginalis, which is flattened by the pressure of the hernia. The hernia is opened posteriorly, and its contents, which are the cæcum and part of the colon, are there shown. The vessels of the spermatic cord are separated; the spermatic artery and the vas deferens pass together along the inner and posterior part of the hernia, and the spermatic veins are at some distance external to them. There is no true hernial sac."

Through the kindness of Mr. D'Arcy Power, I have been enabled to examine this specimen carefully. In the first place, it presents a sac of clear outline, capable of holding a hen's egg. The continuity of this sac with the general peritoneum can be readily traced. In the second place, the gut contained in the hernia is not cæcum. It is a loop of colon quite free from adhesions. Its anterior part only is covered with the sac, so that a large portion of the circumference of the loop—less than one-half—is uncovered by peritoneum, and is outside the sac. The specimen affords an excellent example of incomplete sac, but it is not an example of a cæcal hernia without a sac.

Another specimen in the same museum (No. 2,086) shows a cæcal hernia with a large sac that is nearly but not quite complete.

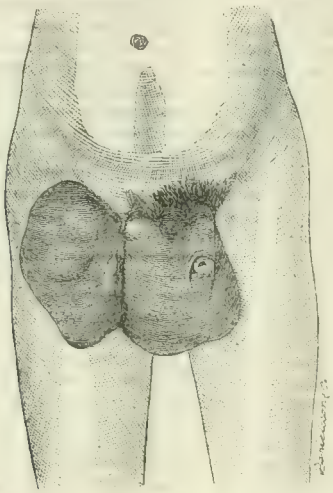
It may now be convenient to describe the two examples of hernia of the cæcum upon which this paper is based. The first case is that of a man, aged 41, who was admitted into the London Hospital on May 31st, 1886, with a very large and remarkable looking scrotal hernia. The patient was a potman, and had always been engaged in public houses. He was of average height, was spare, of slight muscular development, and unhealthy-looking. He was flabby, and a little anæmic. He had been in the habit of drinking a great deal. Apart from the rupture, the patient appeared to have had no definite ill-

[1] It is but fair to say that South, the translator of Chelius, adds a footnote in which he protests against his author's statement, and declares that "the cæcum does descend into a true hernial sac beyond doubt."

nesses, other than such as may depend upon excessive drinking. His account of the hernia was as follows. Fourteen years ago, when turning a drunken man out of a public-house, he was thrown violently to the ground, and was knelt or jumped upon. From this resulted a small strangulated hernia in the right inguinal region. The patient was not aware he had a rupture prior to the assault in question. With its first appearance, it became strangulated. It was of small size, and did not extend to the scrotum. He was taken to St. Thomas's Hospital, where the gut was reduced by operation. The wound appears to have been attacked by erysipelas, and sloughing and copious suppuration followed. He remained in the hospital for nearly twelve months. When he left, there was a large and irregular scar in his groin, but the rupture had entirely disappeared. The suppuration does not appear to have involved the scrotum. He wore no truss, and saw nothing of the hernia for six years. At the end of that time, it appeared again very insidiously, and increased slowly but steadily. In less than a year, it had descended into the scrotum.

About two years ago, the tumour "began to be double;" the outer or second swelling appeared, and increased very rapidly. The scrotum became larger, and in a little while the whole mass had attained to twice its previous size.

For some years the scrotal tumour had been readily reduced. When, however, the second swelling appeared reduction became difficult, and, for the last year or so, the patient had made no attempt to replace the intestine. With regard to the outer tumour when it first appeared, and was of small size, its contents were readily returned; as its dimensions increased it became quite irreducible. The patient had



never worn a truss; when the tumour was small he wore a suspensory bandage, but of late years the mass had become too large for any kind of supporting apparatus. The rupture gave him a great deal of trouble, and the inconvenience of it was still increasing. It was the seat of a wearisome dragging pain, that became unbearable after much exertion or long standing. It was the cause, he thought, of some pain he felt in the back. He was liable to frequent attacks of slight colic and to indigestion. He was troubled with flatulency, and the bowels were irregular; sometimes he was constipated, at other times he had diarrhœa; he was often a little sick; it is very probable that some or all of these latter symptoms were due in part to his habit of excessive drinking.

The large size of the swelling exposed it to frequent injury, and he had difficulty in concealing it from view even when he wore an apron. Of the two tumours, the outer one had been the most troublesome; it had been now and then the seat of definite pain, attended with considerable tenderness. The patient sought relief because the hernia was beginning to incapacitate him from work.

In the right inguinal region was a tumour of considerable dimensions, divided into two distinct parts. (See Figure.) The inner of the two swellings presented the ordinary characters of a scrotal hernia of large size. At the posterior and inferior part of the mass the testicle could be indistinctly felt; the tumour was resonant on percussion, and appeared to contain intestine only; the greater part could be reduced, but the reduction was effected slowly, and with difficulty; the scrotal tissues, apart from the effects of distension, were perfectly healthy; the left side of the scrotum and the left testicle were normal. The outer tumour was irregularly oval, its long axis being vertical; it covered nearly the whole of the front of the thigh near the groin, and extended down the limb for seven inches; the surface was lobulated, and covering by thin integument that near the inguinal ring was composed mainly of scar-tissue. The tumour was connected to the body by a narrow pedicle, with a diameter of less than two inches; this pedicle joined the neck of the scrotal hernia, and the two fused together at an enormous external inguinal ring. Beyond this point the swellings were perfectly distinct. It was evident, however, that they communicated, for when attempts were made to reduce the scrotal rupture, the other tumour increased in size; the outer swelling was resonant on percussion in front and at its outer side, dull on its inner side. Its contents were irreducible, although the size of the tumour could be greatly diminished by squeezing the contained bowel; masses of omentum could be felt in the inner portion of the swelling. The abdomen was quite flat, and not disposed to be pendulous.

The operation for radical cure was performed on June 4th; it was carried out "antiseptically," the spray being used. I made an incision, four inches long, in about the usual position for inguinal herniotomy. It was so arranged as to cross the united neck of the two tumours; the interior of these was soon exposed; they were both entirely lined by peritoneum, and possessed a common neck placed at the opening in the abdominal parietes. The scrotal tumour simply contained a mass of perfectly free coils belonging to the ileum. These were reduced without difficulty.

The outer tumour was less easily dealt with. At its inner side there was a very large mass of omentum, a considerable portion of which was adherent. At its outer side was the cæcum, the appendix, the commencement of the ascending colon, and the last few inches of the ileum. The appendix and ileum were free, but the cæcum was attached to the sac in several places by a number of firm peritoneal adhesions.

All that part of the cæcum and colon that occupied the hernia was entirely covered by peritoneum. There was no meso-cæcum. The bowel, but for the adhesions, would have been hanging free into the hernial sac. These adhesions were divided, the omentum was freed, was clamped as high up as possible, and the part below the clamp cut away. Of the divided omental vessels, the six largest were secured by catgut ligatures; the remainder were nipped by Wells's forceps, which were twisted off, without loosening the blades, before the operation was completed.

When all intestine had been reduced, the neck of the sac was carefully separated from its connections at the opening in the parietes, and firmly closed with stout whipcord. There was no inguinal canal, simply a large hole in the situation of the canal capable of receiving all the fingers. The margins of this aperture were brought together by two sutures of Chinese twist. The structures of the cord were widely separated over the surface of the sac. The testicle was wasted and hard, and the epididymis could not be distinguished from the gland. The testicle, the cord, and the whole of the sac below the ligature were now removed. The testis appears to have been inflamed after the first operation. On section, it was found to be represented only by a homogeneous fibrous mass. The greater part of the skin covering the double tumour was cut away; the piece removed measured about six square inches. After the sutures and drainage-tube had been inserted, the incision was represented by a simple line. The operation occupied one hour.

I did not approximate the margins of the hernial ring under the impression that union of those margins would follow. I considered that the two sutures would serve to prevent protrusion of bowel during the healing of the skin-wound. If healing by first intention were to follow, the encysted sutures would long serve to keep the edges of the ring together. If suppuration followed, the amount of inflammatory material poured out while these two foreign bodies were being eliminated would, when organised, form a fair barrier against further protrusions. The stump of the omentum was introduced well into the abdomen, and left free in that cavity. The coils of ileum in the scrotal hernia, and the small segment of that gut in the outer tumour, were not continuous. So far as I could ascertain, a considerable length of unprotruded ileum must have existed between the two herniated segments.

When the cæcum was free, it was carefully examined. The appendix had not become adherent, either to the sac or the gut. When the extreme upper limit of the protruded colon was examined, the line of reflection of the peritoneum from that bowel to the posterior parietes was reached. This reflection was just at the hernial ring, and, from it, it would appear that there was no mesocolon to the ascending colon.

In attempting to reduce the scrotal hernia, a little of the gut could be pushed by the omentum into the outer rupture-sac.

It would be safe to assume that the original scrotal hernia contained small intestine only, and that the formation of the second tumour was encouraged by the weakening of the parietes, due to the suppuration and sloughing. The second sac was formed from the first, the two having a common neck.

The wound was dressed with sponge and iodoform, and subsequently with iodoform-gauze. The patient made a good but slow recovery. The skin-wound healed, but suppuration took place in the deeper parts. A month after the operation, the patient was up and about, and a small sinus alone existed. He was seen again two months after the operation. There was considerable thickening about the inguinal opening. A minute discharging sinus, which gave no trouble, still existed. On examining this, the whipcord-loop applied to the neck of the sac was found lying quite loose; on its removal, the sinus closed. There was not the least trace of any return of the rupture four months and a half after the operation. No truss had been worn.

The second case was that of a woman, aged 56, who was admitted into the hospital on June 18th, 1886, with a severe contusion of the hip. She incidentally drew attention to a large rupture in the right groin. She looked much older than she was; was very thin and flabby, and in feeble health. She had had several children.

She first noticed the rupture about two years ago. She discovered it by accident. It appeared so gradually that she was unable to give any account of its early condition. She followed no occupation apart from her own household duties. The rupture never gave her any trouble. She never had made any attempt to reduce it, and could not say whether it was reducible or not. She had never worn a truss. The swelling had increased gradually in size.

The hernia was femoral and of considerable size. The long axis of the tumour was parallel with Poupart's ligament, and measured 4½ inches, reaching to the anterior superior iliac spine. The vertical width of the tumour was 2¼ inches. It was irregularly lobulated on the surface. The coverings were very thin, and the integument was white and atrophied. The tumour was always tympanitic on percussion. The thin parietes and the general wasted condition of the patient enabled one to make out with great distinctness the vermiform appendix. It lay in the lower part of the swelling, and could be rolled between the finger and thumb. It could be followed into a large rounded and lobulated mass of gut that was evidently the cæcum. The sacculi of the bowel were reproduced through the thin wall of the hernia. The swelling was tympanitic. The whole of the contents of the rupture were reducible. After pressing upon the rupture for a few seconds, the gut within slipped suddenly back *en masse*. The patient had never seen it reduced before, and it was apparently little affected by the recumbent posture. When the hernia reformed, the same physical characters were reproduced in the tumour, and the appendix reappeared in the same place. The femoral ring would have readily taken three fingers. The abdomen was flat and, indeed, sunken.

The patient stated that she was very liable to indigestion, and to attacks of "spasms." She was occasionally sick during such attacks. Her bowels were irregular; they were sometimes confined and sometimes were opened freely. Latterly she had had diarrhœa. These symptoms were probably independent of the hernia. They had existed before the rupture was noticed. The patient lived very poorly, and for several years had been practically edentulous. In this case, the thin coverings of the hernia made it clear that it contained the cæcum and appendix. There was evidently a perfect sac, the reduction, when effected, was complete, and the protruded bowel must have been provided with a perfect peritoneal covering. In Guy's Hospital Museum (No. 2,503-52) is a specimen closely allied to the present case. It shows a right femoral hernia in a woman aged 47, that contains the whole of the cæcum. It lies free within a distinct sac. The rupture had been irreducible for years, but had given little trouble.

Speaking of cæcal hernia generally, museum specimens and recorded cases show that the rupture is much more common in inguinal than in femoral herniæ, is more common in males than in females, occurs on the right side, and is practically limited to adults. With regard to the last-named points, Schmidt (Pitha and Billroth's *Handbuch*, Stuttgart, 1878, p. 38) mentions a case of cæcal hernia in the left inguinal region. The gut had a mesentery, and hung quite free in a well-formed sac. It was readily reduced. Sandifort (*Icones Herniæ Congenitæ*, 1781) records the case of a male infant, aged 3 months, with a congenital scrotal hernia of the right side. The sac contained the cæcum, appendix and end of the ileum. The appendix was adherent to the testicle and to the bottom of the sac. Sandifort suggests that this adhesion was congenital, and that as the testis descended the cæcum was dragged after it. Mr. Lockwood has reported a case of congenital scrotal cæcocele and refers to like examples by Wrisberg and Cloquet (*Med. Chir. Trans.*, vol. lxix, p. 506).

The large museums of London, namely, those of the College of Surgeons, and of St. Bartholomew's, Guy's, and St. Thomas's Hospitals, contain seven specimens of cæcal hernia. Eight cases, including the two now reported, occur among recent records. In two out of these fifteen cases (St. Bartholomew's Museum, No. 2,086, and Schmidt, p. 38) the sac is incomplete. In one there is a sac, but its limits are obscured by morbid adhesions, and the results of dissection (Guy's Museum, 2,487-10), and in the remaining twelve cases[2] there is a perfectly clear sac, such as exists in ordinary ruptures.

In the cases with perfect sacs, that part of the cæcum and colon is protruded that would naturally have been free and covered by peritoneum while in the abdominal cavity. In the very excellent specimen in St. Thomas's Hospital Museum some four inches or more of a normally arranged cæcum and colon lie free within the sac.

It is to be noted that in these cases the peritoneum that lines the iliac fossa is actually drawn down, as Scarpa believed. This is shown by the fact that the line of reflection of the peritoneum from the colon to the parietes, instead of being about the level of the iliac crest, will be just within the inguinal ring. This was very evident in my case, and is clearly demonstrated in the museum specimen just named. In a case of Petit's (*Traité des Malad. Chir.*, t. ii, p. 352, published about 1790) the same arrangement was evidently present. Should such a protrusion increase, the enlarging sac may obtain a fresh supply of peritoneum from this very reflection; and so in time some of the upper part of the herniated gut may be bared posteriorly, and an incomplete sac be established.

An incomplete sac, when it exists, may be formed also in this manner. The cæcum protrudes as a free segment of gut. It alone occupies the sac. Some loops of small intestine now descend, the sac increases, and in its growth drags the peritoneum from the hinder wall of the cæcum. Schmidt records a good example of this, which is illustrated by a clear figure. The cæcum is covered only on its anterior aspect. From the apex of the cæcum, which is high up in the sac, there extends to the bottom of the sac a falciform fold of peritoneum, which certainly appears to have been stripped from the cæcum. In such a case the connective tissue aspect of the caput coli is not necessarily turned backwards. The gut may be so distorted in its position that all the cæcum visible from the front may be bared of peritoneum.

The cæcum may be protruded alone, or with it may be coils of ileum and omentum. In such cases the cæcum will usually lie to the right, the ileum to the left and the omentum between the two.

Of the clinical characters of the cæcal hernia, there is little to be said. It is usually irreducible or difficult of reduction. This may depend upon mere bulk or engorgement, or upon adhesions, or upon an incomplete sac, or upon the fact that the line of reflection of the peritoneum is close about the hernial neck.

It is apt to become inflamed, and, as a result, to become adherent. Typhlitis and perityphlitis—so-called—may occur when the cæcum and appendix are in the scrotum, as well as when they are in the iliac fossa.

The hernia is frequently in the condition known as that of incarceration or obstruction, and, when so affected, it appears to present no distinctive symptoms. It then compares with a loop of transverse colon obstructed within the sac of an umbilical hernia. The rupture may be strangulated, but this condition does not appear to be so common as that just named.

[2] Guy's Museum, No. 2,503-52; St. Thomas's Museum; College of Surgeons Museum, Nos. 2,634. 2,635, 2,638; *Medical Times*, June, 1850, p. 578; *Gazette des Hôpitaux*, March, 1871, p. 149; Pathological Society's *Transactions*, vol. i, p. 101; *Ibid*, vol. i, p. 103; Schmidt, *loc. cit.*, p. 37.

SEA-WATER SUPPLY OF BOURNEMOUTH. — The Bournemouth Improvement Commissioners contemplate spending £9 000 in a scheme for supplying the town with sea-water for street-watering and sewer-flushing. The Local Government Board has informed the Commissioners that it would be necessary to obtain the consent of the Gas and Water Company to the proposed scheme; but the Company objects, on the ground of the largely increased rates and the injury the sea-water may do to their pipes.

JUBILEE HOSPITALS AND ENDOWMENTS. — A proposal will be submitted at the annual meeting of members of Sir Sydney Waterlow's Industrial Dwellings Society, to set apart a sufficient fund for maintaining beds in convalescent homes for the use of the Society's tenants, thus providing a permanent memorial of the fiftieth anniversary of Her Majesty's accession.

A CASE OF NON-MALIGNANT PYLORIC OBSTRUCTION: DILATATION OF THE PYLORIC ORIFICE: RECOVERY.[1]

By ROBERT HAGYARD, M.R.C.S., L.S.A.,
Late House-Surgeon to the Hull Royal Infirmary.

M. J., aged 51, the subject of this paper, first came under my notice about five years ago, when she was complaining of symptoms of gastric disturbance, such as one meets with in ordinary dyspepsia. She was at this time being attended by Dr. Fitzsimons, of York, who prescribed the ordinary stomachics. Her symptoms varied somewhat with the treatment, and she felt better some days than on others. About two years ago she commenced to vomit large quantities of food at intervals of a few days. I was then led to make an examination of the abdomen, the stomach being found to be somewhat dilated, but no appearance of any abnormal growth could be detected in any of the regions of the abdomen. The vomit was examined, but no sarcinæ or blood could be detected; the material ejected was intensely acid.

Owing to the patient living some distance away, I did not again see her for some months, when I found her greatly emaciated; the dilatation of the stomach had extended, and the quantity of fluid vomited was much larger than formerly. The stomach was again examined, but no hardness or thickening near the pylorus could be detected. She was now taught to wash out her own stomach daily with a long tube and funnel after the manner advised by Dr. Clifford Allbutt, which process gave her considerable relief.

In December last she appeared to be thinning rapidly, and from the nature of the contents of the stomach that came away with the washings out, I concluded that very little food was finding its way into the intestine. She was now fed with Slinger's nutritive suppositories and nutritive enemata, which appeared to keep up her strength for some time, till, in February last, the rectum became irritable, and it was with difficulty that a small enema could be retained. The injection of a few drops of a 4 per cent. solution of cucaine into the rectum somewhat lessened the irritability. During the whole of this time, she never once recollects noticing any blood in the vomit, and taking this point into consideration, as well as her family and previous history, which I will now relate, I came to the conclusion that the obstruction, whatever it might be, did not appear to be malignant.

Family and Personal History.—Her parents are both dead, her father dying from apoplexy, and her mother from bronchitis, both over 70 years of age. All her brothers and sisters are strong and healthy. She had always enjoyed good health up to the time of her marriage, at the age of 24 years. Shortly after marriage, her husband, who was then in the army, contracted syphilis, and soon afterwards communicated it to her, the effects of which she says she feels to this day. She has had two miscarriages, has given birth to two still-born children, and has had three living children, all of whom died young. Ten years ago she had an attack of jaundice, accompanied by severe vomiting, when she says blood was noticed in the ejecta; but what the precise nature of the illness was I have never been able to determine (syphilitic gummata of stomach?). She continued to keep fairly well, with the exception of various eruptions on the skin, till she came under my notice as previously stated. She had been treated with antisyphilitic remedies both by Dr. Ure, and afterwards by his successor, Dr. Fitzsimons; and I myself had also given her large and repeated doses of iodide of potassium.

In February last, she expressed a desire to undergo any operation that might give her a chance of getting rid of her distressing symptoms. It was about this time that I first read two cases reported by Mr. Timothy Holmes, in which Professor Loreta, of Bologna, had successfully dilated the pylorus in two cases of non-malignant stricture. The patient readily acquiescing in any operation that I suggested, I decided, on March 7th last, to cut down on the pylorus, and see if operative means would in any way alleviate her sufferings. I was prepared either to dilate the pylorus, or else, if I found the obstruction malignant, to perform gastro-enterostomy by stitching the jejunum to the anterior wall of the stomach. On the morning of the operation, the stomach was well washed out with tepid water till the contents flowed away quite clear.

Chloroform having been administered by my friend, Mr. Pratt, I proceeded to make a careful examination of the exterior of the abdomen. There was extreme dilatation of the stomach, extending below the level of the umbilicus; the liver appeared to occupy its normal situation, and no growth or hardness could be felt about the region of the pylorus. Under the carbolic spray an incision about five inches long was made in the right median line from just below the xyphoid cartilage, extending downwards and outwards to near the cartilage of the ninth rib. The muscles were divided and the bleeding arrested. The peritoneum was next opened and the stomach exposed. I passed my fingers round the pyloric part of the stomach, but detected no tumour, nothing being felt but a sense of hardness at the pyloric ring. Part of the stomach was now dragged through the wound, and a small aperture large enough to admit the finger was made on its anterior surface; the finger was then passed in and swept round the interior of the stomach, which was found to be quite smooth. By means of a pair of scissors, I now enlarged the wound in the stomach, in the direction of the pylorus, to an extent sufficient to admit the hand; terrific bleeding followed the incision, but as the stomach was well dragged out of the wound, no blood escaped into the abdominal cavity. The vessels were all tied with very fine ophthalmic silk ligatures. The index finger of the right hand was now passed to the pyloric aperture, but it would not admit it. I next tried a pair of fine dressing forceps, with long alligator blades; these, with some difficulty I managed to insert through into the duodenum. I now slowly opened the handles, and caused slight dilatation of the stricture; this was followed by the passage of a female urethral dilator, and gradual and slow dilatation was made, till I was able to insert the index and next finger into the duodenum, without feeling them at all tightly grasped. Loreta, in his cases, dilated with his fingers, till they were more than three inches apart, but I am perfectly certain that had I done so in this case, I should have seriously injured if not ruptured the gut at this position. Very little hæmorrhage resulted from the stretching of the stricture. The hæmorrhage from the wound in the wall of the stomach having quite ceased, I then commenced to stitch up the aperture, and this was by far the most tedious part of the operation. I used Lembert's method of stitching, and stitched up with very fine silk. The needle every now and then transfixed small vessels in the walls of the stomach near the edge of the incision, and these were difficult to stop completely. I found the best plan was to grasp a piece of the stomach wall containing the offending vessel, between the finger and thumb, and keep up slight pressure for a few moments. The wound was eventually closed, and the stomach carefully returned into the abdomen; the abdominal wound was carefully closed by exact approximation of its several different structures, and the patient put to bed. The operation lasted an hour and twenty-five minutes. Loreta states that his cases occupied half an hour, but I found that the stitching of the wound in the stomach lasted fully that time.

The abdominal wound was dressed with iodoform and McGill's salicylic silk. The patient was kept well under the influence of morphine, administered hypodermically, and was fed per rectum with eggs and beef-tea. She passed a good night, her temperature on the evening of the operation being 99 2° F. She remained in a very satisfactory state the next day; but on the third day after the operation she vomited once, the ejecta being almost pure blood, which I concluded had come from the wound in the stomach, the vessels of which gave rise to so much trouble in stitching up. Small quantities of ice were ordered to be sucked, and the vomiting did not occur again that day. Her temperature that evening was 101.5° F. Beyond this, up to the present time, her temperature has never been above 99° F. On the sixth day she was again sick, and brought up a couple of teaspoonfuls of blood. She never vomited again, and from that time up to now she has gone on progressing, her recovery not being marred by any other alarming symptom.

Loreta in his cases commenced feeding by the mouth on the fourth day; but, except ice, I allowed nothing to enter the mouth till the seventeenth day, when she was ordered a tablespoonful of milk every half-hour; this was retained, and the next day milk was supplemented by strong soup and beef-tea. The diet was gradually increased. She never vomited once, and at the present enjoys and is able to digest ordinary food. She has gained visibly in flesh since the operation. Although the obstruction at the pylorus is removed, the dilatation of the stomach exists; still, I think it is slightly less, and my object in bringing this case before your notice is to obtain some suggestions from members present as to the best means of reducing this distention of stomach.

Ever since the operation, the patient has been kept in the recumbent position, so that the food has been prevented from bagging the stomach downwards.

Professor Loreta makes no mention of dilatation of the stomach in

[1] Read at the annual meeting of the East York and North Lincolnshire Branch of the British Medical Association.

any of his cases, and they appear to have got up about the sixteenth day.

The application of the continuous current and massage have been suggested to me as means of increasing the tone of the muscular fibres of the stomach, and overcoming dilatation.

I shall be glad to put into practice any suggestion that any member of the Branch present may wish to make, with a view of diminishing the dilatation. So far as I can ascertain, this operation has never been performed before in this country. Loreta states that he has performed it twenty-three times. Dr. MacBurney, of New York, has performed it twice, but both patients died. He, like myself, found that the operation lasted over an hour.

Since reading this paper last May, before the East York and North Lincoln Branch, I may state that the patient has progressed very satisfactorily; the dilatation is certainly less, although there is still room for considerable improvement. Her general health is excellent, and she is gaining flesh. She remains in the recumbent posture some time after meals, so that the weight of the food shall not unduly drag down the stomach. There is never any feeling of sickness, and, beyond the remaining dilatation, is to all appearances perfectly well.

STRANGULATED HERNIA AND ITS TREATMENT.

By ALFRED SHEEN, M.D.,
Senior Surgeon to the Cardiff Infirmary.

EARLY in 1885, a series of cases of strangulated hernia passed through my hands, which seem to me to be of sufficient interest to call for their publication in a collected form, as, apart from their intrinsic interest, they teach some lessons which may be useful to the thoughtful surgeon.

The first case was that of a woman who had had a rupture, which was supposed to have been reduced; symptoms of strangulation continued, but no hernial protrusion was to be found; abdominal section was performed, and the woman recovered.

CASE I.—Rose H., aged 58, was admitted to the Cardiff Infirmary, under my care, on January 16th, with the following history. She had a rupture, supposed to be right inguinal, for four or five years. It came down more than usual on January 3rd, and as she could not return it, she called in a midwife, who used a considerable amount of force, and "got it back." Pain continued, however, and was so great that she sought medical aid, and a mustard poultice was applied over the abdomen, and on the 6th she had an ounce of castor-oil, which "moved her bowels thoroughly." Since then she has had no motion, though enemata have been administered several times. The castor-oil relieved her, but the pain soon returned, and on the 10th, for the first time, she had vomiting, "which was fæcal," and which was repeated at intervals of about ten or eleven hours, with great relief for some hours on each occasion. The abdomen has since become gradually larger. Treatment has consisted of opium and belladonna internally, clysters and poultices externally.

She complains of great pain in the abdomen, which begins at the right groin, and extends to the umbilicus. There is some distension of the abdomen, specially on the right side, where there is some dulness and extra resistance. No hernia can be detected. The vomiting is frequent and distinctly fæcal.

The history clearly pointed to reduction *en masse*, with a still existing stricture in the sac, or, more probably, an incomplete reduction of the hernia which had been previously noticed. At 8.30 P.M., after a consultation, I opened the abdomen for four inches, midway between the umbilicus and pubes. On lifting up the omentum, which was spread over the intestine, the latter was seen thickened and congested (claret colour), with a few specks of lymph here and there; and on introducing the finger to the internal ring, I could feel the intestine gripped by it. To this point, downwards, on the right side, the bowel was dilated; from it, onwards, it was contracted. With little difficulty I brought the parts into view, notched the ring with a hernia-knife, and then withdrew about two inches of gut. It was interesting to see the distal bowel fill with air, and resume its normal condition after the stricture had been divided. There was a slight tear on the outer coat, into which I put a small catgut suture. The operation was performed under all the usual antiseptic precautions, including the spray; but as the latter was cold, it was turned off early in the proceedings.

Hypodermic injection of morphine, one-sixth of a grain. No food.

January 17th, A.M. No further sickness. Very slight pain. Looks calm. Good night's rest. No motion nor flatus. Tongue dryish. Nothing taken but a little iced water. Urine drawn off at intervals.

January 18th, A.M. Yesterday, at 3 P.M., much pain and feeling as if abdomen was going to burst. Had hypodermic injection of morphine, one-quarter of a grain. At 9 P.M., passed some flatus. Feels very sinking. Had only had about a pint of milk and a little iced water. Moved to a fresh bed. To have gruel and beef-tea in small quantities.

January 19th. Wound dressed, looking healthy. Some distension of abdomen and tenderness on pressure.

January 21st. Bad night on account of her back. Found, on examination yesterday, that she had a bed-sore five or six inches in diameter. Dressing renewed last night. Tea and bread and butter added to her diet.

January 23rd. Antiseptic dressing stopped, and boracic ointment applied. Some suppuration around sutures, which were removed. Rectum loaded with fæces.

January 24th. Warm olive-oil enema given, and bowels relieved (first time since operation) without any pain.

This patient was detained till April 22nd, on account of the bed-sore, which had healed by that time. On March 10th, a ventral hernia was noticed opposite the abdominal cicatrix, and a belt was put on to support it. On the 27th, she was up for the first time. The temperature was nearly normal throughout, never rising above 100° Fahr.

CASE II.—T. K., aged 19. Admitted to Cardiff Infirmary on February 18th. Patient states that he has had a right inguinal hernia for years, and that it has never gone back. On the 14th, it became swollen and painful, and sickness came on, and has continued daily notwithstanding treatment. On admission, right inguinal hernia, tense, painful; no impulse on coughing. Pulse small and thready. Vomiting; pain across abdomen. No motion since 13th. Ether was given, and herniotomy performed, under spray. Tumour seemed to be composed entirely of omentum, which was of a port-wine colour in some parts. Search was made for intestine, but none found. As the mass could not be returned, it was ligatured and cut away, and the stump returned. Drainage-tube inserted, and the wound closed. On examining the omentum removed, it was found that a small piece of bowel had been included in the ligature. It was impossible to be certain of this until the internal coat of the gut was seen, as it was intimately adherent to a part of the omentum which was of the same dark colour. The patient died four hours after the operation, never rallying, and constant vomiting continuing.

Necropsy.—On opening the abdomen, the gut was found to be quite patent, but it never recovered from its paralysis. On freeing the ligature, there was an opening in the bowel about the size of a sixpence. The constriction was at the lower part of the ileum, about a foot from the cæcum.

CASE III.—B. W., aged 25, single, admitted February 28th, 3 P.M., states that she has noticed a small lump in the right groin for two months, which has varied in size from time to time. A week ago was seized with pain shooting up towards the umbilicus. Vomiting then came on, and has continued at intervals ever since. Bowels not moved for ten days. On examination, a small irreducible femoral hernia was found, painful on pressure, and having no impulse on coughing, which, she says, has previously varied from the size of a marble to that of a small orange. Pulse 84, regular, fairly strong. The patient was etherised, and, after the failure of taxis, herniotomy was at once performed. The bowel was of a dark claret colour, but glistening. I returned it easily into the abdomen, and followed it up with my finger, on withdrawing which I was astonished to find the contents of the intestine pouring out of the wound. The wound was at once enlarged upwards, and, after drawing out some feet of the bowel, a small round hole was found in it. This, after the abdomen had been washed out, was stitched to the abdominal wound. The patient died five hours after the operation.

CASE IV.—W. B., aged 14 months, admitted on March 11th, with a left inguinal congenital hernia. On the 6th, the child was sick through the night, and in the morning the tumour was noticed to be much further down than usual, and could not be put back. Sickness continued at intervals. No motion of bowels since the 6th or 7th, when there was some diarrhœa. Mother administered castor-oil on the 9th, but this was vomited. Has a tumour in the position of a left scrotal hernia, tense, somewhat tender, no impulse on crying, dull throughout, irreducible. Child suffering from shock, pulse scarcely perceptible. Taxis had already been tried in the out-patient department under chloroform. At 7.30 P.M., chloroform was given and herniotomy performed. Strangulated bowel of a deep claret colour. Drainage-tube inserted.

March 12th. Bowels open seven times during the night. No fur-

ther vomiting; sheds tears. Spray dressing removed, as it was impossible to keep it dry. Temperature 103°. Boracic ointment. *Vesp.*: Temperature 100⅘°; pulse 160. Fretful and crying; legs drawn up. Tr. opii ♏ ½ 4tis horis; linseed poultice to abdomen.

March 13th. Passed a good night. Slight suppuration of wound, and some swelling of scrotum. Drainage-tube removed. Temperature 100⅘°; pulse 128. Opium stopped. *Vesp.*: Pulse 116; temperature 100°. Opium repeated, as he was crying very much.

March 14th. Good night; very quiet. Has had three doses of medicine. Pulse 120; temperature 99⅘°. Poultices and mixture discontinued. *Vesp.*: Drowsy; cough; few moist *râles* over chest. Pulse 124; temperature 100⅘°.

March 15th. Sutures removed. Temperature 99°. *Vesp.*: Restless and irritable. Pulse 108; temperature 100⅘°.

March 16th. Doing well. Wound granulating; swelling of scrotum gone. Pulse 128; temperature 98°.

March 17th. Restless; slight cough; no tenderness in abdomen; no sickness. At 7 A.M., pulse 160, temperature 102⅘°; at noon, temperature 103⅘°. Tr. aconiti ♏ ½ ex aq. every half-hour. 6 P.M. Temperature 102°. 8. P.M. Pulse 140; temperature 99⅘°.

March 18th. Pulse 120; temperature 98. Aconite stopped. *Vesp.*: Temperature 103⅘°. Aconite repeated from 5 P.M. till midnight.

March 19th. Wound doing well; less restless; cough not worse; only a few *râles* to be detected in the chest; much thirst. Pulse 120; temperature 98°. *Vesp.*: Pulse 140; temperature 102⅘°. Aconite from 7 P.M.

March 20th. Pulse 120; temperature 98°. *Vesp.*: pulse 136; temperature 102⅘°.

March 21st. Cough increased; temperature 98°. To have saline expectorant mixture, and linseed poultice to chest. *Vesp.*: Temperature 102⅘°.

On the 22nd he was much better, and steadily improved, without any further mishap. The temperature remained normal. The bowels were moved once or twice daily from the beginning. On the 31st, the wound was healed. He was discharged on April 18th, wearing a truss, and much improved in health.

CASE V.—William McJ., aged 45, admitted March 24th. Has had a right inguinal hernia for five or six years, and wore a truss. On the morning of the 22nd he awoke with great pain in the hernia, and could not reduce it. Vomiting began, and has continued ever since. Bowels moved on the 22nd or 23rd. On the 23rd a medical man saw him and tapped a hydrocele, which had existed for some time, but failed to reduce the rupture. Treatment: hypodermic injection of morphine. Left side of scrotum distended and pyriform in shape, and a firm mass at the lower part separated from the hernia. Skin of a dusky character. The patient being etherised, I tapped the hydrocele and drew off several ounces of sanguineous fluid. Taxis tried without success. Herniotomy; found large piece of omentum lying over a coil of bowel, claret-coloured, but glistening. Returned bowel and ligatured omentum and cut it off. Operation done antiseptically. Drainage tube. Hypodermic injection of morphine, gr. ⅓. *Vesp.*: Dressed.

March 25th. Passed a good night. No sickness. Some abdominal pain and tenderness. Has passed flatus. Temperature 99⅘° (temperature before the operation 97⅘°). Wound dressed; drainage tube removed. *Vesp.*: Temperature 100⅘°.

March 26th. Pulse 88, feeble. Temperature 98⅘°. Good deal of abdominal pain and thirst; no sickness; no action of bowels. Wound dressed; looking well. *Vesp.*: Pulse 84, temperature 97⅗. Abdominal pain much worse; no distension. Pil. morph. gr. ¼, 6tis horis.

This patient died on March 30th at 7 P.M., without any action of the bowels, although he passed flatus. The pulse was small, tongue dryish, and the temperature never rose above 97°. Hiccough came on on March 27th. The pills were stopped on March 28th. He never seemed to rally, and was in a torpid condition throughout.

Necropsy.—Evidences of peritonitis. The part of intestine involved in the strangulation was the ileum, about two feet from the cæcum. Here the bowel was gangrenous and of an ashy grey colour, the parts being matted together. A part of the ileum, about three feet further on, was ashy grey and greenish in appearance and adherent to the middle of the transverse colon, which was of the same colour. The sloughy state was confined to the outer coat. There was no constriction of the bowel, and beyond the affected part it was dilated and apparently paralysed. There was a good deal of blood-stained serum in the abdominal cavity.

CASE VI.—R. D., aged 71, a wiry old man, who had been the subject of a scrotal hernia for some years, and had worn a truss, was admitted on April 24th, 3 P.M., with a large scrotal tumour on the left side, and symptoms of strangulation. The patient was chloroformed and herniotomy performed, there being a constriction at the neck of the sac in two places. About one foot of bowel (ileum) was down, of a dark claret colour, glistening, but with no specks of lymph on it. The spray was turned off during the operation, as it was cold. A large Keith's glass drainage-tube was inserted. During the operation a good deal of blood-stained serum oozed out. Temperature, 97° F. To take as little food as possible.

April 25th. Wound dressed last night and again this morning. Drainage-tube not disturbed; abdomen tender; some hiccough. Passed a good night without morphine. Temperature, 97.4° F. *Vesp.*, wound dressed; temperature, 98° F.

April 26th. Tongue dry, face flushed; pulse, 84; temperature, 97.4° F. No passage of flatus or fæces; some hiccough; tenderness of bowels less. Has taken nothing but a little weak brandy and water. *Vesp.*, wound dressed; temperature, 98° F.

April 27th. Good night. Passed a good deal of flatus last night and this morning; hiccough troublesome; tongue dryish; pulse, 80. Has been fed by the bowel, every four hours, since yesterday morning—egg, beef-tea, and brandy. About two hours after the last enema he rejected it.

April 28th. Wound dressed; passed a good night; tongue dryish; hiccough less. Bowels moved at 7 P.M. yesterday; motion fluid, brown, with disagreeable odour. Continues to be fed by enemata.

April 29th. Yesterday, at 3 P.M., he had a little milk and soda-water by the mouth for the first time, which gave him pain. In the evening he had a hypodermic injection of morphine to relieve great pain in the stomach. He had a normal action of the bowels last night; feels very comfortable; has occasional hiccough.

April 30th. Bowels moved again last night; no hiccough; wound dressed and drainage-tube removed. Has had milk and weak brandy and water by the mouth since yesterday; one pint of milk, one pint and a half of strong beef-tea.

May 1st. Wound dressed.

May 5th. Wound dressed yesterday; doing well; fish diet to-day; bowels open two days ago; tongue moist.

May 7th. House diet; one pint of milk, no potatoes.

May 8th. Antiseptic dressings left off; boracic ointment.

May 17th. Doing well; wound nearly healed.

May 30th. Fitted with a truss and discharged cured.

I add one more case, which, although not one of strangulated hernia, may prove interesting. The patient was anxious to be operated on for the radical cure of an inguinal hernia.

CASE VII.—James T., aged 19, admitted in December 1884, suffering from a small, easily reducible inguinal hernia on the right side, which had existed a long time.

December 31st. The patient was etherised, and an operation performed with a view of returning the hernia, and tying the sac, but I could not satisfy myself as to the presence of any sac that could be so dealt with. I ventured the opinion, however, that after so much manipulation, sufficient inflammation would occur to efficiently close the neck of the sac. A drainage-tube was inserted. The next day the wound was dressed and the drainage-tube removed. Orchitis followed, and an abscess formed, which was opened. On January 25th the parts had completely healed, and the hernia did not come down when he stood up and coughed. He was fitted with a truss and discharged. Unfortunately, I have been unable to follow up the history of this case.

Herniotomy from without has hitherto been the recognised operation for strangulated hernia, and it is, as a rule, *per se*, so safe that it appears hardly justifiable to advocate a new departure. Notwithstanding this, recent advances in abdominal surgery have been so daring and so successful, that it is becoming a question whether we shall not more frequently resort to abdominal section in such cases. Case I is an illustration of the success of such a course of procedure, and, whilst the indications for abdominal section were obvious enough, it also shows clearly that we may open the abdomen in such cases, not only without injury but with the most gratifying results.

Should herniotomy from within the abdomen be performed in cases of strangulated hernia? This has hitherto hardly been a question for consideration in the minds of most surgeons when about to operate, but I think that in the future it is well that it should be.

In dealing with cases of ovariotomy in general hospitals, we take special care as to all the surroundings of the patient—special ward, extra cubic space, and so on—and some surgeons, notably Mr. Tait, go so far as to say that this operation should never be performed in a general hospital. Now, here is a case which will cause one to reflect a little; although for the first few days it was treated in a special ward, it was afterwards removed to the general ward, and did well. Why should not an ordinary ovariotomy be dealt with in the

same way, with equal success? Ovariotomy is abdominal section for the removal of a certain tumour, and this is a case of abdominal section for the relief of a gut damaged by strangulation.

Case I teaches another lesson—one in nursing, namely, the necessity of carefully examining a patient all over. Here was a large bedsore, which was not discovered until some days after the operation. This is an instance of careless nursing. There are other questions which these cases bring prominently before one's mind, apart from their illustrating the trite saying that every case of strangulated hernia differs from every other. One is the question of drainage. We ought all to bear fully in mind the danger of pent-up secretions, a subject so ably dealt with by Mr. Wheelhouse (British Medical Journal, vol. i, 1885, p. 85) and others. Under what circumstances is drainage necessary in herniotomy? At the necropsy in Case v, there was a great deal of blood-stained serum found in the abdomen; how far this had to do with the fatal result it is impossible to say, but it is fair to conclude that it had a pernicious effect. I believe that if there had been efficient drainage, the patient would have had a better chance of recovery, and I resolved thenceforth, in all cases where the bowel was dark in colour, not to neglect drainage. I believe it is a most important detail of treatment. In the next case, I had an opportunity of putting my resolve into practice, and, although the case had many bad points about it, the ultimate result was successful. I prefer a Keith's glass drainage-tube to any other.

Case II shows how very careful we ought to be in examining an omental hernia to see if any portion of bowel is included in it. The difficulty was caused by the bowel being so intimately adherent to the omentum, and by both being of the same dark claret colour. Still, I cannot altogether free myself from blame in not detecting the bowel.

Case III is an illustration of how little a fatal strangulation of the bowel sometimes affects the general condition of the patient. She was first seen in the out-patient department, where she did not complain of the hernia, and she walked from the ward to the operation-room, having no look of distress about her, and getting on to the operating-table without assistance.

Case IV was a miserable-looking specimen of neglected humanity, with a quaint little face, always indicative of astonishment, never smiling. It was said to be the youngest child operated on for strangulated hernia; but this is not correct, as may be seen by a reference to Neale's *Digest*. It will be seen that the day after the operation in this case I have noted "tears." I look upon the presence of tears, or their return after being absent, as a most favourable sign in the serious diseases of children.

In all the cases of strangulated hernia here recorded, the temperature before the operation was 97°, or lower; this sign should, I think, be added to the list of those of serious import. I would add a few words of earnest advice to junior practitioners in dealing with cases of strangulated hernia. Let there be no dallying. Waste no time with opium, warm-baths, etc. Give no medicine; I hope it is needless to say, give no purgatives. Put the patient fully under an anæsthetic, and give taxis a fair trial, in consultation with a brother practitioner, if possible, and, if unsuccessful, proceed to operate, or, if not willing to do so yourself, call in a surgeon for that purpose. I have waited in some instances, and with success as to the ultimate result, but I do not intend to do so again; the risk is too great.

I would open the sac in all cases; in these days of antiseptic surgery, I see no advantage to be gained by not doing so, and there is a risk of returning the bowel with a stricture at the neck of the sac. I have a vivid recollection of such a case, which occurred to me in the early days of my practice, and where the patient died. The sac must be opened, if we are to see what condition the bowel is in. Lift the whole of the bowel out of the scrotum, if it is a scrotal hernia, and, after dividing the stricture, draw down the bowel a little, if it has been some time strangulated, in order to see its condition at the point of constriction. Be prepared for efficient drainage. Be prepared to wash out the abdomen thoroughly with warm water, if such an accident should happen as in Case III.

After taxis has been fairly tried and has failed, it is undesirable that a number of surgeons should successively repeat the operation. In a supposed case of strangulated hernia where no tumour is to be found, I would open the abdomen. In the after-treatment, pay marked attention to what appear to be small details. It is an axiom in both surgery and medicine that successful treatment often depends on such attention. The most important point is that the parts should have as complete physiological rest as possible; and, with this object in view, little or no food should be given by the mouth for some days after the operation. Sedatives, as opium, may be indicated, or the application of ice to the abdomen. In no case give purgatives. I recollect an instance where I operated for a strangulated femoral hernia. The bowel was very dark. At the request of the patient to have some relief of the bowels, the practitioner in attendance gave a dose of castor-oil, and the woman died next day.

Let the points I have here laid stress upon be conscientiously acted up to, and we shall not so frequently, when we see an operation failing to save life, have to utter those words, "Too late—too late!"

REMARKS ON A METHOD OF FIXING THE BONES IN THE OPERATION OF EXCISION OF THE KNEE-JOINT.

By HOWARD MARSH, F.R.C.S.,

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In the Journal of February 12th, Mr. Baker has fully described the proceeding by which he maintains the tibia and femur in close and even contact with each other after excision of the knee, by the use of steel pins. I believe he has rendered good service in laying this method before the profession. My own experience of a slight modification of it is that it renders the after-treatment of excision of the knee-joint much more simple, and much more free from the risk of failure than is otherwise the case. It is hardly necessary to point out that the knee is the only instance in which the surgeon aims at securing bony ankylosis after excision, and the only instance, therefore, in which the same immobility that is required during the union of a fracture has to be provided. In every other joint the object is to preserve free movement.

As the after-treatment of excision of the knee involves, for some five or six weeks, this perfect fixation of the tibia in relation to the femur, and, at the same time, the coincidence of the local axis of the two bones, both the kind of splint that is selected and the accessories that are employed are matters that largely influence the success of the operation. In putting up an excision of the knee, the surgeon has not only to guard against the shifting of the tibia on the femur that may be produced by the movements of a restless patient, by spasmodic action of the muscles, or by the disturbance of the limb when the patient is lifted, however carefully, for the action of the bowels; he has also to prevent the riding of the femur in front of the tibia, which is especially apt to occur in cases in which the bones of the leg have undergone displacement backwards towards the popliteal space. To prevent this latter condition, I have for the last four or five years employed the apparatus recommended by Mr. Gant (*Practice of Surgery*, 2nd edition, vol. ii. p. 16). This consists of a back splint and an outside splint. The former is a simple straight splint, extending from just below the tuberosity of the ischium to the commencement of the tendo-achillis. In adaptation to the limb, it is wider above than below, slightly concave and well padded; but, in adjusting it, pads are added to the part corresponding to the leg, so that the tibia is brought well forward, and landed up, so as to be raised to the level of the femur. By this means, the plan of binding the femur down to the level of the tibia, a proceeding which involves firm constriction of the thigh, and often produces œdema of the soft parts about the knee, and thus interferes with sound healing, is avoided. As soon as the limb has been secured on the back splint, so that the tibia lies in easy and close contact with the femur, the bones are pinned together.

The modification of Mr. Baker's plan, to which I have alluded, and which I copied from Mr. Willett, consists in the use of pegs made of bone instead of steel. Ordinary bone knitting-needles answer the purpose well. These, with their ends sharpened, are very easily introduced through orifices in the tibia made with a bradawl, and can be readily driven to the requisite distance onward into the femur by a few slight taps with a mallet.

The other part of Mr. Gant's apparatus consists of an outside splint, reaching as high as the great trochanter, furnished with a foot-piece, and interrupted at the knee. It serves to steady the whole limb. It is applied as soon as the bone-pegs have been introduced. The concluding part of the operation comprises the suturing and dressing of the wound. These steps come last, so that it can be ascertained that, when all is finished, the bones are still in proper apposition, and so that the dressings can be changed without disturbance of either the outside or the posterior splint.

In the first three or four cases in which I used these bone-pins, I left their ends projecting, so that they might subsequently be extracted. I found, however, at the end of a month—when union, I anticipated, had become firm—that although some were loose, others were so tightly fixed that they could not be withdrawn. I therefore broke them short off, and left them. In later cases, I have cut

them off short at the time of the operation, and have seen no more of them.

I have used these bone-pins, combined with Mr. Gant's splint, in nine cases, and the result has been very satisfactory. From the moment of the introduction of the pins, the two bones have remained firmly fixed upon each other. In one case, that of a little girl, aged 5, the skin-incision closed in eight days without suppuration. In a man, aged 22, union of the skin was complete in fourteen days, except at one end of the incision, where a small opening, discharging a few drops of sero-pus, remained for a few days longer; his temperature was never above normal, and he had no pain. In a third case, in a girl aged 9, union was complete in a fortnight, and the wound was only dressed once. In another case, in a little girl aged 4, the wound healed in nine days. In one case, I adopted the plan suggested by Mr. Golding-Bird (*Clin. Soc. Trans.*, 1883)—that of dividing the patella transversely, turning one fragment up, and the other down, and then, when the ends of the tibia and femur have been removed, replacing the fragments of the patella, and wiring them together. A very strong limb was the result, and, within six months of the operation, the patient, a sturdy lad, aged 16, walked from London to Great Yarmouth, a distance of about 120 miles, in seven days. In four other instances, healing has been somewhat more prolonged, but in all sound repair has occurred. The ninth case is still under treatment, and has been the least satisfactory of the series. The patient, a delicate boy, aged 7, has had high temperature, and there have been free suppuration and considerable pain; but the bones have remained in close apposition, and he is now doing well. He appears, however, to be acutely tuberculous, and has had, since the operation, suppuration of his cervical glands.

The value of this method of pinning is well seen in cases in which, owing to displacement backwards of the tibia, it is impossible to place the limb in a straight position without either cutting away so much bone that the epiphysial lines must be either destroyed or so far encroached upon that growth would be arrested; or using such force that serious mischief might result. Under these circumstances, I have on two occasions, in children aged respectively 4 and 5, brought the bones into the best line I could secure with safety, and have pinned them together in a position of some degree of flexion, and have then, when union has occurred, gradually straightened the limb by means of a back splint and a carefully applied elastic bandage.

It may be of interest to note the fact that some of the bone-pegs, when removed, after having been embedded for four to six weeks in the cancellous tissue of the ends of the tibia and femur, were deeply eroded by absorption; while in three or four instances the pegs had become so firmly fixed that they could not be pulled out—a result no doubt due to the circumstance that they had become deeply eroded, and that then new bone had moulded itself upon their irregular surface, and so locked them *in situ*. Mr. Savory found that when pegs of bone were tightly driven into the femur of a rabbit, they underwent considerable absorption in five, and had nearly disappeared in twelve weeks. Probably the pegs used in fixing the bones after excision are entirely absorbed in the course of three or four months.

SURGICAL MEMORANDA.

REDUCTION OF SUBGLENOID DISLOCATION OF THE HUMERUS.

THE various methods already instituted for reduction of this dislocation leave but little ground for investigation in extending or improving any particular plan. The two following cases may prove of some interest to the readers of the JOURNAL.

CASE I.—This was the case of a middle-aged, fairly muscular man whose right shoulder had been dislocated about twelve hours before being seen. Reduction was repeatedly and successfully tried with the aid of an assistant—by the knee-in-axilla method. Then, with the patient still seated, I grasped his wrist with the left hand, and his elbow with the right, and having flexed the forearm on the arm, the latter was (1) flexed to the level of the shoulder; (2) then, by continued elevation, now combined with external rotation, it was raised to nearly in line with the long axis of the body; (3) the arm, still in a state of external rotation, was then depressed to the side, when (4) it was rotated inwards. By the time these four movements had been performed, reduction was complete.

CASE II was that of a farm labourer, aged 26, whose left shoulder had been dislocated about two hours. By the method above described reduction was successfully accomplished in the time taken to perform the various movements, namely, about five seconds.

In right-sided dislocations, the surgeon should stand more or less posterior to the patient, while the latter is seated on a chair somewhat below the average height. When the left humerus is dislocated, the patient, seated on a chair of good average height, should be placed face to face with the surgeon. I can recommend the method as elegant, rapid, successful, and I think free from intercurrent danger.

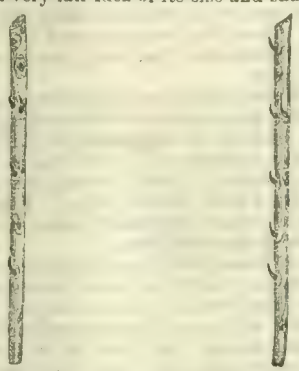
The dislocation is in a downward and inward direction, and the above method of reduction is physiologically adapted. The upward movement brings the head of the bone to the margin of the fossa, which acts as a point of resistance in the movement of external rotation; the latter brings the head into the glenoid cavity, while the subsequent depression and ultimate inward rotation of the arm place the head in its normal position.

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RETENTION OF URINE CAUSED BY A PIECE OF THORNY CANE.

DURING the autumn of 1881, when acting as Civil Surgeon of Backergunge, a district of East Bengal, the following case, which presents some interesting features, came under my notice. I am not aware of a similar case having been noticed before. On October 7th, whilst I was at the Civil Dispensary at Barisal, a man came up in rather a shamefaced way, and complained of retention of urine since the previous night; something, he said, had got fixed in the urethral channel. On examination, a foreign body was seen projecting slightly beyond the urethra. The lips of the meatus were swollen and lacerated, and the foreign body was tightly grasped. The foreign substance was a piece of the stem of the thorny cane (*Calamus rotang*), and the accompanying drawing gives a very fair idea of its size and shape.



Front View. Side View.

Portion of a thorny cane removed from the urethra of a man (natural size).

Before bringing him to hospital, he and his friends had tried the effect of direct traction for some hours, only with the result of cruelly lacerating the urethral mucous lining and more firmly wedging in the piece of twig. It was obvious that any further effort in this direction, even the gentlest, would have greatly increased his sufferings, and, from the nature of the foreign body this will be readily understood. I, therefore, gently pushed it back, until I judged all the thorns had become disentangled, and with some little trouble succeeded in passing a cannula over it, as recommended by Mr. Christopher Heath, and withdrew the piece of stick easily through the cannula.

Beyond some slight scalding and pain in micturition for some few days, no ill-effects followed. It transpired on inquiry that three brothers, not quite approving of the attentions paid by my patient to one of their female relatives, took counsel together, and waylaying him in the jungle at night, overpowered him and deliberately introduced two and a half inches of thorny cane into his urethra, well knowing from the disposition of the thorns on the stem that it would be extremely difficult, if not impossible, for the victim himself to remove it, and that, in any case, extreme suffering would result; a powerful moral hint being at the same time inculcated in a way that would ensure its being remembered through life.

Dr. Chevers, in his work on Indian Medical Jurisprudence, p. 556, merely mentions that "pieces of straw and wire" have been occasionally introduced into the male urethra as methods of torture. From the reference given in the footnote this was apparently done only in the Madras Presidency.

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THERAPEUTIC MEMORANDA.

DELIRIUM PRODUCED BY DUBOISIN AND ATROPINE.

Duboisin.—Dr. Chadwick, in the BRITISH MEDICAL JOURNAL of February 12th, records a very interesting case of poisoning by duboisin. About two years ago, two cases occurred in the Royal London Ophthalmic Hospital, Moorfields, exhibiting much the same symptoms. They occurred after using a solution of the strength of 4 grains to the ounce, which was at that time being used to see how far it would be possible for it to replace atropine, so as to avoid the irritating effects often produced by that drug. It was used largely for a period of six months before any case of delirium occurred.

Atropine.—Within the last year there have been three cases in the hospital of delirium in old people from the use of atropine drops to the eye. In all, a solution of the strength of 4 grains to the ounce was used three times a day.

CASE I.—A woman, aged 73, of very eccentric appearance and manners, was admitted to the hospital in order that an opaque membrane, left after the extraction of a cataract, might be needled. After using the drops for two days, she became wildly delirious, shouting at the top of her voice, struggling, and endeavouring to get out of bed.

CASE II.—An Irishman, aged 60, was admitted with iritis, and had been using the drops for three days before the commencement of the delirium. It was of the same character as in Case I. He had a strong impression that he had been robbed, and wished to go and see about it.

CASE III.—A peculiar old man, aged 84, was admitted for extraction of cataract. After using the drops for three days, his delirium commenced, and lasted about six hours, as in Dr. Chadwick's case; in the intervals between his more violent outbreaks he seemed to recall and dwell upon events that had happened years ago.

The most efficacious way of quieting the delirium and controlling the patient I have found to be the administration of chloroform, just sufficient to render the patient unconscious, kept up as long as may be found necessary. Dr. Chadwick remarks that "children bear belladonna better than adults." Still, one constantly sees cases in which the use of atropine to the eyes in children has produced a mild form of delirium, generally of a very pleasing character, in which they see and describe beautiful views and scenes. I think it may be truly said that the two extremes of life are most subject to atropine delirium.

As to the absorption of duboisin or atropine by the conjunctiva, I think it is more likely that it trickles down the nasal duct, or runs down the cheek into the mouth. This was very likely to have occurred in my third case, as the man had lost all his teeth.

E. TREACHER COLLINS,
Royal London Ophthalmic Hospital, Moorfields. House-Surgeon.
February 15th.

IODOFORM PENCILS.

UNDER the above heading, in the JOURNAL of January 29th, it is stated that Dr. Oscar V. Petersen, of St. Petersburg, recommends, in the treatment of syphilis, pencils made of 50 or 70 per cent. of iodoform, together with glycerine and gum arabic, enclosed in a wooden holder. Iodoform pencils, in a somewhat modified form, have, since the beginning of 1883, when they were introduced by Dr. Boxall, been in constant use in this hospital, not for syphilitic sores especially, but for all lacerations about the vulva in lying-in women, and also for sore navels among the infants.

The formula is as follows: R iodoform (in powder), 1 part; oxide of zinc, 1 part; cocoa butter, 4 parts; coumarine, q.s.

The iodoform and oxide of zinc are stirred in with the melted cocoa butter, and cast in glass tubes four inches in length; sufficient coumarine is added to mask the smell of the iodoform. The oxide of zinc is inserted to obviate the smarting which occasionally follows the application of iodoform. By employing cocoa butter as a vehicle, a double advantage is gained, for, in the first place, the point of the pencil is melted by the heat of the part to which the application is made; and, secondly, the greasy nature of the coating so obtained prevents the discharges from irritating the raw surface of the sore. The one precaution necessary is to cleanse and dry the surface thoroughly before the application is made.

The tubes employed are fitted at one end with a pellet of cork; by pushing this onwards with a small stick, the point may be made to project to any required length.

These pencils are very convenient and cleanly in use, and the smell of the iodoform is entirely masked. They are, moreover, very inexpensive, and the tubes can be refilled when emptied. They may be obtained, as prepared for the General Lying-in Hospital, from Corbyn, Stacey, and Co., 300, High Holborn, together with a vulcanite cap for the point, which allows the pencil to be carried in the pocket when necessary.

G. MALLACK BLUETT,
The General Lying-in Hospital, House-Physician.
York Road, Lambeth, S.E.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

LEEDS GENERAL INFIRMARY.

STRANGULATED INGUINAL HERNIA: SPONTANEOUS REDUCTION "EN MASSE": RETURNED BY TAXIS.

(Under the care of Mr. MAYO ROBSON.)

[The notes of the case have been furnished by Mr. ASHTON STREET.]

A. V., AGED 19, who was admitted on September 10th, 1886, stated that whilst at work ten days before he strained himself, but thought no more about it until four days afterwards, that is, six days before he came to the infirmary, when he noticed a lump the size of an egg in the right inguinal region. He did not feel it coming, nor had he noticed anything unusual until feeling it with his hand in his pocket. His bowels had been freely opened the day before. On the following day (five days before admission) his medical man saw him, and aspirated the swelling with a small syringe, withdrawing a little bloody fluid. The next day he did the same, when the swelling seemed to be rather smaller, and, on the following day, after another operation, the swelling disappeared altogether. He stated that from first noticing the tumour he had passed neither fæces nor flatus, and had vomited everything taken; whilst, during the four days preceding admission the vomit had been very offensive in smell.

He looked fairly well, was quite sensible, and could walk, but with considerable pain. The cheeks were slightly flushed. The pulse was 113°, full and hard; the respirations were 23. The tongue was coated, and not very dry. There was general distension of the abdomen, but no marked coils could be made out. A good resonant note was obtained all over the abdomen, but the note was not quite so resonant in the flanks as in front. There was no sign of hernia at any of the usual situations, although the umbilicus was rather prominent. The right inguinal ring was large enough to admit two fingers easily, and, on examination, an ill-defined fulness was felt beyond the internal ring. On external manipulation there was a small fairly well-defined tumour, about the size of a hen's egg, situated just above Poupart's ligament, and a little external to the internal ring. Over this the note was not so resonant as elsewhere. The patient vomited every hour, the vomit being markedly stercoraceous. In the evening the patient was put under ether, and everything prepared for laparotomy; but whilst Mr. Mayo Robson was again examining the swelling, it got less, and then suddenly disappeared with a distinct gurgle. Under these circumstances it was decided to wait and watch the course of events. The patient was removed to the ward, and as soon as he become conscious, vomited some more fæcal matter. Late at night he was sleeping calmly, breathing quietly, and the pulse was 90.

On September 11th the general condition was quite changed. He had had a slight motion during the night, and another copious one the first thing in the morning. He was ordered beef-tea, milk, and ice; he passed flatus freely, had no pain, and the pulse was 85.

On September 12th he was much improved, wishing to get up, and very hungry; he was allowed a fish diet. The temperature had not been above normal after the first night, when it was 100°. On September 14th he was practically quite well; the bowels were open regularly; there was no pain. He was allowed full diet, and on September 20th he was discharged cured.

REMARKS BY MR. MAYO ROBSON.—The case being an unusual one, and presenting so many points of interest, I wrote to his medical man for details, and received the following reply of which I give a copy:

"I saw V., the case you wrote me about on the evening of the 5th. There was a swelling extending from the inguinal canal, half-way down the scrotum; it was exceedingly tender to touch, and the skin red and inflamed over it. There was not the least impulse when he coughed. As it gave me the idea of fluid, I aspirated it, and drew off about three drachms of serum; the next day the swelling was less in size, and not so tender, and I drew off about two drachms of serum. The day after (7th) I did the same; and on the 8th found the swelling quite gone, and the canal open. There were no urgent symptoms of obstruction until 9th, and no fæcal vomiting until the day of his admission to the infirmary. It seems curious that although there was no impulse, and I could not reduce the swelling in the least, he was able to take a fair amount of food for four days without vomiting or distress."

That there was at first strangulated inguinal hernia there can be little doubt, and that the unusual occurrence of spontaneous reduction *en masse* took place seems in the highest degree probable, for, besides the well-marked symptoms of strangulated hernia, there was the enlarged empty canal, and also the presence of a rounded hard tumour, distinctly felt by the finger introduced along the canal, as well as by manipulation through the abdominal walls. The patient was examined by several of my colleagues, who entertained no doubt of the diagnosis. The patient being on the operating-table, and under ether, I was about to cut through the abdominal walls, expose the tumour, divide the stricture, reduce the hernia, ligature the neck of the sac, and remove the parts beyond the ligature, feeling that this would be safer and more expeditious than cutting down on the empty canal, and trying to reach the hernia in that direction. I have not heard of a hernia reduced *en masse* having been reduced by taxis; nevertheless, whilst I was manipulating the swelling through the relaxed muscles, I felt a distinct gurgle under my fingers, accompanied by the disappearance of the tumour; and feeling sure that the hernia was reduced, I stayed further proceedings. As the patient from that moment began to improve, and soon left the hospital quite well, it seems very probable that the displaced hernia was reduced by manipulation.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, FEBRUARY 11TH, 1887.

W. H. BROADBENT, M.D., F.R.C.P., President, in the Chair.

RENAL SURGERY.

THE discussion on the papers read by Mr. Henry Morris, Mr. Howard Marsh, and Mr. W. K. Bennett at the previous meeting of the Society was commenced by Dr. GEORGE JOHNSON, who said that the subject of renal surgery was one in which he felt great interest. Within the last three years, five of his patients who had suffered long and grievously from renal calculus had been operated upon, and in every case with complete success. Nothing could be more satisfactory than the result of surgical treatment in the case related by Mr. Morris at the last meeting of the Society. To have relieved a man of a lumbar pain which he had endured for nineteen years, and which was driving him to the consumption of poisonous doses of laudanum and alcohol, was a triumph of surgical skill. In three of his cases, Mr. Knowsley Thornton had been the operator. One of them, a military officer, had been compelled to leave the army after seven years of acute pain; he was now perfectly well. A lady, operated on by Mr. Tom Smith, had endured terrible pain on and off for five years. In that case the kidney was found so much disorganised, that it was removed with the calculus. The result was entirely successful. He would express no opinion as to the advisability of opening the abdomen as a preliminary proceeding in all cases, but the advantage of this proceeding was conspicuously shown in one case. A girl, aged 11, had attacks of violent pain in the left loin, with pus and blood in the urine. Mr. Thornton, having opened the abdomen, explored the left kidney, but found no stone; he then passed his hand to the right, felt more than one stone, and succeeded in removing five. Formerly, if a patient had symptoms of renal calculus, he was told that relief might come by the escape of the stone through the ureter, or the stone might become encysted, and cease to trouble him; or, possibly, after prolonged suffering, with suppuration and disorganisation of the kidney, he might survive the storm. We can now do much better for him by calling in the aid of the surgeon.

Mr. KNOWSLEY THORNTON related some of his experiences. In 1879 or 1880, he first cut down to the kidney for the removal of a stone. There was no calculus, but a large kidney, and the patient died of suppression of urine. That operation decided him in any future case to open the abdomen by a longitudinal incision, in order to examine the two kidneys and ureters, then to open the diseased kidney from the loin. In 1883, a patient came to him who had apparently had right renal calculus for years. Her father had died from renal calculus, and her sister suffered from renal trouble. He opened the abdomen, and found the left kidney and ureter healthy; then passing to the right kidney, he found a stone in its pelvis; and holding the stone from the front he thrust the bistoury down to it from the loin, and easily removed it. The wound healed quickly, but the patient did not get so rapidly well as one could have hoped. After two years, blood and pus still passed with the urine. Mr. Thornton hesitated to cut down to the other kidney from the abdomen; but at length he did so, and found it quite healthy. Then in the right kidney he found one stone in its pelvis, and another in one of its calyces. He extracted the two stones, and there came an end of the renal symptoms. Between these two operations Mr. Thornton had cut down on to a kidney, in February, 1884, and found pyelitis, but no stone. In April and June, 1884, he operated on two male patients, and extracted calculi through lumbar incisions, which he employed, fearing lest, if he made the abdominal section, the extra muscular exertion to which men are subjected might result in a ventral hernia. The lumbar incisions in these cases led to suppuration in the loin, and long-delayed recovery. In another case the speaker returned to the two incisions; the stone was small, and the patient had a fat abdomen, so that even with the abdominal wound it was difficult to find the calculus, owing to the large amount of perinephritic fat. She died, with total suppression of urine, twenty-four hours subsequently. In Dr. Johnson's case, if the healthy kidney had been opened, as there were five calculi in the other, there would probably have been total suppression and death. In Mr. Thornton's sixth case, he first made an abdominal section, and finding a large stone in the kidney, removed it through the loin; the patient made a tedious recovery. In the seventh case, that of a male, Mr. Thornton used the combined method, and with every success. The patient had since had good health. As to the general question whether it was better to operate by the lumbar section or by the combined method, he remarked that, using the former section only, surgeons had failed to find the kidney, and even opened kidneys in which were no stones; or, failing to find the stone *in situ*, had removed the kidney, and then found stones in it. As to puncturing the kidney to find a stone, he thought it a rash proceeding. The kidney healed, and the patient apparently quite recovered; but one must wait for some time to learn the after-course of a kidney punctured in many places or boldly incised. Would it remain healthy? As to the lumbar operation, the more common it became, the more kidneys would be unsuccessfully explored, and the more patients lose their lives. The combined operation seemed to him the proper one to employ in the majority of cases, for various reasons. The operator never failed to find the kidney; could avoid cutting into a healthy kidney; and, if he wounded a healthy peritoneum, would know it, so that precautions could be at once taken to avoid the effect of such wounding. The parts in the loin were less liable to be torn and damaged; the operator could examine the kidney that had a stone in it, and could best tell whether to remove the stone or to go on and perform nephrectomy. The only objection to the double operation was, that it necessitated two openings. But, in his experience, there was no part of the body which better bore opening than the peritoneum, if the wound were made with complete asepticity. As to the pain referred from one kidney to the other, it was a piece of common experience, in regard to ovarian disease, that pain might be referred to one groin, and yet the ovary of the opposite side be the diseased one.

Mr. B. PITTS had had three cases. The first was that of a woman with a swelling in the left loin, due to suppurating kidney. He had opened the swelling, and much relieved the patient. The second case was that of a man with swelling in the loin, after injury. Mr. Pitts cut down to the kidney, found a stone, and removed it. The patient, for four weeks, did well. Then no urine was passed by the wound, only pus. The loin was again opened, but the patient died. At the *post-mortem* examination two other small stones were found in the upper part of the kidney, around which was suppuration that extended behind the diaphragm to the thorax. Mr. Pitts regretted he had not removed the kidney. The third patient was a man who for twelve years had had pus in his urine, but no pain. As there was a definite resistance in the right loin, Mr. Pitts cut down to the kidney, and, opening the pelvis of it, let out offensive pus and a stone. No urine escaped. The kidney was inactive. At the end of the month offensive pus came by the bladder. The lumbar wound was again explored, and a finger passed into the kidney; but no stone could be

found. The patient had not improved. Pus was still passing into the bladder. If a kidney were incised, and no urine passed afterwards by the wound, might one take it that the kidney was inactive, and proceed to remove it? He would say yes; and he had proposed to this patient to have the damaged kidney removed. When one had a large offensive suppuration in one kidney, he thought the double incision should be made for its removal.

Mr. MORRANT BAKER had reported a case to the International Medical Congress of 1881. The patient, for seventeen years, had pain in the right kidney, with swelling in the loin, due to hydronephrosis. The cyst was opened, and a leather bottle being fixed to the side, ten or twelve ounces of urine were daily passed into it. Then the patient had suppuration, and was going down hill when Mr. Baker removed the kidney by the lumbar incision. The man made a good recovery, but after a period of nearly perfect health, had again had hectic, and lost ground. The cyst, which was of the size of an orange, was then found filled with a putty-like material, the remains of dried-up pus. In such another case should the primary cyst be removed, or the kidney only? He considered that his case justified the treatment by the removal of the kidney only, and not of the large cyst as well.

Mr. R. GODLEE quoted the case of a man with marked right renal colic. Mr. Beck had cut down upon the kidney, and pricked it, to detect a stone, but unsuccessfully. Afterwards, as his symptoms returned and were extreme, Mr. Godlee again cut down upon the kidney from the loin and examined it, but could find no stone. As the result of the former operation, it was found that a large amount of fibrous tissue had grown around the kidney. After a few days the patient passed a small calculus. He never had pain on the other side. Had the abdominal incision been made, it was of course possible that the stone might have been found *in situ*. In another case a young man had stone impacted in the ureter, with renal colic, for which large doses of morphine were given. There was suppression of urine, and death. Had an incision in that instance been made in the central line of the abdomen, the stone in the ureter and the pus of the abscess behind it would have been detected, and the life might have been saved. Even with an abdominal incision, however, a stone might be undiscoverable from the front, whilst it must not be forgotten that the abdominal incision might result in a ventral hernia.

Mr. BRUCE CLARKE alluded to the difficulty of diagnosis in these cases. Not long since a man came under his care who was supposed to have stone in the kidney, with right renal colic. After careful examination, a considerable amount of pulsation was detected in the right lumbar region from the front. He died suddenly, and was then found to have an abdominal aneurysm, opening into the psoas muscle, and dissecting out the lumbar nerves. Fortunately, operation for the supposed stone had been deferred. In another case, the kidney was so small that it took nearly an hour to find and open it from the loin, and the patient did not recover.

Dr. BURNEY YEO would ask what were the precise symptoms that indicated that the time for surgical interference had come. At Contréxeville, the treatment adopted was the drinking of as much as six quarts of water a day; and when there recently, he was shown large calculi which had been expelled *per vias naturales*, as the result of that treatment. Why should not the same method be adopted in England?

Mr. PEARCE GOULD had operated upon a woman, aged 40, in the Middlesex Hospital, who was said to have fallen years ago, and injured her liver. She had attacks of pain in the right groin, and a swelling which was recognised as a renal tumour. The urine was purulent. The kidney was explored for calculus. Upon the tumour being opened, a stone was felt at the lower part of the pelvis, just where it joins the ureter. A drainage-tube was inserted, and left in position for twenty-four hours. The patient was quite well when she quitted the hospital. On the fourth day after operation all urine was evidently passing by the bladder, and none by the lumbar wound. Of recent years cases had been explored, without a stone being found, although there were all the usual symptoms of renal calculus. In one such case he had known the mere exploration of the kidney relieve the symptoms. Sometimes, also, although calculi were found after death, they had during life given rise to no symptoms. It was of importance to remember this in reference to those cases in which the pain was on the wrong side.

Dr. COUPLAND thought it a matter of reproach to physicians that they should have to hand over their patients to the surgeon for operation; but there seemed to be no alternative. The treatment recommended by Dr. Burney Yeo must last weeks, months, or years to produce benefit, whereas the surgeon did the operation at once, and relieved the patient. Justification for the operation was abundantly found in the *post-mortem* room, where the number of kidneys found disorganised by the presence of calculi was very large. As regarded the case of the little girl with five stones in one kidney, and pain on the other side, he could not yet believe that the trouble which caused the symptoms was on the side from which the stones were removed. Was the other kidney certainly quite healthy? He would ask how many patients physicians had seen with renal colic on the side opposite to that of the disease.

Mr. THOMAS SMITH said that Mr. Thornton had seemed to represent that by opening the abdomen from the front, one could ascertain with certainty whether there was a stone in one or the other kidney. But one could not always tell this, even if one felt the kidney out of the body. In three different cases in which he had handled kidneys so removed, no stone could be detected therein until the kidneys were cut open. It was therefore impossible that the diagnosis could be always made with certainty through an abdominal incision. Again, although the abdomen might be opened by Mr. Thornton with impunity, other surgeons could not do the operation without much risk to the patient. A kidney, too, which had once formed a stone, might do so again. Some patients, sent to Contréxeville, returned after two or three weeks' residence there quite well. A patient of his own, suffering from renal colic, used to drink four to six pints of very hot water on an empty stomach daily, and could now ride forty miles on a tricycle; so that he thought these large draughts of water might well be tried first, before the surgeon cut down upon the kidney.

Mr. THORNTON said that the exploration of a kidney through an abdominal incision was not infallible. He thought it was much more easy to detect a stone in a living kidney than in one hardened by keeping.

Mr. MORRIS, in replying, said there were three chief points to which he should limit his remarks. First, as to the advantage of the abdominal or lumbar incision. Mr. Thornton had contended that, by making the abdominal section, the kidney containing the stone was not likely to be overlooked. Secondly, that a kidney was not likely to be cut which did not contain a stone. Thirdly, that there was often a tedious healing after the lumbar operation. As regarded the first and second points, he would remark that both things might happen. A kidney really containing a stone might not be discovered to contain one, whilst another might be cut into which was not the peccant organ. Even when a kidney was practically alive, as just after its removal by operation, it occasionally happened that a stone in it could not be at all felt; such was the case with the kidney he had exhibited at the previous meeting. As regarded the third point, the rate of healing, he had often known the lumbar wound to be healed as quickly as a wound could be healed, as quickly, in fact, as when the kidney had not been opened, only explored—in a week, for example. In a recent case he had stitched the wound in the pelvis of the kidney to the loin wound, and had introduced a drainage-tube, and fifteen days afterwards all urine had ceased to flow by the lumbar wound, whilst 60 ounces were passing by the bladder. Although the kidney had been sometimes explored from the loin, and no stone felt, yet no fatality had followed the operation. The diagnosis was, however, the chief point in these cases, in the framing of which physicians could give great assistance. When the presence of stone in the kidney was doubtful, the prostate in the male and the ovaries and Fallopian tubes in the female should be carefully examined, as being the chief sources of fallacy. As to Dr. Burney Yeo's suggestive remarks, he would say that, after a patient had taken 12 pints of water daily at Contréxeville without benefit, he might then receive advantage from surgical treatment. After many months of the "water cure," patients' symptoms were sometimes the same as at the beginning. He anticipated that nothing in the future would arise to show that the lumbar incision was not, on the whole, the better.

Mr. BENNETT said that, as to the risks of exploring the kidney with the needle, he considered that instrument a very valuable means of diagnosis. In three recent cases he had detected a stone by the needle, which could not otherwise have been found at all.

The reading of several papers was postponed to the next meeting.

Living Specimens.—The following cases were exhibited: Dr. A. H. ROBINSON: Sporadic Cretinism.—Mr. A. PEARCE GOULD: Removal of Renal Calculus.—Sir DYCE DUCKWORTH: Saturnine Cachexia and Gout.—Mr. H. S. CLUTTON: Tubercle of Palate and Larynx.—Mr. SIDNEY JONES: Rheumatoid Arthritis in a Lad.—Dr. FOWLER: Curious Cutaneous Infiltration.

PROFESSOR RANVIER, the well-known histologist, has been elected a member of the Académie des Sciences.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 15TH, 1887.

Sir JAMES PAGET, Bart., F.R.C.S., F.R.S., President, in the Chair.

On the Falling Out of the Teeth in Locomotor Ataxy.—Dr. HALE WHITE related the case of a man, aged 40, who had had the first symptoms of locomotor ataxy eight years ago; a year ago the ataxy came on, and nine months ago the lightning pains. On admission, taste was impaired, there was anæsthesia in various parts of the body, and a girdle pain; all the reflexes were absent; there was loss of sexual power and some diarrhœa. A wisdom tooth was exhibited, which had fallen out, without any previous signs of decay, two years ago. It was quite healthy. The other teeth appeared ground down, otherwise they were healthy. He went out of the hospital after showing some improvement; he was treated with large doses of iodide of potassium. Dr. Hale White mentioned some references to this subject. Thus Richardière (*Rev. de Méd.*, No. 2, 1886, p. 170) related the case of a patient suffering from tabes; the mouth and face swelled; all the teeth of the upper jaw fell out, one by one, without any previous caries; after this a few pieces of bone came away from the palate. Hoffman (*Berl. klin. Woch.*, No. 12, 1885) mentioned a man in whom all the teeth fell out of the upper jaw, without any apparent cause, and the year after tabes dorsalis showed itself. Dr. Lewis (*Amer. Journ. Neu. and Ment. Dis.*, No. 2, 1885) also gave cases. Dr. Hale White considered that, before allowing that this was a definite symptom of tabes dorsalis, it would be desirable to note many more cases; for the teeth were liable to fall out from so many causes.—Dr. SEMON said that there were two forms of affection of the teeth met with in tabes dorsalis. In one group of cases, the teeth fell out in the way described by Dr. Hale White. In the other class, portions of the alveoli carrying healthy teeth came away without any pain. In one case this occurred in association with laryngeal crises. This observation he thought of great interest in connection with Dr. Buzzard's theory that the nutritive centre for bone was near the pneumo-gastric centre, and that bone lesions occurred most often in cases where laryngeal crisis occurred. Recently two men had been under the care of Dr. Ord, who had stated that healthy teeth had spontaneously and painlessly fallen out.—Mr. F. G. BENNETT spoke of pyorrhœa alveolaris, which he said was a rather bad name for a disease familiar to dentists; a slight serous discharge exuded from the side of the tooth, and was followed by exfoliation of small pieces of bone; in the end, the teeth fell out; the whole process was painless. It was usually associated with gout, or imperfect nutrition, and might affect all the teeth in a jaw, or only one.—Dr. G. N. PITT had observed the loss of a large number of teeth without definite reason in a patient with locomotor ataxy.—Dr. ORMEROD had seen an affection of the upper jaw in a patient suffering from locomotor ataxy, in which a large piece of the upper jaw and several teeth were lost without pain.—Mr. J. BLAND SUTTON referred to cases of softening of the cord and perforating ulcer in carnivorous animals, which he had recorded, and mentioned that in these animals many teeth had fallen out, owing to a softening of the alveolus.—The PRESIDENT commented on the great interest of the subject raised, and observed that the difficulties which surrounded it could only be solved through the united action of dentists and pathologists.

Intermuscular Synovial Cysts.—Mr. D'ARCY POWER brought forward some further specimens of intermuscular synovial cysts. After briefly alluding to the examples which he exhibited before the Society in 1885, and observing that the present cases confirmed in every respect the theories which he then advanced, he showed a preparation of a knee-joint obtained from a patient who died of phthisis in St. Bartholomew's Hospital. The joint presented an irregularly hour-glass shaped cyst situated over the inner side of the knee and communicating by a contracted channel with a second enlargement, situated in the loose connective tissue of the popliteal space. The bursa beneath the popliteus muscle was also greatly dilated, but was not in connection with the previous swelling. Neither of the cysts communicated with the knee-joint. Mr. Power believed that the disease here commenced in an almost simultaneous enlargement of all the bursæ in the neighbourhood of the right knee, dependent perhaps on some form of tuberculosis, and that the bursæ then opened one into another, following the line of least resistance. This was the first case he had dissected in which there was absolutely no communication between the cysts and the synovial cavity of the articulation near which they had formed. In a second specimen in which the articulation was extensively diseased, a cyst in the same situation as in the preceding case opened directly into the knee-joint. An especial point of interest was, that connected with the cyst was a partially pervious cord representing the remains of a pre-existing cyst which had been aspirated with antiseptic precautions sixteen months before amputation of the joint. In a third case exhibited by Mr. Power the cystic enlargement was due to a hernia of the synovial membrane of the elbow and not to the distension of any bursa. He thought it a significant fact that in two out of the three cases the cysts occurred in association with tubercular disease of the neighbouring articulation.—Mr. GODLEE had seen more than one case in which a simple ganglion on the back of the wrist was a forerunner of tubercular disease of the wrist-joint.—Mr. CHARTERS SYMONDS mentioned a case of ganglion of the wrist-joint which contained caseous material, and a second case in which a tubercular growth which, clinically, closely resembled a ganglion, was attached to the sheath of one of the flexor tendons of the finger.

Endothelioma of Dura Mater.—Dr. HYLA GREVES exhibited a specimen of endothelioma of the dura mater. The patient was a woman, aged 60, who had been in good health up to about fifteen months before death, when she began to experience pain in the right side of the head referred to the parietal bone, where there was some superficial tenderness. A little later she experienced epileptiform seizures, affecting at first the hand and face on the left side; subsequently the left lower limb was affected, and finally there was partial left hemiplegia. Well marked double optic neuritis was present. The dura mater was adherent to the right parietal bone, and internally to a tumour which lay deeply imbedded near the fissure of Rolando, and displaced the convolutions; the growth measured in the transverse diameter 2⅝ inch, and in the vertical 1½ inch. On section it had a greyish colour, and was firm throughout. The tumour was made up of endothelioid cells, some arranged in trabeculæ, and contained cell nests. The blood-vessels were numerous, and apparently had no distinct walls. The structure closely corresponded with the growths described by Ziegler as endothelioma.—Dr. CARRINGTON observed that a specimen of endothelioma, growing from the dura mater, was described in Wilks and Moxon's *Pathological Anatomy*.—Mr. EVE asked for further particulars of the relation of the growth to the dura mater. Dr. Goodhart had presented to the Museum of the Royal College of Surgeons a large intracranial tumour growing from and in the bone; the dura mater covered, but was not attached to the growth. He had been surprised to find that the growth was an angeiolithic sarcoma; it consisted of small connective tissue cells, which in places formed whorls, which he thought had originated in abortive vascular buds.—Mr. JONATHAN HUTCHINSON, jun., thought there was much to be gained by dropping the term psammoma, and using in its place the term calcifying endothelioma. The growths differed from sarcoma in their tendency to remain isolated. He recalled a case which he had reported to the Society, of calcifying endothelioma arising in connection with the vertebral column, which had entirely compressed, without invading the spinal cord.—Dr. HYLA GREVES, in reply, said that the dura mater lay external to the growth, and was only attached over a small area.

Hyperplastic Syphilitic Laryngitis.—Dr. F. SEMON showed, for Dr. JACOB, of Leeds, photographs and microscopic specimens of the following case. The patient was a child five months old, who had, from a fortnight after birth, suffered from manifestations of congenital syphilis, and was admitted into the Leeds Infirmary in November last with cough and huskiness of the voice. Laryngeal obstruction soon supervened, tracheotomy had to be performed, and the patient died the same day. At the necropsy, no marked change in the upper compartment of the larynx was found. Below the cords, however, the lumen was reduced to a mere chink by swelling and thickening of the mucous membrane, which extended about three-quarters of an inch downwards, and terminated rather abruptly. On section, the thickening presented a deep red colour. Microscopically, it was seen to consist of mucous membrane greatly thickened by interstitial deposit of connective tissue, as well as by hypertrophy of the glandular tissue. The vessels were greatly distended. The lungs showed a few patches of lobular pneumonia; the liver, an increase of connective tissue and some small aggregations of leucocytes. Dr. Jacob, in his remarks, drew attention to the differences between this case and the somewhat similar ones reported by Dr. Felix Semon in the Society's *Transactions*, vol. xxxi; the localisation of the tumefaction was different, and there was entire absence of ulceration. The case most nearly resembled one recently shown to the Society by Mr. R. W. Parker.

Mitral Aneurysm in a Child.—Dr. W. B. HADDEN showed a specimen of aneurysm of the mitral valve from a child aged 2 years and 3 months. There was no history of syphilis or acute rheumatism; it was said that the child occasionally turned blue for a short time. It was brought to St. Thomas's Hospital suffering from bronchitis; no cardiac murmur was detected; two days later, it suddenly became worse and died. At the necropsy, extensive broncho-pneumonia was found,

and there was one small caseous mass in the right lung. Both the auricles and the left ventricle were dilated, and there was an aneurysm of the posterior cusp of the mitral valve; the sac was perforated, and the perforation was fringed by vegetations. No other lesions were noticed in the body. The aneurysm was undoubtedly due to localised endocarditis, but whether originating before or after birth was a matter for conjecture.—Dr. SIDNEY COUPLAND thought the case very remarkable, not only because it occurred in a young child, but because the mitral valve was alone affected. As a rule, there was a secondary affection of the mitral valve from the aortic.

Ectopia Vesicæ.—Mr. SHATTOCK showed a specimen of ectopia vesicæ in a male child, and made some observations on the anatomy of the malformation. He suggested that the condition might be explained by supposing that the primitive cloacal invagination, by undue extension upwards, laid open the anterior wall of the urino-genital sinus and the bladder. In confirmation of this view, he mentioned that epispadias occurred without ectopia, but not ectopia without epispadias.—The PRESIDENT said the Society had to thank Mr. Shattock for a most ingenious and probable explanation of a condition which had never been explained, or explained on manifestly erroneous grounds.

Retro-Pharyngeal Abscess.—A specimen of retro-pharyngeal abscess opening into the œsophagus and larynx was shown by Mr. H. CLUTTON. The patient was a man who had been subject to epileptic fits, and, immediately after one, felt severe pain and swelling of the neck, of which he had previously made no complaint. When admitted, he was expectorating much muco-purulent fluid, which apparently came from the pharynx. Deglutition, but not respiration, was impeded. He improved, and left the hospital in three weeks; but at about that time it was found that the abscess-cavity could be filled with air by blowing with closed nose and mouth. The patient shortly afterwards developed broncho-pneumonia, and died. At the necropsy, it was found that the abscess-cavity was situated immediately behind the œsophagus. It opened by three round orifices into the œsophagus, and by one into the larynx below the vocal cords leading to acute laryngitis. The abscess had also communicated with the right lung, and had set up gangrenous pneumonia. It was impossible to suggest any plausible theory to account for the formation of the abscess.—Dr. ERNEST CLARKE commented on the chronicity of the case. He had recently performed tracheotomy on a child eight months old. No swelling could be detected, and the dyspnœa had come on suddenly. The child died eight hours after the operation. There was a large chronic abscess, with thick walls, pointing in the middle line, immediately behind the cricoid cartilage. After very careful search, caries of the third cervical vertebra was found, and was seen to be connected with the abscess-cavity by a narrow sinus.—Mr. MARMADUKE SHEILD inquired whether the abscess might have had its origin in a hæmorrhage occurring after a prolonged violent epileptic fit. Such hæmorrhages were not very infrequently seen about the orbit. He suggested that retro-pharyngeal abscess in children commonly took origin in connection with some of the specific fevers.—Dr. ANGEL MONEY made the objection to Mr. Sheild's explanation that the majority of the cases occurred in young infants. In three cases he had seen, all under six months, it was quite impossible to find any explanation either in the history or the *post-mortem* appearances.—Mr. CLUTTON, in reply, said that the fits hardly seemed to have been of a sufficiently severe character to produce an extensive hæmorrhage.

Horny Growth on Penis.—Mr. PEARCE GOULD exhibited a specimen of horny growth on the penis. The patient was a man aged 50, who had had congenital phimosis. He first experienced difficulty in micturition about four years earlier, and was circumcised; the wound healed except in the middle line, where a small granulating surface remained; in connection with this surface two small warts developed; from the earliest formed a discharge commenced and continued up to the time he came under Mr. Gould's care. On the middle of the upper surface of the glans was a sessile truncated horn of yellowish colour, translucent, and of the size of a small marble. The penis was amputated, the inguinal glands removed, and the patient rapidly recovered. Microscopic sections of the horn prepared by Mr. L. Hudson showed the usual epidermal structure, the cells being flattened, nucleated, and in regular superposed layers; no enlarged papillæ entered the base of the horn; the ulcer was epitheliomatous; the glands showed no secondary deposits. Reference was made to Sir Erasmus Wilson's collection of ninety cases of horns, of which five were on the penis, and to the later collection made by Lebert, of a hundred and nine cases from various sources, of which six were on the penis. Mr. Gould also mentioned other cases, and stated that his specimen was the fourteenth recorded case of horn on the penis. Some of the horns had reached a great size; in one recorded by Mr. Jewitt the horn was three inches and a half long, and three-quarter inch in diameter. In another recorded by Pick, the horn was two inches and a half long; in the case recorded by Mr. Gould, the patient was in the habit of paring the horn down. It had been shown that horns originated in three different ways; from the interior of sebaceous cysts, which was the most frequent mode: from the matrix of nails, and from some change occurring in warts. Those on the glans penis belonged to the last group. Histologically they fell into two classes, the papillary and flat; the specimen shown was of the latter kind.

Card Specimens.—Dr. HADDEN: Perforation of Large Intestine in Enteric Fever.—Mr. FENWICK: Renal Carcinoma.—Dr. MOTT: Myxo-fibroma Compressing the Spinal Cord.—Mr. CLUTTON: Congenital Abnormality of Lower Lip with Cleft Palate.—Dr. G. N. PITT: (1) Ulcer of Vagina, possibly Tubercular. (2) Two Cases of Hydrosalpynx.

MEDICAL SOCIETY OF LONDON.

MONDAY, FEBRUARY 14TH, 1887.

R. BRUDENELL CARTER, F.R.C.S., President, in the Chair.

Two Successful Cases of Removal of Enormous Cancerous Growths of the Superior Maxilla.—Dr. LEOPOLD SERVAIS, of Antwerp, read a paper on the above. He discussed the anatomy of the parts concerned, and exhibited photographs of the patient before and after operation. The superior maxillary bones in both cases were involved to such an extent as to render their ablation necessary. He gave statistics of the frequency of the different varieties of tumours met with in this region. The first patient was a lad, aged 9, who was operated upon in October, 1883. The growth protruded from the mouth and measured 19 centimètres long and 23 centimètres in circumference. It was ulcerated in two places. The general health of the patient was good. The tumour, which had been growing for six years, was smooth, and of the consistence of india-rubber. Dr. Servais followed Fergusson's method of removing it piecemeal. The patient lost a good deal of blood; nevertheless, his recovery was very rapid, and so far there had been no recurrence. The second case was that of a young woman, in whom the growth had begun at 11 years of age, and had always been the seat of very severe pain. Removal had been attempted on several occasions by surgeons, but the hæmorrhage had been so severe as to oblige them to desist. Caustics had also been tried without success, and after ten years' growth the tumour was as large as an adult head. The operation took five hours, but the patient recovered in about three months.

Removal of both Superior Maxillary Bones for Sarcomatous Growth.—Mr. BOWREMAN JESSETT showed a woman whose upper maxillary bones he had removed for a sarcomatous growth. He also showed microscopical sections of the tumour and the parts removed. The patient had first noticed a lump on the hard palate twenty-one months before. It grew rapidly, and soon projected considerably into the mouth, interfering seriously with articulation and mastication. At the expiration of six months she went to Guy's Hospital, where the tumour, which was of a myeloid nature, was excised by Mr. Lucas, and the bone scraped and cauterised. In June, 1886, she placed herself under the care of Sir Wm. Mac Cormac at St. Thomas's Hospital, having at that time an extensive vascular recurrent growth. In October, 1886, she came under Mr. Jessett's care. The whole of the hard palate and most of the soft palate were implicated. On November 9th two incisions were made, extending from either angle of the mouth upwards and outwards towards the outer angle of the orbits, the whole flap, which included the nose, was reflected upwards and the tumour well exposed. With a fine narrow saw both superior maxillary bones were divided about half an inch above and parallel to the alveolar processes. With a raspatory used as a lever this portion of the bone was separated from the upper and remaining parts. It was then wrenched off, and the whole of the growth carefully removed, with the exception of the portion which had grown into the left antrum; this was subsequently cleared away with a Volkman's spoon. There was very little hæmorrhage. The skin flaps were brought together, fastened with harelip pins and dressed with iodoform, the patient being fed by means of nutrient enemata. She made an excellent recovery, and was quite well three months after the operation.—The PRESIDENT mentioned that a circular saw fixed on a stem, such as dentists used, had been employed by Mr. Victor Horsley in operations on the cranial bones, and suggested that it would be found useful in operations like the preceding.—Dr. ANGEL MONEY thought the growth was distinctly myeloid, but Mr. MARMADUKE SHEILD thought it was alveolar.—Mr. JOHN MORGAN discussed the procedure, and alluded to a case of his own.

SOUTHERN BRANCH: ISLE OF WIGHT DISTRICT.

THURSDAY, JANUARY 27TH, 1887.

E. ALLAN WATERWORTH, M.D., in the Chair.

Collective Investigation.—Dr. ROBERTSON read a report on the progress of Collective Investigation.

Separation of Upper Epiphysis of Femur.—A question of diagnosis was raised by Dr. HARVEY, of Ventnor, on a case in which there was lengthening of the limb by ¾ inch after injury, reduced when in the recumbent position, but returning on standing. The opinion of the meeting coincided with Dr. Harvey's, that it must have been the result of separation of the upper epiphysis of the femur. The case was speedily cured with a long splint.

Perchloride of Iron in Post-partum Hæmorrhage.—Surgeon BARNES then read a series of cases in which he had used injections of perchloride of iron for *post-partum* hæmorrhage. The conclusions arrived at were that it was perfectly safe, that any danger was from absorption of infective matter from decomposing blood clots, which could be obviated by frequent syringing with Condy's fluid and water.—Mr. GREEN said that he did not consider the treatment free from risk, having seen two cases in which local peritonitis had followed injections of perchloride of iron, severe pain commencing immediately after the injection, followed by great rise in temperature. These cases had not been fatal. He had used only injections of hot water for some years, but, should that fail, he would certainly again have resort to the iron.—Drs. GROVES and WATERWORTH also discussed the paper. The former said that he agreed with Surgeon Barnes as to blood clots being a great source of septic infection.

Quinsy.—Mr. GREEN then read a short paper on the subject of quinsy, mentioning a case which had occurred in an infant of eight months, followed by resolution and recovery. Time would not allow of any discussion on this paper.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, FEBRUARY 4TH, 1887.

S. C. SMITH, M.D., President, in the Chair.

Method of Ligaturing an Intercostal Artery.—Mr. C. TURNER described a method by which a special curved needle was passed below the vessel, and upwards over the rib, the ligature being tied over a pad. He described various modifications of the process according to the position of the wound, age of the patient, etc.—Mr. JESSOP thought the suggestion valuable, and described a case in which he adopted a similar method, as well as in the case of a wounded epigastric artery in an operation for hernia.

Resection of Bowel for Intussusception.—Mr. LAWFORD KNAGGS described a case of laparotomy for intussusception in a young child, and showed the removed portions of gut. The patient died in a few hours. In a review of the treatment to be adopted in such cases, he recommended the use of inflation, and immediate laparotomy should that be unsuccessful.—Mr. PRIDGIN TEALE, who had seen the case, said his experience led him to the conclusion that abdominal section should be more frequently done in these cases. He described several cases, one in a man of 86, in which he had removed gangrenous bowel, and sutured the ends of the gut together. The obstruction was relieved, but the patient died of exhaustion in six days.—Mr. MCGILL had decided that in the next case which should come under his care, he would make a longitudinal incision over the distended bowel, withdraw and excise the invaginated portion, stitching the opening to the skin, making a fæcal fistula, which could afterwards be closed. He thought that excision of gangrenous bowel and suture must nearly always be fatal.

Hemianopsia.—Dr. WARDROP GRIFFITH described, with the aid of diagrams, the several varieties of hemianopsia, and their probable anatomical relations, both with regard to lesions of the optic tract, internal capsule and cortex of the brain. He related several cases in which a permanent hemianopsia appeared to indicate grave organic disease. 1. A patient was admitted with left hemianopsia and slight left facial palsy. He was dull and heavy, and passed much urine. At the necropsy a tumour was found in the right optic tract close to the optic commissure, pressing on the crus, but not injuring the optic nerve, though in contact with it. 2. A man, aged 57, who had suffered from left hemianopsia for six months. Ten days after the appearance of this symptom he was seized with left hemiplegia. The ocular affection became permanent. 3. A man, aged 25, suffering from right hemiplegia and right hemianopsia, with slight optic neuritis. He died soon after leaving the hospital, probably from cerebral tumour. 4. A sailor, aged 51, was admitted with pain in the head, of three years' duration. He had left hemianopsia on admission, but no hemiplegia, though there was a history of "two slight strokes." Left hemiplegia supervened, with contracture of the left leg, and twitching of the affected side, probably due to a cortical lesion. The patient became demented, and was removed to an asylum. 5. A man aged 52, suffering from granular kidney, was seized with left hemiplegia. When examined fifteen minutes afterwards, there was left hemianopsia and conjugate deviation of the eyes to the right. In conclusion, Dr. Griffith thought that, while temporary hemianopsia was not uncommonly associated with megrim and slight functional derangements, a permanent condition indicated grave organic disease of the brain.

Pathological Specimens, etc.—Dr. CHADWICK showed some living and preserved specimens of the *filaria sanguinis hominis* from a case under the care of Dr. Stephen Mackenzie.—Mr. BACON showed a Larynx from a case of Poisoning by Carbolic Acid.—Mr. MAYO ROBSON showed: 1. A Foot with Sarcoma of Bone. 2. A Hydrocele in the Sac of an Old Hernia.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, FEBRUARY 2ND, 1887.

LLOYD OWEN, F.R.C.S.I., President in the Chair.

Gunshot Wound of Vertebræ.—Mr. J. T. J. MORRISON showed a man, aged 25, who nine weeks ago shot himself in the mouth, discharging a No. 7 conical Eley bullet from an ordinary revolver. On admission there was some shock, but no loss of consciousness. The tongue and palate were blackened with powder; the soft palate presented a round perforation, through which the tip of the finger could feel an opening in the bony wall of the pharynx. A probe passed through this aperture, traversed a canal in the bone about an inch in length, and impinged on a hard substance at the bottom. There were no signs of spinal concussion or hæmorrhage. No attempt was made to extract the bullet. The patient was now in excellent health, the hole in the vertebral column having closed, and its place being indicated only by a slight elevation.

Fractured First Rib.—Mr. A. F. MESSITER showed a specimen of fracture of the first rib, from a man, aged 70, who was run over by a cart, and died shortly afterwards from collapse. At the *post-mortem* examination the sternal end of the right clavicle was found to be dislocated forwards; the first rib was broken at the spot where the subclavian artery passed over it, the second was fractured at its middle, and the third and fourth behind their angles, the two latter wounding the lung; there was no other injury. Mr. Messiter considered that the clavicle, after dislocation, was pressed down on the first rib, thus breaking it by direct violence. The periosteum was torn on the under surface of the bone, but was intact on its upper.

Glass Catheters.—Mr. J. W. TAYLOR showed small female catheters made of glass, which he used for operation cases whenever a catheter was required. He found them very clean and inexpensive.

Artificial Amnion.—Mr. TAYLOR also showed his "artificial amnion,"—a simple form of uterine dilator and tampon.

Ruptured Abdominal Aorta.—Mr. L. TAYLOR showed, for Dr. OLIVER FIELD, a specimen of rupture of the abdominal aorta, taken from a boy, aged 8. Half an hour before admission to the hospital he was run over by a brewer's cart. On admission he was suffering from great shock, and was much blanched, the abdomen being moderately distended; he died in an hour. On *post-mortem* examination a considerable quantity of blood was found extravasated behind the peritoneum, and there was a large rent in the abdominal aorta, where it divided into the two common iliacs, the abdominal viscera being uninjured.

Mr. DONOVAN read a paper on "Some Points in Therapeutics."

ACADEMY OF MEDICINE IN IRELAND.

MEDICAL SECTION.

FRIDAY, JANUARY 28TH, 1887.

JAMES LITTLE, M.D., President, in the Chair.

The late Henry Kennedy, M.B.—On the motion of Dr. FITZPATRICK, seconded by Dr. MACSWINEY, the following resolution was unanimously adopted:—Resolved, "That the Fellows and Members of the Academy of Medicine in Ireland desire to place on record their sense of the loss the Medical Section has sustained by the death of Dr. Henry Kennedy, and to express their sympathy with Mrs. Kennedy and her children."

Massage.—Dr. KNIGHT exhibited a case under treatment by manipulations applied by an experienced masseur.—After some queries from

Dr. MacSwiney, Mr. Cox said he had a case of neurasthenia in a girl, aged 22, and he adopted massage, following, at the same time, the treatment as to diet, seclusion, and rest laid down by Weir Mitchell. The result was satisfactory, but was due in his opinion much more to the rest and regimen than to massage. He had himself submitted to massage by Jules Wölff, who sought tender points and manipulated these considerably, employing, as it were, centrifugal force moving from within outwards—first kneading or pinching the skin; next, the tissue beneath; and then the muscles, until the tenderness seemed to diminish; while he moved the joints freely in all directions. Massage was likely to be beneficial for local loss of power, the result of atrophy of the muscles or stiffness of joints in arthritis.—Mr. Frazer said that for ages the Turks had been in the habit of using massage. The Japanese employed a similar process, filliping the surface of the skin till it became black and blue, with excellent results.—Dr. Atthill had experience of three cases which, having failed to be cured by medicine, were put under a course of massage, combined with careful supervision and enforced proper feeding; the good results, he thought, were more due to the hygienic treatment than to the massage.—Mr. J. W. P. Kennedy mentioned a case of intractable sciatica, for which the sciatic nerve was stretched without the desired result. Three months afterwards the patient went to a woman reported to have great powers as regards massage; and under her treatment—rubbing from within outwards over the sciatic nerve—he recovered.—The President said affections of joints produced by rheumatism and the peculiar condition affecting the nervous system in girls were totally different things. He was himself, he believed, the first Irish physician to place a patient under Wölff's care, and the result was satisfactory. He would, however, never recommend a medical man to undertake the treatment of any of his own patients by the process, but to transfer a case that baffled his medical skill to a new practitioner and a new nurse.—Dr. Knight, in reply, said he believed the case to be suitable for massage, and the masseur had had many years' experience. On Wednesday afternoon the patient was carried into hospital, and he got his first rubbing at half-past two on Thursday, the time occupied being an hour, with the result that he got a good night's sleep, and walked down to the College of Physicians. There was no arthritic trouble of the larger joints, but many of the smaller were affected. Massage was practised generally in the East, being called "hand-grasping."

Classification of Insanity.—Mr. Conolly Norman read a paper on variations of form in mental diseases in relation to the classification of insanity. The older schemes were briefly referred to. The classification which the speaker adopted as most closely corresponding to the general facts of his experience was that of Professor von Krafft-Ebing, of Graz. The distinction which that author made between psycho-neuroses and conditions of psychical degeneration he believed to be a genuine one, and of the greatest value from a prognostic point of view. There were many cases, however, which it was most difficult to locate correctly in any system of classification. Three cases were described, all presenting very marked symptoms, which, nevertheless, the speaker had not been able to assign definitely to any one class, owing to the rapid and complete alteration of type which they had undergone. The first was a young man of good family history, in whom no distinct cause of illness was discoverable. He suffered from an acute attack of pure mania (exalted emotional state, with much incoherence and general excitement), lasting three months. He then passed into a condition of the profoundest stupor (acute dementia), which continued for nearly three months, and was followed by gradual, complet , and apparently permanent recovery. The second was a young woman whose family-history was very bad, and who had been exposed to domestic trouble and shock. She suffered from intense suicidal melancholia for about nineteen months, then became maniacal, and remained so till her death, two years later. The third case was that of a young man of dissolute habits and bad family-history, who became insane after a bout of drinking. When the immediate signs of alcoholism had passed off, he remained for some time in an exalted state, resembling the incipient stage of acute mania. With apparent suddenness he became depressed, attempted suicide, and fell into a condition of the most profound melancholia (pure emotional depression without delusion). These cases illustrated the difficulty of framing a satisfactory classification. Taking them to be pure psycho-neuroses, the symptoms of states usually held to be the most diverse succeeded each other in a manner that defied classification. On the other hand, an intermingling of discordant symptoms and an alteration of various mental states was one of the signs of psychical degeneration. No other clinical features in these cases, however, pointed to the same conclusion, and they fell under no described class among the degenerations. They were not examples of *folie circulaire* (*folie à double forme*), neither were they cases of "hebephrenia" or "kalatonia," two forms described by Kahlbaum, which often presented a good deal of variation in symptoms.—Dr. Fitzpatrick regarded Mr. Conolly Norman's cases as simply cases of mania diverging into different forms.—Dr. John Eustace said that some classified mental disease according to the patient's acts, others according to his words. He deprecated transferring the diagnosis from the medical to the legal profession, judges and jurymen being prone to rely on what a patient said as the index of insanity. But a patient's deeds were of far more importance. He thought that the cases in question indicated a neurosis rather, perhaps, of the spirit than of the body.—Mr. Molony said words were a guide as well as deeds. For instance, he had a patient who did his work like everyone else, though he always said he was a king.—Mr. Cox hoped the study of insanity would be made compulsory, as in the Royal University.—Mr. Frazer said no advance had been made in classification since Burton's *Anatomy of Melancholy*, a work published two hundred years ago.—Mr. Wheeler having also joined in the discussion, the President said that the study of insanity was a want that existed, just as the necessity for a proper course in pathology. Mr. Conolly Norman had dealt with variations in the immediate symptoms of insanity as helping to a forecast of the result; hence the value of classification, and he hoped the time was not far distant when the scalpel or object-glass would enable the surgeon to point out the traumatic changes lying at the root of insanity.—Mr. Conolly Norman replied. The advantage of a natural classification was its prognostic value as to the course of the disease and its probable issue.

REVIEWS AND NOTICES.

A New Departure in Science. By Charles Bland Radcliffe, M.D. Macmillan and Co. 1886.

It is a great advantage, for the establishment of a genuine belief that we know the truth about any point, that the common opinion on that point should be occasionally questioned, however sure its foundation should seem to be; and that the evidence should be re-examined. That the earth is not flat, but round, is not obvious, to say the least of it; it was never deemed conceivable by so exact a man as Euclid, whose logic and conclusions on many other points we nevertheless value very highly; and the occasional little disputes about the matter which arise now-a-days are easily settled, and do rather good than harm. We are, therefore, glad to see that Dr. Radcliffe does not hesitate to take up an independent position with regard to several doctrines which the scientific world may be said to have long ago made up its mind about, as well as to advance some rather novel hypotheses on some more hypothetical matter.

A New Departure is a serious thing for science in 1887, and we must follow our author's footsteps in trying to explain it. Dr. Radcliffe has long been interested in the tides—chiefly, he tells us, by a paper of Whewell's "On our Ignorance of the Tides," which was published before 1860; "and since this time," he says, "nothing has been done to show that our ignorance is less than it was then stated to be." He had noticed for himself that "the mean time of the spring tide is exactly what it ought not to be in accordance with the Newtonian law of attraction. This is evident." Once, when he was at Eastbourne, he noticed also that the waves, "whether the tide was coming in or going out, or whether it was in or out, always came towards the shore.....It seemed as if they were attracted, or in some other way strongly influenced, by the land." Then the idea of a tidal land-wave came upon him, and he began to see that the tides were not so much the result of the sea going up and down as had been commonly supposed, but of the land going down and up. High tide, in fact, meant a time when land was low. This point, as he took it, had never seriously been tested, and could be settled by the barometer; for, if a point on the surface of the land be more distant from the centre of the earth at high tide (so called) than at low tide, then, other things being equal, there will be a less weight of atmosphere above it at high tide, and consequently a less barometric pressure; whereas, if the point keeps at a uniform distance from the centre of the earth, the pressure will, other things being equal, be uniform. He made some "on the same spots afloat and ashore.....at each tide," at various places; and, though they do not by any means all point in the same direction, he came to the conclusion that, on taking an average barometric pressure, "the land has gone down at high water to 30.255, and up to 30.250 at low water"—a difference equivalent to about 5 feet; so that "there is low land with what seems to be high

water, and high land with what seems to be low water. This is the simple case.....In a word, the evidence of a tidal wave in the land seems to be fairly conclusive." He does not deny that at the same time there may have been "a wave in the water resulting from gravitation," but only is forced to conclude that it "may really be as insignificant as the wave in the atmosphere arising from the same cause." Why is it, then, that the surface of the earth moves up and down like this? "All that is necessary," he answers, "is to suppose that the earth is traversed by powerful electrical currents from the sun and moon, and that these currents are frittered down into heat." The heat expands a layer of the earth far below the surface, and the surface is forced up and down by this expansion.

The past history of the earth next occupies our author. He cannot believe that it has been as long as some suppose, else geology would have shown us, not one, but many glacial epochs, all dependent on the varying distance of the earth from the sun, due to the varying eccentricity of her orbit in the last million years. The one glacial epoch we have had depended, he prefers to think, on our collision with an aërolite, which does not seem to have left much mark on the earth, but which nevertheless altered the position of the earth's axis very largely, and brought about what is commonly called the Deluge, which began on November 6th, and ended on November 16th of the following year. It is unfortunately easier, it seems, to give the month than the year. "It may also," he adds, "have been quite in order that there should have been no rain or rainbow before the Deluge," because all the land was previously on the equator, and "the vapour arising from the hot land might be carried polewards, where, whether it fell as rain, or hail, or snow, it would fall far out of sight of land." And so, after all, the independent conclusions of science after its "new departure," have turned out to be, as regards the world's history, very much the same as those of some of the earlier Hebrew writers.

It hardly falls within our province to criticise hypotheses of collisions with aërolites, which have been often termed the last resource, or, more impertinently, the *asylum ignorantiæ*, of the cosmologist; or of an electrical current through the earth "from the sun and the moon," which seems to want at least the last link in its circuit. Before Dr. Radcliffe has convinced the world, we may expect a word from the meteorologists, who know that a stationary barometer in a storm on sea or land may show changes in twelve hours which are equal to a rise or fall of 1,000 feet, and may find it hard to trace the constant tidal land-wave after the fashion of Dr. Radcliffe; and perhaps a word from an astronomer like Professor George Darwin, who, after years of labour on the possibilities of the conditions shaping of the earth and its interior, concludes a recent essay with the cautious words "that it is likely that we are at least three or four inches nearer the earth's centre when the barometer is very high than when it is very low;" or from Sir W. Thomson, who has long had decided views as to the great antiquity of the earth, and the meaning of such a phrase as an "electrical current." However, that is all to come. For our own part, we have endeavoured to let Dr. Radcliffe tell his own story and take his new departure without let or hindrance.

NOTES ON BOOKS.

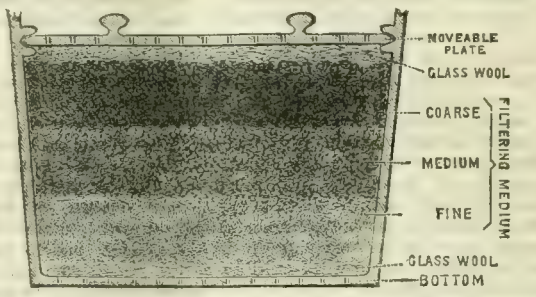
Führer durch das medicinische Berlin. (Fischer's Medicinische Buchhandlung, Berlin, 1886.)—This is a guide to Berlin and its medical institutions, which is calculated to be especially useful to the foreigner who visits that great medical centre, with the view of prosecuting studies in some special department. The first section contains information about railways, hotels, lodgings, restaurants, cafés, cabs, tramways, and so on, after the manner of the familiar *Bædeker*. The second section contains a vast amount of information about the university, the hospitals, and the medical laboratories of Berlin, the names of professors and assistants, and the places and hours at which they severally are to be heard. There is a complete medical directory to Berlin, and finally a large map of that city. It ought to be said, in conclusion, that the volume is a small octavo, easily carried in the pocket.

University College of South Wales and Monmouthshire. The Calendar. Fourth Session, 1886-87. (Cardiff: Owen and Co. 1886.)—The Calendar of the University College of South Wales contains the usual information as to teachers, classes, and examinations. Students can be prepared for the Matriculation, the Intermediate (M.B.) in Science, and the B.Sc. Examinations of the University of London.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

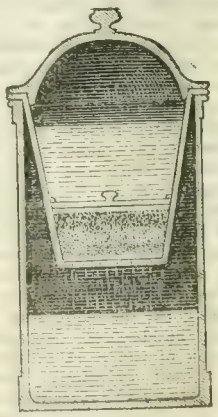
THE NEWCASTLE PATENT FILTERS.

We have received from Messrs. Mawson and Swan, of Newcastle-on-Tyne, a specimen of their new water filters, which combine various requirements which the results of lengthened experience have shown to be adapted for the efficient performance of water-filtration and purification. Among the chief features noticeable in these filters is that the filtering medium is arranged in strata differing in fineness, so that a graduated process of filtration is carried on. These strata are held in position by layers of glass-wool and a



Section of Filtering-bed only. (Patent.)

plate, which can be unscrewed when it is desired to cleanse or renew the filtering medium. Mr. T. Hatfield Walker, L.R.C.P., F.R.M.S., Newcastle-on-Tyne, states that he has subjected the water filtered through them to both chemical and biological examinations, according to Koch's method of cultivation of bacterial germs, and the average of a large number of experiments shows that this filter reduces the organic impurity to about one-eighth of the original amount, and almost entirely removes all bacterial germs. Thus, a water which contained 5 grains of nitrogenous organic matter, after being filtered was found to contain only half a grain; and a very bad water of very offensive odour, and which contained 12 grains of organic matter, after filtration was found to contain 1.4 grain, and was rendered perfectly sweet. A hard water after filtration was found to be actually softer than rain-water; a water having 22 degrees of hardness was found after filtration to have only 1 degree. Among the advantages which the makers claim for these filters are their great purifying and softening action, the impossibility of unfiltered water passing, and the ease with which the filtering medium can be



Section of Earthenware Filter.



Mawson and Swan's Glass Filter.

renewed. Lead and iron were found to be entirely removed, even after 200 gallons had been passed. Mr. Walker, in his experiments, found that these filters removed all the carbonate of lime and magnesia from the water filtered through them. These filters, which are obtainable from any chemist, are made in convenient sizes to suit varied requirements, and at prices varying from 14s. 6d. to 50s.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 19th, 1887.

THE PROGNOSIS OF CHRONIC VALVULAR DISEASE.

THE remarks upon valvular disease of the heart which has existed for over five years without serious symptoms, made by Sir Andrew Clark, at the meeting of the Association at Brighton, and the publication of which is concluded in this week's number of the JOURNAL, demand special notice for several reasons; and, since the occasion is an unusual one, we will say, first of all, because of their distinguished source. In saying this, we shall be acquitted of any idea of irrelevant flattery. We have no such thought. But when we recall the whirl of professional occupation that has more than fully engaged him for many years past, all our readers, who are in any way plodding the same round, will appreciate the effort made by Sir Andrew Clark, in their behalf, to supply them with information such as they sadly want, and will agree that the effort is as noteworthy as it is rare. There have, indeed, been few contributions to our knowledge comparable with it within recent memory. Let us not be misunderstood. There has been no lack of good practical work done; but in the main, it has been contributed by younger men out of hospital records, ere the stress of work had for them begun; and it necessarily wants that ripeness and fulness of knowledge of medical practice which is the special need of the day. Who of our leading men has thus put his own private note-book into the retort, and given us the distillate? yet there have been many others—there are such now—who have been, and who are equally the proprietors of mines of untold wealth, which await only the means and a method of working them.

But the intrinsic value of the subject itself hurries us on. There are few more attractive questions than the prognosis of valvular disease of the heart—for this is what it comes to, as Professor Gairdner reminds us in the heading to his paper. And this is so because in all manner of ways it presents itself to the practitioner, and presents itself, too, with almost daily recurrence. For example, a child has an attack of rheumatism and the heart becomes affected, or perhaps some trifling ailment leads to a medical examination, and a murmur is discovered. What are the chances in either case? A young man has worked for, and obtained, a public appointment, and then finds himself unexpectedly barred by the discovery of disease which has never caused him any inconvenience. Another suddenly feels a fluttering in the præcordial region—an endocardial murmur is heard. May he marry? Or a man takes steps to insure his life and is refused for similar reasons. How far can one honestly endeavour to reassure such a one by telling him that a creaking pump is capable of many years of moderate wear and tear, and that refusal by a life office *per se* by no means indicates the immediate necessity for building a family vault? And hardly less free from doubt in the present day is the answer to the further question: Supposing that a favourable view is taken of a particular case such as any of these, what is the best rule of life for the patient to observe?

Two or three years ago, Dr. Broadbent dealt with the prognosis of heart-disease, and he attempted to substantiate, from clinical and *post-mortem* records, some general rules for prognosis in the case o the several valves, where the heart affection had been associated with symptoms. Many points of considerable value came out of that inquiry, one of them being that mitral stenosis, which had been said to be the lesion most compatible with prolonged life, had in reality no title to so favourable a position, at any rate, when symptoms had once set in. Many a case of chronic valvular disease goes on for a long time, provided that compensation—which may be taken to mean, in short, accommodation of the muscular wall of the heart and, in a less measure, of the tissues in the vascular circuit, to adverse circumstances—occurs. In passing, however, let it be said that compensation is rather a hope than a reality. A good deal is heard of it nowadays; but, as a matter of fact, all we know of it, as the cases with which we are concerned teach, is, that in a certain number of cases of valvular imperfection without corresponding symptoms, and in any case where the presumption is that the disease is of some years' standing, it must have taken place. It must not mislead us. There are no means by which, in any recent case, its advent can be foretold. We cannot say whether it will or will not take place; we can only wait and see.

The tables drawn up by Sir Andrew Clark, and the cases of Professor Gairdner, supply us with most valuable additional evidence—and it may be safely said that the experience, more or less, of every practising physician is in accordance with it—that valvular disease of the heart, as seen in the community at large, is not of the same gravity as that seen in hospital practice, and must not be judged entirely by general rules derived from the latter. We must always be careful, as Dr. Gairdner put it, not to over-estimate the importance of the murmur as a fact, nor to pay too much attention to the mere existence of the sound, and too little to the circumstances in which it occurs. In other words, each case comes up on its own merits, and if there are no symptoms; if there be good health, sound ventricles, freedom from venous turgescence in the viscera or elsewhere; if the subject is temperate in all things, and the disease has existed for three years without change, then the prognosis is good. Sir Andrew Clark is perfectly logical in carrying his conclusions to their legitimate outcome. Such a one, he says, may marry, may be permitted to continue the ordinary duties and enjoyments of life; and an application for life insurance may be entertained. This last opinion is probably rather in advance of the present practice of the various offices. Some of them, and good offices too, refuse, most unjustly to the applicant, and to their own loss, trivial cases of temporary muscular disturbance, and it may be doubted whether a pronounced mitral murmur, subject even to the numerous qualifications above mentioned, would be accepted anywhere except under a "loading," which would wreck the policy. The case of mitral disease narrated by Dr. Gairdner, as taken at an ordinary rate, must have been fortunate in coming before a board of unusual open-handedness, and of more than the average trustfulness in their medical adviser. But more sorry by far than the would-be policy-holder declined, is the man pulled up at the open door of a

chosen employment. In the present day of many applicants for every vacancy, the fiat "none but the best lives," is becoming more and more fixed, and most men must have had the painful experience of having been compelled to reject candidates for work, which if they were fitted for any employment at all, was the most suited to their physical capacity. Much as it might be wished otherwise, it is to be feared, nay, it may be regarded as certain that, no matter what our further enlightenment regarding the risks of valvular disease, the old-world edict has become accentuated—not mitigated—by time, and that the battle is now more than ever to the strong.

The teaching concerning the treatment of chronic valvular disease has, independently of such observations as those under notice, but probably in part in consequence of a growing consensus of opinion, founded upon similar experiences, undergone—or perhaps, to speak more correctly, threatens to undergo—a revolution. It was a good old maxim, based upon the ready but sometimes rough dictates of common sense, that a damaged organ requires lessened work. Thus chronic invalidism has been the state of existence usually enjoined for the subjects of valvular disease. Of late, however, there have been some who have questioned the soundness of this advice, and there is certainly much to be said for holding to moderate views. For, in the first place, on general grounds deprivation of all exercise must lead to muscular relaxation, and whatever depresses the general tone must of necessity render the heart liable to dilatation. But there is still another very plausible argument in favour of a less rigid application of the treatment by rest, which is derived from the life history of contracting valves. There is some evidence to show that valves, the subjects of chronic thickening, contract but slowly for a long period of years, and subsequently close in at a greatly accelerated rate. In this they resemble many a case of urethral stricture, of which over and over again the tale is that for long after the cessation of the exciting cause there has been no difficulty in micturition, and that this has been succeeded by a short period of rapidly increasing disability. Now, without attempting to discover the meaning of this in all its bearings, it is impossible not to be struck by the features common to these two pathological conditions. Both concern passages along which fluid is propelled by muscular effort, and no doubt in both cases there is this much in common, that so long as the muscular propulsion can out-do in power the contractile element in the cicatricial tissue, so long is the latter kept open, and the calibre of the channel is undiminished. It is, therefore, evident that a vigorous muscle and a strong stream are perhaps the most important elements in the preservation of health. And from this point of view, it is quite obvious that rest, and all the other possible means for reducing the force and frequency of the circulation may, by destroying the balance of power, allow the contractile element to gain the mastery, and so do much to hurry on a catastrophe. On the other hand, by a fair amount of exercise, and the intelligent use of all such means as conduce to mental and bodily vigour, the cardiac muscle is kept at its best, contraction of the valves is kept at bay, and it is conceivable at any rate that here or elsewhere the morbid material may be in part absorbed under the influence of the dilating force. This theory of exercise in disease of the heart is a somewhat startling one; but though it is in contradiction to much that has been taught, yet a good deal can be said for it. It requires, however, much discrimination in its application, and it is obvious that, failing this, it is a most dangerous doctrine to spread amongst the ignorant or careless.

THE HUNTERIAN ORATION.

As might have been expected, the oration delivered by Mr. Savory at the College of Surgeons last Monday was a model of eloquence. That it was something more, the reader can learn by perusing it in this number of the JOURNAL, though all who have once heard Mr. Savory must feel that much is lost to those who have only an opportunity of reading any address which he has delivered. The orator, in this case, dwelt upon Hunter as a man of science, one who made surgery into a science, and who studied science in a truly scientific spirit. Thus, although Hunter was an indefatigable collector, no specimen which he took pains to acquire was valued by him merely because it filled a space on a shelf, or satisfied an idle curiosity. In this observation lies one of the many suggestions in the oration. A curator or a pathologist must be certain that his motive in acquiring or studying any specimen is not merely to possess it because a similar specimen is not to be found in his museum, but is to be seen in some rival collection. Nor must he specially prize a specimen because it illustrates an "exceedingly rare and interesting condition." These are not the highest aims of the museum as a factor in science. The collection should be serial and comparative, and not a mere assortment of objects simply unique or remarkable. The principles which guided Hunter in forming a museum have borne their fruit, for as museums should be, so is the museum founded by Hunter at the present day, and better still, as managers and students at such institutions should work, so do they work at Lincoln's Inn Fields, and at many other museums which keep tune to Hunter's key-note. The principle that surgery should be essentially scientific was, no doubt, first fully appreciated by Hunter; like all other great principles, it is recognised by a large section of the profession who act quite contrary to it. The orator referred very pointedly to that section. In respect of Hunter's qualities as a manipulator, he briefly noted how there is evidence that they were below the average. On the other hand, it is too certain that some of the most unworthy of our profession, and some of the most ignorant, have greatly excelled in manipulative dexterity. The defects of the great are more important to study than the failings of inferior men. We can understand how an ignorant or unprincipled man can use the knife and the suture needle with consummate skill. The total inability to acquire this skill, not rarely observed in surgeons who have made their mark, is a fact worthy of reflection, and the medical teacher must bear this fact in mind; he must, if conscientious, never fail to satisfy himself that he takes pains to teach his pupils how to handle instruments, as well as how to learn facts. On the other hand, teachers, including under this term senior medical officers at the schools, must remind brilliant young dressers and house-surgeons that, as Mr. Savory observed, the study of science requires, especially in their case, far more self-sacrifice than does the practice of feats of mechanical dexterity, and the mastering of the routine of the operating theatre.

But it must never be forgotten that Hunter's unceasing search for truth was also prosecuted by the experimental method. He was a pathologist, not only a morbid anatomist. Hunter grappled with, and frequently solved, the problems of disease, by studying the living organism, and in this way also advanced the science of surgery. The time has now come for the College of Surgeons to cease to be placidly satisfied with annual declamations, like that of Mr. Savory on Monday last, which simply recount the glorious results of Hunter's experimental method; now is the opportunity for

the fulfilment of the long neglected duty of fostering researches, which will afford a firm basis for fresh advances in surgery, to the endless benefit of mankind.

The Hunterian Museum forms a splendid laboratory for following out the great surgeon's anatomical method; it perpetuates Hunter's boundless self-sacrifices for surgical science, as well as his marvellous contributions to its progress. We need a Hunterian Institute also, for the prosecution of his experimental method; and thus the twin agencies of scientific investigation would work together, and make the Royal College of Surgeons of England what it should be; namely, the centre and fountain-head of surgical knowledge and progress among all English-speaking nations.

So long as the income of the College was limited and restricted, by reason of its trusteeship of the Hunterian Museum, and so long as physiology and pathology were yet dark paths of science, there was ground for the action of the College in not attempting to keep alive the brilliant memory of Hunter, in the two-fold manner we have described; but the munificence of Sir Erasmus Wilson has swept away all these trammels, and now, therefore, the College is able, if it will, to show to the scientific and surgical world, that it is determined to do real honour to Hunter's work and teaching, and to energetically aid in the advance of surgery. Although Mr. Savory admitted the essential value and first importance of the experimental method, still his address was little more than a declamatory apotheosis of the museum.

Mr. Savory seemed to seek to establish the proposition that physiology, as a groundwork of pathology, can be acquired by the study of morbid anatomy, comparative or otherwise, as demonstrated in museum preparations. If Mr. Savory could bring himself to believe that the greatest advance that has been made since surgery began to be cultivated either as an art or a science (estimating advance by the amount of human life and suffering directly saved, by the help given to the undertaking of new operations, and by relief of mental anxiety and responsibility) is the result of Sir Joseph Lister's teaching, and if he would remember that that antiseptic system of treating wounds was based wholly and entirely upon Hunter's experimental method, he would not, we think, have said that "no memorial, however majestic, can rival our museum." On the contrary, if, as we have suggested, Mr. Savory could realise with what startling success the application of Hunter's experimental method has been crowned, he would have said with us that no memorial of Hunter is worthy of his renown unless it be of the two-fold character in which experimental research is combined with anatomical investigation, not, of course, in imagined, though impossible, rivalry, but as Hunter used them, in fruitful co-operation. It cannot be that the Council of the College will suffer the appropriation of the Erasmus Wilson Fund to be carried out in negation of the greater half of Hunter's genius and lifelong work. Possibly it is not realised by some how changed is the field of work in pathology. Now that science has so improved instruments of observation as to permit of our watching the processes of disease, a glance at any record of advance in medical science shows that that advance is being carried on by experimental observation by the bedside or in laboratories, and that fewer and fewer observers hope to solve the vital problems of disease by the study of morbid anatomy. The foundations of modern pathology were laid by Hunter; he showed us the two parallel directions in which we must labour to accumulate material facts, and it is for the present generation to see that the edifice is completed in the two-fold manner after Hunter's own heart, and not to the crippling of the one-half by prodigal expenditure on the other.

BRAIN SURGERY.

"So that henceforwards there shall be no chyrurgeon, howsoever ignorant in the performance of his art, which . . . may not perform this operation without any danger or fear of danger of touching the *Dura Mater*, the hurting whereof puts the life in jeopardy."

Thus speaks Ambroise Paré in the middle of the sixteenth century, fully aware that the opening of the dura mater in a septic wound was the most frequent cause of death in compound head injuries, and later, in the next century, Percival Pott, whose liberal use of the trephine subsequently evoked the abusive criticism of John Bell, realised the danger of following up removal of the bone by incision of the dura mater. The semi-religious respect with which the peritoneum was regarded up till thirty years ago finds its exact parallel in the dread of operative interference with the arachnoid membrane. A disputation similar to that which hindered the reform of stereotyped notions concerning the peritoneum seems likely to be imitated at this era of the birth of brain surgery proper, if certain views, which have recently found expression, are reiterated. There is, however, one fundamental difference between the introduction of surgery in the treatment of abdominal and cerebral disease respectively. In the former the mortality was at first high, in the latter it is low. The statistics of the splendid results obtained by Sir Spencer Wells in the first series of abdominal cases are in every one's hands. Of recent cerebral operations we understand that Mr. Victor Horsley has operated in ten cases with one death, and that from shock (the cases including four tumours of the brain); that Dr. MacEwen has had three successful cases and no deaths; Dr. Hahn, of Berlin, one successful case and no death. These, with the pioneering operation (unfortunately fatal) of Mr. Godlee; a successful Italian case, recently noted in our columns; and a case by Mr. Bennett May, show that we already possess a series of fifteen successes and three deaths (two of the latter being due to shock, the operation having been postponed too long). But we would draw attention to the fact that in this as in every new point of departure in medical science, stress is to be laid, not on statistics of a few early cases, but on the facts of each, individually. Further proof of the value of surgical interference in cerebral disease is evidenced by the two very gratifying cases lately published in our columns; namely, one by Dr. Gowers and Mr. Barker, on December 11th, 1886, and one by Dr. Greenfield and Mr. Caird, in the JOURNAL of February 12th. In reviewing the circumstances which led to the performance of the operation in these cases, it is to be noted, in the first place, that in both instances the prognosis was inevitably fatal, a state of things which, in spite of high authority, we venture to say always justifies any line of surgical treatment which is not in itself very dangerous to life. Probably every case of deliberate operation upon the brain that has been or will be performed for some time to come, has been or will be undertaken with this circumstance standing first among the factors of justification. If only one case, therefore, recovers with life, it is clear that the surgical treatment is sound, since all other was completely inadequate. Judging from slight indications, such as those to which reference is made above, the profession requires at the hands of those who are practising in this new direction very full accounts of the cases thus relieved and, above all, exact information on that point

wit which this article is begun, and which commends itself most especially to the mind of the public, namely, the guarantee that the treatment is not in itself dangerous.

The assurance of this, so far as deliberate operation on the previously uninjured head goes, is sufficiently easy, since it means nothing more than the thorough observance of certain precautions, mainly antiseptic principles. It is, however, a different question when we consider such cases as those which form the subject of this article. In these instances, as a rule, the contents of the cerebral abscess are foul; and though the subdural space has to be penetrated to allow of the escape of the pus, septic infection of the meninges, which, as we have seen, has been known for centuries to be the cause of death in traumatic lesions, is, in these instances, conspicuously absent. The explanation of this is simple. As noted by Mr. Caird during his operation, simple meningitis seals the arachnoidal surface of the brain to that of the dura mater, just as in the same way simple peritonitis shuts off visceral abscesses, which, by bursting into the abdominal cavity, would infallibly cause death. The infective (septic) pus liberated from the cerebrum by the incision, and already flowing out rapidly in the direction of least resistance, is thus prevented from spreading beneath the dura mater. Fortunately, too, the intracranial pressure lends valuable aid in the obliteration of the subdural space. The actual surgical position, therefore, of this operation of trephining for cerebral abscess is exactly that of operating for any other visceral suppuration, and may be undertaken with as little, if not less, hesitation.

The operation being thus so justifiable as to be called for, the next problem is the accurate application of such treatment; in other words, the diagnosis. We suppose that the reflection of most who read the reports of these two brilliant cases will be the somewhat discouraging one that the diagnosis in each was so uncertain as to afford little guide for future action. It is, of course, very obvious that, since the cerebral symptoms due to irritative lesion and destruction of certain portions of the brain—in these two instances the temporo-sphenoidal lobe—are masked in such cases by secondary symptoms due to pressure, etc., the diagnosis must remain somewhat obscure, even when cerebral physiology shall have discovered the functions of all parts of the brain. Meanwhile, however, it is obvious that, with the wealth of clinical research existing among the profession, a great stride forwards might be taken if all cases of cerebral abscess were most fully recorded, and if a thorough revision and comparison of the reports thus obtained were made in summary of the facts. Indeed, the minutest symptomatic detail must not be allowed to escape observation; as, for instance, the onset, spread, and character of the optic neuritis, as compared with that arising from other causes, etc. The differential diagnosis of cerebral abscess which is a surgical emergency, from those cases which recover with or without the aid of drugs, is a difficult question, the answer to which would be honourable to the finder and valuable to humanity.

THE REMOVAL OF CHRIST'S HOSPITAL.

THE growing practice of asking questions in Parliament is in many respects a thing to be discountenanced; but it has at least the merit of drawing public attention to subjects on which it would otherwise be difficult to gain a hearing. It is for this reason that we advocate the otherwise somewhat stale and unprofitable expedient of a question in the House with regard to the way in which the Christ's Hospital matter is being allowed to drag on. The private quarrels of the governors with the Charity Commissioners cannot be allowed indefinitely to retard a reform which is demanded alike in the interest of the foundation generally, and of the scholars themselves. The arguments adduced against the removal of the school from airless and smoky Newgate Street to the free and open country, are of the most flimsy and sentimental description. When Christ's Hospital was established, its surroundings were comparatively rural. It is now hemmed in on all sides by miles of houses and warehouses. No one would willingly ignore the old recollections of the place and its historic associations; but there must be means of keeping green the memory of these without clinging desperately to the original scene of them.

Other great schools have seen the wisdom of transplanting their scholars from the murky city to the more healthy suburbs. It is impossible to point to any real disadvantage which has been suffered by the removal of Charterhouse to Godalming or St. Paul's to West Kensington. Why should not Christ's Hospital do the same? There is every reason why it should. The blue-coat boys would grow up healthier and stronger both in body and mind; the income of the foundation would be largely increased by the proceeds of the sale of the Newgate Street site; and, as a consequence, the number of children admitted to its benefits could be greatly augmented.

It is ridiculous to suppose that there can be any difficulty in disposing of a site so advantageously placed for business purposes. We have already indicated some of the more clamorous applicants for greater space in the immediate vicinity. St. Bartholomew's Hospital wants better accommodation for its nurses than its present space allows. The increase of the work of the Post Office has already made it necessary for it to acquire compulsorily almost all the land to the east of the school; and no better site for the proposed Clergy House, under the very shadow of St. Paul's, could possibly be found. Given a willing seller, anxious purchasers would spring up in all directions.

The important thing to accomplish is to imbue the minds of a majority of the Governors with the belief that it is right and necessary for the sake of the scholars of the foundation that the school should be moved away from the City. The boys' health would be improved, and their discipline and morals as well, which are points that need to be kept strongly in view in all aggregations of growing boys. The Royal Commissioners of ten years ago were emphatic on this subject. They showed how the faulty arrangements and crowded state of the wards affected the possibility of discipline, and agreed with two eminent head-masters, both old Blues, that "all the defect would disappear at once if the school were removed to a site in the country." And they added, "We think its removal from London is indispensable."

If the Government authorities feel themselves unable to interfere—and certainly matters of education are not now in very strong hands—the Court of Aldermen, who have a share of responsibility in the management of the school, might usefully make their influence felt amongst the Governors. The City Corporation has recently shown itself in other matters to be capable of good and useful work for the benefit of the community at large. Christ's Hospital is a noble trust, which is lagging behind in this age of progress. Will not the City help to awaken it from its present lethargy?

THE Senate of the University of Cambridge has sanctioned the preparation of plans for a physiological laboratory, the whole cost of which is estimated at £10,000.

THE GENERAL MEDICAL COUNCIL.

Owing partly to increase in the number of its members, and partly to new appointments, the General Medical Council, which met on Tuesday last, was, so far as regards the personality of its members, a very different body from that which separated in November; though the members who took their seats for the first time constituted a third of the entire number, yet the Council quickly settled down to its work, and the new members at once took their share both in its business and debate. Mr. Wheelhouse was appointed a member of the Financial and Sir Walter Foster of the Pharmacopœia Committee. Some apprehension had been expressed that the room in which the meetings are held would not easily accommodate the additional members, but it was soon seen that these fears were groundless, and the arrangements made by Dr. Quain, upon whom, as Senior Treasurer, this duty devolved, appear to have given general satisfaction. The session was opened by a somewhat discursive address by the President, Sir Henry Acland, who established, to his own satisfaction, that the accession of the Queen corresponded, in time, with a "new era in the conception of medicine." This afforded him an opportunity for sketching the growth of the two departments of medicine—preventive and curative—during the past fifty years, and giving an outline of the progress of legislation in respect of medical education and examination during the Queen's reign, which was strangely inadequate in its description of the agencies which have brought the reforms to a successful conclusion.

We indicated a fortnight ago the subjects which the Council would have before it, and the observations of the President on this head only confirmed the general accuracy of the information we then published. The method of carrying out the inspection of examinations required by the Act of 1886 was raised by a report presented by Dr. Quain and Professor Humphry, embodying a simple scheme which could be easily worked, and, as a provisional arrangement, would probably meet the requirements as well as the more elaborate system proposed by Mr. Simon in a memorandum written with all his old energy of style and precision of argument. As an early decision is necessary, the only course open was to refer the rival schemes to a special committee for report.

When the position of the Apothecaries' Hall of Dublin under the new Act came to be discussed, it soon became evident that the Council was not prepared to endorse the contention of the College of Physicians in Ireland that the Hall has no claim to be considered a licensing body. After many members had spoken strongly in favour of the body which some would doom to extinction, resolutions were adopted requesting the Colleges of Physicians and Surgeons to admit the Apothecaries' Hall to the Conjoint Board and declining to nominate an examiner in surgery for the Hall until the response to this request was known. The parallel afforded by the position of the Apothecaries' Societies in London and Dublin could not escape comment, and both Mr. Simon and Mr. Wheelhouse appeared to hold that a policy which the Council considered to be injurious in Ireland could not be beneficial in England.

The appointment of a Committee to report on the alleged deficiencies in the clinical examinations of the Royal University of Ireland, and reference to the Executive Committee to obtain further legal opinion on the power of the Council to approve or disapprove of conjoint schemes, are the only other important proceedings to be chronicled during the first three days of the session.

Sir Henry Thompson has just been elected a "Membre Associé" of the Société de Chirurgie de Paris, having for some years been a corresponding member.

STANLEY'S EQUATORIAL EXPEDITION.

Surgeon Parke, who has joined Mr. Stanley's expedition for the relief of Emin Pasha, was, before his departure from Alexandria, entertained by his colleagues on the medical staff at the Khedival Club. Brigade-Surgeon Ramsbottom presided. All Surgeon Parke's colleagues on the medical staff at Alexandria were present, with many civilian friends. Warm compliments were paid to the guest of the evening, who appears to be universally popular, and he was assured of the deep interest with which his new undertaking would be watched.

THE CASE OF THE BRIGADE-SURGEONS IN INDIA.

We have received a copy of a printed statement of the claims of brigade-surgeons in India, with proposals for redress. Colonel Hughes-Hallett will bring this matter forward in the House of Commons when the Estimates are under discussion. Medical officers who can assist are asked to write to Messrs. Holt, Laurie and Co., the Departmental agents, for copies of the statement referred to, and to circulate them among Members of Parliament and members of their universities, with a request to forward them to the Secretary of State for India.

THE VACCINATION BOGY.

A public vaccinator writes to us: The following true anecdote is an amusing illustration of the absurd way in which everything that is bad is imputed to vaccination. A patient of mine, suffering from epithelioma of the uterus, consulted, by letter, an "American Doctor," residing in London. The doctor inquired if there was any family history of cancer, and receiving an answer in the negative, at once wrote back saying, "then it must be due to vaccination." How crestfallen that "American Doctor" must have felt when his patient wrote back to say that she had never been vaccinated.

CREMATION IN FRANCE.

The crematorium now in course of construction at the cemetery of Père-Lachaise will be opened in July. The building will consist of two divisions. The one will contain three cremating ovens; the other, a spacious hall, will be for the use of the relatives of the deceased and the general public. This second division will be constructed when the cremation law adopted by the Chamber of Deputies is passed by the Senate.

ASSES' MILK FOR INFANTS.

The Administration of the Assistance Publique has decided to employ asses' milk at the Hôpital des Enfants Assistés for infants suffering from hereditary contagious diseases. Owing to the dangers incurred by women in nursing such children, the Administration substituted goats' milk for human milk; but the infants did not thrive upon it. The Administration has now provided ten asses, which are kept in the stables of the hospital, with their young. Each ass is capable of nourishing three children besides its own young for the first three months, and two children for the two following months. After this period, it is capable of nourishing one child until the ninth month. Eight children are being nourished in this manner at the present time.

THE INFECTION OF WET-NURSES BY SYPHILITIC SUCKLINGS.

Professor Fournier, of Paris, in a clinical lecture, recently gave the history of a case in which an apparently perfectly healthy wet-nurse became, a fortnight after commencing her duties, the subject of an ulceration on the nipple, subsequently recognised as syphilitic. This, in the meantime, was naturally communicated to the infant. On inquiry, no history of syphilis could be traced, either on the part of the nurse or the parents of the infected infant; but it was ascertained

that the nurse had already suckled an infant which had succumbed to symptoms of undoubted syphilis. At the time, therefore, that she accepted the second engagement she was already infected, but the disease was in the period of incubation. Dr. Fournier said he had met with fourteen cases of this description, and advised greater care in the selection of wet-nurses. Two precautions were specially indicated, namely, to engage no woman who had suckled any other than her own child; and if this were not practicable, to require a medical certificate of the last infant's immunity from contagious disease.

TREATMENT OF FEVER.

At a recent meeting of the Paris Biological Society, M. Albert Robin gave further details of his researches on the subject of fevers. In typhoid more especially, medicaments should be employed which increase oxidation, such as oxygen, cold baths, cutaneous derivatives, chlorate of potash, iodates, and bromates. Substances like sulphate of quinine and antipyrin, which diminish oxidation, should be avoided. Chlorate of potash, iodates, and bromates must be given very cautiously, owing to the poisonous effects of large doses. M. Robin thinks that they may be replaced by drugs which indirectly favour oxidation, such as alcohol, copious draughts of fluid milk, etc. M. D'Arsonval stated that the results obtained by the use of cold baths, as described by M. Robin, agreed with his own investigations on the temperature of animals. In animals, however, oxygen did not increase heat.

THE SIXTH GERMAN MEDICAL CONGRESS.

The sixth German Congress of Medicine will take place at Wiesbaden, from April 13th to April 16th, 1887. Professor Leyden will preside. The following subjects have been announced for discussion: Wednesday, April 13th, the Therapeutics of Phthisis, introduced by Drs. Dettweiler (Falkenstein) and Penzoldt (Erlangen). Thursday, April 14th, Localisation of Diseases of the Brain, introduced by Professors Nothnagel (Vienna) and Naunyor (Königsberg). Friday, April 15th, the Pathology and Therapeutics of Whooping-cough, introduced by Drs. Vogel (Munich) and Hagenbach (Basle). Papers are also promised on Pernicious Anæmia, by Dr. Lichtheim (Berne); on the Pathology of Tabes Dorsalis, by Dr. Rindfleisch (Würzburg); and on Experimental Epilepsy, by Dr. Unverricht (Jena).

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Professor Charles Barrett Lockwood, F.R.C.S., will deliver a course of three lectures on "The Development and Transition of the Testicle, Normal and Abnormal" on Wednesday, Friday, and Monday (February 23rd, 25th, and 28th), at 4 o'clock P.M. precisely each day. On the completion of Mr. Lockwood's course, Professor A. Bowlby will deliver a similar course of three lectures on "Injuries of Nerves: their Pathology, Symptoms, and Treatment," on Wednesday, Friday, and Monday, March 2nd, 4th, and 7th, beginning on each occasion at 4 o'clock. The last course for the winter session will be given by Mr. Stewart on "The Auditory Organs of the Mammalia, and Recent Additions to the Museum." Students are admitted to these lectures on the introduction of a Fellow or Member of the College.

ACCLIMATISATION OF MICRO-ORGANISMS.

Dr. Dallinger's address, on the occasion of his re-election as President of the Royal Microscopical Society for the fourth time, contained much that was interesting and important. He referred, in the first place, to Abbe's new apochromatic lenses, and acknowledged that a great advance had been made, more especially by means of the new eye-pieces. He then went on to describe a series of experiments which he has been conducting for nearly seven years, on the adaptability of the lower organisms to changes of temperature. Several species of monads were kept at a constant temperature, and, from time to time, the temperature was raised one degree or less at a time. In four months he succeeded in raising the temperature from 60° F. to 70° F. without any apparent effect on the organisms. At 73° F. the vitality of the organisms was impaired; but, after being kept for two months at this temperature, they regained their vigour, and, in five months, a temperature of 78° F. was reached. At this point vacuolation became very marked, and it was necessary to wait for a long time before the organisms regained their healthy condition. In this way, by raising the temperature slowly, and pausing for a time when the organisms exhibited signs of failing health, a temperature of 158° F. was ultimately reached. At this point the research was accidentally terminated; but Dr. Dallinger has begun again, and hopes to reach a still higher temperature. It is interesting to note that the organisms which had become adapted to these high temperatures died when exposed to the original temperature of 60° F.

ST. BARTHOLOMEW'S HOSPITAL.

The severe competition for the vacancy caused by the resignation of Dr. Wickham Legg, Assistant-Physician to this Hospital, has set others thinking besides the unfortunate candidates. The objections to the system of personal canvassing, which we urged some six weeks ago, are forcing themselves upon the attention of everybody connected with the great City hospital. Another point that is suggested is the inevitable waste of good men which must result, since only one vacancy exists, whilst the medical side of the hospital is under-officered. It was found necessary, some years since, to increase the number of surgeons and assistant-surgeons from four to five. No doubt certain circumstances of frequent occurrence in surgical wards, take up time, and therefore require a large staff when there are many beds. There can be no doubt, however, that the careful examination of patients, and the proper instruction of pupils in the medical wards, must always be lengthy processes. The physicians' wards in this hospital are very large, hence it is felt that the time has come to augment the number of physicians and assistant-physicians. We understand that neither the staff nor the governors are averse to the change.

NVASSING AT THE MEDICAL BENEVOLENT COLLEGE.

It was decided by an overwhelming majority at a general meeting of the governors of the Medical Benevolent College three years ago, that the practice of canvassing at elections should be discontinued, and that in all cases the claims of candidates should be submitted to committees. It is obvious that the system of canvassing places at the greatest disadvantage precisely those candidates who are in the deepest distress, and that it gives the best prospects of success to those having the largest command of funds, rather than to those who are in greatest need of aid. The new plan has been acted on with considerable success for some years, but repeated infringements have occurred, due, we may believe, to forgetfulness of this useful resolution, rather than to any deliberate intention to set it at nought. We have received several copies of a canvassing card on behalf of one candidate, signed by a large number of the staff of St. Bartholomew's Hospital. This case may be, and possibly is, deserving of all support; but the statement signed by the distinguished men who have appended their names to the card would receive all the attention which it deserves from the Investigating Committee, and we are strongly of opinion that it is for such men to have regard to the resolutions passed for the governing of the institution, and to set an example of maintaining rather than of violating the principles which have been established for its benefit, and for the benefit of those for whose good it is established.

"BRANDING THEIR OWN HERRINGS."

We understand that at a recent meeting the Senate of University College, London, passed a resolution requesting the Council of the College "to promote a petition to the Crown praying for the grant of a charter, identical in its terms with that of the Victoria Univer-

sity, to an academical body in London, of which University College shall be the first constituent, such charter to give the right of conferring degrees in arts and science only." Professor E. Ray Lankester has given notice of his intention to invite the members of the College at the annual meeting to be held on February 23rd to adopt a resolution drawn in identical terms. The scheme on the face of it seems like trying to turn the hands of the clock back. Fifty years ago, after much bickering and debate, a similar scheme was rejected as too small, and the present University of London was founded. When the examination system was substituted for every other kind of test of education, its promoters plainly saw that it would immediately break down if the teachers were allowed to control and, in fact, to be the examining body; hence the peculiar constitution of the University of London. Teachers have never heartily approved of examinations as the sole test of knowledge, and the University, though it has not completely failed, has never been really successful. The claim raised by the teachers to have a voice in pronouncing on the merits of their pupils has been irreverently described as a desire "to brand their own herrings." We are now witnessing a reaction from the extreme views held by Lord Sherbrooke when he was Mr. Robert Lowe and a great power in the land, and this proposed application by University College probably represents the furthest rebound of the pendulum.

THE SECOND CONGRESS OF RUSSIAN MEDICAL MEN.

LAST year, the "first congress of Russian medical men" was held in St. Petersburg, the attendance numbering about 500, and the papers read amounting to about 100. Now, the "second congress" has just been held in Moscow during the week beginning the 4th, or according to our reckoning, the 16th of January. The number of members was about 1,300, and the papers read, or put down for reading, amounted to about 200, so that there was plenty of work for the different sections to do, though they sometimes sat for eight hours a day. The most prominent subjects were, as had been previously arranged, State medicine, pharmacology, electrical treatment, and pharmacy in relation to ophthalmic and children's diseases.

HERRINGS CURED WITH BORACIC ACID.

LARGE quantities of herrings preserved with salt and boracic acid being at present imported from Norway, and sold in the London and Newcastle markets, and attempts having been made to prevent their sale, the National Sea Fisheries Protection Association discussed the question at a recent Conference at Fishmongers' Hall; but no decision as to the admissibility of such fish was arrived at. It may, therefore, be worth while to point out that boracic acid, being the essential ingredient of our many food-preservatives—be it in the form of the acid, of boroglyceride, or of borax—has been used for years, especially to preserve milk in hot weather, and no evidence has ever been brought forward even to suggest injurious effects upon the health; it may, therefore, be taken to be perfectly harmless. The Norwegian herrings preserved with salt and boracic acid are of exceptionally fine quality, are perfectly fresh when brought into the market, and are, of course, subject to the usual process of inspection by the market-inspectors, whose power of rejection is almost absolute. If, nevertheless, an outcry is heard against this sale, it is difficult to resist the belief that it is dictated by the jealousy which is notoriously rife is Billingsgate circles. The introduction of cheap food from new sources, welcomed as it always is by the public, is invariably opposed by the trade, who, after all, reap the chief advantage in the long run. One has but to recall the sneers of meat-vendors at American and Australian meat to value the agitation against Norway herrings at its proper worth. Hitherto, happily, we have been spared the bitter discussions which have on the Continent led to legislation against certain food-preservatives, such as salicylic acid, which we in England admit without hesitation. The question is mainly one of national economy: Shall good food be wasted for want of a preservative, even if certain objections may be urged against their use, or shall we put up with these objections, and aim at cheapening food for the masses, provided always that nothing which could injuriously affect their health is allowed to be present? A sufficient guarantee is afforded by the vigilance of medical officers, public analysts and market inspectors against the abuse of antiseptics and food preservatives.

INSANITARY OLD LONDON.

SPEAKING at the Royal Institution on some of the unpublished records of the city, Mr. Edwin Freshfield mentioned, among other points of interest, how much light they threw on the former sanitary condition of London, especially during the hundred years 1565 to 1665. Each of the 113 city parishes had its regularly kept books, one of which was the "Book of Records," and from these books it is possible to trace with great minuteness not only what districts were healthy or unhealthy, but also what houses were. During the outbreaks of plague in 1565, 1593, 1603, 1625, 1640, 1647, and 1665, it can be seen that the plague, in many instances, reappeared in the same house. There are also many indications that the course of the plague was about four or five days, as there are several cases of a man taking an active part in parish affairs, and writing in the books, and a record of his burial five days afterwards. In family after family the introduction of the disease can be traced to servants and apprentices, and there appeared to be no stopping it when it once got into a house. At times of its greatest severity the parishes isolated themselves, and servants from one parish were not allowed to work in another; to such an extent was this isolation carried, that even church "lecturers," who were distinct from the resident rector, were not allowed to come from other parishes to perform their accustomed duties. Mr. Freshfield dwelt on this noteworthy fact, that medical science made then little progress, if any, for, at the end of the hundred years' experience, the same supposed remedies were used as at the beginning. The doctors solemnly recommended the use of tobacco, because they held that the bad fumes of the disease went out through the nose with the smoke. So far as the city itself was concerned, the heaviest visitation was in 1603. As these "records" of parishes have never been published they are but little known, but in them there is evidently a mine of information not only for future historians of the City and its connection with Parliament, but also for the sanitarian.

THE ADMINISTRATION OF PHOSPHORUS IN RICKETS.

THE administration of phosphorus and of phosphates in rickets has been recommended, on the ground that in the diseased bones the earthy phosphates are greatly deficient, and that, introduced into the system, these substances will supply the deficiency. Phosphorus, as is well known from the researches of Wegner, when given to growing animals, renders the developing cancellous tissue of the bones denser than natural, more like the compact tissue; even in adult animals, a similar change takes place. These results are independent, as Wegner showed, of the presence of excess of phosphates, for they occur when phosphates are absent from the food. Although, therefore, the reason for the administration of phosphorus in rickets is well-grounded, medical men hold very different opinions as to its utility in that disease. Some have given it with cod-liver oil; as in Kassowitz's phosphorised cod-liver oil, which contains 0.01 per cent. of phosphorus. The objection to this mode of administration is not only that the phosphorus tends to deposit on standing, and thus a variable and even dangerous dose may be given, but it is impossible to say how much benefit (if any) that ensues is due to the oil, and how much to the phosphorus. A better mode of administration has been devised by Hasterlik. Phosphorus (0.01 per cent.) is dissolved in bisulphide of carbon (0.25 per cent.), and one hundred parts of water added; one tea-spoonful is given twice daily, constituting a dose of 0.0001 gramme in the day. The bisulphide of carbon not only acts as a solvent for the phosphorus, but has, according to Dujardin-

Beaumetz, a beneficial effect in intestinal catarrh, and might thus be of service in the early stages of rickets. How far this preparation is beneficial in the disease has not yet been sufficiently ascertained.

SCOTLAND.

UNIVERSITY OF EDINBURGH: PROPOSED ACADEMIC HALL.

A DEPUTATION from the Edinburgh University, consisting of Principal Sir William Muir, Professor Sir William Turner, and Mr. R. Bruce Johnstone, waited on the Chancellor of the Exchequer on Tuesday last, with the view of urging the Government to grant £12,000 to meet the cost of a site for the erection of an Academic Hall for the University. It was mentioned that a private donor—an Edinburgh citizen—had offered £50,000 for the building of the hall. Mr. Goschen promised that the subject would be carefully considered by the Government.

ANTIFEBRIN IN THE ROYAL INFIRMARY, EDINBURGH.

ANTIFEBRIN has now been used for several months in the Royal Infirmary, Edinburgh. It was introduced by Professor Grainger Stewart shortly after the first account of its properties was published, and since then it has been used largely in more than one ward. The antipyretic qualities of the acetanilide have been most thoroughly tested, and it now occupies a high place among the febrifuge resources of the Infirmary. More especially it has been proved superior to antipyrin, kairin, and thallin, in its freedom from accompanying disadvantages, such as the production of vomiting, rigors, and other discomfort, at the various stages of its action.

BEQUESTS TO SCOTCH UNIVERSITIES.

BY the will of the late Lord Gifford, a Lord of Session, £80,000 are appropriated to found, on certain conditions, lectureships on natural theology in the Scotch Universities. Of this sum, £25,000 are devoted to Edinburgh University, £20,000 each to Glasgow and Aberdeen, and £15,000 to St. Andrews.

THE PROFESSOR AND HIS ASSISTANT.

A CORRESPONDENT writes that the Rutherford-Ashdown dispute continues to excite much interest in university circles. Professor Rutherford's letter makes it somewhat difficult to understand his position. If no "gross charges" were made, what becomes of his apology? And if accusations were made which could not be sustained, why was the apology withdrawn? The diplomatic attitude of the professor makes the situation somewhat embarrassing for Dr. Ashdown.

EPIDEMIC OF SCARLET FEVER IN EDINBURGH.

THE outbreak of scarlet fever in Edinburgh noticed in the JOURNAL some weeks ago has, within the last ten days, increased to such an extent as seriously to perplex the authorities as to its management. While the number of fatal cases has not as yet been great, there have occurred several severe cases with rapidly fatal effects. The most reliable statistics as to the epidemic are to be derived from the statement made by Dr. J. A. Russell, convener of the Public Health Committee, at a meeting of Edinburgh Town Council held on Tuesday. He stated that there had been a very marked increase of scarlet fever during February, and that, of 202 patients in the City Fever Hospital, 155 were under treatment for that disease, that during February up till Saturday there had been 156 cases of scarlet fever reported by medical men, but that, since last Saturday up till the time the Council met on Tuesday, there had been no fewer than 148 cases reported, which showed there had been a very distinct explosion of the epidemic since Saturday. The cases were localised in certain districts, and were not evenly spread over the city. Dr. Russell also referred to the straits to which they had been put in the Fever Hospital; they had had to utilise the play-rooms of the children, to put up beds everywhere in the hospital, and to put a greater number of children into wards together than was compatible with a due regard to cubic space in the case of adults. He also alluded to statements that had been made in the newspapers with regard to the relation of milk-supply to the spread of the disease, and stated that the medical officers' staff had been inquiring as to the dairies in certain districts, and they had not been able to trace any connection between the present explosion of scarlet fever and the milk-supply. At a meeting of the Public Health Committee held subsequently, the burgh engineer was instructed to inquire into the drainage system of certain localities where the epidemic has been of a more pronounced character. With regard to the milk-supply, a correspondence is taking place in the *Scotsman* newspaper; it was commenced by Dr. Foulis, who alleged that it was so frequently the means through which scarlet fever was conveyed, that he advised the boiling of the milk. To this Dr. James Carmichael, in a letter two days afterwards, took exception, so that the public is likely to be made thoroughly acquainted with the differences of opinion that exist on the subject among medical men in Edinburgh.

SEASIDE TRIPS FOR POOR CHILDREN.

MR. WALTER WILSON, one of the largest retail warehousemen in Glasgow, arranged last year for several trips to the seaside for the benefit of poor children. This year, Mr. Wilson is making arrangements to take free every poor child in Glasgow under thirteen years of age, who is fit to be taken, on a trip to the sea-coast for a summer afternoon. For that purpose he is supplying tickets to ladies and gentlemen—as many as they desire—if they undertake to distribute them only to the poor and deserving. This is a method which some of our wealthy merchants, whose money is a care to them, might adopt to relieve them of a little of their burden.

ANDERSON'S COLLEGE, GLASGOW.

PROFESSOR CRUM BROWN, of Edinburgh, lectured to the Anderson's College Scientific Society on February 11th, on the life and work of the French chemist, Thénard. Professor Dittmar occupied the chair. After detailing the incidents of Thénard's life, the lecturer proceeded to enumerate and discuss his various works, referring chiefly to his discovery of peroxide of hydrogen, his investigation of Berthollet's "zoonic acid," his preparation of the "blue" which goes by his name, his research upon ethers, and his joint work with Gay-Lussac. At the close of the lecture, a vote of thanks was given to Professor Crum Brown.

GLASGOW AND WEST OF SCOTLAND BRANCH, BRITISH MEDICAL ASSOCIATION.

THIS Branch met in the Western Infirmary, Glasgow; Dr. Morton, the retiring President, took the chair, but soon resigned it to the new President, Dr. D. Fraser, of Paisley. After some routine business, Professor MacLeod brought forward from his wards some surgical cases of interest, and Professor McCall Anderson described some medical cases, including a loud musical cardiac murmur, heard without the stethoscope, a case of purpura rheumatica, cases of pericardial pleuritic, and peritoneal effusion, and tinea favosa epidermidis. Dr. Coats made some remarks on the pathology of uterine fibroid, illustrating by a series of sixteen preparations.

GLASGOW TRAINING HOME FOR NURSES.

THE thirteenth annual meeting in connection with this institution was held on February 9th, under the presidency of the Right Hon. Lord Hamilton, of Dalziel. The annual report stated that on December 31st, 1886, 64 nurses were attached to the home, of whom 50 were fully trained, and the remainder were under training. During

the past year 254 patients were treated in the private hospital attached to the house, of whom 175 underwent surgical operations. Trained nurses were sent out to 417 cases in private families, being an increase of 31 over the previous year. When it is mentioned that in 1875 only 72 private patients were attended by nurses from the home, some idea may be formed of the growing esteem in which the institution is held by the medical profession and the public. In 1877 the income from nurses' fees and in-door patients was, from nurses, £673 18s. ; and from in-door patients, £163 5s. 3d., while in 1886 this amounted to £2,595 2s. 11d. and £915 3s. 4d. respectively. The total expenditure last year was £3,698 8s. 8d., and the total income from ordinary sources, £4,023 16s. 6d, showing a balance of £325 7s. 10d., which was added to the building account. The total cost of the premises up to the end of December, last year, was £10,510 11s. 10d. The debt upon the property has been reduced in the year by £500, and now amounts to £3,600. At the annual meeting, comment was made on the fact that the home is nearly self-supporting, the excess of expenditure over income from nurses' fees and indoor patients being only £188 2s. 5d.

GLASGOW MEDICO-CHIRURGICAL SOCIETY: DISCUSSION ON CEREBRAL ABSCESS.

THIS discussion was carried on in the Hall of the Faculty of Physicians and Surgeons, Glasgow, on February 11th and 12th. Dr. Joseph Coats, Vice-President of the Pathological Section of the Society, occupied the chair. The meeting was very largely attended, but the discussion was less interesting than had been anticipated. No definite time had been set for each speaker, and the result was that Dr. William Macewen, who opened the discussion, discoursed for over an hour on the Causes, Symptoms and Pathology of Cerebral Abscesses, and sat down at the end of that time, after the briefest possible reference to treatment, to hear which the meeting had so patiently waited. In consequence of Dr. Macewen's absorption of time, Mr. Barker of London and Drs. Barr and Somerville of Glasgow had to condense their remarks to permit the meeting to adjourn at half-past ten, by which time it had been reduced to a mere fraction of the audience with which it was begun. Professor Greenfield and others who had intended to take part in the discussion had to postpone their remarks till the adjourned meeting, and the number of speakers was thus considerably restricted. Dr. Macewen spent a considerable portion of his time endeavouring to prove that cerebral abscess was invariably the result of septic conditions, local or general, such as compound fractures, punctured wounds not aseptically treated, septic mesenteric glands, etc. He referred to the fact that he had advocated operative interference eleven years ago. A few weeks ago he had operated for abscess in the temporo-sphenoidal lobe, with a successful result, the first he had been able to obtain. The details of the case will be published. It was due to ear disease, and Dr. Macewen had no doubt there were many similar cases, and that many would yet be cured. Mr. Barker confined his remarks to abscess from middle-ear disease, which he thought should be credited with more than 30 per cent. of cases, and insisted on the necessity of separating into different classes those dependent upon different exciting causes. He pointed out that various conditions might result from otitis media, such as septic meningitis, phlebitis, subdural abscess, besides abscess of the cerebrum and cerebellum ; and said that it was not successful surgery to open a brain abscess and permit disease of the temporal bone to remain unrelieved. Abscess of the cerebrum was three times more frequent than abscess of the cerebellum and other cerebral abscesses. Nine-tenths lay in the temporo-sphenoidal lobe within a circle three-quarters of an inch in diameter, the centre of which was one inch and a-half behind and the same above the centre of the meatus. He pointed out that in this region the brain was perfectly callous, and there were no special nerve symptoms, for there was no motor disturbance. In any threatened case he strongly urged the need, without delay, of cleansing and draining the tympanum by an incision into the mastoid. Speaking of symptoms of abscess, he mentioned that he had observed subnormal temperature most marked in the evening, and thought this might have a special significance. Dr. Barr also devoted himself to a consideration of the relationship between cerebral abscess and middle-ear disease, and Dr William Somerville showed tabulated reports of the condition of the urine in the case operated on by Dr. Macewen and others, reports drawn up after the method of Dr. Haswell of Vienna. Dr. Somerville drew attention to the great diminution in chlorides and increase in phosphates excreted before the operation, and the rapid return to the normal state which set in immediately after operation.—At the adjourned meeting, the discussion was opened by Professor Greenfield, who could not accept Mr. Barker's guide to the position of the abscess, as he considered that each case required independent localization. He discussed the question of the frequency of abscess, and was inclined to regard it as comparatively rare. In nine years' experience he had an average of one each year. Mr. Caird, who operated in Professor Greenfield's successful case, Dr. Alexander Robertson and Dr. Workman continued the discussion. Dr. Joseph Coats, in summing up the debate, expressed the opinion that abscess from otitis marked itself very distinctly off from that from other causes by its putridity, indicating that it resulted from direct extension of a suppurative process from the tympanum. In eleven years, at the Western Infirmary, he had seen an average of cases similar to that of Professor Greenfield's ; but, as cerebral abscess was found in his experience only once in 150 *post-mortem* examinations, he could not consider that comparatively rare. Dr. Macewen and Mr. Barker replied, the latter adhering to his view of the position of abscess from ear-disease, but promising to give the question further consideration.

IRELAND.

FEES FOR THE EXAMINATION OF LUNATICS.

THE Armagh Board of Guardians having sent a fee of one guinea to Dr. Patterson for examining a lunatic, that gentleman has returned the cheque and has declined to take less than the legal fee.

DUNDALK UNION.

SEVERAL cases of fever have recently occurred in certain streets in the town of Dundalk, due principally to their insanitary condition. The Local Government Board has sanctioned an additional loan of £5,000 for the completion of the waterworks.

THE PAYMENT OF FEES TO A MEDICAL SUBSTITUTE.

DR. COYNE recently acted as *locum tenens* for Dr. Thompson during his illness, but when his claim was furnished, the Johnstone Dispensary Committee refused to entertain it. It is satisfactory to learn that their decision has been overruled by the Urlingford Board of Guardians, who have paid the sum claimed.

ROYAL UNIVERSITY OF IRELAND.

DR. CHRISTOPHER J. NIXON, Senior Physician to the Mater Misericordiæ Hospital, and a Fellow and Examiner of the University, has been appointed by the Crown to the seat on its Senate vacated by the death of Dr. Lyons.

THE DERRY BOARD OF GUARDIANS AND THE CHOLERA-INTERCEPTING HOSPITAL.

SOME time ago, the guardians erected a movable hospital at a cost of £222. A dispute arose as to the proportion to be paid by the Derry, Innishowen, and Limavady Unions respectively. This has now been settled by an order from the Local Government Board directing that the Innishowen and Limavady Unions should each pay £20, and the Derry Urban Sanitary Authority £86 6s.

MEDICAL FEES UNDER THE LABOURERS' ACT.

THE fees for medically inspecting labourers' cottages under this Act vary in different parts of Ireland, but are usually five or ten shillings for each house. The Limerick Guardians, however, evidently consider the smaller amount too much, and they recently passed a resolution "that their medical officers should be granted a fee of only two shillings for each inspection." The medical staff very naturally objected to this paltry sum; and the matter came before the Local Government Board, the guardians wishing to obtain their sanction to the two-shilling fee. The Board has informed the guardians that, until they receive information showing that the remuneration intended to be given is reasonable, they decline to express approval of the scale proposed.

NEWRY FEVER HOSPITAL.

LAST week the annual meeting of the subscribers was held, under the presidency of the Earl of Kilmorey. During the past year, 623 persons were treated, with a mortality of five. The subscriptions included a presentation of £200 from the Grand Jury of the County Down, while the voluntary subscriptions were a few pounds below that sum. As there has been a considerable falling off in the funds, a special effort is being made by several members of the committee to obtain additional subscriptions for the hospital.

ULSTER HOSPITAL FOR CHILDREN AND WOMEN: ANNUAL MEETING.

THE annual meeting of this institution was held in the hall of the Young Men's Christian Association, Belfast, on February 9th, under the presidency of the Mayor of Belfast. The annual report stated that extensive alterations and improvements had been made in the hospital in the course of the year. The funds of the hospital had been augmented by a sale of work realising £143; by the penny collections instituted by the lady superintendent, Miss Moore, amounting to £104; and lastly, by a generous donation of £250 from Lady Johnson. The charity was now entirely free of debt. The total receipts for the year amounted to £894 17s. 7d., and the expenditure to £850 5s. 8d., the balance in hand being £44 11s. 11d. The committee had to record the death of Dr. Malcomson, a member of the staff; and the resignation of Dr. Poole. The medical report stated that 159 patients had been treated in the intern department during the year. The number of students attending for clinical instruction was larger than in any previous year.

CER'S HOSPITAL.

THE Dublin City Grand Jury returned "No bill" in the case of the resident surgeon of the above hospital, who was charged with having accelerated, by ill-treatment, the death of a man who had been a patient in the hospital. The same case came before the Commission Court on February 11th, the defendant having surrendered to his bail on the minor charge of assault. After a few witnesses had been examined, the judge asked the prosecution if they considered there was any use in going on with the case. The jury having subsequently intimated that they had heard enough to come to a decision, the judge reviewed the evidence. Without leaving the box, the jury returned a verdict of "Not guilty." A rider was also added, expressing regret that the defendant had been put to the hardship and trouble of a trial upon such a charge. The judge said that the gentleman left the court without the slightest stain upon his character.

ULSTER MEDICAL SOCIETY: ANNUAL DINNER.

AT the annual dinner of the Society, held in the Royal Avenue Hotel, Belfast, Dr. Whitla (President of the Society) presided, and was supported by Professor Cuming, Professor Dill, Professor Sinclair, Dr. Harkin, J.P., Dr. Wheeler, Mr. Fagan, Dr. Walton Browne, Dr. John Moore, Dr. Esler, Dr. McFarland, Dr. Woodhouse, and most of the other leading practitioners of the town and district. A large number of visitors were present, amongst whom were Dr. J. W. Moore (Dublin), Dr. Adams (Antrim), Deputy Surgeon-General Sinclair, and others. Forty-eight gentleman sat down to dinner, which was served in excellent style. The toast of "The Lord-Lieutenant and prosperity to Ireland," was proposed by the President, and responded to by Professor Dill. "The Army, Navy, and Reserve Forces," proposed by the President, was responded to by Deputy Surgeon-General Sinclair, Surgeon McFarland, and Dr. John Moore. "The Belfast Medical School" was proposed by Dr. Wheeler, and responded to by Professor Cuming, and Dr. Walton Browne. "Our Guests," proposed by Dr. Harkin, was responded to by Dr. J. W. Moore (Dublin). "The North of Ireland Branch of the British Medical Association" was proposed by Dr. Woodhouse, and responded to by Mr. Fagan (President of the Branch). "The President and the Ulster Medical Society," proposed by Dr. J. W. Moore, was responded to by Dr. Whitla and Dr. Esler. Musical selections were rendered at intervals, and the proceedings did not terminate until a late hour. The dinner was in all respects one of the most successful in the annals of the Society.

THE JACOB TESTIMONIAL FUND.

THE Honorary Secretaries and Treasurers beg to thankfully acknowledge the following additional subscriptions received or promised since last week.

	£	s.	d.
Amount already acknowledged	383	2	6
Kilkelly, C., Deputy Surgeon-General Indian Army ..	1	1	0
Jackson, Sir R., Dublin ..	1	1	0
Crean, J., Wexford	1	0	0
Pierse, T., Wexford	0	10	0
Drapes, T., Enniscorthy ..	0	10	6
Boyd, James, New Ross ..	0	10	6
Boyd, John, New Ross ..	0	10	6
Hadden, D., Wexford	1	0	0
Moorhead, T. H., Cootehill ..	1	0	0
Dickson, R. L., Maguiresbridge	1	0	0
Bagot, E., Enniskillen ..	1	0	0
McDermott, S., Ballagherderrin	1	1	0
Davy, E. W., Rathgar	1	0	0
Nixon, C. J., Dublin	1	1	0
Webb, S. H., Dublin	1	1	0
Warnock, J., Trillick	1	0	0
Fleming, H. B., Omagh ..	1	0	0
Thompson, E., Omagh ..	1	0	0
Roulston, R. J., Newtownstewart	0	10	0
Love, W. S., Omagh	0	10	0
Hamilton, J., Dromore ..	0	10	0
Duncan, T., Fintona	0	10	0
Stone, R., Omagh	0	10	0
Chamber, J., Fintona	0	5	0
West, G. F., Omagh	0	5	0
Given, D. K., Omagh	0	5	0
O'Connor, G. A., Belmullet ..	0	10	6
Hayes, T., Rathkeale	1	1	0
Buckley, C., Kildorrery ..	1	0	0
O'Neill, J., Fermoy	0	10	6
Cullinan, —, Ennis	1	1	0
French, A., Ballygar	0	10	6
McDonnell, J. J., Letterfrack	1	0	0
Wright, E. P., Trinity College	1	1	0
Morton, R., Nenagh	1	1	0
McKenna, W., Carrickmacross	1	1	0
McGinety, —, Louth	1	0	0
Craig, A. T., Dundrum ..	0	10	6
Dolan, T. M., Halifax	1	0	0
Madden, T. More, Dublin ..	2	0	0
Bigger, S. L., Dublin	1	1	0
Burton, J. E., Liverpool ..	2	2	0
Rutherford, W., Ballinasloe ..	1	0	0
Smyth, W., Burton Port ..	0	10	6
Watson, C., Kildare	1	1	0
Falkiner, F. J., Naas	1	1	0
Thunder, —, Newbridge ..	1	0	0
Murphy, R., Newbridge ..	1	0	0
O'Connor, —, Clane	1	0	0
Darby, M., Monasterevan ..	0	10	0
Waters, W., Carbery	0	5	0
Chaplin, S., Kildare	2	0	0
Graves, H., Cookstown ..	1	0	0
Owens, Sir G. B., Dublin ..	1	1	0

Cheques to be made payable to the Honorary Treasurers—Professor Edward Hamilton, 120, Stephen's Green, W., Dublin; or Dr. Thomas Purcell, 71, Harcourt Street, Dublin; or to any of the County Treasurers, or to the Honorary Secretaries—Professor E. D. Mapother, 6, Merrion Square, N., Dublin, and Dr. J. H. Chapman, 122, Pembroke Road, Dublin.

We are asked to remind those who have promised subscriptions to this fund that it is necessary to forward their subscriptions immediately to the Honorary Treasurers, that their names may not be omitted from the address to be presented.

RESIGNATION OF THE STAFF OF THE MARGARET STREET INFIRMARY FOR CONSUMPTION.

A SPECIAL general meeting of the governors of this infirmary was held on Wednesday, February 16th, to determine whether the character of the institution was to be changed by the introduction of homœopathy as a method of practice by certain members of the medical staff. The members of the staff of this institution are:—*Consulting Physicians:* Dr. Hawksley, M.R.C.P.Lond., 11, Albert Mansions, Victoria Street, S.W.; Dr. Cholmeley, F.R.C.P.Lond., 63, Grosvenor Street, Grosvenor Square. *Physicians:* Dr. J. Cooper Torry, M.R.C.P.Lond., 33, Oseney Crescent, Camden Road; Dr. Jagielski, M.R.C.P.Lond., 54, York Terrace, York Gate, Regent's Park; Dr. Joseph Gillman Barratt, M.R.C.P.Lond., and F.R.C.S., 8, Cleveland Gardens, Hyde Park. *Visiting Physicians:* Dr. Marsh, 56, Fitzroy Street, Fitzroy Square, W.; Dr. Featherstone Phibbs, 30, Sutherland Gardens, W.; Dr. Julian Willis, 82, Sutherland Gardens, W.; Dr. Robert Walford,

4, Argyle Street, W.; Dr. Powell, 7, Thayer Street, Manchester Square. *Surgeon:* F. Carr Beard, Esq., 44, Welbeck Street, Cavendish Square.

It was alleged at the meeting that Dr. Jagielski and Dr. Marsh were treating patients homœopathically, and the other members of the staff had threatened to retire in consequence. A resolution calling upon Dr. Jagielski and Dr. Marsh to resign was moved by the Rev. M. R. Mowll, and seconded by Captain Baily. After some discussion, however, the resolution was lost by a narrow majority of three votes. It is understood that Dr. Hawksley, Dr. Cholmeley, Dr. R F. Phibbs, Dr. S. Powell, and Mr. F. Carr Beard, will resign, a step which, under the circumstances, will meet with the approval of the profession.

THE FIFTEENTH ANNUAL REPORT OF THE MEDICAL OFFICER OF THE LOCAL GOVERNMENT BOARD (FOR 1885).

It is unfortunate for Dr. Buchanan that the larger portion of his annual report is invariably out of date by the time that the Blue-book which contains it is given to the world. We have before commented on the extraordinary delay in the publication of a report which is, we understand, due on March 31st, is dated August, and is not out until the following February. It is impossible to expect much interest to be excited in the chronicle of events some of which happened two years ago, and all the more important of which have been made known in other ways before the issue of the Blue-book; and we must sympathise, therefore, with Dr. Buchanan in the untoward circumstances which militate against an otherwise excellent and interesting report receiving the attention that it merits.

The work of the Medical Department of the Local Government Board is, as is well known, divided into three sections. There is, first of all, the systematic inspection of the public vaccination of the country, which seems to monopolise a great deal of the time of the inspectors, and which it is still thought necessary, twenty years after its institution, to make at biennial periods. Apparently such leisure as the inspectors can find from looking after public vaccination is utilised in inquiries into special outbreaks of disease or insanitary conditions in individual places. Occasionally, these inquiries branch off into a general investigation of a particular subject, as, for example, in the report before us, Dr. Parsons's inquiries into the manufacture of shoddy, rag, flock, and similar substances from rags, and into the influence of such businesses on health. Or an inquiry may involve special and minute examination of new and complicated phenomena, such as that at Hendon (also reported on in the Blue-book), where an epidemic of human scarlatina was found to have been dependent on a diseased condition of certain milch-cows at a dairy-farm.

The third branch of the Medical Department's work is conducted by skilled investigators, whose whole time is not at the command of the Board, but who are paid by fees out of the grant for auxiliary scientific investigations annually voted by Parliament. The most constant of these associated scientists appears to be Dr. Klein, F.R.S., of St. Bartholomew's Hospital; but work has in addition been done this year by Mr. Lingard, Dr. Wooldridge, Dr. Cash, Mr. Laws, and Dr. Dupré, F.R.S. None of the inquiries of these gentlemen appear to be quite concluded; but work of the kind is necessarily very slow, and the demonstrable results from it are few and far between.

Vaccination.—The only point that seems to challenge comment in the part of the report relating to vaccination is Dr. Buchanan's remark that as Dr. Cory has previously established an identity between calf lymph and humanised lymph in the degree of their 'insertion success' when both are used in a fresh condition, so now he shows that there is much less difference than at one time was believed to exist between the two kinds of lymph in respect of the degree of success obtainable from them after keeping during ordinary periods of time." We are very glad to publish this *amende honorable*. At the time when Mr. Ernest Hart was striving in 1879 to secure the adoption by the Government of a system of animal vaccination, the working of which he had personally investigated in various continental towns, he was met on the part of the Medical Department with the retort that animal lymph was not so certain in its results as human lymph, and that it would not keep. The Department's own experience has, it will be seen, completely nullified these fears, and has proved in the most satisfactory way the truth of Mr. Hart's contentions, and the wisdom of the efforts which he made for the establishment of the calf-lymph station subsequently set up by the Local Government Board.

Small-pox Hospitals.—The report contains a further contribution to the much vexed question of the influence of the small-pox hospitals in the metropolis in spreading that disease in their immediate neighbourhood. Mr. Power appends a memorandum, bringing the story of the Fulham Hospital up to the end of the epidemic of 1884-5, which is confirmatory of the experiences recorded in his former reports. "Time after time that this hospital has been empty, but most at times when small-pox was beginning to assume its epidemic quality, the disease has appeared in excessive amount in houses round the hospital. The excess has always been graduated according to the proximity of the houses to the hospital; it has always been uniform upon the four points of the compass." Dr. Buchanan passes in rapid review the similar evidence obtainable from the reports of the health officers of the districts concerned as to the apparent capacity of the Deptford, Stockwell, Homerton, and Hampstead Hospitals to spread small-pox in their vicinity. He thinks that the whole of the experiences now on record concerning the districts of London, which are in special relations with small-pox hospitals, combine to form a very strong corroboration of the view of the Royal Commission of 1881, that, in the metropolis, all small-pox hospitals share the disastrous ability of Fulham to spread small-pox "by some means or other" (as the Commission has it) over the neighbourhoods around them. This ability is now, he holds, proved to extend to the distance of at least a mile, and to be independent of lines of human communication. It has now been shown to be exerted when the number of acute cases in a hospital has been restricted to twenty or thirty, and it was on one occasion exerted when only five acute cases were in hospital together. It has not been extinguished, as Mr. Power's recent examination of the reports of health-officers show, by the regulation of methods of transit, or by the removal of opportunities for personal communication with patients in hospital. These results are profoundly unsettling; and it is to be hoped that some means may be devised for making the intra-urban small-pox hospitals—if used at all—innocuous to the people who live in their vicinity.

Milk-Scarlatina.—Mr. Power's report on the Hendon milk-scarlatina outbreak (which may be, for convenience, termed for the present the "Hendon disease") has already been sufficiently discussed in these columns; but some fresh and interesting facts are now furnished by Dr. Klein. In the cows affected, the disease began as a small vesicle seated on a red and swollen teat; the vesicle broke down, leaving a shallow ulcer; the constitutional disturbance was slight, and no pyrexia was actually observed. In the animals killed during the existence of the ulcers, recent pleural adhesions, congestion of peripheral lobules of the lungs and of the cortex of the kidney were found. Calves were inoculated with the fluids of the ulcers. After three days, redness and swelling commenced at the point of inoculation and spread, vesiculation and ulceration following. In the lymph squeezed from the base of one of the ulcers in a cow from Hendon, Dr. Klein found, after staining, numerous dumb-bells of micrococci; similar organisms were found in the epithelial structures of the affected part, and by inoculating culture-tubes with the material from the deeper part of one of the ulcers, a growth of the micro-organism was obtained. Inoculation of artificial cultivations, derived from these, produced in calves a much more profound disease than inoculation with material taken directly from the ulcers. Changes in the skin were produced, chiefly of an infiltrating kind, which, in Dr. Klein's opinion, resembled those found in human scarlatina; there was intense lobular congestion of the lungs, in parts amounting to red-hepatisation, slight but extensive pleurisy, congestion of the throat, hæmorrhagic patches in the spleen, and changes in the kidney which "completely coincide with those in acute scarlatinal nephritis in man"; there was also extensive enteritis, and both the mesenteric and bronchial glands were in an early stage of inflammation. The micrococcus was found in the skin, lungs, pleura, intestinal mucous membrane, and in the blood. Cultivations were started from the blood, and yielded cultures having the same characters as those presented by the organism used for inoculation. The milk of affected cows, when extraordinary precautions were taken to exclude accidental contamination by the discharges, did not contain the virus of the disease, but when obtained in the ordinary way it was infective. The disease, therefore, as a whole, bears a striking likeness to human scarlatina, and Dr. Klein's researches confirm in a remarkable manner the hypothesis framed by Mr. Power and Dr. Cameron from a consideration of the general etiological characters of the Hendon disease. Dr. Klein concludes his report by expressing the opinion that the investigation should be continued by giving cultivations of the organism to calves in their food. One additional fact, the significance of which will be variously estimated, though its extreme interest will hardly be disputed, is mentioned by Dr. Buchanan in a postscript. It is that Dr. Klein has obtained from the blood of ordi-

nary human scarlatina a micro-organism identical in its morphological characters with that found in the ulcers of the Hendon cow-disease.

Foot-and-Mouth Disease.—The report of certain researches into the etiology of foot-and-mouth disease, otherwise of somewhat remote interest to human medicine, becomes in this connection of special importance. The intrinsic interest of the report is very great, and the research, taken as a whole, is the most complete which Dr. Klein has yet made in this particular field, and reflects the greatest credit on his scientific acumen and manipulative skill. In the cutaneous lesions characteristic of the disease occurring as an epizootic in sheep, he found a micrococcus occurring in dumb-bells or chains; inoculations of culture-tubes, with material from the lesion, yield cultivations of a micrococcus growing in chains; inoculation with cultivations derived from these primary cultivations, did not produce the disease in sheep. Some of the cultivations were given with food to four sheep, and two developed the disease on or about the sixth day; cultivations made from the fluids of the cutaneous lesion of one of these sheep, yielded the same micrococcus. This is a very significant observation, the more so as the micrococcus of foot-and-mouth disease and of the "Hendon disease" are so much alike as to be with difficulty distinguished; their morphological characters appear to be identical, and the cultivations in gelatine, Agar-agar, and in serum, do not perceptibly differ. The chief difference in the behaviour of the two organisms which has been noticed, is that milk inoculated with the micrococcus from the "Hendon disease," when kept at the temperature of 35° C. for two days, becomes solid, while the other organism produces no such effect. Both these papers are illustrated by excellent lithographs, after Dr. Klein's drawings of microscopical specimens and culture-tubes.

Mode of Action of Pathogenic Organisms.—Dr. L. C. Wooldridge contributes an extremely suggestive preliminary report on the mode of action of pathogenic micro-organisms. He made use of a bacillus which produces septicæmia in guinea-pigs. The organism was isolated by Dr. Klein from cases in which the disease had been accidentally produced, and is described by him. Its immediate interest, however, is that, when grown in a solution of vegetable albumen, it produces a copious precipitate; this precipitate consists partly of the bacilli, but the great bulk is made up of granular proteid material. Dr. Wooldridge has made the interesting observation that this precipitate, washed and filtered (so as to remove coarse particles), causes the death of a rabbit in less than a minute when injected into the circulation. The fluid from which the precipitate was separated—that is to say, the original culture-fluid—is not toxic. These experiments certainly tend to show that the toxic principle in the case of this micro-organism at least is a proteid body, and not one of the ptomaines to which it is now fashionable to attribute so much importance and such universal prevalence.

Regret may be expressed at the abrupt termination of the series of investigations undertaken by Mr. Laws, under the direction of Dr. Burdon Sanderson. The report in the last volume appeared to promise valuable results on the mode of action of pathogenic micro-organisms. The report in this volume is very brief and fragmentary.

Action of Corrosive Sublimate on Bacteria.—Dr. Klein also presents a report on the action of perchloride of mercury on bacteria, which, with the various side issues which it raises, will well repay careful study. In his main conclusion, that its power to restrain the growth, and in stronger solutions to kill certain micro-organisms, is greater than that of any other chemical substance with which experiments have been made, he agrees with Dr. Koch; he has, however, gone further, and has shown that this power differs widely in the case of different organisms, and in the same organism derived from different sources. As a general result, it may be stated that non-pathogenic micro-organisms possess a greater power than pathogenic micro-organisms of resisting corrosive sublimate; this, as Dr. Buchanan points out, is in accord with previous experiments with other disinfecting agents. Incidentally it was discovered that, if a sublimate solution of the strength of 1 in 25,000 were allowed to act for ten or fifteen minutes on virulent anthrax bacilli from the blood of a guinea-pig, the bacilli did not produce fatal anthrax in sheep, and the animals were protected from subsequent infection with virulent anthrax material. Dr. Klein has founded a scheme for the protective vaccination of sheep on this fact; the preparation of the "vaccine" is very simple when compared with M. Pasteur's method, for it is only necessary to mix a given quantity of blood with a given bulk of the sublimate solution of the stated strength, and to keep the mixture for a quarter of an hour before using it for protective inoculation.

Prophylactic Properties of Mercury.—The remarkable prophylactic powers of small doses of perchloride of mercury given to animals before inoculation with anthrax were the subject of a report by Dr. Theodore Cash in the volume issued last year; in this volume he reports some further observations. After experimenting with the red oxide and red iodide, administered hypodermically, and with the ammoniated mercurial ointment administered by inunction, he found that the hypodermic injection of the perchloride gave by far the most satisfactory results. With this salt, his later experiments confirm his previous results. One rabbit, after receiving during seventeen days an amount of corrosive sublimate equal to about a quarter-of-a-millionth part of its weight, suffered but slightly and rapidly recovered after inoculation with anthrax-virus, which caused the death of an undrugged animal in four days.

Disinfectant Properties of Oxygen and Ozone.—Dr. Cash has also made some experiments on the disinfectant properties of oxygen and ozone. With regard to oxygen, the results were purely negative; its circulation through a fluid in which the anthrax bacillus was growing appeared to increase the rapidity with which the micro-organism grew, but in no way modified its virulence. Ozone, however, appeared to exercise a certain restraining influence on anthrax and on tuberculosis; it also resulted from these experiments that ozone was more inimical to putrefactive than to pathogenic bacilli.

Aëration of Water.—Dr. Dupré has continued his observations on the changes in the aëration of water as throwing light on the nature of the impurities in it, but the experiments recorded in this volume still leave the subject in a very embryonic condition.

Human and Bovine Tuberculosis.—In previous reports Dr. Klein has expressed the opinion that human and bovine tuberculosis are not, as has been generally assumed, one and the same disease. In an investigation reported in this volume made in conjunction with Mr. Lingard it was found that though fowls might contract tuberculosis after feeding with human tuberculosis, or after inoculation, they appeared to be insusceptible to bovine tuberculosis whether by feeding or inoculation. Tested upon guinea-pigs the avian tuberculosis appeared to be less virulent than human tuberculosis, so that it is possible that in passing through the organism of the fowl the virulence becomes attenuated. The same observers also found that "sections of tubercular deposit" in guinea-pigs, "in which, on the most careful microscopic examination by the most approved methods, no tubercle bacilli can be discovered, possess, nevertheless, the power of producing tuberculosis with appearance of tubercle bacilli in the resulting caseating deposits," and they conclude that tubercle bacilli, or spores of tubercle bacilli, must have been present, though undemonstrable, in the sections used for inoculation.

SICKNESS, ACCIDENT, AND DEATH IN THE MEDICAL PROFESSION.

There was an interesting meeting of the Executive Committee of the Medical Sickness, Annuity, and Life Assurance Society, on Wednesday, February 9th, the Chairman (Mr. Ernest Hart) presiding, and there being a full attendance. The steady progress of the Society, it was stated, still continued, eleven new members having been admitted during January, making a total of 857 since the foundation of the Society less than three years ago. In the same period, between £14,000 and £15,000 had been accumulated from the regular contributions of the members, and the Society was now in such a position as to ensure its permanence and stability. The report on sick claims showed that, while there were several heavy demands on account of severe illnesses, the general expenditure under this head remained sensibly below the amount provided for. A noticeable feature was the number of accidents for which payment had been made—(these being covered under the rules of the Society by the term "sickness"). In fact, it would seem, from the present experience of the Society, that members of the medical profession ran more than ordinary risks in this direction. Out of the current claims, it was stated, payment was then being made for two severe injuries to the spine—one from a fall downstairs and the other from an accident in the hunting-field—and for an accident on the ice, producing concussion of the brain. The deaths of two members was announced, causing claims on the life-assurance fund—one for £200 and the other for £50. These were directed to be paid immediately on the production of the necessary probate by the executors. The question of further investments was considered, and the officers were authorised to enter into negotiations for a loan of £1,000 to the Bembridge Burial Board, for thirty years, at 4 per cent.

The objects of this Society are to provide payments in sickness (including accidents), annuities in old age, and limited life-assurances for medical men and licentiates of dental surgery, in return for quarterly contributions, and on a purely mutual and self governing basis. Prospectuses, proposal forms, etc., will be forwarded on application to the Secretary, Mr. C. J. Radley, 26, Wynne Road, Brixton, S.W.

GENERAL COUNCIL
OF
MEDICAL EDUCATION AND REGISTRATION

SESSION 1887.

Tuesday, February 15th, 1887.

SIR H. W. ACLAND, President, in the Chair.

Before the ordinary business of the Council was commenced, a question was raised by Dr. McVail, with reference to the appointment of members by the Senatus Academicus of the Universities of Aberdeen, Edinburgh, and St. Andrews; but he was informed by the President that the subject could not be brought forward without notice of motion.

President's Address.—The PRESIDENT then delivered his opening address. He said that the difficulty of condensing within reasonable space the topics demanding the attention of the Council had never been as great so on this occasion. The Council now met for the forty-first time, enlarged, under the Medical Act of 1886, by seven members, with the addition, since the Act passed, of a representative from the Victoria University. These eight members, with a newly-appointed Crown nominee for Ireland, and a new member for the Apothecaries' Society of England, formed almost a third of the entire Council. It would seem, therefore, culpable not to endeavour to make a short statement of the work that lay before them. After referring at length to the progress which medicine has undergone during the last fifty years, and to legislation in regard to medical education and examination during the Queen's reign, the President alluded to the duties assigned to the Medical Council. We have, he said, the power and duty to see (1) that no one legally enters the medical profession who is not fit for it; (2) that no one remains in the profession whose conduct has been professionally infamous; (3) that all necessary medicines may be officially sanctioned and scientifically prepared; (4) that due rights and privileges are accorded to all properly educated Colonial and foreign practitioners, who are legally qualified in their own countries. It had taken seventy years of discussion to come thus far. Of the Act of 1858 we could not on the whole speak too highly. Where it failed, it had failed through and by reason of one canker of our nation—*amor sui non patriæ*. Two expressions had been rife in this regard—and they had given rise to comment, and had caused offence on opposite grounds—the one, "Moral Suasion;" the other, "the Battle of the Shops." These terms represented great forces in no wise peculiar to medicine. The former appealed to individual and to corporate conscience. The latter asserted the claim of supposed corporate interest. The Act of 1886, to which all who did not oppose it were practically parties, increased by a full fourth the number of this Council; and the institutions, with power to license separately, were more numerous by one than they were before. This was surely a strange result. It taught a profound lesson for the future of medicine and of science. It was a lesson that it was an evil thing for a free country when its people and its institutions depended on parliaments, and not on themselves, for matters which they themselves could, without compulsion, adjust and rectify. There were now, therefore, twenty independent bodies with power and duty to certify the fitness of the medical practitioners of Great Britain to practise every part of their profession; to grant higher titles to those who possessed knowledge, general or scientific or practical, higher than was essential for the generality; and to combine together for this national end in whatsoever manner they might severally determine. Once again the institutions were free, and, being free, were once more on their trial. It was almost needless to state here that while eleven universities still remained separate, the licensing corporations had combined, or were combining, into one in Scotland; they aimed at becoming either two or one in Ireland; and they were two in England. When this was done there would be in all sixteen separate examining boards. A movement was in action in England to make a sixth degree-giving body, to be designated a University. Should this be accomplished, there would then be in England only one Medical Corporation. Whether these arrangements would hold, whether they were the best, whether some government would arise to constitute three Divisional Licensing Boards, as recommended by the Royal Commission on the Medical Acts, were matters on which it were idle now to speculate, and which did not concern this Council as a State-appointed Council of Education. The President then dwelt on the educational inquiries of the Council from its commencement, and alluded to the business to come before the present session, and thus concluded: "It is no slight happiness to those who have long watched the changes of our time to know that there are now in our medical schools many who, judged by the tests of love for truth, desire for knowledge, and benevolence of purpose and personal character, may stand comparison with any youths of any place, or any profession. To them belongs the task of reaping the harvest of knowledge which this age has sown, and which cannot yet be fully gathered in. Many have the temper of reverent and earnest inquirers into the order of things under which, for a little span, we have all been placed, and in which they, being in constant contact with the sufferings of other men, have deep concern. In their progress and in their lives will be the great reward of the Court of Education."

Results of Examinations.—Tables were presented showing (1) the results of professional examinations held in 1886 for qualifications granted under the Medical Act by the bodies named in Schedule A of the Act; and (2) results of preliminary examination in 1886, compiled by the Registrar from such returns as have been supplied by the examining bodies, pursuant to the Council's request.

Dr. A. SMITH said it was worthy of observation that the Apothecaries' Society of London had passed 214 candidates and rejected 447, and that the Faculty of Physicians and Surgeons of Glasgow had passed 69 candidates and rejected 159, showing either that the examinations had become more stringent, or that the education was defective.

Mr. MACNAMARA said that some of the universities had not supplied the required information with regard to the percentage of marks obtained by the candidates, and suggested that such information should be sought and obtained in future.

A table was received showing the number of exceptional cases that occurred during the year 1886, in regard to length of courses of professional study, together with a statement of the action taken thereon by the several licensing bodies.

Dr. STRUTHERS pointed out that there had been a diminution since last year in the number of exceptional cases. There were none from any other bodies than the Royal College of Physicians of London and the Royal College of Surgeons of England. In the former the number was 39, and in the latter 22. He thought that some explanation should be given of the circumstances under which they had occurred.

Sir DYCE DUCKWORTH said that the cases in the College of Physicians were chiefly those of colonial graduates.

The REGISTRAR was instructed to inquire in future into the details of the exceptional cases.

A table was received showing Results of Professional Examinations held in 1886 for Qualifications granted under the Dentists' Act.

Replies were received from the Army and Navy Medical Departments, giving information applied for by the Council.

Visitation of Examinations.—Mr. MARSHALL brought up a preliminary report by a subcommittee of the Executive Committee on the visitation and inspection of examinations, together with certain suggestions by Mr. Simon with reference to future inspections and recommendations by the Executive Committee. He moved that the subject be referred to a Committee of the Council for consideration and report. The matter, he said, was so important that it ought to be dealt with by a larger body than the Executive Committee.

Dr. HERON WATSON seconded the motion.

Dr. STRUTHERS contended that the words "medicine, surgery, and midwifery," in the Act should not be taken in a limited sense, but should be regarded as referring to preliminary training, which required inspection as much as the final examinations. He approved of the suggestion of the Committee that inspectors should be appointed for the three divisions of the kingdom, and not for a single division. The inspections, however, should be of a more general character than formerly, and need not enter into so many minute details.

The Rev. Dr. HAUGHTON urged that the inspections should be limited to the final examinations, having no reference, at least in the case of universities, to preliminary examinations.

Dr. QUAIN contended that the inspectors were not merely visitors, and that their duty was clearly pointed out in the Act of Parliament—namely, the inquiry whether the standard of proficiency was such as to guarantee the possession of the knowledge and skill requisite for the efficient practice of medicine, surgery, and midwifery.

Sir WILLIAM GULL suggested that the Council should take into consideration the clauses of the Act of Parliament relating to inspection. In the discussion of that subject, the report of the Executive Committee could be considered.

Mr. SIMON said he considered that the Council should not refer to the Committee the question of the meaning of the words "medicine, surgery, and midwifery," but give the Committee an instruction on that subject. He said he would also propose at a fitting period: "That it be an instruction to the Committee that the Council desires its inspection of examinations to cover the entire range of those

branches of knowledge which it has declared in its recommendations to be essential constituents of the qualification of a candidate for licence."

Dr. HUMPHRY said he would propose, instead of Mr. Simon's suggestion, the first recommendation of the Executive Committee: "That, reserving for future action the visitation and inspection of the examinations in the earlier subjects of professional education, the Executive Committee recommends to the Council that the first year's appointment of inspectors provide for the inspection of examinations in medicine, surgery, and midwifery."

After some further discussion, Mr. Marshall's motion was agreed to as follows: "That Sections 2 and 3 of the Medical Act of 1886, together with the foregoing preliminary report by Dr. Humphry and Dr. Quain, on the visitation and inspection of examinations, under the Medical Acts of 1858 and 1886, with certain suggestions by Mr. Simon for the Council's future inspection of examinations, and the recommendations by the Executive Committee, be referred by the Council to a Committee, to report on the subject to the Council at its present session."

The Committee was then appointed, of which Mr. Marshall was requested to act as Chairman.

Diplomas in Sanitary Science.—Various communications were brought up on the subject of diplomas in sanitary science.

University of New Zealand.—An application was made by the University of New Zealand for the recognition of its diploma.

Conjoint Scheme in Ireland.—Communications were also presented from the Apothecaries' Hall of Ireland, and the King and Queen's College of Physicians in Ireland, in regard to a conjoint scheme of education and examination.

The Council concluded its sitting in private.

Wednesday, February 16th.

Sir HENRY ACLAND, President, in the Chair.

Conjoint Scheme in Ireland.—Dr. STRUTHERS moved, pursuant to notice:

"With reference to the 'Scheme for constituting an Examining Board in Ireland, by the King and Queen's College of Physicians and the Royal College of Surgeons in Ireland,' received and entered in the Minutes of November 20th, 1886, page 154, and to the communications to the Council from the King and Queen's College of Physicians in Ireland, of November 10th, 1886, and the Apothecaries' Hall of Ireland, of November 9th, 1886, received and entered in the Minutes of November 19th, 1886, page 145; and to the 'Remarks,' with Appendix, by the King and Queen's College of Physicians, of date December 31st, 1886, transmitted to the President by the College on January 5th, 1887, and the 'Comments' thereon by the Governors and Court of the Apothecaries' Hall of Ireland, transmitted to the Registrar of the Council on February 3rd, 1887, and received and entered in the Minutes of February 15th, 1887; That the Council request the King and Queen's College of Physicians and the Royal College of Surgeons in Ireland to reconsider the scheme, in the strong hope that they may be able to arrange with the Apothecaries' Hall of Ireland a scheme which shall include the Apothecaries' Hall with the two Colleges."

He said he did not appear as a special pleader for the Apothecaries' Society, but only desired to perform a public duty. The object of his motion was to advise the two Dublin colleges to reconsider their scheme of examination, with a view of admitting the Apothecaries Hall. If it were omitted from the scheme, it might, under the Act of 1886, apply to the Council to have examiners appointed, and, in the event of its refusal, it might go to the Privy Council, who might themselves appoint assistant examiners, in which case the Apothecaries' Hall of Dublin might be started as a new and independent licensing body for medicine, surgery and midwifery. That might lead to England and Ireland being flooded with practitioners under the name of Apothecaries. The matter had been discussed by the Council on previous occasions, and the Council had, in answer to an application from the War Office, stated its opinion that the Registered Licentiates of the Apothecaries' Company of Dublin were, as Apothecaries, entitled to practise medicine in Great Britain and Ireland. Accordingly, the Army and other Boards received the Apothecaries' diploma on the same footing as any other. He proposed the motion, first, as a measure of justice due to the Apothecaries; secondly, as a matter of expediency to other bodies; and thirdly, as a public duty. He moved it also as a measure of peace. If they had the three corporations united into a conjoint Board, there would be an end to contention; otherwise it would be every man for himself.

Dr. BRUCE seconded the resolution.

Mr. SIMON said he heartily supported the motion, and he hoped that the two London colleges would reconsider their decision. The more the College of Physicians felt itself to be stronger and higher than the Apothecaries' Society, the more it was bound to yield on the principle of *noblesse oblige*, and not to allow any personal consideration to stand in the way of a public good. Whether they liked it or not, the Apothecaries' Society was a legally recognised authority, and was it wise that it should be allowed to set up as a separate and competing body?

Mr. WHEELHOUSE, in supporting the motion, said the question was whether the qualification given by the Apothecaries' Society was a full and complete one. He maintained that it was not, and that it would be unwise to assist in the setting up of a corporation as a separate competing body, that was ill equipped for its duties. All the bodies united would give a complete qualification, but if they were divided, infinite mischief might be done.

Mr. TEALE briefly but emphatically supported the motion.

Dr. BANKS urged upon the Council the danger and discredit attending the creation of a new examining body in Ireland.

Sir WILLIAM GULL said that the principle of the motion, if applied to Ireland, should apply equally to England. The Apothecaries' Company in Ireland had certain useful functions to discharge, and, on public grounds, ought to be maintained. The Council would be stultifying itself if it rejected the motion.

Dr. GLOVER said that the pharmaceutical side of medicine was very important, and, as legislation contemplated the continuance of the Apothecaries' Hall, he was quite prepared to give a hearty vote in favour of the union of that body with the two Dublin colleges.

Dr. KIDD, as a direct representative for Ireland, said that the feeling of the profession in that country was that the three bodies ought to be united, and that the separation of the Apothecaries' Hall would be a serious injury to the community, leading to a downward instead of an upward competition. He might remind the Council that the College of Physicians had accepted the first examination of Apothecaries Hall as equal to their own first examination. The Act of 1886 evidently contemplated the inclusion of that body in any conjoint scheme.

Sir WILLIAM TURNER, in supporting the motion, said that the object of the Legislature was evidently combination wherever it was possible; but if, through any difficulty, it could not take place, Parliament did not desire that a body which was doing its duty efficiently should be extinguished. The bodies, accordingly, should be urged to carry out the intention of the Act, in order that the alternative proposition might not be brought into operation.

Mr. COLLINS called attention to a resolution of which he had given notice, asking the Council to nominate an Examiner in Surgery for the Apothecaries' Hall of Dublin. He hoped the resolution would be passed, as well as the one proposed by Dr. Struthers; otherwise the Apothecaries' Hall would be disfranchised, at any rate until the meeting of the Council in June. The Apothecaries' Hall was perfectly willing to enter into a tripartite scheme, or even a dual scheme with the College of Surgeons.

Sir DYCE DUCKWORTH could not agree with Sir William Gull in regarding the question at issue as applying to London. The circumstances of the two cases were different, and he was not frightened by the bugbear that had been held out as to the terrible consequences that might be expected. It had been said that a great injustice would be done, and that the country would be flooded with an inferior order of practitioners. That could not happen, because it was the duty of the Council to see that any other examinations that might be adopted were satisfactory.

Mr. MACNAMARA, as representing the College of Surgeons, said he should vote most heartily for the proposal to send back the scheme for the consideration of the College of Physicians. It would be sad if that College did not listen to the voice of the Council in the matter, because it would lead to the establishment of another competing body.

The discussion was adjourned, and the Council held a short private sitting, with Mr. Muir McKenzie in attendance as legal adviser. On the resumption of the debate,

Dr. A. SMITH gave a detailed account of the proceedings at two meetings held by the College of Physicians, to consider the application of the Apothecaries' Hall to be admitted to the conjoint examination. At the first of those meetings the Council resolved that it was unable to accede to the proposal, because it believed that the intentions of the Medical Act were best carried out by the existing arrangement. The College of Surgeons had then suggested that the scheme should be modified so as to include the Apothecaries' Hall; upon which the second meeting of the College of Physicians was held, when a resolution was adopted by 17 votes to 4, declining to re-open

the question. He (Dr. A. Smith) thought that it would be perfectly useless to send the matter back for further consideration.

Mr. BRUDENELL CARTER thought it would be unworthy of the dignity of the Council to address a request to the College of Physicians which it was unable to enforce, and he should accordingly vote against the motion of Dr. Struthers.

Dr. STRUTHERS, having replied, the motion was put and carried, nineteen members voting for it, four again, five abstained voting.

The Council then adjourned.

Thursday, February 17th.

Sir HENRY ACLAND, President, in the Chair.

Admission of Strangers.—The Council sat some time in private to consider a communication from Dr. McVail on the admission of strangers.

Conjoint Scheme in Ireland.—Mr. COLLINS moved:

"That the Governor and Court of the Apothecaries' Hall of Ireland having failed in their efforts to enter into a conjoint scheme of examination with the other Irish corporations or universities, respectfully request that the General Medical Council will be pleased to nominate an examiner in surgery for the Hall (the Governor and Court having been advised that to ask for one in midwifery is not requisite), to entitle them to issue registrable qualifications, in accordance with Clause 5 of the Medical Act (1886)."

He hoped the Council would pass this resolution, so as not to leave the Apothecaries' Company in the anomalous position of being disfranchised, as he had explained in the previous debate, and would nominate an examiner in surgery to complete the educational examination, and so make the Apothecaries' License registrable under the Act.

Rev. Dr. HAUGHTON seconded the motion.

Sir WALTER B. FOSTER thought the resolution premature, for this reason, that it was part and parcel of a great question that would have to be decided by the Council. The intention of the Act was that all the corporations in the United Kingdom should enter into combination, so as to have joint schemes in each division of the kingdom, and, if possible, to lessen the number of competing and rival licensing bodies. They were in hopes that the resolution passed on the previous day would have the effect of making the King's and Queen's College of Physicians reasonable in this matter, and not force the Council into the position of recognising the Apothecaries' Hall of Dublin as an independent licensing body. They were in the face of these high contending parties. They had to recognise the Apothecaries' Hall as being, at the present time, a medical corporation recognised by the Act of 1858, and were anxious that the contention that was going on between these great powers in Dublin should be, if possible, settled in a friendly manner; but, if they were to pass the recommendation moved by Mr. Collins, it would make him the Bismarck of the situation. He submitted that to pass this resolution would be a violation of the spirit in which they had recommended the College of Physicians and the Apothecaries' Hall to consider this question.

Some discussion took place on the wording of the resolution, and eventually the Council gave Mr. Collins permission to alter his resolution as follows:—"That in conformity with the request of the Governor and Court of the Apothecaries' Hall of Ireland of the 9th of November, already entered on the minutes of the present Medical Council, this Council will proceed to appoint an examiner in surgery to entitle the Apothecaries' Hall to issue registrable qualifications in conformity with Clause 5 of the Medical Act (1886)."

Dr. STRUTHERS moved as an amendment: "That the Council defer coming to a decision on the motion of Mr. Collins in order to give the College of Physicians and the Royal College of Surgeons of Ireland, and the Apothecaries' Hall of Ireland, time to consider the resolution passed by the Council yesterday on the motion of Dr. Struthers."

Mr. TEALE seconded the amendment.

After discussion, in which several members of the Council expressed the opinion that the motion was premature, Mr. COLLINS agreed to accept the amendment.

The amendment, as moved by Dr. STRUTHERS, was then put and agreed to.

Alleged Insufficiency of Examinations in Ireland.—The Council then proceeded to consider a communication which had been received from the Lord President of the Privy Council, enclosing a memorial addressed to the Lords of the Council by Mr. Thomas Laffan, of Cashel, with respect to the efficiency of qualifying examinations under the Medical Acts, and requesting the Medical Council to favour their Lordships with their observations in regard to Mr. Laffan's memorial. With the memorial were enclosed extracts from the report of the visitors of the Medical Council on the examinations of the Royal University of Ireland, which the memorial said would "show that the candidates for the degrees of the university are shamefully deficient in clinical training," and also "another document to prove that that university itself imposes restrictions which stand in the way of the adequate clinical training of said candidates, and that it has declined to remove the same."

Dr. BANKS defended the action taken by the Royal University, and moved:

"That this Council, having before it the regulations of the Royal University with respect to the attendance of students at hospitals, is of opinion that it is not expedient to take any action on the subject."

Dr. KIDD seconded the motion, and said the gravamen of the memorial was that the University would not accept the clinical teaching of the University Hospital Schools, because they held that it was inadequate.

Rev. Dr. HAUGHTON called attention to the request of the memorial that the Privy Council should enforce the nineteenth section of the Act, and said it should be stated in their answer that, in the opinion of the Medical Council, the memorial had nothing to do with the nineteenth section. He thought it would be wise to refer the whole question to a committee of experts; for, while they disapproved of the spirit and tone of Mr. Laffan's letter, they should not be led to look over the important point raised—one that concerned not only the Royal University, but every licensing authority in the kingdom—as to whether they were or were not too narrow in limiting the field of hospital teaching by their regulations. He thought it would be well to agree to a resolution recognising, as a general principle, that if the teaching of any hospital institution in the country and the practice were considered good, that it should be more or less partially recognised.

Sir WM. GULL thought the Council would be only wasting time in discussing the matter at present; and therefore moved, as an amendment, that this communication be referred to a committee to report, and then the Council could discuss it.

Mr. SIMON supported the amendment, and said that, as the question affected not only the Royal University, but also other Corporations, that the committee should not be exclusively an Irish one.

Mr. MACNAMARA said he could not allow the memorial to appear on the minutes of the Council without first bearing his testimony to the high motives that actuated the Royal University in the discharge of its duties.

Dr. BANKS said he entirely accepted the amendment that this matter should be referred to a committee. The Royal University, in taking the course it had done, was solely actuated by a knowledge of the fact that the workhouse infirmaries did not provide materials for clinical teaching. It had not the least desire to cast any doubt on the efficiency of the medical officers to discharge the duties of clinical teachers, but the real fact was that they had not the means at their disposal.

Mr. SIMON having seconded the amendment, it was put to the Council and agreed to.

On its being put as a substantive motion,

Sir WALTER FOSTER moved, as an amendment,

"That a committee be appointed to draw up a reply to the communication from the Lord President of the Council, and the documents referred to in that communication, and to report to the Council."

Dr. BRUCE seconded the amendment.

After a short discussion, Sir WALTER FOSTER withdrew his amendment, and the motion was agreed to and the Committee nominated.

The Council in its Relation to Conjoint Examinations.—Dr. HERON WATSON then moved:

"That, considering the somewhat anomalous position in which the General Medical Council is placed by the opinion given by Mr. Muir Mackenzie on the clauses of the Medical Act, referring to the qualifying examinations held by a combination of medical authorities, and the relation of the General Medical Council to such contracting bodies as may agree to hold qualifying examinations under such scheme, it is desirable that a further opinion from the responsible legal advisers of the Government be obtained before the Council proceeds to take any steps arising out of the interpretation of Sections XV, XVIII and XIX of the Medical Act, 1858, construed along with Sections I, II, III, IV, V, and VI of the Medical Act, 1886, together with the consideration of any other points which may arise within this reference; and that it be referred to the Executive Committee to take the requisite steps to give effect to this."

He said his only object was, that some statement should be prepared and presented to the law officers, in order that an authoritative statement might be obtained as to the duties of the Medical Council in connection with the interpretation and reading of the Act.

Dr. STRUTHERS seconded the motion.

Dr. AQUILLA SMITH moved, as an amendment, and Sir DYCE DUCKWORTH seconded, that the Council proceed to the next order of the day.

The amendment was negatived, and the motion, on being put to the Council, was agreed to.

Report of Finance Committee.—The report of the Finance Committee was brought forward by Dr. QUAIN, and some discussion ensued on the question of dental finance, which had for some few years shown a continual deficiency, it standing at £9,824 in 1881, while in the present year it was only £7,465.

The report was adopted, and the Council adjourned.

THE FOUNDATION OF A RESEARCH LABORATORY BY THE COLLEGE OF PHYSICIANS OF EDINBURGH.

THE College of Physicians of Edinburgh recently appointed a Committee to consider the question of the prosecution of scientific research in connection with the Royal College of Physicians. This Committee, which has held several meetings, has made a report to the College containing the following recommendations.

"1. That the College shall establish and maintain a laboratory for the prosecution of original research, which it is essential should be in the neighbourhood of the Infirmary.

"2. That the College shall vote from its capital £1,000 for the establishment of this laboratory, and year by year a sum not exceeding a third of the clear surplus of annual income over annual expenditure for its maintenance, including the payment of salaries. It is suggested that the laboratory be placed under the care of a curator and committee, who shall supervise all work done in the laboratory. They shall appoint a scientific man as superintendent, who shall devote his whole time to the direction and prosecution of scientific research in the laboratory. The salary paid him shall not be less than £200 per annum.

"3. They recommend that a man experienced in microscopic work be engaged to reside on the premises and assist in the laboratory, and that his salary be £80 per annum.

"4. It is suggested that the fitting-up of the laboratory should be proceeded with cautiously, and that apparatus should be procured only as occasion requires. The Marine Station at Granton and the 'Challenger' Laboratory in Queen Street are taken as models in this respect. Although £1,000 is asked for as probably necessary for the full equipment of a laboratory, it is suggested that only the essentials of a laboratory should be at first procured, and that the balance should remain at the disposal of the Laboratory Committee, to be employed, if necessary, for its further development.

"5. That the laboratory should be open without fee—(1) to Fellows of the College; (2) to Members; (3) to any Licentiate, medical man, or investigator, who may, by testimonial or otherwise, satisfy the curator and committee that he is a fit person to use the laboratory for purposes of scientific research.

"6. That, should sufficient funds be at its disposal, after paying the expenses of the laboratory, the committee should be empowered to offer yearly a medal and money prize (not exceeding £21) for original work conducted within the laboratory or elsewhere; the results to be embodied in essays to be submitted to the committee. The subjects of the essays should be specially connected with medicine, therapeutics, gynæcology, and psychiatric medicine, each of which should in succession be advertised as the subject for competition. Thus every fourth year one of these departments would be recognised. The committee should also be empowered to apply any surplus funds in grants to investigators unable to conduct research without assistance.

"7. That every year, at the quarterly meeting of the College in August, the curator should report to the College regarding the year's work done in the laboratory and the expenditure incurred."

This report has been very favourably received; and there is, we believe, no doubt that this project will be adopted by the College, and carried into effect. Such a laboratory will meet an obvious want, and the quiet earnestness and public spirit with which it has been carried out reflects great honour upon the College of Physicians. Similar institutions are, as we have often pointed out, greatly needed in London; and we have reason to believe that the Council of the College of Surgeons of England is likely, with the funds placed at its disposal by the Erasmus Wilson bequest, to make a generous provision for a similar purpose. At least, the protest against the expenditure of any large proportion of those funds in bricks and mortar, and the evidently strong opinion in favour of their application for the purposes of research and higher study, cannot be ignored by the College, and will, no doubt, be acted on. The College of Physicians of London has also at its disposal funds which might advantageously be utilised in the same way. It is becoming more than ever a severe reproach, and even a scandal, to London, that it is, up to the present time, devoid of any such public facilities for scientific research, and that its Colleges have done so little to aid that object.

OFFICIAL INSTRUCTIONS TO VACCINATORS.

WE understand that the statement on this subject, which has appeared in several of our daily contemporaries, is so far accurate that the Local Government Board intend to issue shortly an order prescribing a revised set of "Instructions for Vaccinators under Contract." The present instructions were prescribed by an Order in Council, dated as long ago as July 29th, 1871. They superseded the original instructions that were appended to the original Order of December 1st, 1859. During the interval that has elapsed since the promulgation of these Orders, some slight deficiencies that need at once to be remedied have been disclosed. We are glad, therefore, that the Order has been revised, but we believe that no new departure in regard to vaccination is thereby contemplated. Rather is it intended to secure the removal of every reason, however slender, for opposition to the Vaccination Acts on the score of danger attending certain methods of operating.

THE NEW BUILDINGS AT THE COLLEGE OF SURGEONS.

A CORRESPONDENT writes: Where are the plans? This question must have suggested itself to all who read the report of the meeting of the Council of the College in the last number of the JOURNAL. A Committee, composed of some of the most distinguished members of Council, was formed last autumn to consider the extension of the College premises. Certain plans were submitted to the Committee. The nature of these plans became known, and were reported in the JOURNAL of December 11th. We have reason to believe that a large number of persons had opportunities of examining the plans non-officially. Still the matter was shrouded in the usual official secrecy.

The Committee went formally to work, and at the meeting of the Council, on February 10th, the final Report was presented; thus it was first made officially known to the Council. Yet, although not officially known till then, the Council straightway received, approved, and adopted this remarkable Report. Such being the case, why were not the plans officially published before February 10th? Would it not have been better, on the other hand, had the Council insisted, last week, that, after then officially receiving the Report, they should consider it, and not deal any further with it till the next meeting, at the earliest, and had directed that the plans be published for general consideration? Neither of these steps has been taken, but £10,000 has been voted for the new museum, and £5,000 for the new work-rooms, at the same meeting tha the Committee presented their recommendation that such expens was needed; and the plans have been approved, although the latter were officially unknown to the Council outside the Committee till the evening of February 10th, when the report was received, approved, and adopted. We have heard that the plans are even yet but imperfectly known to these members of Council; and, what is more serious, a rumour has gone abroad that more than one member protested vigorously against the adoption of the report, but that the eloquence of some distinguished members of the Committee gained at once, by the force of argument, approval which should never have been yielded till after prolonged independent deliberation. A small fraction of the Council have thus hurriedly run up a scheme for disposing of a large amount of money, to be partly taken from the Wilson Legacy, and the Council have straightway adopted the scheme. This being the case, surely at least the plans will now be published? Are not the distinguished scientists who signed the memorial, recently drawn up by Dr. Wilks, to have a voice in the matter? or is the opinion of the Committee to be final, although its members are none of them pure scientists, and are not all of the class of essentially scientific surgeons, whose praises were justly sung by Mr. Savory last Monday, and who alone, in combination with pure scientists, should be charged with the destiny of the College Museum.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1887. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Meetings of the Council will be held on April 13th, July 13th, and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, March 24th, June 23rd, and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary*.

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,

THE VALUE OF HAMAMELIS, THE VALUE OF PURE TEREBENE.

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE, CANCER OF THE BREAST, and the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE, are now closed.

A Report on the CHOREA Inquiry has been prepared by Dr. Stephen Mackenzie; and will be published in the BRITISH MEDICAL JOURNAL as soon as the printing can be completed.

A Report on CENTENARIANS, prepared by Professor Humphry, was published with the JOURNAL of December 11th; a full Report on OLD AGE will follow.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, CANCER OF THE BREAST, and HABITS OF INTEMPERANCE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

STAFFORDSHIRE BRANCH.—The second general meeting of the present session will be held at the London and North Western Hotel, Stafford, on Thursday, February 24th, 1887. The President, Dr. W. G. Lowe, will take the chair at 3.30 P.M. —VINCENT JACKSON, General Secretary, Wolverhampton, January 31st, 1887.

WEST SOMERSET BRANCH.—The spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, March 3rd, at 5 o'clock; dinner at 5.30. The subject settled by the Council to be discussed after dinner is the Etiology of Phthisis. Dr. Isambard Owen, secretary of the Collective Investigation Committee, will attend and open the discussion, and members having any communication to bring forward should send early notice to W. M. KELLY, M.D., Honorary Secretary.

BORDER COUNTIES BRANCH.—The spring meeting will be held in Carlisle, on Friday, March 18th, at 6 P.M., when Dr. Haddon, Hawick, will read a paper and introduce a discussion on Perityphlitis. Notices of papers for reading, patients or morbid specimens for showing, should be sent to the Secretary without delay. —HENRY A. LEDIARD, M.D., 41, Lowther Street, Carlisle, Honorary Secretary.

SHROPSHIRE AND MID-WALES BRANCH.—A half-yearly meeting of the Branch will be held at Borcatton Park Asylum, Baschurch, near Shrewsbury, on Tuesday, February 22nd, at 3.30 P.M. — ED. CURETON, Honorary Secretary.

WORCESTERSHIRE AND HEREFORDSHIRE BRANCH.—The spring meeting will be held at the Belle Vue Hotel, Malvern, on Tuesday, February 22nd, at 4.30 P.M. Mr. Bates and Dr. Crowe: A successful case of Perro's Operation. Mr. Lawson Tait: On the Cleansing of the Peritoneum. Mr. Wilding: A successful case of Tracheotomy for Acute Laryngitis. Dinner at 6 punctually; dinner tickets 5s. each, exclusive of wine.—GEO. W. CROWE, M.D., Honorary Secretary.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT. —The next meeting will be held at the Hackney Town Hall, on Thursday, March 17th, at 8.30 P.M. The chair will be taken by Dr. Herman. A paper on Puerperal Convulsions; their Cause and Treatment, will be read by J. Williams, M.D., President of the Obstetrical Society. Visitors will be welcome.—J. W. HUNT, M.D., Honorary Secretary, 101, Queen's Road, Dalston.

SPECIAL CORRESPONDENCE.

AMERICA.

Centenary of the Philadelphia College of Physicians.—Naval Medical Service of the United States.—Varieties and Treatment of Anæmia. —Treatment of Detached Retina.—Insanity an Index of Intellectual Progress.—Another Medical Dramatist.—Professional Jubilee of Dr. N. S. Davis.—The American Medical Association.—New Genito-urinary Society.—Memorial to Dr. Rush.

THE College of Physicians of Philadelphia has celebrated the centennial anniversary of its foundation at an interesting commemorative meeting, at which an historical address was given by Dr. Alfred Stillé. The College was founded by physicians intimately associated with the leaders of medical thought in Europe, and having a close relationship with Dr. Fothergill, the founder of the Medical Society of London, who seems to have taken the liveliest interest in the medical affairs of Pennsylvania, and especially in the foundation of its hospital and the establishment of a medical library. Philadelphia has long boasted itself as the *civitas Hippocratica* of America, and the library of the College is the largest medical library in America, except the public medical library at Washington. Dr. Stillé referred to the services which the College had rendered in 1843 by framing a Code of Ethics, which for years afterwards was substantially adopted by the American Medical Association. Oddly enough, it is in consequence of the violation of this Code of Ethics, in respect to consultation with irregular practitioners, by a large body of physicians in New York that the recent split has occurred which has estranged so many of the New York specialists from the American Medical Association; this has underlain the reconstitution of the Organizing Committee of the International Medical Congress, and has led to subsequent disunions, and the hostile attitude of a large number of the leading physicians of Philadelphia, New York and Boston with regard to that Congress. Dr. Stillé, in this address, gave a sort of side-blow to the American Medical Association, for he recalled the fact that, in 1845, the College had hesitated to send delegates to the Convention which formed the American Medical Association, although it did afterwards take part in this movement. "History," he said, in a sentence of which the meaning is not quite clear, "has demonstrated the clearness of its foresight by proving the incapacity of medical societies, by the mere force of authority, to lift themselves, or the medical profession, out of the ruts of routine and the mire of ignorance." This is apparently meant to be uncomplimentary to the American Medical Association, and complimentary to the College of Philadelphia; but whether it really applies to the Association, or what societies are supposed to have shown their incapacity, or when, does not clearly appear, and possibly Dr. Stillé may take some other opportunity of making his utterance a little less oracular in its obscurity. Passing to less controversial subjects, he congratulated the College upon the liberality of its members, which had supplied it with its present magnificent library, commodious rooms, and valuable scientific museum. The subsequent festivities were celebrated with the accompaniment of suitable speeches, and a "loving cup" was passed round in old-fashioned English style. On the *menu* was printed a medallion portrait of the first President of the College, Dr. John Redman.

The naval medical service of the United States languishes for want of candidates as that of Great Britain did some little time ago. According to the report of Surgeon-General Gunnell, candidates possessing the necessary qualifications cannot be found to fill the vacancies. Since 1870, more than thirty young naval medical officers have resigned. The Surgeon-General points out that the army medical department has qualified applicants far in excess of its needs, attracted by better pay, well defined rank, and more satisfactory professional position, and he recommends that prompt measures be taken to increase the advantages, and improve the condition of the naval department.

In an interesting paper by Professor Osler, in the *Therapeutic Gazette*, he divides anæmias into secondary and primary. In all forms of serious anæmia he attaches the greatest importance to treatment by arsenic. Of secondary anæmias, in which he has found arsenic useful, he especially specifies the cardiac, malarial, and gastric varieties. His primary anæmias are of three kinds, the first due to changes in the hæmatogenous tissues, the spleen, lymphatic glands and bone-marrow; Hodgkin's disease he includes under the head of lymphatic anæmia; secondly, chlorosis; thirdly, pernicious or essential

anæmia. Chlorosis is of course best treated by iron; in leukæmia and Hodgkin's disease arsenic is only occasionally successful; in splenic anæmia it is useless. It is, on the other hand, exceedingly useful in pernicious anæmia. He states that in all cases of pernicious anæmia there was no one case of recovery in which arsenic did not form the basis of treatment. Of forty-eight cases in which arsenic was not used, forty-two died, while of twenty-two cases treated with arsenic, sixteen recovered. It is not, however, a specific. Iron is only occasionally useful in these cases. Dr. Osler commences usually with five minims of the liq. potassii arsenitis three times daily, and continues it with occasional intermissions for weeks and months, and after apparent recovery.

Dr. Eugene Holt reports four cases of successful treatment of detachment of the retina. His method consists in restricting the diet within rigid limits, keeping the patient recumbent, the eyes bandaged, and using hypodermic injections of pilocarpine without production of nausea, say five minims of a 2 per cent. solution cautiously increased. At the same time, the patient drinks an infusion of jaborandi leaves. In the cases reported, recovery resulted in about twenty days.

A rather interesting question has been raised by Dr. Bryce, Superintendent of the Insane Hospital of Alabama, who has been inquiring whether insanity has increased among negroes since their emancipation. He concludes that there can be no doubt on this point. The returns for 1870 show one insane negro to 2,695; in 1880, one in 1,096. No doubt a large part of this increase is due to greater accuracy in the more recent statistics; but it is believed that, in point of fact, insanity is somewhat on the increase among the negroes. On the other hand, however, it is pointed out that an increase of mental disease accompanies in all races, according to modern experience, an increase of mental activity, so that the greater number of insane negroes may in fact be taken as the ratio indicating the intellectual progress of the race since their emancipation. This is, perhaps, a poor consolation for the individual insane negro, who is incapable of estimating the value of the progress of his intellectual brethren.

The excursions of physicians into the flowery fields of literature are not confined to the denizens of either continent; and to balance somewhat those related in your pages respecting English medical men, I may report that Dr. Donaldson, of Baltimore, has published two comedies: *An Ill Wind* and *An Abject Apology*, which are favourably spoken of.

Dr. N. S. Davis, the venerable founder of the American Medical Association and of Chicago Medical College, has just celebrated his golden wedding with the profession of medicine at the College which he founded nearly thirty years ago. A large and distinguished company assembled to congratulate him, and justice was done to his professional services as a physician, author, professor, and editor. He was presented by the students of the College with a handsome easy-chair and revolving book-case. Dr. Davis stands at the head of the medical profession in Chicago, and is father of the American Medical Association, of which he has been twice president, and of which he is still the moving spirit. He is the editor of the journal of the Association, and will be the president of the International Medical Congress at Washington. Dr. Davis has returned from the Brighton meeting of the British Medical Association full of admiration and kindly feeling towards his professional brethren in England, and speaks highly of the cordial reception with which he met, and of the opportunities which were afforded to him and his brother representatives of offering a welcome to intending visitors at the approaching congress. He does not, however, appear to have gathered a very clear idea of the constitution of the Association, for, oddly enough, he speaks of the Council of the British Medical Association as being an imperfectly representative body, while, on comparing the constitution of the English with the American Association, it is very easy to see that the British Medical Association is by far the more democratic in principle, and more thoroughly representative in character, seeing that its Council appears to be elected wholly by the Branches, and its presidents by the local profession in each district in succession in which the annual meetings are held. The presidents of the meetings so elected by the common vote of the profession are apparently the only permanent members of the Council. On the other hand, the American Medical Association is reproached with being very "cliqueish" in its constitution, being made up of delegates from county medical societies, which are often controlled by small knots of men, and are by no means, in all cases, widely representative. It is, however, natural that Dr. Davis should prefer a constitution which he took so much part in framing to that of any other body. It cannot be said, however, that the American Medical Association is so prosperous or widely representative, or so robust as its friends could wish. It has a relatively small membership. Its journal has as yet but a very secondary position in literature, and the Association cannot be said to exercise anything like the influence which it would do if it were larger, more comprehensive, and more national in character. Its aims are high, its principles sound, its finances secure; its development is alike to be desired and anticipated. "Americans," as the editor of the *American Lancet* recently observed, "so frequently have the example of the British Medical Association placed before them as a sample of what the American Medical Association ought to be," that it is worth while occasionally to consider the other view of the matter, and no doubt the members of the British Medical Association will not be sorry to hear any criticisms from this side."

The specialists in diseases of the genito-urinary system have formed a national association for the discussion of the affections and treatment of the genito-urinary organs—a species of male gynæcological society, if I may be pardoned a bull.

A great effort is being made to raise a costly memorial to Dr. Rush, and a proposal has been made that each of the eighty thousand physicians of this country should give fifty cents for the erection of a monument. The *American Lancet*, however, expresses the opinion that "more than forty thousand of these had better use their fifty cents to pay their debts, and to provide the comforts of life for themselves and families. The great mass of the medical profession are poor, and we fear they always will be, so long as the supply of doctors increases three times as fast as the population of the land."

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Gouty Affections of the Eye.—Syphilis during Pregnancy.

In the *Recueil d'Ophthalmologie* there are some remarks by M. Zychon on certain manifestations of gout in the eye. According to him it attacks all parts of the eye, sometimes the eyelids, but very frequently the lacrymal ducts. It has an especial preference for the sclerotic, the iris, and the ciliary body, causing glaucoma; and also for the choroid and the retina, where it produces atrophy and a characteristic exudation. These various alterations are progressive, but happily they are not very severe, as they do not entirely destroy the sight. Gout, whatever organ it attacks, marks its presence by congestive eruption and by hyperæmia more or less continuous or periodical, and this holds good of the eye. All the gouty affections of the ocular membranes fall almost exclusively into the category of *goutte larvée*. Among them M. Zychon describes lithiasis of the upper lid, a sort of cutaneous gravel, which is, however, seldom met with; it is never found on the lower lid. It consists of a deposit of urate of soda, similar to that which is seen on the helix. On the conjunctival membrane and near the free edge of the upper lid are to be found small granulations, containing a calcareous deposit, encysted in the mucous membrane; the little body protrudes under the conjunctiva in the form of a white point, which is hard and resisting. As long as this body does not protrude the patient does not complain; but when the conjunctiva begins to ulcerate, well defined local congestion together with a very limited ulceration of the cornea take place; moreover, the eye is inflamed and painful, and photophobia and epiphora are present. It is only on turning back the lid that the condition is discovered. The treatment consists in extracting the little calculus with the point of a needle. Another manifestation of gout is a dry eczema of the eyelids resembling pityriasis, which usually begins on the lower lid. It is characterised by very fine small scales, which produce a sensation of heat and itching. This affection is troublesome on account of the insupportable itching to which it gives rise. Dusting with calomel several times a day is the most effective remedy; morphine may often be added to the calomel with advantage in the proportion of 10 centigrammes of the former to 10 grammes of the latter. Gouty conjunctivitis usual occurs consecutively to dry eczema of the lids. Sometimes, however, it appears as a primary lesion in gouty subjects; and, in such cases, the conjunctival eruption alternates with articular gout. Spontaneous extravasation of blood under the conjunctiva has also been observed in gouty patients. The hæmorrhage, which is due to friability of the arterial capillaries, is not serious in itself, but forms an indication as to the general state of the patient. There is one form of keratitis attributable to gout, which M. Galezowski calls "calcareous keratitis;" this form, however, which is characterised by an opacity in the form of a narrow band, is very rare. On the other hand, inflammation of the sclerotic may be called the typical gouty affection of the eye. It consists of a swelling of the sclerotic, with peripheral vascular injection. It is often intermittent, attacking first one eye and then the other; finally it becomes

chronic. The inflammation, after remaining for a long time indolent, may suddenly produce unbearable neuralgic pain, together with very pronounced photophobia and epiphora; it is often followed by iritis.

A series of very remarkable clinical observations on syphilis in pregnancy have recently been made by M. Hirigoyen, at the Maternity Hospital in Bordeaux, from which he concludes that, from an obstetric point of view, both abortion and natural labour take place in syphilitic patients exactly as in healthy women. In certain exceptional cases, however, difficulties attributable to syphilis may arise, such as hæmorrhage from partial adherence of the placenta, rigidity of the os, etc. Finally, women suffering from primary or secondary syphilitic lesions in the genital organs are rather predisposed to puerperal accidents, and require more attention on the part of the attendant than other women. The following is a summary of the observations, which extended over a period of two years: 1. In the lying-in wards, in Bordeaux, the proportion of syphilitic to other patients was 5 per cent. 2. Five-sixths of them were unmarried. 3. Syphilis in a pregnant woman tends to bring about premature labour. 4. The duration of the disease seemed to have a very decided influence. 5. In eight cases of pregnancy in syphilitic women who had had the disease for one or more years, only two children were born alive, and these were very puny. 6. In twelve cases, in which the mother had contracted the disease during the first four months of pregnancy, the fœtus was in every case stillborn. 7. When the mothers had become affected between the fourth and the sixth months of pregnancy, the fœtus died in about half of the cases. 8. When syphilis had been contracted during the three last months of gestation, the proportion of living children was a little more than one-half—four out of seven. 9. Out of thirty-three cases of pregnancy in syphilitic women, living children were born in eight. 10. Syphilis may give rise to difficulties during labour, and also to subsequent complications, but this is rare. 11. To be effectual, antisyphilitic treatment should be administered from the very beginning of pregnancy, and continued throughout. The treatment should be perseveringly carried out, in order to prevent accidents in future pregnancies.

CORRESPONDENCE.

☞ To Correspondents. ☜

Our correspondents are reminded that prolixity is a great bar to publication, and, with the constant pressure upon every department of the Journal, brevity of style and conciseness of statement greatly facilitate early insertion. We are compelled to return and hold over a great number of communications, chiefly by reason of their unnecessary length.

THE MEMBERS' PETITION TO THE PRIVY COUNCIL.

Sir,—We trust that you will forgive us for offering a few further details as to the signatures (now over 4,600) received to the petition of the Members of the Royal College of Surgeons to the Privy Council. By the end of last year the number was 1,430, chiefly obtained by personal solicitations; but we felt then that we might expect a very much larger total than this, and consequently issued about 9,000 forms of the petition to the Members of the Royal College of Surgeons in the United Kingdom who had not already signed, this number covering all those whose addresses appear in the *Medical Directory*. It has been most satisfactory, seeing the usual fate of a circular, that over one-third of this number has been returned to us, and that we have what may fairly be called almost half of the members resident in the United Kingdom, whose present addresses are discoverable, as signatories to the petition. We make no manner of doubt that by a "house-to-house visitation," as has been suggested to us, the overwhelming majority would be in our favour. But we do not think the expenditure of energy and money at all necessary, the more especially as the probable result of such a measure is clearly foreshadowed by the following statistics: Out of 503 Members of the Royal College of Surgeons placed on the Local List of the *Medical Directory* for 1887, as resident in the following eighteen provincial towns, namely, Bath, Bolton, Bristol (with Clifton), Cardiff, Winchester, Great Malvern, Middlesborough, Ramsgate, Scarborough, Shrewsbury, Southampton, Swansea, Wigan, Windsor, Worthing, Yarmouth, and York, 359 have signed, which, allowing for about 23 of the 503 being either noted as "retired" or marked with an asterisk as of uncertain address, gives a proportion of three-quarters who have signed (75 per cent.). We instance these places, as in them our Local Honorary Secretaries have been very active in getting the question ventilated; and it is far more just to argue from such localities than from very large unwieldy cities or country districts where our circular is the only intimation Members have had that such a movement was on foot, and where, consequently, their interest has not yet been aroused in it. Of the towns mentioned, we would lay especial stress on Bristol, from which place and from its sister, Clifton, our local Honorary Secretary, Mr. Samuel Smith, sent us the petition signed by sixty Members of the Royal College of Surgeons, that is, by half of the members residing there; twenty-four of the remaining moiety sending their signatures later on our circular-forms. As to any feeling contrary to our proposals existing among the members of the College, we may inform you that we have had only fourteen expressions of objection to the memorial—fourteen against 4,600.

The Council of the College is really responsible for this widespread expression of feeling; for had it moved forward more rapidly with its application for a supplemental charter, we should not have had the time to get our aims so widely known. Shall we call this generosity on its part?—We are, etc.,

Warwick C. Steele,
Wm. Ashton Ellis,
Western Dispensary, Westminster. Hon. Secs. Association of
February 16th, 1887. Members of Royal College of Surgeons.

DR. SKENE KEITH'S STATISTICS OF ABDOMINAL SURGERY.

Sir,—If Mr. Tait considers that it is a "mistake, which amounts to misrepresentation" to draw attention to one year when his results are bad, what does he call it when he himself attempts to add a year, namely, 1886, the hospital report for which is not yet published, when his results are good; or what can he say to his statement that it is as safe to open the peritoneal cavity as to open one's pocket, when his hospital mortality for the two years, before this statement was made, has been one death in twelve? Mr. Tait thinks that I have "unearthed" the information about 1884. Perhaps he will be surprised to hear that every American surgeon who came here the summer before last, had at least one copy of the hospital report, all having been struck with the difference between teaching and practice. The copy of the first series of one thousand abdominal cases has not yet arrived.

The insinuation about hysterectomy is worth noticing. About two years ago Mr. Tait wrote Dr. Keith that he was very anxious to see a hysterectomy, as his results in that operation were so very bad. With the single exception of a case where medical friends of the patient objected to the presence of Mr. Tait there was no case to show. While Mr. Tait was in Edinburgh more than a year ago, we did all we could to get a patient for operation, and a letter from a doctor, explaining that his patient could not come was sent to and returned by Mr. Tait. Yet, in spite of this, Mr. Tait told friends, both here and in the West, that Dr. Keith had some plan of treatment he did not wish to show, and would not allow him to see an operation. After these remarks, which Mr. Tait allows that he made, no notice has been nor will be taken of any desire of his to see anything.—I am, etc.,

Edinburgh, February 15th. Skene Keith.

HEPATIC PHLEBOTOMY.

Sir,—I am far from having any desire to take part in the correspondence now being carried on in your columns on the above subject; yet, as my name has been introduced into the controversy by gentlemen who have taken part in it on several occasions, I desire, as briefly as possible, to explain my position.

At page 300 of my lately-published *Lectures*, the following passage will be found, in the lecture devoted to the treatment of suppurative inflammation of the liver: "On several occasions in this hospital (Netley), I have had the following experience. We have had men admitted here with symptoms pointing to the existence of hepatic abscess, with, at the same time, sharp local pain in the liver over well-defined limits. Into such places I have several times introduced the hollow needle of an aspirating syringe, in the expectation of finding pus. On applying the syringe, instead of pus, 5 or 6 ounces of blood have been drawn off, with immediate relief of all the symptoms, and without any unpleasant results. I have thus been led to think that, in this way, at the sacrifice of a small quantity of blood in the acute stage of inflammation of the organ, we might look for good results. I am sure of this, I have seen this small bleeding much more effective than the abstraction of twice or even three times as much from the integuments over the liver by leeches or cupping. I throw this out as a hint worth trial in cases where the symptoms are so acute as to raise in your minds a suspicion that the direct abstraction of blood might relieve pain and ward off the danger of suppuration."

It will be seen from the letters of several military medical officers that this "hint" has been successfully acted upon in India.

Seeing in the medical journals a notice that Dr. George Harley was to read a paper at the Brighton Meeting on Hepatic Phlebotomy, I communicated the substance of the above paragraph (at that time in the press) to Dr. Harley, and as I did not know where my friend and successor, Dr. David Boyes Smith, was at that time to be found, I wrote to Dr. Ewart, late of the Bengal Army, to give to the Meeting my experience in the matter, should any debate arise on Dr. Harley's paper. After the Meeting, I received two letters, one from Dr. Smith, giving me a brief summary of the discussion, and another from Dr. Harley, with his version of the debate—written, however, in a very different tone from that of his opponent. From those letters I gathered that Dr. Harley's method of "hepatic phlebotomy" was very different from that recommended by me, and in writing to Dr. Harley, I expressed myself to the effect that I considered the practice of thrusting large trocars into the liver a dangerous one. When, in support of this opinion, I referred to "Smith's case," I did not know whether Dr. Smith spoke of one occurring in his own experience, or in that of another; I merely meant by the expression the one referred to in the debate, and I do not think Dr. Harley is justified in quoting my words, used in a different sense, in support of his contention.

In conclusion, I wish it to be understood that I put forward no claim to any "discovery." The profession must decide whether Dr. Harley's method is one that will take its place as a safe means of relieving an inflamed liver. I must, however, add, even at the risk of offending Dr. Harley, that, were it my misfortune to suffer from acute hepatitis, threatening to run on to suppuration, I would shrink from allowing any man, however eminent, to plunge such a formidable instrument into my liver as the one described by that physician, when I know that the required relief can be obtained by, to say the least, a much less formidable proceeding. This is all I mean to say on this subject.—Faithfully yours,

W. C. MACLEAN.

SIR,—To avoid the possibility of Dr. Harley further misconstruing the practice I have been accustomed to follow in dealing with cases of acute hepatic inflammation which proved rebellious to medicinal treatment, will you kindly grant me space in your next issue to say that in 1883 I punctured in three different directions an acutely inflamed liver, not for the sole purpose of evacuating an abscess (for there was no indication of the presence of one), but with the twofold object of (*a*) abstracting, if possible, a small quantity of blood, and (*b*) relieving the inflammation by the punctures. Relief was almost instantaneous, and recovery quickly followed.

Only a few days subsequently I was asked to see, in consultation, another case of acute hepatitis which had defied medicinal treatment. Here also there was no indication of suppuration; nevertheless, we punctured the liver in the same manner as in the first case, and with the same object, namely, (*a*) to abstract blood, and (*b*) to relieve the inflammation by the puncture. The result was in every way satisfactory.

When I use the term "puncture," I mean the employment of one of the long trocars of the aspirator. This is carefully thrust through the liver-substance, both transversely and obliquely, before it is withdrawn.

I can offer no explanation how puncturing the liver, as above described, can relieve (I might almost say disperse) an acute inflammation of the liver; I only know that it does so, and that most effectually.

I trust I have now made it clear to Dr. Harley that he can claim no originality for his practice of depleting the liver by puncture. What I have done has, I am sure, been done in numerous other cases by army surgeons practising in India and in the East generally.—Yours faithfully,

R. H. QUILL, M.D., Surgeon-Major, Army Medical Staff.

Woolwich, February 11th, 1887.

*** This correspondence should, we think, now cease.

THE PREVAILING EPIDEMIC OF DIARRHŒA.

SIR,—In response to the suggestion of Dr. Kerr, in the JOURNAL of February 12th, I hasten to offer my small contribution towards the elucidation of what I cannot help calling this extraordinary and unique epidemic—certainly, in my experience here of twenty-five years such has not happened. During the months of December, 1886, and January, 1887, I have had over twenty cases of diarrhœa, presenting much the same symptoms as those recorded by Dr. Kerr, except that, in the majority of my cases, there was severe abdominal pain. My patients were mostly of the middle or poorer classes—farmers, farm-servants, and their children; and their ages ranged from infancy to eighty-five years. Their residences were in many cases far apart. The milk-supply was in all cases drawn from the cows on the farm. When the disease appeared in small and crowded dwellings, with no possibility of separation, and no sanitary arrangements, all the inmates were attacked. How far atmospheric or telluric influences may have been factors in the outbreak, I cannot say; but give the following notes from our local meteorological station (453 feet above sea level) for the two months. December, 1886, lowest temperature, 4° Fahr.; highest, 51° Fahr. Barometer, lowest, 27.400; highest, 30. Prevailing winds, W.N.W.; clouds, *cumulus*. Rainfall, 2.19 inches. January, 1887, lowest temperature, 11° Fahr.; highest, 56° Fahr. Barometer, lowest, 28.470; highest, 29.98. Prevailing winds, W.; clouds, *cumulus*. Rainfall, 1.78 inches. Very high winds prevailed during the two months, and snow fell all over to a depth of about 12 inches.—I am, yours obediently,

A. D. KEITH, M.B. and C.M.

Craigveigh, Aboyne, Aberdeenshire.

RATE OF GROWTH OF IDIOTS.

SIR,—Dr. Langdon Down, in his Lettsomian Lecture, published in the JOURNAL for February 5th, says: "Dr. Shuttleworth has correctly stated 'that the relative rate of growth of the two sexes of idiot children follows the same rule as that of normal children, and is subject to the same variation at puberty,' etc." Now this extract was part of a sentence written by me in explanation of a table and diagram which I lent to Dr. Shuttleworth to illustrate his lecture on the health and physical development of idiots at the Health Exhibition of 1884, and which loan was duly acknowledged by him. Short as the sentence is, it was the result of several years' labour in collecting statistics from Earlswood, Clapton, the Royal Albert, Larbat, and several small asylums, and which statistics were published in the first edition of my *Anthropometery* in 1878. Thus, by a stroke of a pen, a fact which I worked out for the purpose of establishing the general law of the growth of children has been appropriated by specialists, and will be bandied about among them as the "correct" statement of Dr. Shuttleworth, on the incorrect authority of Dr. Down.—Your obedient servant,

CHARLES ROBERTS, F.R.C.S.

THE HEALTH OF FLORENCE.

SIR,—There having been lately more than one reference in the JOURNAL to the public health of Florence, I should be glad if you could give a short space to some information which might be useful to members who are consulted on the subject.

It should be observed that the *Times* correspondent, who has been drawing the public attention to the health of this city, says "it is not, taking the entire mortality, an extremely unhealthy city;" and statistics show that the mortality, although higher than what one finds in England, is lower than the average mortality for the whole kingdom of Italy. In a recent letter to *La Nazione*, a leading Florentine newspaper, the same correspondent says: "I have not advised the English not to come to Florence, but not to rent an apartment where there are not drinking-water and portable latrines." And, although he spoke, in one of his communications to the *Times*, of "the ever-present typhoid," he now says: "I have never spoken of epidemics in Florence, nor of a general state of health worse than in other towns."

There is room for great improvement in the sanitary arrangements in Florence; but the fact that attention is at present being called to these possible improvements should not allow people to jump to the conclusion that the public health is deteriorating, or that it is worse than any other Italian, or even continental, city.

The *Times* of December 25th last says: "The salient fact is that the principal cause of unhealthiness to foreigners is absolutely removable by good sanitary arrangements well carried out." The "unhealthiness" referred to is, presumably, cases of typhoid fever and "drain-fever." I can positively state that, in the practice of the British medical men in Florence, only one case of typhoid fever has occurred since the commencement of this season on October 1st. That was the case of a patient of mine, in whom the fever was at the seventh day on the day after arrival in Florence. As to "drain-fever," on which the *Times* correspondent enlarges, none of the English medical men here have seen any cases at all corresponding to the symptoms he describes. One writes: "I don't know the form mentioned by Mr. Stillman (that is, the *Times* correspondent), and never heard of any fever called—or, rather, I never knew that fever in Florence was

called 'spring or growing fever.'" And another says: "I have never seen a case of 'drain-fever' in Florence, and the condition of 'habitual feverishness with night-sweats' is unknown to me here."

The death-rate from zymotic diseases in Florence is 1.44 per 1,000 per annum. In England and Wales, in 1884, the annual mortality from the same causes was 2.64 per 1,000.

The authorities are doing their best, according to their means and their knowledge of sanitary science here, to improve the town. And the travelling public may rest assured that progress is being made, as speedily as it can be here, to make Florence what the *Times* correspondent says it might be—"the sanitarium of Europe." For the present they may visit it with as little risk as any other Italian city, and with as much safety as in former years.—Yours faithfully,

ST. CLAIR THOMSON, M.B.Lond., M.R.C.P.Lond.

Florence, February 1st, 1887.

HONOURS EXAMINATIONS OF THE UNIVERSITY OF LONDON.

SIR,—The cause of the London medical student is always so warmly advocated by you, that I hope you may be able to find space for a protest, on behalf of the university students in London, against the system now adopted in the Honours Examinations of London University. These examinations have, for a considerable time, been extremely unpopular with both teachers and students, for there has been no equality of standing amongst the competitors for Honours. Thus, a candidate for Honours, passing his Intermediate M.B. Examination at the end of his second academical year, has been placed at the disadvantage of having to compete against students one, two, or more years his senior in standing, as well as against those who have been in for the examination before. The absence of any equality of standing in the candidates for Honours has rendered it impossible to obtain, from an inspection of the Honours lists, any fair and accurate estimate of the relative merits of the students. These remarks apply equally to the Preliminary Scientific, Intermediate, and Final M.B. Examinations.

About two years ago, a new regulation, relating to the Honours Examinations of the Preliminary Scientific, came into operation, which not only did not remove this objection, but even added a new one. Formerly, a student, after having secured a "pass," could compete upon a more difficult set of papers for Honours in any one or more of the subjects of the Pass Examination; but now each candidate is required to enter either for the Pass Examination or for Honours, but not for both, taking the pass papers in those subjects in which he does not compete for Honours. He is further required to state beforehand whether he intends to compete for Honours or not, and to his decision he must adhere. He is not allowed to choose, after seeing the papers, whether he will try for Honours or not.

Now, Sir, I can say, from an experience of several years as a teacher, that this change in regulations is very obstructive to the teachers, and I have not met with a single student with whom the change has found favour.

The reason for this is obvious. The average student, whose time and money are limited, cannot afford to risk a rejection in Honours in one subject, which means a rejection on the whole examination; and is thus debarred from competing for those Honours which he would, under the old regulations, have had a fair chance of securing. But, further than this, the student early makes up his mind either to compete for Honours or not. Far most frequently, the students decide not to compete, and, therefore, do not attend the lectures on more advanced subjects of study. Some few of the more fortunately placed students do, no doubt, compete for Honours, but by far the larger number neither compete, nor, what is far more important, do they attend the lectures and laboratory work on advanced subjects. A distinct discouragement is thus placed on advanced work, and the teacher finds his advanced courses of instruction attended by a much diminished number of students. Yet, notwithstanding these very potent objections to this obstructive regulation, the Senate of the University have recently extended it to the Intermediate M.B. Examination.

I have a large number of students under my instruction who are working for the Preliminary Scientific and Intermediate M.B. Examinations, and, without exception, they are opposed to the regulation. On their behalf, and on behalf of the teachers, I make a strong protest against the regulation. It has been said to work well, but in what way I fail to comprehend. The only advantage I can see in it is that it lessens the work of the examiners.

It has been said, and justly said, that the University of London, by the high standard of its examinations, has done much to raise the standard of teaching in medicine, science, and arts; and I trust that its influence may long continue to be felt. But I cannot help feeling that the recent changes are retrogressive; and, in pointing this out very strongly, I am sure I am speaking as much in the interest of the University as in that of the teachers and students.—I am, Sir, yours, etc.,

THOMAS W. SHORE, M.D., B.Sc.(Lond.),
Lecturer on Comparative Anatomy at St. Bartholomew's Hospital.

THE MORTALITY AFTER LAPAROTOMY FOR EXTRA-UTERINE PREGNANCIES.

SIR,—In the BRITISH MEDICAL JOURNAL of December 4th, 1886, appeared the paper upon extra-uterine pregnancy, which was read before the British Medical Association by Professor William T. Lusk, of New York, with the discussion which ensued upon it. In this discussion, it appears to have been admitted by common consent that but two women had ever been saved after the operation of primary laparotomy, the fœtus being living and viable; and that the operations were performed by Jessop, of Leeds, and A. Martin, of Berlin.

Mr. Lawson Tait was present, and made a few remarks, but, by some strange oversight, does not appear to have reported his own much more encouraging successes. The world-at-large appears, as far as I have examined the record, to have saved two women out of eighteen, the gestation in each having advanced to the eighth month. The children were alive, one for a short time, and the other lived nearly a year. Mr. Tait, in a letter to me dated May 10th, 1886, wrote as follows: "You are much mistaken about saving patients by primary laparotomy in extra-uterine cases. I have operated seven times, and saved all my patients but one, and in that case I saved the child. Three of my extra-uterine children are alive and growing up." There is no ambiguity here about the meaning of the term "primary," which is employed in the sense in which it is generally used by obstetrical writers: the fœtus was living and viable.

Being very anxious to obtain records of these seven important cases, I wrote to Mr. Tait, on May 22nd, 1886, and enclosed a carefully ruled and arranged table, with a request that he would fill up the blank spaces. I did this to save him any unnecessary labour.

In his reply of June 4th, 1886, he pleaded press of professional engagements, and wrote: "I am not prepared just now to hunt up the references, and I know that most of the cases have been published in detail."

Will Mr. Tait be kind enough to state where? A search of the *Index Medicus*, from January 1st, 1879, to January 1st, 1887, has only served to discover the report of the fatal case. Where have the other six been reported? There are many here and abroad who would like to know the secret of his great success. His six successes would reduce the general mortality from 88⅞ per cent. to 33⅓ per cent.; and a statement of his method of operating would be of very great value to other surgeons who may seek to save two lives by a primary laparotomy in a case of abdominal pregnancy.

To have saved six out of seven cases such as these is much more to Mr. Tait's credit, considering the usual fatality of the operation, than his record of ovariotomy. Mr. Tait should by all means publish these cases collectively, and at an early date.—Yours very respectfully,

Philadelphia, U.S. America. ROBERT P. HARRIS, M.D.

SUNSHINE IN ENGLAND.

SIR,—In your issue of January 29th, you published a summary of the bright sunshine recorded at Undercliffe, Isle of Wight, for the year 1886. Considering the very disparaging remarks constantly levelled against the amount of our English sunshine by Englishmen and foreigners alike, it is interesting to note that the amount of sunshine at such a well-known health resort as Davos Platz only exceeded that in the Isle of Wight by seventeen hours for the whole year.

Appended is a monthly summary of the bright sunshine recorded at Davos for the past year:—January, 72 hours; February, 123¾ hours; March, 185½ hours; April, 168½ hours; May, 216 hours; June, 105¼ hours; July, 245¼ hours; August, 170¾ hours; September, 147½ hours; October, 140 hours; November, 82 hours; December, 40 hours; total, 1,696 hours.—I am, etc.,

H. COUPLAND TAYLOR, M.D.

Davos Platz, February 1st, 1887.

DEATHS FROM SMALL-POX.—The Registrar-General's quarterly returns show that, during the last half of 1886, only thirty-three deaths occurred from small-pox in the whole of England; during the last quarter, the number was only eleven. These are the smallest actual numbers ever recorded.

MEDICO-LEGAL AND MEDICO-ETHICAL.

LICENTIATES OF SCOTCH AND IRISH COLLEGES.

We have received a communication from the Secretary of the Royal College of Surgeons of Edinburgh, stating that the attention of the President's Council of that College has been called to a letter signed "M.D.," published on January 1st, in answer to which it was stated that a Licentiate of the Scotch or Irish College of Surgeons was not, in our opinion, legally qualified to visit patients and dispense medicines in England, and that such a person so practising in virtue of that qualification would be liable to a prosecution for an infringement of the privileges of the Society of Apothecaries, if that Society thought fit to authorise a prosecution. The communication concludes as follows:

"I am directed to inform you that, according to the provisions of the 31st Section of the Medical Act (1858), 'Every person registered under th is Act shall be entitled, according to his qualification or qualifications, to practise medicine or surgery, or medicine and surgery, as the case may be, in any part of Her Majesty's dominions, and to demand and recover in any court of law, with full costs of suit, reasonable charges for professional aid, advice, and visits, and the cost of any medicines or other medical or surgical appliances rendered or supplied by him to his patients.'"

We are sorry that the reply to the question of "M.D.," which appeared in the JOURNAL of January 1st, should have been misunderstood. In giving that reply, there was not the slightest intention of raising any question as to the effect of the 31st Section, and of the Medical Act of 1858.

The inquiry of "M.D." apparently raised a doubt whether a member of the Scotch or Irish Corporation could practise in England as an apothecary, and the answer in the JOURNAL was intended to convey that, though a member of the Scotch or Irish medical corporation could, a member of a Scotch or Irish surgical corporation could not, without contravening the provisions of the Apothecaries' Act of 1815. To this answer we adhere, being informed that the Society of Apothecaries has no doubt on the subject, though when applied to (as it constantly has been) to allow prosecutions against persons who, registered only in respect of a surgical qualification, were practising as apothecaries, it has refused to do so.

SPURGIN *v.* NICHOLSON.

MR. CHARLES HARRIS writes: Would you kindly inform the gentlemen who have subscribed to this fund that Judge Ingham has granted a new trial (January 27th); but the plaintiff has to pay all the costs of the previous trial. Subscriptions are therefore earnestly and respectfully solicited, as Mr. Spurgin is fighting this case in the interest of the profession, and it is rather hard that he should have the whole burden of costs. Counsel having necessarily been employed, the costs in the previous trial were consequently heavy. Amount subscribed altogether, £31 12s. 6d. Further subscription towards the fund:

Dr. Dudgeon £1 1 0

RESPONSIBILITY OF SICK CLUBS FOR THE PAYMENTS TO THEIR SURGEONS.

INQUIRER asks whether the local agents of a sick and burial benefit society—the name of which he mentions—are alone responsible for the payments which are due to the surgeon of the club? For instance, if an agent fails to pay you quarter after quarter for a year or two, becomes bankrupt, and leaves the place, what remedy have you for recovering your claims? Is the society responsible for the surgeon's remuneration? It seems to be a very short-sighted policy on the part of those who are interested in conducting the business of the society at head-quarters, not to see that their agents discharge their duties regularly and promptly in this respect. I know two instances, in my limited acquaintance, where these payments have been allowed to run on for nearly two years, and in the end have resulted in a great deal of unpleasantness.

*** We have no specific knowledge of the arrangements of the society in question, nor would it be possible to answer "Inquirer" without a fuller statement of the facts, particularly as to the mode in which the engagements named were made. In all such cases, however, it is most essential, and a mere elementary business precaution, to obtain something in writing to show the conditions of agreement; where agents are treated with, to have it made clear they are acting for and with the authority of the society or company with which they are connected; and to obtain a copy of all rules or regulations referring to medical attendance connected with the society or company. Where arrangements are made with a recognised agent, acting within such regulations, there is no doubt the society or company would be responsible. For example, if an agent or official received certain sums on behalf of a society, as such, part of which would eventually be paid to the medical officer, and embezzled or misappropriated the amounts, the fraud would be on the society whose agent he was, and would not invalidate the claim of the medical officer for payment.

R. N.—It is probable that a fee would not be accepted; but, if circumstances admit, it would be proper to tender it, and to requite ultimately the services rendered by such a presentation as may be thought suitable.

MIDWIFERY ENGAGEMENTS.

EXPERIENTIA DOCET writes: In your reply to J. H. H., you have (pardon me) overlooked one important item, namely, Did the patient or the husband authorise the mother to engage J. H. H.? If not, I promise him that he has no chance of receiving his fee.

*** The answer to J. H. H. assumes that the patient's mother was authorised to engage his services, and that the only question to be decided would be as to the bargain she made. If she was not authorised, an action against anyone else would of course fail; but in that case it might possibly be maintained against her, on the ground that she had untruly represented that she had authority to make the bargain.

ETHICS AND GRAMMAR.

MR. J. C.—That a young and inexperienced practitioner, reputed, moreover, to be professionally associated, as an assistant, with an unqualified person, should venture, in discourteous and withal ungrammatical language, to lecture an elder brother medical man on professional etiquette, may be fitly regarded as an ethical anomaly peculiar to these latter un-prenticed days. Nevertheless, it is clearly the duty of our correspondent not to be content with simply characterising the imputation of unprofessional conduct as "groundless," but to meet the charge and disprove it.

HOSPITAL AND DISPENSARY MANAGEMENT.

NEWCASTLE THROAT AND EAR HOSPITAL.

At the recent annual meeting of this institution, the report stated that the number of patients entered for the first time on the books was 1,482, the financial statement showing that £233 10s. 9d. had been contributed by patients. It was feared, however, that many "made use of the hospital who were in a position to contribute, but neglected to do so." Dr. Houseman had resigned, and Dr. William Robertson had filled the vacant post. A successful course of lectures on Injuries and Diseases of the Ear, had been given by the senior surgeon, Dr. Ellis, to students and practitioners. An effort should be made in the present jubilee year to carry out the erection of a new hospital, which would supply existing wants as to space and accommodation for staff and patients. Such a hospital could be built for £2,000.

THE QUEEN'S JUBILEE HOSPITAL.

THE SECRETARY writes: Will you permit me to say a few words in reply to Mr. Cheyne's letter, inasmuch as I wish to correct a most important error which I am sure he has inadvertently made, namely, that the hospital is only for the treatment of diseases of the "throat, ear, eye, rectum, etc.;" whereas he has omitted to mention "orthopædic surgery" in all its branches, which will of course include diseases of the "spine and joints." There is also connected with this institution a surgical appliance department for the purpose of supplying various mechanical instruments to distressed persons, on their obtaining the requisite number of letters from the subscribers to this department; and I venture to think that this branch (Surgical Appliance Department) is most important, and of absolute necessity to the poor, who abound in thousands in the immediate neighbourhood, such as Chelsea, Fulham, etc., who cannot afford the time to obtain such articles from more distant institutions. It was this branch that induced the promoters to add to their programme most of the special organs for treatment, such as the throat, ear, skin, and eye; and to these they have since added a department for the treatment of disease of the nasal and pharyngeal cavities by the most advanced methods, as beyond the cost of a few inexpensive drugs, the same establishment and servants can be utilised for carrying out the latter, and the medical staff is, of course, honorary. With regard to the in-patients, though the number of beds is somewhat limited, there is every prospect of success in adding more, as a great many influential persons have already promised their support, but who do not and will not contribute to other charitable institutions, for the reason that they are not allowed any privilege with regard to the internal administration of such, beyond a few patients' letters of recommendation. Another all-important item is that, by the establishment of this institution, it will afford opportunities to many medical men to become attached to a hospital, and so develop latent talent which would otherwise lay dormant.

In conclusion, I beg to state that this hospital will be governed by a committee consisting of an equal number of lay and medical members, and that, by strictly adhering to all matters of professional etiquette and economy, the Queen's Jubilee Hospital will, I hope, be an ornament to the profession.

UNIVERSITY INTELLIGENCE.

CAMBRIDGE.

THE examination for the Shuttleworth Scholarship (of the annual value of £60) will be held at Gonville and Caius College, on March 10th; the subjects of examination are botany and comparative anatomy (including zootomy and comparative physiology); there will be a practical examination in each subject. Candidates must be medical students of the University of Cambridge who have passed the previous examination for honours. Candidates must send in their names on or before March 1st. Further information may be obtained from the Rev. E. S. Roberts or Dr. Reid, tutors of Gonville and Caius.

NAVAL AND MILITARY MEDICAL SERVICES.

SALLES D'HONNEUR.

THE French military authorities, with a view to encourage feelings of professional pride among the officers of the army, and to cultivate that sentiment of regard for the particular regiments or parts of the army they may be serving in, which is so fully comprehended in the term *esprit de corps*, have recently established regimental club-rooms, under the name of "salles d'honneur," in which the officers may freely assemble, and in which all the distinguished deeds of the corps are brought to notice in as conspicuous a manner as practicable. One of these "salles d'honneur" has been instituted at the military hospital of the Val-de-Grâce, in Paris, which may be regarded as the head-quarters of the medical department of the French army. On the wall of this assembly-room, there has just been placed a list of the names of the military surgeons who have been killed by the enemy, or who have died from epidemic disease while on active service in the field, since the year 1844. The list contains 124 names; but it is believed there are many omissions in it. Of the 124 surgeons named, 15 lost their lives in the Algerian campaigns, between 1844 and 1849; 76 in the Crimea, between July 1854, and May 1856; 17 during the occupation of Mexico; 8 were killed during the Franco-German war of 1870-71; (the names of those who died from disease in France during the war are not included in the list); and 8 have lost their lives in Tonquin, between 1884 and 1886. The deaths have been due in fifty-five instances, to "typhus" fever; in thirty-six, to cholera; in twenty-one, to wounds inflicted by the enemy; in ten, to yellow fever; and in two instances, to dysentery. The deaths from cholera and typhus chiefly occurred in Algeria and the Crimea; the deaths from yellow fever were confined to Mexico.

THE NAVY.

DR. DUGALD MCEWAN, whose promotion to be Deputy Inspector-General we announced last week, joined the Royal Navy as Surgeon, April 9th, 1856; was made Staff-Surgeon from the same date; Fleet-Surgeon, October 18th, 1875; and Deputy Inspector-General, January 20th, 1882. Dr. McEwan served in the *Magicienne* in the Baltic, during the Russian war in 1854-55 (medal), and in the *Hastings* flag-ship during the war with Burmah.

Surgeon JAMES J. WALSH has been appointed to the *Vernon*, additional.

Mr. J. V. LAVERICK has been appointed Surgeon and Agent at Skinningrove, Staithes, Runswick, Kettleness, and Humersea.

The following appointments have been made at the Admiralty during the past week:—P. E. MAITLAND, Surgeon, to the *Acorn;* S. O. O'GRADY, Surgeon, to the *Lion;* P. J. SHERIDAN, to be Surgeon and Agent at Kilmore; ALFRED HOLLIS to be Surgeon and Agent at Yarmouth, Isle of Wight.

THE MEDICAL STAFF.

BRIGADE-SURGEON P. B. SMITH, M.D., has been brought on the Administrative Medical Staff of the Bengal Army, with the temporary rank of Deputy Surgeon-General, *vice* Deputy Surgeon-General R. Webb, transferred to temporary half-pay.

Brigade-Surgeon P. H. WHITE, M.D., is directed to officiate on the Administrative Medical Staff of the Bengal Army, with the temporary rank of Deputy Surgeon-General, *vice* Deputy Surgeon-General R. Wolseley, deceased.

Surgeon-Major C. F. POLLOCK, serving in the Bengal command, has been granted six months' leave of absence on medical certificate; this cancels the leave previously granted to Surgeon-Major Pollock, announced in the JOURNAL of January 15th.

Surgeon-Major G. B. HICKSON, who has being doing duty at the station-hospital at Bellary, is ordered to do duty at the station-hospital at Madras.

Surgeon A. A. PECHELL, serving in the Madras command, has been allowed an extension of his leave of absence, the period, however, not being stated.

Surgeon-Major R. KEITH, M.D., has been brought on the strength of the British troops in the Bombay command, from December 14th.

Surgeon-Major GOUGH ASHTON, M.B., has been granted retired pay; his commissions are dated:—Assistant-Surgeon, October 1st, 1862; Surgeon, March 1st, 1873; and Surgeon-Major, April 28th, 1876. He was engaged in the recent war in Afghanistan, and has the medal for that campaign.

Surgeon-Major SANDFORD MOORE, M.B., is also granted retired pay with the honorary rank of Brigade-Surgeon. He entered the service as Assistant-Surgeon October 2nd, 1866; became Surgeon March 1st, 1873; and Surgeon-Major October 2nd, 1878. Surgeon-Major Moore (says *Hart's Army List*) served with the British Military Ambulance during the Franco-German war from October 1870 to March 1871; and, with the "B" Division of the Ambulance, accompanied the 22nd Prussian Division under General Wittische in the operations before Chartres and Orleans in November and December. He was present at the actions of Chateauneuf and Bretoncelles, and at the general engagement at Artenay on December 3rd (Prussian War Medal, and French Bronze Cross). He proceeded to the Gold Coast in September, 1873, and served throughout the Ashanti war of 1873-74; was present at the action of Essaman, and subsequently filled the post of Statistical Officer (medal).

THE INDIAN MEDICAL SERVICE.

THE appointments of Surgeon-Major F. A. SMYTH and of Surgeon J. C. SMITH, both of the Bengal Establishment, the former to the medical charge of the 1st Native Cavalry, the latter to that of the 27th Punjab Infantry, have been cancelled.

Surgeon-Major C. J. M'NALLY, M.D., Madras Establishment, Chemical Examiner and Professor of Chemistry at the Medical College, is appointed to be also Professor of Medical Jurisprudence, *vice* Brigade-Surgeon A. Porter, M.D.

Surgeon-Major R. H. BATTY, and J. F. KEITH, M.B., and Surgeon W. G. H. HENDERSON, all of the Bombay Establishment, have been detailed for service in Burmah.

Surgeons J. M'CLOGHRY, Bombay Establishment, in medical charge of the 6th Native Cavalry, has returned to duty from sick furlough.

Assistant-Surgeon GEORGE HALDWELL, formerly of the Madras Establishment, died at Bangalore on January 13th, at the age of 79.

Surgeon JAMES ROSE, who is serving in the Madras command, has passed the examination in Hindustani by the lower standard.

Surgeon J. P. S. HAYES is appointed to do duty in the Sind Circle, Bombay command.

Surgeon-Major W. J. WILSON, M.D., and Surgeon R. J. D. HALL, have been brought on the strength of H.M.'s forces in the Bombay command from January 20th, the date of their arrival at Bombay.

Surgeon-General BENJAMIN SIMPSON, M.D., of the Bengal Establishment, Sanitary Commissioner and Surgeon-General with the Government of India, has been nominated Knight Commander of the Most Eminent Order of the Indian Empire. Sir Benjamin Simpson entered the service in 1853, and, passing through the intermediate ranks, became Surgeon-General March 29th, 1885. The army lists, however, do not credit him with any war experience.

Surgeon C. W. OWEN, C.I.E., of the Bengal Establishment, has been nominated a Companion of the Order of St. Michael and St. George for his services in connection with the Afghan Boundary Commission. Surgeon Owen entered the service in 1876, and served in the Afghan war in 1879-80, during which he was present in the action at Charasiah, and in the operations round Cabul in December, 1879, at one of the engagements near which city he was slightly wounded; he was twice mentioned in dispatches, nominated Companion of the Order of the Indian Empire, and received the medal with two clasps. He was also in the war in Egypt in 1882, and was at the battle of Tel-el-Kebir (medal with clasp and Egyptian bronze star). In 1884 he was appointed Medical Officer to the Afghan Boundary Commission, and has recently returned to India, where it is announced his services have been placed at the disposal of the Home Department for employment in the North-West Provinces and Oude.

Surgeon G. A. EMERSON, Bengal Establishment, 2nd Class Supernumerary Civil Surgeon, having returned from deputation duty, has resumed charge of the civil medical duties of Minpoorie.

Brigade-Surgeon A. PORTER, M.D., Surgeon to the 4th District, Madras, is appointed Physician to the Madras General Hospital, on the retirement of Brigade-Surgeon J. Keess, M.D.

To meet the demand for medical officers in Burmah, it has beendecided that the order requiring medical officers to pass in the vernacular before being appointed to the medical charge of regiments shall be held temporarily in abeyance, to allow of the service of young surgeons who have recently arrived in the country being utilised at once.

Surgeon-Major CHARLES PRENTIS, Bengal Establishment, died at Calcutta, on his way to England, on January 14th, in his 52nd year. He entered the service as Assistant-Surgeon January 27th, 1858, and became Surgeon January 27th, 1870, and Surgeon-Major July 31st, 1873. Surgeon-Major Prentis served during the Indian Mutiny in 1859, and was at the action of Ruttonpore, and in the operations on the Nepaul frontier (medal).

THE VOLUNTEERS.

SURGEON and Honorary Surgeon-Major R. SETTLE, M.D., of the 2nd Volunteer Battalion of the Loyal North Lancashire Regiment (formerly the 14th Lancashire), has resigned his commission, which dates from July 4th, 1860; he is permitted to retain his rank and uniform.

Mr. WILLIAM COLLINGRIDGE, M.D., has been appointed Surgeon (supernumerary) to the Woolwich Division of the Volunteer Medical Staff Corps.

Quartermaster C. J. L. EAMES has resigned his commission in the London Division of the Volunteer Medical Staff; Mr. Eames joined the corps on November 27th last.

In reference to a paragraph which appeared in the JOURNAL, January 5th, we are asked to say that Surgeon-Major FRAIN'S first commission is dated March 14th, 1860, and next in promotion October 1st, 1864, and that he has never ceased his connection with the corps from its commencement, in October, 1859, until his recent resignation.

Brigade-Surgeon O. W. GEORGE, M.D., has been appointed Surgeon to the East Kent Yeomanry. Dr. George was formerly Surgeon-Major to the 1st Life Guards, but in June, 1880, was granted retired pay, which he commuted in the spring of last year.

M. F. A. DAVSON, M.D., has been appointed Acting-Surgeon to the 2nd Volunteer (Devon) Brigade Western Division Royal Artillery (formerly the 2nd Devon Artillery).

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Friday, February 11th.

Compulsory Temperance in Bombay.—In reply to Mr. S. SMITH, Sir J. GORST said, according to the official information received by the Secretary of State, the movement among the population in certain collectorates in Bombay was not one in favour of total abstinence, but a strike against the severe restrictions enforced on the tapping and sale of toddy, and the high price of the liquor.

Tuesday, February 15th.

Army Medical Officers.—Sir G. HUNTER asked the Secretary for War whether, in the recent Army Warrant, any alteration had been made in the relative rank, position, or titles of medical officers to those heretofore held by them.—Mr. E. STANHOPE replied that relative rank had been abolished for all departments, but medical officers retained all the privileges heretofore attaching to it. In other respects their status was unchanged.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE AMENDMENT OF THE METROPOLITAN SANITARY LAWS.

We note with satisfaction that the Council of the Society of Medical Officers of Health is about to take into consideration the question of the amendment of the various Acts of Parliament having reference to sanitary administration. In commencing upon the Public Health Act of 1875, the Council has, no doubt, been actuated by the thought that this is the Act which affects the largest number of people. But, as the Council would probably be the first to admit, the provincial sanitary code, as embodied in the Public Health Act, is infinitely less imperfect and unsatisfactory than the maze of Acts that now do duty for a sanitary code in the metropolis. It appears to us, therefore, that the early energies of the Council would be better bestowed upon a consolidation and improvement of the very numerous sanitary Acts which represent the uncodified public health law of London. The present position of affairs is anomalous in the extreme. That there should be one law for London and another for the provinces, and that the former should be the weaker, would be ridiculous if it were not disgraceful. Ten years ago Mr. Sclater-Booth made a half-hearted attempt to consolidate London sanitary law; but he allowed himself too easily to be overborne by the Vestries. The report of the Royal Commission on the Housing of the Poor dragged the anomaly of the position once more into light; and the Chairman of the Commission drafted a Bill, which it subsequently fell to the lot of Lord Salisbury to introduce into the House of Lords in August, 1885. The Bill was brought in, however, at the fag-end of the session, when it was obviously useless to attempt to pass it; and its introduction was, perhaps, little more than an inoffensive piece of "kite-flying." It was hoped and expected that the Bill would have been reintroduced in the Session of 1886; but the political atmosphere was so troubled and stormy, that the times were apparently regarded as unpropitious for a measure out of which little political capital could be made. There seems, however, no reason why the Bill should not be brought in again this year, and pressed to a decision. The House of Lords is in want of something to employ its spare time; and, with the Bill ready drafted, five minutes' deliberation by the Government would suffice to set going the machinery for its passage through at least one House. We do not say that the Bill is perfect; but it at least affords a basis to work upon. And should it be introduced, we commend to the careful attention of the responsible Minister an exhaustive report on the subject, presented to the Kensington Vestry last year by its Law and Parliamentary Committee, on the motion of Mr. Herbert C. Saunders, Q.C. The report of this Committee, and the appended opinions of the Vestry's Medical Officer of Health (Dr. Dudfield) and Surveyor (Mr. W. Weaver), contains most valuable indications as to the defects of the existing sanitary law of the metropolis, and the directions in which its amendment should be pressed.

SPECIAL ATTENDANCE OF MIDWIFERY CASE.

J. W. O. inquires whether he is entitled to the extra fee of £2 under the following circumstances: He received an urgent message, with an order from the overseer of the parish and also the necessary order from the relieving officer, to attend a patient two and a half miles distant. The patient had been confined ten days. He found her very ill from causes clearly due to the confinement. He had then a long and troublesome attendance of about six weeks. By Art. 183 in his rules, he concludes he is entitled to the extra fee upon the ground of long subsequent attendance.

*** In answer to our correspondent, we consider that Art. 183 was intended to meet all cases of a puerperal character, but late experience has shown that the central authority does not authorise the payment of the extra fee, except in cases occurring immediately after the confinement. We should, however, advise our correspondent to apply to his Board for remuneration, stating the exceptional nature of the case, and the prolonged attendance, and we have no doubt the Local Government Board will sanction the gratuity that may be given, as it did in a similar case not long since.

VACCINATION CERTIFICATES.

A WELL-INFORMED correspondent writes as follows with regard to the question raised in the JOURNAL of February 5th, page 313, by L.R.C.S.I., L.K.Q.C.P.: There can be no doubt that the English Local Government Board would not accept as equivalent to the special certificate of proficiency in vaccination, which public vaccinators in England must produce, a certificate of instruction in one of the Dublin dispensaries, by one of Dr. Montgomery's predecessors. Dr. Montgomery has only recently been appointed to grant special certificates, as has already been noted in the JOURNAL. The Local Government Board, before appointing a teacher or examiner, carefully assures itself of the competency of the individual to be appointed, and does not have regard merely to the fact that he vaccinates in a particular place or town. It should be noted that the Local Government Board has authorised certain public vaccinators, in London, Liverpool, Leeds, Newcastle, Bristol, Exeter, Edinburgh, and other large towns, to grant the special certificates, after satisfactory examination, to persons whom they have not themselves instructed.

THE DUTIES OF A MEDICAL OFFICER AND PUBLIC VACCINATOR.

P. T. would be glad to know, with price, the best handbook on the duties of medical officer and public vaccinator of a union appointment.

*** We are not aware that the duties of Poor-law medical officers and public vaccinators have been set out in any single manual; but Fry's *Law of Vaccination* (Knight and Co., price 5s.) is the standard and most complete work on public vaccination; whilst Lumley's *Manual for Poor law Medical Officers* (Knight and Co., price 6s.) is a useful handbook for district medical officers. We believe, however, that no edition of this latter work has been issued later than 1882. The duties of district medical officers are for the most part defined in the General Consolidated Order issued by the Poor-law Board in 1847, as amended by some general and special orders of later dates, dealing with particular matters and places. Glen's *Poor-law Statutes* (two volumes) and Glen's *Poor-law Orders* (one volume) cover the whole ground of Poor-law administration, but they are rather bulky and expensive.

FEES FOR INSURANCE CERTIFICATES.

A MEMBER OF THE BRITISH MEDICAL ASSOCIATION writes: 1. On New Year's Eve I was called to see an old man (of a strongly phthisical family) suffering from strangulated inguinal hernia, which I easily reduced. A few days later I received an order from the relieving officer to attend him. The old man died from pulmonary phthisis, and, I understand, had insured himself in an insurance company. The widow will now receive nearly £5 from the company. On Sunday last I was called from a place of worship to sign a certificate of the cause of death for the insurance company. I refused, because it might as well have been left until Monday (not being a case of urgency or necessity), and the relative had not the usual form to fill up. As union medical officer, am I obliged to fill up the form for the insurance company? Can I charge the widow for the certificate, and what would be a reasonable charge?

2. A widower lately received £30 from the same company after his wife's death. I attended his wife about five years ago for subacute rheumatism. I sent my account, as usual, to him. He, however, never paid it, although in good and regular employment; but during his wife's illness he "kindly" brought me an "order" from the relieving officer to attend. He did not receive out-door relief. Could I not compel him to pay for the attendance five years ago? He is now married again, and is consumptive, and I expect will live but a short time. He has again had an "order" from the relieving officer, and his wife will at his death receive £30 from the insurance company. Could not I charge the widow for the certificate of the cause of death for the company?

*** In answer to our correspondent, we may say that he is not compelled to fill up an insurance certificate in virtue of his office, but is entitled to payment for the same, 2s. 6d. being the lowest fee. Regarding his attendance five years ago on the late wife of his present pauper patient, he has his remedy in the usual way through the county court, but we fear he would not get much redress, or that it would not be worth his while so to proceed. The first answer equally applies to his last question.

EL CABALLO has a just grievance, which he can only get rectified by bringing his case before the next meeting of his board. We should recommend him thoroughly to sift the matter as to the writing of the order, and if his board declines to support him in his view of the case, we should recommend him to appeal to the central authority. The order was binding unless proved to be forged.

OBITUARY.

ALEXANDER FERGUSSON, M.D.GLAS., F.R.C.S.ED., L.F.P.S.G., L.R.C.P.ED., ETC.

We regret to announce the death of Alexander Fergusson, M.D., which took place of February 15th, at his residence in Peebles, after an illness of a fortnight's duration. The deceased had a considerable practice in Peebles, and was medical officer for the parishes of Peebles Manor and Stobo, surgeon to the 1st Peeblesshire Volunteers, and joint Visiting Physician to Peebles Hydropathic Institution. He contributed to the *Edinburgh Medical Journal* a paper on Traumatic Tetanus successfully treated by Chloral and Bromide of Potassium, and to the BRITISH MEDICAL JOURNAL a description of a New Automatic Tongue Depressor. The deceased took a great interest in public questions, was a member of Peebles Town Council, president of the Peebles Burns's Club, and honorary president of the Peebles Literary and Debating Society. Brought thus so frequently into contact with the public in his professional and personal aspects, it need not be wondered that his death has caused a widespread feeling of regret at the loss of so public-spirited a citizen and so respected a practitioner.

MEDICAL NEWS.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—The undermentioned Licentiates in Medicine of the College, having complied with the by-laws relating to membership, pursuant to the provisions of the Supplemental Charter of December 12th, 1878, have been duly enrolled as Members of the College.

P. T. Lyster, Lic. Med. 1866, Athlone; R. Stone, Lic. Med. 1874, Omagh.

At the usual Monthly Examinations for the Licence of the College, held on Monday, Tuesday, Wednesday, and Thursday, February 7th, 8th, 9th, and 10th, 1887, the following candidates were successful.

For the Licence to Practise Medicine and Midwifery.—J. D. O'Dowd Egan, Ballinrobe, co. Mayo; V. Nash, Limerick.

For the Licence to Practise Medicine Only.—J. Butler, Dublin; T. M'C. Foley, Wexford; J. S. Freeborn, M.D.Vict.Univ., Toronto; T. M. Frood, Donnybrook, Dublin; W. R. G. Hamilton, Rathmines, Dublin.

For the Licence to Practise Midwifery Only.—E. F. O'Sullivan, M.D., R.U.I., Powerstown, Killavullen, co. Limerick.

For the Licence to Practise as a Midwife and Nursetender, Mrs. A. Reynolds.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentleman passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received a certificate to practise on Thursday, February 3rd, 1887.

Chapman, Robert Hugh, M.R.C.S., 19, Halford Road, Richmond.

The following gentlemen passed on Thursday, February 10th.

Bartholomew, Alfred Aldam, Crowle, Doncaster.

Skelding, Henry, M.R.C.S., M.B., B.C.Camb., 16, Euston Square, N.W.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM GENERAL HOSPITAL.—Two House-Surgeons. Applications by February 26th to Henry Fox, Esq., R.N., House-Governor.

DONCASTER GENERAL INFIRMARY AND DISPENSARY.—House-Surgeon. Salary, £100 per annum, with board, etc. Applications by February 21st to W. Clark, Esq.

GLAMORGANSHIRE AND MONMOUTHSHIRE INFIRMARY AND DISPENSARY, Cardiff. Ophthalmic Surgeon. Applications by March 15th to the Secretary.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Resident Clinical Assistants. Applications by February 19th to the Secretary.

LEEDS UNION.—Assistant Medical Officer. Salary, £100 per annum, with board, etc. Application by February 21st, to Jno. King, Esq., Union Offices, East Parade, Leeds.

LISTOWEL UNION.—Medical Officer, Ballylonford Dispensary. Salary £120 per annum, and fees. Applications to Mr. David O'Sullivan, Honorary Secretary, Rushy Park. Election on March 1st.

OWENS COLLEGE, MANCHESTER.—Senior Demonstrator in Physiology. Stipend, £150 per annum. Applications by March 21st to the Registrar.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY.—Senior House Surgeon. Salary, £100 per annum, with board, etc. Applications by February 28th to R. F. Easterby, Esq., Fishergate, Preston.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road, E.C.—Junior House Physician. Salary, £50 per annum, with board, etc. Applications by February 26th to the Secretary.

SHILLELAGH UNION.—Medical Officer, Coollattin and Clonegal Dispensary. Salary £115 per annum, and fees. Applications to Mr. Thomas Lawrenson, Honorary Secretary, Ballykelly. Election on February 25th.

STAFFORDSHIRE GENERAL INFIRMARY.—Honorary Visiting Physician. Applications by February 24th to the Secretary.

WEST HERTS INFIRMARY, Hemel Hempstead.—House Surgeon and Dispenser. Salary £100 per annum, with board, etc. Applications by March 2nd to the Secretary.

MEDICAL APPOINTMENTS.

BROOK, W. F., M.R.C.S., L.S.A., appointed Clinical Assistant in the Ear Department of St. Thomas's Hospital.

BROWN, C., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Throat Department of St. Thomas's Hospital.

BULSTRODE, H. T., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Ear Department of St. Thomas's Hospital.

CALVERT, J. T., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Skin Department of St. Thomas's Hospital.

DAVIES, E. T., M.D., C.M.Edin., re-appointed Assistant-Surgeon to the Hospital for Women, Shaw Street, Liverpool.

EVANS, C. S., M.B.Cantab., M.R.C.S., L.S.A., (Extn.), appointed Resident House-Physician to St. Thomas's Hospital.

FITZGERALD, G. C., B.A., M.B., B.C.Camb., M.R.C.S.Eng., appointed Junior Assistant Medical Officer to Cane Hill Asylum, Surrey, *vice* H. Gardiner Hill, promoted.

FOX, E. L., B.A., M.B., M.R.C.S., appointed Assistant House-Surgeon to the Liverpool Infirmary for Children, *vice* J. F. Haswell, resigned.

GRIME, T. Jackson, M.B., C.M., appointed Medical Officer to the Aysgarth Union, *vice* F. Arnold Lees, M.R.C.S., L.R.C.P., resigned.

HAWKINS, H. P., M.R.C.S., L.S.A., appointed Assistant House-Physician to St. Thomas's Hospital.

HINSHELWOOD, Jas., M.A., M.B., C.M., appointed House-Surgeon to the North Riding Infirmary, *vice* T. A. Fraser, M.B., M.R.C.S., resigned.

HUTTON, J. S., M.B.Lond., L.R.C.P., M.R.C.S., appointed House-Surgeon to St. Thomas's Hospital.

JONES, J. Owen, L.R.C.S., L.R.C.P., appointed House-Surgeon to the Flintshire Dispensary, *vice* H. D. Brown, M.B., C.M., deceased.

MACEVOY, H. J., L.R.C.P., M.R.C.S., appointed Resident Accoucheur to St. Thomas's Hospital.

MONTAGUE, A. J. H., M.B.Durh., L.R.C.P., M.R.C.S., L.S.A., (Extn.), appointed Non-resident House-Physician to St. Thomas's Hospital.

PESKETT, Alfred Freeman, M.R.C.S.E., L.S.A.Lond., appointed Medical Officer of Health to the Leyton Urban District, and Surgeon to the Master Bakers' Almshouses, *vice* A. Peskett, M.D., deceased.

PHILLIPS, H. Heygate, M.D., L.R.C.S.I., appointed Honorary Consulting Surgeon to the Reading Dispensary.

SANSOM, H. A., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Throat Department of St. Thomas's Hospital.

SKELDING, H., M.B., B.A., M.R.C.S., appointed Resident Surgeon to the Bedford General Infirmary, *vice* P. C. Smith, M.R.C.S., L.R.C.P., resigned.

SOLLY, E., M.R.C.S., L.S.A., appointed Clinical Assistant in the Skin Department of St. Thomas's Hospital.

STACY, J. H., L.R.C.P., L.R.C.S.Ed., appointed Medical Officer and Public Vaccinator to the 1st District of the Henstead Union, Norfolk, *vice* T. W. Richardson, M.R.C.S., L.S.A., resigned.

STACY, J. H., L.R.C.P., L.R.C.S.Ed., appointed Medical Officer to the 6th District of the Norwich Union, *vice* C. W. Doyle, M.B., resigned.

STABB, E. C., L.R.C.P., M.R.C.S., L.S.A., appointed Assistant House-Surgeon to St. Thomas's Hospital.

STAVELEY, W. H. C., L.R.C.P., M.R.C.S., appointed House-Surgeon to St. Thomas's Hospital.

SYMES, E. West, M.D.Edin., M.R.C.S.Eng., appointed Medical Officer to the Halifax Post Office, *vice* Solomon Smith, M.R.C.S.Eng., resigned.

SYMES, G. Dickenson, M.R.C.S., late Clinical Resident, Bethlem Royal Hospital, appointed Assistant Medical Officer to the Lancashire County Asylum, Rainhill.

TAYLOR, A. E., M.B., B.S., M.R.C.S.Eng., appointed House-Surgeon to the East Suffolk Hospital, *vice* J. L. W. Kitching, M.R.C.S., L.S.A., resigned.

TONKING, J. H., L.R.C.P., M.R.C.S., appointed Assistant House-Surgeon to St. Thomas's Hospital.

WALDO, F. J., M.A., M.D., appointed Assistant-Physician to the Chelsea Hospital for Women.

WHEATON, S. W., L.R.C.P., M.R.C.S., (Extn.), appointed Resident House-Physician to St. Thomas's Hospital.

WINFIELD-ROLL, G., M.B., B.C.Cantab., L.R.C.P., M.R.C.S., appointed Second Ophthalmic Clinical Assistant to St. Thomas's Hospital.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—MEDICAL SOCIETY OF LONDON. Dr. E. Milner: On the Different Modes of Administering Mercury in Syphilis, and the Indications for their Application.

TUESDAY.—ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M. Mr. Henry Morris: A Case in which the Urinary Bladder was Twice Ruptured, the first time by an injury, the second time—seven years after the first—by the giving way of the cicatrix. Mr. W. H. Bennett: A case of Extra-peritoneal Rupture of the Urinary Bladder, the direct result of Aspiration above the Pubes, with remarks on some objections to the use of the aspirator as a means of evacuating the bladder, and suggestions for the treatment of certain cases of retention of urine.

WEDNESDAY.—BRITISH GYNÆCOLOGICAL SOCIETY, 8.30 P.M. Specimens will be shown. Adjourned discussion on Dr. Fitzgerald's paper on the Use and Abuse of Pessaries. Council at 8 o'clock.

HUNTERIAN SOCIETY, 8 P.M. Dr. SCARTH: A Review of Forty Cases of Diphtheria, illustrating its Manner of Spreading, and its Relation to other Fevers, to Diathesis, and to Neurotic and Paralytic Conditions.

FRIDAY.—CLINICAL SOCIETY OF LONDON, 8.30 P.M. Dr. Hughlings Jackson: A Case of Paralysis of Left Leg from Sub-cortical Disease. Dr. Carrington: A Case of Rheumatic Hyperpyrexia treated by the Cold Bath. Dr. Haddon: A Case of Epilepsy following an Injury to the Leg. Mr. Bowlby: Cases of Profuse Hæmaturia in connection with Granular Kidney. Living Specimens—Dr. Arthur Davies: Two Cases of Myxœdema (male and female).

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTH.

CHEESEWRIGHT.—On February 11th, at Rawmarsh, Yorks., the wife of Jno. F. Cheesewright, M.R.C.S.Eng., of a son.

MARRIAGE.

GOSTLING—PARKINSON.—On February 10th, at St. Mark's, West Hackney, by the Rev. J. G. Pilkington, M.A., Vicar, William Ayton Gostling, M.D., of Worthing, Sussex, to Frances Marion, only daughter of Mr. G. H. Parkinson, of the Royal Courts of Justice, London.

DEATH.

GIBSG.—At Kirkland, Campbeltown, Argyllshire, on February 16th, W. Gregory Gibson, medical student, aged 23 years.

QUERIES.

FORCEPS asks where he can purchase at a moderate price or hire a "Phantom," such as is used by midwifery lecturers for giving practical instruction in the use of midwifery instruments, etc.

HOSPITAL FOR CHRONIC CASES.

DR. D. LL. JONES writes: A young woman, who is a parish patient of mine, is suffering from spinal caries and is also subject to epileptic fits. She was discharged from a general hospital three months ago. I should feel obliged if you would give me, in the next issue of the JOURNAL, the addresses of any institutions to which such a case would be admitted, either for a time or permanently.

*** The absence of any provision, other than that afforded by the workhouse infirmaries for such cases, has recently been the subject of comment by several correspondents. The National Hospital for the Paralysed and Epileptic, Queen's Square, W.C., and the Hospital for Epilepsy and Paralysis, Regent's Park, N.W., receive epileptic patients for a few months, where there is a prospect of improvement.

TECHNICAL TRAINING OF ADULT DEAF-MUTES.

M.D. writes: I should be glad if you, or any of your readers, could give me advice in the following case, which I think will strongly commend itself to my brother practitioners.

F. A., aged 24, is one of three deaf and dumb children. His father, an aged medical man, is in very bad health, unable to practise, and in extremely poor circumstances. Is there any institution or place where F. A. might be taught a trade and be removed from the baneful influences which surround a life of idleness in a small country town?

ANSWERS.

B. H. A. (Member).—Certainly he is entitled to do so.

SUBSCRIBER.—The address of Moule's Patent Earth Closet Company is 5A, Garrick Street, Covent Garden.

W. A. T.—The proposition seems to meet with no favour, and we can see no advantage in pushing it.

COTTAGE HOSPITALS.

W. A. T. and Dr. CAREY COOMBS will get the information they require in a book on *Cottage Hospitals*, published by Churchill and Co., New Burlington Street.

HELMHOLTZ'S "SCIENCE OF MUSICAL SENSATIONS."

T. T.—*Die Lehre von den Tonempfindungen*, by Helmholtz, is published at Brunswick (Vieweg), price 12s. It can be obtained through Williams and Norgate, 14, Henrietta Street, Covent Garden. An English translation from the third edition, by Mr. Alex. A. J. Ellis, F.R.S., was published in 1875, price 30s., but this, it would appear, is out of print.

ADMINISTRATION OF NITROUS OXIDE TO EPILEPTICS.

INQUIRENS.—Nitrous oxide may usually be given with impunity to epileptics. This gas, however, will in some cases initiate a fit, so that such a contingency should be prepared against—gags secured, lest they drop into the larynx or pharynx; tongue guarded from injury, etc.

THE TREATMENT OF RESTLESSNESS DURING SLEEP.

M.R.C.S. writes: With regard to the case for which advice is sought by "A Member," in the JOURNAL of January 22nd, and for which a line of treatment is suggested by Dr. Lucas, I should like to ask "A Member" whether his little patient has an elongated prepuce, or if there is any difficulty in retracting the foreskin, and, if so, whether there is enlargement of the inguinal glands. Rocking of the head, as all know, often indicates very grave central disturbance, but oftener it arises from distal irritation, with subsequent, and no doubt consequent, central mischief.

NOTES, LETTERS, ETC.

SNAKE-WEED IN HYDROPHOBIA.

A CORRESPONDENT sends us the following: According to M. Kraskovsky (*Vratch*, No. 1, 1887, p. 18), a clergyman residing at Teliatchi, in the Vilna Government, the rhizome of snake-weed (*Polygonum bistortum L.*, called by the Russians "Our Lady's root," and also "crawfish's tail") is successfully used by the Lithuanian peasantry as a prophylactic in cases of bite by rabid animals. In 1872, a rabid wolf bit a number of cows at M. Kraskovsky's village. All those animals which had been treated by snake-weed remained well and sound, while the others died from hydrophobia. In 1879, a mad dog bit several pigs and hens, and two peasants; the latter took the drug, and never fell ill, but the animals soon died. Professor V. A. Manassein thinks that it would be well to study the physiological properties of the root, which, in scientific medicine, is as yet employed only as a powerful astringent in the form of a decoction of 20 parts of snake-weed to 1,000 of water, which is used externally.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. P. A. Marchand, Cincinnati; Dr. Norman Kerr, London; Surgeon-Major Ray, Malta; Dr. A. H. Bampton, Plymouth; Mr. J. Wickham Barnes, London; Jr. Willoughby, London; Mr. J. R. Talbot, Stockport; Dr. J. N. Hyde, Chicago; Mr. T. Hoskin, Hackney; Dr. Sutherland, London; Mr. Otto Hehner, London; Secretary Parkes Museum, London; Mr. M. Tuke, Staplehurst; Professor Osler, Philadelphia; Dr. Maxwell, Woolwich; Dr. A. G. C. Van Duyl, Amsterdam; Dr. Hack Tuke, London; Mr. R. S. Salmond, London; Dr. J. Batty Tuke, Murrayfield, N.B.; Mr. W. Brown, Carlisle; Dr. Arnison, Newcastle; Mr. D. J. Caddy, St. Leonards-on-Sea; Mr. Karkeek, Torquay Dr. Edwardes, London; Mr. A. H. Benson, Dublin; Mr. T. S. Short, Birmingham; Mr. W. Donovan, Erdington; Dr. Atkinson, Surbiton; Surgeon-General Quill, Woolwich; Dr. J. Ruxton, Blackpool; Mr. W. E. Green, Sandown; Surgeon G. H. Parker, Alexandria; Mr. W. H. Brodie, Farnham; Dr. G. H. Wise, Walthamstow: Dr. J. Roger, London; Dr. V. Idelson, Berne; Mr. C. Spurway, Rome; Mr. F. W. Underhill, Birmingham; Dr. Edge, Manchester; Dr. Beverley, Norwich; Dr. Styrap, Shrewsbury; Major M. S., Southsea; Dr. T. Unicume, Headcorn; Mr. G. Eastes, London; Mr. A. F. Peskett, Leyton; Dr. Emile Pfeiffer, Weisbaden; Dr. T. Cranstoun Charles, London; Mr. R. Freeman, London; Mr. R. Settle, Bolton; Dr. J. Beckett, London; Dr. C. P. Coombs, Castle Cary; Brigade-Surgeon Hamilton, Dillkooshu Oudh; Dr. W. R. D. Blackwood, Philadelphia; Mr. T. Holmes, London; Dr. E. West Symes, Halifax; Brigade-Surgeon R. J. W. Orton, Newcastle-under-Lyme; Mr. E. J. Byrd, Pontypool; Dr. C. R. Illingworth, Accrington; Surgeon A. Leahy, Bombay; Dr. Railton, Manchester; Dr. J. Dunbar Dixon, Marlow; Mr. B. Browne, London; Dr. Myer Dutch, Crewe; Dr. H. Atock, H.M.S. *Indus*; Dr. Dr. J. L. Callagan, Street; Mr W. A. Thomson, Ampthill; Mr. E. B. Stephens, Doddington; Mr. S. E. Mostyn Hoops, Wrexham; Surgeon-Major G. B. Mouat, Bangalore; Dr. Fraser, Totnes; Mr. W. C. Blackett, Durham; Mr. B. W. Cawthorne, Bath; Dr. Savage, London; Mr. C. B. Lockwood, London; Mr. W. H. Hughes, London; Mr. D'Arcy Power, London; Mr. Lawson Tait, Birmingham; Mr. J. H. Stacey, Norwich; Dr. Cullimore, London; Dr. W. P. Mears, Newcastle-on-Tyne; Dr. S. Martin, London; Mr. F. P. Mandell, Chatham; Mr. J. Lewis, Llanon; Mr. G. F. Blake, London; Mr. J. Kendall, Coniston; Mr. W. S. Frew, Princetown; Mr. G. R. Hall, Stoke, Devonport; Secretary Jacob Testimonial Fund, Dublin; Mr. G. Stokes, London; Mr. A. T. Stewart, Waterford; Mr. H. F. Oldham, Monsall; Mr. E. D. Vinrace, Birmingham; Dr. F. Knight, Swansea; Dr. J. W. Moore, Dublin; Mr. J. Bibley, Bamber Bridge; Mr. J. S. Wood, London; Mr. G. D. Symes, London; Dr. G. W. Crowe, Worcester; Dr. J. Lloyd Roberts, Denbigh; Mr. Thomson, Boxmoor; Mr. T. Browning, London; Mr. O. W. White, Tottenham; Honorary Secretary Queen's College, Birmingham; Mr. S. Wright, Bolton; Sir T. Longmore, Woolston; Dr. Reihlen, Stuttgart; Mr. C. Malcolm, Yeadon, Leeds; Mr. J. Hadley, London; Mr. J. White Hopkins, Snethisham; Mr. W. B. White, Tralee; Mr. S. de Lisle, Baldock; Dr. Norman Moore, London; Mr. Watson Cheyne, London; Dr. S. Keith, Edinburgh; Mr. H. Sell, London; Mr. W. J. Fleming, Glasgow; Dr. F. C. Turner, London; Mr. B. May, Birmingham; Mr. A. G. Klugh, London; Dr. H. Phillips, Reading; Messrs. Cassell and Co., London; Dr. Tatham, Salford; Mr. J. Willis, London; Dr. A. D. Keith, Aboyne; Mr. L. W. Keelan, Leeds; Mr. C. Penruddocke, Winchcombe; Messrs. Burroughs, Wellcome, and Co., London; Secretary School of Massage and Electricity, London.

BOOKS, ETC., RECEIVED.

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The Diseases of the Ear and their Treatment. By Dr. A. Hartmann. Translated by James Erskine, M.A., M.B. Illustrated. Edinburgh: Y. J. Pentland. 1887.

Rest and Pain. By the late John Hilton, F.R.S., F.R.C.S. Edited by W. H. A. Jacobson, B.A., M.B.Oxon., F.R.C.S. Fourth edition. London: George Bell and Sons. 1887.

Hip-Disease in Children, with special reference to its Treatment by Excision. By G. A. Wright, B.A., M.B.Oxon. Illustrated. London: Longmans, Green and Co. 1887.

The Medical Annual, 1887. London: Hamilton, Adams and Co. 1887.

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REPORTS
OF THE
COLLECTIVE INVESTIGATION COMMITTEE
OF THE
BRITISH MEDICAL ASSOCIATION.

CHOREA: CANCER OF THE BREAST.

REPORT ON INQUIRY No. II., CHOREA.

PREPARED BY
STEPHEN MACKENZIE, M.D., F.R.C.P.,
Physician to, and Lecturer on the Principles and Practice of Medicine at, the London Hospital.

THE inquiry on Chorea was commenced in September, 1882, and terminated in October, 1885.

The result is the collection of 439 cases of chorea, probably the largest number of original cases ever subjected to careful and detailed examination. The cases are contributed by members of the profession in various parts of the kingdom (two only being furnished from beyond the British Isles), by those engaged in different kinds of practice. The result of the inquiry will owe whatever merit it may possess to the gentlemen who have taken part in this collective investigation, and its faults partly to the framing of the original inquiry-card, and largely to the shortcomings of the writer of this report. There can be no doubt that the collection of facts in this inquiry is of great value. The subject is one of considerable complexity and difficulty, and the immediate results of an investigation in such circumstances are rarely striking, and may to some appear disappointing. The inconclusiveness of an inquiry, however, is no measure of its success. Good work always bears fruit, even if it is tardy in its development. The present inquiry, if it does not settle definitively any of the numerous points on which opinions are divided with regard to the causation, pathology, and phenomena of chorea, will serve as the basis of future inquiries, and narrow the issues for future investigators. It shows, further, that there are, scattered through the United Kingdom, a large number of members of our profession who are not only willing, but competent, to assist in the scientific investigation of disease; and offers a hope that properly directed inquiries may lead to most valuable results. The general purport of the inquiry will be gathered from the Memorandum on Chorea, published by the Collective Investigation Committee of the British Medical Association, in the BRITISH MEDICAL JOURNAL of April 1st, 1882. The lines of inquiry are further indicated in the tabulation of chorea returns. The order observed in the tabulation will, with one or two exceptions, be adhered to for convenience in presenting this report, and the information gathered will be dealt with in the following order: 1. Sex; 2. Age; 3. Class; 4. Nutrition; 5. Strength; 6. Complexion; 7. Previous Mental Condition; 8. Growth; 9. Sexual Function in the Female; 10. Food; 11. Number of Attacks; 12. Antecedent Illnesses; 13. Exciting Cause and Interval; 14. Characters of the Attack; 15. Condition of Heart, before, during, and after the attack; 16. Rheumatism during and after the attack; 17. Other Complications; 18. Common ailments; 19. Family History; 20. Treatment; 21. Sequelæ; 22. Locality; 23. Names of Contributors for Reference.

1.—THE SEX.

The following is the result of the analysis of the cases on this point:—

Males	114
Females	322
Sex not specified	3
	439

The preponderance of females over males in this series—nearly three females to one male (1 to 2.8)—is quite in accordance with common experience.

2.—AGE.

The age-incidence is expressed in the table below.

Age-Incidence of Chorea.

	Totals	Under 4	4	5	6	7	8	9	10	11	12	13	14	15	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	Over 40
Males	114	1			4	8	5	13	16	9	14	11	11	4	15	2				1
Females	322	1	1	3	11	17	15	29	30	39	28	29	28	16	56	8	2	1	1	5
Sex not Specified	3							1		1		1								
	439	2	1	3	15	25	20	43	46	49	42	41	39	20	71	10	2	1	1	6

Arranged in decades these cases give in

First decade	155
Second decade	262
Third decade	12
Fourth decade	2
Above fourth decade	6

In the first half of the first decade, however, very few cases occur, and the age-incidence is best arrived at by dividing the decades thus:

First hemidecade	(under 5 years)	6 cases or	1.36	per cent.
Second ,,	(6 to 10 ,,)	149	,,	33.96	,,
Third ,,	(11 to 15 ,,)	191	,,	43.50	,,
Fourth ,,	(16 to 20 ,,)	71	,,	16 15	,,
Fifth ,,	(21 to 25 ,,)	10	,,	2.29	,,
Sixth ,,	(26 to 30 ,,)	2	,,	.45	,,
Seventh ,,	(31 to 35 ,,)	1	,,	.22	,,
Eighth ,,	(36 to 40 ,,)	1	,,	.22	,,
Above eighth	(over 40 ,,)	6	,,	1.36	,,

It will be seen that the greatest incidence of the disease in this series of cases is from 11 to 15 years inclusive; next in the hemidecade, 6 to 10; a great falling off occurs in the hemidecade 16 to 20; and that the number in the other hemidecades is very small. Thus over 93 per cent. occurred in the second, third, and fourth hemidecades (that is, from six to twenty years); and above 77 per cent. of all the cases are found in the second and third decades together.

To sum up these results, the great majority of the cases here tabulated occurred between the ages of 6 and 15 years, and this probably fairly represents the usual age-incidence of chorea.

The incidence in the two sexes at different ages is very nearly equal. In the three most important hemidecades taken together the proportional incidence in males is very slightly in excess, which is entirely due to the preponderance of males in the second hemidecade. Thus:

In the second hemidecade,	males 46, or 40.34	per cent.
	females 102, or 31.67	,,
,, ,, third ,,	males 49, or 42.98	,,
	females 140, or 43.47	,,
,, ,, fourth ,,	males 15, or 13.15	,,
	females 56, or 17.39	,,

The youngest case was aged 3 years (No. 238), a female. Another case under four years of age was a male, aged 3½ years (No. 217), and proved fatal. The oldest case was a woman, aged 86 years.

CHOREA AT EXCEPTIONAL AGES.

The cases of chorea at exceptional ages deserve special mention. They are as follows:—No. 318 (Duncan J. Mackenzie, M.D., Glossop), female, aged 32. First attack. Menstruation irregular. Rheumatism with vague pains 16 years previously. Scarlet fever 24 years. Dyspepsia 6 years before. Anæmia for 8 years. Subject to headache and palpitation. Mother and sister liable to headaches. Father thought to have had rheumatism, from which sister and probably mother also suffered. Attack mild; duration 19 days; non-febrile, accompanied by vague pains in a few joints. Exciting causes, shock of a storm at night, and painful and excessive menstruation. Interval not stated. Condition of heart before, during, and after attack, slight presystolic murmur. The movements occurred almost exclusively in one arm, and only after going to bed. Hysterical?

No. 365 (M. D. Macleod, M.B., Beverley). Female, aged 40. First attack. A stout woman. Menstruation regular. No antecedent illnesses. No family history of nervous diseases or rheumatism. Attack severe, non-febrile; duration 5 months. Heart normal, before, during, and after attack. Exciting cause, blows on back and top of head. No apparent interval. Acute mania for 1 month. Large, sloughing bed-sores, and inflammation and abscess of leg occurred.

"Mental and bodily recovery proceded simultaneously, as if lesion in front of brain were disappearing."

No. 119 (W. Gowans, South Shields). Male, aged 40. Second attack; the first at the age of 11. Rheumatic fever at the age of 23 and 40. His son had chorea two years ago. Exciting cause not stated (rheumatism?). Condition of heart before, during, and after attack not stated, but subsequently there was tricuspid disease and hypertrophied right heart and heart dropsy.

No. 223 (J. Alexander, Leslie). Female, aged 63. Third attack. Moderately well nourished; food insufficient. No antecedent illnesses, except chorea and chronic diarrhœa. No family history of nervous affections or rheumatism. Exciting cause, overwork in factory. Attack moderately severe, lasting four months. Condition of heart before attack unknown, during attack occasional palpitation, after attack normal. Arsenic was given, but with no effect, though apparently of benefit in previous attacks.

No. 222 (J. Alexander, Leslie). Female, aged 68. First attack. A weakly woman, with insufficient food. Rheumatism, with distinct joint affection two years before. Subject to flatulent dyspepsia. Family history uncertain. Attack moderately severe, non-febrile, lasting 6 months, and attributed to overwork in a factory. Treatment arsenic; sulphate of zinc was given for several months without benefit.

No. 180 (W. A. Carline, M.D., Lincoln). Female, aged 73. Several previous attacks in last three years. A thin, weak woman, who had suffered from rheumatism in early and late life. Uncle gouty. Exciting cause; nervous excitement from husband often coming home drunk. Attack severe, non-febrile; duration nearly four weeks. Nodules present in the attack. Condition of heart before attack unknown, during and after attack aortic systolic murmur.

No. 62 (J. Bridger, Cottenham). Female, aged 78. First attack. Catamenia ceased 30 years. Chronic rheumatism, with permanent affection of joints, 40 years previously, after confinement. Bronchitis for 6 weeks, 4 years before attack. Ascites and anasarca 2 years. Diuresis for 7 months in previous year till within 4 months of attack. To the latter the attack ascribed. The patient was subject to anæmia, headaches and bilious attacks. A sister had chronic rheumatism for 10 years, and was helpless for 2 years. A brother, who died at the age of 70, had chronic rheumatism for 2 years. No nervous affections in family. The attack is described as severe, lasting 40 days, till death; it was febrile, the temperature ranging between 100° and 102° Fahr. The movements were violent at the onset. Condition of heart previous to and during attack; feeble, no *bruit*. Apex beat in normal position. During the attack there was chronic rheumatism in many joints; no nodules. Ulceration of the side of the tongue was caused by its choreic movements.

No. 93 (Thomas Aitken, M.D., Inverness). Female, aged 86. No previous attack recorded. Stout. Mental condition good. Food stated to be insufficient. Had suffered from rheumatism and had had small-pox. Subject to constipation. Family history not recorded. No exciting caused assigned. Attack severe; duration 1 year. The treatment was confined to regulating the bowels, as the patient declined other treatment.

3.—Class in Society.

The cases are returned as belonging to the upper class in 12 (males 3, females 9); the middle class in 115 (males 41, females 74); the lower class in 303 (males 71, females 232). Nine cases were not classified.

The preponderance, as is seen, falls very heavily on the lower classes, to which of these tabulated cases 70.46 per cent. belonged; whilst 26.74 belonged to the middle classes, and only 2.79 belonged to the upper classes. As regards the two sexes in relation to class, the females preponderate in the lower classes, as 72.27 to 61.73 per cent., whilst in the middle classes the stress falls on the males, as 35.65 to 23.03 per cent. In the upper classes the proportion of the two sexes is nearly equal. The question may be raised whether these figures express the usual relative prevalence of chorea in the different strata of society. It may be held that notes are more easily taken in the case of poorer patients, and that those engaged in practice amongst more wealthy patients will not have time, or take the trouble to record their experience. On the other hand, the high standing of a large number of the contributors to this inquiry negatives the latter view and renders it very probable that these numbers fairly represent the frequency with which chorea occurs in the different classes of society. Of course, it is obvious that the lower and middle classes largely predominate in numbers over the upper classes.

4.—Nutrition.

The patients are stated to have been thin in 212 cases, or 48.29 per cent.; to have been moderately well nourished in 181, or 41.23 per cent.; and stout in only 43 cases, or 9.79 per cent.

5.—Strength.

The patient is reported to be weak in 133 cases, or 30.29 per cent.
,, ,, moderate in 202 ,, 46.01 ,,
,, ,, strong in 69 ,, 15.71 ,,

6.—Complexion.

The complexion is stated to have been fair in 232, or 52.84 per cent.
,, ,, ,, dark in 191, or 43.50 ,,
,, ,, ,, mixed in 1, or .227 ,,

7.—Previous Mental Condition.

The replies to this question, partly owing to question asked, mix up the intellectual with the nervous or emotional state of the patient previous to the attack.

Analysing the tables, it would appear that the intellectual condition of the patient was good or normal in 298 of the cases, or in 67.88 per cent.; fairly good in 4; above the average in 58, or in 13.21 per cent.; and below the normal only in 29 cases, or in 6.6 per cent.

On the emotional side, the patient is stated to have been excitable in 12, timid and nervous in 5, anxious in 2, highly nervous in 1, cheerful in 2, hysterical in 2. In one case the mental condition is said to have been "perfect." It is scarcely necessary to add, it belonged to the fair sex.

8.—Growth.

The growth is stated to have been moderate in 208, or 43.38 per cent.
,, ,, rapid in 159, or 36.21 ,,
,, ,, slow in 49, or 11.16 ,,

If we were to attempt to form a "composite picture" of the choreic patient based on these facts, it would be that of a moderately vigorous spare child between 6 and 15 years of age, of rather above the average intelligence; indeed, the subject would be of the type we are wont to regard as "nervous."

9.—Sexual Functions in the Female.

In many of the cases the patient had not reached the age when menstruation usually commences. In no case is menstruation recorded to have been present in a patient under 13 years of age. Below are tabulated all cases in which reference is made on this point, above 10 years of age, as it may be of interest to some. Menstruation is stated not to have appeared in 70 cases, to have been regular in 44, and to have been irregular in 32. Seven women were pregnant at the time of the attack; of these, particulars are given below. One woman was suckling.

Table of Menstruation at Different Ages.

Age.	Not Appeared.	Regular.	Irregular.
10	3	—	—
11	8	—	—
12	17	—	—
13	15	3	2
14	13	2	2
15	4	8	6
16	1	9	10
17	3	4	3
18	1	2	1
19	—	7	3
20	—	4	1
21 to 25	—	3	2
26 to 30	—	1	1
31 to 35	—	—	1
36 to 40	—	1	—
	65	44	32

In 5 cases under 10 years of age, menstruation is recorded as not having commenced, making the 70 in which it had not appeared. Thus, in the 32 cases where there was irregular menstruation, in those who were 16 years or over, in whom no catamenia having appeared, menstruation may be considered as retarded, numbering 5, and in the 7 pregnant women, amounting in all to 44 cases, disordered or very active sexual functions may have had some share in the production of chorea. The fact of the preponderance of males over females in the second hemidecade, before the sexual function developes, appears to support the

view that one cause of the greater frequency of chorea in the female sex is due to this influence, but this is rather negatived by the fact that in the first hemidecade also, that is, in children under 5 years of age, the greater stress falls on the females. The greater incidence of the disease in males in the second hemidecade, is therefore in all probability a coincidence only. The numbers, however, are too small to warrant any conclusion.

CASES OF CHOREA IN CONNECTION WITH PREGNANCY.

No. 40 (J. L. Treharne, Roath, Cardiff), aged 19. First attack. Rheumatism with distinct joint-affection, and fever one year before. Exciting cause: fright, three or four days before attack. The onset was sudden, the attack severe, non-febrile, and lasted six weeks. Miscarried at six months, two weeks after commencement of chorea. Rapid improvement under treatment by sulphate of zinc, tonics, skipping and exercises.

No. 132 (Maurice Davis, M.D., Brunswick Square), aged 23. Third attack. Menstruation stated to be regular, although pregnant. No rheumatism before, during, or after attack. Exciting cause assigned, debility. Attack severe, lasting eight months. Heart normal before, during, and after attack. Great aggravation of disease by worry at loss of wedding-ring. Sleeplessness marked. Treated by arsenic, bromide of potassium, chloral at night, and extract of malt. Massage subsequently employed; relief in two days; marked improvement in a week.

No. 142 (W. Benthall, M.D., Derby), aged 23. First attack. Scarlet fever in childhood. Doubtful acute nephritis at 8; rheumatism with distinct joint-affection at 10. Exciting cause not stated. Attack severe, non-febrile; duration, eight weeks. Heart normal during and after attack. Treated with bromide of potassium, chloral, and purgatives.

No. 206 (T. W. Thursfield, M.D., Leamington), aged 24. Second attack. Seven months pregnant. Scarlet fever as a child; rheumatic fever with distinct joint-affection four years before attack; anæmia some time. Exciting cause, shock; death of father one month before chorea. Attack severe, febrile towards end. Heart normal before and during attack. The patient came under treatment towards the end of the fifth month of chorea. Chloral hydrate in from ten to twenty grain doses, every three hours, produced no effect. Morphine injections, with or without atropine, while under chloroform, did not produce sleep. Hyoscyamine, subcutaneously, was without effect. Chloral in doses of forty and fifty grains gave some sleep (as much as 180 grains given in twenty-four hours). Premature labour, fourteen days after beginning of treatment, induced by means of Barnes's bags. Delivery of healthy stillborn child in twenty-six hours. Choreic movements did not stop. She died exhausted two days later. No *post-mortem* examination allowed.

No. 239 (T. Frederick Pearse, M.D., Haslemere), aged 26. The first attack came on four months after confinement; was slight, lasting several weeks. Obstruction of bowels (?) two years before attack. Rheumatic pains in several joints, just before attack. Anæmia Exciting cause: loss of money a few days before attack. Severity moderate, non-febrile; duration uncertain. Heart normal before and during attack. Treatment unattended with relief by (1) arsenic; (2) bromide of potassium. In reply to an application, Dr. Pearse has been good enough to furnish the following further particulars. "My chorea case, I very much regret to say, has left the neighbourhood, and gone somewhere on the South Coast. She was undoubtedly pregnant when I last saw her. Her mental condition was certainly peculiar, but showed nothing decided at my visit. Her neighbours, however, told me they sometimes thought she would go out of her mind. She appears to have had an attack of hæmorrhage at about the third month, but which was not attended with a miscarriage, and when she left the neighbourhood she was about six months pregnant. The movements were of typical choreic form; she kept on shuffling about her arms and legs 'in a fidget.' Her speech was constrained and somewhat hesitating. From what I heard, she seems to have been decidedly better the last few weeks of her stay in this neighbourhood, but at times, during my attendance, I had to keep her in bed."

No. 288 (H. Handford, M.D., Nottingham), aged 19. Fifth attack Pregnant five months. Rheumatism with distinct joint-affection ten years before. Anæmia for years. Exciting cause unknown; attack mild, non-febrile; duration unknown. Condition of heart before attack unknown, probably the same as during. During attack, mitral systolic murmur; condition after unknown. Memory much affected. Treated with bromide of potassium and iron.

No. 381 (W. H. Dobie, M.D., Chester), aged 20. Second attack. Rheumatic fever with chorea four years before. Vague pains two years. Short of breath since childhood. Exciting cause: pregnancy. Attack severe, sub-febrile, duration three months. No heart-affection. The chorea began when four months pregnant, on July 20th; was very violent, once threw her out of bed. She used to call out loudly, at which time the chorea would stop. Aborted September 6th. Rapid emaciation had been going on; this stopped and chorea got less; became incoherent, and then maniacal. Removed to asylum September 21st; left there cured after six weeks.

Thus, of the cases of chorea in pregnant women five recovered, one was lost sight of, and one died. The mortality is usually high in the pregnant.

10.—FOOD.

The returns are very nearly complete on this point, particulars being recorded in 437 of the 439 cases. In 384, or in 87 per cent., the food is stated to have been sufficient; in 48, or in not quite 11 per cent., it is stated to have been insufficient. In one only is it stated to have been excessive; in two it is stated to have been of bad, and in one of doubtful, quality.

11.—NUMBER OF ATTACKS.

The attack recorded in the tables was: The first in 306 (males 84, females 222), or in 69 per cent.; the second in 80 (males 15, females 65); the third in 18 (males 6, females 12); the fourth in 7 (males 3, females 4). In 13 cases (male 1, females 12) the patient is stated to have had several attacks, and in 10 cases (males 5, females 5) the number of the attack is not stated.

12.—ANTECEDENT ILLNESSES.

This is one of the most important sections of the inquiry. Speaking of antecedent illnesses generally, in the first instance, the following are the facts recorded.

	Total.	Males.	Females.
Rheumatism, with distinct joint-affection and fever	116	32	84
Rheumatic, vague, or growing pains ...	62	15	47
Chronic rheumatism	1	—	1
Scarlet fever	129	32	97
Measles	116	30	86
Scarlet fever and measles	34	9	25
Whooping-cough...	43	8	35
Enteric fever	14	2	12
Varicella	8	1	7
Anæmia	92	26	66
Jaundice	2	1	1
Tonsillitis	4	2	2
Pneumonia	5	2	3
None	38	11	27

In addition to these, numerically important, the following antecedent illnesses are recorded: Struma, 5 (males 2, females 3); worms, 5 (females); hemiplegia, 3 (male 1, females 2); pleurisy, 2 (females); dyspepsia, 2 (females); bronchitis, 2 (females); infantile paralysis, 2 (females); congestion of brain, 1 (female); asthma, 1 (male); epilepsy, 2 (male 1, female 1); convulsions, 2 (male 1, female 1); exophthalmic goitre, 1 (female); incontinence of urine, 1 (female); somnambulism, 1 (female); diphtheria, 1 (male); mumps, 1 (male); small-pox, 1 (male); typhus, 2 (male 1, female 1); intermittent fever, 1 (female); eczema, 1 (male); purpura, 1 (male); erythema nodosum, 1 (female); ecthyma, 1 (female); parotid abscess, 1 (female); acute nephritis, 1 (male); toothache, 1 (female); rheumatic synovitis, 1 (female); lateral curvature, 1 (female); peritonitis, 1 (female); otorrhœa, 1 (female); rickets, 1 (female); obstruction of bowels, 1 (female).

It is desirable to consider some of the more important antecedent illnesses in greater detail. First, as to—

RHEUMATISM AS AN ANTECEDENT.

Acute and subacute rheumatism preceded the attack of chorea in 116 cases (males 32, females 84). This gives a percentage of 26 for the whole number in which the sex was specified. The incidence in the two sexes is practically equal, being 27 per cent. in males, and 26 per cent. in females. In 9 cases (males 4, females 5) the patient had had two previous attacks of acute or subacute rheumatism; in 2 cases (females) had four previous attacks of rheumatism; one female patient had had six attacks of rheumatism; and one male had had several attacks. One female patient (No. 62) had suffered from chronic rheumatism for years.

Besides these cases of definite rheumatism, in 62 cases (males 15, females 47), or 14 per cent., the patient is stated to have had "vague pains"—the term suggested in the inquiry—"rheumatic," or "growing pains." These cases occupy debatable ground. Some would

regard them, in some instances at least, as positively rheumatic, some as possibly rheumatic, whilst others would deny altogether their right to be regarded as rheumatic. They have throughout this report been everywhere distinguished from the indubitably rheumatic cases.[1]

It has been found practically impossible to give the data on which an opinion can be based as to the truly rheumatic nature of these cases, short of the whole record of each case. The reader is, therefore, referred to the cases themselves, which are grouped below according as they are, in the opinion of the reporter, believed to be rheumatic or doubtfully rheumatic.

Rheumatic, Vague, or Growing Pains.

Believed to be Rheumatic.—Males: Nos. 125, 171, 177, 303, 341, 367, 438; Females: Nos. 95, 97, 103, 104, 106, 133, 186, 192, 225, 238, 239, 242, 276, 282, 283, 318, 353, 398, 426.

Doubtfully Rheumatic.—Males: Nos. 53, 80, 130, 139, 146, 178, 247, 439; Females: Nos. 2, 6, 13, 17, 42, 56, 110, 113, 123, 127, 147, 148, 169, 233, 236, 243, 248, 262, 270, 307, 310, 317, 326, 335, 347, 433, 435, 437. Sex not recorded, No. 408.

If the 26 cases of "vague pains" believed to be rheumatic are added to the 116 cases with an antecedent history of acute or subacute rheumatism, it raises the percentage of antecedent rheumatism to 32.5.

In estimating the frequency of the association of chorea with rheumatism, besides the 116 cases in which rheumatism preceded the chorea, there require to be added the cases suffering from rheumatism during and after the attack of chorea, which had not previously been affected with rheumatism. These number 26 (males 9, females 17). These, added to the 116 cases, give 116+26=142 cases of chorea associated with rheumatism, and raise the percentage of rheumatism to 32.

Amongst the patients with antecedent rheumatism there was heart-affection of a definite character in 59 cases (males 17, females 42), or in 50 per cent. Besides these, there were altered heart-sounds or functional heart-derangements in 17 cases (males 3, females 14), or in 14 per cent. In the 58 cases of antecedent "vague pains," there was positive heart-disease in 19 cases, or in 32 per cent.; and altered sounds or functional derangements in 6 cases, or in 10 per cent.

It will be subsequently seen that, under the heading of heart-affection, of the whole number of cases of chorea the heart was affected by disease of what may be called a positive kind, in 32 per cent.; so that, as would be anticipated, those who had previously suffered from rheumatism had a marked preponderance of heart-disease.

Of the patients who had suffered from definite antecedent rheumatism, 12 cases (males 5, females 7) had acute rheumatism during the attack of chorea; 17 cases (males 2, females 15) had subacute rheumatism in the attack of chorea; and 3 cases (females) suffered from "vague pains" during the attack of chorea. One case suffered from chronic rheumatism previous to and during the attack.

Of the cases with definite antecedent rheumatism, 116 in number, in 61 cases (males 17, females 44), or in 52 per cent., there was a family history of rheumatism; whilst in the 58 cases of "vague pains" there was a family history of rheumatism in 29 cases (males 10, females 19), or in 49 per cent.

Scarlet Fever as an Antecedent.

Scarlet fever was an antecedent in 129 cases (males 32, females 97), or in over 29 per cent.[2] Of these, it was the sole antecedent recorded in 27 (males 7, females 20), or in 6 per cent. It was associated with rheumatism (including pains) in 56 cases (males 14, females 42); with measles in 34 (males 9, females 25); with whooping-cough in 10 (male 1, females 9); with varicella in 3 (females); with anæmia in 34 (males 10, females 24); and in 3 cases (females) the patient is stated to have suffered from the ordinary diseases of childhood.

Considerable importance and interest attaches to the question of the influence of scarlet fever, measles, and other exanthemata, in the causation of endocarditis, and thus (1) lead to the production of a murmur which may be present previous to the attack, or be heard in an attack of chorea, or (2) predispose to the production of a murmur during the attack; this, of course, without reference to the share, if any, endocarditis has in causing chorea. Of the 27 cases in which scarlet fever was the sole antecedent illness recorded, in 10 cases there was some heart-affection. These cases were briefly as follow:

No. 51, male, aged 14; first attack; mitral systolic murmur, heard only during the attack. Heart known to be normal before.

No. 174, male, aged 12; first attack; aortic regurgitation during and after attack. Heart known to be normal before.

No. 232, male, aged 16; second attack; mitral systolic murmur, and enlargement of heart during the attack. Heart known to be normal before.

No. 250, male, aged 10; first attack; scarlet fever shortly before chorea. Heart known to be normal before attack. Mitral systolic murmur during and after, with hypertrophy of heart after. Subacute rheumatism in a few joints during and after attack of chorea.

No. 16, female, aged 13; at least one previous attack of chorea. Condition of heart before attack unknown. Mitral systolic murmur during and after.

No. 111, female, aged 9; first attack; loud apical systolic murmur during and after attack of chorea. Heart known to be normal before.

No. 166, female, aged 14; four previous attacks; slight mitral murmur before, during, and after attack.

No. 237, female, aged 12; first attack; mitral systolic murmur during attack. Heart known to be normal before.

No. 309, female, aged 16; second attack; mitral systolic murmur during attack, none after. Heart known to be normal before.

No. 328, female, aged 11; first attack; mitral systolic murmur during and after attack. Condition of heart before attack unknown.

So that of these cases, in only one was the heart known to have been affected previous to the attack of chorea tabulated, and in this case the patient had had four previous attacks of chorea. On the other hand, it is interesting to note that, in seven out of the ten cases in which the heart was known to have been free from signs of disease before the attack, a murmur was present during the attack, one only of these suffering from rheumatism during the attack; whereas in one out of every three and a half cases, or in 28 per cent. of the general cases, a murmur was present where the heart was known to have been normal before the attack. Perhaps the numbers are too few to warrant a conclusion, but the tendency of these facts is to show that scarlet fever predisposes to the occurrence of heart-affection in the attack of chorea.

Measles as an Antecedent.

Measles is recorded as an antecedent in 116 cases (males 30, females 86), or in 26 per cent.[2] Of these, it was the sole antecedent illness in 32 cases (males 7, females 25), or in over 7 per cent. Measles was associated with scarlet fever as an antecedent in 34 cases (males 9, females 25); with rheumatism (including pains) in 39 cases (males 8, females 31); with anæmia, in 17 cases (males 8, females 9); with whooping-cough, in 35 cases (males 8, females 27); with varicella, in 5 (male 1, females 4).

In 9 cases in which measles was the sole antecedent illness recorded,

[1] Dr. Octavius Sturges gives (*Lancet*, 1884, vol. ii, p. 484), as the result of ten years' observations, the following estimate of the antecedence of rheumatism in chorea. In 219 cases of chorea in children, there had been previous rheumatic fever in 16, pains, probably rheumatic, in 25 to 28, and 12 were without information on the point; so that rheumatism preceded the attack in about 42 out of 219 cases, or in nearly 20 per cent. He shows, however, from facts collected by Dr. Horatio Donkin, Dr. Coutts, and himself, that in patients coming to hospital for various diseases, excluding cases of rheumatism and chorea, there was antecedent rheumatism in something over 20 per cent. for adults, and 15 per cent. for children.

Dr. Horatio Donkin (*Westminster Hospital Reports*, vol. i, p. 5) in 104 consecutive cases of chorea in children, found antecedent rheumatism in 27, or in nearly 26 per cent., and of these in 15 the chorea seemed to be immediately caused or excited by the rheumatism.

In the "Preliminary Report on Chorea," based on some of the same cases from which this complete Report is drawn up (*Collective Investigation Record*, vol. i, p. 113), in 128 cases of chorea there were definite antecedent rheumatism in 31 cases, or in 24 per cent.

In relation to antecedent rheumatism, it may be remarked that the reporter has shown that, of 172 cases of chorea in the London Hospital, there was a history of distinct rheumatism in 47, or 27.32 per cent., and of "pains" in 30, or 17.44 per cent. (*Trans. Internat. Med. Congress*, 1881, vol. iv, p. 97.)

The Committee is indebted to Dr. Joseph Hunt, Queen's Road, Dalston, for the following analysis of 50 cases of chorea, occurring under his notice in the neighbourhood of Wolverhampton. These 50 cases consisted of 9 males and 41 females. The average age was 12. Of the 9 males, one had had rheumatic fever or rheumatism, no heart-affection; of the 41 females, 10 had had rheumatic fever or rheumatism, and 5 of these had heart-disease. Thus 22 per cent. of the chorea cases had a history of rheumatic fever or rheumatism, and the average age of these was 12¾ years. In addition, 6 cases had some form of cardiac disease, without any rheumatic history to be discovered. Therefore, 22 per cent. of the chorea cases had some cardiac affection.

As to Causation.—In 3 cases, all girls, and 2 with a maternal neurotic history, the chorea distinctly followed fright. In 2 cases, pregnancy was the cause, but in each case it was a second attack, the first occurring apart from pregnancy. Both cases had a maternal neurotic history. In 2 cases (girls) it was distinctly mimetic, and in both there was a maternal neurotic history.

As to History.—Of the 9 boys, one had a father in a lunatic asylum, and one a brother with chorea. Of 41 females, 16 had no neurotic history. Of the other 25, 10 had a neurotic history on paternal side, 13 on maternal side, and 2 relationship not noted. The neuroses were—fits 25 per cent., chorea 40 per cent., paralysis 17 per cent., lunacy 35 per cent.

[2] The large proportion of cases in which scarlet fever and measles are recorded as antecedent illnesses appears due to the early age of the majority of the patients; children's diseases being often disregarded in the histories of older patients suffering from various diseases.

there was some heart-affection during the attack of chorea. Three were males (Nos. 253, 258, 389), and six were females (Nos. 52, 165, 212, 267, 350, 376). In all the cases, the heart-affection involved the mitral valve, the murmur being systolic in all except one (No. 258), in which there is stated to have been a "loud diastolic murmur at apex, heard plainly towards axilla; sound at base normal." In addition to these cases, there are two others in which the heart-sounds were altered, but which are not regarded as definite heart-disease, namely, No. 86, female, condition of heart before attack not known; during attack, first sound at apex, rough and accentuated; action irregular; condition of heart after attack unknown. No. 284 (female); condition of heart before and after attack unknown; impure first mitral sound during attack.

None of the cases are known to have had a murmur previous to the attack of chorea. In four, it is stated that the heart was known to be normal before the attack; so that none of these cases afford any evidence that measles, *per se*, induces heart-disease.

Anæmia as an Antecedent.

Anæmia is recorded as an antecedent in 92 cases (males 26, females 66), or in 20 per cent. of all the cases (or 21 per cent. excluding those without the sex recorded). It had lasted for weeks in 10 cases, for months in 33, for one year in 12, for two years in 6, for three years in 1, and for more than three years in 8. In 1, it is stated to be chronic, in 1 it had existed the greater part of life, and in 4 it had always been present. The incidence in the two sexes is nearly equal, with a slight excess in males—as 22.5 to 20.5 per cent.

Anæmia was associated with rheumatism as an antecedent in 37 cases (males 10, females 27); with scarlet fever in 32 cases (males 9, females 23); with measles in 18 cases (males 8, females 10); with whooping-cough in 5 cases (male 1, females 4); and with varicella in 3 cases (male 1, females 2).

In 21 cases (males 7, females 14), or in not quite 5 per cent., anæmia is the sole recorded antecedent illness. Of these cases, in 4 males (Nos. 37, 90, 128, 274) and in 5 females (Nos. 112, 219, 272, 287, 378), or in 9 cases in all, there was some heart-affection during or after the attack of chorea. In none of these cases was a murmur known to have been present previous to the attack; but in one (No. 274), the first sound at the apex was prolonged previous to, and during the attack; and a mitral systolic murmur gradually developed after. In this case, the pre-existing anæmia may be credited with a share in the production of the *bruit*. In the other cases, there is no evidence of anæmia causing the murmur heard in the attack of chorea, as the previous condition of the heart was unknown.

13.—Exciting Cause and Interval.

The ascribed exciting cause of the attack of chorea was of a directly or indirectly nervous character in 222 cases (males 51, females 171), or in 50 per cent. This was nearly equally so in the two sexes, with a preponderance in females, the percentage in females being 55, that in the males being 44.

The causes included as nervous are as follow:

	Total.	Males.	Females.
Fright	98	24	74
Mental overwork	71	15	56
Shock	17	3	14
Imitation	13	3	10
Anxiety	4	—	4
Excitement	2	—	2
Mental distress	1	—	1
Disappointment	1	—	1
Injuries	5	3	2
Sunstroke	1	1	—
Worms	9	2	7
	222	51	171

In addition to these neurotic causes, the following are recorded: rheumatism in 18 cases (males 7, females 11); scarlet fever, 2 (male 1, female 1); measles, 1 (male); enteric fever, 1 (female); sudden changes of temperature and chills, 5 (males 3, females 2); tropical heat, 1 (male); debility, 3 (females); diuresis, 1 (female); acute suppurative otitis, 1 (female, No. 87; the chorea ceased three days after the abscess was opened); hemiplegia and aphasia, 1 (female); menstrual irregularities and pregnancy, 3; overfeeding, 1 (female); anæmia, 1 (female); indefinite illness, 1 (female); convalescence, 1 (female); emboli, 1 (female); and in one female it was attributed to east winds. Some of these might legitimately be included amongst the neurotic causes. Some appear to have been simply concomitants. It is further stated that the exciting cause was unknown in 27 cases (males 3, females 24), or in 6 per cent.; and that there was no exciting cause in 40 cases (males 13, females 27), or in 9 per cent.

Analysing the ascribed exciting causes, we find, under the heading of Fright, the following: falls, 8 (males 2, females 6); fright by animals, 6 (females); struck at school, 3 (females); scolding, threats, or fear excited at school, 3 (females); practical jokes, 2 (females).

Amongst causes stated to have excited the attack in single instances, the following are named in males: fear of being beaten for neglecting work, threatened suicide of father, stuck in mud at school, run after by policeman, fear of tree falling on him, sudden death of brother in his presence, all but fell into water; and in females, in individual cases, the following are named: fall of ladder, burglars, seeing sister in a fit, window broken by stone at night, seeing men fighting, mat catching fire, nervous excitement from husband coming home drunk, shock of storm at night, man in the house at night, seeing corpse of baby, seeing boy in a fit, fright in childbed, seeing man with severe chorea, and the constant presence of "a wicked aunt."

With reference to the *interval* between the fright and commencement of the chorea, the following facts are elicited:

No interval (immediate onset) in 6 cases	Within one week, 44.
Interval of half an hour, 1	
,, ,, a few hours, 6	
,, ,, one day, 5	
,, ,, thirty to thirty-six hours, 2	
,, ,, two days, 5	
,, ,, three days, 6	
,, ,, three to four days, 1	
,, ,, four days, 1	
,, ,, a few days, 1	
,, ,, six days, 2	
,, ,, several days, 1	
,, ,, one week, 7	
,, ,, over one but less than two weeks, 2	
,, ,, two weeks, 8	
,, ,, three weeks, 8	
,, ,, one month, 6	
,, ,, two months, 5	
,, ,, three months, 1	
,, ,, six months, 1	
,, ,, twelve months, 1	

Under the heading of Shock, the following details are given. Death of relatives, 6; seeing the corpse of mother, 2; and one each of the following: undeserved flogging at school, shock of falling water, shock of blow on arm. The shock was in one case attributed to love—of course, the patient belonged to the more impressionable sex. In one case (No. 379), the attack was ascribed to the shock of the death of sister when the patient was convalescing from rheumatism. As six weeks elapsed between the supposed exciting cause and the attack of chorea, it is difficult to avoid the conclusion that the rheumatism had at least as much to do with the production of the chorea.

Fright and shock are so nearly akin in nature, that it is but natural that some confusion should exist in trying to distinguish between them. Thus some cases of apparently the same kind are by one observer classified as caused by fright, and by other observers as shock. The distinction, however, is not of any real importance, as they act in closely similar manner on the nervous system.

The interval between the shock and chorea was as follows:—Under one week, 4 cases (in one case, that of a boy, who had an undeserved flogging at school—No. 261—it was only one day); one week, 4 cases; two weeks, 3 cases; one month, 1 case; six weeks, 2 cases; two months, 1 case; four months, 1 case.

As already stated, the exciting cause of the attack of chorea was attributed to *mental overwork* in 71 cases, or in 16 per cent. As this is a matter of great practical importance in relation to education and overpressure at school, these cases have been arranged according to their ages in the following table:—

Mental Overwork as an Exciting Cause of Chorea.

	Totals.	6 to 10 years.	11 to 15 years.	16 to 20 years.
Males	15	6	7	2
Females	56	21	29	6
	71	27	36	8

From this table it is apparent that it is between the ages of 6 and 15, corresponding with the age incidence of chorea from all causes,

that the greatest number suffered from "educational overpressure." Beyond the latter age education ceases in the majority of cases of the classes from which these cases are drawn. The duration of the mental overwork is not mentioned in most of the cases.

The exciting cause was ascribed to *bodily overwork* in 34 cases, or excluding two cases aged respectively 63 and 68 in 32 cases, or in 7 per cent. The duration in most cases was indefinite. They are arranged, according to ages, in the table below.

Bodily Overwork as an Exciting Cause of Chorea.

	Totals.	6 to 10 years.	11 to 15 years.	16 to 20 years.	Over 20
Males ..	12	1	6	4	1
Females ..	20	2	6	11	1
	32	3	12	15	2

14.—Characters of the Attack of Chorea.

These will be considered with regard to (*a*) severity, (*b*) distribution of movements, (*c*) duration, (*d*) mode of termination, (*e*) temperature.

(*a*) *Severity of Attack.*—For convenience, the gravity of the attack has been arbitrarily, but conveniently, classified as mild, moderate, and severe. The character as to gravity is specified in 429 of the 439 cases.—The attack is described as mild in 81 cases (males 19, females 62), or in 18 per cent. ; moderate in 188 cases (males 49, females 139), or 42 per cent., and severe in 160 cases (males 45, females 115), or 36 per cent.

(*b*) *Distribution of the Movements.*—In the majority of cases, no special mention is made of the range of the movements. In 30 cases (males 8, females 22) the movements are stated to have been entirely, or predominantly, on one side. The hemichorea was right-sided in 10 cases (males 3, females 7) ; left-sided in 13 (males 4, females 9) ; unilateral, but side affected not specified, in 7 (male 1, females 6). In two cases the movements were entirely facial. These numbers probably convey no accurate notion as to the distribution of the movements in chorea, as it cannot legitimately be concluded from no mention of the point that the movements were bilateral and equal. Attention should be directed to some cases presenting unusual or important features.

No 181, female, aged 26 ; the movements confined to right side ; at commencement of attack it simulated facial paralysis, to which soon followed twitching (Ed. Crossman, Hambrook, near Bristol).

No. 218, male, aged 9 ; second attack, left hemichorea ; previous attack, right hemichorea (C. H. Milburn, M.S., M.B., Durham).

No. 130, male, aged 11 ; first attack ; the spasm was most violent in one arm ; splint and bandages and the continuous current were employed in its treatment (C. B. Coombs, M.D., Somerset).

No. 417, female, aged 14 ; first attack, attributed to the shock from a blow on the arm ; the attack commenced seven days after the injury in the injured arm (James Crawford, Sevenoaks).

No. 367, male, aged 6 ; first attack, occurring thirty hours afterwards, and attributed to fright from the sudden death of his brother in his presence ; four months before onset he was nearly drowned, since when he has been very nervous and fidgety at night ; the right side was almost exclusively affected ; tongue protruded to right ; paresis of right arm, and there was considerable choreic aphasia. This case is further interesting in that the patient had had rheumatism with vague pains a week or two before the attack, and that during the attack he had subacute rheumatism in a few joints limited to the left side; when the rheumatism began, the left side became affected (F. G. Benham, M.D., Ipswich).

No. 297, female, aged 18 ; first attack ; paresis of right arm fourteen days before the onset of chorea (W. Newman, M.D., Stamford).

No. 414, female, aged 9 ; first attack ; speech first affected ; numbness of certain fingers during attack (Wm. J. Mackie, Turvey, Beds).

No. 318, female, aged 32 ; first attack ; the movements occurred almost exclusively in one arm, and only after going to bed; (?) hysterical (Duncan J. Mackenzie, M.D., Glossop).

No. 150, male, aged 6 ; first attack; tonic painless contraction of extensors of right hand ; can be relaxed at will ; chorea slight; spasm lessened under treatment (W. Bernard, Derry).

No. 411, male, aged 9 ; first attack; followed scarlet fever four months, parotid abscess three months, anæmia four months, complicated by scarlatinal nephritis ; the larynx was affected (John King, Kilburn).

(*c*) *The Duration of the Attack.*—The duration of the attack is given, in the cases in which information was afforded on this point, in the table below :

Duration of the Attack of Chorea.

	1 week.	2 weeks.	3 weeks.	4 weeks.	Under 2 months.	Under 3 months.	Under 4 months.	Under 6 months.	Over 6 months.
Males	1	2	6	11	36	26	9	6	8
Females	3	11	16	21	97	69	35	26	15
	4	13	22	32	133	95	44	32	23

From this table it will be seen that the usual duration of an attack of chorea, chiefly in private practice, is from two to three months ; 57 per cent. of the cases in which the duration is recorded, or 53 per cent. of the whole number of male and female cases tabulated, extending over this period of time.

(*d*) *Mode of Termination.*—Death occurred in 9 cases (males 3, females 6), which gives a death-rate of 2 per cent. The remainder of the cases are believed to have terminated favourably, though in a few recovery was not completed when the report was furnished, and one or two cases passed out of the observation of the reporter. The fatal cases are as follow :

No. 62, female, aged 78 ; first attack ; catamenia ceased thirty years ; chronic rheumatism, with permanent affection of joints, forty years ago, after confinement ; bronchitis for six weeks four years ago; ascites and anasarca two years ; diuresis for seven months last year, till within four months of onset. To the last the chorea was attributed. The patient was subject to anæmia, headaches, and bilious attacks ; a sister had chronic rheumatism for ten years, and was helpless for two years ; a brother, who died at the age of 70, had chronic rheumatism for two years ; no nervous affections in family. The attack is described as severe, lasting forty days, till death ; it was febrile, the temperature ranging between 100° and 102° Fahr. ; the movements were violent at onset. Previous to the attack the action of the heart was feeble ; no *bruit*. During the attack the same condition was present, the apex beat being in its normal position; chronic rheumatism in many joints was present during the attack ; no subcutaneous nodules were observed ; there was ulceration of the side of the tongue from choreic movements (J. Bridger, Cottenham).

No. 172, female, aged 8½ ; second attack ; the first 2½ years previously, lasting nine weeks ; the patient had had convulsions several times since five years of age, and suffered from constant anæmia ; after first attack had dyspnœa and palpitation on the least exertion ; a sister had convulsions ; father and mother suffered from chronic rheumatism ; no exciting cause specified ; attack described as moderately severe; temperature normal or subnormal ; duration fourteen days ; condition of heart before attack not known ; during attack, mitral incompetency, with dilatation and hypertrophy ; no rheumatism during attack. Patient extremely weak when first seen. Death rather sudden, attributed to heart-disease (James MacNee, M.D., Inverness).

No. 206, female, aged 24 ; seven months' pregnant ; second attack ; scarlet fever as a child ; rheumatic fever with distinct joint-affection four years previously ; anæmia some time ; a brother and sister had chorea after rheumatism ; father and four of family have had acute rheumatism; chorea attributed to shock (death of father) one month before attack ; attack severe, lasting six months ; febrile towards close ; heart normal before and during attack. Patient came under treatment towards the end of the fifth month of chorea; chloral hydrate in ten and thirty grain doses every three hours had no effect; morphine injections, with or without atropine, given while under chloroform, did not produce sleep ; hyoscyamine, subcutaneously, had no effect ; chloral, in doses of 40 and 50 grains, gave some sleep, as much as 180 grains given in twenty-four hours. Premature labour, induced by Barnes's bags fourteen days after beginning of treatment, delivery of healthy still-born child in twenty-six hours ; choreic movements did not stop ; she died exhausted two days later ; no *post-mortem* allowed (T. W. Thursfield, M.D., Leamington).

No. 217, male, aged 3½ ; first attack ; scarlet fever five months previously ; measles eight to ten days, since which anæmia ; attack attributed to measles ; no family history of nervous affections or

rheumatism. Attack severe; duration three weeks. Condition of heart before attack unknown; intense endocarditis during attack; fatal within a week of the development of the heart-disease (C. Merves, Sandown, Isle of Wight).

No. 307, female, aged 9; first attack; vague pains three days before attack; dyspepsia last month; somnambulism. Maternal aunt somnambulist; had acute rheumatism. Grandmother had chronic rheumatism. Attack attributed to fright one month before; attack severe; left side most affected at first, right side towards end; marked exacerbations, non-febrile; duration three weeks. Heart normal before; during attack systolic *bruit* at apex; apex-beat pushed outwards; impulse weak and rapid (J. Mackenzie Booth, M.D., Aberdeen).

No. 350, female, aged 11; first attack; only antecedent illness measles; common ailments, frontal headache, with sickness, eleven months. According to mother's statement, during attacks of headache patient almost entirely lost the use of her right hand. No family history of nervous affections or rheumatism. Exciting causes: overwork at school; fright (someone jumping out of a hedge), interval seven days. Attack severe; non-febrile; duration three months. Condition of heart before attack normal; during attack and until death, mitral regurgitation. Death from syncope (Robert Mears, Atherstone).

No. 380, female, aged 17; second attack; first attack two years before, with rheumatism and pericarditis; menstruation regular. No family history of nervous affections or rheumatism; no exciting cause assigned. Attack mild, but febrile; acute rheumatism in many joints and pneumonia during attack. Condition of heart before, adherent pericardium (verified by *post-mortem* examination); during attack, systolic murmur. Died of lung complications consecutive to acute rheumatism. Brain examined by Professor Hamilton, of Aberdeen; results negative. Pericardium found adherent; mitral, aortic, and tricuspid valves studded with small vegetations (W. H. Dobie, M.B., Chester).

No. 432, male, aged 7; first attack: several attacks of rheumatism, with distinct joint-affection; scarlet fever two years. No nervous affections in family. Maternal uncle had acute rheumatism severely; maternal grandfather suffered from rheumatic gout. Exciting cause attributed to rheumatism, and the patient suffered from acute rheumatism in many joints during the attack of chorea. Condition of heart before attack, soft mitral systolic murmur; during attack, friction (pericarditis) for two days, systolic murmur. Attack moderately severe, febrile; duration, twenty-one days. Death from embolism; fatal in eight hours. Suspicion of spinal meningitis (C. P. Coombes, M.D., Castle Carey).

No. 235, male, aged 9; second attack; no antecedent illnesses; family history unknown. Exciting cause, mental overwork. Attack severe, non-febrile. Condition of heart before attack, normal; during and after attack, mitral murmur. Subacute rheumatism in a few joints during and after attack; no nodules; anasarca present. Patient admitted into infirmary. The reporter (Samuel Johnson, M.D., Stoke-on-Trent) was good enough to ascertain that the patient died there, and that the certified cause of death was "Chorea, heart-disease, dropsy."

Three other cases died subsequently to the attack reported. These are as follow:

No. 28, male, aged 12; first attack. Rheumatism, with distinct joint-affection, one year before; again two months before, to which chorea was ascribed. No nervous affections in family. Mother's family very rheumatic; father had rheumatism for eighteen weeks when a boy. Attack severe, non-febrile; duration, three months; recovery not complete; left side chiefly affected. Condition of heart before attack, normal; during attack, action tumultuous, *bruit* developing; after attack, loud double aortic murmur, regurgitant much the louder. Relapse of chorea eight months later. The patient died of acute rheumatism two years later still. Heart-affection old and recent (Thomas F. Raven, Broadstairs).

No. 68, female, aged 12; first attack. Rheumatism, with distinct joint-affection and fever, seven years before, and just previous to attack; subacute rheumatism in a few joints during and after attack. A brother or sister an epileptic idiot; no rheumatism in family. Exciting cause not specified (rheumatism?). Attack sudden in onset, severe, and febrile; duration, fourteen days. Mitral systolic murmur before, during, and after attack. Rheumatic symptoms subsided during chorea, returned slightly afterwards. Heart-disease proved fatal some months later (M. Messiter, Dudley).

No. 66, male, aged 16; first attack; rheumatism with distinct joint-affection eighteen months before. No family history of nervous affections or rheumatism. Exciting cause not stated. Attack moderately severe; duration, three months at least. Condition of heart before attack, normal; during and after attack, mitral murmur. Patient subsequently became dropsical; believed to have died of tricuspid disease and dropsy. (S. J. Smith, M.D., Bilston.)

(*e*) *The Temperature in Chorea.*—In 315 cases (males 83, females 232) the temperature is stated to have been normal, whilst in 54 cases (males 11, females 43) the attack is stated to have been febrile; so that only in 14 per cent. of the cases in which the temperature is recorded, or in 12 per cent. of the whole number of the cases tabulated was the chorea pyrexial.

15.—The Condition of the Heart in Cases of Chorea before, during, and after the Attack.

This is one of the most important and interesting sections of the inquiry. There was some heart-affection, of a more or less definite character, in 141 cases (males 40, females 101), and in one in which the sex is not recorded. This gives a percentage of 32 in which a more or less decided lesion was present. In addition to these, in 73 cases (males 21, females 51, sex not recorded 1), or in 16 per cent., there was some derangement of function, or change of an indefinite and probably not organic character.

The cases of a more or less definite character are arranged below in a table.

Table of Cases of Heart-Affection in connection with Chorea before, during, and after the attack.

Before Attack.			During Attack.				After Attack.							
			Affected		Not Affected		Affected		Not Affected		Doubtful.		Not Specifd.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Not known ..	2	21	2	21	—	—	2	14	—	2	—	1	—	4
Not specified ..	13	30	11	30	1+1?	—	11	21	—	2	—	2	2	5
Normal	16	24	16	24	—	—	9	15	4	6	—	1	3	2
Bruit	8	21	8	21	—	—	8	17	—	1	—	1	—	2
Altered sounds..	1	1	1?	1	—	—	1	—	—	1	—	—	—	—
Doubtful.. ..	—	2	—	2	—	—	—	1	—	—	—	1	—	—
Adhrent. pericardium	—	1	—	1	—	—	—	—	—	—	—	—	—	1
Weak	—	1	—	1	—	—	—	1	—	—	—	—	—	—
Total ..	40	101	37 1?	101	1 1?	—	31	69	4	12	—	6	5	14

In the next table the character of the heart-affection is specified, arranged as in the preceding table, with some additional particulars.

Table of the Character of the Heart-Affection Present During or After the Attack of Chorea.

Character of Heart-Affection.	Total During Attack.	Before.						During.		After.		Enlargement of Heart.	
		Not known		Normal.		*Bruit.*							
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Mitral systolic murmur .	113	10	46	11	22	6	18	25	88	19	64	3	13
				1	2?			1?	1?	1?	6?		
Mitral presystolic ,, .	3	2	—	1	—	—	1	2	1	3	1		
Aortic systolic ,, .	5	1	1	3	—	1	1	4	1	4	1		
Aortic diastolic ,, .	—	—	1	—	—	—		—	—	—	1		
Double aortic ,, .	1	—	—	1	—	—		1	—	1	—		
Double murmur . .	1	—	—	—	—	1	—	1	—	1	—		
Mitral and aortic systolic murmur . . .	—	—	—	—	—	—	—	—	—	—	—		
	7	—	4	—	2	—	1	—	7	—	8	—	1
Endocarditis . . .	1	1	—	—	—	—	—	1	—	1	—		
Pericarditis . . .	4	1	—	—	—	1	1	2	2	—	—		
	135	15	52	16	24	9	22	36	99	29	70	3	14
				1?	2?			1?	1?	1?	6?		

It will be seen from this table that, corresponding to our usual experience, mitral disease was the most common, there being 116 cases of purely mitral disease against 6 of purely aortic disease. Of the cases in which a more or less definite affection of the heart was present, the following is a statement of the occurrence of such disease in relation to the number of the attack: In first attacks, 95 cases (males 21, females 67); in second attacks, 27 cases (males 6, females 21); in third attacks, 7 cases (males 4, females 3); in several attacks, 10 cases (male 1, females 9); in doubtful numbers of attacks, 2 cases (male 1, female 1).

Of the cases suffering from a first attack of chorea, the heart was affected during the attack in 93 cases (males 27, females 66), and in

two others the heart-affection was doubtful during the attack. This gives the proportion of heart-affection in first attacks as 30 per cent., against 32 per cent. of heart-affection in the whole number of cases tabulated, irrespective of the particular attack.

Of first attacks of chorea, it may be further stated that the condition of the heart before the attack was unknown in 41 cases (males 10, females 31); normal in 30 cases (males 13, females 17)[3]; doubtful in 3 cases (females); whilst a *bruit* was present before the attack in 19 cases (males 5, females 14). In 10 primary attacks there was accompanying enlargement of the heart.

Of primary attacks, a murmur was present after the attack in 66 cases (males 22, females 44), and in 5 cases (females) a doubtful murmur persisted. It should be noted in both this series of cases of primary attacks, as well as in other attacks, it is stated in several instances that the murmur was less distinct or loud after the attack; but in no case in this report has the murmur been stated to have persisted unless it is distinctly recorded by the observer.

As already stated, in addition to the cases in which the cardiac lesion has been regarded as more or less positive (but not necessarily of organic nature), in 73 cases (males 21, females 51, sex not recorded 1), there was some abnormality of the heart's action or sounds. The view taken of the latter will probably differ amongst individual scrutinisers of the tabulated records. The character of the alterations are as follow: Irregular action of the heart in 18 cases (males 6, females 12); excited action of the heart in 6 cases (males 2, females 4); increased or accelerated action of the heart in 6 cases (males 3, females 3); irritability of the heart in 5 cases (males 2, females 3); palpitation in 5 cases (females); feeble action of the heart in 5 cases (females); alterations in heart's first sound in 4 cases (females); prolonged first sound at apex in 3 cases (male 1, females 2); weak first sound in 1 case (female); reduplicated first sound in 1 case (male); reduplicated second sound in 4 cases (males 2, females 2); hæmic *bruits* in 6 cases (male 1, females 5); anæmic thrill in 1 case (male).

Association of Heart-Affection with Rheumatism.

The association of such heart-affection as was present with rheumatism is a point of considerable interest and importance. Taking the cases in which the heart-affection is regarded as definite, 141 (males 40, females 101) in number, it is found it was associated with acute and subacute rheumatism in 71 cases (males 21, females 50), or in 50 per cent., and it was associated with *pains* in 18 cases (males 3, females 15), or in 12 per cent.

There was no rheumatism, antecedent or coincident, in 50 cases (males 15, females 35), or in 35 per cent.; whilst in 1 case (male) this point is not specified. Leaving out of consideration the cases in which pains had occurred—some of which, at least, were probably rheumatic—it will be seen that the heart-affection was associated with rheumatism in 50 per cent., against 35 per cent. in which no such association is recorded. This calculation, of course, has no bearing directly on the connection between rheumatism and chorea, but only on the influence of rheumatism in the production of the heart-disease met with in cases of chorea.

Taking the cases in which the heart was affected in the attack, but was known to be normal previous to the attack, the association with rheumatism is expressed in the following table:

Table showing the Connection between Rheumatism and Heart-Disease in Cases in which the Heart was affected during the Attack of Chorea, but was known to be healthy previous to the Attack.

	Antecedent.		During and after Attack.			
	Acute and Subacute Rheumatism.	Pains.	Acute and Subacute Rheumatism.	Pains.	No Rheumatism.	Not Specified.
Males	6	1	5	—	9	2
Females	7	3	7	1	13	3
	13	4	12	1	22	5

No. 157.—Heart normal during and after attack. During previous attack of rheumatic fever, systolic mitral murmur; apex normal.

[3] From notes furnished subsequent to printing of tables.

Table showing the Connection between Rheumatism and Altered Heart Sounds in the Attack.

	Antecedent.		During and after Attack.		
	Acute and Subacute Rheumatism.	Pains.	Acute and Subacute Rheumatism.	Pains.	No Rheumatism.	Not Specified.
Males	4	2	1	2	12	4
Females	14	5	5	2	33	10
	18	7	6	4	55	14

The condition of the heart at considerable intervals of time subsequent to the attack of chorea is also of much importance, as throwing a light on the interpretation of the abnormal signs observed during the attack. All the information on this point that can be gathered from the records of the cases tabulated is given in the following table:

Condition of the Heart at Periods subsequent to the Attack recorded.

No. of Case.	Sex.	Age.	Before Attack.	During Attack.	Immediately after Attack.	Interval.	Ultimate Report.
8	F.	11	Unknown	Apex normal sounds exaggerated at apex. Action irregular.	Action regular; sounds intensified at apex	2½ yrs.	Sounds exaggerated at apex, irregular once or twice per minute; impulse increased, but position normal; transverse dulness normal.
41	F.	10	Normal	Normal	Normal	3 yrs.	Hypertrophy and systolic murmur.
65	M.	19	Not recorded	Action irregular; systolic *bruit*	Not recorded	2½ yrs.	Presumed to be sound; plays cricket and works in fields, etc.
66	M.	16	Normal	Mitral *bruit*	Persistence of murmur	—	Patient subsequently became dropsical; believed to have died of tricuspid disease and dropsy.
68	F.	12	Mitral regurgitation	,,	,,	—	Heart-disease proved fatal some months later.
130	M.	11	Not recorded	Soft systolic mitral *bruit*	,,	—	No murmur; cardiac dulness exaggerated, and comes out to nipple-line.
144	F.	16	Normal	Slight mitral regurgitation	,,	3 yrs.	The mitral insufficiency has increased rather than diminished.
207	F.	13	Slight endocarditis 11 months	Distinct peri- and endocarditis.	Cleared up	2 yrs.	Reported normal and strong.
212	F.	16	Normal	Systolic mitral murmur; apex normal	The same	,,	*Bruit* not no marked, but there is still some impurity.
240	M.	12	,,	Systolic mitral murmur	The same, but much less marked	,,	Murmur heard.
262	F.	6	Unknown	Soft systolic mitral; some hypertrophy	The same	17 & 26 mths.	Heart as before.
263	F.	14	Normal	Soft systolic murmur at apex and base, loudest above pulmonary artery	No murmur; cardiac impulse diffused, and hearing first sound prolonged at apex	20 mths.	Apex-beat in fifth space within nipple-line. Very soft systolic murmur at apex and 1 in. to left; systolic murmur over aortic cartilage and over pulmonary artery; marked accentuation of pulmonary second sound.
317	F.	11	Unknown	Soft systolic *bruit*; apex normal	The same	15 mths.	Heart-murmur present; Apex-beat in nipple-line.
351	M.	13	Normal	Continuous musical murmur	Normal	1 yr.	Normal.

16.—The Occurrence of Rheumatism during or immediately subsequent to the Attack of Chorea.

Of the 439 cases of chorea tabulated, acute or subacute rheumatism occurred in 56 cases, during or immediately subsequent to the attack. In 15 cases (males 7, females 9), the patient had acute rheumatism;

in 40 cases (males 11, females 28, sex not recorded 1), the patient had subacute rheumatism. In one patient, the occurrence of rheumatism in the attack was doubtful; and in 3 cases (males 1, females 2), patients who had previously suffered from chronic rheumatism, this condition obtained during the attack of chorea. Besides the cases of undoubted rheumatism, 11 cases (males 4, females 7) suffered from pains during or immediately subsequent to the attack.

Leaving the doubtful case and the 3 cases of chronic rheumatism out of consideration, it gives the proportion of cases suffering from undoubted rheumatism in connection with the attack as 56 in 439 cases, or 12.7 per cent. But it appears impossible to exclude from the category of rheumatism the 11 cases alluded to above as suffering from pains. Of these 11 cases, 2 (1 male and 1 female) had previously suffered from definite rheumatism; and 6 others (males 3, females 3) had previously suffered from pains such as they had in the attack.

Of the cases in which acute and subacute rheumatism occurred during the attack, in 29 cases (males 9, females 20), the patients had previously suffered from definite rheumatism; and in 10 cases (males 4, females 6), the patient had suffered from antecedent pains. These facts appear to justify the conclusion that the arthritic and muscular pains should be regarded as evidence of rheumatism. If this be conceded, it would add 11 to the 56 cases of rheumatism occurring during or immediately subsequent to the attack of chorea, and thus raise the percentage to just over 15 per cent. On the other hand, in 26 cases (males 9, females 17), the rheumatism occurring in connection with the attack of chorea is the first recorded.[1]

Subcutaneous or Rheumatic Nodules.

In 7 cases (male 1, females 6), so-called "rheumatic subcutaneous nodules" occurred in connection with the attack of chorea; and in 1 other case (female), the occurrence of nodules was doubtful. The following are brief particulars of these cases, arranged in a table.

Table of Cases with Rheumatic Nodules.

No.	Sex.	Age.	Antecedent Rheumatism.	Concurrent Rheumatism.	Condition of Heart.
30	F.	12	Distinct joint-affection two months before	During and after in a few small joints	Not affected.
55	M.	13	Distinct joint-affection shortly preceding attack	None recorded	Unaffected.
41	F.	10	None	In one finger	Normal during attack; three years later, hypertrophy and systolic murmur.
176	F.	10	,,	None recorded	Unaffected.
180	F.	13	Doubtful	None	Aortic systolic *bruit*.[2]
225	F.	7	Vague pains one year to onset	,,	Mitral systolic *bruit*, apex-beat half-inch outside nipple-line before, during, and after attack.
269	F.	11	Distinct joint-affection and fever just before	,,	Systolic mitral *bruit* developed during rheumatism, and persisted after attack.

One case in which the nodules were doubtful is recorded—No. 136, female, aged 14. Rheumatism with distinct joint-affection two years before; none during attack. Faint mitral systolic *bruit*, said to have started seven years before.

17.—Other Complications.

The other complications recorded are the following:—Headache in 12 cases (males 2, females 10); hysteria, 3 cases (females); emotional disturbance, 2 (male 1, female 1); ungovernable temper, 1 (male); sleeplessness, 4 (females); delirium, 1 (female); stammering, 1 (female); loss of memory, 1 (male); paralysis of arm, 1 (male); toothache and neuralgia, 3 (females); affections of speech and articulation, 4 (males 2, females 2); epileptiform attacks, 2 (males); somnambulism, 2 (male 1, female 1); exophthalmic goitre, 1 (female); spasm of glottis and pharynx, 1 (female); various nervous symptoms, 1 (female); incontinence of urine, 1 (female); eruptions, 12 (males 3, females 9); worms, 3 (male 1, females 2); constipation, 4 (females); diarrhœa, 4 (females); anæmia, 3 (females); ocular affections, 2 (females); pneumonia, 2 (male 1, female 1); bronchitis, 4 (males 2, females 2); bronchocele, 1 (male); amenorrhœa, 2; dysmenorrhœa, 1; irregular menstruation, 1; leucorrhœa, 1; epistaxis, 3 (females); albuminuria, 2 (male 1, female 1); abscess in subcutaneous tissue, 2 (male 1, female 1); and one each of the following: gastro-intestinal catarrh (male), anasarca (male), syncope (male), follicular tonsillitis (male), enlargement of submaxillary glands (male), dyspepsia (female), ulcer of tongue (female); spinal caries (female); pain in wrist and scalp (female), tubercular peritonitis (female), catarrh (female), genu valgum (female), mumps (female), varicella at time of onset (female), vomiting (female), anorexia (female), dysuria (female), lupus (female), emaciation (male), extreme debility (female), bed-sores (female).

A few of these complications deserve a more detailed notice.

Cases of Pneumonia.—No. 70, male, aged 12; third attack. Acute rheumatism just previous to and during attack, as well as three previous attacks; mitral regurgitation and dilatation of left ventricle; short attack of pneumonia at right apex during attack. Had an attack of urticaria also during attack. The case terminated favourably (G. F. Blake, Moseley).

No. 380, female, aged 17; second attack; one previous attack of rheumatism, and rheumatism acute and in many joints during the attack of chorea. Mitral regurgitation and adherent pericardium. Died of lung-complication (W. H. Dobie, M.B., Chester).

Cases in which Speech and Articulation were Affected.—No. 91, male, aged 20; first attack; rheumatic fever one month before. Pericarditis and mitral regurgitation. Left side involved a fortnight before the right. "Aphasia at times. He stops short in the middle of a sentence" (E. A. Laurent, M.B., Bedford).

No. 332, male, aged 13; first attack. Subacute rheumatism in a few joints during attack, none previously. Heart normal before; mitral systolic *bruit* during attack. Slight defect in articulation (J. Neil Whitfield, Heywood).

No. 89, female, aged 19; first attack. Menstruation irregular. Rheumatism, with distinct joint-affection, for one month. Exciting cause, right hemiplegia and aphasia. Mitral regurgitation before, during, and after attack. Chorea attacked only the right (paretic) side. Aphasia improved slightly, and she could say monosyllables. No agraphia (E. A. Laurent, M.B., Bedford).

No. 338, female, aged 14; first attack. No rheumatism antecedently. Subacute in one joint during and after attack. Mitral and aortic systolic *bruits*. Loss of speech, beginning in second week, and lasting five weeks. Inability to swallow. Bed-sores on back and hips (J. Brown, M.B., Surbiton).

Case with Anasarca as a Complication.—No. 235, male, aged 9; first attack; no antecedent rheumatism, but subacute in a few joints during and after the attack. Heart normal before, mitral systolic during and after. Admitted into infirmary, where he died. Death certified as chorea, heart disease, dropsy (Samuel Johnson, M.D., Stoke-on-Trent).

Cases with Albuminuria.—No. 411, male, aged 9; first attack; Scarlet fever 4 months, parotid abscess 3 months, anæmia 4 months. Heart weak before attack, irritable during. Larynx affected with chorea. Scarlatinal nephritis (John King, Kilburn).

No. 328, female, aged 11; first attack; one side only affected. Antecedent scarlet fever, date unknown. Condition of heart before attack unknown, mitral systolic murmur during and after. No rheumatism before or during attack. "Albuminuria for a few days" (John E. Garner, M.D., Preston).

Partial Paralysis of one Arm.—No. 177, male, 6; first attack. Vague pains antecedently; subacute rheumatism (very slight) in a few joints during the attack. Loud mitral murmur and quickened action before, during, and after attack. "Partial paralysis of right arm." After attack, boy more irritable than before, health depressed (T. Robinson, M.D., Guilford Street).

Cases with Convulsions during the attack.—No. 115, male, aged 13; a very intelligent boy; first attack. No rheumatism before or during attack, subject to spinal pains. Heart normal. Had an epileptiform attack the day of admission. A sister, aged 2, had fits (Robert H. Lloyd, M.D., Lambeth Infirmary).

No. 357, male, aged 16; first attack. Epilepsy since the age of 2. Accentuated second sound of heart at base after attack. Epileptic fits, 7 or 8 daily. "He has had chorea since he had the fits; movements apparently connected with the fits. Onset unknown" (J. Stevenson, M.B., Aldershot).

A Case in which Syncope occurred.—No. 302, male, aged 9; first attack lasting over 18 months. No antecedent rheumatism, but acute in a few joints after 18 months of chorea. "An attack of syncope during the rheumatism." At the end of the rheumatism chorea improved (Herbert S. Renshaw, M.D., Sale).

A Case Complicated by Tubercular Peritonitis.—No. 112, female, aged 14; first attack. Anæmia for one year. No rheumatism before

[1] No. 480, male, aged 10, first attack. Stiff-neck, lasting for a week, followed the somewhat sudden termination of the attack of chorea (J. B. Unwin, Rugby). This case might legitimately be added to the cases of rheumatism occurring in connection with the attack, but has not been included in the number. One patient, No. 130, male, aged 11, had pleurodynia during the attack. He had previously suffered from vague pains, and had a soft systolic mitral *bruit*, which persisted after the attack (C. B. Coombe, M.D., Somerset).

[2] "Rheumatism in early and late life."

or during attack. Father had suffered from subacute rheumatism. Systolic mitral murmur during and after attack. Condition of heart previously unknown. "Tubercular peritonitis." The attack of chorea was moderately severe and febrile. Its duration was indefinite, and no statement is made as to the influence, if any, exerted on the chorea by the peritonitis (J. A. Erskine Stuart, Yorks).

Cases Complicated by the Presence of Worms.—In one case, No. 39, "thirteen round worms were passed during attack." No mention is made of the circumstance in any way influencing the course of the attack.

No. 286. It is mentioned under the head of complications, that the patient had headache and round worms. There is no reference to their being causally connected with, or influencing the character of, the attack.

In the third case, No. 361, the attack—a first one—is ascribed to "fright (?); worms;" the interval elapsing between the exciting cause and the attack was uncertain. Seven round worms were passed during the attack. Though there was neither antecedent nor concurrent rheumatism, there was a systolic mitral murmur during the attack which persisted afterwards (F. W. Humphrey, M.B., Winchester).

Eruptions occurring in connection with the attack of Chorea.—*Urticaria* was present in four cases, namely, No. 58 (male), No. 84 (female), No. 423 (female), No. 427 (female). No. 84 presents some points of interest. It was that of a female, aged 9; first attack, rheumatism, with distinct joint-affection, date unknown; fever and vague pains, 7 days. Attack attributed to "overwork at school, fright of burglars next door, indigestion." Heart normal before attack. On tenth day slight aortic systolic murmur; on twenty-second it was replaced by a soft systolic mitral murmur; condition of heart after the attack not noted. "Fever (temperature 100°), delirium, *diffuse urticaria*, and pain in left arm, ushered in the attack. This preliminary fever lasted eight days, and ceased under sodæ salicylas; chorea a week later." During the attack there was pain in left wrist and tender scalp; no true rheumatism; marked constipation. (B. G. Morison, M.B., Canonbury).

Erythema was present in three cases, namely, No. 202 (female); erythema nodisum, No. 221 (female); and erythema multiforme, No. 351 (male). The two latter occurred in patients who had suffered from antecedent rheumatism.

Eczema, confined to ear, occurred in one patient, No. 231 (female).

Hæmorrhages and Abscesses.—No. 219 (female), aged 7; first attack, attributed to fright, causing anæmia; twenty-one to thirty days before attack, a diastolic murmur developed, at first intermittent, later permanent. During the attack, hæmorrhagic patches, and subsequently abscesses appeared on the sacrum and extremities. The child was subject to anæmia, associated with obstinate constipation, and inherited lithiasis. Both mother and child convulsed in parturition. Father suffered from chronic rheumatism, and had fever (? malarial) about the time of conception. The chorea lessened with the opening of abscesses. Double pneumonia, which proved fatal, occurred as a sequel (M. D. O'Connell, M.D., Amballa).

Ichthyosis occurred in one case, No. 439 (male), with a marked family history of this affection.

Pityriasis Rubra occurred in one case, No. 13 (female). It made its appearance a few days after the patient came under treatment, with a rise of temperature to 104°. (Frederick Pollard, M.D., Liverpool).

In addition to these cases, in one, No. 143 (female), a *bullous eruption occurred on the legs*, after the administration of arsenic.

18.—Common Ailments to which Patients Suffering from Chorea are Liable.

It was thought desirable to ascertain the common ailments to which patients suffering from chorea are liable, in the hope that a light might be thrown on the clinical affinities or pathology of the disease.

Under the heading of common ailments, the following are recorded:

Headache and migraine in 79 cases (males 12, females 67); catarrh 18 (males 4, females 14); bronchitis 8 (males 4, females 4); dyspepsia and biliousness 24 (males 8, females 16); anæmia 10 (males 3, females 7), toothache and neuralgia 7 (male 1, females 6); tonsillitis 9 (males 2, females 7); eruptions 10 (males 6, females 4); constipation 6 (females); worms 6 (males 2, females 4); hysteria 5 (females); epilepsy 2 (females), syncope 2 (male 1, female 1); asthma 1 (female); excitability 1 (female); nervousness and timidity 8 (males 2, females 6); tubercular diseases 1 (female); irregular menstruation 2, amenorrhœa 1, menorrhagia 1, otorrhœa and deafness 3 (females); palpitation 2 (females); loss of speech 1 (female); bad temper and depravity 1 (female); rheumatism 3 (male 1, females 2); vague pains 1 (female); anorexia 1 (female); sore-throat 1 (female); delicacy 1 (female); incontinence of urine 3 (males 2, female 1); swelling of cervical glands 1 (female); strabismus 1 (female); occasional pain inside 2 (females); stammering 1 (male); spinal pains 1 (male); sleep-talking 1 (male); laryngismus stridulus 1 (male); strumous ophthalmia 2 (males).

Of the *Eruptions* to which these patients were liable as common ailments, the following are recorded:—Urticaria in 3 cases (males 2, female 1); eczema 3 (male 1, females 2); lichen 1 (male); prurigo 1 (male); psoriasis 1 (male); and ichthyosis 1 (male).

It is obvious that many of the ailments, numerically important in this series, are common ailments to which all are liable. It would appear from these figures also that rheumatism is an ailment to which few were subject, but this arises from the fact that it has been classified by the observers as an important antecedent, and not as a common or trivial ailment. It is doubtful if any further conclusions can be drawn from the facts elicited, than that nervous affections of some kind are common ailments of those who become attacked with chorea in 26 per cent., and that the most frequent of these is *headache*, which was a common ailment in 18 per cent. of the cases.

The occurrence of headache in childhood is a point of considerable importance, particularly in relation to *mental overwork*. This point has been inquired into in the tabulated cases. It is found that in the 71 cases of mental overwork recorded (males 15, females 56) in 19 cases (males 2, females 17) headache was a common ailment. This gives a percentage of headaches in those recorded as mentally overworked of 26, against 16 per cent. of the cases in which no mental overwork is stated.

Two of the cases recorded as mentally overworked are further stated to have suffered from headache as a complication of the attack of chorea, viz., No. 285 (female), and No. 336 (female), the latter severely.

Several of these patients are also stated to be subject to *bilious attacks*, which, as well known, are sometimes, at least, attacks of sick headache, or *migraine*.[6]

19.—Family History.

Information on this head was asked on two points—(*a*) As to the occurrence of nervous affections; (*b*) as to the occurrence of rheumatism in the family of those suffering from chorea.

(*a*) *Nervous Affections.*

Nervous affections of some kind are recorded:—
In males in 55 cases, or in 47 per cent.
In females in 147 ,, ,, 45 ,,

Total 202 ,, ,, 46 ,, of the whole number.[7]

The nervous affections were distributed amongst the different members of the patients' families as follows:—

	Total.	Males.	Females.
Grandparents	20	2	18
Parents	122	29	93
Uncles and Aunts... ...	34	7	27
Brothers and Sisters ...	65	19	46
Cousins	7	2	5
Son	1	1	—

Number of Relatives affected.—One member of the family was affected in 129 cases (males 38, females 91); 2 members in 42 (males 9, females 33); 3 members in 15 (males 2, females 13); 4 members in 2 (male 1, female 1); 5 members in 4 (females); several members in 14 (males 4, females 10); and the whole family is stated to have been neurotic in one case.

The nature of the nervous affections occurring in the families of those suffering from Chorea.—Chorea occurred in 63 families or in 14 per cent. It occurred in parents in 9 families; in brothers and sisters in 37 families, and in 8 of these it occurred in more than one brother or sister; and it occurred in other relatives in 17 families, in one of which two were affected.

Insanity, including imbecility and idiocy, was present in the family in 17 cases, or in not quite 4 per cent. It occurred in grandparents in 2, in parents in 7, and in other relations in 8, in one of the latter families two members being affected. Epilepsy and convulsions occurred in 35 families, or in 8 per cent. (males 7, females 28); hysteria in 33 families (males 12, females 20, sex not recorded 1, or in 7.5 per cent.); drunkenness in parents in 11 families (male 1, females 10); nervousness and excitability in 54 families (males 10, females 44); paralysis in 16 families (males 4, females 12); headaches and migraine in 6 families (male 1, females 5); asthma in 4 families (males 3, female 1); brain fever in mother in 1 family (female);

[6] On "Megrim or Sick Headache," by Edward Liveing, M.D., pp. 44, 86, 225.

[7] In each of the 3 cases in which the sex of the patient is not recorded there is a family history of nervous affections.

somnambulism in 2 families (females); herpes zoster in 1 family (female), and 1 each of the following in 1 family, tubercular meningitis, congestion of brain, sunstroke in father, injury to spine in father, exophthalmic goître, diabetes, sciatica. One patient is stated to be the child of old parents.

The committee is indebted to Mr. West, of Stoke-on-Trent, for the following remarkable family history of chorea.

"Charles P., junr., now in South Wales, son of James P., choreic. Stephen, brother of Charles, died at 40, had chorea 7 or 8 years; was married; his children unaffected. James, father of the above, died, aged 56, from chorea, death supposed to have been hastened by a fall a month before death. Charles P., the brother of James and uncle of Stephen and Charles, junr., died of the same, aged 51; was affected about 16 years; was always quiet during sleep; the twitching was worst on first awaking, and on being annoyed. Charles P. had three daughters, one married. Two are quite healthy, but very emotional. The youngest is becoming heavy in manner, and cross-tempered, just as most of the others, who have been affected, have begun. She is now 33, but not choreic at present. The children of the married daughter are healthy. William (a brother of Charles and James) had a daughter, who died from this disease at the age of 56, in America. James had a daughter who is quite right. Charles and James's father lived to a great age, and was quite free. His father lived to over 90, quite free from it. Charles and James, whose mother was a Wedgwood, of Etruria, had it some years before death. It began when she was about 60, and was caused by fright. She died from 'rupture of a blood-vessel.' Other members of her family were given to 'shaking,' and here the first indication of the hereditary taint seems to have begun, as far as I am able to trace. The foregoing may be relied on."

In another communication Mr. West writes: "I believe the chorea is organic, and not the ordinary functional chorea."

These cases of chorea in adults, and especially of hereditary chorea, deserve a closer investigation than they have hitherto received. Though rare, cases have been recorded by good observers, in which the chorea appears to have presented its usual characters, when occurring (for the first time?) in middle or late adult life.

(*b.*) *Rheumatism.*

Rheumatism was present in the family of the patient:

In males in ...	...	69 cases,	or in 60 per cent.
In females in ...	...	129 ,,	40 ,,
In sex not recorded in		1 case.	33 ,,
Total	...	199,	or in 45 per cent. for the whole number (439).

The distribution of the rheumatism amongst the members of the patients' families was as follow:

In grandparents in ...	34	cases	(males	10,	females	24).
In parents in	125	,,	(,,	44,	,,	81).
In uncles and aunts ...	35	,,	(,,	11,	,,	24).
In brothers and sisters	49	,,	(,,	14,	,,	35).
In cousins	3	,,	(,,	1,	,,	2).

Number of Relatives affected with Rheumatism.

There was 1 of the family affected	in 122	cases	(males	47,	females	75).
,, were 2 ,, ,,	44	,,	(,,	13,	,,	31).
,, ,, 3 ,, ,,	12	,,	(,,	3,	,,	9).
,, ,, 4 ,, ,,	5	,,	(,,	1,	,,	4).
,, ,, 5 ,, ,,	2	,,	(females).			

There were many or several of the family affected in 10 cases (males 2, females 8).

In the patients suffering from rheumatism (including pains) antecedent to, or during the attack of chorea, there was, as previously stated, a family history of rheumatism in 61 cases (males 17, females 44), or in 52 per cent.; there was, on the other hand, in this category of cases, no history of rheumatism in the family in 76 cases (males 18, females 58), or excluding the cases with pains, 51 cases (males 16, females 35). That is to say, in 51 cases, or in 44 per cent. (nearly) rheumatism occurred previous to or during the attack in patients in whose families there was no history of rheumatism. On the other hand there was a family history of rheumatism in 90 cases (males 34, females 56), or in 20 per cent. of cases which had not suffered from rheumatism previous to, or during, the attack of chorea. By these figures it is shown that the family tendency to rheumatism is most marked in those cases in which rheumatism was associated antecedently or directly with the attack of chorea, but the preponderance is not great. As to whether 20 per cent. is above the average occurrence of rheumatism in families, of patients with all diseases, we have no accurate information to guide us.[8]

To endeavour to ascertain if any share of the production of the heart-disease met with in chorea in those believed not to have had rheumatism could be ascribed to the family tendency to rheumatism, the cases have been scrutinised with the following results:—

Heart disease of definite character No rheumatism in patient antecedent to or during the attack of chorea	With a family history of rheumatism, 30 cases (males 8, females 22).
	With no family history of rheumatism, 27 cases (males 9, females 18).
Altered sounds or rhythm of heart in chorea No rheumatism in patient antecedent to or during the attack of chorea	With a family history of rheumatism, 21 cases (males 10, females 11).
	With no family history of rheumatism, 21 cases (males 3, females 18).

These two groups of cases, therefore, do not lend any support to the view that the heart-affection accompaning chorea, in patients who have not themselves suffered from rheumatism, is in any marked way influenced by a family tendency to rheumatism. Or, to put the matter in another and probably more correct way, if heart-disease is found in a choreic patient, in whom no personal history of rheumatism is obtainable, we are not justified in concluding that the cardiac affection is rheumatic simply by finding there there is rheumatism in the family. In these figures no account has been able to be taken as to the amount of rheumatism in the family, that is, of the number of members of family affected and their greater or less marked liability to rheumatic affections. On this a more correct estimate as to the probable rheumatic nature of an affection in any given case could more reasonably be based.

There is one further point to be touched upon in dealing with the rheumatic family history, and that is its frequency in the cases which have had the indefinite "vague pains."

It is found that, in patients who have suffered from vague pains antecedent to or during the attack of chorea, there was a family history of rheumatism in 24 cases (males 8, females 16), and no family history of rheumatism in 25 cases (males 3, females 22). So that, as regards family history, the rheumatic nature of such pains receives no support.

It may be mentioned that gout is recorded in the family in 4 cases, phthisis in 9, struma in 1.

20.—Treatment.

This should be the most important section of the inquiry, for the information and knowledge on the many points that have been hitherto considered are chiefly of value in so far as they enable us to treat the disease, now or hereafter, with increased success. Chiefly valuable, is said advisably, because after all the effects of increased knowledge may be in this disease, as in others, by indicating how the disease is brought about, of more service in preventing than in enabling us to cure it when it occurs. Unfortunately, in this inquiry, as in most therapeutical investigations, the difficulties are very great.

The special and varying circumstances of each case require to be dealt with by variations in the treatment, or by the employment of more than one therapeutical measure; so that the rigid requirements of a strictly scientific test of the efficacy of treatment can rarely be fulfilled. Moreover, an attack of chorea being of indefinite duration, it is a disease peculiarly unsuited for testing the comparative efficacy of different methods of treatment. Thus, in the great majority of cases under consideration, several methods of treatment were employed, sometimes simultaneously, sometimes in succession, and the observer is only able to state his opinion that, at a certain stage of the affection, some remedy appeared to exercise a beneficial influence.

In the first place, it may be stated that comparatively few patients were treated without drugs. In a certain number of cases, however,

[8] Dr. Goodhart has kindly furnished the Committee with the following important information collected by himself. In 138 presumably healthy youths from 17 to 20 years, 16 had a family history of rheumatism, 4 had had rheumatism themselves, 6 had morbus cordis without history of rheumatism. In 96 out-patients at the Evelina Hospital for Children, taken consecutively, there was a rheumatic family history in 24. In 328 cases from private note-books, 92 gave a history of rheumatism in the family. Dr. Goodhart adds: "I should say I made my inquiries as wide as possible (grandparents, uncles, and aunts), and that anything in the shape of rheumatic pains has been included. It is, therefore, probable I took an over- rather than an under-estimate. As regards the private cases, they are taken consecutively, as far as possible, from the volumes, of people coming to me in the morning, and in which I make it a special object at the time to go into the family history.

feeding appears to have been chiefly trusted to, presumably in conjunction with rest, etc.

The best cases illustrating the effect of feeding alone are a series of cases reported by Mr. Holland Wright, of Forest Hill. These briefly are as follows: No. 373, moderately severe, duration two months; No. 375, severe, duration three and three-quarter months; No. 376, moderately severe, duration three months; No. 377, severe, duration six weeks. None of these cases were attended by rheumatism or any other complication in the attack. The only treatment recorded is "Full diet." The average duration of the attack in the series of four is ten weeks, which is about the average duration of the whole series of cases however treated. The same may be affirmed of the other cases treated without drugs.

Secondly, it may be safely affirmed that there is no drug that exercises a specific influence over the course of the disease, the same drug which appears so successful in some cases, failing entirely in others. Two drugs appear to have been most generally used—namely, arsenic and iron—drugs which are generally recommended in the treatment of this disease, and which the attendant circumstances of the disease, especially the anæmia, naturally suggest.

Arsenic appears, in some cases, to have been strikingly useful, but, on the other hand, in a great many cases, the disease does not appear to have been markedly influenced by it. The cases in which arsenic is recorded to have done good are the following: Nos. 34, 125, 126, 138, 169, 200, 203, 209, 214, 297, 330.

Iron, though so frequently employed, was very exceptionally the only drug given. The following are about all treated by iron alone: No. 49, severe, duration six weeks; 174, severe, duration two and a half years; 193, moderately severe, duration ten weeks; 346, mild, duration eight months; 359, mild, duration twelve weeks.

Salicin and Salicyl Compounds.—Considerable interest attaches to the group of cases of chorea treated by salicin and salicyl compounds, whatever view is taken as to the relationship of chorea and rheumatism. Attention is directed to the following cases.

No. 38, female, aged 14; first attack; hemichorea. Rheumatic fever two years before; subject to slight rheumatic pains at times. Mother has subacute rheumatism. No rheumatism during the attack; heart normal. Marked improvement under salicin in three-grain doses when sulphate of zinc, belladonna, and bromide of ammonium had failed (O. E. B. Marsh, Newport, Mon.).

No. 103, female, aged 13; first attack. Scarlet fever three months, followed by vague pains until attack. Attack attributed to scarlet fever and rheumatism; heart normal; no rheumatism during attack; hemichorea affecting the side which had just suffered most from rheumatism. No improvement under iron and quinine; rapid improvement under treatment by salicylate of soda (W. Taylor Colby, M.D., Malton).

No. 104, female, aged 5½; first attack. Scarlet fever five months before, followed by vague pains. Attack attributed to scarlet fever and rheumatism; heart normal; no rheumatism during attack. A severe febrile case, lasting eight weeks; deglutition and speech greatly interfered with. No improvement with iron and quinine; rapid improvement with salicylate of soda. (*Idem.*)

No. 125, male, aged 16; first attack. Vague pains three months; subacute rheumatism in a few joints during and after attack; heart normal. "History of overwork during subacute rheumatism." No relief under treatment by bromide of iron; slight relief under treatment by salicylate of soda; marked and immediate relief under treatment by arsenic (William Armstrong, Manchester).

No. 131, female, aged 8; first attack, severe, febrile, and lasting about three weeks. No antecedent rheumatism, but acute in a few joints during and after attack; heart normal. Rapid recovery in three weeks under treatment by salicylate of soda (and Dover's powder, two nights). (J. F. Joseph, Warrington.)

No. 171, male, aged 13; first attack. Vague pains a few days before the chorea; no rheumatism during attack; heart normal. A very severe febrile attack, could not articulate for a considerable time. Arsenic was given freely for some time; did no good. Salicylate of soda then given with much benefit; drug stopped, chorea relapsed; drug resumed, not so much benefit as before. Arsenic completed the case (James MacNee, M.D., Inverness).

No. 245, female, aged 9; second attack; the first a slight one. A few years previously, rheumatism, with some joint-affection, and temperature of 103° Fahr.; preceding month, subacute rheumatism in a few small joints during attack. Heart normal before attack; during attack, loud systolic mitral murmur; five weeks after, apex normal, murmur faint, not constant. Attack moderately severe, lasting nine weeks; temperature occasionally 103° Fahr., probably due to rheumatism; joints painful, no effusion. Yielded to salicylic acid, followed by digitalis and iron (J. P. Wills, M.B., near Hastings).

No 362, female, aged 13; second attack; the first thirteen months before. Rheumatism with distinct joint affections six months; rheumatism with fever three months; acute rheumatism in many joints during attack. Family rheumatic and subject to quinsy. Acute rheumatism after first attack. Heart normal. Attack moderately severe, non-febrile, lasting three weeks. No relief from bromide of potassium; relief in twenty-four hours from salicylate of soda (one drachm daily) (Thomas Fiddes, M.B., Manchester).

Amongst the other remedies stated to have been of benefit are the following:—

Sulphate of zinc, Nos. 10, 29, 40, 100, 261.
Valerianate of zinc, No. 15.
Oxide of zinc and belladonna, Nos. 153, 154.
Iron and arsenic, Nos. 66, 143, 257, 361, 438.
Arsenic and bromide of potassium, No. 11.
Chloral, Nos. 278, 311, 312, 405.
Bromide, iron and nux vomica, No. 232. Iron and strychnine, No. 70. Iron, Nos. 143, 170. Bromide of potassium, No. 307. Strychnine, No. 378. Conium, No. 382. Physostigma, No. 5. Nepenthe, No. 108. Gelsemium, No. 111. Santonin, 266. Gymnastics, No. 21. Galvanism, No. 22. Massage, No. 132. Blisters to spine, Nos. 54, 55. Opening abscesses, Nos. 87, 219. Destruction of worms, No. 90. Food, No. 299. Sponging, No. 418. Change of air, Nos. 6, 32, 52, 67, 244, 308, 438.

21.—SEQUELÆ.

Amongst the sequelæ recorded are the following: anæmia in 9; headache in 2; abscess in 2; and 1 each of the following: excitability, nervousness; hystero-epilepsy, No. 309; nervous prostration and delicacy, No. 327; diminished intelligence, 4; stupidity, No. 69; anæmia and headaches, No. 82; clipping of words, tremor of hands, and fidgetiness, No. 63; slight awkwardness of tongue, No. 178; slight twitching of angles of mouth, No. 125; recurrence of symptoms during excitement, No. 79; irritability and depression of health, No. 177; great weakness, exhaustion, and constipation, No. 210; double pneumonia (fatal), No. 219; mitral incompetency, No. 321; rheumatism when chorea nearly well, No. 331; in better health than for two years previously, No. 67.

Subsequent attacks of Chorea occurred in 8 cases (males 3, females 5). They are as follows: No. 28, male; eight months later; died of acute rheumatism two years subsequently. No. 151, male; two subsequent attacks; one year and two years after attack recorded. No. 240, male; thirteen months later; preceded by rheumatism. No. 56, female; five subsequent attacks in two years. No. 262, female; two subsequent attacks seventeen and twenty-six months later. No. 263, female; five weeks subsequently; properly a relapse. No. 281, female; practically relapse, on returning to school. No. 325, female; two years later.

The locality from which the cases are reported and names of contributors will be published with the Tables.

REPORT ON INQUIRY No. XIII, CANCER (OF THE BREAST ONLY).

PREPARED BY
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THE inquiry concerning Cancer, the first surgical inquiry of the Collective Investigation Committee, was issued in January, 1885, and was closed in December, 1886. In the course of these two years, it has produced 210 returns from 111 observers, in addition to a large number of letters relating to the subject of the inquiry. The intention of the Committee was to apply particularly to men in general practice, although there was no desire to exclude the information furnished by consulting-surgeons or those attached to hospitals and dispensaries. The names of only two or three consultants appear in the list of contributors; and only eleven hospitals and dispensaries have furnished returns, 34 in number, for the most part through the house-surgeons or registrars, who have either taken a special interest in the matter, or have replied at my especial request. Nearly all the information comes therefore from men engaged in general practice; and of these, 25 resided in the metropolis and 75 in various parts of the country.

The inquiry was divided into three parts, preceded by certain general questions, which had for their chief end to ascertain as far as possible that the individual case was really one of malignant disease. In three-quarters of the total number of the returns, the evidence furnished under these headings was so satisfactory, that there could not be any reasonable doubt of the character of the disease. In the remainder of the returns, although there was not enough evidence to prove (to the reader) the cancerous nature of the tumour, yet on the other hand there was only one instance in which the diagnosis appeared certainly open to question. This return did not contain any important statement, and may therefore be left out of consideration. No attempt was made, or ever intended to be made, to separate the different varieties of carcinoma, or to distinguish between the carcinomas and the sarcomas. For all the purposes of such an inquiry as the present, these diseases are malignant, and may be included under the common name of cancer.

There was, however, one among the preliminary general questions to which much greater interest attached—that, namely, which asked whether there had been "previous inflammation or abscess of the affected breast." Of late years much more attention has been paid than formerly to the local conditions which predispose to cancer. Among the most powerful of these conditions must be ranked chronic inflammation, with its effects. Surfaces which have been long the seat of chronic inflammation, such as the surface of the tongue, the nipple, and areola; irritated scars in various parts of the body are liable to grow cancer. And the question has therefore been raised whether deep-seated inflammations, either chronic or acute, may not leave behind them tissues which may be predisposed to cancer. Statistics have been brought forward by several authors to show the relation between these conditions in the breast and the later occurrence of cancer; and Gross finds (*Tumors of the Mammary Gland*, p. 32) that, "of 365 women who had borne children, there was antecedent mastitis in 71." This question in the inquiry was answered in 174 of the returns; in the affirmative in 27, in the negative in 147. Nothing is said of the condition in which the breast had been left by the past inflammation or abscess, so it is not possible to trace a direct connection between the two diseases in any instance. There were, however, four instances in which the mastitis appeared to have immediately preceded the cancer, and it is therefore not improbable that the one disease may have been directly developed out of the other. In every other return in which the period of occurrence of the mastitis is recorded, it was from four to 40 years before the appearance of the cancer; and in at least 10 cases, more than 20 years had elapsed between the inflammation and the formation of the tumour. The proportion of cases in which the occurrence of previous mastitis is chronicled is small, and it can scarcely be conceived that it plays an important part in the production of cancer. Nor does it appear probable that it should do so, for the inflammatory conditions which are recognised as predisposing to cancer are almost always of a different kind, frequently recurring, like the attacks of superficial glossitis; or continuous, like the so-called eczematous conditions of the nipple; and the effects of past inflammation, such as scars and warts, if they become the seat of cancer, are almost always so situated that they are subject to injury or irritation, and are thus encouraged into cancer, if one may use the term.

Of the three great divisions of the inquiry, let us consider first INHERITANCE. One hundred and eighty-four of the 210 returns contained definite statements under this head. Of these, 116 were to the effect that there was no family history of cancer, 68 that cancer had occurred in other members of the patient's family. The proportion is therefore more than one in three, a fact of great interest when it is remembered that, in the discussion on cancer at the Pathological Society in 1873, Sir James Paget stated that, since his practice had become exclusively or almost exclusively private, one in three was the proportion of instances in which it was possible to discover a history of cancer in the family of his cancerous patients. Our numbers may be regarded as a direct confirmation of the impression of Sir James Paget that cancerous histories are much more common in the cases of private patients, for the proportion is larger than I have ever seen in any statistics which have been drawn up from hospital practice; nor were these cancer returns made, so far as I am aware, for the purpose of demonstrating the influence of inheritance; they were not supposed to be, and certainly do not bear the aspect of having been, selected cases. The absence of selected cases is the more evident, because I wrote personally to many men who have been long in practice, begging them, if possible, to furnish me with accounts of families in which cancer had been very prevalent, but these requests have been well-nigh unanswered.

Before commencing the examination of the evidence which has been furnished on the question of inheritance, it is necessary to draw attention to one point. It is not our duty to discuss the exact manner in which cancer or a disposition to cancer may be inherited. We have nothing to do here with the local or the constitutional origin of cancer, or with the evidence that cancer, being admitted to be constitutional, is also a blood-disease. These matters have been discussed many times, and under many different aspects, and there can be no doubt that the possibility of the transmission of cancer is just as clear as the possibility of the transmission of gout, scrofula and syphilis by inheritance. What we have to consider is whether the number and character of the family histories is sufficient to justify the belief which largely prevails that cancer is an inherited disease.

In the statement which accompanied the cancer cards, it was pointed out that the chief evidence on which the theory of inheritance rests is: (1) the occurrence of a few cases of cancer in many families; (2) the occurrence of many cases of cancer in a few families. Taking the former class of evidence first, we find that the 68 patients whose returns show a history of cancer in the family had among them 99 cancerous relatives. These relatives were 11 fathers, 21 mothers, 1 grandfather, 6 grandmothers, 2 great-grandmothers, 6 brothers, 10 sisters, 6 uncles, 17 aunts, 4 great-aunts, 13 cousins and 2 nieces. The female element predominated, as we should expect it to do from the greater liability of females to the disease. The manner of distribution was that 44 patients had only one cancerous relative each, 19 had two, 3 had three, and 2 had four cancerous relatives a piece.

Again, as might be expected, the disease in the cancerous relatives was not invariably of the breast. The seat of the cancer is mentioned in almost all instances, and the breast was affected in 34 cases. In other instances, it was the uterus (10), the testis (1), the tongue, the lip, the œsophagus, throat, rectum, or one or other of the internal organs. The organs of generation were affected in about half the cases in which the seat of the disease is mentioned. This circumstance accords with what is known of the general distribution of the disease, and cannot be said to have a direct bearing on the theory of inheritance. The variety of the disease, too, was not by any means the same in the affected persons, for some of them suffered from epithelioma, and some probably from sarcoma; but attention has been more than once drawn to this point in discussions on the inheritance of cancer.

Probably few persons will be disposed to deny that the proportion of cases in which there was a history of cancer in the family is very large; indeed, I believe it is larger than has ever been previously recorded in an equal number of cases of cancer, whether gathered from various sources or taken from the practice of a single observer. But, on the other hand, few persons will be disposed to accept this bald statement of numbers without examining carefully how far they bear directly on the question of inheritance.

It is to be observed that a history of cancer in the family of a cancerous patient does not of necessity imply a history of inheritance of the disease. It is plain that the disease cannot be inherited from brothers, sisters, uncles, aunts, etc., and that the mere fact that one of these relatives has suffered from cancer may be no more than an interesting circumstance in the history of the individual patient. It is necessary to deduct all cases of this kind, and to reduce the 68 family histories to 38, in which the parents, grandparents, or great-grandparents were cancerous. In these 38 families, there were 41 cancerous persons, for both the father and mother were cancerous in one, and both the mother and the grandmother in two. This at once reduces the proportion of "histories of inheritance" from 1 in 2.70 to 1 in 4.84.

Even then deductions may be made, or at least called for, on several counts. In some instances the account of the disease is not wholly satisfactory, for the parent or grandparent is said to have suffered from "internal cancer," or a grandparent is "believed" to have suffered from cancer of the breast. Allowance must be also made for the effect of other probable causes of cancer, and among these the residence of the cancerous relatives must not be left out of the consideration, for the same cause or class of causes may be responsible for the occurrence of the disease in two or more members of the same family.

With regard to deductions on the first count, it may fairly be replied that there are greater reasons for estimating the proportion of cancerous relatives at a higher than a lower rate. For the number of relatives who are said to have suffered from internal cancer or cancer of the stomach is too few in proportion to those who suffered from cancer of the breast and uterus, when the general liability of different parts of the body to the disease is duly considered. Only in 16 out of the whole 99 cancerous relatives is the disease said to have affected

the stomach, or to have been "internal," and in 9 of these it was of the stomach. So far, therefore, from deducting any of these cases on account of the uncertainty of the diagnosis, it would be more reasonable to add a certain number of cases to the whole, because these cancers are disproportionately few in comparison with the cancers of the external parts; and a similar method of reasoning may fairly be applied to the few instances in which a "belief," not amounting to certainty, has prevailed of the existence of cancer in a grandparent; for, if the medical histories of all the grandparents of the cancerous were accurately known, it is certain that it would be found that many more of them were cancerous than appear in these returns. Even among persons in such a social position as our own, comparatively few could tell accurately the cause of death of the four grandparents, particularly if some of them had died many years previously, and in a distant part of the country.

In making allowance for the effect of other causes in the production of cancer, and in considering the responsibility of the same cause or class of causes for the occurrence of the disease in two or more members of the same family, regard has been particularly paid to the residence of the cancerous. In 23 cases, the cancerous relatives resided in the same place as the patient. In 10 instances they resided in places which we may, perhaps, regard as predisposing to cancer; and, in 13 instances, in places which appear to be only slightly, or not at all, cancerous regions. In the remainder of the cases the abode is not stated, or is stated in such general terms, that it is not possible to form an accurate opinion regarding it.

In order more truly to estimate the value of a history of cancer in the immediate relatives of a cancerous patient, it might be desired that each return should contain a complete statement of the number, age, sex, cause of death or condition (if still alive) of every member of the patient's family, so that one might see not only that one or more members of the family had suffered from cancer, but also how many of them had escaped the disease. The larger the family and the smaller the number of cancerous persons in it, so much the less apparently the influence of relationship on the occurrence of the disease. In a few of the returns, those particularly of Mr. Harthill, of Willenhall, this statement has actually been made; but very few men could be found to carry out this scheme thoroughly. And even if the surgeon were disposed to carry it out, the difficulties in many instances would be very great.

After all has been said, it must be borne in mind that, in endeavouring to estimate the influence of such a factor as inheritance in the production of such a disease as cancer, which is probably due to the combined effects of several or many very different causes, the manner of estimating each possible factor should be, as far as possible, the same. For example, few persons at the present time will deny the influence of traumatism in the production of cancer. A lady, sitting watching tennis, receives a sharp blow on the breast with a tennis-ball, and from that time there gradually forms an induration, which, in the course of six months, bears all the marks of cancer, and, in less than eighteen months, destroys the patient. A young lady, looking out of the window, is struck heavily on the back by the falling sash, and, within a few weeks of the injury, a round-celled sarcoma develops in the subcutaneous tissue where the back was struck, and speedily ends in death.

No one is disposed to deny that the injury in these and similar cases is the, or a, cause of the disease. And the fact that a hundred other women have received similar injuries in the same parts of the body without suffering from malignant disease does not in the least affect our belief in the influence of the injury in the production of the disease in the particular instances referred to. Nor, on the other hand, when we attribute the occurrence of the malignant tumour in these cases to the influence of the injury, is there the least intention to deny the influence of other causes. Had the first lady been 17 instead of 47 years of age, it is wholly improbable that the injury in her would have been followed by the occurrence of carcinoma of the breast. Had there not been some predisposing conditions in the second case, it is by no means likely that the young lady would have been the victim of a rapidly growing sarcoma.

Whether or not inheritance is admitted to be a predisposing cause of malignant disease, there can be no doubt that it is not the only predisposing cause, and still less, the only cause of any kind. Age, sex, an abnormal condition of such organs as the uterus and breast, injury, frequently recurring or chronic inflammations, anxiety, abode, occupation, all exercise their influence in the production of certain cases of cancer.

Thus far, we have been employed in considering the circumstances which tend to detract from the importance of the returns in reference to inheritance, and have only endeavoured to show how the objections may be met, so that the subject may be treated as impartially as possible. And now it is only just to examine what may be termed the indirect evidence of inheritance which is furnished by some of the returns.

The mere fact that a second individual, of perhaps a large family, has suffered from cancer, is not in itself a circumstance of much value, even when the individual is a brother or sister, much less when it is an aunt or cousin. Cases of this kind, therefore, in which only one relative of the patient is known to have suffered from cancer, may be dismissed without further reference. But the cases in which two or more relatives of the patient suffered from malignant disease deserve attention. There are 19 returns of two members of the family, 3 of three members, and 2 of four members cancerous in addition to the patient. The number of these cases is so large as in itself to lend colour to the theory of inheritance of the disease. And, when the character of the relationship is studied, there are reasons for admitting that the evidence is greatly strengthened by it. The relationship is, so to speak, almost invariably on one side. There are scarcely any cases in which the relations have been divided between the father's and the mother's family. One of these has been already alluded to, in which both the father and the mother were cancerous. In 3 cases the mother and the sister of the patient were the cancerous members of the family; in 3 the mother and the mother's sister; in 1 the sister and the mother's brother; in 1 the mother's brother and the mother's sister; in 1 the mother's brother and the mother's sister's daughter; in 2 the mother and the mother's mother; in 1 the father and the father's brother; in 1 the father and the father's sister; in 2 the father and the father's sister's daughter; in 1 two of the father's sister's; in 1 the mother and two of the mother's cousins; in 1 the brother, the sister and the father's sister; and in another the brother, two of the father's sisters and the father's sister's child. The only exceptions to this rule are the one already mentioned, a case in which the mother, the father's sister and the father's sister's daughter were cancerous, and a case in which the sister, the mother, the father's mother's sister and the father's mother's sister's daughter were cancerous.

It cannot be denied that these circumstances in the family histories afford strong corroborative evidence of inheritance, for they tend to show that the disease approached the patient in one line and was inherited, as many inherited diseases appear to be, from either the father's or the mother's family, rarely from both.

Of evidence of the second class, practically none has been offered, for there has not been a single return of the occurrence of cancer in more than four of the patient's relatives, and in the two instances in which as many as four were affected, the relationship was not all on one side or was not so close as to render the returns of absorbing interest.

Before closing this part of the report, there are three letters to which special interest attaches. The first is from Dr. Chapman Grigg, of Curzon Street, who mentions several instances taken from his hospital or private practice of history of cancer in two or more members of the same family, and one family of five sisters, who had all died of cancer. The second letter is from Dr. Arthur Roper, of Exeter, enclosing a curious history which had been gleaned from one of his patients of the occurrence of cancer in one generation of her husband's family. Mr. D. was one of 22 children. There is no history of cancer in either his or his wife's family, and neither he nor his wife had cancer. But they had 7 children, six of whom died of cancer, the men of cancer of the stomach or bowels, the women of cancer of the breast. The seventh of the family is still alive, an old man, aged 82, crippled with gout, but not cancerous.

The third letter comes from Mr. Gill, of St. Germans, in Cornwall. Under the head of inheritance, he says: "Both my partner and myself are very strongly of opinion that cancer does depend on inheritance to some extent. My partner and his father have attended nearly every family around here for the last fifty years, and he says that it has occurred in a few families constantly, and the great majority of families have entirely escaped."

I confess that when I first proposed the subject of the inheritance of cancer for collective investigation, it was with a very small belief in the reality of inheritance, and with a strong belief that the inquiry would result in such a failure of evidence as to diminish largely the impression which prevails that cancer is due in part to the influence of inheritance. I am forced to own that the mass of evidence which has been accumulated by the inquiry has led me to take a different view. The number of instances in which there is a history of cancer in the direct line of descent, the manner of the relationship in those families in which more than one of the patient's relatives were the victims of cancer, and the very strong probability that the case is

throughout under- rather than over-estimated, are, to my mind, proofs which cannot be resisted. Compare this evidence of the influence of inheritance with that on which some of the undoubted causes, whether exciting or predisposing, rest, and the balance is largely in favour of inheritance. What is more certain than the predisposition of the breast and uterus to cancer, yet probably not more than 1 in 50 (2 per cent.) of the adult women who die, dies of cancer of the breast or uterus. Injury is admitted on all hands to be a cause of cancer, yet Gross finds that only about 11.70 per cent. of the large number of patients in his collection attributed the occurrence of the disease to injury. Our returns show that there was a history of cancer in the direct line of descent in 20.60 per cent. of the cases; and, if only the fathers and mothers of the cancerous patients are considered, that there was even then a percentage of no less than 16.84.

Turning our attention now to the question of the influence of DIET on the occurrence of cancer, the information afforded by the returns does not support Professor Humphry's impression that large eaters and especially large eaters of meat are particularly liable to cancer. The questions relating to diet are answered in 194 of the 210 returns. Under the heading of general food, it is stated that 123 were moderate feeders, 59 small feeders, and 12 large feeders. Under the heading of meat, 99 were moderate, 78 small, and 16 large. On the other hand there was not a single strict vegetarian. Several of the patients are said to have been great eaters of vegetables and fruit; one was almost a vegetarian, one had taken a diet "chiefly vegetarian of late years," one ate meat only three times a week, and one ate little or no meat. The evidence cannot be said to disprove the theory of Beneke that vegetarians are not liable to cancer, but it does little to establish it. Under the head of stimulants, 161 are said to have been moderate, 9 large drinkers, and 21 took none at all. Of the 9 large drinkers, 2 took spirits habitually, but were not drunkards, and 1 was a habitual drunkard.

The history of the diet of these persons all goes to show that they were moderate in food generally, and particularly moderate in partaking of animal food and stimulants. But neither a very small allowance of meat nor total abstinence from stimulants sufficed to protect them from the disease.

In all investigations regarding diet, it must be borne in mind that the terms used are necessarily very indefinite. Small quantities of food and meat and large quantities are only relative terms, bearing a very different signification according to the circumstances under which they are used, and the persons who employ them. Many women, if they are not truly, like to be thought to be, very moderate in the quantity of food they take, and especially in the amount of meat they eat. It is only when the terms imply absolute abstinence from a particular article of food that they can be quite relied on. Making due allowance for errors under this head, however, there is every reason to accept the general tenour of the returns to the effect that the very large majority of these cancerous women were moderate in diet and sparing of stimulants.

One letter may be quoted, for it is a type of several others from the agricultural districts. Mr. Lloyd Williams, of Dolgelly, says: "Eating too freely of meat certainly cannot apply to my cases, as they, with one or two exceptions, belonged to the working-classes, who here live upon tea, milk, oatmeal, salt meat, rarely, if ever, getting fresh meat, except on an occasional Sunday."

The question of LOCALITY is, in many respects, the most difficult to treat by the method of collective investigation. The collection of cases, not being compulsory, only contains cases from practitioners who are interested in the inquiry, and is not in any respect exhaustive. The number of returns received from any individual district may be rather a measure of the interest and energy of the practitioners of the district than of its liability to cancer. The relative numbers, therefore, of the cancerous returns from town and country, from valley and hill, from dry and moist areas, must be received with caution.

Taking first the relative numbers of the cancerous dwellers in town and country, we find that there are 136 of the former, 70 of the latter. I do not think the disproportion is greater than might have been expected. Many of the returns are furnished by London practitioners, the number of people inhabiting the towns is so large, the men practising in towns have more facilities for note-taking, and are more inclined to take notes of their patients than those who have large rural practices. It would not, therefore, be safe to draw from this statement of numbers a conclusion that the disease is proportionately more frequent in town than country.

Again, the numbers of those who dwelt in valleys and on hills is singularly equal, for there were 58 of the former, 50 of the latter. The mere terms, valley and hill, are, however, in some respects, very misleading, for in several of the returns the hill was not 50 feet high, while in other returns the valley was situate 1,000 feet above the level of the sea. The low hills are, for the most part, rises of ground in the immediate neighbourhood of places situate close to the sea, and almost on the sea level; while most of the elevated valleys are, as one might expect, in the bosoms of the Welsh hills and mountains. Examples of cancer in the low-lying districts are so numerous that there is no need to refer particularly to them, but cancerous patients in elevated localities are of more interest. Taking the most elevated of these hill-residences, there is only one instance in which the patient lived in a house more than a thousand feet above the level of the sea, and this instance is supplied by Mr. Brown, of Tredegar, Monmouthshire. The patient was a woman, aged 39, married, and resided in the country above Tredegar at an altitude of 1,370 feet. The soil was sandy and shallow, on a formation of mountain limestone. There was no river or stream in the neighbourhood. Looking into the general account of this patient, there are no circumstances which can be regarded as predisposing her to cancer. There was no history of cancer in her family; there was no history of previous affection of the breast. She was generally a moderate eater; a small eater of meat, and took but little stimulant. She was still alive at the time of the report. The tumour of the breast had been first noticed three years after she came to live in her present residence. The breast was removed at the end of two years, and a small recurrent nodule had quite recently appeared in the cicatrix. Speaking generally of the occurrence of cancer in and around Tredegar (which Mr. Bevan tells me stands from 1,000 to 1,100 feet above the level of the sea), Mr. Brown says: "Cancer of the breast is by no means a common disease hereabouts." He does not mention the occurrence of cancer of other parts of the body, but from the continuation of his letter, I am disposed to think the disease cannot be rare, for he goes on to say: "I am able to call to mind two recent cases under my own care, and two seen in consultation."

Of cancerous patients in elevated valleys there are at least five examples, four from Wales, and one from the Peak district. But I think this is a smaller number than I ought to have; for in looking over the returns, I find that the four returns sent me by Mr. W. E. Williams, of Abertillery, Monmouthshire, correspond in most respects, but that only one of them contains a note to the effect that the residence of the patient was situated about 1,000 feet above the level of the sea. Taking the five returns alone, three of them are furnished by Dr. Hall Redwood, of Rhymney, one by Mr. W. E. Williams, of Abertillery, and one by Dr. Duncan Mackenzie, of Glossop. The account of all five cases leaves no doubt in the mind of the reader that all of them were cases of malignant disease. Dr. Redwood's three patients lived in or near Rhymney, two in the town itself, one in a neighbouring village. All lived on the side of the valley at an elevation of from 800 to 900 feet, and had lived there from one to twenty-seven years before the appearance of the disease. The soil was clay and very damp, and the river lay within a quarter of a mile of the houses. The valley was subject to floods, but there was no seasonal overflow of the river. It is worthy of note that all three of the women were small eaters, particularly of meat, and two of them were teetotallers. Mr. Williams's patient was aged 35, married, and had lived for several years in the residence in which she fell a victim to cancer. This was in the country, in a valley about 1,000 feet above the level of the sea, with a clay soil. Her house was near the river, which, however, did not overflow its bank so as to inundate the land. She was a moderate feeder, a small eater of meat, and drank very little stimulant. Dr. Mackenzie's case is that of a woman, aged 46, dwelling in the outskirts of the town of Glossop, quite close to a stream subject to seasonal overflow. She had lived there twelve years when the affection of her breast was noticed, and had been a small eater and total abstainer. Dr. Mackenzie estimates the altitude of her residence at about 1,000 feet, but I find that the town of Glossop is stated in the official returns as standing from 600 to 800 feet above the level of the sea, so that his estimate is probably rather too high. It is worthy of note that not one of these five patients, whose returns show that great care and patience was bestowed on them, was cognisant of a history of cancer in the family.

Scarcely any difference is observed in the number of the cancerous dwellers in residences which combined town and hill, town and valley, country and hill, or country and valley.

In the character of the soil on which the dwellings stood there is a great difference. One hundred and fifty-three of the returns contain information on the subject, with the following result, which may be given in a tabular form:

Clay	60
Gravel	29
Sand	23
Chalk	13
Loam	5
Red sandstone	5
Oolite	4
Rock	4
Alluvium	3
Slate or shale	2
Mixed (1 gravel and clay)	2
"Damp"	2
Peat	1
Total	153

The 29 gravel are furnished largely by London: 16 from London, only 13 from other parts of the country—a marvellous difference when the fact is taken into account that the large proportion of the total returns are furnished from different parts of the country. The clay gives by far the largest figures, and it may be still further increased by adding to it some, if not all, of the loam, the alluvial, the mixed, and the damp, so that it probably furnishes at least 70 out of the total of 153. Among the 23 returns of "sand," there are 9 which come from seaside places. The red sandstone is, in three of the cases, Devonian; in the fourth and fifth, perhaps Devonian, but of that I am not sure, for the patients lived in Worksop and Wolverhampton. The largest difference in the nature of the ground is undoubtedly that between the various soft soils, on the one hand, and the rock soils, on the other. Comparing the "rocks" with the other soils, there are only four returns of them; and if to the "rocks" are added the slates, the red sandstones, the oolite, and even the chalk, the total number is only 28, compared with 125 of the clays, gravels, sands, etc. This experience agrees with that of Mr. Haviland, who finds the lowest rates of mortality from cancer in those parts of England and Wales which are composed of the hardest and most elevated rocks, or the most absorbent (like the oolite and chalk); and the highest rates in the sheltered and low-lying grounds which are composed of crag, alluvium, and clay.

From a geological point of view, it is quite interesting to observe the relation of the numbers in the above table to the age of the soil on which the residence of the patients rested. The numbers furnished by the rock, the slate, the red sandstone, and the oolite, are insignificant. The chalk furnishes a much more considerable, yet still a small, number. The sands and gravel furnish a much larger number, and the clays by far the largest of all. I will speak presently of corrections which may need to be made in these estimates.

The proximity of a river or stream to the residence of the patient is mentioned in rather more than half the total number of cases. In the returns which came from the country, the proximity of a river or stream is noted in eighty-four, and that of a canal or reservoir in six cases. There were also several patients residing close to the seashore. The London returns furnish twenty-five instances of patients living near to the river-bank, either of the Thames or of the Lea. In forty-seven of the country returns the river or stream is said to have been subject to seasonal overflow. It must be noted that some of the returns which do not describe the dwelling of the patient as being situated on or near a river or stream, nevertheless state that the soil was damp; and, on the other hand, that several of the returns which note the proximity of a river or stream state that it was distant from a quarter to half a mile from the patient's residence. But the influence of a river, especially a river of large size, is often felt at a far greater distance from its bank than a quarter or half a mile.

The large majority of the letters which refer to the question of locality only deal with impressions, more or less vague, of the relative frequency of cancer in the town or county of the writer. Two or three of them may, however, be quoted.

Dr. Ferguson, of Cheltenham, says: "We have two classes of soil here, low-lying and alluvial, and high (1,000 feet) and oolitic. Just as many cases from the one as from the other."

Mr. Sidney Hayman, of Abingdon, says: "Quite recently, a doctor who has practised in the neighbourhood for twenty years, mentioned a village into which I go much as having furnished him with many cases of cancer. It lies at the foot of the Berkshire downs, stands on clay—it is chiefly gravel about here—and has two or three brooks, very liable to flood, running through it."

Mr. W. H. Ellis, of Shipley, Yorks, tells me: "There is a prevalent notion in this Aire valley—or rather, I should say, a popular notion—that cancer is contagious; indeed, I am frequently asked the question, due, I believe, to rather a large number of cases of late in this valley;" and he encloses his annual report as medical officer of health for the year 1884, in which 11 deaths out of a total of 225 are ascribed to cancer.

Mr. Copley, of Wisbech, Cambs., says: "I have for some time been much interested in the subject, for I think that in no part of England is there so much (cancer) to be found as in these fen districts. The same was noticed by my predecessor, Mr. Nicholl, and I doubt not by many other practitioners hereabouts." Mr. Copley thinks that the malarial anæmia and chronic dyspepsia from which many of the inhabitants suffer, and the inferior quality of their diet may have something to do with their liability to the disease; but, in spite of these circumstances, many of them are very long-lived. It is curious that, in Mr. Haviland's map, Wisbech and the surrounding district are coloured in such a manner as to indicate that the mortality from cancer is below, although not much below, the average.

Mr. Gill, of St. Germans (whose letter I have already quoted), says: "We have three tidal rivers around us intersecting our district, which is also very hilly. We have a population roughly 4,000. We have four villages on the tops of hills. Cancer in them is very rare indeed; in this my partner quite agrees. We have six villages very little above the sea-level (two on sea-coast). In them also cancer is very rare. In these six villages, with a population of about 600 altogether, I have only seen one case in the six years I have been here. Among 4,000 people we have seen seven cases only of cancer in the last six years; and of these, in six cases, the patients (curiously enough) all lived on the side of a hill at 200 or 300 feet above sea-level." In answer to further inquiries, Mr. Gill said that the six persons did not all live on the same hill, or near each other, and that he could discover no conditions common to them all in reference to diet, locality, and inheritance, except the fact of their residence on the side of a hill.

Mr. Jackman writes: "Chepstow I believe to be singularly free from cancer. As far as our practice is concerned, during the last six years not more than one case has come under our care, and that was not a native."

Mr. George Owen Mead, of Newmarket, tells me: "In Newmarket, cases of cancer are extremely rare comparatively. This town is very dry, situated on the chalk, which in places is overlaid with gravel deposits (pockets of loam and marl in places). The fens are three miles off, in N. and N.W. direction. My father says that, during the past twelve years, he has only had one case of cancer of the breast, and the patient was not a native."

Dr. Bowen Davies, of Llandrindod Wells, writes: "Though I have been in practice here nearly fourteen years, I have not had a single case of cancer of the breast brought to my notice. I have often thought this peculiar, for, having the only hospital (eighteen beds) in the county (Radnorshire) under my sole care, they would naturally gravitate there. Has the locality anything to do with it? We are on shale or old Cambrian rocks about 700 feet above sea-level, with hills nearly 2,000 feet high, not a valley, but a broad plateau. Certainly no seasonal overflow of our streams. Population thinly scattered. No works."

Many other letters refer to the frequency or infrequency of the disease in particular localities, but, as the statement is in very general terms, they need not be quoted here.

The general tendency of the returns on the question of locality is to bear out the observations of Mr. Haviland in the *Geographical Distribution of Disease*, but there are certain difficulties on theory to which it is right to direct attention. The "nature of the soil" on which the residence of a cancerous patient stands refers, of course, to the surface-soil, and the answers which have been returned naturally refer to the surface-soil. Only occasionally is a statement made that beneath the surface lies rock, or chalk, or slate. No account is taken of the thickness of the surface-soil or of what lies beneath it in the very large majority of the returns. Yet the character of the subsoil, if the surface-soil is but thin, may exercise considerable influence on the occurrence of disease.

Again, the surface of England and Wales is not equally divided between clay, gravel, chalk, slate, rock, oolite, etc.; and, in the consideration of the relative influence of various soils on the occurrence of cancer, we ought to have, in addition to the relative numbers of cases occurring on various soils, also the proportion of the various soils over the entire country. Otherwise, the impression gained by a study of the numbers may be quite misleading. For example, owing to the large area of the country which is covered with clay, the number of persons living on clay may be so much larger than the number of persons living on gravel, that the difference in the mortality from cancer may merely correspond with the general difference in the number of the inhabitants covering the two soils. And so of chalk and sand.

I have sought for evidence on this point, but have not yet found it. The ordinary geological maps scarcely refer to the surface-soil, and the agricultural statistics deal with the acreage devoted to the cultivation of different crops. I do not yet know whether there are any statistics which refer to the character of the surface-soil of the whole country, or to the proportion of the inhabitants to the various surface-soils.

Our returns may be said to have supplemented Mr. Haviland's more general observations in certain directions. In the first place, we have more definite information regarding the actual character of the soil on which the residence of the patient is situated than he was able to furnish; and, although we cannot place an absolute value on the knowledge, yet it is of such a kind that it may lay the foundation for very valuable knowledge in the course of the next few years. Further, we learn that residence at an elevation of more than 1,300 feet, on a light sandy soil, with a subsoil foundation of limestone, on a hill in the country, at a distance from river or stream, apparently under very favourable circumstances for the maintenance of health, is not sufficient to protect the individual from cancer.

Before taking leave of this subject, I would venture to point out certain difficulties in the complete acceptance of Mr. Haviland's *Geographical Distribution of Cancer*, for which I can at the same time express my admiration. Comparing the map with the text, I cannot but be struck with the infrequency of cancer in certain well-watered districts, such as Ulverton, watered by the river Leven; and the Ipswich portions of Suffolk, watered by the Orwell and the Deven.

The great frequency of cancer in certain towns in non-cancerous districts, such as Cambridge and Sheffield. The explanation offered by the author that these towns attract many cases of cancer from the surrounding areas is not sufficient, and does not apply to these towns more than to Bradford and Manchester.

The circumstance that the facts of distribution are not made to apply to males, of which again the explanation that the males go out and the females stay at home does not appear sufficient.

The occurrence of areas of a low mortality from cancer along the course of rivers which appear to predispose to cancer. This is particularly noticeable in parts of Worcester and Devonshire.

The immense difference which appears to exist in the mortality from cancer on the two banks of certain rivers or streams; for example, the Norfolk Bure and the Yorkshire Ouse.

Perhaps a further inquiry on the localities in which cancer flourishes or which are not favourable to its occurrence may throw light on these exceptions to the general rules laid down by Haviland.

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,
THE VALUE OF HAMAMELIS, THE VALUE OF PURE TEREBENE.

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE, CANCER OF THE BREAST, and the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE, are now closed.

A Report on the CHOREA Inquiry has been prepared by Dr. Stephen Mackenzie; and will be published in the BRITISH MEDICAL JOURNAL as soon as the printing can be completed.

A Report on CENTENARIANS, prepared by Professor Humphry, was published with the JOURNAL of December 11th; a full Report on OLD AGE will follow.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, CANCER OF THE BREAST, and HABITS OF INTEMPERANCE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

MURDER OF A MEDICAL MAN.—A medical man named Schapira was recently attacked in a public place in Roumania by a military officer, who fancied that he was to blame for the death of his wife. He cut off his nose, and inflicted such serious injuries that his victim died. The murderer, on being tried by court-martial, excused himself on the ground that he had not meant to kill the doctor.

CLINICAL LECTURE
ON CERTAIN CONDITIONS OF THE HAND AND ARM WHICH INTERFERE WITH THE PERFORMANCE OF PROFESSIONAL ACTS, ESPECIALLY PIANO-PLAYING.

BY G. VIVIAN POORE, M.D., F.R.C.P.,
Physician to University College Hospital.

GENTLEMEN,—I wish to direct your attention to a class of case which must be familiar to most of those who are in the habit of attending my out-patient practice. These are cases in which the patient is suffering from a disability of the upper limb, which interferes with the performance of some accustomed—often professional—act. These conditions form a very important group among the minor troubles which we see, alike in hospital and private practice. When I use the word "minor," please remember that they are minor only to our eyes and in a pathological sense; they are often of maximum importance to the sufferer, who possibly sees his livelihood in jeopardy, because his hand has forgotten its cunning. On this account these cases demand our sympathy and most careful attention.

There is never any coarse objective change in the limb, and the loss of function is often all that the patient complains of. From time to time I have brought such cases specially to your notice. Of so-called "writers' cramp," I have brought many examples to your notice, and I have also directed your attention, comparatively recently, to the cases of a sawyer and a hammerman who, in respect of their professional acts, had become disabled.

I wish to-day to direct your attention to a group of patients who have sought advice because of some difficulty which they have experienced in playing the piano, a condition which has in many instances been apparently brought about by the over-exercise of their professional functions as pianists. We might speak of this condition (as indeed it has been spoken of) as "pianists' cramp," but I hesitate to do so because I think such a word would be misleading and might tend to encourage the belief that a failure in piano-playing is something more than a symptom, and might tend to make you believe that you had made a diagnosis when, in fact, you had only used a word. You will find that a failure in playing the piano may depend upon a variety of causes, a fact which I believe to be true in the great majority of professional ailments. Your reason, backed by your knowledge of anatomy and physiology, will tell you that this must be so. The machinery involved in the delicate manipulations necessary for a pianist is, indeed, so complicated that the wonder is break-down does not oftener occur.

In playing the piano, all forms of sensation (cutaneous, articular, muscular) must be perfect; from peripheral nerve-endings to brain the sensory path must be free from all defects. The motor path must be equally free from defect from the cerebral cortex to the motor end plates on the muscles, and it must be borne in mind that a trouble affecting a fine nerve-twig supplying some little muscle of the fingers is as capable of upsetting the harmony of a delicate act like piano-playing as is a damage to one of the chief cords of the brachial plexus. The muscles involved in the act must one and all be healthy. We do not know much of the minor pathological changes which affect the muscles. Fatty and fibroid change may occur, and we know that a muscle may be painful, or tender, or stiff, as the result of cold, gout, rheumatism, or fatigue, and we speak of such conditions as "muscular rheumatism," or myalgia, without having anything very solid behind the expression. Not only must the fibres of the muscle be healthy, but the tendons and their sheaths also; too much or too little of the fluid which lubricates the tendon in its sheath, or the deposit of a small amount of urate of soda in the sheath must necessarily interfere greatly with the performance of a delicate act.

I would direct your attention to the great number and very wide extent of the muscles used in piano-playing, and also to the fact that for the performance of delicate acts we need steadiness quite as much as agility. For piano-playing the scapula must be steady, the shoulder must be steady, the elbow must be steady, and the wrist

must be steady in order that the fingers may act with certainty and precision on the keys. When I use the word "steady," I mean, of course, steady in movement, and not necessarily fixed. In examining such cases, you must therefore bear in mind that the shoulder may demand examination equally with the hand and fingers.

It is needless to say that a sound condition of all the articulations of the upper limb is necessary for piano-playing.

The frequency of piano-failure is not very great. I find I have seen only twenty-one cases in a period extending over many years. In the same time, I have seen about eight times as many cases of writing-failure. The comparative infrequency of piano-failure is due to the fact that the number of persons who are obliged to play the piano excessively is infinitely smaller than of those who write excessively. The class of clerks is decidedly larger than the class of pianists. The pianists belong mainly to the female sex, and hence it is not surprising that out of my twenty-one patients, all but two were females. There is another and more important reason for the comparative rarity of piano-failure as compared with writing-failure—namely, that in piano-playing there is no prolonged strain upon the muscles, at least, to the same degree, as there is in writing. I have again and again pointed out that in writing it is in the muscles of pen-prehension rather than in muscles of pen-movement, that failure is liable to occur, and that in all of these "professional" ailments break-down most often takes place, or, at least, is most apparent in muscles which are maintained in a state of contraction for long periods.

In examining the cases of professional failure, we must always try to discover which muscles, if any, are likely to be most subject to fatigue in performing the professional act, and we must be very careful to investigate the condition of these muscles.

Now, in piano-playing, it is, at first sight, very difficult to say which muscles, if any, are subjected to prolonged strain. The very essence of piano-playing, as of all musical performances, is rhythm, and rhythm in movement means that in the muscles producing the movement, periods of contraction alternate with periods of relaxation with regular intervals, and therefore break-down from fatigue is scarcely more liable to occur than in the heart itself, the untiring prototype of rhythmical movement. Piano-playing does not, however, consist entirely of rhythmical movement, as might appear to be the case. Professors are very exacting with their pupils as to the position of the hand. There is a way of holding the hand in piano-playing which, I am told, is called the "Stuttgart method," in which the extension of the wrist is most rigidly maintained during the whole performance, and, except during the instant when the finger is depressed on the key, the extension of the near phalanges of the fingers is also maintained. In this method of holding the hand there is considerable strain thrown upon the extensors of the wrist and the extensors of the near phalanges (extensor communis digitorum, extensor indicis, extensor minimi digiti). In order to be sure that this orthodox manner of holding the hand is maintained, I have known young ladies practise their scales with a coin balanced on the back of the hand, the falling off of the coin showing at once that the absolute level of the carpus and metacarpus has not been maintained. It is obvious that this position of the hand has the effect of keeping the finger-tips constantly as near their work as possible, and that it must conduce to great rapidity of fingering. If the "Stuttgart method" were not of practical value, one may conclude that it would not be insisted on. Certain it is, however, that a large proportion of my patients have had symptoms referable to the extensor muscles of the wrist and fingers and the musculo-spiral nerve. I will briefly give you the facts of a case which will serve as an illustration.

Case I.—Miss R., aged 24, consulted me in November, 1875. She had been working at the School of Music in Berlin, and had practised as much as eight hours a day, besides using a digitorium for the exercise of the fingers. She had found the Stuttgart position very trying. Her trouble was in the left hand, and was mainly experienced in playing staccato passages, necessitating a sudden extension of the wrist and fingers; and further, there was a tendency, during the exercise of runs and scales, for all the fingers of the left hand to "run together," as she said, owing apparently to a failure of the extensor communis digitorum steadily to maintain the extension of them. There was some tenderness of the left ulnar nerve at the elbow, and excessive irritability (to faradism) of the interossei muscles. There was, further, this peculiarity that, when the first left dorsal interosseous muscle was faradised, all the left interossei muscles responded to the current. This phenomenon was not observed in the right hand, and disappeared in the left hand when she recovered, as she eventually did. This peculiarity was due, probably, partly to the irritable condition of the left ulnar nerve and interossei, and partly to the weakness of the extensor communis digitorum, which in part antagonises the interossei muscle. It was very interesting to see that faradisation of one interosseous produced, as it were, the very trouble of the "running together of the fingers," which was one of her chief difficulties when playing. Although the disability of the left hand was most marked in piano-playing, it was not limited to this act. The limb was generally inefficient in the performance of all acts, and readily got fatigued. It often "died away," and was sometimes burning hot, and at other times was blue, cold, and mottled. She was worse in cold weather, and her trouble was intensified by emotional excitement, such as was caused by playing before an audience or her music-master. There was well marked tremor of the left hand. This patient was in depressed health, due to overwork; and also, as she said, to the fact that the diet and mode of life in Berlin had not agreed with her. She was treated by rest, tonics, a blister over the tender ulnar nerve, and friction for the arm. In February, 1877, she called upon me to say she had recovered.

Case II was similar in many respects. Miss L., aged 33, a teacher of music, had been practising the "Stuttgart method." Piano-playing had become painful and impossible. All the nerve-trunks of the left arm were very tender. She suffered from great discomfort in the arms at night, an uneasy feeling, and a difficulty in getting them into a comfortable position in bed. Her hands were crippled for all acts, and she was worse in cold weather. She was worried and sleepless. With rest, tonics, and blisters to the painful nerve-trunks, she recovered.

Case III.—Miss F., a music teacher, aged 33. Had been practising the "Stuttgart method." Marked tenderness of the right musculo-spiral nerve and over the extensors of wrist and fingers. She was anæmic, and attributed her trouble to catching cold.

Case IV.—Miss O., aged 20, in delicate health, had "strained her arm playing the piano." There was pain, tremor, tenderness of the right musculo-spiral nerve, and excess of irritability to faradism of the extensor muscles. There was discomfort in the arms at night, as in Case II. After rest, tonics, and blisters to the tender nerves, she completely recovered.

Case V.—Miss W., aged 20. Marked tenderness of the median and musculo-spiral nerves and tremor of the hand. She was in ill-health and dyspeptic.

Case VI.—Miss G., aged 19, a pupil at the Royal College of Music; and

Case VII.—Miss M., aged 35, were in a condition almost exactly similar to the preceding, so that I need not trouble you with further details.

Case VIII.—Miss Y., a governess, aged 22. Her difficulty was mainly with the left hand. Extension of the wrist and fingers caused her pain, and she had marked tenderness of the median and ulnar nerves. Tremors of both hands, highly nervous, and a history of family trouble and loss of rest.

Case IX.—Miss F. complained that "the left forefinger would not keep off the keys." There was marked deficiency of irritability of the left extensor indicis and extensor primi internodii pollicis. No nerve tenderness. The patient attributed her trouble to a whitlow which she had had on the left forefinger two years previously. She was nervous and sleepless.

These nine cases are of interest as showing a distinct involvement of the extensor muscles or the musculo-spiral nerve in each case. They also serve to illustrate other points which many of these cases of piano-difficulty have in common.

First, there is the nerve-tenderness which accompanies almost all of these cases. This may definitely be brought about by over-use of the muscles; it may also occur in connection with a wrench or strain of the arm, or may follow a bruise (as we shall see in connection with a case to be presently recited), and it seems very liable to occur in persons of delicate organisation who are in depressed health or who have been exposed to cold. We have no right to assume that it, in all cases, indicates neuritis, but it may do so; or it may point to hyperæmia or congestion of the nerve. There are four conditions, which may accompany nerve-tenderness; these are (*a*) muscular disability which, although it may be specially manifest in one particular act, will generally be found to affect other acts as well; (*b*) more or less tremor; (*c*) pain or early fatigue during muscular exertion; (*d*) a sense of discomfort in the limb (not exactly pain), which is always worse at night and makes it difficult to put the limb in a comfortable position in bed and often keeps the patient awake. This latter symptom is both interesting and curious, and one which is often complained of. This sense of discomfort is an effect, probably, of the tenderness of the nerves, whereby they become sensitive to the slight degrees of pressure which are inseparable from almost every position. Not only, however, are the nerves sensitive to pressure, but also to slight degrees of stretching. This fact was well illustrated by a case

of so-called multiple neuritis due to alcohol which was in Ward 3 last summer. This patient's nerve-trunks were all tender (median, ulnar, and musculo-spiral), and I had frequent opportunities of showing you that when either of these nerve-trunks were put upon the stretch, the patient (who was habitually drowsy and in a state of partial mental incapacity) invariably manifested pain, and when asked where the pain was, invariably pointed to the position of the trunk of the nerve which was being stretched. Thus, with the elbow bent and the wrist forcibly extended, if the ring and little fingers were pulled back so as to stretch the ulnar nerve to the utmost, the patient pointed to the back of the olecranon as the seat of pain. If, with the elbow straight and the wrist extended, the thumb and forefinger were pulled back so as to stretch the median nerve, the patient pointed to a point internal to the biceps tendon at the bend of the elbow as the seat of pain. If, with the elbow straight and the wrist forcibly flexed, the thumb and forefinger were bent strongly into the palm so as to stretch the musculo-spiral nerve, the patient complained of pain in the position of the trunk of the nerve above the outer condyle of the humerus. We tried these experiments again and again, and always with the same result. If, then, the nerves are sensitive both to pressure and tension, it is not surprising that trouble should be experienced in finding a comfortable position for the affected limb.

Another fact worthy of notice is the common implication of the left hand, either alone or to a greater extent than the right. The left hand is less expert and more difficult to train than the right, and it is not to be wondered at that it should be the most prone to suffer from overwork in acts which call upon both hands equally or nearly so. Because of the difficulties experienced with the left hand, it is often inordinately worked while practising exercises.

The next four cases are similar to those already given, except in the fact that the extensors and the musculo-spiral nerve were not specially involved.

Case x.—Miss G., aged 20, experienced pain and difficulty in playing, and to a less extent in all acts with both hands. All the nerve-trunks were tender. She was dyspeptic, and there was a strong family history of gout. Cured by rest, diet, and change of air.

Case xi.—Mrs. A., aged 34, complained of pain and "creepy feelings" after playing the piano. There was distinct tenderness of the right median nerve, and the cervico-dorsal spine was also tender.

Case xii.—Miss A. B. experienced difficulty in lateral (interosseal) finger movements, and to a less extent in all acts, both coarse and fine. It was found that the median and ulnar nerves on both sides were distinctly tender.

Case xiii.—Miss B., aged 21, had been working hard at the Leipsic Conservatorium. The right median nerve was exquisitely tender. The patient was anæmic and dyspeptic. Completely cured by rest, iron, blistering the tender nerve, and massage.

The next two cases are of interest as examples of difficulty caused by trouble apparently limited to the region of the shoulders.

Case xiv.—Miss E. B., aged 27, a teacher of music, suffered from pain in the shoulder after playing—or, indeed, after any work with the right hand. There were no tender nerve trunks, but a very tender spot was found close to the insertion of the levator anguli scapulæ, at the superior angle of the right scapula. She improved after blistering the tender spot and the administration of arsenic.

Case xv.—Miss R., aged 29, a governess, came complaining of an ill-defined awkwardness of the right arm, which interfered not only with piano-playing, but with other acts, such as cutting her dinner. The elbow, she said, had a tendency to stick out. There was no nerve-tenderness, and no well-marked change in electric irritability. On removing the clothing and faradising the right deltoid, it was noticed that the vertebral border of the right scapula was tilted away from the thorax, whereas nothing of the kind occurred when the left deltoid was faradised. This was due, apparently, to a relatively weak condition of the right serratus magnus. There was a disturbance of the normal balance of power between the right deltoid and right serratus, which became manifest to the eye, not during forced voluntary acts so much as during the forcible faradisation of the deltoid. When the right scapula was tightly bound or held against the ribs, the clumsiness of the right hand was much lessened. This weakness of the serratus was of long standing; its cause was not evident, and, when last seen, the condition had not materially improved.

The next two cases were, in a mild sense, traumatic.

Case xvi.—Miss E. E., aged 23, complained of a trouble with her left hand when playing. The meta-carpo-phalangeal joint of the left thumb was found to be weak and tender, and, on being questioned, she remembered that she had strained the joint a few weeks previously, while struggling with her brother.

Case xvii.—Miss F. B., aged 31, bruised the right arm eighteen months ago, and since then she has had pain and disability of the limb. All the nerve trunks were tender, and she was ordered to counter-irritate the skin over the tender nerves, and rest the limb.

The next case I have to quote is one of considerable interest, in which the primary trouble seems to have been in a tendon.

Case xviii.—Miss Ada H., aged 21, pianist, complained of weakness in the right hand while playing, and in all acts. There was special difficulty with lateral (interosseal) finger movements, and in turning the hand and little finger towards the ulnar side, and she complained of a quivering in the first right dorsal interosseous muscle after playing. There was found a considerable thickening on the tendon of the flexor carpi ulnaris muscle, which not only interfered with the use of that muscle, but also, by pressing on the ulnar nerve, seriously hampered the use of the muscles in the palm supplied by that nerve. The thickened tendon was blistered, and the patient was ordered to take a tonic and go for a holiday. She made a good recovery.

Case xix.—Miss L. H., a pianist, whose performances were hindered by a troublesome cramp of the flexor minimi digiti. The cause of this cramp was not very evident; but she was dyspeptic, and this fact, combined with excessive use of the muscle, may be regarded, perhaps, as sufficient to account for the cramp.

I have only seen two males who have come to me complaining of difficulty in piano-playing.

Case xx.—Mr. P., aged 60, a professional pianist of intemperate habits. He had all the symptoms of disseminated cerebro-spinal sclerosis. His eyesight was failing, and there was grey atrophy of the optic discs. He went gradually from bad to worse. Tremor was most marked in the left arm, which was very tender, so that he could hardly bear to have it touched. The musculo-spiral and ulnar nerves of this arm were especially tender. He said that he could not strike the keys with any certainty, and he complained that the left ring-finger always gave him the most trouble. The left ring-finger is the finger which pianists always find the most difficult to educate. This case is of interest as showing how a well-recognised pathological condition may first show itself in parts which are especially overworked.

Case xxi was that of a professional pianist, aged 23, who for the last few months had experienced an ill-defined difficulty in playing in both hands. The right little finger and the back of the left hand were particularly painful. There was slight rheumatic thickening of some of the small joints of the fingers. Each nail of both hands had a white mark above the middle. These must have been formed at about the same time. The patient stated that, about three months previously, he had kept the house for a feverish cold. This may have entailed some failure of nutrition, and it was subsequent to this that he experienced his difficulty in performing. I could make out nothing definitely wrong with nerves or muscles, and I have no knowledge of the subsequent course of this case.

The short summary of these twenty-one cases shows us that in no two cases was the cause of break-down precisely the same. These cases afford no justification for using such a term as "pianists' cramp," to imply a morbid entity having a special cause, and a pathology of its own. Confronted with a pianist who has broken down, our first duty is to make a diagnosis, and answer the questions, Where? and Why? The most common symptom in these cases was nerve-tenderness (indicative possibly of congestion or mild inflammation), which affected different nerves, and seemed to depend, not only on overwork, but on such accidental causes as strain or cold, and to be predisposed to by various bodily conditions, such as anæmia, rheumatism, gout, and dyspepsia.

You will have noticed that, although the act of piano-playing was most seriously affected, there was usually some general disability of the limb as well, which accompanied the "professional" trouble in almost every case. You are aware that, with regard to "writers' cramp," it is often asserted that, with the exception of the act of writing, there is nothing wrong. Although I cannot quite endorse the statement with regard to "writers' cramp," still I must admit that these cases of pianists' trouble offer a contrast to "writers' cramp" in the large amount of disability which generally existed for acts other than piano-playing. This is due, I believe, to the fact that the muscles, the derangement of which causes break-down in piano-playing are larger, more numerous, and in more common requisition for general purposes than are the muscles (most commonly the interossei) whose break-down causes writers' cramp.

The prognosis necessarily depends upon the diagnosis. In cases where nerve-tenderness and local muscular weakness are the only troubles, I believe the prognosis to be good. Cases of this kind oc-

curring, as very often is the case, in young girls, nearly always recover, although I am bound to say that recovery is sometimes very tedious.

Treatment.—The most important point in treatment is rest. The excessive use of the hand must be discontinued, and it is often necessary to insist upon this rather forcibly. Piano-playing, if not prohibited altogether, must only be practised to a degree short of that which causes pain or annoyance. It is often difficult to restrain the ardour of these patients in the matter of playing. Directly they feel in a small degree better, they fly to the piano; and I have known the progress of more than one case very seriously retarded by the undoing, as it were, of the good effect of rest by an hour's injudicious and prohibited "practising."

I need hardly say that constitutional treatment is all-important. The body must be healthy in order that the arm may recover. Anæmia and dyspepsia must be attended to and counteracted by diet, medicines, and change; and no change is better than to a mountainous climate, where the advantages of a chalybeate water may be enjoyed. St. Moritz in the Engadine, Rippoldsau in the Black Forest, Schwalbach, and Spa have a well-deserved reputation for benefiting these cases. Any indications caused by gout and rheumatism must be met, and if there be evidence of gastric irritation, you may be sure that the arm will not be well until this trouble has been cured.

In many cases the administration of arsenic has seemed to be of decided benefit. The most important local measure is the employment of counter-irritation over the tender nerve-trunks. This may be accomplished by means of blisters or by the application of strips of capsicum plaster. Douching, friction to the arm, and systematic massage are often of great use, but the last-named mode of treatment is not to be adopted as long as the nerve-trunks are tender, for under these circumstances it seems decidedly to do harm rather than good. You must remember that the professional *masseur* is not infrequently over-zealous, and that the mere passive act of being rubbed is very exhausting to the patient. You must take care that the massage is neither too long nor too vigorous. If massage be well timed, and be reasonably and sensibly carried out, it is undoubtedly of great value. It seems necessary, in view of the sort of fashion which has set in towards this mode of treatment, to warn you not to recommend a patient to place himself in the hands of a "professional rubber," unless you know something of his character and capabilities. While on the subject of treatment, I may allude again to the fact that pianists have special difficulty in educating the ring-fingers, which have less power of independent movement than the other fingers. This is partly due to the absence of special extensor muscles, such as are provided for the index and little fingers, and partly to the fact that the extensor tendon of the ring-finger is joined to its fellows on either side by a fibrous band, near the far end of the metacarpal bone. With the hand in the pianists' position, it will be found that the power of raising the ring-finger while the middle and little fingers are resting on the keys is not great, less than that possessed by either of the other fingers when similarly circumstanced. It cannot be raised more than about three-quarters of an inch, and hence the power of striking the key is small. To remedy this, it has been proposed to divide, by means of a tenotome, the bands connecting the extensor tendon of the ring-finger with the extensor tendons on either side of it. This operation has been performed in America and in this country, and it is said with good results. How the reunion of the divided band is prevented I do not know. I confess that the operation seems to me to be one likely to produce weakness at first, and to be followed by greater fixity in the end, when the cicatricial tissue of the divided bands contracts and draws them tighter than before. It must not be forgotten that the ring-finger has its special use, which appears to me to be to grasp firmly in the palm, while the other fingers of the hand are otherwise employed. The great characteristic of the ring-finger is its power of firm grasp, and we should not rashly do anything which is likely to lessen this firmness.

Mr. Thomas Platt, M.R.C.S.Eng., Consulting Surgeon to the Oldham Infirmary, has been placed on the Commission of the Peace for the Borough.

Presentation.—Dr. Wild, who is leaving Pittington for Towlaw, has been presented with a handsome mantelpiece and bronze figures by a large circle of friends. Mrs. Wild received a silver kettle.

Fires in Theatres.—The necessity for the most rigorous control over the structural arrangements of theatres is shown by the fact, reported by the *Neue Freie Presse* of Vienna, that even last year, when fewer accidents than usual occurred, nine theatres were burnt down in various parts of the world.

ABSTRACTS OF LECTURES

ON

THE DEVELOPMENT AND TRANSITION OF THE TESTICLES, NORMAL AND ABNORMAL.

Delivered at the Royal College of Surgeons of England, February 23rd, 1887.

By C. B. LOCKWOOD, F.R.C.S.,

Demonstrator of Anatomy and Operative Surgery in St. Bartholomew's Hospital; Surgeon to the Great Northern Central Hospital; Hunterian Professor of Anatomy, Royal College of Surgeons.

Lecture I.—The Development of the Wolffian Body and Pronephros.

After some preliminary remarks, the lecturer observed that the fact that the body of the testis and the epididymis had different origins was well known; the latter arising from a part of the Wolffian body, the former from a separate group of cells; and continued as follows: The smallest human embryo in which I have examined the Wolffian body was $\frac{1}{32}$ in. long. To give an idea of the smallness of this creature, it may be compared to a small house-fly. It is hard to estimate

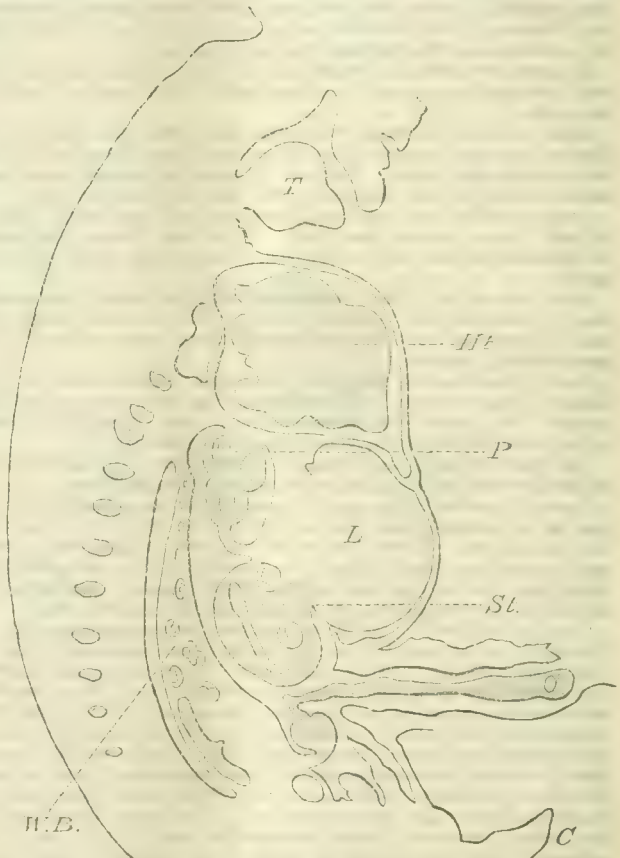


Fig. 1.—Longitudinal Section, × 30. Human embryo, twenty-three days (?). To show size and position of the Wolffian body (W.B.) T. Tongue and lower jaw; Ht. Heart; L. Liver; P. Lungs; St. Stomach (divided twice); C. Tail.

the age of such embryos as this, but it looks exactly like one which is considered to have been twenty-three days old. The most palpable of its external characteristics were a considerable curvature of the body and neck, an absence of limbs, and the presence of a very

obvious tail. Longitudinal sections show that the body is divided into two compartments: a superior, containing the heart; and an inferior, containing the liver, lungs, alimentary canal, and Wolffian bodies (Fig. 1). A glance at the accompanying figure shows that, owing to the absence of the diaphragm, there is no separate pleural sac, but that the lungs lie in the upper part of a pleuro-peritoneal cavity. The size and the appearance of its glomeruli render the Wolffian body a conspicuous object, occupying nearly all the back part of the pleuro-peritoneal cavity; it reaches nearly as far forwards as the heart and pericardium. Its front extremity is tapering, and situated behind the lungs; whilst the posterior is large, and ends towards the hinder end of the pleuro-peritoneal cavity. Perhaps it would not be incorrect to say that, at this period (twenty-third day), the length of the Wolffian body is a third of that of the embryo, and that together they constitute a sixth part of its bulk.

Although this embryo serves admirably to display the size and importance of the Wolffian body, yet it affords but little information concerning its minute structure. In the section which has been figured, it may be seen without difficulty that the organ consists of a groundwork of connective tissue, throughout which are numerous round and oval spaces. These spaces are lined with minute cubical cells, and a glomerulus protrudes from some part of the wall into the interior. This arrangement holds good throughout the whole length of the Wolffian body; but it may be noticed that anteriorly the glomeruli and the spaces which contain them are smaller than elsewhere. Besides these glomeruli, various tubules lined with epithelium may be made out in other sections; but, as these will soon be considered in detail, it is unnecessary to do more than merely mention them.

To examine these bodies in greater detail, transverse as well as longitudinal sections are requisite, and a commencement may be made with specimens which have been made from a human embryo a little larger and more advanced than the last, and perhaps at about the twenty-sixth day of intra-uterine life. The length of this specimen was nearly half an inch, and the fore and hind limbs had just begun to appear. The section which has

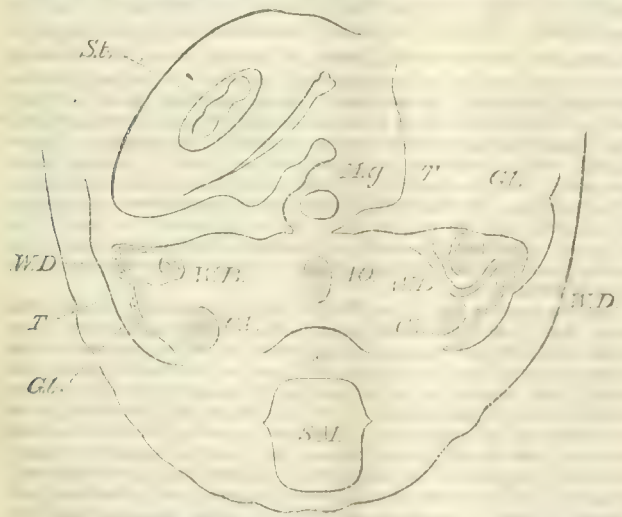


Fig. 2.—Transverse Section. Human embryo, twenty-five days × 30. To show Wolffian bodies in transverse section. St. Stomach; M.G. Mesogastrium; W.B. Wolffian body; C.V. Cardinal vein; A.O. Aorta; S.M. Spinal medulla; Gl. Glomerulus; T. Tubule; W.D. Wolffian duct.

been chosen (Fig. 2) is through about the middle of the embryo; and the organs divided by it are the stomach and duodenum, the liver and Wolffian bodies. The latter occupy no inconsiderable portion of the back of the pleuro-peritoneal cavity, and their triangular shape is very unmistakable. The base of the triangle is towards the aorta and vertebral column, and is continuous with the tissues which surround these parts; the other sides are free and loose into the peritoneal cavity. The bulk of the Wolffian body consists of embryonic connective tissue, and its surface is covered with a layer of cells, which are thickest and most columnar round the most prominent part of the organ. Beneath this covering, and near the apex of the triangle, there is a ring of concentrically arranged cells, surrounding a small lumen; and this represents the Wolffian duct. On either side, coiled tubules—the Wolffian tubules—are apparent; and on one side, the spectator's right, the tubule seems to open into the duct. Moreover, in all probability, the tubule is connected with a large glomerulus, for on either side these structures are prominent objects. The large veins in the back part of the Wolffian body—the cardinal veins—are the channels by which the blood from the primitive kidneys is returned to the heart.

It is clear that it is impossible to pursue this branch of the inquiry upon human embryos, for it may have been noticed that the organs in question had already, in the youngest embryos at my disposal, attained a certain degree of perfection. The origin of the Wolffian duct is most conveniently studied in the chick; but the embryos of rabbits have also been freely used in this investigation. Theoretical considerations would tempt one to anticipate that the Wolffian duct would originate from the epiblast, near which, at the beginning, it lies; but the lecturer showed that in the chick its origin was undoubtedly mesoblastic. Nevertheless, there were *a priori* reasons with which the observations did not readily conform. For instance, in the case of other glands, it is possible to trace the origin of their epithelia either to their epiblast or hypoblast, so that, in this case, the chick seemed to be an exception. His and Henson had stated that in the chick the Wolffian duct commenced as a longitudinal involution of epiblast. But the evidence to the contrary seemed overwhelming, that His had changed his opinion, and now believes that it comes from mesoblast.

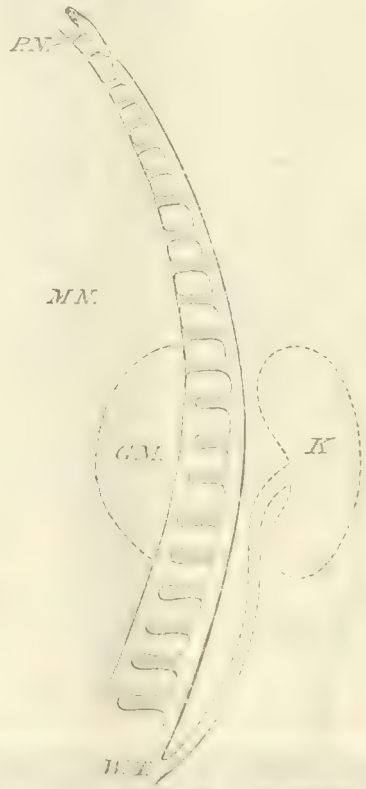


Fig. 3. Diagram constructed from a series of transverse sections of a rabbit's embryo at the thirteenth day of intra-uterine life. To show pronephos and mesonephros or Wolffian body. The future positions of the permanent kidney and genital mass are indicated. P.N. Pronephos; W.T. Wolffian tubules; G.M. Genital mass; K. Kidney.

The origin of the Wolffian duct is a problem interesting to the embryologist, and important to the pathologist. Quite recently observations have been published, with the intention of proving its epiblastic origin in the guinea-pig and rabbit. Flemming is of opinion that in the rabbit the Wolffian duct originates from certain thickenings of the epiblast, which lie just external to the somite, but at the ninth day the rabbit's Wolffian duct arises from a mass of cells which are produced from the intermediate cell-mass. No doubt epiblastic thickenings exist, both in the rabbit and the chick, but sometimes an embryo possessed as many as three thickenings on one side, and, moreover, they are present in the chick, and in that animal there is no doubt about the epiblastic origin of the Wolffian duct. It would

be hard for the scientific pathologist to admit the cogency of these arguments, for he is tempted to assume that the epiblastic origin is true because it accords with *a priori* conceptions. For instance, in the case of the testicle, the assumption that the Wolffian duct arises from epiblast, has suggested a plausible explanation of the origin of testicular carcinomata; but under the circumstances such an inference seems premature. However clearly the epiblastic origin of the Wolffian duct is demonstrated, an obvious fallacy has to be guarded against. It is superfluous to point out that nothing but a very simple conclusion ought logically to be drawn from that demonstration; namely, that it may explain the origin of carcinomata from the parts developed from the Wolffian duct.

After describing the way in which the Wolffian duct attained its position in relation with the body cavity, the development of the Wolffian tubules was discussed. The simplest origin for these organs would be as outgrowths of the Wolffian duct, but in the rabbit they arise independently, and were produced from the mass of cell (intermediate cell-mass) from which the Wolffian duct grew. Anteriorly the rudimentary tubules are continuous with the peritoneal epithelium, but posteriorly they are separate (Fig. 3).



Fig. 4.—Front part of human Wolffian body, to show the appearances which may be supposed to indicate the existence of a fore-kidney. The embryo was at about the thirtieth day of intra-uterine life. C.V. Cardinal vein; P. Protrusions into peritoneal cavity; R. Recesses; W.T. Wolffian tubules.

Soon after their formation the tubules become continuous with the inner side of the duct, and eventually by a separation of the central cells acquired a lumen opening into the lumen of the Wolffian duct. The number of Wolffian tubules developed was equivalent to about two or three for each somite in relation with the Wolffian body.

After showing that in early human embryos the Wolffian tubules were continuous with the peritoneal epithelium, the question was raised whether the body cavity was, in mammals, prolonged into the Wolffian tubules. For this purpose, the anterior end of the rabbit's Wolffian duct was examined, and the following condition described (Fig. 3). After beginning as a solid column of cells, and after receiving two prolongations (nephrostomata) from the body-cavity, the duct ceased. After a few sections it began again, and had one nephrostoma, after which it merely received the Wolffian tubules. The lecturer agreed with Janosik and Renson in considering that this indicated the existence of a head kidney or pronephros in the rabbit. The absence of external glomeruli, such as Renson mentions, was noted, but this fact was not thought to militate against the previous assumption.

After showing that nephrostomata seemed to be present in transverse sections of human embryos, the appearances seen at the fore end of the Wolffian body of a human embryo were described, in which there were three well marked protrusions from the fore end of the Wolffian body (Fig. 4), the recesses between these protusions were in close relation with the Wolffian tubules. The lecturer thought that these appearances indicated the existence of a pronephros in the human embryo; and, in conclusion, drew attention to the various histological specimens and drawings with which the lecture was illustrated.

TINNITUS AURIUM, AND ITS TREATMENT BY A NEW METHOD OF ALTERNATE INJECTION AND EVACUATION OF AIR.[1]

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Tinnitus aurium is a symptom which occurs in connection with many obscure aural disorders, and it is also a frequent accompaniment of many of the common forms of middle-ear disease. It is generally absent, however, in cases of chronic otorrhœa, attended with perforation or ulceration of the membrana tympani.

In different cases we observe a marked variation in the character and intensity of the tinnitus. The noises are compared to many varieties of external sound, and their existence seems sometimes to augment the intensity and to modify the character of actual sounds; so that the distress of the patient is increased, and his head is constantly filled with vibrations which have no real existence in the surrounding air. Tinnitus is generally associated with some degree of deafness, but cases occasionally occur in practice in which the hearing power, tested by the ordinary method, appears to be scarcely below the normal standard. Sometimes the noise is referred to one or both ears; at other times it is described as sounding all over the head. Sometimes it is intermittent, and very variable in character. Sometimes it sets in gradually, and, at the onset, scarcely causes much annoyance; but it occasionally creates great alarm by the suddenness of its invasion. Fortunately tinnitus often passes away, and gradually subsides, and the patient is scarcely conscious of the time of its departure. On the other hand, it sometimes continues for years, and haunts many who are the unfortunate victims of the most hopeless forms of aural disease.

Tinnitus aurium can be artifically induced by simply pressing the tragus firmly over the aural orifice. In this way the column of air within the external passage is condensed, and the pressure on the drum augmented, and this increase of pressure is directly transmitted through the conducting apparatus to the endo-lymph and nervous structures of the labyrinth. Now this little experiment yields an explanation of the occurrence of tinnitus in association with the most common forms of middle-ear disease; for, in a vast majority of cases, it is wholly dependent upon abnormal tension within the tympanum. In acute catarrhal affections it is present, together with throbbing and distressing pain. An attack of this kind often follows exposure to cold, and the introduction of water into the ear during bathing. The hearing power is impaired, the lining membrane of the middle ear congested and swollen, and its cavity distended with mucous secretion. This sort of aural disturbance originates, too, in pharyngeal and bronchial affections, and generally soon passes off; but it is also the forerunner of a chronic disorder, by which the conducting apparatus is seriously damaged.

Again, in chronic catarrhal inflammation of the tympanum, the cavity becomes filled with thick and inspissated secretion, its mucous membrane gets thickened, and bands of adhesion slowly form around the ossicles; so that the membrana tympani loses its normal elasticity, the mobility of the bony chain is impaired, and tympanic tension is developed, attended with gradually increasing deafness and tinnitus. In many of these chronic cases, a disturbance of pressure is produced by obstruction of the Eustachian tubes, and this is of frequent occurrence as the result of catarrhal and specific inflammations of the

[1] Address delivered before the South-East Hants Medical Society.

throat. In the early stage, the pent-up fluids cause serious distension, but these become gradually absorbed; and then, unless the normal communication between the ear and the pharynx is re-established, the atmospheric pressure on the outer surface of the membrana tympani presses it inwards, and forces it against the fenestra ovalis. In this way, the organ undergoes permanent injury, and the drum, together with the contents of the tympanum, are damaged by structural changes. The membrane then appears to be deeply indented and concave, the margin looks thickened, the centre thin and transparent, and sometimes the short process of the malleus is visible through it.

Deafness and tinnitus are also intimately associated with diseases of the naso-pharynx. The tonsils are often enlarged, and their follicles filled with a yellowish fluid. Sometimes the mucous surfaces of the pharynx are swollen and covered with a thick muco-purulent secretion, which completely blocks the Eustachian orifices. In many chronic cases, the mechanical closure of the tubes is caused by outgrowths of glandular tissue, which narrow the naso-pharynx, and obstruct the nasal passages.

Pressure on the outer surface of the drum is another source of tinnitus. It is frequently excited by the presence of a mass of impacted cerumen or the lodgment of a foreign body. In a case, recently under my care, immediate relief followed the removal of a large polypoid growth which projected from the external orifice. Under these circumstances, of course, efficient treatment is very easy of application.

Some aurists have ascribed the obstinate continuance of this unpleasant symptom to an altered condition of the intrinsic muscles of the tympanum. It is quite possible that, during a state of chronic inflammation, they may form adhesions with the surrounding structures, and so excite abnormal pressure during their contraction. On the other hand, they may lose their normal tonicity, or fall into a paralytic condition, through vascular and trophic changes. Now, any loss of contractile power must tend to aggravate any disturbance of the balance of pressure within the tympanum. The muscles of the ossicles are directly stimulated by sound, and, in the normal state of the organ, may regulate the tension of the membrana tympani, and the movements of the stapes in the foramen ovale; so it is at least probable that a loss of tone may be followed by an undue excitation of the auditory nerves.

I have now briefly considered tinnitus aurium in its relation to many common disorders of the conducting apparatus of the ear. In all cases of middle-ear disease in which it is present, it must be regarded as a symptom excited by abnormal pressure upon the internal auditory apparatus, and produced by mechanical causes within the tympanic cavity. But this disorder has sometimes a much deeper origin, and is essentially dependent upon disease of the nervous structures of the organ, and this, too, under many and very varying conditions.

During the course of brain or meningeal disease, the blood-supply to the internal ear may become deranged, and thus abnormal vibrations may be generated by a disturbance of the circulation within the cranium. The presence of persistent tinnitus, in association with general indications of atheromatous degeneration, must be regarded as a premonitory symptom of structural changes in the walls of the cerebral blood-vessels. Under such circumstances, the sounds appear especially depressing to the patient, exhibiting a wavy or beating character, and are often synchronous with the cardiac systole. Not long ago, a case of this sort occurred in my practice, and the patient, an officer in the army, died suddenly in a London street.

Tinnitus may result from hyperæsthesia or undue irritability of the auditory nerve. This condition is often induced by constant exposure to loud and harsh sounds. Many persons engaged in noisy trades experience for hours, after the cessation of their toil, a constant buzzing in the ears. Now, whenever this aural system constantly recurs, more or less deafness is sure to follow; and, if the exposure is continued, it will at length issue in the development of a very obstinate and persistent form of this affection.

In many cases of chronic aural disease, the branches of the auditory nerve which are distributed to the deep recesses of the labyrinth, appear to be the real seat of the disorder. Sometimes the fibrous membrane lining the bony cavities, and also the osseous structure itself, are found thickened and congested. The blood-vessels of the labyrinth are likewise dilated, and the membranes marked by the remnants of old capillary extravasations. Many forms of atrophy and degeneration of the nerves of the labyrinth are the result of arrested function, induced by disease of the conducting apparatus and tympanum. In these cases, from the long withdrawal of healthy stimulation, the ultimate fibres have lost their sensibility for sound, and a persistent tinnitus has been roused into existence dependent upon chronic changes in the walls of the membranous labyrinth, which are capable of exciting the filaments of the auditory nerve, and creating disorderly discharges in the direction of the cerebral centres.

The most careful examination of the internal ear, in cases of obstinate aural disease, has sometimes failed to discover any very definite structural lesion; but, after all, opportunities for investigation in this direction are rare; at the same time, the complexity and delicacy of the auditory nervous network render the recognition of morbid changes a matter of considerable difficulty.

I have already remarked that very slight and varying conditions of the tympanic apparatus are often quite sufficient to modify the sensibility of the ear, and to kindle within it disturbing vibrations. Now, in some cases, these little variations are rendered acutely distressing through constitutional derangement, or by general disorder of the vascular system. Thus, tinnitus is sometimes present in anæmia and chlorosis, and is roused into activity and greatly intensified through the altered composition of the blood itself. At other times, it follows as the result of serious hæmorrhage, by which the blood-pressure is reduced and the vessels suddenly relaxed. It occurs in connection with venous hyperæmia, associated with cardiac obstruction and regurgitation. Occasionally it is a troublesome symptom during the course of some forms of chronic disease, in which the aural vascular system is disturbed by the high tension of the circulation. Many constitutional disorders are also observed to be important factors in the production of tinnitus, and this fact is frequently exhibited in patients who have long been the victims of gout, alcoholism, chronic dyspepsia, and general nervous depression.

It is evident, then, that tinnitus, of every character and intensity, must be regarded as the outcome of many disordered conditions of the ear, and that these conditions are aggravated by vascular and constitutional derangements. Sometimes it is an indication of temporary functional disturbance, at other times it points to structural change in some part of the organ. When considered apart from all its surroundings, it possesses very little diagnostic value. The important question to determine is the special form of aural disease of which it is a manifestation. Is it a symptom of middle-ear disease, or an affection of the nervous structures of the organ? We must not forget, however, that in practice the deep and superficial disorders are often intimately blended together, that changes in the sound-receiving apparatus are the secondary results of chronic middle-ear disease, and that it is sometimes a difficult problem to determine the exact seat and nature of the lesion which is the real source of the tinnitus. It is necessary, therefore, that we should in every case investigate the history and duration of the disorder, and carefully inquire into the constitutional condition of the patient. The conducting power of the ear must be tested with the watch and tuning-fork, and the external meatus and tympanic membrane inspected under good illumination. It is always, too, an important matter to examine the condition of the pharynx and nasal cavities, and then to prove the mobility of the drum, and the patency of the Eustachian tubes, by means of the air-douche and otoscope.

[*To be continued.*]

PROLAPSE OF THE UPPER INTO THE LOWER PART OF THE RECTUM WITHOUT EXTERNAL PROTRUSION.

By HARRISON CRIPPS, F.R.C.S.,
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The term prolapse of the rectum is often used somewhat loosely, many writers making it include hæmorrhoidal protrusion as well as the simple eversion of the gut. When the protrusion chiefly consists of dilated or hypertrophied vessels, it is rightly described as hæmorrhoidal, notwithstanding that a certain amount of normal mucous membrane may be drawn down at the same time.

The word prolapse should be restricted to cases in which the bowel, except for its liability to protrude, is healthy, or, at any rate in which any morbid condition affecting it is the result, rather than the cause, of the protrusion.

The amount of bowel that prolapses varies greatly, sometimes being little more than a fold of mucous membrane, while, occasionally, many inches involving all the coats of the bowel are turned inside out. In the former case the prolapse is described as partial, in the latter as complete. The closeness of the attachment of the rectum to the surrounding structures varies greatly in different individuals, a fact often noticeable upon examining the part with the finger. In some patients the bowel, when empty, has a smooth uniform surface, while

in others it is so relaxed as to be thrown into deep folds and reduplications. The mucous membrane is often so loosely connected with the muscular coat, as to slide considerably upon it, and it is a portion of mucous membrane thus sliding downwards, that forms the partial prolapse. In other instances, not merely does the mucous membrane slide upon the muscular coat, but the whole upper part of the bowel is liable upon straining to become invaginated into the lower portion, and, eventually protruding through the anus, forms a complete prolapse.

The cause of prolapse can in many cases be traced to abnormal and persistent straining, as may be seen from its frequent concurrence with phimosis, or stone in the bladder in children, and from chronic constipation and hypertrophied prostate in the adult; while occasionally the dragging of a polypus is the exciting cause. Often, however, none of these conditions appear to be present, and the prolapse can only be accounted for by a natural deficiency in the attachments of the gut. Sometimes a prolapse may be produced suddenly, during some violent straining effort; but, more commonly the process is a gradual one, and it can be observed how a partial prolapse, at first consisting of the sliding of the mucous coat alone, may gradually become complete by drawing after it the other coats of the bowel.

Many cases of complete prolapse, however, doubtless commence by an invagination of the middle into the lower part of the rectum. The upper portion of the gut is naturally more mobile and less firmly attached than the lower part, and this difference in mobility affords an explanation of the extensive prolapses occasionally met with, for these commence by an invagination of the upper into the lower part of the bowel, forming an intussusception, which, by the continuance of straining, is eventually protruded from the anus. It will be seen that in such a case there must have been a stage in which there was merely a slight invagination of the middle into the lower part, without any anal protrusion. It is probable that, in many instances, this first stage is never exceeded.

It is the object of this paper to call attention to this particular form of invagination. The condition is of not infrequent occurrence, and it is possible that it may exist without causing trouble; but, I am confident that it occasionally affords an explanation of rectal symptoms otherwise unaccountable.

The symptoms of prolapse when any considerable portion of the bowel is protruded are sufficiently prominent to admit of easy diagnosis, and the patient is generally aware of protrusion on straining. Occasionally, however, even with a considerable prolapse, the patient may be quite unconscious that any part of the bowel comes down, as in the case of a girl under my care at St. Bartholomew's Hospital, who had been passing blood and a certain amount of slime daily for more than two years. Whilst in the hospital, the bowels acted several times a day, about a teaspoonful of blood passing with each motion. She generally strained a good deal, but had never noticed any protrusion. She had but little pain in the bowels or about the anus. She was very weak and anæmic from the continual loss of blood. After a purge, and a soap and water injection, I examined the parts, which appeared normal with the exception of a weak sphincter. There was no sign of piles. By gently drawing on the parts, and telling the girl to strain, a small quantity of mucous membrane was everted, when by a sudden effort about three inches of the bowel shot out, forming a typical complete prolapse. At the top of some of the protruded rougie could be seen several shallow ulcers about an eighth of an inch in diameter. As the prolapsed part became congested, blood at once commenced to ooze from the margin of two or three of the ulcers, and in a few seconds accumulated in sufficient quantity to drip. The case was eventually cured by the use of the linear cautery. In this case, owing to the prolapse being complete, and becoming extruded at the time of examination, the diagnosis was fortunately easily made, and the girl cured, but had the protrusion not occurred at the time of examination, it would have been extremely difficult to make a diagnosis as to the cause of the trouble.

In cases in which the prolapse never protrudes at all from the anus, it is highly probable that the disorder may be altogether overlooked. The following case affords a good illustration of this fact.

A gentleman sent to me by my friend and colleague, Dr. Lauder Brunton, gave the following history. For two years he had a discharge from the rectum. This usually occurred in the morning on first going to stool, and it was occasionally repeated once or twice in the day. The discharge amounted to about a teaspoonful in quantity, and consisted of a muco-purulent material resembling the lightly-boiled white of an egg. He often had a sensation of the bowels being incompletely relieved, and he also complained of an occasional slight aching about the sacrum, but had suffered little or no actual pain. He occasionally lost small quantities of blood. He was very anxious and nervous about himself, and had for long been treated without benefit, his disorder having been variously described as "catarrh of the bowel," "dysentery," and "liver complaint."

I made a very thorough examination of the bowel, on the probability of there being some ulceration, internal fistula, or possibly malignant disease, but failed to find any one of these conditions. On introducing the finger into the rectum, it became arrested by some loose folds of the gut, and some little manipulation was required to pass the finger into the bowel. On further examination, it was found that the middle part of the rectum was so relaxed, that a large fold of it became invaginated into the lower portion, and each time the patient strained, it was forced down so as to make a kind of intussusception. The invaginated part did not extend low enough to protrude through the anus. The mucous membrane at the summit of the prolapsed fold had a thickened velvety appearance, caused by the development of minute flattened villi on the surface. Having failed to find any other morbid condition, I came to the conclusion that the discharge and other symptoms arose from the intussuscepted mucous membrane becoming congested from pressure about its neck, and that, if this could be prevented, the case might be cured. The case was treated accordingly with the linear cautery with the most satisfactory results. I saw the patient a year later, when he stated that, since the operation, he had had scarcely any trouble, the irritability of the bowel having passed away, and the mucoid discharge having ceased.

It should be understood that when patients complain of mucoid discharge, and loss of blood, it not infrequently happens that the disease is the result of hæmorrhoids, ulceration, stricture, or cancer, each of which has its peculiar train of symptoms, the diagnosis of which can be confirmed only by examination. But it is when somewhat anomalous symptoms, such as described in the last case, occur, and when a careful examination fails to disclose any of the common diseases mentioned, that the probability of the symptoms being occasioned by a partial internal prolapse should be remembered.

Treatment.—It is possible that some benefit may arise from palliative treatment, and I have seen good results follow, especially when intussusception is slight, the use of water injections, as advocated by Brodie. The treatment consists of a daily injection of warm water, in order to obviate straining; and then, after the motion is passed, one to two ounces of quite cold water should be injected. The effect of the latter injection is to brace up the bowel by causing contraction of the muscular fibres. Benefit from this line of treatment must not be expected immediately, and the method should be persevered with for at least some months. In cases where the protrusion is considerable, causing trouble by creating an unnatural frequency and desire for a motion, with a troublesome mucoid discharge, if the cold water treatment and astringent injections have been tried without success, the case has a good chance of cure by the free use of the linear cautery. This treatment, so strongly advocated by Van Buren for external prolapse, is certainly an invaluable method of treating that disorder. It was from its success for external prolapse that I was led to try it as a means of remedying the invaginations now under consideration. The cautery produces inflammation resulting in the formation of a new fibrous tissue which, from its contractile tendency, firmly unites the mucous and the muscular coats along the track of the cautery iron. In this way the sliding of the mucous on the muscular coat is prevented, and the prolapse stopped in the initial stage. It is, of course, possible that the effect of the cautery may be more extensive, and that the inflammation may extend sufficiently to effect the union between the bowel and the cellular tissue surrounding it. The detail of the operation is as follows:—

The apparatus required consists of a large duck-bill speculum, two or three small sponges on holders, and a small blunt prong on a long handle for separating the mucous folds, a large spirit lamp, and a couple of cautery irons. The iron consists of a tapering metal rod four inches long set in a handle, the end of which is turned down at a right angle, expanding into a knob of metal about the size and shape of a small acorn. These irons can be heated over the spirit-lamp and used alternately. They will be found far more convenient and readily handled than Paquelin's cautery, which too rapidly cools.

The patient having been prepared with a purge on the previous day, and the bowels washed out an hour before the operation, is placed in the lithotomy position; the speculum is introduced, and four lines of cautery are drawn along the axis of the bowel, commencing as high as possible, and terminating at the anus. Of these lines one is drawn on the anterior, one on the posterior, and one on each side of the bowel, the speculum being shifted as required.

It is difficult to estimate the exact depth to which the cautery extends; it will be found sufficient if the iron be used at a black heat, and drawn slowly along the bowel. On completing the cautery, a pad of cotton-wool should be placed against the anus, and kept firmly in position by a perineal bandage. The after-treatment consists of keeping the bowels confined for some days, and for several weeks only allowing an action in the recumbent position. The patient should be specially cautioned against straining, and the motion should be kept soft by taking twenty to thirty drops of extract of cascara sagrada every evening. If care be taken to prevent the skin of the anus being touched by the cautery, there is very little after-pain.

If the case is not cured by a single application of the cautery, the procedure should be repeated.

THREE HUNDRED CONSECUTIVE CASES OF HÆMORRHOIDS CURED BY EXCISION.[1]

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During the first five years of my professional career, I employed the ligature in the few cases of severe hæmorrhoids that came under my treatment. I operated according to the most approved method of that time, cutting through the skin and mucous membrane, and applying the ligature to the artificially-produced pedicle. The number of cases operated upon did not, perhaps, exceed a dozen; nevertheless, they were sufficient to convince me that the ligature by no means produced a radical cure. One of my patients returned almost as bad as ever, and the reports I heard of another were anything but satisfactory. Although I have rarely made use of the ligature since, I have, during the last fifteen years, frequently operated a second time on patients whose piles had been previously ligatured. In some of these recurrent cases the operation had been performed by men of eminence in this department of surgery, leaving piles so extensive that it has been difficult to believe that they had ever been subjected to a previous operation. Amongst these, one was a case operated upon by Salmon thirty-six years ago.

After abandoning the ligature, I adopted the clamp and cautery, which to the novice appear to have such fascinating advantages. For eight years I treated all my cases in this manner, and I devoted a considerable amount of attention during this time to the construction of an instrument, which I eventually finished to my satisfaction, and called a Speculum Clamp. This instrument I now produce; and I merely mention it to show that for the time I had a strong prejudice in favour of this method of treatment. My experience of the clamp and cautery, which certainly exceeded fifty cases, resulted eventually in the conviction that it was decidedly inferior to the ligature. The immediate risks I found to be greater, and the failures by recurrence more numerous. Certainly it was more frequently followed by secondary hæmorrhage, and I am acquainted with cases where the bleeding, which is reported to have taken place, must have been little less alarming after the use of the clamp and cautery than that which occurred in those days when hæmorrhoids were unceremoniously excised, and no precautions whatever taken to arrest hæmorrhage. These cases were operated upon by surgeons of recognised repute in this special method of treating piles. I consider that a plan of treatment which fails to compass that special end for which it was designed, and in addition has other obvious disadvantages, besides the further objection of being somewhat difficult to understand and complex in execution, loses its position in surgery, and must give place to other operations which involve less risk, give better results, and do not require any special surgical training.

Being convinced of the disadvantages and the imperfections of the ligature, and the clamp and cautery, I abandoned both in 1876, and I have never used either of them since.

During the last nine years, with the exception of a few cases treated by thermo-puncture, and others by the injection of chemical agents, I have almost exclusively removed hæmorrhoids by excision, and unless I had very ample and sound grounds for advocating the advantages of this plan of treatment, I should have deferred saying anything until such time as much greater experience would have justified the course I am now taking. It has, however, so far exceeded all my expectations, that I have no hesitation in expressing my conviction that it surpasses in every respect every other operation designed for the same purpose. I have now operated upon more than three hundred patients without a death, a single instance of secondary hæmorrhage, or one case where any complication, such as ulceration, abscess, stricture, or incontinence of fæces has occurred. I may go further, and state that I have never had one moment's anxiety about any of the cases, and to the best of my knowledge every patient has been completely and permanently cured.

I am now, with all due diffidence and respect, going to make what may appear a very bold statement. I do not consider that any surgeon has a thorough conception of hæmorrhoids until he has performed the operation of excision. He may have dissected the cadaver any number of times with the special object of studying the structure of hæmorrhoids, but it is only on the living subject that dissection will reveal their true nature. It is these vivisections that have confirmed my belief in the inefficiency of the ligature and the clamp, and they have revealed also the cause of failure. In surgical literature we read of hæmorrhoids as distinct individual tumours, but the vivisections I have referred to demonstrate that the entire plexus of veins surrounding the immediate interior of the gut is invariably at fault. Without doubt the hæmorrhoidal condition is marked by special protuberances at certain points in the circumference of the gut, and these I find have a pretty uniform position, owing no doubt to the regular disposition of the fibrous septa.

But the essential fact remains that, though possibly concealed by these masses, there are minute venous radicles behind and between the main tumours. They are now as small as their larger neighbours once were, but let the latter be removed by clamp or ligature, and the apparently insignificant venules will dilate and take their place, the very removal, perhaps, affording room for growth, and whilst taking off external pressure leaving the tension within increased. It is on the removal of these rudimentary piles, that the permanence of the cure and the future welfare of the patient depend; and I contend that the operation of excision alone satisfactorily accomplishes this object.

The principles of the operation are exceedingly simple, and its performance requires no special apprenticeship. I have received numerous letters from provincial practitioners, who had only read the original description I gave in the British Medical Journal for February, 1882, expressing their entire satisfaction with the operation. As I have since slightly modified the operation I will first briefly describe it, and afterwards discuss in more detail some of the stages which, perhaps, require further explanation and some vindication at my hands, as the operation is opposed to some of the most cherished practices of modern surgery.

1. The patient, previously prepared for the operation and under the complete influence of an anæsthetic, is placed on a high narrow table in the lithotomy position, and maintained in this position either by a couple of assistants or by Clover's crutch.

2. The sphincters are thoroughly paralysed by digital stretching, so that they have no "grip," and permit the hæmorrhoids and any prolapse there may be to descend without the slightest impediment.

3. By the use of scissors and dissecting forceps, the mucous membrane is divided at its junction with the skin round the entire circumference of the bowel, every irregularity of the skin being carefully followed.

4. The external and the commencement of the internal sphincters are then exposed by a rapid dissection, and the mucous membrane and attached hæmorrhoids, thus separated from the submucous bed on which they rested, are pulled bodily down, any undivided points of resistance being snipped across, and the hæmorrhoids brought below the margin of the skin.

5. The mucous membrane above the hæmorrhoids is now divided transversely in successive stages, and the free margin of the severed membrane above is attached, as soon as divided, to the free margin of the skin below by a suitable number of sutures. The complete ring of pile-bearing mucous membrane is thus removed.

Bleeding vessels throughout the operation are twisted on division. This brief description comprises the several stages of the operation.

1. In the first place it will be observed that beyond the chloroformist the operation requires no skilled assistance. A single nurse is quite sufficient, and I have on more than one occasion dispensed with assistance altogether.

Contrary to general recommendation I prefer the lithotomy position, with the legs well flexed on the thighs and the thighs on the body. This raises the whole pelvis, and gives the surgeon a commanding view of the field of operations. I sit in front of my patient, with my work on a level with my shoulders.

2. I have a strong objection to the use of instruments in the dilatation of the sphincters. Not only are they apt to produce sloughing, which would jeopardise the success of the final step in the operation, but the danger of rupture and possible future incontinence is also

[1] Read in the Section of Surgery at the Annual Meeting of the British Medical Association at Brighton.

greater, for the resistance can only be very imperfectly estimated, and the pressure cannot be regulated with delicacy, and is moreover unequally applied; I therefore invariably employ digital stretching. With the fingers the pressure can and ought to be distributed all round the circumference of the bowel, so that the muscles are uniformly stretched and not torn. If the sphincters be firm I generally introduce my two first fingers or thumbs, and knead the muscles all round, but if the parts are more relaxed, I at once collect the fingers in the form of a cone, and gradually pass in as much of the hand as is necessary. If ordinary prudence is exercised, the sphincters will invariably be restored to the full exercise of their natural function within three weeks.

3. It is better to commence the separation of the mucous membrane from the skin at the lowest point and deal with the two sides in succession, before completing the circle above, so that any oozing that may occur shall be below the work as it proceeds. The incisions must be made through the mucous membrane and not through the skin. It is very important that no skin should be sacrificed, however redundant it may appear to be, as the little tags of superfluous skin soon contract, and eventually cause no further inconvenience. If this precaution be taken there is no fear of stricture, which, as Treves has shown, is much less common even after elimination of a complete segment of gangrenous bowel than was once imagined.

The attachment of the mucous membrane and piles to the sphincters is so slight that I either employ the closed scissors as a raspatory or use my fingers in their separation. The firmest adhesions are always found at the highest and lowest points where the fibres of the external sphincter converge. With a very little patience the whole of the hæmorrhoidal plexus can be isolated and the membrane drawn down, leaving the external sphincter almost bare and cleanly dissected. Up to this stage of the operation there is practically no hæmorrhage, for, as is well known, the arteries which supply the rectum run immediately beneath the mucous lining, and not in the loose tissue separating it from the sphincters. They are, however, necessarily cut in the next step, which consists in the transverse division of the mucous membrane just above the piles. To prevent hæmorrhage it is advisable to cut through the bowel by degrees and to twist each bleeding vessel as it is divided. After securing the vessels, before making any further incision in the bowel, I attach the free edge of the piece of mucous membrane first divided to the corresponding portion of skin at the verge of the anus. This procedure is repeated until the entire circumference of the bowel is secured to the skin. By this means I almost invariably secure healing by first intention.

The arteries met with are exceedingly small, easily seized, and only require a few twists of the forci-pressure forceps to prevent both immediate and secondary hæmorrhage. Ligatures may slip off, be torn off by the first action of the bowels, or ulcerate through before the vessel is occluded, but torsion never fails.

I have often operated on severe cases and not found it necessary to twist a single vessel, and very frequently only one or two. The rectum and four inches of the bowel can be excised as I have excised it, without securing a single vessel, and I have proved that 300 operations for the radical removal of piles can be effected without a single instance of secondary hæmorrhage; consequently I consider that special instruments and extraordinary precautions may be finally dismissed, and the excision of hæmorrhoids once more be admitted within the pale of general surgery.

I do not make use of any sponges during the operation, as I very much prefer little squares of lint wrung out in hot spirit and water.

Before closing the wound I insufflate iodoform between the raw surfaces, as I find it checks any tendency to sanguineous oozing, and facilitates primary union. For the purpose of suturing the mucous membrane to the skin, I always employ carbolised silk, and I never take out the stitches, as I find they come away of themselves without creating the needless alarm to the patient which their removal generally occasions. Indeed, after the operation, there is no real necessity ever to look at or touch the parts again.

Whilst the patient is still on the table, I introduce into the rectum a suppository containing two grains of extract of belladonna, give the external parts a final dust with iodoform, and place over all a strip of oiled lint, which is retained in position by a T-bandage.

For the first few days, with highly neurotic patients, I keep a bag of ice in close proximity to the rectum, and I generally recommend a dose of castor-oil to be taken on an empty stomach on the morning of the fourth day. The patient sits up on the fourth day, and is in a condition to resume work within a fortnight.

I rarely find that the patient suffers much pain after the operation, though this depends chiefly on the nervous susceptibility of the individual. Some aching in the back may be complained of, as in other pelvic operations, but this is generally relieved by change of posture. If the change of posture does not answer, a hot water-bag or hot salt applied to the back will generally give immediate relief.

Retention of urine occasionally follows, and sometimes I have found it desirable to use a catheter; but, as a rule, I direct the patient to pass water on his hands and knees, and after a little patience he succeeds. I have never but once known the use of the catheter absolutely and urgently required, and that was in a case in charge of another medical man, who confessed that he had prematurely attempted to pass an instrument and failed, and admitted that the retention was more due to his clumsiness than to the real necessities of the patient. I am of opinion that this complication is met with less frequently after excision than after any of the other operations which aim at the same result.

Such, gentlemen, is the operation I wish to advocate for the removal of hæmorrhoids by excision, or I might rather say, for the removal of the hæmorrhoidal area by excision; and I claim:

1. That it is the most natural method, and in perfect harmony with the most approved principles of surgery.

In illustration of the inconsistencies that have from time to time been introduced to support special departures from the ordinary practice of general surgery on this subject, I will quote the arguments which have recently appeared from the pen of a distinguished surgeon. In the BRITISH MEDICAL JOURNAL for 1882, he states, with reference to the ancient plan of excision of the mamma: "The breast was laid hold of with great pincers, and having been cut clean off, the surface was rubbed over with a red-hot poker. Against a proceeding so shocking to the age, modern taste revolted." And yet this distinguished surgeon writes in 1884: "There have been three great strides in the surgery of the rectum, and one of them is the treatment of hæmorrhoids by the clamp and cautery." Now, I ask, what does the clamp-and-cautery treatment imply if it does not mean that the tumour is laid hold of by pincers, and having been cut off, the surface is rubbed with a red-hot poker. The rectum has its rights, I consider, as well as the breast, and I therefore claim for it the privileges of modern surgery. Curiously, the same author, in 1886, takes exception to the scientific construction of the clamp now almost universally employed.

2. Excision, in addition to its simplicity, requires no instrument which is not found in every practitioner's pocket-case.

3. It is a radical cure. It removes the peculiar pile-area, and I believe recurrence to be impossible.

4. Though no operation is absolutely devoid of risk, I consider that excision in this respect is at least on a par with the safest method yet recommended for the removal of piles.

5. The pain after excision is slight in amount, of short duration, and, I believe, less severe than follows any of the other operations.

6. The loss of blood at the time of operation is so small as hardly to merit notice; though perhaps in this respect it must give precedence to the ligature and clamp; but, so far as secondary hæmorrhage is concerned, the risks are unquestionably less.

In conclusion, allow me to recapitulate briefly what my contention is. I contend that the internal hæmorrhoids, which are generally regarded as localised distinct tumours, amenable to individual treatment, are, as a matter of fact, component parts of a diseased condition of the entire plexus of veins associated with the superior hæmorrhoidal, each radicle being similarly, if not equally, affected by an initial cause, constitutional or mechanical.

I am of opinion that, when surgical treatment becomes imperative, the extent of the mischief can only be appreciated and effectively dealt with by a free exposure of the diseased vessels, and that no procedure fulfils this purpose short of a deliberate dissection of the lower rectal area.

And, finally, I consider that any operation, which has for its object the removal of hæmorrhoids, is not complete which does not provide for the readjustment of the healthy tissues, with the object of securing primary union and rapid convalescence.

The dread of hæmorrhage in excision of hæmorrhoids, is a delusion which has been fostered and sustained by potential authorities who have, I consider, for the last thirty years, indulged in unjustifiable departures from the sound principles of general surgery.

Dr. WARD COUSINS said that excision was undoubtedly the best and safest method of removing piles; but he thought that many cases could be cured by a less severe operation than complete excision of the whole mucous surface just within the anus. He was in the habit of making free separation between the skin and the portion of diseased mucous membrane, and then securing the little pedicle with a silk ligature. He thought, also, that Mr. Whitehead had laid too little

emphasis on that ring of ligatures which he so carefully applied around the anus. This was really the real protection against hæmorrhage.

After some remarks from Mr. HEMMING, Professor PANCOAST stated that he was much interested in Mr. Whitehead's paper. He liked the surgical character of the treatment, and was impressed by the statement that the patients were able to get up and go about in ten days. In regard to the sewing the mucous membrane to the skin, and ligaturing bleeding points, and also in secondary hæmorrhage, Dr. Pancoast suggested that Mr. Whitehead should try the non-inflammatory iron-dyed silk, which he (the speaker) had introduced into surgery. It was much used in the United States and in Canada; also in Paris by M. Panas, Professor of Ophthalmology; in Switzerland, and at Antwerp, Belgium, by Dr. Servais and others. Dr. Pancoast described the different sizes and strength of the silk, from No. 1 to No. 14. The most delicate was for operations on the conjunctiva and in plastic surgery, and the strongest was for any form of ligature, as it was the strongest ligature made. Dr. Pancoast added that there was no such thing as pure white silk in the market; the natural colour of silk from the cocoon of the worm was a dead white or some shade of yellow. The bright white silk in the market was dyed with lead. He was led to the use of the black silk by finding, about twenty-five years ago, in performing a plastic operation on the face, that a fine black silk which he took from an ordinary spool for the sake of its distinctive colour did not cause suppuration or inflammation in its track, which the fine white silk did. Again, he found that the black silk could be left for ten days, while he had to remove the white. The pure iron-dyed silk was made by a manufacturer in New York, and Mr. Snowden, the instrument-maker at Philadelphia, was the agent for the firm. Dr. Pancoast said that he used this black silk, almost exclusively, in all operations. He had tied the common carotid with it, cut short the ligature, and left it, the ligature coming away ultimately without any pulling. He had also operated for varicocele with it, cutting off the ligature, and leaving it. In operations for strangulated hernia, he had sewn up the external ring with it, and left it there. Professor Montgomery, a distinguished gynæcologist in Philadelphia, told him that he used it in his operations, and that he left the ligature of black silk in the abdomen. Dr. Pancoast, in using it in cavities or deep wounds, would leave it there. The ligature either became encysted or came away with the discharges. The ligature could be carbolised or saturated with the mercurial lotion. Dr. Pancoast further stated that for twenty-seven years he had always used the chain *écraseur* in removing hæmorrhoids, applying one *écraseur* on each side of the rectum over the hæmorrhoidal tumour, so as to leave a space between, which thus prevented any stricture. Like Mr. Whitehead, he removed not only the vascular tumour, but also part of the adjacent mucous membrane, so as to take away the nascent enlarged vessels or capillaries. He had operated in about one hundred cases with uniform success. He emptied the patient's bowels well before the operation, and in a week or ten days afterwards gave oil to remove the fæcal matters, which were dark and sometimes fœtid, though the patient had been fed only on broth. Then he allowed him to get up. One point in the operation, suggested by his father, was that he always put a hollow pipe up the rectum before finishing, so as to let out any flatus or blood, and to show any secondary hæmorrhage should it possibly occur; this had happened only two or three times, and was stopped by a plug of lint pushed up around the hollow tube. Dr. Pancoast had tried the galvanic wire *écraseur* in several operations, but did not like it in the case of hæmorrhoids, as the platinum wire, unless used very slowly, cut like a knife, and was followed by bleeding. This also might occur even if it was used very slowly. In the United States some irregular practitioners had gained much patronage from the public by promising to cure piles without any operation. This was found to be cauterising them deeply with some strong acid—a very painful process—or injecting carbolic acid. Dr. Pancoast said he had operated with the *écraseur* upon patients who had been thus treated, and not cured until he had extirpated the hæmorrhoids finally with the *écraseur*. Some distinguished surgeons now used the injection of carbolic acid, and in small tumours this might be very useful.

Mr. T. R. JESSOP advocated the use of the galvano-cautery in the treatment of internal piles, as having proved more successful in his hands than the old ligature or the clamp and cautory. He briefly described the method: dilatation of the sphincter, separate seizure of individual piles, and removal by means of the heated wire. His results so far encouraged him to continue its use.

Mr. LENNOX BROWNE, from daily experience during many years with galvano-cautery in analogous hæmorrhoidal conditions at the base of the tongue, had never seen any secondary hæmorrhage follow separation of the eschars, nor had he seen any adhesive contraction follow galvano-caustic operation in any portion of the throat or nose. In these, and in other respects, the galvanic possessed considerable advantage over any form of actual cautery.

Surgeon-Major BOUSTEAD stated that in all his experience the treatment of hæmorrhoids by excision and free removal of all varicosities of the mucous membrane with the scissors was decidedly the best in tropical countries. The galvano-cautery, the clamp and cautery, and the ligature, were attended by risks which excision did not offer. The disadvantages of any form of cautery were sloughing of the charred parts; inflammation, which might sometimes be extensive; septicæmia; hæmorrhage after separation of the slough; contraction of the cicatrix, and the long time required for recovery from the cauterisation treatment. The risks from excision were almost *nil;* the operation was cleanly, and the healing process was more speedy and more lasting.

Mr. CHARLES SMITH had fully expected to hear some allusion made to the operation of simple crushing. The danger of secondary hæmorrhage after the use of the clamp and cautery, or ligature, was so great, that those operations had practically been abandoned for simple crushing, from which he had never seen secondary hæmorrhage. Recovery took place in as short a time as in the cases described by Mr. Whitehead.

Mr. REEVES did not consider that the operations devised by clever and experienced surgeons in the past ought to be laid aside too eagerly. He said there were many cases of piles curable by dilatation alone. With reference to crushing piles, he remembered a very severe case of secondary hæmorrhage which had occurred in a patient of his after the crushing operation. As to the mischief alleged to follow the use of the clamp, he thought it was essential to know whether the method had been properly followed out. His own experience was certainly favourable to this method.

EXPERIENCES WITH DRUMINE AS A LOCAL ANÆSTHETIC.[1]

By ALEXANDER OGSTON, C.M.,

Regius Professor of Surgery in the University of Aberdeen, and Surgeon to the Royal Infirmary.

ON January 6th, 1887, I received from John Reid, M.A., M.D., of Port Germein, South Australia, a copy of the *Australian Medical Gazette*, of October 15th, 1886, containing a paper by him on "Drumine: a new Australian Local Anæsthetic," and a box containing 40 grains of drumine. The drug was in the form of a semi-crystalline, waxy mass, of a greyish-white colour. Dr. Reid requested that the drug should be submitted to trial as to its anæsthetic properties.

Twenty grains of it were, on January 7th, dissolved, by boiling in equal parts of absolute alcohol and water, and filtered, the strength of the solution being 4 per cent. of drumine. It tasted faintly of apples on the tongue, and caused a slight feeling of tingling and harshness where it had been applied to that organ. Next day, January 8th, 4 minims of the solution were injected hypodermically into two patients who were about to be subjected to operation, one for gouging out of tubercular cervical glands, and the other for the opening and scraping out of a chronic cervical abscess. The injection was made at 10.45 A.M., in the immediate neighbourhood of the diseased parts. At 11.45 A.M., when the operations were performed, no anæsthesia was observable, and the patients were therefore rendered insensible by chloroform until the operations were completed. At this time (11.45 A.M.), 4 minims were injected hypodermically into the backs of the forearms of Mr. Middleton, student of medicine, and myself. A quarter of an hour, half an hour, and an hour later, neither of us was aware of any diminution of sensation on or near the injection site, but pretty smart pain was felt, which lasted for several days, and then disappeared. During the afternoon of the day of injection, Mr. Middleton felt as if under the influence of a small dose of morphine. I was unconscious of any unusual feeling, save the pain and tenderness at the injection site.

Next day, January 9th, the remaining 20 grains of the drumine were dissolved in pure water by boiling, and the solution filtered, the strength being, as before, 4 per cent. of drumine. On January 12th, 6 minims of this solution were injected hypodermically into the back of each of our other forearms; no anæsthesia resulted, but a sharp aching pain was felt in the arms, lasting a day. The pain diminished sensibly on the following day; but the site of the injection showed an area of firm swelling and tenderness over a spot the size of a crown-piece (a phenomenon not observed in the alcoholic solution). This

[1] Read before the Aberdeen, Banff, and Kincardine Branch.

remained tender and swollen for weeks, but gradually became less so; yet even so late as February 8th, a flat area of induration, with slight tenderness, was very evident at the injection site in both of us. At the same time as the injection a drop of the solution was instilled into my own conjunctival sac, and into that of Mr. Riddell and Mr. Williamson, students of medicine. No anæsthesia of the cornea or conjunctiva was observable in any of us. It had no perceptible action on the pupil or accommodation.

On purpose to institute a comparison between the effects of this drug and of cucaine, Mr. Middleton and I subjected our forearms to the action of cucaine. On January 29th, at 12.25 P.M., 5 minims of a 10 per cent. solution of cucaine were hypodermically injected into the back of each of our left forearms. The act of injection was much less painful at the moment than that of either of the solutions of drumine. After five minutes (at 12.30), a patch of skin over the spot elevated by the injection, the patch being ¾ of an inch in greatest diameter, oval in shape, with its long axis corresponding to that of the forearm, was anæsthetic to the prick of a needle, while the sensibility around was perfect. At 12.43 the anæsthesia was so complete on the patch that incisions, made slowly and deliberately down to the aponeurosis of the forearm, caused no pain in my case, and only slight discomfort in that of Mr. Middleton. At 12 45 the wounds were sutured, painlessly to me, and nearly so to Mr. Middleton, in whom the anæsthesia was throughout less perfect than in myself. At 12 50 the above patches became surrounded by an area of rosy redness, over which sensation was decidedly diminished. These areas increased in size, were oval in shape, and extended down the forearm from the point of injection, but scarcely ascended above it at all, and were on Mr. Middleton's arm of a rounded oval shape, on mine more of a ribbon form. At 12 50 their measurements were 2 by 3½ inches in Mr. Middleton, and 4 by 1½ inches in me. Surgical needles could be passed through theskin with little pain, and an incision was made in my forearm down to the aponeurosis, without intolerable discomfort. The suturing of this incision was disagreeable, but not actually painful. At 1 P.M. (25 minutes after the injection), these areas of deadened sensation occupied one half the circumference of the forearm, and everywhere within them the sharp points of a pair of dressing scissors could be scored over the skin, so as to scarify it, without causing actual pain. Sensation of contact however remained, and was never entirely abolished. This was possibly due to the movements communicated to the deeper parts. The anæsthesia corresponded pretty closely to the area of redness of the skin. In Mr. Middleton a secondary patch of complete anæsthesia appeared for a short time, 2 inches below the injection site, and was, like the patch there, of oval shape, and about ¾ of an inch in greatest diameter. The anæsthesia faded more rapidly on my arm than on Mr. Middleton's. The wounds made began to smart badly at 2 P.M. with me, in Mr. Middleton's arm not until 3.30 P.M., or three hours after the injection.

It seemed as if the insensibility were due to a gradual diffusion of the cucaine through the subcutaneous tissues from the point where it was introduced. The wounds made under cucaine healed badly in both our arms, showing more inflammation, induration, and pain than should have been expected on my arm, while, on Mr. Middleton's, the wounds suppurated superficially. In neither of us was the induration gone on February 8th, that is, ten days later.

These experiences indicate pretty clearly that, as a local anæsthetic, drumine has little, if any, effect, and certainly cannot be compared with cucaine. It is possible that the drumine supplied to me may have been altered in composition or have otherwise lost its effect during its prolonged transit from the Antipodes. This suspicion is, I think, strengthened by a letter I received (after the above notes were written) from Dr. Reid's brother, who writes: "The sample sent was stale through exposure; another sample sent at the same time was quite decomposed." Fresh supplies are, however, expected, and, if they reach my hands, shall be duly submitted to trial, and the results made public.

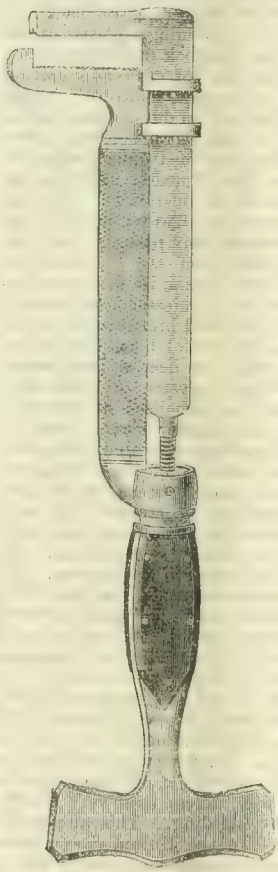
MR. J. S. MORGAN has offered £10,000 towards the fund being raised for Guy's Hospital, provided the required £100,000 be raised on or before May 1st next.

ROYAL ASYLUM OF ST. ANNE.—The annual festival of the Royal Asylum of St. Anne's Society was held on February 22nd; and, as the report shows that a large proportion of the boys and girls clothed and educated by the Society are the children of members of the medical profession, it seems but justice to call attention in these columns to the admirable work accomplished by this noble charity. In lending their hall for the purposes of the festival, the Salters' Company set an example which might well be followed by other companies.

A NEW AND IMPROVED CLAMP FOR HÆMORRHOIDS, WITH NOTES ON THE OPERATION OF CRUSHING.[1]

BY CHARLES JOHN SMITH, M.R.C.S.,
Formerly Surgeon to the Farringdon Dispensary.

TO-DAY I have the pleasure of submitting, for the first time to a meeting of my professional brethren, a new, and—as I hope I may be justified in claiming for it—an improved clamp, for the now almost universally accepted operation of crushing piles. Of the various crushers introduced for this operation, two only (Benham's and Allingham's) have come into general use. The unwieldy crusher, known as Benham's, has fairly yielded to, if it has not been quite superseded by, Allingham's fenestrated instrument; but even his excellent clamp appears, in my humble opinion, to possess certain disadvantages, which it has been my endeavour if possible to overcome. What measure of success has been obtained in the clamp now submitted to this meeting, time and experience will show. In my own hands it has—somewhat naturally, cynical critics may feel inclined to say—fully answered expectations; and I am able to affirm that its efficiency, as a crusher, has been fully equal to the economy of time gained in its use.



The principle upon which it was formed will at once strike all who, being of mechanical turn of mind, have had occasion to handle the "spanner" or "screw-hammer" of the workshop. The action is direct. The upper bar, it will be seen, is, by a slow acting screw, drawn down upon the lower bar; the slow screw giving an amount of power that is very striking compared with the quicker acting screw which I used in my first instrument.

The lower bar, it will be noticed, has a return at its extremity; for this important modification of my original design, I am indebted to my friend, Mr. Blaker, of the Sussex County Hospital, who pointed out the advantage to be gained by preventing the possibility of the escape of any portion of a pile under treatment. That this was, indeed, a most important point, I demonstrated in a case I was operating upon a few days back—when, for the sake of experiment, I put my first designed instrument on a largeish pile—and found that, as soon as pressure was brought to bear upon it, there was an escape of tissue which might have been fatal to the success of the operation. It is but right that this valuable suggestion of Mr. Blaker's should thus early be acknowledged by me.

The experience already gained has suggested no other modification, although perhaps a broader grip for the left hand might with some advantage be given; this is a matter easily arranged with the makers of the instrument, Messrs. Maw, Son and Thompson, whom I would here thank for the kindly interest they gave and the trouble they took, in producing the clamp strictly in accordance with my directions.

The mere description of the instrument now given is a poor apology perhaps, for the time and attention which have been so kindly accorded by this meeting. I will, then, with some diffidence, venture to supplement this, by mentioning a few points in connection with the operation itself, which have occurred to me in my experience.

First, then, as to preparing the patient. It always has been insisted, and always should be insisted upon, that the bowels are well

[1] Read in the Section of Surgery at the Annual Meeting of the British Medical Association at Brighton.

cleared out prior to the operation ; in ordinary cases, a good dose of castor-oil, given the day before, will suffice, but if the large intestine appears to be unusually loaded, a brisk purge once or twice before this will be distinctly advantageous. A recent case, in which I was called upon to operate rather hurriedly, brought this very uncomfortably home to me, for the patient, soon after the operation, began to pass bulky motions, and developed a decided tendency to diarrhœa. This condition of things kept me very anxious lest hæmorrhage should result ; but I took at least this comfort from the case—which, up to the present, has done well—that my crusher had satisfactorily performed its task, while it also set me to consider how far it is really necessary to keep the bowels quiet for many days, as is the custom, with opium. To return : on the morning of the operation, a warm enema should be used, to ensure the perfect emptying of the lower bowel. No food should be allowed for some two hours before the operation ; this minimises the chance of sickness after the anæsthetic. The anæsthetic I usually employ is the A.C.E. or 1.2.3. mixture, which, as you know, consists of 1 part of alcohol, 2 of chloroform, and 3 of ether, but in the case of women, I always use chloroform alone ; for this reason : I have found ether produces in women a considerable congestion of the vessels of the rectum—indeed, in one or two cases, the whole area has appeared a darkly congested mass. The why and wherefore of this I have not yet discovered. I can only state what I have found to be the case. Next, I should lay stress upon the importance of fully dilating the sphincter, and drawing down the gut as much as possible, so that a perfect view of the field of operation may be gained. Operators will bear me out in my statement that this is of the utmost importance for the easy and efficient dealing with the piles. In the JOURNAL for July 31st, there is an account of a little instrument designed by a namesake of mine, Dr. F. A. A. Smith, of Portsea, for the purpose of securing the perfect protrusion of the piles. I hope to have an early opportunity of using that instrument.

The next point I endeavour to gain is to crush the piles, so that the wound is made in the axis of the transverse diameter of the bowel. I do not know that there is very much in this, but it is a "fad" of my own, based upon the supposition that as dilatation of the gut is in that direction, less strain is likely to be put upon the wound by adopting this course. At the same time that I endeavour to compass this object, I am careful to include as little tissue as possible within the bars of the crusher ; and this is one advantage that I claim for my clamp,—it can be more easily adjusted under the tenaculum with which the pile is seized.

Having crushed the pile, I allow the clamp to remain closed for two minutes ; there is no doubt that a less time would suffice, but I prefer being on the safe side.

Another point I would mention is the method of dealing with a pile which comes down to the verge of the anus. In such a case, having seized the pile, I detach it by a cut, which I make where the mucous surface joins the skin. I found, if this were not done, I got considerable swelling of the wounded skin, which not only gave rise to much unnecessary pain, but produced the appearance of inflamed external piles. On one occasion, when I had operated upon a patient of Dr. Mackey and Dr. Withers Moore, of Brighton, I had subsequently to snip off these inflamed tags ; this is altogether an undesirable business, and, as such, to be avoided.

Concerning the after-treatment, I have little or nothing to say which is novel. I have always followed the excellent teaching of my master, Mr. Allingham. Just lately I have modified the T-shaped bandage which supports the pad of cotton-wool upon the anus. This I do in accordance with a plan illustrated recently in one of the medical journals, by carrying a bandage over the shoulders, thus relieving the patient from the discomfort of pressure round the waist. Up to the present time, I have been lucky enough to escape all trouble from hæmorrhage, save in one case, that of the patient mentioned just now. In that case there was bleeding very soon after the operation, lasting for some days, but, happily, never severe. It was due to the patient, a self-willed lady, insisting upon enthroning herself upon the night-stool within a short time of the operation (which event, by-the-bye, she celebrated by taking a pint of champagne), and having from the outset discarded pad and bandage.

In two cases I have had some little trouble with the wound, but I found that suppositories of hamamelis and iodoform stimulated them to healthy action. Here let me parenthetically mention that the objectionable odour of the iodoform may be well disguised by the addition of one-eighth of a grain of coumarine to each suppository. This not only removes the odour, but replaces it by a perfume which is, I believe, that of the active principle of the Tonquin bean.

One word, in conclusion, as to an objection which has been raised to this operation in persons of comparatively advanced age. I have heard it gravely asserted that no one after fifty years of age should be submitted to the operation of crushing. I have operated upon persons nearer seventy without having any anxiety or trouble, and cannot understand the objection. I certainly would infinitely prefer the clamp to the ligature, even in the oldest patient.

I am conscious that I have trespassed upon your time and patience ; but I trust that if, beyond my instrument, I have not been able to bring forward much that is particularly new, I may at least have succeeded in interesting some among my audience in the operation of crushing hæmorrhoids.

SURGICAL MEMORANDA.

INCISION IN TONSILLITIS.

IN the BRITISH MEDICAL JOURNAL, February 5th, page 228, Dr. Charles Maclean makes some remarks on the above subject, and as I am sure that, should his practice be followed in every case of quinsy without discrimination, more harm than benefit would result, I beg leave to make a few remarks.

Those who have had extensive dealings with such cases know that the treatment varies greatly in the different stages which mark the progress of this affection, and that, with or without special treatment, it may terminate in resolution or go on to suppuration. Now it is only in the latter form that incision is called for, and I hold that it is not good practice to make that incision unless the presence of an abscess can actually be diagnosed. Certainly, as soon as this diagnosis is arrived at, the correct treatment is the immediate evacuation of the pus by incision.

Dr. Maclean says : "A large incision seldom fails, in my experience, to modify the course of the disease almost at once." It is this sentence I mainly object to, as it leads one to suppose that, in whatever stage he finds an acutely enlarged tonsil, he incises it, and recommends others to follow his example. Blood-letting, general or local, was in olden times the routine treatment for quinsy in its early stage ; the former is, I think, almost wholly abandoned, but the latter—by means of scarifying the surface of the inflamed tonsil—is frequently resorted to, and with considerable benefit. It is in the earlier part of this stage that guaiacum and aconite are so useful ; but in addition to these, free scarification, followed by the use of soothing moist inhalations, will often bring about the desired resolution. Incision at this stage should not be practised.

Then, as regards the presence of the internal carotid artery, if the incision to evacuate an abscess be made as usually recommended, it need never be feared. The bistoury, when making the incision, should be directed upwards and inwards, thus cutting away from this important vessel. In a paper published by me in the *Edinburgh Medical Journal* for August, 1886, on "Hæmorrhage following Tonsillotomy," it was shown that the cases, elsewhere fully reported, of serious hæmorrhage from the tonsil, almost invariably followed incision, and that the bleeding was mainly from the tonsillar branch of the internal carotid or from the ascending pharyngeal artery, never from injury of the internal carotid, which vessel, in cases of tonsillitis, as remarked by Dr. Maclean, is rather displaced outwards by pressure of the swollen gland.

J. WALKER DOWNIE, M.B., F.F.P.S.G.,
Lecturer on Diseases of Ear and Throat, Western Medical School, Glasgow.

DEATH FROM WHITLOW.

W. F., aged 7, was brought to my consulting-room on the evening of October 6th, 1886, suffering from a small whitlow on the ring-finger of his left hand. On examination, I found the whole left hand and forearm œdematous, and inflamed in patches. The temperature was 101°, the pulse 120, and the tongue was thickly coated. Having made an incision on either side of the distal phalanx down to the bone, and ordered linseed-poultices, with frequent warm water bathing, I prescribed a calomel and compound jalap powder, with a saline mixture containing small doses of aconite. On the 9th, the temperature and pulse became normal. The patient was then put upon quinine, steel, and port wine. On the 10th, the œdema of the hand and arm had disappeared, and the finger looked comparatively healthy. On the 11th, retching and vomiting set in, without any increase of either pulse or temperature, and continued unabated in spite of the use of such remedies as bismuth, cerium, hydrocyanic acid, opium, etc., until the morning of the 12th, when death took place from exhaustion, although beef-tea and port wine were frequently administered by enema. From first to

last there was neither swelling nor tenderness of any part of the abdomen, and head-symptoms were entirely absent, the child being conscious to the last. R. H. A. HUNTER, L.R.C.P.ED.

Battersea.

OPHTHALMOLOGICAL MEMORANDA.

GLASSES "À DOUBLE FOYER."

I CAN fully endorse the remarks of Mr. Oldham in the JOURNAL of January 22nd with regard to having the lower half of "glasses with double focus" set for reading, so as to avoid the astigmatism in looking obliquely through the reading-glass. The idea occurred to me in 1880, when ordering a pair of Franklin spectacles with the lower glass of rather strong power, and Messrs. Pickard and Curry, of Great Portland Street, very ably carried out the suggestion for me; the glasses gave great satisfaction.

ALEX. DEAS DAVIDSON, M.R.C.S.ENG.,
Surgeon to the Swansea Eye Hospital.

CLINICAL MEMORANDA.

PASSAGE OF A LARGE FOREIGN BODY THROUGH THE ALIMENTARY CANAL OF AN INFANT.

THE following case may be interesting to your readers. A child barely two months old, had, through the playfulness of an older one, got introduced into its mouth, and swallowed, a large heavy nail, fully three inches long. The parents did not call in medical assistance till they discovered the nail in a dejection. On inquiry it was elicited that during the period between the swallowing and the passing of the nail, that is to say for nine days, the child had shown no deviation from normal health. The case is interesting as showing how such a large body could pass through the primæ viæ of so young a child, without giving rise to the slightest symptom to indicate its presence and passage. C. D. STEWART, L.R.C.P.ED.

Burnvale, West Calder.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

WEST BROMWICH DISTRICT HOSPITAL.

CASES OF FRACTURE OF PATELLA TREATED BY PRESSURE AND ASPIRATION.

[Reported by EDWIN KITE, M.R.C.S., House-Surgeon.]

CASE I (under the care of Mr. SUTCLIFFE). — G. H., a strong muscular man, aged 54, was admitted on January 9th, 1886, three hours after the accident. The right knee-joint was distended with synovial fluid, and the patella transversely fractured, the upper fragment being the larger by two-thirds. The joint was immediately aspirated; two and a half ounces of sanguineous serum being removed, and the fragments of the patella fixed in the following manner. Two lengths of strapping, about a couple of inches in breadth, were loosely applied, reaching from the middle of the thigh over the patella to the anterior surface of the lower part of the leg, crossing over the knee-joint; a piece of cane, about the length of a pen-holder, was placed under the strapping, and slightly twisted above two pads of lint placed over the fragments of the patella; a back-splint was bandaged to the knee. Ice was then applied over the joint, the foot and the knee raised, and the pressure required to keep the fragments in apposition obtained by twisting the cane round the strapping. The patient made a good recovery, and, within six weeks, the fragments had so firmly united as to allow of the knee being encased by plaster-of-Paris; and the patient was discharged on February 23rd, 1886. When last seen, the man had the perfect use of the joint, the patella being in one bony piece, and without any fibrous separation between the old fragments.

CASE II (under the care of Mr. SUTCLIFFE).—J. T., aged 25, a shopman, was admitted on November 4th, 1885. Pressure was applied in the manner described above. The patella became fairly well united by bony material, and would ultimately have made a perfect recovery, had not the patient been restless, and too anxious to get to his work; as it was, a depression could be felt, about the width of the finger, but it did not interfere in any way with the strength or utility of the knee-joint.

CASE III (under the care of Mr. LANGLEY BROWNE).—H. B., aged 24, a groom, was admitted on August 22nd, 1885. The left patella was transversely fractured, with quite one-and-a-quarter inch of separation between the fragments, but without any great amount of effusion. This case was treated on similar principles, with the exception of aspiration, and left the hospital with a sound knee, without any apparent separation of fragments. Three months after the accident, the man was following his usual occupation.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 22ND, 1887.

J. W. OGLE, Esq., F.R.C.P., Vice-President, in the Chair.

On a Case in which the Urinary Bladder was twice Ruptured, the first time by an Injury, the second time—seven years after the first—by the giving way of the Cicatrix. By HENRY MORRIS, F.R.C.S., Surgeon to, and Lecturer on Surgery at, the Middlesex Hospital.—A man, aged 36, had been drinking at a public-house on the evening of June 4th, 1879, when a struggle ensued, and his opponent threw him and knelt with violence upon his abdomen. All the symptoms of peritonitis and rupture of the bladder were excited, and the patient was admitted into the Middlesex Hospital on June 6th, 1879. The treatment consisted of hot fomentations to the abdomen, half a grain of opium in a pill every six hours, and the retention, just within the neck of the bladder, of a gum-elastic catheter. He recovered perfectly, and left the hospital on July 10th, 1879. He applied at the hospital again on August 4th, 1886, and gave the following account: On August 2nd he had been at a "bean-feast." On the following morning his bowels acted and he passed some urine, but the latter act was attended with some pain. From this time pain increased, and in the evening he was unable to micturate. He vomited frequently, and had had hiccough since the onset of pain, until the afternoon of August 4th, 1886, when a catheter was passed and nearly three ounces of bloody urine were withdrawn. He was then admitted as a case of peritonitis and suppression of urine. On August 5th about one pint of thick, purulent, and slightly blood-stained urine was drawn off. At 7 A.M. on August 6th, he passed a little flatus and a large quantity of urine, and suddenly became very sick. Soon afterwards he was quite collapsed; his abdomen became very distended; he never rallied, and died at 11.5 A.M. on the same day. At the *post-mortem* recent general acute peritonitis was found, and in the pelvis there were fifteen ounces of purulent urine and a quantity of lymph. A band an inch and a quarter long united the fundus of the bladder with the rectum. The vesical end of this band was hollowed out into a slender funnel, and through a rupture in it close to the bladder a string of mucus was projecting. Slight pressure caused purulent urine to ooze from the bladder through the rent into the peritoneal cavity. The rectum, bladder, and penis were removed *en masse*, and were submitted to a committee consisting of Mr. Savory, Mr. Bryant, and Drs. Goodhart and Kingston Fowler, who reported that in their opinion "the specimen exhibits all the features which might be expected at a remote period after a rupture of the bladder." This case, in the first instance, had been reported in 1879 as one of recovery from rupture of the bladder. It was now brought before the Society because in its completed form it afforded conclusive proof that an intra-peritoneal rupture of the bladder was not necessarily fatal, but may be recovered from under the simple treatment employed in this case, provided the urine at the time of the rupture is of normal composition. The case was believed to be unique, in that it furnished the *post-mortem* appearances of the bladder some years after recovery from an intra-peritoneal rupture of its coats.

A Case of Extra-Peritoneal Rupture of the Urinary Bladder, the direct result of Aspiration above the Pubes, with Remarks on some Objections to the Use of the Aspirator as a means of evacuating the Bladder, and Suggestions for the Treatment of certain cases of Retention of Urine. By WILLIAM H. BENNETT, F.R.C.S., Assistant-Surgeon to St. George's Hospital.—The author stated that he had always objected to the aspirator as a means of relieving a distended bladder, excepting in a very limited number of cases, as he believed that its use directly tended, in a large number of instances, to rupture of the

organ, or oozing of urine by the side of the needle, in consequence of the immediate relief to the vesical tension being insufficiently afforded by the small instrument commonly employed. The question of vesical tension was discussed as having an important bearing on the subject. The case was then described of a man, aged 38, who came under the author's care on September 19th, 1886, with retention of urine of three days' duration, consequent upon a stricture which had existed for fifteen years. The house-surgeon having failed to pass a catheter, aspirated the bladder above the pubes. Rupture of the organ immediately followed. The abdomen was laid open by the author, and a large quantity of urine escaped from a cavity in the pelvis and hypogastric region. The bladder was subsequently drained through a perineal incision. The patient progressed satisfactorily till November 6th, when an opening formed between the bowel and the perivesical cavity, after which he sank. The preparation and a drawing of the parts were shown. Three other instances in which complications happened were referred to. In conclusion, the following propositions were submitted. 1. Aspiration of the bladder for the temporary relief of retention of urine can only be resorted to with absolute safety in cases in which the bladder walls are presumably healthy. 2. The operation is inadmissible in cases of retention consequent on long-standing stricture, the bladder walls being diseased, and often rotten; the appropriate treatment in such cases, if the stricture be impassable, being drainage of the bladder through a perineal incision. 3. The aspirator can be used only with some risk in cases of distended bladder where there is reason to suppose that the urine is foul, unless the organ is washed out with an antiseptic solution before the withdrawal of the needle, and, even then, aspiration is only applicable to certain cases of retention from prostatic obstruction, not associated with long-continued previous cystitis or irritable bladder, such cases being properly treated by prostatotomy and perineal drainage. 4. In any case of bladder-distension, where there is reason to suspect disease of the coats of the organ, if tapping be performed at all, a large trocar and cannula should be used, and not a small aspirating needle. 5. In the event of aspiration being followed by pain, suprapubic dulness and rigidity of more than a temporary character, incision above the pubes should be practised, the bladder being drained through the perineum, if the urethral obstruction be still impassable.—Mr. BRYANT thought that Mr. Morris's case might probably be accurately described as an original rupture of the bladder with a subsequent giving way of an acquired sacculus. Mr. Morris was to be congratulated that in the treatment of the first injury the catheter was not pushed further than the neck of the bladder, and no deep exploration was attempted, as thereby the rent might have very easily been reopened. He was glad that Mr. Bennett had urged the possible dangers of aspiration, as to which he had long agreed with him. The operation was certainly treated too lightly. He brought forward two cases in his own practice which had suffered from it. In the first, a young man, retention from stricture had been treated at first by suprapubic puncture with an aspirator; then perineal section had become necessary, and death soon followed. There was proved to have been suppuration round the bladder, originating in the oozing of urine from the first puncture. In the second case, one of prostatic retention, six or seven aspirations had been made in a few days, and death quickly followed. A *post-mortem* examination showed six distinct punctures of the bladder, marked by small sharp-edged ulcers. The benefit of a larger opening was often exemplified in the tapping of a tight hydatid.—Prof. G. M. HUMPHRY did not dispute the possible toleration of healthy urine by the peritoneum. He had been interested in Mr. Bennett's case, and quite endorsed his conclusions. He had himself recently observed a case of prostatic retention in an elderly man who had been, as he thought unnecessarily, aspirated for its relief. There had been some slight extravasation of urine from the suprapubic wound; he had made a perineal opening when the patient came under his care, but death had followed from the previous extravasation.—Mr. BARWELL remarked that in most cases where any diagnosis of rupture was possible, the wound was too large for repair, and he had found it difficult in practice to make any accurate estimate of the amount of damage done.—Mr. HULKE said that there could be no doubt that time was wanted for any such absolute diagnosis, but that he did not suppose Mr. Morris would wish to leave all ruptures to heal by themselves. He was much obliged to Mr. Bennett for calling attention to the dangers of aspiration which he had long felt. It was not an operation to be left to a house-surgeon. The mechanism of its injurious action he still thought somewhat uncertain. The use of a large suprapubic trocar he had not seen do any harm.—Mr. RIVINGTON thanked Mr. Morris for having offered him the opportunity of seeing his specimen when it was first on view, and was sorry that he had been prevented from so doing by his attendance at the meeting of the British Medical Association at Brighton. He had examined it lately, and thought what could now be seen of the former injury might be explained by a subperitoneal rupture in the coats of the bladder causing slight local peritonitis. He had not been able to find evidence of a cicatrix. He could not admit any tolerance of normal urine by the peritoneum, and quoted Sir William Mac Cormac's cases, as showing the large quantity of serous fluid secreted by the peritoneum under such irritation.—Mr. C. HEATH said he had examined Mr. Morris's specimen carefully when fresh, and felt no doubt that the old cicatrix which was then clearly visible, was due to a complete rupture.—Dr. J. K. FOWLER had made the *post-mortem* examination, and had commented at the time on the characteristic vascularity of the cicatricial tissue.—Mr. MORRIS, in reply, hoped that his case might be taken to show that, even in cases of rupture of the bladder, which were not further treated, it might at least be useful to continue catheterisation.—Mr. BENNETT had to thank the Society for many expressions of agreement. Mr. Hulke had found some difficulty in accepting his explanation, because the bladder-wound in his case was round; but he thought that might have been due to his not having made himself understood that such was the case only after a separation of a slough about the twentieth day.

MEDICAL SOCIETY OF LONDON.

MONDAY, FEBRUARY 21ST, 1887.

R. BRUDENELL CARTER, F.R.C.S., President, in the Chair.

On the Different Modes of Administering Mercury in Syphilis, and the Indications for their Application.—Dr. E. MILNER said that the treatment of syphilis might be summed up in the word "mercury." While admitting that apparently in many cases blue pill was as good as blue ointment, and the green iodide of mercury as Donovan's solution, he thought that more careful observation taught that such an admission might not be justifiable. There was an obstinate form of syphilitic rash—vesicular syphilide—which occurred mostly in light-haired people, especially females, and was associated with a wine-drinking habit; and the incipient tubercular syphilide, occurring in dark-haired beer drinkers. In the first class the green iodide of mercury with Donovan's solution, in large doses, had proved most beneficial; while, in the latter, the inunction of the German preparation of blue ointment had proved most effective. In persons who drank to excess the rash was always severe and angry-looking, and in these cases the green iodide of mercury, with Donovan's solution and iodide of sodium, was useful. Inunction was recommended in the early and late stages of syphilis, in abstemious people who were inclined to take care of themselves. Done early it markedly modified the secondary symptoms, and, at a later period, it almost invariably gave good results. It was equally effective in cases of syphilitic testicle, gummata, and nerve affections. Finally, calomel vapour had proved very beneficial in the treatment of indurated local sores and ulceration of the extremities.—The PRESIDENT inquired how long the mercurial course should be continued, and remarked that when tertiary symptoms had come under his notice it generally turned out that mercurial treatment had not been thorough.—Dr. DRYSDALE thought it was inopportune to discuss the action of different mercurial preparations when the use of mercury itself was being questioned. He deprecated the use of mercury in the tertiary stage, and said iodide of potassium was then the proper remedy.—The PRESIDENT added that at the Royal Hospital for Epilepsy they had remarked that the iodides, though possessed of great influence on the later local manifestations, did not prevent their recurrence.—Dr. LAUDER BRUNTON said that doubtless mercury and iodine acted as germicides, and owed to this their value in syphilis. He called attention, however, to the fact that it was not iodine, but iodide of potassium, which produced the effect, and was found in the tissues, and this drug was not a germicide. He suggested that while mercury acted on the disease germ, the iodides acted on the diseased tissues. Mercury, he said, was injurious, and it was an open question whether it inflicted the most damage on the disease germ or the tissues.—Mr. H. DE MÉRIC said he considered inunction an unsatisfactory and dirty method of giving mercury. With reference to its administration for tertiary symptoms he had often met with cases where it had promptly relieved the symptoms when iodide of potassium had failed.—Dr. J. ALTHAUS asked for information as to the value of the different preparations of mercury for inunction. Personally, he preferred the oleate of mercury, which was more readily absorbed and less irritating. He had also obtained excellent results with blue ointment rubbed down with an equal bulk of lanoline, which, he said, was a very satisfactory vehicle. In very bad cases he had used hypodermic injections of mercury with the best

results. He also spoke very highly of the internal use of tannate of mercury.—Dr. T. K. SALTER said he had contracted an obstetric chancre on the finger, and had been quite cured by a nine months' course of mercurial vapour baths.—Dr. MILNER, in reply, said that a twelve months' course of mercury was indispensable, and marriage could be allowed only after four years. He spoke strongly on the subject of the injurious effects of a prolonged course of the iodides.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, FEBRUARY 9TH, 1887.

Inspector-General LAWSON, Vice-President, in the Chair.

Cholera in India before 1817.—Dr. MACPHERSON read a paper entitled "Memorandum on Notices of Cholera in India before 1817," in which he said that Dr. Semmelinck, in his recent *History of Cholera before 1816-17*, and still more Colonel Yule, in his admirable *Anglo-Indian Glossary*, have made some additions to our knowledge of the diffusion of cholera in the East in early times. Dr. Semmelinck had pointed out that *Bort* was the name applied by the Dutch in the East to choleraic attacks, although that writer did not believe that malignant cholera existed in the East before 1816-17, as all accounts of the disease before that date were unsatisfactory and incomplete in the enumeration of the symptoms. There was, however, positive evidence in Semmelinck, and still more in Yule, that cholera of the worst type occurred in Arracan, in the Bay of Bengal, in 1602; that *Bort* occurred in Ceylon in 1679; and cholera in the Isle of Bourbon in 1716, and possibly cholera in China in 1517. In almost all cases when captains of ships, or travellers, or surgeons, had mentioned the diseases of the East, they had, in addition to the usual ones of the country and to colic, mentioned a certain disease called *Mordexin*, or *mort de chien* of the French, noted for its sudden onset and rapid course. This was doubtless Indian cholera, sometimes sporadic, sometimes epidemic.

Statistics of West Ham Small-pox Hospitals in 1884 and 1885.—Mr. JOHN MOIR read a paper on the statistics of the West Ham Small-pox Hospitals during the epidemic of 1884 and 1885. He stated that, during that period, he attended 1,211 cases in the Guardians' Hospital, and 303 cases in the Local Board Hospital, with a total mortality of 280, or 18·4 per cent., and the tables compiled by him showed that the mortality after re-vaccination, with the exception of one case of pneumonia from which the patient was suffering on admission, was *nil*; with three or more good marks, 4 per cent.; with from one to two marks, 15 per cent.; in the imperfectly vaccinated, 29 per cent.; in those said to be vaccinated, but without evidence, 44.6 per cent.; and in the unvaccinated, 52.66 per cent. Protection was in exact ratio with the efficiency of the vaccination, and re-vaccination afforded practical immunity from confluent small-pox and from death from small-pox. The deaths from small-pox in West Ham were 259 in 1884 and 563 in 1885, whereas, in 1886, there were only 3. A house-to-house visitation, carried out by Dr. A. E. Kennedy, led to a great increase in vaccination and re-vaccination, as, during the period in question, from March 30th to May 14th, 1885, the public vaccinators in West Ham re-vaccinated 2,978 persons, besides vaccinating 515 over the age prescribed by the Vaccination Act, with a large increase in the number of primary vaccinations. It appeared, from Dr. Kennedy's report to the West Ham Board of Guardians in May, 1885, that in a population of close on 150,000, 98.6 per cent. were found to be vaccinated, and only 1.4 per cent. unvaccinated. The fact that there were only 3 deaths from small-pox in 1886 was greatly owing to this house-to-house visitation. Another feature brought out by this epidemic was the increase in the number of cases round the hospitals area. The report of Mr. Power to the Local Government Board, printed by the West Ham Board of Guardians, showed that, in the three-quarter mile radius (used for the reason that it included the whole of the built-upon area of Plaistow, in which the hospitals were situated, and leaving a zone comparatively sparsely populated), in the six months, December, 1883, to June 21st, 1884, this hospital-area suffered a rate of small-pox mortality ten times greater than that of the remainder of the district; in the two and a half months, June 22nd to August 30th, 1884, a period corresponding to the normal seasonal decline of epidemic small-pox, West Ham suffered about the same amount of fatal small-pox as in the preceding six months, but the small-pox mortality in the hospital-area was smaller, but still nearly twice greater than in the remainder of the district, and in the next six months increased again to over three times that of the rest of the district, and although less towards the end of the epidemic, owing to an increased number of severe cases in the Canning Town and Victoria Dock district, continued greater than in the area outside the three-quarter mile radius. There were a large number of hæmorrhagic cases in hospital—57—mostly coming from the insanitary and overcrowded districts. The tables showed that the largest number of cases occurred between the ages of 15 and 30 years, proving the necessity for successful re-vaccination, and not simply a nominal re-vaccination affording no protection whatever. Of the 1,514 cases, 55 were under two years of age, 18 being vaccinated, with 2 deaths; 4 had small-pox and vaccination concurrently, with 3 deaths; and 33 were unvaccinated, of whom 27 died. These records of the West Ham Hospitals showed the excessive death-rate of the unvaccinated, and the comparatively almost perfect immunity from a fatal result in the case of the well vaccinated.—In the discussion which followed, the PRESIDENT, Dr. DICKSON, Drs. MURRAY, LAWSON, LILBURNE, LLOYD, PRINGLE, THORNE, and WILLOUGHBY, and Mr. SHIRLEY MURPHY, took part.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, FEBRUARY 9TH, 1887.

G. GRANVILLE BANTOCK, M.D., President, in the Chair.

Undescended Ovary.—Mr. BLAND SUTTON exhibited a specimen showing the non-descent of the ovary. It had been removed from a fœtus with spina bifida, which had survived its birth a few days. On opening it, the abdominal cavity presented evidence of the most extensive peritonitis; the coils of the small intestine were glued together, and the colon lay under the liver, and was firmly adherent to the ventral aspect of the right kidney. The right ovary and Fallopian tube were firmly fixed by stout adhesions just below the crest of the ilium. The uterus, in consequence of the fixed position of the ovary, was drawn out of position, and was in contact with the right side of the true pelvis. The connection between the descent of the testis and colon was something more than casual. In several instances of congenital funicular hernia (right), he had found the vermiform appendix and cæcum in the pouch, and in two cases they were united to the testis and walls of the pouch by connective tissue.

Misplacement of Kidney.—Mr. BLAND SUTTON also exhibited a specimen showing misplacement of the kidney. It lay over the left sacro-iliac synchondrosis, and was covered by the first part of the rectum. Three arteries entered at the hilum, one being derived from the left common iliac, and two from the right common iliac artery. The vein entered the inferior vena cava, midway between the point of confluence of the common iliac veins. The ureter was double for the first inch of its course. The specimen was taken from a man, aged 30, who died of phthisis. The deformity gave rise to no inconvenience. The right kidney was normal.—Dr. MEADOWS thought the displacement of the uterus upwards in the first case was probably brought about in the same way as that of the ovaries, namely, by peritonitic adhesion.—Dr. SINCLAIR, Mr. REEVES, and the PRESIDENT took part in the discussion.

Removal of Uterine Appendages.—Mr. LAWSON TAIT exhibited the left tube and ovary of a patient, aged 23, from whom he had removed the appendages of the right side in July, 1883, for pyosalpinx. At that time the left appendages were found healthy, and were not removed. Two years subsequently the pain returned, and examination showed the uterus more or less fixed, and a lump on the left side, which was very tender. At the second operation the ovary was found to be cystic, and as large as an orange; the tube was distended, and contained about an ounce and a half of pus. From a large number of such cases, Mr. Tait had come to the conclusion that if the appendages of one side required removal, it was much safer to remove both.

The Use and Abuse of Pessaries.—Dr. FITZGERALD, of Folkestone, read a paper on the use and abuse of pessaries, in which he said it was a matter of common sense that when a body, be it uterus, humerus, or intestine, was dislocated, it should be restored to its place as soon as possible. The case was, of course, different when an organ, such as the uterus, was bound down by inflammatory adhesions, and grave consequences had followed forcible attempts at replacement, and the routine use of pessaries in such cases. The normal position of the uterus was more or less one of anteversion; he was disposed to consider congenital retroflexion, or even retroversion, extremely rare. In cases of acute flexion, pessaries were not, as a rule, of much service. The causes which tended to push the uterus backward in women were very numerous. He considered it a mistake to keep women so long on their back after childbirth, as the heavy uterus was thereby allowed constantly to gravitate back into the hollow of the sacrum. The patient should be advised to sit up occasionally, and to lie alternately on her side and chest. He differed from those who regarded stenosis of the cervix as of no importance in producing dysmenorrhœa, for although this condition might not

matter as long as the flow was fluid, yet it produced almost complete stoppage as soon as clots were formed, and uterine spasm or colic was the consequence. Dr. Fitzgerald then related several cases illustrating the relief often given by the replacement of a dislocated uterus.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, FEBRUARY 17TH, 1887.

EDMUND OWEN, M.B., F.R.C.S., President, in the Chair.

Some Notes on the Collapse of Cholera.—Mr. WILLIAM SEDGWICK directed attention to the arrested formation of the chief constituents of urine and bile as the cause of the suppression of those secretions during collapse. Attempts had been made to account for the absence of uræmic poisoning in cholera by what was known as the theory of vicarious secretion. Very little attention had been bestowed upon the absence of jaundice, although, in accordance with the theoretical opinion then entertained, there should be some tendency in cholera patients to become yellow or green, instead of simply blue. It had been suggested that the suppression of urine and bile was due to defective oxygenation of the blood. There was, however, no evidence from chemical analysis to support such a view; while the author had fully demonstrated that there was "an absolute reduction in the pulmonary interchange of gases, and, as the result of such reduction, an increase in the usual proportion of the oxygen absorbed." There was absolutely nothing in medical science to justify the retention of this theory of defective oxygenation; for it had been repeatedly disproved by chemical analysis, and it was physiologically unsound.—The PRESIDENT thought the collapse of cholera comparable to that present in cases of perforating ulcer of the stomach, and considered it due to injury of the solar plexus. It might be questioned whether bacilli did not play some part in the production of the collapse.—Dr. CLEVELAND thought that the arrested production of urine and bile depended on arrest of the functions of the kidney and other organs for the time. The actual cause of death in the stage of collapse was still doubtful.—Mr. SEDGWICK, in reply, stated that it was difficult during cholera epidemics to make the differential diagnosis of collapse due to the perforation of gastric ulcer. Some authors thought that a molecular change existed in the solar plexus during the collapse period, but this point was uncertain.

Some Points in the Treatment of Fever.—Dr. SIDNEY PHILLIPS pointed out in the course of his paper that pyrexia was one of the dangers of the febrile state, and though its mode of production was not yet satisfactorily explained, it required treatment as a symptom. The chief indications for antipyretic treatment should be the avoidance of hyperpyrexia, and the securing of remissions or intermissions if the temperature remained continuously high. The cold bath was a very effective but very transiently-acting antipyretic agent, and there were many conditions contra-indicating its use; it should not be used as a first resource. Quinine took a long time to act, was required in large doses, and often produced disagreeable effects; it was ill-suited for cases of hyperpyrexia. Salicin and its salts were ill-suited for general antipyretics on account of their action on the heart. Antipyrine was very constant, very rapid, and very powerful in action; its effect was of short duration, and it produced free sweating. Collapse due to the drug was rare, unless over-large or over-frequent doses were given. Antifebrin was superior to antipyrin in the smallness of dose required, and in its cheapness; it produced less sweating. The local application of ice to the præcordial region with a view of protecting the heart-muscle from the effects of a high temperature was advocated. The importance of keeping up cardiac power to ensure elimination by the excretory organs was insisted upon, and seeing that Charcot had found albuminuria to result from mere slackening of the renal blood-flow, it was possible that the albuminuria of the febrile state was in part due to this cause.—Dr. CLEVELAND remarked on the value of alcohol as an antipyretic.—Dr. WILLIAM DUNCAN thought cold was best applied by means of the ice-cap.—Dr. M. HANDFIELD-JONES advocated the combined use of large doses of quinine and frequent cold sponging.—Dr. SIDNEY PHILLIPS briefly replied.

On the Best Means of Dilating the Cervix Uteri.—Dr. LEWERS brought forward the notes of seven cases, in which rapid dilatation of the cervix uteri had been employed, and drew attention to the superiority of this method over slow dilatation by means of tents. The dangers connected with the use of tents having been carefully pointed out, the author proceeded to demonstrate the best mode of employing rapid dilatation with Hegar's dilators. Antiseptic precautions and injections were especially insisted upon.—Dr. WILLIAM DUNCAN considered rapid dilatation was by no means devoid of danger. The patient had for half an hour to be kept under an anæsthetic, and even in experienced hands the cervix might be torn through. Tents could be used safely if first rendered aseptic by dipping them in a solution of iodoform and ether. The cervix of the nullipara required different treatment from that applicable to the multipara.—Dr. AMAND ROUTH thought practitioners should make their own tents, and render them aseptic. The use of tents, combined with rapid dilatation, usually gave the best results.—Dr. M. HANDFIELD-JONES pointed out that careful antiseptic precautions constituted the real secret of success in the use of either tents or rapid dilatation. The use of either method must depend (1) on the degree of dilatation needed, and (2) on the condition of the cervix.—Dr. LEWERS briefly replied.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

PATHOLOGICAL AND CLINICAL SECTION.

FRIDAY, JANUARY 28TH.

EDWIN RICKARDS, M.D., President, in the Chair.

Aneurysm of Descending Aorta.—Dr. SUCKLING showed a patient with aneurysm of the descending aorta, compressing the bronchus and root of the left lung. The case had been previously diagnosed as one of fibroid phthisis. The patient, a man aged 42, had been ailing eighteen months, complaining of pain in the back, the front of the chest, and over the heart. The pulses were equal. There was slight stridor on deep inspiration and expiration. The pupils were unequal, the right being the larger. There was an aortic systolic *bruit*, and an accentuated aortic second sound. No *bruit* was heard in the back. The veins on the surface of the chest were engorged. Breath-sounds, vocal fremitus, and vocal resonance were diminished over the left lung. Laryngoscopic examination showed that the left vocal cord was paralysed. After two months' treatment with iodide of potassium (twenty grains, thrice daily), and low diet, his condition was much improved, the stridor had almost ceased, and the pain was much diminished; the laryngeal paralysis and the signs of pressure on the left bronchus, however, still remained.—The PRESIDENT mentioned a somewhat similar case in which no stridor existed.—Dr. SAUNDBY remarked that, in cases when pressure on the bronchus was the only prominent symptom, aneurysm would generally be diagnosed.—Mr. PALMER mentioned a case in which the only symptom was pain in the back; the condition was not diagnosed until the aneurysm burst with an immediately fatal result.

Pathology of Alcoholic Paraplegia.—Dr. SAUNDBY exhibited microscopical specimens and drawings of sections of nerves from a case of alcoholic paraplegia, which he had described in the *Lancet* of August 7th, 1886. The patient died at home, and only a very incomplete examination had been made. The only part sent to Dr. Saundby was a small portion of the anterior crural nerve. The nerve-lesion in this disease was originally described as a descending neuritis, characterised by disappearance of the axis-cylinders, and breaking up of the medullary sheath into globules identical with the Wallerian degeneration which followed nerve-section. Gombault believed that the primary lesion was a periaxial segmentary neuritis, attacking the medullary sheath to which the above-described degeneration was secondary, but he failed to find it in two cases of alcoholic paraplegia. Hadden had described an endo- and peri-neuritis followed by destruction of the nerve-tubes. The present lesion seemed to be identical with that described by Hadden, but in an early stage, the nerve-tubes being very little affected in spite of the considerable increase of the nuclei of the endo- and peri-neurium, which were swollen. The small vessels were surrounded by groups of round cells.

A Demonstrating Ophthalmoscope.—Mr. PRIESTLEY SMITH exhibited a demonstrating ophthalmoscope designed by him, and described in the *Ophthalmic Review* for September, 1886. With it, a case of traumatic rupture of the choroid was exhibited to the members of the Section. The patient had been struck upon the left eye by a piece of ice thrown at him by a companion. The globe was not wounded; the choroid was torn as by *contre-coup*, the rupture being visible as a white ragged line forming a semi-circle concentric with the optic disc, and to its inner side.

Sections of Liver from a Case of Rickets.—Dr. HOGBEN showed these sections. They were from a child who had died of gangrene of the lung following acute pneumonia. The sections showed a cirrhotic change resembling somewhat the monolobular variety of cirrhosise There was no history of syphilis or tubercle.

Pyosalpinx.—Mr. JOHN TAYLOR showed a specimen of pyosalpinx removed by him from a patient in the Women's Hospital. The left Fallopian tube was of the size of the large intestine, very adherent, and

greatly distended with pus. The patient eventually made a good recovery. Mr. Taylor suggested that the weight of the fluid in the tube was the chief cause of the position finally assumed by the latter in its relation to the uterus and broad ligament.

Myeloid Sarcoma of Foot.—Mr. W. F. HASLAM showed a myeloid sarcoma growing from the centre of the first metatarsal bone. It had expanded this, and was as large as a small orange. The patient, a male, aged 37, first noticed pain on the inner side of the foot six months ago; this was soon followed by some swelling. He continued his work, however, for five months, and, after treatment for a month at home, he applied at the General Hospital. He was at once admitted, and the foot was successfully removed by Pirogoff's amputation.

Specimens.—Mr. G. BARLING exhibited Tubercle Bacilli in Lung from Acute Tuberculosis.—Dr. WINDLE showed the following dissecting-room specimens: 1. Double Sacculated Stomach, from a female, aged 70. 2. A Portion of a Knitting-needle, 2½ inches long, embedded in the Liver. 3. A Pin in the Gizzard of a Pigeon. 4. A Phlebolith in Ovarian Vein. 5. Fracture of Scaphoid Bone (man).

SUNDERLAND AND NORTH DURHAM MEDICAL SOCIETY.

THURSDAY, FEBRUARY 17TH, 1887.

G. B. MORGAN, L.R.C.S.I., President, in the Chair.

Perforating Sarcoma of Skull.—Mr. MORGAN showed the brain and skull of a little girl, aged 4 years, who had a fall about a year ago, which stunned her. This caused a lump over the right temple, which was visible for some time, but produced no further symptoms. About three weeks since she complained of pain over the situation of the former injury, and the swelling appeared again. She became sleepless and irritable, vomited frequently, and the tumour rapidly increased in size, with prominent veins coursing over it. Pulsation was very distinct over it, and the separated edges of the parietal bone could be easily made out. A week before death left hemiplegia appeared, and the child gradually became comatose and sank. On *post-mortem* examination, a large fleshy-looking mass was found, containing a cyst the size of a walnut, filled with clear straw-coloured fluid. The bone was irregularly eroded, and in places was as thin as tissue-paper. Microscopical examination showed the growth to be a small round-celled sarcoma.

Carcinoma of Larynx.—Mr. E. A. MALING showed the larynx of a man, aged 40, who had died from pneumonia following tracheotomy, which had been done for epithelioma. The growth was the size of a filbert, and occupied the anterior part of the larynx just above the true vocal cords. The glands of the neck were considerably enlarged. —Dr. SQUANCE and Mr. WHITEHOUSE remarked on the absence of any ulceration and the unusual seat of origin for an epithelioma.

Perityphlitis followed by Hip-Joint Disease.—Dr. BRADY related a case in which a young man had a severe attack of perityphlitis, which went on to form an abscess. This was opened, and a plum-stone was found in the discharge. Three months after the commencement of the disease, the patient complained of severe pain in the hip-joint of the same side, with distressing jerking of the whole limb. On examination, the joint was found to be affected, and pus began to form in many directions around it. The joint-disease was treated in the usual way, and fifteen abscesses in all were opened before ankylosis resulted. A year after the commencement of the disease, the patient was able to walk, with a firmly ankylosed joint.

Living Specimens.—The following cases were exhibited:—Dr. BERWICK: Polydactylism.—Dr. DRINKWATER: Elephantiasis Arabum.—Dr. LEGAT: Multiple Fibroma.—Mr. HOPGOOD: Series of Cases of Nystagmus.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, FEBRUARY 2ND, 1887.

JAMES HARDIE, F.R.C.S., President, in the Chair.

Congenital Dislocation.—Mr. C. E. RICHMOND made some remarks on a case of congenital dislocation of the hip and shoulder, and showed the patient.

Hemi-atrophy.—Dr. ROSS and Dr. JUDSON BURY showed cases of hemi-atrophy. Dr. Bury's case was a girl, aged 9 years, whose right limbs were shorter than the left, and from half an inch to one inch less in girth. The right half of the chest and the right cheek were also smaller than the left, and there was marked atrophy of the right half of the tongue. Above the cheek, however, the left side was the smaller, the left palpebral fissure being narrower than the right, and the left parietal eminence flatter than the right one. There was no paralysis, and all forms of sensation and the special senses were normal. The knee-jerks were slightly increased, the right more than the left. Electrical reactions were normal, the right (atrophied) half of the tongue acted to weak faradism. The patient was healthy and intelligent, but "inward fits" had been noticed for the last nine months. The mother had been an epileptic since the age of 14, and had many fits when pregnant with the patient; five other children were all healthy. Dr. Bury said that there was probably an arrested development of some of the cells of the left motor convolutions preventing complete development of all the fibres of the pyramidal tract. Such a condition was, perhaps, not uncommon, as want of symmetry in the face and limbs was pretty often seen when looked for.

Congenital Hygroma.—Dr. OWEN showed a case of congenital cystic hygroma in a child 9 weeks old. The tumour occupied the right clavicular region, arising from the posterior triangle of the neck, and nearly filling up the space between the clavicle and the ear. It had been tapped once, and ten drachms of straw-coloured, highly albuminous fluid drawn off. Only partial collapse followed, and it was probable that some smaller cysts were included in the tumour. The mother stated that no impediment to labour had been caused by the deformity. The tumour was a typical one of its kind. Allusion was made to the observation of Silcock and others as to the endothelial lining of such tumours, and to their probable origin in a dilatation of lymphatic spaces.

Abdominal Section.—Dr. CULLINGWORTH read a paper on this subject, and presented a tabulated statement of sixty-four cases, showing the particulars of each operation, its object, and its result.

PATHOLOGICAL SOCIETY OF MANCHESTER.

WEDNESDAY, FEBRUARY 9TH, 1887.

J. DRESCHFELD, M.D., President, in the Chair.

Cystoma of the Ovary.—Mr. W. A. STOCKS showed a preparation of a cystoma about the size of an orange, which had passed down Douglas's pouch, and had been extruded through the anus, pushing the anterior wall of the rectum before it. It had been successfully removed by operation.

Vesical Calculi.—Mr. W. A. STOCKS showed thirty-seven calculi which had been removed from the bladder of a man by lateral lithotomy. Each original calculus contained a minute millet-seed nucleus, around which had been deposited some buff-coloured urates, showing a distinct concentric arrangement, and having four or five lines of a much lighter colour radiating from the centre to the circumference, after the manner of those seen in the transverse section of an orange, each stone being about three-eighths of an inch in diameter. At this stage of their development, many of these stones seemed to have undergone spontaneous division through the lines above-mentioned, forming a second series of nuclei. Every stone had been covered with a thick layer of phosphates, those of the primary series forming stones three-quarters of an inch, and those of the latter series, stones of about half an inch in diameter, irregular in shape, and furnished with a varying number of facets.

Mammary Tumours.—Dr. WM. THORBURN exhibited a series of sections of various breast-tumours. He demonstrated the varieties of cancer and their modes of growth, and showed preparations illustrating every stage in the development of cysts and intracystic growths in non-cancerous tumours. Among the rarer forms, he showed a pure myxoma, an adenoma without overgrowth of the connective tissue elements, a typical "villous cancer," and others.

Intra-ocular Growths.—Dr. HILL GRIFFITH showed twelve glycerine-jelly preparations demonstrative of intra-ocular growths and cyclitis, and mentioned the diagnostic appearances of sarcoma of the choroid, glioma of the retina, and plastic cyclitis, or the so-called pseudo-glioma.

Changes in the Spinal Cord and Peripheral Nerves after Amputation.—Dr. E. S. REYNOLDS made some observations on the changes in the nervous system after the amputation of limbs, showing a series of specimens from a case. Having briefly referred to the history of the subject, and especially to some recent observations made by Friedländer and Krause, he pointed out that the changes in the case which he had investigated consisted in a simple atrophy of the majority of the fibres in the nerve-trunk of the amputated leg, with increase of lymph-spaces and connective tissue, and that this change could be traced up to the cord, principally in the posterior nerve-root, but also in the anterior nerve-root. In the cord, the changes were limited to the lumbar region, and consisted of a slight decrease of the posterior horns and columns, and a more marked decrease of the anterior horns, affecting the number and structure of the cells in all the groups, but especially in the postero-lateral and central groups. Clarke's column was not affected.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, FEBRUARY 4TH, 1887.

Dr. ALDERSON, President, in the Chair.

Living Specimens.—Mr. KEETLEY showed (1) a case of Cholecystotomy; (2) a case of Arterio-venous Aneurysm of the Cavernous (?) Sinus after Treatment by Compression.

On the Nature and Treatment of Hypertrophies and Tumours of the Nasal and Pharyngeal Cavities.—Dr. THUDICHUM read a paper under this title, in which he pointed out the evil consequences arising from hypertrophy of the turbinated bones, and the relief given by the removal of the enlarged portions. He said he had taught the whole subject of reflex neuroses from nasal disease, particularly asthma, hay-fever, hemiopsia, convulsive twitchings, spasm of the pylorus, perverted sense of smell, vertigo, loss of consciousness, cough, and spasmodic sneezing, long before Hack or others referred to by Dr. McBride (JOURNAL, January 29th, 1887, p. 205). Dr. Thudichum denied that the nose contained erectile tissue. He maintained the superiority of the electro-cautery to all other operative procedures, and said that great attention must be given to all the foramina of the cavities adjacent to the nasal cavity, of which foramina there were no fewer than sixteen.—After some discussion, in which Mr. SPENCER WATSON, Dr. CLIPPINGDALE, Dr. BALL, Mr. COLLYER, Dr. BENNETT, Dr. NEWTON PITT, Mr. LLOYD, and the PRESIDENT took part, Dr. THUDICHUM, in reply, described in detail his method of removing the inferior turbinated bone with the electro-cautery.

Unilateral Progressive Facial Atrophy.—Dr. CAMPBELL POPE read notes of a case under this title, communicated by Dr. C. W. SUCKLING. The patient was a woman, aged 42, in whom the disease commenced when she was about 18 years of age. The left side of face was markedly smaller than the right; the bones were much atrophied; the fat was quite gone; the skin was not altered in colour, but the eyelashes were scanty, and there was complete alopecia over the left half of the front of the skull. The temperature was a degree higher on the left side; sensation was unaffected. The general health was unimpaired. The tongue, soft palate, and hard palate were normal, and there was no atrophy elsewhere. The faradic response was much increased on the left side, evidently owing to diminished resistance of the skin, etc. There was no syphilitic history, and no cause could be assigned for the disease.

Multiple Neuritis after Diphtheria.—Dr. CAMPBELL POPE read notes of a case under this title, also communicated by Dr. C. W. SUCKLING. A young man was admitted into the Queen's Hospital, Birmingham, three months ago, with almost complete paralysis, which had commenced in the legs, and later on had affected the forearms. Ten weeks previously he had had a sore throat; his sister, living in the same house, died of diphtheria, and his larynx was anæsthetic on admission. There were well marked dropping of the hands and feet, emaciation, marked tenderness in the calf muscles and along the nerve trunks. He suffered from shooting pains before admission. A prick of a pin caused two sensations, touch being first perceived and pain after. The reaction of degeneration was present in the extensor muscles of the legs and forearms. He was now improving gradually, taking 40 minims of the liquor strychniæ three times daily, and being galvanised and rubbed.—An interesting discussion followed, in which the PRESIDENT, Dr. BENNETT, Mr. MALLAM, Dr. PITT, and Dr. BLENKINSOP took part, and Dr. POPE replied.

Card Specimens.—By Mr. H. PERCY DUNN: 1. Extensive rupture of the Duodenum, following a Kick from a Horse. 2. Tuberculosis of the Spleen from a Child of Three Months. 3. Sarcoma of the Testis. 4. Large Intussusception from a child.—Dr. ABRAHAM showed some Microscopical Sections of Sponge Grafts.

PLYMOUTH AND DEVONPORT MEDICAL SOCIETY.

WEDNESDAY, FEBRUARY 2ND, 1887.

C. ALDRIDGE, M.D., President, in the Chair.

Cystic Tumours of Breast.—Mr. W. J. SQUARE read a paper on cystic tumours of the breast, and related a recent case of lymphatic cyst treated by evacuation, followed by the continued application of a liniment after Sir B. Brodie's formula.

Treatment of Typhoid Fever.—Dr. BAMPTON opened a discussion on the treatment of typhoid fever, advocating the use of quinine in considerable doses, and cold applications to combat hyperpyrexia, where the cold bath treatment was not practicable. The administration of antipyrin had, in his hands, been followed by marked lowering of temperature, accompanied by sweating, and followed by refreshing sleep. No untoward symptoms were observed. Malt extract was suggested as a valuable dietetic adjuvant. The cautious return to farinaceous food, after the normal temperature had been reached, was insisted upon. Cardiac exhaustion in the later stages of the fever was best treated with old sherry, or other highly etherised wines.—A discussion followed, in which a large number of members and visitors joined.—Surgeon RUSSELL, A.M.D., bore testimony to the efficacy of the cold bath, believing that it prevented complications.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, FEBRUARY 18TH, 1887.

EDWARD ATKINSON, M.R.C.S., Vice-President, in the Chair.

Obstruction of Colon by Old Adhesions.—Mr. LAWFORD KNAGGS described a case in which the colon was obstructed by old adhesions. Obstruction came on gradually. Colotomy was immediately followed by the discharge of foul mucus from the anus, but afterwards all fæcal matter came through the artificial opening. The patient's death was accelerated by chloroform vomiting, which lasted four days, and by bed-sores.

United Fracture of Axis.—Dr. IRVING showed the upper part of the spine from a man aged 86, who had sustained the injury ten years before; there was then bending of the head backwards, and a prominence in the pharynx, interfering with respiration and deglutition, but no paralysis.—Dr. TEMPEST ANDERSON related a case where a fall on the head seemed to him to have fractured one of the cervical vertebræ. There was much deformity, but no paralysis, and the patient recovered.

Enlarged Kidney, with Calculi.—Dr. IRVING showed a kidney, of large size, containing eight calculi. The substance of the kidney appeared to consist mostly of fat. A fistulous opening had formed into the bowel, and an incision into the prominent part of the tumour was followed by the expulsion of flatus and fæces.—Mr. MCGILL thought the kidney resembled a sarcomatous growth, and related a case in which incision into a large cyst connected with a kidney gave exit to much pus and blood; but the urine was clear, and there were no urinary symptoms. The necropsy showed that the patient had sarcomatous growths in both kidneys.—Mr. LAWFORD KNAGGS thought the fat was secondary to a sarcomatous growth.

Acute Infective Necrosis of Tibia.—Mr. MCGILL showed the tibia of a boy in whom signs of extensive inflammation followed almost immediately on a slight injury. An incision, made thirty hours after, showed the whole of the periosteum to be stripped. This was followed by a secondary abscess in the opposite leg, and inflammation in the knee-joint, on the side of the injury. Rapid recovery followed amputation.—Mr. LITTLEWOOD showed gelatine cultivations of the micrococcus pyogenes aureus from the above case, and remarked on the rarity of the affection, and the danger of mistaking it for rheumatism, in an early stage.—Mr. ED. WARD referred to a case under Mr. Teale, in which the whole of the clavicle of a child necrosed in two days.

Epithelioma of Tongue.—Mr. MCGILL showed the specimen and the patient. The tongue was removed by Whitehead's method, after previous laryngotomy and plugging of the pharynx. He attributed the rapid recovery to free use of iodoform as a dressing to the stump.

Excision of Knee for detached Cartilage.—Mr. E. ATKINSON showed an excised knee-joint, with a piece of cartilage detached from the articular surface of the femur. Loose bodies had been previously removed from both joints, but a second operation was followed by suppuration in the left knee, necessitating excision. There was no history of injury.—Mr. WARD referred to a case lately under Mr. Teale, in which a piece of the patella was detached.

Lesions of Visceral Syphilis.—Dr. JACOB showed a series of microscopic preparations of some of the less common syphilitic lesions, including gumma of skin; syphiloma of lung (the "white hepatisation" of Virchow); congenital syphilis of the liver and hyperplastic laryngitis, from a case of congenital syphilis lately under the care of Dr. Eddison, in which the lower part of the larynx was almost occluded.—Dr. JACOB also showed a number of morbid growths closely resembling normal tissues, and a collection of photo-micrographs of various pathological conditions.

WOMEN DENTISTS.—The Committee of the National Dental Hospital, 149, Great Portland Street, W., has resolved to admit registered female medical students to the practice of the hospital.

SANITARY INSTITUTE OF GREAT BRITAIN.—The Right Hon. G. Sclater-Booth, M.P., has accepted the Presidentship of the Congress of the Institute to be held at Bolton in September next.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, FEBRUARY 16TH, 1887.

Professor GRAINGER STEWART, M.D., President, in the Chair.

DISCUSSION ON EMPYEMA.

DR. WILLIAM RUSSELL opened the discussion with the reading of a full clinical record of five or six cases of empyema, which had recently been under his care. One of the most successful of these he had exhibited to the members at the last meeting. The others were all more or less successful. While aspiration had not proved of much value, he had found free drainage, without resection, most efficient. He was in the habit of making a double opening, and using a continuous drainage-tube. This allowed of thorough drainage, but could only be carried out with effect in comparatively recent cases. In the more chronic forms, especially in the adult, resection of a slice of the thoracic wall would probably be found necessary.

Dr. CAVERHILL detailed the history of two cases, which he showed. He said that, by carefully adjusted external pressure during the healing process, the results which followed operation might be materially improved. It was also a mistake to suppose that germs were necessarily present in a purulent effusion. In one of his cases, the pus had been repeatedly examined with negative results.

Dr. JOHN DUNCAN thought the scientific position was to regard empyema as they would an abscess. There were three ways of evacuating the pus—aspiration, drainage, resection. The results obtained by aspiration of an ordinary abscess were not satisfactory, and he doubted, therefore, whether much was to be expected from the tapping of an empyema. They had still much to learn as to the causation of pus, and until they could combine treatment of its cause with the local aspiration, they must not hope for much success. They might look for more from drainage, provided the cavity were kept aseptic. One opening would probably be found most efficacious. It must not be made too low down, but should be at least two or three inches above the base of the cavity, as during the subsequent retraction proper drainage was disturbed by the elevation of the diaphragm. In old standing cases, especially those complicated by grave lung-change, or in which the discharge was septic, they must fall back on resection He advocated the removal of portions of eight or nine ribs. He had treated six cases thus, three with perfect success ; two with cure, complicated by persistent sinus ; and one which lived for three or four years, but ultimately sank from pyæmia. He had further tried various methods of applying traction or suction to the retracted lung, but so far his results had been negative.

Dr. AFFLECK said that, as to the cause of empyema, a good deal of stress must be laid on general depreciation of the system. At the last meeting, he had shown a case in which the pleural effusion had become purulent after an attack of scarlatina. The diagnosis of pus in the pleura was difficult, and the points usually laid stress on were apt to prove fallacious. He had noticed—though he had never seen it referred to elsewhere—that the cough in empyema differed from that in ordinary serous effusion. It had a peculiar ringing, brassy character.

Mr. HARE cited recent French observations to show that a large number of pleurisies were really tubercular in origin. He thought this of interest in connection with the specimens submitted by Dr. Woodhead at the last meeting. From the operative point of view, there appeared to be at present too great a tendency towards the adoption of Esslander's method. He was of opinion that, in view of the serious deformities often resulting therefrom, they should, wherever it was practicable, adopt a more conservative mode of treatment.

Dr. JAMES said that the value of tapping seemed to him to be underestimated. It should be begun early, and repeated frequently. They must not wait for a re-collection, but the operation was to be carried out at intervals of two or three days, till no pus was discoverable. He had obtained most satisfactory results by this means. The best site for puncture was between the fifth and sixth ribs, slightly behind the mid-axillary line. He had noticed the cough characters, and associated the peculiar tone with increase of intra-thoracic pressure.

Mr. A. G. MILLER said that operative interference must be delayed as little as possible. The chest wall and the visceral surface must be approximated. The principle of resection was, that if the lung would not come to the chest, the chest must be made to go to the lung. The rise of the diaphragm was a most important point. On this account, it was well to make the puncture as high up as the fourth or fifth rib.

Dr. HADDEN thought if pleurisies were only more carefully watched and tapping done sufficiently early, there would be little need for surgical interference.

Dr. NAPIER (Dunbar) objected to the early routine tapping of pleurisy with effusion. The absorptive power of the serous surface was very considerable, and a large proportion of cases got well without external aid. He had been struck with the association of empyema with the puerperal state.

Dr. WILLIAM HUNTER agreed with Dr. Napier's view. He explained the mechanism of absorption from the serous surfaces. Partial tapping was doubtless of value as aiding nature's effort at absorption.

Dr. CAMPBELL (Dunse) objected to the routine use of the subcutaneous syringe. The aspirator needle should be used by itself.

Dr. BYROM BRAMWELL spoke of the difficulty of diagnosis. In young children, especially, it was possible to hear good breath sounds at the base, even when considerable effusion was present. In the matter of treatment, much depended on the age of the patient. In young children, aspiration was distinctly useful, while in the adult its ultimate efficacy was slight. With the view of overcoming the obvious difficulties which resection introduced, he was inclined to advocate a system of constant drainage, the fluid being run off by siphon action. This combined the possibility of free outlet to the fluid with the obvious advantage of a closed pleural sac. In addition, the siphon action ensured a certain amount of suction, and the chances of complete expansion were thus much greater.

Dr. BRAKENRIDGE thought that, in many cases, the empyema was undoubtedly due to localised patches of caseating pneumonia. Granting this, there was an obvious danger in the employment of too great suction action, which would tend to keep up, if not, indeed, to induce the mischief. He had seen one case, at least, in which such a result had occurred.

Dr. SINCLAIR gave details of a case of empyema, treated operatively, in which a sinus was left ; little improvement took place, until the patient, who was an amateur musician, resumed his cornet playing. This illustrated the value of the expiratory effort.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, FEBRUARY 16TH, 1887.

J. URQUHART, M.D., President, in the Chair.

Electric Apparatus.—Professor OGSTON showed a new electric apparatus which could be used for the illumination of the eye, ear, larynx, and for endoscopic examination ; for heating the platinum-hoop ; and for generating galvanic or faradic currents. Dr. Ogston also exhibited a portable accumulator, designed at his suggestion by Mr. Swan, of Newcastle, suitable for all the purposes mentioned above.

The Uses of Iodol.—Dr. JOHN GORDON read a paper on the uses of iodol. This was introduced as a substitute for iodoform, being equally antiseptic, and having no smell. Pyrrol C_4H_4NH, acted on by iodine, gave iodol, C_4I_4NH. It had nearly 89 per cent. of iodine, was odourless, tasteless, insoluble in water, but freely soluble in alcohol, especially if warmed. It readily adhered to the skin, and so could be applied as a very thin coating. It might be used as an ointment, rubbed up with vaseline or lanoline ; as a powder dusted over the affected parts, or as a solution in alcohol diluted with glycerine or dissolved in warm oil. Dr. Gordon had tried it in cases of indolent ulcer, which thereupon soon took on healthy action. Iodol had also considerable local anæsthetic properties, and where there was much discharge, acted as an astringent and promoted scabbing. In one case, after excision of a suppurating inguinal gland, the cavity left was dusted with iodol, and two days afterwards, its dimensions were much reduced by the production of a quantity of healthy granulation-tissue. In another case—that of a strumous girl—a number of superficial ulcers on the dorsum of the foot had been treated in vain for many months by the application of various stimulating agents. In a few days after the application of iodol, there was marked improvement, and healing was rapid. In this case, to test its efficacy, other agents were applied to some of the ulcers at the same time as the iodol, namely, iodoform, sulphate of zinc, and sulphate of copper ; but those treated with the iodol healed most quickly.

Ophthalmic Cases.—Dr. MACKENZIE DAVIDSON showed (1) a little girl suffering from Bo-ophthalmos, a rare condition, in which there was great increase in size of the anterior chamber, and consequently much elongation of the antero-posterior diameter of the eye ; (2) a case of Congenital Zonular Cataract in a man aged 30 ; and (3) a case in which a piece of steel was extracted from the anterior chamber of the right eye of a boy by means of Snell's electro-magnet. The small fragment of steel had stuck in the iris, a piece of which had to be cut away.

On the Use of Drumine.—Professor OGSTON made a communication embodying his experiences in the use of drumine, which will be found in full at page 451 in this day's JOURNAL.

ACADEMY OF MEDICINE IN IRELAND.

SURGICAL SECTION.

FRIDAY, JANUARY 21ST, 1887.

Sir WILLIAM STOKES, President, in the Chair.

Trephining for Mastoid Disease with Paralysis and Aphasia.—Mr. FITZGIBBON read a paper on a case of trephining for mastoid disease with paralysis and aphasia. A. E., aged 27, was attacked by earache on the left side in May, which continued for several weeks, when facial paralysis set in on the affected side. This disappeared, shortly after which facial paralysis appeared on the right side, with confusion of ideas and aphasia, and threatened loss of power of the lower limbs, indicating intracranial mischief. He trephined the left mastoid cells, removing a portion of the upper surface of the petrous portion of the temporal bone. After some days, matter escaped from the opening in the bone, and the patient recovered.—The PRESIDENT asked whether the suppuration was from an abscess, or from the track of the wound made by the trephine, and whether the paralytic symptoms resulted from local inflammation of the bone itself, or, possibly of the periosteum.—Mr. WHEELER said that he saw the patient, and came to the conclusion that she was suffering from phlebitis, perhaps a slight meningitis, and not improbably from an abscess in the temporo-sphenoidal lobe. Two symptoms very characteristic of intracranial abscess were absent, namely, abnormally slow pulse and abnormally low temperature; but the existing phlebitis and meningitis would account for this. The want of power in the lower limbs was due to irritation of the medulla oblongata, perhaps from local phlebitis. The facial paralysis on the right side was probably caused by the irritation of the centre of the seventh nerve, carried from the left side, as the centres of both nerves lie close together. The defect in speech was probably due to the fibres of the left restiform body running upwards. At the consultation he strongly advised operation.—Mr. STORY failed to see what object was gained by trephining the mastoid at all, since pus was found nowhere. Another point was that he did not see why the left ear was trephined instead of the right, as the lady had a running from both ears after scarlatina, and had paralysis of the facial nerve on the left side.—Mr. PRATT said he had seen eight cases of the kind. Of these, four were operated on and recovered, while two that were not operated on died, and he lost sight of the others. Pus welled into the wound when made by the trephine only in one case, but the pus that came afterwards appeared to come from inside the skull rather than from the wound itself; hence the advisability of the operation. He asked how Mr. Fitzgibbon stopped the hæmorrhage?—Dr. COX mentioned the case of a woman, whom he had treated medicinally for similar symptoms with success. He asked how Mr. Fitzgibbon accounted for the paralysis, especially in the lower extremities.—Mr. THOMSON inquired at what period after the operation was performed did recovery result? If the opening had given exit to any collection of pus, once the pus escaped there ought to have been some definite improvement. But the case seemed to have covered a very long period, with fluctuations.—Mr. JOHN H. SCOTT asked whether the purulent discharge had a strong fœtor?—Mr. BENNETT said the tendency of Mr. Wheeler's remarks was to recommend trephining as a remedy for all cases of otorrhœa. His own opinion, however, was that the only cases likely to be relieved were those in which the operation was done early for accumulation of pus in the mastoid cells, or where, with a bold stroke, an abscess of the brain was reached.—Mr. FITZGIBBON, in reply, attributed the paralysis to inflammation extending, in the first instance, to the facial nerve upon the left side, and the paralysis on the opposite side to reflex irritation extending to the opposite side of the brain. The loss of power in the lower extremities was due to inflammation extending to the medulla oblongata, arising from the pus between the dura mater and the bone on the left side of the cranium. Mr. Story's question as to what was gained by the operation, since no pus was got, had been answered sufficiently by Mr. Pratt. The hæmorrhage was stopped by pressure with a piece of lint. Relief was given when he gave the pus free exit. The inflammatory condition had been going on, extending to the base of the brain, to the meninges and the medulla oblongata, and was subacute at the time of the operation; but the pain was relieved immediately the matter commenced to discharge through the trephine opening, and the patient never complained of the agonising pain in her head, which she had done for a considerable number of days following the operation. The discharge was offensive. As to Mr. Bennett's objection to trephining in all such cases, he had himself had a case, in which Mr. Wheeler would have trephined, but in which the milder operation of incision answered the purpose quite as well. It was a well-known fact that the incision of inflamed bones often led to the recovery of a bone which otherwise would go on to destructive caries.

SUB-SECTION OF STATE MEDICINE.

THURSDAY, FEBRUARY 3RD, 1887.

JOHN WILLIAM MOORE, M.D., President, in the Chair.

The Present and the Future of State Medicine.—The CHAIRMAN delivered an address on the present and the future of State Medicine.—The REGISTRAR-GENERAL (Dr. GRIMSHAW) recalled the fact that, nearly fifty years ago, the late Dr. Henry Maunsell delivered a remarkable address on political medicine in presence of the then Lord-Lieutenant.—Dr. JACOB said the Chairman's address proved that the science of sanitation was making steady progress.

Inexpensive Clearance of Unhealthy Areas.—Sir. C. A. CAMERON read a paper on the clearance of an unhealthy area in Dublin through the operation of the Public Health Act, 1878, without expense to the ratepayers. He pointed out how the provisions of the Artisans' and Labourers' Dwellings Acts were practically useless for the closing or repair of insanitary or ruinous houses, and how, even for the clearance of large spaces, difficulty arose owing to the preposterously large compensation often awarded by juries to the persons whose insanitary houses were cleared away. The Corporation of Dublin had expended in the clearance of the Coombe and Plunket Street areas the sum of £56,700, or, allowing for the rent obtained from the acquired ground, at the rate of £5,971 per acre, or about £18 per head of the population removed. Sir Charles Cameron, as health officer, proceeded to deal with unhealthy houses under the 107th and 113th sections of the Public Health Act, and succeeded in getting a whole area, comprising more than an acre, and containing 39 houses with 353 inhabitants, completely cleared without cost to the ratepayers. If this area had been cleared under the Artisans' and Labourers' Dwellings Act, the cost would have been at least £6,000.—Dr. GRIMSHAW said the operation of the Public Health Act, 1878, in effecting the clearance of unhealthy houses, was not sufficiently known, but Sir Charles Cameron had been lucky in getting a number of houses unfit for habitation together, because the intervention of one or two good ones would have spoiled his scheme. Success depended on getting a lot of bad property in the same spot. Moreover, the effective operation of the Act was due to the prohibitive words being "a nuisance *or* injurious to health," instead of "*and* injurious to health." The "and" had been changed into "or," and the bill became law before the alteration was discovered. The area thus cleared might be utilised as an open space, or as a site for artisans' dwellings.—Dr. MACSWINEY would prefer to have the cleared area used as an open space—a sort of lung for the thickly-populated neighbourhood.—Dr. JACOB, seeing that the compulsory clearance of three acres under the Dublin Improvement Acts cost £27,000, or about £19 10s. a head for the families removed, thought the citizens were to be congratulated that the adversely criticised Corporation had not done more in clearing unhealthy areas, and that the plan carried out by Sir Charles Cameron, however inequitable, in effecting clearances at the people's expense rather than that of the ratepayers generally, was to be preferred. He concurred in the desirability of using the cleared space as a lung.—Dr. E. MACDOWEL COSGRAVE observed that the apparently large cost of the clearance, under the Dublin Improvement Acts, was considerably diminished by the revenue from the increased rating of the new buildings.—The CHAIRMAN said the lowering of the death-rate depended to a considerable extent on works of the kind being carried out, and that would prove an enormous saving in respect of taxation after the lapse of some years.—Dr. F. T. HEUSTON also spoke.—Sir C. A. CAMERON, in reply, said it was satisfactory that at last the Corporation had got admirable by-laws, according to which the houses demolished could not be rebuilt, unless the plans were approved of by the Public Health Department. From the present would be observed the good effects of the clearances in diminishing the death-rate; and, in his opinion, Dublin would never again suffer from terrible epidemics of typhus or small-pox. The death-rate for Dublin in 1886 was the lowest on record.

THE Hon. and Rev. John Northcote has been elected President of the Exeter Dispensary for the ensuing year.

DR. ARTHUR E. TURNOUR (the senior medical officer) has invested one thousand guineas to support three "Turnour" free beds at the Denbighshire Infirmary. Mr. S. Whitbread, M.P., has given £1,000 towards the purchase of land.

REVIEWS AND NOTICES.

HEATH'S OPERATIVE SURGERY, AND MAC CORMAC'S NOTES OF AN AMBULANCE SURGEON. Translated into Japanese. Tokyo.

NOT the least important of the signs of material progress in Japan is the rapidly increasing assimilation of the scientific and practical elements of Western medicine and surgery. The best of the native aspirants to medical honours are being sent by the Imperial Government to complete their studies in England and Germany, and some of the number have already returned to Japan to win their spurs in the systematic investigation of maladies that for many a long century have perplexed and disheartened their forefathers; two teaching universities have been founded on the lines of similar institutions in Europe; and a compulsory State-examination is now established for the purpose of delivering the realm from the plague of quackery which rages in every corner of its sunny islands. During the whole of this time of advance, there has been a steadily increasing absorption of the best foreign literature by the educated members of the profession, and a few of the most public-spirited of these are extending a helping hand to their less accomplished brethren, by translating standard English and German works on medicine and surgery into the vernacular. In the fore-front of the European writings so honoured, it is pleasant to see two such well-known works as Heath's *Operative Surgery*, and Mac Cormac's *Notes of an Ambulance Surgeon*. Mr. Heath's name, in its curiously metamorphosed syllabic form of "Kurisutoferu Heasu," has long been familiar in Japan; for his *Practical Anatomy* and *Minor Surgery* have been text-books amongst all the English-reading students for the past ten years; and the volume now prepared by his former pupil, Mr. Yoshida, is in almost every way worthy of the reputation of its author. It appears as a comely tome, bound in European style, clearly printed with movable metallic type, upon English paper, and illustrated with serviceable chromo-lithographic reproductions of Léveillé's splendid plates; and it is edited in a manner that leaves nothing to be desired. It is certain to be popular, and will probably do as much to guide the footsteps of the surgical neophyte at Tokyo and Osaka, as it has already done among the rising generation of surgeons nearer home.

Of no less importance is the other work, which, although but recently sent to England, has been in circulation in Japan for several years. The attention of Japanese army surgeons was first strongly directed towards European military surgery during the unfortunate rebellion of the Satsuma clan in 1877-8; and amongst the favourite studies of the more advanced section of the staff at that time was the *Notes and Recollections of an Ambulance Surgeon*, by Sir William Mac Cormac. That work was already current in no fewer than five European languages; it was from the French version that the Japanese translation now before us was prepared for the benefit of the newly organised medical service. This work, unlike the last, is got up in an almost purely Japanese style, and, with its neatly printed columns, struck off from engraved copper-plates, its filmy double leaves, limp yellow covers, and slightly Orientalised reproductions of the familiar heliogravure plates, is a quaint but by no means unattractive volume. Its more solid qualities are, however, demonstrated by the warm appreciation it has met with amongst those for whom it was intended. The Japanese are to be congratulated upon having secured the possession, in a form available for every native reader, of the surgical experience of our two distinguished countrymen.

NOTES ON BOOKS.

Erkenntniss und Behandlung der Frauenkrankheiten im Allgemeinen, von Dr. CARL CONRAD THEODOR LITZMANN, Professor of Gynæcology at Berlin. (Berlin: Hirschwald. 1886.)—These four lectures were delivered by Professor Litzmann at the gynæcological *clinique* at Berlin, and dealt with the general aspect and treatment of the diseases of women. The author dwells on the "proprieties" of practice, the precautions to be taken to avoid conveying infection, and the means of arriving at a correct diagnosis. Dr. Litzmann has recently vacated this chair, and this volume contains his last course of lectures.

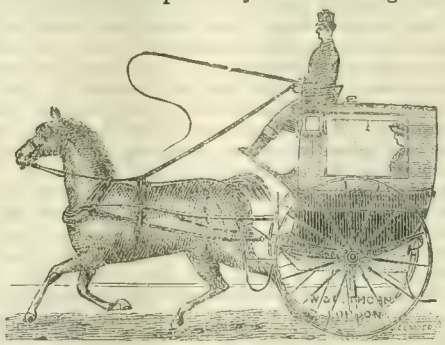
The Revolution of Medicine. By JOHN H. CLARKE, M.D. (H. Kimpton. 1886.)—This is a panegyric upon Hahnemann; it contains nothing either of originality, novelty, or utility.

Dr. GARSON has been elected a Vice-President of the Anthropological Institute of Great Britain and Ireland.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

BROUGHAM HANSOM.

MESSRS. W. and F. THORN, 19, Great Portland Street, London, W., have introduced a new two-wheeled brougham hansom, which has much to recommend it as a single brougham on two wheels. It is more roomy than an ordinary hansom, but very much lighter and easier in its running, the horse being quite close to his work, the wheels high, and the body well balanced. The weight is below the centre of the wheels, which obviates the possibility of the carriage being turned



over. The access is by a folding door from behind, so that there is no risk of soiling the dress against the wheels in getting in or out. The door fastens by an easy but secure automatic bolt when the rider takes his seat. The total weight is guaranteed not to exceed 6½ cwt. It is one of the most successful inventions of the kind which we have seen, the motion being slight, the weight light, and the balance perfect.

NEW TUBE FOR UTERINE LAVEMENT.

IN washing out the *débris* of an incomplete abortion, or merely cleansing the cavity of the uterus by the injection of an antiseptic fluid, it is an important point that free exit should be provided for the fluid injected, or uterine colic is most likely to occur. Various forms of tubes are sold for this purpose, having either small openings in the side or larger openings (like the eye of a catheter) near the point. Both forms, however, being unprotected from the entrance of solids, have their disadvantages. The former becomes completely covered by the contraction of the cervical canal, while the openings in the latter become plugged with clots, etc., and so in each case the proper exit of the return current from the uterus is prevented.

The woodcut represents an ordinary vulcanite tube to be attached to



the rectal nozzle of the syphon syringe with *one opening at the point of the tube only*. The tube is surrounded for about one-third of its length with a cage of crossed wires (removable at pleasure), the top of which splits the current injected into four distinct streams, but allows of free egress for the return current. It is almost impossible that the entire cage and point of the tube should become blocked, and the wires being plated are easily cleaned and kept bright, so that on trial the advantages of the tube described over those in general use will, I venture to say, become apparent. The price will also be found moderate. The makers are Messrs. Fannin and Co., Dublin.

ALEXANDER DUKE, M.K.Q.C.P.I.,
Ex-Assistant-Master Rotunda Hospital.

DE JONG'S COCOA.

WE have received a tin of cocoa manufactured by De Erve H. De JONG, of Wormerveer, Holland. We have examined it, and it appears to be of good quality and free from adulteration. It has an agreeable flavour, and seems to be well adapted for invalids and others who cannot take tea or coffee. It is stated that it can be obtained in England from most chemists, retail druggists, and grocers.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, FEBRUARY 26th, 1887.

THE LUNACY ACTS AMENDMENT BILL, IN COMMITTEE, IN THE HOUSE OF LORDS.

IN the JOURNAL of February 12th we referred to a few of the difficulties that would arise in the working of some of the new provisions in the present Lunacy Bill. Under these provisions, when a petition has been presented to a judge, magistrate, or justice, to make an order for the reception of a person who is not a pauper into a lunatic hospital or asylum, or under single care, he shall send notice thereof to the alleged lunatic, unless he is satisfied that this course will be prejudicial to the lunatic, or dangerous to the public; he shall also have a personal interview with the alleged lunatic, if required to do so by the latter. The evils of the former provision are obvious, and in practice the justice would, no doubt, feel compelled to put it into operation in almost every non-pauper case about to be placed under care. Warned of what was proposed to be done—and this before any legal authority to control them had been obtained—many of the most insane or most dangerous lunatics would endeavour to escape from their friends, or would seek vengeance upon them, or would refuse to see or speak to either medical men or justices, or would arm themselves to make dangerous or deadly resistance. The latter of the above provisions would lead to delay; it would be better, indeed, than this to enact that the justice should see the alleged lunatic at once in every case. In their entirety the three subsections concerned would lead to delays in treatment, loss of chances of recovery, and, in some cases, would hasten, or induce suicide. In the debate in Committee on the Bill in the House of Lords, on February 21st, Lords Grimthorpe, Selborne, and Herschell, brought weighty arguments against the subsections in question. The first-named proposed to substitute for them a clause which would practically restore the provisions, on this point, of Lord Herschell's Bill of 1886, "as amended on report on recommitment." Lords Selborne and Herschell gave utterance to views similar to those expressed two weeks ago in these columns, when we stated that it was necessary to devise provisions which, while meeting to some extent the feeling on the part of a section of the public with regard to alleged illegal placing and detention of patients in asylums, would, on the other hand, as little as possible damage the welfare of the general body of lunatics by increasing publicity, and by making the act of placing an insane relative under care at once tedious, complicated, and costly. As Lord Selborne was understood to say, the main object of the lunacy law was "the prompt placing under restraint and supervision of the alleged lunatic, before he could do harm to himself or any one else. To proceed against such a person as if he were accused of a crime, and to put him upon his defence, would be a perversion of the law and practice of lunacy;" and Lord Herschell urged that any proposed legislation should be such as not to interfere with early treatment in cases requiring it. Ultimately, the subsections were postponed, the Lord Chancellor expressing himself as being prepared to modify them, so as to give the alleged lunatic a right to be brought before some judicial tribunal within a day or two from his being placed under a medical certificate. If there is to be a judicial tribunal, we think it should be at the very outset.

The reports in the daily press may not be accurately worded, but it is not pleasant to read of insanity being "imputed" to a person, or of the latter being "taken into charge" under medical certificates of insanity. Why do so many men, eminent in the legal profession, insist upon wheeling insanity into line with crime? One person is insane, another of sound mind—surely, in the one case, there is no imputation, in the other, no special merit.

Nor do we admit it to be an accurate statement that the medical profession desires to have entirely in its own hands the power to place lunatics under care and treatment, to the exclusion of a judicial element. As far as concerns themselves, at least, and not the welfare of the patients, there is no good reason why any large number of medical men should desire the exclusive exercise of such power; for cases of insanity are troublesome to those who attend them; the fees paid for certifying them are small; and the medical man who signs a certificate of the insanity of one member of a family often loses, as patients, the other members of it. In fact, now-a-days, the increasing difficulty is to get medical men to certify; so ungrateful is the task, and so great the risk that it may become a source of future anxiety and of vexatious legal proceedings, no matter how perfect the good faith in which it is done.

The clause dealing with payments to be made for the maintenance of pauper lunatics taken charge of by their relatives should be carefully guarded; otherwise it may open a way by which designing persons, acting in collusion with their relatives, may improperly obtain a permanent pension out of the rates. There may be an opportunity of excluding this possibility when the House resumes the consideration of Lord Monkswell's suggestion with regard to repayment of the allowance made by the guardians of the union, or treasurer of the county or borough, to which he is chargeable, for the maintenance of the lunatic under this clause.

Another clause of the Bill provides that in some appropriate cases, found lunatic by inquisition in the future, only the estate of the lunatic may be dealt with, and he may retain his personal liberty. On the motion of the Lord Chancellor, it was agreed to add new clauses, making similar provision for one class of those already found lunatic by inquisition, and also arranging for periodical reports to the Masters in Lunacy by the medical attendants of such persons. These new clauses will affect only a few lunatics, but they harmonise with what already exists in the Bill, and if applied with discrimination will prove themselves to be useful.

The amendment of Lord Holbhouse having been agreed to, under which joint licences may be subdivided amongst joint licensees, in such manner that the renewed licences shall not exceed in the aggregate the number of patients allowed by the joint licence; Lord Monkswell succeeded in obtaining the insertion of a clause embodying the principle—often advocated by those who are engaged in the medical service of public asylums—that when any officer's service has been in

more than one county asylum, his service in all such asylums should count towards pension or superannuation allowance. The effect of the new provision would certainly be to consolidate and improve the public county asylum service, in its several branches. But why should the borough asylums not be embraced within the scope of its operation? Only county asylums are mentioned in the press report.

In the Bill, as it stands, there are several other points which it is desirable to amend—so that the protection given to medical men who certify in cases of insanity should be extended to those who receive and detain the very same patients; so that the provisions should be modified as to the primitive effect of the Bill on workhouse medical officers, and as to their remuneration; so that the certificate alone (and without a special report) of the asylum medical officer may suffice under Clause 23; so that a patient should not too readily be taken from under the control of his friends on the application of anyone, if supported by medical certificates from persons called in as partisans, under Clause 31; and so that the provisions of Clauses 37 and 38 be altered, under which letter-writing lunatics would be a a grave nuisance to all concerned, and extra clerks would be needed at the Lunacy Office to deal with the flood of insane rubbish pouring in from every quarter. On these and other points, communications are being made to the Lord Chancellor by the Chairman of the Parliamentary Bills Committee of the Association, in furtherance of the views of the Committee. A special meeting of the Parliamentary Bills Committee will be held on the subject on Friday (this day).

THE GENERAL MEDICAL COUNCIL.

If the small number of consultant practitioners who are the governing bodies of the Colleges of Physicians and Surgeons in London could adequately recognise that they stand to the whole profession in a fiduciary position, and are the trustees and not the born masters of the profession and the Colleges, the reception afforded by the General Medical Council to a resolution asking them to reconsider their position might well make them pause, and seek an opportunity, not difficult to find, of retracing their steps. The Council of the College of Surgeons will, perhaps, be disposed to regret the indecent haste with which it scornfully ignored the wishes of the Members of its own College, when it finds that this step is condemned, not only by the general voice of the profession, not only by the contemned general practitioners who have, as the phrase is, no practical acquaintance with educational matters, but by the chosen representatives of the medical corporations of the United Kingdom. The General Council of Medical Education—the body specially created by the Legislature to guide and regulate the education and training of medical men of all grades—has decided, by an overwhelming majority of six to one, "that it would be contrary to the interest of the public to have two competing examining boards sitting in London," and that, consequently, the two Colleges ought to come to some arrangement with the Apothecaries' Hall. It would seem impossible for the Colleges to disregard such a demand, were it not that both are in various degrees irresponsible to the commonalty of the Colleges, that is, to the whole body of Members and Licentiates; it is therefore, impossible to predict the course of action into which the Council may be dragged by members whose influence over its deliberations is rather in proportion to fervency of optimist convictions, or the prestige of a distinguished past, than to breadth of view, or to regard for the future progress of the profession, and the existing opinions of the overwhelming majority of the members of the bodies whose finances they control, and whose will they defy.

Mr. Marshall, who is the representative of the College of Surgeons, frankly admitted that his sympathies were with the popular cause, and against the course of action followed by the majority of his colleagues at the College. "When they do agree, their unanimity is wonderful;" but we now know, officially, what has all along been rather more than suspected, that this wonderful unanimity has only been obtained by ruthlessly stifling the voices of the minority; a minority already considerable, and destined before long, when reinforced by members elected on the larger franchise, which must sooner or later be conceded, to be transmuted into a victorious majority. Unhappily, victory by this means will come too late; when the Apothecaries' Society has achieved a position of complete independence, and when we have the "two competing Examining Boards sitting in London," which the General Medical Council has, with all due solemnity, declared to be "contrary to the interest of the public;" then it will be too late for the College of Surgeons to repent, or if not too late, the difficulty of bringing about a satisfactory solution will be increased ten-fold. The Apothecaries' Hall already sees its advantage, and is far more eager that the General Medical Council should appoint examiners in surgery, so as to make its license a complete double qualification, than that the Council should seek to induce the two Colleges to act in accordance with the best interests of the profession and of the general public. The end of all the discussions—the resolution requesting the President to communicate the resolutions inviting the Colleges of Physicians and Surgeons, in England and Ireland, to enter into some reasonable combination with the Apothecaries' Halls, in London and in Dublin, and "to take such further action as he may think fit, towards the attainment of the object of these resolutions, to which the Council attaches great importance in the interests of the public,"—is a pitiable demonstration of the impotence of the General Medical Council.

Sir Dyce Duckworth, speaking as the authorised representative of the official element of the College of Physicians, took up the challenge at once, and bluntly intimated that the admonition of the Council would be treated with the same contempt which has been exhibited towards the clearly expressed wishes of the profession at large. Radical reformers may well wish that the two Colleges will accept this hot-headed counsel, for such an insulting rejection of the reasonable demands of the profession and its legal representatives would of itself, and at once, establish an unanswerable case for a Royal Commission to inquire into the constitution of corporations governed by small self-elected bodies, who, resting their case upon mediæval charters or the corrupt bargains of a later age, venture, in the insolence of power, to persevere in forcing their own retrograde policy upon the great body of an enlightened profession which repudiates the substitution of the interests of a party or an institution for those of the profession and the public at large. "The right divine of kings to govern wrong" was once as seriously defended. If the College, as Sir Dyce Duckworth prophesied, reject the verdict of the General Medical Council as they have that of the profession already expressed so clearly in many public forms, the appeal to the Privy Council and to Parliament will be precipitated, and a Royal Commission will be inevitable. The prospect of new charters and degrees will be necessarily postponed, but the result will be better in the end. Meantime, the profession will heartily appreciate the outspoken and honest frankness of Mr. Mar-

shall, who could not be persuaded to defend the acts of the Council of the College of Surgeons, of which he is the official spokesman.

For years, the General Medical Council has had more money than it could spend, but now its expenses have increased in several directions, so that income and expenditure will probably be nearly balanced. It is much to be hoped that the new Council will not follow the evil example of extravagant loquacity set by the old. Something is to be done to try and reduce expenditure, and we are glad to note that one of the direct representatives, Mr. Wheelhouse, seconded the resolution for the appointment of a committee on this subject. Still, even during this session, members have frequently made suggestions which would have involved large expenditure in new directions, so that it was necessary for Dr. Quain, the senior treasurer, frequently to exert his influence to nip the proposal in the bud by the chilling criticism of financial facts. We view the rider added on the motion of Mr. Rawdon Macnamara, directing the Committee to consider whether the income of the Council might not be increased, with dissatisfaction and alarm; this is probably equivalent to a proposal to impose fresh taxation on the profession; it would be stoutly resisted, at any rate as long as the Council continues to find itself so impotent to carry out the wishes of the profession embodied in a resolution adopted by itself by an enormous majority, as it has been discovered to be in the matter of the Apothecaries' Halls.

One of the most important functions entrusted to the Council by the Legislature has been to ascertain that the examinations held by the various licensing bodies were so conducted, as to guarantee that the successful candidates possessed at least the minimum amount of knowledge requisite for the practice of medicine, surgery, and midwifery. Up to the present time the Council has discharged this duty with more or less success, and at a great outlay of money, by holding visitations, at which two or three gentlemen visited the licensing body during the examinations, and reported thereon to the Council. The last visitation was made on the Universities, and the report of the Visitors, together with the answers of the Universities, all spurning with more or less indignation the complaints and criticisms of the Visitors, were referred to a Committee, which presented an accurate and elaborate, if somewhat colourless, report during the present session. As, however, the system of visitation has been replaced under the Act of 1886 by a system of inspection, the Council was impatient of prolonged discussion of the views of the defunct Visitors, and proceeded with that hope which "springs eternal in the human breast", to make arrangements for the inspection of the examinations. It was decided to direct the Executive Committee to appoint three Inspectors, one each in medicine, surgery, and midwifery to inspect in a systematic manner, during the first year, the pass examinations in these subjects, the inspection of the earlier subjects of education being reserved for future years.

The students of the provincial schools seem to have a just cause of complaint, in that they are put to considerable expense in attending in London to be examined, in writing, for their diplomas. The written examinations could easily be conducted in the places of education, and it would also be possible to warn those students who had completely failed in their papers that it would be unnecessary for them to attend to undergo *viva voce* examination. Mr. Teale was only allowed to move the first clause of a resolution to this effect. The clause embodied the principle, and might with advantage have been affirmed, the more as two of the members of the Council who could speak with the greatest experience, Mr. Mitchell Banks and Mr. Wheelhouse, supported it; but the Council apparently feared to commit itself, and came to no decision of any kind. The discussion, however, was of value, inasmuch as it elicited from Sir Dyce Duckworth the statement that the question was under the consideration o the Colleges of Physicians and Surgeons in London, and that "no doubt some course of action would be decided on,"—a somewhat oracular utterance, which may probably be taken to mean that the Conjoint Board may possibly attempt to get over "the practica difficulties" of which we always hear so much when any innovation is proposed; difficulties, in this case, long ago overcome by the University of London, which holds its Matriculation Examination not only at several centres in England, but in various colonies and dependencies, the same papers being set to all candidates. One other educational matter of great importance—the proposed revival of the apprenticeship system—was also discussed; and a Committee, of which Mr. Wheelhouse is Chairman, and both Sir Walter Foster and Dr. Glover are members, was appointed to consider the best method of increasing the practical element in medical education.

The first session of the enlarged and reformed Council was a fitting occasion for the public recognition of the services of Sir Henry Acland, who has been a member of the Council from its commencement, and its President for twelve years. The bust which was presented to the retiring President will remain in the room in which he has so often presided, to perpetuate the memory of the ability and courtesy with which he has participated in the deliberations, or directed the business of the Council, for nearly thirty years.

THE COLLEGE OF SURGEONS AND THE FELLOWS AND MEMBERS.

THE first of the important series of resolutions, passed at the meeting of Fellows and Members at the College Theatre, at Lincoln's Inn, on November 4th, 1886, was to the effect that it was advisable that Members should take part with Fellows in the election of members of Council, and that Members should be made eligible to sit on the Council, provided that no Member should be entitled to vote till he had held his diploma for ten years, nor be eligible to sit on the Council till he had been a Member for twenty years, and that not more than one-fourth of the Council should consist of Members who were not also Fellows. The second resolution declared that, in order to give effect to the recommendation contained in the first, the Council should be asked to empower some of its members to confer with representatives of the Associations of Fellows and Members, as well as with an equal number of Fellows and Members not attached to the Associations, if necessary. At the quarterly meeting of the Council on January 13th, Sir Spencer Wells moved, and Mr. Jonathan Hutchinson seconded, a resolution which announced that, although the Council was not prepared to give effect to the recommendation in the first resolution, it was ready to act on the second, so far as to appoint a small committee to confer on the subjects of the first resolution with representatives from the two Associations. The resolution was agreed to; and at the last Council meeting, on February 10th, the Council elected a committee, consisting of Sir James Paget Sir Spencer Wells, Mr. Marshall, the President and Vice-Presidents, to confer with the two Associations on the subject of the first resolution passed at the November meeting.

This announcement seemed strange to the Fellows and Members o

the College, when it became known through the medical journals; and as the conference between the Committee and the Associations was arranged for Thursday, February 24th, it was felt that there was no time to be lost in deciding how the Committee should be met. Indeed, the date fixed by the Committee was inconveniently close to the official announcement that the Council had agreed to the conference and selected the committee. Further reflections naturally followed in the minds of Fellows and Members. The rejection of a recommendation, followed by the decision that the Council was ready to hold an official parley with the Associations on the subject of the very same recommendation which had been rejected, seemed, it was argued, like an absurdity. The offer of the Council was thought to savour of a mere act of official politeness to cover the plain truth of the action of the Council, which was that the reasonable demands of the Fellows and Members had been totally set aside. It was felt that, under the circumstances, if the Fellows and Members agreed to the conference, they would merely assist, with a condescension quite uncalled for, in the nullification of their demands.

A meeting of a conjoint committee of the two Associations was, therefore, held on Tuesday, February 22nd, when it was moved by Mr. Tweedy, and seconded by Mr. Davy, "that considering that the Council of the College has laid down, as a condition of the conference, that it is not prepared to give effect to the recommendation contained in the first resolution carried at the meeting of Fellows and Members, held at the College on November 4th, 1886, no useful purpose is likely to be served by a conference on these subjects with representatives of the Associations of Fellows and Members; but if the Council will withdraw this condition, both Associations will be happy to appoint delegates to meet a committee of the Council." This resolution was agreed to unanimously. The secretary was instructed to forward a copy of this resolution to the secretary of the College, with an expression of regret "that the short notice which was given has not permitted us to answer the invitation of the Council at an earlier period."

In the course they have pursued, the Associations have, at any rate, shown a resolute determination manfully to carry out the principles which have received the assent of so very large a part of the College constituency; and if their interpretation of the resolution of the Council of the College be in all respects accurate, there can be no doubt that their course was as diplomatically correct as it is sturdily aggressive; as to the precise interpretation to be put upon this resolution, and the meaning to be read between the lines, they are likely to be more correctly informed than ourselves. If they were right in assuming that the Council of the College would come into conference, and, with a *non possumus* in their hands, or under an inability in virtue of their delegated powers to discuss the question from an affirmative point of view (the representation of the Fellows and Members in the election to and membership of the Council), the associations were undoubtedly right in declining a conference of which the negative result would have been from the first prepared and foreseen. There remains the question whether, on this point, they were correctly informed, or whether they have relied upon too rigid an interpretation of a form of words which is possibly capable of another meaning. It does not necessarily follow because the Council of the College was not prepared, in anticipation of the conference, to give effect to the resolution of the Members and Fellows passed in the theatre, that it would refuse to do so as the result of the conference; but if it had the purely Macchiavellian intentions which the representatives of the Associations—no doubt, on good authority—assumed to exist the course taken was prudent as well as bold.

We still hope, however, that the Council of the College will be able to inform the Association that its ambiguously worded resolution was not intended to have the meaning which it has been held to convey; and that the Council, which is now well informed by the memorial, signed by upwards of five thousand of its Members, of the wishes and claims of the great body of the constituency, is prepared to come into conference with more conciliatory and progressive objects than those with which it is at present credited. The Council must by this time feel well assured that it will not get a new charter, or a revision of its charter in any particulars, without the active intervention of the Members and Fellows to secure to the commonalty of the College a reasonable share in the administration of its affairs; and we would prefer to credit it with a desire to settle by conference the methods by which such a result can be brought about, than to suppose, as has here been assumed, that the object of the conference was merely to make a move in a game of chess, while the Council held the means of crying at any moment "checkmate" to its opponents. We may perhaps be giving too much credit to the Council for public spirit, wisdom, and a recognition of the inevitable forces of progress. We hope not.

THE ABOLITION OF RELATIVE RANK AMONG ARMY MEDICAL OFFICERS.

THE answer given by the Secretary of State for War, on Tuesday last, to the question of Sir Guyer Hunter, on the subject of relative rank, has caused something like dismay throughout the Medical Department of the army. And no wonder. Mr. Stanhope informed the House bluntly that the relative rank of all departmental officers has been abolished by the recent army warrant, "medical officers retaining all the privileges previously attached to them." "In all other respects their position is the same." In other words, to put it plainly, this new warrant deprives medical officers of the only rank they had in the army. Is it possible that any one, however ignorant—as no doubt Mr. Stanhope is—of military life, manners, and customs, can really suppose that the position of medical officers deprived of their rank can be the same as it was? The Horse Guards may be able so to persuade civilians like Mr. Smith and Mr. Stanhope, but the whole army will laugh at their simplicity. What evil demon has put it into the heads of the advisers of the Secretary for War to strike this blow at the status of a body of honourable officers, at the very time when the public has been awakened to the immense service they have rendered to the army and the State?

After a long and weary struggle, content had been restored to the department, and young men of good social position believed they could find in its ranks an honourable and useful career; and, session after session, the teachers in our medical schools saw a considerable number of their best men competing eagerly for appointments in it. This is the time selected by the wisdom of the authorities, in matters military, not only to awaken slumbering discontent, but with one stroke of the pen to cut off the supply of the very class of men it ought to be the earnest endeavour of wise rulers to attract into the service by all reasonable means.

If you take away a medical officer's relative rank and leave him only vague "privileges," his position in the army and in military society will be intolerable. Truly this measure comes with becoming grace

from a branch of administration that, until shamed by public exposure and indignation, was contented to go on supplying bursting guns to our sailors and swords and bayonets to our soldiers that "bent like hoop-iron." But this must not be. If the old struggle for common justice and honourable treatment for the medical official of the army is to begin again, so be it. We call on all young medical men who are casting about for a career, to look well to what they are about before they "take the shilling." We call upon their professors and teachers in the great schools throughout the kingdom to make the facts of the case plain to the young men who look to them for guidance. We call upon the great medical corporations to protest against this retrograde and most unwise measure; and, lastly, it will be the part of the great Association whose organ this JOURNAL is to use all the influence its members possess to save their brethren in the army from this grievous injustice. The public have an interest in the army. Is it their wish that the health of our soldiers in peace and war should be put into the hands of the incompetent to be found in all professions? If so, let them, through their representatives in Parliament, sanction this measure; if not, the authorities must be made to know that as they will not allow their soldiers to fight with "hoop-iron" swords, so they are equally determined they shall have the best and most skilful medical and surgical attendance the country can supply.

MR. LAWSON TAIT has been elected a Vice-President of the International Medical Congress, which meets in Washington in September.

LORD JUSTICE FRY'S Committee of the Senate of the University will, we understand, hold a final meeting on March 2nd before presenting its report on the reform of the University.

HER MAJESTY has been graciously pleased to accede to the request of the University of London to be permitted to enjoy the privilege, already possessed by the Universities of Oxford and Cambridge, to present addresses to "Her Majesty upon the Throne" without the intervention of any intermediary.

THE RIGHT HON. A. J. BALFOUR, M.P., Secretary of State for Scotland and Vice-President of the Scotch Education Department, has been appointed by the Crown to fill the vacancy on the Senate of the University of London caused by the death of Mr. George Busk, F.R.S.

PATHOLOGICAL SOCIETY OF LONDON.

THE Pathological Society will meet next week on Thursday, March 3rd, in consequence of the annual meeting of the Royal Medical and Chirurgical Society taking place on Tuesday, the 1st.

DR. MOXON'S WRITINGS.

A VOLUME of the collected writings of the late Dr. Moxon, of Guy's Hospital, will be published next week by Messrs. Sampson Low and Co., under the title of *Pilocereus Senilis*.

ST. BARTHOLOMEW'S HOSPITAL.

THE election at St. Bartholomew's Hospital of an Assistant-Physician to fill the vacancy caused by the resignation of Dr. Wickham Legg, took place on Thursday, February 24th. Dr. West, who received 120 votes, was declared to be duly elected. Dr. Percy Kidd stood second, and Dr. Ormerod third.

THE DENTAL HOSPITAL, LEICESTER SQUARE.

SIR JAMES PAGET, Bart., F.R.S., has consented to preside at the dinner of the friends and supporters of the Dental Hospital, Leicester Square, in celebration of the Queen's Jubilee, at the Hotel Métropole, on Thursday, March 10th.

CONGRESS OF THE SANITARY INSTITUTE.

MR. G. SCLATER-BOOTH, M.P., has accepted the presidency of the Congress of the Sanitary Institute of Great Britain, to be held at Bolton next September.

RHINOLITHIASIS AND LUPUS OF THE NOSE.

AT a recent meeting of the St. Petersburg Medical Society, Dr. Lavr. V. Silitch showed (*Vratch*, No. 1, 1887, p. 16) calculi which he had removed from the nasal cavity of two patients suffering from lupus of the nose, with offensive discharge in the one case of four, and in the other of two, years' duration. In one of the stones, the nucleus consisted of a piece of dead bone.

THE BLOOD IN LEUKÆMIA.

ACCORDING to Dr. Prus (*Medycyna*, No. 39, 1886; and *St. Petersburg Med. Wochenschrift*, No. 1, 1887, p. 1), who bases his statements on five cases of his own, leucin-crystals are met with only in those cases of leukæmia, in which the lymphatic glands are diseased. The number of Bizzozero's corpuscles is, as a rule, very considerable, while Charcot-Neumann crystals are very seldom found. Karyokynesis of leucocytes is always largely increased.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

PROFESSOR ANTHONY ALFRED BOWLBY, F.R.C.S.Eng., will deliver a course of three lectures on "Injuries of Nerves: their Pathology, Symptoms, and Treatment," on Wednesday, Friday, and Monday, March 2nd, 4th, and 7th. Students are admitted to these lectures on the introduction of a Fellow or Member of the College. The lectures will commence at four o'clock each day.

CONJOINT EXAMINING BOARD IN ENGLAND.

ON and after Monday, March 14th next, all applications relating to the diplomas of the two Colleges under the old regulations as well as under those of the Examining Board, must be addressed to Mr. Frederic G. Hallett, Examination Hall, Victoria Embankment, London, W.C. All inquiries by telegram should be addressed "Conjoint, London."

CREMATION.

A MEMORIAL, influentially signed, having been presented to the Leicester Town Council, asking that provision might be made by the Corporation for the cremation of the dead, a large committee has been appointed to consider and report to the Council. It is understood that a decided majority is in favour of the proposal, but it remains to be seen whether the providing of a crematory can be taken as being within the powers of the Town Council.

VACCINATION IN AFRICA.

ARCHDEACON FARRAR, of Magila, writing from East Africa, says:—"We have just saved the whole district of Magila from an invasion of small-pox, vaccinating everybody, at the rate of about fifty a day, until all have been vaccinated; so that while other districts have suffered considerably around us, there has not been a single case of small-pox in the Magila district, with its hundreds of villages, and thousands of people. This, of course, has commended our medical science to the people, and they come in numbers."

RESIGNATION OF THE STAFF OF THE MARGARET STREET INFIRMARY.

WE are informed that the medical staff of the Margaret Street Infirmary for Consumption has consisted for some time past of two consulting physicians, Dr. Thomas Hawksley and Dr. Cholmeley; two physicians, Dr. J. Cooper Torry and Dr. Jagielski; one surgeon, Mr. Carr Beard, of Welbeck Street; and five visiting physicians, Dr. Marsh, Dr. Featherstone Phibbs and Dr. Julian Willis, Dr. Robert Walford and Dr. Scudamore Powell. Of these, seven have resigned,

eaving only three on the staff, namely, Dr. Cooper Torry and the acknowledged homœopaths, Dr. Jagielski and Dr. Marsh. Our notice of last week only mentioned that five of the staff would resign, but we learn that the seven who have resigned have been entirely of one mind throughout; the letter of resignation signed by the seven members of the staff is dated February 23rd, and expresses their unanimous opinion that the action taken by the Governors of the Infirmary left them no other alternative.

THE LATE DR. WAKLEY.

THE report of the Council of University College, London, presented on Wednesday last, announces that the late Dr. Wakley, an old student of the College, and part proprietor of the *Lancet*, has bequeathed to the College, for and on behalf of the Hospital, his freehold residence Heathlands, Longcross, Chertsey, and eight acres of land, for the purposes of a convalescent home for patients from this hospital, as a memorial of his late father, Thomas Wakley, Esq., M.P., the founder of the *Lancet*, the home to be called the "Wakley Convalescent Home." He also bequeathed £1,000 to be expended in the maintenance of the convalescent home, at the rate of £200 per annum.

EXTRACTION OF A FOREIGN BODY FROM THE BRONCHUS.

ON February 17th, Mr. Tom Smith removed from the left bronchus of a little girl, aged 9—the daughter of a member of our profession—a hollow metal cover, about one inch long and a third of an inch in diameter, used for protecting the point of a cedar pencil. The case was seen by Dr. Cheadle, who diagnosed the object to be situated at the further extremity of the left bronchus, with its closed end downwards, resting against the subdivision. In this situation it was found by Mr. Smith, and extracted through an opening in the trachea. It is noteworthy that, though the foreign body was in the bronchus a fortnight before the child was seen by Dr. Cheadle, there was not the slightest constitutional disturbance, and no symptoms whatever, except occasional slight cough. The patient is doing well.

TESTIMONIAL TO PROFESSOR AITKEN.

IT is proposed, in recognition of the great services rendered by Professor Aitken, F.R.S., to his profession generally, and to the medical officers of the army, navy, and H.M. Indian army, by his writings on medicine and his teaching in the Army Medical School, and in admiration of his high personal character in public and private life, to invite that gentleman to sit for his portrait, to be placed at Netley, the scene of his labours, and the home of the school with which his name has been honourably associated from its foundation. Subscriptions, limited to one guinea, will be received by Surgeon-General W. Campbell Maclean, M.D., C.B., 28, Carlton Crescent, Southampton, hon. secretary and treasurer.

REINDEER-TENDON AS A SUBSTITUTE FOR CATGUT.

DRIED reindeer-tendon was first recommended as a very cheap, but effective, substitute for catgut by Dr. Putiloff of Ormsk, in 1884 (see the *London Medical Record*, May, 1884, p. 197). In the *Vratch*, No. 1, 1887, p. 19, M. Kriedener, a veterinary surgeon practising in the Trans-Petchora District, which is the home of the reindeer, writes that he has also used this material in several cases of operations upon animals with most satisfactory results. He is prepared to send specimens of the ligature in question, free of cost, to any surgeon who may be enterprising enough to write to him at the following address—Mokhtchenskaia, Potchtovaia Stantzia, Mezensky Uiezd, Arkhangelsk Government, Russia.

FRENCH SURGICAL CONGRESS.

THE third meeting of the French Surgical Congress will take place in Paris in April, 1888, at a date which will be announced shortly, under the presidency of Professor Verneuil. The following questions are arranged for debate at the Congress: 1. On the Treatment of Gunshot Wounds of the Visceral Cavities; 2. On the Value of the Radical Treatment of Hernia as a Permanent Cure; 3. Chronic Suppuration of the Pleura, and its Operative Treatment; 4. Recurrence of Tumours after Operation (Causes and Prevention). The object of the French Surgical Congress is to establish scientific relations amongst surgeons and practitioners of France and foreign countries. All qualified men become members of the Congress on duly entering their names and on payment of the subscription of 20 francs. Members of the Congress who desire to make a communication to the meeting are requested to communicate their intention to the Secretary-General three months before the opening of the Congress. A summary of the conclusions of their paper must also be forwarded. All communications should be addressed to Dr. S. Pozzi, 10, Place Vendôme, Paris.

PHYSICAL AND CHEMICAL PROPERTIES OF ANTIPYRIN.

PROFESSOR V. A. TIKHOMIROFF, of Moscow, says (*Proceedings of the Moscow Physico-Medical Society*, Nos. 5 and 6, 1886) that a pure preparation of antipyrin is rapidly and completely dissolved in water, the solution having a neutral reaction. The most characteristic reaction of the drug is that a very weak, slightly yellowish, solution of perchloride of iron becomes dark reddish-brown in colour when a small quantity of antipyrin is added to it. On the subsequent addition of a drop of sulphuric acid, the mixture becomes completely discoloured. Another characteristic property of the drug is that, on mixing a watery solution of it with an excess of nitrous acid (or, rather, with a mixture of KNO_2 and HCl), a green precipitate, bearing the name of "iso-nitroso-antipyrin," appears, and forms spherical masses, which, as seen under the microscope, closely resemble colonies of yeast-fungi (*saccharo-myces cerevisiæ*). This appearance is produced by the aggregation of extremely minute crystals, having a double refraction. The precipitate is soluble in caustic alkalies and ammonia, the solution being of a greenish-yellow colour.

SANTAL IN RENAL COLIC.

THE *Journal de Médecine* publishes the following note by Dr. Philbert on the use of santal in nephritic colic. Having already suffered from this painful disease, the author resolved to try the above remedy upon himself. An opportunity soon presented itself. Towards the end of March, about 4 o'clock in the afternoon, he experienced the usual symptoms, and hurried home as quickly as possible. He took four capsules of santal, and got into a bath. The pain was much less severe than usual, and did not last so long; in about an hour it ceased entirely. Dr. Philbert attributes this result in great measure to the santal, whilst allowing that the bath also did good. For six months he had no occasion to renew his experiment. At the end of that time he was again seized with frequent and imperious desires to pass water. Having no doubt as to the diagnosis, he immediately took four capsules of santal, and awaited the onset of the familiar pain in the kidneys. It did not come on, however, and nothing but a "stitch" in the left lumbar region made him aware that the calculus was passing off on that side. Dr. Philbert does not undertake to explain the mode of action of the santal in this case; he is content with pointing out its beneficial effects.

MEDICAL JURISPRUDENCE IN THE POLICE FORCE.

EXPERT evidence has, as we all know, never been held in very high exteem, but it has now reached a depth of degradation for which no one could have been prepared. It appears that the proper person to give the medical evidence at a coroner's inquest is a policeman. An inquest was lately held at Willingham Cherry, on the body of a male infant, found in a river near there, enclosed in a meat-tin. Evidence of the discovery of the body having been given, Mr. Superintendent Truelove, of Lincoln, testified that he had examined the body in company with a professional brother in the shape of the local police-constable, and, as a result of this highly skilled investigation, he

found (1) that the body was that of a fully developed male child; [we suppose he means by this that it was the body of a child which had arrived at full term. It would certainly have been instructive if the reasons for determining this important and by no means always easy point had been given; but they were withheld.] (2) That the umbilical cord had been torn, and not cut; [here again there is room for more detail as to the exact condition of the cord, the point of rupture, etc.] (3) That there were no marks of violence, but that the body was much decomposed. As no mention is made of a *post-mortem* examination, we are forced to the conclusion either that the learned gentleman did not make one, or that he had misgivings as to the results of his first essay with the hydrostatic test, and thought it best to say nothing about it. The object of an inquest on the body of an infant found in the water is to determine whether the child had lived, its probable age, the cause of death, and how long it had been in the water. The expert evidence tendered in this case did not in the least degree elucidate any one of these points. To find that the inquest was in this instance conducted by a medical man only makes the whole transaction more lamentable, as he must have known the worthlessness of the opinion he allowed to be given to the jury as scientific evidence. In the end, the jury returned an open verdict, and thus terminated an inquest which, except for the serious issues possibly involved, was nothing better than a farce.

THE FIFTY-FIFTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION AT DUBLIN, 1887.

THE arrangements for the annual meeting of the British Medical Association in Dublin are now so far advanced that we are to-day able to publish the programme of the week's work, as well as the names of the officers of Sections. It will be noticed that a complete, and it is hoped most beneficial, change has been made in the business arrangements. The Sections, which at previous meetings have met in the afternoon, will meet at 11.30 A.M.; while the general meetings, to hear the Addresses in Medicine (by Professor Gairdner), in Surgery (by Professor Hamilton), and in Public Medicine (by the Rev. Samuel Haughton, M.D., F.R.S.), will be held at 3 P.M., instead of in the morning. The first general meeting, however, at which the report of the Council and Committees will be presented, and other business transacted, will be held in the morning. By these alterations more time will be given not only to the general meetings, and especially to the first, but also to the work of the Sections. The general and sectional meetings will all be held in the noble buildings of Trinity College, which the authorities have generously placed at the disposal of the Association during the meeting. The excellent arrangements which have been made are due in great measure to the power of organisation displayed by Dr. G. F. Duffey, the Honorary Local Secretary, and the self-sacrificing energy with which he has attacked his onerous task.

UNIVERSITY COLLEGE AND THE PROPOSED TEACHING UNIVERSITY.

AT the annual general meeting of the members of University College, held on Wednesday afternoon, under the presidency of the Earl of Kimberley, Professor E. Ray Lankester moved: "That this meeting of the Governors, Fellows, and Members of University College, London, approves and adopts the resolution passed on January 28th, 1887, by the Senate of the College, namely, that the Council of the College be requested to promote a petition to the Crown praying for the grant of a charter, identical in its terms with that of the Victoria University, to an academical body in London, of which University College shall be the first constituent, such charter to give the right of conferring degrees in Arts and Science only." He said it was exceedingly probable that very definite action would be taken during the present year by the Government in the direction of constituting a degree-giving body in London. He and his colleagues felt that, unless University College took a decided part in the movement, it was very likely that its interests might suffer very seriously; the Senate had decided, by a considerable vote, that, in their opinion, the Council should promote a petition to the Crown in favour of a charter according to the terms of the resolution which he had moved. He should be willing to co-operate with King's College in this matter. He contended that the charter would not injure the University of London or any other vested interest. The University of London was, in fact, only a university which had its headquarters in London, and had extended its operations all over the globe. The motion was seconded by Mr. Bywater. Professor T. E. Scrutton moved an amendment "That this meeting of the Governors, Fellows, and Members of University College, London, approves and adopts the resolution passed on July 10th, 1886, by the Council of the College in favour of the organisation of a teaching university in and for London, with faculties of Arts, Science, Medicine, and Law, and requests the Council to use their best endeavours to promote the object specified in that resolution." He contended that the amendment would be far more likely to achieve the object which Professor Lankester had at heart than a motion which would bind them to a definite scheme not suited to the special conditions existing in London. Professor Morley seconded the amendment. He agreed with Professor Lankester that time ought not to be lost; and he thought that the time had come when there must be a teaching university for London; but he regarded the ready-made scheme referred to in the original motion as inadequate. The amendment was supported by Sir George Young. After some debate, the original motion was withdrawn. The amendment thus became a substantive motion, and was carried unanimously

RECENT TESTS FOR SUGAR.

IN addition to the ordinary clinical tests for sugar, such as copper sulphate and potash, potash alone, indigo-carmine and others, two new reactions have been described which are stated to be more delicate than those now in use. The first of these, in point of time, was introduced by Fischer, and has been utilised by von Jaksch in clinical investigations. It consists in placing a small portion of hydrochlorate of phenyl hydrazine with twice the quantity of sodium acetate in a test-tube, which is then half filled with water and warmed. After adding an equal volume of the solution to be tested, the mixture is boiled for twenty minutes, when, on cooling, yellow crystalline needles of a compound of glucose and phenyl hydrazine (phenyl glucosazine) are deposited. These crystals have a definite melting point of 204° to 205° C. If the quantity of sugar is small, the microscope may be required to detect the characteristic crystals. By this test, which is a very delicate one, von Jaksch has investigated the occurrence of sugar in many morbid conditions. In normal urine, a positive result was never obtained, though the small number of cases examined did not justify a refutation of the statement that small quantities of sugar are present in normal urine. The test is a very convenient one to apply to the small quantities of sugar which are sometimes present in the urine in cases of brain tumour and liver disease; but the most interesting results were obtained in certain cases of poisoning. Thus, in carbonic oxide poisoning, though the fact of the presence of sugar in the urine has often been stated, no accurate chemical investigation has been made of the matter. The question is, however, settled by the very positive results obtained by means of the phenyl hydrazine test. Sugar was found in all the three cases of poisoning which came under investigation. It was also found in two cases of asphyxia, and in one of deep chloroform-narcosis, and in the of urine a patient taking large doses of salicylate. The last observation is an interesting one, as, though it is well known that the urine of patients taking salicylate reduces Fehling's solution, it is not certain whether this reduction is due to glucose, or to a salicylate excretory compound. The phenyl hydrazine test will no doubt be found useful in deciding whether sugar is present or not, when the ordinary clinical tests give a doubtful reaction. The second test for sugar has been introduced by Molisch, and does not appear to be so accurate as the one just mentioned. It consists in adding two drops of a 15 to 20 per cent. solu-

tion of α naphthol in alcohol to the liquid to be tested, and then an excess of strong sulphuric acid, which causes a deep violet colouration; if water be now added, a deep violet precipitate is formed. If thymol be used instead of naphthol, a carmine-red precipitate is produced. The test was introduced by Molisch, and Seegen has stated that it is given by all proteid bodies. The reactions are, however, different, since the proteid precipitate is soluble in strong hydrochloric acid, while the sugar one is not. The reaction would thus have disadvantages in a clinical application if albumen were present. Molisch states that, by its means he has been enabled to confirm Brücke in finding small quantities of sugar in normal urine.

FOOD ADULTERATION AND ANALYSIS.

Mr. Cassal, in a lecture which he gave a few days ago at the Parkes Museum of Hygiene, on food adulteration and analysis, called attention to the ignorance which so extensively prevails as to the true meaning of the terms adulteration and analysis. The best definition, in his opinion, was that an article was adulterated if it contained any admixture injurious to health, or which was added to increase its weight or bulk, or if any of its components were extracted, or if one article were substituted and sold for another. According to the Act of Parliament, it must be an intentional admixture, for the sake of gain. A distinction should be drawn between injurious and non-injurious adulteration. The Act of 1872 worked badly side by side with the Act of 1860, legal minds being quite at variance as to their application. Referring to the articles of daily consumption, which were commonly chosen for the purposes of adulteration, and the ingredients with which they were adulterated, the lecturer cited mustard, which often contained wheat-flour and turmeric. Butter was mixed with various fats incorporated with a small quantity of butter or worked up with milk. Vinegar contained sulphuric acid. Brandy, whisky, gin, wine and beer, were all subject to adulteration, many of the ingredients being injurious. Temperance drinks had been found to contain sulphuric, tartaric, and citric acids. From a sanitary point of view, all these adulterations were to be deprecated, as they were found to be more or less deleterious. No doubt adulteration had diminished since the passing of the Act, but it was still extensively carried on. Speaking of the difficulties surrounding the analysis of articles of food, Mr. Cassal referred to the misconception that existed as to the working of the Sale of Food and Drugs Act, and the inconvenience attending the different standards adopted by the official experts at Somerset House, and by the certified analysts. It should, he said, be clearly understood that Somerset House was not a court of appeal: it might perhaps be called a court of confirmation. There was still an alteration in the law needed, and a considerable extension of it to other articles besides food and drugs. It was, he said, not possible to detect in all cases the quantity of admixture by the microscope, and so the plan of comparison was adopted, a certain quantity being tested and the bulk judged by it. Then there was the test by specific gravity, and also the chemical test. It was necessary that the results should be reliable and rapidly attained, and the delinquent should be punished as rapidly.

THYROTOMY.

Three cases of thyrotomy reported by Dr. Clinton Wagner, of New York (*New York Medical Journal*, October 30th, 1886), present some points of interest. The patients were all between three and five years of age. In the first case, a boy five years old was admitted into the Metropolitan Throat Hospital suffering from alarming dyspnœa and spasm of the glottis. A large papilloma was seen to be attached to the right cord. A membranous web was also observed stretched from cord to cord behind. Tracheotomy was first performed, and then thyrotomy. The papilloma was removed, and the web was cut away with scissors. The web was formed by cicatricial tissue, resulting from the healing of diphtheritic ulcers some months previously. Six years later the cords were normal, and the voice was excellent. The second case resembled the last in some respects. A membranous web, resulting from diphtheria, extended across the larynx below the vocal cords, and just above the inferior border of the thyroid cartilages, occluding at least the anterior two-thirds of the lumen of the passage. A tracheotomy-tube had been worn from the time of the diphtheritic attack, five months previously; and, whenever the tube was removed, dyspnœa came on at once. Dr. Wagner, who was called in consultation to see the child, performed thyrotomy, and removed the occluding membrane which he expected to find, but which, from the laryngoscopic examination, could only be suspected. Two years later the boy had a good strong voice. The third case, also, had points in common with the first. A child, three years old, suffering with dyspnœa and spasm of the glottis, was found to have a large papilloma. Tracheotomy was first performed; but, owing to the accidental cutting of a large vein, and the prostration consequent on the resulting hæmorrhage, thyrotomy was deferred for a fortnight. It was then successfully performed, and the papilloma was removed. Nineteen months later the voice was strong and clear. Touching the necessity of the operation, Dr. Wagner holds that, in adults, a cicatricial web can be removed in various ways; but that, in children, thyrotomy is the only means of affording radical relief. Some points as to thyrotomy in general are also referred to. In subjects over 45 years of age, ossification of the cartilage was almost invariably found; and a small file-cut wheel, revolving by means of a dental engine, was found to make a cleaner cut, and to be more easily managed than the small convex saw generally used. After the operation, the author used formerly to employ silver sutures to keep the edges of the cartilages together. These he now considers quite unnecessary; finding that, if the skin be well brought together by stitches and plaster, the parts remain firmly in apposition.

VENT, NOT VENTILATION.

In the course of an address on "The Laws of Nature in Relation to Health," given before the Hertfordshire Natural History Society, Professor Attfield, F.R.S., in speaking of the prevention of infectious disease, said a possibly serious source of contamination of the air of towns was to be found in the delivery of foul vapours from certain of the gratings at our feet as we walked along the streets and roads. There was, he observed, a general impression—probably a right one—that we had gone too far in the matter of sewer-ventilation—a little too far in a wrong direction. Fifty and a hundred years ago certain fevers which decimated the inhabitants of our towns were said to be, and probably were, largely due to the emanations from open urban ditches and other collections of impurities. We had now filled up the unsightly conduits, got rid of pestilential accumulations, and had substituted closed pipes and drains. But now, under some fancy that these tubular channels needed ventilating, we adopted mechanical contrivances which often brought the noisome vapour to the feet of adults or children as they played near or perhaps actually peered into the grid-guarded caverns. True, the contents of the passages were not allowed to stagnate as in old days, but so far as we ventilated them—that is, washed them out with air—and brought that possibly pestilential air to the lungs of human beings, to that extent, Professor Attfield contended, we were making a retrograde movement towards the fever-breeding conditions of pre-sanitary times. To prevent the vapour-laden air being driven by great pressure within the drains past the water-traps of our homes into the rooms in which we lived, he would suggest some judiciously disposed vent-pipes with no such current of air through them as constituted true ventilation, kept clear by an annual or semi-annual inspection. There was no danger to be apprehended from the generation of poisonous gas in these sullied-water passages. Such small quantity of gas as would be present even in stagnant stuff would be harmless. Ground level gratings should be done away with altogether; what was required was vent, not ventilation.

SCOTLAND.

DESTITUTE SICK SOCIETY, EDINBURGH.

At the quarterly meeting of the directors of the Destitute Sick Society, it was stated that 3,250 visits had been paid during the quarter by the twenty-seven gentlemen visitors, who had distributed £555 in money, meal, coal, and clothing. The subscriptions and donations for the quarter amounted to £290. Legacies of £300 from the late Mrs. Bradbury, of Strathmartin, and £50 from the late Mrs. Bridges, were announced.

GREENOCK INFIRMARY.

The annual report of Greenock Infirmary states that in the fever wards 269 patients had been admitted during the year, and 29 had remained from the previous year. Of these, 250 had been dismissed cured, 2 were relieved, and 16 died. In the medical and surgical wards, there had been 653, of whom 415 were cured, 122 were relieved, and 55 had died. The total admissions were 863 last year, as against 879 in the previous year; and the cases treated to their termination, 860, as against 865. The deaths amounted to 71, or about 8 per cent., as against 10 per cent. in 1885. A large number of cases of typhus, enteric, and scarlet fever were admitted, the latter being prevalent the whole year. The average residence of patients was 27 days in the fever wards, and 32 days in the medical and surgical wards. The total of subscriptions and legacies amounted to £5,952, of which workmen contributed over £498.

INSTRUCTION IN SICK NURSING.

Considering the important bearing that proper nursing has on the course of many diseases, we are pleased to notice that a course of instruction on the subject is being given in Edinburgh, in connection with the School of Cookery, by Miss Stelfox. The course includes lectures on the sick-room, infectious diseases, children's diseases, outward applications, operations, and enemata (how often the practitioner finds absolute ignorance existing as regards the latter!). The lecturer was introduced by Dr. G. W. Balfour, who said the subjects were such as every woman should know, and expressed his hope that the course would prove successful. This is likely to be the case, as it has been found necessary to engage a larger hall for the subsequent lectures.

THE PERTH INFIRMARY.

Rules requiring the retirement of the physicians or surgeons of a hospital, after a stated number of years of service, are usual, and often necessary; but we never remember to have heard before of so short a term of office as eight years. In 1864, this period was adopted by the "Directors" of the County and City of Perth Infirmary. After remaining for three and twenty years a dead letter, it has been suddenly put in force, and Dr. J. P. Bramwell, who has been one of the Visiting Surgeons for nearly nineteen years, was named Honorary Consulting Surgeon. The re-arrangements thus rendered necessary included the appointment of a new junior surgeon over the head of one of the junior staff. Altogether, the Directors appear to have acted in an extremely high-handed and inconsiderate manner, and we are not surprised to see numerous letters of complaint and indignation in the local papers. Dr. Bramwell evidently has the sympathy of his fellow-citizens, and of at least a large part of the medical profession resident in or about Perth; no complaint is made either of his want of ability or willingness to discharge his duties, and the sudden enforcement o a rule which had been allowed to become obsolete inflicts a great hardship on him.

HEALTH OF GLASGOW.

Dr. Russell's report to the Town Council states that, during the fortnight ending February 12th, there were 488 deaths, as compared with 578 in the preceding fortnight. The number of deaths from diseases of the lungs was 166, as compared with 207; from diarrhœa 7, the same as during the preceding fortnight, of which 4 were of children below five years of age; from fever, the deaths were 5, in place of 3, all from enteric fever; and from infectious diseases of children 58, in place of 72, of which 31 were due to whooping-cough, 20 to measles, and 7 to scarlet fever. In the Fever Hospital, on February 12th, there were 208 cases of scarlet fever, 80 of measles, 42 of enteric fever, 15 of whooping-cough, 7 of erysipelas, and 3 of typhus fever—in all, 355 cases, as compared with 404 a fortnight before, and 352 at the corresponding period last year. During the fortnight, 76 cases had been admitted to the Fever Hospital, 108 dismissed well, and 17 had died. During the month of January, two nurses died of enteric fever. The physicians had been considerably embarrassed by the occurrence of cases of rötheln. The death-rate for the week ending February 19th had been 27 per 1,000 of the population, as against 25, 24, 30, and 28 for the previous four weeks, and 25, 28, 25, and 27 for the corresponding weeks of the past four years. During last year, 1,692 children under 13 years of age had been in the hospital, each for an average period of seven weeks. A report from the Sanitary Inspector stated that one case of rötheln was found in a milk-shop. The patient was removed to hospital, and the premises fumigated and cleaned. A dairy-farm in the parish of Beith, Ayrshire, from which a part of the milk-supply of the shop was derived, was inspected, and five children were found suffering from a disease certified as scarlet fever. The milk-supply was at once stopped, and a report on the sanitary condition of the farm given to the medical officer of health.

IRELAND.

The Lord Chancellor of Ireland, on the recommendation of the Right. Hon. Lord Monck, has been pleased to appoint Robert Browne, M.D. Univ. Dub., F.R.C.S.I., to the Commission of the Peace for the county of Dublin.

HEALTH OF DUBLIN IN 1886.

During last year the births amounted to 10,199, and the deaths to 9,491, or 26.9 per 1,000, as against 29.5, the average for the preceding ten years. The mortality from zymotic affections came to 1,100, being 217 less than in 1885. Of these, scarlet fever caused 184 deaths, fever 193, whooping-cough 246, and diarrhœa and dysentery 283. The deaths from phthisis were in excess of the average, while, on the other hand, the mortality from other diseases of the respiratory system were much below the average. To apoplexy, 127 deaths were attributed; to epilepsy 48; and to other diseases of the brain and nervous system 496; mesenteric disease caused 249 deaths; tubercular meningitis 176; cancer 224; and diseases of the circulatory system, 597.

KILMALLOCK WORKHOUSE.

An election took place recently for a medical officer to the workhouse, in the room of the late Dr. O'Connell, at a salary of £100 per annum; the gentleman appointed will not be allowed to hold any other position connected with the union. There were six candidates, but the contest really lay between Drs. Macnamara and Cleary, the latter being successful by 23 votes to 19.

CAVAN UNION.

One of the Cavan Guardians lately proposed a resolution to the effect that the medical officers of the union, with two exceptions, should have their salaries reduced by £20 per annum. He referred to the prevalent distress as his reason for bringing forward the resolution. It was shown, in the discussion which ensued, that, even if the resolution was adopted, it would only make a difference of three-sixteenths of a penny in the valuation; besides this, after contracting to pay certain salaries, it was illegal to reduce them when no exceptional circumstances had arisen for such a proceeding. Ultimately the resolution was lost by 32 to 8 votes.

MEDICAL FEES.

At a recent meeting of the Claremorris Board of Guardians, Dr. Kelly applied for £1 1s. for attending an operation case at the hospital with Dr. Burke, the medical officer of the workhouse. The chairman, however, thought the claim was outside the rules of the Local Government Board, and the matter was adjourned for further inquiry.

THE NATIONAL LYING-IN HOSPITAL.

The second annual meeting of the friends and supporters of this hospital was held on Monday last. The report of Dr. Roe, master of the hospital, stated that during the year 134 patients were attended in the hospital, all of whom did well, there being no deaths of mothers. There were 57 patients attended in the chronic ward, and 117 at their homes. The number of attendances recorded at the dispensary was 3,853.

THE DUBLIN HOSPITAL SATURDAY FUND.

The fourteenth annual meeting of the friends and supporters of this fund was held on February 16th. The total sum distributed for the year 1885 was £3,933 16s. 7d. This includes a bonus of seven and a half per cent. to all the hospitals with the exception of Mercer's and the Whitworth, which have not as yet provided trained supervision for their nurses. The participating institutions (sixteen in number) are the same this year as last, and the amount awarded to each is as follows: Sir Patrick Dun's, £356 1s. 2d.; City of Dublin, £814 2s.; Steevens's, £79 1s. 3d.; Meath, £451 19s. 10d.; Mercer's, £159 0s. 9d.; Whitworth (Drumcondra), £64 18s. 4d.; Coombe (Lying-in), £102 10s. 9d.; Rotunda (Lying-in), £144 6s. 6d.; St. Mark's (Ophthalmic), £116 5s. 7d.; National Eye and Ear Infirmary, £109 7s. 9d.; Convalescent Home, £186 12s. 2d.; Cork Street (Fever), £132 17s.; Adelaide, £759 14s. 6d.; Monkstown, £144 7s. 7d.; Orthopædic (Great Brunswick Street), £189 12s. 6d.; National Orthopædic and Children's, £122 18s. 11—total, £3,933 16s. 7d. The Earl of Meath, who has been President of the Fund since its inception, and has always shown the deepest interest in it, having resigned his position in consequence of the state of his health, a resolution expressive of gratitude for his Lordship's services, and regret for the loss of them, was unanimously adopted. Lord Brabazon, one of the honorary secretaries, and one of the originators of the fund, was elected President in the place of his father. An inquiry into the dietaries of the different hospitals participating in the fund was submitted in a report of a committee appointed to investigate the matter. This committee, from a consideration of the dietary returns made by the hospitals, found differences in quantity between some of the principal items of diet which seemed quite inexplicable. In the matter of bread and potatoes alone, for example, the committee found that while in five of the hospitals the allowance of daily bread amounted to 12 ounces, potatoes varied as follows: 4, 6, 8, 16, and 20 ounces daily. Again, the difference between 12 ounces of bread with 4 ounces of potatoes in one institution, as compared with 18 ounces and 20 ounces respectively in another, points to either short allowance in the former or waste in the latter. The committee propose to continue and complete its inquiries, which, as will be readily understood, are by no means free from difficulty.

CORK DISTRICT LUNATIC ASYLUM.

At the last monthly meeting of the Governors, the annual report of Dr. Jameson Dwyer, resident medical superintendent, was brought under their notice. It appears that there were 240 admissions during the year, while 126 were discharged from the asylum. The deaths numbered 100. The admissions showed a decrease of 25, and the deaths an increase of 13, as compared with the previous year. On the last day of the year there were 925 patients in the institution. Taking the population of the city and county of Cork as 500,000 (Census of 1881), it will thus appear that there was in this district about one individual in every 541 afflicted with mental disease, and confined in the asylum. The percentage of recoveries on the total admissions during the year was 27, and on the total number treated 6.4. The percentage of deaths on the daily average number in the house was 10.8. An analysis of the probable causes of insanity in those admitted during the year shows that, in 101 cases, physical causes were the chief factors in originating the disease, and that, in 39 instances, the causes were attributed to moral agencies. The total expenditure for the year was £18,588 4s. 5d., and the average annual cost per patient was £20 2s. 4d., which was a decrease of 16s. 4d. as compared with the year preceding. No deaths from suicide or accident occurred during the year.

HENRY TESTIMONIAL FUND.

The Treasurer, Dr. Walter Dickson, R.N., and the Honorary Secretaries, Dr. W. C. Grigg and Mr. George Eastes, M.B., before closing the fund which the Council of the Metropolitan Counties Branch has initiated on behalf of Dr. Alexander Henry, appeal specially to the members of that Branch, and generally to all members of the British Medical Association, for further donations to the fund. Dr. Alexander Henry, it may be remembered, was for more than twenty-six years one of the Honorary Secretaries to the Metropolitan Counties Branch, whilst also filling the responsible post of Sub-editor of the British Medical Journal; and he has now, for many months past, been quite incapacitated by illness. Donations should be sent at once to Mr. Eastes, 69, Connaught Street, Hyde Park Square, London, W.; and will be duly acknowledged in the British Medical Journal.

The amount of donations already announced in three lists published in the Journal on January 15th, 22nd, and 29th, 1887 (after the deduction of two donations, amounting to three guineas, announced by error in two lists) is £246 18s. 6d. The following donations have been received since January 29th:

	£	s.	d.		£	s.	d.
Dr. Fletcher Beach	1	1	0	Dr. J. C. Langmore	0	10	6
Dr. W. Cholmeley	1	1	0	Dr. J. N. T. Lipscomb ..	1	1	0
Dr. S. Coupland	1	1	0	Dr. L. W. Sedgwick	1	1	0
Mr. G. A. Critchett	1	1	0	Dr. R. H. Semple	1	1	0
Dr. C. Godson	1	1	0	Sir E. H. Sieveking, M.D. ..	1	1	0
Dr. A. Grant	0	10	6	Mr. Thomas Smith	3	3	0
Mr. T. Hoskin	1	1	0	Dr. T. Thyne	1	1	0

THE JACOB TESTIMONIAL FUND.

The Honorary Secretaries and Treasurers beg to thankfully acknowledge the following additional subscriptions received or promised since last week:

	£	s.	d.		£	s.	d.
Amount already acknowledged	431	13	6	Eustace, M., Drumcondra ..	1	1	0
Greene Pacha, Chief Medical Officer, Sanitary Dept., Egypt	1	1	0	Donovan, W., Birmingham ..	1	1	0
Crean, C. J., Ballyhaunis ..	1	1	0	Lentaigne, J. V., Dublin ..	1	1	0
Ford, J., Dublin	1	1	0	Canton, T., Kells	1	0	0
O'Reilly, F. J., Trim	1	1	0	Jeffreys, R. P., Chesterfield ..	1	0	0
Fahie, C. J., Rush	0	10	0	Deely, W. B., Ballymacward	1	0	0
Barrett, C. D., Ballyfarnon ..	0	10	0	Kirwan, W., Cararoe	1	0	0
Cordner, L. M., Aughnacloy ..	1	1	0	Fraser, A., Dublin	2	0	0
Leary, T., Castlederg	0	10	6	Dickson, J., Ballynahinch ..	0	10	6
Burgess, R., Coagh	1	1	0	Broomfield, H., Dublin ..	1	1	0
Sterling, R., Stoneyford ..	0	10	0	Phillips, R. R., Leighlin Bridge	1	0	0
Fisher, M. W., Portarlington	1	0	0	Colgan, F. P., Bagnalstown ..	0	10	0
				Fryer, W. F., Fenagh	0	5	0
				MacLaughlin, P., Brighton ..	1	1	0

Cheques to be made payable to the Honorary Treasurers—Professor Edward Hamilton, 120, Stephen's Green, W., Dublin; or Dr. Thomas Purcell, 71, Harcourt Street, Dublin; or to any of the County Treasurers, or to the Honorary Secretaries—Professor E. D. Mapother, 6, Merrion Square, N., Dublin; Dr. J. H. Chapman, 122, Pembroke Road, Dublin; and Mr. G. F. Blake, Royal College of Surgeons, Dublin.

Errata.—Subscribers will much oblige the Hon. Secs. by calling attention to errors or omission in the lists which have appeared weekly. The name H. Graves in last list should have been "C. H. P. D." Graves. J. O'Neill, Fermoy, should have been "J. O'Neill Sisk, Fermoy."

Sir G. C. M. Birdwood, M.D., C.S.I., Special Assistant in the Statistics and Commerce Department of the India Office, has been nominated Knight Commander of the Order of the Star of India; and T. B. Christie, M.D., Medical Superintendent of the East India Asylum at Ealing, has been appointed Companion of the same Order.

GENERAL COUNCIL
OF
MEDICAL EDUCATION AND REGISTRATION

SESSION 1887.

Friday, February 18th.

Sir HENRY ACLAND, President, in the Chair.

Representation of Scottish Universities on the Council.—Mr. MARSHALL said, with reference to the communication from Dr. McVail, he had at the last meeting thought it his duty to ask the Council to suspend the printing of the letter upon the minutes, wishing, as Chairman of Business, to see whether any irregularities had been committed. He had now unreservedly to say that there had been no irregularity as far as he could ascertain. He therefore moved that Dr. McVail's letter be now entered on the minutes.

General Medical Council Office,
299, Oxford Street, London, W., February 16th, 1887.

DEAR SIR,—The point of order that I rose to speak to yesterday concerned the Commissions of the Representatives of the Scottish Universities, as read by the Registrar.

These Commissions, in all four instances, are from the Senates of the universities; in three of them this is formally expressed; and in the case of Glasgow, although not definitely stated in the document, yet the Senate alone made the appointment.

I desired to call your attention to the circumstances, first, that the Medical Act of 1886 does not, in the case of any one of these universities, restrict the power of election to the Senate; and, secondly, that the Scottish Universities' Act of 1858 is likewise without any such limiting provision.

I hold that in the Scottish universities the duty of electing the representatives to the General Medical Council falls on the same constituencies that return the representatives to the Imperial Parliament.

I therefore regard the returns read before the General Council yesterday as being quite invalid.—I am, dear Sir, yours faithfully, D. C. MCVAIL.

To Sir HENRY W. ACLAND, President of the General Medical Council.

Dr. MCVAIL expressed his satisfaction with Mr. Marshall's statement and motion.

The Council's Income and Expenditure.—Professor HUMPHRY moved the appointment of a Committee to consider "the past and prospective income and expenditure of the Council, and to report to the Council whether any—and if so, what—diminution can be made in the future expenditure of the Council." He said the expenses of the sittings of the Council amounted to about £2,000 a year, and any opprobrium cast on the old Council should not be fixed on the new one. The annual excess of income over expenditure during the past seven years averaged £1,400, and the estimated increase of expenditure in the years to come would be £1,200. That would bring expenditure and income within close relation to one another, and he thought the Council should seriously consider whether any diminution could be effected in the various expenses.

Mr. WHEELHOUSE seconded the motion, believing that the appointment of such a Committee would be some guarantee to the profession that the Council was not inclined to spend its funds recklessly.

Dr. MCVAIL said he would move as an amendment that the Committee be asked to consider also whether the meetings could not be held, occasionally at all events, in Edinburgh and Dublin.

The PRESIDENT ruled that Dr. McVail's proposal was not an amendment to the motion before the Council.

Dr. QUAIN strongly opposed the suggestion. If the sixteen English members had to travel to Scotland and Ireland, the expenses would be doubled, and the funds would be totally inadequate.

The Rev. Dr. HAUGHTON added as an additional objection that the Irish members were so hospitable that, if the Council came to Dublin, they would be "broke" in entertaining them.

On Mr. MACNAMARA'S suggestion, Professor HUMPHRY agreed to add words to his motion providing that the Committee should also consider whether and in what manner the income of the Council might be increased.

Mr. SIMON said the primary question was the organisation of the work of the Council, for if their work was well organised, he believed great economies would result. He thought that a Committee should first be appointed to deal with their methods of procedure, and then, on the report of that Committee, the Council would be in a position to reconsider its finances.

After a short discussion, in which several members of Council supported Mr. Simon's view, the motion, as amended by the addition suggested by Mr. Macnamara, was carried, and the Committee was nominated.

Medical Education and Examination: Exceptional Cases in 1886.—Mr. MARSHALL, in accordance with notice of motion, furnished information in regard to the exceptional cases that had occurred during the year 1886, under Clause 20 of the Council's *Recommendations on Education and Examination.* He said that twenty-two such cases had occurred at the College of Surgeons, and thirty-nine at the College of Physicians, but a certain number of those were duplicate representations of the same persons. In every instance, the men were graduates of Indian, Colonial, or foreign universities, and he was prepared to state that they had all studied medicine for the required period of forty-five months.

Sir DYCE DUCKWORTH said all the cases had been carefully scrutinised by the registrar of the College of Physicians.

Final Report of the Visitation of Examinations Committee.—Mr. MARSHALL moved the reception of the report, and, in doing so, expressed his deep regret that Dr. Haldane was prevented from being present at this session of the Council, and also his great sorrow at the sudden death of Dr. Lyons.

Mr. TEALE seconded the motion.

The Rev. Dr. HAUGHTON bore testimony to the extreme accuracy of the report.

Dr. GLOVER, while thanking Mr. Marshall and his colleagues for their labours, thought the conclusion rather disappointing. Considering the great cost of these visitations, he thought the Committee might have given a more definite deliverance, in the way of either endorsing the complaints of the visitors or acquitting the universities. The Privy Council had sent some very serious observations for the consideration of the Council; and, unless some reply was given, it might be thought that the Council had rather evaded the expression of a definite opinion upon the justice or otherwise of the charges which had been made.

Dr. MCVAIL discussed the details of the report at considerable length, and urged that the Council should go into the matter much more fully than was proposed. He was referring to the character of the examinations in operative surgery in the University of Glasgow, when

Dr. LEISHMAN interposed, and said there was no law which required the University to give any such examination for the M.D. degree, and he could not submit to the very elaborate attack which was being made upon it.

The PRESIDENT said that if Dr. McVail's course was pursued it meant an elaborate discussion upon the whole report.

Dr. MCVAIL repudiated the insinuation that he was attacking any university, and said he was only dealing with facts and figures which were open to all the members.

The PRESIDENT ruled that Dr. McVail could not be heard unless he moved an amendment.

Dr. MCVAIL said he would move, as an amendment, that the Council proceed to consider the conclusions of the report *seriatim.*

Dr. QUAIN protested against any such expenditure of the time of the Council and the funds of the profession.

Dr. STRUTHERS said the whole matter had been threshed out at the November meeting.

Dr. DUNCAN said he entirely disagreed with the general tenour of Dr. Glover's remarks, as well as those of Dr. McVail. The Council had fully considered the matter, and he thought had wisely agreed that the reports of the visitors, beyond being responded to by the bodies visited, should not be further dealt with. It would be very disastrous if the Council had power to insist upon changes in the conduct of the examinations by the various universities and other public bodies, and he thought its efficiency would be diminished by any such policy.

Mr. MARSHALL protested against the irrelevant discussion raised by Dr. McVail.

Dr. HERON WATSON said he intended to move that the Council should resolve itself into Committee on the following Tuesday for the purpose of considering the conclusion of the report in detail.

Mr. SIMON hoped that, in the event of that motion being carried, the fees received by the Council would be suspended.

Mr. Marshall's motion was then put and agreed to.

On the motion of Dr. STRUTHERS, seconded by Sir WILLIAM TURNER, it was resolved:

"That the best thanks of the Council be given to the Committee on Visitation of Examinations, and also to Mr. Marshall, as Chairman and Reporter, for the great labour and care he has bestowed in preparing the Report."

Registration of Foreign and Colonial Titles.—The Report of the Subcommittee on the Registration of Colonial and Foreign Titles and Degrees was adopted, together with new standing orders rendered necessary in order to carry out the recommendations agreed to.

The Council then adjourned.

Saturday, February 19th.

Sir HENRY ACLAND, President, in the Chair.

The Society of Apothecaries and the Conjoint Scheme.—Mr. BRUDENELL CARTER moved:

"That inasmuch as the Master, Wardens, and Society of the Art and Mystery of Apothecaries of the City of London, having used their best endeavours to enter into a combination with some other Corporation or University for the purpose of holding a Qualifying Examination in accordance with the provisions of the Medical Act of 1886, and having reported to the Council that they have been unable to enter into any such combination, have in consequence, and in further compliance with the Medical Act aforesaid, made application to the Council for the appointment of Assistant Examiners in Surgery, the Council do now appoint such Examiners accordingly."

He said the Apothecaries' Society were now, as they always had been, perfectly willing to enter into combination with the Royal Colleges; but as a self-respecting body they could not be expected to approach again those universities or corporations which had already in so decided a manner refused to combine with them. He thought the proposition to adopt the same course as had been done in the case of the Dublin Society, and refer the subject back to the Colleges for reconsideration, would be a waste of time. The differences between the two cases were very great. The London Society stood in a stronger position than the Dublin Society, inasmuch as its privilege rested upon the wide basis of Parliamentary enactment and long usage, and during its licensing and examination career it had given its licence to no fewer than 22,000 general practitioners. One great point of difference was that in Dublin the College of Surgeons was willing to admit the Irish Apothecaries into combination, whereas in London that was not the case. The matter had been under consideration for eleven years, and when the conjoint scheme was agreed upon, the two Royal Colleges joined hands, and excluded the Society of Apothecaries from their combination, and that in the most deliberate way. Both Colleges were governed by men of profound sagacity, who had acted in the way they thought best for the interests of the public, and it would therefore be useless to refer the question back to them. He claimed that the Apothecaries' Company had fulfilled the conditions laid down in the Act of 1886. Their Examining Board was composed of gentlemen of the very highest standing, and if his application was successful, he should ask the Council to nominate as examiners in surgery those gentlemen who now filled the post with such distinguished ability.

Dr. CHAMBERS seconded the motion. He agreed that it would be useless to refer the matter back to the Colleges, as it was not possible, knowing the deliberate action they had taken, to expect them to reconsider the question. The adoption of the proposals put forward in the amendments would simply defer the matter until it was too late to be of any use.

Mr. MITCHELL BANKS moved as an amendment:

"That the Council postpone coming to a decision on the motion of Mr. Brudenell Carter, and earnestly request the Royal College of Physicians of London, and the Royal College of Surgeons of England, to reconsider their action with reference to the admission of the Apothecaries' Society of England to a joint Examining Board."

He said he should be glad to merge his with Dr. Struthers's amendment, or to abandon it in favour of the latter.

Mr. WHEELHOUSE was prepared to second the amendment. There was among the profession a most earnest desire for the suggested combination.

Sir DYCE DUCKWORTH said it was admitted that the Conjoint Board was complete, and wanted no adding to, and he was quite sure that their examination was second to none, not even to that of any of the universities in the United Kingdom. He saw no particular benefit that could result from granting the claim of the Apothecaries' Society, and thought it would be a great disaster to have another competing licensing body. He was authorised to state that it was absolutely useless to refer the matter back to the College, because he was perfectly certain that its deliberate action would be sustained.

After a short discussion, Mr. MITCHELL BANKS having withdrawn his amendment,

Dr. STRUTHERS moved:

"That the Council, being of opinion that it would be contrary to the interest of the public to have two competing Examining Boards sitting in London, and that it is desirable that the Royal College of Physicians of London, and the Royal College of Surgeons of England, and the Apothecaries' Society of London, should arrange to hold a qualifying examination conjointly, strongly recommend to these medical authorities to reconsider their position with a view to such an arrangement, and meantime defer coming to a decision on the application from the Apothecaries' Society of London of February 12th."

Mr. TEALE seconded the amendment.

Sir WALTER FOSTER opposed the multiplication of portals to the profession.

The Rev. Dr. HAUGHTON supported the resolution, believing that the Apothecaries had made out a fair case.

Dr. GLOVER said he should be no party to asking the Apothecaries' Company to put itself in the attitude of knocking at the doors of all the corporations and universities of England again. There was a feeling throughout the profession that a body which had had so much to do with the general practitioners ought not to be treated coldly, or, at any rate at present, to have its existence discontinued; and, an appeal having been made to its Licentiates, the large majority had responded in the sense of wishing most heartily the continuance of that body in a conjoint form. He thought the Council might assume, however, that the Royal Colleges would not disregard the strong expression of opinion of the Council, and therefore hoped that Dr. Struthers's amendment would be adopted. The Council might only get another proof that it had lost its power; but, if so, the sooner it got that proof the better.

Sir DYCE DUCKWORTH asked Mr. Carter the meaning of a paragraph in the letter of the Society of Apothecaries to the Royal Colleges of Physicians and Surgeons: "Nor should it be forgotten that if the Colleges be unwilling to combine with the Society, there is still open and possible to the latter a very formidable combination, which in this alternative would equally cause a very serious competition to arise to the prejudice of the Colleges."

Mr. B. CARTER said he could not explain the paragraph, the letter having been written before he was a representative of the Society.

Mr. MARSHALL said that, in the position he occupied in relation to the College of Surgeons, he could not vote for the amendment; but as a member of the Council his sympathies were in its favour. The argument as to its bearing upon the public good was one that he could not oppose. Under the circumstances, he should abstain from voting.

Dr. DUNCAN supported the amendment, and protested against the "mock humility" of Mr. Carter in regard to the Society of Apothecaries, which he said might regard itself as an equal with the two Royal Colleges. It had generally kept pace with all improvements in teaching and examination. He was no advocate, however, for the one-portal system, which he considered the worst of all systems. He thought that competing bodies were a great advantage; but, in the present state of affairs, and considering the action of the Council in regard to the Dublin bodies, he was in favour of the course proposed by Dr. Struthers.

Professor HUMPHRY and Dr. BANKS supported the amendment on the ground of consistency. They thought that the Council should make an effort, however futile it might be.

Mr. B. CARTER, in reply, said that the Society of Apothecaries had acquired a vested interest in English medical education and examination, and no Parliament or Government would dream of extinguishing it without compensation. The idea was nothing but a nightmare, and the sooner it was dismissed the better.

Dr. STRUTHERS's amendment was then put to the Council, and carried by 24 votes against 4.

Organisation of the Work of the Council.—It was then resolved, on the motion of Mr. SIMON, seconded by Mr. MARSHALL:

"That it be referred to the Business Committee, with six additional members to be appointed by the Council for the purpose of the reference, to consider under what rules of meeting and procedure, and with what appointment and authorisation of standing committees and subcommittees, the Council may best provide for the regular, effective, and economical discharge of its statutory duties; the Committee to report to the Council at its next meeting, and to propose for consideration of the Council the draft of any new standing orders which it may deem desirable."

Visitation of Examinations.—Dr. HERON WATSON moved:

"That, having received the final report of the Visitation of Examinations Committee, the Council determine that it resolve itself into a Committee to consider the report of the visitors appointed by the General Medical Council, together with the answers of the several universities, in the light of that report, and that it do so resolve itself into Committee upon Tuesday next."

Dr. BANKS seconded the motion.

Dr. AQUILLA SMITH and Professor HUMPHRY having spoke against the motion,

Dr. BRUCE moved, as an amendment,

"That, in receiving the final report from the Visitation of Examinations Committee, the General Medical Council is happy to find that all the universities do provide a sufficient guarantee that their graduates possess the requisite knowledge and skill for the efficient practice of their profession."

The Rev. Dr. HAUGHTON moved the adjournment of the debate, and the Council then adjourned.

Monday, February 21st.

Sir HENRY ACLAND, President, in the Chair.

The Apothecaries' Societies and the Conjoint Schemes.—Dr. STRUTHERS moved:

"That the President be requested to communicate to the King and Queen's College of Physicians, the Royal College of Surgeons of Ireland, and the Apothecaries' Hall of Ireland, the resolution of the Council of February 16th, and to communicate to the Royal College of Physicians, London, the Royal College of Surgeons of England, and the Society of Apothecaries of London, the resolution of the Council of February 19th, and to take such further action as he may see fit towards the attainment of the object of those resolutions to which the Council attaches great importance in the interest of the public."

The motion was seconded by Mr. WHEELHOUSE; but as Mr. BRUDENELL CARTER was prepared to move an amendment, the motion was postponed till the following day.

Visitation of Examinations.—Dr. BRUCE then moved an amendment to Dr. Heron Watson's motion:

"That, in receiving the final report from the visitation of the Examinations' Committee, the General Medical Council is happy to find that all the Universities do provide a sufficient guarantee that their graduates possess the requisite knowledge and skill for the efficient practice of their profession."

He protested against the waste of time which the discussion of the report would involve.

The Rev. Dr. HAUGHTON seconded the amendment. It was simply the business of the Council to see that no corporation or university let loose upon the world men who were not safe practitioners, and it had not been proved that any body had done so.

Mr. SIMON disapproved of both the motion and amendment. He thought that it would be better to agree:

"That the Council intending shortly to begin its inspections under the Medical Act of 1886, will, when it enters on that duty, particularly direct the attention of its inspectors to all points at which the late visitors of the final examinations of the Universities take exception, more or less, to the sufficiency of certain of those examinations, and will on the same occasion take a like course in respect of the reports which it last received on the examinations of the medical corporations."

Dr. MATTHEWS DUNCAN said he was quite prepared to second that amendment.

Sir W. TURNER was also disposed to support Mr. Simon's proposal. He could not accept the proposition laid down by Dr. Heron Watson, that the various documents had not been properly discussed by the Council, because the Committee had before them certain instructions, prepared by order of the Council for the instruction of the visitors, and also the discussions held in June last in Committee of the whole Council.

Dr. BRUCE withdrew his amendment in favour of Mr. Simon's.

Sir W. FOSTER said he would move the previous question, in the interests of economy of time, which had been neglected by the Council for days past.

Dr. MOORE said he would second the previous question, but

The PRESIDENT ruled that it could not be put until the amendment had been disposed of.

Dr. GLOVER said the subject had been postponed at the last meeting of Council, and had not been fully dealt with. In one of the reports it had been stated that the examiners had erred on the side of leniency, and in three cases the examinations were not considered sufficient to guarantee the requisite knowledge on the part of the person passing. He should, however, vote for Mr. Simon's amendment, because the Council was about to undertake very critical inspections, with a view to securing a more severe standard than had hitherto existed.

Dr. MCVAIL considered that it would be a waste of time not to consider the reports, after all the trouble and expense that had been incurred.

Dr. LEISHMAN said that nothing would give him greater pleasure than to hear anything that could be said against the University which he represented, provided he had the right of reply.

Dr. BANKS said that one of the cases that had been referred was that of the University of Dublin, but that examination was for physicians, and not for general practitioners.

Dr. HERON WATSON replied, after which Mr. SIMON'S amendment was carried.

Proposed Changes in the Conduct of Examinations.—Mr. TEALE then moved:

"That in the opinion of the General Medical Council it is desirable

"(*a*) That, in the interest of students whose place of medical education is at a distance from the seat of examination, the written portion of the examination should be conducted at the place of education;

"(*b*) That a sufficient time should intervene between the written and the oral portions of an examination, to allow the examiners to read over and judge the written answers of every candidate, and to confer upon doubtful cases, before the commencement of the oral examination; and

"(*c*) That candidates who in the written examination have failed so completely as to have forfeited all chance of passing by the aid of the oral, shall be 'stopped' from passing on to the remaining portion of the examination. This step ought to be granted as a matter of economy of money in the case of students, and as a matter of economy of time in the case of examiners."

Mr. SIMON objected, on a point of order, to the reception of the motion, on the ground that the question was not one for the consideration of the Council; but the PRESIDENT overruled the objection.

Mr. TEALE then said he would limit his motion to the first paragraph. He referred to the disadvantages under which many provincial students were placed in having to come to London for their written examinations, and urged the desirability of sending the examination papers into the country, to save the time and money of the candidates.

Mr. MITCHELL BANKS, in seconding the motion, contended that the proposed alteration would only be a matter of common justice to provincial students. The papers, he said, could be sent easily and safely by post, and the authorities in the country could be trusted to see that the examinations were honestly conducted.

Dr. MOORE thought that the absence of the examiner would be a practical difficulty, especially in cases where the students needed an explanation in regard to some particular question in the paper.

The Rev. Dr. HAUGHTON did not think that the presence of an examiner was needed at the pass examination, but in Dublin it was considered desirable in the case of an examination for honours.

Dr. DUNCAN supported the motion, and said that the plan recommended had been already adopted by the London University and other bodies.

Dr. BANKS thought there would be a danger attending the transmission of papers.

Mr. WHEELHOUSE said there was a strong feeling among provincial students that injustice was done them by the present system, and he urged that it should be altered.

Dr. HERON WATSON moved the previous question, which was seconded by Mr. SIMON.

Professor HUMPHRY referred to the practical difficulties in the way of Mr. Teale's proposal, and said he thought it would be unwise to prevent a student coming up for his oral examination (which was a most useful discipline), simply because he had failed in his written papers.

Sir DYCE DUCKWORTH said this question was under consideration by the London Colleges, and no doubt some course of action would be decided upon. He was surprised to hear that there was a want of confidence as to the manner in which the paper work was conducted. As one of the examiners, he could say that they gave an amount of time to their work which would perhaps surprise some members of Council. No candidates were rejected on any one paper, and practically in each subject every man had a *viva voce* examination.

Mr. SIMON, while his sympathies went with Mr. Teale, thought that the Council had no authority in the matter.

The previous question was then carried by 11 votes to 9.

Unqualified Assistants.—In the case of Dr. Day, it was resolved to refer the papers with the report on the uses and abuses of unqualified assistants presented by the Committee appointed by the Council, and the resolution of Council thereon, to the Privy Council, and to communicate the result to a future meeting.

Registration of Diplomas in Sanitary Science.—It was then agreed, on the motion of Mr. MARSHALL, seconded by the Rev. Dr. HAUGHTON:

"That the diplomas in sanitary science, public health, and State

medicine, granted after examination (see pp. 46 to 71 of the minutes for February 15th, 1886) be accepted by the Council for purposes of registration in the *Medical Register*, under Section 16 of the Medical Act (1886)."

In reply to Dr. GLOVER, Mr. MARSHALL stated that the Council had no power to insist upon uniformity of titles; they must take the title that the body itself used.

Presentation to the President.—At the termination of the day's proceedings, Professor HUMPHRY said that he had been deputed by the members of the late Council to offer to the President a marble bust of himself, executed by Mr. Boehm. There was no one, he said, who had been so thoroughly identified with the work of the Council as Sir Henry Acland, and it was scarcely probable that any other person ever could be so much identified with it. He had been a member of the Council from the commencement, and its President for twelve years, and he possessed the high regard and esteem of all the members for his admirable qualities, both as a President and as a man, for his unvarying impartiality, and for the firmness and gentleness with which he had conducted their proceedings. In season and out of season he had devoted his whole energies to the work of the Council, and had always been animated by a love of his work, founded on the conviction that it was one that tended to promote the welfare of the profession and of the public. Having referred to the labours of the President at Oxford in connection with the teaching of natural science, his efforts in promoting a better system of nursing, and in regard to sanitary legislation, Professor Humphry presented the bust, and assured the President that when time or circumstances should induce him to vacate the chair, he would be remembered with deep regret and sincere affection.

The PRESIDENT, in acknowledging the presentation, said that his work in connection with the Council had been so entirely a part of himself that whenever the time came for it to cease he should feel that the great object of his life was nearly at an end. After referring at some length to the functions performed by the Council, and the high motives by which its members had been actuated, he expressed the strong affection which he felt for his colleagues, and his gratitude for the presentation they had made to him. He then asked, on behalf of himself and family, that the Council would kindly accept the bust from himself, and permit it to remain in the Council room. He concluded by intimating that considerations of health rendered it necessary that he should tender his resignation, but if he could be of any service to the Council till its next meeting, all other considerations would at once be dismissed.

Professor HUMPHRY, on behalf of the Council, accepted the bust from the President, and expressed a hope that the Council might also soon possess the bust of his distinguished predecessor.

A vote of thanks was then passed to Professor Humphry and Mr. Boehm.

Tuesday, February 22nd, 1887.

Sir HENRY ACLAND, President, in the Chair.

Removal of Name from Register.—The REGISTRAR, on motion put from the chair, was directed to remove from the *Medical Register* the qualification and name of Mr. William Edward Robson, such qualification having already been withdrawn by the Colleges of Physicians and Surgeons, Ireland.

The Apothecaries' Societies and the Conjoint Schemes.—Dr. STRUTHERS, in moving his resolution, requesting the President to communicate with the Colleges on the subject of the Apothecaries' Societies, said it was, of course, not intended that the President should exercise any undue pressure, but if he would comply with the request, it might materially tend to a harmonious solution of the difficulty.

Mr. WHEELHOUSE seconded the motion. The subject was of very great importance to the profession at large, and the Council should leave no stone unturned to carry it to a successful issue.

Mr. MACNAMARA said that from letters which he had received from Dublin, he was afraid that the two Colleges there would not listen to the charmer, "charm he never so wisely."

Mr. B. CARTER proposed an amendment which omitted all reference to the English bodies, on the ground that any efforts in that direction would simply be a waste of time, and might inflict serious injury on the Society of Apothecaries. By June 1st that Society must have ready an examination which it might with confidence submit to the Council, and then examiners would have to be appointed either by the Medical Council or the Privy Council. The Court of the Society could not wait an indefinite time on a question of such vital importance. During 72 years, the Society had licensed 22,000 persons, averaging 309 annually; and, during the last five years, notwithstanding severe competition, it had passed 250 men annually. It did not object to competition, but it claimed to be treated with justice.

The Rev. Dr. HAUGHTON seconded the amendment. He said he had hopes that something might be done in Dublin, but he agreed with Mr. Carter that it was useless to expect to accomplish anything in London by the proposed action of the President.

Sir W. FOSTER said the Council were custodians of the interests of the public, and must leave aside narrow views as to the advantages likely to accrue to any individual body. He could quite understand that the Apothecaries' Society would be delighted to be placed in an independent position, but he thought that the Council should do all in their power to prevent it. He was by no means sanguine as to the success of the action recommended by the resolution, but he wished to be able hereafter to say that the Council had taken every possible means to prevent the creation of two competing bodies.

Sir WILLIAM TURNER was opposed to the amendment. If it were accepted, Mr. Carter would next bring forward a resolution asking the Council to do what they had already decided not to do this session, namely, to appoint examiners.

Mr. MITCHELL BANKS regarded the amendment as simply an attempt to undo all that had already been done.

Dr. HERON WATSON said that there was no likelihood of the Privy Council acting in the matter without first consulting the Medical Council. After that consultation there would be no difficulty in making the necessary arrangements for the examinations.

Dr. STRUTHERS, in reply, said he had no reason to suppose that the efforts of the Council and the President would be useless, for he did not believe that a resolution of the Council, passed by 20 against 4, would be disregarded by the Colleges.

Mr. B. CARTER withdrew his amendment, considering that that would best harmonise with the general feelings of the Council.

The resolution was thereupon agreed to.

Inspection of Examinations.—The report by the Inspection of Examinations Committee was next considered.

Mr. MARSHALL moved the adoption of the first resolution:

"That the principle on which the Council's visitation and inspection of examinations ought to be founded is, that the visitations shall systematically cover, within stated periods of time, the pass-examinations in all branches of knowledge which the Council deems essential as qualifications for licence."

The motion was seconded by Dr. HERON WATSON.

Dr. MATTHEWS DUNCAN considered that the resolution would only produce confusion. The Act of 1886 distinctly confined the inspection to the three branches of medicine, surgery, and midwifery, and did not extend it to "all branches of knowledge."

Dr. KIDD did not regard it as possible to secure the requisite knowledge of surgery, if it were not ascertained that the student was taught anatomy, or to be certain that he was competent to practise as a physician, unless they knew that he had been taught physiology and pathology.

Dr. DUNCAN said the plain meaning of the Act was that the inspections should be confined to examinations in medicine, surgery, and midwifery, and he would therefore move as an amendment that the words "pass-examinations in all branches of knowledge" be omitted, and that the words "pass-examinations in medicine, surgery, and midwifery" be substituted.

Dr. QUAIN thought it was sheer waste of time to continue a discussion on such a small matter.

Dr. DUNCAN having, after some further discussion, withdrawn his amendment,

Sir WILLIAM GULL moved:

"That the Council's visitations and inspections, imposed by Section 19 of the Medical Act (1858) and Section 20 of the Medical Act (1886), shall be systematically performed within stated periods."

Professor HUMPHRY seconded the amendment.

Dr. BRUCE suggested that it would be better to omit the resolution altogether.

Dr. HERON WATSON said the resolution was the expression of a general principle, the details of which were worked out by the subsequent resolutions. It was, therefore, important that the first resolution should be passed.

The amendment was then negatived; as was also the "previous question," moved by Dr. BRUCE, and seconded by Dr. STRUTHERS.

The motion for the adoption of the first resolution was then agreed to.

The second and third resolutions were also agreed to:

"That, reserving for future action the visitation and inspection of the examinations in the earlier subjects of professional education, the

first year's appointment of inspectors provide for the inspection, wholly or in part, of examinations in medicine, surgery, and midwifery."

"That each inspector to be appointed for any purpose of the preceding resolution (2) be appointed for all three divisions of the United Kingdom."

Mr. MARSHALL having moved the adoption of Clause 4—

"That the Council appoint one inspector representing medicine, one representing surgery, and one representing midwifery—three inspectors in all"—

Dr. MCVAIL asked whether three inspectors would be sufficient.

Mr. MARSHALL said the Committee had taken that important subject into consideration. It was felt that they could not afford to pay more than three inspectors during the first year, and hence the inspection was limited to those three subjects. There were fifteen bodies only to be visited, and surely that could be done in the course of twelve months.

The resolution was agreed to.

Appointment of Inspectors.—The following resolutions were also agreed to:

"That previously to making such appointments, the Council invite suggestions concerning them from each Branch Council."

"That each inspector make, from time to time, such inspections of the examinations in his special subject, held by the several licensing bodies in the United Kingdom, as may enable him to form an opinion upon, and report to the Council as to the sufficiency or insufficiency of those examinations; and further that he enter in a diary the date of, and the time occupied in each inspection, and any observations that he may think fit, and present this diary with a report as to the sufficiency or insufficiency of the examinations of each body so inspected by him, to the General Council annually or at such times as may be required."

"That the remuneration for these inspections be by annual payments."

Remuneration of Inspectors.—The final resolution having been proposed:

"That the Inspector in Medicine, and the Inspector in Surgery, appointed as above recommended, receive for the year's services £300 and certified travelling and hotel expenses, and the Inspector in Midwifery £200 and certified travelling and hotel expenses;"

Dr. DUNCAN objected to a distinction being drawn between the inspectors, and moved, as an amendment, that their emoluments in each case should be the same.

Rev. Dr. HAUGHTON seconded the amendment on the ground that the Act of Parliament had placed these three subjects on an equality.

Mr. MARSHALL explained that the inspectors in medicine and surgery would have a great deal more work to do than the inspector in midwifery.

The amendment was negatived, and the motion agreed to.

Arrangements for Inspection.—Dr. QUAIN then moved that it be referred to the Executive Committee to make arrangements for carrying out the scheme, and to report to the next meeting of Council thereon.

Sir W. FOSTER seconded the motion.

Mr. SIMON objected to this work being thrown on the Executive Committee, and moved that the Inspection of Examinations Committee should be charged with this duty.

After some discussion, Mr. Simon's proposal was negatived, and the resolution was agreed to.

Continuance in Office of the President.—A record having been placed on the minutes of the Council of the presentation of the bust to the President on the previous evening, and of its acceptance by the Council,

The PRESIDENT stated that he was willing to remain in office until the next meeting of Council, his special object being to endeavour to carry out the instructions of the Council with reference to bringing about an arrangement between the Colleges and the Apothecaries' Societies relative to a conjoint scheme.

The Council then adjourned.

Wednesday, February 23rd.

Sir HENRY ACLAND, President, in the Chair.

Removal of Name from Dental Register.—Dr. HERON WATSON called attention to the report in the morning papers, of an application that had been made by Mr. Partridge before a Divisional Court, for a writ of *mandamus*, ordering the Council to restore his name to the *Register*, under the provisions of the Dentists' Act of 1878.

Strangers had to withdraw while a letter on the subject from the solicitor to the Council was read, and the subject was referred to the Executive Committee.

Inefficiency of Medical Examinations in the Royal University of Ireland.—Sir WILLIAM GULL moved that the report by the Committee on the Lord President's letter be received and entered on the minutes, and adopted. The Committee had considered a memorial addressed to the Lords of the Council by Mr. Thomas Laffan, of Cashel, alleging inefficiency in the qualifying examinations under the Medical Act. The memorial also stated that the candidates for the degrees of the Royal University of Ireland were "shamefully deficient in clinical training." The report ascribed the large proportion of rejections to the imperfect training of the candidates, no less than to the impartiality and discrimination of the examiners. In conclusion, the Committee assured the Lord President that they had full confidence in the Royal University maintaining the efficiency of its qualifying examinations under the Medical Act, and in their adopting, so far as a non-teaching university could, every possible means for promoting the practical training of students.

Dr. MOORE seconded the motion.

Mr. MACNAMARA characterised Mr. Laffan's grievance as not much more than a sentimental one. The Royal College of Surgeons and University of Dublin accepted certificates of attendance for increased time, at a provincial hospital, as equivalent to three months at a metropolitan hospital; but the privilege was very rarely taken advantage of.

Dr. BANKS said that the Royal University also accepted such certificates.

Dr. LEISHMAN said the Royal University was only an examining body, while Mr. Laffan's strictures pointed solely to deficiencies in teaching, with which the University had nothing whatever to do.

The motion was agreed to, and it was decided to forward it to the Lord President, together with the first and final reports of the Visitation of Examinations Committee.

Visitation of Medical Schools.—The Rev. Dr. HAUGHTON proposed: "That the visitation of medical schools and hospitals is a pressing question; more especially as regards their requirements and facilities for the practical study of fever and midwifery cases."

He considered that the regulations with regard to the practical study of fever and midwifery at the great centres of medical education were simply disgraceful. In some, fever cases were not admitted, but the new Act compelled the Council to see that the men sent out to practise were competent to deal with fever and midwifery cases. On this, the last day of their sittings, it was, however, impossible to discuss the question fully, and he would agree to its postponement if Dr. Leishman would withdraw his notice of an amendment to pass to the next order of the day.

The motion was seconded by Mr. MACNAMARA.

Dr. LEISHMAN said he had given notice of his amendment because he considered that at the present time the subject was not ripe for discussion, and still less for decision. In conclusion, he moved his amendment.

Professor HUMPHRY seconded the amendment.

Mr. SIMON thought that the whole subject should be referred to a committee, to be called the Curriculum Committee.

Dr. BANKS supported the motion. As physician to a fever hospital he knew the extreme difficulty of getting students to attend fever-cases.

Sir DYCE DUCKWORTH said it was not possible for a student in one of the great London hospitals to see a case of typhus or scarlet fever, and it was only by very great effort that a few diligent students could be got to go to the fever hospitals. The great mass of London students were, therefore, grossly ignorant of fevers. Although the treatment might be very simple, it was essential that the students should have clinical teaching.

Dr. HERON WATSON considered that it was the duty of the Council to take in hand and carry out regulations as to courses of study.

Mr. B. CARTER thought the inspection of examinations which the Council were about to undertake would do a great deal towards improving the courses of study. The one thing to attract students to any particular subject was the knowledge that questions would be asked upon it.

Dr. BRUCE considered that the Council would go beyond its province if it passed the motion.

The amendment was ultimately withdrawn, and

Mr. SIMON moved as an amendment:

"That a standing committee (to be called the Curriculum Committee) be appointed to report from time to time to the Council on questions arising under Section 18 of the Medical Act of 1858, with regard to courses of study, and that the motions of Dr. Haughton and Dr. Glover be referred to the Committee for early consideration."

Professor HUMPHRY seconded the amendment, and said if the

Council looked well after the examinations, the courses of study and the teaching would be sure to improve.

Dr. PETTIGREW opposed the amendment on the ground that the question of the visitation of schools had been referred to the Branch Councils, who would be unfairly treated if a general committee were appointed to supersede them.

Dr. HERON WATSON said that the only duty of the committee, if appointed, would be to constantly harass the medical schools.

Mr. SIMON, in reply, explained that what he proposed was not the visitation of schools but the consideration, by the Committee, of a particular class of questions.

The amendment was negatived; but another, by Dr. STRUTHERS, to postpone the subject until the next meeting of the Council, was carried.

Improvement of Practical Teaching.—Dr. GLOVER then moved:

"That a Committee be appointed to consider the best methods of increasing the practical element in medical education,—as by a system of limited pupilage with a registered practitioner, and insistance on more clinical, therapeutical, and pathological teaching and work in medical schools."

In doing so, he said an impression was very prevalent among the profession that, whatever might be the accomplishments of the men who were now leaving the schools, they were not well up in practical subjects, because they had few opportunities of becoming acquainted with the common diseases which made up the bulk of medical practice. The tables of the results of the final examinations pointed in the same direction. At the Royal College of Physicians, London, 152 were rejected and 242 passed; at the Royal College of Surgeons, 443 were rejected and 561 passed; at the Apothecaries' Society, 121 were rejected and 235 passed; at the Royal Colleges of Physicians and Surgeons of Edinburgh, 116 were rejected and only 91 passed; at the Conjoint Examination of the three Corporations in Scotland, 74 were rejected and 84 passed; at the Royal College of Surgeons, Ireland, 54 were rejected and 81 passed; and at the Royal University of Ireland, 77 were rejected and 76 passed. Those figures pointed to a terrible deficiency in the means of practical teaching. There were several fields of practical teaching which were not now used. Many of the best practitioners believed in the old system of pupilage, and he believed that great good might be done by bringing private practitioners into co-operation with the medical schools. Workhouse infirmaries also offered a valuable field for the study of common diseases. Probably, there never was a time when the examining bodies were more anxious to do their duty; but competition still existed between universities and corporations, and between different divisions of the kingdom; and he hoped that, in consequence of the Act of 1886, and the reports of the inspectors, a better state of things would be brought about.

Dr. CHAMBERS, in seconding the motion, confirmed what Dr. Glover had said about the general feeling in the profession as to the incompetence of recently passed candidates. The blame, in his opinion, rested on the Medical Council in consequence of the arrangement of their curriculum. He would suggest that the students might be allowed to pass in the principles of medicine, surgery, and midwifery, and afterwards come up for examination in the art.

Mr. WHEELHOUSE said the subject could not now be threshed out by the Council, but if the committee were appointed and brought up a report, the Council might afterwards arrive at a just decision.

Sir WM. GULL said that a very wide field of pathology outside morbid anatomy could only be studied in private practice, but hospitals only taught pathology founded upon morbid anatomy.

Dr. HERON WATSON said that the enormous number of rejections at the Royal Colleges in Edinburgh might be accounted for by the fact that some of the men had come up as often as six times, and many of them were inefficients who remained over from the old state of affairs. These men could not now come up again, and therefore it was hardly to be expected that the rejections would be so numerous in future. The London University showed a still higher percentage of rejections.

Professor HUMPHRY thought that the enormous amount of preliminary work which was laid upon the students was the real cause of the difficulty in connection with clinical education.

The motion was carried, and a committee of ten (Mr. Wheelhouse, Chairman) was appointed.

Vote of Thanks.—A vote of thanks was passed to the Directors-General of the Army and Navy Medical Departments for the returns they had forwarded to the Council, and the session then terminated.

THE Duke of Cambridge has consented to preside at a festival at the Hôtel Métropole on Friday, May 6th, to commemorate the twentieth anniversary of the Victoria Hospital for Children.

ARRANGEMENTS FOR THE NINTH INTERNATIONAL MEDICAL CONGRESS.

THE Ninth International Medical Congress will, as our readers are aware, meet in Washington on Monday, September 5th next. The Senate of the United States has passed an appropriation providing 35,000 dollars (£7,000) for the expenses of the meeting. The last Congress in Copenhagen was formally opened by King Christian, and the ceremony on the present occasion will, it is stated, be performed by the President of the United States, who has consented to be a patron of the Congress. The other patrons are the Secretary of State, the President of the Senate, and the Speaker of the House. The Congress will meet under the presidency of Dr. N. S. Davis, LL.D., the Secretary-General being Dr. J. B. Hamilton (Supervising Surgeon-General of the United States Marine Hospital Service). The Chairman of the Executive Committee is Dr. Henry H. Smith (Emeritus Professor of Surgery in the University of Pennsylvania). The Chairman of the Committee of Arrangements is Dr. A. Y. P. Garnett (Columbia University, Washington), and the Associate Secretaries of the Congress, Dr. W. B. Atkinson (Philadelphia), and Dr. G. B. Harrison (Washington). The list of foreign medical men proposing to attend the Congress is kept by the Secretary-General, Dr. J. B. Hamilton, and the following are announced as having been entered on his books: Drs. H. Radcliffe Crocker, J. Althaus, W. Murrell, B. W. Richardson, J. L. W. Thudichum, Charles West, Eustace Smith, G. H. Savage, A. W. Orwin, Edmund Owen, T. Bryant, W. Anderson, R. Barwell, Christopher Heath, J. W. Hulke, C. Macnamara, P. H. Pye-Smith, W. H. Dickinson, J. S. Bristowe, D. Hack Tuke, Henry Power, W. A. Brailey, D. Ferrier, H. C. Bastian, John Simon, Sir James Crichton Browne, Wm. J. Mickle, Walter Pye, Sir E. Sieveking, George Johnson, Dudley W. Buxton, R. N. Wolfenden, W. L. Purves, Jonathan Hutchinson, George Thin, T. Colcott Fox, and Alfred Lewis Galabin, of London; W. D. Spanton, of Hanley; H. B. Hewetson, Leeds; J. Comyns Leach, Dorset; T. M. Dolan, Halifax; J. W. Taylor, Scarborough; W. M. Whitmarsh, Hounslow; Lawson Tait, Birmingham; Walter B. Geikie, Toronto, Ont.; W. Frazer, Bournemouth; A. T. H. Waters, Liverpool; F. M. Pierce, Manchester; P. H. Bryce, Toronto, Ont.; J. A. Grant, Ottawa, Ont.; Daniel Clark, Toronto, Ont.; W. N. Kingston and Duncan C. MacCallum, Montreal, Que.; O. Chiari, Emil Ehrendorfer, Gustav Braun, Herman Hofrath Widerhofer, E. H. Kisch, Hans von Hebra, Isidor Neumann, and M. Kaposi, of Vienna; Professor Alvis Monte, of Prague; A. Chervin, E. Landolt, M. Magitot, Walter Douglas Hogg, Dujardin-Beaumetz, P. Ménière, Léon Petit, M. le Marquis Nadaillac, J. Amédée Doléris, A. Charpentier, Henri Picard, Max Durand-Fardel, and P. Budin, of Paris; Professor H. Leloir, of Lille; J. A. S. Grant Bey, Cairo, Egypt; Leonard Boor, Nelson, New Zealand; Miguel Gonzalez Gonalsey, of Periana, Spain; F. Wenckel, of Munich; A. Wernich, of Coeslin; Oscar Lassar, L. Lewin, Dr. Gasserow, J. Veit, A. Eulenberg, A. Oldendorff, and P. G. Unna, of Berlin, Germany; Domenico Perruzzi, of Bologna; Eugenio Fazio, of Naples; Luigi Casati, of Forli; W. W. Baldwin, of Florence; Dr. A. Cordes, of Geneva; Professors Guye and Tilanus, of Amsterdam; Alf. Struebens and Professor Hauben, of Brussels; Leopold Servais, of Antwerp (detailed by the Government); G. Gray, Castlewellar; R. Gray, Armagh; T. M. Madden, J. W. Moore, and Samuel Gordon, of Dublin; H. Reiman, of Kiev; W. Macewen, Glasgow; A. Mitchell, J. J. Kirk Duncanson, and W. Allan Jamieson, Edinburgh; McCall Anderson, Glasgow; C. Bäumler, of Freiburg; H. Hirschsprung, Copenhagen; J. Korosi, of Buda-Pesth; Dr. Hegar and Dr. John Sutcliffe, of Frieburg.

We have it on the best authority that several of the Transatlantic steamboat companies are prepared to make considerable reductions in their fares to medical men attending the International Medical Congress, at Washington, in September next. The Hamburg-American Steamship Company offers a first-class return ticket for £18. The Royal Netherland will provide the same accommodation for £16;

whilst the Red Star Line gives a return ticket from Antwerp to New York for £20. The Inman Line, whose steamers are amongst the largest and fastest on the Atlantic, will also afford every accommodation to passengers at the same reduced fare; but the Cunard has, as yet, declined to entertain the overtures that have been made them. Ladies accompanying members will also be taken on the same terms. The hotel expenses need not exceed 12s. a day, so that Members of the Congress and their wives may attend the meeting for about £25 a head. Messrs. Thomas Cook and Sons, of Ludgate Circus, London, and Rue Scribe, Paris, and Domhoff, Cologne, have issued a circular of round tours through the United States, starting from New York or Washington, at reasonable rates.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1887. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Meetings of the Council will be held on April 13th, July 13th, and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, March 24th, June 23rd, and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary*.

BRANCH MEETINGS TO BE HELD.

WEST SOMERSET BRANCH.—The spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, March 3rd, at 5 o'clock; dinner at 5.30. The subject settled by the Council to be discussed after dinner is the Etiology of Phthisis. Dr. Isambard Owen, secretary of the Collective Investigation Committee, will attend and open the discussion, and members having any communication to bring forward should send early notice to W. M. KELLY, M.D., Honorary Secretary.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the Hackney Town Hall, on Thursday, March 17th, at 8.30 P.M. The chair will be taken by Dr. Herman. A paper on Puerperal Convulsions; their Cause and Treatment, will be read by J. Williams, M.D., President of the Obstetrical Society. Visitors will be welcome.—J. W. HUNT, M.D., Honorary Secretary, 101, Queen's Road, Dalston.

METROPOLITAN COUNTIES BRANCH: NORTH LONDON DISTRICT.—The next meeting will be held at the Board Room of the Great Northern Central Hospital, Caledonian Road, N., on Wednesday, March 9th, 1887, at 8.30 P.M., Dr. Bristowe, F.R.S., President of the Branch, in the chair. Dr. E. Clifford Beale will read some notes on Two Cases of Symmetrical Gangrene (Raynaud's Disease). Drs. Burnet and Beevor will describe and show cases. W. Spencer Watson, Esq., F.R.C.S., will read a short case of Chronic Hypertrophic Rhinitis, with spasmodic sneezing. All members of the profession are invited.—GEORGE HENRY, M.D., Honorary Secretary.

BORDER COUNTIES BRANCH.—The spring meeting will be held at the County Hotel, Carlisle, on Friday, March 18th, at 6 P.M. Dr. Haddon, Hawick, will read a paper and introduce a discussion on Typhlitis and Perityphlitis. Dr. Eaton (Cleator Moor): The Coroner's Court from a medical point of view. Dr. Altham, Penrith, will read a paper on a Case of Compound Fracture of the Patella, and a Note upon the Antiseptic Treatment of Hydrocele. Notices of papers for reading, patients or morbid specimens for showing, should be sent to the Secretary without delay.—HENRY A. LEDIARD, M.D., 41, Lowther Street, Carlisle, Honorary Secretary.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The spring meeting of the above District will take place on Thursday, March 17th, at Broadstairs, Mr. Raven in the chair. Members having any communication to bring forward should send early notice to W. J. TYSON, Honorary Secretary, 10, Langhorne Gardens, Folkestone.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.—A conjoint meeting of the above Districts will be held at the Grand Hotel, Brighton, on Wednesday, March 30th. Dr. J. H. Ross will preside. Gentlemen desirous of contributing papers, etc., should communicate with the Honorary Secretary for East Sussex, 97, Montpellier Road, Brighton.—T. JENNER VERRALL, G. B. COLLET, Honorary Secretaries.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting will be held at the Queen's Hotel, Upper Norwood, on Thursday, March 10th, at 4 P.M., Edmund Hooper Galton, M.D., of Brixton Hill, S.W., in the chair. Papers by Dr. Braxton Hicks, "On the Alternate Contraction and Relaxation of the Uterus as a means of Diagnosing Pregnancy, normal and abnormal." By Dr. Pye Smith, "On the Treatment of Pyrexia." By H. G. Plimmer, Esq., "On a case of Melanotic Sarcoma of the Foot." By Dr. J. H. Galton, "A case of Ovariotomy." By Dr. Dalton, "A case of Hydatid Liver," etc. Dinner at 6 P.M.; charge, 7s., exclusive of wine.—P. T. DUNCAN, M.D., Croydon, Honorary Secretary.

EAST ANGLIAN BRANCH: ESSEX DISTRICT.—The next meeting of the members of the Essex District will be held at the Saracen's Head, Chelmsford, on Thursday, March 10th, 1887, at 3.30 P.M. Dr. Elliston, President of the Branch, will preside. Programme and Business Agenda: 3.30 P.M. General meeting. 1. To elect an honorary secretary for the year 1887. 2. To arrange the place and date of the next meeting, and to nominate a member of the district, resident in or near such place of meeting, to take the chair thereat, provided the President of the Branch does not attend. The following papers have been promised: 1. Pessaries: their varieties, uses and abuses, by Dr. Clement Godson, London. 2. Age in Zymotic Diseases, by Dr. Downes, Chelmsford. 3. Notes of a case of Charbon, with remarks by T. H. Waller, Esq., Chelmsford. At the conclusion of the meeting, there will be "high" tea at the Saracen's Head, tickets 3s. Any member wishing to be present, or to read a paper, or exhibit a case, is requested to notify his intention to C. E. Abbott, Esq., Honorary Secretary (*pro tem.*), Braintree, on or before Thursday, March 3rd.—W. T. JACKMAN, 114, Brixton Hill, S.W., Honorary Secretary.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIFTH ANNUAL MEETING.

THE fifty-fifth Annual Meeting of the British Medical Association will be held at Dublin, on August 2nd, 3rd, 4th, and 5th, 1887.

President: Withers Moore, M.D., F.R.C.P., Senior Physician to the Sussex County Hospital, Brighton.

President-elect: John T. Banks, M.D., D.Sc.(Hon.), F.K.Q.C.P.I., Regius Professor of Physic in the University of Dublin.

President of the Council: Sir B. Walter Foster, M.D., F.R.C.P., Professor of Medicine in Queen's College, and Physician to the General Hospital, Birmingham.

Treasurer: C. Macnamara, F.R.C.S., Surgeon to the Westminster Hospital, London.

An Address in Medicine will be delivered by W. T. Gairdner, M.D., F.R.C.P.Ed., Professor of Medicine in the University of Glasgow.

An Address in Surgery will be delivered by Edward Hamilton, M.D., Fellow and Professor of Surgery in the Royal College of Surgeons in Ireland.

An Address in Public Medicine will be given by the Reverend S. Haughton, M.D., F.R.S., D.C.L., Senior Fellow, Trinity College, Dublin.

The scientific business of the meeting will be conducted in eight Sections and two Subsections, as follows, namely:

MEDICINE.—*President*, William Moore, M.D. *Vice-Presidents*, H. C. Bastian, M.D., F.R.S.; J. Magee Finny, M.D. *Honorary Secretaries*, T. Gilbart Smith, M.D., 68, Harley Street, Cavendish Square, London, W.; C. J. Nixon, M.D., 2, Merrion Square, Dublin.

SURGERY.—*President*, Sir George H. Porter, M.D. *Vice-Presidents*, Alexander Ogston, M.D.; John Fagan, F.R.C.S.I. *Honorary Secretaries*, W. Thomson, M.D., 34, Harcourt Street, Dublin; R. J. Godlee, F.R.C.S.Eng., 81, Wimpole Street, London, W.; C. B. Ball, M.D., 16, Lower Fitzwilliam Street, Dublin.

OBSTETRIC MEDICINE.—*President*, A. V. Macan, M.B. *Vice-Presidents*, T. More Madden, M.D.; A. L. Galabin, M.D. *Honorary Secretaries*, Wm. J. Smyly, M.D., 56, Fitzwilliam Square, Dublin; Wm. Duncan, M.D., 8, Harley Street, Cavendish Square, London, W.

PUBLIC MEDICINE.—*President*, Sir Thomas Crawford, M.D., K.C.B. *Vice-Presidents*, John S. Taylor, M.D.; R. Thorne Thorne, M.D. *Honorary Secretaries*, John Wm. Moore, M.D., 40, Fitzwilliam Square West, Dublin; John F. W. Tatham, M.D., Town Hall, Salford.

PSYCHOLOGY.—*President*, J. R. Gasquet, M.B. *Vice-Presidents*, Frederick Needham, M.D.; Oscar T. Woods, M.D. *Honorary Secretaries*, Conolly Norman, F.R.C.S.I., Richmond District Lunatic Asylum, Dublin; T. Lyle, M.D., Rubery Hill Asylum, Bromsgrove, Worcestershire.

PATHOLOGY.—*President*, Samuel Gordon, M.D. *Vice-Presidents*, A. W. Foot, M.D.; David J. Hamilton, M.D. *Honorary Secretaries*, Theodore D. Acland, M.D., 7, Brook Street, Grosvenor Square, London, W.; Henry T. Bewley, M.B., Willow Park, Booterstown, Co. Dublin.

THERAPEUTICS AND PHARMACOLOGY.—*President*, Wm. Whitla, M.D. *Vice-President*, Matthew Charteris, M.D.; D. J. Leech, M.D. *Honorary Secretaries*, Chas. Y. Pearson, M.D., 42, King Street, Cork; Michael McHugh, M.B., 25, Harcourt Street, Dublin.

OPHTHALMOLOGY.—*President*, H. R. Swanzy, M.B. *Vice-Presidents*, D. Argyll Robertson, M.D.; Priestley Smith, M.R.C.S.Eng. *Honorary Secretaries*, A. H. Benson, M.B., 42, Fitzwilliam Square, Dublin; A. W. Sandford, M.D., 17, St. Patrick's Place, Cork.

SUBSECTIONS.

OTOLOGY.—*Chairman*, E. Woakes, M.D. *Vice-Chairman*, J. B. Story, M.B. *Honorary Secretary*, D. D. Redmond, L.R.C.S.I., 14, Harcourt Street, Dublin.

LARYNGOLOGY AND RHINOLOGY.—*Chairman*, W. H. MacNeill Whistler, M.D. *Vice-Chairman*, Kendal Franks, M.D. *Honorary Secretary*, R. A. Hayes, M.D., 56, Merrion Square South, Dublin.

Local Honorary Secretaries.—George F. Duffey, M.D., 30, Fitzwilliam Place, Dublin; Wm. Cox Neville, M.D., 71, Lower Baggot Street, Dublin.

TUESDAY, AUGUST 2ND, 1887.

9.30 A.M.—Meeting of Council.
10 A.M.—Service at the Roman Catholic Cathedral.
11.30 A.M.—First General Meeting. Report of Council. Reports of Committees; and other business.
4 P.M.—Choral Service at St. Patrick's Cathedral.
8.30 P.M.—Adjourned General Meeting from 11.30 A.M. President's Address.

WEDNESDAY, AUGUST 3RD, 1887.

9.30 A.M.—Meeting of Council.
10.30 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Second General Meeting. Address in Medicine.
9 P.M.—Soirée given by the President of the Association and by the Dublin Branch.

THURSDAY, AUGUST 4TH, 1887.

9.30 A.M.—Meeting of Council.
10.30 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Third General Meeting. Address in Surgery.
7 P.M.—Public Dinner.

FRIDAY, AUGUST 5TH, 1887.

10 A.M. to 1.30 P.M.—Sectional Meetings.
3 P.M.—Concluding General Meeting. Address in Public Medicine.
4 to 6 P.M.—Garden Party.

SATURDAY, AUGUST 6TH, 1887.

Excursions.

ANNUAL MUSEUM.

THE Annual Museum will be held on August 2nd, 3rd, 4th, and 5th.

The Museum will be arranged in the four following Sections, and intending exhibitors are requested to communicate with the Secretary of the Section or Sections in which they propose to exhibit.

SECTION A.—Food and Drugs. (Honorary Secretary, F. J. B. Quinlan, M.D. Univ. Dub., 29, Lower Fitzwilliam Street, Dublin.)

SECTION B.—Recent Books, Instruments, and Appliances—Medical, Surgical, and Electrical. (Honorary Secretary, John Lentaigne, F.R.C.S.I., 29, Westland Row, Dublin.)

SECTION C.—Anatomical and Pathological Specimens and Drawings, Microscopes and Microscopical Preparations. (Honorary Secretary, Alex. B. McKee, M.B. Univ. Dub., Royal College of Surgeons, Dublin.)

SECTION D.—Hygienic and Sanitary Appliances. (Honorary Secretary, H. C. Tweedy, M.D. Univ. Dub., 2, Gardiner's Row, Dublin.)

Particulars should be supplied to the Secretaries of the objects proposed to be exhibited and the amount of space required. No showcases will be allowed.

As it is intended to print a catalogue, with appendix of advertisements, it is requested that inquiries be addressed to the Secretaries as early as possible.

Chairman of Museum Committee—Wm. Thornley Stoker, F.R.C.S.I., 16, Harcourt Street, Dublin.

Vice-Chairman—D. J. Cunningham, M.D., 69, Harcourt Street, Dublin.

FRANCIS FOWKE, *General Secretary.*

161A, Strand, December 16th, 1886.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.

A MEETING of the above district was held at St. Bartholomew's Hospital, Chatham, on February 18th, WALTER BUCHANAN, Esq., in the chair.

Next Meeting.—It was resolved, unanimously, that the next meeting be held at Gravesend, in April, and that C. J. W. Pinching, Esq., be requested to preside on the occasion.

Communications.—The following papers were read and discussed.

1. Dr. H. LEWIS JONES: On some Disorders Confounded with Chronic Rheumatism.

2. G. HARTRIDGE, Esq.: On Refraction of the Eye.

3. A. W. NANKIVELL, Esq.: The Causes and Treatment of Retention of Urine.

At the conclusion of the meeting, Mr. HARTRIDGE gave a practical demonstration on the methods of ascertaining and correcting the various errors of refraction.

Dinner.—Twenty-two members and visitors dined at the Sun Hotel, Chatham.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

THE February meeting of the Branch was held at 198, Union Street, Aberdeen, on February 16th, at 8 P.M., and the chair was taken by the President, Dr. URQUHART.

New Members.—After the nomination of two new applicants for admission at the next meeting, the following gentlemen were balloted for, and unanimously admitted members of the Branch: Dr. T. Best Gibson, 2, Golden Square, Aberdeen; Dr. W. H. Gray, Old Rain by Insch; Dr. Robert Souter, 32, Bridge Street, Montrose; and Dr. Alexander S. Jameson, Edenville, Woodside.

Post-Graduate Course.—Dr. EDMOND proposed the appointment of a Committee to consider and report to the Branch on the advisability of forming a post-graduate course in Aberdeen. This was carried, and a Committee was accordingly appointed.

British Medical Benevolent Fund.—A letter from Dr. Urquhart, Perth, respecting the British Medical Benevolent Fund, was referred to the Council for further consideration.

SPECIAL CORRESPONDENCE.

SWITZERLAND.

[FROM OUR OWN CORRESPONDENT.]

Arterial Transfusion in Chronic Anæmia.—"Gigantic" Nettle-rash.—Artificial Ascites after Laparotomy.—Penetrating Abdominal Wound.—Whooping-Cough and Opium-Poisoning.—Cucaine-Poisoning.—Gersau as a "Terrain-Curort."

IN the *Revue Médicale de la Suisse Romande*, December 15th, 1886, p. 760, Dr. Givel, of Payerne, describes two cases of arterio-venous transfusion of blood in women, aged respectively 29 and 62, who were suffering from extremely grave chronic anæmia. The result was in each case completely satisfactory. The author recommends that the same measure should be tried in patients exhausted by various chronic affections, such as tuberculosis, Bright's disease, etc. The one drawback is, that the procedure involves the sacrifice of the bloodgiver's radial artery.

Dr. E. Rapin has published (in the same periodical for November and December) an interesting article on certain rare forms of nettle-rash. His main conclusions may be summarised thus: 1. Amongst the various forms of urticaria there is one characterised by the large size of the patches, which has obtained the name of "gigantic nettle-rash" (*urticaire géante*). 2. The rash may be limited to one or two patches, which sometimes affect certain special regions (hands, forehead, neck). 3. Itching, which is generally regarded as a constant sign of nettle-rash, may be absent in some of the cases under consideration. 4. Œdematous patches of the rash pit but slightly on pressure. 5. Therefore the absence of itching and of pitting has no particular value in the recognition of nettle-rash generally. 6. Urticaria of the scalp occurs in the shape of hard lumps, resembling rheumatic deposits, for which they may be mistaken. The differentiation of these two conditions may be made from the absence of other symptoms, the occurrence or non-occurrence of tenderness, and the greater or less duration of the affection. 7. Nettle-rash occurs not only on the skin, but also on the mucous membrane of the digestive canal, at any part from the mouth to the anus. It may give rise to swelling of the tongue and pharynx, pain in the gullet and stomach, eructation, vomiting, and diarrhœa. 8. The presence of urticaria in the alimentary tract explains also the occurrence of anxiety and dyspnœa in some of these cases. The author was not able to convince himself as to the existence of urticaria in the bronchi. 9. Urticaria and migraine seem to be the manifestations of one diathesis.

Professor Peter Müller, of Berne, draws attention to intestinal disturbances which are apt to occur after laparotomy (especially after ovariotomy). In some cases, gastric phenomena (distension of the abdomen, colic, and dyspepsia) depend upon simple coprostasis caused by absolute rest of the body and intestinal muscles; in other cases, upon coprostasis in the sigmoid flexure and descending colon, caused by fulness in Douglas's space (exudation in connection with changes in the pedicle). Again, in other cases, intestinal disturbances may be caused by the development of adhesions between the bowels and the abdominal wound, or by pre-existing adhesions between the small intestine and the abdominal wall, or the tumour. Most importance, however, is to be ascribed to adhesions between the bowels after laparotomy; these may cause stenosis of the intestines and fæcal fistula. Such complications may occur either immediately after the operation, or perhaps months or even years later. Two fatal cases of that

description which had occurred in the author's practice last winter, induced him to search for the means of preventing such accidents in future. He believes he has found such a means by filling the abdominal cavity after operation with a seven per mille solution of chloride of sodium, a procedure which is intended to isolate the wounded surfaces of the bowels, stump of tumour, and abdominal wall, till cicatrisation and healing have taken place. The author has as yet attempted to produce this "artificial ascites" only in one case of removal of ovarian cyst which had been adherent on all sides. After completing the operation he introduced a drainage-tube into the upper angle of the abdominal wound, sutured the remaining part of the latter, poured through the tube 2,400 grammes of the salt-solution (previously warmed to the temperature of the body), and clamped the tube. There was some reaction, shown in slight dyspnœa, quickening of the pulse (150 a minute on the second day), and moderate rise of the temperature (38·9° C. on the second day). By the sixth day the "artificial ascites" had disappeared. No symptoms of intestinal disturbance were observed. The reactive phenomena, which depended upon a rapid absorption of the injected fluid, could probably be prevented by some modification of the method, for example, by the introduction of smaller quantities of the fluid at a time, by regulating the supply of the latter by means of a second tube, etc.

At a meeting of the Lucerne Medical Society, Drs. Steigers (senior and junior) showed a man who, in a brawl, had been stabbed in the hepatic region with a jack-knife. From the wound, which measured eight centimètres in length, there protruded four intestinal loops about eight or ten feet long, and perforated in seven places. Having sewn up the holes, the authors enlarged the abdominal wound, and returned the bowels through it, closing it afterwards with an *étage* suture. The operation lasted two and a half hours, and was performed under the internal administration of tincture of opium (140 minims), chloroform being contra-indicated by the extreme prostration of the patient. The temperature never rose above 38.2° C. For the first four days the patient was allowed neither food nor drink; on the fifth day, 150 grammes of water and the yolk of two eggs were given. The bowels were opened with an enema on the eighth day, and, on the tenth day the patient was allowed to get up.

Dr. Brun, of Lucerne, mentioned the case of a girl, aged 6, who, while suffering from whooping-cough, was given so large a dose of morphine that she slept for two days and then awakened quite cured.

Dr. Buebler, of Lucerne, described two cases of chronic cucaine poisoning. The patients were a man and his wife, who had formerly been morphinists, and who took to cucaine by way of antidote. They gradually reached a daily hypodermic dose of the latter equal to 2 or 2.5 grammes. The prominent symptoms were incoherence of ideas and optical delusions. They saw everywhere (on their hands, beds, walls, etc.) small spots, worms, and the like, presenting incessant movements and changes in form. Absolute discontinuance of the drug was followed by complete recovery.

Gersau being an eminently suitable "Terrain-Curort," in the sense of Oertel, the local "Verschönerungsverein" has published a special map of the place and its environs, which gives all necessary information concerning mountain footpaths, time required for ascents, etc. The map will thus prove very serviceable to medical men and patients desiring to use Gersau as a place for carrying out the treatment of diseases of the heart and circulation by Oertel's method (gymnastics of the cardiac muscles, etc.).

CORRESPONDENCE.

DR. SKENE KEITH'S STATISTICS OF ABDOMINAL SURGERY.

SIR,—Dr. Skene Keith is a very misguided young man, for he seems desirous of alienating those who have, up to the present moment, held in reverence the name which he bears. This blunder I deeply regret, but as he brews so he must drink.

I repeat that certainly it was a great mistake, amounting to misrepresentation, "to draw attention to one year in which my results were bad," because it was unfair, and the motive which prompted it was obvious. It would be quite as unreasonable if I were to select the month of October last, and say that Dr. Skene Keith's ovariotomy-mortality was 25 per cent. Again, Dr. Skene Keith's misrepresentation of me is complete when he brackets my saying that "we open the peritoneum very much as we open our pockets," with anything else than exploratory incisions. It certainly never was intended to be applied to hysterectomies and incomplete removal of malignant sarcomata.

Dr. Skene Keith proceeds to discuss what he is pleased to call my insinuation about hysterectomy. Let it be distinctly understood that it is no insinuation, but a deliberate statement. Not two years ago, but nearly five years ago, I first wrote to Dr. Keith, asking him to let me know when he would do a hysterectomy, pledging myself to go down by the night mail, at any sacrifice, to keep any appointment Dr. Keith might fix. I have a big bundle of letters from Dr. Keith, on many subjects, received since then, but with the uniform statement, "not a case of fibroid." But I heard from Edinburgh friends, and from the foreign visitors who go to and fro, that fibroids did turn up, and were operated upon in Edinburgh, and Dr. Keith's published tables confirm this.

In December, 1884, Dr. Keith wrote me that he wished his son to come to Birmingham, and see my work; and my reply was to have him here as my guest in April, 1885, to show him everything I could in private, as in public, practice, and to kill what I could in the way of a fatted calf. On May 22nd, 1885, Dr. Skene Keith wrote to me, "Since I saw you, I have seen five cases of 'tubes;' two have been operated upon, the other three I feel quite sure of. I think that I would have missed at least three if I had not seen you; so thanks." Whilst he was my guest, he promised he would intimate to me the first case his father had for hysterectomy, but the intimation never came. In the following July, I heard that Dr. Keith had operated on a patient of my own. I did not grudge him the case, but I felt naturally annoyed that to that case, at least, I had received no invitation. I wrote to Dr. Keith, asking for an explanation, but received no reply. I wrote to Dr. Skene Keith, telling him frankly how dissatisfied I was, and how others besides myself were growling over the difficulties they had to encounter in getting to see Dr. Keith operate. His reply was characteristic. He said his father would oblige me, but "the others might growl, and be d——d."

From Dr. Keith, I received at last (so late as November 3rd, 1886), sixteen months after, a statement that I was not asked to be present at the operation on my patient because some relative objected to my presence. I asked Dr. Keith for the name of that relative, but again he has not replied to my letter. I have written to the patient and several others likely to yield information, and have received only explicit denials that Dr. Keith ever suggested that I should be present, and equally strong avowals that no one would have raised an objection to my being there.

But the worst has to come, concerning the case which Dr. Skene Keith says was hunted up for me when I was in Edinburgh in December, 1885. That case was operated on in July, 1886. Notice of its occurrence was conveyed to a number of Americans who were visiting me, and they went down to Edinburgh on purpose.

I told them I was most anxious to see it, and one of them promised to telegraph to me the precise date. Instead of doing this, however, he most unwisely went to Dr. Skene Keith to ask his permission for my presence. As possessor of a perpetual ticket to the practice of the Royal Infirmary, and a Fellow of the Edinburgh College of Surgeons, entitled to a reserved seat within the rails, I have an inalienable right to be admitted to the practice of that institution. My American friend, however, knew nothing of this, and, therefore, he asked permission for my presence. Let me give the sequel in his own words.

"I write you this respecting the operation by Drs. Keith, which is to take place at the Infirmary at 12 A.M. to-day. I called on Dr. Skene Keith yesterday, and supposed I could easily arrange to have you invited to be present. But, alas! I found it quite impossible for me to get permission to invite you. I need not assure you, my dear Mr. Tait, that it would have been a great pleasure for me to have telegraphed you yesterday to come on. I so much regret that you cannot enjoy some of those great privileges which you so lavishly bestow on others."

Dr. Skene Keith's conduct to me was not only ungrateful, but insufferably impertinent, for he had as much right to keep me out of the Infirmary as he had to assume the throne of England. But the fact is that it has been proved to me by these incidents, and others of which I may have occasion again to speak, that the constant complaint of the medical profession in Edinburgh (made alike by venerable professor and youthful student) that an effort is being made there to keep abdominal surgery as a hereditary craft, a close borough, is fully justified. This attempt is absolutely unexampled in the history of medicine since the days of the Chamberlens.

Concerning this last case two other points deserve consideration, for they put a qualification on the value of the statistics of the Keiths which must be of considerable importance. A Nemesis was at hand about that case, for it turned out to be not a case for hysterectomy at all, but a simple parovarian tumour,—so the Americans told me when

they came back. Where is that case recorded? Is it Case 82 in Dr. Skene Keith's list? and even if it is not, how is it to be reconciled with the statements made by Dr. Skene Keith at the end of his paper, "and there has been no mistake in diagnosis"? He may say that if a mistake occurred it was his father's, and that may be true enough, for they work together so well, that at the end of an operation I defy any one to say (in some cases, at least) whose operation it was, the father's or the son's. I do not blame him, but I think it possible, under such circumstances, that a generous and considerate father may estimate the chances of his son's practice in allocating the cases or the results. We therefore should see the tables of father and son side by side, for the same periods, in order to get any fair estimate of what the exact results are. Besides this, we ought to know how many cases they have each declined in the same time, for that they both pick their cases on a pretty liberal scale is well known. Last Saturday I operated on two cases in the south of Scotland which had been declined by Dr. Thomas Keith, one of these having been also declined by Dr. Skene Keith.

Picking cases may contribute largely, in skilful hands, to keeping the mortality low. But when somebody else operates successfully on the rejected cases, the rejector is made to look uncommonly foolish. One of these Scotch cases of last Saturday was a parovarian cyst, the kind that is usually most easily diagnosed, and most easily removed. In his paper, Dr. Skene Keith says: "It remains a mystery why surgeons will not even try to cure these cysts by simple means,—a trocar or cannula, not larger than a No. 4 or 5 catheter is all that is required." But my patient at Melrose told me that Dr. Keith tapped her fifteen years ago. She was tapped only eight months ago, and yet I removed ten pints of fluid from her on Saturday. Tapping does not cure these cases, though it may keep them quiet for a long time, but tapping is more fatal than removal.

Suppose, now, that both of these Scotch patients of mine die, to whose mortality-tables ought they to be added? I say to Keith's, most certainly, for, in refusing to operate on them, he could have been influenced by no other consideration than his own statistics. I, on the contrary, have never refused to operate on a case of ovarian tumour in my life, and next time Dr. Skene Keith tackles my statistics, perhaps he will bear this fact in mind. I never pretend to be absolutely certain of my diagnosis, but I don't mistake parovarian cysts for fibroid tumours.—I am, etc., LAWSON TAIT.

7, The Crescent, Birmingham.
February 21st.

VALVULAR DISEASE OF THE HEART.

SIR,—The article recently contributed to your columns by Sir Andrew Clark, Bart., is of very high interest to all, and still more to those who have paid special attention to the diseases of the heart. As your leader on it remarks, our literature does not receive its main contributions from men of long standing or practice, and this contribution from a man of ripe experience is of the highest value. Had I been present at the Brighton Meeting, my remarks would have appeared alongside those of the other speakers. May I ask you to allow me a little space at the present time?

When my work on *The Heart and its Diseases* appeared in 1872, it contained a final chapter on The Elements of Prognosis in Heart-Disease. Since then my attention has been attracted more and more to the subject by a constant succession of experiences. Again and again it happens that a patient has been grievously alarmed by a medical man discovering a murmur in the patient's heart, and immediately jumping to the very worst conclusions. Never by any chance has the gravity been underestimated. There is never a mistake on that side of the wall. It is scarcely creditable to our profession (that is, speaking of it in general) that it is so backward in its knowledge of the various maladies of the heart. So long as cardiac murmurs hold their present position as the great matter *par excellence* in the diagnosis of valvular disease of the heart, and the murmur is not read correctly by the other phenomena, so long must this undesirable condition of affairs remain.

In a lecture on Valvular Lesions of the Heart (delivered at Victoria Park Hospital), which appeared in the JOURNAL of November 14th, 1885, I pointed out that, after making sure that a cardiac murmur was actually due to valvular change, several other points presented themselves for solution.

1. Is it a large or a small lesion? The murmur can say nothing upon this head. But the rate of increase of the respirations on effort tells a great deal. If the lesion be a large one, effort soon sets up dyspnœa. If a moderate one, the patient can walk without discomfort, but cannot run. A very small one will permit of running, but not for any great distance. So much for the mitral valve. As to the aorta, it is not so easy to settle this matter. If it is stenosis, a careful consideration of many matters becomes necessary. If the case be one of regurgitation, the size of the left ventricle and the regularity of rhythm of the systole are our guides. If the ventricle be not greatly enlarged and the stroke regular, then the lesion, in all human probability, is a small one.

2. Is it static or progressive? A primary valvular injury is, in persons of good constitution, rarely progressive. The experiences of the dead-house records of Vienna, and of private practice in England, are directly opposed to each other. It is the exception—indeed, it may be said, the rare exception—for a case of primary valvulitis to progress at a measurable rate from bad to worse. The injury is done, and remains as static as a scar. The question is its size, and how far it degrades the heart. If it were only taught generally, as Dr. Angus Fraser teaches at Aberdeen, that the heart is primarily a muscular sac to which valves are accessory, views would be clearer and sounder. According to the size and extent of the lesion, the heart is degraded towards a valveless muscular sac. If the valvular lesion be a small one, the muscular compensation is (in well-nourished systems) easily set up and well maintained. If the lesion be large, the muscular compensation will be imperfect and soon worn out.

Such static primary lesions are a very different matter from those secondary valvular lesions found in the gouty heart. We know that in that great vaso-renal change best known to us as "chronic Bright's disease," there is a high arterial tension and hypertrophy of the left ventricle, with a loud aortic second sound; and less frequently a clear loud mitral valve sound. Such a condition appertains to advancing life. Here we have the aortic valves closed violently by the aortic recoil; and this strain upon them starts up valvulitis, which may truly be called secondary. Here the muscular hypertrophy precedes the inflammation of the valve. It is not "compensating" hypertrophy. The mitral valve is exposed to the shock of the systole of a huge ventricle. My surprise is that secondary mitral valvulitis is not more common than it is. This progressive, secondary, or sclerosing valvulitis carries with it a measurable rate of progress. This was well brought out in the remarks which appeared in your columns about the late Lord Iddesleigh's case. He had an old standing static primary mitral lesion, which did him little or no harm. But when a secondary valvulitis manifested itself in a large gouty heart, it went on from bad to worse, quickly. No case could possibly be more instructive, that is, of cases of this nature.

3. What is the condition of the muscular wall? This is the matter where the confusion and lack of knowledge mainly lie. The profession, as a body, largely ignores the practical lessons and teachings of pathology. The heart, as a muscle, is liable to be ill-nourished, and flabby at times, just like any other muscle. When the coronary arteries get choked by atheromatous change, then the nutrition of the heart becomes impaired, and the muscular structure (being like all muscle, a loose combination of albumen and fat) commences to undergo fatty degeneration. In his original observations on the subject, Rokitansky observed that this fatty degeneration occurred usually in large hearts. Niemeyer speaks of true hypertrophy passing into spurious hypertrophy, as the heart-wall yields from the structural decay.

When a patient comes into hospital with a dilated heart, beating irregularly, and mitral regurgitation, causing dropsy, it is most commonly not a matter of sudden increase in the valvular lesion, but a break-down of the muscular wall. Over-work, poor fare, lack of sleep, an exhaustive discharge as diarrhœa, or malnutrition from an acute attack of dyspepsia—these are the causes of temporary failure of the heart as a muscle. Rest in bed, good food, perhaps the help of a little digitalis, and in a few weeks the patient is back to work. How are we to calculate the condition of the heart-wall?

I am afraid you cannot afford space at present for the discussing of that important matter; and other men may have something to say on the subject of valvular lesions, which deserves more attention than it gets.—I am, Sir, yours faithfully, J. MILNER FOTHERGILL.

THE CAMBRIDGE CHOLERA-FUNGUS.

SIR,—In a recent issue (January 20th) of your contemporary, *Nature*, Mr. Gardiner, who had previously suggested that the so-called Cambridge cholera-fungus might be a Chytridium, has withdrawn that opinion, and now believes it to be the involution form of some bacterium. He further adds that this organism very vividly recalls to his mind the involution-form assumed by *Bacterium Cyanogenum*.

I should like at once to point out that this later opinion bears out to a certain extent the conclusion which I arrived at last year. This

I have expressed in the new edition of my *Manual of Bacteriology*, which will be issued I hope in a few days, as follows:

"At a meeting of the Physiological Society, May 15th, 1886, at Cambridge, a preliminary communication was made upon the investigations in Spain referred to in the first edition of this work. The observations made by Roy, Brown, and Sherrington rather tend, in the opinion of the author, to confirm Koch's views. Comma-bacilli were found to be present in some cases in enormous numbers, and the frequency of their occurrence led these observers to believe that they must bear some relation to the disease. At the same time, as they failed to find them in all cases, they regarded the existence of a causal relation as not proven. They failed to find the Naples bacterium, or the small straight bacillus noted by Klein, but they drew attention to certain peculiar mycelium-like threads in the mucous membrane of the intestines. This organism, however, judging from a preparation stained with methylene-blue, which was exhibited at the meeting, appeared to the author to much more closely resemble some of the involution-forms of the comma-bacillus, *filaments à masses globuleuses*, figured by Van Ermengen, than anything else he had seen. Yet, assuming that these peculiar structures do belong, as described, to some species of Chytridiaceæ, it is very doubtful whether they can be considered to be of any significance. Methylene-blue has been employed by Koch and others, including the author, for staining sections of the intestine from cholera cases, and had these structures been constantly present, it is hardly possible that such striking objects could have been overlooked. Again, we must bear in mind that hyphomycetous fungi occasionally have been found to occur saprophytically in the intestinal canal, the lungs, the external auditory meatus, and elsewhere. We must, however, wait before expressing a more decided opinion until the report of these observers is published in full."

I have now before me the proceedings of the Royal Society, No. 247, and I must confess that I am much puzzled by the illustrations which accompany the preliminary report on this subject. These figures, as Dr. Klein has pointed out, certainly appear to represent a branched mycelium, but they do not in the least recall to my mind the actual preparation which I had an opportunity of examining, and upon which I formed my opinion in May last. It has occurred to me that possibly Mr. Gardiner was shown the very same preparation, and hence his recent opinion that this organism is some involution-form.

With regard to methylene-blue having been used by Koch, I would refer those interested in this discussion to *Bacteriology*, p. 141, where the method is given as reported in the *Berliner klinische Woch.*, No. 31 (*Conferenz zur Erörterung der Cholerafrage*, July 26th, 1884). In their preliminary report, Messrs. Roy, Brown, and Sherrington state that the particular method they employed was almost identical with that of Löffler, and they add: "So far as we know, Löffler's method has not been employed to stain sections of tissues taken from fatal cholera cases;" but here I must add that Löffler's method was precisely the one which I, in July, 1885, used in staining a great number of sections of the intestines from cholera cases, as this method had been especially recommended for that purpose by Dr. Workman, in the JOURNAL, Vol. i, 1885, p. 458.—I am, Sir, yours faithfully,

EDGAR M. CROOKSHANK, M.B.

24, Manchester Square, W.

THE ROYAL MEDICAL BENEVOLENT COLLEGE, EPSOM.

SIR,—As Honorary Local Secretary to the Royal Medical Benevolent College, I have lately received a list of annual subscribers, a copy of which has, I conclude, been sent to the other local secretaries. On looking it over, several points strike me, and to these I wish to draw the attention of the local secretaries, and of the profession generally.

The duty of a local secretary, as I understand it, is to further the interests of the College, not only by collecting the subscriptions already on his list, but by getting more. To do this, he must be prepared to take some trouble, by begging persistently every year, bringing the institution under the notice of different people, in order to get new subscribers. Of course, he must be prepared for refusals, but I have often been surprised at the readiness with which a new subscription is given to me, and continued from year to year; still more surprised have I often been at the number of men in the profession who never heard of the Medical Benevolent College, and do not know what it is. It is unfortunately the case, largely owing to this ignorance, that the subscriptions have for some years fallen off to such an extent that the Council have seriously considered the question of reducing the number of pensioners and foundation-scholars, which would be nothing short of a calamity to many of our poorer brethren.

It seems to me fair to suppose that the subscription list sent from any town should bear some proportion to the population but what is the fact? In twenty-four instances, the local secretary, in some cases representing a town of considerable size, sends his own subscription, and nothing more; in a few other instances, only a single guinea is sent. In the case of towns which do send a list, I find the large towns come out very badly. Take the following figures:

Cheltenham	Population,	44,000	Subscribers,	25
Chester	,,	37,000	,,	27
Shrewsbury	,,	27,000	,,	27
Taunton	,,	17,000	,,	25
West Hartlepool ...	,,	29,000	,,	22

And compare them with the following:

Birmingham	Population,	400,000	Subscribers,	19
Leeds	,,	309,000	,,	11
Liverpool	,,	553,000	,,	57
Manchester.....	,,	342,000	,,	48
Sheffield	,,	285,000	,,	5

Still more startling is the number of towns, with populations ranging from 20,000 to 184,000, which have no local secretary, and send no subscriptions. I have picked out the following: Ashton-under-Lyne, 37,000; Barnsley, 30,000; Barrow-in-Furness, 47,000; Blackburn, 104,000; Bolton, 105,000; Bradford, 184,000; Burnley, 59,000; Chatham, 27,000; Darlington, 35,000; Dewsbury, 30,000; Doncaster, 21,000; Dudley, 46,000; Eccles, 98,000; Hanley, 48,000; Huddersfield, 82,000; Lincoln, 37,000; Macclesfield, 37,000; Middlesborough, 56,000; Newport, Mon., 35,000; Oldham, 111,000; Rotherham, 35,000; Salford, 176,000; Scarborough, 30,000; Wigan, 48,000.

From a consideration of the foregoing, I venture to throw out a few suggestions, some of them very obvious.

1. That no local secretary should be content to send merely his own subscription, and that none should be content with a stationary or, perhaps, decreasing list, but make every effort to increase it.

2. That in towns so large as Manchester, Birmingham, and others, the local secretary, in conjunction with the General Secretary, Mr. Freeman, should arrange a division of the town into two or more districts, each with its own local secretary.

3. That in towns which have no local secretary some one should be asked to undertake the work.

4. That when a local secretary has not time or inclination to fulfil the duties of the office, he should transfer it to someone who has both.—Your obedient servant,

Newcastle-on-Tyne, February, 1887. W. CHR. ARNISON.

RATE OF GROWTH OF IDIOTS.

SIR,—I regret to find, from Mr. Roberts's note in the JOURNAL of February 19th, that any misapprehension is possible as to the source of the statements with regard to the comparative growth of idiots, quoted by Dr. Down in his recent Lettsomian Lectures.

On reference to a paper on the "Health and Development of Idiots" (*Health Exhibition Literature*, Vol. xi, p. 531) which the organisers of the School Hygiene Conference asked me to read at the International Health Exhibition, I see that full acknowledgments are rendered to Mr. Roberts, as also in my Clinical Lecture on Idiocy, published in the JOURNAL in January, 1886. I claim nothing more than to have furnished to Mr. Roberts the weights, measurements, and ages of 300 of my patients; and similar particulars of 900 other cases having been supplied to him by sundry "specialists," he was enabled to draw up the table and chart, which, with explanatory notes, he kindly placed at my disposal for the illustration of my paper.

In conclusion, may I be allowed to express a hope that Dr. Langdon Down's interesting lectures may before long be published *in extenso*, when I have no doubt Mr. Roberts and other readers will find therein a correct distribution of the *suum cuique*?—Your obedient servant, G. E. SHUTTLEWORTH, M.D.,

Royal Albert Asylum, Lancaster.

February 19th, 1887.

THE GLASGOW DISCUSSION ON CEREBRAL ABSCESS.

SIR,—In reference to the article in the JOURNAL of February 19th on the discussion on Cerebral Abscess in the Glasgow Medico-Chirurgical Society, I have been instructed by the Council of the Pathological Section to point out that your correspondent has been misinformed in the following particulars. (1) The number of speakers for the first meeting was not curtailed; (2) Mr. Barker, of London, read his paper in full; and (3) it was arranged beforehand that Professor Greenfield should not speak till the second day of the discussion.—Yours, etc., JOHN LINDSAY STEVEN, Hon. Sec.

Glasgow, February 22nd, 1887.

NAVAL AND MILITARY MEDICAL SERVICES.

RELATIVE RANK OF MEDICAL OFFICERS OF THE ARMY.

THE official announcement that the relative rank of medical officers of the army has been abolished is causing us to receive letters which show that the medical officers regard the anomalous position they are now placed in as a matter of the gravest importance. They look upon the fact of their being deprived of rank in the army as a degradation, for while, only recently, real rank has been conferred on the officers of the Commissariat and Transport, and Pay Departments of the army, the only rank the medical officers have ever had, relative rank, has been taken away from them. It will save the necessity of printing some of these communications, if we announce, as some doubts still appear to exist regarding the nature and effects of the abolition of the army status of medical officers which has been lately notified in the House of Commons, that steps are being taken by Mr. Ernest Hart, as Chairman of the Parliamentary Bills Committee of the British Medical Association, to ascertain the precise meaning of the change, as well as to discover the purpose for which it has been introduced. The whole subject will be brought before the Committee at its meeting of Friday, February 25th (this day).

THE CASE OF THE BRIGADE-SURGEONS IN INDIA.

WE are asked to state that copies of the printed statement of the claims of brigade-surgeons in India, with proposals for redress, can be obtained of Messrs. Steel and Jones, Newsagents, Spring Gardens, S.W., not from Messrs. Holt, Laurie, and Co., as stated in our last issue.

RELATIVE RANK.

SIR,—As it has been officially declared by the Secretary of State for War in the House of Commons that the relative rank of the surgeons of the army is abolished, and as they never had, and have not now, any other description of rank, will some Member of the House of Commons ascertain if they are now officially recognised only as civil employés hired for a particular service? If the reply be in the affirmative, will the Member further inquire whether, in consideration of the surgeons having ceased to be military medical officers, they may in future wear civil dress, and so escape from the expenses of providing themselves with uniform, and the various articles of equipment, swords, etc., which they have hitherto had to obtain for the purpose of marking their distinctive military character and indicating their army grades? If the military surgeons are deprived of the advantages of relative rank in the army, it seems only just that they should be relieved of its encumbrances also.—Yours, etc.,

ARMY SURGEON.

*** This letter is written ironically, but it none the less indicates clearly the absurdity of the step which "some one" in authority has unfortunately taken in trying to sweep away the only status medical officers have had in the military sphere in which they have to move and work.

A COMPARISON OF THE ARMY AND NAVY MEDICAL SERVICES.

SIR,—I have just read in the JOURNAL of Jan. 29th, a letter on the above subject. No man should growl about the present position of the naval medical service; it possesses many solid advantages, even over the army, and the only improvement I really think required would be a somewhat longer period of full-pay leave on returning from foreign service.

As regards half-pay time, this is inseparable from naval service. A certain number of officers must always be unemployed, but, even with that drawback, I was compulsorily retired before the age of 45, with the comfortable backbone of £1 *per diem*, which has enabled me to build up a good and steadily increasing private practice; and half-pay exists as well in the army.

As regards No. 3, I have often seen some of the quarters occupied by medical officers of the army abroad, and felt I would not exchange my cabin on board with their so-called good quarters.

As regards No. 4, I would like to be on the active list again, and taking day and day about with my junior *confrère*, instead of being on duty from 8 A.M. to-day until 8 A.M. to-morrow, and then beginning again, and getting no leave in the year unless you pay dearly for it.

As regards No. 5, I think that is sentimentalism. Should the paymaster punish the ship's stewards? the engineers punish stokers? the chaplain punish the ship's schoolmaster?—they might just as well be allowed that privilege, as the medical man to punish his sick bayman. For my own part, I never found the captain wanting in his support when needed, a circumstance very seldom requisite, and, situated as we all are on board ship, the calm and independent authority of the executive should never be relegated to others.

For my own part, I do not think there is anything to be really objected to now-a-days in naval medical life. All have crosses to bear, but they are a great deal less in the services than in civil life, if one will only quietly

GIVE AND TAKE.

CHANGES OF STATION.

THE following changes of station among the officers of the Medical Staff of the Army have been officially notified as having taken place during the past month:—

	From	To
Deputy Surg.-General R. A. Chapple	York	Bombay.
,, ,, E. G. M'Dowell, C.B.	Woolwich	Nova Scotia.
,, ,, J. Landale, M.D.	Ceylon	Bengal.
Brigade-Surgeon J. T. M. Symons, M.D.	—	Winchester.
,, J. Mackenzie, M.D.	Madras	Aldershot.
,, St. J. Killery, M.D.	Aldershot	Devonport.
Surgeon-Major F. A. Turton, M.D.	Half Pay	Birmingham.
,, T. Murtagh	Devonport	Plymouth.
,, J. R. Greenhill	Canterbury	Dover.
,, J. N. Stock	Portsmouth	Gosport.
,, J. B. Kelly	Limerick	Cork.
,, R. H. Carew	Birr	Bengal.
,, P. L. Kilroy	Madras	Hulme.
,, R. C. Eaton	Colchester	Norwich.
,, W. H. Steele, M.D.	London	Gibraltar.
,, J. A. Campbell	Hulme	Shorncliffe
,, J. R. Rahilly	Devonport	Horfield.
,, F. A. L'Estrange	Dublin	Newbridge.
,, A. H. Anthonisz, M.B.	Demerara	Barbadoes.
,, B. M. Bleunerhassett	Bombay	Bengal.
,, B. W. Wellings	Gravesend	Salford.
Surgeon H. J. Robbins, M.D.	Shorncliffe	Devonport
,, B. W. Large	Templemore	Dublin.
,, C. A. Webb	Portsmouth	Gosport.
,, E. F. Smith	Horfield	Devonport.
,, R. H. Forman, M.B.	Glasgow	Piershill.
,, A. O. Geoghegan, M.D.	Portsmouth	Christchurch.
,, C. R. Egan, M.B.	Newbridge	Curragh.
,, A. M. Kavanagh	Woolwich	Egyptian Army.
,, E. North	Bengal	Woolwich.
,, H. L. Battersby	Portsmouth	Golden Hill.
,, E. Landon	Colchester	Warley.
,, D. Wardrop, M.B.	Christchurch	Portsmouth.
,, J. M. Jones	Colchester	Shoeburyness.
,, F. M. Baker, M.B.	Curragh	Dublin.
,, J. P. Carmody, M.D.	Curragh	Newbridge.
,, G. H. Sylvester	Bull Point	Cardiff.
,, D. O'Sullivan	York	Beverley.
,, J. O. G. Sandiford, M.D.	Clonmel	Bandon.
,, W. Hefferman	Liverpool	Fleetwood.
,, G. E. Twiss	Dublin	Birr.
,, A. P. Hart, M.B.	Shoeburyness	Landguard Fort.
,, C. J. Addison	Bombay	Bengal.
,, R. C. Johnston, M.B.	Belfast	Curragh.
,, T. A. Dixon	Beverley	Burnley.
,, H. H. Johnston, M.B	Piershill	Mauritius.
,, F. J. Lambkin	Bengal	Brighton.
,, J. Semple	Belfast	Newry.
,, W. B. Thomson	Bermuda	York.
,, W. Kelly, M.D.	Bombay	Bengal.
,, T. B. Winter	Barbadoes	Demerara.
,, H. Mitchell	Portsmouth	Portland.
,, B. O. W. Norfor, M.B.	Egypt	Canterbury.
,, R. I. Power	Bombay	Bengal.
,, B. L. Mills, M.B.	Edinburgh	Bengal.
,, C. A. Reuny, M.B.	Colchester	Bengal.
,, J. B. Wilson, M.D.	Devonport	Bengal.
,, W. J. Lee	Devonport	Mauritius.
,, J. G. Black, M.D.	Curragh	Bengal.
,, J. Kearney, M.D.	Dublin	Bengal.
,, F. A. Saw, M.B.	Colchester	Shoeburyness.
,, W. B. Stokes, M.B.	Dublin	Bengal.
,, R. C. G. Dill	Aldershot	Bengal.
,, J. B. W. Buchanan, M.B.	Belfast	Bombay.
,, C. J. W. Tatham	Dover	Canterbury.
,, R. J. C. Cottell	Portsmouth	Hilsea.
,, H. A. Cummins, M.D.	Clonmel	Cork.
,, R. E. Kelly, M.D.	Clonmel	Cork.
,, J. J. Russell, M.B.	Cork	Fermoy.
,, G. Scott, M.B.	Edinburgh	Glasgow.
,, T. Whaite, M.B.	Portsmouth	Parkhurst.
,, R. E. Foott, M.D.	Aldershot	Bombay.
,, J. H. Nicholas	Sierra Leone	CapeCoastCastle

THE NAVY.

MR. JOHN N. CORBETT has been appointed Surgeon to the *Orwell*.

We are informed that Dr. M'EWAN, Inspector-General of Hospitals and Fleets, entered the Navy November 29th, 1847, and not April 9th, 1856, as we stated last week on the authority of the *Royal Navy List*.

THE MEDICAL STAFF.

SURGEONS W. H. P. LEWIS, A. E. HAYESS, A. M. KAVANAH, and R. E. R. MORSE, have been seconded for service with the Egyptian Army.

Deputy Surgeon-General J. B. C. READE, C.B., having completed a tour of foreign service in India, is directed to proceed to England.

Surgeon-Major J. E. FANNIN, who has been serving in the Madras Command, was detailed to proceed in the *Jumna*, which was to sail on February 12th.

Surgeon-Major R. KEITH, M.D., is placed on general duty in the Poona Circle, Bombay command.

THE INDIAN MEDICAL SERVICE.

THE undermentioned officers, recently retired from the service, have been granted a step of honorary rank:—Deputy Surgeons-General C. PLANCK, A. J. DALE, M.D., and JOHN BRAKE, all of the Bengal establishment; and Deputy Surgeon-General

HENRY COOK, M.D., Bombay establishment, to be Surgeons-General; Brigade-Surgeons JAMES FAIRWEATHER, M.D., JAMES BROWNE, M.D., and R. S. BATESON, all of the Bengal establishment, to be Deputy Surgeons-General; and Surgeon-Major J. P. STRATTON, M.D., Bombay establishment, to be Brigade-Surgeon.

Surgeon R. MACRAE, M.B., Bengal Establishment, officiating civil surgeon at Sarun, is appointed to act as civil surgeon of Nuddea, during the absence on deputation of Surgeon-Major E. G. Russell, M.D.

Surgeon G. J. SHAND, M.D., Bengal Establishment, is confirmed in the appointment of Superintendent of Chenawan Central Jail, in which he has been officiating.

Surgeon S. T. AVETOOM, Bombay Establishment, is ordered to officiate as medical officer to the 5th Cavalry (Jacob Ra Risala), during the absence of Surgeon K. H. Mistri on field-service in Burmah, or till further orders.

The services of Surgeon G. E. FOOKS, Bombay Establishment, have been replaced at the disposal of the Commander-in-Chief.

THE VOLUNTEERS.

THE undermentioned gentlemen have been appointed acting-surgeons to the corps specified: E. F. POTTER, the Volunteer Submarine Miners (Humber Division); J. H. WALTERS and F. W. D. FRASER, M.D., the 1st Volunteer Battalion of the Princess Charlotte of Wales's Royal Berkshire Regiment (formerly the 1st Berkshire); J. H. HOUGH, the 2nd Cambridge (Cambridge University); KENNETH MACLEAN, R. A. MURRAY, M.B., and JOHN KEAY, the 4th Cheshire; and JAMES MILL, M.B., the 1st Midlothian (Leith).

Acting-Surgeon JAMES HITCHCOCK, M.B., of the 1st Banff Artillery, has resigned his appointment, which bore date February 8th, 1882.

Surgeon BURFORD NORMAN, of the 1st (Hampshire Brigade, Southern Division, Royal Artillery), has been granted the honorary rank of Surgeon-Major.

Surgeon and Honorary Surgeon-Major F. J. SANDFORD, M.D., of the 2nd Shropshire, has resigned his commission, which dates from March 18th, 1861; he is permitted to retain his rank and uniform.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Monday, February 21st, 1887.

LUNACY ACTS AMENDMENT BILL.

IN Committee on the Bill, Clauses 1 and 2 were agreed to.

Lord GRIMTHORPE moved to leave out Subsections 9, 10, 11, of Clause 3, and insert the following:

"Upon the presentation of the petition, the judge, magistrate, or justice shall consider the evidence of lunacy appearing by the medical certificates, and whether it is necessary for him personally to see and examine the alleged lunatic; and, if he is satisfied that an order may properly be made forthwith, he may make the same accordingly; or, if not so satisfied, he shall appoint as early a time as practicable, not being more than seven days after the presentation of the petition, for the consideration thereof; and he may make such further or other inquiries of or concerning the alleged lunatic as he may think fit, and for that purpose may summon any person or persons to give evidence, and may take evidence on oath; and notice of the time and place appointed for such inquiry (unless personally given to the petitioner) shall be sent to him by post in a registered letter, addressed to him at his address as given in the petition."

The clauses he desired to leave out proposed that a magistrate must give notice to an alleged lunatic. A great deal of expense and trouble would be prevented if the justice or judge were allowed to exercise his discretion without listening to the demand of the lunatic whether he should see him or not.

The Earl of SELBORNE considered the clause as it stood would be absolutely destructive of the main object of such a law—namely, the prompt placing under restraint and supervision of the alleged lunatic before he could do harm to himself or any one else. To proceed against such a person as if he were accused of a crime, and to put him upon his defence, would be a perversion of the law and practice of lunacy. It was assumed that there were a number of persons who, unfortunately, required to be taken care of in their own interests and those of society, and that assumption required that they should be promptly dealt with, and that no unnecessary delay should defeat the real object of the law itself.

Lord HERSCHELL said he could not support it. It was highly important that a sane person should not be put under restraint, but it was also important that restraint should be applied to those whom it was necessary and beneficial to restrain. They had to steer between these two dangers. The latter, to his mind, was a very real danger.

The LORD CHANCELLOR said, if the principle of the Bill, as he took it, were agreed to, he would undertake to alter the form of the clause so as to meet as far as possible the objections which had been raised. What he desired was that every person to whom lunacy was imputed should, if he wished it, have a right to demand that he should be brought before some judicial tribunal within a certain time—say twenty-four or forty-eight hours—from his being taken in charge under a medical certificate. If that principle were conceded, he was ready to mould the machinery of the clause so as to meet the views of noble and learned lords; and he did not think it would operate prejudicially either to the lunatic or to the public. He did not know why an examination before a magistrate should be more injurious to a lunatic than the investigation which medical men were supposed to make before signing a certificate for his removal, and he could not understand why a magistrate should not be as competent to decide the question with a judicial mind as a medical man. The magistrate would determine the question, not solely by his own view or his power of detecting mental disease, but in the ordinary way in which he determined any matter which came before him in his judicial capacity.

The Earl of SELBORNE pointed out that it was entirely different from that contained in the ninth subsection of the clause.

The LORD CHANCELLOR expressed his willingness to postpone the clause, in order that his proposition might be considered by noble and learned lords.

Clause 3 was postponed accordingly.

Clause 4 was agreed to with slight verbal amendment.

On Clause 6, referring to lunatics not under proper control or care and cruelly treated or neglected, Lord MONKSWELL moved an amendment providing that the justice, upon information that a person, not a pauper and not wandering at large, is deemed to be a lunatic within his jurisdiction, and is not under proper care or control, or is cruelly treated or neglected, shall "either himself visit the alleged lunatic, or whether making such visit or not," shall direct two qualified medical practitioners to visit and examine the alleged lunatic. The amendment was agreed to, and the clause as amended was added to the Bill.

On Clause 33, dealing with the maintenance for pauper lunatics taken charge of by relatives, Lord MONKSWELL moved to add the following at the end of Subsection 5, "and the allowance made by the guardians or treasurer under this clause shall, for all purposes of recoupment to such guardians or treasurer, be deemed to be moneys paid for the maintenance of the lunatic in the asylum from which he has been moved."

After a brief conversation, in which Lord HERSCHELL, Lord KIMBERLEY, and the Earl of SELBORNE joined, consideration of the amendment was postponed, at the suggestion of the LORD CHANCELLOR, until report stage.

After Clause 39, dealing with the provision on inquisition for commitment of estate only, and not of person, the LORD CHANCELLOR moved the following new clauses:

"A. (1) If in any case of a person who has been found lunatic by inquisition, the Lord Chancellor or Judge in Lunacy, being satisfied on the report of the Commissioners or of one of the Lord Chancellor's Visitors in Lunacy, or on any other evidence, that the lunatic is cured, or that he is capable of managing himself, and not dangerous to himself or others, though incapable of managing his affairs, may, if he shall think it desirable that the ordinary proceedings for a *supersedeas* should not be insisted on, by order supersede the inquisition, so far as the same finds that the lunatic is incapable of managing himself, and rescind or vary any order for the commitment of the person of the lunatic. (2) An order under this section may be made on such terms and conditions as the Lord Chancellor or Judge in Lunacy may think fit. (3) Notice of an order under this section shall be forthwith given to the committee of the lunatic, and also to the person under whose care the lunatic is."

"B. (1) The medical attendant of every lunatic so found by inquisition shall, before the expiration of one, three, and six years respectively from the commencement of this Act, and before the expiration of every subsequent period of five years after the expiration of six years from the commencement of this Act, send to the Masters in Lunacy a report as to the mental and bodily condition of the patient, with a certificate under his hand, certifying that the patient is still of unsound mind, and a proper person to be detained under care and treatment. (2) If, before the expiration of any of the periods hereinbefore mentioned, such report and certificate is not sent to the Masters, the order for the commitment of the person of the lunatic as to whom such report and certificate is not sent shall determine at the expiration of such period; but nothing herein contained shall affect the commitment of the estate. (3) A Master in Lunacy may, by order under his hand, extend the time within which any report and certificate under this section is to be sent to the Masters, and, if the time is so extended, the order for commitment of the person of the lunatic as to whom the time is so extended shall continue in force until the expiration of the extended time, but such extended time shall not exceed six calendar months. (4) Where any order for commitment of the person of a lunatic has determined under this section, the Masters in Lunacy shall forthwith give notice of such determination to the committee of the person of the lunatic, and to the person under whose care the lunatic is."

The clauses were agreed to.

On Clause 42, Lord HOBHOUSE moved to insert a new subsection dealing with the case of joint licensees desiring, from disagreement or otherwise, to carry on business apart from one another, and provided that the Commissioners or justices might grant to each of such licensees renewed licences for such number of patients (not exceeding in the aggregate the number allowed by the joint licence) as such joint licensees should agree upon, or, failing agreement, as the Commissioners or Justices might determine.

The LORD CHANCELLOR saw no objection to the proposal.

The Earl of SELBORNE remarked that, on the understanding that the application of the subsection was confined to cases in existence at the time of the passing of the Act, he was not disposed to make any objection to it.

The subsection was then inserted, and the clause, as amended, ordered to stand part of the Bill.

After Clause 50, Lord MONKSWELL moved the addition of a new clause to the effect that, when any officer was transferred from one county asylum to another, his service in all such asylums should count for the purpose of computing his pension or superannuation allowance.

The clause was agreed to.

The Bill then passed through Committee.

HOUSE OF COMMONS.—Friday, February 18th.

Oleomargarine.—Sir R. PAGET obtained leave to bring in a Bill for the better prevention of the fraudulent sale of oleomargarine. The Bill was read a first time.

Tuesday, February 22nd.

Mr. LACAITA's Bill for the Sanitary Registration of Buildings was read a first time.

MEDICO-LEGAL AND MEDICO-ETHICAL.

MIDWIFERY FEES TO SUBSTITUTES.

To our correspondent's first and second questions (the reply to which has been unwittingly delayed), a clearly defined answer will be found in the following extract from the *Code of Medical Ethics*, second edition, page 71, note 12, by which "B," in the matter of "C's" confinement, should have been governed.

"When a practitioner is called in, or otherwise requested, to attend at an *accouchement* for another, and completes the delivery, or is detained for a considerable time, he is entitled by custom (except in the case of illness, etc., provided for by Rule 3) to one-half of the fee; but, on the completion of the delivery, or on the arrival of the pre-engaged accoucheur, he should resign the further management of the case. In a case, however, which gives rise to unusual fatigue, anxiety, and responsibility, it is right that the accoucheur in attendance should receive the entire fee. Note.—In either event, when the officiating accoucheur is a stranger, or a non-acquaintance of the family doctor, the full fee should be tendered to him."

With regard to the third question submitted, although there is no ethical rule directly bearing thereon, we venture confidently to affirm that, under the circumstances related, "A," in visiting the patient in the Union hospital, did not act unprofessionally, as alleged by "B," whose consultative attendance ceased on the case being admitted into the hospital, and who, moreover, we are clearly of opinion, had no professional or ethical claim whatever to be considered "C's" ordinary medical attendant.

MUTUAL RELATIONS OF MEDICAL PRACTITIONERS IN CASES OF EMERGENCY.

ASSUMING that our correspondent's statement is in strict accordance with the facts, there can, in our opinion, be no doubt that "B.'s" conduct in relation to the case in question was in direct contravention of the principle laid down in the following rule, extracted from the *Code of Medical Ethics*: "When a practitioner is called to an urgent case of illness, accident, or injury, in a family usually attended by another, he should (unless his further attendance in consultation be desired), when the emergency is provided for, or on the arrival of the attendant in ordinary, resign the case to the latter; but he is entitled to charge the family for his services."

The accident, moreover, having occurred within fifty yards of the residence of the family medical attendant, it is much to be regretted, alike on his own account and in the interest of the faculty at large, that B. should not only have assumed sole charge of the case without any communication whatever with A. (the family medical man), but sought to retain it, until summarily dismissed by the patient—a circumstance which may not unfairly be regarded as a just Nemesis, so to speak, which ought to fall upon all practitioners who knowingly and wilfully deviate from the path of honourable practice.

WORK ON MEDICAL ETHICS.

H. S. asks where he can obtain a book on medical ethics, and what the price is. Is it the custom in London for newcomers to call on old practitioners?

*** *A Code of Medical Ethics;* with General and Special Rules for the Guidance of the Faculty and the Public in the Complex Relations of Professional Life. By Jukes de Styrap, M.R.Q.C.P., second edition. J. and A. Churchill. Price 3s. 6d.

A CURIOUS CIRCULAR.

A CORRESPONDENT forwards the subjoined:

"273, Regent Street, W., August 21st, 1886.

"We beg to inform you that, in consequence of the numerous applications made to us in reference to obtaining reliable medical advice at a reduced fee, we have made arrangements with an eminent physician to attend at the above address from 9 to 10 in the morning, and 6 to 9 in the evening (Sundays excepted), when his professional services may be secured free of charge, so that persons of limited circumstances will derive the advantage of securing to themselves the assistance of a consulting physician, with the benefit of gratuitous advice.

"In cases of urgent necessity, patients will be visited at their own houses at any hour gratuitously. To heads of families and proprietors of large establishments this arrangement will be peculiarly worthy of attention. Medicines will be dispensed at co-operative prices. Entrance to the consulting-room from the side door in Great Castle Street.—We remain, your obedient servants,

"R. M. REW AND CO. (Operative Chemists).

"N.B.—Midwifery cases will be attended at the reduced fee of 7s. 6d., including medicine. Surgical cases will be attended to at all times by an experienced surgeon at a nominal fee."

*** Were it not for the stigma which must necessarily, more or less, attach to the profession at large by such compacts as that disclosed in the circular, between "operative" chemists and a reputed "consulting physician," abetted by "an experienced surgeon," we should abstain from offering any comment thereon, and allow it to record its own unvarnished tale. In the interest, however, of the profession and the public, too apt to be lured by such announcements, it is well to suggest to our correspondent the desirability of devising some means (a matter, probably, of little difficulty) by which the physician and surgeon in question may be rescued from the comparative obscurity of the chemist's consulting-room, and have greater publicity given to their abilities by the disclosure of their names to the community and the profession, and more especially to the authorities of their respective Colleges.

REGISTRATION AND THE RECOVERY OF MEDICAL FEES.

L.K.Q.C.P.I. writes: 1. In reference to your reply (which appeared in the JOURNAL of November 27th, 1886) to my letter, I would again trouble you. The case to which you referred was "Leman *v.* Housley," but that which I mentioned was "Leman *v.* Horsley," in "44 *Law Journal*, Queen's Bench 22," which says that a medical man must be registered at the time of the services rendered, and medicine supplied, in order that he might recover his charges in a court of law. In my case the county court judge reversed his judgment, not because of want of registration at the first trial, but on the ground that I was not registered at the time of the services rendered. Has the judge exceeded his jurisdiction on this point? Could I recover, at a fresh trial, under the head of "Medicines Supplied?"

2. Can a registered physician and surgeon of Ireland, England, or Scotland, legally compound, dispense, and supply medicines to his own patients, and recover for the same in each of the aforesaid countries, without possessing the license of the Apothecaries' Society?

*** 1. The case of Leman *v.* Housley, and Leman *v.* Horsley, is the same, the former spelling being the correct one. In one of the law reports of this case, Lord Blackburn is reported to have used words which he does not make use of according to the other reports; but even according to the one which does not agree with the others, there is language used by him which agrees, and is entirely consistent with what is found in the other reports, and which, in fact, amounts to this, namely, that to recover for services rendered, a man may get registered at any time before the trial, but must have been actually qualified before the services were rendered for which he seeks to recover.

2. In reply to his second question, a registered physician of England, Scotland, or Ireland, can compound, dispense, and supply medicines to his own patients, and recover for the same in each of the aforesaid countries, without possessing the license of the Apothecaries' Society, and so can a registered surgeon in the like cases, provided that they are supplied by him in surgical as distinguished from medical cases.

FORCED TO TESTIFY.

DURING a recent murder trial in Macon, says the *Atlanta Medical Journal*, Dr. E. G. Ferguson was put on the stand. He refused to testify, saying that his was expert testimony, and physicians in the State received no compensation for that. Judge Simmons said it was true that the State did not make any provision for paying physicians for their expert testimony, but directed the medical man to proceed. The ruling of Judge Simmons is quite different from the following, from the *New York Post*: "Judge C. C. Faller, of Mecosta country, in the case of State of Michigan *v.* Vanimmans, decided, when a physician refused to testify on the ground that the evidence would be expert evidence: 'After many years' study and observation, I decide that a physician's knowledge is his stock in trade, and we have no more right to take it without extra compensation than we have to take provisions from a grocery without pay, to feed the jury. The Court rules that the witness is not compelled to testify.'"

LIABILITY FOR SERVICES RENDERED.

A MEMBER—We must decline, under the circumstances stated, to give any advice or assistance.

CLEANTHES writes: A few months ago I was written to (which letter is in my possession) by a solicitor asking me to go and depose to an affidavit that a client of his, who was my patient, would not be able, owing to his illness, to attend the trial, so that his depositions might be taken by commission. In accordance with this request, I went a distance of five miles for the purpose, and was detained there four or five hours, owing to the Commissioner of Oaths being out of town. For this I sent the solicitor a bill of £3 3s. This gentleman says that he is in no way liable, and that I ought to go to his client for the fee. His client never spoke a word to me nor I to him about the case. Will you kindly inform me who is liable in this case, and if the fee be exorbitant?

*** The person liable is the one who requested the service. It is a question of fact whether the solicitor did so as principal, or merely as agent for his client; but *primâ facie*, he is personally liable. We know of no law book which states this shortly, but the matter is treated in all works dealing with the question of agency. Considering the time occupied, the fee charged does not seem exorbitant, but if payment of a smaller sum is tendered, it might be wise to accept it.

FORENSIC.—1. It is now an indubitable fact that pregnancy may result from one act of sexual intercourse. 2. Rape may be followed by pregnancy. 3. On this point we have nothing to go by except the woman's own statements, and there does not seem any good reason for disbelieving her. You do not mention the object of your investigations, but your patient would be ill-advised to bring a charge of rape against anyone after (evidently) so considerable a lapse of time. Consult Tidy's *Legal Medicine*, Taylor's *Principles and Practice of Medical Jurisprudence*, Ogston's *Medical Jurisprudence*, Casper (New Sydenham Society's *Transactions*), or Wharton and Stillé on *Medical Jurisprudence*.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

THE Registrar-General has just issued his quarterly return relating to the births and deaths registered in England and Wales during the fourth or autumn quarter of last year, and to the marriages in the three months ending September last. The marriage-rate was again considerably below the mean rate in the corresponding quarters of the ten preceding years, and was lower than the rate recorded in the third quarter of any year since 1842. The birth-rate and the death-rate were also much below their respective averages. The mean temperature during the quarter exceeded the average, and the weather generally was favourable to the public health.

The births of 217,592 children were registered in England and Wales during the three months ending December last, equal to an annual rate of 31.0 per 1,000 of the population, estimated by the Registrar-General to be nearly twenty-eight millions of persons. This birth-rate was 2.4 per 1,000 below the mean rate in the corresponding quarters of the ten preceding years 1876-85, and was lower than the rate recorded in the fourth quarter of any year since 1853. The birth-rate in the quarter under notice ranged in the several counties from 25.6 in Sussex, 26.0 in Huntingdonshire, and 27.1 in Shropshire and in Westmorland, to 34.5 in Durham, 34.6 in Monmouthshire, 34.7 in Northumberland, and 36.4 in Essex. In the twenty-eight great towns for which the Registrar-General publishes weekly returns, the birth-rate last quarter averaged 32.1 per 1,000, ranging from 24.8 in Brighton and 26.8 in Halifax, to 38.2 in Newcastle-upon-Tyne, and 41.5 in Cardiff. The births registered in England and Wales during the quarter under notice exceeded the deaths by 87,846; this represents the natural increase of the population during that period. From the Board of Trade returns, it appears that 62,941 emigrants sailed from the various ports of the United Kingdom at which emigration-officers are stationed; of these, 32,092 were English, 5,240 Scotch, and 8,658 Irish. The proportions of British emigrants to a million of the respective populations of the three divisions of the United Kingdom were 1,151 from England, 1,327 from Scotland, and 1,771 from Ireland.

During the fourth quarter of 1886, the deaths of 129,746 persons were registered in England and Wales, equal to an annual rate of 18.5 per 1,000 of the estimated population. This death-rate was 1.4 per 1,000 below the mean rate in the fourth quarters of the ten preceding years 1876-85, and corresponded with the rate in the fourth quarter of 1885, which was lower than that recorded in the corresponding period of any year since the commencement of civil registration in 1837. Among the urban population of the country, estimated at nearly seventeen millions of persons, the rate of mortality during the quarter under notice was equal to 19.7 per 1,000; in the remaining or chiefly rural population of nearly eleven millions of persons, the rate did not exceed 16.5 per 1,000. These urban and rural rates were below their respective averages for the ten preceding corresponding quarters. The rate of mortality last quarter among infants under one year of age was 4.3 per cent above the average; while that of persons aged between one and sixty years was 11.6, and that of persons aged upwards of sixty years was 3.4 per cent., below the respective average rates in the ten preceding corresponding quarters.

The 129,746 deaths registered in England and Wales during the three months ending December last included 4,386 which were referred to diarrhœa, 3,444 to measles, 2,305 to scarlet fever, 2,050 to fever (including typhus, typhoid, and simple fever), 1,797 to whooping-cough, 1,216 to diphtheria, and 11 to small-pox; in all, 15,209 deaths resulted from these principal zymotic diseases, equal to an annual rate of 2.17 per 1,000, against an average rate of 2.49 in the ten preceding fourth quarters. The mortality from diarrhœa, measles, and diphtheria showed an excess, while that from each of the other zymotic diseases was considerably below the average. Only 11 deaths from small-pox occurred in the whole of England and Wales during the quarter under notice, a smaller number than in any quarter on record.

The rate of infant-mortality, or the proportion of deaths under one year of age to registered births, was 147 per 1,000, and slightly exceeded the average rate in the ten preceding corresponding quarters. While the rate of infant mortality in London did not exceed 144 per 1,000, it averaged 173 in the twenty-seven large provincial towns, among which it ranged from 129 and 139 in Birkenhead and Derby, to 207 in Oldham, Wolverhampton, and Halifax, 208 in Blackburn, and 237 in Preston.

HEALTH OF IRISH TOWNS: QUARTERLY SUMMARY.

IN the quarter ending Saturday, January 1st, 1887, the average annual death-rate represented by the deaths registered in the Dublin Registration District and fifteen of the principal urban sanitary districts of Ireland was 22.8 per 1,000 persons, the respective rates for the several districts being as follow, ranging in order from the lowest to the highest: Lisburn, 10.4; Sligo, 12.6; Kilkenny, 13.3; Armagh, 15.1; Newry, 15.4; Dundalk, 16.5; Lurgan, 20.1; Drogheda, 20.2; Belfast, 21.1; Cork, 21.5; Limerick, 21.6; Galway, 22.8; Londonderry, 23.2; Wexford, 24.0; Dublin, 25.9; Waterford, 26.9. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.6 per 1,000, the rates ranging from 0.3 in Kilkenny to 5.5 in Londonderry; the 169 deaths from all causes registered in the last-named district comprising 33 from measles, 1 from whooping-cough, and 6 from diarrhœa. The number of deaths registered in the Dublin Registration District amounted to 2,350 (1,177 males and 1,173 females), affording an annual ratio of 1 in 37.6, or 26.6 in every 1,000 of the estimated population; omitting the deaths (67) of persons admitted into public institutions from localities outside the district, the rate was 25.9 per 1,000. The average number of deaths registered in the fourth quarter of the ten years 1876-85 was 2,404, equivalent to an annual mortality of 27.8 per 1,000 persons. The number of deaths from zymotic diseases registered was 318, being 14 over the number for the preceding thirteen weeks, but 37 below the average for the fourth quarter of the ten years 1876-85. The deaths from these diseases during last quarter were equal to an annual rate of 3.6 per 1,000 of the population; in the corresponding quarter of 1885 the rate was 3.1 per 1,000.

A MEDICAL OFFICER AND HIS REPORT.

THE recently issued report of the medical officer of health for Workington (Dr. Lowe) has excited a good deal of interest. The infantile mortality for the past year in this parish is said by Dr. Lowe to have reached the extraordinary rate of 136.2 per 1,000 of the registered births, and 5.2 of all the deaths were of children under five years of age. He attributes a large proportion of this high infant mortality to excessive tea drinking on the part of the mothers, who take tea two, three, and four times a day, the children also being, as he expressed it, "regularly dosed with it." Tea drinking was not so degrading as opium eating, but it was doing more mischief. Another prolific cause of infant mortality at Workington was the Salvation Army. The mothers went to the Salvation Army hall in all weathers, and at all hours, leaving the children to look after themselves, the result being that they "often caught cold, were burnt, or scalded."

HALIFAX SANITARY DISTRICT.

THE long-agitated question of the appointment of a joint medical officer of health for the various sanitary authorities within the area of the Halifax Union, appears likely now to be settled, for the Local Government Board has addressed a circular letter to all the authorities, stating that it is its intention to issue an order under Section 286 of the Public Health Act, combining them for the purpose. The Halifax Rural, and the Sowerby-Bridge, Luddendon-Foot, Ovenden, and Northowram Urban authorities, object to the proposed combination; the Hipperholme, Midgley, Soyland, Southowram, Queensbury, and Stainland-with-Old Lindley Urban, approve of it while others have deferred the consideration of the proposal. It is evident, therefore, that there will be a good deal of discussion upon this subject; but there can be little doubt that the Local Government Board will make some order settling the matter for the next five years.

LUNACY ACTS AMENDMENT BILL, 1887.

SIR,—Would you again permit me to draw the attention of workhouse medical officers to the injustice which it is proposed, in the Lord Chancellor's Lunacy Act Amendment Bill, to perpetrate on them by the provisions contained in Clause 14, Sections v, vi, vii, viii, page 13, whereby it is arranged that they shall be debarred by statute from receiving any remuneration whatever for the examination and certification of a lunatic received into the workhouse of which they are the medical officers, and that they shall be subjected to a fine of £10 for any day or part of a day they neglect to supply a certificate for nothing. Some forty-five to fifty years ago, a similar proviso was made, but the great injustice implied therein having been made manifest, the restriction was removed, and guardians were permitted—nay, encouraged—by the Commissioners in Lunacy to allow the workhouse medical officer to perform this duty, and to pay him a fee varying from 10s. 6d. to £1 1s. The reason given for the prohibition in the first instance, and for its repetition now, is the feeling entertained by certain persons in the medical and legal professions that the workhouse medical officer would abuse his position for the sake of the fees above-named in certifying that all and sundry of the inmates of the house were of unsound mind, wholly oblivious of the fact that when certified to they at once pass under the skilled superintendence of the principal medical officer of the asylum to which they may be sent, who would speedily report upon any abuse of authority by the workhouse medical officer or his substitute.

Before concluding, I should like your readers to understand that, with the

rare exception where an inmate becomes insane, all persons alleged to be of unsound mind admitted to a workhouse, go there with a certificate from the district medical officer, the divisional surgeon of police, or by the order of a police magistrate or Justices of the Peace. It should be remembered that it not infrequently happens that the workhouse medical officer is specially sent for on the admission of a lunatic, and perhaps may have to travel four or five miles, and that he is liable to being assaulted, as I have been, in years gone by, by an excited lunatic; yet all this is to count as part of his duty, for which he is to receive no consideration of any kind—nay, many workhouse medical officers will lose much of their emoluments when the Bill becomes law. It is probably hopeless to expect that the Law Lords will modify these sections, but it is to be hoped that some medical member of the Lower House will enter an opposition to them; at any rate, I feel that I am only doing my duty to my former colleagues in raising this objection.—I am, Sir, yours obediently,

31, Montague Place, W.C., February 21st, 1887.

JOSEPH ROGERS, Chairman of the Poor-law Medical Officers Association.

HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, February 12th, 5,788 births and 3,453 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons. The annual rate of mortality, which had declined in the five preceding weeks from 26.5 to 19.6 per 1,000, further fell during the week under notice to 19.5. The rates in the several towns, ranged in order from the lowest, were as follow:—Nottingham, 14.9; Leicester, 15.3; Derby, 16.1; Leeds, 16.9; Sunderland, 16.9; Brighton, 17.2; London, 17.6; Preston, 17.9; Halifax, 18.4; Birkenhead, 18.7; Birmingham, 18.9; Bolton, 19.5; Salford, 19.6; Bradford, 20.0; Sheffield, 20.5; Hull, 20.9; Portsmouth, 21.6; Oldham, 21.8; Bristol, 21.9; Norwich, 21.9; Plymouth, 22.3; Newcastle-upon-Tyne, 22.6; Blackburn, 23.7; Cardiff, 24.5; Manchester, 25.8; Liverpool, 26.9; Wolverhampton, 27.1; and the highest rate during the week, 30.1 in Huddersfield. The death-rate in the twenty-seven provincial towns averaged 21.1 per 1,000, and exceeded by 3.5 the rate recorded in London, which, as before stated, did not exceed 17.6 per 1,000. The 3,453 deaths registered in the twenty-eight towns during the week under notice included 340 which were referred to the principal zymotic diseases, against numbers declining from 485 to 367 in the four preceding weeks; of these, 95 resulted from whooping-cough, 77 from measles, 61 from scarlet fever, 43 from diphtheria, 32 from diarrhœa, 31 from "fever" (principally enteric), and 1 from small-pox. These 340 deaths were equal to an annual rate of 1.9 per 1,000. The zymotic rate in London during the week under notice did not exceed 1.5 per 1,000, while in the twenty-seven provincial towns it averaged 2.1, and ranged from 0.0 and 0.2 in Derby and Nottingham, to 3.4 in Norwich, 4.6 in Liverpool, and 6.4 in Huddersfield. The deaths referred to whooping-cough, which had been 76 and 111 in the two preceding weeks, declined during the week under notice to 95, and were proportionally most numerous in Oldham, Sunderland, Huddersfield and Norwich. The fatal cases of measles, which had steadily declined from 235 to 104 in the five preceeding weeks, further fell to 77 during last week, a lower number than in any week since the end of October last; this disease caused the highest death-rates in Halifax, Bristol, and Huddersfield. The 61 deaths referred to scarlet fever exceeded by 7 the number in each of the two previous weeks; this disease was most fatally prevalent in Birkenhead and Sheffield. The fatal cases of diphtheria, which had been 33 and 29 in the two preceding weeks, rose again during the week under notice to 43, and included 17 in London, 4 in Liverpool, 3 in Birmingham, 3 in Manchester, and 3 in Huddersfield. The 32 deaths from diarrhœa differed but slightly from the average. The deaths referred to different forms of fever, which had increased in the three preceding weeks from 33 to 40, declined again during the week under notice to 31, of which 9 occurred in London, 6 in Liverpool, and 4 in Manchester. The fatal case of small-pox was recorded in Manchester. Only two small-pox patients were under treatment in the Metropolitan Asylum Hospitals on Saturday, February 12th. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 4.6 per 1,000, and was considerably below the average. The causes of 89, or 1.5 per cent. of the 3,453 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

In the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons, 5,772 births and 3,736 deaths were registered during the week ending Saturday, February 19th. The annual rate of mortality, which had steadily declined in the six preceding weeks of this year from 26.5 to 19.5 per 1,000, rose again during the week under notice to 21.1. The rates in the several towns, ranged in order from the lowest, were as follow:—Derby, 17.2; Salford, 17.9; Leicester, 17.9; Brighton 18.1; Nottingham, 18.4; Norwich, 18.5; Hull, 18.6; Portsmouth, 18.9; London, 19.3; Bradford 20.2; Leeds, 20.7; Wolverhampton, 20.7; Bristol, 20.8; Sunderland, 22.1; Oldham, 22.2; Blackburn, 22.3; Birmingham, 23.3; Cardiff. 23.5; Sheffield, 24.2; Newcastle-upon-Tyne, 24.3; Halifax, 24.4; Birkenhead, 24.6; Bolton, 25.1; Huddersfield, 25.5; Plymouth, 25.7; Liverpool, 28.1; Manchester, 28.6; and the highest rate during the week, 29.6 in Preston. In the twenty-seven provincial towns the death-rate averaged 22.6 per 1,000, and exceeded by 3.3 the rate recorded in London, which, as before stated, did not exceed 19.3 per 1,000. The 3,736 deaths registered in the twenty-eight towns during the week under notice included 125 which were referred to whooping-cough, 107 to measles, 47 to scarlet fever, 36 to diarrhœa, 32 to diphtheria, 23 to fever (principally enteric), and 1 to small-pox; in all, 371 deaths resulted from these principal zymotic diseases, against numbers declining from 485 to 340 in the five preceding weeks. The zymotic death-rate was equal to 2.1 per 1,000. In London the zymotic rate was 1.9, while in the twenty-seven provincial towns it averaged 2.6 per 1,000, and ranged from 0.4 in Brighton, and 1.1 in Leicester and in Derby, to 4.2 in Bristol, 4.6 in Huddersfield, and 4.8 in Liverpool. The fatal cases of whooping-cough, which had been 111 and 95 in the two preceding weeks, rose again during the week under notice to 125, and caused the highest death-rates in Bristol, Sunderland, Huddersfield, and Plymouth. The deaths referred to measles, which had steadily declined in the six preceding weeks from 235 to 77, rose again last week to 107, and were proportionally most numerous in Hull, Huddersfield, and Liverpool. The 47 fatal cases of scarlet fever showed a decline of 14 from the number in the previous week, and caused the highest death-rates in Salford, Blackburn, and Bristol. The 36 deaths from diarrhœal diseases showed a slight further increase upon recent weekly numbers. The fatal cases of diphtheria, which had been 29 and 43 in the two preceding weeks, declined during the week under notice to 32, and included 15 in London, 3 in Portsmouth, 2 in Liverpool, 2 in Birkenhead,, and 2 in Preston. The deaths referred to different forms of fever, which had been 40 and 31 in the two previous weeks, further declined last week to 23, and were proportionally most numerous in Preston. Small-pox caused one death in Newcastle-upon-Tyne, but not one in London or in any of the twenty-six other large towns. Only 2 small-pox patients were under treatment in the Metropolitan Asylum hospitals on Saturday, February 19th. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 4.8 per 1,000, and was considerably below the average. The causes of 95, or 2.5 per cent. of the 3,736 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

IN the eight principal Scotch towns, having an estimated population of 1,299,000 persons, 790 births and 550 deaths were registered during the week ending Saturday, February 12th. The annual rate of mortality, which had been 24.7 and 19.6 per 1,000 in the two preceding weeks, rose again during the week under notice to 22.0, and exceeded by 2.5 per 1,000 the mean rate for the same period in the twenty-eight large English towns. The 550 deaths registered during the week in these Scotch towns included 28 which were referred to whooping-cough, 16 to measles, 14 to diarrhœa, 13 to scarlet fever, 3 to diphtheria, 2 to fever, and not one to small-pox; in all, 76 deaths resulted from these principal zymotic diseases, against 75 and 66 in the two preceding weeks. These 76 deaths were equal to an annual rate of 3.0 per 1,000, which exceeded by 1.1 the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns during the week under notice were recorded in Aberdeen, Paisley, and Glasgow. The deaths referred to whooping-cough, which had been 19 and 23 in the two preceding weeks, further rose during the week under notice to 28, of which 19 occurred in Glasgow, 3 in Aberdeen, and 3 in Paisley. The 16 fatal cases of measles exceeded by 4 the number recorded in the previous week, and included 12 in Glasgow, and 4 in Aberdeen. The 14 deaths referred to diarrhœa exceeded those returned in recent weeks. The fatal cases of scarlet fever, which had declined in the three preceding weeks from 16 to 8, rose again during the week under notice to 13, of which 7 occurred in Edinburgh, and 4 in Glasgow. The deaths referred to diphtheria, which had been 7 in each of the two previous weeks, declined during the week to 3, a lower number than in any week of the current year; 2 were returned in Edinburgh. The 2 fatal cases of fever also showed a marked decline from recent weekly numbers. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 5.7 per 1,000, against 4.6 in London. The causes of 71, or nearly 13 per cent., of the 550 deaths registered during the week in these Scotch towns were uncertified.

During the week ending Saturday, February 19th, 814 births and 607 deaths were registered in the eight principal Scotch towns having an estimated population of 1,299,000 persons. The annual rate of mortality, which had been 19.8 and 22.0 per 1,000 in the two preceding weeks, further rose during the week under notice to 24.3, and exceeded by 3.2 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 13.7 in Greenock, 14.6 in Perth, 18.7 in Leith, 22.7 in Dundee, 23.7 in Edinburgh, 26 6 in Aberdeen, 27.0 in Glasgow, and 28.2 in Paisley. The 607 deaths registered during the week under notice in these Scotch towns included 103 which were referred to the principal zymotic diseases, against 66 and 76 in the two preceding weeks; of these, 32 resulted from whooping-cough, 25 from scarlet fever, 23 from measles, 14 from diarrhœa, 5 from diphtheria, 4 from "fever," and not one from small-pox. These 103 zymotic deaths were equal to an annual rate of 4.1 per 1,000, which exceeded by as much as 2.0 the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic death-rates in the Scotch towns during the week under notice were recorded in Edinburgh, Glasgow, and Aberdeen. The fatal cases of whooping-cough, which had increased in the three preceding weeks from 19 to 28, further rose during the week to 32, of which 22 were recorded in Glasgow, 4 in Aberdeen, and 3 in Edinburgh. The deaths referred to scarlet fever, which had been 8 and 13 in the two previous weeks, further rose during the week under notice to 25, and included 16 in Edinburgh, 5 in Glasgow, and 3 in Dundee. The 23 fatal cases of measles also showed a marked further increase upon recent weekly numbers, and included 12 in Glasgow, and 9 in Aberdeen. The 14 deaths from diarrhœa differed but slightly from the average. The 5 fatal cases of diphtheria exceeded by 2 the number in the preceding week; 3 occurred in Glasgow, where 2 of the 4 deaths referred to different forms of fever were also returned. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 4.8 per 1,000, against 4.8 in London. The causes of 69, or more than 11 per cent. of the 607 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

IN the week ending Saturday, February 12th, 420 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered during the week in the sixteen principal town districts of Ireland was 25.2 per 1,000 of the population. The deaths registered n the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 10.3; Belfast, 25.6; Cork, 18.8; Drogheda, 46.5; Dublin, 27.0; Dundalk, 21.8; Galway, 30.3; Kilkenny, 55.0; Limerick, 20.2; Lisburn, 4.8; Londonderry, 32.1; Lurgan, 30.8; Newry, 14.0; Sligo, 4.8; Waterford, 23.2; Wexford, 12.8. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.9 per 1,000, the rates varying from 0.0 in eleven of the districts to 5.3 in Londonderry; the 18 deaths from all causes registered in that district comprising 3 from measles. Among the 110 deaths from all causes registered in Belfast are 1 from scarlatina, 1 from typhus, 1 from whooping-cough, and 4 from diarrhœa; and the 29 deaths in Cork comprise 1 from whooping-cough and 2 from enteric fever. In the Dublin Registration District, the births registered during the week amounted to 216, and the deaths to 185. The deaths represent an annual rate of mortality of 27.3 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 27.0 per 1,000. Eighteen deaths from zymotic diseases were registered, being 8 over the number for the preceding week, but 13 under the average for the sixth week of the last ten years; they comprise 5 from scarlet fever (scarlatina), 1 from typhus, 3 from whooping-cough, 1 from diphtheria, 3 from enteric fever, 4 from diarrhœa, etc. The number of deaths from diseases of the respiratory system registered is 46, being 24 below the average for the corresponding week of the last ten years, and 7 under the number for the week ended February 5th; the 46 deaths comprise

29 from bronchitis and 6 from pneumonia or inflammation of the lungs. The deaths of 13 children under 5 years of age (including 12 infants under 1 year old) were ascribed to convulsions. Four deaths were caused by apoplexy, 11 by other diseases of the brain and nervous system (exclusive of convulsions), and 12 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 29 deaths, and cancer 5. Five accidental deaths were registered. In 23 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending February 12th, that the annual death-rate recently averaged 31.5 per 1,000 in the three principal Indian cities; it was equal to 25.0 in Bombay, 29.6 in Calcutta, and 40.1 in Madras. Cholera caused 31 deaths in Calcutta, showing a considerable decline from the numbers in previous weeks; diarrhœal diseases 50, and measles 10, in Madras; and "fever" was considerably more fatal in Madras and Calcutta than in Bombay. According to the most recently received weekly returns, the annual death-rate averaged 26.7 per 1,000 persons estimated to be living in nineteen of the largest European cities, and exceeded by no less than 7.2 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 31.9, and showed a decline upon the rates in previous weeks; the 568 deaths included 9 from small-pox, and 14 from "fever." In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 23.8, and ranged from 20.6 in Christiania to 25.7 in Copenhagen; diphtheria and croup caused 10 deaths in Copenhagen, 8 in Stockholm, and 3 in Christiania; 7 fatal cases of whooping-cough occurred in Copenhagen, and 5 of scarlet fever in Christiania. In Paris, the death-rate was 26.9, and exceeded by no less then 8.5 the rate that prevailed during the corresponding week in London; the deaths included 42 from measles, 34 from diphtheria and croup, and 16 from "fever." The 186 deaths in Brussels, of which 4 resulted from "fever" and 4 from whooping-cough, gave a death-rate of 22.2, showing a marked decline from that in the previous week. No returns from Geneva have been received since the beginning of this year. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 22.8, the several rates ranging from 19.5 in the Hague, to 23.2 in Rotterdam; the deaths in Amsterdam included 3 each from "fever" and diphtheria; and 2 fatal cases of whooping-cough both in Rotterdam and the Hague. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 27.1, and ranged from 19.6 in Dresden and 23.1 in Berlin, to 34.4 in Buda-Pesth and 40.1 in Trieste. Small-pox caused 18 deaths in Buda-Pesth and "fever" 16 in Hamburg; diphtheria and croup caused considerable mortality in Hamburg, Dresden, Prague, and Buda-Pesth. The death-rate was equal to 26.6 in Rome and 29.4 in Venice; the deaths in Rome included 15 from small-pox, 6 from diphtheria, and 4 from typhoid fever; and in Venice 3 deaths resulted from typhoid fever and 2 from small-pox. In Cairo the death-rate was 40.9, and in Alexandria 30.9; diarrhœal diseases caused 85 deaths in Cairo and 23 in Alexandria; the deaths from typhoid fever were 14, and from diphtheria and croup 8, in Cairo; and 2 from small-pox and 6 from whooping-cough in Alexandria. In four of the largest American cities the recorded death-rate averaged 23.9, and ranged from 18.1 in Baltimore to 28.8 in New York. Diphtheria and croup caused 54 deaths in New York, 28 in Brooklyn, 20 in Philadelphia, and 7 in Baltimore; 6 deaths from typhoid fever occurred in Philadelphia and 3 in Baltimore.

It appears, from statistics published in the Registrar-General's return for the week ending February 19th, that the annual death-rate was recently equal to 22.7 in Bombay, and 69.1 in Madras. Diarrhœal diseases caused 44 deaths in Madras, and "fever" mortality was very nearly twice as great in this city as in Bombay. According to the most recently received weekly returns, the annual death-rate averaged 26.2 per 1,000 persons estimated to be living in twenty of the largest European cities, and exceeded by 5.1 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 31.5, and exceeded the rate in the previous week; the 561 deaths included 18 from typhoid fever, and 12 from diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 21.7, and ranged from 17.5 in Christiania to 23.9 in Copenhagen; diphtheria and croup caused 5 deaths in Copenhagen, 3 in Stockholm, and 3 in Christiania; 7 deaths from whooping-cough occurred in Copenhagen, and 5 from scarlet fever in Stockholm. In Paris, the death-rate was equal to 24.9, and showed a decline from the rates in recent weeks, but exceeded by 5.6 the rate during the corresponding week in London; the deaths included 39 from diphtheria and croup, 32 from measles, and 20 from typhoid fever. The 185 deaths in Brussels, of which 10 resulted from diphtheria and croup, and 4 from measles, gave a rate of 22.1. No returns from Geneva have been received since the beginning of this year. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 22.2, the several rates ranging from 21.1 in Amsterdam, to 22.9 in Rotterdam; whooping-cough caused 3 deaths in Amsterdam and 2 in Rotterdam, and measles 3 in Amsterdam. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 25.9, and ranged from 19.6 and 22.1 in Dresden and Berlin, to 32.7 in Trieste and 34.0 in Buda-Pesth. Diphtheria caused the largest proportional mortality in Hamburg, Berlin, Dresden, and Munich; 10 deaths from typhoid fever were recorded in Hamburg; and 17 of small-pox, and 7 of scarlet fever in Buda-Pesth. The death-rate in three of the largest Italian cities averaged 27.8, and ranged from 25.8 in Turin to 33.7 in Venice; small-pox caused 19 deaths in Rome, and 2 both in Turin and Venice; and typhoid fever 8 in Rome, 4 in Turin, and 2 in Venice. In Cairo the death-rate was 39.1, and in Alexandria 30.9; diarrhœal diseases caused 82 deaths in Cairo and 29 in Alexandria; 18 deaths from typhoid fever were recorded in Cairo, and 4 from small-pox in Alexandria. In four of the largest American cities the recorded death-rate averaged 23.3, and ranged from 17.6 in Baltimore to 26.8 in New York. Diphtheria and croup caused 13 deaths in Brooklyn, and 14 in Philadelphia; 8 deaths from typhoid fever occurred in Philadelphia, and 3 from small-pox in New York.

PRESENTATION.—Mr. Thomas Simpson, Great Coggeshall, Essex, was on Friday evening last presented with a very handsome clock, and a pair of vases in gold and ormolu, by the members of the Good Samaritan Lodge 3,997 of Odd Fellows, as a slight token of acknowledgment of his services to the above lodge for the past twenty years. An illuminated address was also given him on the same occasion.

HOSPITAL AND DISPENSARY MANAGEMENT.

ROYAL FREE HOSPITAL.

THE fifty-ninth annual report presented at a meeting of the governors of the Royal Free Hospital, held last week, showed a satisfactory financial position; receipts from all sources during the year having amounted to the large sum of £20,083 9s. 11d. Of this sum, £15,341 12s. 4d. accrued from legacies. The other sources of income maintained their normal condition. The amounts received from the Metropolitan Hospital Sunday Fund and the Hospital Saturday Fund, were £885 8s. 4d., and £168 5s. 8d. respectively. They had been enabled to increase the amount of their Government stock to £20,704 6s. 10d. The statement of account showed a total expenditure of £11,121 10s. 4d., as against £11,085 12s. 4d. in 1885.

The number of out-patients who received advice and medicine was 22,191. It was stated that there were 39 students attending the hospital during the year, and a number of present and past students had received various important medical appointments. Mr. George Sturge's Samaritan Fund had been of great service during the year by enabling the committee to send patients to convalescent homes, and also to assist others on being discharged from the hospital.

GLASGOW LOCK HOSPITAL.

THE eighty-first annual report of this hospital shows 340 patients admitted during the year, of whom eighteen remained under treatment at the close of the year. Of those dismissed cured, a number had been restored to their relatives, or otherwise put in the way of reformation. The average cost of each patient dismissed cured was 35s. 5½d. The sum of £445 had been contributed by the public, and the total subscriptions showed a decrease of £19 on the previous year, though the capital fund had been increased by a legacy of £175, and a donation of £10 from the Industrial Exhibition.

ROYAL PUBLIC DISPENSARY, EDINBURGH.

THE annual meeting of the Royal Public Dispensary was held recently in the Council Chambers, the Lord Provost presiding. The annual report submitted by the Secretary stated that, during the year, 8,719 cases had been treated by the staff of the dispensary; 5,274 patients received advice at the dispensary; 2,649 were visited at their own homes, many cases being of a serious nature; 624 infants were vaccinated, and 172 women were attended at their confinements. The number of cases treated outside has considerably increased, being 799 more than in 1885. The number of general diseases has been in much the same proportion as usual, but infectious diseases have increased in the case of measles, the increase being from 53 to 305, and in scarlet fever from 5 to 44. It may be mentioned that the 8,719 cases treated is far from representing the work done by this institution, as however many times a case is visited or visits the dispensary, it is only counted as one. The total revenue for the year was £449 16s. 7d., of which £145 12s. 10d. was received in subscriptions and donations, and the expenditure amounted to £405 3s. 5d. The report was adopted, and the managers re-elected, the vacancy caused by the death of Mr. W. Brown, surgeon, being filled by the appointment of Sir Alexander Christison.

COUNTY AND CITY INFIRMARY, PERTH.

AT the annual meeting of the Perth Infirmary, held recently, the report stated that there were 532 patients treated in the institution, as against 530 in 1885; and the number of consultations at the dispensary was 1,200, as against 1,154 in 1885. The ordinary income was £2,361 14s. 5d., a decrease of over £86 on the previous year; and the ordinary expenditure £2,640, an increase of over £59.

CITY DISPENSARY.

AT the ninety-eighth annual meeting of this charity, the report submitted showed that the number of patients on the books on January 1st, 1886, was 1,256; admitted during the year, 13,868; discharged, cured, relieved, and ceased attendance, 13,853; died, 26; remaining on books, 1,245. A large number of patients were visited at their own homes. The report and balance-sheet were adopted. Mr. F. St. G. Mivart, in responding to a vote of thanks presented to the medical officers, remarked that the dispensary was continuing its good work, although the attendances last year were less than previously. This, however, he believed, was general. The fact was there was not so much illness abroad as there used to be, and this he attributed to the work carried on at such institutions as the City Dispensary, because they not only cured sickness, but told people how to avoid it in the future. Votes of thanks were presented to the various officers, and the chairman for presiding, and the proceedings terminated.

MEDICAL NEWS.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentleman passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received a certificate to practise on Thursday, February 17th, 1887.

Bindley, Robert Alfred, M.R.C.S., 86, Highbury Hill, N.
Dane, Robert, 86, Finchley Road, Hampstead.
I'Anson, William, M.D., Toronto, Homewood Avenue, Toronto.
Jamieson, Archibald, M.D.Kingston, Spark Street, Ontario, Canada.
Owen, John Vaughan, M.R.C.S., Llawrpenegoes, Machynlleth.
Ozzard, Albert Tronson, M.R.C.S., Southsea.
Woolfe, Robert Inglewood, Ardsley, near Wakefield.

MEDICAL VACANCIES.

The following vacancies are announced.

ASHTON-UNDER-LYNE DISTRICT INFIRMARY.—House-Surgeon. Salary, £80 per annum, with board, etc. Applications by March 8th to W. Bottomley, Esq., 120, Stamford Street, Ashton-under-Lyne.

BIRMINGHAM GENERAL HOSPITAL.—Two House-Surgeons. Applications by February 26th to Henry Fox, Esq., R.N., House-Governor.

CHELSEA HOSPITAL FOR WOMEN, Fulham Road, S.W.—Medical Officer. Salary, £60 per annum, with board, etc. Applications by March 12th to the Secretary.

ITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Pathologist. Applications by March 21st to the Secretary, 24, Finsbury Circus, E.C.

GLAMORGANSHIRE AND MONMOUTHSHIRE INFIRMARY AND DISPENSARY, Cardiff. Ophthalmic Surgeon. Applications by March 15th to the Secretary.

NFIRMARY FOR CONSUMPTION, Margaret Street, Cavendish Square, W.—Physician. Applications by March 12th to the Secretary.

LISTOWEL UNION.—Medical Officer, Ballylonford Dispensary. Salary £120 per annum, and fees. Applications to Mr. David O'Sullivan, Honorary Secretary, Rushy Park. Election on March 1st.

NARBERTH UNION.—Medical Officer for District No. 4. Salary £45, with extra fees. Applications by March 19th to J. Thomas, Esq.

NORTH-WEST LONDON HOSPITAL, Kentish Town Road, N.W.—Assistant-Physician. Applications by March 10th to the Secretary.

OWENS COLLEGE, MANCHESTER. — Senior Demonstrator in Physiology. Stipend, £150 per annum. Applications by March 21st to the Registrar.

PADDINGTON WORKHOUSE INFIRMARY.—Assistant Medical Officer and Dispenser. Salary, £100 per annum, with board, etc. Applications by March 5th to H. F. Aveling, Esq.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY.—Senior House-Surgeon. Salary, £100 per annum, with board, etc. Applications by February 28th to R. F. Easterby, Esq., Fishergate, Preston.

QUEEN'S JUBILEE HOSPITAL, Gloucester Terrace, Queen's Gate, S.W.—Ophthalmic Surgeon. Applications by March 8th to the Secretary.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road, E.C.—Junior House Physician. Salary, £50 per annum, with board, etc. Applications by February 26th to the Secretary.

SALFORD AND PENDLETON ROYAL HOSPITAL. — District Surgeon. Salary, £80 per annum, with board, etc. Applications by February 28th to the Secretary.

WEST HERTS INFIRMARY, Hemel Hempstead.—House Surgeon and Dispenser. Salary £100 per annum, with board, etc. Applications by March 2nd to the Secretary.

WORCESTER AMALGAMATED FRIENDLY SOCIETIES' MEDICAL ASSOCIATION.—Assistant Medical Officer. Application by March 3rd to W. B. Gibson, Esq., Lansdowne Street, Worcester.

MEDICAL APPOINTMENTS.

GRENFELL, Henry Osborne, M.R.C.S., L.R.C.P.Lond., L.S.A.Lond., appointed Assistant Medical Officer to the Wandsworth Union Infirmary, *vice* H. T. Corbould, resigned.

HILLIER, T. Ernest, M.A., M.B.Cantab., M.R.C.S., appointed Resident House-Surgeon to the Tunbridge Wells General Hospital, *vice* Christopher Vise, M.D., resigned.

HOWNSELL, F. C. W., M.R.C.S., L.S.A., appointed Resident Clinical Assistant to the St. Marylebone Infirmary, Notting Hill.

MENZIES, W. F., M.B., C.M.Edin., appointed Assistant Medical Officer to the County Asylum, Rainhill, Lancashire.

O'BRIEN, P. M., M.R.C.S., appointed Resident Medical Officer to the North London Hospital for Consumption, Hampstead.

SNOW, L. M., M.R.C.S., L.R.C.P., L.S.A., appointed Medical Officer and Public Vaccinator to the Fifth District of the East Ashford Union, and to the Sellindge District of the Elham Union, *vice* A. Charlton, deceased.

SYERS, W. Henry, M.D., M.R.C.S., appointed Assistant-Physician and Registrar to the Hospital for Epilepsy and Paralysis, and other Diseases of the Nervous System, Regent's Park.

THOM, G., M.R.C.S., L.S.A., appointed Honorary Surgeon to the Royal Albert Hospital, Devonport, *vice* J. May, jun., M.R.C.S., resigned.

WALDO, F. J., M.A., M.D.Cantab., M.R.C.S.Eng., appointed Assistant-Physician to the Chelsea Hospital for Women.

WHEATLY, A. W., M.B., S.Sc.C.Durham, M.R.C.S.Eng., appointed Surgical Registrar and Anæsthetist to the National Orthopædic Hospital.

WILLOUGHBY, E. F., M.B.Lond., appointed Chief Medical Officer to the Sanitary Assurance Association, *vice* Dr. J. Stevenson, resigned.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—The following is a list of the officers and other members of Council of the Royal Medical and Chirurgical Society of London, for the year 1887-88, to be balloted for at the Annual General Meeting on March 3rd: *As President:* George David Pollock. *As Vice-Presidents:* *William Howship Dickinson, M.D.; *William Ogle, M.D.; *Arthur Edward Durham; *Thomas Smith. *As Treasurers:* *Charles John Hare, M.D.; Timothy Holmes. *As Secretaries:* Walter Butler Cheadle, M.D.; Howard Marsh. *As Librarians:* Wilson Fox, M.D., F.R.S.; John Whitaker Hulke, F.R.S. *As other Members of Council:* *John Cavafy, M.D.; *Sir Thomas Crawford, K.C.B., M.D.; *Joseph Frank Payne, M.D.; *Richard Douglas Powell, M.D.; *Arthur Ernest Sansom, M.D.; Henry Cooper Rose, M.D.; Marcus Beck; *Henry Trentham Butlin; Jeremiah McCarthy; *Charles Sissmore Tomes, F.R.S. Those gentlemen to whose names an asterisk is prefixed were not on the Council, or did not fill the same office last year.

THE Mayor of Lancaster has (upon the motion of the retiring President) been elected President of the Lancaster Infirmary for the ensuing year.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—MEDICAL SOCIETY OF LONDON. Clinical Evening. Dr. Robinson: Excision of Hip in Adult. Mr. Lennox Browne: 1. Case of Excision of Half the Larynx; 2. "Faucial and Pharyngeal" Tuberculosis. Mr. Pickering Pick: Case of Displacement of Head of Femur after Fever. Mr. Bourne: Case of Ichthyosis Hystrix. Mr. Black: Case of Trephining for supposed Abscess of Brain.

TUESDAY.—ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M. Annual Meeting. Address by President. Election of Officers and Council.

WEDNESDAY.—OBSTETRICAL SOCIETY OF LONDON, 8 P.M. Specimens will be shown. The President (Dr. John Williams) will deliver the Inaugural Address. Adjourned discussion on Dr. Gibbons's paper on a Case of Unilateral Galactorrhœa. Dr. Champneys: On the Separation of the Placenta.

THURSDAY.—HARVEIAN SOCIETY OF LONDON, 8.30 P.M. Mr. Mitchell Banks: Extirpation of the Axillary Glands; A necessary accompaniment of Removal of the Breast for Cancer. Dr. W. H. Day: Habitual Constipation in Children, and the Methods of Treatment.

PATHOLOGICAL SOCIETY OF LONDON, 8.30 P.M. Mr. Godlee: Adeno-sarcoma of Tongue with Calcifying Nodule in Centre. Mr. G. R. Turner: Alveolar Sarcoma growing from the Lumbar Spine. Dr. N. Moore: Malarial Diseases of Liver and Spleen. Mr. Lawson Tait: On the Pathology of Extra-uterine Pregnancy. Mr. Barwell: Cirsoid Aneurysm of whole of Left Upper Extremity. Dr. Price: Cholesteatoma at Base of Brain. Mr. Fenwick: Metastatic Carcinoma of Prostate. Mr. A. Doran: Fibroma of the Ovarian Ligament. Card Specimens.—Mr. Gould: 1. Portion of Cervical Vertebræ Expectorated in a Case of Retro-pharyngeal Abscess; 2. Old Excision of Knee-joint. Mr. D'Arcy Power: A Rhinolith. Mr. Shattock: Colles's Fracture, with Forward Displacement of Lower Fragment. Mr. Doran: Horny Growth from the Neck.

FRIDAY.—WEST LONDON MEDICO-CHIRURGICAL SOCIETY, 8 P.M. Card Specimens—Mr. H. Percy Dunn: 1. An Aneurysm of the Thoracic, extending into the Abdominal, Aorta, the Lower Portion of the Sac of which is formed by the Left Psoas Muscle; 2. Epithelioma of the Lower Third of the Œsophagus and of the Cardiac Orifice of the Stomach, which Perforated the Sac of the Pericardium. Dr. P. S. Abraham: Microscopical Sections of the Cervical Cord and Sympathetic Ganglia in a Case of Exophthalmic Goitre. Living Specimens.—Dr. Scanes Spicer: A Series of Cases of Diseases of the Naso-pharynx. Papers—Dr. J. B. Ball: Nocturnal Incontinence of Urine in Children. Mr. R. Fitzroy Benham: Impacted Urethral Calculus, followed by Urinary Abscess; Perineal Section; Complete Recovery.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement.

MARRIAGE.

BARHAM—WINTERBOTHAM.—February 15th, at St. Mary's Church, Bridgwater, by the Rev. Rayner Winterbotham, M.A., incumbent of Trinity, Deane Bridge, Edinburgh, uncle of the bride, assisted by the Rev. W. G. Fitzgerald, vicar, Arnold, eldest son of Alfred G. Barham, to Rose Clinton, second daughter of W. L. Winterbotham, M.B., both of Bridgwater.

DEATHS.

FORSYTH.—On February 18th, at 12, Park Place, Maze Hill, Greenwich, Katherine, wife of Alexander Forsyth, M.D.

LINDSAY.—On February 21st, at Mickleover, Derby, J. Wallace Lindsay, aged 22, eldest son of J. Murray Lindsay, M.D.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY.....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's—1 30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy s (Ophthalmic Department); Royal Westminster Ophthal. mic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M: North-west London; Chelsea Hospital for Women.

FRIDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY.....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9: Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., S. Eye, M. Th., 2.30; Ear, M., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medica Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

QUERIES.

WILLIAM OSBORN, M.D., 1791.

D.V., who possesses an old engraving dated April, 1791, of a William Osborn, M.D., wishes for information as to the nature of Dr. Osborn's claims to fame.

TREATMENT OF PYROSIS.

INQUIRER asks for suggestions for the treatment of the following case, in which all ordinary remedies have been tried without avail. The patient, an old lady of 80 years, suffers from pyrosis in its most aggravated form, worst at nights, when she retires to bed, when large quantities of slightly acid fluid are eructated. There is little or no pain over the region of the stomach, and there are no signs of organic disease of that organ. The patient also suffers from rheumatic gout, and when the pain is felt in the joints more than usual, the waterbrash becomes less marked, but returns on the cessation of the rheumatic trouble.

LIQ. ARSENII ET HYDRARGYRI IODIDI, B.P.

INQUIRER writes: The dose of liq. arsenii et hydrargyri iodidi, in the *British Pharmacopœia* of 1885, is given as 10-30 minims. Roughly speaking, this represents half a grain of iodide of arsenic to each drachm, and thus, were the maximum dose prescribed, the patient would take a quarter of a grain, whereas, under the head of Iodide of Arsenic, I find only one-thirtieth of a grain given Would some of your numerous readers say what their opinion of the case is?

CONTRACTS WITH BOYS' SCHOOLS.

JOANNES writes: I am asked by the principal of a grammar school to say at what sum a head a year I will attend the boys. The school is situate about 500 yards from my house; contains about forty boarders, mostly sons of clergy. The terms are not high. I think about £40 per annum. Will any brother practitioner suggest what is fair to the school and to myself?

RELATIVE MERITS OF SALICYLATES OF SODA AND POTASH.

DR. OTHO R. TRAVERS asks: Why is salicylate of soda used in rheumatism, etc., instead of salicylate of potash? If one had to treat a case of rheumatism with an alkali, one would use potash, not soda, so how has it come to pass that the soda is used? In conversation with a druggist the other day, I was informed that the comparatively high price of potass. salicyl. is only due to the small demand for it. I always use the potash salt, and certainly think I get better results.

ANSWERS.

A MEMBER has been good enough to point out that the reference sought by Mr. Horne (JOURNAL, February 5th, p. 313) is to an address by Mr. Jonathan Hutchinson, F.R.S. (See JOURNAL, October 5th, 1885, p. 631, second column.)

MR. JOHN HEDLEY.—All information as to the International Medical Congress at Washington can be obtained of the Secretary-General, Dr. J. B. Hamilton, Supervising Surgeon-General of the United States Marine Hospital Service, Washington.

NOTES, LETTERS, ETC.

J. R. REID, M.D., LL.D., etc., writes to say that at the meeting at the Margaret Street Infirmary for Consumption, held on February 16th, of which a notice appeared in the JOURNAL of February 19th, the result of the voting was a majority of four and not three as stated.

JUBILEE M.D'S.

DR. DONOVAN (Birmingham) desires that the Universities and Colleges should be invited in strong terms to grant degrees and diplomas to men already on the *Register* during the jubilee year, and as it will not be, to say the least of it, probable that a sovereign jubilee will occur for another century, the act of grace could not be taken as other than an exceptional act in honour of a great national rejoicing.

UNQUALIFIED ASSISTANTS.

PHYSICIAN writes: In reference to the remarks by Mr. Bingham under the above heading in the JOURNAL of February 12th, I must take exception to the description he gives of the method of obtaining the L.M. of the Coombe Hospital, Dublin. His assertion that a fortnight's attendance at the hospital and the payment of the fee will entitle a student to the L.M. is quite misleading. Before I obtained the qualification, I had to attend the hospital for six months, take charge of thirty cases of labour, pay the fee, and then pass a searching examination.

I quite agree with the object of Mr. Bingham's letter, which I assume is to show the great injustice which is done to qualified men by allowing men without any diploma—or such a diploma as the L.M.C.H.Dub.—to engage in practice, and palm themselves off on the public as properly qualified "doctors." There have been some very touching letters from unqualified assistants appearing in the various medical journals lately, saying what a shame it would be to turn them off now after so many years' hard work with no prospect before them but the workhouse. It does seem very hard lines on them, but still I do not see why men who have studied, paid fees, passed examinations, obtained diplomas, and finally registered, should not be protected. If there is anything to be done for the unqualified assistants (whose days, I hope, are numbered), it should be done by those practitioners who have employed them, and who are more guilty of dishonesty and of receiving the public money under false pretences than the unqualified assistants themselves. I cannot understand why qualified men, who have never employed unqualified assistants, but who, on the contrary, have been injured by them, should be asked to contribute to their support by allowing them to be registered or even acknowledged.

I hope our representatives on the General Medical Council will not forget their promise, but take some steps to abolish unqualified assistants. Out of pity the Medical Council might allow them two years either to qualify or turn out.

UNQUALIFIED writes: "L.R.C.P." ventures to assert a great deal more than he can corroborate. I beg leave to inform him that unqualified aid is largely used by solicitors and chemists. I might also remind him that stupidity is not entirely confined to the unqualified. Do qualified men never make mistakes? I can cite two, out of many known to me, of such gross stupidity that his

"evolution" case is completely shadowed. 1. A L.R.C.P. mistook a long forceps case for one of extra-uterine fœtation. 2. A L.R.C.P. advised a woman suffering from procidentia uteri to buy a truss, under the impression she was suffering from hernia.

Treatment of Obstinate Constipation.

Dr. William Jelly writes: If "O. R. T." will adopt the following simple plan I feel sure that neither he nor his patient will be disappointed. At all events, I have never failed in a single case, after many years experience abroad or at home. 1st. If the bowel-retention is prolonged for six or eight days at a time, let him give her ʒii of pure glycerine, well beaten up in a wineglass, with ʒif of ol. ricini, forming an opaque gelatinous mass, adding thereto a table-spoonful or two of milk. This mixture may be taken at any hour; in from three to five hours there will be one or two copious dejections. 2nd. The following day one teaspoonful of pure glycerine should be taken during each of the three meals, in whatever liquid is used on these occasions, such as tea, coffee, milk, or water, etc.; at the same time massage or kneading (not friction) should be carried out by a thoroughly healthy young masseuse or kneader (but she must have no kinship with the patient), and the kneading must be suspended during the catamenial periods of both patient and masseuse. Should the patient be anæmic, and have little relish for food, she should take a teaspoonful of Easton's syrup, in a wineglassful of water, after each meal. She should also have full, simple diet—oatmeal porridge and milk once or twice a day, whole wheat-meal bread, vegetables, and fruit, with daily exercise in the open air. Of course the above advice is only for simple or hereditary constipation from atony of the intestinal tube, and not for any grave constitutional or local complication.

Chancre of Lip.

Dr. P. Caldwell Smith (Motherwell, N.B.) writes: The interesting case of primary syphilis, reported by Mr. Sheild, in the Journal of February 5th, has recalled to my mind a similar case which I had about three years ago. My patient was a young man, a miner, about 21 years of age, and he consulted me regarding a growth which had appeared on his upper lip. The growth had appeared about a fortnight before he consulted me, and was increasing in size. The description so clearly given by Mr. Sheild applies equally to my case, the size, colour, and involvement of glands being almost identical. The young man was very much alarmed when I told him I thought he had contracted syphilis, as he was quite innocent of ever having exposed himself to infection. To satisfy him as regards the nature of his disease, I sent him to the Western Infirmary, Glasgow, and there he was examined by Dr. Crawford Renton, who confirmed my diagnosis. The treatment was simple and successful. The chancre was dusted with iodoform, and covered with dry lint, and the patient confined to the house. Mercurials were given internally, and, in the course of six weeks, the chancre healed up completely, leaving a depressed cicatrix. Before it had completely healed, other syphilitic symptoms appeared—sore-throat, rash, and loss of hair being marked; but the mercurial treatment was continued, and these external manifestations disappeared in about two months after their first appearance.

It may be interesting to state that afterwards I discovered the source of infection. It seems that the patient's brother was a private in the Scots Guards, and had returned home on furlough for a few days. He was suffering from syphilis, and the brother, before becoming aware of the fact, used his toothbrush, but only used it once. The chancre appeared about fourteen days after this, as a small pimple, and continued to increase until it attained the size of a florin.

Removal of Scalp.

Dr. W. Wylie (Skipton) writes: In connection with Mr. C. R. Owen's case, described in the Journal of February 5th, the following may be interesting. A girl under 20 years of age, contrary to the rules of the factory in which she was employed, stooped to pick up a reel of cotton which had fallen below a spindle, revolving over 160 times per minute. At that time (ten years ago) the hair was worn chignon-fashion, and consequently caught the shaft, which completely removed the scalp and muscle from the mastoid process of the temporal and the outer part of the superior curved line of the occipital bone to the insertion of the muscle above the eyebrows. The pericranium was left bare over its whole surface, but little hæmorrhage had taken place when I saw her two hours after the accident. The parts torn off were tightly bound round the spindle, and were with difficulty removed from their abnormal position. She had brandy administered by those about her before I saw her, but the shock to the system was very considerable. My first idea was to replace the parts on the cranium, and to stitch them in position, but they had shrunk, and were impregnated with grease and grit, which caused me to give up the attempt. I dressed the parts with lint steeped in carbolic oil (1 in 40) and ordered a little brandy, beef-tea, etc.

In the evening I found her flushed, and suffering from considerable pain in the parts; pulse 102; and, to make matters worse, she could not lie down, as the parts were so painful when they came in contact with the pillow or cushion. The discharge from the wound was very considerable, the pulse quick, and the temperature high. I ordered a solution of boracic acid and glycerine, with water, which seemed to suit the parts much better than the carbolic oil.

Healthy granulations sprang up, and I tried skin-grafting, with the usual success. Many were washed off by the pus; some were pulled away in the dressings; still some remained, and several islands of healthy appearance were to be found over the pericranium. About three months after the accident I lost sight of her, but since then I have heard that the parts have healed over as well as can be expected, considering the loss of tissue involved.

Errata.—Dr. Ruxton has called attention to an error of punctuation in his letter published in the Journal of February 12th. At p. 355, instead of "I became more keen in puncturing the liver's capsule. When I had little or no suspicion of an abscess....." should read "I became more keen in puncturing the liver's capsule, when I had no suspicion of an abscess."—The Licence of Midwifery of the Combe Lying-in Hospital, Dublin, referred to at p. 353 of the Journal of February 12th, should have been expressed by the letters L.M.C.H.(Dub.), not L.M.Ch.(Dub.), as there printed.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Rentoul, Liverpool; Dr. Parsons, Dover; Mr. D'Arcy Power, London; Dr. Grant Bey, Cairo; Mr. T. A. Martin, Kingston; Mr. T. Wheeler, Bexley; Mr. E. A. Appleton, Coggeshall; Dr. Handfield Jones, London; Dr. Willoughby, London; Dr. E. Lane, London; Mr. Lawson Tait, Birmingham; Mr. W. Howard Cory, Bristol; Dr. J. R. Day, London; Mr. T. Browning, Manchester; Dr. C. W. Suckling, Birmingham; Dr. W. R. Dambrill Davies, Chelford; Dr. C. B. Gunn, Peebles; Mr. J. H. Elliott, Dublin; Dr. C. F. Moore, Dublin; Mr. W. Stamford, Tunbridge Wells; Mr. A. F. Hawkins, Birmingham; Mr. J. T. Knight, Carlton; Messrs. Rigard and Chapoteaut, Paris; Col. F. C. Hughes-Hallett, M.P., London; The Secretary of the Hospital for Epilepsy and Paralysis, London; Dr. E. Drummond, Rome; Mr. A. W. Nankivell, Chatham; Mr. W. Watson Cheyne, London; Mr. J. R. Reid, London; Mr. R. Wells, London; Dr. Gubb, London; Professor H. M. Ward, Staines; Dr. T. J. Verrall, Brighton; Mr. P. T. Duncan, Croydon; Mr. E. M. Kelly, Nottingham; Mr. J. Whitehouse, Sunderland; Mr. J. Hedley, Middlesborough; Mr. C. H. Wise, Walthamstow; Messrs. Holt, Laurie and Co., London; The Secretary of the Society of Medical Officers of Health, London; Dr. J. Rogers, London; Dr. Jacob, Leeds; Mr. J. Willing, junior, London; Mr. S. D. Wells, Plymouth; Mr. S. E. de Lisle, Baldock; Dr. G. E. Shuttleworth, Lancaster; Mr. J. Oliver, London; The Secretary of the Harveian Society, London; Dr. J. F. Payne, London; The Secretary of the British Medical Temperance Association, London; Mr. T. Wells, London; Mr. G. F. Blake, Dublin; Dr. C. D. Stewart, Burnvale; Dr. Laidlaw Purves, London; Dr. Weir Mitchell, Philadelphia; Mr. W. H. Hughes, London; Mr. S. Laurence, Oban; Dr. Hunter, Edinburgh; Dr. Warner, London; Mr. W. B. Hemsley, Kew; Dr. McBride, Edinburgh; Mr. Stephenson, Beverley; Our Paris Correspondent; Dr. J. M. Booth, Aberdeen; Dr. R. Barnes, London; Dr. Tatham, Salford; Mr. C. D. Palmer, Buxton; Mr. W. Pye, London; Messrs. Merton and Co., London; Dr. F. P. Atkinson, Surbiton; Mr. T. W. L. Beales, Great Yarmouth; Dr. Pozzi, Paris; Dr. G. P. Rugg, London; Dr. Norman Kerr, London; Mr. C. W. S. Barrett, Hinckley; Mr. G. A. Wright, Manchester; Dr. Graham, Middleton, near Manchester; Mr. C. Osburne, Church Stretton; Dr. W. R. Parker, Liverpool; Dr. E. D. Mapother, Dublin; The Secretary of the Obstetrical Society, London; Mr. Craske, London; Dr. M. D. Makuna, Treherbert; Mr. S. Snell, Sheffield; Mr. C. Harris, Whitehaven; The Honorary Secretary of the Medical Society, London; Mr. S. Wilson, Hackney; Dr. J. W. Moore, Dublin; Dr. C. E. Abbott, Braintree; Messrs. J. Robertson and Co., Edinburgh; Mr. A. de St. Dalmas, Leicester; Dr. Peart, North Shields; Dr. W. Macewen, Glasgow; Mr. W. A. Michie, Cove, Aberdeen; Dr. R. Wade Savage, London; Dr. Arlidge, Stoke-on-Trent; Dr. J. L. Steven, Glasgow; Mr. G. Thom, Stoke, Devonport; Dr. A. W. Wheatley, London; Dr. S. Evans, Harwich; B. B.; Miss A. Whyte, London; Dr. Coghill, Ventnor; Mr. J. M. Jones, Hull; The Honorary Secretary of the Jacob Testimonial Fund, Dublin; Mr. T. E. Jones, Llanrwst; Dr. Fly Smith, London; Mr. A. Sutcliffe, Burnley; Dr. S. K. Cotter, Dorchester; Dr. Uhthoff, Brighton; Mr. G. J. W. Stoney, Cloughjordan; Messrs. Sampson Low and Co., London; Dr. Mickle, London; Messrs. Newbery and Son, London; The Secretary of the City of London Institute, London; Mr. W. Cholmeley, London; Mr. Major Greenwood, London; Mr. H. Watts, London; Mr. E. East, London; Messrs. Steel and Jones, London; Dr. B. Thornton, Margate; Dr. S. Coupland, London, etc.

BOOKS, etc., RECEIVED.

Pulmonary Consumption. By James Weaver, M.D., L.R.C.P. London: J. and A. Churchill. 1887.

Atlas of Venereal Diseases. By P. H. Maclaren, M.D., F.R.C.S. (Illustrated. Edinburgh: Y. J. Pentland. 1887.

The Organic Materia Medica of the British Pharmacopœia. By W. Southall F.L.S. Fourth Edition. London: J. and A. Churchill. 1887.

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REMARKS
ON THE CONDUCTING PATHS BETWEEN THE CORTEX OF THE BRAIN AND THE LOWER CENTRES IN RELATION TO PHYSIOLOGY AND PATHOLOGY.

By D. J. HAMILTON, M.B., F.R.C.S.Ed., F.R.S.E.,
Professor of Pathological Anatomy, University of Aberdeen.

One of the primary points to be considered in tracing the connection between the cortical so-called centres and those lower down, is the course and attachments of the fibres entering into the structure of the corpus callosum.

It is, I think, almost universally believed at the present day that this body is a commissure; that anatomically it unites equivalent areas in the two cerebral hemispheres, and that physiologically it serves to bring these into functional harmony. Some years ago, when working at the pathology of the brain, I came upon certain appearances which tended to shake my belief in the commissural theory, and which led to an inquiry, part of the results of which are embodied in this paper. The appearances to which I refer are to be seen in the brain of any animal possessing a corpus callosum, when it has been hardened in Müller's fluid, but best in those in which this body is of large size, as in man. It was in man that I first noticed the appearance, but I found afterwards that it is common to all callosal mammals. The Müller's fluid in the case of the human brain, or in any brain of large bulk, must be injected from the large vessels at the base, in order to cause it to penetrate properly.

If such a brain, when completely hardened, be simply cut into a series of perpendicular transverse segments, each of about half an inch in thickness, the following can be readily seen with the naked eye or a simple lens:

Coming out of the corpus callosum, at each side, is a large arched mass of fibres, which, leaving the corpus callosum and continuous with it, turns upwards, outwards, and downwards, in the centrum ovale. The arched mass varies somewhat in shape at different parts of the brain. Thus, anteriorly it represents an almost complete semicircle, while posteriorly it becomes more pointed. The fibres entering into the composition of the arched mass subsequently pass into the inner and outer capsules. The greater bulk of them enter the inner capsule, and in its anterior limb this mass of white matter is almost entirely composed of them, while a considerable portion also seem to run into the outer capsule, constituting the inner of the two layers of which it consists. Their further course and attachments to underlying parts will be considered afterwards.

This arched mass is very large, quite corresponding in bulk to half of that of the corpus callosum, and, in order to get at once at the gist of the arguments I intend using to explain its nature, I shall start with the postulate that it is mainly constituted of callosal fibres which have arisen in the opposite cortex, have crossed in the corpus callosum, and, instead of turning upwards to become attached to points in the opposite cortex equivalent to those from which they have sprung, are now turning downwards into the two capsules, to become subsequently united with the nasal and other ganglia presently to be enumerated.

In a former paper (*Journal of Anatomy and Physiology*) I have named this mass of fibres the crossed callosal tract; and, as all my work since then has tended fully to bear out the view I then entertained as to its nature, I propose still to retain this nomenclature.

The great difficulties heretofore experienced in investigating the nerve-centres have been, first, the want of a method of preparation by which their gross anatomy could be thoroughly sifted and exposed; and, secondly, of a method by which bundles of nerve-fibres could be distinctly traced or their relationship to nerve-cells indicated. In the endeavour to collect anything like reliable data from the records of lesions of the human brain, it becomes abundantly evident that until some much more efficient method of exactly localising lesions be adopted than those generally employed at the present day, little can possibly be added to the knowledge we already possess. Our conception of the functions of some of the most important parts of the central nervous system is as yet so obscure, and, in many cases, so contradictory, that it seems perfectly clear we must be erring in our notions of their physiological and structural significance.

Before continuing the attempt to demonstrate the functions of these obscure regions by the purely empirical means that have been employed of late years, it would, to say the least of it, be desirable to know something about their connections. Would it be considered a scientific method to cut down, for instance, upon the tissues of the axilla, to irritate or partially excise these, and to find that certain phenomena ensued in the upper extremity without, in the first place, endeavouring to differentiate the nerve-fibres of this region, and to display their connections with the parts below? In our present state of knowledge of the construction of the central nervous system we are in a like position. The greater part of the human brain is in fact a *terra incognita*, and I feel convinced that the prevailing conceptions of its mechanism are utterly erroneous. We have attempted far too wide generalisations in times gone by, and the idea of founding a system of psychology upon data such as we are possessed of, certainly to anyone who knows anything about the matter, savours of the absurd.

The methods of preparation I now employ for demonstrating the gross connections of the organ are, with certain modifications, essentially the same as the "gelatine-potash" process I have elsewhere described. My great difficulty in employing Weigert's hæmatoxylene copper stain for medullated fibres has been that of combining it with the method of cutting large preparations in the freezing microtome. I have now completely succeeded in doing so, and have reduced this most serviceable process to great simplicity. Space will not allow of me entering into these technicalities at present, but I intend before long to publish a full account of them.

Could one combine with Weigert's stain for nerve-fibres the aniline-black stain of Sankey and Lewis for nerve-cells, nothing better could be desired as a means of demonstrating the relationship of the conducting nerve-fibres to them. There is this difficulty, however, in the way of complete success, namely, that the aniline-black dye will give its proper reaction only when the brain is perfectly fresh, whereas the hæmatoxylene will act on the nerve-medulla only when it has been hardened in a chrome salt. I have, however, already succeeded in partially combining the two, and see no insuperable difficulty to fully accomplishing it.

If what I have postulated regarding the crossed callosal tract be true, namely, that it represents the fibres derived from the opposite cortex, which have passed over in the corpus callosum, and which are now turning down to the two capsules, the following data ought to admit of verification.

1. The crossed callosal tract should be capable of being dissected out;
2. It ought to be co-extensive with the corpus callosum; and,
3. It should be possible to trace the fibres microscopically as they turn downwards.

1. Foville long ago showed that an arched ridge of fibres could be exposed by simple dissection turning downwards at each side of the corpus callosum, and he has figured appearances in his atlas which, allowing for a certain amount of artistic embellishment, substantially represent what actually exists. I lately exhibited to the Royal Society of Edinburgh a brain previously hardened in Müller's fluid, in which this dissection had been made, and in which the arcuate mass of fibres was distinctly displayed. At that meeting I further showed this arcuate mass in horizontal gelatine-potash preparations of the centrum ovale, as clearly mapped out as if it had been drawn with a pencil. Its fibres have a more or less transverse direction, totally different from that of the fibres descending through the medullary white substance from the surrounding cortex.

2. That the crossed callosal tract is coextensive with the corpus callosum can be proved by dissecting it out, or by examination of it in a horizontal gelatine-potash preparation.

3. It is only to be expected, of course, that the fibres should be capable of being traced microscopically, curving downwards from the corpus callosum. This is not so easily accomplished as might be supposed, owing in great part to the fibres running in different planes throughout their course from their points of origin, down to those of their termination.

It has been asserted by Meynert that he was able to trace a single fibre from the cortex of one side through the corpus callosum into the cortex of the opposite side. Anyone who has given even a minor amount of attention to the subject will have discovered that this must be a gross misstatement. The individual fibres diverge and run so obliquely after crossing, that it is utterly out of the question, even

in small animals, to think of tracing an axis-cylinder continuously from side to side in a single section.

If the brain be cut perpendicularly in an oblique antero-posterior direction, however, a very considerable part of the course of the bundles of nerve-fibres can be followed, and the most essential part, namely, from about the middle line down to the two capsules, can be traced with precision. Various methods may be employed for staining the fibres as they turn downwards, but that which I have found by far the best is Weigert's hæmatoxylene-stain modified as previously indicated. By this means, it can be demonstrated that the fibres coming out of the corpus callosum all, I believe, turn downwards to the outer and inner capsules, instead of up to the cortex, as generally asserted. In no case have I been able to see a single bundle of fibres run upwards after emerging, but the whole mass of fibres seems, after having crossed, to turn downwards into the two capsules, and to form the greater part of their bulk.

In a late number of *Brain*, Dr. Beevor has taken exception to this view as originally enunciated by me in a communication to the Royal Society, and in papers which I subsequently published in the *Journal of Anatomy*, in *Brain*, and elsewhere. He says that, in the marmoset, he has been unable to see the fibres turning down in the manner I have described, and gives a drawing which he considers demonstrates that my view is wrong, and that the old idea of the fibres passing from cortex to cortex is correct.[1] He asserts that this drawing is not a diagrammatic scheme, but an actual representation of a preparation in his possession. He further states that he has made oblique sections as I had directed, but still has been unable to see what I had described.

When I read this criticism, I felt certain of two things: first, that Dr. Beevor had not examined preparations cut in the oblique direction I have recommended; and, secondly, that the drawing above referred to was not an actual representation of the preparation from which it was said to have been taken. If nerve-fibres of the corpus callosum, when magnified, as he says they were, have the thickness of the nerve-fibres depicted in this illustration, they certainly differ from any callosal nerve-fibres which it has been my good fortune as yet to meet with. I was fully convinced that what he had endeavoured to depict consisted in reality of the fibres passing into the corpus callosum, and that he had entirely failed to see, as had happened to so many before him, those which were issuing from it, owing to his having cut the brain transversely, instead of obliquely. Those entering the body can be readily distinguished from those leaving it by the fact that, while the former are spread out in a regular fan-shaped manner, each fibre distinct from its neighbour, the latter are all aggregated into bundles, from the fact of their having been condensed while passing through the corpus callosum. In justice to Dr. Beevor's statements, however, I resolved to adopt a course which he well might have followed before being so perfectly sure that I was in error, namely, to see his preparations for myself, and to hear his explanation of them by word of mouth. I am constantly being reminded by so-called critics that they are still sceptical of my statements, and the most ardent are those who have never taken the trouble to examine my work, nor really to work at the subject for themselves. The matter is not one which can be settled in an off-hand manner, but requires the most careful scrutiny. If it had been easy to demonstrate what I have recorded, it would long ago have been done. I have never yet failed, however, to convince an unbiassed and competent person that every statement I have made in regard to the corpus callosum is substantiated and fully borne out by the preparations which I possess, when that person has done me the honour of examining the facts for himself.

My anticipations in regard to the basis on which Dr. Beevor's criticism was founded were more than realised. I emphatically state that the drawing of the corpus callosum given in his critique in *Brain* is very far from being an actual representation of the preparation from which it was taken. The continuity of the fibres is not such as that he depicts, for immediately at the outer margin of the corpus callosum there is a break in the preparation caused by a large number of fibres having been cut off abruptly, which is not represented in the drawing. The fibres so cut across constitute those I have described as turning downwards. They have been severed, because they do not lie in the same plane as those entering the body. I further found that the oblique preparations he had been examining had been cut in an entirely wrong direction, in a direction which was calculated to divide the crossed callosal fibres, instead of rendering them more apparent. As I have elsewhere stated, he has not followed the directions I have so explicitly given in various of my published papers, and until he does so it is useless to argue the point. If he will harden the human brain, or that, say, of a sheep, by the method I have recommended, and cut this perpendicularly in an oblique antero-posterior direction, he will see what I have described. If he fails to do this, he will still continue in unbelief. I have over and over again exhibited preparations before competent judges, stained by my modification of Weigert's process with the invariable result that they have confessed to the downward course of the crossed callosal fibres being indisputable. Individual axis-cylinders it is impossible to trace throughout their entire course, as I have already indicated, but the continuity of individual bundles between the corpus callosum and the capsules can be demonstrated in all the mammals I have examined. The great drawback to tracing the course of the crossed callosal fibres, I believe, rests on the fact that, after crossing, those which lie anteriorly run obliquely backwards, while those which lie posteriorly run obliquely forwards, the point to which they all tend to converge being the knee of the inner capsule.

It consequently happens that, cut the brain in whatever plane you choose, the fibres will be divided at some point. In a completely transverse perpendicular section the crossed callosal fibres are usually divided, and, being represented only by small fragments, are very apt to be overlooked in the dense mass of nerve-medulla lying in their neighbourhood.

Such being the course of the fibres as they issue from the corpus callosum, let us next consider where those which enter it are derived from.

Of late years a good deal has been written of the most interesting plexus of fibres which exists in the cortex of the cerebellum and cerebrum, by Exner, Weigert, Butzke, Gerlach, Rindfleisch, Boll, and others. It seems likely that since the discovery of these fine cortical plexuses our whole notions, as suggested by Hill, of what are known as nerve-centres, and of the communication which exists between nerve cells and fibres, will shortly be revolutionised. The plexuses to which I refer can only be seen when certain methods of staining are employed. Exner, who is generally regarded as having discovered the plexus in the cerebral cortex, employed perosmic acid and ammonia, but since then (1881) the reagent used for the purpose of demonstrating it has almost exclusively been Weigert's hæmatoxylene stain previously referred to. This brings out an appearance in the cortex, both of cerebrum and cerebellum, which is truly marvellous. In the cerebellum it is particularly dense, but I have also found it in all parts of the cerebral cortex I have examined.

What I would specially wish to direct attention to, however, is that this plexus not only prevails in the cortical grey matter, but appears to intertwine itself round the nerve-fibres throughout a great part of the white. The large medullated fibres from the cortex run into the white matter, but almost immediately become surrounded by a dense padding or casing of this fine plexus of nerve-fibres. At first it might be supposed to be simply connective tissue, and it has in times gone by been always regarded, when indistinctly seen by other methods of demonstration, simply as the branching neuroglia. The plexus I refer to as pervading the white matter of the brain is, however, nothing more or less than a true nerve-apparatus of extreme complexity, and that which is found in the cortex of the cerebrum and cerebellum is simply an extension or outcrop of this. It also exists in certain of the ganglia, such as the thalamus and lenticular nucleus, but there is one part of the brain in which it is probably more highly developed than in any other, namely, in a little comma-shaped body which lies in the angle formed by the caudate nucleus and the corpus callosum. This body, whose presence I have never seen even referred to, is one mass of a dense and complicated nerve-plexus, without nerve-cells, so far as I am able to discover. It is contiguous to the caudate nucleus below, but the tissue of the one is separated from that of the other by a sharp line of demarcation. It passes for a short way underneath the corpus callosum; and the fibres constituting the plexus of which it is composed are directly continuous with the fibres of the plexus in the white matter of the brain, to which I have already referred. It is only lately that I have made out the true nature of this mass, and as yet I am at a loss to give it a name. Let us call it for present purposes the plexiform nucleus.

The large masses of nerve-fibres coming in from the cortex are therefore immersed, as it were, in a dense plexus of nerve-fibrils, and those which are callosal take the following course in entering that body.

The most of those which come down from the vertex appear to run directly into the corpus callosum, and interlace in doing so with those leaving it, which are turning down to the two capsules. Those which are derived from about the lower third to a half of the cortex extending between the Sylvian fissure and the great longi-

[1] Ferrier, I find, has somewhat hastily reiterated this statement in the latest edition of his work on *The Functions of the Brain*.

tudinal fissure do not appear to run directly into the corpus callosum, but pass first of all into the plexiform nucleus just described. Shortly after issuing from the grey matter, they become united into strands which penetrate through the fibres of the crossed callosal tract, and which finally pass into the plexiform nucleus just described. They seem to lose themselves within this by breaking up into its reticular network. From the callosal end of this plexiform nucleus fresh fibres appear to arise, and to enter the corpus callosum. In all probability, these turn downwards on the opposite side into the two capsules as fibres of the crossed callosal tract. This plexiform nucleus would thus represent a meeting-point for many of the callosal fibres before they proceed to cross. The individual fibres lose their identity within it by splitting into an anastomosing common network, and from this network again fresh fibres arise, which travel across the corpus callosum to the opposite side.

The fibres which enter the body are chiefly derived from the region of the motor centres which in man have been found to preside over the muscles of the tongue and face, that is to say, the lower parts of the ascending frontal and parietal convolutions, and it is quite possible that the function of the plexus contained in it is to correlate and associate the action of the various fibres coming from these parts, so that they may exert a combined influence.

After passing into the inner and outer capsules, the arched callosal fibres just described become united into dense bundles ; and the next point to consider is their subsequent distribution. A very large proportion of them certainly lose themselves in the thalamus opticus. The excessively fibrous appearance which the thalamus presents is due to these fibres passing into it. They probably break up into a network, in the meshes of which are intercalated the nerve-cells. Are these nerve-cells directly connected with the nerve-fibres entering the ganglion, or is the plexus referred to intermediate? The more I examine the cortex and basal ganglia, the more enamoured do I become with the idea that the union is not direct, but that a plexus intervenes in most cases between the two. I am not certain about the large motor cells of the cortex, but in the case of the other cells of this part of the brain, and in that of the cells in the basal ganglia, it seems much more probable that the actual termination of the nerve-fibres is in a plexus, and that this plexus simply surrounds the nerve-cells. I am not at all convinced, even, that the nerve-cells in all cases are directly connected with the plexus by their processes. How do we know that nerve-energy generated in cells may not exert its influence upon nerve-fibres in ways other than by direct continuity? Is it not conceivable that it may be transferred to the coils of a dense plexus through the liquid and neuroglia which fill up the intervals in the tissue, and that conversely peripheral stimuli may thus be conveyed to a nerve-cell? I think this is quite possible, and the idea has of late been entertained by several physiologists, both in this country and abroad.

Few, if any, callosal fibres end in the caudate nucleus, and, curiously, as if supporting this observation, the plexus in the caudate nucleus seems to be very scanty. The lenticular nucleus may receive through the striæ medullares a considerable number, and probably some of the fibres connected with the red nucleus may be also callosal. A large number appear to end in the pons and medulla oblongata, while there is a probability of certain of them even penetrating down to the spinal cord.

This paper, however, is concerned with the connections between the cerebral cortex and the centres lower down, and as yet I have referred to only one set, namely, those which are callosal and which cross from the opposite side. There are others, of course, which run down directly, and of these the motor fibres are among the most important. These direct motor fibres lie to the outside of the crossed callosal tract, and, like it, bend somewhat outwards in circumventing the ventricle. Those derived from the marginal gyrus seem, at least in the sheep, to lie in very close apposition with the fibres of the crossed callosal tract. In man, I calculate that about one-third of the fibres entering the anterior two-thirds of the posterior limb of the inner capsule are direct while the remainder are crossed callosal.

From experiments made upon the cortex, it is evident that these are derived from a wide area, one, indeed, so wide that it comes to be a question how it is that the fibres are so few when they decussate in the medulla, and become connected directly, or through the intermediation of the spinal cord, with the peripheral nerves. The notion at present held by most physiologists is that, from the motor cells of the cortex, fibres issue which are continuously prolonged downwards to the spinal cord. But if we consider the matter for a moment, it must be evident that they must have suffered much in bulk by the time they reach the medulla, and that the pyramidal fibres of the medulla or cord cannot represent the whole of the motor fibres derived from the motor area. How, then, is this sudden falling off to be accounted for? My present conviction is that the direct continuity of the process of a ganglion motor cell in the cortex and the pyramidal tracts of the spinal cord is a myth. Try to follow them from the cortex inwards, in the best stained preparation to be had, and you will find that, shortly after they enter the centrum ovale, you lose their direct continuity, and they appear to merge into the plexus, which I have just described as pervading the whole medullary white. My firm belief is that, just as in the case of many of the callosal fibres, the motor fibres break up into a plexus, from which again fresh fibres, those which enter the pyramidal tracts, take their origin. When the pyramidal tracts in the cord are affected by secondary degeneration, the implicated tracts are mapped out with the utmost precision, and the degeneration never overlaps them. Can the same be said of the degeneration further up in the centrum ovale? I do not think that it can. There is always more or less diffusion of the tract below the point of lesion, if that be cortical, and the explanation, I think, is to be found in the interposition of this plexus. The plexus is a means of reduction and association, a means by which the action of the many fibres coming from a particular cortical area may be combined and correlated in the few.

But the direct fibres entering the inner capsule are not all motor in their function. There are many other bands which enter it and whose function varies. Thus there is a large contingent of fibres which passes into its posterior limb from the parieto-occipital region, and whose function there cannot be much doubt is sensory. It has been shown, over and over again, that when it is destroyed hemianæsthesia results.

One of the main differences which exist between the brain of man and that of the lower mammalian types consists in the disproportional size of the white and grey matters. In man the white matter is relatively more abundant than in the brain of any other mammal I have examined, and the lower we go in the scale the greater the disproportion appears to be.

Now, the cause of this, I think, seems mainly to reside in the fact that this intertwining plexus which ramifies through the whole centrum ovale is vastly more abundant in man than in the lower animals, and hence, probably, the superiority of the human brain, as an instrument of association, may be accounted for.

Then there is a large band of fibres which comes from the prefrontal region, and which enters the anterior limb on its way back to the anterior nucleus of the thalamus, to which it becomes attached. The geniculate bodies and the pulvinar finally are connected by direct bands with the occipital region.

I have said that a large number of callosal fibres pass into the thalamus opticus. They lose themselves in it, apparently by becoming connected with a dense plexus. In conclusion, let me ask the question whether there are any fibres which leave the thalamus, and, if so, where do they go to? Do fibres descend from the thalamus into the cerebral peduncle, to enter ultimately into the spinal cord? I am becoming daily more and more convinced that, if such do exist, they must be small in number. The thalamus no doubt has certain bands of fibres entering it which are not callosal, but these seem to connect it with parts of the cortex associated with which experiment has shown are definite and well located functions. Thus there are the three so-called peduncles of the thalamus, uniting it respectively with the prefrontal region, with the nucleus amygdalaris in the temporo-sphenoidal lobe, and with the hippocampus major. But these differ entirely in their nature from the fibres which are supposed to leave the thalamus and to pass downwards with the other descending cerebral tracts, and it seems to me that the latter, if they do exist, must be in small quantity.

How then is the thalamus connected peripherally, and what is its use? As yet any statement on this subject must necessarily be largely of the nature of a mere conjecture, but my researches incline me to believe that it is almost exclusively connected with the education of the brain through the optic nerves. Of all the nerves in the body the optics are those by which the brain is mainly educated. They are in constant use, imperceptibly opening up the cortical grey matter to impressions made upon the periphery by light vibrations. How is this brought about? What is the connecting link between the peripheral retina and the central cortex? Vision is said to be located in the occipital lobe, but I would ask if the optic does not equally subserve a most important function in educating other parts of the cortex as well as this small area? How is it that the motor centres, for instance, are educated to a particular complicated act, purely through the sense of sight?

What is the mechanism by which a sudden visual impression, accompanied by a sense of danger, will serve instantaneously to throw

the body into a complicated attitude of defence? This introduces far too wide a subject of discussion to take up at present; but it seems to me extremely likely that the thalamus is an educating optic ganglion, in the sense that the callosal fibres entering it have their functions concentrated within its substance, and that these fibres are the means of educating the opposite side of the brain through vision.

Where the corpus callosum has been destroyed in infancy, the invariable result seems to have been imbecility. There are certain congenital deficiencies of the body which have been recorded unaccompanied by any symptoms of note, more especially one described by Eichler. In these latter cases, however, it seems, from an examination of their records, that we have to do not with a deficiency in the actual callosal fibres, but with a malformation by which they have failed to decussate in the middle line, just as so frequently happens in the anterior pyramids.

On the supposition that the thalamus subserves the purpose of concentrating the fibres which educate the higher centres through the optic, I can quite easily see how, if it were destroyed in adult life, no very evident symptoms might follow. It has already subserved its purpose to a great extent. The higher centres have been educated, and are capable of discharging their functions apart from the channels through which that education has been imparted.

Nay, I could go so far as to grant that a large part even of the corpus callosum might be annihilated in adult life without occasioning any very marked phenomena. It has already played its part, so to speak, in infancy and youth, and may in a manner be now considered as functionally inert. The impressions made upon the cerebral cortex through it are quite possibly recalled by a perfectly different set of channels; for I do not see why in the brain-economy there may not be paths for educating the higher centres through vision, hearing, touch, and so on, and a whole set of other paths by which the results of this education may be brought into action. If such be the case—and I advance this simply as a surmise—I should regard the callosal system of fibres as the great educating system; while the other direct bundles to which I have adverted would constitute the means of adapting this education to a utilitarian purpose.

In the case of those born blind, this education, of course, could not go on through the optic circle of communications, but would take place by means of the nuclei of the nerves of special sense situated in the pons and medulla and the crossed callosal fibres connected with these.

AN ADDRESS

ON

SOME OF THE RARER SYMPTOMS PRODUCED BY GALL-STONES.

Read in the Section of Medicine at the Annual Meeting of the British Medical Association in Brighton.

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The occurrence of gall-stones is so common, and the symptoms of biliary colic are, in a general way, so decisive, that, in dealing with the effects produced by gall-stones, I shall ask to be allowed to pass over many points which, in a complete treatise, would be, necessarily, subjects of primary consideration. Therefore, I do not intend to discourse either on the structure of gall-stones, or on the way in which they come to be formed; nor to describe biliary colic as commonly seen; nor to enumerate all the possible wanderings of gall-stones, either to exit by one path or another from the body, or to intrusion into various organs; nor to discuss treatment, operative or not operative, seeing that this relation is to be discussed in another Section.

I will ask you to follow me in two lines of thought. Accuracy of diagnosis occupies, in all cases, the primary attention of the practical physician. In this aspect, it appears to me, on the one hand, that cases in which gall-stones have existed without producing the symptoms commonly indicative of their presence may be found worthy of consideration; that, on the other hand, cases illustrating uncommon effects due to the presence of gall-stones may be found to have a value, a very different value, of their own. Around this thread of diagnostic investigation winds the thread of inductive or explanatory investigation, every turn whereof may send us to contemplate some fresh and important relation to the whole organism of the small area affected by disease. In this aspect we are rather philosophic observers than practical physicians. If we are to do all that is required of us, we must be both; and we may be sure that it will ever come about that in this duality each comrade will minister to the other. I will first call your attention to gall-stones which give rise to no symptoms.

Gall-stones Existing without Symptoms.—It is a common experience of the *post-mortem* room that gall-stones, small and large, solitary or in hundreds, shall be found in the bodies of persons whose medical history contains no record of suffering or disease such as our present knowledge would refer to gall-stone; and that, structurally, no evidence of serious local mischief determined by the presence of concretions shall be apparent. Are there, one is tempted to ask, people who pass gall-stones unconsciously, and without symptoms, as there are people who pass renal or vesical calculi, without other signs than the migrations of the calculi into the chamber-pot?

Gall-stones Passed without Symptoms.—The occurrence of what is generally spoken of as biliary colic, with vomiting, with sequence of jaundice, and of the fæcal and urinary signs of retention of the bile, constitute, I think you will allow, the most obvious signs of the existence of gall-stone. But gall-stone of large size may exist, and may find its way into the bowel, without producing any symptoms whatsoever of biliary colic. Here is a specimen which I showed some time ago at the Pathological Society of London. It was sent to me by my friend, Mr. Carr H. Roberts, of Kensal Town. I always call it the "Twin," because it was passed by a lady on the day after her confinement, with such difficulty as almost to constitute a second labour. This lady had, so far as I can learn, no precedent signs of gall-stone whatever, and it must be supposed that adhesion had taken place between the gall-bladder and an adjoining coil of intestine, and that a painless ulceration had offered an easy retreat to the concretion. But we all know that the obstruction met with in this case at the anus may occur in the intestine. Most of us have, no doubt, seen cases of the kind. I have seen several. One, which I saw with Mr. Bullock, of Isleworth, I should like to quote. A lady, aged between 60 or 70, was attacked suddenly with symptoms of intestinal obstruction. A careful investigation led to the belief that the obstruction was mechanical, and within the abdomen. Mr. Thomas Smith, of St. Bartholomew's, was accordingly asked to give his help. He first opened the abdomen at a point where most pain was felt. He then minutely examined the state of the intestines, bringing out through the small orifice the nearest coil of intestine, and working from this in both directions, a fresh coil being brought out after its predecessor had been examined and returned. A piece of jejunum, about 5 inches long, was at length extruded, in a state of intense inflammation, black and rough on the surface. Nothing abnormal could be felt within it, and we supposed that it had undergone some strangulation, which had been relieved by the operation. The patient died the next day, and a very limited *post-mortem* examination was allowed. A large gall-stone was, however, found, embraced strongly by slightly inflamed intestine, a little below the seat of inflammation already observed. The gall-stone had, of course, been moved on, without being felt, in the manipulation. Now, in this case, reviewed after the knowledge of the actual existence of the conditions stated, it may be observed that no ordinary symptoms of gall-stone had presented themselves. It follows that in considering the possible causes of any case of intestinal obstruction, we are not justified in excluding impaction of gall-stone, even though all story of previous biliary colic or of jaundice be wanting.

Gall-stones giving Rise to Pain, etc., without Jaundice.—The case just recorded leads on to the consideration of a fact of great importance, namely, that gall-stones may give rise to various kinds of pain and suffering to inflammation, and even to death, without the occurrence at any time of jaundice. Such cases are far from rare, and are to me of great interest. Let me quote two or three illustrative histories

Some years ago, I was asked to see the wife of a clergyman in the East of London. I was informed that she was subject to irregularly recurring attacks of fearful pain in the region of the gall-bladder, with associated vomiting and faintness. She had never had jaundice, nor passed pale stools. Many physicians had seen her, whose diagnoses had ranged between uterine irritation at one pole, and cancer at the other. The absence of jaundice, and of the other signs of obstruction of the common bile duct, left the clinching of the diagnosis impossible, and the idea of duodenal ulcer was chiefly entertained. The patient died in an attack a few months later, and was found to have had a large biliary calculus, which had made its way through a perforation of the gall-bladder into the peritoneum.

Medicine, we may observe, is full of seeming paradoxes. One such paradox is here presented to us, in that, granted a disease having generally definite symptoms, death or danger occur frequently in such disease without previous presence of—rather with conspicuous absence of—the symptoms held to be most decisive of its presence. Let me, in passing, commend this seeming paradox for your consideration.

In a second case belonging to this class, the patient is an unmarried lady of 40, who is still under my observation. During the last three years she has had, from time to time, attacks of severe pain in the epigastrium, not related with food-taking, lasting for several days, almost continuously, but with recurring periods of intensity in which she has become faint. Vomiting has soon followed the pain, and has recurred at intervals, the vomited matter containing, besides ingesta, bile and mucus. There has been no jaundice; the fæces have been always of natural colour; there has been no pile-pigment in the urine. When I first saw her, a year ago, she was supposed to be suffering from new growth in the stomach. Her appearance did not support this idea. Although she had lost a good deal of flesh, she was still well nourished; her face was placid, and was free from all expression of anxiety; the tint of her skin was healthy, its texture soft and elastic. I saw her then in the interval of comparative ease following an attack. She still had uneasiness and distinct tenderness in the epigastrium. The abdominal wall was tense, from the xiphoid cartilage to the umbilicus, and through the tension it was possible to feel a somewhat extensive sensitive induration, corresponding in position to the right end of the stomach, the duodenum, and the gall-bladder. No special enlargement of the gall-bladder was made out, though, of course, carefully sought. The symptoms of gastric catarrh were present. Under treatment, chiefly directed to the relief of the gastric catarrh, she improved for some time; but, some months later, I was summoned to see her in consultation with Dr. Brockwell, of Gipsy Hill. She was then in the midst of one of the severe attacks of pain which I have described; there was again no jaundice or other sign of biliary obstruction. Two or three days later she passed, with a soft motion, a hard body, which attracted notice by the noise which it made in falling into the closet-pan. This hard body was broken up by her nurse. Fragments of it, subsequently brought to me, were clearly fragments of a gall-stone, and, as far as could be made out, of a gall-stone of considerable size. The passage of the gall-stone was followed by cessation of the urgent symptoms, and by rapid improvement in the general health. Within the last few weeks another attack of the same kind has ended in the passing of the stone which I now show. It is, as you see, a large stone, and presents at least five facets, indicating probably that it has had, at least, five companions of much the same size.

To these cases I will add a brief note of a third, which was under my care in St. Thomas's Hospital. In this case, after symptoms simulating cancer, but without jaundice, a gall-stone, escaping by ulceration into the duodenum, produced fatal obstruction in the upper part of the jejunum.

You will observe that, in three of the cases quoted, large gall-stones found their way into the intestine without the occurrence of jaundice or other sign of biliary obstruction.

The disproportion between the size of the stones and the size of the gall-duct renders it to the last degree improbable that the entry into the intestine was effected through the duct. The last case indicates the track probably taken by all—through an adventitious ulcerative perforation, leading, in the first case, into the peritoneum, in the rest, into the intestine, after the previous establishment of protective adhesions. In two cases, the process was attended with great suffering, and with signs of inflammatory thickening so marked as to suggest the existence of new growth. In the remaining case, which is far from standing alone in my experience, the process of ulceration and escape was attended by no sign, the obstruction being the first condition to attract notice.

These cases, and the recorded experience of many good observers, must lead us to remember that, although no signs of biliary obstruction be present, gall-stones must be kept in mind as possible factors in cases of recurring pain, vomiting, tenderness, and thickening in the epigastric region; that is to say, where cancer, ulceration of the pyloric part of the stomach, or of the duodenum, may be also suspected.

The class of cases in which no suffering is recorded, although large calculi have escaped from the gall bladder, is certainly puzzling. The passage of the stone into the intestine must have been permitted by processes of ulceration of the gall-bladder, of adhesions of the gall-bladder to the intestine, and by subsequent perforation of both parietes. Yet the several histories tell us of no symptoms of the occurrence of such processes. Here is another paradox less easy to solve than the former.

In our considerations, we have, so far, been fixing our attention mainly on the nomadic gall-stone. We might, if time should have served, have followed it in many an excursion. A reference to text-books and monographs will readily indicate a great number of tracks by which a gall-stone, once escaped from the gall-bladder, has been known to travel to exit from the body, or to intrusion, mostly fatal, into viscera or into serous cavities. These tracks are so fully set forth in many books, that I do not propose to deal with them now. I leave them for the (to me) more interesting study of little noticed and more remote evils wrought by gall-stones.

Gall-Stones producing Intermitting Pyrexia.—First, let me speak of the occurrence in relation with gall-stones of a form of fever, with precedent rigors, occurring at more or less irregular intervals, so as to present some resemblance to an ague, but to an ague not of ordinary character. My attention was first called to this complication by some remarks of the late Dr. Murchison, having reference to the case of a distinguished Indian medical officer, who, after his return to this country, was attacked with paroxysms of shivering, followed by fever and sweating, at regular weekly periods. He was supposed, at first, to have a recurrence of an old intermittent; later on, to have hepatic abscess; till, at last, his symptoms indicated and the necropsy proved, that his actual and only disease was gall-stone, so impacted as to produce great irritation, but not complete obstruction of the common bile-duct. Similar cases have been noticed by M. Charcot (*Maladies du Foie*, 1877), who argues that "la fièvre hépatalgique, comme celle de l'angiocholite, résulterait de l'introduction dans le sang de l'agent pyrétogène hypothétique provenant de l'alteration de la bile." Dr. Murchison was of opinion that such attacks were not of poisonous or septic origin, but were due to nervous irritation; and he compared them to similar intermittent febrile seizures observed in connection with the passage of renal calculi. Charcot has touched upon these also, and has evidently accepted in them the idea of a uro-septic fever. For my part, I believe that the paroxysmal fever here considered is due to local irritations of mucous membrane, propagated to the central nervous system, and resulting in pyrexia, mostly in persons apt to take on febrility, and particularly in persons who have been previously the victims of intermittents.

The whole subject of the tendency of irritation of mucous membranes to produce remittent or paroxysmal pyrexia is one which has yet to be studied completely; but, as a clinical observer, I believe that I can recognise such tendency, not only in enteric fever, but in catarrhs of all kinds, specially in children as regards mucous surfaces generally, specially in persons of all ages in as regards catarrhs of intestine, or in catarrhs of the urethra, particularly when the prostatic portion thereof is involved.

Gall-stones producing Glycosuria.—In relation to this question, there is much to be taught by the case of a gentleman of the age of 60, who first consulted me in December, 1884. He had lived many years in Ceylon, where he had severe jungle-fever. After returning to England—after, indeed, some time of residence at Bedford—he had become subject to regularly recurring attacks of biliary colic, with jaundice, and with "ague-fits" of great sharpness, coinciding with the biliary attacks. The liver and the spleen were found to be enlarged. He was very thirsty at all times, was passing much urine, and he was wasting. The urine at this time ranged in quantity from fifty to seventy ounces daily; its specific gravity ranged from 1026 to 1032; it contained much sugar, and much albumen. The case, after exclusion of all other conditions productive of febrility, seemed to me, so far as the intermittent febrility was concerned, to be like Dr. Murchison's case; to illustrate the power of a limited, but intense, irritation of a mucous-membrane-lined duct, to arouse the febrile excitement to which the system had been accustomed in the tropics. But the glycosuria was a complication which had to be examined, both in diagnosis and in respect to treatment. I set to work to reduce, as far as possible, all catarrhal conditions, at the same time enforcing a diet intended to contain as little sugar-making stuff as possible. I found that, up to the time when I saw him, he had been taking large doses of quinine in alternation with arsenic, but had, notwithstanding, steadily gone down. On the hypothesis that the mucous membrane irritation was the real basis of his illness, I gave him alkaline sulphates, carbonates, and iodide of potassium. Before the action of the treatment could be well established, the patient had fallen in weight from an original 13 stone to 10 stone. Within two months from the institution of treatment, the liver and spleen had returned to normal size, the jaundice and glycosuria had disappeared, and the patient had increased to 12 stone 12 lbs. in weight. The improvement had commenced soon after the beginning of treatment, and was soon followed by the passage

of a gall-stone. It is important to notice that two attacks of "fever" had occurred without signs of colic. This patient subsequently gained flesh, till he reached the weight of 14 stone. I have just heard of his death from an attack of acute illness, the nature of which has not been communicated to me.

I have published, in *St. Thomas's Hospital Reports* of 1881, the case of a man who had attacks of fever of agueish character, occurring at first pretty regularly in conjunction with similarly regular attacks of biliary colic, and ceasing after the colic had yielded to treatment comprehending the use of no antiperiodic or antipyretic, but consisting in the free use of salines. In this case the symptoms left little reason for doubting the existence of biliary calculus, and of its causal relation to the attacks.

Reviewing this class of cases, I may point out that the glycosuria, increased quantity of urine, and thirst which formed no inconsiderable part of the symptoms of the case last but one quoted, disappeared when the febrility ceased to reappear. No one, I think, would find any ground for regarding glycosuria and polyuria, as the work of septicity or poisoning. Nevertheless, they coincided in their duration with a period in which constantly recurring block of the common bile duct was indicated, in which a distinct enlargement and painful condition of the liver was observed. I would venture to regard them as signs of a quasi-inflammatory condition of the liver, in which an active arterial hyperæmia was induced by the irritation in the gall-ducts, and by the incidental over-distension of the whole duct-system of the liver. They appear to me to illustrate the production of glycosuria by irritations of the liver. Glycosuria, as we know, may be brought about by irritation of the central nervous system, by paralysis of certain parts of the sympathetic system, by certain peripheral irritations outside the liver. In this case, the irritation of the liver has not been reflected to other organs, as is often the case, but has been turned back upon itself, with resulting arterial hyperæmia of the liver and glycosuria.

A case still under my observation is akin to the above. A labourer, aged 74, was admitted to St. Thomas's Hospital, for jaundice, which had commenced, suddenly, about six months before, after an attack which, as described, was an attack of biliary colic. From the time of that attack, there had been persistent jaundice, with equally persistent absence of bile in the fæces. It is necessary to state that this patient had several forms of disease. He had aortic obstruction, thickened arteries, enlarged heart, hypertrophy of the left ventricle, and albuminuria.

The analysis of the meaning of particular symptoms is certainly made more difficult by these complications. But his history makes it quite clear that soon after the establishment of jaundice, he began to pass a much larger quantity of water than he had been accustomed to pass, and that, having been a stout man, he began to lose flesh. When he came under observation, he was still fairly well nourished; his liver was greatly enlarged; but there was absence of pain, of tenderness, and of vomiting. He was passing from 60 to 80 ounces of urine daily; the specific gravity was generally about 1030, and the urine contained sugar, as well as some albumen. The history begins with biliary colic, and goes on to polyuria, with thirst and wasting, which proved, when observation began, to be associated with glycosuria. None of the other morbid conditions were such as would produce glycosuria.

Surely here again we have evidence of the reflection upon the liver of an irritation arising in its own domain—to all appearance an irritation started by gall-stone.

The argument of the preceding remarks is that irritation in the gall-duct may, besides producing pain and local inflammation, act in a reflex way, so as to produce arterial hyperæmia of the liver, and thereby glycosuria; or in another—possibly reflex—way, to produce a pyrexia corresponding with storms of local irritation. Have we, it is well to ask, any other indications of reflex action taking different directions from these? There is clearly a curious association of renal troubles with biliary colic, which has been noticed by Murchison and others. But I should like to give a short history of a case where acute pneumonia was, to all appearance, set up by impacted gall-stone, altogether apart from any sign of septic poisoning.

Gall-stones and Reflected Visceral Inflammations.—A gentleman, of middle age, had consulted me for some years on account of recurring attacks of what appeared, from all the symptoms, to be biliary colic. He was kept under very careful observation, but no calculus was ever found in the fæces. After two courses at Carlsbad, he seemed much better, and remained free from attacks for a year. Then he had a series of excessively severe attacks of biliary colic, increasing in duration. I went down into the country to see him in consultation with my friend, Dr. Horley, of Hoddesden, during one of these attacks, with a view to coming to a decision as to cholecystotomy. Up to the time at which I saw him, he had no signs beyond those belonging to biliary colic; he had no irregular fever, no perspiration, no shortness of breath, but he had had some rise of temperature and some quickening of respiration for the last twenty-four hours. When I saw him, he presented, besides intense jaundice and the other results of obstruction, a pneumonia occupying the lower lobe of the left lung. At first I thought that this pneumonia must have arisen by continuity, and I feared that it might indicate either the formation of abscess in the gall-bladder, taking an unusual direction, or extension of inflammation; but no signs of suppuration, or of inflammation or tenderness in the epigastric or right hypochondriac region, were present. Moreover, there was no pain attending the contraction of the diaphragm. In respect of external causes, it may be stated that the patient had been lying in one room, which was well warmed and free from draughts, for several weeks, and had been sedulously protected from all exposure. On the other hand, it must be noted that the attacks of colic had been of increasing severity, and that the last, which had preceded the pneumonia by only two days, had produced intense shock. The pneumonia then appeared to me to be of reflex causation, and to be an alternative of the glycosuria, indicating hepatic hyperæmia, observed in the preceding cases.

Now we all know that, in advanced diabetes, pneumonia is a fairly common complication, and that when pneumonia occurs in diabetes, the sugar in the urine diminishes, or altogether vanishes. The disappearance of the sugar is often attributed to the fever accompanying the pneumonia, and is then regarded as an indication of increase of combustion in the body, whereby the sugar is consumed before it can reach the urine. I believe this hypothesis to be as far from the truth as the original hypothesis of Bernard assuming the combustion of sugar in the lungs—the hypothesis so completely demolished by Dr. Pavy. As I read the order of phenomena in these cases, the pneumonia is induced by a transference of arterial hyperæmia from liver to lung, variously determined by position of body, by cold, by disorders of venous circulation by previous weakening of the lung. I have record now of three cases of diabetes complicated by pneumonia, in which fever preceded the appearance of the physical signs of pneumonia for twenty-four hours or more. In these cases, so long as there was only pyrexia, the sugar remained at its previous amount; when the signs of pneumonia became manifest, the sugar at once fell in two of the cases, and disappeared in the third. I venture to submit the probability that, in the case under consideration, the intense conditions of irritation in the liver tended, *per se*, to produce a primary reflex arterial hyperæmia, and, therefore, glycosuria; this was carefully looked for, but was not found. The absence of glycosuria was compensated by the access of pneumonia, presumably, in the circumstances of the cases, the result of a secondary or remote reflex arterial hyperæmia, determined by local or general conditions which cannot be identified.

It is well to note that the patient got over his pneumonia, which, of course, precluded operation; and, soon after, passed a large number of rather small, facetted, gall-stones, of which nearly seventy were obtained by regular washing of the fæces.

Gall-stones and Malignant Disease of Liver.—The co-existence of gall-stone with malignant disease of the gall-bladder and parts immediately adjoining has been recorded frequently enough to give rise to speculation as to how far the presence of gall-stones would be capable of giving rise to malignant disease. I exhibit a specimen from the museum of St. Thomas's Hospital, which has been described by Dr. Murchison. The patient, a woman, aged 64, had suffered for four years from attacks of severe pain in the region of the gall-bladder, without vomiting or jaundice. Six months before her death an unusually severe attack of pain was followed by jaundice, which persisted till her death. The stools were at first pale, but during her stay in hospital, for seven weeks before death, they contained a distinct evidence of bile. At the necropsy the gall-bladder and common duct were found filled with colourless (nearly clear) mucus, and the duct was blocked with a small calculus, at a point about an inch from its termination. A large cancerous mass occupied the centre of the liver, extending forwards to the neighbourhood of the gall-bladder. The bile-ducts were dilated throughout the liver, and filled with thick bile. The anterior wall of the stomach was adherent to the liver; and at the adherent portion were three or four rounded orifices, through which dilated bile-ducts on the surface of the liver opened into the cavity of the stomach. This was the source of the bile found in the fæces.

There is nothing in the case to indicate whether, on the one hand, the gall-stone was an incident to the malignant growth in the liver, or a result itself of retention of bile in the gall-bladder. Here, however, is another gall-stone which effectually answered my question,

in a case of malignant disease evidently beginning in and around the gall-bladder, and extending into the liver. I will not enter fully into the details of the case, but will merely say that the patient had violent recurring pain in the region of the gall-bladder, and for some time before death there was jaundice. At the necropsy the gall-bladder was found embedded in a mass of adherent growth, which completely closed the hepatic and cystic ducts. The cavity was rather small, and contained clear, pale, mucus, together with this calculus. It is so clear from the dissection that the growth had started at the gall-bladder, that I did ask myself the question whether the presence of the gall-stone might have been the original determining condition.

Chemical examination showed that the calculus was composed of carbonate and phosphate of lime, with a large proportion of animal basis, apparently altered mucus. It contained no trace whatever of any constituent of bile. This result showed, clearly, that the calculus was formed subsequently to the obliteration of the duct, and that it was a consequence, and not a cause, of the malignant disease.

Gall-stones and Hæmorrhage.—In two cases coming under my observation of late, the passage of gall-stone has been attended by sharp hæmorrhage. In the first place, the hæmorrhage preceded the passage of a large gall-stone without biliary obstruction. The bleeding might here be supposed to be produced by the tearing of the opening between the gall-duct and the bowel.

In the second case which was under my care in St. Thomas's Hospital last spring, hæmorrhage of a considerable volume occurred directly after an attack of biliary colic, with jaundice. After the cessation of the hæmorrhage, a ragged gall-stone, of such size as might have allowed it to traverse the gall-duct, was found in the fæces. Another was found a few days later, after a smaller hæmorrhage.

The various effects of gall-stones which we have passed under review may well make us pause and meditate. We have to deal with biliary colic very often; to know it as a process involving intense pain, and many other distresses; to see it make its progress commonly to a satisfactory end. As regards the suffering produced, we are impelled to do all that we know towards relief; as regards the outcome, we may be generally hopeful, if not confident. Biliary colic being the most commonly apparent indication of the presence of gall-stones, we may be ready to see in gall-stones things productive of much suffering, but having in their aspect more of the troublesome than the deadly. Gall-stones, indeed, travel so commonly by the same line, that we tend to believe that, in spite of delay occurring now and then, the terminus must be reached. The consideration which I have very imperfectly put before you may remind us of many possible accidents of the journey. A permanent block occurring on the line sends the travelling stone into many by ways of disaster. We may find the stone in such case causing abscess, causing perforation of the gall-bladder, causing intermitting pyrexia, causing glycosuria, causing distant inflammations, probably malignant disease, and certainly serious hæmorrhage.

I rise from the contemplation with increased respect, born of sad experience, for the gall-stone. If biliary colic be no very terrible illness, the gall-stone is to be dreaded and feared, in proportion as there is less of the colic and more of accessory symptoms.

ABSTRACT OF LECTURES
ON
THE ACTION OF NERVE-CENTRES AND MODES OF GROWTH.

Delivered at the Royal College of Surgeons of England, February, 1887.

By FRANCIS WARNER, M.D., F.R.C.S.,
Hunterian Professor in Comparative Anatomy and Physiology at the Royal College of Surgeons; Physician to, and Lecturer on Botany at, the London Hospital.

Lecture I.—On the Action of Nerve-Centres.

Movements are here studied as signs of action, observations being recorded by verbal description or by the graphic method.[1]

To study a movement involves the consideration of the part moved, the muscles moving it, and the nerve-centres which stimulate them; while the movement itself indicates the time and quantity of action in the nerve-centre corresponding; these are called the intrinsic attributes of the movement.

The time of a movement often affects its outcome or sequence; movement of a single part is a comparatively simple fact; when several parts are acting, combination of their movements occur. The special combinations of movements are simply the result of the time of the action of each of the moving parts.

In observing movements of the digits, two modes of description may be employed: the series of movements of each digit may be described, or the series of coincidencies or combinations of acts may be recorded. Either plan may be used, as convenience may dictate; thus it may be said that each of the five digits flexed at the same moment, or it may be said that the hand assumed "the convulsive posture." What we commonly call an action, such as writing or walking, is really an observed series of combinations of movements; this applies equally to spontaneous reflex, or voluntary action. When a child seizes an orange, we observe a series of movements, each of which can be performed separately; while the character of the action depends upon the time and quantity of each of the component movements.

Series of movements in plants were then described. The quantity of a movement is its second intrinsic attribute; it indicates the quantity of action in the nerve-centre. Quantities of motor action are studied in observing postures of the body, as signs of the ratios of force in the nerve-centres. In "the straight intended hand,"[2] we observe a sign of the temporary equilibrium of the nerve-muscular apparatus for flexion and extension; the posture may change, the fist being clenched; the change of hand posture is a sign of a change in the ratio of force acting in the apparatus for flexion and extension, the force of flexion being increased. Thus we see the outcome of the balance, or ratio of quantities of motor force, demonstrated by the observation of postures. Examples were given concerning other hand postures. It was argued that postures often indicate the condition of the nerve-system; that they are often changed by the sight of objects; that they are due to the ratios of force exerted by opposing portion of nerve-muscular mechanism; and hence, that postures are signs of ratios of action that can be controlled by incident forces, such as light, sound, mechanical irritation, etc.

The total quantity of movement seen in man may depend upon the quantity of blood-supply, and upon the amount of stimulation of the subject; the blood-supply and stimulation are needed to produce movements. In anæmia, and in starvation, the quantity of movement is lessened. In darkness but little movement occurs in a well-nourished man; the sight of an object may be followed by the head turning towards it, and by other series of movements such as result in the seizure of the objects. The quantity of movements in plants is mainly determined by light and heat. The proposition was then enunciated that every movement depends on some change in the time or the quantity of action in the nerve-muscular apparatus producing it, and that every such change in the apparatus must be preceded by some stimulus acting on it, immediately antecedent, or more remotely antecedent.

Among the forces which, acting upon a man, may stimulate and control the undivided movements, the following were mentioned and illustrated: light, heat, sound, mechanical irritation, etc. Every movement must have some sequence, whether it be to supply food, or be expended as physical energy. The sequence of a movement must be carefully separated from the cause or antecedent. To say that the bee visits the flower to get honey is to imply that the honey causes the visits. It was argued that the bee sees the flower, and afterwards gets the honey; that it is not the honey but the light reflected from the flower which determines the movements of the bee. The forces which control the time and quantity of the acts composing a series of movements are really the antecedents of the results of the action.

The sequences, outcome, or results of movements are often said to be useful, intelligent, voluntary, purposive, etc. What is meant by the outcome of an action being useful? What is the connotation of the term "useful" expressed in terms of physical criteria that can be observed? Concerning the meaning of the word "useful" as applied to the outcome of an action or movement, the primary idea seems to be that the outcome produces some physical change that can be observed. A movement which brings food to the subjects is said to be useful, partly because it produces some effect or impression on the subject. The movements of deglutition, respiration, and all the movements of organic life are useful, because, among other things, they impress the subject considered. We do not say that all acts which produce an impression are useful; but to be useful there must be survival in the subject producing the act, or in others considered at the same time. It is insisted that usefulness is not an intrinsic character of any movement, but a relation of its outcome to surrounding objects. Impressionability as a property in man may be indicated by movements. If the movements of a man are regulated and controlled by light or sound,

[1] See *Journal of Physiology*, Vol. iv, No. 2, and Vol. vii, No. 4.

[2] See *Physical Expression, its Modes and Principles*, Chapter ix.

he is impressionable to these forces. In conditions where impressionability is lost, the eyes may move spontaneously and independently of one another; this is seen under chloroform and in the deep sleep of infants. Actions may be defined as similar if on one, two, or more occasions there be movements of the same parts of the body, the action of each part respectively being alike in time and in quantity on each occasion. In a body of soldiers at drill the movements of each man are similar. Thus actions, or series of movements in the same or in corresponding parts, are identified as similar on account of their intrinsic attributes. Similar movements may recur in a man or be repeated, each such occurrence after the first is a repetition or reversion of the action, a trick or habit in a man may revert in his children. Similarity of action is here defined as an observed fact, not as a question of relation to antecedents or sequents of the action.

Automatic or spontaneous movements are such as have no special antecedents controlling their attributes. Athetoid movements are automatic; they occur in similar series whenever any impression is made upon the subject.

Instinctive movements, so-called, probably imply a certain structure of the nerve-system, due to its inheritance, such that when stimulated by certain surroundings forces the movements resulting should be regulated by those forces, the sequence of such acts producing some impression upon the subject, directly or indirectly.

Purposive or intelligent movements are probably always controlled by forces surrounding the subject, or by impressions previously made, the sequents of such movements rather than their antecedents possess the characters of intelligence. It seems that the purposive or intelligent character of a series of movements is not due to its intrinsic attributes, but to its sequents. The respiratory movements are considered very automatic when occurring in regular and uniform order of time and quantity, but when the sight and sound of various objects modifies them, to form speech, laughter, etc., then they are signs of mental action. All expression of mind and mental states is by series of movements, and these, of course, have their intrinsic attributes, observable in the body.

Co-ordinated movements are such series of acts as have special characters, dependent upon the time and quantity of the component movements. It is also an essential character that the attributes of the series are determinable by sight, sound, or other modes of forces acting upon the subject.

Movements may be classed according to their results as respiratory, acts of deglutition, etc. For the purposes of a scientific classification of movements, it is very desirable that they should always be described according to the parts moving, their intrinsic attributes, the antecedents, and sequents, or outcomes. All these characters are capable of direct observation.

It has been said, What is the good of these studies of movements? What practical advantages are likely to result therefrom? Nerve-muscular movements are physical signs of brain action; with but few exceptions, they are the only signs of brain action; and the only physical signs by which we know anything of the action of mind. Describing facts in man as we see them, in terms of movement, is probably the best mode of attempting to do away with such metaphysical terms as "voluntary," "intelligent," "purposive," in scientific description. Facts must be described in physical terms before we are likely to find out their physical causation.

BEQUESTS, DONATIONS, ETC.—Mrs. Harriett Beckford, of Cowes, has bequeathed £1,500 to the Isle of Wight Infirmary, at Ryde; £1,000 to the Royal Hospital for Incurables; and £500 to the Metropolitan Convalescent Institution.—The York County Hospital has received £1,042 9s. 11d., under the will of Mrs. Gascoigne, of Heworth.—Mr. Matthew Whiting has given a second £1,000 to King's College Hospital.—Mr. Nutting, of Wootten, near Liverpool, has given £500 to the Radcliffe Infirmary, Oxford, for the perpetual endowment of a bed.—Mr. William Middlemore, J.P., has bequeathed £250 to the Queen's Hospital, Birmingham.—The General Hospital, the Queen's Hospital, and the General Dispensary, at Birmingham, have each received £100 under the will of Mr. Peter Hollins.—Captain Thomas Ruddiman, of Cavendish Place, has bequeathed £100 to the Middlesex Hospital.—The Border Counties Home for Incurables, at Carlisle, has received £100 under the will of Mrs. Maria Brown, widow of the Rev. Edward Brown, Vicar of Addingham, near Penrith.—The Court of Common Council of the City of London have voted one hundred guineas to the Hospital for Women, Soho Square, and one hundred guineas to the German Hospital, Dalston.—The Dean of Ripon has given £100 to the Ripon Dispensary.—The Hon. Henry Cowper has given £100 to Charing Cross Hospital.—Mr. Joseph Sturge has given a sixth instalment of £50 to the Hospital for Diseases of the Throat.

ABSTRACTS OF LECTURES
ON
THE DEVELOPMENT AND TRANSITION OF THE TESTICLES, NORMAL AND ABNORMAL.

Delivered at the Royal College of Surgeons of England, February 23rd, 1887.

BY C. B. LOCKWOOD, F.R.C.S.,
Demonstrator of Anatomy and Operative Surgery in St. Bartholomew's Hospital; Surgeon to the Great Northern Central Hospital; Hunterian Professor of Anatomy, Royal College of Surgeons.

LECTURE II.

BY this time the leading characteristics of the human Wolffian body may have been recognised. Its resemblance during early stages to the corresponding excretory organ of other vertebrates is very marked, and need not be further mentioned. The relations and extent of the uro-genital ridge, in which the component elements of the immature Wolffian body lie, have also been discussed, and it is unnecessary to say more than that, besides a quantity of mesoblast and a covering of epithelium, it contains the duct, tubules, glomeruli, and blood-vessels. The glomeruli have been frequently referred to, but so far nothing has been said concerning their histology or development. This omission may now be repaired, and fortunately suitable human embryos are available for the purpose. This happens because, although the glomeruli had appeared in the youngest human embryo at my disposal (Fig 1), yet it is obvious that they are in their most primitive con-

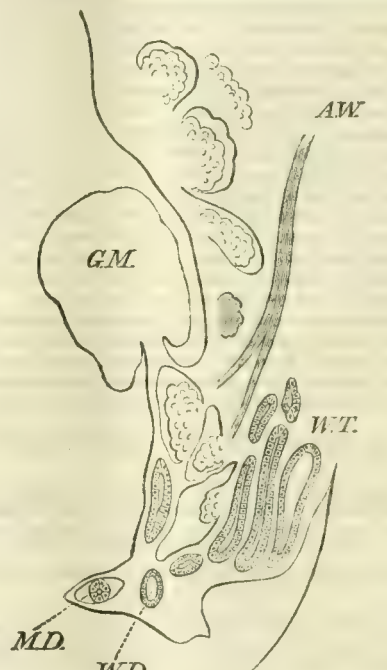


Fig. 5. A.W. Human embryo—Section rather towards the middle line. Portion of Wolffian body which atrophies. G.M. Genital mass; W.T. Wolffian tubules; W.D. Wolffian duct; M.D. Müller's duct.

dition; indeed, in the order of development, they are not manifest until after the duct and tubules are well established; roughly speaking, their appearance coincides with the earliest budding of the limbs. But preparatory to the development of the glomeruli, the tubules grow and alter, and apparently their increase in size is due to a process of cell-multiplication, and to an actual increase in the bulk of the cells themselves, the ultimate result being a coiled tube lined with

short columnar epithelium, which here and there has a tendency to send protrusions (ciliæ) into the lumen of the tubules. A typical Wolffian tubule consists of several parts, namely: (1) a section carrying the peritoneal opening, and known as the peritoneal funnel; (2) a dilated vesicle into which this opens; (3) a coiled tubulus proceeding from (2), and terminating in (4) a wider portion opening into the Wolffian duct. Evidence has been adduced to show that the human embryo, as well as the rabbit, has, at the fore end of its Wolffian body, peritoneal openings or nephro-stomata; but the tubules present, neither in the rabbit nor in the human embryo, no peculiarity at their opening into the Wolffian duct. Excepting the anterior tubules, which disappear early, the end of the Wolffian tubules furthest distant from the Wolffian duct becomes expanded, and a bunch of capillaries grows (in the manner stated) into the lumen of the dilated duct. So far as rabbits and human embryos are concerned, only internal glomeruli, that is, glomeruli grown directly into tubules, call for description, for the various specimens of rabbits' embryos do not warrant an agreement with Renson, who says that external glomeruli may be seen in that animal. In the human embryo, certain vascular protrusions do exist, but of course it is not certain whether it will be admitted that they correspond to the external glomeruli seen in connection with the fore kidney of the chick and various other animals. However, the mature internal glomerulus of the human Wolffian body is a conspicuous object, and remains so until the third



Fig. 6.—Human testis (10 weeks). 7 Hartnack Eyepiece 4, showing developing seminal tubes and stroma. Ep. Epithelium; T.A. Tunical albuginea; St. Stroma; T.T. Tubuli testis.

month of intra-uterine life, or even later. The stroma of the Wolffian body is also of some interest, for it consists of a beautiful reticulum of nucleated branched anastomosing cells, which together form a matrix similar to that which is found in the developing kidney and testicle and in other parts of the embryo. After the blood-vessels of the Wolffian body have been developed (in the manner described), the question was raised as to whether, either in rabbits or human embryos, any secondary Wolffian tubules were developed, and reasons were advanced to cast doubt upon such a supposition. By this time the Wolffian body has reached a certain degree of complexity, and towards its ventral surface and rather to the side of it which is nearest the mesentery, the future ovary or testicle has appeared, and may next be considered.

The mere origin of the body of the testicle is a matter of general agreement. This point has been clearly determined in the chick and many of the smaller mammals, and therefore, so far as they are concerned, the question does not call for lengthened notice. Under the circumstances it is proposed, as a preliminary, to endeavour to ascertain how the gland appears in rabbits and afterwards in human embryos. When once the origin of the testicle has been illustrated, the development of the various constituents will call for attention, and upon this branch of the subject the widest differences of opinion exist. It would be easy to verify this statement by reference to the well-known writings of Foster, Allen Thomson, or Balfour, or to the admirable epitome which Janosik gives in his recent memoir. As we proceed, the different views will be indicated, but at present let us confine ourselves to the question of the origin of the body of the testicle. At present it is a matter of common acceptation that, at their commencement, no one can discriminate between the rudiments of the ovary and those of the testicle. I am not aware that Waldeyer's views upon this point have met with acceptance. But although, at last, these glands differ so widely, yet, at first, they originate from a cell-mass which is identical for male or female, and which, in its early stages, betrays no evidence of its ultimate fate, whether destined to become an ovary or a testicle. Under these circumstances a suitable



Fig. 7.—Wolffian body and sexual eminence of rabbit at thirteen days. The section is at about the middle of the sexual eminence. W.D. Wolffian duct; C.V. Cardinal vein; Mes. Mesentery; Ao. Aorta. To show that the genital eminence consists of primordial ova and branched anastomosing cells.

name has to be found for this indifferent rudiment, and it is usually called the sexual eminence.

When the genital eminence appears in rabbits' embryos, (Fig. 7) the bulk of the uro-genital ridge consists of the Wolffian body and its various constituents. The relation of the genital eminence to the uro-genital ridge may be illustrated by saying that, if the length of the ridge be divided into thirds, the genital mass would occupy rather more than the middle third. This is only an approximate estimate, because the eminence tapers at either end, and therefore it is hard to determine its exact limits. The histology of the genital eminence in the earliest stages is of great interest and importance. Both in the rabbit and in the human embryo its surface is covered with a thick layer of epithelium, which, in section, looks like a semilune, and is called the germinal epithelium. As development proceeds, the epithelial cells migrate into the underlying stroma of branched anastomosing cells, so that the composition of the genital eminence is determined from its earliest commencement. With regard to the germinal epithelium of rabbits and human embryos, it is to be noted that the large, clear, oval nucleated cells, called primordial ova, cannot be discerned. The germinal eminence, continuing to grow, and still maintaining its original histological structure of a stroma with cells in its meshes, at last becomes as large as the Wolffian body, which latter becomes its appendage, and commences to form the epididymis. The conversion of the Wolffian body into the epididymis is not at first marked by any great change in its appearance. It is true that by this time its front part has atrophied, but the remainder displays very well marked tubules and glomeruli. Before the advent and growth of the genital eminence, the Wolffian body seems qualified to perform the duties of a great excretory organ, but henceforth it is merely an appendage of the testicle. This change in its destiny is the signal for the appearance of the permanent kidneys, which, both in rabbits' and human embryos, arise quite independently of the Wolffian body.

As far as I can ascertain, from the examination of numerous human embryos and rabbits, the permanent kidneys, although so much like the Wolffian bodies in structure, are quite separate and distinct, even from their earliest origin. When the kidneys appear, the limits of the Wolffian body are very definite, and there is no admixture of the canals of either of these organs. As for pretending to distinguish the canals of one from those of the other, in the earlier stages, it would, in my opinion, be exceedingly difficult; or, more likely, impossible. If this be conceded, it would seem superfluous to invoke the assistance of misplaced Wolffian tubules for the purpose of explaining congenital cystic conditions of the kidney. Some malformation of the

kidney tubules themselves, or of the glomeruli, would afford an equally plausible explanation, and would not necessitate a demonstration of the actual passage of Wolffian tubules into a place where they do not normally exist.

The development of the Wolffian body was then described by the lecturer until the stage was reached in which its front part had commenced to atrophy, and its posterior portion became an appendage of the genital mass (Fig. 5). At this stage the development of the last



Fig. 8.—Human embryo six to seven weeks. The Wolffian bodies are blended near the cloaca.

named structure was recommenced. Repeating that the genital mass, either in the male or female, consisted of a matrix of branched anastomosing cells closely resembling mucoid tissue in appearance, together with a large number of round, nucleated, unbranched cells in the meshes (Fig. 6), it was explained how the latter formed the seminal tubules, and how, from the matrix, the tunica albuginea and fibrous tissue of the testicle originated. Comparisons were then instituted between the structure of the developing testicle and certain varieties of sarcoma of the testicle, particular stress being laid upon the relations of the spermatic elements to the stroma.

The development of the seminal tubules having been accomplished, certain tubules were described which had appeared in the upper and outer part of the Wolffian bodies; these gave origin to the tubules of the head of the epididymis, and, in the female, to the structure commonly called the parovarium. The remaining part of the Wolffian body—that is, the original structure—gave rise to embryonic remains in the neighbourhood of the head of the epididymis and digital fossa, and to structures which Waldeyer has demonstrated in the vicinity of the ovary. The lowest tubules of the Wolffian body became the vasa aberrantia of Haller. (A specimen which showed four of the last named structures was exhibited.)

At the conclusion of the lecture a case was mentioned in which was found the first abnormality seen during the investigation (Fig. 8). In a human embryo, at about the fifth week of intra-uterine life, the Wolffian bodies of opposite sides were fused together. The lecturer, after mentioning G. St. Hilaire's case of fusion of the testicle, compared the circumstance to that which is seen in cases of horse-shoe kidney.

MILE END.—Mr. Thomas Taylor has issued a short preliminary report for this hamlet, giving a few outlines of events during 1885. The statistics at his disposal are of the barest, he having entered upon his duties in the course of that year, and the information not being forthcoming from which the usual statistical particulars are obtained. The mortality from all causes was 2,232, including deaths of inhabitants in public institutions and hospitals outside the district, and yields a death-rate of 19·9 per 1,000. The mortality from zymotic diseases was 417, showing a death-rate of 3.7 per 1,000. More than half the deaths were from measles and whooping-cough; and Mr. Taylor accounts for this by the trivial manner in which parents treat these complaints, never seeking medical advice until some serious complication has taken place. The number of deaths under one year of age was 563, and those over 60 years of age, 529. No epidemics of a serious character occurred during the year.

REPORTS

OF THE

COLLECTIVE INVESTIGATION COMMITTEE

OF THE

BRITISH MEDICAL ASSOCIATION.

CENTENARIANS.

By G. M. HUMPHRY, M.D., F.R.S.,
Professor of Surgery in the University of Cambridge.

THE following reports of fourteen centenarians (one in his 100th year), received since the table published with the JOURNAL of December 11th was in type, and bringing the number, in all, up to sixty-six, are in most particulars confirmatory of the observations I drew from that table. Seven of the fourteen are women, and seven are men, the proportion of men being thus greater than usual. The greater number of these old people, like those in the table, enjoyed life with fair vigour of body and mind, had good appetite and digestion, were and had been small or moderate eaters, and small consumers of alcohol and meat, and had little illness or ailment.

One only (56) is said to have had slight deformity of the finger-joints; nine retained good sight, and seven good hearing. In three the sight is reported indifferent, and in four the hearing. Five are stated to have been first children; and the parent of one was a twin. Eleven had been married; two were single ladies. Of the five married women four had respectively eight, five, two, and nine children; of one the number is not given, but it is said that three of her children are still alive. One of the men had ten children, and another twelve. Thus the productive quality is demonstrated here as well as in the table; and there is fair prospect of the maintenance, or rather of the increase, of the centenarian qualities. The average height of the four women in whom it is given is 5 feet 2 inches, and of the five men 5 feet 4 inches, which is scarcely equal to that of those in the table, and is therefore not quite so confirmatory of Mr. Roberts's observations (JOURNAL for January 1st, p. 41) respecting the association of good stature with longevity. The disappearance of teeth, especially in the women, is evinced by the fact that the four women in whom mention of the teeth is made were toothless; two of the men are toothless; five have respectively 4, 10, a few 8 and 6, and these were chiefly in the lower jaw. In the one woman and six men, with reference to whom the matter is mentioned, micturition is stated to have been natural. The good state of the arteries and the elasticity of the chest-wall are noted in some, also the recovering power from illness in Nos. 53 and 62; and No. 57 is stated to have been confined in bed by debility for two years between 60 and 70. The placid energetic disposition and kind benevolent character, are also shown by these reports, as by the tables, to be frequent adjuncts to the centenarian qualities, being promoters, we may presume, as well as resultants, of old age.

53.—Dr. Selby, of Portwilliam, writes: "Died at Portwilliam, Wigtonshire, on December 29th, 1886, Betsy Boath—married name Stirling; born May 18th, 1784; married and had eight children, who predeceased her; first child born in 1810, when she was 26 years of age. A brother of hers died in April, 1885, and there were between her and him a sister who died two years since, aged 89 years, and another three years since, aged 91 years. She was born in Kennettles, Forfarshire, and lived in that part of the country till May, 1860, when she removed to this place. She was always a very healthy woman, quiet and industrious, and very temperate in her habits. She retained her faculties to within a few days of her death, and could read with the aid of spectacles. She was confined to bed for a fortnight at the last, and died of no special disease, but of sheer old age."

54.—Dr. Samuel White, of Pershore, sends the following account of Sarah White, a widow, who died at Pershore eight years ago, aged 101; was strong and stout, about 5 feet, and erect; was in a comatose state at 99 for some weeks after a chill from sitting in a draught, but recovered, and danced and sang on her 101st birthday; joints natural; digestion and appetite good; toothless; hearing and sight indifferent; was intelligent, with good memory, and good-tempered;

in moderate circumstances; had five children; had been an early riser and drank some beer; did not smoke or take snuff.

55.—Dr. Smith also reports of Sarah Mumford, a widow, who had had ten children, that she died, aged 103, of diarrhœa, at Pershore; about 5 feet; a brisk, energetic, sociable, intelligent person, but childish at last; good hearing, sight, digestion, and appetite; toothless; took little alcohol; was able to walk about; always a very abstemious person, taking very little meat, not smoking or taking tobacco; had no illnesses, ailments, or accidents, indeed always good health; was the first child of her parents, one of whom was a twin. Three of her children are alive, aged 67, 70, and 75.

Dr. Smith attended both the above.

56.—Dr. Cameron, of Bawtry, sends me the following account of Jane Neale, a widow, born May 17th, 1785, who died September 8th, 1885. She was in church, and received the Communion on her 100th birthday, which happened on a Sunday; was confined to bed for two months, and sank very gradually. She resided at Bawtry in comfortable circumstances; of average general condition; used glasses, but had good sight, hearing, digestion, and appetite, and regular action of bowels, rarely taking medicine; of energetic character, high intellect, and with good memory; active; a good sleeper, going to bed about 10, and rising between 7 and 8; no teeth, natural or artificial; slight deformity of finger-joints; pulse 72, regular, large, compressible; little arcus senilis; micturition natural; had two children; two sisters died at the age of 86.

57.—Dr. Sinclair, of Kirkwall, sends me the following, of Robert Yorston, born December 10th, 1786 (registerin family Bible), poor, spare and feeble, lately confined to bed by weakness, but contented, pleased to see friends, and still able to shave himself, voice full, hearing and sight indifferent, used glasses many years, finger-joints natural, digestion and appetite good, small eater, four meals, ½ ounce whisky at night, very little meat, bowels act irregularly and often takes an aperient; is of placid disposition, has full possession of his mental faculties, and has fair memory; no maladies, micturition natural: four lower incisors remain; chest girth, 37 inches in inspiration, 36 in expiration; elasticity of rib-cartilages distinct; pulse 54, regular, large, incompressible; arteries even; respiration 24, regular; arcus senilis much; no evidence of failure in great organs. He worked as a shoemaker till 90, at Kirkwall; was married at 28, and had 12 children; was the first child of two; was a spare man, always had good health, digestion, and regular action of bowels, of placid disposition, average intellect, active, but took little out-door exercise; rose at 7, good sleeper, good appetite but small eater, no alcohol and very little meat; no tobacco; between 60 and 70, was in bed two years from debility, gradually recovered. His father was 33 when Yorston was born, and died at 44, of phthisis. His mother died at 89, and his sister at 65, of cancer of intestines. Six of his children are alive, ages from 48 to 71; one died of locomotor ataxy aged 68, another of dropsy aged 48, and others when young. No blood-relationship between his parents.

58.—C. Ogden, M.R.C.S., of Rochdale, writes of Robert Brearley, who was born May 20th, 1787, whose baptismal certificate is dated June 10th, 1787, and who is in comfortable circumstances, that he is of average condition, erect, 5 feet 6 inches, active and walks about; has seen him walking out this winter, one cold, foggy, very trying morning; has clear full voice, good hearing, used glasses for thirty years, but cannot read now; finger-joints natural, teeth all gone; good digestion, appetite, and action of bowels; is a moderate eater, takes no alcohol, but a moderate amount of meat; energetic and placid; average intellect, good memory; goes to bed at 9, gets up at 11; has no maladies; micturition natural; chest-girth 37 inches in inspiration, 36 in expiration; elasticity of rib-cartilages distinct; pulse 70, regular, small, incompressible; arteries visible and even; respirations 20, regular; arcus senilis little; no evidence of failure in great organs. He was a flannel-weaver, was a first child; married at 22, wife lived 49 years after, and had three children; was always in comfortable circumstances; stout; good health, appetite and digestion, action of bowels, and sleep was active, walked many miles and used to hunt on foot; got up at 4 or 5; an average eater, moderate animal food, very little alcohol, no tobacco; of average intellect; had few ailments; his father's father died aged 65, mother aged 35; mother's mother at 74; father 54, mother 85; brother 79, sisters 86 and 80; one child is alive, aged 75, one died at 65 of dropsy, and another aged 25, of rupture of blood-vessel.

59.—A. W. Steer, M.R.C.S.E., of Stewart Town, Jamaica, sends me the following account of a native man, named Tawny, supposed to be 115, who was given as a wedding present to Mr. Steer's great grandparents at their wedding in 1783; and it is not the custom to to make a present of a slave till he is developed into useful property, varying from 12 to 16. Quite black; grey, woolly hair; supports himself by cleaning a chapel, and walks a mile each way every morning, to fetch milk for the minister. Came to Mr. Steer's wedding a few months ago to give good wishes, as he has been to all the weddings in the family for four generations; is 5 feet high, weight about 90 pounds; spare, erect, of average strength; active and energetic; muscles well developed, clear voice, good sight, hearing, appetite, digestion, and sleep; moderate eater; two meals, little animal food; never tasted alcohol, joints natural; average intellect and good memory; 50 years of married life, two children, and one of these is quite an old man; was a first child, always had good health; employed in slave work, and got up at daylight; no illness, ailments, or accidents, since boyhood. Two of his sisters are alive, one aged 80, the other a little younger than himself. His father was a native of Jamaica, his mother an African; chest girth in inspiration 31½ inches, expiration 31, elasticity indistinct; pulse 62, regular and small; arteries tortuous; respirations 15, regular; much arcus senilis; 10 teeth: 2 incisors, 1 canine, 4 molars in upper jaw, 1 incisor and 2 molars in lower; heart sounds clear and distinct; micturition natural; temperature in rectum 98.4°.

60.—H. C. Smith, M.R.C.S., of Notting Hill, enclosed baptismal certificate of his aunt, Miss Anne Spurr, of whom he saw much in the latter part of her life. She died aged 104 (born March, 1777, died in 1881), was the first child of her parents, was about 5 feet 5 inches, no gouty affection of hands, a self-sacrificing, truly religious person, had good health, used spectacles late in life only for reading, deaf, kept ladies' school for sixty years, retained her faculties till death, broke the neck of the thigh bone three years before death, and unable to walk afterwards. Latterly had slight attacks of bronchitis, but always rallied in a wonderful way; sank at last after a slight attack, with gradually increasing insensibility. Her father, a German, died at 75, her mother, English, at 68. Was cheerful, amiable, interested in what was going on in the world, and retained her faculties with little change till about a year before death.

61.—A relative sends, through Sir Dyce Duckworth, the account of Miss Catherine Heathorne, who lived, at Maidstone, to 103; 5 feet 2 inches, bent, glasses twenty years, joints natural, no teeth, natural or artificial, high intellectual powers, plenty of out-door exercise, an early riser, average sleeper, able to reinvigorate herself by a short nap, good appetite, average eater, little alcohol, no illnesses, the fourth child of fifteen, long lived family.

62.—Dr. Kenny, of Dublin, sends report of William Holland, aged 104, in the Union Hospital. Widower, formerly sailor and day labourer, 5 feet 1 inch; average strength, uses glasses, good hearing, finger-joints natural, good appetite and digestion, moderate eater, two meals, a little whisky, regular bowels, placid disposition, average intellect, active, walks about, cheerful and chatty, some rheumatic pains; was a sailor and a servant, poor, always spare and healthy, bald and grey late, an early riser, good sleeper, good appetite, average eater, and moderate drinker; had attack of pneumonia four months before death, from which he had recovered when an attack of diarrhœa carried him off in two days; pulse about 64, regular, rather large and compressible; a few teeth remained, micturition slow but natural; some evidence of aortic disease in the last few years. Dr. Kenny remarks that the recovery from pneumonia showed the soundness of his organs, and that the attack was a good example of the insidious manner in which that disease comes on in old age.

63.—Mr. Nicoll, a medical student of Peterhouse, reports of John Ronan, living in Dunowth, co. Cork, that he is reported to be 104, was married at 40; his wife lived 52 years with him, and bore ten children; that he is strong, and walks about; 5 feet 8 inches, 11 stone, erect, of average strength, tough as an oak, good sight and hearing, finger-joints natural, eight teeth remaining (one upper canine, four lower incisors, two canine, one molar), good appetite and digestion, three meals, seldom alcohol, placid disposition, very shrewd, fair memory, good sleep, goes to bed about 8, gets up about 12; was a farm labourer, had good health, got up at 5; average eater, took alcohol when he could get it, which was seldom; lived much on fish, smoked much; had fever about 40; pulse 72, intermitting, large; incompressible; arteries, even respiration 24; arcus senilis little, no evidence of failure, micturition quite natural.

64.—Professor Chione, of Edinburgh, sends the account, by Mr. Bowman, of Crail, of Mrs. Murray, whom he, at the age of 18, was taken to see when she was 100, as she wished to see the seventh John Chione in lineal succession. She was born at Kilduncan in 1761, and died August 1st, 1862, having broken her thigh bone by a fall in walking across her room several weeks previously; had nine children, all of whom, with one exception, reached maturity. She lived alone, under the care of an old and faithful servant; took a daily short walk

out-of-doors till her accident; had good sight with spectacles, fair hearing; was quite clear-headed, always cheery. It was easy to maintain conversation with her, and she would respond with a hearty laugh to anything humorous; very tidy and particular in her dress; employed herself busily in knitting, and did it excellently, although disadvantaged by the contraction of the third and fourth fingers of each hand, which were doubled into the palm. Teeth had long been gone, but her splendid health was not affected thereby, and to the last distinct traces remained of the beauty for which, in her youth, she had been distinguished.

65.—A. D. Rolleston, of St. Bartholomew's Hospital, sends note of Thomas Thatcher, 7, Crown Court, Warwick Lane, E.C., aged 100, poor, bent, loud clear voice, good sight and hearing, joints natural: one upper molar tooth and below two incisors, two canine, and one molar; little arcus senilis; appetite bad, takes a little rum; average intellect; moderate memory; good sleep; had no illnesses.

65.—The Rev. F. Howlett, and W. Curtis, M.R.C.S., send the following account of William Bone, in his 100th year, who still acts, and has done so for sixty years, as parish clerk; though very deaf for twelve years, has good sight (using glasses for about ten years), loud clear voice and good health, with moderate digestion and appetite, a moderate eater, taking little meat and alcohol; daily action of bowels, no teeth; chest-girth 33½ in inspiration, 32¾ in expiration; elasticity of rib-cartilages distinct; pulse 80, occasionally intermitting, large and compressible; arteries visible, but without knottiness; respirations 22, and regular; much arcus senilis; heart, lungs, brain, urinary, and other organs healthy; micturition natural; a large inguinal rupture being his chief trouble. He is 5 feet 7 inches, weighs 10 stone, somewhat bent, active, with good intellect and memory; a moderate sleeper, goes to bed at 9, and rises at 7.30. A tailor and gardener, in comfortable circumstances, and kept a public-house from 1812 to 1819, but was always very temperate in eating and drinking; good appetite and digestion, and average eater; rose before 5; was a first child; lived at East Tisted; married at 24, for thirty-three years, and had six children; described as of high intellect, active, and energetic, though placid; had always good health; no illnesses, accidents, or ailments, except occasional slight erysipelas in the face and legs. His mother lived to 100, and her parents to a great age. His father died at 60, and his parents were not long-lived. Mr. Curtis describes him as "wonderfully bright and cheerful, and had not long come in from chopping wood in the wood-house."

The correspondent of the *Times*, January 1st, 1887, gives account of an interview, in Vienna, with Magdalene Tonza, who entered her 112th year on Christmas eve, in full possession of her mental faculties; lost the last of her teeth 30 years ago, excellent appetite, eats meat minced, drinks a little beer, and hobbles about the room with the aid of a stick. Sixty years were spent in her native village, Wittengau, Bohemia (where she was born in 1775), 30 years in another village, and she was past 90 when she came to Vienna, 17 years ago. Her youngest surviving grandchild is 60.

Dr. Coker, of Chicago, writes me word that he attended a lady, aged 106, who recently died in that city of cancer of the tongue. This is the only instance of death of a centenarian from malignant disease that I have heard of.

A friend writes that Mrs. Covill, of Settington (No. 13 in the table) died on December 20th, within two months of being 102, after a week's illness, of bronchitis; she retained possession of her faculties to the very last; received the Holy Communion in the afternoon of the day on which she died, was quite collected, thanked the clergyman, and wished him good-bye. My friend saw her a month ago, when she was as well as usual in mind and body. Then she was sound and cheerful to the last, had a short illness, and a quiet peaceful end, affording a typical example of the close of a centenarian life.

In some respects contrasting with this is the account sent me by Dr. Boswell, of Saffron Walden, respecting Mr. N. (No. 11 in the table), who, for five or six months, was visibly declining, became unable to walk upstairs, and for three or four months had sacral bedsore, though not confined to bed. His legs were swollen, and he had a sore similar to the bedsore on one heel. This healed under treatment and relief from pressure, though the discharge was very profuse. The sacral sore, however, got worse. On December 12th his housekeeper, hearing his bell ring, went to him and found him breathing heavily, and she could not rouse him. He remained insensible, with inability to swallow, contracted pupils, and general rigidity of muscles, till his death, December 15th. "Cerebral hæmorrhage was undoubtedly the cause of his death, though the bedsore would have proved fatal had he lived a little longer."

The following remarks are in a letter from R. G. Daunt, M.D Edin., of São Paulo, Brazil, who has interested himself much in the subject of longevity: "I have known not a few individuals who attained the age of 114 years, one that of 115, many that of 100, and now in this district of Campinos exists a still strong and active man, Joseph Joachim do Prado—of good family—who counts 107 years, and whose mother and maternal grandmother reached the years of 112 and 122, the mother dying from an accident. Macrobians (of all races) of 100 to 130 are not at all infrequent—well-authenticated cases. Even cases of deaths at 140 are known to have occurred, especially in the mountainous province of Minos Jeraes. I cited (in the *Medical Times*) the district of Santo Amaro, near the capital of this province, as remarkable for the longevity of its inhabitants. The climate of Santo Amaro is cold, and the horses and cattle—natives of the district—are small, like those of Scotland. From what my residence of forty-three years in the interior of this country has permitted me to observe, I think it perfectly unreasonable to doubt the possibility of the attainment of the age of 150 years. The facts of longevity are more frequent among individuals of a mixed race of whites and Indians, next among Africans, and lastly among whites. It is a curious fact that, of a number of immigrants from the Açores who came here about seventy years ago, very few died with less than 100 years, and others reached 105, 109, 114. The truth of such ages I could safely swear to."

I may refer to "the physical condition of centenarians, as derived from personal observation in nine genuine examples," by Sir George Duncan Gibb, in the journal of the Anthropological Institute, 1872. Of these, two were men, and seven were women. They appear to have had remarkably good health, and the enjoyment of mental and bodily faculties; and in eight there was "an entire absence of those changes which are usually observed in persons approaching the allotted period of threescore and ten." One had been imbecile from childhood, and an inmate of a workhouse for probably the greater part of her life.

ON EARLY TRACHEOTOMY IN DIPHTHERIA.

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In a foot-note to a paper on Bacteriology in the January number the *International Journal of the Medical Sciences*, I pointed out what I thought ought to be the lines of treatment of diphtheria, based on what we now know of the pathology of that disease; and I also referred to the question of early tracheotomy. At the time that that note was written (April, 1886), I had not had an opportunity of putting my ideas as to early tracheotomy to the test of practice, but I have since that time had a suitable case, and I therefore take this opportunity of narrating it, and of raising the question. Unfortunately, up to the present time, diphtheria has been reckoned as a disease which ought to be placed under the care of a physician rather than of a surgeon, and consequently the surgeon is not, as a rule, called in till the period which I believe to be the suitable time for performing tracheotomy has already passed. In reality, as the disease is essentially an external and local one, and the chief part of the treatment is the local part, diphtheria is, from its commencement, a surgical disease.

Although the exact pathology of diphtheria has not yet been made out, the following is probably, roughly speaking, the state of matters. The disease is, without doubt, due to a micro-organism, and, from Lœffler's researches, most probably to a bacillus. This organism gains access to and grows on the mucous membrane of the throat, penetrating into the superficial layers of the mucous membrane, and leading to the exudation of fibrinous material, which, together with the dead epithelial cells, forms the diphtheritic membrane. The bacilli grow and spread in the superficial part of the mucous membrane, and as they spread the patch extends. As the result of their growth, they apparently produce very toxic ptomaines, which are absorbed into the circulation, and give rise to the general constitutional disturbance. Apparently, according to Lœffler's researches, the virus of the disease (the bacilli) does not penetrate into the circulation, so that the disease remains from first to last a local one, and the general symptoms are merely due to chemical poisoning. The exact pathology of diphtheritic paralysis still remains a complete mystery.

Now if this pathology of the disease is correct, it is evident that the main point in the treatment must be to prevent the local spread of the disease. If the bacilli can be destroyed or prevented from spreading, the diphtheritic membrane will not spread, the formation of the poisonous ptomaines will be arrested, and consequently the

constitutional symptoms will be prevented. I have therefore, for some time, treated the local throat-affection with antiseptics, and with an amount of success that tends to confirm the view that diphtheria is essentially a local disease. In the first place, I strip off the false membrane with forceps, etc., as far as possible, and then apply to the raw surface a watery solution of bichloride of mercury (1 in 500). This is best done by means of a brush or a sponge, but care must be taken not to have them too saturated, lest some of the fluid should be pressed out and swallowed. The application of this lotion is repeated every two hours, the spreading margin of the disease being chiefly attended to. In the intervals, the patient gargles the throat frequently with a weaker solution of the bichloride (1 in 2,000), which is, apparently, not irritating to the mucous membrane, and, from time to time, a spray of carbolic acid (1 in 40) is directed over the back of the throat. In adults, this treatment is very satisfactory, and I have seen the disease quickly and completely arrested in several instances where the treatment was vigorously pursued, and where the disease was taken early. In the case of children, it is much more difficult to carry out this treatment effectually; the throat is small, the child cries or closes the mouth when the brush is introduced, he does not gargle properly, and, not understanding the importance of the matter, he naturally objects to the disagreeable taste of the bichloride. The results are, accordingly, not so good in children as in the adult. It may perhaps be possible to combine the antiseptic with some material, such as glycerine or lanolin, which will adhere for some time to the mucous membrane, keep up the action, and thus render the gargling and painting less frequent.

I will not, however, dwell on the treatment of the throat-affection, as the special object of the present paper is to call attention to what I believe to be the proper indications for performing tracheotomy when the air-passages proper have become affected. I was led to reconsider this question by a sad case of diphtheria of which I had charge rather more than a year ago. The patient, an adult, had a very severe attack of diphtheria, and did not come under treatment till the disease had existed for at least two days. By that time the membrane had covered the tonsils and spread over a considerable part of the pharynx; there was also great constitutional disturbance. The local treatment indicated in the preceding paragraph was at once commenced, and, of course, attention was paid also to the general condition, the state of the bowels, etc. The general constitutional disturbance rapidly subsided, the disease seemed to be checked, and after two days' treatment the throat was almost entirely free from membrane, except at the base of the uvula, and the patient felt much better; there was return of appetite, etc., in fact, everything seemed to point to speedy recovery. Unfortunately, on the following day the patient was worse, and it became evident that the disease had broken out in the larynx, probably from infection from the patch at the base of the uvula, and the state of matters at once altered; the usual constitutional disturbance again appeared, diphtheritic asthenia quickly set in, and the patient ultimately died. When the larynx became affected, a consultation was held in order to discuss the question of tracheotomy; but it was decided that, as there were no symptoms of obstruction, tracheotomy was not called for. At the time I thought that, by means of tracheotomy, one might be able to arrest the spread of the disease downwards, to treat the local condition of the larynx, and thus prevent both death from suffocation and death from asthenia. Further consideration of this question has strengthened my opinions on this subject.

Opinions differ much as to the period at which tracheotomy should be performed when the false membrane has spread into the air-passages, some advocating early operation with the view of allowing good oxygenation of the blood and preventing the dangerous lung-collapse which is so apt to occur, others preferring to delay the operation till symptoms of obstruction are urgent. Mr. R. W. Parker probably represents the generally accepted views when he gives the following as the indication for performing tracheotomy in cases of diphtheria: "Tracheotomy is indicated in cases of increasing and persistent dyspnœa, when due to disease or mechanical obstruction in the larynx or adjoining part of the trachea." The test employed by most surgeons is the amount of mechanical obstruction, and the aim of the operation is to open the trachea below, or to remove this obstruction. Mr. Parker also aims at preventing, by means of a solution of carbonate of soda, the formation of tenacious membrane below the seat of operation, which would renew the obstruction.

Now, if the pathology given above is correct, and if I am correct in supposing that the good results which have followed the treatment indicated above were due to that treatment, the question naturally suggests itself whether tracheotomy should be limited to cases of obstruction, or whether it ought not also to be performed where possible with the view of preventing the spread of the membrane from the larynx into the trachea. In deciding this question, one has to weigh the dangers of tracheotomy in diphtheria against the advantages of opening the trachea early, and the probabilities of preventing the spread of the membrane downwards.

What are the dangers of tracheotomy in diphtheria? They may be classed under three headings: *a.* the ordinary septic dangers of an operation which cannot be performed thoroughly aseptically; *b.* the special danger that the wound may be attacked by the diphtheritic process; and *c.* the risks of bronchitis from the admission of cold air into the trachea, and the risks in connection with the tracheotomy-tube, such as ulceration of the trachea, etc. (As to dangers during the performance of the operation itself, these may be disregarded. The operation is a simple one, and would be undertaken at a period when rapidity of execution was not essential, and when, therefore, the various steps may be performed leisurely and securely). As regards the first point, although the operation cannot be performed thoroughly aseptically, this danger can be so much reduced by proper treatment, that it may be disregarded. When the trachea has been thoroughly exposed, ready for the incision, but before it has been opened, and when the bleeding has been arrested, the wound should be thoroughly washed with 1 in 500 bichloride solution, and then sponged out with solution of chloride of zinc (40 grains to the ounce). When the trachea has been opened, the chloride of zinc should be again applied, care being taken that it does not run into the trachea. By sponging it out, from time to time, with the bichloride solution, and applying antiseptic ointments, the risk of septic infection may, I think, be reduced to a very slight one. The spread of the membrane on to the wound, however, is the real objection to tracheotomy in diphtheria; but the same treatment as is employed to protect against ordinary septic infection will also act against the special infection. If the membrane should spread on to the wound, it is within easy reach, can be stripped or scraped off, and the raw surface and the spreading margin can be touched from time to time with powerful antiseptics. In the case to be mentioned below, the membrane did actually appear on the upper part of the wound, but there was no difficulty in preventing it from spreading; and, if it is possible to prevent the spread of the disease down the trachea, it ought to be easy to protect the wound from attack. As regards the dangers of bronchitis and of damage from the tracheotomy-tube, these are comparatively slight with the methods now employed. On the whole, I cannot look on the tracheotomy wound in diphtheria as adding very much to the risks to the patient; and, considering the gravity of the disease, if there is any probability of advantage from the operation, there need not, I think, be any hesitation in performing it.

On the other hand, the results obtained in the throat encourage one to hope that it would be possible, in the more easily accessible trachea, to check the progress of the disease with suitable treatment. In almost all cases, the membrane appears first in the larynx and spreads from thence continuously down the trachea; and, if the operation be performed as soon as it is evident that the larynx has become affected, the trachea will be found to be healthy at the seat of operation, and the spread of the disease can be watched and, if possible, arrested; and, apart from the question of averting the spread of the membrane, most authorities are agreed that the chances of recovery are greater, if tracheotomy is performed early, than if it is delayed, the hesitation in the minds of some being due chiefly to the fear of infection of the wound—a danger which, I believe, may be avoided if the wound is treated in the manner before described.

These various considerations have led me to the belief that the indication for tracheotomy in diphtheria ought not to be obstruction of the respiration, but *that tracheotomy ought to be performed in cases of diphtheria as soon as it is certain that the larynx is affected, chiefly with the view of preventing the spread of the membrane downwards.* In adults, it is more especially important not to wait for symptoms of obstruction, for, as everyone knows, these may be absent, even though the membrane has reached the bronchi.

In order to accomplish the above aims, it is, in the first place, necessary that the trachea be opened more freely than usual, the object of the incision being not merely to get in a tracheotomy-tube, but to inspect the interior of the trachea. Where the affection has not spread beyond the larynx, the high operation will be sufficient; but, in order to get a good view of the interior, it will be necessary in most cases to divide the cricoid cartilage, as well as the upper three rings of the trachea, and it may be necessary, in some instances, to divide the isthmus of the thyroid gland. The trachea having been opened, the edges are held well apart by hooks, and the interior inspected. If operating by daylight, an excellent view is obtained

by raising the child's neck on the arm; but, of course, if it is necessary, the light may be reflected by means of a mirror. If the trachea is healthy, it will present a bright red appearance; if membrane is present, it has a dull grey character. The tracheotomy wound is treated in the manner before described, and, if the trachea is healthy, a feather or brush dipped in the 1 in 500 bichloride solution is pushed upwards into the larynx, with the view of disinfecting or detaching the membrane present. If the membrane has spread to the trachea, it is pulled off by means of dissecting-forceps, and the raw surface left and especially the spreading edge, touched with the 1 in 500 bichloride solution.

Where no membrane is present, I had originally proposed to insert a tracheotomy-tube at the lower part of the incision, and to introduce into the trachea above the tube strips of thin rag soaked in a watery solution of bichloride of mercury (1 in 2,000), so as to fill up the tube. This solution would probably not irritate the mucous membrane, and the rag would be removed every two hours or so in order to inspect the interior, to see if the membrane was spreading downwards or if the presence of the dressing was doing any harm. If no bad effects were visible, fresh strips would be introduced and the inspection repeated in two hours' time. In this way the mucous membrane would be constantly in contact with the solution, and I hardly think that the membrane would succeed in spreading. If membrane was seen it could be stripped off, the surface treated as aforesaid and the dressing re-applied.

But when I came to operate on the case mentioned below, Mr. Stanley Boyd, with whom I had discussed the matter, and who had already been fortunate in having the opportunity of testing the idea, I believe successfully, suggested the use of Golding-Bird's dilator instead of a tube, and brushing the surface from time to time, if necessary, with a weak solution of bichloride. Certainly there is a good deal to be said in favour of this plan, as the trachea remains always exposed to view and accessible, so that the nurse can make the necessary applications from time to time, while it is not irritated by the presence of a dressing; but I am not sure that, after all, my original plan, or some plan like it, is not the best. There is a serious objection to Golding-Bird's dilator, namely, that, after a time, it is very apt to slip out, though this might be remedied by having little hooks at each end of the bars. But the chief objection that I see to the plan is that the bichloride applied only now and then quickly ceases to be in contact with the mucous membrane, because it is removed by the mucus excreted, etc., and the membrane may spread down in the intervals between the applications; whereas, with such a dressing as I have suggested, the bichloride is always in contact with the mucous membrane. Perhaps this difficulty may be got over if we can apply the antiseptic, whatever it be, in a tenacious vehicle which will adhere to the mucous membrane for some time, and, in that case, I think that the use of the dilator so arranged that it cannot slip would be superior to a tube. Where the membrane is found to have spread below the seat of operation when the trachea is opened, all that can be done is to extract as much of the membrane as possible, to apply Parker's carbonate of soda solution, and perhaps from time to time to introduce a feather dipped in the 1-500 bichloride solution.

The following case, and others in which I have used bichloride where the trachea was not opened till the membrane had reached the bronchi, show that these solutions may be applied to the tracheal mucous membranes in the ways indicated without apparently producing any hurtful effect. That bichloride of mercury is the best antiseptic for the purpose I am inclined to doubt; certainly in a watery solution it is not all that can be desired; other substances must be tried before a decision can be come to on that point.

The case to which I have alluded was that of a little boy, 2 years old, who was admitted to the Paddington Green Children's Hospital, on September 4th, 1886. He had suffered for two days from sore-throat, and, on the morning of his admission, a cough developed, the voice became hoarse, and he was noticed frequently to catch at his throat, as if there were difficulty in breathing.

On examination of the throat, patches were seen on both tonsils, and also at the back of the pharynx and on the soft palate. In the afternoon as many of these patches as possible were detached by means of dissecting forceps, and the throat was thoroughly sponged out with 1-500 bichloride of mercury solution. Directions were given to brush out the throat from time to time with 1-2000 bichloride solution. Next morning the right tonsil was clean, and there was only a small patch on the left; but, as the laryngeal symptoms were more marked, and it was now clear that the larynx was affected, it was decided to open the trachea.

This was done as above described, the isthmus of the thyroid gland being divided, and the wound being sponged with bichloride of mercury and chloride of zinc. The trachea was healthy, the membrane not having yet reached it. Golding-Bird's dilator was fixed in the trachea, and directions were given to brush the surface from time to time with a 1 in 2,000 bichloride solution. On the next morning there was still no membrane to be seen, but during the night of the 6th it spread downwards, and had almost reached the lower part of the exposed trachea when seen on the morning of the 7th. By means of dissecting forceps as much of the membrane was stripped off as possible, and the surface was sponged with 1 in 500 bichloride of mercury. This was repeated at intervals during the day and following night, but the membrane did not get beyond reach, and soon ceased to form. On the morning of the 7th it was also found that the membrane had spread on to the upper part of the tracheotomy wound, and this was treated in a similar manner with satisfactory results. On the 8th, it was found impossible to keep the dilator in place, and therefore an ordinary tracheotomy tube was substituted. As regards the question at issue, it is unnecessary to give further details of the progress of the case, which was quite satisfactory, except that it was some weeks before the tube could be left out. This difficulty ceased on the patient being attacked by measles. In this case the membrane was found to have spread down during the night, apparently unnoticed by the nurse, but when it was observed and treated, the treatment had evidently considerable effect in arresting the further progress. I believe that if the antiseptic had been applied more continuously, as would have been the case had the trachea been packed as above proposed, or had some more adhesive antiseptic been employed, that the membrane could hardly have spread downwards.

It will be evident that the object of this paper is not to recommend the application of any particular antiseptic substance in this disease, but to raise the question of the indications for performing tracheotomy in diphtheria. And I believe more lives will be saved by opening the trachea early, as soon as the larynx is evidently attacked, and by attempting to prevent the spread of the membrane downwards than by delaying the operation till symptoms of obstruction are marked. The probable advantages, I think, more than counterbalance the possible dangers, for, apart from the advantages generally admitted to attend early tracheotomy, there is the further advantage that there is a possibility of arresting the spread of the disease, and also of applying medicaments to the larynx.

ON HERNIA OF THE CÆCUM.

By G. A. WRIGHT, B.A.Oxon., F.R.C.S.,
Assistant-Surgeon, Manchester Royal Infirmary; Surgeon to the Children's Hospital, Manchester.

In an interesting paper on Hernia of the Cæcum in the Journal for February 19th, 1887, Mr. Treves discusses various points, among which are the question of the presence of a sac, the age at which the hernia is met with, and its reducibility. As some misapprehension appears to exist on the subject as to these points, and as to the frequency of the occurrence of cæcal hernia, my experience in the matter may not be without interest.

I find, on referring to my cases, published in the *Annual Abstracts of the Children's Hospital*, four cases recorded between the years 1881-85; two cases are in my ward at the present time, and a seventh is among my out-patients at the Royal Infirmary. Briefly, the cases are as follow:

Case I.—A strangulated right inguinal hernia in a male infant, aged 5 months. The rupture had existed two months. On operation the sac contained discoloured fluid, the cæcum, vermiform appendix, and a small part of the ileum; the hernia was into the funicular process, not into the tunica vaginalis. The sac was ligatured and removed after reduction of the hernia, and the child recovered. The friends neglected it, and the child was readmitted a year later with the hernia down again. It was again cut down upon; a new peritoneal sac had formed, or, at least, a sac indistinguishable from the ordinary one, and the hernia again contained cæcum and vermiform appendix. The sac was ligatured, and the child recovered, but still required to wear a truss. (*Vide Abstracts* for 1881-82.)

Case II.—A boy, aged 7, had congenital right inguinal hernia, of large size, and irreducible. On operation the sac was opened, and was found to contain cæcum, vermiform appendix, and two or three inches of ileum; in the mesentery were enlarged tuberculous glands, which prevented reduction; by removal of some of these, and enlarging the

aperture, the hernia was reduced. The sac was tied, and the wound closed. The boy recovered, but was phthisical when seen some time after. (*Abstracts*, 1884.)

Case III.—Male, aged 13 months. At six weeks old had an umbilical hernia; a week before admission, a scrotal hernia appeared, which was not reduced. On admission there was vomiting, and a large right scrotal hernia was present; this was irreducible under chloroform. On operation the sac contained an ounce and a half of fluid; the gut, which was cæcum and some small intestine, was congested, and could not be reduced until the ring was notched. The pillars were wired, and the sac ligatured. He recovered, and, five months later, remained well. (*Children's Hospital Abstracts*, 1885.)

Case IV.—A boy, aged 6 years 9 months. Had a hernia since three months old. On admission the hernia, which was reducible, reached, when down, to within a short distance of the knee. The operation for "radical cure" was done; the sac was found to contain cæcum, vermiform appendix, and other parts of the intestine. He recovered. (*Children's Hospital Abstracts*, 1885.)

Case V.—A male, aged 3 months. Right inguinal hernia, which was reducible. The appendix was distinctly felt in the hernia, which had appeared a fortnight before the child was seen. The testicle had descended, and there were no adhesions between it and the hernia. An umbilical hernia was also present. No operation required. This case is an out-patient of mine at the Royal Infirmary at the present time.

Case VI.—Male infant, 1 year 11 months. Has had double inguinal hernia since birth. As trusses failed to keep the hernia reduced, he was admitted. The hernia on the right side was partially irreducible, and the appendix could be felt in it, remaining down after reduction of the rest of the bowel. On operation, the sac, being opened, was found to contain cæcum and appendix, and some omentum; a broad band connecting the appendix with the testis was partially divided, and the appendix reduced. The canal and sac were then closed. The child is still in hospital.

Case VII.—A boy, aged 4 years. Has had a right inguinal hernia since birth. On admission for operation, the appendix was felt in the hernia, which was easily reducible. At the operation, the hernia, which was funicular, was reduced before opening the sac, and was not, therefore, seen. The boy is still in hospital.

It will be seen that five of the seven cases were verified by operation, out of a total of twenty-four cases operated upon in children; hence either cæcal hernia must be quite common in children, or, when it occurs, it must present some features which make operation necessary in a larger proportion of cases than the ordinary hernia. I am inclined to think that both alternatives are, to some extent, true. Mr. Treves mentions four instances as the only ones recorded, and says the condition is "practically limited to adults"; my own experience disproves this, and I am inclined to think that cæcal hernia not uncommonly exists in children, but its exact nature is overlooked. In several of my cases the appendix was readily felt before operation, and there was no doubt about the portion of bowel that was down, but a casual manipulation of the hernia might easily have reduced it without noticing the appendix. As to unusual features in these herniæ, in two of my cases there was strangulation, a third was irreducible, but this was the result of enlarged glands (so far as I know, a hitherto undescribed cause of irreducibility), a fourth (Case 6) was also irreducible from adhesion between the appendix and the testis, the fifth was of very unusual size (Case 4).

A well-defined sac, just as in an ordinary hernia, was present in all my cases that were operated upon. In one there was adhesion of the vermiform appendix to the testis by a sort of mesentery, which, at the time of operation, I attributed to the same cause as Sandifort, mentioned by Mr. Treves. In all my cases the hernia had existed since early infancy, at or before 3 months old. In one child an umbilical hernia had existed before the scrotal; possibly the cæcum, pushed out of its umbilical sac, had protruded through the next weakest spot, namely, at the inguinal ring; but whether the umbilical hernia was cæcal or not, I have no evidence. I would then suggest that the following statements are more correct in this matter than those mentioned by Mr. Treves as being commonly accepted:

1. Cæcal hernia is not very rare in male children, and may be funicular or into the tunica vaginalis.

2. A cæcal hernia in children is provided with a perfect sac, just as in other herniæ, as shown by Mr. Treves; and, if this sac is removed, may acquire a new one,—a point of much interest in this question (see Case 1).

3. Cæcal hernia may be irreducible as a result of adhesions of the appendix to the testis, may be strangulated, and may attain a great size.

4. Such herniæ are recognisable with certainty in some cases at all events, by feeling the rounded cord-like appendix, without operation.

In conclusion, I may be allowed to suggest that writers on the subject of children's diseases will find material not devoid of interest in the annual abstracts of cases treated at the Children's Hospital, Manchester, which have been published for the last five years, and from which four of the cases here recorded are taken.

SURGICAL MEMORANDA.

PAINLESS REDUCTION OF SHOULDER-DISLOCATIONS BY LATERAL EXTENSION IN THE SUPINE POSITION WITHOUT ANÆSTHETIC, APPARATUS, OR ASSISTANT.

Since the publication of my paper in January of last year (Journal, 1886, vol. i, p. 194), twelve communications on the subject have appeared in the Journal, some reporting cases, others claiming priority for certain of the details, all of which were expressly stated in my paper to be old, and new in combination only. Whether the method be new or old is a comparatively small matter, though it is not yet apparent that it has been previously described, or, what is still more important, has had the following advantages claimed for it (as demonstrated in eight out of twelve cases attempted by myself and others), namely, that it is easy, rapid, painless, needs no anæsthetic, apparatus, or assistant, and probably does no injury to the joint,—advantages which would justify recourse to it, in the first instance, in all shoulder-dislocations, even if successful in only one quarter of the cases tried, since it does not materially delay, or interfere with, the application of other methods when it fails.

Experience of failure and success has suggested slight improvements. Place the patient on his back on the floor with the arm at right angles to the body, and tell him to lie limp, and make no effort, that there will probably be no pain, and that, if any is excited, it is to be reported, when the surgeon will desist. The surgeon, sitting on the floor, places his heel in the axilla, quietly takes the injured limb by the wrist and upper arm, and pulls in a line at right angles to the line of the trunk, at first gently and gradually increasing up to a force of a few pounds, the arm being still on the floor or but slightly raised from it. As reduction may take place without any intimation, to ascertain if this has occurred, the hand may be placed on the joint, or the limb adducted. If necessary, repeat the traction with a greater degree of force, and should all the force that can be applied, short of giving pain, fail, gentle rotation of the limb, first in one direction, and then in the opposite, can also be made with traction. When pain is excited either by the above-described traction or rotation, it is probable that this method will fail, like any other, from muscular spasm.

The supine position is the only one in which complete relaxation of all voluntary muscles can be obtained, not even associated tonic muscular action being present, and hence less pain and resistance than in other positions. The arm stretched out follows the indication given by the patient supporting the elbow—takes the strain off the deltoid, abducting the limb completely, and usually entirely relieving pain. Traction at right-angles to the line of the trunk is in the direction most nearly opposite to that of the force which generally causes the injury, and, therefore, the most likely direction by which the bone may come back to its proper position through the opening torn in the tissues, with less likelihood of enlarging this opening, and causing less resistance from most of the muscles concerned in the movements of the joint.

Shanghai. Neil Macleod, M.D.Edin.

OBSTETRIC MEMORANDA.

ARM AND SHOULDER PRESENTATION: "SPONTANEOUS EXPULSION" (DOUGLAS)

I was called, on December 12th, at 1 P.M., to see a Mrs. W., who was in labour with her second child. On arrival, I found the right arm of the fœtus already in the world, with the right shoulder firmly fixed against the arch of the pubes, and was informed by the nurse that it had been in this position for the last two hours, the liquor amnii having been discharged at 10 A.M. The pains had been regular and severe, but were becoming weaker; I therefore decided to turn, but found great difficulty in introducing my hand, the fœtus being so firmly fixed and low in the pelvis. I had nearly succeeded in reaching a foot, when the uterus commenced acting very forcibly, compelling me to withdraw my hand.

The pains continued, and the shoulder still remaining fixed beneath the pubes; the spine and body of the fœtus became flexed upon itself, the nates descended and swept over the perineum being followed by the lower extremities. The other arm now came down, and the head was delivered as in cases of breech presentation. The child, a girl, appeared to have been dead some hours; it was quite mature but thin, and the funis was twisted twice round its neck. The placenta followed immediately, and when I left the house, my patient was feeling very comfortable.

CHARLES PENRUDDOCKE.

Winchcombe, near Cheltenham.

COMPLETE INVERSION OF THE UTERUS.

I WAS called, on November 2nd, to see Mrs. F., a multipara, who had been delivered by a midwife of a female child. She was livid and collapsed, sighing and moaning, throwing her arms and legs about in an aimless manner. I found on examination a large mass hanging from the vulva into the bed resembling a polypoid fibroma, with the placenta attached over the fundus, especially at the front and right angle. Palpation of the abdomen revealed the fact that there was no uterine tumour, and that the muscles of the abdomen were hard from contraction, giving it a boat-shaped appearance. The fingers in the vagina felt the round ligaments in front upon the stretch. Being satisfied that I had a case of complete inversion to deal with, I grasped the uterus in my left hand. It felt firm in consistency, and from the fact that it had a distinct feeling resembling that of testicles, I judged the ovaries were in the centre of the cavity. With my right hand I peeled off the still partially adherent placenta, exposing the opening of the right Fallopian tube. I next pushed the right hand, grasping the neck of the uterus, as far as possible into the vagina, carefully kneading that portion next the cervix, and trying to push it back into its place. Soon it began slowly to return until my hand was within the cavity of the uterus, when it rapidly resumed its natural condition. My hand on the abdominal wall assisted my closed fist on the inside in returning the lost portion. There was no hæmorrhage, but about a pint of clot and *débris* were in the bed with the placenta, which was full-sized and with an average cord. The operation being completed, I administered a drachm of tincture of opium in a tablespoonful of brandy in a little hot water, cut off the stays, and applied a mustard plaster over the heart, for the pulse was imperceptible at the wrist, and the apex-beat was only 32 to the minute. External warmth was applied by means of the oven-shelf and hot bottles, and the yolk of an egg having been beaten up with an ounce of brandy it was given also, and I ordered the same to be repeated later on. The midwife stated that labour had lasted about four hours, that no pains had followed the expulsion of the child, that she had placed the patient on her elbow, and applied pressure to the abdomen, that she had not used force to the cord, that the first untoward symptoms were the patient giving a cry of pain and beginning to vomit, when, upon examination, she discovered the condition of things. All this was corroborated by those present. Nearly an hour must have elapsed between the accident and my attendance. The patient was slightly convulsed on the following day, and the urine had to be drawn off for a fortnight. The vagina and lower portion of the uterus were washed out twice daily with a weak solution of Condy's fluid. After keeping the patient in bed for a month, I inserted a Hodge's pessary, and allowed her to get up. She has since enjoyed good health, and works at a factory.

Professor Lusk states that in the *cliniques* of Braun and Spœth no case of complete inversion of the uterus occurred in 150,000 labours, that only one case occurred at the Rotunda Hospital in 190,000 confinements, and that Cross's statistics show a fatality of one in three. It is possible that the size and weight of the placenta attached to the highest part of the uterus were a cause of the accident. Pulling at the cord is always an easy way of explaining the difficulty. Vomiting was probably the result of partial, and the cause of complete, inversion. If the uterus does not contract over that portion of its walls to which the placenta is still adherent, it is possible that this area, dragged upon by the placenta through the efforts of the uterus to expel it, is a factor far more potent than any other yet put forward, and by this means a still increasing portion of the uterus becomes expelled by the actively contracting fibres, until so large a portion has been expelled that its own weight completes the process.

Hinckley. C. W. SESSIONS BARRETT.

VACCINATION GRANT.—Samuel Evans, L.R.C.P.Lond., M.R.C.S., etc., of Harwich, Essex, has obtained a Government grant of £37 12s. for the efficient performance of public vaccination in the first and second districts of the Tendring Union.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

GUY'S HOSPITAL.

SUPRAPUBIC LITHOTOMY IN A CHILD.

(Under the care of Mr. GOLDING-BIRD.)

[Reported by Mr. W. KEIFFENHEIM.]

T. W., aged 5, was admitted on October 9th, 1886, with a history of four months' symptoms indicative of vesical calculus. He was sounded, and the following note was made: "Calculus apparently small; felt immediately. Urine frequently passed; acid; no albumen; prepuce long; some bubonitis." His general health was satisfactory in all points; but he suffered much from pain after micturition.

On October 15th, Mr. Golding-Bird performed suprapubic lithotomy, under chloroform. A Thompson's india-rubber rectum-dilating bag was passed into the bowel, and was distended with two and a half fluid ounces of warm water. (Subsequently, just before the bladder was opened, half an ounce more was injected.) A No. 5 catheter (Jacques' soft) was passed into the bladder, and retained by a tape round the penis, and three ounces of "Thompson's fluid" were injected through it, the urine being first drawn off. In the middle line, beginning at the symphysis, and extending upwards for one and a half inches, an incision was made, which passed between the two recti; and, the posterior layer of the sheath of these muscles being opened, the subperitoneal fat was easily recognised. This was now seized on each side by a Spencer Wells's torsion-forceps; and by this means, slight traction being made, the thin anterior wall of the bladder was both steadied and easily held up in the wound. A scalpel was now thrust into the bladder, and the little finger of the left hand immediately afterwards, so that none of the fluid that had been injected escaped. A small stone was at once detected lying at the left base (the rest of the bladder being quite normal), and was seized with a small pair of lithotomy forceps and withdrawn. The fluid now escaped, and pressure being removed simultaneously from the catheter, some of it escaped in that direction. Two wire sutures were now introduced through the skin and the edges of the sheath of the rectus, on either side, and by their means the edges of the wound were in great measure, but not completely, approximated. Six strands of carbolised gut were laid in the bottom of the wound, under the sutures, to prevent too rapid closure and to ensure drainage.

The catheter was adjusted so as to lie near the neck of the bladder, and was tied in in that position, its end being left patent, that urine might drain away. A light dressing of benzoin and carbolic oil was employed; the carbolic spray was not used.

October 16th. The patient had a restless night; the morning temperature was 103° F.; the dressing was slightly stained with sanguineous fluid. At 11 A.M., he voluntarily passed by the catheter three ounces of urine, together with a little blood. This was the first urine passed since the operation. Between 3 and 4 P.M. he passed voluntarily another ounce of urine in the same manner. The dressings were now removed; the lower stitch and the gut strands were taken away for good, and the catheter was withdrawn and not replaced, since the child micturated voluntarily through it and it had failed to act, as intended, as a drainage-track for the urine. There was no urinous odour about the wound. The moisture on the dressings appeared to be only sero-sanguineous. Iodoform and oiled lint were now applied. The temperature was 104.2° F.

October 17th. During the night he micturated voluntarily three times, passing in all three ounces. At 2 P.M., the temperature was 103° F., and there was some abdominal pain. The house-surgeon removed the remaining stitch, and put hot fomentations on the abdomen. The bowels were open once. At 7 P.M., four ounces of urine were passed; none appeared to have come through the wound, which already had commenced to granulate. At 10 P.M., on changing the fomentations, liquid, evidently urine, came through the wound on pressing over the bladder. Quinine was ordered.

October 18th. The temperature was normal; the pain in the abdomen had subsided; the middle of the wound was nearly united. At 10 A.M. and 7 P.M., he passed six ounces of urine in all by the urethra. A very little trickled out of the lower extremity of the wound.

From this date the patient made an uninterrupted recovery, but the wound, which broke down, did not finally close until November 10th, when he was discharged well. From October 19th to October 24th he passed ten or eleven ounces of urine, on an average, through the penis every day. The amount that came through the wound was never enough really to saturate the dressings. The child rarely micturated more than twice in the twenty-four hours, at times passing six ounces at once. From October 24th to November 1st the average daily quantity passed was thirteen ounces, and at more frequent intervals. It was difficult to say the exact day when any urine ceased to come through the wound, as the amount was so very small; but it probably was about the twelfth day from the operation.

Remarks by Mr. Golding-Bird.—This case is recorded rather as a duty, since this revived operation is still on its trial, than from any special lesson that it teaches. The only points requiring notice are the following. The bag was employed as being usually advised, but it did not appear requisite in this case; the firm hold obtained by the torsion-forceps on the fatty tissue outside the bladder not only steadied the viscus, but allowed of its anterior wall being held well up in the wound in the way that some operators hold up the peritoneum when opening the abdominal cavity. The union, in fact, of the wound was undertaken solely to expedite healing, it being expected that the urine would drain off by the catheter, but this must have slipped since the child voluntarily micturated through it; and though this occurred in the first twenty-four hours, yet no urine made its way above the pubes; and when subsequently it did so to a small extent, the child yet was able to retain as much as six ounces for some time in the bladder; the aperture could not, therefore, have been large. The fact of his only micturating about twice in the twenty-four hours was because he dreaded a return of the pain he had suffered prior to operation; and it required some time to restore his confidence sufficiently to make him relieve himself more frequently.

It would be rash from one case to express any opinion as to the absolute value of this mode of operation over the lateral method; the writer may, however, say that for ease of execution, and for less fear of injuring important structures, he infinitely prefers lateral lithotomy; nor should he, as far as he sees at present, resort to the suprapubic method again unless under peculiar circumstances, such as the presence of a very large stone. Of course, the anatomical danger of cutting one, or, if carelessly done, both ejaculatory ducts by the lateral method is recognised; but is it proved, if even the accident occur, that any permanent lesion, anatomical or physiological, results? The writer has Mr. Cock's authority for stating that, in all his experience of lithotomy (over 200 cases), he has never known injury in this direction result; and he has in his recollection a remark of Sir Astley Cooper to the same effect, one case only excepted. That was one of a very large stone, in which Sir Astley had to use the knife freely; and some time after his recovery the patient remarked that he had suffered some injury, inasmuch as he "felt something pass backwards into the bladder," during a certain physiological act. Mr. Cock can add but one case only in which the seminal ducts were injured (or one of them) by operation, and this was after puncture *per rectum* for retention of urine. Some time afterwards, the testis on one side was observed to dwindle, and it finally became completely atrophied, this being attributed to division and subsequent closure of its excretory duct. Even were the duct injured in the course of lithotomy, the known difficulty of occluding by adhesion a mucous tract, however small, renders it very unlikely that the exit of the semen into the urethra would be hindered; most probably, its path would be only somewhat short-circuited. Injury of the duct, with occlusion during cicatrisation, would be certainly followed by gland-atrophy, and this is not a sequence of lateral lithotomy.

ST. JOSEPH'S HOSPITAL, VICTORIA, BRITISH COLUMBIA.

ANEURYSM OF INNOMINATE ARTERY: SIMULTANEOUS LIGATURE OF COMMON CAROTID AND SUBCLAVIAN ARTERIES: HEMIPLEGIA: DEATH.

(Under the care of Mr. E. A. Praeger.)

S. B., aged 60, gold miner, came under treatment on January 26th, 1885. Two years earlier, a heavy weight had fallen on his chest. Shortly afterwards he noticed a swelling on the right side of his chest, between the first and third ribs. The swelling had gradually increased in size. He complained of constant pain at the back of the right shoulder and in the chest, under the swelling, constant numbness in the right arm and hand, pain at night, and attacks of dizziness and dyspnœa. There was an expansile pulsating tumour extending from the right sterno-clavicular articulation to the second intercostal space. The first and second bones of the sternum and the sternal ends of the corresponding ribs were bulged forwards. A loud rasping *bruit* was audible all over the upper part of the right side of the chest.

Treatment for some weeks with iodide of potassium having failed, he was admitted, and on March 26th, chloroform having been administered by Dr. Hickey, an incision parallel with the anterior border of the sterno-mastoid muscle was made through the skin and superficial fascia. The deep fascia having been scratched through with the finger-nail, the artery was tied with strong carbolized gut; the wound was sponged with carbolized water and drawn together with silver wire sutures. The patient's shoulder being depressed, an incision was made in the usual way by drawing down the skin and dividing it on the clavicle. A second incision was then made upwards, at right angles to the first, and, the deep fascia having been torn through with the finger-nail, the subclavian artery was ligatured. The edges of the wound were brought together with silver wire, and, the arm having been enveloped in cotton wool, the patient was removed to bed. Pulsation in the tumour was hardly perceptible. The patient soon rallied from the shock, and complained of pain in the neighbourhood of the operation wounds only. At 9 P.M. very feeble pulsation was felt in the right radial, none in the temporal; pulsation was strong and regular on the left side. The temperature in the left axilla was normal; in the right it was 96° F. He was perspiring profusely. A subcutaneous injection of morphine (one-quarter of a grain) was given.

March 27th. He had slept fairly well, but had been vomiting and retching violently. The temperature was normal in both axillæ. Pulsation in the tumour was very much diminished, and there was no *bruit*. The pulsation in the right radial was rather stronger than last night; it was hardly perceptible in the right temporal.

March 28th. The temperature was normal in both axillæ. Pulsation was hardly perceptible in the tumour. On the following day the patient had difficulty in swallowing; pain in the head; could not protrude his tongue properly; his speech was thick, and he appeared deaf. The pupils were contracted. The left side of the face became paralysed, and during the night the left side became hemiplegic. Temperature normal.

April 1st. The operation-wounds had healed by first intention. There was hyperæsthesia of the left side; this had become less on

May 3rd, when he was passing large quantities of water of low specific gravity (1005). It was acid, and did not contain albumen.

August 10th. The quantity of water had steadily diminished, under ergot. There was complete loss of sensibility and motion on the left side.

February 20th, 1886. He had continued in much the same state, ate and slept well, and had recovered sensibility, but not motion, on the left side.

He caught cold at the beginning of March; had bronchitis, followed by exhaustion, to which he succumbed on March 10th—a year, less a few days, from the date of operation.

Remarks.—I greatly regret that, owing to a mistake on the part of the hospital-porter, no *post-mortem* examination was obtainable. The diagnosis arrived at was that the aneurysm was innominate, possibly subclavio-innominate, but that the aorta was not involved. Judging from the rapidity with which circulation was re-established in the right arm, it is probable that the first part of the subclavian, with the thyroid axis, was abnormally dilated. On several occasions previous to the operation, the patency of the vessels to the brain had been tested by making pressure on the right and left carotids together and singly, and, after reading the article written by Mr. Barwell on this class of cases, this was considered one suitable for operation. Although the patient subsequently became hemiplegic (probably from failure in re-establishing the cerebral circulation), the symptoms of aneurysm gradually subsided, and there is little doubt that the operation succeeded in prolonging his life.

Royal Asylum, Morningside.—At the annual meeting of the corporation of the Royal Edinburgh Asylum, Morningside, held on February 28th, under the presidency of the Lord Provost, the financial report showed a balance of £4,026 in favour of the asylum. The report of the medical superintendent, Dr. Clouston, brought out many interesting points as to the connection between the condition of the patients' health when admitted and the mental state, and also as to the larger proportion of recoveries that took place during the first six months of residence, in comparison with recoveries after more prolonged residence in the asylum. He also directed attention specially to the circumstances under which two suicides occurred at the asylum during the year, and to the possibility of the asylum requiring to be removed more into the country.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, FEBRUARY 25TH, 1887.

W. H. BROADBENT, M.D., F.R.C.P., President, in the Chair.

Paralysis of the Left Leg from Sub-Cortical Disease, with Cancer and Fracture of the Left Femur.—Dr. HUGHLINGS JACKSON read a paper on this case. A woman, aged 52, was admitted December 28th, 1885, under Dr. Hughlings Jackson's care, for paralysis of the left leg, which had come on suddenly on December 7th, whilst she was standing at her work. The knee-jerk on the paralysed side was greatly exaggerated, and there was foot-clonus; there was no defect of sensation; no morbid changes existed in the fundi. On December 30th, whilst she was being lifted from the bed-pan, the left femur broke just below the great trochanter, and she died on January 10th. At the necropsy, in addition to cancer of the left femur and of the ovary, Dr. James Anderson found growths in the brain, one accounting for the paralysis in the region of Ferrier's leg centre. Schäfer and Horsley had shown that the marginal gyrus is part of the leg centre.—The PRESIDENT said that it was interesting to note that the patient died in little more than a month after the occurrence of the paralysis, and yet the exaggerated ankle-clonus and ankle-jerk had been remarked, although this was generally supposed to result from descending degeneration which could hardly have taken place.—Dr. BEEVOR said the case was of interest as showing the localisation of the leg-centre. The posterior part of the marginal convolution was part of this centre. The absence of fits was also remarkable. Mr. Horsley and he were carrying out experiments by stimulating the internal capsule, and they had found that the hindmost fibres went down to the leg.

Successful Treatment of Hyperpyrexia in Acute Rheumatism, by the Cold Bath.—Dr. CARRINGTON read notes of a case. He said that, although there was nothing new in the case he brought forward, still he thought it was well to put such cases on record in order to accumulate a body of evidence such as would enable medical men to combat the prejudice existing amongst the friends of patients, against the employment of a remedy which afforded the only chance of safety in this desperate complication. The patient was a medical student, aged 23, strong and muscular, and hitherto in perfect health. He had been ill with what was apparently a mild attack of rheumatism, for which he had been treated by salicylic acid. He was so far recovered that he had left his bed, and on the evening of October 31st had received the visits of his friends. He passed a good night, and there was nothing to excite attention next day, but on taking his temperature next morning about twelve, noon, quite as a matter of routine, it was found to be 107° F. Dr. Carrington saw him soon afterwards, and then found the temperature to be 106°. He was, as soon as practicable, removed to the private ward of Guy's Hospital, but during the journey had become noisy and delirious, and by the time he had been placed in bed he was quite livid, unconscious, and generally convulsed. His temperature was then found to be 109.8°. The necessary arrangements had been previously made, and he was at once placed in a bath at a temperature of 70°, which was as rapidly as possible cooled down by ice; large quantities were used, but the body heat was so great that there was great difficulty in lowering the temperature of the bath. Pouring ice-cold water on the patient's head had a beneficial effect. A rectal injection of fifteen grains of antipyrin was administered. He was kept in the bath for a full hour, and when the rectal temperature was 102.4°, he was removed and placed on a blanket, and lightly covered by a sheet. Then marked tetanic convulsions supervened, and he gradually became quiet, and at 7 P.M. his temperature fell to 97.2°. At 8 P.M. consciousness returned, and he took a pint of milk, and at 10 P.M. he was quite rational. During the next day he remained comfortable, and took gr. xx of salicylate of soda every two hours, but his temperature again arose, and at 12 P.M. it was 103.8°. He was given gr. xv of antipyrin by the mouth, but at 2 A.M. the temperature was 105.2°, and the ice-bath was again employed for fifteen minutes. He was taken out when his temperature had fallen to 101°, but at 6 A.M. it had again risen to 105.4°, and the bath was again had recourse to for a similar period. After this he slept well, but at 2 P.M. the temperature had reached 105°, and he was bathed again for forty minutes. From this time the temperature never again rose to any extent; it was, for the most part, normal, but on one occasion, with a return of the articular pain, it reached 101°. After the third bath, salicine was substituted for sodic salicylate, in twenty-five-grain doses every two hours. After two days he took it every three hours, and the dose was gradually reduced. With an interruption due to the slight relapse, the patient made an uninterrupted recovery from this time, and left the hospital quite well. The experience of the case seemed to be that within the limits of collapse, prolonged immersion was more effectual than shorter and more frequent baths.—Dr. HALE WHITE said that the failure of salicylate of sodium and antipyrin was of interest, as leading us to see in some manner the way in which those drugs acted. In rheumatic pyrexia, at any rate, they were not of value. It was possible that it would by-and-by be discovered that each drug was applicable to a particular class of cases.—The PRESIDENT said that he had not seen convulsions occur during the rise of temperature. He had seen them come on during the cold bath in a case which ultimately proved fatal, and he had seen hyperpyrexia supervene during the use of salicylate of sodium.—Dr. HUGHLINGS JACKSON wished to know the exact nature of the convulsions, and particularly whether they were tonic or clonic, or both.—Dr. STEPHEN MACKENZIE said he had had three or four cases of hyperpyrexia in private practice, and could endorse the remarks as to the difficulty of the cold-water treatment in private practice. He had succeeded in reducing the temperature to normal, but they had all terminated fatally. Those cases required the most careful supervision. The convulsions were invariably tonic.—The PRESIDENT said the convulsions took the form of opisthotonos, without clonic convulsions.—Dr. CARRINGTON said, in reply, that the convulsions came on after the patient had been removed from the bath. The first bath lasted a good hour, as a great difficulty was experienced in reducing the temperature of the bath. He thought the antipyrin did more harm than good by favouring collapse. The salicylate did not appear to have had much effect either. He thought antipyrin was a dangerous drug.

Epilepsy after Gunshot-Wound.—Dr. HADDEN brought forward the case of a man, aged 32, who was under Mr. Croft's care at St. Thomas's Hospital. There was no family history of epilepsy. In 1872 he was wounded in the left calf, and several shots were extracted. In six or seven weeks the wound was quite healed. Four months after the injury he began to have fits. For nine months they were occasional, but afterwards he had as many as twelve daily. The sciatic nerve was then stretched, and the fits ceased for thirteen years. They recommenced seven weeks before admission into St. Thomas's, when he fell to the ground from a ladder, unconscious. During the week preceding admission, he had eight or ten daily. The fits began with a sharp twitching pain in the scar in the left calf; then there was a creeping, heating sensation passing up the leg and left side of the body to the head. The left side then became convulsed. The pupils were immobile, and the conjunctivæ insensitive. Finally, there were some general convulsive movements, and then rapid return to consciousness. The tongue was not bitten, nor were the evacuations passed. The scar was somewhat tender, and when pressed he would at times have the sensation passing up the body, and sometimes a convulsion. Occasionally in the seizures he would roll about in bed, and sometimes there was opisthotonos. An attempt was made to stretch the sciatic nerve by extreme flexion of the hip, but the result was a violent convulsion. A few days later the nerve was exposed and freely stretched. The fits stopped for nine days. He then had occasional seizures, sometimes one a day, sometimes one every other day. Two occurred whilst the splint was being bandaged to the leg, and one during removal of the splint. The man wrote four months later to say that he had had no convulsion since he left the hospital, but he suffered from severe paroxysmal pain in the left calf, followed by the "fitty" sensations. There was no doubt that the attacks were genuine, the condition of the pupils and conjunctivæ and other points proving this. The interest of the case had reference to Brown-Séquard's and Victor Horsley's experiments on guinea-pigs. Epilepsy was induced by these observers after injury to the sciatic nerve. There was usually a latent period of from two to six weeks. In the man the incubation was four months. Opisthotonos occurred in the patient, as in the case of guinea-pigs.—Mr. BOWLBY said he remembered a case at St. Bartholomew's Hospital where a man had a gunshot-wound of the leg, which was followed by epileptic fits. The musculo-cutaneous nerve was resected first, and this procured an immunity from the fits for five years. They then recurred, and some shots were removed from beneath the skin, and this operation was followed by another remission. Some months later, the fits recurring, the sciatic nerve was stretched, and since that time no more fits had been observed.—Dr. CARRINGTON said that possibly the operations might have had somewhat the same effect as the old-fashioned setons, which were formerly a recognised method of treating epilepsy.—Dr. ANGEL MONEY said the occurrence of epileptic fits at particular periods had

never been satisfactorily explained. He knew a man who could induce an epileptic seizure by eating chocolate, and suggested that an irritated stomach might play the same part as a seat of injury.

Hæmaturia and Granular Kidney.—Mr. ANTHONY BOWLBY read a paper containing the records of three cases of hæmaturia in connection with granular kidney. The first was that of a man, aged 73, who was admitted into St. Bartholomew's Hospital, suffering from enlargement of the prostate and hæmaturia. His death, which occurred within twenty-four hours, appeared to be chiefly due to the exhaustion caused by the loss of blood. A *post-mortem* examination showed an enlarged prostate and dilated bladder, containing several ounces of almost pure blood. The kidneys were small and granular. Their pelves and the ureters contained blood, and in the renal substance there was much blood extravasated. Microscopical examination showed that the hæmorrhage had occurred both into the renal tubes and into the cellular tissue of the gland. The second case was that of a man, aged 49, who had long suffered from stricture of the urethra and difficult micturition, and who, for three months previous to admission into St. Bartholomew's Hospital, had passed considerable quantities of blood with his urine. He had many of the ordinary signs of interstitial nephritis, and, in addition, passed a great deal of blood. On his death from uræmia no cause of hæmorrhage was found, except in the kidneys. These were small and granular, and contained a little bloody urine. In the third case, a man, aged 64, was admitted on February 3rd, 1886, with profuse hæmaturia, and pain in the loins. After losing much blood for several weeks, the hæmaturia ceased. The urine when clear contained albumen. There was some albuminuric retinitis, and some opacity of one lens. Attention was drawn by the author to the fact that the subject of hæmaturia in connection with granular kidney had received little attention, and that no cases of profuse hæmaturia of this nature had been previously recorded, and that no *post-mortem* examinations had been described. It was pointed out that in one of the patients referred to in this paper the hæmorrhage was so profuse as to be mistaken for vesical bleeding, and in others that the diagnosis had to be made from other of the more recognised causes of renal hæmorrhage, especially calculus. It was in connection with this question of diagnosis that these cases were of importance. Lastly, it was stated that simple interstitial nephritis, independent of dilatation or absorption of the renal substance, was often found as the result of obstruction to the outflow of urine.—Dr. CARRINGTON said that these cases were very rare, and suggested that the instruments might have been responsible for the hæmorrhage.—Dr. HADDEN quoted a similar case, in which, at the *post-mortem* examination, hæmorrhages were found in the substance of the kidney.—Dr. MAGUIRE did not think that hæmorrhage in cases of granular kidney was as rare as stated. Patients sometimes seemed better after slight hæmorrhages.—The PRESIDENT said that severe hæmorrhages were doubtless rare. He had seen a case where the patient bled to death in spite of treatment.

Specimens.—Dr. ARTHUR DAVIES showed two living cases of myxœdema (male and female).

MEDICAL SOCIETY OF LONDON.

MONDAY, FEBRUARY 28TH, 1887.

R. BRUDENELL CARTER, F.R.C.S., President, in the Chair.

CLINICAL EVENING.

Case of Excision of Half the Larynx for Epithelioma.—Mr. LENNOX BROWNE exhibited a patient from whom he had excised the left half of the larynx ten weeks before. The details of the case have already been published in the JOURNAL of February 5th, p. 272. The patient was able to resume his occupation, and spoke with a fair, though gruff, voice.

Tuberculosis of Pharynx.—Mr. LENNOX BROWNE also showed a young woman, aged 20, married and the mother of three children, who was the subject of tuberculosis of the fauces and pharynx, extending to the posterior wall of the larynx, and slightly involving the right arytenoid cartilage. The lung showed only incipient phthisis, but tubercle bacilli were plentiful at the seat of ulceration. The patient had been unable to swallow, but the dysphagia was cured by scraping the diseased surface, previously anæsthetised by cucaine, and then applying solutions of lactic acid (20, 40, and 60 per cent.) to it daily for three weeks. This plan had been recommended by Krause, of Berlin.

Case of Displacement of the Hip after Fever.—Mr. T. PICKERING PICK exhibited a boy with dislocation of the heads of both thigh-bones, the result of softening and yielding of the capsular ligaments. The right thigh-bone was dislocated forwards on to the front of the pelvis, and the left upwards and backwards on to the dorsum of the ilium. Twelve months before the boy had suffered from acute necrosis of the right tibia, probably followed by pyæmic synovitis of both hip-joints, with rapid effusion into the articulations and softening of the capsule. Owing to the position which the boy assumed, the heads of the thigh-bones pressed on this softened structure, which yielded and allowed the heads of the bones to slip out of the acetabular cavities. When admitted into hospital the right thigh was everted, rotated outwards, and flexed on the pelvis, and the left thigh was adducted and rotated inwards and also flexed, and the limbs fixed in this position. Mr. Pick performed osteotomy on both sides, dividing the neck of the femur on the right side and the shaft of the bone just below the trochanters on the left. This had the effect of bringing the limbs into a much better position, though some slight amount of inward rotation and adduction still remained on the left side. The boy could, however, walk with a certain amount of support.—Mr. ADAMS asked whether in cases of dislocation after fever the capsular ligament was ruptured or distended.—Mr. MORGAN related a similar case in a lad in which he had cut down and examined the condition of the parts. He found the capsular ligament distended and tense over the head of the femur; on cutting through it the latter was found perfectly healthy, but the acetabulum was almost filled with granulation tissue.—Mr. WALTER PYE also made some remarks.

Case of Excision of Hip in Adult.—Dr. ROBINSON showed a man, aged 45, on whom he had performed excision of the head of the femur. The acetabulum was filled with granulation tissue. The result was very satisfactory.

Two Cases of Ichthyosis Hystrix.—Mr. BOURNE showed two cases of ichthyosis hystrix. One was in a woman aged 74, and had existed only for four years. The other was in a girl.

Trephining for supposed Abscess of Brain.—Mr. JAMES BLACK showed a young man who had had symptoms pointing to abscess connected with disease of the ear. Puncture of the mastoid cells having failed to relieve him, the skull was trephined one inch and a quarter above and behind the external auditory meatus, and the brain explored for the abscess. The wound was subsequently reopened, and further search made with a trocar and cannula, but with no better result. In spite of severe constitutional symptoms, the wound healed well with the exception of a small sinus, and the patient ultimately made a good recovery.

BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, FEBRUARY 3RD, 1887.

E. NOBLE EDWARDS, M.R.C.S., President, in the Chair.

Lumbar Abscess.—Mr. NICHOLLS read notes of a case of large lumbar abscess, in which was found an ear of wild rye-grass, one inch and a half long; this had been accidentally swallowed by the patient a few weeks before. He had vomited blood a fortnight before the abscess appeared, but there was no other sign of gastric irritation.—Dr. BLACK mentioned a case in which a similar ear of grass passing from the mouth had caused the formation of a parotid abscess.

Recovery from Morphine-Poisoning.—Mr. NICHOLLS also related a case of recovery, after taking five grains of hydrochlorate of morphine. The patient was an old man, aged 71; the dose was taken just after a full meal, and nothing was done for him until seventeen hours after he had taken the poison.

Atrophy of Muscles of Arm.—Dr. PALEY showed for Dr. WITHERS MOORE a case of atrophy of the muscles of the left upper extremity, coming on after an injury to the hand, and distributed after the manner of progressive muscular atrophy. The right hand and arm were unaffected.

Puerperal Eclampsia.—Mr. SANDERSON read notes of a case of puerperal eclampsia, associated with hyperpyrexia. He protested against cases in which there were marked kidney changes, general œdema, and a large quantity of albumen, being included in the same category with those in which there were no kidney changes, very little albumen—not more than the high temperature would account for—and no œdema. The case related was an example of the latter class. Mr. Sanderson suggested that in such cases the disease should be regarded simply as a neurosis, and that the treatment should be based on this hypothesis, rather than on that of its being a toxæmia.—Dr. GASQUET, in support of the theory of neurosis, remarked that the same hyperpyrexia was seen in the course of chronic brain-disease, in association with eclampsia.—Dr. BLACK thought puerperal eclampsia differed much from other forms, and he would still include all varieties of it under one head.—Dr. MACKEY thought most would accept the theory of neurosis. He asked whether pilocarpine had been injected, which he considered valuable in toxæmia.

Hypnotism.—Dr. GASQUET read a paper on hypnotism, in which

he classified the causes of the condition as: (1) mental, such as belief that the predicted effect can be produced; (2) physical, such as fixing the eyes on any bright object, or arresting the hearing by some monotonous sound; or slight stimulation of the surface by "passes," friction, and the like. The proportion of persons that could be hypnotised was variously estimated at from 10 to 95 per cent. Charcot divided hypnotism into three stages or forms: (*a*) Lethargy, in which the whole muscular system was in a state of "resolution," the patient seeming to sleep soundly, and being incapable of any sensation, though he might remember afterwards all that had passed. Pressure on the superficial nerve-trunks produced contraction of the muscles supplied by them, or the muscles might, also, be made to contract by pressure directly upon them. By opening the eyes and exposing them to bright light, the next stage was produced, namely: (*b*) Catalepsy, in which the muscular system was in a state of "waxy" flexibility, and the limbs remained for some time in any attitude; tendon-reflexes were abolished, and pressure on the muscles or nerves associated with them caused the muscles to lose their tonus. Mentally, the subject was a marionette, executing such primarily or secondarily automatic actions as might be suggested to him, and continuing them until checked. (*c*) Somnambulism. There was anæsthesia of the skin, unless the patient was a hysterical woman. The limbs could be moved in all directions; sometimes there was cataleptic flexibility, sometimes a state of resolution; the tendon-reflexes were normal, but the muscles contracted under very slight stimulation of the skin covering them. The mind appeared to be a blank, unless acted on by suggestions from without; such suggestions were unquestioningly adopted, whether they were hallucinations, or impulses to action. These might even be made to persist after the subject was awake, and he might be made to perform acts long after. It might be said generally that these several forms of hypnotism were due to various degrees of removal of inhibition. The curative value of hypnotism was very doubtful; and the social and moral dangers connected with it were enormous.—Mr. SANDERSON asked if the health of the subject were impaired by being constantly put into the hypnotic state, and related a case in point.—Mr. NICHOLLS mentioned a case in which the subject suffered in mind.—Mr. GORDON DILL asked if any physical force passed from the operator; such a force had been said to have been imparted even to inanimate objects.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, FEBRUARY 3RD, 1887.

W. J. CLEAVER, M.B., C.M., President, in the Chair.

Goître.—Mr. E. BARBER showed a lad with a large goître, which had caused severe dyspnœa, but was now subsiding.

Extraction of Foreign Body from Œsophagus.—Dr. CLEAVER described the removal of a halfpenny from the œsophagus of a child 3 years of age, twelve days after it had been swallowed. There were no symptoms indicating the presence of the foreign body, and food was readily swallowed. The halfpenny lay across the œsophagus, its surfaces looking forwards and backwards; it was impacted nearly on a level with the second rib. It was removed with a long pair of curved forceps.

Dental Abnormalities.—Mr. FRANK HARRISON exhibited a series of specimens illustrating varieties of dental abnormalities.

Some of the more Common Diseases of Women.—Dr. GWYNNE recommended erosion of the canal of the cervix in chronic endocervicitis, in addition to the application of caustics. He alluded to the different forms of uterine luxation, especially drawing attention to the best methods of treating anterior flexions and versions. In the case of flexions he pointed out the necessity of fixing the cervix, while at the same time rectifying the flexion, a double result only procurable by using stem-pessaries fixed in a diaphragm. He next expressed the belief that cases of chronic pelvic peritonitis were much more common than was usually supposed, and were often overlooked. He related some cases in illustration of this.—Remarks were made by the PRESIDENT, Dr. MARTIN, Dr. DYSON, and Mr. RECKLESS.

THURSDAY, FEBRUARY 17TH, 1887.

W. J. CLEAVER, M.B., C.M., President, in the Chair.

Cancerous Deposits in Liver.—Mr. COOMBE exhibited specimens taken from a woman, aged 52, for whom Mr. Jackson had removed the breast for scirrhus about four weeks before. The deposits were numerous, and were thought to be encephaloid. The specimen was referred to the Pathological Committee.

Thoracic Aneurysm Bursting Externally.—Mr. COOMBE showed specimens from a patient recently under Mr. Jackson in the Sheffield Infirmary. The aneurysm sprang from the anterior wall of the ascending and transverse portions of the arch of the aorta, and penetrated the chest-wall to the left of the sternum by completely eating through one of the ribs. The patient, a scissors forger, had noticed a tumour forming for about twelve months; there was no history of syphilis. The tumour measured four inches in diameter, and ruptured by ulcerating through at a small point. The patient died in three hours.

Aortic Disease.—Dr. DYSON showed specimens from two cases. 1. A brewer's drayman, aged 47; during life a well marked high pitched musical murmur (aortic diastolic) was heard, and a thrill all over the front of the chest was felt. At the *post-mortem* the aorta was very extensively atheromatous, and the valves much thickened, but no satisfactory cause was found for the musical nature of the murmur. 2. A woman, aged 51, who had had rheumatic fever. The valves were much deformed, one being split down the middle, the segments being free to flap in the blood stream. The murmur in this case was a typical aortic diastolic one, with no musical quality. Both cases had Bright's disease, and died of uræmia.

Suprapubic Suppuration.—Mr. ATKIN related a case, occurring in a woman aged 27. There had been nearly constant vomiting for two months; she was very emaciated, and suffered great pain in the womb; pulse 120; temperature 100°. Her illness commenced with griping pains, followed by bloody vaginal discharge. Under ether, the uterus was found to be not enlarged. An exploratory incision was made above the pubes, which gave issue to two ounces of fœtid pus. The cavity continued backwards, lying over and roofing in the bladder. The woman gradually recovered. Mr. Atkin remarked on the doubtful origin of the suppuration, the lowness of temperature, and constancy of the vomiting. He also alluded to the anatomy of the *cavum Retzii*, described by Hyrtl.

Plumbism from Drinking-Water.—Dr. PORTER, in opening a discussion on the influences of the Sheffield water, alluded to the previous discussions before the Society on the subject; and speaking of his own experience, showed that out of a total of 1,068 out-patients who had come under his care at the public hospital during the past year, 14 had suffered from plumbism attributable to drinking contaminated water, while 13 others had a more or less defined "blue line," though treated for other complaints. Three of these 27 cases had come from the country away from the Sheffield water-supply; but of the remaining 24, no fewer than 16 lived in a district of the town where the drinking-water had been shown by Dr. White to contain more lead than did the water from other parts. Seventeen had occurred during the summer and autumn months.—Remarks were made by Dr. MARTIN, Mr. PYE-SMITH, Dr. WHITE, Dr. KEELING, Mr. GARRARD, Dr. DYSON, Dr. T. H. MORTON, and Messrs. J. RECKLESS and J. WILLIAMS.

ACADEMY OF MEDICINE IN IRELAND.

FRIDAY, FEBRUARY 11TH, 1887.

WALTER G. SMITH, M.D., President, in the Chair.

PATHOLOGICAL SECTION.

Spindle-celled Sarcoma.—Mr. E. HAMILTON exhibited the viscera of a man who had died after the removal of a recurrent spindle-celled sarcoma from the axilla. Secondary growths were found in the lungs, liver, pancreas, intestines, and the interauricular septum of the heart, of which Dr. M'Kee had prepared microscopical slides, which were shown at the meeting. Mr. Hamilton added that, during the patient's life, no clue was obtained to the vast disorganisation which was discovered after death to have been going on through his entire system. He had neither pulmonary trouble, cough, pain, nor symptoms of dyspepsia, and the diarrhœa was the only sign of intestinal trouble. As he sank lower and lower, however, he manifested a peculiar mental dulness.—Dr. M'KEE remarked that in sarcoma, as a general rule, the secondary growths reproduced the first very faithfully, but there was a departure from that rule here. The growth was partly melanotic, but as to the source of pigment, they knew nothing. It was probably derived from the blood, and an attempt had been made to show that in these tumours the pigmentation was due to the occurrence, in the small vessels, of embolisms or thrombi, which caused an effusion of the blood-colouring matter into the surrounding tissues.—Dr. PURSER said the chief point was to determine where the primary seat of the growth was, there being an enormous number of growths in different parts of the body, all of the same size. Those in the skin might easily have become pigmented, because there was naturally a certain amount of pigment in the skin.—The PRESIDENT said the extensive implication of the lungs, without the manifestation of any local or external symptom, was a remarkable fact. Was there any suspicion that there was internal infiltration of the organs before the second operation was done?—Mr. HAMILTON, in reply, said he did not

see the first tumour. The second growth appeared six weeks after the first operation. He was averse to secondary operations for malignant disease; but, in this instance, he yielded to the man's urgent entreaties, because every time his arm came down on the tumour it bled, and caused him a great deal of suffering.

Congenital Stricture of the Urethra in an Infant.—Dr. MACAN submitted a case of congenital stricture of the orifice of the urethra, hypertrophy of the bladder, and cystic degeneration of the kidneys. The specimen was the first of the kind he had met with, and was taken from a full-grown child in the Rotunda Hospital about a fortnight before. The child was suffering from imperforate anus, and soon died. On examining the abdomen over the pubes, after death, a movable tumour was detected, reaching as far as the umbilicus. From the gristly feel of it, he first thought it was malignant disease of the bladder. The penis was very much distorted in shape and œdematous. On opening the tumour, it was found to be the bladder, with thick hypertrophied walls. Fœtal urine, clear and limpid in character, flowed out, and, after the gush, the bladder seemed to fill again, and another gush took place. He searched for some diverticulum in the bladder that might be filled with urine, but found none; but, on cutting down more into the bladder, he found that the fresh flows of urine came through the ureters. It was then apparent that there must be a collection of urine in the kidneys. There was great contraction of the urethral orifice, and great dilatation of the urethra. The right kidney was blown out into a cyst, and contained a considerable quantity of urine. The left kidney was also disorganised. The intestine ended in a blind sac at the lower portion of the bladder. He thought the primary source of disease was the occlusion of the orifice of the urethra. The accumulation of the liquor amnii during the later stages of pregnancy was a proof that that fluid was in fact the secretion from the kidneys of the fœtus. The child in question presented another curious anomaly. On one side of the spinal column there was a depression of the skin with a cicatrix on the outside, which was proved to be caused by a spina bifida. There was also a deformity in one of the legs.—The PRESIDENT said the specimen was evidence of a well-known pathological law, in accordance with which several different malformations had a tendency to be associated. He did not gather from Dr. Macan whether he held the opinion that liquor amnii was to be looked on as so much diluted urine, or that it was a different fluid only contaminated by the fœtal urine. The presence of urea in it was not enough to settle the question.—Professor BENNETT said Dr. Macan had not mentioned the condition of the urachus. Urinary fistula at the umbilicus was not uncommonly met with without any other deformity; and imperforate anus also occurred independently of the other things seen in the present specimen. The most important point connected with the specimen in a surgical aspect was that of the limb deformity being associated with an indication of damage to the spinal cord. It would be interesting if an examination of the specimen could be made in order to ascertain the extent of the nervous supply to the muscles of the deformed limb, for at the present day the exact nature of the lesions known as "club-foot," and congenital deformity of the hip, were vexed questions. In the present specimen there was club-foot with a distinct lesion, which might involve the nerves that passed into the limb.—Dr. WHEELER expressed regret that the intestine in the present case had not been dissected further up, in order to ascertain where the closure was. Some years ago he brought forward a case of imperforate anus with an opening in the gut at the side of a spina bifida.—Dr. THORNLEY STOKER said the occurrence of cystoid degeneration of the kidneys in the fœtus, though rare, was not altogether unknown. The degenerate kidney sometimes attained a considerable size, pressed up the diaphragm, and displaced the liver into the thorax. It was now a matter of considerable interest to surgeons to arrive at a conclusion as to where the bowel could be best looked for in cases of imperforate anus. The most modern plan was to perform laparotomy, or a lumbar operation, and not to attempt any procedure involving the peritoneum.—The PRESIDENT remarked that in some of the islands of the South Pacific nearly all the natives were afflicted with congenital phimosis, and many of them had a preputial orifice no larger than a pin's head.—Dr. MACAN, in reply, said he would hardly recommend that a child's abdomen should be opened in a case of imperforate anus. There were cases in which the operation should obviously be a rectal one. In the present specimen the end of the gut was at the bottom of the bladder. There was no atresia—only a stricture. A very considerable quantity of the liquor amnii must have been urine, unless the child passed a very small amount of water and drank the fluid. Fœtal urine seemed to be the only known source of liquor amnii, and the fact that the quantity of urea in that fluid was known to increase towards the end of pregnancy seemed to show that fœtal urine was at all events a considerable source of it.

Cerebro-spinal Meningitis.—Dr. QUINLAN exhibited a fatal case of cerebro-spinal meningitis in a cab-driver, aged 50, of very intemperate habits. When admitted to hospital, he was unable to move hand or foot; his pulse was only 44 in the minute; his temperature was under 95° F.; and the surface of his body was cold and numb. The compasses did not produce the sensation of two points unless separated over an inch and a half. He had no control over the urine and fæces, and there was priapism. He died on January 9th. The brain and spinal cord were carefully removed, and exhibited general surface-congestion of the pia mater, with numerous spots of circumscribed inflammation.

Aneurysm of the Abdominal Aorta.—Dr. FOOT exhibited the preparation and drawings of an aneurysm of the abdominal aorta from a married woman, aged 35. The aneurysm was a true one, as large as a lemon, situated immediately above the origin of the common iliacs, and had ruptured at the posterior aspect of the sac. The rupture occurred forty hours before death. About three pints of blood were extravasated into the retro-peritoneal connective tissue. Up to the date of rupture there had not been a single abdominal symptom, the patient's obvious ailment being regurgitant disease of the aortic valves. Dr. Foot pointed out the extreme rarity of aneurysm of this vessel in females.—The PRESIDENT, Dr. QUINLAN, and Mr. COX mentioned cases of the lesion in men which had come under their notice.

Congenital Defect in the Inter-ventricular Septum.—Dr. FOOT exhibited the heart of a man, aged 21, which presented a perforation, apparently congenital, of the septum ventriculorum in the "undefended space." This passage, which was of the dimensions of a goose-quill, had given rise to a murmur, systolic, transverse in direction, heard over the face of the right ventricle, and unaffected by change of posture.—The PRESIDENT said that he knew a family of three children, all of whom had congenital disease of the heart. Two died, and the third, about two years of age, lately came under his care for laryngitis, and on examination of the chest he detected an almost musical murmur above the left clavicle and at the back of the thorax. The child's mother told him that it very easily got out of breath, and became dusky in the face.—Mr. COX mentioned the case of a child in which a cardiac *bruit* was detected a fortnight after its birth. The heart moved to the right side. The child continued extremely delicate, was very easily put out of breath, and ultimately sank at the age of 3 or 4 under a slight attack of measles. He never doubted that it had congenital communication between the two ventricles. The murmur was distinctly systolic.—Dr. FOOT said in his case the foramen ovale was quite closed, but the two coronary arteries rose behind the same valve of the aorta, and were very unequal in size.

REVIEWS AND NOTICES.

BERICHT ÜBER DIE ALLEGEMEINE DEUTSCHE AUSTELLUNG AUF DEM GEBIETE DER HYGIENE UND RETTUNGSWESEN. BERLIN, 1882-3. Herausgegeben von Dr. PAUL BOERNER. Breslau: Schottländer. 1885.

REPORT ON THE GERMAN EXHIBITION IN HYGIENE AND THE SAVING OF LIFE, HELD AT BERLIN IN THE YEAR 1882-3. Edited by (the late) Dr. P. BOERNER. In 3 vols., containing 1,800 pages and 400 illustrations.

SECOND NOTICE.

THE second volume opens with a paper on the Construction of Theatres, by F. O. Kuhn. After the terrible fires at Nice and Vienna, the Exhibition Committee determined to offer two prizes for the best designs for a model theatre which should fulfil certain requirements, one of which was that the building should abut on streets on three, if not on all, its sides. None of the fifteen designs sent in was considered perfectly satisfactory, but the prizes were divided among four; and the report consists mainly in a critical description of these more favoured plans.

The next report, on Cattle Markets and Public Slaughter-houses, by Mr. Kuhn and Councillor Hausburg, director of those departments at Berlin, is extremely valuable. Plans and descriptions are given of nine out of the seventeen which were represented at the Exhibition; but the greater part of the report is devoted to the Berlin market, as being the largest and the most perfect in its arrangements. It covers ninety acres of ground, and cost half a million sterling. Large quantities of dead meat are exported to other countries, including England, and vast numbers of cattle, sheep, horses, and poultry pass through it

alive. Accommodation is provided for the slaughter of 1,000 beasts, 1,000 calves, 3,000 sheep, and 2,300 pigs a day; but the actual numbers killed fall short of these. The manufacture of albumen, tallow-smelting, gut-cleaning, and tripe-boiling are carried on in specially constructed buildings. Cattle from infected districts are isolated on arrival; but no animals are allowed to leave the ground, dead or alive, without having been examined by sworn inspectors and veterinary surgeons. All diseased carcasses are destroyed or rendered inedible on the premises, as are portions of such as are not wholly condemned. The arrangements for maintaining the most perfect cleanliness in every part of the ground and buildings are admirable, and are supported by small tolls; fees being in like manner demanded for the examinations. The animals are fed while in the market at cost price, £40,000 to £50,000 being paid yearly by the owners to the Corporation. There are twelve veterinary surgeons on the establishment for the inspection of live animals, and fourteen for that of the carcasses; these last are assisted by eighty-seven inspectors, trained to the use of the microscope. The utmost care is taken to detect trichinosis, no fewer than twenty-four samples from different parts of each pig being examined microscopically, and those that are passed as free are submitted to a more scientific expert. An immense pathological museum, illustrating every form of dissase, is accumulating, and is open to the public for purposes of study.

Plans and sections of the slaughter-houses are given in the report, which might serve as models for our municipal authorities, when they shall awake to the importance of superseding the dangerous hole-and-corner private slaughter-houses by central *abattoirs*.

Hospitals are reported on by Drs. Boerner and Hallervorden, and Mr. Kuhn, the architect; Dr. Boerner prefacing this part of the work by an interesting historical sketch, in which he shows how these institutions, of essentially Christian origin, grew, from being asylums for the aged and infirm poor, to places devoted to the treatment of disease, and, lastly, to medical education and study. He depicts the insanitary conditions of the older hospitals, and tells how the greater success attained by surgeons in the rudest huts than in these buildings, led to the universal acknowledgment of the pavilion or block system as the only really eligible form; and how the beneficial effects of ventilation and cleanliness, in which our countrymen took the lead, have received their full explanation in the results of Listerism, and the demonstration of the bacterial nature of all septic and infective processes. More than thirty hospitals of various kinds are described and illustrated, most of them on the pavilion, but others on older plans. Like the slaughter-houses and market at Berlin, the Friedrichshain Hospital, near that city, bears the palm. It consists of four pavilions for surgical, six for medical, and two for infectious cases, with administrative department, offices, etc., all forming detached blocks. Each pavilion has its own operating room, bath room, apartments for attendants, kitchen for minor cookery, heating apparatus, etc., forming a complete and almost independent establishment. The blocks are of one story only, consisting of a general ward with twenty-eight beds, with offices at one end and the apartments at the other; over the latter is a small ward, entirely shut off from the larger one, containing a couple of beds for suspected cases, pending removal to the infectious blocks. The building is warmed by hot water pipes, and the ventilation, when the weather does not admit of perflation by the windows, is effected by warmed air. The system adopted is too complex for description in this place, but is highly ingenious and scientific, and is said to be most satisfactory in every way. Like most of the newer hospitals in Germany, it is outside of the city, and surrounded by park-like grounds. Next, perhaps, to that of Friedrichshain stands the Moabite, also at Berlin, which consists of thirty detached pavilions, each containing thirty beds. It is heated by steam, but natural ventilation only is employed; the ridge of the roof of each ward being formed of two valves, surmounted by a riding roof, also with a valve arrangement. Such a construction would, it seems to us, be admirably adapted to churches. More than thirty other hospitals are described and figured, and the report concludes with a summary or survey of the whole subject by Dr. Boerner. One-storied buildings, he says, are everywhere preferred for surgical, obstetric, and infectious cases, though two stories may be permitted in the treatment of ordinary medical cases. In some hospitals, separate blocks are appropriated to skin diseases, cancer, and ophthalmic cases. At Halle, the several infectious diseases are treated in distinct wards, ingeniously isolated one from the other, and separately ventilated; while, at Magdeburg, convalescents are removed to special blocks. Heating is almost everywhere effected by hot water or steam pipes, and ventilation generally by warmed air, at least in cold weather, but the systems adopted are very diverse. At Dresden, the flues can be laid open for cleaning throughout their entire length; and at Berlin University Hospital, at Halle, and elsewhere, they are very accessible. At Hamburg alone, the floors are of stone, warmed by flues—a plan which has received but little favour in medical circles. In several hospitals, the elaborate systems of combined heating and ventilation leave little to be desired, especially in winter, but in others they are far from successful. None, however, approaches that of the Moabite Hospital at Berlin, where flues and exhaust-shafts are dispensed with, and the warm air, abundantly supplied from below, finds free exit in the valvular arrangements of the ridge and riding roof. Nothing could be simpler; but the working is costly from the large amount of heat wasted, if that can be called waste which secures an unlimited renewal of the air.

Dr. Pelman, in reviewing Asylums for the Insane, considers that there is much room for reform in the direction of the separate treatment of acute and chronic, curable and incurable cases, epileptics, criminals, and idiots. In respect of the last two classes, England has long been in advance; but we might do well to copy the "free treatment" of a large proportion of harmless lunatics on farm asylums or colonies, villages rather than prisons, at Hilderheim, Colditz, Grafenberg, and other places. Eight of the principal asylums are fully described by Drs. Boerner and Hallervorden, with plans of those at Berlin and Grafenberg; both are on the pavilion system, and the latter has a "colony" in connection with the asylum.

Disinfecting Apparatus are noticed by Dr. Wernich, and "First help" and "Night service" by Dr. Villaret; Medical and Surgical apparatus and furniture, by Dr. Beely; Ophthalmic Instruments, by Dr. Horstmann, who discusses Colour-Blindness at some length; and Electrical Machines by Dr. Eulenburg. Listerism receives a considerable amount of attention, and great stress is laid on the necessity of implicitly carrying out the minutest precautions, if success is to be attained.

The great wars in which the German armies have, within recent memory, been engaged, and the consciousness of the imperative duty of rendering the defences of the Fatherland as perfect as possible, have co-operated with the progress of hygiene to turn the attention of the authorities to the improvement of everything affecting the health and welfare of the soldier in peace and in war. Barracks, Clothing, Rations, etc., are exhaustively treated by Dr. Villaret, Staff-Surgeon at the Prussian War Office; but the most valuable and instructive part of his report is that which deals with the arrangements for the treatment of the wounded in war. The Prussian field-ambulance, which, with the wagon attached, forms a small hospital-store in itself, providing food, utensils, bedding, and clothing for two hundred patients, is specially worthy of study, contrasting painfully with ours. The recent operations of the Austrians in Bosnia have suggested the substitution for the stretcher of a seat strapped to the back of one man, and better suited to mountain warfare. The newest German hospital-tents are treated with a preparation of fat, wax, india-rubber, and resin, which renders them impervious to wet, but not to air, and obviates the frequent tightening and loosing of the cords. The ordinary canvas, as is well known, lets in the rain until it is thoroughly soaked, when it becomes impervious alike to water and air. But the field-hospital of the future will, Dr. Villaret believes, be the felt huts. Of these, two patterns were shown—one already adopted by the Prussian Government, and another by Messrs. Docker. Made of felt, in wooden frames, and with perpendicular walls and ridge roof, they are more spacious than tents, though quite as portable, and quickly put up. A hut for twelve men costs only £18, and will last for twenty-five years. They are thoroughly water-tight, and, requiring no cords and pegs, may in time supersede tents for all military purposes. Military hospital railway trains have played, and will play, a great part in Continental wars, and receive a due share of attention. A short report, by Messrs. Albrecht and Siemens, on the Disposal of the Dead, specially with regard to Cremation, concludes the second volume of this comprehensive work.

THE CHILDREN OF THE CITY: WHAT CAN WE DO FOR THEM? By JAMES B. RUSSELL, M.D., LL.D. Edinburgh: Macniven and Wallace.

WE cordially commend this little pamphlet, and we should be glad to see it in the hands of every medical man and every well-wisher of the lower classes. Dr. Wallace paints in dark, but not exaggerated, colours the unhappy fate which modern civilisation entails upon the infant population in our great cities; and his proposed remedies, if eminently unheroic, are at least sensible and practicable. He shows how rapidly our large towns are growing at the expense of the rural population. In 1801 it was found that out of every 100 of the entire population of England 11 were inhabitants of London, and this proportion has steadily advanced with every census until, in 1881, it had

reached 15. It is startling to find that in Scotland not less than 18 per cent. of the population reside in the single city of Glasgow, and that this proportion is steadily growing. Of the enormous evils which this congestion of population entails upon the young some idea may may be formed from the fact that in the rural districts of Scotland the death-rate during the first year of life is only 90 of every 1,000 children born, but in the towns it rises to 137 per 1,000, while Glasgow "makes away with 153 per 1,000 of her children before she has had them a year in her fatal arms." The explanation of this alarming fact is clear enough. Foul air, want of playgrounds and breathing spaces, drunkenness and other vices on the part of the parents, excessive severity of the struggle for existence—these are sufficient and we need not search further.

Dr. Wallace wisely negatives any suggestion of legislative measures to check the influx of persons into the large cities. Modern sentiment and science alike resent such a proposition. He warmly commends "holiday-colonies," by which he means that batches of poor children should be drafted off under their teachers to farmhouses or rural inns, and thus spend their holiday month amid the fresh air and wholesome surroundings of the country. He also advocates the promotion of national recreation societies, the establishment of day-nurseries for the care of infants whose mothers must work for a livelihood, the increase of commons and free spaces for the purposes of recreation, and similar obvious and practicable measures. We wish this pamphlet a very wide circulation.

A Few Words on Vaccination. By Major Greenwood, M.R.C.S., L.R.C.P. Douglas and Co., 3, Throgmorton Avenue, E.C. 1886. Pp. 18. Price 6d.

There are many people who decline to be lured into the maze of statistics in which the searcher for the truth about vaccination usually gets lost, and to such persons may be commended the study of Mr. Major Greenwood's earnest and cogent little pamphlet, from which all statistics have been purposely excluded. There is a good deal of truth in Mr. Greenwood's remark that "the proper understanding of statistics is only possible to experts, and the value they possess is obviously dependent on the accuracy with which they have been compiled, as well as on the extent and character of the data on which they rest." Mr. Greenwood takes his readers carefully through the pre-vaccination era, when "people regarded the presence of small-pox in their midst as one of the necessary evils of existence," and invites them to compare the state of things then and now. He describes with much skill the germ-theory of disease in plain untechnical words adapted to the common understanding, and points out the bearing which this theory has upon vaccination and its prophylactic effects. His answer to the argument that, if vaccination is so good and protective a thing, no one need fear because his neighbour neglects it, strikes us as remarkably neat. He remarks, "if we know we are amply protected against some imminent danger, we are not constrained to thrust ourselves into it, and as a fire by burning unchecked acquires force, and begins to destroy what in its earlier stages it was unable to injure, so small-pox, when it comes as an epidemic in our midst, acquires a virulence that is wanting to it in its sporadic form; then, many who are protected against it in ordinary times may find their armour insufficient."

NOTES ON BOOKS.

A Manual of Obstetrics. By A. F. A. King, A.M., M.D., Professor of Obstetrics and Diseases of Women and Children in the Medical Department of the Columbian University, Washington, D.C. Third Edition. (London: J. and A. Churchill. 1886.)—This volume is a compilation from various sources, and is intended for the use of students. The designation of the various presentations is different from that usually adopted in this country, the first cranial position being distinguished as the left occipito-anterior (L. O. A.), and so on. It is doubtless an advance on the present method, but is confusing for those who have learned to call them otherwise. The author has ventured to Anglicise certain expressions such as *ante-partum* and *post-partum* into ante- and post- partal, though the advantage of the innovation is not very obvious. It would seem that it is usual in the States to conduct labours in the dorsal position, and the illustrations are drawn accordingly. The author briefly advises abdominal palpation as a means of aiding in the diagnosis of fœtal position, but he gives no instructions as to its performance. Its usefulness can hardly be overrated, but its practice requires careful instruction and much experience before reliance can be placed upon it, even as an adjunct. The book is fairly comprehensive, and gives, in a succinct form, the essential details of midwifery practice.

A Critical Inquiry into some of the Causes of the High Death-Rate in Preston. By James Arthur Rigby, M.D.—This pamphlet of 23 pages contains a transcript of a paper read by Dr. Rigby, last December, before the Preston Medico-Ethical Society. We have seldom read anything more straightforward, plain-spoken or sensible. It is a healthy sign when a medical man, having no official responsibility for the healthiness of a place, sets himself deliberately to work to ascertain the causes of its abnormally high mortality. Preston has lately come in for a good deal of abuse as the town which has the highest death-rate in England. Dr. Rigby handles with much skill the mortality records, and thinks he sees reason for bringing down the true death-rate for 1885, from 27.1 to 24.67 per 1,000. But, as he sorrowfully admits, even this is "unusually high." Exhaustive, however, as is his analysis of the vital statistics, it is not in this that the chief strength of the paper lies. Its most remarkable feature is the bold and fearless way in which the author treats the social disorders that underlie much of the mortality of the town, especially amongst infants. He gives a graphic picture of the daily life of a young mother working at the mills, and of her stunted and puny offspring. He condemns the amount of immorality in the town, and points to the dangers of having at each end of the town "a large, ill-lighted, insufficiently guarded park, easy of access." He is confident that the Preston mortality table would wear a very different aspect, if all the deaths from syphilis in infants under one year of age appeared in it under their proper heading. Very nearly one half of the total deaths in Preston during 1885, were of children under 5 years of age. This is quite a shocking proportion; and we trust that Dr. Rigby's plain and earnest words about the causes which conduce to it will sink deep into the hearts of all Prestonians, and that they will combine to make an earnest effort to better the state of things which he describes so powerfully.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

ON MEAT EXTRACTS.

Hardly any article of commerce is so liable to the tricks of trade as extract of meat, both on account of the high price which is inseparable from a genuine article—34 pounds of lean meat being necessary to produce 1 pound of extract—and of the difficulty which exists of distinguishing, without exhaustive analysis, between a pure, sound extract and the mysterious mixtures, some of which are now being sold by public auction to dealers at rates varying from 1s. to 2s. per pound. It is difficult to suggest from what sort of meat 1s. extract can be made. We do not credit the report that during the dog scare an extract factory was opened not far from Battersea; but we shudder at the very idea of such extracts, used as they are for the sick and infirm, when life and death may depend upon proper nourishment, digestibility and cleanliness.

We have lately requested Mr. Otto Hehner, Honorary Secretary to the Society of Public Analysts, to undertake a series of analyses of meat extracts. He reports that the results "prove beyond doubt that the Liebig Company's extract towers head and shoulders above numerous other articles of this class which are offered as substitutes for it. Its composition plainly indicates it to consist of soluble meat extractives, meat salts, and nothing else, whilst some other samples we have examined are made up evidently with an eye to produce weight and bulk with as little meat as possible.

"The medical profession is deeply concerned in the purity and quality of these preparations. Whilst fully admitting that others beyond the Liebig Company prepare a good and genuine extract, we would raise a loud voice of warning against the army of extracts which now flood the market, unless they can authoritatively legitimise themselves. A good meat extract should have less than 20 per cent. of water; it should contain almost 25 per cent. of the weight of mineral meat salts, one quarter of which should be phosphoric acid in combination with potash, not with lime; it should, when dissolved in warm water, yield but an insignificant precipitate on the addition

of the double bulk of alcohol; it should be solid, or nearly so; free from excrementitious odour and from burnt flavour. The original Liebig Company's extract fulfils all these conditions. This cannot be said of the other examples simultaneously examined.

"Nothing is more fatal than false economy in an article of this kind. Where in the world can 34 pounds of beef, representing 1 pound of extract, be produced so as to allow the extract to be sold—cost of manufacture, carriage and brokerage included—at 1s.? The call for the cheap and nasty, however, blinds the public to this fact. It is the duty of the medical profession to act as the public's instructors.

"The composition of the six samples was as follows:—

	Liebig Co.	Other Specimens.				
		1	2	3	4	5
Moisture.. ..	17.15 ..	18.34	18.45	24.77	27.00	21.36
Mineral Matter	23.48 ..	16.44	16.55	19.93	19.87	14.66
Phosphoric Acid Precipitate by 60 per cent. alcohol in 2 hours	4.32 ..	10.34	10.66	4.09	3.91	5.85
Percentage of phosphoric acid in ash	23.77 ..	17.92	23.79	19.52	17.41	25.72

"The analysis of the real Liebig extract is by far the most favourable. This extract, the type of a pure meat extract, contains nearly one-quarter of its weight of flesh salts, almost one quarter of which, again, is phosphoric acid, combined with potash. It contains but an insignificant quantity of albuminoids precipitable by 60 per cent. of alcohol.

"The two samples of Nos. 1 and 2 extract are much richer in albuminous compounds (which are comparatively valueless in meat extract), but poorer in ash and phosphoric acid. They contain, therefore, weight for weight, far less real meat-juice than does the Liebig extract.

"The same remark applies, not quite so pointedly, to the samples 3 and 4. They are less albuminous than 1 and 2, but more watery. The percentage of phosphoric acid in their ash, falling so far short of one-quarter, points to the fact that not only lean flesh has been used in their production.

"Lastly, the sample No. 5 is evidently not a legitimate meat extract at all, but a compound. Its ash is out of all proportion small to its total body, plainly proving that it has been reduced by admixture with something which I cannot identify, but which is judiciously chosen 'with intent to deceive.'

"The meat values of the extracts are about as follows, taking Liebig's as 100:—

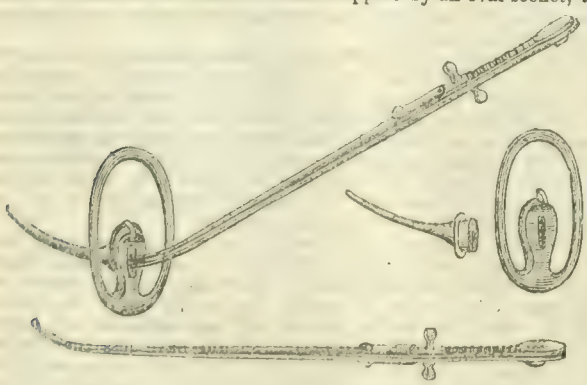
			1	2	3	4	5
Liebig 100	..	Other specimens ..	70	70	85	85	62

"But not only is there a difference in the quantity of the meat, but a more marked one in the quality of the extracts, a difference which doubtless influences the money value of the articles far more than the actual chemical composition, but the definition of which belongs rather to the domain of the merchant than of the analyst."

NEW INTRA-UTERINE STEM-PESSARY AND INTRODUCER.

By J. Gordon Black, M.D.Lond., Harrogate.

The pessary is made of vulcanite, excepting the little gold bolt, and is believed to be entirely unacted upon by the secretions. The lower end of the stem fits into the basic support by an oval socket, thus



providing against rotation of the stem. The gold bolt, which is entirely controlled by the index finger, permanently fixes the two portions of the instrument, at the pleasure of the operator. The pessary is thus with ease introduced, and removed in separate parts. The point of the introducer is first passed through the oval aperture in the support, and is then made to enter the round hole at the lower end of the stem. Here it is jammed by a simple movement of the blades, so that the stem is held fast until it is safely fixed in the support; it is then released by the backward slide of the blades.

When for any reason a rigid material, like vulcanite, is undesirable, the ring portion may be made of watch-spring, covered with pure india-rubber. The ring, thus rendered flexible, collapses around the point of the index finger, and renders introduction very easy.

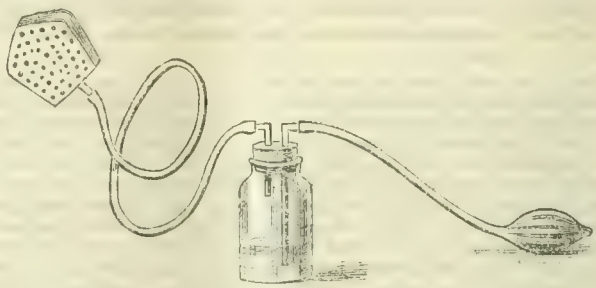
It can be obtained from Mayer, Meltzer, and Co., of Leeds.

MODIFICATION OF JUNKER'S INHALER SUITABLE FOR MEDICAL WORK.

By Frederick A. Floyer, M.B.Cantab., Sussex Square, London, W.

Some time since, while my Junker's Chloroform Inhaler was being repaired, I had occasion to fit up a temporary apparatus which I find so much more serviceable for medical work and minor surgery that I venture to describe it.

Take a Squire's perforated zinc respirator, remove the sponge and bore a hole below. Insert tubing, supported by a short glass piece inside. Connect with an ordinary wide-mouthed 3-oz. bottle, furnished with the requisite cork and glass tubes. To the longer of these latter affix double valved bellows.



The cost is as follows: Respirator 4d., 4 ft. $\frac{3}{16}$ in. tubing 8d., bottle and glass tubing 2d. The bellows, with 2½ ft. tubing attached, can be obtained for 2s. Total 3s. 2d. Any portion, therefore, which gets broken can easily be replaced. The somewhat clumsy face-piece of Junkers's apparatus is here represented by a small, close-fitting one in which the limited amount of chloroform vapour is further attenuated by a copious and regular supply of air. The effects produced are hardly strong enough to place a patient well under chloroform for a surgical operation, but are sufficient to keep up anæsthesia for any length of time.

The greatest value is shown in the perfect relief of paroxysmal pain without real narcosis being produced. On ceasing to pump, conciousness is regained at once, and no nausea or other after-effects are apparent. The face-piece should be held by the patient, whose hand drops as the pain disappears. Paroxysms of pain may be relieved for many hours without any cumulative effect taking place, and, owing to the great and equal dilution of the chloroform vapour, it may be entrusted to the hands of any intelligent nurse.

BURROUGHS' PURE TEREBENE.

Messrs. Burroughs, Wellcome, and Co. have sent us a specimen of their new pure terebène for the treatment of chronic bronchitis, flatulence, and allied conditions. We have examined it carefully, and have no hesitation in saying that it is the best of the specimens yet submitted to us. There is good reason to believe that, if more care were taken in the manufacture and preparation of this drug than is usually bestowed, there would be little or no risk of the production of skin-eruptions and other inconveniences of which complaint is sometimes made. It is recommended that this pure terebene should be used as an inhalation in conjunction with the improved chloride of ammonium inhaler.

Ambulance Work and Railway Servants.—Sir Vincent Barrington delivered on Monday an address on the importance of a practical training in ambulance-work to a meeting of the servants of the Great Western Railway. It was stated that very successful classes are now being held by the London and South-Western and Metropolitan District Railways.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 5th, 1887.

THE COLLEGES AND THE PROFESSION.

THE address of Sir Walter Foster at the hundredth meeting of the Queen's College Medical Society, of which we give a short abstract elsewhere, comes at a timely moment to remind the Colleges of Physicians and Surgeons of England of the feelings with which their recent action and their present attitude are regarded by the great mass of the profession. In denouncing the policy with earnestness and vigour we stood for the moment alone. By the swiftness and secrecy with which the action of the Colleges was taken the profession was at first left altogether in the dark as to the acts of the Colleges, their meaning, and their probable results. Perceiving at once the danger and the critical character of the situation, we raised a solitary, but resolute, voice against a policy which sought to exclude the great body of the practitioners of England from a share in determining the momentous questions involved in the creation of a new class of general practitioners, and the institution of a new competing licence. Week by week we discussed the nature of this policy, the secret methods by which it was being pursued, and the absolute disregard of great professional interests which it implied. We see with satisfaction that our protest has gone to the heart of the profession. It is being echoed everywhere in tones of unmixed approval, and those who thought that they could disregard that protest because it was but one voice must now see that that voice expressed the mind, as it was inspired by concern for the interest, of the whole republic of medicine. Sir Walter Foster evidently carried his audience with him when he declared, in words that excited great applause, that the policy which the Colleges have pursued is contrary to the well-being of the State, and to the desire of the profession to put an end to exclusiveness, selfishness, and degrading competition in examinational arrangements.

With the eloquence, keenness of insight, and freshness of thought, which characterise his public utterances, he maintained the rights of the ten thousand Members of the College of Surgeons and of the great body of Licentiates and Members of the College of Physicians to a voice in the management of their own affairs. He reiterated, for his part, the declaration which we first made some months since, and which we shall never cease to repeat until practical effect has been given to it—that the Councils of the Colleges have neither the right nor the duty to attempt longer to continue an oligarchic form of government, which is irresponsible, and is therefore certain to be wrongly directed. The Councils of both Colleges are out of touch with the great mass of the profession; they represent exclusively the interests of a particular class, and that class one whose occupation, modes of thought, and sympathies are narrowed by obvious restrictions which cannot fail to bias their policy. He endorsed the principle which we have ventured to affirm as one which is now ripe for carrying into action—that the great body of general practitioners can no longer with safety be excluded from a voice in the management of the Colleges of which they form the enormous majority, and towards which they contribute the great bulk of the revenue. The constitution of both Colleges is out of harmony with the times, and the result is seen in the recent policy, of which the issue, if persisted in, cannot fail to be disastrous. What may be the precise effect of the recent action of the General Medical Council it is premature to predict. It is easy to see, however, that it may b turned to a bad as well as to a good purpose, and it will behove those who are interested in progress and good government to take care that they are not outwitted by intrigues of which rumours are already in the wind. It must be remembered that, under the provisions of the Act of Parliament, the Society of Apothecaries must receive either from the General Medical Council or from the Privy Council the appointment of surgical examiners early in June next. The dilatory action of the General Medical Council in deciding to adopt resolutions of conciliation may have an evil as well as a good effect. It requires little astuteness to recognise the fact that delay is, in this matter, on the side of the enemies of progress. If the Apothecaries' Society is so weak as to lose sight of the dates within which its action must be determined, the obstructionists will have triumphed, and, by mere lapse of time, the Society will have lost a status and the profession will have lost privileges which cannot be recovered. The monopolists are already rubbing their hands with unconcealed glee at the prospect of a delay which shall make it difficult for the General Medical Council to receive tidings of the result of negotiations which Sir Henry Acland has undertaken to conduct, in good time to allow it to reassemble for the purpose of giving a final decision, and of appointing those examiners to whom the Apothecaries' Society will in law and in equity be entitled, if the Colleges should persist in ignoring the recommendation of the General Medical Council. In that case, it is alleged that the Privy Council would be influenced to refuse to make appointments which have not been deliberately considered by the General Medical Council, and some sinister utterances of Lord Salisbury are quoted as affording evidence that he would not be unwilling to assist in abolishing the Apothecaries' Society. In this way hopes are openly expressed that the profession may be outmanœuvred, and the Apothecaries' Society outwitted. These are not very dignified suggestions, and there is good reason to hope that the General Medical Council will not allow itself to be thus outgeneralled.

It will, however, behove the advisers of the Apothecaries' Society to be on their guard and to take preliminary measures of precaution by communicating at once with the Privy Council. The profession will also expect that the President of the General Medical Council, seeing how much time is of the essence of the negotiation, shall take care that the General Medical Council is not put in the false and ridiculous position which is suggested, and that a great question of public and professional policy is not disposed of by a clever and not very scrupulous manœuvre. The profession, also, must be on its guard, and we would counsel the Branches of the British Medical Association which have already passed resolutions on

the subject, and those before which its consideration is about to come, to lose no time in making their communications to the President of the General Medical Council and to the Lord President of the Privy Council. Their communications to the Colleges are received with characteristically scant courtesy. They are left without reply, and it is not even pretended that they are to be allowed to have any influence in the Councils of the Colleges to which they are addressed. Those ill-advised bodies have thus far shown no sign of conciliation or re-consideration. The anomalous constitution under which they act gives them the power silently to disregard representations, of whatever force and from whatever quarter. That in doing so they are gathering for themselves a harvest of retribution appears to influence but little their present line of policy. While, therefore, continuing to address remonstrances to the Council, popular bodies of the profession will do well to organise at once effective representations such as shall warn the Government that the profession is against the Colleges in this matter, and that it demands that the objects of the Medical Act shall not be stultified and its principles set at nought to gratify the pride, or to serve the imaginary interests of monopolist institutions, however ancient or dignified. The Society of Apothecaries will no doubt seriously consider its legal position in this matter, but apparently it cannot count upon too much generosity on the part of its opponents. It must be prepared at once to defend its privileges, and it should lose no time in devising a scheme of action which shall set at naught the dilatory policy by which some, at least, of its opponents hope to outwit it.

RELATIVE RANK OF ARMY MEDICAL OFFICERS.

SINCE the publication of our article on the above subject on Saturday last, we have been at pains to obtain the best information on the point at issue, from officers of standing and experience in the combatant as well as in the departmental ranks of the army. Far from having any reason to believe that the note of alarm we sounded was false, we are satisfied that it was not an hour too soon to call attention to what we are constrained to believe was an intended blow at the status of our professional brethren in the army. The medical staff do not need any exposition of the case at our hands; they have to wear the shoe, and they know where it pinches. It is to the profession in civil life that we address our remarks to-day, more particularly to men of light and leading in our ranks, to the professors and teachers in our universities and medical schools in the great centres of education throughout the kingdom, and to the young men whose professional education is sufficiently advanced to cause them to turn over in their minds the important question of a career.

What we have to warn them against is the danger of having dust thrown in their eyes, by delusive official "explanations," either in the House of Commons in answer to questions, or by memoranda cleverly worded with the intention of misleading civilians who so far interest themselves in the matter as to seek for information either from War Office or Horse Guards officials.

There are, or were, three kinds of rank recognised in the army, namely, substantive, honorary, and relative rank; the last was the recognised rank of army medical officers. It was this that gave them all their privileges and precedence, and, so far as it went, their position in the army. That rank is abolished, and the outcome is they have now no rank at all. Mr. Stanhope is, as lawyers say, "instructed" to say that it makes no difference, that the position of army medical officers is not changed, that their privileges remain, and so forth, and we believe that Mr. Stanhope is honest and simple enough to believe what he is told, and, parrot-like, to repeat in the House.

But this is not how the matter is regarded in the army. It may be true a surgeon will get his quarters and his cabin in a transport as he did before, but rank in the army he has none, and so long as this is the case he will be made to feel it every hour of his life. The officers who pay and feed the army have recognised titular rank. They are styled honorary Captains, Majors, Lieut.-Colonels, and so on, according to their grade, although it is as notorious as the sun at noonday that they do not run a tenth part of the risks—the honourable risks of war—that the surgeons of the army do from battle injuries and the diseases incident to campaigns. Do our readers doubt this? Let them look at the long list of young surgeons, hardly in their prime, who laid down their lives in our late wars in Afghanistan, in South Africa, in Egypt, and the Soudan, a list which we place before our readers in another page. We should like to know how many paymasters and commissariat officers lost their lives in battle, or died worn out by the night and day work of field and camp service? Which of them, like Shepherd at Isandlana, when that pitiful massacre was nearly over, dismounted from his horse, in answer to the appeal of a wounded soldier, and, died like a brave man as he was, while binding up the wounds of his humble comrade? Which of them at the miserable *fiasco* of Engoga went during that long day under fire, as another surgeon did, from one wounded man to another, as calmly as he would have done in the wards of Netley Hospital, and a few days afterwards died of his wounds on Majuba Hill? Not to speak of his noble brother officer, who, when all who were not killed or wounded on that hill—the very name of which brings a blush of shame on every Englishman's face—had left, remained with his wounded, and when about to die from a mortal wound, gathered his remaining energies and fast ebbing strength, and gave a hypodermic injection of morphine to a man screaming under the torture of a wound.

This is a matter that demands plain speaking; and, without any wish to hurt the feelings of any one, we must illustrate our meaning by an example. In the *Gazette* of Friday, February 25th, an officer is retired with the rank of Major. This meritorious gentleman began his career as a private in the Hospital Corps. The late Professor Parkes took him into his laboratory, as a laboratory assistant, and never rested until he obtained for him the rank of Sergeant; from this he was promoted in the Army Hospital Corps, and, we believe, under some of the many changes of late years, was attached to the Commissariat. On retirement, he carried with him the honorary rank of Major. Mark this: If Dr. Parkes had remained in the army, and lived to see the present state of affairs, this Major, in military society, would have been the superior in rank to one of the most illustrious men the medical profession in England has ever produced.

We wish it to be distinctly understood that army medical officers do not covet military titles. What they have a right to demand is, that a Royal Warrant shall be published in which their rank shall be defined, their professional titles being the equivalents of recognised military grades, known and seen of all men—not, as now, the nominal possessors of "privileges" which give them no status that is recognisable. Until this is done, we warn the younger members of our profession that the medical ranks of the army is no longer a place for gentlemen.

A GERMAN VIEW OF PASTEUR'S TREATMENT OF HYDROPHOBIA.

THE Paris Academy of Medicine has lately been the theatre of a very excited discussion between the disciples of M. Pasteur and Professor Peter, of the Necker Hospital. Professor Peter showed the most determined opposition to the so-called "intensified method," on account of the fatal result of three cases which had come under his own observation. Hydrophobia in man, he argued, formerly only exceptionally showed paralytic symptoms, whereas since the introduction of inoculation, paralytic cases were more frequent, and the intensified method was especially dangerous in this respect. The so-called statistics of M. Pasteur did not show us what in fact was the case; namely, that since the commencement of the inoculations, the deaths from hydrophobia were actually more numerous than before. Drs. Vulpian and Grancher supported M. Pasteur, as did Dr. Brouardel, but no final conclusion was arrived at. In this connection it is important to note, as the conclusions of an impartial experimenter, the views (see the *Berliner klin. Wochenschrift*, No. 6, 1887) of Professor A. v. Frisch, of Vienna, who was sent to Paris to study M. Pasteur's method. Having on his return to Vienna worked in strict accordance with the method adopted in M. Pasteur's laboratories, he reported to the Vienna Academy of Sciences as follows:

1. The virus of rabies is contained in its most concentrated form in the brain and spinal cord of the animal that has succumbed to it.

2. Small pieces of the brain and spinal cord of a dog that has died of rabies, injected by trephining under the dura mater of other dogs, set up the same disease with almost absolute certainty, after a latent period of slight variation (fourteen to twenty-one days); and from these dogs rabies may similarly be transmitted to other dogs.

3. Subdural insertion into dogs of portions of the spinal cord of human beings who have died of rabies, sets up the disease, with the same symptoms, and after much the same period of latency. Thus the identity of the disease in man and in dogs appears to be perfectly established.

4. After subcutaneous inoculation, infection ensues with less certainty, and the time of incubation is longer than after subdural insertion.

5. The amount of virus inserted beneath the skin is inversely related to the length of the period of latency; the smaller the amount, the longer the latent period.

6. By progressive subdural transference of the disease from rabbit to rabbit (by means of portions of cerebro-spinal substance), a shortening of the period of incubation ensues after several transferences—at first very irregularly, but by-and-by it becomes regular, and is steadily more marked.

7. The so-called "fixed" virus of M. Pasteur, obtained after forty or fifty successive inoculations from rabbit to rabbit, and having a period of incubation of seven days, surpasses the virus of so-called "street-rabies," not only in the shortness of incubation, but also in the fact that the animals invariably die after subcutaneous, as well as after subdural, inoculation.

8. The incubation-period is not further shortened by continued transference of the "fixed" virus (occasionally the animals fall ill on the sixth day); on the contrary, this period (of seven days) becomes no longer constant, and may be prolonged to eight or ten, or even twelve days. But a period of eight to twelve days' incubation, with a virus of equal potency, is sometimes obtained after only two or three successive inoculations of "street-rabies."

9. A "fixed" virus of seven days' incubation may not only be obtained by M. Pasteur's method, but sometimes occurs earlier, independently of the number of transferences, and this virus appears constant in its effect and incubation-period.

10. By drying at 20° C. over caustic alkali, the virus of portions of the spinal cord of an animal that has died of rabies loses power from day to day, and, after sixteen or twenty days, has lost its effect entirely.

11. Animals that have been subcutaneously inoculated with an ascending series of thus "weakened" spinal cords are protected by the weaker virus against the effects of the stronger, if the previous successive inoculations have not followed each other too closely.

12. Animals that have been subcutaneously inoculated during the course of ten days with virus material (that is, portions of spinal cord dried for different periods) of gradually increasing virulency, contrary to M. Pasteur's statements, do not possess perfect immunity against infection with fresh "street-rabies," and, after subdural infection with the latter, remain healthy only in exceptional cases.

13. Rabbits and dogs that were subjected to preventive inoculations after trephining and subdural infection with "street-rabies" (of sixteen days' incubation-period), all died of rabies, with one single exception (see *Anzeiger der K. K. Academie der Wissenchaften*, July 15th, 1886; also *Medicinische Presse*, 1886, No. 32). The animal, moreover, that remained healthy was infected subdurally fourteen weeks later, and died of rabies eight days afterwards.

14. Against these experiments M. Pasteur has objected (*Comptes Rendus*, November 2nd, 1886) that the preventive inoculations followed each other too slowly, although Dr. v. Frisch had carefully adhered to the procedures described by himself. M. Pasteur now requires the application of the whole amount of (preventive) virus within twenty-four hours (the inoculations being made every two hours), and two or three repetitions of the whole series; further, that these inoculations should begin soon after infection, at least on the following day. Experiments thus carried out on dogs and rabbits gave not one favourable result; all the animals died, even after this "intensive" treatment.

15. But, further, the important result arises from these experiments that, by a quick succession of inoculations, gradually increasing in virulence, a protective power of the weaker against the subsequent stronger ones, is no longer to be safely expected. Of a number of rabbits and dogs which served in control-experiments to the above, and in which the intensive treatment alone was adopted without previous infection, a very large majority died.

16. Animals that were subjected to preventive inoculations after subcutaneous infection, nevertheless succumbed to rabies, with few exceptions, even when the incubation-period extended to thirty-four days.

From the above experiments the conclusion may be drawn that M. Pasteur's method of conferring immunity on animals against the virus of rabies, requires still much further working out, before it can be considered safe or trustworthy; while as to human beings, there are as yet no valid reasons for the institution of a preventive treat-

ment. On the contrary, there is a strong presumption that the actual disease may be produced by the preventive treatment itself, at least, in the "intensive" form lately adopted by Pasteur.

THE SANITARY CONDITION OF THE ROYAL BOROUGH: A JUBILEE SUGGESTION.

FROM time to time the sanitary state of the royal borough of Windsor has received a considerable amount of public attention, and the unwholesome condition of the homes of its poor has been severely criticised in the public press and from the local pulpit. But although the most casual visitor to the royal borough cannot fail to have been struck with the squalor prevailing in certain parts of the town, the sanitary authority has hitherto generally resented criticism of its inaction, and, after asserting that the statements were exaggerated, has allowed much of the advice even of its own officers to remain unadopted.

In the autumn of last year, however, the subject came once again very prominently before the public, and an influential deputation from the town, including the borough Member, the Mayor, and representatives of the sanitary authority, appealed to the President of the Local Government Board to direct an impartial inquiry into the whole matter, with the view of setting public anxiety at rest once for all. In compliance with this appeal, Mr. Ritchie instructed Dr. Hubert Airy, one of the inspectors of his Medical Department, and Mr. Arnold Taylor, C.E., one of his staff of engineers, thoroughly to overhaul the sanitary arrangements of Windsor.

The report of these experienced investigators has just been issued, and, although couched in moderate and guarded language, it goes far to substantiate the more important statements that have already appeared on the subject. Speaking of the increase of the inhabitants during the last quarter of a century, it points out that the greater part of this new population, both within and without the borough, is housed on the alluvial plain that stretches at the foot of the western slopes of Windsor. Certain rows are built on such low ground that when the river overflows its banks and floods the meadows, as it did most seriously in 1852, and again some five years ago, their ground floors are two or three feet under water. Whether it can be proved from the death-register or not, there cannot be a doubt that this is an unwholesome state of things. To it is probably due a rather high mortality from phthisis in Windsor. It may not have been within the legal powers of the sanitary authority to prevent this area being built upon. But why did not it obtain the power of regulating the building operations, and of securing such safeguards as would have mitigated the dampness of site, by the adoption of proper by-laws? We note that, although "the need of revision of the borough by-laws has long been recognised by the Town Council," there is not even yet a proper code in force.

But it is the older courts and alleys of the town that are its greatest blot, and when these are examined it is found that, in spite of the structural improvements that have been made in recent years, their condition, in respect of outside air-space, back-yard space, internal ventilation, closet accommodation, surface formation, and pavement, is, in the words of the official report, "still pitiably bad." Bier Lane, Garden Court, Distil House Row, South Place, Charles Place, Charles Street Cottages, Keppel Row, and Keppel Court are all severely criticised, but are given only as examples of the insanitary localities.

Concerning some cottages in Garden Court, we read:

"Their back yards, or rather closet-wells, are only from 4 to 6 feet across, and contain each a pan closet to be flushed by hand. Water has to be fetched from a stand-pipe near the entry to the court. Ashes are deposited at the head of a back lane beyond the end of the court. Each cottage has three rooms, one above another, cubic space from 700 to 800 feet, from which should be deducted the space occupied by bedding, etc. Of 13 houses on the south side of South Place, 10 have no opening whatever at the back, no scullery, no closet, and no water but a tap at the end of the row. For closet purposes, the 65 dwellers in the 10 houses have to go into an open yard at the back of the opposite houses on the north side. Some of them are four-roomed, others two-roomed. Their stairs, 2 feet 6 inches wide, have no ventilation and no light, except in one instance, where there is a front window on the landing. On the north side, Nos. 1 to 4 have sculleries opening into back gardens, and back lean-to bedrooms over the sculleries, with back windows 18 inches square; each of these houses has its own pan-closet; No. 5 also has a closet. Nos. 25-28 in like manner have sculleries and back bedrooms; they open into a common yard with an old pan-closet and a new cistern-closet. Nos. 6 to 24, with a population of 56, are two-roomed houses without any back openings. The bedroom, reached by a stair against the inside of the back wall, contains about 800 cubic feet. Behind these houses are three open unpaved yards, common to five or six dwellings, each with entries from the asphalted passage. One of the houses adjoining each entry has the advantage of a larger bedroom, extending over the entry. These yards together contain eight old pan-closets without water, and five new cistern-closets, 13 in all, for a population of 121, reckoning those who come over from the south side; they have taps of town water; one of them has an iron dust-bin, the others have merely cavities in the ground at the foot of the house-wall. There is plenty of open space at the back of these dwellings, for outside the yards runs a back alley, beyond which come the back yards of Oxford Road. Ventilation could easily be obtained by putting in a window at the head of each stair; as for the houses on the south side, we see no way of rendering them tolerably habitable but by demolishing every third house, and converting its site into a yard for its neighbours, with a proper water-closet to each."

These are only examples quoted from the official report, but surely they warrant the recommendations of the inspector that "the sanitary authority should carefully inquire whether the requisite improvements can be obtained under the powers of the Public Health Act 1875; and, if not, they should resort to the powers given by the Artisans' and Labourers' Dwellings Improvement Acts, 1875 to 1882."

The water-supply of Windsor, in so far as it is derived from the Waterworks Company and not from private wells, is abundant and good, and upon sewerage works the sanitary authority has expended about £47,000 since May, 1875. But there is reason to believe that in many cases the house-drains are ill-laid and unventilated, and ready to convey poisonous gases direct from the sewer to the house through an untrapped sink-pipe or an ill-constructed water-closet. To facilitate the removal of these dangerous conditions, the inspectors appeal, somewhat impotently, to the "better appreciation of their sanitary requirements by the inhabitants of Windsor," and they point out that "it is requisite that public opinion should come to the aid of the sanitary authority in their endeavours to bring about an improvement." Public opinion will surely condemn any system which tolerates "a pan-closet, constructed to be flushed by hand, which, by the neglect of its users, has become coated with dirt or temporarily choked for want of water," and it will not hesitate to endorse the words of the report that "these Windsor pan-closets ought certainly to be kept in better order, and there ought to be such a system of inspection as should ensure this being done. Doubtless the closets would be better if they were all furnished with cisterns giving a two-gallon flush, and for the credit of the town it is to be hoped that this improvement will be generally made." Public opinion will also assert that four pan-closets with "pans dirty for want of flush-water," are

not a sufficient provision for thirteen houses, nor are thirteen closets adequate for 121 persons.

The disposal of ashes and refuse is another of the difficulties of Windsor; but the Corporation could easily overcome it by providing for the more frequent removal of the refuse, and by the erection of a furnace for its destruction. A further great and inexcusable want of the town is that of a small hospital for the isolation of infectious diseases, and of an apparatus for the disinfection of infected articles. No sanitary administration is complete without provision of this sort; and it is to be hoped that the Corporation will not wait for an epidemic and panic to impress upon it the lesson that has so dearly been bought by many another community. The outbreak of small-pox in the town last year, and the extraordinary circumstances that attended the attempt to isolate the patients in tents by the river-side, should be sufficient to convince the Corporation on this point.

Reviewing their report, the inspectors think that "some allowance should be made for the difficulties that beset a sanitary authority in its endeavours to amend the faulty state of things which it has inherited from bygone centuries," and they point out "that it is only recently that towns of the size of Windsor have been invested with full legal powers for the improvement of artisans' dwellings." But it must not be forgotten that the insufficient closet accommodation, the faulty drains, the general unwholesomeness of the dwellings of the poor, have long been before the sanitary authority in the reports of their officers. In these days of advancing sanitation, when action is being taken throughout the country to banish every ally of cholera and other filth-diseases, the public will not readily excuse the toleration of such remediable defects within a stone's throw of the residence of the Sovereign. The influential deputation that waited on the President of the Local Government Board in September last partially promised that the recommendations of the inspectors would be carried out. Those recommendations are reasonable and moderate, and we hope that the hands of the advocates of reform in Windsor will be strengthened by the hint which underlies the concluding words of the report. "We feel sure that with due energy and activity on the part of the Town Council, provided they have a sufficient staff of officers acting under their orders, the sanitary defects which have been pointed out in the course of our report will, in the main, be satisfactorily remedied."

If serious and comprehensive action in this sense be at once taken, the Jubilee year of Her Majesty's reign ought to be a memorable year in the sanitary history of the royal borough.

DR. ROBERT BARNES and Mr. Lawson Tait have been made Honorary Fellows of the British Gynæcological Society.

THE report of the Committee of the Senate of the University of London, over which Lord Justice Fry presides, was, we understand, adopted at a meeting on Wednesday last. The report, which will not, we believe, contain any very novel proposals, will be presented to the Senate at its next meeting about a fortnight hence.

MORE PATIENTS FOR M. PASTEUR.

CONSIDERABLE excitement was caused in the neighbourhood of Shrewsbury, on February 24th, by the career of a rabid dog. The animal ran upwards of twenty miles before being killed, and, during its course, six persons were severely bitten, whilst a large number had very narrow escapes. Dr. Thursfield, the local medical officer of health, has taken the sufferers to Paris for treatment by M. Pasteur.

ST. MARY'S HOSPITAL.

WE learn that the authorities of St. Mary's Hospital are endeavouring to acquire the houses now belonging to the Grand Junction Company in Praed Street, and we understand that the company are inclined to consider the proposal seriously. Should the negotiations be successful, the frontage into a good thoroughfare like Praed Street, Paddington, would be beneficial in many respects to the hospital. A special fund has been started for the purpose of raising the purchase money by Mr. Field, Dean of the Medical School.

DEATH OF PROFESSOR BECLARD.

M. BÉCLARD, Dean of the Paris Medical Faculty, and Professor of Physiology, died on February 9th, aged 70. Pneumonia was the cause of death. M. Béclard wrote a physiological treatise, which has long served as a text-book for students, and still holds its own among its younger rivals.

MEDICAL DEGREES FOR LONDON STUDENTS.

A LARGE meeting of the students of the London Hospital was recently held to discuss the scheme for providing medical degrees for London students. Dr. Langdon Down, in the chair, was supported by Mr. Treves, Dr. Francis Warner, and Mr. Munro Scott (Warden). Mr. F. Treves proposed and Mr. J. Moore seconded, "That a committee be formed to draw up a petition to the Royal Colleges, praying that they use their best endeavours to obtain the power of granting a degree in medicine, and that this committee take such steps as they may think fit to support this petition." Dr. Warner spoke in support of the proposition, which was carried unanimously. Messrs. H. Smith, Watts, Moore, Taylor, and Rayner were elected on the committee, the latter to act as secretary. The meeting was enthusiastic throughout.

THE METROPOLITAN ASYLUMS BOARD.

THE fortnightly returns presented on February 26th at the meeting of the Metropolitan Asylums Board showed that there were three small-pox patients at the several hospitals (an increase of one), and 531 fever patients under treatment (a decrease of 25). The General Purposes Committee recommended application to be made to the Local Government Board for an amending order, making the services of all principal officers available at any infectious establishment under the managers' control. It was unanimously resolved to carry out the proposal. It was also recommended that an application be made to the Local Government Board to obtain authority for the managers to remove all persons suffering from fever or small-pox whose removal shall be applied for by duly-qualified registered medical practitioners.

ANTISEPTIC COLLODION.

THE *Journal de Médecine* of December 26 contains an account of a new kind of "collodion," which is antiseptic and promotes cicatrisation. It does not cause inflammation, and may be substituted for collodion made from gun-cotton, in the treatment of wounds and bruises. Like traumaticine, it is efficacious in relieving neuralgic pains, and acute or chronic rheumatism. The affected parts should be sponged with it every twenty-four hours, and in serious cases every six hours. If strips of linen or silk be soaked in this collodion, an excellent sticking plaster is obtained, which quite equals English court-plaster. The following is the formula: Mastic in globules, 3 grammes; Balsam of Peru, 1 gramme; narcotine, 1 gramme. Each ingredient should be ground separately, and 5 grammes of chloroform added thereto.

CREMATION.

AT the annual meeting of the French Society for the Extension of Cremation, the Secretary, in his report, congratulated the members on the partial victory gained by the supporters of cremation over the legislative body. The Chamber of Deputies, on March 30th last, adopted, by a majority of 147, an amendment of M. Blatin on the "law of liberty at funerals." This amendment concluded by affirming

that every one whose age or condition entitled him to make a will should be at liberty to determine the mode of his burial (that is, to choose between interment and incineration), and that he should have the power to bequeath all or part of his body to the medical schools for purposes of instruction. The Secretary also read a recent mandate of the Holy See, condemning cremation in Italy, and said that it would certainly meet with much opposition, as there were no fewer than sixty cremation societies in that country. Crematories have been established at New York, Lancaster, and Buffalo, in the States, and are in course of construction at Boston, Geneva, and Zürich. The whole German Empire (represented by 23,000 signatures) has petitioned for it. In the Mauritius, some determined cremationists, without waiting to construct any apparatus, have burned their dead on ordinary wood-piles. The meeting, before separating, expressed a hope that the Senate would pass the law allowing liberty as regards burial or cremation.

COLONIAL AND INTERNATIONAL CONGRESS ON INEBRIETY.

A COLONIAL and International Congress on Inebriety (organised by the Council of the Society for the Study and Cure of Inebriety) will be held on Wednesday, July 6th, in the Westminster Town Hall. After the President's opening address, papers on various phases of inebriety as a disease, and on legislation for inebriates, will be read by a number of distinguished medical men, English and foreign. The President is Dr. Norman Kerr, and the list of Vice-presidents includes Dr. N. S. Davis (the President of the International Medical Congress), Chicago; Professor Binz (Bonn); Clark Bell, Esq. (the President of the American Medico-Legal Association); Dr. Simon Fitch (Halifax, Nova Scotia); Dr. Moeller (Brussels); and Dr. Magnan. Any further information will be furnished by the Secretary, Mr. C. H. Bishop, 42, Grove Road, Regent's Park.

AN EPIDEMIC OF MEASLES.

STONYHURST COLLEGE is, it is stated, being visited by an epidemic of measles of a very virulent type. At a meeting of the Clitheroe rural sanitary authority, a letter was read from Dr. Counsellor, the medical officer of health, in which he stated that, at the village of Hurst Green, less than half a mile from Stonyhurst College, he had found that nearly 50 per cent. of the children were absent from school owing to the epidemic, and he should order the schools to be closed. He had ascertained by personal inquiry that over thirty families were infected. The disease, which is said to have been brought from Germany, has caused four deaths in the College. All possible precautions are being taken to confine the disease to its present limits.

A NEW METHOD OF CULTIVATING TUBERCLE-BACILLI.

IN the *Annales de l'Institut Pasteur*, MM. Nocard and Roux describe some valuable experiments which they have been making on the tubercle-bacillus. As is well known, Koch only succeeded in obtaining satisfactory cultivations in solidified blood-serum; and all who have attempted to cultivate these organisms have found it a matter of considerable difficulty. M. Nocard, in a previous paper, stated that he had obtained better cultivations when he added to the serum, before its solidification, 1 per cent. of peptone, 0.25 per cent. of chloride of sodium, 0.25 per cent. of cane-sugar. He noticed, however, that the surface of this material after a time became covered with a thin dry iridescent pellicle, due probably to desiccation and oxidation of the superficial layer; and that in this material the bacilli did not grow well. To obviate this the authors added a small quantity of glycerine to the material, and found that they obtained better growth than previously. They then tried the effect of adding glycerine to nutritive material solidified by adding Agar-agar, and found that, when 6 to 8 per cent. of glycerine was added, copious growth of the tubercle-bacillus was obtained. This is a very important result, as the material is easily prepared, and as by its aid plate-cultivations can be made. The authors have also found that, by the addition of 5 per cent. of glycerine to various cultivating fluids, excellent growth is obtained in the form of flocculi at the bottom of the flask, somewhat resembling cultivations of anthrax-bacilli.

EELS IN EAST LONDON WATER-MAINS.

AN interesting public inquiry will be held on March 8th at the Town Hall, West Ham, by Major-General A. de Courcy Scott, the Official Water Examiner of the Metropolis, and Mr. W. H. Power, one of the Medical Inspectors of the Local Government Board, respecting the quality of the water furnished by the East London Waterworks Company. It will, perhaps, be remembered that some months ago we drew attention to the existence of eels in considerable numbers in the mains and pipes of the water company in question; and we pointed out that, as disease had been found associated with the use of water from pipes in which decomposed eels were discovered, the matter demanded immediate attention. Since then strenuous efforts have been made by the company to get rid of the troublesome creatures, and we believe with considerable, if not yet complete, success. The matter, however, is to be officially investigated on Tuesday next, and any persons interested in the subject of the inquiry are invited to attend.

THE CARRIAGE-TAX.

A DEPUTATION which waited upon the Chancellor of the Exchequer on Monday last, to seek the repeal of the carriage-duty, pointed out that the tax on carriages, as it affects medical men, was oppressive. Mr. Goschen, however, in his reply, does not seem to have allowed due weight to this argument, but considered the grievances under two general heads only—the builders and the users of carriages; and urged that, as the tax was one not imposed upon labour, but upon the wealthier classes, he did not see his way to hold out any hope of an early reduction. It is to be regretted that the Chancellor of the Exchequer is not willing to draw a distinction between those who use carriages for the purposes of pleasure and that large class of professional men to whom a carriage is an indispensable requirement in their professional duties.

APOCYNUM CANNABINUM.

THE apocynum cannabinum is a herbaceous and perennial plant, belonging to the family of the apocynaceæ, which flourishes in the United States, where it is known under the name of Indian hemp. The root, which has been used for some time past in America, contains tannin, resin, and two substances—apocynine and apocynum—having the same properties as digitalis. Dr. Rusch's attention was attracted to this plant by its valuable properties as a hydragogue in arresting serous effusion of the pleura and peritoneum. It is both tonic and diuretic, and is valuable in general anasarca. A decoction is made of 4 grammes of the bark to 250 grammes of water, and a dose of 30 grammes is given every six hours.

SCENES AND LESSONS OF THE EARTHQUAKE.

THE graphic accounts which refugees from the Riviera have brought to London of the scenes at Nice and Monte Carlo during the earthquake give a vivid impression of the gruesome terror of the situation, and the tendency which all such panics have to bring out the brute element in man. *Sauve qui peut* was the prevailing sentiment; and "the devil take the hindmost" was only in too many cases the corollary which the impulse of panic added. The scenes to be witnessed were made up pretty equally of the painful, the disgusting, and the ludicrous. Such a stampede of respectable and distinguished half-naked fugitives of all ranks has not been witnessed in our time. Fear and a selfish impulse of self-preservation appear in too many instances to have been the ruling sentiments; but happily also some of the higher traits of character were shown, and amidst stories of the most brutal selfishness and unreasoning panic it is a relief to hear of a few Englishmen who spent their whole time in calming the fears, aiding the immediate necessities, and relieving the distresses of the women and children. It is painful to be told that the first train from Monte Carlo was wholly filled with men, carrying only one lady, and for her a seat

was secured only by her husband, who knocked down some forcibly intruding claimants and defended by main force the seat which he secured for his wife. The invalids appear to have suffered much from the cold, and in some phthisical cases hæmoptysis occurred. The sad story of after-suffering remains to be told; meantime, the visitors have reason for congratulation that they have emerged from so terrible a situation with so little injury. It will be long before the Riviera will altogether recover from the shock to confidence which this disaster has given. In the reconstruction which must necessarily follow, it is to be hoped that scientific attention will be given to the system of drainage. In many places, it is stated, the drains and water-supplies will need to be partially reconstructed, and it is to be hoped that a better system will be adopted than that which at present exists.

THE ROYAL ASYLUM OF ST. ANNE'S SOCIETY.

Out of a charitable undertaking which originated on a small scale in the City Parish of St. Anne, in the third year of the eighteenth century, has grown an institution which now confers benefits of the very highest value upon the children of parents who have for some reason failed in the battle of life. The schools at Redhill provide accommodation for four hundred children, who there receive an education which fits them to enter the same rank of life as their parents have held, for all the children thus benefited are drawn from what may be most conveniently termed the professional class. So many of the beneficiaries are the children of medical men, that it seems only fair to draw the attention of the profession to this truly benevolent institution, which is quite unendowed. One gentleman has recently purchased four perpetual presentations for the daughters of medical practitioners, and has placed the nominations in the hands of the Royal Medical Benevolent College at Epsom. The Salters' Company recently lent their hall in the City to the Society for a festival dinner—an example which might well be followed by other City companies, as we understand that the Secretary of the Society (Mr. R. H. Evans, 58, Gracechurch Street) has found that a considerable saving is thus effected.

THE ORGANISM PRODUCING DECOMPOSITION OF URINE.

Though it has long been known that the ammoniacal decomposition of urine is due to the splitting up of urea into ammonia and carbonic acid, by means of an organised ferment, the characteristics of this organism have not been accurately described. Many years ago Pasteur and Cohn described a *micrococcus ureæ*, and last year Leube and Graser mentioned four organisms which had the power of decomposing urea into ammonia and carbonic acid. One of these was called by them *bacterium ureæ;* the others were a micrococcus and two species of bacillus. Dr. Robert Smith has lately published the results of his work at the Brown Institution, confirming Pasteur's and Cohn's discovery of a *micrococcus ureæ*. Many kinds of organisms, as is well known, grow in ammoniacal urine, but by the modern methods of "fractional cultivation" and "dilution" Dr. Smith has separated them, and tested the action of each in decomposing urea. He found that the only organism which possessed this power, was a micrococcus occurring singly, or sometimes as diplococci, and growing in gelatine in minute dots. This micrococcus differs from that described by Leube and Graser in its property of liquefying gelatine during its growth. It may be the same organism as that described by Pasteur and Cohn; but, as these observers had not the advantage at the period of their investigations of the method of cultivation on gelatine, this point cannot be decided.

THE WORK OF THE GENERAL MEDICAL COUNCIL.

Though the formal session of the General Medical Council has come to an end, its work is being actively continued by committees. One of these is engaged in making arrangements for the inspection of examinations. A second is occupied in framing rules of procedure, by which the time devoted to business by the Council itself may be limited, either by restricting the length of speeches, or by the devolution to committees of business which, under the present arrangement, is conducted by the Council in full session. A third committee is considering the subject of professional education, more especially in relation to the apprenticeship system or its equivalent. The method of maintaining a more satisfactory relation between the income and expenditure of the Council, furnishes a fourth committee with an onerous task. In addition to these, there are the Executive, the Pharmacopœia, and the Business Committees. It will thus be seen that the members of the General Medical Council are not absolved from the transaction of important business, even during the recess. Mr. W. J. Miller, the Registrar of the Council, has, with a promptitude which must have entailed a great deal of hard work on himself and his staff, issued a complete copy of the minutes of the Council for the present year. The tabular details are brought up to date, and there are two appendices, the one containing the standing orders of the Council, and the other the final report of the visitation of the examinations, in which the reports of the visitors, as well as the replies of the universities, are elaborately analysed and discussed. The volume may be obtained from Messrs. Spottiswoode.

PENDING NEGOTIATIONS.

It will hardly be possible for the two Colleges in London to ignore the resolution, deprecating the exclusion of the Apothecaries' Hall from the Conjoint Board, passed by the General Medical Council, as the Council of the College of Surgeons ignored a similar resolution, unanimously adopted by the Members. The remonstrance which has, we understand, been already addressed by the President of the General Medical Council to the Presidents of the two Colleges, will have all the weight which official authority can give, and the Colleges have always been great upholders of the rights of officialism and the paramount authority of the strict letter of the law. The Council of the College of Surgeons meets on March 10th, and a special "Comitia" of the College of Physicians will probably be summoned shortly, so that the answer will not be long delayed. The rumour is generally accepted that the governing bodies of these two Colleges, or rather the few influential and strong-willed individuals within these bodies who govern the governing bodies, will refuse to do more than pass resolutions to the effect that as the course already followed was deliberately adopted after full discussion, the question shall not be re-opened. Full discussion, in the true sense of the word, there cannot have been, because only one side of the question and one set of interests were adequately represented within the bodies. This matter has been decided, as every other will be so long as the present irresponsible mode of government continues, in secret meetings, where independent thinkers, overawed by the weight of authority and unsupported by a public opinion, with difficulty find a hearing. The Colleges, though enjoying peculiar privileges granted by the legislature, and charged with functions of the utmost importance to the profession and to the public, yet claim to retain the immunities and the irresponsibility of private corporations. The members of the governing bodies are officially told that it is a dishonourable act to reveal to their brethren within the profession, whose interests are deeply implicated in the decisions taken, the reasons upon which these decisions rest. Of discussion in the present emergency there will probably be very little, if the influences which have heretofore guided the Colleges continue to be as potent as they have been during the past few years. It will then be the turn of the General Medical Council to act; and it is stated that the Council separated with the understanding that it should reassemble if necessary, probably shortly after Easter, to appoint Examiners in Surgery at the Apothecaries' Hall in London, and if the deadlock in Ireland continues, in Dublin also. Meantime, it may be noted that every independent organisation of the profession, which has discussed the subject, has pronounced unhesitatingly against the Colleges. That they will take any notice of this universal set of professional opinion against their exclusive and self-interested policy, is

perhaps too much to expect, looking to the high-handed and obstinate disregard of professional opinion with which they have thus far acted. But it will be well that the more calm, sober, and independent judgment of the members less under official influence should be pronounced against a coarse contempt of the opinion of the profession and the General Medical Council, if only by way of protest. Of the proceedings at the Council of the College of Surgeons there is no record except the official minutes. The opinions pronounced at the Comitia of the College of Physicians have occasionally been made known in the columns of the medical papers for the information of the profession. But the last occasion on which this was done brought down a remonstrance from the President, and the Fellows were reminded that, however wide the interests involved, and however far reaching the results, the proceedings were *secreta Collegii*, and the report of speeches was prohibited. The senatorial bodies and convocations even of the older universities do not shun the light. The debates on matters of public interest in the governing bodies of the Universities of Oxford and Cambridge are from time to time fully reported in the daily papers, and always, more or less, in the University chronicles. It is lamentably characteristic of the constitution and mode of government of the Colleges of Surgeons and Physicians that the opposite should be the case. They are determined to show themselves as among the most recalcitrant and impenitent of unreformed bodies. But it is not in this way that they will command the respect or the confidence of the profession, the public, or Parliament when the hour of reform arrives. That hour cannot but be indirectly hastened by their recent courses.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE annual meeting of the Society was held on Tuesday last, March 1st, Mr. G. D. Pollock, the President, occupying the chair. The annual report was read by Dr. Cheadle, and showed the satisfactory result that the £500 spent during the past year in improvements in lighting and draining had been provided for out of the annual income of the Society. The total number of Fellows now stands at 746; this is the highest number yet reached since the foundation of the Society. On the proposal of Dr. C. West, seconded by Mr. J. E. Morgan, the report was received, adopted, and ordered to be printed. The report also shows that the Society enjoys a very fair measure of financial prosperity. It received as ordinary income £1,669, and holds over £3,000 of stock. Its *Transactions* and *Proceedings* and President's address cost £478, and the salaries of its resident librarian and other officers, £441. But it can afford to spend £361 on the purchase and binding of books, and by that means it is able to take the lead very easily of all the medical libraries in England, and in some respects, chiefly in its periodical literature, even of the British Museum. It is to the excellent management of the library by the Library Committee and by the resident librarian, Mr. Bailey, and the liberal privileges which are granted to Fellows, that much of its sound popularity is due. The report of the Honorary Librarians states that the additions to the library during the year 1886 consist of 897 works, including pamphlets, but not including transactions, journals, and other periodical publications. Of these additions, 638 have been obtained by purchase and 241 by donation. These latter include 25 works in 100 volumes, presented by Dr. Lauder Brunton, and 32 old books given by Mr. Charles Hawkins. In the 638 works added by purchase is included a bound collection of 420 *Thèses de Médecine*, put together by the late Dr. C. Parrot. The total number of works in the library, December, 1886, was 30,282. During the past year 3,587 books have been borrowed from the library. The number of visits of Fellows has been 4,574. The collection of portraits of members of the medical profession has been enriched by the addition of 63 new portraits. The *Transactions* of the past year have contained some important papers, and there has been more debate than in any previous year, except 1885, which shows, we think, on the whole, the wisdom of the present plan of issuing, a week before the debate, a short printed analysis of the contents of the paper, which gives anyone who is interested on the subject an opportunity of fitting his experiences to the occasion. The number of papers read, and the attendance of Fellows and visitors during the last six years, are given in the following table:—

Year.	No of Meetings.	Papers.		Present.		Joined in Discussion.
		Medical.	Surgical.	Fellows.	Visitors.	
1881	15	5	21	540	70	94
1882	15	12	14	517	117	102
1883	15	14	17	607	119	113
1884	15	18	13	632	118	145
1885	17	10	16	759	201	171
1886	16	15	18	558	111	160

The gentlemen whose names were given in the JOURNAL of February 26th were duly elected as office-bearers for the year 1887-88. The President then proceeded to read his annual address, which consisted entirely of a brief obituary of the Fellows who had died during the past year. Many well-known names were mentioned in it, including Mr. Cooper Forster, Sir W. White Cooper, Mr. George Busk, and Dr. Walter Moxon—and each notice was kindly and graceful. Sir Joseph Fayrer proposed a motion, which was seconded by Mr. Cowell, thanking the President for his address, and requesting him to have it printed, if possible, in the *Transactions* of the Society. Dr. Sturges, seconded by Mr. Warrington Haward, proposed a vote of thanks to the retiring treasurer, Dr. Radcliffe; and Mr. Barwell, seconded by Dr. J. F. Payne, brought forward a similar vote of thanks to the retiring vice-presidents and members of Council. These were all carried unanimously, and the Society thereupon entered on its eighty-third year.

OBSTETRICAL SOCIETY OF LONDON.

AT the meeting of the Obstetrical Society on Wednesday, March 2nd, Dr. Galabin exhibited a uterus removed by Porro's operation in September, 1886; the patient made a good recovery. Dr. Horrocks exhibited a uterus with fibromyoma, which had impeded delivery at term for five weeks. The waters had broken, and pains had continued during the whole period just mentioned; portions of the fœtal scalp came away. The patient became extremely exhausted, and at length it was thought advisable to perform Cæsarean section, the true nature of the case having been diagnosed. The operation was performed, and a putrid fœtus was removed, but the patient died immediately afterwards. The President, Dr. John Williams, delivered an able and interesting inaugural address, an abstract of which will appear in our full report of the meeting. Dr. Graily Hewitt proposed, and Dr. Braxton Hicks seconded, a vote of thanks to the President, which was carried unanimously. The adjourned debate on Dr. Gibbons's paper, on a case of galactorrhœa, was continued. The President, Dr. Matthews Duncan, Dr. Routh, Mr. Sutton, and others took part in the discussion. Dr. Gibbons replied. A paper, which was announced as the first of a series on the subject, on the Mechanism of the Third Stage of Labour, was contributed by Dr. Champneys. It treated of the separation of the placenta.

CUCAINE POISONING.

IN the *Saint Louis Medical and Surgical Journal* Dr. McIntyre records the following case of cucaine poisoning. The patient, a well-built man, aged 40, was found, as pale as death, lying on the door-step of his shop. His pupils were much dilated, and the conjunctiva insensitive; respiration was slow and difficult; the pulse was 140. The patient was unable to articulate, but frequently made signs for water, which was scarcely placed in his mouth when it was rejected, as he could not swallow it. He had fallen into this state owing to a hypodermic injection of three centigrammes of cucaine twenty minutes before. Dr. Nichols, his ordinary medical attendant, had already, on

several occasions, given him hypodermic injections of from three to four centigrammes of this drug, repeating them every half-hour until twenty centigrammes had been administered; and he was therefore much surprised to see one dose produce symptoms of poisoning. The patient was a very intemperate man, and the injection was given as a remedy for the after-effects of drunkenness. Dr. Nichols, who had had a large experience in the use of cucaine in depression following intoxication, said that its effect was to destroy for a time the desire for alcohol. In the present case, the treatment consisted of morphine and alcohol in repeated doses. The patient was in a serious state for some time, but gradually recovered. At the end of four hours he was able to be taken home in a carriage, and fourteen hours after the injection he was quite well.

UTERINE TENTS AND THEIR EFFECTUAL DISINFECTION.

Dr. Dirner, of Buda-Pesth, has recently written in the *Centralblatt für Gynäkologie* on the effectual disinfection of tents used for gynæcological purposes. He observes how, after the greatest precautions, serious pelvic inflammation may follow the introduction of sponge or laminaria tents. This accident is clearly due, not to the mere ulceration of the dilated structures, but to the introduction of septic material through the wounded mucous surface. The preparation of tents by soaking or coating in antiseptic media is insufficient. Septic matter may be introduced with the aseptic tent; surgeons handle and throw about samples at the shops, nor is the process of manufacture always properly superintended. Fritsch's method of coating tents with wax requires warm water to be at hand when the wax has to be melted, and that water may be septic. Dr. Dirner has detected cracks in the wax, allowing the admission of dust. The most carefully prepared dry tents can convey septic germs on their surfaces. For a year Dr. Dirner has employed in Professor Tauffer's wards a special system of disinfecting laminaria tents. He immerses them in a 1 per cent. solution of corrosive sublimate in absolute alcohol contained in a wide-mouthed bottle. When required, a tent is taken straight out of the solution and passed into the canal of the cervix, the patient being previously placed in the semiprone position, and the vagina disinfected. He takes care to inspect hollow stems before introduction, and should any crystals of sublimate be detected in the channel of a stem, it is dissolved with pure water. The results of this practice have been admirable, and he has seen no bad effects follow the introduction of the disinfected tents; provided that absolute alcohol be employed, the expansive power of the laminaria is in no way damaged.

INOCULATION OF TUBERCULOSIS BY CIRCUMCISION.

In the *Berlin. klin. Wochensch.*, No. 35, 1886, Dr. A. Eisenberg reports a case of the inoculation of tuberculosis in a child during the operation of circumcision. It is well known that in the lower classes among the Jews, circumcision is followed by suction of the wound, either by the operator or by some other person. Syphilis has been communicated in this way in many cases, and Dr. Eisenberg's observation shows that the same may be the case with tuberculosis. The parasites at first proliferate on the surface of the wound, then reach the lymphatic glands, from which they spread throughout the organism, giving rise to lesions which sooner or later cause death. In the case referred to, the inguinal glands became swollen, and abscesses formed. Tubercle-bacilli were found in the glands, but no *post-mortem* examination was allowed. The child was born of healthy parents. Lindmann observed two similar cases in 1873, and Lehmann reported ten others in 1879. In every instance, suction was performed by a phthisical operator. In all these cases the glands of the groin became inflamed within three weeks after the operation. Later on, scrofulous swellings were seen in the lower limbs, in which large abscesses formed. In other cases, the children died of tubercular meningitis. In one case a phagedænic ulcer destroyed the glans penis. Three of the children are still alive, and have a very characteristic scrofulous aspect. With regard to these cases, however, no positive statement can be made, as the bacillus of tubercle had not been discovered at the date of the supposed inoculation, and consequently no microscopic examination was made.

KOEBERLE ON THE TREATMENT OF UTERINE CANCER BY HYSTERECTOMY.

Professor Koeberlé, of Strasburg, has recently given his views on this subject in the *Nouvelles Archives d'Obstétrique et de Gynécologie*, and they have been ably summarised in the *American Journal of Obstetrics*. He points out that primary cancer of the body of the uterus is very rare. When it occurs, the cervix is not affected for a long time. Cancer of the cervix generally begins near the os externum, and spread thence over the tissues of the cervix, involving the vagina and adjoining organs, before it passes beyond the level of the os. As long as the disease has not extended to the broad ligaments, or to the lymphatic glands which communicate with the uterine lymphatics, the body of the uterus will be free from malignant disease. Under these circumstances it is not necessary to remove it. When the body of the uterus is the seat of primary cancer, the cervix being sound, it is useless to remove it. Thus, total extirpation of the uterus, whether by abdominal section or through the vagina, is more dangerous and difficult than removal of either the cervix or the body alone. Hence that operation should be reserved for cases in which partial amputation will not suffice for the complete removal of the disease. Supravaginal amputation of the body by abdominal section is applicable to cases of primary cancer of the body not involving the cervix: supravaginal amputation of the cervix through the vagina should be reserved for cases where the cervix to the level of the os internum is alone diseased. Total extirpation, or hysterectomy, is allowable only in cases where that operation is rendered relatively simple and safe, by the existence of complete prolapse of the uterus. There can be little doubt that all these operations are complicated and dangerous, and that in any one case it is always extremely difficult to make sure of the extent of the disease. Early amputation of the vaginal part of the cervix, by means of the galvano-cautery is likely to become a more popular method of treating cervical cancer in this country. Supravaginal amputation of the body of the uterus, the stump being secured by Koeberlé's *serre-nœud*, has proved very satisfactory in cases of fibroid, and appears to be the best manner of treating cancer confined to the body.

IODIDE OF POTASSIUM IN THE TREATMENT OF DIPHTHERIA.

Dr. L. Stepp (*Deutsche Med. Wochenschrift*) recommends mercury and iodine in diphtheria. Mercury has been given in various forms and doses in diphtheria and croup, though without any good results, as, owing to its poisonous properties, sufficiently large doses cannot be given to destroy bacteria in the blood. Its action is only efficacious in syphilis. In diphtheria, on the other hand, the incubation-period is from two to five days, and serious symptoms develop rapidly. Iodine seems to be the only suitable medicine; and probably still larger doses are required in diphtheria than in syphilis. These two diseases resemble each other, in that they both have a tendency to encroach on the bucco-pharyngeal mucous membrane, and thereby affect the neighbouring glands. Iodide of potassium is decomposed in the organism, and iodine remains in the blood and other liquid elements, and in the glands, where it amalgamates with albuminoid molecules, and possibly with bacteria; in any case, it sterilises media in which bacteria develop. Dr. Stepp mentions one case of diphtheria out of many which he has treated with iodide of potassium. The patient, a girl aged 7, who had been ill for three days, had a very thick false membrane in the pharynx, the glands of the neck were involved, the pulse was weak, and the temperature high. Three grammes of iodide of potassium were given in 120 grammes of water. At the end of a week, the child was completely cured. A boy, aged 7, in whom diphtheria had come on three days previously, was treated in

the same way. A teaspoonful of the solution was given every hour; two days after the treatment was begun, the temperature was lower and the general condition better, though there was no apparent change in the state of the pharynx. Twenty-four hours later, the child's condition became alarming; there was cyanosis of the cheeks and lips, the pulse was 140 to 160, and the little patient fell into a condition of complete apathy. No medicine had been given for fifteen hours, as the smell of the iodine had caused nausea. The following mixture was then ordered: R Iodide of potassium 100 grammes; water 20 grammes; syrup of orange-peel 20 grammes. A teaspoonful every hour night and day. Tokay wine was also ordered at intervals. On the fourth day of the new treatment, the patient's condition was greatly improved, and the pulse was stronger. A teaspoonful of the solution of 5 grammes of iodide of potassium in 120 grammes of water was given. On the fifth day, the temperature was lower, but the swelling of the neck and the false membrane in the pharynx remained unchanged. Eight grammes of iodide in 120 grammes of water were then given in doses of a teaspoonful every hour; on the following day the dose was increased to 10 grammes of iodide. On the seventh day, the false membrane became detached, the cough was looser, and there was less hoarseness, whilst the infiltration of the neck had disappeared. The pulse was 132, the temperature 38.3° C., and the general condition satisfactory. On the eighth day, the temperature rose to 39° C. towards evening, but fell again on the ninth day; the false membranes had disappeared, and the cough was not so hard, though the voice remained rather hoarse. Complete convalescence was established on the tenth day. In the course of one week the child had taken 50 grammes of iodide of potassium. There have been no subsequent symptoms, either as regards the digestive organs or the nervous system.

THE PATHOLOGICAL ANATOMY OF CHOREA.

Fatal cases of chorea are not very common, so that every carefully conducted *post-mortem* examination is of value in aiding to discover the morbid conditions present, and to decipher the pathology of the disease. The opinion is becoming more and more general that chorea is not an entity as a disease; that there are, indeed, several forms, varying in their etiology, to some extent in their symptoms, and in their sequelæ. In a case of chorea minor, which ended fatally by an attack of apyretic pneumonia, Nauwerck made a careful examination of the nervous system, both central and peripheral. He found that the peripheral nerves were normal, but that in the central nervous system there were many changes, all of which were microscopic. He divides these changes into three classes. In the first he includes patches, here and there, of infiltration of the perivascular sheaths by round cells, extending sometimes into the surrounding tissues. This infiltration was most marked in the medulla and pons; there was none to be observed in the spinal cord, the cerebellum, the basal ganglia, or the cortex of the brain. In the second class of changes, Nauwerck describes points of hæmorrhage, one to two millimètres long, situated in the cerebral peduncles, the inner capsules, and in the medulla and pons. No capillary emboli were found. In the third class, changes in the nerve-fibres are described; these consisted chiefly in a degeneration which was most marked in the white substance of the cervical spinal cord, gradually diminishing downwards to the lumbar region. Microscopically, the axis-cylinders of the fibres were seen irregularly swollen, in the condition which is known as "hypertrophy;" they stained badly with neutral carmine, and osmic acid showed fatty granules in their interior. In some fibres, the place of the axis-cylinder was wholly occupied by fat-globules. The degeneration of the fibres did not occupy any particular tract of the cord, but were scattered irregularly. Nauwerck considers that the perivascular infiltration of round cells is to be taken as a sign of inflammation; and that it is probable that the degeneration of the nerve-fibres would explain the inco-ordination of movement in the case recorded by him. A strict search was made for micro-organisms, but none were found in any part of the nervous system. He thinks that there is a group of cases of chorea which may be called infectious, the poison being exclusively localised in the central nervous system.

HYSTERORRAPHY.

Dr. Howard Kelly, of Philadelphia, advocates in the *American Journal of Obstetrics* the operation of hysterorraphy, or "the suspension by suture of a viciously posed uterus." He reserves this operation for intractable cases of retroflexion or prolapsus, believing that removal of the appendages is not then justifiable, whilst his method is superior to shortening of the round ligaments. He does not act on Caneva's suggestion of stitching the serous coat of the uterus to the parietal peritoneum without opening the peritoneum. Koeberlé, Tait, Olshausen, Bardenheuer, and Hennig had stitched the uterus to the abdominal walls, after removal of the appendages, and in Dr. Kelly's case tubal and ovarian disease also existed and rendered oöphorectomy necessary. In operating, both cornua ought to be utilised, an interrupted or several continuous sutures being passed through each, and the body thus attached to the anterior abdominal wall, at points on either side of the incision, distant from it a little more than half the transverse breadth of the body. The selected points should be between two and four centimètres above the pubes. When the appendages are removed at the same time, the sutures should be passed directly through the stumps at the cornua, between two ligatures; this was done in Dr. Kelly's case. When hysterorraphy is performed for retroflexion only, without removal of the appendages, the suture may be passed, including the round ligaments, or, better, above the utero-tubal junction, the former method being open to the objection that it tends to approximate the anterior face of the uterus to the abdominal wall, offering mechanical disadvantages which may in time serve to reproduce the deformity. Dr. Kelly goes so far as to declare that hysterorraphy should form the concluding step of every operation upon the appendages where the uterus has been long retroflexed, and is unable to stand alone when elevated. To effect this, he considers that moderate adhesions may be broken down if necessary. It seems very doubtful whether this operation will ever become universally accepted.

THE INFECTIVITY OF TETANUS.

It has long been well known that tetanus is a disease which occurs in epidemics, and that it is so frequent in certain districts within the tropics as to be truly described as endemic. Recent bacteriological researches by Nicolaier and Flügge tend to support the view that it is a disease which can be communicated by inoculation. This, however, is probably not the ordinary mode of infection, for it is a disease which epidemiology has clearly shown to be largely dependent on climatic conditions. Flügge believes that the infective agent is a bacillus which, he states, is to be found in many kinds of ordinary earth. If this is a correct observation, it may serve to explain the sudden outbreaks of tetanus among the wounded after great battles, which were observed by Larrey, Thierry, and many other surgeons during the Napoleonic wars, and attributed by them to sudden changes in the weather, for if the infective principle is universally distributed, it is clear that there must be some third circumstance acting either on it or on the animal organism, which favours infection. Whether this is to be looked for in the exposure to cold, or in the fact that the men attacked were commonly the wounded left all night upon the ground, is at present mere conjecture. It is worth while noting, however, that Dr. Wing, a veterinary surgeon in America, has recently died of tetanus some time after making a *post-mortem* examination of a horse which had died of lock-jaw. There are very good grounds for believing that the tetanus of horses, oxen, and sheep is the same disease as that observed in man, and as Dr. Wing was known to have scratched his hand during the dissection, there is some probability that his death is an example of the rarer mode of infection by inoculation.

SCOTLAND.

Dr. J. Kirk Duncanson has accepted the office of Vice-President of the Section of Otology of the Ninth International Medical Congress.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

An important discussion on Cerebral Abscess, in its surgical and other aspects, took place at the Medico-Chirurgical Society of Edinburgh, on Wednesday last. The subject was introduced by Mr. A. C. Miller and Dr. McBride. We hope to publish a summary of the debate next week.

RIGHT HEMIANÆSTHESIA OF CEREBRAL ORIGIN: TREPHINING.

A case of much interest is at present under the care of Professor Grainger Stewart in the Edinburgh Royal Infirmary. The patient, an elderly man, received an injury to the back of his head on the 1st of January last. The accident was not immediately followed by serious symptoms. Since then, however, he has complained of gradually advancing anæsthesia of the right side, especially of the arm and leg. On admission, the anæsthesia was precisely determined, and he was found to be suffering from double optic neuritis. During the last few days, signs of an advancing condition of torpor manifested themselves. Accompanying this, there was evidence of motor paralysis in the anæsthetic limbs. The temperature was subnormal. Professor Grainger Stewart concluded that the symptoms were due to pressure, either cortical or the result of cerebral abscess; and, as the symptoms were progressive, he requested Professor Annandale to operate. Accordingly, on February 22nd, Mr. Annandale trephined the frontal bone, immediately in front of the left anterior parietal angle. About two ounces of a dark coloured, grumous fluid escaped, and it was found that the finger could be passed freely beneath the dura mater into a large cavity, which separated the surface of the brain from the dural covering. The surface of the brain appeared healthy. The cavity was gently syringed, and the patient so far is doing well.

THE GLASGOW OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

The fifth meeting of the present session was held in the Faculty Hall, St. Vincent Street, on February 23rd, Dr. Samuel Sloan in the chair. Mr. J. Stuart Nairne read a paper on "Cæsarean Section." After recounting an experience of three cases of fœtal extraction by craniotomy and forceps in contracted pelves, he said that the Cæsarean section, or Porro's operation, would be preferable, and gave details of a case in which he had recently performed the former. The patient died on the fourth day. Mr. Nairne, however, maintained that Cæsarean section should always be performed when a living child was dealt with. After several Fellows had spoken, the discussion was adjourned on the motion of Dr. Pollok.

LEAVE OF ABSENCE FOR PROFESSOR RUTHERFORD.

We understand that Professor Rutherford has recently applied for and obtained leave of absence from the duties of his Chair for a limited period, on the ground of ill-health. The permission will probably not come into effect till the end of the present session. In his absence, it is understood that his duties at the approaching April examinations will be undertaken by Dr. Caton.

THE NEW RESEARCH LABORATORY.

Much satisfaction is expressed here with the recent action of the Royal College of Physicians in proposing to form a new Research Laboratory, to be open to all, free of charge, for purposes of investigation. The proposal has already taken practical shape, and a Committee has been appointed to take the necessary steps for acquiring a suitable building, and for placing it in working order. As we have already announced, it is intended to place the Laboratory under the immediate charge of a superintendent trained in methods of research, who shall devote his whole time to the work. In the meantime, the Fellows of the Royal College of Physicians are to be congratulated on having shown that capability of recognising in advance the needs of medical science, which has so long and so honourably characterised the Medical School of Edinburgh.

ST. ANDREWS AMBULANCE ASSOCIATION: GREENOCK CENTRE.

The annual meeting of this centre was held in Greenock on February 23rd. The first annual report stated that Greenock was already supplied with two ambulance wagons, completely equipped, and maintained at the town's expense. Six hundred and thirty persons had been instructed in rendering "first aid," 227 of whom obtained the Association's certificates. Dr. Wilson mentioned that, in response to an appeal made by railway servants, a class had been formed, which, to suit their convenience, met on Sundays.

NATIONAL INSTITUTION FOR IMBECILE CHILDREN.

The annual meeting of the subscribers to this institution was held in Glasgow on February 22nd, Sir Michael Connal in the chair. The total number of pupils in training at the institution, during the year, has been 218, the average daily number being 171. The health and physical condition of the inmates had been very satisfactory. The income for last year was £7,384 2s., and there was a balance in hand at the bank of £1,094 7s. 3d.

A PROSPEROUS CONVALESCENT HOME.

At the annual meeting of the supporters of the Paisley Convalescent Home, West Kilbride, held recently, it was stated that the expenditure (£692) was less than the income by £174; also that the donations and subscriptions to the Building Fund amounted to £5,753, or £307 more than the sum actually required. During the past year 341 patients had been received into the home, and, of these only eight did not seem to benefit by their stay therein.

THE PROPOSED GLASGOW SOUTHERN INFIRMARY.

A meeting in favour of the proposed infirmary for the south side of Glasgow was held on March 1st, under the presidency of the Hon. the Lord Provost of Glasgow. Among the other gentlemen present were Archbishop Eyre, Mr. J. G. A. Baird, M.P.; Mr. Cameron Corbett, M.P.; Mr. Shaw Stewart, M.P.; Drs. Kelly, Dunlop, Duncan, Pollok, Napier, and Scott. The Lord Provost remarked that Glasgow had been fifty years behind Edinburgh—and even behind Aberdeen, Dumfries, and Montrose—in establishing an infirmary. He pointed out that the population on the south side of the river numbered nearly 240,000, and that hospital accommodation ought to be provided there. Mr. Ronny Watson stated that over £8,000 had already been received or promised, but £20,000 would be required before a beginning could be made. Ex-Lord Provost Ure moved the following resolution: "That this meeting, being convinced of the urgent and increasing necessity for additional infirmary accommodation in the city of Glasgow and suburbs, approves of the action of the Executive Committee in securing a favourable site in the vicinity of the Queen's Park, and in obtaining plans and estimates for the requisite buildings." In supporting the resolution he produced figures, showing that while Edinburgh had one bed for every 400, Glasgow had only one for every 700. He went on to point out that a very large proportion of the Glasgow population consisted of those for whom infirmary accommodation was designed, there being altogether 87,849 families living in houses having only one or two apartments. Taking the average number in each family as 4¾, he made out a total of 421,675 of a population living in these small houses, under the worst circumstances for sickness. The resolution was adopted, as also another approving of the proposal to call the infirmary the Victoria Infirmary, in honour of Her Majesty's jubilee. A telegram was received just after the close of the meeting from the Home Office, giving Her Majesty's sanction to this proposal. In

the *Glasgow Herald* of March 2nd, a letter appears from Mr. William McEwan criticising the statements at the meeting. Mr. McEwan has been one of the directors of the Royal Infirmary for over a quarter of a century. He shows that the statistics of Glasgow hospital accommodation are entirely mistaken, and at the end of his letter the following comparison between Edinburgh and Glasgow is given:

Edinburgh.	Beds.
Chalmer's Hospital	40
Eye, Ear, and Throat	6
Dispensary for Women	6
Royal Hospital for Sick Children	84
Royal Infirmary	650
Maternity	28
Add for fever	100
	914

Population, 236,002, equal to 1-in 247.

Glasgow.	Beds.
Belvidere	550
Eye Infirmary	120
Diseases of Ear	12
Sick Children Institute	57
Women and Children	2
Lock Hospital	81
Maternity	34
Ophthalmic	30
Royal Infirmary	542
Samaritan Hospital	6
Western Infirmary	400
	1,834

Population, 487,918, equal to 1 in 266.

If the population of the suburbs of Glasgow be included, it brings the total up to fully 700,000, or 1 bed to every 382 of the population.

IRELAND.

Dr. Levis has been unanimously elected medical officer to Durrus Dispensary, in the room of Dr. Wheeler, resigned. Dr. Levis's appointment creates a vacancy for Glengariffe District.

LIMERICK DISTRICT LUNATIC ASYLUM: ASSAULT ON A PATIENT BY AN ATTENDANT.

At a meeting of the Board of Guardians of this Asylum last week, Dr. Courtenay, resident medical superintendent, stated, in reference to an alleged assault on one of the lunatics by an attendant, that there was the greatest reluctance on the part of the attendants to give any evidence; and that the patients had been induced in the same way not to give evidence, even as much as they had given before; so that he could bring little or nothing before the Board. The governors, however, have determined to prosecute the attendant charged with the assault.

CORK FEVER HOSPITAL.

The annual meeting was recently held under the presidency of the Mayor of Cork. There was an increase last year in the number of typhoid cases, and a decline of 50 per cent. in typhus patients. There were 63 admissions for typhus, with 9 deaths, being a mortality of 14.28; and 124 typhoid cases, with 15 deaths, or a death-rate of 12.09 per cent. In most instances both fevers were accompanied either with congestion of the lungs or broncho-pneumonia. If 8 cases hopeless on admission are deducted, an average mortality of 5.51 from every form of disease will occur. The medical staff in their report state that they are unable to draw a thoroughly correct conclusion from these figures as to the great prevalence of epidemic disease in the city. Many of the poor were sent to the Union Hospital, and many more of whom there is no record were treated in their own homes; still the number of 88 admissions for typhoid fever for the last quarter of the year is so large and so much out of proportion to the number admitted during the previous nine months as to demand a serious consideration of the probable causes of such insanitary conditions as led to a kind of panic among the citizens. There was a general belief that the outbreak of typhoid fever was attributable to the opening up of sewerage drains in various places, to the non-disinfection of the sewage matter, as well as to the want of properly-constructed trappings and ventilating shafts, more especially in the higher parts of the city; for the blocking up of the main drains by the tides must have had the effect of throwing back the fœtid gases into the higher areas. Only by this means can we account for the prevalence of fever in hitherto healthy localities. Two years ago the staff appealed for funds to build observation wards, and to provide the sick with a uniform, but up to the present these wants still exists. The income for the year included a sum of £121 9s. 6d., received from paying patients admitted to the hospital. Dr. Cotter, one of the staff, has resigned, and has been succeeded by Dr. Adams.

MOXON MEMORIAL FUND.

Subscriptions Received—First List.

	£	s.	d.
Sir W. Jenner, Bart.	21	0	0
F. W. Pavy, M.D., F.R.S.	21	0	0
R. Clement Lucas, B.S.	21	0	0
Sir W. Gull, Bart.	10	10	0
R. Quain, M.D.	10	10	0
S. Wilks, M.D., F.R.S.	10	10	0
Edward Rawlings, Esq.	10	10	0
Thomas Bryant, F.R.C.S.	10	10	0
J. Sydney Turner, Esq.	10	10	0
Mrs. Elphinstone	10	10	0
Sir J. Lister, Bart.	10	0	0
Sir James Paget, Bart.	5	5	0
Sir Dyce Duckworth	5	5	0
Sir H. Pitman	5	5	0
P. H. Pye-Smith, M.D., F.R.S.	5	5	0
Pembroke Minns, M.D.	5	5	0
A. E. Durham, F.R.C.S.	5	5	0
G. H. Savage, M.D.	5	5	0
W. H. Broadbent, M.D.	5	5	0
Dr. and Mrs. Aikman	5	5	0
F. Orton, M.D., J.P.	5	5	0
Wilson Fox, M.D.	5	5	0
E. Clifford Beale, M.D.	3	3	0
R. U. Wallace, M.B.	3	3	0
F. Newland Pedley, F.R.C.S.	3	3	0
A. T. Gibbings, M.D.	2	2	0
Stephen Mackenzie, M.D.	2	2	0
W. A. Brailey, M.D.	2	2	0
J. Rand, F.R.C.S.	2	2	0
C. Bader, Esq.	2	2	0
C. A. Aikin, Esq.	2	2	0
E. L. Adeney, M.D.	2	2	0
J. F. Tabb, Esq.	2	2	0
W. T. Parker Douglas, M.D.	2	2	0
Charles Lewis, Esq.	2	2	0
W. F. R. Burgess, M.D.	2	2	0
Charles Higgens, F.R.C.S.	2	2	0
H. Horsley, Esq.	2	2	0
J. Batteson, Esq.	2	2	0
John Gill, Esq.	2	2	0
John Mackern, M.D.	2	2	0
Thomas Eastes, M.D.	2	2	0
H. C. Burton, Esq.	2	2	0
Miss M. S. Elphinstone	2	2	0
Ben Rix, Esq.	2	2	0
L. E. Shaw, M.D.	2	2	0
T. A. Spalding, Esq.	2	2	0
R. J. Kerby, M.D.	1	11	6
Sir W. Bowman, Bart.	1	1	0
W. John, Esq.	1	1	0
D. H. Forty, Esq.	1	1	0
J. Farrant Fry, Esq.	1	1	0
J. Montague Day, Esq.	1	1	0
W. A. E. Waller, Esq.	1	1	0
A. Roper, Esq.	1	1	0
Arthur Davies, M.D.	1	1	0
E. C. U. Price, Esq.	1	1	0
W. Lockhart, F.R.C.S.	1	1	0
T. Lauder Brunton, M.D., F.R.S.	1	1	0
F. Turtle, M.D.	1	1	0
J. Kingston Fowler, M.D.	1	1	0
R. Hicks, Esq.	1	1	0
H. J. Wolstenholme, Esq.	1	1	0
F. J. Burgess, F.R.C.S.	1	1	0
J. A. Fraser, Esq.	1	1	0
E. F. Gaitskell, Esq.	1	1	0
W. A. Aikin, Esq.	1	1	0
H. E. Dixon, Esq.	1	1	0
A. H. Baines, Esq.	1	1	0
Challoner Clay, Esq.	1	1	0
James Bisshopp, Esq.	1	1	0
G. W. Shipman, Esq.	1	1	0
W. P. Reynolds, Esq.	1	1	0
J. E. B. Burroughs, Esq.	1	1	0
W. A. Lane, M.S., F.R.C.S.	1	1	0
W. A. Garrard, Esq.	1	1	0
E. Marshall, Esq.	1	1	0
S. Knaggs, Esq.	1	1	0
J. E. Viney, M.D.	1	1	0
E. T. Phillips, Esq.	1	1	0
Prof. W. K. Parker, F.R.S.	1	1	0
Robert Harris, M.B.	1	1	0
Edgar Crookshank, M.B.	1	1	0
F. Monser, Esq.	1	1	0
R. Monser, Esq.	1	1	0
W. Floyer, M.D.	1	1	0
J. R. Bosworth, Esq.	1	1	0
R. Parry, M.D.	1	1	0
S. Tilley, F.R.C.S.	1	1	0
Surgeon-Major J. Ince, M.D.	1	1	0
G. W. Daniell, Esq.	1	1	0
A. G. Medwin, M.D.	1	1	0
J. Langdon Down, M.D.	1	1	0
J. G. Hall, Esq., J.P.	1	1	0
C. P. Creed, Esq.	0	10	6
F. P. Weaver, M.D.	0	10	6
Bransby Brooks, Esq.	0	10	6
H. Hawksworth, Esq.	0	10	6
John Crew, Esq.	0	10	6
R. S. Mutch, Esq.	0	10	6
J. C. Clarke, Esq.	0	10	6
J. W. Humphreys, Esq.	0	10	6
L. Bingham, Esq.	0	10	6
H. N. Smith, Esq.	0	10	6

THE JACOB TESTIMONIAL FUND.

The Honorary Secretaries and Treasurers beg thankfully to acknowledge the following additional subscriptions received or promised since last week:

	£	s.	d.
Amount already acknowledged	448	9	9
Tindall, A. A.	1	1	0
Ellis, G., Dublin	1	1	0
Murphy, E., Ballyroan	0	10	6
Greene, E., Bonmahon	0	10	6
Hunt, J. G., Portlaw	0	10	6
Knipe, J. F., Finglas	1	1	0
Meehan, N. J., New Ross	0	10	6
Falkiner, N. M., Dublin	1	0	0
Porter, F. T., Dublin	0	5	0
Pearsall, W. B., Dublin	1	1	0
May, W., Kilmoganny	0	10	0
McDowell, C., Carlow	0	5	0
Moffett, T., President Queen's College, Galway	1	1	0
Wallace, A., Dumbarton	0	5	0
Borthistle, H., Clonevan	0	5	0
Brady D., Manchester	1	1	0
Miles, J. F., Dingle	1	0	0
Mayberry, F. G., Kenmare	0	10	6
Given, J., Gortin	0	10	0
Beatty, J., Kingstown	1	1	0
Mitchell, A., Borris-in-Ossory	0	10	0
Cox, George	1	1	0

Cheques to be made payable to the Honorary Treasurers—Professor Edward Hamilton, 120, Stephen's Green, W., Dublin; or Dr. Thomas Purcell, 71, Harcourt Street, Dublin; or to any of the County Treasurers, or to the Honorary Secretaries—Professor E. D. Mapother, 6, Merrion Square, N., Dublin; Dr. J. H. Chapman, 122, Pembroke Road, Dublin; and Mr. G. F. Blake, Royal College of Surgeons, Dublin.

Errata.—Subscribers will much oblige the Hon. Secs. by calling attention to errors or omissions in the lists which have appeared weekly. The name P. McLaughlin in last list should have been "F." P. McLaughlin. M. Eustace should have been "J." Eustace. W. D. Mackesy should have been W. "L." Mackesy. G. T. Mackesy should have been G. "I." Mackesy.

PARLIAMENTARY BILLS COMMITTEE.

A MEETING of the Parliamentary Bills Committee of the British Medical Association was held at 161A, Strand, on Friday, February 25th. The following gentlemen were present:

Dr. Withers Moore (President of the Association), Mr. D. B. Balding (Royston), Mr. Wickham Barnes, Dr. Alfred Carpenter (Croydon), Dr. Deas (Exeter), Dr. Langdon Down, Mr. Ernest Hart, Dr. Mickle (London), Dr. Nicolson (Broadmoor), Dr. Orton (Newcastle-under-Lyme), Dr. Phillips (Reading), Mr. S. Sibley, and Mr. F. Wallace. Letters of apology for non-attendance were received from Dr. J. W. Brown Dr. G. F. Duffey, Dr. G. A. Gibson, Dr. Bruce Goff, Dr. A. J. Harrison, Dr. C. Holman, and Mr. J. Prankerd.

On the motion of Dr. CARPENTER, seconded by Mr. WICKHAM BARNES, Mr. Ernest Hart was unanimously elected Chairman for the ensuing year.

The minutes of the previous meeting having been certified as correct,

The CHAIRMAN, in referring to his report on Private Sanitary Legislation dealing with Private Health Bills, which had been circulated among the Committee and printed in the JOURNAL of December 18th, pointed out that it was necessary to have the Private Bills before Parliament carefully examined in order to ascertain whether they contained any provisions of public health interest to which the attention of the local profession should be directed, or in respect to which the Committee might act independently. The private Bills of Over Darwen, Wakefield, Weston-super-Mare, Weymouth, Melcombe Regis, Willesden, and Wolverhampton all sought powers for the compulsory notification of disease; and the attention of the local profession had been called to those provisions; but it was to be remembered that the Parliamentary Bills Committee, or any such committee, according to the standing rules of the House of Commons, had no *locus standi* in respect to any such Bills, but only those persons who were directly and locally interested in them; and all they (the Committee) could do was to call the attention of the persons in the locality to the provisions of those Bills, in case they should escape their notice, and offer their advice in respect to them. He (the Chairman) would not recapitulate the precise provisions of which they had pointed out the importance, which were stated in the report, but would ask the consent of the meeting to have the report entered and printed as part of the minutes of the Committee. It was reported that letters had been received from Dr. Vaudrey Lush, under dates of December 16th and 18th, calling attention to a clause relating to the notification of infectious disease, which, notwithstanding the protest of the medical men, had been inserted in a local Bill by the Weymouth Town Council; and also to the fact that he had been informed by the Clerk of the Town Council that any borough applying to Parliament for an Act to promote and carry out local improvement was compelled to accept the clauses referring to sanitary matters, including the compulsory notification of infectious diseases, whether such powers were desired by the local authority or not. He wished to know if that statement was correct; and, as time pressed, a telegram was sent to him as follows: "No obligation on any corporation to insert notification clauses or the like." This was followed by an exhaustive letter on the subject. A letter had also been received from the medical officer of health of the district, Dr. Tizard, on the same subject, and asking to be furnished with the names of the towns already placed under the Act, and the opinion of the Committee as to their general working. To this a reply was given that there were at the present time forty-five towns possessing compulsory powers of the kind, but that, as to the general working of the system, reports differed greatly; that the Parliamentary Bills Committee desired to obtain a parliamentary inquiry into the results of compulsory notification. Dr. Tizard was referred to an important paper by Dr. Edward Seaton on the subject, as also to a complete list of the towns where notification is in force, with the particular system adopted in each town, published in the diary of the *Sanitary Record* for 1887. A resolution was passed, directing that the Report on Private Bill Legislation, and an abstract of the correspondence referred to, be entered and printed as part of the minutes. The Chairman said there were three other questions which he had to bring under the notice of the Committee—the Lunacy Acts Amendment Bill, the position of the brigade-surgeons of India, and a question which had arisen during the last few weeks, and was likely to be a matter of considerable importance unless checked by the action of their Committee or otherwise, as to the relative rank of medical officers in the army.

Brigade Surgeons of India.—The CHAIRMAN said the question of the brigade-surgeons of India had been effectively stated in a leader which appeared in the JOURNAL of July 31st, 1886; and the gist of the matter was that the rank of brigade-surgeons now brought with it duties and responsibilities far in excess of those of surgeons-major when in charge of regiments under the old regulations; and that the only recognition of the rank of brigade-surgeon in India appeared to be permission to wear a different uniform from that of a surgeon-major. The Government of India had, it was said, again and again asserted its right to regulate the pay and allowances of medical officers of the British Service serving in India, irrespective of any warrants dealing with the rank and pay of the same officers when at home, and this acted very much to their disadvantage. When the pay-regulations for the Medical Department in India were promulgated, promotion to the administrative rank was quicker by five years than it is now. Surgeons-major were now in the position that they had to put in from twenty to over thirty years' service, with only one small increment of pay—37 rupees per month after twenty-five years' service. The position of brigade-surgeon was not attained by any means as a matter of course; on the contrary, it was one of strict selection according to merit, and only about 25 per cent. of the grade of surgeon-major attained to it. They must show personal fitness, favourable reports, both medical and military, and pass a strict examination. The whole service, the Chairman continued, were of opinion, and he thought the Committee would be of the opinion, that that being so, there should be some substantial recognition on the part of the Government of India. The Indian Government had the advantage of superior qualification, and it was only right and reasonable that the advantage should not be one-sided. Their suggestion was that the Government of India should have the right to put a limit on the number of brigade-surgeons sent to India, but that their remuneration should be more in proportion to the work and responsibility than it was now. The present objection urged by the Government of India to raising the salaries of brigade-surgeons in India was that they had at present no right to regulate the number sent there. What was proposed was that the Indian Government should have the opportunity of saying how many they wanted, and having regulated the number, should give them some recognition of their extra and responsible duties. Everywhere else but in India these claims were recognised by substantial pay and pension, but India was exempt by a provision in the Royal Warrant of 1879. A statement of claims of brigade-surgeons in India, with proposals for redress, had been drawn up and circulated. The Chairman said he had very thoroughly investigated the matter, and found that the most experienced and responsible officers were quite satisfied that there was a very strong case. Colonel Hughes-Hallett, M.P., had undertaken to champion their cause in the House, and would no doubt have the support of their medical and other friends.

The following resolution was moved by Mr. SIBLEY, seconded by Dr. LANGDON DOWN, and carried *nem. con.*:

"That the statement of claims of brigade-surgeons of India be printed on the minutes, and copies circulated among the Branches of the British Medical Association. That Colonel Hughes-Hallett be thanked for his promise of assistance, and that the Chairman be requested to act in concert with him, and to request the Branches to give from time to time such assistance as he may desire in respect to the action which he will take in the House of Commons."

Relative Rank.—The CHAIRMAN, in introducing this question, said the recent Army Medical Warrant contained a clause, the meaning of which was not quite clear, but which seemed to indicate that the relative rank of medical officers was to be abolished. This, however, was thought to be so unlikely, and was so little believed in, that inquiries were made in very authoritative quarters, and they were assured that nothing was intended to be done which would in any way alter or prejudice the position of Army medical officers. In order, however, to make it clear, Sir Guyer Hunter put a question in the House on February 15th, and asked the Secretary for War whether, in the recent Army Warrant, any alteration had been made in the relative rank, position, or titles of medical officers from those heretofore held by them. To which the Secretary for War (Mr. Stanhope) replied, that relative rank had been abolished for all departments, but medical officers retained all privileges heretofore attaching to it. In other respects, their status was unchanged. That answer was quite unintelligible to the most distinguished medical officers; for, since their only rank was relative, and since the only privileges they had in respect to the army were relative, it was unintelligible how their relative rank should be abolished and their privileges remain. A further step which they had taken, so far, in the matter, had been to ask Sir Guyer Hunter to put the following question in the House, "As the medical officers of the army have neither substantive nor honorary army rank, and as it has been stated by the Secretary of State for War that the relative rank which

they have hitherto held has been abolished, will the right honourable gentleman state what rank, if any, they now have in the army?"

A resolution was proposed by Dr. ORTON and carried, authorising the Chairman, in the event of an unsatisfactory answer, to address a detailed communication, in the name of the Committee, to the Secretary of State for War, and endeavour to extract a statement from him, and, if necessary, subsequently to have prepared a suitable memorial from the Branches, and to take such further steps by way of deputation, or in Parliament, as may be necessary.

Lunacy Acts Amendment Bill.—The CHAIRMAN called the attention of the Committee to this Bill (copies of which were on the table), which had been re-introduced into the House of Lords with slight modifications. They had seen the comments on it published in the JOURNAL, and he (the Chairman) had addressed to the Lord Chancellor a communication based on a summary by Dr. Mickle of the amendments called for in respect to points that were discussed and agreed upon by the Committee when the previous Bill was under consideration with respect to clauses which reappeared in the present Bill.

Dr. MICKLE observed that the new points in the present Bill chiefly concerned the manner in which the order should be obtained, given by a magistrate for the reception of the lunatic into an asylum. These proposals were attacked by Lord Herschell and others, and the matter postponed. They hardly knew what the suggestions were likely to be, but an idea had been thrown out that a patient could, after he had been what was termed "taken in charge under a medical certificate," have the right of an appeal within twenty-four or forty-eight hours to a judicial tribunal.

Dr. CARPENTER raised the question which had been referred to by Lord Herschell, and which he thought important, whether too much examination at the outset would not tend to impede the chance of recovery, and do more harm than good. There must, of course, be an examination; the only question was whether it should be thoroughly judicial or be limited to the examination suggested by the Lord Chancellor.

Dr. ORTON asked whether it was not suggested that notice should be sent to the lunatic himself?

Dr. MICKLE said that the whole clause (Clause 3) had been postponed, owing to the objections raised. It stated that "the judge, magistrate, or justice, to whom a petition has been presented, shall give to the alleged lunatic notice thereof, either personally or by post." It gives the judge or magistrate power to dispense with the notice, if he has satisfied himself that it would be prejudicial to the alleged lunatic or dangerous to the public. Dr. Mickle suggested leaving out subsections 9, 10, and 11 of Clause 3, and substituting subsection 9 of Lord Herschell's Bill.

Dr. ORTON expressed himself in favour of a compulsory visit by the magistrate, who should call in a medical man, whose report should be considered a privileged communication.

Dr. CARPENTER: The magistrate would act as a judge, on his own responsibility, with a medical man as his assessor.

Dr. DEAS asked if that would not lead to very frivolous petitions being presented; there must, he said, be some *primâ facie* evidence to go upon.

Dr. WITHERS MOORE suggested whether it would not be possible to have a certain number of medical men in each district who should be sworn in (as were commissioners to administer oaths) for the purpose of examining patients, and to certify them, and who would not be suspected of having any interest in the case. They should be State officers, as privileged as a judge, not amenable to any prosecution, and paid by the State.

The CHAIRMAN pointed out that there would have to be a large body of such men paid by the State (commissioners to administer oaths were not paid by the State), and if their decrees were irrevocable, they would be liable to be stigmatised as "medical popes."

The CHAIRMAN pointed out that, under the present Bill, the medical man would have much greater protection, though the amount of protection would not be perfect.

Dr. DEAS observed that, under the new Bill, a judge could stay the proceedings, and squash a frivolous case *in limine* (Clause 5, Section 2).

Mr. WICKHAM BARNES called attention to Clause 11, which ran as follows: "After the passing of this Act, no pauper shall be received as a lunatic into any asylum, hospital, or licensed house, under an order, under the hands of an officiating clergyman and overseer, or relieving officer." He contended that the requirements of many villages, in cases of emergency, rendered it most desirable that the above clause should be struck out, and that the clergyman and overseer, or relieving officer, should still have power to grant an order for a pauper lunatic, and concluded by moving a resolution to that effect.

Dr. MICKLE advocated the retention of the clause.

Mr. WICKHAM BARNES stated that he knew some districts where it would be exceedingly difficult to get a county magistrate in cases of emergency.

Dr. DEAS expressed himself in favour of the retention of the present clause. The old clause, which was only intended to meet exceptional circumstances, was occasionally taken advantage of by the relieving officer as the easiest way of having a patient examined. He did not consider an officiating clergyman a proper person to decide in a judicial capacity.

After some further discussion, the proposal of Mr. Wickham Barnes was put to the vote, with the result that three were for it, and six against it.

Mr. WICKHAM BARNES also called attention to Clause 14, section 5, line 14, relating to the workhouse medical officer, who was precluded from receiving any remuneration for certifying and having the care of lunatics.

Dr. MICKLE said that this subject had already been dealt with in the memorandum of amendments of last year forwarded to the Lord Chancellor.

It was proposed, and carried unanimously, "That the recommendations of the subcommittee which discussed the Lunacy Acts Amendment Bill of last year be re-affirmed, so far as they apply to the Bill of the present year."

Dr. MICKLE proposed: "That this Committee recommend in lieu of subsections 9 and 10 of Clause 3, page 4, part of subsection 9 of Lord Herschell's Lunacy Acts Amendment Bill, as ordered to be printed on April 6th, 1886, with the amendment that the interview with the justice of the peace be compulsory instead of optional." This was carried unanimously.

Dr. NICOLSON contended that if a magistrate's visit was to be made compulsory, it should not be made for the purpose of deciding the question whether a person was a lunatic or not, but only as to the *bona fides* of the medical certificate. This he thought was quite sufficient for them to do, and as much as they were often capable of doing. He thought the duties of a magistrate required to be more explicitly stated. Different magistrates had such different views of their duty.

Dr. MICKLE pointed out that, under the present Bill, the magistrate's functions were intended to be more than "merely ministerial."

Dr. DEAS called attention to some provisions of the new Bill, which were regarded as not essential to the good government of registered hospitals for the insane, and, in some instances, objectionable and uncalled for. Clause 8, subsection 4, providing that no person shall be received as a lunatic in a hospital under an order made on the application of a member of the managing committee of the hospital, was deemed to be unnecessary and unfair to those associated with such institutions for philanthropic purposes. Clauses 45, 46, 47, 48, 49, 51, and 52, dealing with the requirements attending the application for registration, and the rules by which registered hospitals are bound, were characterised as being entirely opposed to the principle of local government. That these provisions were not absolutely essential might, it was said, be inferred from the fact that one of the largest—Bethlem Hospital—had been excluded. Clause 53 (powers for enforcing regulations) was considered to be peculiarly objectionable and uncalled for, and as placing in the hands of the Commissioners in Lunacy a power which, under conceivable circumstances, might be used as an instrument of great public injustice. There had, Dr. Deas contended, been no outcry against the management of these hospitals; but, on the contrary, he thought the general opinion was that they did a good work in connection with the treatment of the insane of the middle and lower classes. No one derived any pecuniary benefit from them; any profits that accrued were used for extending the benefits of the institutions.

Dr. MICKLE thought the regulations governing licensed houses even more strict. Clause 8, to which allusion had been made, had already been singled out by the Committee for amendment.

The following resolution was proposed and carried: "With regard to Sections 45-53, the Committee would represent that it does not seem necessary to subject the registered hospitals to special restrictions and disabilities which are not imposed upon other public asylums."

Dr. MICKLE made the following suggestions, which were adopted. Clause 6, subsection 3, line 23, omit the word "or," and in place of it insert "and after personal examination of the alleged lunatic and"; and also in Form 10, line 4, to insert, after the word "practitioner," the words, "and having personally examined"; section 42, page 30,

lines 8, 10, 22, and 29 to read "licensee or licensees"; line 10 to add "his or" at the end of the line; section 43, page 31, line 31, after the second "the" to add "other or"; at the end of the line, to add "the survivor or"; and in line 32, after "survivors" to add "or one of the survivors, or a successor or one of the successors in the licence, as provided in the last preceding section (42)"; and in line 36, after "survivors" to add "or survivor."

Communications from Dr. Cullum and Dr. Bucknill were referred to a subcommittee.

RELATIVE RANK OF MEDICAL OFFICERS OF THE ARMY.

THE following letter has been addressed to the Right Honourable E. Stanhope, Secretary of State for War, on the subject of "Relative Rank of Medical Officers in the Army," by the Chairman of the Parliamentary Bills Committee of the British Medical Association:

"February 28th, 1887.

"To the Right Honourable E. STANHOPE, M.P., Secretary of State for War.

"*Relative Rank of Medical Officers of the Army.*

"SIR,—I have the honour, as Chairman of the Parliamentary Bills Committee of the British Medical Association, to bring to your notice the painful impression which has been aroused in the minds of the medical officers of the army, and of the medical profession generally, by the recent announcement of the abolition of relative rank of medical officers of the army, and your reply, in relation thereto, to a question by Sir Guyer Hunter in the House of Commons. The Parliamentary Bills Committee of this Association has, as you are aware, on behalf of its twelve thousand members, taken for many years a deep interest in the welfare of the Army Medical Service; and has seen, with great satisfaction, the advantageous results of the representations which it has made, from time to time, to previous Governments on the subject, and the excellent influence of the late Army Medical Warrants, in restoring contentment to the Service, and in giving to it its present high efficiency.

"The medical profession, of which the great majority is included in the organisation which I have the honour to represent in this matter, see with great regret any proceeding which is likely to damage the reputation of the Army Medical Service in the eyes of the profession, and to injure its standing in the army, believing that such changes cannot but be injurious to the welfare of the whole service.

"My committee submit to you that in the army there are three kinds of rank—substantive, honorary, and relative. The latter is the rank which medical officers of the army have long held. It gave them quarters, cabins at sea, precedence in military society according to their grade. With this the Service was content. On their uniform they carried the badges of their rank. In reply to a question from Sir Guyer Hunter you, Sir, stated in the House that the relative rank of medical officers is abolished, but that this in no way alters their position or interferes with their privileges. This statement is not understood, and does not satisfy either the medical profession or the Service. To those who are acquainted with military life it appears to be conclusively inferred from your statement that it leaves the medical service of the army without any rank or position at all. The pay and the commissariat departments have distinct honorary rank, and their position in the army is secure, hence the official statement that nothing is really changed, only a name is changed, is not appreciated, for that name carries with it a definite meaning. If it was intended to leave matters as they were, it is not understood why the name has been abolished without substituting something equally distinct. It is well known that to make life tolerable in the army, where rank is of primary consideration, officers, whatever their position, must have a definite rank which requires no laboured explanation. Unless army medical officers retain such definite relative rank, men such as the country has a right to see placed in medical charge of Her Majesty's soldiers will not enter the army as medical officers.

"Army surgeons are exposed to all the risks of war, and to others incidental to their profession. The medical officers in Egypt, the Soudan, and Burma lost more of their number through disease and wounds than any other branch of the service in proportion to their numbers. Pay and commissariat officers are not exposed to a tenth part of the risk that medical officers run in war, as the records of all wars shows. The Parliamentary Bills Committee of the British Medical Association therefore venture to express the hope that you will take this representation into very serious consideration, and will take such steps, and give such assurances as will insure to the medical officers of the army that definite relative rank which they have hitherto enjoyed. The matter is one which has already excited active interest in the medical schools and colleges from which the Army Medical Service is recruited, and I venture to hope that you may be able to afford me a satisfactory reply to the representation which it is my duty to make to you on this subject.—I have the honour to be, Sir, your faithful servant, ERNEST HART,

"Chairman of the Parliamentary Bills Committee."

At the request of the Chairman of the Parliamentary Bills Committee, Sir Guyer Hunter put the following question to the Secretary of State for War on Thursday: "As the medical officers of the army have neither substantive nor honorary army rank, and as it has been stated by the Secretary of State for War that the relative rank which they have hitherto held has been abolished, will the right honourable gentleman state what rank, if any, they now have in the army?"—Mr. Stanhope replied that the abolition of the term relative rank had made no alteration in the position of medical officers of any kind whatever.—Dr. Tanner has given notice of a further question on this subject.

LUNACY ACTS AMENDMENT BILL.

THE following letter has been addressed to the Lord Chancellor by the Chairman of the Parliamentary Bills Committee.

"*Parliamentary Bills Committee of the British Medical Association.*

"February 28th, 1887.

"To the Right Honourable the LORD CHANCELLOR.

"MY LORD,—It is desired again to draw the attention of your lordship to the resolutions passed with regard to 'The Lunacy Acts Amendment Bill, 1887,' by the Parliamentary Bills Committee of the British Medical Association, on February 25th, 1887.

"The Committee has unanimously confirmed such of the suggestions made by the Parliamentary Bills Committee of 1886, as apply to provisions contained in the finally amended Bill of 1886, and in the present Bill; and of these the principal ones were mentioned in the letter recently sent to your lordship; namely, those

"On Section 5, subsection 1, page 8, line 27, to the effect that the same protection as is given to the medical men who sign certificates of insanity should be extended to those who receive and detain the very same persons.

"On Section 14, suggesting remuneration to workhouse medical officers for certificates and modification of the primitive provisions in regard to them at Subsection 8, p. 13, line 33.

"On Section 23, subsection 4, page 19, line 1, seeking omission of the 'special report;' and the same protection for the certificates given under this section, as is afforded to certain certificates under Section 5, subsection 1 and 2.

"On Section 31, seeking that the person making application for discharge of a patient under this section, should give adequate security for the payment of all necessary expenses, and that there should be the same provisions with regard to the medical men who sign certificates under this section, as are made in Section 7; and

"On Sections 37 and 38, seeking omission of these sections, or very sweeping modifications of them.

"Of the other suggestions confirmed, and relating to matters of less importance than the above, it is perhaps only necessary at the present moment to mention those.

"On Section 8, subsection 3, page 11, line 16 and 17, to omit the words 'under an order made on the application of, or;' and thus enable governors of lunatic hospitals to apply for such orders of reception.

"On Section 3, subsection 13, page 5, line 2, after 'thereof' to add 'and all documents and papers relating thereto shall be held to be privileged,' and

"In Form 10, page 51, line 4, after "practitioner' to insert 'and having personally examined A. B.'

"It is felt to be desirable that the existing requirements that the justice who signs the order of admission of a pauper lunatic to an asylum shall personally see and examine the alleged lunatic, should not be discontinued under the present Bill.

"It was also resolved to suggest that in Section 3, at page 4, the subsections numbered 9 and 10 be omitted, and that in place of them the following subsection be inserted: '(9) Upon the presentation of the petition, the judge, magistrate, or justice shall consider the evidence of lunacy appearing by the medical certificates, and shall personally see and examine the alleged lunatic.'

"If magisterial intervention is necessary for the protection of persons who are in reality not insane, as is implicity held in the Bill,

it appears to be necessary that the alleged lunatic should be seen in every case in order to make that intervention effectual.

"Section 6, subsection 3, page 9, line 23, to omit the word 'or' and substitute 'and after personal examination of the alleged lunatic, and,' and thus secure personal examination by the justice; in conformity with the suggestions already made.

"Section 42, page 30, lines 8, 10, 22, and 29 to read 'licensee or licensees'; line 10 to add 'his or' at the end of the line.

"Section 43, page 31, line 31, after the second 'the' to add 'other or'; at the end of the line to add 'the survivor or,' and in line 32, after 'survivors,' to add 'or one of the survivors, or a successor or one of the successors in the licence, as provided in the last preceding section (42),' and in line 36, after 'survivors' to add 'or survivor.'

"These suggestions would, it is thought, more fully and clearly provide for the carrying out in practice of the obvious intentions of the two Sections, especially where there is only one licensee, or where there are only two licensees, as the case may be.

"With regard to Sections 45, 46, 47, 48, 49, 50, 51, 53, the committee would represent that it does not seem necessary to subject the registered hospitals to special restrictions and disabilities which are not imposed upon other public asylums.—I have the honour to be, your lordship's obedient servant,

"ERNEST HART,

"Chairman of the Parliamentary Bills Committee."

QUEEN'S COLLEGE MEDICAL SOCIETY, BIRMINGHAM.

ADDRESS BY SIR WALTER FOSTER.

THE 100th general meeting of the Queen's College Medical Society was held on February 23rd; Mr. A. F. CLAY in the chair. In celebration of the occasion, Sir Walter Foster delivered an address to a large audience, among whom were Dr. Rickards, Dr. Saundby, Professor Windle, Professor Haycraft, Dr. Malins, Dr. Savage, Dr. Grinling, Mr. Bennett May, Mr. Jordan Lloyd, Mr. Priestley Smith, Mr. T. Collings, Mr. W. B. Whitcombe, Mr. Hall Edwards, Mr. Clayton, Mr. Haslam, and others.

Sir WALTER FOSTER, in an address which was warmly applauded, said that the Society meant for its members three great results: it caused improvements in their way of thinking, in their power of speech, and in their power of action. In a calling like theirs, which he held to be the most widely liberal of all liberal professions, they were interested in everything that bore on the welfare of man. His spiritual nature, in its highest and lowest manifestations, was a matter of concern to them. His material condition, his prosperity and misfortunes, were equally their care; so that the whole social organisation must be more or less a matter of concern to the medical man. Surely a calling which had such a wide range above all others demanded organisations which had for their object frequent consultations on the ever-changing plan of campaign. Their discussions, he observed, had included politics, and had done so, as far as he could gather, without detriment to the Society. The question of the admission of women into the ranks of the medical profession had resulted, as he confessed he had been most agreeably surprised to find, in an equal division of votes, so that the Society had never pronounced against the admission of women into the ranks of medicine. He congratulated their members on this, whatever might be the cause. The kind of action which the Society taught was the best of all action—organised action for common ends. In such action lay the future of the medical profession. They were aware that the profession as a body had for years longed to put a limit to the excessive number of competing bodies who could admit to the *Register*. This competition had always been an evil. The Act of 1886 had for its main motive the combination of these bodies. In Scotland they had combined, but there they had no Apothecaries' Hall. In London and Dublin the Colleges of Physicians and Surgeons had refused to combine with the Apothecaries' Halls to form a single portal for a minimum qualification in medicine, surgery, and midwifery. The Medical Council had appealed to the Colleges in both places to reconsider this decision, because it was felt that the institution of a new order of general practitioners licensed by the Hall alone, aided by examiners appointed by the General Medical Council, would not conduce to the unity and the general elevation of the profession. He was glad to say that, up to the present, the Council, without any feeling of antagonism or dislike to the Apothecaries' Society, had refused to give them special examinations, and had given directions to its President that he personally should go and represent to the parties the gravity of the position in order to induce them at the last moment to make some combination. Such things as they had to complain of, however, would not occur if the mass of the profession had the power they ought to have over the Colleges. As it was, they made Fellows, Members, and Licentiates. Medical men as Members and Licentiates contributed to their funds, and remained their voiceless vassals all their lives. They dwelt in outer darkness, while the Fellows controlled the funds and luxuriated in the halls the whole body had helped to build. The distinction of the Fellowship of the College of Surgeons should be of itself enough to make men seek it, without the addition to it of exclusive privileges which every Member of the College had a right to share. The whole course of the profession was in danger of being wrongly directed because the voice of the great body of practitioners was to be set at nought as regarded their own concerns. The narrow selfish policy of the few for the time promised to prevail over the broader views of the many. It would not be for long. Selfish and exclusive policies could not stand, and although harm might be done for years, the anomalous constitution of the Colleges would not long survive their victory. It was better that these great institutions should rest on the broadest possible bases, because the President and Council, to have their full weight in the councils of the State, must speak in the name of their full 16,000 Members. Medical men had an ever-increasing interest in the management of public affairs. Years ago a medical man lived a quiet life, in which he went about daily doing good according to his lights, and careless of the Government under which he lived, because his daily avocations hardly ever brought him into contact with Government officials. All this was now changed, and would be more and more changed as local self-government was developed, and the State, in its care for its citizens, controlled and regulated sanitary work. With this in prospect they ought, above all things, to learn how to act and to organise, so that their voices might be heard for the public good on all health questions. Even now there were many hundreds of health officers who required the help of a united profession to support them in the exercise of their beneficent work against the cramping control of central officials or the crass ignorance of local bodies. Thousands of their fellows were parochial medical officers, and claimed their help for a work which was possibly the divinest permitted to man—the privilege of ministering to the poor. The day was, he hoped, not far distant when the quiet heroism shown in stopping an epidemic, and saving the lives of the poor and neglected, would not be rewarded less highly than the work of a man whose chief attribute had been his capacity for taking away human life. He asked them, therefore, to carry the principles of their Society into the future work which time would find them to do, and so mould their great profession into a nobler and diviner form.

A vote of thanks was accorded to Sir Walter Foster on the motion of Mr. JORDAN LLOYD, and he was afterwards entertained at supper, when a short programme of toasts was gone through.

PASTEUR'S TREATMENT FOR HYDROPHOBIA.

AT a recent meeting of the Académie de Médecine, M. Grancher replied, in the name of M. Pasteur, to the allegations of M. Peter respecting the death of a patient suffering from hydrophobia. The patient in question had received nineteen inoculations, and not thirty-six, as had been stated. This case was not the only one in which the treatment had failed. At present the treatment was carefully graduated, and adapted to meet the special circumstances of each case, such as the number, severity, and situation of the bites, the individual susceptibility of the patient, etc. Bites on the face were the most dangerous; and accordingly, in such cases, M. Pasteur employs the "intensive" method. Of the thirty-six patients treated in this manner between August 15th and November 1st, 1886, not one had died. Up to October 31st, statistics collected by M. Pasteur showed a total of 1,700 cases treated, with ten deaths. On January 1st, the number vaccinated in France and Algeria was 1,956, the deaths amounting to sixteen. The mortality was, therefore, under one per cent.

M. Brouardel mentioned the case of a child that was bitten by a dog, and afterwards treated in M. Pasteur's laboratory. The little patient died some time afterwards with symptoms resembling those of hydrophobia, and M. Brouardel was asked to make a *post-mortem* examination. Two rabbits in M. Pasteur's laboratory were inoculated with the medulla of this child, and, after four months, showed no signs of hydrophobia. M. Brouardel summed up the case as follows: 1. The symptoms observed during life, the lesions found after death, and the negative results of the inoculations made with the medulla, prove that the child did not die of hydrophobia. 2. Both the symptoms and the results of the examination of the urine point to albuminuria as the cause of death. M. Brouardel believes in the efficacy

of M. Pasteur's treatment; dogs that are properly inoculated becoming unsusceptible of rabies.

M. Dujardin-Beaumetz had instituted an inquiry, in conjunction with M. Peter, into the case above referred to by M. Grancher. The patient had been visited by two other medical men besides M. Miquel. One of them had seen the patient but once, the other on several occasions; but he had not been told that the man had been bitten, and that he had been treated by M. Pasteur. He had been puzzled as to the nature of the disease, but it was only after the patient's death that the idea of hydrophobia had occurred to him. Taking all the facts into consideration, M. Dujardin-Beaumetz thought the case open to doubt, and said that the only real proof was the effect produced on animals by inoculating them with the subject's medulla. M. Peter adhered to the belief that the man had succumbed to hydrophobia in its paralytic form. This form of hydrophobia was very rare in man as a consequence of dog-bite, but was very common as a result of experimental inoculations. It was the form under which the disease always showed itself in rabbits, and the form in which it was transmitted from these animals to others by inoculation. M. Peter also believed the case mentioned by M. Brouardel to have been one of hydrophobia, in which the paralytic symptoms predominated. The negative results of inoculation proved nothing, for absolute conclusions could never be drawn in medicine from a negative experiment. Living beings were not like chemical reagents, and did not always react in the same manner under similar circumstances. They resisted infection more or less; and, as regarded rabies in particular, most men appeared to be naturally refractory to it. M. Peter gave the history of two fatal cases treated by M. Pasteur. In one of these the necropsy, seven hours after death, revealed nothing beyond the ordinary signs of asphyxia, namely, congestion of the meninges and lungs, redness of the bronchi, viscid mucus, and fluid black blood. In this case, inoculation was begun forty hours after the bite. The other patient came from Algeria, where he was bitten by a dog on October 12th, 1886. On the 21st of the same month he arrived at M. Pasteur's laboratory, where he was inoculated three times on the day of his arrival, and sixteen times subsequently. He returned to Constantine on November 8th. The next day he entered the hospital, the wounds caused by the bite being very painful, and not being completely healed until the 14th. On the 20th the pain again appeared, and increased in intensity until the 23rd. During these three days the spots where the inoculations had been made were the seat of acute pain. On the 23rd the patient complained of oppression, general lassitude, and want of appetite; his eyes were haggard, and he had slight aversion to water. In the evening his respiration became embarrassed; there was difficulty of expectoration, pulmonary emphysema, albuminous urine, and marked dread of water. The oppression continued until 6 o'clock the following morning, when the patient died. In this case the point to be remarked was the appearance of the pain, at first in the region of the bite, and afterwards at the site of inoculation; that is to say, two poisons were incubating at the same time—that from the dog, and that from the operator's syringe. The case was one of rabies, but of modified, mixed, cyno-Pasteurian rabies, demonstrating both the futility of the method of treatment and the combined effect of the two viruses. An analogous example of the simultaneous and parallel development of two viruses was seen in the case of cow-pox and small-pox, when the former was inoculated during the incubation of the latter.

At a subsequent meeting a letter was read from the colonel of the regiment to which the ten soldiers belonged who were bitten by a mad dog at Vilna. It will be remembered that Prince Zaghit, a medical man, affirmed that the dog was not mad. The colonel, however, said that the dog was killed, and *post-mortem* examination revealed signs of rabies. M. Béclard pointed out that Prince Zaghit claims to have discovered a remedy for hydrophobia, and that he has made several unsuccessful applications to the Académie de Médecine to express its approval of his discovery. A long discussion followed on the same lines as that already briefly reported in the JOURNAL of January 8th. The yearly average of thirty deaths given at the last meeting by M. Brouardel was arrived at, as he then admitted, by consulting imperfect documents; inoculation according to M. Pasteur's method reduced the proportion of deaths from hydrophobia to 1 per cent.

THE first number of the new French bacteriological journal, entitled *Annales de l'Institut Pasteur*, contains, among other interesting material, a letter from M. Pasteur, and statistics of the cases treated by him for the prevention of hydrophobia from November, 1885, till December 31st, 1886. These statistics would not have been published till April, because it is as yet too early to judge of the results of the treatment carried out in December, but so many erroneous and false statements have been made in the press that it is deemed advisable to publish at once an account of all the work that has been done.

The cases treated are divided into three classes: first, cases of persons bitten by animals proved to be mad by inoculation of other animals from them, or by the fact that other individuals or animals bitten at the same time had developed hydrophobia; secondly, persons bitten by animals stated to be mad as the result of a necropsy made by a veterinary surgeon, or of the symptoms presented by the animal; thirdly, cases of persons bitten by animals supposed to have hydrophobia. The total number of individuals treated was 2,164, of whom 29 died, being a mortality of 1.34 per cent. Under the first class were 233 cases, of which 4 died, or a mortality of 1.71 per cent.; in Class 2 were 1,931 cases, of which 25 died, a mortality of 1.23 per cent.; and in Class 3, 518 cases, of which 2 died, a mortality of 0.38 per cent. Five other individuals died, two of pulmonary affections, one in whom the cause of death was unknown, one of meningitis, and one of uræmia. Forty-eight cases were bitten by wolves, of which seven died, one during the treatment, and two on the eighth and twelfth day afterwards. As is well known, Pasteur has of late somewhat altered his treatment, introducing at the end of the series of inoculations more virulent material than formerly, and repeating the course two or three times. The number of persons belonging to Classes 1 and 2, which were treated by the original plan, was 1,649, of which 24 died, a mortality of 1.45 per cent.; the number of individuals of the small classes, treated by the stronger measure, was 515, of which 5 died, a mortality of 0.95 per cent. In Class 3, 409 cases were treated by the old method, of which 1 died, and 109 cases by the new plan, of which also 1 died. Another interesting table gives the results of bites on the face and head belonging to Classes 1 and 2; of these, 136 were treated by the old plan with 9 deaths, a mortality of 6.61 per cent., and 50 were treated by the stronger method without a death.

M. Pasteur, in his letter, gives the results which have been obtained in other countries. Dr. Bujiord, of Warsaw, wrote on November 22nd that he had treated 84 cases without a death. In the laboratory of Prince Alexander Aldenburg, at St. Petersburg, 118 persons had been treated up to November 18th, with 1 death, that of an old man, aged 70, who had been severely bitten on both hands, and in whom the length of the incubation period was only twenty days. On October 26th Dr. Petermann, of Moscow, wrote that he had treated 112 cases, of which 2 had died, the disease having in both instances appeared before the course of treatment was finished. Much has been made of the ill-success of Dr. Gamaléia, of Odessa, who lost 7 patients out of 101. M. Pasteur explains this result by stating that the cases treated in Odessa were all of a very severe nature, and that the treatment was too mild. He pointed out to Dr. Gamaléia the necessity for more intense treatment, and for carrying it out more rapidly. On December 16th Dr. Gamaléia reported that he had treated in all 325 cases; of these 101 were treated by the old plan (ten inoculations with spinal cords fourteen to five days old) with 7 deaths; 35 received eleven inoculations with cords from fourteen to four days old—of these 1 died; 140 underwent two series of inoculations (cords from fourteen to two days, and from ten to two days), no deaths; further, there were 49 very grave cases, which he divides into two catagories: 10 were treated in an incomplete manner, with 2 deaths, and 39 treated more thoroughly, also with 2 deaths. Dr. Vestea, of Naples, wrote on December 20th that he had treated 48 cases, which were all doing well, but sufficient time had not elapsed to judge. Dr. Ullmann, of Vienna, has treated 96 cases without a death. Dr. Parschensky, of Samara, in Russia, has treated 47 cases, with 1 death, which occurred twenty-three days after the bite, and during the course of the two series of inoculations. Later intelligence states that another patient had died, but whether of epilepsy or hydrophobia is not clear. Among his patients were 4 cases of wolf bites; in one instance three other individuals were bitten at the same time and by the same wolf as the case which was treated, but they did not come under treatment, and they all died. In the case of the person who was treated, sixty-three days had elapsed when the letter was written, and the patient was still well.

M. Pasteur also discusses the theory of the action of his method. At first sight one might suppose that the effect of the dry air and the temperature of 23° to 25° C. is to diminish gradually the intensity of the virulence of the spinal cord, and that the method rests on the employment in the first instance of virus without any appreciable virulence, then of a feeble virus, and afterwards of virus gradually increasing in strength. But experiment shows that the diminution in the pathogenic action of the spinal cords is the result of diminution in quantity of the rabic virus, and not of diminution of its virulence. Thus if one inoculate a rabbit by trephining with a cord exposed for

some days to the dry air, the animal dies after a longer incubation-period than usual; yet, if a second rabbit be inoculated by trephining with the fresh cord of the first, the period of incubation in the second animal is seven days, proving that the virus in the first instance was only diminished in quantity and not in virulence. The facts, in Pasteur's opinion, accord better with the idea of the existence of a vaccinal material which is associated with the rabic microbe, the microbes preserving their proper virulence in all the cords which are being dried, but being gradually destroyed more rapidly than the vaccinal material. This opinion is based on several facts. Thus, all methods of inoculation of rabies, with the occasional exception of inoculation of virus under the dura mater by trephining, sometimes give rise to a condition of immunity from rabies, without any symptoms even of a mild attack of the disease. Several experiments are cited in support of this statement. In Pasteur's opinion, this result can be better comprehended by supposing the existence of a vaccinal material accompanying the rabic microbe than by regarding it as the effect of the action of the microbe itself. He further points out that it is difficult to comprehend, without supposing the existence of a vaccinal material, an experiment in which he injected subcutaneously into each of two dogs ten syringefuls of a very virulent virus, with the result that the animals were rendered insusceptible of rabies. Why did not the large number of microbes introduced under the skin grow there, or in the nervous system, if it were not that there was introduced at the same time a material which was carried more rapidly to the nervous system, and produced such an effect upon it, that the microbes could not grow? In further support of this view, Pasteur has obtained experimental results which seem to show that rabies appears more often after the injection of a quarter of a syringeful of the material than after the use of one or more syringefuls, and also that if rabies does not occur, the employment of large quantities leads more often to a refractory condition than when small amounts are used. He admits, however, that he has not yet obtained decisive proof of the existence of this vaccinal material.

M. Pasteur ends his letter by mentioning an experiment with regard to the length of duration of protection in the case of dogs. This year he took six dogs, which had been protected against rabies two years ago, and inoculated them by trephining with the ordinary canine rabic virus. Four out of the six remained well, while two died, one after an incubation period of twenty-one days, the other after twenty-eight days.

THE SOCIETY OF APOTHECARIES AND THE CONJOINT EXAMINING BOARD OF ENGLAND AND WALES.

A COMMUNICATION relative to the above subject, from the Metropolitan Counties Branch, and one from the Association of General Practitioners on the same subject was read, at the meeting of the Shropshire and Mid-Wales Branch, on February 22nd, when the following resolution was carried.

"That this Branch protests against the exclusion of the Apothecaries' Society from the Conjoint Examining Board of England, as tending to create a division of medical interests to the public and to the profession."

NEW INSTRUCTIONS TO PUBLIC VACCINATORS.

THE new "instructions for vaccinators under contract," to which we referred a week or two ago, have now been issued by the Local Government Board. The order embodying them is dated February 28th, 1887, and is to come into operation on March 15th. They supersede those prescribed by the Order in Council, July 29th, 1871, and are printed below in full, the new or altered matter being shown by italics and footnotes for the convenience of our readers.

(1.) Except so far as any immediate danger of small-pox may require, vaccinate only subjects who are in good health. As regards infants, ascertain that there is not any febrile state, nor any irritation of the bowels, nor any unhealthy state of skin; especially no chafing or eczema behind the ears, or in the groin, or elsewhere in folds of skin. Do not, except of necessity, vaccinate in cases where there has been recent exposure to the infection of measles or scarlatina, nor where erysipelas is prevailing in or about the place of residence.

(2.) In all ordinary cases of primary vaccination, make such *insertions of lymph* (*a*) as will produce at least four separate good-sized vesicles *or groups of vesicles*, not less than half-an-inch from one another. *The total area of vesiculation on the same day in the week following the vaccination should be not less than half a square inch.*

(3.) Direct that care be taken for keeping the vesicles uninjured during their progress, and for avoiding afterwards the premature removal of the crusts.

(*a*.) "*Insertions of lymph*" has been substituted for "*punctures.*"

Do not use any needless means of "protection" or of "dressing" to a vaccinated arm; but if in a particular case you find reason for means of "protection" or of "dressing," define the material and the manner of use of the appliance best adapted to the case, avoiding all such as cannot readily be destroyed and replaced whenever they become soiled.

(4.) Enter all cases in your register on the day when you vaccinate them, and with all particulars required in the register up to *and including the column headed "Initials of Persons performing the Operation."* (*b*) Enter the results on the day of inspection. *Each of those entries must be attested by the initials of the person who inspects the case.* In cases of primary vaccination, register as "successful" only those cases in which the normal vaccine vesicle has been produced; in case of revaccination, register as "successful" only those cases in which either vesicles, normal or modified, or papules surrounded by areolæ, have resulted. When any operation (*whether vaccination or revaccination*) has to be repeated owing to want of success in the first instance, it should be entered as a fresh case in the register.

(5.) Endeavour to maintain in your district such a succession of cases as will enable you to vaccinate with liquid lymph directly from arm to arm *at each of your contract attendances;* and do not, under ordinary circumstances, adopt any other method of vaccinating. To provide against emergencies, always have in reserve some stored lymph; either *dry* on ivory points, thickly charged and constantly well protected from damp; or *liquid*, in fine, short, uniformly capillary (not bulbed) tubes, hermetically sealed at both extremities. Lymph, successfully preserved by either of these methods, may be used without definite restrictions as to time. With all stored lymph caution is necessary, lest in time it have become inert, or otherwise unfit for use (*c*).

(6.) Consider yourself strictly responsible for the quality of whatever lymph you use or furnish for vaccination. Never either use or furnish lymph which has in it any, even the slightest, admixture of blood. In storing lymph, be careful to keep separate the charges obtained from different subjects, and to affix to each set of charges the name, or the number in your register, of the subject from whom the lymph was derived. Keep such note of all supplies of lymph which you use or furnish as will always enable you to identify the origin of the lymph. *Do not employ lymph supplied by any person who does not keep exact record of its source.*

(7.) Never take lymph from cases of revaccination. Take lymph only from subjects who are in good health, and, as far as you can ascertain, of healthy parentage: preferring children whose families are known to you, and who have elder brothers or sisters of undoubted healthiness. Always carefully examine the subject as to any existing skin-disease, and especially as to any signs of hereditary syphilis. *Do not take lymph from children who have any sort of sore at or about the anus.* Take lymph only from well-characterised, uninjured vesicles. Take it (*d*) at the stage when the vesicles are fully formed and plump. *Do not take it from a vesicle around which there is any conspicuous commencement of areola* (*e*). Open the vesicles with scrupulous care to avoid drawing blood. Take no lymph which, as it issues from the vesicle, is not perfectly clear and transparent, or which is thin and watery. *From a well-formed vesicle of ordinary size* (*f*), do not, *except under circumstances of necessity*, take more lymph than will suffice for the immediate vaccination of five subjects, or for the charging of seven ivory points, or for the filling of three capillary tubes; and from larger or smaller vesicles, take only in like proportion to their size. Never squeeze *or scrape* or drain any vesicle, *and do not use lymph that has run down the skin.* Be careful never to transfer blood from the subject you vaccinate to the subject from whom you take lymph.

(8.) Scrupulously observe in your inspections every sign which tests the efficiency and purity of your lymph. Note any case wherein the vaccine vesicle is unduly hastened or otherwise irregular in its development, or wherein any undue local irritation arises; and if similar results ensue in other cases vaccinated with the same lymph, desist at once from employing it. Consider that your lymph ought to be changed if your cases, at the the usual time of inspection on the day week after vaccination, *show any conspicuous areolæ round their vesicles.* (*g.*)

(9.) Keep in good condition the lancets or other instruments which you use for vaccinating, and do not use them for *any other purpose whatever.* (*h*) When you vaccinate, have water and a napkin at your side, with which invariably to cleanse your instrument after one operation before proceeding to another. *Never use an ivory point or capillary tube a second time either for the conveyance or for the storage of lymph, but when points or tubes have once been charged with lymph and put to their proper use, do not fail to break or otherwise destroy them.*

(*b*.) This is only a modification of wording.

(*c*.) The following part of the old instruction has been omitted: "*If, in order to vaccinate with recent liquid lymph, you convey it from case to case otherwise than in hermetically-sealed capillary tubes, do not ever let more than eight hours intervene before it is used.*"

(*d*.) The superseded instructions contained this qualification, "*as may be done in all regular cases on the day week after vaccination.*"

(*e*.) In the old instructions the phrase ran thus: "'*but when there is no perceptible commencement of areola.*"

(*f*.) The old instructions had the following: "*From such a vesicle as vaccination by puncture commonly produces, do not, under ordinary circumstances, take more lymph,*" etc.

(*g*.) This originally stood thus: "*have not, as a rule, their vesicles entirely free from areolæ.*"

(*h*.) "*Other surgical operations,*" in the old instructions.

MEDICAL ATTENDANCE ORGANISATION COMMITTEE.

THE fifth meeting of this Committee was held on Tuesday, February 22nd, Mr. W. BOUSFIELD in the chair (in the absence of Sir Spencer Wells).

After the confirmation of the minutes of the last meeting, the Committee proceeded to consider the rates of contribution. The following table, showing the rates of contribution in force at some of the

most important provident dispensaries, had been prepared for the information of the Committee.

Name of Dispensary.	Contributions per Month of Four Weeks.			Servants per annum.	Persons Joining Sick.	Midwifery.	Wage Limit (if any).
	Single.	Man and Wife.	Children under 14.				
Provincial.	d.	s. d.	d.	s. d.	s. d.	s. d.	s. d.
Birmingham Provincial Dispensary	5	0 10	3	...	..	..	..
Northampton ,, ,, [1]	6	1 0	4	5 0	5 0	10 0	..
Derby ,, ,, [2]	4	0 8	2	..	3 6	10 6	..
Liverpool ,, ,,	6	0 10	3	..	10 0	15 0	50 0
London.							
Battersea Provincial Dispensary [3]	4	0 8	2	..	3 6	10 0	30 0
,, ,, ,, [4]	8	1 4	4	..	7 0	15 0	50 0
Camberwell ,, ,, [5]	6	0 8	2	..	5 0	15 0	30 0
Finchley ,, ,, [6]	6	0 9	..	..	..	..	35 0
S. L. Medical Aid Institute [7]	8	0 10	3	..	*	15 0	..
Fulham Sick Club .. .. [8]	4	0 8	2	5 0	5 0	15 0	..
Wandsworth Medical Aid Society [9]	4	0 8	2	..	7 6	15 0	..
Suggested Rates .. .. [10]	6	1 0	2	6 0	..	15 0	..

REMARKS.—[1] 1s. is the maximum rate for a family card. [2] 8d. is the maximum rate for a family card. [3] Class A. Maximum rate, 1s. 4d. a month. [4] Class B. Maximum rate, 2s. 8d. a month. [5] 8d. is the maximum rate for a family card. [6] 1s. for man and wife, and all children under 14. [7] 2s. is the maximum rate for a family card. [8] 8d. is the maximum rate for a family card. [9] 1d. a member a quarter is charged for management. [10] 1s. 8d. to be the maximum rate for a family card.

* Non-Members are attended on the following terms: At Dispensary, first visit, 1s.; each visit after, 6d. At Home, first visit, 2s. 6d.; each visit after, 1s.

The CHAIRMAN suggested that the following monthly rates should be recommended: Single persons, 6d. a month; man and wife, 1s. a month; children under 14 years, 2d. each a month; maximum rate for a family, 1s. 8d. a month.

It was suggested that the contribution for a man and wife joining together should be 10d.

It was pointed out that the success of the scheme would in a great measure depend upon the rates of contribution, and that unless these were high enough to allow of a reasonable remuneration to the medical men, their co-operation would not be secured. A sliding scale of contribution was suggested, by which persons who were willing and able could pay more than the rates suggested. This the Committee refused to adopt, as it was thought incompatible with the fixed wage-limit already adopted. A long discussion took place upon the rate of contribution for children, it being pointed out very strongly by several speakers that children gave the most trouble to the medical staff.

The following alternative rates were suggested: That 4d. a month should be charged for children; or one child, 4d.; two children, 6d.; three children, 8d.; four children, 10d.; man and wife, 10d.; making the maximum rate 1s. 8d. a month.

It was also suggested that children under 14 years should be charged 2d. a month; and between 14 and 16, 4d. a month.

Eventually the following rates were carried unanimously: Single cards (male or female), 6d. a month; man and wife, without children, 1s. a month; man, wife, and one child, 1s. 1d.; other children, 3d. a month each, not charging for more than four children in one family; making the maximum rate 1s. 10d. a month.

The Committee at the next meeting will consider the subject of entrance fees, midwifery, and special rates for persons joining sick.

It was generally agreed that all persons joining as ordinary members must be approved by the medical officers, and that persons whose physical condition would not allow them to be received at the ordinary rates could be received at special rates to be fixed according to the circumstances of the case.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.—The quarterly meeting of this Association was held at Bethlem Hospital on Wednesday, February 23rd. The chair was taken by Dr. Savage. Dr. Baker exhibited a model of a crib-bedstead with a close top, as recently in use at Utica Asylum. Dr. Savage then introduced for discussion the question: "Whether there is ever sufficient reason for the use of strong clothing and side-arm dresses?" which was followed by an interesting debate, in which Drs. Brushfield, Hayes, Newington, S. R. Phillips, Fox, Moody, and Hack Tuke, took part. The proceedings terminated with a paper by Dr. Percy Smith on "The results of an epidemic of Typhoid Fever on the Insane."

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1887. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Meetings of the Council will be held on April 13th, July 13th, and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, March 24th, June 23rd, and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary*.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the Hackney Town Hall, on Thursday, March 17th, at 8.30 P.M. The chair will be taken by Dr. Herman. A paper on Puerperal Convulsions; their Cause and Treatment, will be read by J. Williams, M.D., President of the Obstetrical Society. Visitors will be welcome.—J. W. HUNT, M.D., Honorary Secretary, 101, Queen's Road, Dalston.

METROPOLITAN COUNTIES BRANCH: NORTH LONDON DISTRICT.—The next meeting will be held at the Board Room of the Great Northern Central Hospital, Caledonian Road, N., on Wednesday, March 9th, 1887, at 8.30 P.M., Dr. Bristowe, F.R.S., President of the Branch, in the chair. Dr. E. Clifford Beale will read some notes on Two Cases of Symmetrical Gangrene (Raynaud's Disease). Dr. Burnet will describe and show a case of Chorea, with unusual symptoms. Dr. Beevor, three cases, illustrating some movements in nervous diseases, namely: 1. Paralysis Agitans. 2. Disseminated Sclerosis. 3. Athetosis. W. Spencer Watson, Esq., F.R.C.S., will read a short case of Chronic Hypertrophic Rhinitis, with spasmodic sneezing. All members of the profession are invited.—GEORGE HENTY, M.D., Honorary Secretary.

BORDER COUNTIES BRANCH.—The spring meeting will be held at the County Hotel, Carlisle, on Friday, March 18th, at 6 P.M. Dr. Haddon, Hawick, will read a paper and introduce a discussion on Typhlitis and Perityphlitis. Dr. Eaton (Cleator Moor): The Coroner's Court from a medical point of view. Dr. Altham, Penrith, will read a paper on a Case of Compound Fracture of the Patella, and a Note upon the Antiseptic Treatment of Hydrocele. Notices of papers for reading, patients or morbid specimens for showing, should be sent to the Secretary without delay.—HENRY A. LEDIARD, M.D., 41, Lowther Street, Carlisle, Honorary Secretary.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.—A conjoint meeting of the above Districts will be held at the Grand Hotel, Brighton, on Wednesday, March 30th. Dr. J. H. Ross will preside. Gentlemen desirous of contributing papers, etc., should communicate with the Honorary Secretary for East Sussex, 97, Montpellier Road, Brighton.—T. JENNER VERRALL, G. B. COLLET, Honorary Secretaries.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting will be held at the Queen's Hotel, Upper Norwood, on Thursday, March 10th, at 4 P.M., Edmund Hooper Galton, M.D., of Brixton Hill, S.W., in the chair. Papers by Dr. Braxton Hicks, "On the Alternate Contraction and Relaxation of the Uterus as a means of Diagnosing Pregnancy, normal and abnormal." By Dr. Pye-Smith, "On the Treatment of Pyrexia." By H. G. Plimmer, Esq., "On a case of Melanotic Sarcoma of the Foot." By Dr. J. H. Galton, "A case of Ovariotomy." By Dr. Dalton, "A case of Hydatid Liver," etc. Dinner at 6 P.M.; charge, 7s., exclusive of wine.—P. T. DUNCAN, M.D., Croydon, Honorary Secretary.

SOUTH EASTERN BRANCH: EAST KENT DISTRICT.—The spring meeting of the above district will be held at the Albion Hotel, Broadstairs, on Thursday, March 17th, at 3 P.M.; Mr. Raven in the chair. The dinner will take place at the above hotel at 5 P.M. All gentlemen proposing to dine are requested to inform the Chairman by Tuesday, the 15th, that proper arrangements may be made. Agenda:—3 P.M. Etiology of Phthisis, with Special Reference to the Inquiry of the Collective Investigation Committee: Dr. Isambard Owen. The High Altitude Treatment of Phthisis: Dr. Tyson. Two Cases of Myxœdema and One of Early Multiple Cerebro-Spinal Sclerosis: the Chairman.—W. J. TYSON, Honorary Secretary.

THAMES VALLEY BRANCH.—The next meeting of the Branch will be held at Richmond, on Wednesday, March 30th. Members willing to read papers or show cases are desired to communicate as soon as possible with CHARLES C. SCOTT, M.B., St. Margaret's, Twickenham, Honorary Secretary.

MIDLAND BRANCH.—A special general meeting will be held at Grantham, on Thursday, March 31st, for the purpose of discussing "the question of the payment of the travelling expenses of the representatives of the various Branches of the Association for their attendance at the four quarterly meetings of the Council." Members desirous of reading papers or exhibiting cases to this meeting are requested to communicate at once with W. A. CARLINE, M.D., Honorary Secretary and Treasurer.

EAST ANGLIAN BRANCH: ESSEX DISTRICT.—The next meeting of the members of the Essex District will be held at the Saracen's Head, Chelmsford, on Thursday, March 10th, 1887, at 3.30 P.M. Dr. Elliston, President of the Branch, will preside. Programme and Business Agenda: 3.30 P.M. General meeting. 1. To elect an honorary secretary for the year 1887. 2. To arrange the place and date of the next meeting, and to nominate a member of the district, resident in or near such place of meeting, to take the chair thereat, provided the President of the Branch does not attend. The following papers have been promised: 1. Pessaries: their varieties, uses and abuses, by Dr. Clement Godson, London. 2. Age in Zymotic Diseases, by Dr. Downes, Chelmsford. 3. Notes of a case of Charbon, with remarks by T. H. Waller, Esq., Chelmsford. A Rare Form of Ichthyosis, by E. H. Carter, Esq., Chelmsford. Notes on two successful cases of Malignant Pustule, by R. Z. Fitts, Esq., Chelmsford. At the conclusion of the meeting, there will be "high" tea at the Saracen's Head, tickets 3s. Any member wishing to be present, or to read a paper, or exhibit a case, is requested to notify his intention to C. E. Abbott, Esq., Honorary Secretary (*pro tem.*) Braintree, on or before Thursday, March 3rd.—W. T. JACKMAN, 114, Brixton Hill, S.W., Honorary Secretary.

LANCASHIRE AND CHESHIRE BRANCH.—An intermediate meeting of this Branch will be held at Birkenhead, on Wednesday, March 30th. Members wishing to read papers, make communications, or show cases, are requested to communicate without delay with Dr. Glascott, Honorary Secretary, 23, St. John Street, Manchester. The programme of the meeting and other details will be published as soon as they have been approved by the Council of the Branch.—Dr. GLASCOTT, Honorary Secretary, 23, St. John Street, Manchester.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIFTH ANNUAL MEETING.

THE fifty-fifth Annual Meeting of the British Medical Association will be held at Dublin, on August 2nd, 3rd, 4th, and 5th, 1887.

President: Withers Moore, M.D., F.R.C.P., Senior Physician to the Sussex County Hospital, Brighton.

President-elect: John T. Banks, M.D., D.Sc.(Hon.), F.K.Q.C.P.I., Regius Professor of Physic in the University of Dublin.

President of the Council: Sir B. Walter Foster, M.D., F.R.C.P., Professor of Medicine in Queen's College, and Physician to the General Hospital, Birmingham.

Treasurer: C. Macnamara, F.R.C.S., Surgeon to the Westminster Hospital, London.

An Address in Medicine will be delivered by W. T. Gairdner, M.D., F.R.C.P.Ed., Professor of Medicine in the University of Glasgow.

An Address in Surgery will be delivered by Edward Hamilton, M.D., Fellow and Professor of Surgery in the Royal College of Surgeons in Ireland.

An Address in Public Medicine will be given by the Reverend S. Haughton, M.D., F.R.S., D.C.L., Senior Fellow, Trinity College, Dublin.

The scientific business of the meeting will be conducted in eight Sections and two Subsections, as follows, namely:

MEDICINE.—*President*, William Moore, M.D. *Vice-Presidents*, H. C. Bastian, M.D., F.R.S.; J. Magee Finny, M.D. *Honorary Secretaries*, T. Gilbart Smith, M.D., 68, Harley Street, Cavendish Square, London, W.; C. J. Nixon, M.D., 2, Merrion Square, Dublin.

SURGERY.—*President*, Sir George H. Porter, M.D. *Vice-Presidents*, Alexander Ogston, M.D.; John Fagan, F.R.C.S.I. *Honorary Secretaries*, W. Thomson, M.D., 34, Harcourt Street, Dublin; R. J. Godlee, F.R.C.S.Eng., 81, Wimpole Street, London, W.; C. B. Ball, M.D., 16, Lower Fitzwilliam Street, Dublin.

OBSTETRIC MEDICINE.—*President*, A. V. Macan, M.B. *Vice-Presidents*, T. More Madden, M.D.; A. L. Galabin, M.D. *Honorary Secretaries*, Wm. J. Smyly, M.D., 56, Fitzwilliam Square, Dublin; Wm. Duncan, M.D., 6, Harley Street, Cavendish Square, London, W.

PUBLIC MEDICINE.—*President*, Sir Thomas Crawford, M.D., K.C.B. *Vice-Presidents*, John S. Taylor, M.D.; R. Thorne Thorne, M.D. *Honorary Secretaries*, John Wm. Moore, M.D., 40, Fitzwilliam Square West, Dublin; John F. W. Tatham, M.D., Town Hall, Salford.

PSYCHOLOGY.—*President*, J. R. Gasquet, M.B. *Vice-Presidents*, Frederick Needham, M.D.; Oscar T. Woods, M.D. *Honorary Secretaries*, Conolly Norman, F.R.C.S.I., Richmond District Lunatic Asylum, Dublin; T. Lyle, M.D., Rubery Hill Asylum, Bromsgrove, Worcestershire.

PATHOLOGY.—*President*, Samuel Gordon, M.D. *Vice-Presidents*, A. W. Foot, M.D.; David J. Hamilton, M.D. *Honorary Secretaries*, Theodore D. Acland, M.D., 7, Brook Street, Grosvenor Square, London, W.; Henry T. Bewley, M.B., Willow Park, Booterstown, Co. Dublin.

THERAPEUTICS AND PHARMACOLOGY.—*President*, Wm. Whitla, M.D. *Vice-President*, Matthew Charteris, M.D.; D. J. Leech, M.D. *Honorary Secretaries*, Chas. Y. Pearson, M.D., 42, King Street, Cork; Michael McHugh, M.B., 25, Harcourt Street, Dublin.

OPHTHALMOLOGY.—*President*, H. R. Swanzy, M.B. *Vice-Presidents*, D. Argyll Robertson, M.D.; Priestley Smith, M.R.C.S.Eng. *Honorary Secretaries*, A. H. Benson, M.B., 42, Fitzwilliam Square, Dublin. A. W. Sandford, M.D., 13, St. Patrick's Place, Cork.

SUBSECTIONS.

OTOLOGY.—*Chairman*, E. Woakes, M.D. *Vice-Chairman*, J. B. Story, M.B. *Honorary Secretary*, D. D. Redmond, L.R.C.S.I., 14, Harcourt Street, Dublin.

LARYNGOLOGY AND RHINOLOGY.—*Chairman*, W. H. MacNeill Whistler, M.D. *Vice-Chairman*, Kendal Franks, M.D. *Honorary Secretary*, R. A. Hayes, M.D., 56, Merrion Square South, Dublin.

Local Honorary Secretary.—George F. Duffey, M.D., 30, Fitzwilliam Place, Dublin.

SHROPSHIRE AND MID-WALES BRANCH.

A HALF-YEARLY meeting of the Branch was held at Boreatton Park, on Tuesday, February 22nd, 1887, at 3.30 P.M. The president, Dr. SANKEY, occupied the chair.

New Members.—The following gentlemen were elected members of the Branch: Thomas Edwards, Grinshill; Henry Oakes, Wem; Alfred Martin-Sutton, Pontesbury; James Thomas Neech, Oswestry; Denis Ahearne Sheahan, Oswestry.

State Honours and the Medical Profession.—Mr. BROOKES (Wenlock), in re-introducing this subject, said that the public had now a better knowledge and a juster and more generous appreciation of the services rendered by the medical profession of all classes. He thought the present year afforded an appropriate occasion to present a memorial to the Prime Minister on the subject, in the following terms:

To the Most Honourable the Marquis of Salisbury, Her Majesty's Prime Minister.

THE humble memorial of the Shropshire and Mid-Wales Branch of the British Medical Association, at their meeting held at Boreatton Park, near Shrewsbury, on Tuesday, February 22nd, 1887, showeth:

That the medical profession has for many years rendered great services, civil as well as military, to the State, services which your memorialists believe have not been inferior to those of other professions. That your memorialists have long felt disappointed that the members of the medical profession have not had the privilege of participating in those higher honours of the State which have been properly conferred upon members of other professions, and upon other subjects of Her Majesty, distinguished for their talents or services, or noted for their wealth and its attendant influence. Your memorialists therefore humbly pray that you will be pleased to advise Her Most Gracious Majesty to bestow upon such physicians and surgeons as she may deem worthy of the honour, the highly prized distinction of the peerage, and they beg to assure you that such a mark of your consideration and of Her Majesty's condescension and favour would be welcomed most gratefully by your memorialists and the whole body of the profession. And your memorialists as in duty bound will ever pray.

Signed on behalf of the members of the Shropshire and Mid-Wales Branch of the British Medical Association. W. H. O. SANKEY, President.

Shrewsbury, February 22nd, 1887. ED. CURETON, Honorary Secretary.

Mr. HUMPHREYS (Shrewsbury) seconded the proposal. He thought it was a reflection on the medical profession that all other callings were eligible for admission to the House of Peers. The memorial was unanimously adopted.

The New Coroners Act and the Profession.—The fact that in the new Coroners Act it is proposed to exclude the medical profession from being eligible to fill the office of coroner having been brought forward by Mr. Lewis, of Oswestry, the following resolution was proposed and adopted:

That, in the opinion of the Shropshire and Mid-Wales Branch of the British Medical Association, the clause in the new Coroners Act, which excludes all but barristers and lawyers from the office of coroner, is particularly unjust to the medical profession, many of whom have so long and ably filled that office, and that this new Act should include, with barristers and lawyers, medical men as equally eligible to fill this office.

Prevention of Suicide.—Dr. SANKEY read a paper on the prevention of suicide; also one upon the importance of studying the prodromata of diseases.

Hamamelis.—A short discussion took place upon the therapeutic value of hamamelis, one of the remedies recently under consideration by the Collective Investigation Committee.

The Late Dr. Edwyn Andrew.—It was unanimously resolved to request the Honorary Secretary to write a letter of condolence to the relatives of the late Dr. Andrew, expressing the great loss the Branch has sustained by his death.

CREMATION.—The sixteenth cremation was satisfactorily performed at the crematory belonging to the Cremation Society of England, St. John's, Woking, on Saturday, February 26th. It was that of the body of a gentleman, aged 62. The ashes weighed 5½ lbs.

EDUCATION AND PHYSICAL DEVELOPMENT.—At a recent meeting of the Académie de Médecine, M. Sagneau, the well known statistician, stated that, among the educated classes, one-fourth more are unfit for military service than among the masses. In Prussia, the proportion is much greater.

SPECIAL CORRESPONDENCE.

BERLIN.

[FROM OUR OWN CORRESPONDENT.]

Endoscopy of the Male Bladder.—The Cure of Boils by Parenchymatous Injections.—Mogiphonia.—Salol in Articular Rheumatism and Acute Febrile Diseases.

DR. NITZE recently exhibited his electric apparatus for the examination of the male bladder to the members of the Medical Society. This endoscope is not altogether new, but it has lately been so much improved that a short account of it may not be out of place. Endoscopic exploration is often useful in leading to the discovery of small stones or tumours, and in revealing the cause of the bleeding in certain obscure cases of hæmaturia. Sir H. Thompson's perineal incision does not always allow of a satisfactory examination being made with the finger, while Guyon's "high operation" is dangerous, as compared with the mere introduction of a tube by the natural passage. Dr. von Bergmann related a case of vesical tumour on which he had operated after examination with Nitze's "cystoscope," and dwelt on the advantage, in a procedure of such gravity as opening the bladder, of being perfectly acquainted with the exact site and size of the tumour.

Dr. Bidder described a new method of treating furuncles by parenchymatous injections of carbolic acid. If the boil is a small one, he gives one injection of a few drops of a solution of carbolic acid (2 per cent.); if it is of medium size, two injections are given, the half or the whole of a Pravaz-syringeful of the solution being used on each occasion. In the case of large furuncles, for example, half the size of a man's hand, Dr. Bidder injects at four different spots the contents of four Pravaz syringes half or wholly filled with a solution of 2 per cent. of carbolic acid. These injections are given only once. This treatment is strikingly successful. There is some smarting at the seat of injection at first, but the pain soon disappears, and the next day there is a marked improvement in the patient's condition. The inflammatory swelling subsides very quickly, and in eight or ten days even the largest furuncle is dispersed. By this plan no unsightly scars are left, a circumstance which in many cases is of considerable importance. The success of the treatment is probably to be accounted for by the fact that either the microbes which cause the disease are killed, or the medium in which they flourish is destroyed.

At the same meeting, Professor B. Fraenkel described a rare form of vocal failure, which he proposed to call "mogiphonia" (*μόγις*, with difficulty). He related some cases, including one male and three female professional singers, a governess, and a clergyman. One of the female vocalists was a plump rosy girl, of whose artistic future the highest expectations were formed. Her temperament was much less nervous than is usual in the case of singers, and her throat, on examination with the laryngoscope, showed nothing but slight catarrh of the mucous membrane. The larynx was well formed, and its movements, both in phonation and in respiration, were perfectly normal. When asked to sing, she began in a powerful and melodious soprano tone, but after a little time the voice seemed to lose volume, and it evidently became increasingly difficult for the singer to produce it, until finally she could not utter a note, and even the attempt to do so caused pain in the larynx. Meanwhile, the speaking voice was quite natural and free from huskiness. The other cases were of much the same nature, all the patients being healthy, and in particular having, so far as could be seen, nothing the matter with the larynx. In none of them was there the least sign of hysteria, or nervous affection of any kind. Professor Fraenkel failed to do much good by treatment; even the direct application of the electric current, both continued and faradic, was ineffectual. In one of the cases, however, some benefit seemed to be produced by massage of the larynx. After inunction of the neck with lanolin, he grasped the larynx firmly with both hands, and rubbed from above downwards on each side from forty to fifty times. There was a marked improvement after a few days of this treatment, and in six weeks the patient declared himself completely cured. Dr. Tobold said he had had good results in similar cases from the application of the constant current. It was necessary, however, to continue it for six or nine months. Dr. Krause stated that he had successfully tried a plan sometimes used by singing masters. The patient was directed to speak "into the mouth" instead of in the ordinary way. By this means, the larynx, after a time, recovered its natural power.

Salol, the new antipyretic remedy, has been tried by Dr. Herrlich in acute articular rheumatism, endocarditis, typhoid fever, and diphtheria, with good results. Salol, which is a compound of carbolic and salicylic acid, may be presumed to have powerful antiseptic and antizymotic properties, and may, therefore, be expected to prove useful in infectious diseases. It is decomposed in the intestines into its two constituent principles, and its action is interesting chiefly in relation to the effects of the carbolic acid thus set free within the system. Dr. Herrlich states that he has cured several cases of acute rheumatism with salol. There were, however, occasional relapses, and the treatment did not prevent the occurrence of endocarditis in some instances. The remedy was tried in eight cases of typhoid fever, and in several cases of diphtheria. Patients suffering from typhoid did not bear the remedy so well as those affected with rheumatism. Gastric complications were relatively frequent, and it was found that the best results were obtained in recent cases where the nutrition was still but little impaired. Dr. Herrlich did not find that salol reduced the temperature either too much or too quickly; it did not produce excessive diaphoresis, nor had it any bad systemic effect, with the exception of the gastric disturbance already referred to, and this was observed only in patients in a very weak condition. Carbolic acid poisoning occurred in a woman suffering from chronic articular rheumatism, who had taken 24 grammes of salol in three days. She vomited almost incessantly for eight days, and her urine contained a considerable amount of phenol. She had also much pain and difficulty in passing water. Similar urinary troubles were observed in another case. Salol, however, appears to be beneficial in certain affections of the bladder; urine which contains phenol is aseptic, and remains sweet for a long time.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

Dr. Imlach and the Women's Hospital.—The Abuse of the Medical Charities.—The Proposed New Infirmary.—The Chester General Infirmary.—University College.

As was to be expected, there has been much talk as to the rejection of Dr. Imlach at the annual re-election of the medical staff of the Women's Hospital. Since the meeting some members of the Committee have retired, and well-known and influential friends of the charity have withdrawn their support. A committee of three gentlemen privately distributed a circular inviting subscriptions for a testimonial, to be presented to Dr. Imlach in recognition "of the valuable and unwearied services he has rendered in his capacity as honorary surgeon to the Hospital for Women in Shaw Street since its establishment in 1883." The matter has now been made public, and already nearly £600 has been received. It is announced that on March 11th a special general meeting of the Governors of the hospital is to be held for the purpose of considering amendments to the laws.

The annual meetings of the principal medical charities are usually held at this time of the year. The various reports for 1886 show little or no improvement in the financial condition of our hospitals; this naturally leads thoughtful people to consider the various questions involved in the maintenance of the charities. In a very able communication to the *Daily Post* of March 1st, Dr. Rentoul has dealt with the abuses of the hospital system. After condemning the practice of charging for medicines and for priority-tickets, and mentioning that last year, at seven of the hospitals in this city, £1,164 was spent on alcohol, he says that in 1886, out of a population of about 586,320, as many as 299,411 persons obtained charitable medical relief, or about one in two of the population. As regards finances, at eighteen medical charities there was a total income of £61,482 6s., and a total expenditure of £62,812 16s. There are about five hundred medical men in Liverpool and suburbs, and only ninety-four of these visit the nineteen hospitals, many holding more than three hospital appointments. In conclusion, Dr. Rentoul suggests that all the hospital committees should combine and form a Hospital Society, so that illegitimate competition might be put a stop to, and other abuses rectified.

At the annual meeting of the Royal Infirmary it was stated that the plans for the new hospital had been prepared, and that the building operations would shortly be commenced. The new Infirmary, which is to accommodate three hundred patients, will, it is hoped, be completed in two years' time. At the last meeting of the Health Committee of the City Council, plans were submitted for the erection of temporary sheds for the accommodation of the inmates of the Royal Infirmary during the rebuilding of the institution. The plans were approved, subject to the roofs being constructed of incombustible material.

In the annual report of the Chester General Infirmary it is stated that last year the expenditure exceeded the income by £110; that the weekly cost for each inmate during the year was £1 1s. 10d., that of the previous year being £1 4s. 4d.; that the working-men's Saturday collections amounted to £128; and that £500 had been received from the Chairman, the Duke of Westminster, as the proceeds of admission to Eaton Hall during the summer.

University College has received the munificent donation of £10,000 for the endowment of the Chair of Engineering. The name of the donor—Mr. Thomas Harrison—will be attached to this chair. Handsome gifts—one of £1,000—have also been made recently to the College library.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

Testimonial to Sir Henry Roscoe.—Hospital Sunday.—Demonstratorship of Physiology.—Meeting of the British Association.—Proposed Grant to the Victoria University.—Medical Examinations.

A MEETING of the present and former pupils of Sir Henry Roscoe was held recently in Owens College, with a view to devise some form of testimonial to Sir Henry, on the occasion of his resignation of the Chair of Chemistry in the College, a position which he has filled with great distinction for a period of nearly thirty years. Several schemes were proposed, including a suggestion that a research laboratory should be founded, or a scholarship instituted, but the majority thought that a portrait of Sir Henry should form at least one part of the testimonial.

Hospital Sunday has come and gone, and, in the various churches, about £4,000 was subscribed. To this must be added the sums subscribed on Hospital Saturday, but the exact amount of the latter appeal has not been announced.

Owing to the death of Mr. Waters, the post of senior demonstrator in the Physiological Department of Owens College is rendered vacant. The terms of the appointment are mentioned in our advertisements.

The Manchester Committee of the British Association is making satisfactory progress with the arrangements for the meeting in September. At a meeting recently held it was announced that the Guarantee Fund exceeded £9,000. The spacious new Biological Museum of Owens College is to be the general reception-room; Sir William Roberts and Dr. Joule are amongst the vice-presidents of the Association. Invitations are to be issued to about 500 distinguished scientific men. One of the evening lectures is to be delivered by Professor H. Dixon, successor to Professor Roscoe; but, as yet, the other one is not fixed. Professor Forbes will deliver the evening lecture to working-men.

It is announced that Mr. Goschen will receive a deputation from Victoria University, with reference to an annual grant from the Treasury for the support and maintenance of the University. The sum asked for is the modest one of £2,000 a year. The application is worthy of support, as Victoria is amply deserving of State aid, and has a strong claim on the Imperial purse. The Scotch Universities receive over £20,000 a year, the Welsh and Irish Colleges have also a large annual subsidy, but so far, neither the Victoria University, nor its Colleges in Liverpool and Manchester, have received any support from the State.

About twenty candidates have entered for the intermediate M.B. of Victoria, and a larger number for the preliminary scientific. This is encouraging.

CORRESPONDENCE.

TREPHINING FOR CEREBRAL ABSCESS.

SIR,—Reference has been made lately here and there to a case of cerebral abscess from temporal bone disease, operated on by Schede, of Hamburg, before the case under the care of Dr. Gowers and myself occurred at University College Hospital. From Truckenbrod's report of this Hamburg case now before me, I gather that it belongs to a different category altogether from our case, and ought not to be confounded with it. In the case at University College Hospital, there was no evidence whatever externally as to what was going on within the skull, no œdema over the temporal region, no tenderness, no redness; and, when the soft parts had been incised, the periosteum and bone were found to be perfectly healthy, as were also the dura mater and the cortex of the brain when the trephine opening had been made. The diagnosis, then, of cerebral abscess had to be made, and the surgical operation down to the brain to be undertaken on evidence quite independent of any visible or tangible local change, beyond a slight moisture in the middle ear. In Schede's case, on the other hand, apart from the nervous symptoms, which were well marked (paresis, aphasia), there was great œdema above and behind the mastoid, and a fistula leading upwards and backwards under the soft parts and periosteum into diseased bone. In the latter, at a point about 3 centimètres above and behind the bony meatus (= ¼ inch) there was a small fistula, through which pus escaped. After a little chiselling here the periosteum was found diseased, and much foul pus escaped from between it and the bone. An exploratory puncture of the brain at this point gave only a trace of fluid. The bone was, therefore, further chiselled away downwards and backwards, giving exit to more pus in large quantity external to the dura mater. An exploratory puncture now showed the presence of a cerebral abscess, and on the dura mater being slit up a cupful of pus escaped.

In this case there was everything to guide the surgeon from step to step, until the softened dura mater was reached. And when the latter had been incised, there was nothing further to be done, for the brain-abscess was opened at the same time. In our case the surface of the brain, when exposed, was perfectly healthy, and the tapping and evacuation had to be done across a healthy area of the arachnoid space.

To compare these cases appears to me a mistake, and to rob the University College Hospital case of its chief feature of interest, which lay in the fact that with healthy soft structures, healthy bone and periosteum, and unaltered brain cortex, it was still possible to diagnose and treat successfully an abscess lying deep in the temporo-sphenoidal lobe.—I am, etc.,

ARTHUR E. BARKER.

Harley Street, W., February 28th.

ERASMUS WILSON LABORATORIES.

SIR,—Everyone must admire the zeal and ability which the JOURNAL has displayed in urging the Council of the Royal College of Surgeons to devote the Erasmus Wilson bequest, or a portion of it, to the furtherance of original research. The soundness of your arguments must be admitted by every liberal-minded member of our profession who has at heart scientific progress and advancement in this country. My object, however, in writing to you is to bring under the notice of the profession some considerations in favour of the creation of a laboratory for bacteriological work—educational as well as experimental.

No one will deny that the present sanitary medical service of the country is in a most unsatisfactory condition. How much public money is wasted in paying nominal fees to medical officers of health for nominal work no one knows, except perhaps the Local Government Board. This is not the fault of the medical profession, as clearly shown by the number of men who present themselves as candidates for diplomas in public health granted by the universities and medical corporations. These men have fitted themselves, by a course of hard study—often at great personal inconvenience—for appointments they already hold or that they have in prospect. It is certain, too, that the sanitary medical service attracts, or might attract, a class of men who, having private means, could afford to live on the small salaries which belong to these appointments, and yet devote their lives to the protection of the public health and the advancement of sanitary science. Their semi-independent position also would be of great advantage to the proper performance of their work and to the public good.

Having so far responded to the call for medical men with sound knowledge on sanitary subjects, it becomes the duty of the State to organise the sanitary service in such a way that the public should obtain their services. But the medical profession might even strengthen its position and its claim for recognition of its members who hold sanitary science qualifications at the hands of the State. At present, but very few of those so qualified have had any instruction in methods of bacteriological work. There exists now a need that every medical officer of health should have some knowledge on this subject. In the future its importance is almost certain to be very much greater, for we may hope to be able at some time definitely to recognise, by bacteriological methods, doubtful cases of infectious disease—cases which, if unrecognised and uncontrolled, would probably act as centres for the diffusion of wide-spread epidemics. It is probable, also, that earnest workers in different parts of the country, with their many opportunities, would be able to add considerably to our knowledge on this subject.

The Councils of the Parkes Museum of Hygiene and the Society of Medical Officers of Health have for some time had under their consideration the foundation of a bacteriological laboratory. The impossibility of raising the money necessary to start and endow such an

institution has prevented any action being taken in the matter up to the present time. Let us hope that the Council of the Royal College of Surgeons will be impressed with the necessity and wisdom of devoting a portion at least of the Erasmus Wilson bequest to the advancement of a work which is of national interest. The opportunity should not be lost: it may never occur again.—I am, Sir, yours, etc.,

LOUIS PARKES, M.D., Pub. Health Cert.(Lond.).

TRANSPORT AND TREATMENT OF INFECTIOUS PATIENTS IN THE METROPOLIS.

SIR,—A letter from Sir Vincent Kennett-Barrington, in the *Times* of January 21st, under the above title, hardly met with the support it deserved there, and has received insufficient notice from the medical press. Coming from a member of the Metropolitan Asylums Board, it seemed to me an invitation to the public in general to apply for aid to that body in case of need. Acting on this view, I had an opportunity last week of advising direct application to Norfolk House for the removal of a servant, ill with scarlet fever, from a house of business in a fashionable part of the parish of St. George, Hanover Square. A telegraphic request for ambulance and hospital accommodation was sent off at four o'clock P.M., and a messenger with a certificate followed; by six o'clock the ambulance with a nurse arrived, and the patient was removed with no further delay than was needed to procure another certificate from our dispensary resident medical officer, Dr. Percy Rendell. Another time, the certificate, very properly required by the nurse, could be left in readiness with the patient. Very little time was lost in this case, as doctor and patient were separated only by the length of one street. The occurrence was notified to the medical officer of health, Dr. Corfield, and in a very short time the room the patient had occupied was sulphured, and the bedding taken away to be stoved and thoroughly disinfected.

I wish to contrast with this what happened, a few days before, near the dispensary, but in the opposite direction. A young girl, living at home with her parents, was engaged to assist by day in a large house near, where a servant was laid up, as was said, with a cold and sore-throat; at the end of a week the servant reappeared among the others for a day or two until she was sent off to the country as a convalescent. Then this girl suddenly sickened. She was seen by me in consultation with Dr. Rendell to confirm his diagnosis of scarlet fever.

In the one case, a source of infection is not only at once removed from the neighbourhood, but its course in any other direction prevented; in the other, we hope the vigilance of our sanitary authorities may in the long run succeed, as far as our district is concerned, in averting further mischief. But what as to the neighbourhood where the convalescent is sent without a word of warning? This, if difficult to answer, is indicative of one way in which country epidemics follow any extension of scarlet fever in London.

Want of encouragement delays the Asylums Board in providing for us the accommodation of a convalescent home at Winchmore Hill, in addition to that of perfectly appointed ambulances. The *Times*, in its faint support of the letter above referred to, commends the Board ambulance to any one "who is able to pay for these conveniences." Now it is precisely to those who can pay but little, or who cannot pay at all, that they are to be commended. The charge is small; if the expense is not recovered at once, it is saved in the long run, or else all will feel a little as ratepayers, what we know too well as doctors, that "good is often done at a loss."—I am, Sir, your obedient servant,

WILLIAM SQUIRE, M.D.

February 28th, 1887.

THE DURATION OF INFECTION IN SCARLATINA.

SIR,—I agree with your correspondent, Dr. Bond, of Gloucester, in the JOURNAL of February 5th (p. 277), in regarding complete freedom of the head and feet from scales as incomplete evidence of the freedom of a patient from the scarlatinal infectious matter. The rash in scarlet fever is always accompanied by a number of minute red papules, presumably inflamed sweat-glands. On some parts of the body these are, in certain cases, the sole representatives of the scarlatinal rash.

I have lately had under my care a case of scarlet fever of the acute toxic kind, with violent delirium; dark rash, and almost no enlargement of the submaxillary glands, in which the rash was absent from the thighs (usually its favourite seat), but fairly abundant on the legs below the knees, where it was entirely composed of red isolated papules. Now these papules desquamate with difficulty, little portions of scaly matter continuing to be thrown out, presumably from sweat-glands. It is especially on the shoulders and adjoining region of the back that this long-continued desquamation occurs, and it is therefore necessary to examine the back and arms before discharging a case. It is curious how often the desquamation of the arms and back lags behind that of the feet, and even of the legs, sometimes for several weeks. It is, therefore, possible that many cases are discharged supposed to be free from desquamation, which are yet desquamating freely.

On the other hand, to base a conclusion of infection on one case seems to me a somewhat hasty proceeding. In a few instances I have had children coming from the same house as others already in the hospital, nine or ten weeks after the latter have been admitted. It is manifest that, had these been sent home sooner, they would have discredited the hospital and the precautions we take, without adequate reason. It is manifest that the same sources of infection (often untraceable) which caused the earlier may also cause the later cases.

It is scarcely to be believed that the infection suggested by Dr. Bond to have been communicated by the breath of the discharged patient, could have had that origin, since the throat desquamates at an early period. It is true that in some cases secondary changes occur in the throat, but there is no reason to regard them as specifically scarlatinal.

It has been mentioned to me as matter of belief that the relatives of scarlet fever patients conceal the clothing of the patient who has been removed to the hospital, and bring it out for him when he is discharged. An occurrence of this kind would, of course, explain and justify the belief in infection being conveyed by a patient after discharge.—I am, etc.,

JAMES NIVEN, M.B.Camb.

Oldham.

DIARRHŒA IN LONDON.

SIR,—Among my out-patients at the West London Hospital, in Hammersmith, I have treated, during the last three months, a remarkably large number of cases of diarrhœa. This is so unusual at this time of the year that it is worthy of a short notice.

All the cases have come on during a time of perfectly good health. In none of them have I been able to trace any particular error of diet. All of them have been above the age of infants. The tongue is usually foul but moist, the appetite bad, vomiting is not infrequent, there is often considerable pain in the abdomen; the pain has sometimes lasted a week after the diarrhœa has ceased. The stools have been in some cases extremely frequent, are described as liquid coloured motions passed without tenesmus, and in a few cases have contained blood. One case began with a sudden pain in the lower part of the belly, and a motion containing bright red blood in considerable quantity. Some few have had a temperature of over 100° F. I have never found any spots on the skin in these cases. The diarrhœa has lasted from three to ten days. Three cases have been bad enough for me to advise their admission.

Several have told me that many of their neighbours had been ill in the same way, and I have also heard of many cases among richer people living in the south-west and west of London. On the other hand, my friends the Casualty-Physicians at St. Bartholomew's, who see a very large number of people daily, have had no unusual number of diarrhœa cases. I do not know whether the diarrhœa is prevalent south of the river.

I should be glad if other medical men would give information upon the prevalence and situation of the attack.—I am, etc.,

W. P. HERRINGHAM, M.D.

HEART-DISEASE AND LIFE-ASSURANCE.

SIR,—In the discussion on Sir A. Clark's paper lately published in the JOURNAL, brief allusion was made by some of the speakers to the acceptance of lives who, otherwise in apparent health, were found to have organic *bruit*. I think the point to be considered is not the value of the individual life, but the value of a mass of such lives, compared with a mass of lives without this damage. Until this question can be answered, I think the office that accepts a life with an organic heart-murmur runs a risk at present not calculated for in its rates. Some years ago the late Mr. Brown, the well-known actuary, told me an office of high repute had made an experiment of taking lives with heart *bruit*, but otherwise in fair health. The office, however, in a few years discontinued the practice, as it was found that the lives most largely insured fell in before their expectancy; and though, by reason of the heavy loading, the office might not ultimately be a loser on the total of these lives, yet enough damaged lives did not present themselves to form a separate class which could be calculated for. Would it be possible for the Collective Investigation Committee to put itself in communication with the secretaries of the principal life-offices, and undertake the toil and expense of examining and tabulating the medical data and experience accumulated?—I am, etc.,

H. F. S.

ENTERIC FEVER IN INDIA.

SIR,—Certain remarks at page 287 of the JOURNAL of February 5th lead me to submit the following particulars to your notice. About twelve years ago I received an order, through the Indian Administration, to inquire into and report upon the subject of *typhoid* or *enteric* fever in relation to British troops in the Madras Presidency. In the instructions received by me, the terms which I have italicised were used synonymously, and were in that sense held to indicate "a specific form of fever due to fæcal contamination of air, earth or water." I quote from memory, as the investigation, and all the troubles of mind and body it caused me, have alike passed into the region of the bygones.

In due course, particulars of cases reached me; but, inasmuch as, according to my judgment and interpretation of those particulars, the standard according to which my instructions directed me to decide what was "enteric or typhoid" fever was not reached, I naturally decided that the cases alluded to were of climatic endemic fever, and not the specific disease due to a specific cause, such as my instructions defined.

But I speedily found that different medical officers, without reference to the standard laid down for their guidance and mine, selected a number of arbitrary standards for themselves. For example, one, let us say, would return a case of fever as "enteric" simply because there were "spots" on the skin (during hot weather); another because there was diarrhœa or abdominal pain, on the same principle that the fever might be specifically indicated as "pulmonic" or "cerebral," when either complication thus indicated was present. In other instances, the condition of the patient supplied the specific synonym, the "typhous" condition of old authors being displaced by the "typhoid" of the newer, and then "typhoid" and "enteric" being held to mean the same thing. Why, there you are. In other instances the particular reasons for applying the same specific term were not manifest.

Of course, as my investigation referred to one particular thing, and the reports received by me to several other things, correspondence between the tenour of mine and those sent to me was impossible. Unfortunately for my own peace of mind, I utterly failed, notwithstanding several attempts to let it be clearly understood that the several standards adopted by different men were not the particular standard according to which our joint investigations were to be pursued.

After all the reports had been disposed of—and, unhappily, much misunderstanding arisen—I placed with the Madras Government the sum of 500 rupees, to be given as a prize for the best essay on the several points in relation to the disease called "enteric" fever on which want of unanimity existed. I assigned three years as the time at the end of which three adjudicators whom I indicated should decide upon the question and adjudge my prize. Three years passed, and the decision was that the terms laid down by me had not been fulfilled by the writers of essays submitted. In the meantime, certain journals used strong language towards me personally. Subsequently, my 500 rupees were restored to me by cheque from the India Office, at the rate of exchange of the day, without interest, and without a word beyond the usual formal transmitting letter. This, doubtless, *pour encourager les autres*.

As far as I can judge from reports published, the standard according to which the question of "enteric" fever in India is to be decided is as undefined and as variable among the reporters as it was when I staked my money in the hope of bringing it to a decision.—Yours truly,

C. A. GORDON,
25, Westbourne Square, W., February, 1887. Surgeon-General.

*** We publish Surgeon-General Gordon's letter with pleasure. We must, however, assure the distinguished author of this letter that the observations on the subject of enteric fever in India to which he takes exception were not directed against the "inquiry" conducted by him under the orders of the Government he served, but against the way in which that inquiry was conducted by him. Military discipline is an excellent thing when applied to its proper purpose, and used in a proper way; but what we must remind Surgeon-General Gordon of is this: it has no place in a scientific inquiry. If medical officers in the discharge of their duties use official documents as a vehicle for insubordinate language, and go out of their way to "speak evil of dignities," that is another matter, and requires the hand of authority for the repression of what is in every way objectionable; but it has never been asserted, or even hinted, that anything like this was done by the medical officers who fell under Dr. Gordon's displeasure, mainly because they reported that certain cases of disease which they saw, treated, and often dissected, were cases of enteric fever, not in their main features to be distinguished from that disease, as described by the highest authorities in their profession.

CHRONIC JOINT-DISEASE IN CHILDREN: A JUBILEE HOSPITAL.

SIR,—Whether or not it be desirable to commemorate Her Majesty the Queen's Jubilee year by the foundation of a new hospital, the fact to which Mr. Watson Cheyne's letter draws attention ought surely to be more generally recognised, namely, that cases of chronic joint-disease are less adequately provided for as regards hospital accommodation than any other class.

They are not fitted for the general hospital, because more urgent and acute cases demand their room, while they can be provided for separately and very economically, as the nursing and general management do not involve the elaborate organization of a general hospital. This assertion is based upon a point of practice, because if the aseptic treatment of chronic abscess necessitated the elaborate proceedings described in the letter above referred to, the simplicity and economy to which I refer would certainly be less apparent. This is, doubtless, a side-issue; but, as Mr. Cheyne has based his arguments to a great extent upon the plan of treatment which he outlines, it seems necessary to remark that antiseptic treatment can be applied to these cases in a manner more simple, more effective, and less liable to failure, by daily syringing out the suppurating cavities with an antiseptic fluid, without taking any extraordinary precautions to protect the orifices.

Accommodation for these cases is certainly very small. Probably most of the children's hospitals receive some, but the general hospitals almost entirely exclude them. The All Saints' Children's Hospital, which is one of the few institutions, if not the only one, which is devoted to this class of cases, possesses only twelve beds, and there is much want of further room. If this provision were made, the result would be not only a saving of life, but, what is perhaps of as great importance, the preservation of many of the limbs and joints which are now lost, and the lessening of the number of cripples.—I am, etc.,

Queen Anne Street, London, W. NOBLE SMITH.

MR. SKENE KEITH'S STATISTICS OF ABDOMINAL SURGERY.

SIR,—With Mr. Tait's last letter the correspondence between us has become entirely personal, and has descended to such a low level that I regret that it is necessary for me to correct his numerous misstatements.

When Mr. Tait publishes private letters, he ought at least to do so fairly. He is well aware that the extract he quotes referred to a little disturbance which was going on at the time, and to one or two gentlemen connected with it; he is also well aware that it is not a fact that I prevented him or any other medical man or medical student from being present at any operation, unless they came from the dissecting or pathological rooms; for Mr. Tait, on February 18th, 1886, was able to enter a room in the hospital where I was operating, without invitation, and by simply opening the door and walking in. There was no "reserved seat within the rails" to give Mr. Tait, and no particular notice was taken, either of his entry after the operation was begun, or of his exit within a couple of minutes, and before it was finished. Can it be possible that Mr. Tait's venom is due to this absence of a railing within which to place him? Dr. Imlach, of Liverpool, and at least a dozen students, were present in the room, which measures about 20 × 15, and thus Mr. Tait knew that what he he says about the difficulty of anyone seeing the operation is not a fact. This, however, is a fact, that invitations to operations have been sent, since the beginning of last winter session, to over 150 students and to fully 50 practitioners, excluding those who came to see their own cases operated upon.

Mr. Tait saw me operating for scarcely two minutes; he is therefore not in a position to say whether I do my operations or not; and the following quotation from a paper by an American surgeon, which Mr. Tait has evidently read, throws some light on the subject: "It is true he had his father to advise and assist him, but it is nevertheless true that he did the operation." On the page before, Mr. Tait will see an account of the mistake in diagnosis he is so jubilant about. Is it possible that Mr. Tait manipulates his tables, as he is so ready to accuse others of doing so? I regret, in regard to the last part of the extract from my letter, that the fact of having received a letter from Mr. Tait in which he consigned to perdition a rival ovariotomist does not make my expression any the less objectionable.

On one occasion I certainly declined to allow a stranger to invite Mr. Tait to an operation, because Mr. Tait had stated in different parts of the country that Dr. Keith had something to conceal,

although he was aware, from actual experience, that anyone could walk into the operating-room and walk out again during an operation without being challenged. I do not believe that any American surgeon would have been so ungentlemanly as to send an invitation without permission, as Mr. Tait says ought to have been done.

It is not a fact that Dr. Keith or myself pick our cases, and it is also not a fact that tapping does not cure the majority of broad ligament cysts; but to describe the case of broad ligament cyst tapped by Dr. Keith fifteen years ago as a rejection is not only absurd, it is misrepresentation.

I now ask Mr. Tait to substantiate his statement that he operated in the South of Scotland, on February 19th, on a case of ovarian tumour which had been rejected by me, or is this statement also not a fact?

In conclusion, I shall decline to continue this correspondence until Mr. Tait learns to write less personal abuse, which is always vulgar, and to stick a little more closely to facts.—I am, etc.,

Edinburgh. SKENE KEITH.

*** We have allowed considerable latitude in this controversy, but if the correspondence be continued, we hope that it will be carried on in the language of courtesy, and without the renewal on either side of personal imputations.

RESIGNATION OF THE MEDICAL STAFF OF THE MARGARET STREET INFIRMARY FOR CONSUMPTION.

SIR,—In the JOURNAL of February 26th it is announced that the resignation referred to in the above heading has taken place, but no mention is made as to the cause and motives which lead the staff to take so serious a step. Permit me to state these very briefly. The cause was the adoption by a special meeting of the governors of the institution of a resolution, which made it lawful for a professed homœopath to take and hold office on the staff. We felt that it was impossible to accept such a resolution; first, because our own common sense, our knowledge, and experience, assure us that the distinctive title proposed for admission implies an absurdity. We know that the art and science of medicine rest on a basis much too wide and recondite to be comprehended in a formula so narrow and inductively unproven as *Similia similibus*. And then to accept the brazen blare of the trumpeter of one sect would be to open the door for others, so that any institution proposing to work in the quiet and laborious field of true scientific knowledge and experience would find itself invaded and broken up by all sorts of wild theorists and hunters after notoriety.

In the next place we felt that it would be wanting in respect to our noble profession, and be disloyal to the interests of true science, to condone and acquiesce in an action so disrespectful and inconsiderate. Many of us had worked for this institution for a long series of years without any reward but that arising from the gratification of being useful to the poor, and we break our connection with it very regretfully.

In conclusion, I would beg to submit that it is now the duty of the medical press to take charge of the position. We hope to learn from our professional brethren that we have done our duty, but we think the case is one which demands the Argus eye and the trenchant power of the leaders and guardians of public opinion and of honest action to see, and as far as possible insist on justice being done. We seek nothing for ourselves, but we shall be astonished and pained if in the end it be found possible that an institution which was founded and has for years been supported by the charitable on the assumption that it was carried on for the benefit of the consumptive poor, through the ordinary and orthodox practice of medicine, is now to be diverted from its course without the consent of those who made it what it is, and its funds employed in a practice other than that intended by the donors.

The institution has, I believe, some funded property and a valuable lease given and granted on the assumption mentioned. Surely there will be some inquiry and action taken by the Charity Commission, and the lawyers may find some exercise of the question as to malversation of funds.—I remain, Sir, your obedient servant,

February 28th, 1887. THOS. HAWKSLEY.

A PROTEST.

SIR,—I should be glad if every member of the profession would look at page 250 of last week's *Illustrated London News*. Cannot some action be taken by which the proprietors of that journal may be made to feel that they cannot with impunity commit such violations of propriety and good taste? I have already, for my own part, done what seems appropriate.—Yours, etc., JONATHAN HUTCHINSON.

15, Cavendish Square, W., February 28th, 1887.

THE INTERNATIONAL CONGRESS AT WASHINGTON, U.S.A.

SIR,—In the JOURNAL of February 26th, you published the names of some fifty members of the Association and of others who have already notified their intention of being present at the meeting of the International Medical Congress at Washington, in September next. You also gave some information respecting a few of the Transatlantic Steamship Companies who have signified their willingness to make a reduction in their tariff to members attending this meeting.

From what I can gather, the chief companies, notably, the White Star and Cunard, have not made any reduction in their fares, owing to the indefinite information obtainable respecting the probable number of passengers. If those of your readers who intend to be present, and to travel by one of the Royal Mail lines *viâ* Liverpool, will send their names to me shortly, specifying by which line they wish to travel, I shall be pleased to wait upon certain of the directors whom I personally know, and see if I cannot secure some good berths at a reduced tariff. It is, of course, advisable that as many as possible should go by one line of steamers. It is my intention to be present at the Congress, and I have a predilection in favour of the White Star Line as a means of getting to New York.—Yours faithfully, BOYD B. JOLL, M.B.Lond.

Woolton, Liverpool.

THE JUBILEE MEMORIAL.

SIR,—I have brought the letter of "M.D.," which appeared in the JOURNAL of February 5th, under the notice of my Board, and am desired by them to ask you kindly, in reply to "M.D.'s" suggestions, to state—

1. That we hope to raise a fund to endow at least one or more beds in the British Home for Incurables at Clapham, in commemoration of Her Majesty's Jubilee.

2. That steps are being taken to obtain the patronage and consent of the Queen to this proposal; and that the Board intend to ask Her Majesty to accept the first nomination of these beds.

3. That we have, alas! many empty beds in the Home—empty not from want of applicants, but from want of funds. It costs £1,000 to endow a bed.

4. That my Board will most gladly avail themselves of "M.D.'s" kind offer to assist them in carrying out this proposal; and I beg that he will, therefore, place himself in communication with me.—I am, Sir, your obedient servant, R. G. SALMOND, Secretary.

British Home for Incurables,
Offices, 73, Cheapside, London, E.C.

MEDICAL DEFENCE UNION.

SIR,—Will Mr. Rideal kindly explain a little more clearly than is done in the printed document which he has circulated, what has been the work done by the Society up to the present time. So far as I can read the accounts circulated, £250 appears to have been spent in 1885 and 1886 in working expenses (chiefly in stationery, printing, and postage), and, out of the total subscription, there is £11 18s. 10½d. now in hand for the future operations of the Society. I see a nominal sum of £648 2s. is mentioned as "a reserve," but this appears not to refer to any money in hand, but to a guarantee of £1, to which call each member is liable. All the "sack" here appears to be in expenses, and if there be any "bread," it has not up to the present time proved very nutritious to the subscribers, or to any of those medical men for whose "defence" the Union is supposed to have been established.—I am, etc.,

PUZZLED.

FITCH'S DOME TROCAR.

SIR,—Having been prevented from hearing Dr. Simon Fitch's paper at Brighton, I venture to ask him in your columns whether it would not be an advantage to have an aperture at the penetrating point of the trocar, so that the operator would at once see fluid escaping when that is reached. Probably this may have occurred to Dr. Fitch, and he may have some well grounded objection to such a provision. If so, I should be glad to know the nature of it.

I have been surprised at the very limited use of the dome trocar in this country. It is largely employed and much liked in the United States. Others have claimed the credit of the invention, but to Dr. Fitch the merit is due. It is a reliable, easily introduced, efficient, and safe instrument, and is as applicable to the simpler forms of paracentesis, as in hydrocele, as to the graver evacuation of fluid from complicated joints, in hydrothorax, hydropericardium, and ovariotomy.—Your obedient servant, NORMAN KERR, M.D.

42, Grove Road, Regent's Park, London, N.W.

NAVAL AND MILITARY MEDICAL SERVICES.

LIST OF OFFICERS OF THE ARMY MEDICAL STAFF KILLED IN ACTION, OR WHO HAVE DIED ON ACTIVE SERVICE IN THE RECENT CAMPAIGNS IN AFGHANISTAN, SOUTH AFRICA, EGYPT, AND THE SOUDAN.

THE following list will be of interest in connection with the observations on relative rank in our leading article of this date:

Surgeon-Major	Shepherd	killed.	Surgeon-Major	Turner	died.
,,	Wallace	died.	,,	Conolly	,,
,,	Souter	,,	,,	D. Mononi	killed.
,,	Keith	,,	,,	D. L. Pouter	died.
,,	Bolton	,,	,,	G. M. Russell	,,
,,	Atkinson	,,	,,	Hewson	,,
,,	Longhead	,,	,,	Heath	killed.
,,	Cornish	killed.	,,	McCraith	died.
,,	Langdon	,,	,,	Pedlow	,,
,,	Shaw	,,	,,	Brackeney	,,
,,	C. B. Lewis	died.	,,	Lesley	,,
,,	Bradshaw	,,	,,	Kelsall	,,
,,	J. R. Lane	killed.			

The following civil surgeons were killed: Brice, Glanville, and Chevers.

We regret we have not the data for a list of medical officers of Her Majesty's Indian surgeons who lost their lives in the same service.

ANOMALIES OF HONORARY RANK.

MEDICAL STAFF writes: The *Gazette* of Friday, February 25th, contained a curious illustration of the anomalies of honorary rank in its application to officers connected more or less directly with the Army Medical Department. The retirement of three officers was notified in the *Gazette* above mentioned. One entered the service as a clerk in the hospital purveying branch, passed into the Commisariat, and retired with the honorary rank of colonel. The second entered the service as a private of the Army Hospital Corps, passed into the dispensing department, became a hospital quartermaster, and retired with the rank of major. The third, a surgeon-major, who distinguished himself greatly on active service in the field, in South Africa, in the command of a bearer company and in his professional capacity, retired with the honorary rank of brigade-surgeon. The first will be socially distinguished during the rest of his life as Colonel A., the second as Major B., the third as Mr. C. There are few medical officers who would desire to be distinguished by the titles of combatant officers; but this does not make the anomaly indicated any the less, nor does it in any way make the fact of army medical officers being officially excluded from all military position a satisfactory one.

BRITISH MEDICAL SERVICE.—Subjoined is a list of candidates who were successful for appointments as surgeons in the Medical Staff of Her Majesty's Army at the competitive examination held in London on the 14th and following days of February:—

	Marks.		Marks.
H. E. H. Smith	3390	J. Paterson	2815
G. T. Alexander	3290	J. E. Trask	2800
W. P. Gore-Graham	3210	N. H. Forbes	2785
E. M. Woods	3195	E. C. Freeman	2755
C. S. Spong	3140	V. H. W. Davoren	2730
W. B. Leishman	3125	R. J. Copeland	2722
G. T. Rawnsley	3060	A. P. Blenkinsop	2670
J. Thomson	3040	A. L. Borrodaile	2640
C. W. Reilly	2990	W. Halloran	2640
W. J. Crofton	2895	T. Birt	2630
A. Wright	2880	H. S. Peeke	2630
A. J. Luther	2850	R. H. Smyth	2630
J. Girvin	2820		

INDIAN MEDICAL SERVICE.—Subjoined is a list of the candidates for Her Majesty's Indian Medical Service who were successful at the Competitive Examination held at Burlington House on February 14th and following days. Seventy-three candidates competed for 28 appointments; 70 were reported qualified:—

	Marks.		Marks.
C. H. L. Meyer	3435	L. G. Fisher	2995
W. H. W. Elliot	3340	A. Buchanan	2970
L. F. Childe	3320	C. C. Manifold	2905
W. R. Clark	3290	A. H. Jacob	2900
G. F. W. Braide	3270	J. Garvie	2890
J. Murray	3230	A. R. Jolliffe	2880
P. O. W. Hailey	3160	F. J. Crawford, M.D.	2770
R. J. Marks	3150	W. G. McEvoy	2760
M. A. Ker	3100	H. W. G. Macleod	2760
T. D. C. Barry	3040	R. Robertson	2750
C. E. L. Gilbert	3040	G. B. Irvine	2730
W. Vost	3040	T. C. Moore	2730
H. Herbert	3035	W. H. Karney	2720
C. E. Sander	3000	D. Simpson	2720

RELATIVE RANK IN THE ARMY.

SIR,—All military surgeons owe you a debt of gratitude for the article in the JOURNAL of February 26th, on the Abolition of Relative Rank in the Army. By the recent Warrant, the remaining departments receive the substantial advantages of real rank, while we remain in even a worse position than we were before. The time has now come to demand that medical officers should receive real—that is, honorary—rank, and be put on an equality with the officers of the Commissariat and Transport, Ordnance and Pay Departments of the army. This common justice we can, and hope to obtain by the assistance of the British Medical Association.—Yours, etc., ROYAL SURGEON.

VOLUNTEER MEDICAL OFFICERS' PROFICIENCY EXAMINATION.

SIR,—Will you kindly make known through the medium of the JOURNAL that Surgeon-Commandant Cantlie, of the Volunteer Medical Staff Corps and Charing Cross Hospital, has most generously offered the free use of a room at the headquarters of the corps in King William Street, Strand, for a class of volunteer medical officers to undergo a course of preparation for the "P" examination. Acting-Surgeon Pearce, of the Artists' Rifle Volunteers, is willing to conduct the class, the fee for which will be £1 1s. The class will be held one evening a week from 7.30 to 9, or thereabouts; and, as soon as a sufficient number join, due notice will be given and the class started. I shall be very happy to receive the names of intending members.—I am, yours truly,

OCTAVIUS W. WHITE, Surgeon Tower Hamlets Rifle Brigade.

Fletcher House, Tottenham, February 15th.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Tuesday, March 1st, 1887.

Lunacy Acts Amendment Bill.—The LORD CHANCELLOR moved the amendments to Clause 3 which he had undertaken to prepare when the Bill was previously in Committee. He moved the omission of subsections 9 and 10 of Clause 3, and the substitution and addition of words providing as follows: "Upon the presentation of the petition the judge, magistrate, or justice shall consider the evidence of lunacy appearing by the medical certificates, and whether it is necessary for him personally to see and examine the alleged lunatic, and if he is satisfied that an order may properly be made forthwith, he may make the same accordingly. The judge, magistrate, or justice, if not satisfied with the evidence of lunacy appearing by the medical certificate may, if he thinks it necessary so to do, visit the alleged lunatic at the place where he may happen to be. When a lunatic has been received in an asylum, hospital, or house, or as a single patient under an order of a judge of county courts, magistrate, or justice, and has not been already visited by such judge, magistrate, or justice, the lunatic shall have the right either to be visited by or to be taken before a judge, magistrate, or justice having jurisdiction within the district, unless the medical superintendent of the asylum or hospital, or the medical proprietor or attendant of the house, or the medical attendant of the single patient, shall sign a certificate in writing that such right would be prejudicial to the lunatic, and shall send the certificate to the judge, magistrate, or justice. If such certificate is not signed, the superintendent or proprietor of the asylum, hospital, or house, or the person having charge of the lunatic as a single patient shall, within twenty-four hours after the lunatic's reception, give him notice in writing of such right, and if the lunatic within seven days after his reception desires to exercise such right, the superintendent, or proprietor, or person having charge of the lunatic as a single patient shall forthwith give notice in writing thereof to the judge, magistrate or justice, who shall thereupon either visit the lunatic or procure the lunatic to be brought before him by the superintendent, proprietor, or other person. If any superintendent or proprietor of an asylum, hospital, or house, or any person having charge of a single patient, omits to give either of the notices mentioned he shall be guilty of a misdemeanour."—The LORD CHANCELLOR having undertaken to consider certain verbal alterations, the amendments were agreed to, and the Bill passed through Committee.

HOUSE OF COMMONS.—Thursday, March 3rd.

RELATIVE RANK OF ARMY MEDICAL OFFICERS.

Sir GUYER HUNTER asked the Secretary of State for War whether, since the relative rank of the medical officers of the army had been abolished, what rank, if any, they now had in the army?

Mr. STANHOPE: A medical officer holds the rank in the army which his commission confers upon him; and under Article 125*a* of the Royal Warrant, it is provided that, for purposes of precedence, allowances, and widows' pensions, medical officers shall rank with combatant officers as there laid down. As a matter of fact, the abolition of the term "relative rank" has not altered the position of medical officers in any respect whatever.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

ENGLISH URBAN MORTALITY IN 1886.

In the accompanying table will be found summarised the vital and mortal statistics issued by the Registrar-General in his weekly returns for 1886, relating to twenty-eight of the largest English towns. Weekly summaries of these statistics have already been published in these columns.

During the year under notice, 300,635 births were registered in the twenty-eight towns, equal to an annual rate of 33.2 per 1,000 of their aggregate population in the middle of 1886, estimated at rather more than nine millions of persons. In London the birth-rate did not exceed 32.3 per 1,000, while in the twenty-seven provincial towns it averaged 33.9. Since 1876, when the birth-rate in the large English towns was as high as 38.1 per 1,000, it has continuously declined, and was lower last year than in any preceding year on record. The lowest rates during 1886 in the twenty-eight towns were 25.5 in Brighton, 27.0 in Huddersfield, and 28.8 in Halifax and in Bradford; the highest were 39.5 in Newcastle-upon-Tyne, 39.5 in Preston, and 42.6 in Cardiff.

The deaths in the twenty-eight towns last year were equal to an annual rate of 20.9 per 1,000 of the estimated population, and showed a slight increase upon the very low rate in 1885, which was considerably lower than in any year on record. The marked improvement in the health of the urban population of the country was, therefore, maintained during the past year. During the ten years 1871-80 the rate of mortality in the large towns dealt with by the Registrar-General averaged 24.0 per 1,000. In the past five years of the current decade the death-rate has not exceeded 21.4 per 1,000. This reduction in the rate of mortality implies that more than 130,000 persons in the twenty-eight towns have survived the last five years whose deaths would have been recorded had the mean rate of mortality in the preceding decade been since maintained. It may be here noted that the saving of life during the same period of five years in England and Wales, as the result of the reduction of the death-rate of the country generally, is estimated at no less than 450,000. The death-rate in London during 1886, per 1,000 persons estimated to be living therein, without distinction of age or sex, was equal to 19.9 per 1,000, while in the twenty-seven provincial towns it averaged 21.8, and ranged from 17.1 in Brighton, 18.2 in Derby, 18.8 in Hull, and 19.1 in Birkenhead, to 23.8 in Portsmouth and in Liverpool, 25.5 in Blackburn, 26.3 in Manchester, and 28.9 in Preston. It should, however, be borne in mind that comparisons made between the healthiness of different towns, if based merely upon their general death-rates, are liable to lead to erroneous conclusions in cases where there are material differences in the age and sex distribution of their respective populations. Had the population in each of the twenty-eight towns been identical in age and sex distribution with the population of England and Wales, the death-rates would have been as follow, ranged in order from the lowest:—Brighton, 17.6; Derby, 18.9; Hull, 19.4; Bristol, 20.0; Sunderland, 20.3; Birkenhead, 20.5; London, 21.1; Bradford, 21.1; Leicester, 21.2; Birmingham, 21.3; Sheffield, 21.3; Huddersfield, 21.5; Nottingham, 21.6; Norwich, 22.3; Wolverhampton, 22.9; Plymouth, 23.3; Leeds, 23.4; Newcastle-upon-Tyne, 23.5; Salford, 24.0; Portsmouth, 24.5; Cardiff, 24.5; Halifax, 24.7; Oldham, 25.3; Bolton, 25.4; Liverpool, 26.1; Blackburn, 27.8; Manchester, 29.4; and the highest rate 31.4 in Preston.

It will be at once seen, on comparison of the recorded rates as given in the table with these corrected rates, that the mortality in the several towns is, with two exceptions, greater than would be concluded from the recorded death-rates. Large towns contain, as a rule, a much smaller proportion of aged persons, and a much higher proportion of persons in the prime of life, as well as of females, than than does the country generally, though these advantages are, to a limited extent, counterbalanced by the excess in the proportion of children. It will be noticed that whether the towns be arranged according to their recorded, or their corrected, death-rate, the order will scarcely be changed. As the age and sex distribution in any one town remains practically constant, its death-rate in one year may be compared with that in other years without any correction being made; and although the uncorrected death-rates in different towns are not strictly comparable without correction for the differences in age and sex distribution, yet they afford a really valuable indication of their relative salubrity.

During the year under notice 26,063 deaths were referred to the principal zymotic diseases, equal to nearly 14 per cent. of the total deaths, and to a rate of 2.9 per 1,000. In the preceding ten years, 1876-85, this zymotic rate averaged 3.5 per 1,000. The lowest zymotic

Public Health Statistics relating to Twenty-eight Large English Towns, for the Year 1886.

Towns.	Estimated Population middle of 1886.	Births.	Deaths.	Annual Rate per 1,000 Living. Births.	Deaths.	Principal Zymotic Diseases.	Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Fever.	Diarrhœa.	Rate per cent. of Uncertified Deaths.	Deaths of Children under one year of age to 1,000 Births.
28 Towns	9,693,817	300,635	189,610	33.2	20.9	2.9	26,063	51	4,874	2,285	1,426	4,835	2,068	10,524	2.3	169
27 Provincial Towns	4,944,284	166,935	107,353	33.9	21.8	3.0	14,961	46	2,796	1,597	580	2,001	1,367	6,574	3.2	177
London	4,149,533	133,700	82,257	32.3	19.9	2.7	11,102	5	2,078	688	846	2,834	701	3,950	1.2	159
Brighton	116,416	2,957	1,986	25.5	17.1	1.9	220	—	11	14	21	67	13	94	2.7	160
Portsmouth	136,278	4,923	3,234	36.2	23.8	5.1	689	1	192	18	63	102	124	189	1.2	174
Norwich	92,028	3,186	2,139	34.7	23.3	3.5	324	—	—	14	12	38	38	222	1.8	202
Plymouth	76,584	2,414	1,792	31.6	23.5	3.0	228	—	81	18	10	18	44	57	0.8	154
Bristol	220,915	6,726	4,253	30.5	19.3	2.2	477	7	101	88	30	103	31	117	2.5	149
Wolverhampton	80,012	2,803	1,773	35.2	22.2	3.9	307	—	110	6	14	22	15	140	1.8	175
Birmingham	434,381	14,305	8,628	33.0	19.9	3.1	1,346	—	373	37	74	92	61	709	2.3	175
Leicester	139,606	4,857	2,819	34.9	20.3	2.8	389	—	48	42	4	27	21	252	2.2	211
Nottingham	217,738	7,768	4,419	35.8	20.4	3.0	655	2	171	13	11	94	61	303	1.9	180
Derby	91,823	3,050	1,665	33.8	18.2	1.8	161	—	4	7	2	43	31	74	2.3	150
Birkenhead	95,370	3,210	1,819	33.8	19.1	2.3	221	2	21	40	15	18	18	107	1.9	162
Liverpool	586,320	19,559	13,919	33.5	23.8	3.1	1,835	29	273	277	125	152	198	781	5.1	188
Bolton	111,214	3,786	2,565	34.2	23.1	3.8	417	—	141	16	7	73	17	163	3.3	186
Manchester	376,895	13,636	9,894	36.3	26.3	5.1	1,148	1	85	166	35	259	124	478	2.5	183
Salford	211,241	7,234	4,643	34.4	22.1	3.8	799	—	47	167	12	127	61	385	4.2	198
Oldham	130,216	4,218	2,958	32.5	22.8	2.7	356	—	90	32	27	75	26	126	6.3	174
Blackburn	114,689	3,970	2,918	34.7	25.5	4.3	488	2	231	37	—	24	34	160	3.1	209
Preston	101,340	3,985	2,922	39.5	28.9	5.7	571	—	210	18	8	67	60	208	2.8	233
Huddersfield	88,670	2,386	1,730	27.0	19.6	1.6	143	—	17	32	9	29	13	43	3.9	167
Halifax	78,287	2,240	1,775	28.8	22.8	2.4	187	—	87	9	16	16	15	44	7.7	171
Bradford	219,411	6,290	4,188	28.8	19.2	2.2	472	—	106	88	9	19	36	214	2.6	167
Leeds	339,057	11,456	7,399	33.9	21.9	3.4	1,158	1	239	193	27	119	99	480	1.6	181
Sheffield	310,957	10,576	6,181	34.1	19.8	2.9	891	—	70	130	10	161	63	457	5.5	168
Hull	191,501	6,394	3,597	33.5	18.8	2.4	455	—	28	48	3	82	29	265	4.8	164
Sunderland	127,487	4,021	2,479	36.4	19.5	2.6	326	—	4	26	5	51	29	211	3.3	151
Newcastle-on-Tyne	155,117	6,099	3,459	39.5	22.2	2.5	386	—	43	44	18	101	36	144	2.9	155
Cardiff	100,736	4,280	2,269	42.6	22.6	3.1	312	1	18	17	18	42	70	151	1.8	168

death-rates last year were 1.6 in Huddersfield, 1.8 in Derby, and 1.9 in Brighton; while the highest were 3.9 in Wolverhampton, 4.3 in Blackburn, 5.1 in Portsmouth, and 5.7 in Preston. These 26,063 deaths included 10,524 which resulted from diarrhœa, 4,835 from whooping-cough, 3,874 from measles, 2,285 from scarlet fever, 2,068 from "fever" (principally enteric), 1,426 from diphtheria, and 51 from small-pox. The rate of mortality from diarrhœa was equal to 1.16 per 1,000, and slightly exceeded the average; this disease showed excessive fatality in several of the twenty-seven provincial towns, among which it caused the highest rates in Leicester, Salford, Preston, and Norwich. The death-rate from whooping-cough was considerably higher in London than in the aggregate of the provincial towns, among which this disease was proportionately most fatal in Portsmouth, Manchester, and Preston. The deaths referred to measles corresponded to an annual rate of 0.43 per 1,000, a lower rate than in any recent year; this disease was much more prevalent in London than in the aggregate of the provincial towns, among which, however, it caused relatively high rates in Bolton, Blackburn, and Preston. The rate of mortality from scarlet fever was only 0.25 per 1,000, which, with the single exception of last year, when the rate did not exceed 0.24 per 1,000, was lower than that recorded in any year for which these statistics are available. Among the twenty-eight towns scarlet fever showed the highest proportional fatality in Liverpool, Leeds, and Salford. The death-rate from "fever" (principally enteric) was 0.23 per 1,000, which, though showing a slight increase upon the very low rate recorded in 1885, was considerably below the average in the preceding ten years; while the rate of mortality from this disease did not exceed 0.17 per 1,000 in London, it averaged 0.28 in the twenty-seven large provincial towns, among which it was highest in Preston, Cardiff, and Portsmouth. The mortality from diphtheria somewhat exceeded the average; this disease was much more fatally prevalent in London than in the aggregate of the provincial towns. During last year only 51 fatal cases of small-pox were recorded in the twenty-eight towns, the numbers in the two preceding years having been 1,264 and 1,051 respectively; 29 occurred in Liverpool, 7 in Bristol, 5 in London (excluding 37 deaths of London residents from this disease registered in the Metropolitan Asylum Hospitals situated outside Registration London), and only 10 in seven other large towns. The number of small-pox patients under treatment at the Metropolitan Asylum Hospitals was 41 at the commencement of the year under notice, but no patients remained at the end of December last. The admissions into these hospitals throughout the year 1886 did not exceed 132, while in the two preceding years they had been 6,706 and 6,282 respectively.

Infant mortality, measured by the proportion of deaths of infants under one year to registered births, averaged 169 per 1,000 in the twenty-eight towns during last year, which, owing to the fatal prevalence of summer diarrhœa, slightly exceeded the average. While the rate of infant mortality in London was equal to 159 per 1,000, it averaged 177 in the twenty-seven provincial towns, among which it ranged from 149 in Bristol, 150 in Derby, and 151 in Sunderland, to 202 in Norwich, 209 in Blackburn, 211 in Leicester, and 233 in Preston.

THE EXTRAORDINARY DECREASE IN WORKHOUSE STIMULANTS.

THE full significance of the startling facts recorded in Parliamentary Returns of the Consumption of Alcohol in Workhouses has apparently not been noted. These returns are Lord Derwent's for 1871, Mr. Whitworth's for 1881, and Mr. Watson's for 1885.

In the year ending Michaelmas 1871, in England and Wales, the cost for intoxicating liquors of all kinds supplied to in-door paupers was £82,554. In the year ending December 31st, 1881, the cost was £60,303. In the year ending December 31st, 1885, the corresponding charge was £44,820. From these figures it appears that there has been a reduction of expenditure under this head of more than 25 per cent. during the past four years, and of over 45 per cent. during the past fifteen years.

Nor has this truly astonishing diminution in the amount of alcohol consumed in our workhouses and infirmaries been due to a proportionate decrease in the number of inmates. As the return for 1871 does not give the average number of inmates, we are unable to ascertain the actual difference between the number in that year and in the years 1881 and 1885. But we can learn the facts as to these two later years, inasmuch as both returns show the average daily number of persons in poor-law institutions. In 1881 the total daily average was 170,526, and in 1885 it was 175,987, so that more than 25 per cent. less drink was taken by 3 per cent. more persons. In other words, 5,461 additional inmates cost £15,483 less.

In the Metropolis the decrease has been decided. With an increased daily average number of 6,974 paupers there has been a reduction of £7,511, or almost 32 per cent., in the course of the past four years. In Wandsworth Workhouse with a daily average of 382 inmates, at Lambeth with 1,233, and at Bethnal Green no intoxicants were used. In Marylebone, with an average of 1,633 individuals, only £6 8s. 9d. was disbursed during the twelve months, and that was for malt liquor on Christmas-day. At St. Leonard, Shoreditch, with 743 of a daily average, and at Whitechapel with 319, no alcoholic liquor was consumed except at Christmas. At Greenwich the whole expenditure for the year was £10 12s. 8d. for 1,097 inmates.

Among the provincial workhouses where there was absolutely no outlay for intoxicants were Penzance, 110 inmates; Falmouth, 120; Newmarket, 182; Fylde, 134; Wharfedale, 86; Kirkby Moorside, 20; Weardale, 75; Durham, 136; Bellingham, 14; and Rothbury, 13. In Wales there was no charge at Swansea (378), Wrexham (300), Neath (94), and Pontardawe (33). In many workhouses in the provinces the expenditure on alcohol was so trifling as to be practically inappreciable. Reading, with a daily average of 280 inmates, except for Christmas beer, spent only 11d. during the whole year. At Shaftesbury 73 inmates cost 18s., at Bideford 96 cost 11s. 4d., at Camelford 32 cost 15s. 4d., at Launceston 69 cost 4s. 5d. East Stonehouse, with 74, and Helston, with 140, spent each 3s. 6d. Liskeard, with 148, spent 6d. At Malton, besides 10s. for beer at Christmas, 80 inmates cost 5d. In the South-Eastern division the decrease during the four years ending in December, 1885, was 16 per cent.; in the South Midland, over 32 per cent.; in the Eastern, 27½ per cent.; in the South-Western, 19 per cent.: in the West Midland, 20 per cent.; in the North Midland, nearly 14 per cent.; in the North-Western over 22 per cent.; in the Yorkshire, 25 per cent.; in the Northern, 34 per cent.

In the Metropolitan infirmaries there has been a great reduction. In the St. Marylebone combined workhouse and infirmary, in 1880-1 £1,633 was spent for an average of 2,046 inmates. In 1884 there was only £6 8s. 9d. for Christmas beer at the former, and £340 for medicinal purposes at the latter, with a daily average of 617 patients. At the workhouses of St. George's-in-the-West in Fulham and Buckingham Palace Roads, in 1869, with an average of 570 inmates, the expenditure was £1,493. In 1881, with an average of 1,595, the charge was £364. In 1885, with 1,317, the charge was £8 2s. 5d. In the Fulham Road Infirmary of the same union, the total cost in 1885 for drink as a medicine was £4 0s. 10d. for an average of 503 sick paupers.

In Ireland only two workhouses, Newry and Stranorlar, spent nothing on intoxicants. The expenditure in that country fell from £11,845 in 1881 to £8,800 in 1885, a decrease of nearly 26 per cent.

In Scotland there was no charge for alcohol in the poorhouses at North Leith with 60 inmates, Lorn Combination with 71, and Long Island Combination with 1. The total cost was £837 for 10,039 inmates on a daily average.

In England and Wales more than half the total expenditure was on malt liquors, in Ireland one-fourth, and in Scotland one-thirteenth. As regards spirits the cost was fully one-third of the whole in England and Wales, a little less than one-half in Ireland, and considerably more than one-half in Scotland.

Contrary to the usual belief, the colder localities have called for less stimulation than the warmer. The average per head was 5s. ¾d. in England and Wales, 3s. 9¾d. in Ireland, and only 1s. 8d. in Scotland.

The reduction by nearly one-half in fifteen years, and by fully one quarter in four years, is as gratifying as it is remarkable. It is an indication of the radical change of medical opinion in the direction of the exceptional and guarded prescription of alcohol in accurately defined doses for the occasion only. It is also another proof of the intelligence and trustworthiness of the members of the poor-law service, to whose study of the therapeutic power of alcohol this welcome and rapid decrease in the consumption of stimulants is largely due.

HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, February 26th, 5,882 births and 3,767 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons. The annual rate of mortality, which had been 19.5 and 21.1 per 1,000 in the two preceding weeks, further rose during the week under notice to 21.3. The rates in the several towns, ranged in order from the lowest, were as follow:—Nottingham, 13.5; Brighton, 13.7; Derby, 14.4; Sunderland, 16.1; Bradford, 17.0; Bolton, 17.2; Cardiff, 18.0; Birmingham, 18.9; Oldham, 19.4; Wolverhampton, 19.4; Birkenhead, 19.8; Hull, 20.1; London, 20.9; Leeds, 21.0; Sheffield, 21.4; Norwich, 21.4; Salford, 21.5; Leicester, 21.5; Portsmouth, 21.9; Halifax, 22.4; Blackburn, 22.8; Bristol, 23.3; Liverpool, 24.1; Preston, 25.0; Newcastle-upon-Tyne, 27.2; Plymouth, 29.8; Manchester, 30.1; and the highest rate during the week, 33.0 in Huddersfield. The

death-rate in the twenty-seven provincial towns averaged 21.6 per 1,000, and exceeded by 0.7 the rate recorded in London, which, as before stated, did not exceed 20.9 per 1,000. The 3,767 deaths registered in the twenty-eight towns during the week under notice included 372 which were referred to the principal zymotic diseases, against 340 and 371 in the two preceding weeks; of these, 140 resulted from measles, 94 from whooping-cough, 47 from scarlet fever, 39 from diarrhœa, 31 from diphtheria, 21 from "fever" (principally enteric), and not one from small-pox. These 372 deaths were equal to an annual rate of 2.1 per 1,000. The zymotic rate in London during the week under notice did not exceed 1.8 per 1,000, while in the twenty-seven provincial towns it averaged 2.4, and ranged from 0.0 and 0.4 in Birkenhead and Brighton, to 3.6 in Leicester and in Liverpool, 4.0 in Manchester, and 6.4 in Huddersfield. The deaths referred to measles, which had been 77 and 107 in the two preceding weeks, further rose during the week under notice to 140, and were proportionally most numerous in Leeds, Manchester, Liverpool, Sunderland, Leicester, and Huddersfield. The fatal cases of whooping-cough, which had been 95 and 125 in the two previous weeks, declined again during the week under notice to 94, and caused the highest death-rates in Birmingham and Norwich. The 47 deaths from scarlet fever corresponded with the number in the preceding week; this disease was most fatally prevalent in Bristol and Blackburn. The 39 fatal cases of diarrhœa showed a slight further increase upon recent weekly numbers. The deaths referred to diphtheria, which had been 43 and 32 in the two previous weeks, further fell during the week under notice to 31, and included 14 in London, 4 in Liverpool, 2 in Portsmouth, 2 in Manchester, 2 in Leeds, and 2 in Cardiff. The fatal cases of fever, which had steadily declined from 40 to 23 in the three preceding weeks, further fell during the week under notice to 21, a lower number than has been recorded in any week since May, 1886. No death was referred to small-pox during the week under notice either in London or in any of the twenty-seven provincial towns, and only three small-pox patients were under treatment in the Metropolitan Asylum Hospitals on Saturday, February 26th. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 5.8 per 1,000, and was slightly below the average. The causes of 114, or 3.0 per cent. of the 3,767 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

In the eight principal Scotch towns, having an estimated population of 1,299,000 persons, 781 births and 562 deaths were registered during the week ending Saturday, February 26th. The annual rate of mortality, which had risen from 19.8 to 24.3 per 1,000 in the three preceding weeks, declined again during the week under notice to 22.5, but exceeded by 1.2 per 1,000 the mean rate for the same period in the twenty-eight large English towns. Among these Scotch towns the rate was equal to 11.0 in Greenock, 16.8 in Dundee, 19.4 in Leith, 20.9 in Edinburgh, 21.1 in Perth, 21.4 in Paisley, 24.8 in Glasgow, and 33.7 in Aberdeen. The 562 deaths registered during the week under notice in these Scotch towns included 33 which were referred to whooping-cough, 30 to measles, 17 to scarlet fever, 11 to diarrhœa, 5 to "fever," 3 to diphtheria, and not one to small-pox; in all, 99 deaths resulted from these principal zymotic diseases, against 76 and 103 in the two preceding weeks. These 99 deaths were equal to an annual rate of 4.0 per 1,000, which exceeded by as much as 1.9 the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns during the week under notice were recorded in Glasgow, Edinburgh, and Aberdeen. The deaths referred to whooping-cough, which had steadily increased from 19 to 32 in the four preceding weeks, further rose during the week under notice to 33, of which 22 occurred in Glasgow, 4 in Aberdeen, and 3 in Edinburgh. The fatal cases of measles, which had been 16 and 23 in the two previous weeks, further increased during the week under notice to 30, and included 17 in Aberdeen and 12 in Glasgow. The 17 deaths referred to scarlet fever showed a decline of 8 from the high number in the preceding week; 11 were returned in Edinburgh, 3 in Glasgow, and 2 in Dundee. The 11 fatal cases of diarrhœa showed a slight decline from recent weekly numbers. The 5 deaths referred to different forms of fever showed a slight further increase upon the numbers returned in the two previous weeks, and included 3 in Leith. Of the three fatal cases of diphtheria, 2 occurred in Glasgow and 1 in Aberdeen. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 5.0 per 1,000, against 5.8 in London. The causes of 78, or nearly 14 per cent., of the 562 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending Saturday, February 19th, 519 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 31.2 per 1,000 of the population. The deaths registered during the week under notice in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 20.7; Belfast, 30.9; Cork, 23.4; Drogheda, 33.8; Dublin, 34.7; Dundalk, 21.8; Galway, 30.3; Kilkenny, 8.5; Limerick, 37.8; Lisburn, 9.7; Londonderry, 33.9; Lurgan, 15.4; Newry, 28.1; Sligo, 19.2; Waterford, 27.8; Wexford, 47.0. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.3 per 1,000, the rates varying from 0.0 in Cork, Newry, Kilkenny, Wexford, Dundalk, Sligo, Lisburn, and Armagh, to 12.5 in Londonderry; the 19 deaths from all causes registered in the last-named district comprising 6 more from measles and 1 from diphtheria. Among the 133 deaths from all causes registered in Belfast are 3 from typhus, 8 from whooping-cough, 1 from diphtheria, 2 from enteric fever, and 3 from diarrhœa; and the 12 deaths in Waterford comprise 1 from enteric fever and 1 from diarrhœa. In the Dublin Registration District, the births registered during the week amounted to 188, and the deaths to 289. The deaths represent an annual rate of mortality of 35.3 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 34.7 per 1,000. There were but 15 deaths from zymotic diseases registered, being 18 below the average for the corresponding week of the last ten years; and 3 under the number for the week ending February 12th; they comprise 1 from measles, 3 from scarlet fever (scarlatina), 2 from whooping-cough, 1 from diphtheria, 4 from enteric fever, 3 from diarrhœa, etc. Sixty-four deaths from diseases of the respiratory system were registered, being 18 over the number for the preceding week, but 1 under the average for the seventh week of the last ten years, they comprise 47 from bronchitis and 8 from pneumonia or inflammation of the lungs. The deaths of 23 children under 5 years of age (including 17 infants under 1 year old) were ascribed to convulsions. Two deaths were caused by apoplexy, 11 by other diseases of the brain and nervous system (exclusive of convulsions), and 9 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 32 deaths, mesenteric disease 5, and cancer 5. Two deaths from accidents or negligence were registered. In 33 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending February 26th, that the annual death-rate recently averaged 32.3 per 1,000 in the three principal Indian cities; it was equal to 23.0 in Bombay, 31.4 in Calcutta, and 45.9 in Madras. Cholera caused 22 deaths in Calcutta, and [illegible] in Madras; "fever" mortality was very considerably greater in Calcutta and Madras than in Bombay. According to the most recently received weekly returns, the annual death-rate averaged 28.1 per 1,000 persons estimated to be living in twenty-one of the largest European cities, and exceeded by no less than 6.8 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 32.7, and showed an increase upon the rates in previous weeks; part of this excess was due to the fatal prevalence of diphtheria and typhoid fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 23.8, and ranged from 16.0 in Stockholm to 27.8 in Christiania; 12 fatal cases of whooping-cough occurred in Copenhagen, and 8 of scarlet fever in Christiania; diphtheria and croup caused 8 deaths in Christiania, 3 in Copenhagen, and 3 in Stockholm. In Paris, the death-rate was 27.0, which exceeded the rates in recent weeks, and was no less than 7.7 above the rate that prevailed during the corresponding week in London; the deaths included 62 from measles, 35 from diphtheria and croup, and 29 from typhoid fever. The 204 deaths in Brussels, of which 13 resulted from diphtheria and croup, gave a rate of 23.5, showing an increase upon the rates in the two previous weeks. No returns from Geneva have been received since the beginning of the year. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 23.1, the several rates being 19.9 in the Hague, and 23.4 in Amsterdam and Rotterdam; diphtheria caused 6 deaths in Amsterdam; whooping-cough showed some prevalence in Rotterdam, and measles both in Amsterdam and the Hague. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 27.3, and ranged from 21.1 in Berlin and 22.9 in Dresden, to 33.8 in Prague and 36.6 in Buda-Pesth. Small-pox caused 26 deaths in Buda-Pesth and 8 in Prague, and "fever" 10 in Hamburg; diphtheria and croup caused considerable mortality in most of these German cities, but especially in Hamburg, Dresden, and Buda-Pesth. The mean death-rate in three of the largest Italian cities was 34.6, the several rates ranging from 28.0 in Venice to 37.0 in Turin; small-pox caused 28 deaths in Rome, 6 in Turin, and 1 in Venice; 6 deaths from scarlet fever were also reported in Turin. In Cairo the death-rate was 45.7, and in Alexandria 41.7; diarrhœal diseases caused 108 deaths in Cairo and 29 in Alexandria; small-pox 2 deaths both in Cairo and Alexandria; and typhoid fever 10 in Cairo. In four of the largest American cities the recorded death-rate averaged 24.4, and ranged from 18.0 in Baltimore to 28.9 in New York. Diphtheria caused 56 deaths in New York, 14 in Brooklyn, 26 in Philadelphia, and 4 in Baltimore; 7 deaths from small-pox were returned in New York; and typhoid fever caused 14 deaths in Philadelphia and 6 in Baltimore.

MEDICO-LEGAL AND MEDICO-ETHICAL.

DEATHS BY POISON.

The *Pharmaceutical Journal* publishes a very useful article on the subject of "Deaths by Poison," suggested by the Registrar-General's report, giving the records of deaths ascribed to poison. The article illustrates the extent to which "death by poison, either accidental or by suicide, has been caused by poisons of those kinds which can be obtained from extra-pharmaceutical sources. The year 1885, to which the report now published applies, was remarkable for the small ratio of violent deaths as compared with any preceding years during which these reports have been issued. The total number of such deaths was 17,268, and of these 14,939 are classed as being due to accident or negligence, and 2,007 as suicidal. There has been a great reduction in the deaths from accident, and the total mortality from suicide, which had been gradually increasing in recent years, was lower than in any year since 1878. From the classification of the deaths by accident and suicide according to particular causes, it appears that out of the 14,939 under the general head of accident or negligence, 343 are recorded as due to poison; and out of the 2,007 under the head of suicide, 280 are recorded as being due to poison. The total number of deaths by poison during the year is, therefore, 623, or rather less than 3.7 per cent. of the total deaths by accident, negligence, and suicide. Of the deaths by suicide, 13.95 were caused by poison, but of the deaths by accident or negligence only 2.29 are recorded as having been due to poison. So far as the public safety is concerned in connection with the sale of poisons, it is therefore satisfactory to find that, as compared with other causes of death by accident or negligence, neither the actual number nor the relative proportion of deaths thus caused by poison is considerable. In the case of suicide, as might be expected, the proportion of deaths due to poison is larger; but even in this case it is in fact one of the causes to which the smallest number of deaths is due. Among the deaths by suicide from poisoning, the number of males was about 75 per cent. in excess of that of females, and in the cases of death by accident or negligence it was upwards of 80 per cent. in excess, though in this latter case the relation may be more accidental."

As regard the cases of death by poisoning from accident or negli-

gence, the narcotic preparations were the cause of the greatest number of deaths. "They comprise opium, laudanum, morphine, soothing syrup, cordial, paregoric, and chlorodyne, to which no less than 108 out of the total number of 343 deaths are ascribed. The class of substances which stands next in order comprises articles which are not for the most part poisons by Act of Parliament; such as the mineral acids—sulphuric, nitric, and hydrochloric acids—and carbolic acid, which have been the cause of death in 38 cases. The more deadly poisons, such as strychnine, prussic acid, aconite, belladonna, cyanide of potassium, nux vomica, etc., taken altogether, are accountable for a very much smaller number of deaths, 16 in all. The remaining cases of poisoning under this head comprise 20 that are ascribed to alcohol, chloroform, and chloral, 24 that are referred to chemical products, such as caustic alkalies, phosphorus, bromide of potassium, and lucifer matches; 99 ascribed to arsenic, mercury, lead, copper, and zinc; and 33 to miscellaneous articles, some of which are not described."

Among the cases of death by suicide from poison, the large number of 88, or 31.4 per cent. of the whole, is reported as having been caused by the mineral acids, carbolic acid, and oxalic acid. Next in order comes the class of narcotic poisons—opium, laudanum, morphine, chlorodyne, paregoric, soothing syrup, etc., to which 53 cases of death are attributed. Of the remaining 139 cases, 49 are attributed to belladonna, prussic acid, oil of almonds, cyanide of potassium, and aconite, 2 to chloroform, 20 to strychnine, nux vomica, and vermin killers, and 43 to kinds of poison that have not been stated. In addition to these cases of death by poison, three cases are recorded of murder of children under 5 years of age by poison, where narcotic preparations and a poisonous liniment were employed. These statistics will serve to show the direction in which legislation may be needful in regard to the sale of poisons.

A SATISFACTORY VERDICT.

An instance of the vexatious charges to which medical men are exposed is afforded by the case of Leonard *v.* Leonard, Brown, and Allatt, which came before the President of the Divorce Court last week. The petitioner sought for a divorce on the ground of the misconduct of his wife with the two co-respondents, one of whom, Mr. Brown, had been for a series of years the medical attendant of the respondent. Mr. Brown denied the charge on oath, and produced his books, which accounted for his frequent visits to Mrs. Leonard. The President said there was no evidence of the slightest familiarity between Mr. Brown and Mrs. Leonard. Indeed, he felt that he was scarcely justified in allowing the case to go to the jury; but he allowed it to go to them because he thought it would be more satisfactory to have their verdict. The jury found that Mr. Brown had not been guilty of misconduct. The President pronounced a decree *nisi* because of the adultery of the respondentwith Allatt, against whom he gave costs. He dismissed, with costs, the petition against Mr. Brown.

SPURGIN *v.* NICHOLSON.

FURTHER subscriptions:	£	s.	d.
Dr. Hodgson (Aspatria	0	10	
Dr. Briggs ,, ...	0	1	6
Total subscribed	32	13	6

DUTIES OF MEDICAL PRACTITIONERS UNDER THE CRIMINAL LAW AMENDMENT ACT.

P. S. R. writes: A girl, aged 15 years and 9 months, was brought by her mother to be examined, with the result that she was found to be about five months advanced in pregnancy, so that she must have been seduced when she was 15 years and 4 months old. Is it any business of the medical practitioner to inform the authorities to look after the seducer? as, under the Criminal Law Amendment Act, it is a misdemeanour to seduce a girl under 16 years of age, even with her consent.

*** After a careful consideration of the point involved in our correspondent's judicial interrogatory as to his duty in the case referred to, we fail to recognise that it in any way devolves upon him to inform the authorities of the incident in question. The moral obligation to do so, from our point of view, rests, *de facto*, with the aggrieved parents, and not on the practitioner consulted.

ATTENDANCE ON THE SONS OF MEDICAL MEN WHILE AT SCHOOL.

L.M.C.T. asks whether it is usual for medical men, appointed to the charge of public schools, to receive fees for attendance on sons of professional brethren. He does not allude to those cases where the doctor receives a salary, and where "medical attendance" is included in every boy's bill, whether sick or well. He means where he is sent for for each case of illness. The fee goes from one medical man to the other through the school authorities. It is hard to expect that a perfect stranger should be asked to attend one's boy without remuneration, and yet if the boy were at home any of the local medical men would attend without fee.

*** The principle laid down in the medico-ethical rule published in the JOURNAL of February 12th, page 356, column 2, relative to the professional services of practitioners to each other, their families, widows and children, should, in our opinion, govern the case referred to by "L.M.C.T. If, however he demurs to the principle of non-remuneration, as approved and accepted by the profession at large, the rule in question does not expressly prohibit him from charging for his professional services, in so far as it distinctly sets forth that it is *not* as a matter *of right*, but *of professional courtesy*, that our brethren, their wives and families, are conditionally entitled to the gratuitous services of the profession. At the same time, we are clearly of opinion that our correspondent will do well not to deviate from the usual custom of the profession.

PAYMENT OF FEES TO MEDICAL WITNESSES IN THE CORONER'S COURT.

A. C. writes: I am honorary surgeon to a cottage hospital, where we have no resident house-surgeon. A woman was brought under my care there who had fallen downstairs (after being beaten by her husband), and died from effusion of blood on the brain. The coroner ordered me to make a *post-mortem* examination, which I did, and gave evidence at the inquest (when a verdict of manslaughter was returned against the husband, and the case has just been tried at the assizes). The coroner refuses to pay me anything, on the ground that I am connected with the hospital. I explained to him my position—that I had no pay whatever, and was an honorary surgeon; but he declined. Can I claim my fees, and are you aware whether the point has been tried?

*** We regret to find our correspondent in the unpleasant position of having to do so much work for nothing. It is hard, after giving his services gratuitously as honorary surgeon to the cottage hospital, that he should be compelled to spend extra time and labour in making a *post-mortem* examination and giving evidence in the coroner's court, and then find that he is not entitled to remuneration. Such is the fact, and such we are constrained to say is the state of the law as it at present stands. When the Medical Witness Act, 6 and 7 Will. IV. c. 89, was passed, entitling medical men to receive fees in the coroner's court, and fixing the sum payable, the medical officers of hospitals, public infirmaries, asylums, and other medical institutions, were expressly exempted from its operations when giving evidence as to the death of patients dying *within* the walls of such institutions. Now, we presume a cottage hospital is a hospital within the meaning of the Act, and hence, on the application of our correspondent to the coroner for fees, he declined to pay them. We are not aware of any case where action has been taken against the coroner for the recovery of fees by the medical officer of a hospital, or notably a cottage hospital; but, about three years ago, the medical officer of the Croydon parish infirmary sued the Coroner in the County Court for fees which were claimed for giving evidence as to the death of a person who died in the said infirmary. The medical officer in question was supported by the Poor Law Medical Officers' Association, and counsel on both sides appeared. The case was fully argued, and, after a careful summing up by the judge, he gave his decision in favour of the defendant, stating that, in his opinion, "an infirmary supported by the rates was a public infirmary within the meaning of the Act." The Poor Law Medical Officers' Association then decided to appeal against this decision, and subscriptions were collected for the purpose; but, as far as we know, the appeal was not prosecuted, and the case, therefore, stands good until the judgment is reversed. At the time we fully reported on the matter, and several important letters were inserted in the JOURNAL on the subject. In defining "Hospitals," the Act says "whether supported by endowments or by voluntary contributions," and doubtless the cottage hospital in question would come under this description. Should the person die outside the hospital, even though he may have been for months an in-patient, the medical officer would then be entitled to be paid. This certainly appears an anomalous state of the law, which should be rectified.

ERRATUM.—In the leading article on the Lunacy Acts Amendment Bill, in the JOURNAL of February 26th, page 464, for "*primitive* effect of the Bill on Workhouse Medical officers," read "*punitive* effect," etc.

OBITUARY.

THOMAS FRASER, M.A., M.B., C.M.

We regret to notice the death of Dr. Thomas Fraser, resident assistant medical officer of the Dumfries Asylum. He graduated at Edinburgh University in 1884, and gained the appointment of assistant to the Professor of Clinical Medicine, and resident physician in the Royal Infirmary. Subsequently he acted as resident surgeon and assistant to Professor Chiene, and latterly as assistant resident medical officer under Dr. Rutherford in the asylum at Dumfries. Although young in years and in the profession, he was respected by all to whom he was known, and endeared to those who had more intimate knowledge of him by reason of his modest demeanour, his kindly nature, and upright disposition.

JEAN THÉOPHILE GALLARD.

The Faculty of Medicine of Paris sustained a heavy loss by the death of Dr. Jean Théophile Gallard, who expired suddenly on January 31st, in the fifty-ninth year of his age. He was Physician to the Hôtel-Dieu, a Member of the Academy of Medicine, President of the Obstetrical and Gynæcological Society of Paris, and Officer of the Legion of

Honour. He was also an Honorary Fellow of the British Gynæcological Society. He was appointed *interne* of the Paris hospitals in 1850, and won the gold medal in 1854. He taught gynæcology for many years with great success at the Pitié and Hôtel-Dieu. His excellent work, *Leçons Cliniques sur les Maladies des Femmes*, was published in 1879. He also wrote works *Sur la Menstruation et ses Troubles*, 1885, and *Maladies des Ovaires*, 1886. Numerous essays and memoirs of his are scattered through various journals. To his high scientific attainments he united a genial disposition, which made him loved as well as respected. The British Gynæcological Society, at its meeting on February 23rd, passed a resolution of sympathy with his widow and family.

BRIGADE-SURGEON J. H. HUNT, L.R.C.S.I.

We regret to announce the death of Brigade-Surgeon J. H. Hunt, Medical Staff, which occurred at North Camp, Aldershot, on February 23rd. The deceased gentleman received his professional education at the Meath Hospital, Dublin. When a student he gained the Royal Humane Society's silver medal for jumping from Carlisle Bridge into the Liffey, and rescuing a boy from drowning. He entered the Army Medical Department in 1858, and was stationed at Halifax, N.S. During the Trent affair he accompanied the force in the winter march from New Brunswick to Quebec, and soon afterwards was gazetted assistant-surgeon to the 1st Battalion Rifle Brigade. After serving a number of years with his regiment in Canada, he proceeded to India. His next service was in South Africa, in 1879-80, when he took part in the Zulu Campaign, and was present at the battle of Ulundi. He was mentioned in despatches, and received the medal and clasp. His service since then has been divided between England and the Madras Presidency. The extremes of heat and cold, together with the hardships of the war in Africa, told upon a constitution at one time strong, and the late cold weather endured in an Aldershot wooden hut, brought on capillary bronchitis, which terminated fatally.

Brigade-Surgeon Hunt was a good type of the army surgeon, being a man of excellent physique, good features, and genial manner. The son of an officer, he possessed the military instinct in a high degree, and was a strict disciplinarian. No medical officer in the service was better known or more liked, and wherever the English army is stationed his loss will be regretted. He was buried at Aldershot with military honours. Surgeon-General Hendley, C.B., and every officer and man of the medical staff not on duty, attended, as did Major-General Buchanan, and numerous staff and other officers and men of the division. Brigade-Surgeon Hunt leaves a widow and one child.

INDIA AND THE COLONIES.

INDIA.

The Countess of Dufferin's Fund.—The second report of the Committee of the Countess of Dufferin's Fund gives the following information respecting the progress of this work: "The central fund on January 18th, 1886, brought forward a balance of 146,188 rupees. Since that date, 76,109 rupees have been received, raising the capital sum to 222,297 rupees. Of this money, 14,575 rupees have been spent on the objects of the association, 1½ lakhs have been invested in Five per cent. Calcutta Municipal Debentures, and half a lakh in Four-and-a-half per cent. Government securities. An additional sum of £641 was paid into Coutts's Bank, London, and of this £212 had been expended. The annual income of the central fund as estimated is 19,450 rupees, which is partly made up of 9,750 rupees interest on investments, of 2,700 rupees from annual subscribers, and of a sum contributed by the branches, which this year amounted to 2,700 rupees. In addition to this, the central fund received 2,400 rupees a year in trust; £600 of the money collected in England was kept there, and used as a fund from which to supply the passage-money of ladies coming out to India in connection with the association. The present income is very small, and very far below the exigencies of the situation.

Medical Education of Women in India.—The first annual report of the Bombay Branch of the Countess of Dufferin's Fund for supplying female medical aid and instruction to the women in India states that Rs.65,915,107 had been collected. A training school for nursing and midwifery will, it is hoped, be established in connection with the Cama Hospital, and the erection of living quarters and a lecture-room for this purpose is in contemplation. The number of female medical students attending the Grant Medical College since the opening of this class has been in successive years as follows: in 1884, 13; in 1885, 17; and 1886, 20.

Brigade-Surgeons Indian Army Medical Staff.—The *Times of India* writes: We are given to understand that the claims of the brigade-surgeons of the Medical Staff in India, to which we devoted some remarks in a leading article some months ago, are likely to be fully ventilated in the House during the discussion on the Army Estimates, as Colonel Hughes-Hallett, M.P., and others are likely to interest themselves on behalf of the medical officers. The anomalous position and pay of officers of this rank in India require attention. A misunderstanding seems to prevail in regard to the relative rank of brigade-surgeons and surgeons-major over twenty years' service who rank as lieutenant-colonels. They do not take position and precedence as junior of that rank. Medical officers of these ranks take precedence of lieutenant-colonels according to date of completion of twenty years' service; and the Presidency and other Army Lists define only too distinctly the dates from which the relative rank is given. Instances not infrequently occur, which point to an imperfect comprehension of this subject by those who should know better.

HOSPITAL AND DISPENSARY MANAGEMENT.

METROPOLITAN ASYLUMS BOARD.

At the last fortnightly meeting of the Managers of the Metropolitan Asylums Board, a discussion took place upon a communication from the Local Government Board as to the non-admission of epileptic imbeciles to the Caterham Asylum, in consequence of the wards being full, and requesting the managers to consider whether, by addition to the nursing staff or by some other means, it might be possible to render a refusal a very rare occurrence. The comparative return of the number of fever patients in the several hospitals showed that at the Eastern Hospital 47 patients had been admitted during the fortnight; 1 had died, 50 were discharged, and 247 remained under treatment; 221 were suffering from scarlet, and 26 from enteric fever. At the North-Western and South-Western Hospitals there are at present no patients at all, the total accommodation respectively being 166 and 322 beds. At the Western Hospital, 31 patients had been admitted; 2 had died; 124 remained under treatment, 123 of whom were suffering from scarlet fever. At the South-Eastern Hospital, 46 patients had been admitted; 6 had died, 185 remaining under treatment, of whom 135 were scarlet fever patients, 16 were suffering from typhus—this being the only hospital at which there are typhus patients—and 33 from enteric fever. There are 82 beds available, and 103 in reserve. The totals for the fortnight show that 124 patients had been admitted, as compared with 90 in the preceding two weeks; 9 had died, compared with 12; 556 remained under treatment, against 568 in the preceding fortnight. Of these, 479 were suffering from scarlet fever; 16 from typhus, against 6; and 59 from enteric fever, compared with 72. The total number of beds available at all the hospitals under the control of the managers is 248, while there are 662 beds in reserve, the total accommodation being 1,465 beds. There is, happily, at present an almost complete immunity from small-pox in the metropolis.

The Ambulance Committee reported upon the reference from the Board as to "retaining some accommodation at each of the hospitals for small-pox cases," that the committee had instructed the superintendents of the Eastern and Western ambulance stations to undertake the removal of such small-pox cases as might arise in the neighbourhoods of the hospitals adjoining those stations, at times when the central office is closed.

SIR PATRICK DUN'S HOSPITAL.

A striking example of the effects of the non-payment of rent in Ireland is furnished in a statement lately published by the Governors of this hospital. Its revenue is chiefly derived from the rents of land in the County Waterford, and the serious and alarming falling off in the payment of these rents is shown by the following return of receipts from the estate in the last three years:—

1884 ...	£1,270
1885 ...	£1,050
1886	£385

The Governors have no available funds to meet the immediate expenses of the hospital, as they have been obliged during the last six years to sell out stock to the amount of £3,558 18s. 11d. to meet the pressing demands of the poor district in which the hospital is situated. An urgent appeal is now therefore made for donations and subscriptions to enable the Governors to continue the work of the hospital on its present scale. A bazaar in aid of its funds is to be held at the College of Physicians in April next. The late Mrs. Hughes has left

a legacy of £1,000 to the hospital, which, however, in accordance with the wishes of the deceased lady, is to be expended towards the construction of the projected and much-needed fever wing.

THE CANCER HOSPITAL, BROMPTON.

THE annual report of the Cancer Hospital, Brompton, states that, during the year 1886, 1,029 new patients were received, 652 being in- and 976 out-patients. Lectures are given during the first three months of the year by the medical staff, which are open to all medical practitioners and students.

MEDICAL NEWS.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received certificates to practise on Thursday, February 24th, 1887.

Carver, Arthur Richard, Wenallt, Carmarthenshire.
Olding, Arnold Ebenezer, 5, Lancaster Villas, Brighton.
Theobalds, Owen LeMare, East Love, Cornwall.

MEDICAL VACANCIES.

The following vacancies are announced.

ASHTON-UNDER-LYNE DISTRICT INFIRMARY.—House-Surgeon. Salary, £80 per annum, with board, etc. Applications by March 8th to W. Bottomley, Esq., 120, Stamford Street, Ashton-under-Lyne.

BOSCOMBE PROVIDENT INFIRMARY, Bournemouth.—Resident Medical Officer. Salary, £60 per annum, with board, etc. Applications by March 9th to J. Atkinson Hosker, Esq.

CHELSEA HOSPITAL FOR WOMEN, Fulham Road, S.W.—Medical Officer. Salary, £60 per annum, with board, etc. Applications by March 12th to the Secretary.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Pathologist. Applications by March 21st to the Secretary, 24, Finsbury Circus, E.C.

DERBYSHIRE GENERAL INFIRMARY.—House-Surgeon. Salary, £100 per annum, increasing to £150, with apartments, etc. Applications by March 26th to the Secretary.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell.—Resident Clinical Assistant. Board and lodging. Applications by March 28th to the Secretary.

GLAMORGANSHIRE AND MONMOUTHSHIRE INFIRMARY AND DISPENSARY, Cardiff. Ophthalmic Surgeon. Applications by March 15th to the Secretary.

HOLBORN UNION, Mitcham Workhouse.—Medical Officer. Salary, £100 per annum. Applications by March 14th to the Clerk to the Guardians, Clerk's Office, Workhouse, Gray's Inn Road, W.C.

HASTINGS, ST. LEONARD'S AND EAST SUSSEX HOSPITAL, Hastings.—House-Surgeon. Salary, £70 per annum, with board, etc. Applications by March 25th to the Secretary.

INFIRMARY FOR CONSUMPTION, Margaret Street, Cavendish Square, W.—Physician. Applications by March 12th to the Secretary.

MALE LOCK HOSPITAL, 91, Dean Street, Soho, W.C.—House-Surgeon. Salary, £50 per annum, with board, etc. Applications by March 15th to the Secretary, Lock Hospital, Harrow Road, W.

NOTTINGHAM GENERAL HOSPITAL.—Resident Medical Assistant. Board, lodging and washing. Applications by March 16th to the Secretary.

NARBERTH UNION.—Medical Officer for District No. 4. Salary £45, with extra fees. Applications by March 19th to J. Thomas, Esq.

NORTH-WEST LONDON HOSPITAL, Kentish Town Road, N.W.—Assistant-Physician. Applications by March 10th to the Secretary.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, Queen Square, Bloomsbury, W.C.—Laryngologist. Applications by March 5th to B. Burford Rawlings, Esq.

OWENS COLLEGE, MANCHESTER. — Senior Demonstrator in Physiology. Stipend, £150 per annum. Applications by March 21st to the Registrar.

PADDINGTON WORKHOUSE INFIRMARY.—Assistant Medical Officer and Dispenser. Salary, £100 per annum, with board, etc. Applications by March 5th to H. F. Aveling, Esq.

QUEEN'S JUBILEE HOSPITAL, Gloucester Terrace, Queen's Gate, S.W.—Ophthalmic Surgeon. Applications by March 8th to the Secretary.

STOCKPORT INFIRMARY.—Assistant House-Surgeon. Salary, £70 per annum. Applications by March 15th to the Honorary Secretary.

UNIVERSITY OF LONDON.—Examiners in Medicine. Applications by March 29th to the Registrar.

UNIVERSITY OF GLASGOW.—Examiners in Botany, Zoology, Chemistry, and Materia Medica. Applications by March 15th to Dr. Anderson Kirkwood, 145, West George Street, Glasgow.

WANDSWORTH DISTRICT BOARD OF WORKS, Putney Parish.—Medical Officer of Health. Salary, £75 per annum. Applications by March 21st to the Clerk to the Board, Battersea Rise, S.W.

MEDICAL APPOINTMENTS.

CHARNLEY, William, M.A., M.D., M.R.C.S., appointed Surgeon to the Shropshire and Wales Eye, Ear and Throat Hospital, *vice* Edwyn Andrew, M.D., deceased.

HARWELL, J. F., M.B. and C.M.Edin., appointed Assistant House-Surgeon to the Liverpool Northern Hospital, *vice* C. Charlton, M.B. and C.M.Edin., resigned.

PENNY, F., M.R.C.S., L.S.A., appointed House Surgeon to the Doncaster General Infirmary and Dispensary, *vice* J. S. Gelston, L.K.Q.C.P.I., resigned.

POLLARD, Reginald, M.B., M.R.C.S., appointed Honorary Physician to the Western Hospital for Consumption, Torquay, *vice* H. S. Hounsell, M.D., M.R.C.P., deceased.

STORRAR, W. M., L.R.C.P., L.R.C.S.Edin., appointed Medical Officer and Public Vaccinator to the Eastham District of the Wirral Union, *vice* J. W. Burbidge, resigned.

TYRRELL, E. M., M.B., C.M.Edin., appointed Junior Assistant Medical Officer to the Garlands Asylum, Carlisle, *vice* T. D. Evemlees, M.B., resigned.

WEST, Samuel, M.D.Oxon., appointed Assistant Physician to St. Bartholomew's Hospital, *vice* J. Wickham Legg, F.R.C.P., resigned.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—ODONTOLOGICAL SOCIETY, at 8 P.M. Business: Casual communications by Messrs. A. Winterbottom, F. Henri Weiss, J. Ackery, A. S. Underwood, C. Vincent Cotterell, and W. Harrison (Brighton). Paper by Dr. Dudley Buxton: On the Physiological Action of Nitrous Oxide Gas.

MEDICAL SOCIETY OF LONDON. General Meeting for election of officers and Council. Paper by Mr. Marmaduke Sheild: On a case of Perforation of Femoral Artery and Vein by Ulceration from Sloughing Bubo: Profuse Hæmorrhage, Ligature of both Vessels.

TUESDAY.—ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M. Dr. Debout d'Estrées: On Gouty Parotitis and Gouty Orchitis (communicated by Dr. Garrod, F.R.S.). Dr. W. Ewart and Mr. R. F. Benham: A case of Empyema, with Pulmonary Gangrene following Enteric Fever, treated by Perflation.

WEDNESDAY.—BRITISH GYNÆCOLOGICAL SOCIETY, 8.30 P.M. Specimens will be shown by Mr. Lawson Tait, Dr. Edis, and Dr. Fancourt Barnes. Dr. Purcell: A report of three cases of Vaginal Hysterectomy.

HUNTERIAN SOCIETY. 1. Dr. Horrocks: Notes on some cases of Uterine Tumour, accompanied by Pyrexia. 2. Dr. Turner: Actinomycosis.

EPIDEMIOLOGICAL SOCIETY OF LONDON, 8 P.M. Dr. Stephen Mackenzie, for Dr. Wykeham Myers: Further Observations on Filaria Sanguinis Hominis in South Formosa; and demonstration of the living filariæ in the blood of a patient suffering from that disease.

ROYAL MICROSCOPICAL SOCIETY, 8 P.M. Mr. G. Massu: On the Differentiation of Tissues in Fungi. Dr. H. J. Johnston-Lavis and Dr. G. C. J. Vosmaer: On Section-cutting of Sponges and other similar structures with soft and hard tissues.

THURSDAY.—OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM, 8.30 P.M. Living and card specimens at 8 P.M. Dr. C. E. Beevor: Ophthalmoplegia Externa without any other symptoms. Dr. Sidney Phillips: Case of Peculiar Associated Movement of Upper Lid. Mr. Brudenell Carter: 1. Case of large spontaneous Vitreous Hæmorrhage in a young man; 2. Painting by an artist after Cataract Extraction. Mr. J. G. Mackinlay: Paralysis of both External Recti. Mr. Karop: Fibroid Degeneration of Ciliary Muscle. Mr. Marcus Gunn: Pupillary Movement in association with Lateral Deviation of Eyeballs.—Papers: Dr. Brailey and Mr. Hartley: Tubercular Disease of Choroid. Mr. Simeon Snell: Treatment in Sclerotic Wounds. Dr. Gowers: On Conjugate Ocular Palsy with Nystagmus. Mr. W. H. Jessop: Sudden and lasting Lateral Nystagmus. Mr. Nettleship: On three cases showing Light Blindness, with peculiar Retinal Changes.

FRIDAY.—CLINICAL SOCIETY, 8.30 P.M. Dr. de Havilland Hall: On Pneumothorax occurring in persons apparently healthy. Mr. Eve: On a case of Intra-peritoneal Excision of the Rectum, with recovery. Mr. Keetley: A case of Scoliosis. Mr. Davies-Colley: A case of Contraction of the Metatarso-phalangeal Joint of the Great Toe (Hallux flexus).

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTHS.

COTTELL.—On February 25th, at Brambledown, Crouch Hill, the wife of Surgeon A. Cottell, Medical Staff, of a daughter.

BRANTHWAITE.—On February 26th, at Willesden, the wife of R. Welsh Branthwaite L.R.C.P.Lond., M.R.C.S., of Rickmansworth, Herts, of a daughter.

MARRIAGES.

CORRY—MEAKIN.—February 22nd, at Holy Trinity, Anerley, London, William Corry, M.D., J.P. of Drumquin, co. Tyrone, to Lily, eldest daughter of the late William Meaking, of Walthamstow, Essex.

WELSH—GRIFFITH.—February 22nd, at St. Peter's Church, Brighton, Joseph Welsh, F.F.P.S., third son of the late William Henry Welsh, M.D., of Eccles, Manchester, and Clones, co. Monaghan, Ireland, to Isabella Mary Jane Katharine, only daughter of the late Rev. William Williams Griffith, Rector of Heyope, Radnorshire.

SHADWELL—BOURNE.—February 26th, at St. Stephen's Church, Shepherd's Bush, by the Rev. G. Collett, M.A., assisted by the Rev. A. Matthey, D.D., Harry Winstanley Shadwell, M.R.C.S., L.R.C.P.Lond., of Acton, to Mabel Constance Harriette, youngest daughter of the late Captain G. Sealey Bourne, R.N.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY.....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M: North-west London; Chelsea Hospital for Women.

FRIDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY.....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, M., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

QUERIES.

CAN VACCINATION BE A CAUSE OF OPHTHALMIA?

A MEMBER writes: I should be glad if you or any of your readers could give me any information on the following cases. A child 2 years old was brought to me, with all the appearance of neglected purulent ophthalmia, which had been allowed to run its course for 6 weeks or more. Its eyes were hopelessly destroyed, and it died in a week after I first saw it. Two or three days after its death, its infant brother, 7 weeks old, took the same affection in the eyes, with great swelling of the lids, some purulent discharge, followed by a sanguineous one, rapid destruction of the eyes, and death within a fortnight. The parents are bringing a charge against the medical man who vaccinated the first child, and I am anxious to be able to help him against what I believe to be a most unjust accusation. Please give me the benefit of your opinion as to whether the above symptoms could be produced by vaccine virus introduced in the ordinary way months before.

*** It is not at all unlikely that the morbid symptoms, rapid destruction of the corneæ, and subsequent death of the patient, were due in each case to diphtheria of the conjunctiva. It is proper, however, to state that the evidence is not sufficient to found a sure opinion upon. It would be necessary to know, among other important points, whether diphtheria was in the house or neighbourhood; whether there was any affection of the breathing; the dates of vaccination, of the affection of the eyes, and of the deaths. It most certainly certainly cannot be a result of vaccination.

INSTRUCTION IN MASSAGE.

X. Y. Z. asks where the method of "massage" is properly taught, or where practical lessons can be obtained.

CLIMATE OF RANGOON.

M.R.C.S. wishes for information as to the climate of Rangoon. He has a patient whose business requires him to go there for twelve or eighteen months, who is anxious to know what he should more especially avoid and be prepared against.

ANSWERS.

J. A. CONES, M.R.C.S., will obtain the information he desires by writing to Charles Piercy Austin, Esq., Acting Secretary, Combined Court Government Medical Service, British Guiana.

THE CLIMATE OF BUENOS AYRES, ARGENTINA, AND URUGUAY.

DR. D. H. CULLIMORE writes: In answer to your correspondent, I wish to say that these countries are healthy and temperate regions, capable of perfect colonization by Northern Europeans, the natality exceeding the mortality by 2 to 1.

Physically, the Argentine Republic consists of three divisions: the seaward belt, covered with wild artichokes; the great middle pastoral region; and the arid zone between this and the Andes, the whole being one vast plain, almost entirely devoid of forest, which latter condition, probably, accounts for its freedom from endemic disease.

The city of Buenos Ayres is in lat. 34° 39′ S., the climate being humid and exceedingly variable, and characterised by brisk and frequent changes of temperature. The main temperature is 60° F., the mean of January 71°, of August 50°, that of Monte Video being similar, the extreme varying between 86° and 34°. The mornings are often hot, and the evenings stormy and wet, the thermometer falling between 50° and 60° in a few hours. The sky is generally clear and the air transparent, except in winter, when fogs often prevail for days without intermission, and there are heavy dews at night. Rain falls every month, often attended with storms, and generally in the morning and evening, the weather being serene during the day. The country is, however, drier towards the interior.

The prevailing diseases are eruptive fevers and chest affections, scarlatina, however, but rarely attacking children born in Europe. The mortality of picked French expeditionary corps, during twenty-five months' sojourn on the Rio Plata, was 0.44 per cent. per annum, one-fourth of which was caused by consumption. As the main characteristics of the climate there are dampness and great variability, with a hot sun, cold, hot, or moist winds, sudden changes and frequent storms, and houses generally badly adapted for modifying such influences, Buenos Ayres is clearly about one of the worst places to which a consumptive patient could proceed.

WILLIAM OSBORN, M.D., 1791.

S. OSBORN, F.R.C.S., writes: Some MS. Lectures on Midwifery, by Willliam Osborn, M.D., dated 1779, are in my possession. The engraving is possibly of the same man, and would be of exceptional interest to me. The book contains the following lines "On a Lady who died in Child-bed":

"The breath wch she resigns, while ye receives;
One comes into ye world, ye oy^r leaves;
His cares are all to come, hers all are past;
The son's first moment proves the mother's last;
His life, her death; her death his life supplies;
He kills in birth, and she in bearing dies.
October, 1782."

NOTES, LETTERS, ETC.

ORCHITIS SIMULATING TYPHOID.

MR. MAJOR GREENWOOD, Jun. (Haggerston), writes: I beg to enclose the following account of a case that has just occurred in my own practice, which I think will be of some interest to poor-law medical officers:

I received an order, a few weeks ago, to visit a young man, aged 19, at a common lodging-house, with a view to his immediate removal on account of illness and destitution. On my arrival he seemed very ill, having all the symptoms of typhoid fever, with the exception of the eruption, and diarrhœa; his temperature was 104°, and he had been very delirious. The history I was enabled to obtain from himself and his fellow-lodgers was also very typical of the ordinary onset of typhoid fever. Although I felt nearly sure the case was one of the above disease, I thought I would w till the next day before

sending him to the fever hospital, in spite of the pressure put upon me by the lodging-house keeper to order his immediate removal. When, however, on the following day, I found the symptoms intensified and the temperature 105°, I thought I should not be justified in delaying longer, and I accordingly signed the order for his removal. A week afterwards I was greatly surprised to learn from the superintendent of the parish infirmary that this same patient had been returned there as a case of orchitis, after remaining four days in the fever hospital. I immediately communicated with the medical officer of the fever hospital, from whom I learnt that on admission the case had been regarded as a typical one of typhoid fever, and that it was not till the evening of the day after that the true diagnosis of the case was apparent, when the patient complained of testicular pain, and had retention of urine. The patient steadily denies that up to that time he had any uneasiness whatever in that region. I may say that he confesses to having had gonorrhœa several weeks before, but says the urethral discharge had stopped some time before the onset of this illness.

Falling out of Teeth in Locomotor Ataxy.

Mr. T. W. W. Fay (formerly Surgeon to the Liverpool Dental Hospital) writes: With regard to the remark made by Sir James Paget, at the Pathological Society, on February 15th, to the effect that dentists may throw some light on the above subject, I venture to express my humble opinion that gout and syphilis sometimes are the factors in bringing about the *coincidence* alluded to. Moreover, as the teeth of persons who have been salivated frequently fall out, so mercury, possibly, is in some cases the subtle agent in inducing the condition known as locomotor ataxy. This being a hypothesis remains for pathologists to decide; but instances have come under my notice in dental practice which justify me in making this suggestion.

Poor Children's Aid Society.

The Poor Children's Aid Society seeks to rescue the poor children of our great cities from physical and moral degradation, by the supply of food and clothing, the maintenance of *crèches*, and by co-operating with other existing societies for the protection of the young, and the enforcement of parental obligations in those cases where parents leave their offspring to die from want, cruelty, and exposure. Gifts of clothing are solicited by the Society. The Honorary Secretary's offices are at 3, Agar Street, Strand, W.C.

Peripheral Neuritis.

Dr. David William Aitken writes: Permit me to add my mite on the subject of "Peripheral Neuritis." Several theories were advanced at the Brighton Meeting, but I think I can furnish one which better explains the clinical facts.

It seems to me that the study of the effect upon various organs of these poisons, which produce the above condition, throws a flood of light upon the subject. We find that under the influence of (say) alcohol, the special cells degenerate, while the connective tissue undergoes an inflammatory hypertrophy—this process, in its sequel, still more destroying the functional tissue of the organ.

Now I maintain that this is essentially the process in peripheral neuritis. But why is the condition peripheral? For two reasons: first, the connective tissue is greatest in amount distally, and so can do much more damage by its contraction to the isolated nerve-tubes; secondly, the nerve termination, which has been shown to be a prolongation of a central cell, is farthest away from the trophic centre, and so yields first to the poison, which has also its effect upon that centre, as shown by the lesions found in the spinal cord in severe cases.

To explain the "drop-wrist" in lead-palsy, it is necessary to note that the painter works chiefly with his wrist, in which the flexors are much more powerful than the extensors. As the up-stroke requires considerable exertion, while the flexors are further aided by the weight of the arm in the down-stroke, it seems manifest where the paralysis will soonest occur, namely, in the extensors.

Nerve-Stretching in Sciatica.

Dr. C. R. Illingworth writes: I have frequently cured sciatica by acupuncture and injection of morphine, but I think the measures advocated by Dr. Banks, in the Journal of November 20th, 1886, deserve the highest praise in the treatment of this painful affection. During the last four months I have cured five cases by this method, one of them (at two sittings) a bad one of twelve months' duration. I find the most efficacious movement one of vigorous flexion of the thigh towards the opposite shoulder, after complete flexion of the leg on the thigh, and the thigh on the abdomen. For this purpose I seize the leg just above the ankle with one hand, and the flexed knee with the other.

Right-Angle Traction in Dislocation of the Humerus.

Dr. Myer Dutch (Crewe) writes: It may be of interest to many to know that the "new method" now adopted for reducing dislocations at the shoulder-joint is only "new" in the sense of its reintroduction to notice. In Heister's *System of Surgery*, published about 150 years ago, there is an excellent plate which demonstrates reduction by right-angle traction. A patient is pourtrayed seated upon a stout chair, with his arm raised and extended at a right angle to his body. The surgeon, by the use of a napkin secured round his neck and passed under the head of the humerus, elevates that bone, and by his manipulation, aided by the extension force applied by an assistant, reduces the deformity. I may add that a second assistant steadies the patient's body by securely placing a towel round his chest.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. E. H. Smith, Kenton, Ohio; Mr. H. Thiele, Peshawur, N.W. India; Brigade-Surgeon J. Jameson, Aldershot; Dr. Casey, Windsor; Dr. Maxwell, Woolwich; Dr. Grant Bey, Cairo; Dr. N. Macleod, Shanghai; Mr. L. Bruck, Sydney; Dr. Bristowe, London; Dr. J. A. Mansell Moullin, London; Mr. H. A. Thomson, Edinburgh; Mr. B. C. Powell, Rosorea; Dr. Mortimer Granville, London; Mr. S. A. Tidey, London; Mr. F. R. Benham, London; Mr. C. L. Peel, London; Mr. J. A. Cones, Burgess Hill; Dr. Sidney Martin, London; Mr. F. S. Vincent, London; Dr. Park, Glasgow; An Hon. Brigade-Surgeon; Dr. J. W. Moore, Dublin; Mr. J. Welsh, Knighton; Mr. S. Osborn, London; Mr. J. Gilroy, Birmingham; Senex; Dr. J. Oliver, London; Mr. E. D. Evans, Wrexham; Mr. A. Macmillan, Hull; Messrs. Hertz and Colling-wood, London; Dr. R. Pollard, Torquay; Mr. H. E. Armstrong, Durham; Mr. W. Graves, Southsea; Dr. W. D. Spanton, Cheltenham; Mr. F. C. B. Webber, Nottingham; Dr. Ryan, Gravesend; Brigade-Surgeon F. E. Fishbourne, London; Mr. T. W. W. Fay, Liverpool; Dr. N. S. Davis, Chicago; Dr. J. Woodman, Exeter; Dr. J. Jones, New Orleans; Mr. C. H. Bishop, London; Messrs. Burroughs, Wellcome and Co., London; Dr. W. Squire, London; Dr. Drummond, Rome; Mr. Duncan, London; Dr. D. MacAlister, Cambridge; Sir W. Foster, Birmingham; Sir W. Guyer Hunter, London; Dr. Mackenzie Booth, Aberdeen; Dr. Warner, London; Dr. Braithwaite, Leeds; Mr. W. Cheyne, London; Mr. W. Weiss, London; Mr. J. S. Wood, London; Surgeon D. E. Crauford, Mymensuih, India; Mr. T. Dorman, Aldershot; Mr. C. J. Livett, London; Mr. A. L. Knaggs, Huddersfield; Mr. Bingham, Alfreton; Mr. A. E. Barker, London; Mr. W. J. Stephens, Brighton; Dr. J. D. McCaw, Portglenone, Belfast; Dr. K. Duncanson, Edinburgh; Mr. G. Mellin, London; Dr. Danford Thomas, London; Mr. E. H. Fenwick, London; Dr. Rentoul, Liverpool; Mr. L. Wainwright, London; Dr. B. B. Joll, Woolton, Liverpool; Mr. A. McLeman, Runcorn; Medicus; Mr. R. H. Fox, Dublin; Mr. A. H. Benson, Dublin; Mr. J. Hall Edwards, Birmingham; The Secretary of the National Health Society, London; Mr. E. M. Kelly, Nottingham; Mr. H. Mallins, Watton; Mr. H. A. Lawton, Poole; Mr. J. Hutchinson, London; Our Manchester Correspondent; The Secretary of the London Sanitary Protection Association, London; Mr. J. Brown, New Wandsworth; Dr. Sheen, Cardiff; Dr. Neale, London; Dr. Edge, Manchester; Mr. G. Stillingfleet Johnson, London; Mr. E. Gowing Scopes, Dartford; Surgeon-Major S. Deakin, Bombay; The Secretary of the Westminster Sanitary Aid Association, London; Mr. T. Clark, Blair; Dr. C. E. Abbott, Braintree; Mr. R. Clement Lucas, London; The Secretary of the Royal Microscopical Society, London; Mr. R. W. Braithwaite, Rickmansworth; The Secretary of the London Skin Hospital; Dr. Tatham, Salford; Mr. J. Dickson, Dorking; Dr. Rayner, London; Mr. H. L. Stevens, London; Mr. S. Paget, London; Mr. S. H. Steel, Abergavenny; Dr. J. B. Johnson, Campden; Dr. C. Gross, London; Mr. C. F. Rideal, London; The Honorary Secretary of the Nottingham Medico-Chirurgical Society; Dr. Edwardes, London; Mr. W. E. Kelbe, London; Dr. T. Hawksley, London; Dr. W. P. Herringham, London; Dr. G. R. Griffith, Carnarvon; Mr. P. H. Baily, London; A. M. S.; Dr. Sykes, London; Mr. B. Smith, Westgate-on-Sea; Mr. D. C. Haldeman, London; Mr. H. Dutch, Crewe; Mr. W. A. Carline, Lincoln; Sir A. Clark, Bart., London; Mr. J. Raley, Totnes; Mr. C. D. M. Palmer, Buxton; Dr. Ridley Bailey, Bilston; Mr. C. G. Campbell, Oldham; Dr. F. C. Turner, London; Surgeon-Major Duncan, London; Mr. W. Watson Campbell, Duns; Mr. C. M. Perry, Rotherham; Mr. G. Scott, Halifax; Mr. J. Bellamy, London; Our Liverpool Correspondent; Mr. C. James, London; Mr. N. Hannah, Ashton-in-Makerfield; Mr. J. Vesey Fitzgerald, Birmingham; Mr. F. J. Ford, Devonport; The Secretary of the Jacob Testimonial Fund, Dublin; Dr. Rogers, London; Mr. J. C. Surman, Burton-on-Trent; Major-General Johnson, London; Mr. J. Lowe, Workington; Dr. G. Henty, London; Mr. Skene Keith, Edinburgh; The Secretary of the St. Pancras and Northern Dispensary, London; The Secretary of the Glasgow and West Scotland Branch; Mr. R. H. A. Hunter, London; Dr. Léon Leibowitz, Vienna; Mr. T. Wardrop Griffith, Leeds; Mr. Dinsmore, Coldstream, N.B., etc.

BOOKS, ETC., RECEIVED.

Anecdota Oxoniensia. Vol i, Part ii. Alphita. Edited by J. L. G. Mowat, M.A. Oxford: Clarendon Press. 1887.

Short Contributions to Aural Surgery. By Sir W. B. Dalby, F.R.C.S., M.B. London: J. and A. Churchill. 1887.

Elementary Practical Biology (Vegetable). By Thomas W. Shore, M.D., B.Sc. London: J. and A. Churchill. 1887.

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OBSERVATIONS ON SUPRAPUBIC LITHOTOMY.

A Paper read before the Harveian Society of London, February, 1887.

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Mr. President and Gentlemen,—I owe the Society an apology for addressing it upon a subject of which I have but a limited personal experience. When your President, however, invited me, I willingly promised to do my best to present some considerations of general interest in this important matter. I desire to invite discussion on the present position of the high operation for stone, and the place it is likely to occupy in the future as a recognised surgical procedure.

Suprapubic lithotomy is an operation comparatively rarely performed. Gunther, from 1561 to 1851—a period of nearly 300 years—could only discover 260 cases of the high operation. My first experience of the operation made a strong impression upon me. In July, 1886, I removed a mulberry calculus from the bladder of a boy of seven by this plan. The operation was performed with antiseptic precautions, and was accomplished with great ease. The wound in the bladder, the divided aponeurosis, and the edges of the skin were afterwards successively and separately sutured with catgut. The boy may be said to have experienced no discomfort afterwards; one might, indeed, say that he enjoyed the greatest comfort, having been previously much distressed by the stone. The wound united by first intention. A catheter was introduced on one occasion only, and within one week the child was running about the ward perfectly well. (*Lancet*, 1886, vol. ii, p. 582.) A simpler, safer, and more satisfactory issue to an operation than this was, it would be impossible to find; and, could such results be generally realised, the suprapubic operation would speedily supplant every other for the removal of vesical calculus.

Historical.—The high operation for stone, recently revived in this country, is a very old method of dealing with the disease. As the route to the bladder above the pubes is the shortest and most direct, it must have occurred to surgeons to undertake it from a very early period. Nevertheless, Chelius and others consider Pierre Franco as having been the first to perform it in 1561.

Cheselden (*A Treatise on the High Operation*, 1723) was one of the first to practise it in England, and he has left an interesting account of the revival and disuse in his time of the high operation. Frère Côme, in 1779, strongly advocated it, and had a large and fortunate experience. In the last century and the early part of this, many treatises appeared, advocating the merits of the "new" operation; but it was soon displaced by the lateral method, and finally restricted to cases where the great size of the stone prevents its extraction through the lower outlet of the pelvis.

The past history of suprapubic lithotomy illustrates how new operations obtain for a time great vogue, and then fall into disfavour. Recently, Bigelow's rapid method of crushing and evacuating stone, put cutting operations for a time to one side. The antiseptic method brought them again to the front. Since Braune, Garson, and Petersen have shown the way to protect the peritoneum from injury, the high operation has been again revived and proposed, not only for large but for small stones, so that to some it would seem the only good operation. The first consideration in deciding between the high operation and perineal lithotomy is the relative danger to life, the second to ascertain by which method the removal of the calculus is best accomplished.

The technique of the operation has been much improved. Formerly the *sonde à dard* of Belmas (Fig. 2) was introduced to lift up and afterwards perforate the front wall of the bladder, and on this as a guide it was incised. Few operators would employ this instrument now; it is supplanted by the preliminary distension of the bladder and rectum.

Even so early as 1685, Rousset, in place of using the sound, injected the bladder with some mild injection, to elevate it above the pubes, and Douglas, Cheselden, and Morand, all advised moderate injection of the bladder. They deprecated excessive distension as always very painful and often impossible.

Franco advised the stone to be pushed forward with the finger introduced into the rectum. Blunt hooks and a special gorget (Fig. 1) were used for holding the bladder up after being opened, but the forefinger of the left hand is preferable to any form of instrument. In order to afford additional space, transverse incisions were sometimes practised in the deeper structures, either the aponeurosis or the muscles; but these are rarely needful, and they predispose to the occurrence of hernial protrusion through the cicatrix. In no case was an attempt ever made to close the vesical wound; charpie or unravelled linen was passed from the external surface to the bottom of the bladder, and the dressings renewed three or more times a day.

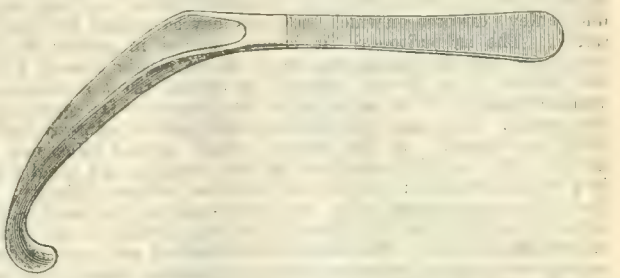


Fig. 1.—Retractor to hold up the superior angle of the wound in the bladder.

Various ingenious but wholly inadequate means were adopted with a view to guard against infiltration of urine, which, next to wounding the peritoneum, was properly regarded as the chief source of danger. Belmas held that the median wound should be carried as far down as the root of the penis, to obviate the chances of extravasation, which of course it had no effect in preventing.

For the purpose of better draining the urine, Pallucci thrust a trocar from within the bladder outwards, near its neck, so that there might be an opening in the perineum by the side of the anus, into which a cannula was inserted.

Civiale injected the bladder, but did not distend the rectum. The *sonde à dard* (Fig. 2) having been introduced, he made an exactly median incision, three or more inches in length, terminating just above the pubes. After exposing the aponeurosis, the linea alba was incised by the aponeurotome (Fig. 3) and the recti muscles separated. The extremity of the sound was now made to project in the wound, and the dart or stylet protruded through the bladder wall, the wound in it being subsequently enlarged by a knife passed along the groove in the stylet. The forefinger was then introduced into the upper angle of the bladder to hook it up, or the hooked gorget was introduced for this purpose, and also to protect the peritoneum.

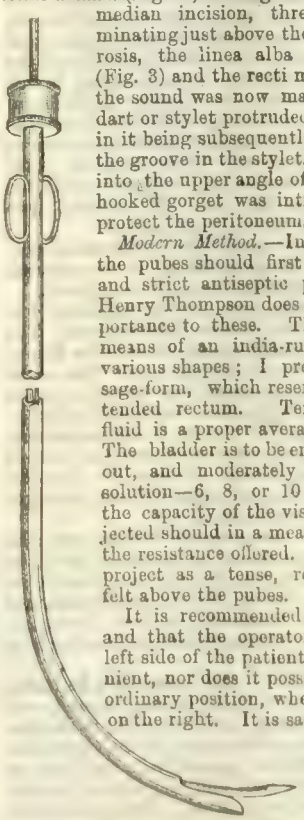


Fig. 2.—The *Sonde à dard* of Belmas.

Modern Method.—In the operation as now performed, the pubes should first be shaved, the surface disinfected, and strict antiseptic precautions taken throughout. Sir Henry Thompson does not, however, attach paramount importance to these. The rectum should be distended by means of an india-rubber bag. This is of various shapes; I prefer an elongated sausage-form, which resembles in shape the distended rectum. Ten to twelve ounces of fluid is a proper average quantity to inject. The bladder is to be emptied of urine, washed out, and moderately distended with boric solution—6, 8, or 10 ounces, according to the capacity of the viscus. The quantity injected should in a measure be determined by the resistance offered. The bladder will then project as a tense, rounded tumour, easily felt above the pubes.



Fig. 3.—Aponeurotome, sometime employed to divide the linea alba.

It is recommended to elevate the pelvis, and that the operator should stand on the left side of the patient; but this is inconvenient, nor does it possess advantages over the ordinary position, where the operator stands on the right. It is safer, in point of fact, to cut from above downwards than in the converse direction, and the left hand will be better placed to control the wound, both in the superficial parts and in the bladder.

The incision must be precisely median, two to four inches in length, according to the age and fatness of the patient, and should terminate just over the upper margin of the pubes. When the subcutaneous fat has been cut through, the linea alba is exposed and afterwards divided throughout the length of the external wound. There is no difficulty in incising the linea alba without risk to the peritoneum; it is constantly done in all cases of abdominal section. The line of junction of the recti muscles should be sought for, and the muscles separated and retracted. The transversalis fascia is now exposed; make a small opening in it near its lowest part, and introduce a Key's director, on which the fascia may be divided with perfect safety. The subperitoneal fat bulges forward in greater or less abundance, and the bladder may be felt as an elastic tumour filling the bottom of the wound, covered by areolar tissue containing a variable quantity of fat, according to the thinness or fat condition of the patient. This may be divided with the knife or separated with a blunt instrument. In the former method, several veins may be divided; they are often abundant in this situation, and usually run in a vertical direction; but they can be secured without difficulty. If the fat be merely pushed aside, the bladder-wall may be insufficiently exposed, and when the fatty tissue is abundant it will lie at the bottom of a considerable hole. The fat must also be bruised, and hence becomes more prone to septic influences and to infiltration, when it has been thus pulled about. While incising this layer of fat, the left forefinger may be introduced into the upper angle of the wound; the peritoneal fold is thus pushed upwards, and all risk of injury to it avoided. But in point of fact it does not usually come within the field of operation at all. When the bladder surface is exposed, it is easily recognised by the arrangement of the muscular fibres. Care should be taken to avoid disturbing the loose cellular tissue between the pubes and the bladder, as by doing so the risk of infiltration of urine is considerably increased, as also of suppuration at a later stage. Two loops of thread should next be passed through the muscular coat of the bladder near the upper portion of its exposed surface, and retractors being used to hold apart the edges of the external wound, the scalpel may be plunged briskly in at right angles to the surface, its edge directed downwards, and an incision made of the required length, long enough to permit the easy extraction of the stone without force, and if possible without bruising the margins of the wound, nor should the wound in the bladder be forcibly dilated or torn with the finger, as this will interfere with its subsequent closure. On making the incision, fluid escapes, the bladder collapses, and would sink down into the pelvis, were it not held up by the loops of thread, which also serve to keep the margins of the incision well apart. These, however, must not be strongly pulled upon, for the bladder may be thus incised too near the neck, or the threads may be torn out. If preferred, two tenacula, or even one sharp hook, can be employed instead.

When the bladder is emptied, the prevesical fold of peritoneum, previously invisible, often presents in the upper angle of the external wound, and, were care not taken, might inadvertently be injured.

It is usually easy to extract the stone with a short lithotomy forceps, selected according to the size of the calculus to be removed. The interior of the bladder may then be readily examined with the finger, or inspected to see that all foreign bodies are removed. The edges of the bladder-wound should now be examined, any bleeding points tied, and the cavity washed out with 3 per cent. boric acid solution.

The after-treatment of the incision in the bladder is very important. Primary antiseptic suture may be adopted, with or without a permanent catheter in the urethra, or drainage effected through the bladder-wound or urethra, or both, or the wound left open without drainage. These points are all open to further consideration.

In young persons, those in whom the urine is healthy, and the bladder-wall also healthy, an attempt should be made, I think, to procure immediate union. This will be best done by inserting interrupted sutures of fine carbolised silk through the muscular coats, not penetrating the mucous lining, after Lembert's method. It is important that these stitches should be numerous and sufficiently near each other thoroughly to close the wound.

The object of vesical suture is two-fold. We desire, by a hermetic closure of the bladder, to exclude urine from the external wound, and thus shut out one source of septic poisoning; and, secondly, to shorten the duration of treatment by the immediate union of the abdominal wound. Suturing the bladder is difficult, especially in children, on account of the thinness of the bladder-wall and the limited extent of the external wound, and it prolongs the operation. During the introduction of sutures, all undue pulling upon the bladder must be avoided. The number must be considerable; for although the sutures may appear close enough in a collapsed bladder, they become separated on its distension, and leakage will occur. A careful trial by injection should, therefore, take place to make sure that the bladder is watertight; if any leakage occur, additional sutures should be inserted. The common practice in the adult is to retain a permanent catheter in the bladder for a week or longer; but the disadvantages of this proceeding are obvious, and its benefits doubtful, if the suture be perfect. I think the necessity for continuous drainage of the bladder has been over-estimated; probably the patient will urinate quite well without the use of the catheter, or, if necessary, a catheter may be passed from time to time. A catheter *à demeure*, and, still less, a perineal puncture, as formerly recommended, are seldom needful. In children who are restless, and strain so much as often to eject the catheter, it is difficult or impossible to retain it, besides the instrument gets blocked from its small size or from clots; for these reasons, many regard it as better practice never to sew up the bladder-wound. If sutures be introduced, the edges of the external incision can be afterwards united in the usual manner by interrupted suture, and a short drainage-tube introduced, so as to emerge at the upper angle of the wound, thus affording a position where it will be better protected by the antiseptic dressing. This should be applied so as to cover the lower part of the abdomen, the groins, and genital organs, leaving an aperture for the penis. In other cases, the wound is simply left open, or a drainage-tube introduced.

The most recent and detailed account of the treatment of stone in children is by Schmitz (Langenbeck's *Archiv*, vol. xxxiii, 1886), who records the experience of the Prince Peter Oldenburg Children's Hospital in St. Petersburg from 1870 to 1885. During this period, there were 98 cases of calculus, of which 91 were boys and 7 girls. Twelve were not operated upon. Of 86 submitted to treatment, the high operation was selected in 38 cases, the median in 15, the lateral in 13, lithotrity in 18, urethrotomy in 11. Schmitz has collected 57 cases of suture of the bladder; 47 recovered, 8 died; mortality 14.8 per cent. In adults, there were 25 cases, with 6 deaths; mortality 24 per cent. In children 30, with 2 deaths; mortality 6.7. The bladder wound healed by first intention in 17 cases, of which 4 were adults and 13 children. The permanent catheter was used 23 times; 8 times the wound united by first intention, 15 times the wound did not thus heal. In 13 cases a catheter was not employed, and of these only 3 united by first intention. In 20 cases silk suture was used; 10 of these healed by first intention. Twenty-three times catgut was employed, with only 4 successful results. In 10 of the 17 cases in which union by first intention occurred, the mucous membrane was not included in the suture; in 2 cases it was included, and in 5 it is not stated whether it was included or not. When the sutures gave way, this happened generally on the fourth day. By this time the danger of infiltration is mainly over, so that even in cases where suture failed to procure immediate union, it was otherwise advantageous.

Bergmann sutures the bladder wound, but prefers not to close the external wound for two days. He fills it with iodoform gauze, and in this way considers suppuration is avoided.

In about two-thirds of the recorded cases of suture of the bladder, the wound re-opened. In the remaining third, it united by first intention.

It has been asked, why should an operation have been abandoned which, when successful, furnishes an ideal result, rapid, complete recovery without any ill consequence? The two chief objections are the possible injury to the peritoneum, and the danger of infiltration. Dulles mentions thirteen cases of injury to the peritoneum in his 478 collected cases. Schmitz observed two cases of wound of the peritoneum, caused indirectly during the extraction of a large stone. In regard to infiltration, urine, when fresh and unchanged, no doubt causes no damage to a wound; but altered urine produces superficial necrosis of the tissues, and septic processes with general infection may follow. Infection is generally associated with decomposition in the urine, but infection of the wound may also come from without. Blood, too, is apt to collect in the loose cellular tissue, or urine may escape from an imperfectly closed bladder into the external wound, and septic changes, when they occur, take place in close proximity to the peritoneum.

Before operation Schmitz prescribes a strict milk diet for two or three days, and in cases of cystitis, benzoic acid is given internally. On the day before the operation he administers castor oil, and the next morning an enema, followed by a few drops of tincture of opium. Under an anæsthetic, the bladder is several times washed out with warm 3 per cent. boric solution, and then filled with the solution until the vertex reaches half way between the pubes and the umbilicus, as may be ascertained by percussion and palpation. The quantity required varies with the age of the child. Schmitz has never found it necessary to use Petersen's rectal tampon. The length of the external incision varies, of course, according to the size of the stone.

The linea alba having been exposed, is divided with a free hand, the recti muscles separated, avoiding, if possible, opening their sheath. The pre-vesical fat is now reached, and a blunt hook is introduced into the upper angle of the wound, which is drawn strongly upwards. If the peritoneal reflection be within the area of the wound, it will then become plainly visible as a transverse line, and can be pushed upwards out of harm's way. Generally it is not seen. The pre-vesical fat must be now divided. It is often in great quantity, and may have to be carefully cut through before the position of the peritoneal reflection is discovered. In accordance with Rousset's advice, Schmitz insists that all rough manipulation of the cellular tissue between the bladder and symphysis must be absolutely avoided, as in this way the door is opened to urinary infiltration. The division of the pre-vesical cellular tissue may be best effected by cutting it carefully between two pairs of rat-toothed forceps; all bleeding points are at the same time carefully seized and secured before the bladder is opened. The bleeding is sometimes embarrassing. In nine of thirty-eight operations, the primary hæmorrhage was considerable, and in four cases severe secondary bleeding occurred. Hæmorrhage may be prevented to a large extent by not incising the bladder too low down behind the symphysis, or approaching the neck of the bladder, where the vessels are large and numerous. Even when the loss of blood is

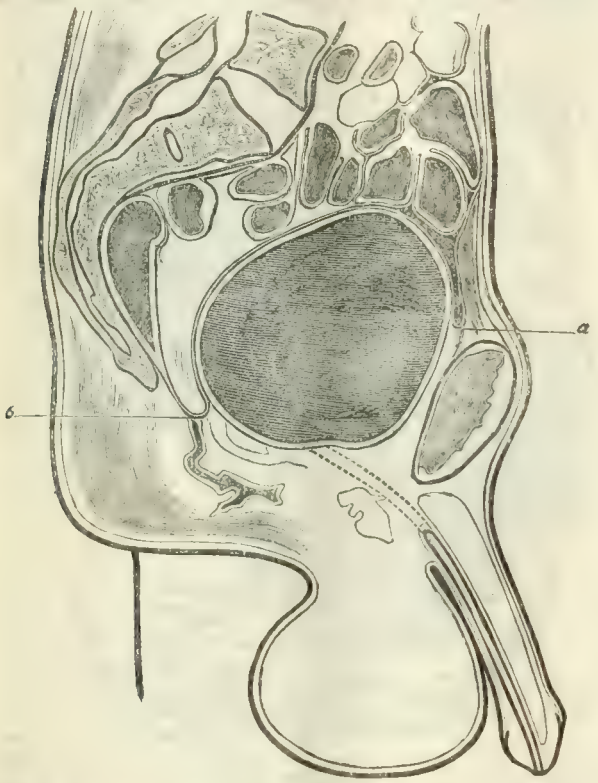


Fig. 4.—Bladder moderately full, containing 300 cub. cent., or 10½ fl. oz. Rectum empty. *a*. Position of the reflection of the peritoneum from the anterior wall of the bladder. *b*. Line of reflection of the peritoneum on the posterior wall. The dotted lines indicate the position of the urethra so far as it is not included in the section.

slight, it is important to prevent it filling the meshes of the pre-vesical cellular tissue. When this occurrence takes place, and the presence of urine is added, it is easy to understand how readily septic changes may take place. Means are taken to prevent sinking of the bladder-wall into the pelvis, not merely to facilitate the extraction of the stone, but also to aid in an examination of the interior of the bladder, in the arrest of bleeding, and in the subsequent suturing of the wound. If allowed to sink downwards, considerable damage may be done to the soft parts in drawing it up again. If not drawn up, the bladder may be pushed before the finger, the opening in it missed, and the bladder-wall separated from the pubes. Schmitz never sutured the bladder. He regards the abdominal position as recommended by Trendelenburg in 1877, as a good one to secure efficient drainage. If the child be restrained till the effects of chloroform are over, it will then remain quite still. Carbolised sponges are applied to collect the fluid, and changed every two or three hours, and the bladder is frequently washed out with boric solution. The drainage-tubes are removed on the fourth or fifth day. At the end of a week the prone position may be given up; urine begins to flow from the urethra at the end of the first or during the second week, sometimes as early as the second day. The wound in the bladder definitively closes the second, third, or fourth week, and the external wound in the course of the fifth week.

Much variety of opinion prevails as to the value and importance of rectal distension. Garson (*Edinburgh Journal*, October, 1878) first described the influence of rectal tamponade in raising the pre-vesical fold of peritoneum.

Two years later Petersen published his experiments (*Trans. German Surgical Society*, 1880). He comes to the same conclusions as Garson, although not aware, apparently, of his paper.

Bergmann caused experiments to be made by Mannheim on the bodies of children from 2 to 8 years of age; and Fehleisen (Langenbeck's *Archiv*, vol. xxxiv) has done the same in adults, by means of frozen sections.

Barwell (*Trans. Med. Chir. Soc.*, 1886) contends that distension of the rectum causes no notable elevation of the anterior vesical reflec-

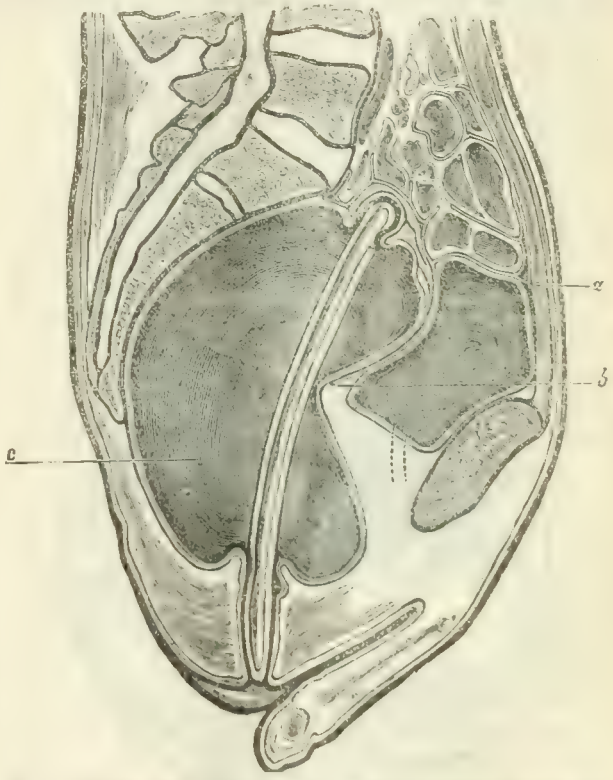


Fig. 5.—Bladder contains 200 cub. cent. Rectum distended with 480 cub. cent., or 16½ ounces of fluid. *a*. Anterior reflection. *b*. Posterior reflection. *c*. Distended rectum.

tion of the peritoneum; never more, he says, than a quarter of an inch, and oftener an eighth of an inch. In my own experiments, this was only true when the bladder was empty; and Fehleisen's investigations, mentioned further on, seem conclusive on this point. It should be recollected that in fat persons the uncovered part of the bladder is much greater than the average, and less distension is required, while in old and thin persons the contrary obtains. In fourteen suprapubic operations on the dead body, the bladder and rectum being distended, and in nine on the living, Petersen never saw the peritoneal reflection exposed, and therefore it was never injured. In the cases which I have seen, the peritoneum was not exposed.

Trendelenburg, on the other hand, disregards the rectal tampon, and states that a moderate distension of the bladder renders the peritoneum absolutely safe. Schmitz also found it unnecessary to distend the rectum; but all his operations were performed on children.

Fehleisen's investigations completely verify Garson's original ex-

periments, and appear conclusive as to the matter in dispute. He has published (*Trans. German Surg. Assoc.*, 1884) the results of several careful experiments made by means of frozen sections in adults. I have reproduced his interesting plates, which were obtained by means of direct tracings on the frozen surface of the section, and have converted the decimals into English measure.

Figs. 4 and 5 show the influence of the empty and the distended rectum on a moderately full bladder. In Fig. 4 the rectum is quite empty; the bladder contains 10½ ounces of fluid; it is rounded. The internal meatus is 1 centimètre higher than the lower border of the symphysis and 4 centimètres behind it. The fundus is almost horizontal, and the lowest point of Douglas's pouch, *b*, about the same level, while the pre-vesical fold of peritoneum, *a*, is only half a centimètre above the superior border of the symphysis.

In Fig. 5 the bladder contains 7 ounces of fluid, and the rectum about 16½ ounces, injected into a cylindrical tampon, which is better adapted for its purpose than the pear-shaped one. The bladder has lost its rounded form, and is somewhat pentagonal. The internal meatus is 4 centimètres (1⅝ inches) above the inferior border of the symphysis, and about 1 centimètre behind it. The bladder is close behind the abdominal wall, and the anterior fold of peritoneum *a* is also 4 centimètres above the border of the symphysis.

Fig. 6 shows how little the anterior fold of the peritoneum is

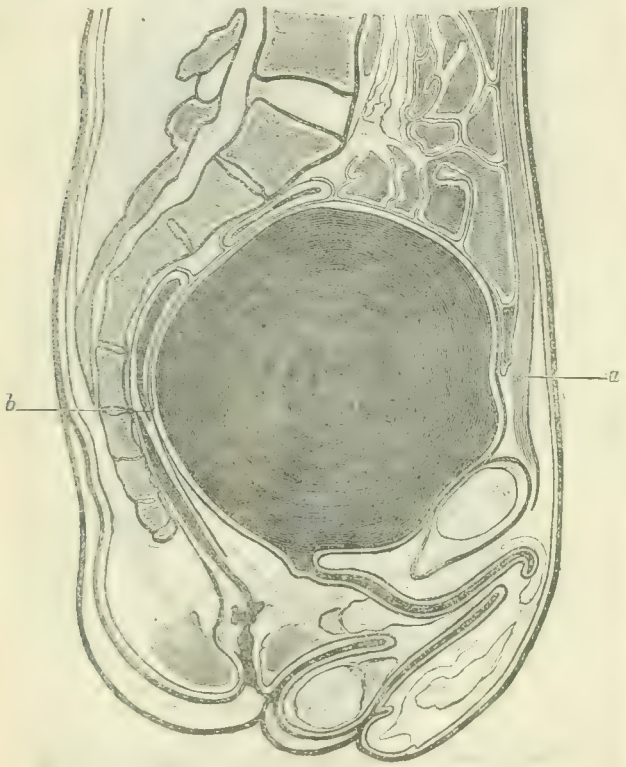


Fig. 6.—Bladder distended with 630 cub. cent., 22½ ounces of fluid Rectum empty. *a*. Anterior reflection. *b*. Posterior reflection.

affected by a large distension of the bladder, the rectum being empty. About 22½ ounces have been injected into the bladder—as much fluid as was contained in the previous case in bladder and rectum together. The bladder is spherical, and the anterior peritoneal reflection is only 2 centimètres (about ¾ inch) distant from the pubes. This preparation shows that the bladder under these circumstances is distended backwards rather than upwards; the internal meatus remains on a level with the lower part of the symphysis, and the prostatic urethra is nearly horizontal.

Fig. 7 shows the effect of the combined distension of bladder and rectum. The former contains 14½ ounces of fluid; the latter, 17½ ounces. The distance of the anterior fold of peritoneum from the upper border of the symphysis amounts to 8½ centimètres, or 3½ inches. The form of the bladder is irregular, but the lateral pockets of Petersen were not formed. The fundus is more elevated than in Fig. 5. The internal meatus is 1 centimètre behind the symphysis, and 2½ centimètres (1 inch) above its inferior border. The prostatic urethra is vertical. No section was obtained of an empty bladder and distended rectum. In Fig. 6, with a maximum distension of the bladder of about 22 ounces, the peritoneum has been raised only 2 centimètres above the upper border of the symphysis. Under pathological conditions, so much fluid could never be safely injected. So that in adults, at all events, dilatation of the bladder alone will not suffice to give adequate space for operative procedures. The same conclusion obtains if the bladder be empty and the rectum only distended. It is clearly needful, therefore, to distend both, and we have to determine what is the best method of doing so. Fehleisen thinks the rectal tampon should extend as high as the promontory of the sacrum. Into this he injects 14 to 17 ounces of water, a quantity sufficient to fill the hollow of the sacrum. This presses the bladder and prostate as far upwards as possible; and, as shown in Fig. 5, a comparatively limited injection of 7 ounces of fluid into the bladder will suffice to give a free space of 4 centimètres. This is the converse of Petersen's procedure, who first injects the bladder, which renders the subsequent distension of the rectum more difficult. It is always preferable to distend the rectum with the larger quantity of fluid, and the bladder with the lesser. By the double distension the floor of the bladder and the prostate can be effectively raised out of the pelvis, as Figs. 5 and 7 demonstrate. In Petersen's cases the

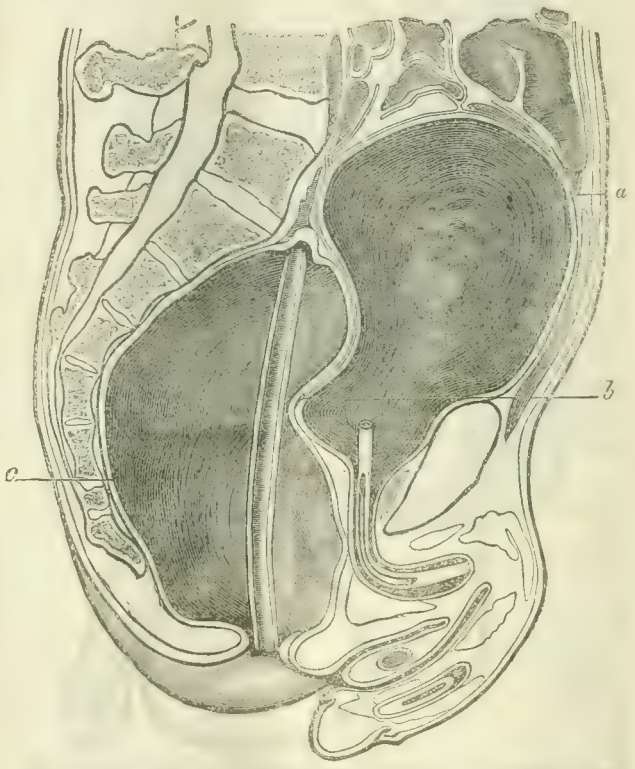


Fig. 7.—Bladder distended with 420 cub. cent. 14½ ounces of fluid. The rectum contains 500 cub. cent., 17½ ounces of fluid.

average gain with a larger quantity of fluid in the bladder was 3.1 centimètres; while, with a lesser amount of fluid, Fig. 7 shows a gain of 8.5 centimètres. Tamponade of the rectum, therefore, when the bladder is at the same time moderately distended, excludes the chance of wounding the peritoneum.

In order to estimate the effect of distension of the bladder and rectum, alternately and combined, I made the following experiments on the dead body.

1. A very thin woman, aged 83. The bladder being empty, the anterior peritoneal reflection was found to be on the level of the upper margin of the symphysis pubis. Ten ounces of fluid were first injected into the bladder, which raised the peritoneal reflection less than ¾ inch. Fifteen ounces of fluid were then injected into the rectal bag, and this raised the peritoneal reflection 1 inch, and pushed the bladder well forward.

2. A young woman, aged 23, rather thin. The anterior reflection

is ½ inch below upper border of the symphysis pubis. The rectal bag was first injected with 15 ounces of fluid; this produced no change whatever in the position of the peritoneal fold. Ten ounces of fluid were then injected into the bladder, which raised the reflection ¾ inch above the pubes.

3. A man, aged 40, of average habit of body. The reflection is ¼ inch below the upper margin of the symphysis pubis. The rectal bag was first injected with 15 ounces of fluid, but this produced no change in position of the peritoneum. On injecting 10 ounces of fluid into the bladder, the peritoneal reflection was elevated 2 inches above the symphysis. The fluid was now let out of the rectal bag, and the bladder sank downwards and backwards to the level of the pubes. On re-injecting 15 ounces into the rectal bag, the peritoneal reflection of the bladder again rose, this time to 1¾ inches above the level of the symphysis.

4. A very fat man, aged 43. The anterior reflection of the peritoneum was 1½ inches above the level of the symphysis. The bladder was first injected with 10 ounces of fluid, which raised the reflection 1½ inches more. On the rectal bag being injected with 15 ounces, the reflection was raised another inch, total 4 inches.

5. A very fat man, aged 39. There was a small quantity of urine in the bladder, and the reflection was ascertained to be 2 inches above the level of the pubes. Injecting the bladder with 10 ounces of fluid did not seem to raise the reflection, but distended the organ backwards. An injection of 15 ounces into the rectal bag then pushed the bladder forwards and upwards. The rectal bag was now emptied and an injection of 10 ounces more into the bladder merely pushed it further backwards. On now re-injecting 15 ounces into the rectal bag, the bladder being very full, 4 inches of its anterior surface were ascertained to be uncovered by peritoneum.

Summary.

No.	Quantity of Fluid in the Bladder.	Quantity in the Rectal Bag.	Elevation of Reflection.
1	10 ounces	15 ounces	1 inch
2	10 ,,	15 ,,	¾ ,,
3	10 ,,	15 ,,	2 inches
4	10 ,,	15 ,,	4 ,,
5	10 ,,	15 ,,	4 ,,

In order to estimate accurately the effects produced, the exact position of the peritoneal reflection was first determined by means of the finger introduced through a small opening made halfway between the pubes and the umbilicus. After the distension was effected, the lower portion of the abdominal wall was divided in the middle line, and the bladder exposed. These trials left no doubt in my mind that when the bladder alone is distended the peritoneal reflection is somewhat but not sufficiently raised, the bladder being chiefly distended backwards, as Fehleisen describes. Distension of the rectum alone seemed in these five cases to produce no palpable effect on the vesical fold; and to obtain the maximum result, distension of both bladder and rectum seems necessary. The dilatation of the rectal bag is plainly seen to push the moderately distended bladder forwards and upwards against the abdominal parietes, its enlargement backwards and downwards being prevented, and the uncovered portion becomes visibly increased.

I was, unfortunately, not able to obtain any bodies of children. I am sure it is both unsafe and unnecessary to employ such considerable quantities of fluid to inject the bladder and rectum in the living subject, as in the experiments detailed have been commonly had recourse to on the dead body. In the five experiments I have quoted, the rectum seemed dangerously tense when the tampon was distended with 15 ounces. Something, too, depends on the shape of the bag; more fluid may be safely injected into a long cylindrical tampon than into the shorter pyriform one. In children, 3 to 4 ounces is a sufficient quantity to distend the rectal tampon with, and about the same quantity may be injected into the bladder. In adults, 10 to 12 ounces will, as a rule, be amply sufficient to distend the rectum, and 6 to 10 ounces may be injected into the bladder, according to the resistance experienced.

[*To be continued.*]

UNIVERSITY OF DURHAM AND ITS COLLEGE OF MEDICINE.—The Dean and Chapter of Durham, with the consent of the Bishop of Durham, have passed a statute, constituting the Professor of Medicine of the University of Durham an official member of the Senate of the University. At the same time, the College of Medicine, Newcastle-upon-Tyne, will retain the right of having a representative in the University Senate. The President of the College, Dr. Heath, was elected to this office at a meeting of the members of the College, held on February 23rd.

REMARKS
ON THE
DIGITAL EXPLORATION FOR TUMOURS OF THE BLADDER.[1]

BY SIR HENRY THOMPSON, F.R.C.S.,
Surgeon Extraordinary to H.M. the King of the Belgians; Emeritus Professor of Clinical Surgery in University College; and Consulting Surgeon to University College Hospital.

I HAVE just read with much interest the complete and elaborate *Note Communiquée au Congrès Français de Chirurgie sur le Diagnostic et le Traitement des Tumeurs de la Vessie*, par M. Le Professeur Guyon, and I must be permitted to observe at the outset how happy an illustration it affords of a truth which we may do well to remember sometimes, when brought into the region of controversy—for myself how unwillingly always I cannot express, since life is too short and too precious for controversy unless absolutely necessary—namely, that between men of large experience, whose work must be equally serious and honest, there is always less real difference than at first sight appears; and this difference is often intensified when two such *confrères* belong to different countries, express their thoughts in different languages, and have not the advantage of personal communications on the subject in question. It is then generally found, when the opportunity of explanation is afforded, that there is really much less disagreement than had been imagined, and that most of what has existed has been due to misapprehension.

The "note," which has for its subject the title above quoted, is, in fact, an endeavour to show that "digital exploration of the bladder" by way of the perineum, as proposed and practised by myself, is a proceeding rarely, if ever, applicable to the diagnosis and treatment of tumours of the bladder.

Now, having read it carefully, I find to my surprise, and, I will certainly add, to my gratification, that Professor Guyon and I have been occupied with two wholly different subjects. That which I have advised in respect of "digital exploration" has no reference whatever to the tumours of which he treats, and that which he has said concerning that little operation does not bear, or but very slightly so, on those cases for which I have applied it.

This I will now proceed to explain. At the close of his article, Professor Guyon states that he has operated on fifteen patients with tumour of the bladder, of whom no fewer than thirteen were the subjects of cancer or of epithelioma (p. 668). But, for cases manifestly cancerous, I have always refused to operate, or if I have done so, have merely opened the bladder to relieve pain, and provide easier exit for the urine, and have not reckoned it an operation; limiting that term to denote an operation which has for its object the removal of the tumour itself. I have emphatically stated, in my work on Tumours, p. 73, partially—only partially—translated into French, my objection to operating for cancer, repeating it on several occasions, notably at the Clinical Society in London only a month ago.

By choice and by intention, I operate only for "papilloma," the formerly so-called "villous" tumour—a light floating, often single, pedunculated but exceedingly vascular growth, much more common with us, as the cause of dangerous hæmorrhage, than cancer and epithelioma.

I now perceive why Professor Guyon lays so much stress on the value of the "*toucher rectal.*" Naturally so; because, in the case of carcinoma, it furnishes indication which almost suffice to determine the nature of the disease. When by this means I have found induration and thickening of the coats of the bladder, showing that the morbid deposit has its seat in the walls themselves, I have never consented to operate, except with the very rare proviso above alluded to, for temporary relief. Of course, there is no occasion to make any digital exploration of the bladder, when one can ascertain by the "*toucher rectal*" that its coats are involved in a hardened or nodular deposit.

I have now operated on thirty-four patients for the removal of tumour, not including those for whom I have merely made an opening to give temporary relief. In every one of the thirty-four cases, the tumour has been examined by one or other of the most experienced pathologists in London, and every one forms a preparation in two or

[1] This article appears in French also in the *Annales des Maladies des Organes Génito-Urinaires.*

three of the chief museums here—to wit, the Hunterian, the University College, and St. Thomas's. The particulars of the first twenty are given in my book on Tumours. The nature of these thirty-four is set forth in the following table :

Simple papilloma, 25 cases (one of the above proved to be associated with cancer, and two or three with myoma); myoma, 4 cases ; epithelioma, 2 cases ; carcinoma, 1 case; sarcoma, 2 cases—total, 34 cases.

But in all these cases papilloma was the chief and the distinctive element. In two instances it was found associated with myoma ; in two or three with "lymphoid cells ;" in one with cancerous deposit ; and in one with commencing cartilage, suggesting an exceedingly rare condition known here as "chondrifying sarcoma."

Now papilloma, unless very largely developed, yields no sign of its presence to the "*toucher rectal*," and none to the exploring sound. Its presence can only be demonstrated by *débris* under the microscope, and then the characteristic structure is sometimes beautifully distinct. The first act of micturition, or, if not, the first washing of the bladder, may produce an atom of translucent material, which shows under a quarter-inch object-glass a papilloma with its central blood-vessel, and the long prismatic epithelium ranged round the extremity of the papilla, assuring the surgeon of the presence of a growth which makes exploration wholly unnecessary. If this fails, a flat-bladed lithotrite may remove a fragment, and so produce the irreproachable witness. But if by none of these means can you produce the needful evidence, and the history is manifestly that of vesical growth, the kidney being acquitted of all participation in the evil, then I have no hesitation in advising that a little *boutonnière* should be made, and a finger be introduced into the bladder, and the question settled beyond dispute. And this can be easily done in nine cases out of ten.

And here, again, the original source of misapprehension shows itself. Professor Guyon doubts the possibility of examining the bladder thus, and adduces the small effect of finger-manipulation in the bladder when operating by the "*taille*," and further states that the age at which tumours of the bladder appear is the age "*des périnées épais et des prostates volumineuses.*"

Quite so ; that is true as regards the cases of cancer, but is less applicable to cases of papilloma ; and as I operate only for papillomata, an enlarged prostate is not often encountered ; papilloma occurring at all ages, but commencing at 25 years of age and upwards.

Now let me here repeat a statement I have often made, and with great deliberation, that in at least nine cases out of ten it is quite easy to examine the whole surface of the bladder if the tip of the index reaches the cavity. This can be done by making firm pressure above the pubes, provided only that the anæsthetic is given to a sufficient extent to overcome all opposition from the abdominal muscles—a proceeding about which we have no difficulty or hesitation whatever in London, with our skilled specialists in the administration of anæsthetics. In that condition, the whole surface of the bladder is easily brought down to the end of the finger so placed, which can readily detect even a very small papillomatous growth. I have demonstrated that fact so often to my *confrères*, both native and foreign, that it is beyond a doubt ; and I am ready to repeat it without stint for any serious inquirer.

Well, supposing by means of such an exploration, I discover a single polypoid growth of papilloma ; I find the question of operation is at once before me. Supposing, after full examination, I feel that it is not difficult to put in the forceps and remove it at once ; why not ? *Voilà tout.* If it is large or not easily placed, I give up the preceding idea, and do the suprapubic operation, as happened to a case about two months ago, in which, after exploring by the perineum, I encountered a large tumour springing from the top of the bladder. I did the high operation at once (the senior surgeon of the Royal Infirmary at Glasgow being present) removed the growth, and that patient accompanied me to the Clinical Society a month afterwards ; he was then perfectly sound, and was seen there by the members at the meeting already referred to.

Then it is, perhaps, worthy of remark that almost all my best and enduring recoveries have been those of cases in which the simple perineal opening alone was performed. My first by that method (performed November 6th, 1880) is at this moment well, and living in London, and has had no return. It was a single pedunculated papilloma.

I am ready to avow that I do not necessarily advise all beginners to follow that method of operating. On discovering a tumour, whether by digital exploration or otherwise, one who is not highly practised in the extraction of foreign bodies from the bladder will act more safely, I doubt not, by performing the suprapubic operation. It requires great facility and experience with instruments in a bladder to nip off safely, with one or two bites of the forceps, a polypoid growth by the perineal route. When intending to do this, I always spend some three or four minutes in examining with my finger the exact position and relations of the growth ; and, having thoroughly ascertained these, I rarely fail, on introducing a light handy forceps, in going at once to the spot, and in bringing it away complete, or nearly so. If I am not content, or find a more difficult task than expected, I can still proceed to the high operation.

But I am tempted now to ask where are the papilloma cases in Paris ? There are only two among Guyon's fifteen cases. Are they less frequent with you than with us, or have you still to find them ? Some of them have been regarded here in former times, I have no doubt, as cases of renal hæmorrhage, and have been only identified as vesical tumours in the latest stage. It is quite evident you have not yet begun to deal with them surgically. Nevertheless, they are the most desirable to find and to treat. Little can be done by operative interference for the cancers. There is more chance in dealing with epithelioma, not of accomplishing a cure, but of offering a reprieve, of lengthening a life inevitably doomed ; yet the papillomata will far better repay the skill and enterprise of the surgeon.

But it is time to close. There are many other things I should be glad to add, but am compelled to be brief. One of my chief objects in making this communication is to show that there never was any ground for supposing that there could be any difference between Professor Guyon and myself as to the inutility of making an exploring operation for a tumour, the presence of which can be verified by the "*toucher rectal*" ; and that, if an attempt is to be made to remove such tumours, the high operation, and not a perineal one, is the only desirable route. On the other hand, I record my profound belief that they are better let alone.

I have never performed an exploring operation except in the absence of all signs of physical change in the rectum ; and when I thus discover a tumour of any kind in the bladder, I decide, after carefully examining it, by what means I can most safely and efficiently remove the growth. In my opinion, each surgeon must judge for himself in what way he can best attain the desired object. No uniform and absolute rule can be prescribed to him by authority however high. Personal predilections and personal qualifications must always count for much in determining a decision in all pursuits which partake of the nature of a practical art ; and, assuredly, among the highest and finest art must be ranked all the achievements of modern surgery.

AN ADDRESS
ON
THE HÆMATOZOA OF MALARIA.[1]

By WILLIAM OSLER, M.D., F.R.C.P.,
Professor of Clinical Medicine in the University of Pennsylvania.

Our knowledge of the animal parasites infesting the blood has been of late enriched by observations which show that certain of these hæmatozoa, as they are called, are more widely distributed and more important than we had hitherto supposed. Parasites belonging to the spirozoa, and to the nematode and trematode worms, have long been known to occur in the blood of various animals. Recent investigations prove that the flagellate protozoa are also not uncommon blood parasites, and it is possible that they may be the pathogenic organisms of certain diseases. I propose in this communication to give an account of the hæmatozoa which have been found in persons suffering with the various forms of malaria.

Historical.—Our knowledge of the blood-changes I am about to describe, dates from the researches of Laveran, in Algiers, which were communicated to the Paris Academy of Medicine in 1881 and 1882, and which were finally embodied in a large work on the malarial fevers, published in 1884.[2] He found, as characteristic elements in the blood of persons attacked with malaria, (1) crescentic pigmented bodies ; (2) pigmented bodies in the interior of the red corpuscles, which underwent changes in form, described as amœboid ; and (3) a pigmented flagellate organism. These forms were looked upon as phases in the development of an infusorial organism which he regarded as the germ of the disease. Richard[3] confirmed these observations. A

[1] An address delivered before the Pathological Society of Philadelphia.
[2] *Traité des Fièvres Palustres*, Paris, 1884.
[3] *Comptes Rendus*, 1882.

more general interest in the question was aroused by the publications of Marchiafava and Celli,[4] who found in the blood of malarial patients at Rome the bodies described by Laveran. They figured carefully the alterations of the organism in the interior of the red corpuscles to which they gave the name Plasmodium malariæ. Councilman, of Baltimore, has more recently confirmed these observations.[5] The pigment granules so numerous in the interior of the red corpuscles in cases of "comatose pernicious fever," and which appear to be included in a hyaline mass are, according to Marchiafava and Celli, and Councilman (who had previously described them[6]) these amœboid parasites deeply laden with altered hæmoglobin.

Technical Details.—The finger pad from which the blood drop is taken should be thoroughly cleansed, and, if the examination is made during a paroxysm, the sweat which may exude after the friction and drying should be removed. Attention to these, apparently trivial, details will secure specimens of blood free from small particles of dirt, and facilitate considerably the search for pigmented bodies. The layer of blood beneath the top cover should be very thin and uniform, the corpuscles, as far as possible, isolated and not aggregated in clumps or in rouleaux. It is well to surround the cover with paraffin if the examination is prolonged. No reagent of any kind should be added. Cover-glass preparations may be made and stained in methyl blue or fuchsin, and mounted in balsam. Osmic acid preparations may also be employed. Although these bodies may be seen with a power of 500 to 600 diameters, it is essential for the satisfactory study of the changes to use higher powers. I have uniformly worked with the $\frac{1}{12}$ homo. immersion of Zeiss, and the $\frac{1}{18}$ im. of Reichert. Stricker's warm stage will be found useful.

Description of the Bodies.

1. *The Forms which Exist within the Red Corpuscle.*—(*a*) The most common alteration in the blood of malarial patients is presented by a pigmented structure inside the red corpuscle. The attention of the observer will most likely be first attracted by the presence of a few dark grains in the stroma, and a careful study of a suitable specimen will soon lead to the conviction that these are not scattered loosely, but are enclosed in a finely granular or hyaline body in the interior of the corpuscle (Fig. 1). The red discs in which

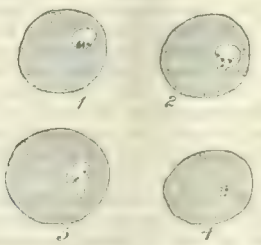


Fig. 1.—Amœboid body in red blood-corpuscles. The sketches were made at intervals of five minutes.

they occur are usually larger, look flat, and are very often paler than normal; they may, indeed, exist only as colourless shells. The number of corpuscles so affected varies extremely in different cases. In some instances they are readily found after a search of a moment or two, but, in other cases, a prolonged examination may be necessary. Only one is usually present in each corpuscle, but two or three, or even four, may occupy the stroma. They vary greatly in size, the smaller ones not occupying a fourth of the corpuscle, while the larger ones may almost fill it. A delicate contour line can usually be seen separating the body from the stroma; at times this is very indistinct, particularly if the illumination is very bright. The substance appears hyaline, or very finely granular, and the pigment grains are scattered irregularly in it. They may be very numerous, and give a dark aspect to the body, or they may be scanty. They frequently present rapid Brownian movements. Occasionally a vacuole may be seen in the interior of the body. In several instances the bodies appeared to be enclosed in a clear space—vacuole—in the stroma. When first seen they are more or less spherical, but, as already stated, the outline may be indistinct. The pigment granules may be seen to alter their position in relation to each other. If the margin of the body is carefully observed, slow changes can be seen, which gradually bring about alterations in shape. These movements, which appear to be amœboid in character, can often be traced with great ease. They are well represented at Fig. 1, and, better still, at Fig. 2. Changes in position of

[4] *Fortschritte der Medicin*, Nos. 14 and 24, 1885.
[5] Paper read before the Association of American Physicians, June, 1886. Councilman and Abbot, *American Journal of Medical Sciences*, April, 1885.

the body in the corpuscle result from them. They are decidedly slower than the amœboid movement of the colourless corpuscle. I have not seen any evidence of migration from the corpuscle. In dry pre-

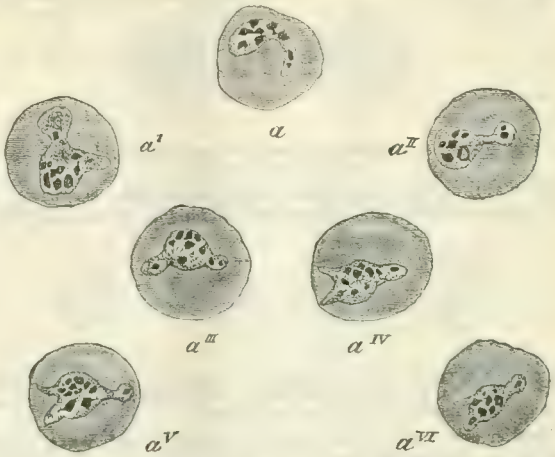


Fig. 2.—Case VI. Pigmented body in red blood-corpuscle; outlined with camera ($\frac{1}{12}$ Zeiss, C eye-piece), by Dr. J. P. C. Griffith; illustrating some of the changes during an hour and a half's observation. *a*, at 11.45, slow alterations in outline, and the pigment-granules are in active dancing motion. a^{i}, 12.15. a^{ii}, 12.25, body has rotated as well as altered its shape. a^{iii}, 12.30. a^{iv}, 12.40. a^{v}, 1 o'clock. a^{vi}, 1.02.

parations these bodies stain deeply with gentian violet or fuchsin, and present a granular stroma, in which the pigment grains are imbedded. (Fig. 3.)



Fig. 3.—Cover-glass preparation of blood stained with fuchsin. The amœboid bodies stain deeply in the corpuscles. Some of them are not pigmented.

(*b*) In seven cases peculiar hyaline structures existed in the interior of the red corpuscles, which differ from the bodies just described, in the absence of pigment and in the much greater activity of the changes. Fig. 4 illustrates the appearance and the alterations in outline. These



Fig. 4.—Sketches of the alteration in form of one of the hyaline bodies; 1, at 7.8 P.M.; 2, at 7.12; 3, at 7.15; 4, at 7.20.

bodies are devoid of structure, and the corpuscles in which they are present are not so pale as those with the pigmented forms. Marchiafava and Celli, who have given an excellent plate of these bodies,[7] regard them as the initial forms of the pigmented bodies. One does occasionally see appearances indicative of commencing pigmentation, but they have not, as a rule, the solid aspect of the pigmented bodies. In three cases I have seen the following remarkable changes. The hyaline body, while actively changing shape, suddenly burst from the stroma, and disappeared, or formed only a few granules. Thus, in a red corpuscle, there were, at 3.40 P.M., two hyaline, irregular-shaped bodies, which were changing rapidly in outline. The alterations were so marked that the physicians present at the time had no difficulty in seeing them. The stroma of the corpuscle was of full colour. At 3.50 P.M., as I was carefully watching these forms, the corpuscle suddenly ruptured, and gave exit to two distinct masses, which quickly broke up into ten or twelve spherical bodies. No change took place in these after twelve hours, except that they became pale and indistinct. The stroma of the corpuscle became quite colourless. On two other occasions a similar phenomenon was witnessed, but in one no trace could be seen of the extruded material. This is evidently a physical change, and I think these very pale hyaline bodies must be carefully distinguished from the pigmented forms, though possibly associated with their early development.

[7] *Fortschritte der Medicin*, 1885. No. 24.

(c) In seven cases there were vacuoles in the red corpuscles containing solid-looking bodies of various sizes and shapes. Certain of these structures resembled micrococci very closely (Fig. 5), and stained



Fig. 5.—Cover-glass preparation, showing corpuscle with solid, deeply stained bodies in small vacuoles.

deeply in aniline dyes; but others, often in the same corpuscle, were larger, more irregular, and altogether different in appearance (Fig. 6).



Fig. 6.—1, 2, 3, Larger solid bodies in the interior of vacuoles (?) which alter in outline. 4, A red corpuscle, with a small vacuole containing small pigment-granules of a deep brown-red colour.

The smaller ones were usually highly refractile, and, when two were together, the appearance suggested a diplococcus. In three instances these bodies had a deep brown tint, as if composed of pigment. The larger bodies were homogeneous, very variable in size and shape. No movement was noticed in them, but the outlines of the spaces in which they lay sometimes changed actively. In Case 29, these bodies were very abundant, and for days formed the only noticeable alteration in the corpuscles.

2. *The Free Forms.*—(*a*) Pigmented crescents. These bodies, which were found in eighteen cases, present remarkable features in appearance and structure. The form was usually that of a beautiful crescent (Fig. 7), with rounded or gently tapering ends; but the degree

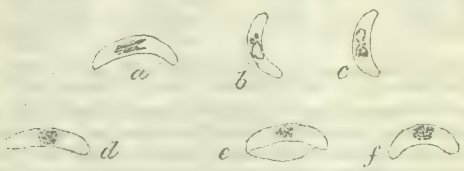


Fig. 7.—Crescents, *a*, *b*, *c*, show the slow alterations in the form of the pigment, as sketched at 9.20, 10.40, and 10.55 A.M. *e* shows the narrow membrane sometimes present in the concave side.

of curvature was variable, and many forms were almost straight. The length is about double that of the width of a red corpuscle, sometimes more. They are not attached, and they never show any motion. Joining the ends of the crescents—or, more correctly, at a little distance from the points—a narrow line can often be seen on the concave margin (Fig. 7, *e*). The body of the crescent appears made up of a structureless, homogeneous material, in the centre of which is a prominent collection of pigment granules. This, with the peculiar form, makes these bodies very easily recognisable in the blood, even when closely surrounded by the corpuscles. The pigment is very dark in colour, distinctly granular, and varies somewhat in its arrangement. As a rule, it is central and aggregated, either in a heap, or assumes the form of a band placed transversely to the axis of the crescent. In some instances it is more scattered, but I have never seen it at either end of the body. Although the most careful examination fails to detect any movement in the hyaline substance of the crescent, yet the existence of such may be inferred from the very positive movement which the pigment granules undergo. Fig. 7, *a*, *b*, *c*, represents these alterations; changes in form are exceptionally seen, as shown at Fig. 8 (1, 2, 3). A crescent became, within an hour, an ovoid body.

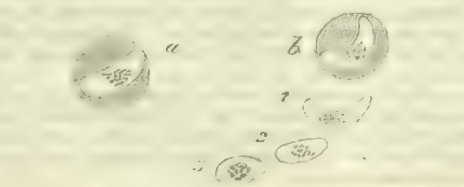


Fig. 8.—*a* and *b* show crescents in the interior of red corpuscles; 1, 2, and 3, changes in a crescent.

Sketch 1 was made at 9.40, 2 at 10.10, and 3 at 10.30 P.M. The outline of these bodies is very clear and defined. Ovoid, elongated and rounded forms of identical structure are also met with, but the crescents predominate. The number is variable, from one or two in a slide, to six or eight in the field of the 1-12th im. Though almost always free, they occur sometimes in the interior of a corpuscle, indicating, doubtless, the mode of development (Fig. 8, *a* and *b*).

(*b*) *The Rosette Form.*—In six instances there were rounded bodies, a little larger than red corpuscles, with a dimly granular protoplasm, and in the centre a rosette of pigment (Fig. 9). Some of these ap-



Fig. 9.—Rosette-form: 1 free; 2 within the shell of a red corpuscle.

peared to be enclosed in a delicate membrane, others were free. In six cases remarkable changes were seen in these forms, of the nature of segmentation. Thus Fig. 10, *a*, represents one of these as seen at



Fig. 10.—Segmentation of a rosette-form: *a* at 6 P.M.; *b* at 6.10, segmentation proceeding; *c* 6.30, segmentation complete; *d* 7.40, small free bodies.

6 P.M., September 4th. At 6.10 (*b*) there were distinct indications of segmentation in the finely granular protoplasm. At 6.30 (*c*) this had resulted in the formation of twelve or fifteen rounded bodies clustered about the central pigment, and still enclosed in the sheath. At 7.40 (*d*) the shell had burst, and given exit to the small corpuscles, which presented a tiny speck at or about the centre. At 10.40 they had not undergone any material change. In Case 60, one of quartan ague, this phenomenon was repeatedly observed. The development of the rosette form can, I think, be traced from the intra-cellular pigmented bodies, which increase in size until the entire corpuscle is filled. In some instances the body was surrounded by the remnant of the red corpuscle, in others there was no trace of it. The pigment granules gradually collect in the centre of the body in a more or less distinct rosette. I thought these changes had been overlooked by the writers on this subject, but I find that Golgi[8] has given a very full description of them, and has beautifully figured the development of the rosette form from the intra-cellular pigmented bodies. He has followed the process of segmentation with much greater detail than I have been able to do.

(*c*) *Flagellate organisms.*—Two or three years ago, when I first read Laveran's papers, nothing excited my incredulity more than his description of the ciliated bodies. It seemed so improbable, and so contrary to all past experience, that flagellate organisms should occur in the blood. The work of the past six months has taught me a lesson on the folly of a scepticism based on theoretical conceptions, and of preconceived notions drawn from a limited experience. Flagellate bodies were seen in seven cases, never in great numbers, usually only one or two in a slide. They are smaller than red blood-corpuscles, often not more than half the size. A specimen in one case was equal in one diameter to a red corpuscle lying near it. They are round, ovoid, or pear-shaped; the protoplasm finely granular, and in every instance contained pigment, usually central, which often displayed rapid Brownian movements (Fig. 11). The flagella are variable in

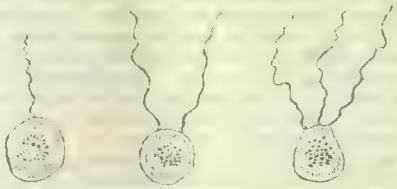


Fig. 11.—Flagellate forms.

number; one, three, and four were noted in different specimens. The length, as closely as could be estimated, was two or three times that of the body. They are exceedingly delicate, gently tapering, and, except in one instance, I could not determine the existence of a small terminal knob, figured by Laveran. The movement is exceedingly active, and the lashing of the long filaments may be sufficiently

[8] Sulla Infezione Malarica, *Archivio per le Scienze Mediche*, vol. x, No. 4, 1886.

strong to drive away the corpuscles in the vicinity. The undulatory movement caused by the play of the filament over the surface of a group of corpuscles may attract the attention of the observer before he sees the cilia. The motion does not persist long; in none of the specimens which I examined, for more than half an hour. In one instance, the flagella disappeared in the short interval between two observations, but I could not determine what became of them. I have not seen the free-swimming cilia described by Laveran, but Dr. Councilman tells me that he has confirmed this observation. I have not been able to discover either nucleus or vacuoles in the flagellate organism. Slight, irregular changes in outline occur, due to slow movements in the protoplasm.

(*d*) Small, round, pigmented bodies, from one-fourth to one-half the size of a red corpuscle, were not uncommon in some cases (Fig. 12).

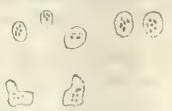


Fig. 12.—Small free pigmented bodies, some of which show amœboid movements.

Usually, they remained unchanged, but, in several instances, they showed amœboid movements. The smaller ones about equal in size the products of subdivision of the rosette form.

Before proceeding to discuss the nature of these bodies and their relation, I will briefly refer to the condition of the blood-corpuscles.

The red corpuscles showed no other notable alteration save that already described. The pigmented organism evidently destroys the vitality, and consumes the hæmoglobin, for the affected cells become pale, often spherical, and, finally, are reduced to the condition of mere shells; except in cases of pronounced anæmia, the variations of the corpuscles in size and outline were not great. The colourless corpuscles were in some cases increased in number, and in very many instances contained dark granules. In several specimens, they were observed to contain the pigmented organisms. In Case 40, a crescent had been included (Fig. 13), and, in Case 51, the process of inclusion



Fig. 13.—A colourless corpuscle containing a crescent.

of two free pigmented bodies was watched during half an hour (Fig. 14). The blood-plaques were, as a rule, scanty, even when the anæmia was pronounced. No pigment was seen in them.

Types of Malaria Studied.—Of the seventy cases examined, a majority were instances of ordinary intermittent fever, chiefly quotidian and tertian, with two quartan cases. There was one case of remittent fever, one of comatose pernicious malarial fever, and the remainder were cases of malarial cachexia or chronic paludism, with occasional outbreaks of fever, with or without chills. In all of the cases, with the exception of seven, one or other of the forms above described was found in the blood.

Relation of the Forms to the Varieties of Malaria.—The pigmented amœboid bodies are met with in both acute and chronic cases, but they may be said to be specially characteristic of the more acute manifestations of the disease. In recent examples of quotidian or tertian ague which had not been under treatment, the amœboid intra-cellular forms were almost invariably present. I will refer subsequently in detail to the cases in which they were not found. The hyaline non-pigmented forms, and the vacuoles containing solid bodies, also occur in the acute cases; indeed, these latter forms were the only alterations noted in several instances. Thus, in Case 29, a man aged 48 was admitted to the Philadelphia Hospital September 27th, in a chill. He had had a paroxysm ten days before, and had suffered with malaria several years previously. The blood examined during the hot stage showed no pigmented bodies, but numerous corpuscles containing the vacuoles shewn in Figs. 5 and 6. The chills occurred on the 28th, 29th, 30th, and October 1st; and each day the blood was carefully examined, without finding other bodies than those in the vacuoles or hyaline spaces. On October 1st, the patient began with ten grains of quinine twice a day, which was continued for five days. He had no chill after October 1st. On the 7th there were crescents in tolerable numbers, which persisted until the 27th, the date of the last examination.

The crescents appear to be associated with the more chronic forms of malaria, or with acute cases which have been under treatment for some time. Of eighteen cases in which they were present, in twelve there was a history of infection lasting from six weeks to six months. In many, the cachexia was marked, and the spleen greatly enlarged. In six instances the attacks were recent—under a month; but in every one of these cases quinine had been taken. As a rule, the crescents occurred alone in the blood; but there were cases observed in which the pigmented amœboid bodies, the rosette form, and the flagellate organisms, were also present. I did not find the crescents in any recent cases of intermittent fever which had not been under treatment.

The rosette form, with its peculiar segmentation, occurred in six cases, and always in association with the amœboid intra-cellular bodies. Case 31: tertian ague, examined in fourth attack; no medicine. Case 33: quotidian for seven days. Case 37: quotidian for six weeks, anæmic, and had a large spleen; took quinine one day. Case 39: quotidian for seven days. Case 58: quotidian, on and off, for six weeks, then stopped; now daily chill for a week. Case 60: quartan for three weeks. I have noted these details, as this form has not been much studied, and as Golgi seems inclined to ascribe to it an important connection with the development of the paroxysm. It was only observed in acute cases which had not been under treatment.

The flagellate organisms were present in seven cases, six of which were chronic forms, and one an acute case of three weeks' duration.

The small free pigmented bodies were very variable in numbers; they seemed more abundant in the chronic forms with cachexia.

Relation of those Forms to the Paroxysm.—Very many observations were made with a view of determining whether these organisms bore any definite relation to the remarkable periodic attacks which characterise acute malaria. For this purpose, in typical cases, examinations were made in the intervals of, just before, and in each stage of, the paroxysm. The results may be thus stated: there were instances, particularly if recent, in which the amœboid organisms were decidedly more numerous and larger before and during the paroxysms than in the intervals; there were others in which the number during the chill and hot stage was so small, that examples were very hard to find; in others again, slides taken before the attack and during each stage were negative, and yet in subsequent paroxysms the bodies were present in the blood. I think, on the whole, that the pigmented bodies in the red corpuscles are more numerous before and during an attack, but the difference is by no means striking, and I have repeatedly had to search long in slides prepared during a paroxysm for a single example. In acute cases which have lasted some weeks, and have had no medicine, the amœboid bodies have seemed to be quite as abundant at one time as another. Nor have I been able to see any special difference in the form of the bodies just before or during the chill, though in the early days of the attack they may be small and less distinctly pigmented, or indeed may present, as in Case 29, already referred to, the appearance of vacuoles containing small solid bodies.

The remarkable segmentation of the rosette form was in each instance met with during the paroxysm, and Golgi claims to have traced in five cases a series of changes corresponding to the stages of the attacks. In the intervals, the pigmented bodies gradually increase in size until they fill the affected red corpuscles, and finally the pigment collects in the centre, as shown at Fig. 9. The process of fission coincides with the onset and course of the paroxysm, and by the time of its conclusion the rosette forms disappear. In Case 60—a quartan ague—an attempt was made to follow these changes, with the following result. The patient, a lad of 18, had had malaria, on and off, for a year, but for three weeks before admission the chills had been recurring with regularity. On Saturday, the 6th, the blood was examined in the chill. The red corpuscles contained many large pigmented bodies, and the rosette forms were numerous, many in process of subdivision. On the 7th and 8th, he was free from fever, and the most careful examination of the blood failed to detect any forms but the ordinary pigmented intra-cellular bodies. They did not seem more numerous on the evening of the 8th than they were on the 7th. On the 9th, hourly examinations of the blood were made between 11 A.M., when the fever began, and 4 P.M. In the first two slides, there were very many pigmented bodies with the granules becoming concentrated, some with typical rosettes and a few in course of segmentation. In the specimens taken during the afternoon, the process of division was readily traced, and there were many of the small bodies in the field. On the 10th the note is: "No free bodies, all intra-cellular, tolerably numerous; no rosettes; no segmentation." On the 11th, several examinations were made, and the note reads, "absolutely none, save pigmented forms in the red." On the 12th, the slide at 8 A.M. showed large number of pigmented bodies, some with the granules irregularly arranged, other with distinct rosette. Fever began at 12 A.M.

Throughout the paroxysm, hourly examinations were made; rosette forms were abundant, and segmentation active. On the 13th and 14th, the ordinary forms were present, and in the paroxysm of the 15th, the segmenting bodies were again seen. The development of pneumonia interrupted the observations. It is worth noting that in this case the onset of the paroxysms was marked by an outbreak of the most intense urticaria. Blood and lymph from the wheals did not show any special changes.

Certainly the segmentation seems associated in some way with the paroxysm in these cases, but unless our observations have been faulty or very incomplete, there are many others in which there are no such changes in the attack. It is a point, however, to which the attention of observers should be carefully directed.

The crescents appear, as already stated, to be confined to the more chronic cases, or to those which have had treatment. They may persist for weeks or months. Thus in Case 56—a patient had irregular fever with what he called dumb chills, which had lasted for a month—for three weeks there was fever without chills, the temperature rising on some occasions to 103°. The crescents were numerous, and were not associated with other forms. With this his general condition was good, and he did not look anæmic. Under arsenic he improved, and the fever subsided, but the crescents were still in his blood six weeks from the date of the first observation.

Genuine paroxysms may occur in these chronic cases without the development of other forms than the crescents. This observation was repeatedly made in Case 25, a man with irregular malaria of many months' duration and occasional severe chills. The flagellate organisms did not seem to have any special relationship to the paroxysm, but they were so rarely seen that my observations on this point are not of much value.

Influence of Medicines on the Organisms.—Quinine invariably caused the pigmented bodies to disappear. In acute cases, which were usually studied during two or three paroxysms before the administration was begun, this observation was repeatedly confirmed. In a few days the corpuscles were entirely free; in several instances, the crescents appeared before the blood became normal. For example, Case 46 had his first chill on October 1st, and a daily recurrence until the 10th, when he came under observation. The pigmented bodies were abundant, and continued so on the 11th and 12th, when the temperature rose in the paroxysm to 105°. Quinine (twenty grains) was given on the morning of the 13 h (which broke the chill), and repeated on succeeding days. The bo lies were present on the 13th, and a few on the 14th. They were not found on subsequent days. In less acute cases the action of the quinine did not seem to be so prompt, and the crescents did not disappear so rapidly under its use. Certainly, in recent cases this medicine acts as a positive specific against these organisms, just as it does against the malady itself. Arsenic does not appear to influence the pigmented intra-cellular bodies. In a chronic case, without chills, but with irregular fever, the crescents persisted for over five weeks, although the patient had improved in general health and vigour, and was no longer anæmic. Thallin and antifebrin were given in some cases without any noticeable results. As is well known to practitioners in malarial regions, there are cases of intermittent fever which subside without special treatment. I have had several patients in whom, without any quinine, the chills stopped or recurred very irregularly. In Case 66, the crescents appeared in the blood, which at first contained only the intra-cellular forms.

Cases examined with Negative Result.—As before stated, there were eight instances of apparently true malaria in which the organisms were not found, and to these I shall now briefly refer. I would remark, in the first place, that we cannot always rely upon one, or even two, examinations of the blood for these bodies. They may be very scanty, or they may be present at one examination and absent at the next. For example, Case 41, a young man, aged 26, was admitted with a temperature of 104°. He had been cranberry-picking in New Jersey, and had been ill for a week with fever and indefinite pains, but no chills. He was so very dull, that as the fever persisted, typhoid was suspected, although, as a cranberry-picker, malaria was first thought of. The blood was examined on three occasions with negative results, but on the fourth observation, five days after admission, and when the temperature had fallen to normal, crescents were found, which continued in the blood until he was thoroughly cinchonised. The cases are as follows:

Case 10. Child, aged 5; chills and fever in Maryland nine months ago, occasional chills since, the last two weeks ago; spleen 4 inches vertical diameter; had taken quinine, none recently. One examination.

Case 11. Man, aged 19; never malarial before. Four distinct paroxysms. Slides examined from fifth and sixth, taken in cold, hot, and sweating stages. No quinine. I did not see the case subsequently.

Case 20. Man, aged 40. First attack six months ago. Chills on and off for past three months. Blood examined three days after last chill. Had taken quinine for two days. Spleen enlarged.

Case 21. Man, aged 28. Examined on 17th, first chill on September 6th; four since. On 14th, took quinine grs.xxx, and has had gr.x t. i. d. since.

Case 26. Man, aged 35. Chills for three weeks, at first quotidian, latterly tertian. Had taken medicine, but did not know the nature of it. Was admitted on 24th. Two examinations, negative; pigment in white corpuscles. On 25th quinine was given. Three subsequent examinations, without result.

Case 28. Man, aged 60. Admitted on 14th. Well-marked chills for eight weeks; had one when he came in, and four after. Blood examined on 28th, two slides. He had had quinine gr.xx each day since admission.

Case 38. Man, aged 70, resident of the almshouse for six years. First chill on 2nd, second on the 5th, third on 6th, when blood was examined, two slides.

Case 52. Man, aged 25. Chills and fever for six days. Blood examined in chill, and on the following day. Had had quinine.

Thus, in five of these cases quinine had been taken, and they may be counted out. In Case 10, the child was brought from the country, and only one examination was made. Case 11 was undoubtedly a case of quotidian ague, and the examination of slides taken from each stage of the fifth and sixth paroxysm was negative. I did not see the patient, and further examinations were not made. In Case 38, the bodies were not found on two occasions. This man also could not be followed, and I do not know his subsequent history.

The importance of excluding other causes for the paroxysmal chills was well illustrated by a case under the care of my colleague, Dr. J. H. Musser, which we regarded as one of malaria, but in which the pigmented bodies could not be found. The man had had chills on and off for several years; of late, the attacks had been more frequent and recurred more regularly. Quinine in medium-sized doses had no influence, but very large doses appeared to control the paroxysms. Their recurrence excited suspicions, and the discovery of pus in the urine, with decided pain on deep pressure in the lumbar region, indicated a more probable cause for the irregular chills.

Nature of the Organisms.—It is very evident that we are dealing here with structures unlike any others which have been described in human blood, and with bodies which have no relation whatever to the spirilla, micrococci, and bacteria of certain acute diseases. I would call attention to the remarkable unanimity in the description of these parasites by Laveran, Richard, Marchiafava and Celli, Councilman, Golgi, and myself. Laveran's original description is well-nigh complete, and subsequent workers have done little else than confirm his results, though to Marchiafava and Celli is due the credit of insisting upon the amœboid character of the intra-cellular form. Before discussing the relation of the forms to each other, it will be necessary to take a brief review of cognate organisms occurring in the blood, upon which recent investigations throw an important light.

It has been known for some years that hæmatozoa exist in the frog; one form, a flagellate organism, the Trypanosoma sanguinis, described by Gruby in 1843, is a well recognised monad; a second, the Drepanidium ranarum, of Lankester, is evidently a gregarine, possibly a larval form, as he suggests.[9] Having been long familiar with these bodies,[10] which were very abundant during several winters in the frogs in my laboratory at Montreal, I was at once struck with an apparent similarity to them of the forms found in malarial blood. The crescent-shaped body in particular resembles strongly certain of the gregarines, and I thought it possible that we had here an instance of a sporozoon becoming flagellate at one stage of its development as Rivolta affirms may be the case. I soon discovered, however, that there were other observations on hæmatoza which bore more directly on the subject, and rendered possible a more likely explanation. Mitrophanow,[11] in 1883, announced the discovery, in the blood of the carp and of the mud-fish, of parasites belonging to the flagellate infusoria. A description of these forms need not detain us, further than to note that they were polymorphic, and one stage was represented by an amœboid body without flagella.

In a report published by the Punjab Government, December 3rd, 1880, and in the *Veterinary Journal*, London, 1881-82, my friend, Dr. Griffith Evans, described a new and very fatal disease known as *surra*, which prevailed among horses, mules, and camels in India, and

[9] *Quarterly Journal of Microscopical Science*, vol. xxii.
[10] *Canadian Naturalist*. 1883.
[11] *Biologisches Centralblatt*, Bd. iii, p. 35.

in which he discovered a parasite in the blood during life. At first Evans believed it to be a spirillum, but subsequently came to the conclusion that it was a much higher organism. His observations have an important bearing on the question of the parasites in malaria. In 1885, Veterinary-Surgeon Steel published "An Investigation into an Obscure and Fatal Disease among Transport Mules in British Burma," which also proved to be *surra*. A careful clinical investigation of the disease led to the conclusion that it was a true relapsing fever, very similar to recurrent fever of man. Steel found the parasite described by Evans in all cases, and determined that it appeared as the temperature rose and disappeared in the intervals between the paroxysms. He regarded it as a true spirillum, and named it Spirochœta Evansi. Both Steel and Evans found the disease readily communicable to dogs, horses, and mules, either by inoculation or by ingestion. Recently, on the return of Dr. Evans from India, he placed material from the *surra* disease in the hands of Dr. Crookshank, who has made an elaborate report,[12] confirming Dr. Evans's view that the organism is not a spirillum, and states that the parasite is morphologically identical with the hæmatozoa described by Mitrophanow in the carp and mud-fish. In 1879, Lewis[13] described certain parasites in the blood of rats in India; and, again, in 1884,[14] he more fully discussed the question, and spoke of the identity of the organism with that found in the *surra* disease. Crookshank, in the paper just mentioned, gives the results of his investigations on the blood of European rats, 25 per cent. of which he finds infested with Lewis's parasite. It is a flagellate organism, with an undulating fin-like membrane, and is highly polymorphic. Crookshank has distinguished "globose, angular, non-filamentous, bi-flagellate, semi-circular, and disc forms;" the latter represent the encysted stage. This organism is believed to be morphologically identical with the *surra* parasite and with Mitrophanow's hæmatozoa.

In the *Biologisches Centralblatt*, 1885, Professor Danielewsky, of Charkoff, makes an important contribution to the subject. He states that Trypanosoma, the well known flagellate organism of frog's blood is polymorphic, and occurs in an amœboid form, and also produces spores; and, further, he has found in the red blood-corpuscles of birds a pigmented protoplasmic body, which subsequently appears in the plasma as a pigmented flagellate organism. In a later communication,[15] he suggests the identity of the pathogenic blood parasites of man with the hæmatozoa of healthy animals, and refers specially to the similarity of the forms which he has found in birds to certain of those described by Laveran in malaria.

With this information, we are in a better position to discuss the relation of the forms described to each other, and the zoological position of the organism. It is evidently closely allied to the hæmatozoa just spoken of, and the facts which we know of their life-history enable us to assert, with greater confidence, that we are here dealing with the varieties of a highly polymorphic species, and not with two or three different organisms. The flagellate form is doubtless the adult condition; and it is interesting to note, in contrast to the hæmatozoa of the rat and of the *surra* disease, the comparative infrequency of its occurrence. Laveran met with it ninety-two times in four hundred and thirty-two cases, and Councilman eleven times in eighty cases. The steps in development remain to be worked out. It seems clear, however, that the pigmented amœboid form may become transformed into a sporocyst (represented by the rosette form and its changes), or into an encysted body (resting form), the crescent. The gaps in our knowledge relate specially to the form and manner of entrance of the parasite into the red corpuscle. Do the solid particles contained in the vacuoles (Figs. 5 and 6) represent the earliest stage? I think it highly probable that they do, and that they, with the hyaline unpigmented bodies, are the immature forms. The spore-like structures which result from the segmentation of the rosette form do not resemble the small solid bodies seen in the red corpuscles, but are rather like the tiny free pigmented forms which, in some cases, were abundant in the plasma. Of the latter, various sizes are found, and it is possible that from them the adult flagellate bodies arise. Golgi suggests that the spores, resulting from the segmentation, pass to the spleen, and there attack the red corpuscles, in which they develop into the amœboid forms. As at present the data are not available for a final decision, a further consideration of these points need not detain us. There is sufficient evidence to show that the various forms are only phases in the life-history of one of the flagellate protozoa, belonging to the order Flagellata-Pantostomata. Mitrophanow suggests a new genus, Hæmatomonas, to include the monad hæmatozoa; but Crookshank, who has carefully worked out the affinities of the parasites of the rat, the fish, and the *surra* disease, has referred them to the genus Trichomonas. The organism here described has not, however, the characteristic marks of a Trichomonas; for it lacks the undulating fringe on one side and the caudal filament. Nor does it agree with the features of a Cercomonas; so that, meanwhile, until the true affinities are determined by an expert, its proper place seems to be the genus Hæmatomonas of Mitrophanow, which conveniently includes all monads parasitic in the blood. Thus: genus, Hæmatomonas; species, Hæmatomonas malariæ. Definition: Body plastic, ovoid, or globose, no differentiation of protoplasm, which contains pigment grains; flagella variable, from one to four. Highly polymorphic, occurring in (1) amœboid form; (2) crescents, encysted form; (3) sporocysts; (4) circular, free, pigmented bodies. The name designates the natural affinities of the parasite, its habitat, and the conditions under which it occurs, on which grounds it seems preferable to that of Plasmodium malariæ, suggested by Marchiafava and Celli.

Relation of the Parasites to the Disease.—The same difficulty meets us here as in so many affections in which micro-organisms have been found: Are they pathogenic, or are they merely associated with the disease, which in some way furnishes conditions favourable to their growth? As evidence of their pathogenic nature may be urged, with Laveran, the constancy of their presence, their absence in other individuals in malarial regions, the destructive influence upon the blood-corpuscles, and their abundance in the graver forms of the disease. But even these considerations, weighty as they may appear, will not carry conviction to all, in the absence of experimental demonstration such as can be afforded in the case of certain pathogenic schizomycetes. Attempts to isolate and grow these hæmatozoa outside the body have failed. Marchiafava and Celli have shown that the inoculation of healthy persons with blood taken from a case of malaria is followed in a variable time by genuine ague paroxysms, in which the blood contains the parasites; but in regions where malaria is prevalent such experiments are not wholly free from objections. A series of negative observations on undoubted cases of malaria would be convincing. I lay no special stress on the three cases in which I did not find the parasites, as the patients were not followed from day to day with the accuracy necessary to give any value to the observations. It must be borne in mind that hæmatozoa are not uncommon in animals, and, as in the rat, do not appear to interfere seriously with the health of their hosts. Under these circumstances, the association of a specific form with a definite disease in an animal makes it all the more probable that the species is pathogenic. A further study of the *surra* disease is particularly to be desired with the new light which Evans and Crookshank have thrown upon it. The conditions under which the disease occurs, combined with its paroxysmal character, are so similar to those of malaria, that a full explanation of its pathogeny would have a very direct bearing upon the present question.

To my mind, two facts in connection with these hæmatozoa point significantly to their etiological association with malaria. First, the positive anatomical changes which can be directly traced to their action, changes upon which one at least of the most marked symptoms of the disease depends; I refer to the destruction of the red blood-corpuscles, which can be followed in all its stages, and is as well-defined an alteration of tissue brought about by a parasite, as any of which we know. The second fact is the action of quinine upon the parasites. The simultaneous disappearance of the symptoms of the disease and the hæmatozoa suggest that the specific influence of the medicine is upon the parasites, though it may be urged that the quinine, while curing the disease, simply removes the conditions which permit of their growth in the blood.

Practical Considerations.—An interesting practical point is the diagnostic value of the presence of these bodies. There were six or eight cases in which the examination of the blood proved of great service in determining the existence of malaria. Some of these are worth mentioning. One of the first was a man aged 37, who had been under observation on three or four occasions with anæmia and an enlarged spleen. He had had three attacks of hæmatemesis. There was no history of malaria, and, from the gravity of the case, I was led to regard it as one of severe splenic anæmia. On his fourth visit, however, a careful examination of the blood revealed the presence of the parasites, and I gave, in consequence, a more favourable prognosis in the case, which has since been justified. In an instance of pernicious malaria admitted to the Philadelphia Hospital, under the care of my colleague, Dr. J. H. Musser, the diagnosis rested on the discovery in the blood of the characteristic changes in the corpuscles. To a third case, No. 41, I have already referred, and there were four or five other instances of chronic malaria in which the nature of the dis-

[12] *Journal of the Royal Microscopical Society.* 1886.
[13] *Quarterly Journal of Microscopical Science.* 1879.
[14] *Quarterly Journal of Microscopical Science.* 1884.
[15] *Centralblatt f. die Medicinischen Wissenschaften*, Nos. 41 and 42. 1886.

case was determined by an examination of the blood. On the other hand, in many cases of suspected malaria, the absence of these bodies led to a more careful examination, and to the discovery of the cause of the chills and fever. Four of these were cases of phthisis with ill-defined physical signs; in a fifth, after several negative blood-examinations, the ague-like paroxysms were found to be due to a septic pneumonia; in a sixth and seventh, renal disease was discovered. I feel confident that, in malarial regions, the examination of the blood will prove, in skilled hands, a most valuable aid in the diagnosis of many obscure cases.

Melanæmia.—These researches on malaria throw light on the formation of pigment in the blood and various organs in the chronic cases. Evidently the primary change is in the red blood-corpuscle, which is gradually destroyed by the amœboid form of the parasite. Every stage of this process can be readily traced, and these observations bear out the more recent views on the origin of the pigment in the blood itself. The pigmentary degeneration of the red corpuscles noticed long ago by Frerichs and by Kelsch,[16] was no doubt the same as here described. The gradual accumulation of the granules in the spleen, liver, and bone-marrow leads to the characteristic melanosis of these organs. I sought carefully for evidence of active interference with these parasites on the part of the white blood-corpuscles, but on only



Fig. 14.—A colourless corpuscle studied for an hour and a half, during which time it had, as shown at 1, included a pigmented body, and was about to take another 2.

two or three occasions was this seen. Once a crescent was found inside a colourless corpuscle (Fig. 13), and again, as shown at Fig. 14, a corpuscle gradually enclosed two free pigmented bodies. The greater portion of the pigment resulting from the destruction of the monads is picked out by the cells of the spleen and bone-marrow, which also, no doubt, as in health, remove the effete red cells and their remnants. Pernicious malaria, common enough when Stewardson[17] wrote his well-known article, has now become very rare in Philadelphia. In these cases, Marchiafava and Celli have found the capillaries of the various organs filled with corpuscles containing pigment-grains which appear enclosed in a hyaline matrix. Councilman and Abbot[18] have described the same change, and I am indebted to Dr. Councilman for the specimen from which the accompanying sketch was taken (Fig. 15). It represents a small brain-capillary filled with corpuscles, in many of which are pigmented bodies which stain deeply, and, so far as can be



Fig. 15.—Sketch of a capillary vessel of grey matter of brain. Case of pernicious comatose malaria—Dr. Councilman. The red corpuscles are seen in outline, and in five there are pigmented bodies.

ascertained, are identical with the pigmented organisms met with in the red corpuscles during life. Only one instance of fatal malaria came under observation, a man aged 70, admitted to Dr. Musser's wards on October 25th. He had been on the Isthmus of Panama and in Georgia, and had chills and fever in both places; last chill was three days before admission. He had also had hæmaturia. He was very anæmic, the spleen was slightly enlarged, the temperature, 101.3°. There was great stupor, and he was roused with difficulty; the tongue was dry. The temperature became subnormal on October 27th and 28th. Examination of the blood showed many pigmented bodies in the red corpuscles, numerous free circular forms, a few crescents, and several flagellate organisms. The stupor deepened to coma, and he died on the night of October 28th. The spleen and liver showed typical pigmentation, and the bone-marrow was also very dark. The spleen-pulp contained free pigment and many large cells, some of which were filled with dark granules, while in others there were bodies identical with the small pigmented forms so abundant in the blood during life. The marrow presented similar changes. The number of red corpuscles containing the pigmented bodies was not great, nor were the capillaries of the liver or the brain stuffed with them, as in the instances of pernicious malaria just referred to. Probably this was an instance of severe malarial cachexia of many months' duration, and scarcely should be grouped with the pernicious comatose form.

To my colleagues, Drs. Curtin, Neff, and Musser, I am indebted for the privilege of examining the malaria-cases in their wards; and to my resident physicians, Drs. Donohue, Albertson, and Westcott, for assistance which materially lightened my work.

[16] *Archiv. d. Physiologie*, 1875.
[17] *American Journal of Medical Sciences*, 1851.
[18] *American Journal of Medical Sciences*, 1886.

AN ADDRESS
ON
THE INADEQUATE TREATMENT OF ANÆMIA.[1]

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None amongst us can doubt that there is everywhere a great deal of untreated anæmia. I observe it quite as commonly in healthy rural districts as in the large towns. An out-door life, in pure air, is by no means preventive or curative of this state. I have a strong impression, indeed, that many cases, anæmic in the country, improve under the conditions of the more intense life of big cities, provided the ordinary hygienic conditions are favourable. It is common to find the contrary affirmed—that country girls often become anæmic in the large towns. This is quite true, but the facts of each case must be brought out in order to explain the cause in each case. The causes of anæmia, ill-understood as they are, are certainly not uniform. For instance, I am as convinced of anæmia due to nervous influences, as I am of anæmia due to bad air, bad food, and imperfect solar influences; and for successful treatment regard must be had to all such matters. It is not difficult to follow the onset of the disorder in a young girl who comes from healthy farm-service in the country, to work as a scullery-maid in the dungeons of Belgravia, or to sleep in the stifling attics of Mayfair; but it may be asked why this state should so often supervene in young girls sent from home to schools where, now-a-days, even in Germany and France, attention is paid to diet and to active open-air exercise. The causes may be, and probably are, not far to seek in each instance, but they are, at any rate, as I have said, not uniform.

In this communication I wish to express my belief that many cases of anæmia are insufficiently or incompletely treated. I propose to discuss neither the very large subject of the etiology, nor the nature of the particular disorder in question. I refer to cases which are very common in all ranks of life, and more especially frequent in young females, to what is known as essential anæmia in its non-pernicious variety.

The term chlorosis is especially applied to the aggravated form of this in women, and it is a good one, and worthy of retention on all accounts. I suppose the ordinary conception of chlorosis is that of a case of severe anæmia in a young woman accompanied by amenorrhœa. The relation of the latter to the anæmic state has been interpreted in two ways; first, that the amenorrhœa is the cause of the anæmia; and secondly, that the amenorrhœa is the consequence of the anæmia. With the latter view I am disposed to agree. Menstrual disturbance is common, and chiefly in the direction of scanty and pale flow, the latter being perhaps as often met with as total cessation of menstrual effort. Of course, I exclude cases where menorrhagia is the cause of a truly hæmorrhagic and non-essential anæmia.

It is a matter of fairly common belief that chlorotic women are especially liable to gastric ulcer, and to the worst accident of such a lesion, namely, perforation; and in this belief I share.

The association of menstrual derangement, itself the result of the anæmia, with gastric ulcer, is too obvious to escape recognition, and there is no other disorder so frequently associated. The ulcer itself, once formed, probably suffers from nutritional defect by reason of the impoverished state of the blood, which prevents the formation of resisting tissue around it. The risk attending gastric ulcer in an anæmic female is certainly great. Amongst other evils and dangers

[1] Read in the Section of Medicine at the Annual Meeting of the British Medical Association at Brighton.

arising out of the anæmic state, which have only been sufficiently recognised recently, are the conditions of cardiac debility and dilatation, and the tendency induced thereby to valvular disease, especially of the mitral curtains. I think no doubt will be entertained on these points by those who have made careful clinical studies of anæmia. It is perhaps worthy of consideration whether a condition of prolonged and untreated anæmia may not tend to overstep a curable stage, and pass into the pernicious variety.

I am not, however, now concerned to discuss this or any other points in relation to the pathology or associations of the anæmic state, and merely refer to these graver evils in order to emphasise the necessity for prompt and complete treatment. The greater number of cases of the milder forms, as a rule, are untreated, and often there is very insufficient care taken to restore the defective state of the blood. It is generally held that iron is practically a specific remedy in anæmia of the non-pernicious form. This is my own belief, and I am disposed to think that many of the failures attributed to it are due to improper administration, or insufficient dosage of the drug. Other remedies have been consequently sought, most of them proving of limited usefulness, and many of them being, I maintain, unnecessary.

I would now instance two approved plans of treatment. Some years ago, Dr. Wilks expressed the opinion that some of these cases were readily cured by aloes without any iron, and I think I have been able to satisfy myself that this is so. Constipation is a common trouble in anæmia, and it is well treated by such an aperient as aloes, which operates on the large bowel, and probably stimulates adjacent pelvic viscera, encouraging thereby restoration of function to the uterus and ovaries, and thus establishing the menses. Intestinal catarrh is relieved in this way, and so better general nutrition is secured, leading to improved condition of blood. Cases of amenorrhœa dependent on plethora, the opposite state to anæmia, may be thus treated, but saline purgatives probably answer better. The first method I would mention is that consisting in giving saline aperients together with good diet and some full-bodied red wine, such as Burgundy, to the extent of four or six ounces daily. This is found to achieve the desired result in many cases without any iron. The second method is chalybeate treatment. Good therapeutists have urged that the non-astringent preparations of iron act best, and should therefore be used. And inasmuch as the term therapeutist has been lately much objected to, I would say, here and now, that if practising physicians are not therapeutists, I do not recognise any place for them in our social system. If the end and aim of all our studies and labours is not to heal the sick, I do not know what object we are in pursuit of. I see, only too plainly, that some of the studies which now absorb the attention of many amongst our body are not directed to this end; and I have a strong opinion that those who scoff at the efforts of so-called practical men in this direction, are in no proper sense bedside healing physicians. A great gulf is fixed between the students of bedside and those of dead-house pathology. Our business as healers of the sick is to try and afford the pathologists as few opportunities as possible of following us in our work and twitting us with our failures. Their harvest, unhappily, is only too plenteous, and we owe them, and always shall owe them, our thankful acknowledgments for the aid they give us in bedside work. But let it be recognised at once, that we have to deal with life and to save it, if we can, while they deal with death. I have often said, and now repeat it, that a great physician is a great artist, and can hardly transmit his special and personal powers. His skill, however, is far from being limited to mere drug-giving, and consists in a comprehensive care and solicitude for everything, however minute, that has to do with the well-being of the patient, and the aversion from him of all unfavourable influences. Hence, no amount of pathological learning will ever, by itself, make a master of the art of healing, and a seeming antagonism is thus set up between those who maintain that dead-house research is all in all, and those who hold that bedside study alone enables a man to employ remedial agents. All, then, who try to heal the sick in any rational way are therapeutists whether they like the term or not. The rational method is, of course, founded on accurate physiological and pathological conceptions, but it is therapeutics all the same, and always will be; and drug-giving is a part, but only a part, of it; not, indeed, always necessary or advisable. Asking your pardon for this brief digression, I resume what I have to say about iron in the treatment of simple anæmia. It is found that the state of the digestive system sometimes forbids the immediate use of iron. Thus, it will hardly agree, unless the tongue be clean, and any catarrhal state of stomach be first removed. For this purpose some alkaline and mild tonic remedy is necessary, such as a soda and calumba mixture for a few days; then iron may be given, beginning with small, and increasing to large, doses. The best preparations are the ammonio-citrate, the tartrate, and saccharine carbonate amongst the non-astringent ones; of these, from five to twenty grains may be given thrice daily. The larger doses will often succeed where the smaller fail. The carbonate of iron is perhaps one of the best preparations, and is not so much used now as formerly. In the form of "mistura ferri composita" it is still presented in the last *Pharmacopœia* (Dr. Griffiths's green mixture).

To be effectual in many cases the dose would require to be increased beyond the indicated maximum of two ounces, and patients resent such dosage. The carbonate is, therefore, better given in fuller doses in the form of the saccharated carbonate, which is not at all unpleasant, spread on bread and butter, and half-drachm doses may be thus taken. In the form of Blaud's pills it is now very commonly given, and the late Professor von Niemeyer has the credit of introducing it in this form into English practice, for it became known here only after the English translation of his book appeared in 1869. He remarked that he had "had such brilliant results with these pills that he never found any opportunity to experiment with other articles." As various formulæ are given for these pills, and they demand some skill in making, I append one which is trustworthy: ℞ Ferri sulphatis gr.ij; potassii carb. gr.ij; glycerini tragacanthæ q.s. ut ft. pil.j. The dose is one pill thrice daily, gradually increased to four or six thrice a day. Given in this way, a large amount of iron is introduced into the system, much more than is actually taken up, but there is plain clinical evidence to show that these large and seemingly uncouth doses effect what smaller ones fail to do. Of the astringent preparations, the tincture of the perchloride, of the acetate, and the sulphate, it is certain that large doses cannot well be borne or digested. The dried sulphate is a good preparation given in pill with potash or soda. I have employed it in twenty and thirty grain doses in pills with the best effects in some very severe cases of anæmia, and I wish to commend the practice, which is at once seen to be very different from that commonly pursued, in which only small doses are given. To secure the full benefit, however, in some severe cases, it is necessary to keep the patient under care or observation from time to time for one or two years, and to recur to the treatment for a few weeks at intervals. There is a great tendency to relapse, and for the benefit to pass off. The risk is of leaving such cases incompletely cured, and so still exposed to the graver evils attendant on the anæmic state. Much benefit is to be obtained from the use of chalybeate waters by patients who can resort to suitable spas. Harrogate presents, without any question, the best potable iron waters in this country, and the Kissingen aperient chalybeate spring there is very suitable for many cases; also the chloride of iron and the Tewit springs. On the Continent are many excellent iron waters, of which the best are to be found at Spa, Schwalbach, Pyrmont, Bocklet (near Kissingen), and St. Moritz. The waters most impregnated with carbonic acid are the most agreeable to take. During the treatment by iron, it is well to give a nightly dose of the compound decoction of aloes, made more powerful, if necessary, by the addition of one or two drachms of the tincture of aloes.

The therapeutics of the anæmic state demand something more than mere drugs; but I must not dwell on these. I would, however, call attention to the importance of securing rest in the early treatment of severe cases. This is urgently called for when there is cardiac debility and dilatation, also if there be any suspicion of gastric ulcer. Repose in bed for some days or weeks proves of great value; and, if there be any pain after solid food, it will be well to suspect the possibility of gastric ulcer, and to employ suitable diet for some time. The great point I seek now to enforce is the value of iron in much larger doses than are commonly given, and the maintenance of the treatment for a prolonged period. Trousseau called attention to this matter many years ago, but his precepts have been forgotten. He considered the only limit to the amount of iron to be given was the tolerance of the stomach; and, where it disagreed, he gave it with opium or belladonna, or suspended it for a time in favour of cinchona. Here was a dictum of that wise physician in respect of anæmia: "A maladie chronique, il faut une thérapeutique chronique." He regarded the disorder—not, as is too often the case, as a simple and fleeting one, but as essentially chronic. I must add, that the fault is often on the patient's side. Having secured some temporary benefit, our cases pass away from us; but our duty is to follow them up till we are certain that the blood is restored to, and maintained at, due corpuscular richness. I am sure, from observation of many cases, that persistent treatment with iron, in a suitable form, and in much larger doses than are commonly given, will prove the most valuable and trustworthy remedy we have in dealing with anæmia. The mental condition of many of the subjects of this disorder must not be

neglected. Chagrin and unhappiness, and want of active pursuits, often retard recovery. The venous murmur in the neck is found to be the last to disappear; but, until it is no longer heard, a case of anæmia demands treatment.

I might add that arsenic is of unquestionable value, sometimes, as an addition to treatment by iron, though I am not able to distinguish the cases in which it is specially useful. It is intelligible that it should be beneficial in cases complicated with malarial impregnation, as in persons long resident in the tropics; and its great value in cases of pernicious anæmia, where iron is useless, must not be forgotten in connection with its occasional suitableness in simple anæmia.

Lastly, I would say, there is a chapter in medicine to be written respecting the future life-histories of those who once have been severely anæmic, and have recovered more or less completely from that state. We want knowledge as to their special tendencies, and their tolerance of other morbid states; as to their power for child-bearing and suckling, their ability to do their share of the world's work. We want to know, also, the relation of the anæmic state, and a tendency to it, with other morbid proclivities. And all this knowledge can be gathered and made common by this great Association.

I would suggest that such an inquiry as I have here indicated be set forward, and its results brought into this Section at some future meeting of our body. The work will be accomplished by those who enjoy the advantages of family practice, and can thus trace life-histories over long periods.

POST-MORTEM EXAMINATIONS OF CENTENARIANS: WITH REMARKS.

By G. M. HUMPHRY, M.D., F.R.S.,
Professor of Surgery in the University of Cambridge.

Of the *post-mortem* examinations of centenarians which have been recorded (they are unfortunately but few), the first and best known is that[1] of Thomas Parr, aged 152 years and 9 months, made by Dr. William Harvey, by command of the king (Charles I). The body was muscular, the chest and forearms hairy, the hair being still black, but the legs without hair. Organs of generation healthy; penis not retracted or extenuated; testes sound and large, "so that it seemed not improbable that the common report was true, namely, that he did public penance, under a conviction for incontinence, after he had passed his 100th year; and his wife, whom he had married in his 120th year, did not deny that he had intercourse with her, after the manner of other husbands with their wives." The chest was broad and ample; the lungs nowise fungous, adhered, especially on the right side, to the ribs; heart large, thick and fibrous, with considerable quantity of fat; cartilages of ribs soft and flexible; stomach and intestines and all the viscera sound; kidneys healthy, with the exception of a few watery cysts; no appearance of stone in them or in the bladder; spleen very small, scarcely equalling one of the kidneys; a good deal of fat about the mesentery, omentum and kidneys; brain healthy, firm and hard to the touch.

He "had observed no rules or regular time for eating, was ready to discuss any kind of eatable that was at hand; his ordinary diet consisting of sub-rancid cheese and milk in every form, coarse and hard bread, and small drink, generally sour whey. On this sorry fare, but living in his home, free from care, did this poor man attain to such length of days. . . . He was accustomed to walk about, slightly supported between two persons; had been blind for twenty years, heard extremely well, understood all that was said to him, answered immediately to questions, and had perfect apprehension of any matter in hand; his memory was, however, greatly impaired." "He was accustomed, even in his 130th year, to engage lustily in every kind of agricultural labour, whereby he earned his bread, and he had even then the strength required to thrash the corn." His death was attributed to the change from the pure air of Shropshire to that of London, and to the change of diet, incidental to a residence in the house of the Earl of Arundel, by whom he was brought to town and presented as a remarkable sight to his Majesty the king.

2. Dr. James Keill gives, in *Phil. Trans.*, xxv, p. 2247, 1706, an account of the death and dissection of John Bayles, of Northampton, reputed to have been 130. The oldest people remembered him to have been old when they were young. Of late decrepit and carried about. His diet was anything he could get; but he had not eaten meat for some years, and of late lived only on small beer, bread, butter and sugar. Pulse irregular and intermitting for some years before death; went to stool but once in ten or twelve days for some years before death. A little man; body emaciated; abdominal viscera pale; spleen small; kidneys and urinary passages sound; a few yellow grains of gravel in the right kidney; cartilages of sternum not harder than they usually are; ribs brittle. "Lungs attached even to the pleura." Heart large, thick and fat; diameter of aorta above two inches; the abdominal and iliac arteries for the greatest part cartilaginous. Bones of skull sound and good; a small ossification in dura mater, by the falx. Brain more solid and firm than usual; ventricles full of serum. Genitals, both testicles and penis, of large size. He had lost sight for some years, but hearing was good till he died. "The greatest part of his blood was in his arteries, whereas generally in all dead bodies the veins are full." This is attributed to the loss of elasticity in the arteries; and to the same cause is attributed the dryness and the deficiency of the secretions in the old. The strong fibrous heart, the low stature, the largeness of the chest and goodness of the lungs are regarded as having had the greatest share in preserving the longevity.

3. In *Phil. Trans.*, xliv, p. 528, 1747, is an account by Haller of the examination of a decrepit woman reputed to be 100. Tissues dry; costal cartilages not yet osseous. Aorta, together with large arteries, osseous and rough; the aorta much dilated (5 inches 2 lines in circumference), with valves indurated and earthy. Twenty small stones in gall-bladder.

4. Dr. J. Beddoe, of Clifton, informs me that he "assisted at the *post-mortem* of a woman, credibly reported to be aged 106, who died from a burn. Her costal cartilages were normal. There was no evidence of her having ever had a tooth, so entirely had the alveoli been absorbed. One of her kidneys was perfectly obsolete. She exhibited signs of extreme tight-lacing."

5. Sir G. Duncan Gibb (*Journal of Anthropological Institute*, July, 1875) gives the necropsy of Mrs. Leatherlund, believed by him to have died at the age of 110. She was 4 feet 9 or 10 inches, and body proportionately small. Skin yellowish brown; muscular development good; no decided emaciation; some fat over the chest and abdomen; cartilages of ribs cut through with the greatest ease; lungs healthy; heart a little large, rather soft and flabby, with slight covering of fat; muscular structure, cavities and valves appeared healthy; arch of the aorta enlarged, measuring 4 inches in circumference at its commencement and 3¼ inches at its termination. An atheromatous patch the size of a silver threepence at the lower surface of the transverse portion, and a ridge of atheroma at the left part of the ascending portion; scarcely a trace of omentum; stomach and alimentary canal, liver and gall-bladder healthy; spleen small but healthy; kidneys soft and flabby, but, as well as the ureters and bladder, healthy; uterus, Fallopian tubes and ovaries small; thoracic and abdominal blood-vessels healthy. The larynx and the rings of the trachea were perfect and flexible.

The same author attached much importance to the good conformation of the larynx and the erect position of the epiglottis, facilitating the passage of air to and from the lungs.

6. The most complete account of the examination of a centenarian is given by Rolleston.[2] John Pratt, reputed to be 107. Father died aged 75; mother, 104; grandmother, 110. Habits some way short of strictly temperate. Examination made thirty-two hours after death. One upper canine. Dura mater closely adherent to skull; well-nigh continuous tracings marked the position of the coronal and sagittal sutures. No exostoses on interior of skull. Canals for meningeal arteries deepened by bands of bone on either side, but there is no mention that the skull was thick, dense, or heavy. The relation of diploë, internal and external tables, much as in an ordinary skull. Weight of brain, 43 ounces. Mentions one from a woman aged 100, 45 ounces. Convolutions rounded, and to some extent atrophied; the fissure of Rolando, and the fissure anterior to it, being especially wider and deeper than natural. Cavities of lateral ventricles somewhat enlarged; numerous amylaceous bodies on surface of corpus striatum. Body appeared emaciated, but considerable layer of yellowish fat over pectoral muscles. Muscles looked pale, but showed the usual characters of striated muscle with great clearness and distinctness. Costal cartilages cut with greatest ease, of brownish yellow colour, from oil in cartilage-cells. Died of acute pleurisy. Much fluid in right pleura; apex of right lung the seat of chronic pneumonia. Had cough for some months before death. Heart much loaded with fat; atheroma of aorta opposite the edges of valves, and calcareous deposit; very little beyond this—only one patch. Liver, 43 ounces; much oil in cells. No mesenteric glands visible; Peyer's glands merely black specks;

[1] *Harvey's Works*, published by the Sydenham Society, p. 589. Harvey expresses no doubt about his age. In this more sceptical period we may fairly admit him to rank among the centenarians.

[2] *Scientific Papers and Addresses* i, 141.

but these, under microscope, showed the same turgescence and soundness as in younger persons. Haller notes the absence of mesenteric system in advanced years. Spleen small, weighing 2 ounces; capsule tuberculated. Concretions of uric acid abundant in pelvis and calices of right kidney, and in bladder. Right kidney, 2¾ ounces; left, 2¼; both lobulated, and with numerous cysts scattered over the surface. Ureters much dilated. Bladder hypertrophied with sacculi fasciculated. Lateral lobes of prostate large, like Home's plate 2, in vol ii. Pediculated growths, size of pea, projected from third lobe into urethra; orifices of ducts large. Testes not to be detected, though epididymis easily recognised by examination through the scrotum. No spermatozoa in vesiculæ seminales or vasa deferentia.

7. A. Melis, aged 104 an ecclesiastic who lived in Sardinia, by Dr. Luigi Berruti, quoted by Rolleston. Good digestion, middle-size, strongly built; fond of pleasures of table and good wine; bled at various periods some hundred times; died of pneumonia in spite of three bleedings. Curly black hair, and teeth in perfect preservation. Body muscular and fat; costal cartilages quite ossified; diploë and sutures of skull disappeared; dura mater beset with bony plates; basilar and vertebral arteries ossified, also incrustations on aortic valves, aorta, and many of its branches. Heart fat, its muscular tissue firm. Splenisation of lungs and bronchitis.

8. Dr. Holyoke, aged 103 (quoted by Rolleston, from his *Memoirs*, Boston, U.S., 1829), a physician who settled in Boston, at the age of 21, in 1749, and scarcely left till the time of his death, and who led a life of the greatest temperance. Costal cartilages ossified; lungs pigmented; fat about heart; cysts in kidneys; widened cerebral fissures and hydrocephalus *in vacuo*, which he had predicted from the sense of fluctuation in his head.

9. Some years ago, I made a hasty examination of a woman, reported to be 103, who died in this town of bronchitis. No certificate as to date of birth was obtainable, but there was incontrovertible evidence of her great age. My attention was directed chiefly to the skeleton. The cartilages of the ribs were soft and yellowish from impregnation with oil. The skull was thick and heavy, weighing 28½ ounces, although only one tooth—a lower incisor—remained, and the alveolar process of the maxillæ were in great measure absorbed. The other bones examined were remarkably light and porous. Thus the thigh-bone, though large for a woman, weighed only three ounces. The skull and thigh-bone are in the museum of the University; and the lightness of the latter is in remarkable contrast with the heaviness of the former. The brain was shrunken, the fissures between the convolutions being wide, and occupied by arachnoid fluid—hydrocephalus *in vacuo*. The density and thickness of the skull which I have observed not infrequently in the skulls of old persons (my *Treatise on the Human Skeleton*, p. 195), and which may be regarded as an ossification *in vacuo*, is probably, like the accumulation of fluid in the subarachnoid spaces, due to a diminished pressure on the tissues and the blood-vessels, consequent on the diminution of the size of the brain, which takes place in advancing years. In some instances, absorption from the exterior keeps pace, or more than keeps pace, with the addition to the interior. Then the skull becomes smaller, and, it may be, thinner as well as smaller. Hence, although in some aged people the skull retains its size, and becomes thicker and heavier, in others it becomes smaller, but of the ordinary thickness, and, in some, it becomes small and extremely thin and light. In some cases, the external absorption takes place unequally, causing especially thinness at certain parts of the calvarium. This is peculiarly the case in the parietal bones on either side of the sagittal sutures; oval symmetrical, or nearly symmetrical, depressions being here formed, as though the outer and middle tables had been planed or chiselled off. In one specimen in the Cambridge Museum, the absorption had extended quite through the parietal bone at one part. I directed attention to these depressions in the parietals in my *Treatise on the Skeleton*, p. 242, and in the *Journal of Anatomy*, viii, p. 136, but never could explain why the absorption should especially affect this particular region. Possibly the pressure of the occipito-frontalis tendon may have some relation to it. I may observe that the neck of the thigh-bone in this old woman forms an angle of 128° with the shaft. Hence there has been none of that lowering of the head and neck which is generally stated to occur, as a rule, in aged people, but which my observations show very often, indeed generally, does not occur.

[*To be concluded.*]

THE building of a deaf and dumb institution in Berks is one of the latests projects for celebrating the Queen's jubilee.

BACTERIOLOGY IN SPAIN.—A bacteriological laboratory is about to be established at Barcelona, under the direction of Dr. Ferran.

ON THE MANAGEMENT OF PERFORATIONS OF THE MEMBRANA TYMPANI.

BY SIR WILLIAM B. DALBY, F.R.C.S., M.B.(CANTAB.),
Aural Surgeon to St. George's Hospital.

IF any examples of a morbid condition of the body might be described as having individualities of their own, as exhibiting various moods, or showing a diversity of behaviour under treatment, surely it would be perforations of the tympanic membrane. To those who are in the daily habit of observing how soon they occasionally heal, how for long periods they do not heal (periods to be measured by years, and even by long life-times), how tolerant at one time they are of manipulation and of treatment, how intolerant at others, how susceptible to climate, to diet (especially in the matter of stimulants), they indeed display an "infinite variety."

Occasionally there may be found fragmentary additions to medical literature in which this application or the other is recommended as the best treatment for perforations. Now, although many of these applications are useful under appropriate conditions, I fear it is nearer the truth to say there is no best treatment that may be employed by those who appreciate the interesting variety referred to as belonging to perforations.

To begin with early life. Of all children who during their infancy have a purulent discharge from the ear after a few hours of pain in the ear (the position of the pain being generally unrecognised at the time), how very small a proportion are submitted to an examination of the membrana tympani! When in isolated cases they are so examined at the time of the discharge, is it not almost the rule that the membrane is found to be perforated? The probabilities, therefore, are that in all, or at least most of them, these discharges are accompanied at the time by perforation. I say at the time, for when the membrane is examined weeks or months after the discharge has ceased, it is often discovered to be entire. We must admit, then, that during infant life the membrane is extremely prone to become perforated, and happily equally prone to heal. This view must have occurred to so many that it is only necessary to mention it, in order that either the occurrence of the perforation or its healing should not excite surprise with those who see comparatively little of ear-disease.

What is still further deserving of notice is that the majority of these children, when they grow up, hear well. If this fortunate ending of the affair is occasionally in part due to the fact that there has been no local interference, it does not follow that nothing in the way of management should be done for recent infantile perforations; but I feel convinced that they are better without treatment, if such treatment includes mineral astringents in solution; the sulphate of zinc and acetate of lead lotions, which used to be thought as necessary for a perforation as iron and quinine mixtures and Latin verses are still for the English boy, are worse than useless. Scrupulous cleanliness—not only by removing discharge from the meatus, but by its expulsion from the tympanic cavity, vegetable astringents, and protection from the action of external air—include the routine of treatment under which the perforations are aided in healing. The same will apply to the treatment of recent perforations in adults; and when the perforation has healed, so long as there is undue secretion within the tympanum, if the case is treated as one of catarrh, the best possible results as to future hearing will follow. Why, then, do we find so many perforations which have occurred from simple catarrhal inflammation either permanent, or, if they heal, leaving such considerable losses in hearing? Of course the disorganisation of the tympanic cavity (the result of inflammation) must be taken into account; but, having excluded this element, I cannot but think this is sometimes due to the pardonable anxiety of the patients to (as they express it) "stop the discharge," and so they resort to anything that offers this prospect.

No doubt, for a time, the mineral astringent will do this, but it does more—it stops the healing, and it stops the hearing. For it astringes the tympanic end of the Eustachian tube; it prevents the possibility of expelling the discharge from the tympanum through the perforation; it allows the discharge to collect in the tympanic cavity, and become inspissated; it causes cicatrisation of the edges of the perforation—in short, it does not give the lesion a chance of repair. More than this, when the mineral astringent whose motto is, "Stop the discharge," is discontinued, the discharge comes on as before, so it indifferently fulfils its own motto. I suspect that the advertised lotions and drops for the ear which patients obtain and use on their

own responsibility contain mineral astringents in considerable quantities, as they sometimes cause great pain, and excite inflammation as soon as they reach the perforation. If it is thought that the expulsion of the discharge from the tympanum through the perforation tends to keep open the perforation, let it be remembered (and it is a matter of common knowledge) that if a membrane is inclined to heal, nothing of this kind prevents it; of this fact we have ample evidence in the case of perforations made for remedial purposes in cases of chronic proliferous catarrh; and it surely is desirable in the instance of perforation caused by disease that at the time when this happens as little as possible of the products of inflammation should be left within the tympanic cavity.

And now in regard to the tolerance or intolerance respectively which perforations of long standing exhibit to well recognised and useful applications. Take for example the case of alcohol. Many perforations with unhealthy edges, discharging in large quantities from the tympanum, at once become more healthy under the use of alcohol in various dilutions; but to some, alcohol, even extremely diluted, is most painful and irritating. This is especially noticeable if the perforation is of small size. How can it safely be said in a general way that alcohol is a good treatment for perforations? The same may be said of iodoform or boracic acid. What satisfactory results either of these applications often produce in old perforations with bone granulations and a fœtid discharge! But the fact that they occasionally set up irritation is enough to prevent me, and probably many others, from recommending them when the patient is subject to pains in the head, especially if these pains are chiefly on the same side as the perforation.

The tolerance and intolerance of all forms of artificial membrane or support which perforations show is so well recognised that it is hardly deserving of mention; and the excellent hearing and improved local condition of the perforation is perhaps better known than occasional intolerance which some perforations show to its employment; but the following case will perhaps illustrate so well what I might term the behaviour of a perforation under treatment that I relate it.

About fifteen years ago, a gentleman had perforations of both membranes after scarlet fever. On the right side all hearing was lost and the perforation healed. It was then found that on the left side (he being extremely deaf with this ear), he could obtain excellent hearing by the use of a cotton wool pad, which he learned to apply to the perforation. This he habitually used during fourteen years spent in active work which necessitated good hearing. Finding one day that the pad did not give the usual result, he tried various applications without avail. Having noticed that the pad was very dry when it was removed, he proceeded, on his own account, to irritate the ear in several ways in order to produce a discharge. Amongst other plans which he tried, one was by dipping the pad into turpentine. This was soon followed (strangely enough, without any pain) by a discharge, and on again adjusting the pad, he heard well for several days. Finally, nothing succeeded; the ear became dry and he was deaf.

When I saw him, I found, as he told me was the case, that the perforation had healed. The size of the old perforation was markedly shown and filled up with new tissue. After I had made an incision into the membrana, and after a great deal of trouble, the new tissue disappeared, leaving the old perforation as before, and he could again use the pad with efficiency, and without the tendency to heal being shown. Could anything illustrate better than this little history the behaviour of perforations? One might almost say that it is necessary to make use of our experience to anticipate their moods, and even then we shall be often wrong in our surmises. What is needed, however, to treat satisfactorily perforations of the membrana tympani, and many other forms of chronic disease, is the intelligent co-operation of the patient, and whoever is the subject of them must patiently learn to manage himself. When it is remembered that by careful management the hearing may frequently be made and kept good enough for the ordinary purposes of life, and, more important still, the patient may be often kept free from the dangers which have a fatal ending, it is not trouble ill-spent.

Of all the many forms of perforation, some of the most troublesome are perforations of Shrapnell's membrane, and the most difficult to treat are those in which there is evidence of caries. The easiest to treat are perhaps those in which the perforation has arrived at a dry state without any discharge, a state which it may retain for many years if not interfered with; then a masterly inactivity, as shown by leaving it alone (it may be permitted to say for this perforation, if for none other) is the best of all treatments.

ABSTRACTS OF

THE GULSTONIAN LECTURES,

ON

THE NATURE OF FEVER.

Delivered at the Royal College of Physicians of England, March, 1887.

By DONALD MACALISTER, M.A., M.D., F.R.C.P.,
Physician to Addenbrooke's Hospital, Lecturer in Medicine at the University of Cambridge.

Lecture I.

After some preliminary observations, the lecturer said that in disorder of the body-heat he recognised the essential, though not therefore necessarily the primary, condition of fever, and then proceeded to sketch the conditions under which the body-heat was maintained in health; the points to be considered were heat-loss, heat-production, and the mechanism which regulated the body-temperature and gave it stability, which was termed the thermotaxic mechanism.

The main channels by which heat was lost were through the skin by evaporation, conduction, and radiation (80 per cent.), and through the respiration (less than 20 per cent.). The blood-supply of the integuments was under the control of the vaso-motor "centres," with their vaso-constrictor (motor), and vaso-dilator (inhibitory) nerves; while the rate of respiration was governed by a respiratory centre, having two sets of nerves, which there were good grounds for regarding as motor and inhibitory respectively. Traube had founded, on facts of this nature, his "retention-theory" of pyrexia, which was that pyrexia was due to a diminished discharge of heat from the surface of the body, and this to a powerful contraction of the arterioles of the skin; this theory rested upon the one fundamental assumption, that the escape of heat from the body was unduly small, and it at once fell to the ground when Leyden and Senator showed that fever was accompanied not by diminished, but by increased, discharge of heat.

Like experiments, the lecturer said, have been repeated in recent years by Wood, of Philadelphia, and by Reichert and Hare under his direction. Their arrangements were admirably designed, the criticisms of 1875 were considered and met, and the work bears every mark of honesty and care. From a physical point of view there seems nothing to which objection can be taken; and the outcome of these last measurements, published only the other day, is the same as that of the older and less perfect ones of fifteen years ago. It is that heat is not abnormally retained in the body during fever; on the contrary, it is excessively discharged; and this is true not of one stage only; it holds for the rise and for the continuance of the fever, as well as for its fall. The lecturer further contended that clinical observation showed that in fever the cutaneous vessels are not in a state of continuous contraction. The cutaneous blood-supply, on the contrary, fluctuates in an irregular manner; now flushing the surface tissues, raising their temperature, and pouring out heat into the air, now reduced to a minimum, leaving the skin pale and dry, and shutting in the heat of the central parts. All this, of course, betokens that the nervous mechanism which controls the cutaneous discharge of heat is notably disordered. There is, indeed, no constant stimulation of the vaso-constrictor nerves such as Traube imagined; there is no continuous retention of heat, but there are marked irregularities in the rate at which it is discharged. One possibility only remains, namely, that the production of heat within the body is abnormally increased.

The next question that suggests itself is this—Is the heat production steady, or is it fluctuating? We have seen that the heat loss, as gauged by the condition of the surface, is subject to wide and irregular variations, not merely from day to day during the course of the fever, but even from hour to hour in the same day. Is there any similar irregularity in the rate of heat production? To answer this question we must again fall back on calorimetry. Thermometrical observations are of no service.

The only recent investigations which have been conducted with a view to directly answering our question are those of Wood and his assistants. An examination of their numerical results shows that in the septicæmic fever of dogs and rabbits the hourly rate of heat-production does vary in a remarkable way, even under uniform conditions as to feeding or fasting. The variation shows in some animals a tendency to rhythm, being usually higher towards the evening. Feeding introduces a marked increase of heat-production in the nor-

mal animal, and the increase is not absent in fever. Further experiments are to be desired, but of the mere fact of fluctuation in heat-production there seems no doubt. Some of the figures, moreover, show that, as the course of the temperature varies, the rate of heat-production may actually be highest when the temperature is lowest. An excessive rate of heat-loss may overbear and so disguise a simultaneous excessive rate of heat-production; and conversely, the time when the temperature is high may coincide with a time when the heat-production is low. The inference from this is very important, namely, that the height of the temperature in fever is in great measure dependent on the momentary relation of the two processes of heat-production and heat-loss. And inasmuch as these two processes tend to vary irregularly, with but a weak *nisus* towards a daily rhythm, the fluctuations of the temperature do not afford an accurate measure of the changes in either process. The daily and hourly variations in febrile temperature are wider and more irregular than those in health; febrile temperature is inconstant. Moreover, trifling changes in the surroundings of the patient or in his functions readily send his temperature up or down; febrile temperature is unstable. The two co-operant factors of the temperature are acting more or less independently; thermotaxis is enfeebled or overpowered.

The lecturer then proceeded to criticise Liebermeister's theory (adopted by Dr. Hilton Fagge) that pyrexia consists in a change in the normal function of the heat-regulation by which the production and loss of heat are so balanced as to maintain an abnormally high temperature. He objected to this that febrile temperature, even when it is at its height and oscillating with fair steadiness about a mean level, is marked by its instability. A trifle that in health would have but a vanishing effect will in fever produce a large and enduring variation. A whiff of cold air, a little food, a passing excitement, a feeble muscular effort will send up or send down the temperature. The thermostatic character of the healthy normal is conspicuously absent in the mean high level of fever. The imperfect daily rhythm of temperature observed in some continued fevers is no evidence of true regulation. We have seen that even the fluctuating heat-production of a fevered animal showed signs of a periodicity. In health this rhythm is deep-seated and singularly persistent, in spite of the most various disturbances. That it should to some extent "show through" the irregularities of the fever heat is not wonderful; it merely proves that not all the thermal processes are utterly perverted in pyrexia; some that are normally rhythmic may be rhythmic still. But regulation has to do with balancing the integral sum of all the processes, and it is that balance which is overthrown, or at least rendered tottering, in fever. The risk of laying too much stress on the high temperature of the body, and of regarding it *per se* as an index of the heat-production, was exemplified in a recent address by Dr. Ord to the Medical Society. In this address (see JOURNAL October 24th, 1885, p. 783) Dr. Ord had criticised the theory that the increased heat of the body in fever was due simply to increase of combustion, and had pointed out that the increased exhalation of carbonic acid and excretion of urea were not found on calculation to represent a source of heat sufficient to cause the increased temperature of the body. The lecturer considered that the difficulty was an unreal one. There is, he continued, high temperature in fever, and there is increased production, but the one is not the measure of the other. There is increased heat-production in fever as compared with the heat-production of health on the same diet, but not necessarily as compared with that on full diet. Somewhere between these two propositions comes Dr. Ord's, and I am afraid that between them it comes to the ground. I shall be glad if a re-examination of the premisses convinces him that he need not lose faith in his first belief. Dr. Sanderson's memoir, taken in conjunction with Professor Wood's, which supplements and corrects it, when properly weighed, will show him that his first belief is true, though perhaps not the whole truth. And as a final satisfaction I may add that, even though the preamble of his address is unproved, though the discontent with the existing, which acted as a stimulus to his research, was not well founded, the happy suggestion to which it led him appears to me to be true notwithstanding, in a certain guarded and limited sense.

When we say that more heat is produced by a patient in fever than by a patient in health, we must add the proviso—in like circumstances. One of the most important of these circumstances is diet. I being in health can, by eating to excess, raise my rate of heat-discharge far above my usual rate, and I can lower the rate by fasting, and still remain in health. If I become fevered I eat less and less, but my rate of heat-discharge does not fall accordingly. In the report already mentioned, Dr. Sanderson, from the data before him, finds that the heat-production of a fevered patient might be about 50 per cent. higher than in the same patient in health on a low diet. And if that be the case, some "increased combustion explanation" is not only satisfying but inevitable. Admitting increased heat-discharge, increased exhalation of carbonic acid, increased excretion of urea, we must admit a source whence they are derived. They cannot come from the food consumed, for that is notably reduced in quantity; they can only come from the body-substance itself; there must be increased combustion—the tissues must be "consumed by an unseen fire." But, to go further, there are not wanting grounds for believing that fever-heat is often greater than normal heat even on a full diet. The Philadelphia experiments, made since Dr. Sanderson's paper was written, enable us to follow the thermal history of an animal for several successive days under varying conditions of diet and in varying degrees of pyrexia. The outcome is that in dogs and rabbits at least the fundamental part of the febrile process is an increase in heat-production "by chemical movements in the accumulated material of the organism." And though, to use Professor Wood's expression, this increase was usually insufficient "to overplus the loss of production from abstinence from food," in some cases it was more than sufficient. Moreover, reasons are given—valid reasons, as I think—for surmising that what is occasional in the lower animals is probably common in man, in whom febrile movement is more pronounced and severe. In other words, it is probable that in the fevered man there is sometimes an absolute, and not merely a relative, increase of heat production.

ILLUSTRATIONS OF EXCEPTIONAL SYMPTOMS AND EXAMPLES OF RARE FORMS OF DISEASE.

By JONATHAN HUTCHINSON, F.R.C.S., F.R.S., LL.D.,
Emeritus Professor of Surgery at the London Hospital, Vice-President of the Royal College of Surgeons.

[*Continued from page 1212*, JOURNAL, *June*, 1886.]

XIV.—ON INABILITY TO KNOW WHEN THE BLADDER IS FULL. A GENTLEMAN once told me that for nearly two years he had never known the feeling of wishing to make water. He went to relieve his bladder at stated times, and if he did not do this, overflow might occur, but he had never had any sensation whatever which warned him that the bladder was full. Incontinence had occurred several times in the night. He had never had retention. I found, as expected, that he was the subject of ataxy. His patellar reflex was quite lost and so also his sexual desire and aptitude. His pupils were large and sluggish, if not motionless, on exposure, but acted somewhat in accommodation. I have known this form of vesical anæsthesia, in some degree, in many other cases of ataxy, but never to so marked a degree. It may be of interest to note that in this instance the patient retained the appearance of good health, and had perfect use of all his voluntary muscles with good muscular sense, being a distinguished lawn tennis player. He was single, only 30 years of age, and had suffered from syphilis seven years before I saw him. He had suffered much from the characteristic pains of ataxy in his lower limbs, and also from pelvic aching. Although moderate exercise at tennis did him good, any unusual fatigue made his pains worse. He had, when I saw him, been already greatly benefited by a year's specific treatment of mercury and iodide, but the hebetude of his bladder remained as it was.

XV.—ON PAINLESS RETENTION OF URINE.

In close alliance with the symptom just mentioned, and often in the same patients, we have a form of retention of urine which is unattended by pain. In cases of absolute paralysis, whether cerebral or spinal, we are of course quite accustomed to meet with painless retention. I am, however, wishing now to speak of cases in which no obvious paralysis is present, and the patient is walking about and believing himself in his usual health. Under such circumstances, painless retention occurs, I think chiefly in association with two conditions, senility and locomotor ataxy. It is in connection with ataxy that the best marked and most absolutely painless cases are met. In old persons with enlargement of the prostate, the bladder often becomes gradually accustomed to retain habitually a certain quantity without inconvenience, and even without cognisance, but if the retention should become complete, the distension pain is always experienced, and may become considerable. It must be borne in mind in this connection that old age and ataxy have many symptoms in common; that an obtunding of sensibility, and especially of certain special forms of it, is a very frequent condition in the aged. In the painless retention which we encounter in connection with ataxy,

however, the symptom is a most definite and extraordinary one. The bladder, not being the seat of any previous hypertrophy, is capable of great dilatation, and it may fill until it reaches the umbilicus, without any overflow occurring, and without the slightest pain. Sometimes a sense of mechanical fulness is present, but there is nothing approaching to pain. I have several times known ataxic patients retain their urine for more than forty-eight hours without any suffering. Whenever the bladder shows unusual tolerance of distension, the symptoms of ataxy should be searched for. In the retention which so often follows operations for piles and the like, there is probably some loss of sensation, as well as of motor power, but neither is complete, and the latter probably preponderates.

[*To be continued.*]

SURGICAL MEMORANDA.

CASE OF SWALLOWING ARTIFICIAL TEETH, WITH RAPID EXPULSION BY THE RECTUM.

On Wednesday, January 19th, 1887, between the hours of one and two in the afternoon, I received an urgent request to see Helen M., aged 35, residing about a mile and a-half from this town. I was informed that she had swallowed her false teeth, and that the plate had stuck in her throat.

On my arrival shortly afterwards I found the woman in a semi-erect posture, afraid to move, in case, as she said, the plate might assume a more dangerous position. Pain in the throat and difficulty in swallowing were complained of, but there was no interference with the respiration. I made a rapid, but minute, examination of the pharnyx, carrying my right forefinger well downwards and backwards, but was unable to detect the presence of any foreign body. I now directed her to take a draught of water, which she swallowed without any difficulty. To make doubly sure, I then passed a large-sized probang, but was sensible of no obstruction of any kind, the instrument finding its way easily and smoothly into the stomach. I now assured her—not a comfortable assurance certainly—that there was every probability that her artificial teeth had entered the stomach. A laxative diet was ordered, and instructions were left to send for me at once if any urgent symptoms developed. Next morning I received a message that the plate and teeth had been passed at stool at 6 A.M. I learned, moreover, in the course of the day that, with the exception of slight nausea and retching about an hour after my visit, and some occasional pain, slight in character, in the right iliac region for two hours previous to the action of the bowels, nothing unusual had occurred.

The absence of any serious symptom and the rapidity with which the denture was passed by the rectum are points of interest in this case, and were accounted for, to some extent at any rate, by the form and position of the hooks. These, as will be seen from the subjoined sketch (exact size) taken after the occurrence, are well turned in, and not projecting, in which case it is just possible a much more serious result might have taken place.



Several somewhat similar cases have been recorded in the JOURNAL during the last six years, and I find that in most of them the time stated to have elapsed from the entrance to the exit of the foreign body varied from two to six days. Seventeen hours was the time occupied in this case—an unusually short period of time.

Elgin. WILLIAM GALLETLY, M.D.

OBSTETRIC MEMORANDA.

CASE OF OVARIAN FŒTATION.

Ovarian fœtation being undoubtedly the rarest form of extra-uterine pregnancy, the following case will, no doubt, be interesting to your readers. Velpeau and Allen Thomson do not believe in the existence of the ovarian variety. As "seeing is believing," I do. M. S., aged 20, a black, unmarried woman, apparently in robust health, pregnant for the first time, was last seen alive at 6 A.M. on January 29th, when she complained of pain in the bowels. Three hours afterwards, she was found lying on the floor dead. I made a *post-mortem* examination seven hours later. A fluctuating tumour in the abdomen directed my attention at once to that cavity. On dissection, I found a large quantity of fluid and coagulated blood effused into the peritoneal cavity. In this blood I found a male five months' fœtus enclosed in its membranes. The umbilical cord was attached to a thin placenta, embedded in a ruptured cystic ovary (right side). Rapid and profuse hæmorrhage was the cause of death. The fertilised ovum had clearly attached itself here, and the cyst, no longer able to contain its burden, had given way. The Fallopian tubes and the rest of the uterine appendages were healthy. The uterus was of natural size and shape.

St. Andrew, Jamaica. JASPER CARGILL, M.D.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

ST. LUKE'S HOSPITAL FOR CHINESE, SHANGHAI.

A CASE OF EXPLORATORY LAPAROTOMY, WITH A QUESTION IN SURGICAL ETHICS.

(Under the care of R. A. JAMIESON, M.A., M.D., Consulting Surgeon to the Imperial Maritime Customs in China.)

Ku Siao-yun, a fat, muscular shopkeeper, aged 42, was admitted on September 2nd, 1886. His story was that on August 30th he was occupying a few moments of leisure by harpooning bugs on the frame of his bedstead with a shoemaker's awl, when he was suddenly called. He stuck the instrument into the woodwork by his side, and forgot all about it until night, when, preparing for bed, he sat down exactly on the handle of the awl which, tearing through thin silk drawers that he was wearing, entered the anus. Springing up, he dragged the awl with him, and a friend whom he called to his assistance professed to see the point of it slightly protruding from the bowel. On endeavouring to pull it out, however, the friend succeeded only in pushing it altogether out of sight. Next morning the patient had an ordinary stool, but since then he had eaten nothing, he had felt no desire to evacuate the bowels, apprehension had prevented him from sleeping, and he had severe and continuous pain in two places corresponding to the ascending and descending colon. He brought the drawers with him that he had worn at the moment of the alleged accident. The seat was irregularly torn, and there was one small bloodstain, about a quarter of an inch in diameter, on the edge of the rent.

The patient was flushed on admission, extremely restless, the temperature under the tongue was 102° F., the skin was very dry, with occasional fits of sweating, the tongue was clean, the urine was passed in normal quantity, but was muddy and deep red, clearing on the application of heat. It contained no blood. There was no wound or scar at or near the anus. The entire hand inserted into the bowel found the rectum empty. Palpation of the fat-laden abdominal wall, which was impossible without an anæsthetic on account of great sensitiveness, was not decisive even after administration of chloroform. Two irregular masses could, however, be made out in the region to which pain was referred. A grain of opium every four hours was ordered. The night was passed quietly. Next morning (September 3rd) about 60 ounces of warm water was slowly injected into the bowel. This produced several hard lumps of fæces, and some relief was acknowledged. A repetition of the enema next morning (September 4th) brought nothing away. Meanwhile, the patient refused to eat, his temperature did not fall below 101° F., he continued sleepless in spite of the opium, and he would listen to no suggestions as to the probability of his having been mistaken. He announced his intention of leaving the hospital, of cutting open his abdomen, or of hanging himself. Next day (September 5th) he was almost maniacal. Under the pretext of examining him again an enema of 60 grains of chloral was administered. After a few hours' sleep he woke quiet and rational, but urgently demanding operation, at the same time promising to be satisfied that he was under a delusion as to the presence of the awl, if nothing was found. Chloroform having been administered, the mass which had previously been made out on the left side was found to have disappeared, but there was still considerable resistance to deep pressure over the ascending colon. Dr. Jamieson there-

upon opened the abdomen by an incision 2½ inches in length along the external edge of the right rectus, its middle point on the level of the umbilicus. Through this the entire cavity was methodically explored, but no foreign body was found. The mass in the ascending colon was gently kneaded through the wall of the bowel. It consisted of hardened fæces.

On recovering from the anæsthetic the patient expressed a sense of great relief, and seemed satisfied with the negative result of the operation. His temperature at night was 99.8° F. On the fourth day the dressing had become loose and was replaced. The incision had healed, and there was no tenderness around it or elsewhere. The patient was discharged on the fifteenth day, having had a stool regularly every day for a week. He was quite satisfied that the awl had never entered the bowel; and from the moment of the operation there had been no return of excitement or apprehension. He has continued well to the present date.

Such is the case. The ethical question involved is, whether the operation was or was not justifiable.

NEWCASTLE-ON-TYNE INFIRMARY.

CONGENITAL SYPHILIS WITH MULTIPLE JOINT EFFUSION.

(Under the care of Dr. ARMSTRONG.)

[Reported by Mr. MAYNARD, House-Surgeon]

J. W. S., aged 19, was admitted on March 16th, 1886, suffering from severe interstitial keratitis. He stated that he had never been strong, was subject to sore tongue, to occasional rashes, and to colds. He had never had gonorrhœa. His father was alive and said to be healthy; his mother died of disease of the "heart and kidneys"; she had had three miscarriages; his two brothers died as babies of "scurvy." He had two teeth when born, and cut two more within a month of birth, and, as his grandmother put it, "he cut his teeth with an ulcerated back-body," finishing dentition within eight months.

When admitted he was found to present a fairly characteristic face, a greasy skin, muddy complexion, and the bridge of the nose rather sunken. The incisor teeth were small, but not peg-topped. He had marked interstitial keratitis, with large salmon patches, and an unusual amount of photophobia and lachrymation. He could count fingers when admitted, but soon vision was reduced to perception of light. The patient went through the attack in the usual manner, and the corneæ were clearing well, when, on May 20th, he had rapid and large effusion into both knee-joints, without reddening of the skin or local heat. His temperature rose and he sweated. This was followed by similar effusion into both ankles, wrists, and, finally, elbows, though the effusion in these joints was never very large.

On June 19th he went home with his knee-joints still containing a rather large quantity of fluid, the ligaments relaxed, and extreme movement rather painful.

On March 1st, 1887, the boy was visited and examined. There was very slight corneal haziness, but no synechiæ. The knee-joints still contained some fluid, the right more, and flexion was limited in it. He said that it was some months before he could use the limbs, and that he had had skin eruptions since he had left the hospital.

Remarks.—The family history of this boy is clear, and well illustrates a point of considerable importance, namely, the early period at which dentition occurs in congenital syphilis. I rely much upon this in diagnosis, believing that dentition commencing before the fifth month as frequently betokens hereditary syphilis as later dentition (after the eighth or ninth month) indicates rickets. The case is interesting mainly in standing alone as regards the number of joints into which effusion took place.

This might be explained by supposing that the patient was suffering from subacute rheumatism; and the sweating and rise of temperature favour this. Against it are the rapidity and long duration of the effusion, the absence of redness of the skin, and loss of mobility; on the contrary, the ligaments were relaxed, and there was much increase of mobility. In addition to these, the fact of his having syphilis argues strongly in favour of the probability of the effusion being syphilitic.

Though it is more usual for these effusions to occur at an earlier age—about 13, whereas he was 19—the interstitial keratitis occurred late also, so that the anomaly is not so great as it appears.

PRESENTATION.—Mr. C. Knott, of Southsea and Landport, has been presented by the members of the district branch of the Ancient Order of Foresters with a handsome silver salver as a token of esteem.

LORD STRAFFORD, the Lord Lieutenant of Middlesex, will take the chair at the festival dinner in aid of the Royal Hospital for Diseases of the Chest on Tuesday, May 10th, at the Hôtel Métropole.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 8TH, 1887.

G. D. POLLOCK, Esq., F.R.C.S., President, in the Chair.

On Gouty Parotitis and Gouty Orchitis.—By Dr. DEBOUT D'ESTRÉES, of Contrexéville. (Communicated by Dr. GARROD, F.R.S.).—The object of the paper was to fill a *lapsus* in the literature of gout, in so far as this disease affects the glandular system, more especially the parotids. There are genuine attacks of gout having their seat in the glands, and alternating with articular manifestations. The following case was related: X., aged 68, a well-marked gouty subject, was suddenly attacked with swelling at the angle of the jaw, which resisted ordinary treatment, and only disappeared on the invasion of the knee of the opposite side. The second parotid and the other knee were also attacked subsequently. Some little induration of the parotids remained, together with salt taste in the mouth, due probably to the presence of urates in the saliva secreted by these glands. Similar cases by Drs. Garrod and Rotureau were also referred to. These cases were promptly relieved by a tincture of fresh colchicum flowers, fifty drops thrice daily. The author had only seen two cases of gouty orchitis, which, resisting treatment, subsided spontaneously on the appearance of gout elsewhere. The left testicle was most frequently affected, but not invariably. He had not seen it in both parotid and testicles in the same patient.—The PRESIDENT, after proposing a vote of thanks to the author, remarked that he had himself seen several cases of gouty orchitis, but none of parotitis.—Sir DYCE DUCKWORTH admitted that the parotitis such as they had heard described was not, as far as he knew, recorded in the literature of gout. Its absence certainly was remarkable and supported Sir James Paget's observation that the lymphatic system, as a rule, escaped gouty injury. There could be no doubt that the diagnosis of gout was correct in the cases cited. There seemed to be no connection between the parotitis and the orchitis.—Mr. S. PAGET had looked through about 100 cases of parotitis, excluding the cases of infective mumps, and had found one case, at least, in which it occurred in a gouty subject—a woman, aged 54, whose case was related by Dr. Guéneau de Mussy. In almost all the other cases it was associated with dyspepsia, and he would venture to suggest that there might have been a similar association in the case brought before them by Dr. Debout d'Estrées.—Dr. B. O'CONNOR mentioned a case in which he had seen inflammation of the lingual glands subside on the onset of an attack of gout in the joints.—Dr. GARROD said that a few years ago he had collected 2,000 cases in his private note-books and found no affection of the glands mentioned among their multifarious symptoms. Since then he had had one gouty female patient, who had acute inflammation first in the right parotid and then in the left. It terminated in profuse salivation. There was no suppuration in this case, and indeed suppuration was unknown in true gouty inflammation, though it might occur round tophi when they acted as any other foreign bodies. The parotitis observed in France might be due to some French habits, climate, water, or diet. Orchitis was certainly connected with gout, and much more frequent.—Dr. DEBOUT D'ESTRÉES, in reply to Mr. Stephen Paget, observed that his patient had had hardly any dyspepsia, and none that accompanied his gout. He had experimented on his patient by taking the first part of the flow of saliva at each meal, and showing that it produced the murexid reaction. He had received the account of a second case from his friend Professor Damaschino, of the Hôpital Laennec, in Paris; the patient, again, was an elderly woman who had double parotitis, which was followed by distinctly gouty inflammation of the knees.

A Case of Empyema with Pulmonary Gangrene following Enteric Fever, treated by Perflation. By WILLIAM EWART, M.D., and R. FITZROY BENHAM, M.R.C.S.—C. C., aged 10 years 11 months, was seized with enteric fever (due probably to drain-infection) on April 23rd, 1886. The symptoms were not unusual in character, but severe in degree, especially the delirium. The treatment adopted by Mr. Benham consisted of quinine, which proved ineffectual, and of antipyrin, which appeared to relieve the pyrexia and the delirium. The patient was convalescing at the end of the fourth week, when peritonitis supervened, soon followed by left pleuritic pain. Within a week the signs of left empyema were fully developed, the exhaustion was extreme, and the dyspnœa bordered on asphyxia. On June 11th, aspiration was made, and three-quarters of a pint of thick shreddy pus removed, with relief of the most urgent symptoms. The following day the chest was opened freely in the anterior axillary line (fifth space) and in the scapula (ninth space), a large quantity of pus

escaping. Free discharge continued, but no injection was used. On June 15th perflation was performed under spray, in the manner depicted in the *Lancet* (July 31st, 1886), the appliances being elastic tubing, a Woolffe's bottle containing carbolic acid solution (1 to 10), and a hand-ball bellows. The air was delivered into the centre of the chest through the anterior opening, and allowed to escape only at the posterior. The result was the expulsion of fœtid pus, of a piece of necrosed lung, and of heavy false membranes. A smaller mass of membrane was expelled by perflation the next morning, and a small piece on the third day. From this day the fœtor ceased, and the amount of pus decreased rapidly. On the eighth day, the discharge was turbid-serous, and it remained serous to the end. Both wounds were closed on the thirtieth day from the date of incision, and on the thirty-fourth from the first perflation. Among the advantages obtained in this case by the method employed were the following: (1) Early removal from the chest of putrid residues; (2) Presumably considerable shortening of the period of suppuration as a result of (1); (3) Avoidance of permanent atelectasis and of eventual resection of ribs as a result of (2); (4) Avoidance of deformity as a result of (3); (5) Daily dressings free from discomfort and from wet (excepting the spray); (6) A drier state of the cavity and of its coverings than is allowed by fluid injections, with absolute sweetness of the discharge.—The PRESIDENT observed that this paper opened up a large subject both for the surgeon and the physician. He was inclined himself to make first an exploratory incision into the pleura, to test what was the nature of the fluid contained there; and, if it was pus, to make a free incision. That had been his main principle in treatment for the last thirty-five years. He could not see why perflation should have any advantage over the process of washing out the cavity through a free opening. Such treatment had, in his experience, healed cases when there had been empyema for six or seven years.—Sir D. DUCKWORTH remarked that a change had come over most surgical treatment of empyema since the time to which the President had referred; and free washing out of the cavity was, as a rule, abandoned. He himself considered that, when pus had been found, the best plan was freely to evacuate it by an opening and a counter-opening, with good antiseptic precautions, but to adopt no washing out. Even under this treatment, a small residuum of cases did not get well; and to these he thought Dr. Ewart's plan of perflation would be very applicable, and he intended to make use of it on the first opportunity.—Mr. R. J. GODLEE thought the case that had been brought before them was not in any way an uncommon one, except that there had been discharge of a piece of gangrenous lung. A similarly good result, he considered, would have been attained if they had merely made a free opening, large enough to admit the finger. That would probably have involved the removal of a part of a rib, which would easily have been reproduced. If the finger had been introduced, the false membranes and gangrenous bit of lung might have been removed at once. He agreed that there were very few cases where washing out was possibly needed, and those were cases where some suppurating residue remained behind. In such cases he preferred himself to blow iodoform as a disinfectant into the cavity.—Mr. W. H. BENNETT said he had used this method of perflation, and found it easy to blow the contents out of an empyema; but it required a good deal of pressure, more almost than he thought Dr. Ewart had described. The case brought forward was interesting, but it was one which might well have recovered under various methods of treatment; and he thought they wanted more experience of perflation in serious cases of empyema in adults that were not doing well. It was adopted in a late stage of a case under his own care which was not improving, and it had been followed by almost complete recovery. Nevertheless, it produced at one time a large fluctuating swelling in the back, which at first seemed likely to be a deep abscess, but which turned out finally to be a mass of fungous material, such as was to be seen in a pulpy joint. Dr. Ewart had suggested that perflation might be useful in the treatment of other abscesses, and he had acted on this suggestion in the case of a large abscess in the thigh. Before the pus was evacuated the wall of the abscess broke, and there was general subcutaneous emphysema. In other smaller abscesses, however, it had been successful.—Mr. R. W. PARKER remarked that when free openings into empyemata were not common some years ago, he had advocated in a paper read before the Society the injection of warm air into the empyema to displace the pus, and to lead to expansion of the lung when the air was being gradually absorbed. The suggestion had not been widely acted upon, and, indeed, his own practice now in the 100 cases he had had in the last few years was to use a double drainage-tube, of which one part should serve as a vent-hole and the other for the exit of pus. Many serious cases got well from the excision of considerable portions of the chest-wall to allow of the shrinking of the lung and the formation of sound adhesions.—Dr. DREWITT found it difficult to imagine how the membrane lining an empyema could be blown out, just as the lining membrane of an egg could resist any attempt at dislodgment by perflation.—Mr. HOWARD MARSH agreed with most of the surgeons who had spoken that a free opening was the best treatment, an opening, in fact, some inch and a half long. His usual practice was to make a first opening, and through that to introduce a catheter to determine the lowest point of the empyema, and then to make a second opening through which the pus should be allowed to drain and the upper opening to heal. To wash the cavity out freely he thought unnecessary and sometimes dangerous, as in a case where he had used a weak solution of iodine, and produced dangerous prostration. The use of iodoform, as Mr. Godlee had suggested, he had been led, after some experience at St. Bartholomew's, to consider toxic, and he hoped to point out to the Society the reasons for that conclusion before long. The excision of a piece of rib was to be recommended so long as the periosteum was separated and retained.—Dr. SANSOM suggested that, as water would only dissolve 5 per cent. of carbolic acid—not 10 per cent., as Dr. Ewart had seemed to imagine—it would be better to pass any air used for perflation not through an aqueous solution of carbolic acid, but through cotton-wool or blotting-paper soaked in the disinfectant.—Mr. P. GOULD considered that no final judgment could be arrived at from a single case such as Dr. Ewart's, which was especially favourable to recovery, inasmuch as he was a boy of 10 years old, whose empyema was treated early, and could probably have been cured by many methods. He could hardly agree with Mr. Marsh in his preference for an opening at the lowest possible point of the pleura, for that was practically a chink which was often filled up by the diaphragm in movement. He considered it generally best to make a free opening in the sixth and seventh spaces, and to excise a bit of the rib between them.—Dr. EWART, in reply, expressed himself as much obliged for the discussion of many interesting points. He thoroughly agreed with the majority of the speakers in advising a free incision. In the case he had brought forward it was about 1½ inch long, and admitted two of Mr. Benham's fingers. He regarded the perflation as most important for occasional use in some old cases of empyema, for by this means it could be ascertained whether there was any loose or loosely attached body which had not been expelled, and kept up irritation and suppuration. If the patient were placed so that one opening into the empyema was at the lowest point, and the cavity were then blown through, the loose body or false membranes, as in his present case, could be forced against the opening and extracted with forceps. Disinfectant air would penetrate much more universally than iodoform, and was in that respect preferable. As to the danger from the pressure which it was necessary to use, he thought it could be avoided by attention to the complaints and feelings of the patient, which were as a rule slight, though he admitted in one case in a little child the sudden and unexpected process had led to extreme danger. The perflation did not endanger the heart. In five cases out of seven, he had operated on the left side without cardiac failure. He was sorry he had not made himself acquainted with Mr. Parker's former proposal for the introduction of air into the pleura, but as far as he understood it, it was radically different, inasmuch as Mr. Parker wished the air to stay there, whilst he wished it only to pass through. In surgical treatment of other than pleural abscess, he thought that perflation could only be useful where there was a free way for the air to come out as well as to go in, and a double tube might be necessary, which had not been used in the case of large abscess of the thigh, on which Mr. Bennett had operated. As to what Dr. Drewitt had said, he admitted it was probably impossible to separate the lining membrane from the egg-shell, but experiment had showed that it was possible to separate the false membrane from the pleura.

PATHOLOGICAL SOCIETY OF LONDON.

THURSDAY, MARCH 3RD, 1887.

Sir JAMES PAGET, Bart., F.R.S., President, in the Chair.

Adeno-Sarcoma of the Tongue, with Ossifying (Calcifying?) Nodule in the Centre.—Mr. GODLEE showed a hard nodule, of the shape and size of a small fusiform bone, and having the appearance of bone, removed from the centre of a tumour on the under surface of the tongue, near the tip, of a young woman, aged 24, a patient of Mr. S. N. Bruce. The tumour had only been noticed five weeks, and had a slough as large as a shilling on the under surface, through which the hard mass had been removed with sinus forceps. Some weeks afterwards, the tumour was excised with scissors. The growth was an

adeno-sarcoma; the sarcoma-tissue being abundant and highly vascular; the adenoid-tissue arranged in acini of varying size, lined with square epithelium. The acini were in parts dilated into small cysts, containing a brownish structureless material, in which were nuclei (leucocytes?) The hard mass, on section, had roughly the appearance of imperfectly formed bone. Mr. Godlee suggested that the tumour, which he believed to be unique, was connected with a mucous gland, 7-10 lines long, described by Nuhn in 1845, and by Blandin at an earlier date, in this situation, lying beneath a few fibres of the styloglossus. A specimen of this gland, prepared by Mr. Pearson at the College of Surgeons, was shown. The presence of bone, it was pointed out, would be very remarkable; but it was added that the microscopical examination was not unequivocal, and that it might, after all, be merely a mass formed by a cretaceous or calcareous change in the contents of one of the cysts contained in the tumour.—Mr. STEPHEN PAGET observed that the tumour seemed to be very similar to some tumours found in the palate. In the age of the patient, the chronic course of the disease, the superficial ulceration and calcification, he saw points of resemblance. He thought such a case might be explained on the hypothesis that there were vestiges of gland-tissue in the tongue as well as in the palate.

A Case of Alveolar Sarcoma.—Mr. G. R. TURNER showed this specimen. The tumour grew in the left loin of a man aged 20. It was found to arise from the twelfth rib, the periosteum of the transverse processes of all the lumbar vertebræ, and the crest of the ilium; it had no capsule, and had extended inwards, surrounding the aorta and inferior vena cava, and completely enclosing the left common iliac vessels, and infiltrating the lumbar glands, the psoas on the left side, and the pancreas. Secondary deposits were found in the diaphragm, omentum, mesentery, meso-colon, and pleura. Microscopically, it was an alveolar sarcoma, the cells being chiefly oval or pyriform; the stalk of the latter could be seen to be continuous with the fibrillated septa of the stroma. The diaphragmatic growth showed the muscle fibres separated by an alveolated stroma containing cells, and a similar appearance was found in the secondary pulmonary growth.—In reply to Dr. NORMAN MOORE, Mr. TURNER said that the supra-renal body was not invaded; the growth passed behind the left kidney, but neither it nor the supra-renal body was involved.

Malarial Disease of Liver and Spleen with Tuberculosis.—Dr. NORMAN MOORE showed a greatly enlarged spleen weighing 60 ounces and a liver weighing 120 ounces, taken from the body of a man aged 21. Numerous white specks and some large caseous nodules were seen in the spleen. Similar nodules were seen in the liver, and similar masses, some of them caseous, were found in the peritoneum; the mesenteric glands were caseous; there were a few small caseous nodules in the kidneys. The upper end of the rectum was surrounded by a caseous mass; scattered nodules were present in the lungs; one caseous abdominal gland had broken down. Microscopically, the nodules in the liver contained caseous matter, small round cells, and a few multi-nucleated cells, but no giant cells and no tubercle bacilli could be found; there was slight increase of the fibrous tissue. In the spleen the changes were similar, but there was a much greater increase of connective tissue. The patient had suffered from ague whilst at the Cape, in 1883, and subsequently from dysentery. He had not had syphilis. Whilst in St. Bartholomew's Hospital, he had irregular fever, varied with periods of normal temperature for a few weeks at a time. The proportion of white to red corpuscles was about one to five. Under very large doses of quinine he improved, and his spleen, which had been enlarged since 1884, decreased in size. There was no doubt that the enlargement of liver and spleen was a chronic cirrhosis, and was due to the intermittent fever. The caseous matter in the peritoneum and glands strongly suggested that the nodules in the liver and spleen were true tubercles. They were certainly not gummata. They resembled leucæmic tumours; but the caseous changes and their distribution were against this and in favour of the tubercular hypothesis.—Dr. COUPLAND remarked upon the very high degree of leucocytosis present in this case; he would almost have been inclined to regard the case as one of leucocythæmia. Was it usual in malaria to have so large an increase of white corpuscles?—Dr. G. N. PITT thought the association of diseases in this case resembled that seen in hypertrophied cirrhosis of the liver. He had seen several cases in which acute tuberculosis terminated cirrhosis.—Dr. GOODHART thought that a fair proportion of cases of leucocythæmia supervened on malaria. Enlargement of glands or lymphatic leucæmia was often present also, and the complication of tuberculosis was not unknown. He thought these mixed cases were related, and could be traced to malarial poisoning.—Dr. MOORE, in reply to the President, stated that the red corpuscles were normal. He quite admitted the unusual proportion of white corpuscles, but could not explain the appearances on any other hypothesis than that of tuberculosis. He had seen four cases of malaria with leucocytosis, and had seen true tuberculosis supervene upon malaria.

Note on the Pathology of Tubal Pregnancy.—Mr. LAWSON TAIT said that the views on extra-uterine pregnancy which the author first advanced before the Obstetrical Society in 1873 were immediately characterised by Dr. John Parry as having at least the merit of simplicity. Since then they had received remarkable confirmation by a number of *post-mortem* examinations, and by thirty-four cases of extra-uterine pregnancy in which operations had been performed by him; also by the remarkable observations of Arthur Johnstone and Bland Sutton that the inner surface of the uterus and tubes was affected by menstruation. Accepting the results of these observers, the author regarded the periodic desquamation and turgescence of the endometrium as being essential for the retention of a fertilised ovum, and therefore it was that we had to reckon pregnancies from menstrual dates. On clinical grounds he was induced to offer the suggestion that the starting point (not the cause) of menstruation lay in the Fallopian tubes, and this suggestion had been developed into what had been erroneously called Tait's tubal theory of menstruation. But certainly it was a fact that removal of the tubes without the ovaries would, in the majority of the cases, immediately arrest menstruation, and, therefore, the author had come to the conclusion that the tubes had far more to do with menstruation than the ovaries, but more than this he has not said. The difference between the uterine and tubal mucous surfaces lay in the ciliated epithelium of the latter, the functions of which the author regarded as being, primarily, to move the ovum down towards the uterus, and, secondarily, to prevent the access of spermatozoa to the tube; also, perhaps, to prevent the adhesion of a fertilised ovum to the tube wall. This epithelium, like similar structure elsewhere, when once destroyed, did not seem very apt in renewal; desquamative salpingitis would, therefore, put the whole of the machinery out of gear. By this denudation of the tubal surface, the ovum would be retained in the tube, spermatozoa would be admitted; and, in the event of an ovum becoming fertilised in the tube, nothing would prevent its adhesion to the tubal wall. When this had taken place, the tube became distended by the growing ovum, and seemed to rupture always towards the end of the third month, this being proved alike by the history of the case and the appearance of the ovum. The primitive facts of the anatomy of the Fallopian tubes explained the rest of the pathology of this interesting displacement. The tube was held loosely in its place by a folded piece of peritoneum passing round its circumference, and meeting itself very near its starting point. The two external surfaces of the peritoneum (that is, external in relation to the cavity of the sac) touched each other, and were loosely united by some cellular tissue, as in the broad ligament. There was a narrow line of tube running in its axial direction, at the point where the two external surfaces of the peritoneum met, which was not touched by the serous coat; and it was not difficult to imagine that, as the tube got distended by the growing ovum, these layers tended to get separated, and this uncovered line of tube would, therefore, increase in width. It was made certain by the preparations the author had examined at the time of rupture that the mesosalpinx was practically obliterated by the separation of its layers, just as the broad ligament was obliterated by the growth of a broad ligament cyst, or the occurrence of a broad ligament hæmatocele. The tube inevitably ruptured, and the site of the rupture was the leading feature, not only of the future pathological changes, but of the clinical progress and treatment of the case. The site of the rupture was determined by the seat of the placenta; and if the rupture took place at any part of the tube covered by peritoneum, extravasation took place into the peritoneal cavity, forming a tubal intra-peritoneal hæmatocele. If, however, the rupture took place at a point in relation to the cavity of the broad ligament, the hæmorrhage took place into the cellular tissue, this fact being alone sufficient to aid materially in arresting the quantity of the hæmorrhage, also into a cavity which is not indefinitely capable of extension. We have in this case the broad ligament pregnancy which formerly was known as the "*grossesse sous-peritonéo-pelvienne*" of Dezenneris. The relation of the area of the broad ligament site to the seat of rupture which corresponded to the peritoneum, made it certain that the latter would be much more frequent than the former, and clinical evidence established this fact. Tubal rupture into the peritoneum would be almost inevitably fatal to the mother, and therefore inevitably fatal to the child. Indeed, we had only one indubitable case in which a fatal issue had not taken place, and that was the celebrated case recorded by Jessop, of Leeds. Tubal rupture into the broad ligament, on the contrary, was probably very rarely fatal. The majority of the ova died before they reached maturity; after death took place they became absorbed, and in

a short time there would be no trace of them. In other cases, the ovum die during the middle months of pregnancy, and it was found, after death, as a lithopædion, or it might suppurate and discharge above the brim of the pelvis into the bladder or rectum. In a few cases, it went on to maturity; a false labour ensued, in which the child might be removed by abdominal section—an operation in which it was not necessary to open the peritoneal cavity. The pathology of extra-uterine pregnancy was made extremely simple by these views, and they explained all the varieties that were known, bringing them absolutely within two categories; and, from these pathological facts, the rules for surgical proceedings could be very easily laid down.—Mr. DORAN observed that the true pathological question suggested by Mr. Tait's paper was the relation of inflammation of the tube to extra-uterine pregnancy. Disease of the tubal mucous membrane was very common, as the tubal canal communicated with the exterior through the uterus and vagina, and was thus liable to septic infection and to extension of inflammatory affections from the uterus. If, then, this "desquamative salpingitis" rendered the patient liable to tubal pregnancy, that form of pregnancy ought to be very common. Freund's theory that a large proportion of tubal pregnancies ended by early arrest of the development of the fœtus and disappearance of all objective and subjective symptoms, would account for the discrepancy suggested by the great frequency of tubal disease and the apparent relative rarity of tubal pregnancy.—Dr. MOORE asked whether there were any specimens in illustration of the paper, and whether the diagram was only a diagram or represented a particular case.—Dr. W. S. A. GRIFFITH thought that, without an examination and criticism of specimens, the evidence in support of Mr. Tait's views was not incontrovertible; the drawings were diagrams and not representations of facts. In reference to the rupture in tubal pregnancy taking place at the site of the placenta, he reminded Mr. Tait that this structure was not differentiated till after the third month of gestation. He had a month previously brought forward the first recorded case of salpingitis as a cause of extra-uterine fœtation.—Mr. LAWSON TAIT, in reply, said that one of the drawings represented a particular case, the other was a diagrammatic representation of the parts seen in a case he had operated upon. He was glad to hear of Freund's views, as they confirmed the impression he had been arriving at, that tubal pregnancy was common. In reference to the placenta question, he was frequently engaged in removing pieces of placenta before the third month of gestation; they were usually infiltrated with blood, hence the difficulty in recognising their real nature.

Cirsoid (?) Aneurysm of one Arm.—Mr. BARWELL exhibited an arm, and photographs taken during life, showing enormous dilatation of the superficial veins, both on the front and back. There was a remarkable venous plexus on the median nerve, just above the wrist; the brachial artery was about as large as a common iliac; the ulnar was the larger branch, and by the side of the ulna was a plexus of contorted arteries; there was an aneurysm on the radial at the origin of the superficialis volæ, the recurrents and muscular branches were enormous, and the muscles full of big capillaries. There was no direct communication between the artery and vein. The patient had come under his care for uncontrollable hæmorrhage from a wound at the tip of his left index finger, for which the arm had been amputated above the elbow. The disease was believed to be congenital, and the case had already been recorded by Mr. Bryant, in his *Manual of Surgery*, as an instance of arterio-venous aneurysm. This, however, it was not, nor was it a varicose aneurysm, or an aneurysmal varix, and he thought the best name would be "macro-angeiosis."

Cholesteatoma at the Base of the Brain.—Dr. J. A. PRICE showed this specimen, taken from the body of a widow, aged 39. It was situated in the space extending from the medulla to the optic chiasma, laterally extending as far as the temporo-sphenoidal lobes; it was encapsuled, the capsule being continuous with the pial arachnoid, and the brain substance was everywhere free from new growth. Microscopically, many cholesterine crystals were found in it, besides granular masses, and cells devoid of nuclei; the tumour was very brittle, and of pearly white aspect. There were other similar smaller tumours by its side. The patient had been ailing for five years, and had been liable to seizures, probably of an epileptic character; she had atrophy of both discs, and had been blind of the right eye for four years. A similar case had been fully reported in the fifth volume of the Society's *Transactions*.

Card Specimens.—Mr. D'ARCY POWER: A Rhinolith. Mr. SHATTOCK: Colles's Fracture, with Displacement forward of Lower Fragment. Mr. DORAN: Horny Growth from Neck. Dr. G. N. PITT: Thickened Capsule of Testicle. Dr. A. WITHERS GREEN: Aneurysm of Aorta ruptured into Pericardium.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MARCH 3RD, 1887.

EDMUND OWEN, M.B., F.R.C.S., President, in the Chair.

Extirpation of the Axillary Glands a necessary accompaniment of Removal of the Breast for Cancer.—Mr. MITCHELL BANKS, in opening the subject, laid before the meeting a printed table showing the results of his practice in eighty-two cases. The complete operation, as advocated by himself, was indeed a very severe measure, and its mortality was very considerably in advance of that of the old incomplete method, in which the axilla was not opened. At the same time, however, his table showed that the duration of life was prolonged, and the recurrence of cancer less seldom occurred; and these results justified the greater risk to which the patient was exposed. The old incomplete operation he condemned as unscientific and useless. He laid great stress on not allowing the chest-wound to remain exposed while the axilla was being cleared, but advocated closure of the wound from below upwards as the operation proceeded; the glands should not be removed by the knife, but enucleated with the aid of the fingers and two pairs of forceps. He did not hesitate to tie and remove portions of the axillary vein, if this last vessel interfered with complete removal of the glands.—Mr. BRYANT, while congratulating the author on his paper, thought the operation advocated a very severe one, and its results, as shown by Mr. Banks's tables, disappointing. Theoretically, the complete operation was all that could be desired, but turning from theory to practice, he felt that it was in reality the worse of the two. In ordinary cases, it might be right to perform the complete operation, but in some cases—for example, in aged women with ulcerating cancers, and in feeble women possessed of only moderate powers—we were justified in doing the incomplete. Speaking from his own experience, the mortality of the complete was but little over that of the incomplete operation. It would seem that the average duration of life, after the severe operation, was not much greater than after the milder procedure. Statistics showed that after the incomplete operation one-third of the cases lived for six years, and 25 per cent. for ten years and more. It might fairly be questioned whether the complete gave really better results; and, if not, was it justifiable to submit every patient to the greater risk? In his opinion, unless the glands could be easily felt, it was wisest, in dealing with aged or feeble patients, not to open the axilla. He approved of Mr. Banks's plan of closing the wound from below upwards as he proceeded, and likewise of his method of enucleating the glands in preference to removing them by section. No harm came from interference with the axillary vein, though he had only once had occasion to tie that vessel in the course of the operation.—Mr. PICK did not agree with Mr. Banks in his opinion, that the operation for removal of the breast for cancer in the usual manner, by the method which Mr. Banks was pleased to call the incomplete, was useless, or worse than useless; even though it did not prolong the patient's life by a single day, it freed the patient from the oppression of a disease which she knew was rapidly approaching a fatal termination, and gave her the chance, and certainly the hope, of immunity from recurrence. It afforded her an interval of health and freedom from pain, instead of a life of anxiety and suffering; and, in a certain percentage of cases, the cancer returned in some internal organ, and afforded the patient a quiet and comparatively painless death. With regard to the complete operation of Mr. Banks, he quite agreed with him that the removal of the disease should be most thorough, and that in order that this might be so, no heed should be taken to preserve sufficient skin to form flaps to cover the gap left, but that if necessary the sore should be left to granulate as an open wound; but he was not prepared to agree with Mr. Banks that clearing out of the axillary space was either necessary or judicious. The proceeding added very materially to the danger of the operation, as shown by Mr. Banks's tables; and in his experience it was only in a small percentage of cases that the disease recurred in the axillary glands, the cicatrix remaining healthy. For these reasons he regarded the proceeding as unnecessary, and it was also injudicious, as adding to the mortality. Mr. Pick was inclined to attribute the success obtained by Mr. Banks to the very free removal of the breast and surrounding tissues, rather than to extirpation of the axillary glands.—Mr. HARRISON CRIPPS did not approve of removing the glands in every case; the question turned to some extent on whether or not the opening of the axilla and removal of the glands added greatly to the danger of the operation. According to the experience of St. Bartholomew's Hospital, this did not appear to be the case. In the five years 1863 to 1867, at a period when it was the exception rather than the rule to open the axilla, the mortality was as near as possible 11 per cent.; owing, however, to improved sanitation, the percentage had dropped in the last five years to 5½ per

cent. and moreover, in this latter period, in about half the cases the axillary glands had been removed. In the last year's report, the mortality of the two operations had been identical. Mr. Banks's high death-rate seemed due to septic surroundings. Mr. Cripps considered that, in operating for breast-cancer, the free removal of skin over the tumour, although it might appear to be supple and not implicated, was of the utmost importance. Cancer often returned in the skin bordering on the cicatrix.—Mr. THOMAS SMITH thought that the greater mortality of the complete operation was lawful, if return of the cancer could be shown to be less frequent. The patients lived longest who had never been operated upon. It was a question for consideration whether a local excretion of cancer did not render patients less liable to constitutional disease. In his opinion cancers differed clinically.—Mr. BUTLIN said that, in the discussion on Dr. Gross's paper during the meeting of the International Congress in London, he had been inclined to take a similar view to Dr. Gross and Mr. Banks with regard to the removal of cancer of the breast. Since that time, however, he had made a much more careful study than previously of the natural history and course of cancer of the breast, and of the cases published by the author of this paper, and had come to the conclusion that the very free removal of the mamma and opening of the axilla recommended by Mr. Banks in every, or nearly every, instance of cancer of the breast was an unsurgical and unscientific proceeding. Besides several minor propositions, Mr. Banks had put forward two main propositions: that the operation should include the entire mamma with the overlying skin and parts beneath in all cases, and that the axilla should be opened, whether enlarged glands could be felt in it or not. Mr. Butlin dissented from both propositions. From the first, because the operation bore no direct relation to the extent of the disease. The tumour was often of small size, and situated in the inner or the lower segment of the breast, and the incisions, instead of being carried equally far from it in every direction, were perhaps three inches from it in one direction, and less than one inch in other directions. Cancer of the breast must be treated in the same manner and on the same principles as cancer of lip and similar parts. There should be very free removal of the disease, the surrounding textures, the overlying skin, and the fascia over the muscle, if need be, but not removal of parts which were not, and probably never would be, affected. With regard to the second proposition, most surgeons were agreed that the glands in the axilla should be removed if they were enlarged and could be taken away. Mr. Butlin would go so far as to open the axilla in cases in which an indefinite fulness could be felt; but he would not open the axilla in other cases. He had collected notes of 101 cases in which the axilla had not been opened, and 209 cases in which the glands had been removed. The mortality in the first set was 10 per cent., the proportion of women alive and well at the end of three years, 18 per cent. The mortality in the second set was 20 per cent.; the number of women remaining well at the end of three years, about 5 per cent. The cases in which there was no affection of the glands, and in which the axilla had consequently not been opened, were by far the best cases for operation, not only on account of the less severity of the operation, but because the disease was less malignant. There was a great difference in the relative malignancy of different cancers of the breast.—The PRESIDENT was under the apprehension that surgical opinion was steadily drifting in the direction of opening the axilla and enucleating all discoverable lymphatic glands, whether definitely implicated or not. Often it was difficult to say whether there was axillary invasion or not until the armpit had been opened up. The clearing away of the glands was a desirable measure, in that it diminished the risk of subsequent pressure (from secondary malignant enlargement) upon the axillary vein and brachial plexus. Probably, also, the removal of the glands might be the means of checking a general invasion of the lymph-channels. The risk of remote infections was surely less if those centres of infection, the glands, were out of the way. The operation was a very severe one, but had the great recommendation of being thorough. He failed to see how an operation for malignant tumour could be complete which did not affect at the same time the cancerous glands associated with that tumour.—Mr. BANKS replied briefly.

PRESCRIPTION FOR ASTHMA.—Dr. Cazenave de la Roche has found iodide of potassium combined with cow's milk a very efficient remedy for asthma. It should be given as follows: distilled water, 150 grammes; iodide of potassium, 8 grammes. One tablespoonful of the solution in a cup of milk twice a day.

THE Mercers' Company has made a grant of 500 guineas to the Countess of Dufferin's Jubilee Fund in aid of the Association for supplying medical aid to the women of India.

REVIEWS AND NOTICES.

DISEASES OF THE DIGESTIVE ORGANS IN INFANCY AND CHILDHOOD, with Chapters on the Investigation of Disease, and on the General Management of Children. By LOUIS STARR, M.D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania; Physician to the Children's Hospital, Philadelphia, etc. With coloured plate and other illustrations. Edinburgh: Young J. Pentland. 1886.

AN acquaintance with the processes of digestion and with their disorders is very necessary to the practitioner of medicine and surgery; the successful treatment of nearly all acute, and a considerable proportion of the more chronic, ailments rests very largely on a maintenance of the digestive and assimilative powers at the highest attainable statement. It is true that many adults continue in passable condition whose digestive apparatus performs its functions most imperfectly. Civilisation, it is said, has produced indigestion; and it may safely be added that it is only under the protection afforded by an elaborate civilisation that chronic dyspeptics could long resist the wear and tear of life. The adult, however, has merely to maintain a balance between income and expenditure, while the growing child has to increase his stores; it is a condition of his continued existence that income shall exceed expenditure. The extraordinary rapidity with which a robust child is reduced by fever or inanition, is only equalled by the rapidity with which the tissues are once more built up when the digestive organs are again enabled to resume their functions. Hence the extreme importance of the disorders of digestion in childhood; the enormous mortality among children under two years old is one of the commonplaces of the sanitary reformer, and there has been, perhaps, a too great readiness to ascribe the whole to improper feeding. Dr. LOUIS STARR, in the excellent manual before us, in discussing the diseases of childhood especially characterised by diarrhœa, appears to have steered cleared of the Sylla and Charybdis of writers on these subjects; that is to say, he does not seek to explain the origin of all these diseases by an appeal to digestive heresies on the one hand, or microbial theories on the other.

The essay is one which may be read with interest and advantage, and, even when compelled to differ from the author, the reader feels that his opinions are worthy of study and respect. Dr. Starr bases his classification on pathology, so that in the chapter on Affections of the Stomach and Intestine we find sections on acute and chronic gastric catarrh, chronic gastro-intestinal catarrh, acute and chronic intestinal catarrh, entero-colitis, cholera infantum, and so on. It will be noticed that with the last term quoted the classification to some extent breaks down. This is, of course, inevitable, sooner or later, in the present state of knowledge; but it is open to question whether the separation of entero-colitis from cholera infantum is not in reality one of those over-refinements which are essentially misleading. The differences between a mild case of entero-colitis and severe cholera infantum are very striking; but they are differences chiefly of degree, and the affections have an almost identical etiology, and present pathological lesions of the same character. Dr. Starr also is compelled in this chapter to give separate sections to colic and to habitual constipation. In the management of the latter condition, which is often most difficult to treat with permanent success, the author recommends, in the first place, the removal of the masses of fæces in the rectum by the injection of small quantities of olive-oil, followed by clysters of soap and water with or without oil, or of warm water and common salt. If this injection fails, he administers an enema composed as follows: one teaspoonful of oil of turpentine or castor-oil; two teaspoonfuls of olive-oil; the yolk of one egg, thoroughly mixed, and added, while constantly stirred, to four fluid ounces of warm water. In infants, he says that suppositories are equally effective and more convenient. The following is his prescription: R Saponis gr. vi; olei theobroma 5i. M. et ft. supposit No. vj. He forbids the use of castor-oil or rhubarb as habitual laxatives, and prefers a mixture containing manna, carbonate of magnesia, and senna; or, when there is a sallow skin and loaded tongue, podophyllin dissolved in alcohol. Children three or four years old do best, he thinks, on aloes and belladonna. These, with recommendations to use oatmeal, Mellin's food, and to vary the diet in other ways, as by giving "cracked wheat in the form of mush" (our insular ignorance leaves us in some doubt as to the nature and mode of preparation of this dish), comprise the chief points in this section; and it will be seen that Dr. Starr has no very subversive or novel doctrines to teach. Novelty of treatment is, however, by no means an unmixed good:

and it is much more useful, practically, to get sound advice as to the use of familiar remedies and easily obtainable food.

The chapter on Diseases of the Mouth and Throat contains an excellent account of natural and of difficult dentition. Dr. Starr contends that the only connection between dentition and bronchitis is the continual moisture of the clothes covering the front of the chest produced by slobbering, unless special means are taken to catch the saliva on a waterproof bib; on the other hand, he admits a long list of sympathetic affections, including blennorrhœa, otitis, diarrhœa, vomiting, convulsions, "dental paralysis," and a variety of skin-diseases, so that the reader is surprised by a somewhat elaborate disquisition on the treatment of eczema under the head of difficult dentition; this is, however, a solitary instance of digression, and is valuable for itself. With regard to lancing the gums, Dr. Starr writes: "I feel confident that no one who has once attempted early lancing, and observed distressing and dangerous symptoms rapidly disappear, will ever hesitate a second time." The remaining chapters are on Tabes Mesenterica, and on Affections of the Liver and Peritoneum. There is a prologue on "The Investigation of Disease" in children, and an epilogue on "The General Management of Children"—both admirable in their way.

Contributions to Pathology and the Practice of Medicine. By John Richard Wardell, M.D. London: H. K. Lewis. 1885.

"Out of the fulness of the heart the mouth speaketh." Would that in medicine it were ever so. But in the present day, alas! it is too often the case that books are begotten of leanness of stomach. Some years ago it was our lot to review a volume of clinical lectures in this Journal, written as a legacy at the end of a medical career, and we then gave utterance to the wish that others, whose knowledge has been ripened by experience, would withdraw themselves at times from the stream of life's competition, and devote the leisure thus obtained to telling us what they have learnt, and how they learned it. Such works would be a priceless heritage to succeeding generations, and would never become obsolete, for a faithful record of facts will remain true, however the interpretation of them may change.

The volume before us is one of the right sort in part. We say in part, because it partly consists of a reprint of Dr. Wardell's well-known articles in Reynolds's *System of Medicine*, which, as a consequence probably of their original purpose, are classical rather than strictly clinical. In the latter part of the book there are examples of both types. There is a very elaborate article on Relapsing Fever, based in great measure, apparently, upon the writer's experience of that disease at Edinburgh in 1841 to 1843. There is also a good practical essay upon Pleuritic Effusions based upon cases. The other articles are shorter, but we think them none the worse for that, since they show the writer at home in his work at the bedside, and contain many useful hints and observations. They are all instructive and readable, and perhaps none more so than that entitled "A Thorn in the Flesh." In this the writer details his own illness, induced by the unknown passage of a thorn into the leg on being thrown from his horse. Some years afterwards this produced a curious local cellulitis, and the case is interesting as an illustration of the difficulty that is often experienced in obtaining histories of cases, even in patients who are themselves medical men. Dr. Wardell, who might have been supposed to have been alive to the possibility of some obscure injury at the time of the accident, does not seem to have suggested to any of the eminent surgeons who saw him that there could be any connection between the two events. The truth was not discovered until after the part was explored, and the consequent cellulitis had all but cost him his limb, and perhaps his life, when a long black thorn appeared in the wound, and was extracted.

The volume is full of papers on various topics of medical interest. To name only a few, there are articles on Enteritis, Ulceration, and Carcinoma of the Bowel, Pelvic Cellulitis, Obesity, Hydronephrosis, Exfoliation of the Bladder, Syphilitic Hemiplegia, Chronic Glossitis, etc.

In many respects a book of this kind naturally reminds us that time advances rapidly, and medicine with it. Explorations such as that submitted to by Dr. Wardell under the circumstances already alluded to are now performed without very much risk of setting up diffuse cellulitis. The discovery of the spirillum has thrown light on the subject of relapsing fever, and, sadly enough, this volume is hardly published ere the writer himself has left us, and his work can no longer take fresh impress from his hand. For this reason no criticism is called for; the book must stand as its author left it, the record of his medical life. For those who knew him, and for such others as may happen to open its pages, it will ever be interesting and instructive in many ways. It may safely be said of it that its author's modest wish will certainly be realised, namely, that the articles will be of some use to practitioners, and also to writers, should they refer to any of the subjects which are dealt with in its pages.

Food-Grains of India. By A. H. Church, M.A.Oxon., F.C.S., F.I.C., Professor of Chemistry in the Royal Academy of Arts, London. London: Chapman and Hall. 1886.

This new work by Professor Church is published for the Committee of Council on Education, and forms one of the series of South Kensington Museum Science Handbooks. It deals with an important subject, on which accurate information is very necessary, since food-grains form so essential an element in the dietary of our Indian fellow-subjects. The materials for the book, as the author says in his preface, were mainly derived from the numerous and laborious investigations of Dr. Forbes Watson, though these have been supplemented by original work and analysis on the part of the author himself. The plan of the book is very simple. The first part is taken up with an account of the constituents and uses of food; the second, with a description of the methods of composing dietaries and rations; and the three remaining parts with a detailed description of the various grains used as food in India. The account given of the constituents of food is clear, and, though not professing to be complete, is also accurate. Professor Church naturally, however, looks at the albuminoid constituents of food from a chemical point of view, in fact as so much nitrogen; and considering that so little is known of the chemical characters of proteids, this view is perhaps the safest to set forth in an elementary handbook. Some notice might, however, have been taken of the investigations of late years, showing the wide distribution of globulins in food-grains, and the effect their relative indigestibility by the stomach has on their nutritive value.

The section on dietaries and rations is very clear and instructive, and the physiological principles underlying the selection of an adequate diet are correctly explained. The subject is naturally considered from the Indian standpoint; namely, with the view of constructing a chiefly vegetable diet. Still, if one fault may be found with this part of the work, it is that the author has not drawn attention to the distinct advantage of an admixture of animal food with the vegetable, for by this means the proper proportion of albuminoids to starch (the "nutrient-ratio," as it is called) is more readily and beneficially obtained than by a simple admixture of vegetable foods. As a consequence of considering the dietary from a purely vegetarian point of view, the author has had to take a very high nutrient value, 1 to 5, much higher than that usually accepted by physiologists, which is not higher than 1 to 4, and is usually 1 to 3½. This is a point of some importance, since in a diet constructed on the nutrient-value as stated by Professor Church, there would be an excess of carbo-hydrate food, which would be so much waste material and might lead to derangement of the digestive organs.

The description of the various cereals, leguminous and other plants used as food in India, is illustrated by an excellent series of woodcuts which greatly enhance the value of the book; and though some of Professor Church's statements have been subjected to criticism, his book, with the complete series of analyses it contains, will no doubt prove of great service to Indian economists and officials.

NOTES ON BOOKS.

Centralblatt für Bacteriologie und Parasitenkunder. Bd. I, No. 2.—In the second number of this journal, Dr. Leuckart continues his paper on the bothriocephalus question, and there are several interesting abstracts of papers on anthrax, on the bacteria of the mouth, etc. This number is hardly so full as the first, but at the present moment there seems to be a remission in the publication of papers on bacteriology.

On some Forms of Paralysis from Peripheral Neuritis; of Gouty, Alcoholic, Diphtheritic and other Origin. By Thomas Buzzard, M.D.Lond., F.R.C.P. (J. and A. Churchill. 1886.)—Those who have read the papers by Dr. Ross and Dr. Buzzard, recently published in the Journal, will here have the opportunity of pursuing the subject further in this essay by the latter physician. The subject is handled mainly from the clinical point of view, though morbid anatomy is not neglected. Numerous cases of the highest interest are quoted to illustrate the various forms of the disease, and Dr. Buzzard has contrived, within the compass of 140 pages, to give a most interesting and readable account of all the principal types.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

POULTICE HOLDER.

(Communicated by the Director-General of the Medical Department of the Navy).

THE accompanying illustration, from a photograph, represents an appliance I have devised to retain poultices and other applications to the external ear in position. It is very simple, consisting of a shallow in saucer of oval shape, rivetted to a piece of flat spring; this passes over the vertex to the level of the auditory meatus on the opposite



side. An ordinary truss-spring, covered with flannel, answers the purpose admirably; and, should it be required to make applications to both ears simultaneously, a saucer can be attached to each end of the spring.

Those only who have suffered from ear troubles, and their accompanying throat complications, can appreciate the relief this appliance affords; enabling him, as it does, to dispense with the bandage or handkerchief ordinarily used to retain the poultice in position, which, as it requires to be tied tightly under the throat, increases the already existing difficulties attendant upon respiration and deglutition. Provided with this little apparatus, the patient can keep the poultice constantly applied without any inconvenience; can masticate and swallow his food comfortably; and go about his ordinary business; as, when worn under a soft hat or travelling cap, the holder is little noticeable.

The appliance is made by and can be obtained from Coxeter and Sons, Grafton Street, Gower Street, London.

WILLIAM DIGBY LONGFIELD, L.R.C.S.I.,
Fleet Surgeon, R.N.

SCHIEFFELIN AND CO.'s PILLS.

MESSRS. W. H. SCHIEFFELIN AND CO., of New York, have sent us, with a request for examination and report, samples of their soluble pills and granules with a list of formulæ and notes. We have been acquainted with these pills since their introduction to the medical profession of this country at the International Medical and Sanitary Exhibition held at South Kensington in 1881, and have formed a favourable opinion of their value. The pills are coated whilst soft; the coating is transparent, so that the colour of the pill-mass is readily recognised, and there is no subcoating of any kind. The London agent for Messrs. Schieffelin's pills is W. E. Sacker, of Fenchurch Street, E.C.

METHYLAL A NEW HYPNOTIC.—MM. Mairet and Combemalle have studied the physiological action of methylal, an acetal obtained by the action of potassium upon formethylal. This substance is a hypnotic, and, to judge from the rapidity of its elimination and the absence of disturbance on waking, a hypnotic which does not accumulate in the economy, and possesses but slight toxic properties.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 12th, 1887.

THE COLLEGE OF SURGEONS AND THE ERASMUS WILSON BEQUEST.

THERE is a good reason to hope that the protest which we made against the large expenditure at first contemplated in the mere extension of museums at the College of Surgeons will produce the designed effect. The discussion which we raised was at once followed by a circular letter of remonstrance addressed to the Council by eminent biologists of all branches of the profession, claiming for physiological and biological research a large part of the funds placed at the disposal of the Council by the munificent bequest of Sir Erasmus Wilson. This has now been followed by a well-reasoned circular, which we print elsewhere, and which is signed by all the teachers of surgery in the London schools, with two incomprehensible exceptions. Nor can we doubt that this circular, which speaks the mind of the leaders of metropolitan surgery, will have its due effect. It puts plainly, and in few words, the case which we have on several recent occasions argued more elaborately. "The present museum, which offers a spendid field of study, can never be considered a complete memorial of Hunter's work, and can never be thoroughly utilised for the benefit of surgical science until a laboratory is added to it for the study of morbid anatomy, including histology; experimental pathology, including bacteriology; and experimental operative surgery." That sums up in brief our commentary on Mr. Savory's Hunterian Oration, which was largely devoted to "an apology for the museum." The museum needs no apology, but it remains imperfect without its complement of laboratories, where the dead bones of mere morbid anatomy can be clothed and animated by the principles of related pathological and physiological research.

While, in the minds of the teachers of surgery in London, owing to the peculiar nature of the proceedings of the Council of the College of Surgeons in England, fears have been aroused lest the large fund which is at the disposal of the Council of the College should be expended on mere enlargement of the College premises and museum, the teachers in Edinburgh, with no such wonderful accession of property, have so completely understood the real problem of the progress of modern medicine, that they have hastened to solve it out of their ordinary funds in the only manner possible, namely, by the establishment of a laboratory.

It may not be at first sight quite obvious why Edinburgh should thus contrast so favourably with London. Both are great centres of medical science; both are homes of general science, and to both must

be presented in the same light the urgent necessity of grappling with the hydra of ignorance of the causation of disease—an ignorance which sometimes makes the physician's treatment a source of astonishment to himself as well as to his patient. The circumstances surrounding the financial conditions in the two capitals are, however, somewhat different. In Edinburgh it is the farsightedness of the profession as a whole, represented by the College of Physicians, which has spoken in so practical a manner as to have secured the admiration of the profession in the United Kingdom. In London it is the prescient munificence of one man which has furnished the Council of the College of Surgeons of England with the power to similarly hold out to British Surgery the helping hand of experimental science. In fact, until the Erasmus Wilson bequest made it possible, our College could not contemplate doing that which the College of Physicians of Edinburgh, a wealthy corporation, has so wisely determined upon. Further, experimental pathology stands on a different footing in the two capitals. In London the physiological laboratory of University College, and the pathological laboratory of the Brown Institution, would have supplied in no small degree the requirements of experimental pathology, had not the needs of physiological science in the one case, and inconvenient position in the other, made the pursuit of pathological research under these circumstances exceedingly difficult to the practical physician and surgeon. In Edinburgh magnificent laboratories exist in the University Buildings, but it is unfortunately notorious that they are utilised for elementary teaching and not for original research. So difficult is it in Edinburgh for anyone desiring to carry on such investigation to obtain the accommodation required that the College of Physicians has now come forward in a self-sacrificing spirit to remove this reproach from Scottish medicine.

The circular of the London teachers of surgery sets forth, in a clear and categorical manner, the three parallel paths along which research must be directed. Surgery in their view offers three great classes of problems; namely, the causation of disease, the effects of disease, and the means of obviating both of these.

A knowledge of the causation of disease, which is only to be obtained by experimental observations on man or the lower animals, is necessary for diagnosis. The study of the effects of disease, that is to say, the anatomical changes caused by it, sometimes faintly suggests to the investigator the mode of action of the *materies morbi*.

Finally, operative treatment to remove the diagnosed cause of disease on the one hand, or to palliate and rectify, if possible, the effect of disease on the other, is based upon observation of the results of experimental operations tested upon man or upon the lower animals. Experimental operative surgery, pure and simple, or the testing of an operative procedure by trying its effect upon one of the lower animals before applying it to man, received its greatest impetus at the hands of the founders of modern English surgery—John Hunter, Cooper, Travers, and many others. In later years it has become a custom in England either to try a new operation immediately upon man, or to await the results obtained from abroad of experiments upon the lower animals. There may, of course, be some who prefer, with the anti-vivisectionists, that progress in surgery should be obtained at the cost of human, rather than of lower animal, life, but we feel assured that the humanity and common sense of the English people will endorse the request of the teachers of surgery in London to be furnished with the means of testing the feasibility and value of some new departure in surgical treatment by observation of the same in the laboratory, and not in the wards.

If there should be any who may affect not to understand what is meant by "experimental operative surgery," we would recommend to them, first, a diligent study of the works of the great surgeons we have just quoted; and secondly, we would ask them to recollect what they themselves have seen of fresh, that is experimental, departures in surgery in our operating theatres; and lastly, to learn the facts of experiment on the lower animals which have led to the progress of visceral surgery in the last twenty years. The study of the causation and effects of disease requires, as is set forth in the teachers' circular, "adequate provision."

From the report of the sub-committee of the Council, in the JOURNAL of March 5th, it would appear that the Council proposes to spend only £5,000 in providing laboratory accommodation. The utter inadequacy of this sum is rendered startlingly distinct by the knowledge of the fact that the College of Physicians of Edinburgh, out of their own ordinary funds, intend to commence with an expenditure o £10,000.

When the teachers of surgery see that one-quarter of the whole bequest is proposed to be spent in the enlargement of the College premises and museum, and that but one-tenth of this estimated expenditure is reserved for the accommodation of scientific research, they may well feel "anxiety" lest the golden opportunity of affording British Surgery the greatest public aid it has ever received should be lost.

NORMAL OVARIOTOMY: BATTEY'S OPERATION: TAIT'S OPERATION.

THE operative proceedings upon the ovaries and tubes and the uterus are so complicated with ethical, personal, physiological, and pathological questions, that it requires not a little care and perfect candour to analyse them so as to arrive at just conclusions concerning them. As helping to this end, we are glad to have the opportunity afforded by a recent history of normal ovariotomy given by Dr. Battey, whose initiative in these proceedings justly entitles him to be heard (*Atlanta Medical and Surgical Journal*, January, 1887.)

Fourteen years ago, this enterprising surgeon had to defend his operation before a Committee of his brethren; Dr. Bozeman was Chairman. This Committee "concurred in according to this idea, and its successful author, the merits of originality, skill, and utility." Time has, we believe, fully endorsed this judgment. Of course, the question of utility depends upon the proper application of the proceeding. Every operation in surgery must rest upon this basis for its justification.

What is the proper application? Much must depend upon the skill and experience of the surgeon. What may be hazardous, dangerous, and unjustifiable in the hands of one man may be perfectly justifiable in the hands of another. For example, a man who is practically ignorant of abdominal surgery (that is, one who never operates) ought not to begin with this operation; and we will go further, and say that he is not competent to form a trustworthy opinion upon it. It is only those who are skilled in abdominal surgery, and have thus become adepts in the diagnosis and appreciation of abdominal and pelvic diseases, who can possibly have acquired the knowledge that can safely guide in this relatively new and difficult department of surgery. The utterances, therefore, in

denunciation of these operations, however dogmatic and vehement, or in unqualified advocacy of it must be taken for what they are worth. The cure is mostly attained gradually. But the opponents of the operation exclaim: "The woman is sterilised; the transcendent function of propagation is destroyed." This argument is based upon the most arbitrary assumption. In the first place, the function is often destroyed by the uterine disease; pregnancy is exceptional when myoma of the uterus exists; and if it take place, the prospect of a living child being born is very small, whilst the danger to the life of the mother is so grave, that it would be criminal to allow her to run the risk. Is it not a well-established rule to advise a woman, who is suffering from uterine tumour, not to marry?

This is not the occasion to enter upon a controverted point which has arisen (we will not say has been grafted) upon Battey's operation. But in some measure arising out of it, or following in chronological succession, is the operation for removal of the uterine appendages; that is, of the tubes as well as the ovaries, but especially the tubes. This is Tait's operation. Battey's operation is one thing, Tait's is another; but it is useful to discuss them together. First, the uses and applications of the two operations are different. The very term, "normal ovariotomy," implies the removal of the healthy ovaries. Tait does not, we believe, advocate, or practise the removal of the healthy tubes; therein is a radical distinction. It has been well established that Fallopian tubes, diseased, distended with blood or pus, or the seat of gestation, whether or not enveloped in inflammatory effusions, are, in the first place, a source of present and continuous misery; and, in the second place, a source of danger that may break out at any moment, imperilling life. Here then is ample ground for resolute action. Buried as these structures are in the pelvic and abdominal cavity, they are out of the reach of medical treatment. If the physician is equal to the task of recognising the disease, his duty is to stand aside, and let the surgeon act. There are two ways of acting. One is to try to puncture or open the distended tube, with trocar or knife, from the vaginal roof. Now and then a lucky hit may be made; the pus may flow, the tube may collapse, and after a time of more or less protracted anxiety, a cure may be effected; or chronic pelvic inflammation may remain. The operation is at best a stab in the dark. The other plan is to open the abdomen. This proceeds upon clear and definite lines. The surgeon brings the suspected structures directly under the faithful eyes and skilled hands; he removes the diseased organs; and the patient, in the vast majority of cases, is radically cured.

As might be expected, the proximate organs, the ovaries, are frequently involved, secondarily or primarily, in the morbid process which has attacked the tubes. These will be removed at the same time. Thus, not only is actual disease removed, but the possibility of future disease in these organs is also averted. This cannot be said of any other method of treatment. These organs are not essential to life; and if injurious to life, what is gained by preserving them? There is a feeling very intelligible, and very proper, that these organs are to be respected, because they are the organs of sexual life, making a woman what she is, fitting her for the duties and functions of womanhood, including childbearing. Now it is obvious that the conditions described as calling for the operation have settled this point. Diseased tubes and ovaries exclude the patient from the functions of wife or mother. The operation may even restore her to the toleration, if not also to the enjoyment, of the first function. It is absurd then to talk of this operation as unsexing a woman. It is perverting the relations of cause and consequence.

Battey's operation has to be justified on somewhat different grounds. It deals with healthy organs. If all the associated organs were healthy, it would rightly be stigmatised as "spaying." But if physiology and clinical observation prove that the ovaries, healthy or diseased, exercise a disastrous influence upon the uterus, or even upon distant organs and the general system, it becomes a fair question whether their removal be not a legitimate surgical operation. It is justified on the same grounds as the removal of a leg, an arm, or an eye when one of these offends to the point of injury and danger to the possessor. But this rational justification was not always recognised by Dr. Battey's professional brethren at the beginning of his career. Disregarding essential distinctions in cases, they utterly condemned the operation. Thus Dr. Battey, in what may appear to readers not accustomed to discount the fervid oratory of the States, a somewhat grandiose triumphant retrospect, tells us of "professional brethren holding nightly caucuses awaiting the death of the first patient in order to arrest the operator;" he tells us of "their disappointments" and of "opposition from medical journals." Something like an echo of this has been heard in connection with the work at the Liverpool Hospital for Women.

Clinical experience has demonstrated a useful and legitimate field for the operation. Not to dwell upon cases still under trial, such as some extreme cases of dysmenorrhœa, of metrorrhagia, and of nervous disorders in which other treatment has failed and in which clinical analysis points to the ovaries as the source of the mischief in certain cases of growing myoma of the uterus, which do not develop in such a way as to admit of removal, the ablation of the ovaries will arrest growth and save the patient. No one familiar with the history of these growths will dispute the fact that their progress is often, through terrible distress, to more or less speedy death. Battey contends, in accordance with the all but unanimous opinion of physiologists, that the ovaries are the *primum mobile* of uterine function and growth. Myoma, or uterine tissue in perverted excess, like the normal tissues is stimulated by ovarian action. Take away the ovaries, and the growth ceases—premature climacteric is induced. As to the relative influence of the ovaries and tubes in the function of menstruation, the prevalent doctrine is that the ovaries are the instigators of menstruation. Mr. Lawson Tait, daring the charge of physiological heresy, affirms that ovulation is not the efficient cause of menstruation, and that the Fallopian tubes, being strictly a part of the uterus, are of more pathological importance. So Battey removes the ovaries; Tait removes the tubes, but he takes the ovaries along with them. Certainly the tubes, regarded as conduits, are of no use if they have nothing to carry. Tait has yet to prove this part of his case; but this does not weaken the great clinical basis upon which his conclusions and his remarkable results rest.

THE PINEAL GLAND AND THE PINEAL EYE.

The pineal gland has always held a certain importance in the minds of students of anatomy from the statement of Descartes in his work, *Les Passions de l'Ame*, that it was the principal seat of the soul. It is interesting to recall the reasons which induced the great philosopher to make so bold an assertion. In Article 32 of the work quoted, he argues that since all other parts of the brain are bilateral, as also we

all have two eyes, two hands, two ears, and since also we have at one time only one single and simple perception of the same thing, it necessarily follows that there is a locality where the two images which come from the eyes, or the two impressions which come from a single object by the double organs of the other senses, can be made one before they belong to the soul, in order that they may not be represented by two objects instead of one; the pineal gland, by its single median position, answers to these conditions of junction of impressions, and is therefore conceivably the principal seat of the soul. Descartes's deductions rested, as is evident, on very slender premisses, but were incontrovertible in his days, when the study of comparative morphology was not begun, and the science of embryology had still to be born. Though his conclusions, however, appear to us at the present day baseless and even absurd, it is a curious fact that the philosopher, who was also, it must be remembered, a student of nature, should have chosen as the seat of the soul, a portion of the brain which, by the light of the researches of the past two years, has become of great importance and interest in the minds of scientific men. The pineal gland has, indeed, been shown to be closely connected with a once functional eye.

The steps which have led to this discovery may, with advantage, be studied as illustrating the gradual evolution of knowledge from isolated facts obtained by various observers. Thus, it had for many years been known that in many animals of the lizard class there existed on the vertex of the head, slightly posterior to the level of the two eyes, a scale of the epidermic armour, modified so as to be readily distinguishable from the other scales; and other observers had noticed that underneath this peculiar scale there was an organ of some kind. The significance and the structure of this organ were not at all known until the last two years, not indeed until Henri de Graaf, of Leyden, published his researches on the development of the epiphysis in amphibia and lizards, and Baldwin Spencer demonstrated its structure in certain living lizards; to both of these observers belongs the honour of unravelling the mystery. The results obtained by Spencer are detailed in an elaborate and beautifully illustrated paper in a recent number of the *Quarterly Journal of Microscopical Science*. The structure of the organ in a New Zealand lizard, Sphenodon, may be taken as a type of that existing in all the lizards in which the organ is present. Sphenodon, for example, has the modified central scale on the vertex of the head, which has been previously mentioned. Lying under this scale is a gap in the parietal bones, which has been named the parietal foramen; in this gap lies the organ, imbedded in connective tissue. Spencer was the first to show that this organ had the structure of an eye; thus, it is roughly conical in shape, forming an optical vesicle bounded by a membrane with the structure of a retina behind and at the sides, and with that of a lens in front, the cavity being filled with transparent tissue. Both the retina and the lens differ from the type which belongs to the paired eyes of all vertebrate animals. Thus the retina has the rods on the inner side of the membrane, agreeing in this point with the eyes of invertebrate animals, and the lens is a modification of the optic vesicle itself and not a secondary invagination of the epiderm, as occurs during the development of the paired eyes of vertebrates. The imperfect eye is connected with the brain by a nerve, which is joined to the epiphysis, the scientific name for what is commonly known as the pineal gland. From this mode of connection with the brain, it will be seen that the names given to the parts of the organ are very appropriate; thus the eye itself is called the "pineal" eye, the nerve, the "pineal" nerve, while the cerebral part of the organ would retain its name of "pineal" gland.

This nomenclature, however, is somewhat confusing, for, at the present time, it is uncertain whether the pineal gland, as it exists in those animals which do not possess a median eye, corresponds to the pineal eye, stalk, and gland of the lizards mentioned, so that it is more correct to call the cerebral part of the organ the proximal portion of the epiphysis, and the pineal eye and stalk the distal portion, or that which has grown away from the brain.

The pineal eye, as Spencer has shown, is present in many different kinds of lizards, and has the same general structure throughout, with a similar mode of connection with the brain. But though the general structure is the same, the degree of development varies greatly. In some, the retina is of low development; in others, the external modification of the epidermis, which would form the cornea, is scarcely perceptible; in others again the eye lies within the cranium, the parietal foramen being closed; while in at least one form the connection of the organ with the brain has been lost. Each of the species examined exhibited one or other of these modifications, so that Spencer concludes that "the organ is never present in a perfectly functional state, but always presents some one feature in which it is more or less imperfect." The researches of de Graaf also bear out this conclusion, and the results of his investigations in the development of the organ in Batrachia showed a greater degree and a greater variation of degeneracy than Spencer found in the adult lizards.

There are two or three points of great scientific interest in regard to the subject of the pineal eye. In the first place it is important to note, as has already been mentioned, that the organ is of the invertebrate type of eyes (with the rods lining the cavity of the optic vesicle), and that it is developed as a hollow outgrowth from the neural canal, from which also is developed the paired vertebrate eyes (with the rods on the outer side of the membrane lining the optic vesicle). This is another of the many links between the lower and the higher classes of animals. In the second place, the organ is in all living animals, which possess it in a degenerate condition, and in none is it functional. It therefore seems to be a rudiment of an ancestral functional organ. The organ has been traced during development in amphibians by de Graaf, as has already been mentioned, and has been found by him to exist often as mere traces of structure and it is interesting to note that in a certain class of extinct animals, the Labyrinthodonta, which are considered the ancient representatives of living amphibia, there is a very large parietal foramen, even relatively larger in many cases than that which exists in living lizards. This large foramen is no doubt closely associated, as Spencer remarks, with a high state of development of the epiphysis, and indicates the presence of a pineal eye during life. Though any surmises as to its function during life can now only be tentative, yet in certain other extinct forms, the gigantic Ichthyosaurus and Plesiosaurus, the foramen is so large that it would seem quite a legitimate conclusion that the pineal eye was functional during their life. From these and other considerations, which are fully detailed in Spencer's paper, it will be seen that the pineal gland as it exists in man and in all mammalia is a rudimentary structure, but whether the whole of the gland corresponds to the proximal portion of the epiphysis, pineal stalk and pineal eye, or only to the first mentioned part is at present uncertain. Further researches will, no doubt, shed light on this point.

THE ABOLITION OF RELATIVE RANK OF MEDICAL OFFICERS IN THE ARMY.

THE replies of the Secretary of State for War in the House of Commons to Major Rasch and Sir Guyer Hunter do not appear to have brought us any nearer than we were before to the solution of the question—why has the relative rank of medical officers been abolished, and what is the true meaning of the abolition? Although the Article 125A of the Royal Warrant, to which the Secretary for War referred Sir Guyer Hunter, does very distinctly state that army medical officers shall rank according to their grades, for purposes of precedence, etc., with combatant officers of the same corresponding grades as hitherto, and although it is not easy to perceive what the distinction is between medical officers ranking with certain combatant officers and their holding rank relative to them; still we presume there must be a difference, or so much trouble would not have been taken to promulgate the fact that the relative rank of medical officers had been abolished. The Secretary for War, in his reply to Sir Guyer Hunter, stated that, "as a matter of fact, the abolition of the term relative rank has not altered the position of medical officers in any respect whatever." It seems only natural to follow up this reply by the question—why then was it abolished? One reason given by a contemporary is, that it was found to operate unjustly in certain cases among the combatant officers. If this be one of the grounds for doing away with the relative rank of medical officers, then its abolition has in some way been advantageous to the combatant officers—it has put a stop to something that was regarded by the combatant officers as unjust. But how could this change take place as regards the combatant officers without at the same time some alteration occurring in the status or position of the medical officers relatively to them? It seems to be a contradiction in terms to say that the relative rank of medical officers of the army has been abolished because it was an occasional source of injustice to the combatant officers, but its abolition has not altered the position of medical officers in any respect whatever. As, however, all military authority and power are placed by the regulations of the army in the hands of the combatant officers, the question which most concerns the hourly comfort of the medical officers who have to act in direct relations with them really amounts to this: How will the combatant officers construe the fact of the medical officers being deprived of relative rank? Will they accept and act upon the statement that the abolition of their relative rank has made no difference whatever in their position? We confess that we can hardly believe they will regard the abolition in this light.

THE next matriculation examination of the University of London will commence on June 13th, instead of on June 20th, as previously arranged.

THE work done by the General Medical Council ought to be very valuable if it is worth as much as it costs. It is said that the total expenses of the last session, including fees to members, printing and other incidental expenses, amounted to a round sum equal to £1 sterling for each minute given to business—a consideration, however, which seems to have had but little effect in checking the costly eloquence of its members.

A GOOD deal of attention has been attracted to the remarkable statements in the report of the committee on the accommodation for untried prisoners. Questions are to be addressed to the Government in regard to the defective lighting, heating, ventilating, and sanitary arrangements in many places; Mr. Childers will ask the Home Secretary what action he proposes to take on the report.

DR. BROUARDEL, the well-known epidemiologist and medical jurist, whose report on the epidemic of cholera in the South of France raised so much discussion a few years ago, has been appointed Dean of the Faculty of Medicine in Paris.

PASTEURISM AND ITS RESULTS.

M. BERGÉ, an inhabitant of Bordeaux, who was treated for rabies by M. Pasteur six months ago, developed symptoms of the disease a few days ago. He was taken to the Saint André Hospital, where he died, after a terrible attack of rabies. Dr. Pitres refused to give his opinion upon this case until he had inoculated rabbits with a portion of the patient's spinal marrow.

LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

PROFESSOR CHARLES STEWART, M.R.C.S., commenced a course of nine lectures on Wednesday, March 9th, on "The Auditory Organs of the Vertebrata," and on "Some Recent Additions to the Museum," which will be continued on Friday, Monday, and Wednesday, March 11th, 14th, 16th, 18th, 21st, 23rd, 25th, and 28th. The lectures will be delivered in the theatre of the College at 4 o'clock precisely each day.

"ANNALS OF THE PASTEUR INSTITUTE."

THIS new journal, which is issued under the editorship of M. Duclaux, Professor of Biological Chemistry in the Faculty of Science of Paris, has a wider scope than the title would seem to import. M. Duclaux will be glad to publish the results of researches which appear to have any value, whether the work has been done in M. Pasteur's laboratory or elsewhere.

EXECUTION BY ELECTRICITY.

THE last Legislature of New York appointed a committee to examine into the least objectionable method of carrying out the sentence of the law in cases of murder of the first degree. The committee recommends the abandonment of hanging, and the substitution of the electric battery, so heavily charged as to produce instant death. The suggestion is not novel, and has much to recommend it. The last penalty of the law would thus be inflicted by a method which is expeditious, certain, painless, awe-inspiring, and free from the revolting bungling which sometimes occurs in carrying out the rougher modes of hanging, decapitation, and throttling. But we look forward to the abolition of capital punishment as having no just basis in Divine law, and a violation of a sacred principle too little regarded in the present state of society.

MEDICAL DEGREES FOR LONDON STUDENTS.

A MEETING of the students of the Middlesex Hospital was convened by the Middlesex Hospital Medical Society on Thursday, March 3rd, Dr. J. K. Fowler in the chair. The following resolution was proposed by Mr. Leopold Hudson and seconded by Mr. Arthur Hensman: "That in the opinion of this Society it was expedient that a degree in medicine should be placed within the reach of the bulk of the London medical students, and that this Society ventures to express a hope that this may be brought about by the conjoined action of the Royal Colleges of Physicians and Surgeons." The resolution was warmly supported by Mr. Gould, the Dean of the School, and by Dr. Coupland, and after a very animated discussion it was carried by a large majority.

ANILINE IN PHTHISIS.

DR. KREMJANSKIJ, formerly professor of medicine in Charkow, has recently propounded a scheme for destroying the bacilli of phthisis in the living body by saturating the blood with aniline, which, he says, is poisonous, even in very dilute solutions, to the bacilli, but has never been known to kill a human being. Caution must,

however, be used, and the inhalation of fresh air, turpentine, anise, and eucalyptus oils, ought also to be used. He suggests that the drug may be introduced into the system by inhalation of atomised aniline several times a day. The matter was discussed at the recent congress of Russian medical practitioners, and, though it of course evoked a considerable amount of unfavourable criticism, a commission was appointed to watch the carrying out of the plan by Professor Kremjanskij, in one of the Moscow clinics.

THE BRUSSELS M.D.

It is a significant fact that, according to a list recently published, upwards of two hundred medical men residing in England and Wales have taken the degree of Doctor of Medicine of Brussels. Many of these graduates occupy distinguished positions at hospitals and other institutions. The publication of this list is, doubtless, preliminary to an application to the General Medical Council for the admission of the degree to registration in this country. An additional argument is thus furnished, if one were needed, in favour of the granting of similar facilities for graduation in London. It is a grievous thing that Englishmen should be obliged to go abroad in search of a degree for want of means at home. Should the scheme now under consideration be brought to a satisfactory conclusion, Brussels and other refuges of degree-seeking practitioners, will probably cease to attract candidates from this country.

PILOCEREUS SENILIS.

The small volume of collected essays by the late Dr. Walter Moxon, issued this week under the curious title *Pilocereus Senilis*—a *nom de plume* with which he used to sign his contributions to the *Guy's Gazette*, long defunct, but now within these last few weeks revived—contains also three other essays on Art and Science in Medicine, on the Biologist and the Physician and on Alcohol and Individuality. The volume is throughout characterised by many of the qualities which endeared Dr. Moxon to those who knew him well; there is the same knack of taking a fresh view of familiar facts, the same verbal wit, and the same kindly spirit and generous enthusiasm. The memorial fund now amounts to more than £400, and subscriptions continue to come in, but we are prevented by the great pressure on our space from publishing the second list this week.

AN INTERMITTENT FORM OF MENING

Dr. Henoch has described a moderate form of simple, non-tubercular meningitis, characterised by a protracted course and by alternations of exacerbation and improvement (*Centralbl. f. klin. Med.*, February 5th). The onset is sudden, the fever being more or less intense, with frontal headache, sometimes vomiting, and always marked rigidity of the muscles at the back of the neck, which may sometimes affect the muscles of one or other side. The fever abates, and improvement occurs after one and a half to two weeks, to be followed by a renewed exacerbation after an interval varying from twenty-four hours to several days, without any apparent cause. These variations may be repeated frequently in the course of the next few weeks, cure resulting in from seven to ten weeks. Cases in which the remissions are not marked usually end fatally, especially when they occur during the first year of life. Treatment appears to have little or no effect on the disease, and its etiology is frequently obscure, although sometimes it seems to depend on some infectious cause. Flexion of the knee-joint, with the thigh at right angles to the trunk, as described by König, is not always present.

COMPETITION IN DEGREE-GIVING IN FRANCE.

The centres of least examination would seem to be those of most attraction for a large number of students in other countries as well as our own. The Medical Faculty of Lyons, not receiving what it considers its fair share of students during the past year, and, looking about for an explanation, has hit upon the stringency of the preliminary examination in science as the "formidable shape" which drives students from its gates. Statistics of the results of this ordeal certainly seem to show either that the students in other parts of France are more diligent than those in the neighbourhood of Lyons, or that the examiners in chemistry, physics, and natural history temper justice with mercy to a less extent in Lyons than elsewhere. Thus in 1885, though the Lyons faculty passed only four men, fifty were admitted at Bordeaux, sixty-three at Poitiers, and sixty-seven at Toulouse. The following figures show that "plucking," or its French equivalent, rages with quite extraordinary violence at Lyons. In 1882, thirty-three candidates failed out of forty-one; in 1883, fifteen out of twenty; in 1884, fifteen out of twenty; in 1885, eleven out of fifteen; and, in 1886, all the twelve candidates who presented themselves were rejected! In view of this high rate of mortality, it is proposed by the Lyons Faculty to petition the Government to abolish the examination altogether, admitting students on the Baccalauréat-ès-Lettres alone, and trusting to the Medical School entirely for their training in science.

TWO NEW SPECIAL HOSPITALS.

Of the making of new hospitals there is no end. We have this week the announcement of another Skin Hospital in the West End, to be called the British Hospital for Diseases of the Skin. With the multiplicity of skin departments in general hospitals, and the special institutions already existing for the purpose—of which there are more than enough in London—the foundation of a new skin-hospital we cannot but regard with feelings of regret, as a step taken mainly in the interest of the surgeons who found it. Existing hospitals have more than enough to do to find funds, and the multiplication of management and administrative expenses connected with the incessant creation of little special hospitals is an evil greatly to be deplored. This skin-hospital has its origin in the fact that Mr. Startin has ceased to be a member of the staff of St. John's Hospital, Leicester Square. He has been joined by several colleagues anxious to distinguish themselves in the same field of cutaneous medicine, and we see with regret that Dr. Bristowe has accepted the office of consulting-physician. Another new special hospital is announced as the result of the secession of the bulk of the members of the Throat Hospital in Golden Square. They have now founded a rival hospital in Great Portland Street. The medical staff include Dr. McNeill Whistler, Dr. Woakes, Mr. George Stoker, Dr. Fenton-Jones, Mr. W. R. H. Stewart, Dr. Coleman Jewell, and Dr. Edward Law. The new hospital has a sounder constitution than that from which it sprung, and it may be hoped that the quarrels which have marked the history of the older institution will not dog the steps of this offshoot from it. With respect to this institution also, we can but regret that it makes an unnecessary addition to the already too great number of special hospitals in London; it is a pity that men so well qualified as those who are named cannot be absorbed into the staff of the special departments of the general hospitals.

SIR MICHAEL HICKS-BEACH.

It is with much satisfaction that we are able to state that the gloomy reports which have been current concerning the prognosis of the illness which has compelled the resignation of Sir Michael Hicks-Beach are—in their most serious aspect, at least—without foundation. Sir Michael Hicks-Beach had, as is now known, shown symptoms of incipient cataract some months since, the right eye especially being affected by diffused opacity of the lens, which has practically made it for the time useless. During the last few months, and no doubt under the strain of great mental pressure, anxiety, and overwork, this condition has made somewhat rapid progress, and both eyes are now affected with opacity of the lens; so much so, that it is with difficulty that manuscript can be deciphered, and the carrying out of ordinary official duties became practically for the time a work of great difficulty, involving vicarious aid. In addition to this, the mental strain and pressure of official anxieties have produced a condition of nervous exhaustion seriously affecting the health. The con-

tinuance in office under such circumstances must not only have told seriously upon the constitutional strength of Sir Michael Hicks-Beach, but would have affected still more seriously the prospects of success in the operation for removal of cataract, which is, of course, under such conditions, inevitable at a future date. To ensure the success of such an operation, the patient must be in his best health; and at the consultation held it was decided that, in view of the absolute necessity of improving his physical condition, Sir Michael Hicks-Beach must perforce resign his heavy official anxieties, and take a period of rest, under conditions likely to give him strength and health prior to undergoing the operation for cataract. Sir Michael Hicks-Beach proposes, under the advice of Sir W. Jenner and Dr. Robson Roose, to visit Wiesbaden, the climatic conditions of which, and the character of the waters, are altogether suitable to his condition. While there, he will, with the approval of Mr. Anderson Critchett, have the care of Dr. Pagenstecher, the well-known oculist. Some comment has been made, under misapprehension, upon the announcement that he was about to consult a German oculist. It will, however, be readily understood that no such consultation is in contemplation for any other reason than that during the ensuing months it will be proper that Sir Michael Hicks-Beach should have the care of a competent oculist in whatever town he happens to select as his place of residence. When he returns to England there is every reason to hope that he will do so with restored health and under favourable conditions for the removal of cataract—an operation in which English surgeons have the highest reputation in the world, and in which they have achieved a success which has not been exceeded anywhere. It is satisfactory to be able to add that there are no conditions of organic disease, and nothing which need inspire any serious anxiety as to the ultimate recovery of this distinguished statesman and the restoration of his sight.

DIGITAL EXPLORATION OF THE BLADDER.

THE paper by Sir Henry Thompson which we publish in another column is not only in itself interesting in relation to a controversy which has sprung up on the subject in France, but illustrates with some piquancy the relative slowness with which the French mind becomes impressed with the medical and surgical progress of other countries. It was long years after ovariotomy was well established on both sides of the Atlantic before French surgeons awoke to the possibility of performing such operations. The resections and the cleft-palate-operations of Sir Wm. Fergusson took many years to cross the Channel, and it is curious to see that even now, in the case of an English surgeon who, like Sir Henry Thompson, is a member of the Société de Chirurgie in France, and is by no means a stranger in Paris, that a surgeon of such eminence as Professor Guyon has apparently so far mistaken the gist of Sir Henry Thompson's most recent addition to genito-urinary surgery by digital exploration of the bladder as to confound cases of epithelioma, in which he does not advise the operation, with cases of papilloma, in which he does. With a gentle touch of irony, Sir Henry Thompson points out in this paper that those cases of hæmorrhage not due to epithelioma of the bladder so long the despair of the physician, have apparently hardly yet fallen within the remedial domain of French surgery, since the class of cases to which M. Guyon refers is precisely that in which the operation introduced by Sir Henry Thompson is unnecessary. For the most part cancer of the bladder can be detected by the rectal touch, and of course under such conditions operation is rarely advisable, and can seldom be useful.

THE LATE PROFESSOR BORODIN, OF ST. PETERSBURG.

THE Russian lady-doctors have lost a warm supporter of their cause in Professor Borodin, of the St. Petersburg Military Medical Academy, who died suddenly of cardiac disease last month. In all their difficulties—and they have not been less than those which female aspirants to medical diplomas have had to encounter in this country—Professor Borodin worked for them and with them, and to the last days of his life gave them every assistance in his power. But it is not alone, or even perhaps chiefly, as the champion of the lady-doctors, that Professor Borodin will be remembered. He was an eminent chemist, and had done much to assist clinical investigation by his researches on organic, toxicological, and clinical chemistry. He worked out a process for the estimation of nitrogen, which, when combined, as suggested by Dr. Malieff, with that of Kjeldahl, is suitable for the physician who has perhaps neither the time nor the skill required for the older processes in use by professional chemists. The Russian journals speak also of the deceased professor, who was in his sixty-third year, as a man full of kindness and greatly respected. He was, besides, an accomplished musician.

THE COLLEGES, THE GENERAL MEDICAL COUNCIL, AND THE APOTHECARIES' SOCIETY.

WHEN attention was first drawn, some four months ago, in these pages to the evil consequences which would follow the rejection of the demand of the Apothecaries' Hall to be admitted to the Conjoint Board, it was clearly pointed out that the haste with which the business was being pressed forward was one of the dangers of the situation. It seemed but too probable that having once snatched a decision the governing bodies of the Colleges would, when representations were made to them by the general body of the profession in the future, plead inability to re-open a discussion which had been promptly closed. If current rumour can be trusted, the fears then expressed were but too well founded, for it is said that the individual Fellows who direct the policy of the College of Physicians profess to believe that the College will be bound by the result of the meeting of the Council of the College of Surgeons, to be held on March 24th. The letter, which we publish in another column, from an eminent provincial Fellow, shows with sufficient clearness that if the Comitia had been invited to vote, after the subject had been fully elucidated, the decision might have been very different. As it is, however, the plea of *non possumus* is to be set up, and a rumour which we can hardly credit, but which comes to us on high authority, intimates that unless wiser counsels prevail at the last moment to curb the headstrong temper of the dominant party, even the very Fellows of the College—the body which legally and technically is the College—will not be consulted upon this momentous question, but the reply to the request of the General Medical Council, the constituted authority in all matter connected with medical education and examination, will be arranged by a mere official circle. No acute anxiety need be felt for the privileges of the Comitia, but it may be pointed out that if our correspondent has not misinterpreted the feeling of his provincial compeers there may be even yet time to act, for on a requisition signed by ten Fellows the President is bound (By-law IX) to summon an extraordinary general meeting within seven days. The Council of the College of Surgeons, at its meeting on Thursday last, discussed the subject briefly, but showed some sense of the importance of the question by arranging to hold a special meeting on March 24th for its final decision.

A FORM OF GONORRHŒAL CONJUNCTIVITIS NOT DEPENDENT UPON INOCULATION.

THE general recognition of the fact that the malignant purulent ophthalmia which occurs with gonorrhœa is due to direct inoculation with the urethral discharge, has often caused it to be forgotten that there is another form of conjunctivitis, which also depends upon gonorrhœa, but is not caused by inoculation. Its existence was recognised by Abernethy, who described cases in which urethritis, articular rheumatism, and an irritative ophthalmia alternated in their occurrence, or in their severity. Most modern writers, however, have looked upon gonorrhœa almost entirely as a local affection, and have ignored the possibility of its affecting the eye, except through direct application of the discharge. In a paper published in Knapp's *Archiv* (June, 1886), Dr. Haltenhoff, besides quoting cases mentioned by other

writers, gives four of his own, in which it seems probable that inoculation played no part. The conjunctival injection is less than in the ordinary cases, and the secretion mucous rather than purulent; but the most distinctive features are the occurrence of multiple arthritis, the simultaneous affection of both eyes, and the tendency to recur with each attack of gonorrhœa, although, in subsequent attacks, the patient has been careful to shield his eyes from all risk of inoculation. Professor White, of Philadelphia, considers this form of gonorrhœal ophthalmia more common than that induced by inoculation.

THE SCIENTIFIC PRESS ON THE ERASMUS WILSON LEGACY.

Our scientific contemporary, *Nature*, has not overlooked the advantages which might accrue to science through an intelligent disposition of the great legacy which has fallen to the College of Surgeons. In a leading article entitled "Endowment of Medical Research," in the issue of March 3rd, *Nature* dwelt upon the probability that the College would make another and an enduring addition to the benefits which it had conferred upon science. An opinion was expressed that it might be found possible to meet the needs of extension of the museum buildings and increase in the staff of officials by current income. Then the writer pointed out that few scientific investigations could now be carried on properly, except in well-equipped laboratories. The familiar comparison between the state of the Continent and that of this country, with regard to laboratories, was not overlooked. It was stated that physiology and pathology were, to some extent, provided with means for research, but that other sciences allied to medicine were utterly destitute. "Physiological chemistry," the writer continues, "has scarcely existed in England since the days of Prout, and at the present day there is not a single laboratory where this difficult and important branch of knowledge is pursued. When Dr. Gamgee's excellent text-book is completed, the *Index Auctorum* will scarcely contain an English name. Pharmacology, the experimental investigation into the action of drugs, is another foreign science. Fraser and Brunton have done much to redeem this country from absolute sterility, but in London there ought to be a laboratory like that of Professor Schmiedeberg, for this most obviously and practically useful of all medical sciences." The article commences with a reference to the memorial recently presented to the Council, with the signatures of leading scientists, and concludes by expressing a belief that the leading scientific surgeons in the kingdom "will decide on using the Wilson bequest for the endowment of some new and urgently needed institution for research, which will be an honour to the College, a credit to the nation, and an instrument for increasing knowledge and diminishing suffering for centuries to come." Our readers will heartily agree with the writer in *Nature*, and we trust that the legacy will not be sunk in bricks and mortar, and in salaries to an enlarged staff of officials, through the agency of subcommittees of the Council. The legacy will, however, most assuredly meet some such fate, unless outside pressure be brought to bear on the College authorities, since the Council has only too often shown a fatal readiness to agree to any report which the subcommittees may choose to present.

BRAIN SURGERY IN THE STONE AGE.

An interesting address was recently delivered by Mr. Victor Horsley, F.R.S., at the Royal Institution, on the subject of "Brain Surgery in the Stone Age." Having referred to the fact that our present civilization is the outcome of man's working in stone, bronze, and iron in successive epochs, he said it was certain that as Troy was being overwhelmed by a race who had but quite lately learnt the real power embodied in the use of iron, and who were still clad in splendid bronze armour, the great nations of the north-west, whose surgical skill was his theme, were perforce content to satisfy their domestic needs with sharpened stone, while the luckiest among them but rarely owned a single metal instrument, even a bronze one. It was to him a most fundamentally important question whether the art of trephining had not reached a relatively high development in Asia before its introduction into Europe, or whether it could have been really evolved as a definitely new procedure in France, whence we got the clearest evidence of its use. He leaned to the view that some light broke upon us from the history of its decline rather than from that of its rise. It was during the polished stone period that this branch of surgery especially flourished in France, while in the same age it was carried on in the neighbouring European countries, though in a far less degree. Hence, whereas the Broca Museum of Anthropology in Paris contained about 60 specimens bearing on this point, including about 10 fairly complete crania, on the other hand the skulls operated on in all Europe besides could be counted on the fingers. Professor Horsley having spoken of the domestic life and habits of the dwellers in caves, showed, by reference to a manuscript of the 13th century, that the mode of perforating the skull adopted by the stone age peoples was either by scraping, drilling, or sawing the bone, the balance of evidence being in favour of the last process. He next showed that not only the pieces of bone which were removed, but also the edges of the holes thus made, were thought to possess beneficial, probably supernatural properties, and the fragments were worn as amulets. He further showed from the pathological evidence afforded by the specimens that the majority of the patients must have survived the operation. After fully describing the *technique* of the operation, the question as to the reason of its being undertaken was considered. He found that most of the operations appeared to have been performed on the vertex of the head, and that therefore they were probably undertaken to relieve depressed fracture. The lecturer then drew attention to the significant fact that the holes were also grouped, almost without exception, over the motor and epileptogenic region of the surface of the brain. He further suggested that since a depressed fracture in this region would almost certainly give rise to epilepsy, and at the same time occasion such local pain as to call for its removal for that reason alone, it was obvious that traumatic epilepsy would be relieved, if not wholly cured, by a trephining operation originally designed for nothing else but the relief of the fracture, a result which would certainly lead to wider adoption of the operation. The lecture was copiously illustrated by lime-light photographs of the trephined skulls and of the stone age implements.

THE TREATMENT OF SYPHILIS.

At a recent discussion at the Medical Society of London on a paper read by Mr. Milner, divergent opinions with regard to the treatment of syphilis were expressed, and some valuable and interesting remarks were made by Dr. Lauder Brunton and Dr. Althaus. The effect of mercury in controlling to some extent the secondary manifestations of syphilis, is assumed to be due to its properties as a germicide, and the same convenient explanation is given of the undoubtedly beneficial action of iodide of potassium in the later stages. It was pointed out, however, that the effects of iodide of potassium or sodium are due, not to the iodine, but to the salt, which is not a germicide. Further, it was remarked by several speakers that the action of the iodides, while prompt and certain in dissipating the local symptoms which are supposed to belong to the later stages of syphilis, is not permanent. It has, indeed, been generally recognised that the iodides of potassium and sodium are only indicated in the lesions which occur in various tissues from the action of the virus in the past. Dr. Brunton appeared disposed to allow that mercury might owe its effect in syphilis to its action as a germicide, and observed that whatever its influence on the diseased germ, it was detrimental to the tissues. Further, there was a very general expression of opinion that iodide of potassium, like mercury, was not a drug to be trifled with; and the propriety of employing mercury, even in the later stages, found several supporters. Inunction as a method of treatment has become more systematic of late years, especially since pharmaceutical research has placed at our disposal more elegant and convenient preparations for the purpose. Dr. Althaus spoke very

highly of the oleate of mercury as a cleanly and readily absorbed preparation, and the peculiar qualities of lanoline as a vehicle for the administration of drugs, and particularly mercury, by the skin, also elicited expressions of approval. For severe cases, the intra-muscular injection of mercury in some form or another, as practised by Mr. J. Astley Bloxam at the Lock Hospital, is productive of good results, though patients are apt to resent the pain which accompanies its introduction. Each method of mercurial administration possesses certain advantages. A clear and well-defined classification of the indications for each method is still wanting, though Dr. Milner has filled the gap to some extent in the paper referred to.

THE ALLEGED PREVALENCE OF ANÆMIA AMONG MINERS.

THE *Gazette des Hôpitaux* publishes notes of a communication made by Dr. Paul Fabre to the Société de l'Industrie Minière concerning anæmia among miners. M. Fabre, whose practice lies among the mining population of Commentry, has proved that in anæmic miners the number of blood-corpuscles and the quantity of hæmoglobin contained in them are normal. Dr. Fabre's observations at Commentry were confirmed by those which he made among the miners at Saint Etienne, Pas de Calais. The rare cases of anæmia seen among them were chiefly due to traumatic hæmorrhage, overexertion and muscular exhaustion, alcoholism, helminthiasis, lead-poisoning, marsh fever, etc. As regards helminthiasis, M. Fabre has frequently observed among the miners at Commentry tape worms, thread worms, and round worms which may have often caused anæmia; but he has never met with the ankylostomum which is generally supposed to be present in miners' anæmia. M. Fabre agrees with M. Dransard and others in thinking that anæmia is not more frequent among miners than among other workmen, and that, where it exists among miners, it has no special characteristics, and arises from the causes which always induce anæmia.

THE TRANSMISSION OF CHOLERA FROM MOTHER TO FŒTUS.

LIZZONI and Cattani, of Bologna, have recently published a careful examination of a five months' fœtus, which was expelled by a woman suffering from cholera. On the third day of illness, the mother aborted after the reaction stage of the disease had lasted twenty-four hours. The fœtus was examined twenty hours after expulsion, and was found to be in good condition. A *post-mortem* examination showed dilatation of the right side of the heart, with fulness of the veins of the thorax, and some bloody exudation in the pleural cavities. The contents of the small intestine were red in colour, while those of the large were green. These contents were carefully removed, as well as some of the blood of the right side of the heart, and micro-organisms carefully sought for. A small number of micrococci and bacilli were found in all the specimens prepared; as well as small bodies, somewhat larger in diameter than comma-bacilli, but resembling very closely an old cultivation of these organisms. No definite comma-bacilli were seen in the blood, exudations, or the contents of the intestine; but by means of plate-cultivations, colonies of Koch's comma-bacilli were grown, having their definite characteristics. From this case, as the authors conclude, it is evident that the transmission of cholera from the mother to the fœtus takes place by means of the blood. A further communication on the period of the disease when such transmission takes place is promised, and may prove of great interest.

TOTAL EXTIRPATION OF THE UTERUS AND NEPHRECTOMY.

DR SCHMIDT, of Cologne, relates in the *Münchener Medizinische Wochenschrift*, No. 33, 1886, a case in which these formidable operations were successfully performed at one sitting. The patient was 49 years old, and had given birth to four children, all still-born; and the menopause had occurred two years previously. For a year she had suffered from severe, irregular uterine hæmorrhage. Carcinoma of the cervix, involving the vault of the vagina, was detected. The uterus was removed, but the operation was rendered very difficult by abundant, cord-like adhesions between the fundus and the pelvic walls. The peritoneal cavity had to be very widely opened. On careful examination of the extirpated uterus, it was found that an inch of the right ureter had been cut away with that organ. The vagina was plugged with iodoform gauze, and the right kidney was removed through a lumbar incision. The patient made a good recovery. Dr. Schmidt states that total extirpation of the uterus is quite inadmissible, when it appears at all probable that a ureter is likely to be injured, not that the necessary nephrectomy would greatly increase the risk, but rather because the extirpation of the uterus would be of little service in such a case, as the cancerous infiltration would be extensive, and rapid recurrence would be certain. Yet, when the ureter has been injured, he thinks that nephrectomy is preferable to sewing of the proximal end of the ureter to the vaginal walls, as this leads to inflammation and sloughing, and renders nephrectomy necessary later on. In Dr. Schmidt's case, it must be noted that the disease had distinctly involved the cellular tissue to the right of the cervix.

SCOTLAND.

THE MEDICAL SCHOOL FOR DUNDEE.

THE University of St. Andrews has expressed a desire to co-operate with the committee charged with the arrangements for establishing a medical school in Dundee, the university reserving a claim to a share in the medical teaching. The subscriptions for the school have now reached the substantial amount of £19,000.

ABUSE OF MEDICAL CHARITIES IN GLASGOW.

A DISCUSSION is going on in Glasgow regarding the need of medical charity organisation in general. It was started some time ago by a paper on the "Abuse of Medical Charities," read by Dr. James Erskine to the Southern Medical Society, which has since been printed in pamphlet form. Dr. Erskine confines his attention to out-door medical relief, and estimates that, in 1885-86, 78,055 individuals were treated in the out-door departments of the medical institutions of Glasgow, a number equal to 12.1 per cent. of the population; while in the same year, parochial medical relief was given in out-door departments to 14,403 persons. The total number of individuals treated by medical charities and parochial boards he estimates at 112,149, or 17.5 per cent. of the population. As a remedy for this abuse, Dr. Erskine recommends the formation of a central board, whose authority would extend over all the medical charities of the city, and would ensure their being confined to those really needing them.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.

AT the ordinary monthly meeting of this society, Dr. Hector C. Cameron made some observations on thirty cases of abdominal section for ovarian and other cystic tumours, and discussed the mode of dealing with the pedicle, the question of drainage, after-treatment, complications, ventral hernia, etc. Of the thirty cases, six proved fatal, four from peritonitis and two from collapse, one of the last two turning out to be a case of cystic tumour of the pancreas. Drs. Knox, W. L. Reid, Perry, J. A. Robertson, and Professor Gairdner took part in the discussion which ensued. Dr. Gairdner mentioned a case of solid ovarian tumour removed from a child, aged 10, by Dr. Keith. The child recovered.

THE HEALTH OF GLASGOW.

DR. J. B. RUSSELL'S fortnightly report states that during the fortnight ending February 26th, there were 522 deaths, an increase of 34 on the preceding fortnight, representing a death-rate of 25.9 per 1,000, in place of 24.2, but, as compared with the death-rate of the

same two weeks last year, showing a decrease of 2. In the first week of the fortnight the rate was 27, in the second 24.8. The number of deaths of persons below 1 year of age was 107, compared with 96, and of persons aged 60 and upwards 86, as compared with 82. Of the total deaths 46 per cent. were of children below 5 years of age. Of children at school age (3 to 13 years inclusive), there were 40 deaths, as compared with 29—2 from scarlet fever, 3 from measles, 4 from whooping cough, 1 from diarrhœa, 6 from consumption, 6 from acute diseases of the lungs, and 18 from unclassified causes. The death-rate last week was 26 per 1,000, as compared with 25, 27, 25, and 24 for the four weeks preceding. This rate is the lowest for the last four years, the rate for the same week last year being 30 and 29 and 27 the two previous years respectively.

THE WORSHIP OF HYGEIA IN THE "ATHENS OF THE NORTH."

THE present outbreak of scarlet fever in Edinburgh has led to an examination of the drainage and water-supply, with results that must have been a shock to those who looked upon the Scotch capital as being a city of "light and leading" in all that relates to sanitary well-being. The Burgh Engineer has reported on a district of the town called Daley, consisting of substantial-looking three-storey houses, mostly occupied by well-to-do artisans, and it may be noticed that in the greater part of this district the buildings have been put up within the last twenty years. The report states that of forty tenements with common stairs examined, all except three were found to have defective sanitary arrangements; four tenements were directly connected with the main sewer. As to the water-supply an examination of the cisterns, to the number of 558 (supplying 870 families), showed that 193 were clean, 365 dirty, and some very foul; only 91 were covered, 467 were uncovered, and 12 were the watery graves of mice. As to their overflow discharge pipes 500 opened free and 58 were wrongly joined to soil pipes. The favourite position for the cisterns seemed to be over the water-closet. Such a report concerning a very limited portion of Edinburgh may well make the public inquire how the plans of such buildings came to be passed. It is earnestly to be hoped that the Public Health Committee, with its energetic health officer, Dr. Littlejohn, will spare no pains to get the condition of every defective portion of the city brought to light, and insist on its being rectified.

HOSPITAL ACCOMMODATION FOR MID-LOTHIAN.

A MEETING of the subcommittee of representatives of Local Authorities West of Edinburgh was held last week. The Clerk stated that he had written to the eight Mid-Lothian parishes west of Edinburgh, and to the six eastern parishes of Linlithgowshire, as to whether they were willing to join in erecting a Combination Hospital. Six of the Mid-Lothian parishes and three of the Linlithgowshire parishes sent answers, agreeing to join in the scheme, if satisfied with the details. The other parishes have not yet come to a decision in the matter.

LUNACY ACCOMMODATION IN LANARKSHIRE.

THE question of lunacy accommodation in Lanarkshire was recently again brought before the Glasgow District Lunacy Board. A deputation from the City Parochial Board was received, who expressed the opinion that the proposed new asylum at Hartwood would be inconvenient, and requested that the present operations of the Glasgow District Board at Hartwood should be delayed, in order that an effort might be made to get the county of Lanark divided into four lunacy districts—the City, Barony, and Govan parishes being each a district, and the landward part of the county being a fourth district. Communications were also read, stating that meetings had been held in the parish of Govan in opposition to the proposed new asylum, as the ratepayers were already assessed for the asylum in their own parish. After considering the whole matter, the District Board resolved to appoint a deputation to confer with the General Board on the subject.

SEA-WATER FOR GLASGOW.

A SCHEME for the introduction of sea-water into Glasgow was brought before the Philosophical Society, on March 1st, by Mr. John Anderson. He proposed that the water should be pumped from the sea at Saltcoats, on the Ayrshire coast, into a reservoir, and sent through pipes, laid along the public road, through Beith, Johnstone, and Paisley. The engineering difficulties were, he thought, not insurmountable. A fair quantity of water for trial would be 520,000,000 gallons per annum. The supposed cost would be £210,000, or an annual outlay of £18,000. He proposed a sliding scale for charges: for quantities from 80,000 to 100,000 gallons, 1s. per 1,000; between 100,000 and 500,000, 10d.; between 500,000 and 2,000,000, 8d.; and for quantities above 2,000,000, 6d. per 1,000, the minimum charge being £4. Of the quantity, the public baths would require at least 80,000,000, which, at 6d., would yield £2,000; while four thousand families, at the minimum of £4, would bring up this sum to £18,000. This would leave a balance of 120,000,000 gallons, which could be distributed through the different quarters of the town, by stand-pipes, for the benefit of all who chose to use it. It was highly probable the scheme would clear itself, and that a large quantity of water would be left over for free distribution.

IRELAND.

WESTPORT UNION.

IN consequence of measles being prevalent in the Kilsallagh and Lacawrey districts, the National Schools have been closed, at the recommendation of Dr. Griffin, the medical officer.

QUADRUPLE BIRTH.

A WOMAN residing at Dowra, in the County Leitrim, recently gave birth to four children—one boy and three girls—all of whom are alive.

CHARGES AGAINST THE MEDICAL OFFICERS OF LIMERICK UNION.

THE sworn inquiry into the charges brought against the resident medical staff, of being absent from the workhouse at unauthorised hours, was reopened last week by the Inspector of the Local Government Board; the proceedings, however, being, as heretofore, strictly private. The decision of the Local Government Board is expected to be before the guardians this week.

CONSUMPTIVE HOSPITAL, BELFAST.

THE first anniversary of the opening of the Consumptive Hospital was held in that institution upon December 14th. The subscriptions towards the proposed endowment fund of £15,000 to support the new wing to be erected by Mr. Forster Green now amount to nearly £7,000.

BELFAST ROYAL HOSPITAL.

THE quarterly meeting of the General Committee of this institution was held on February 28th in the Hospital, under the presidency of W. T. B. Lyons, Esq., D.L. The staff reported that during the quarter 594 intern patients had been treated, of whom 227 were medical and 332 surgical cases. Forty-five operations were performed. During the same period 2,652 extern patients were treated, of whom 560 were medical and 2,152 surgical. There were 152 minor operations, and 320 cases of teeth-extraction, making a total of 2,972 cases.

THE GENERAL MEDICAL COUNCIL AND THE IRISH CONJOINT EXAMINATION SCHEME.

THE usual monthly business meeting of the King and Queen's College of Physicians in Ireland was held on March 4th, and was largely attended by the Fellows. A letter was read from the President of the General Medical Council, forwarding the resolution passed by the Council at its recent meeting, requesting the College of Physicians

and the Royal College of Surgeons in Ireland to reconsider their Conjoint Examination Scheme, "in the strong hope that they may be able to arrange with the Apothecaries' Hall of Ireland a scheme which shall include the Apothecaries' Hall with the two Colleges." A communication from the Council of the Royal College of Surgeons in Ireland, bearing on the same matter, was also read. The latter communication suggested that there were but two courses open: either (1) to admit the Apothecaries into the scheme, allowing them to examine in pharmacy, chemistry, and materia medica; or (2) to let the present combination stand as it is, the College of Surgeons entering into another combination with the Apothecaries' Hall to grant a double diploma with them as well as with the King and Queen's College of Physicians! The adoption of the first of these two courses was recommended by the College of Surgeons as being "more conducive to the public welfare and the interests of the profession than the second." After a long debate, in the course of which every speaker condemned the action of the General Medical Council for having adopted such a resolution, a Committee was appointed to draw up an answer to the President of the Council, explaining why the College declines to enter into any combination with the Apothecaries' Hall.

THE APOTHECARIES AND THE PHYSICIANS.

A WELL-INFORMED correspondent writes, with reference to the meeting at the King and Queen's College of Physicians: "It will be sufficient for the Council of Medical Education, and for the Council of the Royal College of Surgeons, to know that this final refusal to join with the Apothecaries' Hall was carried by nineteen votes to two. Two Fellows declined to vote. The two Fellows who constituted the minority are members of the General Medical Council. They, however, said nothing in defence of their votes, nor of the extraordinary action of the Council, nor of the well-meant but mistaken offer of its President to come over to Dublin to intercede with the College, in order to induce it to enter into a combination with a trading company —selling soap and tooth-brushes—with the object, by so doing, of 'conducing to the unity and the general elevation (?) of the profession.' It does not seem to be at all clearly understood in England that the Society of Apothecaries in London occupies quite a different position as a recognised licensing body from that which the Apothecaries' Hall of Ireland has or claims to have."

THE INTERNATIONAL MEDICAL CONGRESS AND THE ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

WE have received an official note of the arrangements to which we recently referred, by which foreign visitors to the International Medical Congress, Washington, U.S.A., on September 5th, will be enabled to travel to New York, and return by the Red Star, Inman, Hamburg, and Royal Netherland Lines, at the rate of £20. The arrangements will probably include for each delegate the privilege of taking with him, at the same expense, two lady members of his family. The notice is signed by Dr. A. Y. P. Garnett, chairman of the Management Committee, Washington, D.C., U.S.A.

As many English and Scotch members as well as foreigners will be making arrangements to visit America next autumn in order to attend the meeting of the International Medical Congress which opens at Washington on September 5th, we might remind them that the date of the annual meeting of the British Medical Association at Dublin has been fixed for the first week of August, so as to allow members attending it time to pay a visit to the Lakes of Killarney, or to the Giant's Causeway and the Donegal Highlands, before proceeding to America. The Cunard steamers take up passengers at Queenstown, and there are also weekly sailings from Lough Foyle. Facilities for making these trips at reasonable rates will, we understand, be afforded, and will, no doubt, be largely made use of.

PROVISION AGAINST ACCIDENT, SICKNESS, AND OLD AGE.

THE stated monthly meeting of the Medical Provident Sickness, Accident, and Annuity Society was held at 38, Wimpole Street, London, W.; Mr. ERNEST HART, the founder and President of the Society, in the chair. The report of progress was of the most cheering and satisfactory character. The Society has now within three years enrolled 860 applicants, who, by moderate quarterly payments, are thus secure against the distress so often resulting from unforeseen sickness and accident, and who have secured to themselves pensions in old age, and, for the most part, insurances for the benefit of their families after death. The costless system of management was illustrated by the return of accounts payable. The total outlay for the three months in postages, stationery, rent, and clerical expenses was less than £80, being actually less than for the corresponding quarter of last year, when the number of members enrolled and the corresponding income were necessarily considerably smaller. The total cost of administration, including rent and all expenses, this year will be less than 5 cent. of the income—less, therefore, than one-half of the actuarial allowance, which, in view of the costless system of direction devised by the founder, had been fixed at not more than 10 per cent. of the income. A considerable addition to the reserves of the Society is thus made from the surpluses upon the modestly estimated management-fund. One hundred and eight pounds were voted to members whose certificates showed them to have been disabled from practice during the last four weeks by accident and illness. These included cases of injury to spine, pneumonia, broken leg, pelvic abscess, and other diseases arising from exposure and injury, as well as cases of locomotor ataxy and suddenly supervening phthisis, in which the fund will provide permanent allowances of £100 a year for the rest of life. Two insurances had been promptly paid. It was stated that the working of the tables continued to be most satisfactory, the demands on the fund—which were in every case carefully examined and duly certified—being well within the calculated limits of the Society's tables. The accruing reserves were now already upwards of £14,000; an investment of £800 was reported in Corporation Bonds, as ordered at the last meeting; and further investments for the quarter, in the names of the Trustees, Sir T. Spencer Wells, Mr. Hart, and Dr. Ord, to the amount of £1,600 were ordered in first-class securities, of which the details were submitted. Mr. Noble Smith and Dr. de Havilland Hall suggested some improvement in the wording of the schedule of questions to be filled in by applicants, which were approved in principle, and referred for formal decision to the next meeting. Mr. Wallace and the Secretary, Mr. Radley, were deputed to attend a forthcoming Conference at the Foresters' Hall, with a view to secure improvement of the existing law affecting Friendly Societies, and the Chairman suggested certain amendments to be brought before Parliament in respect to the existing law as to assurances. Applications for new membership were dealt with. Mr. Ernest Hart, after congratulating the Society on the brilliant success which had attended its beneficent operations, and the continually increasing appreciation of the benefits which it conferred on the profession, by putting it within the reach of everyone to secure himself and his family against the direful results of incapacitating sickness, accident, and premature death, stated that he was about to leave London for a few weeks' rest, on a visit to Orotava and the Canary Islands, and requested that Dr. de Havilland Hall, one of the Vice-Presidents, might be appointed in his absence to discharge his weekly duties of examining claims and applications and superintending the Society's work. Dr. de Havilland Hall, at the request of the Committee, kindly undertook to do so. Documents and forms of application may be obtained from the Secretary, Mr. Radley, 25, Wynne Road, Brixton, London, S.W.

THE SOCIETY OF APOTHECARIES AND THE CONJOINT EXAMINING BOARD OF ENGLAND AND WALES.

A LETTER from the Metropolitan Counties Branch, dated December 31st, 1886, forwarding certain resolutions passed by that branch on December 3rd, was read at the meeting of the West Somerset Branch on March 3rd. The subject matter of the resolutions having been considered, it was resolved:

1. That in the opinion of this meeting the exclusion of the Apothecaries' Society from the Conjoint Scheme is opposed to the interests of the public and of the profession.

2. That it is the opinion of this meeting that the Licentiates of the Royal College of Physicians, London, and the Members of the

Royal College of Surgeons, England, should have representatives elected by themselves on the Councils of their respective Colleges.

3. That copies of these resolutions be forwarded to the Metropolitan Counties Branch.

FURNEAUX JORDAN TESTIMONIAL FUND.

FINAL LIST.

	£	s.	d.		£	s.	d.
Crompton, D. W., Esq. ..	3	0	0	Jackson, Vincent, F.R.C.S., Wolverhampton	1	1	0
Parkes, Ed., M.D., Handsworth	2	2	0	Messiter, A. F., Esq.	1	1	0
Boddy, E. M., Esq.	1	1	0	Moore, J. W., Esq.	1	1	0
Chambers, W.R., Esq., Nechells	1	1	0	Raynor, T., M.D., Great Malvern	1	1	0
Edgington, R. W., M.D. ..	1	1	0	Smith, Richard, Esq.	1	1	0
Freer, J. F., Esq., Rugeley ..	1	1	0	Fuller, Andrew, Esq., Weedon	0	10	6
Hart, G. H., Esq., Harborne ..	1	1	0	Wright, William, M.D., Shipston-on-Stour	0	10	6
Hogg, Jenner, M.D.	1	1	0				
Lafarelle, J., Esq., Coleshill ..	1	1	0				

T. H. BARTLEET, Honorary Treasurer, 27, Newhall Street, Birmingham.

BENNETT MAY, 81, Edmund Street, JORDAN LLOYD, 22, Broad Street, Birmingham, } Hon. Secs.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AN ordinary meeting of the Council was held at the College on March 10th, 1887.

Mr. H. G. Howse was admitted a member of the Court of Examiners.

In accordance with a report of a special committee on the forms of the College diplomas, it was decided that in future all diplomas should be issued directly by the Council, instead of by the Court of Examiners.

It was agreed that an offer by Mr. J. T. Morton, to institute a Lectureship on Cancer and Cancerous Diseases, should be accepted for a term of three years as an experiment, and that one lecture should be delivered yearly on the subject.

The subject of the draft of the new charter was mentioned, and the difficulties of giving effect to the resolution of the Council, by which Members of fifteen years' standing were to be admissible to the Fellowship without examination in anatomy and physiology, having been considered, the Council rescinded its resolution on the subject.

The report of the delegates of the two Colleges upon the question of the best mode of celebrating the Queen's Jubilee was read, and the recommendation that, in honour of that event, a statue of Her Majesty should be placed in the Examination Hall, was agreed to.

The letter from the conjoint committee of the Associations of Fellows and Members, declining to meet the delegates of the Council on the terms required by the Council, was read.

A communication from the Honorary Secretary of the Association of General Practitioners, requesting an interview, was read; and it was resolved tha tthe President and Vice-Presidents should receive a deputation from the Associations, the subjects of the conference having been first defined by the Committee of the Associations.

A communication was received from Sir Frederick Abel requesting the Council to bring the objects of the Imperial Institute before the notice of the Fellows and Members.

A report from Mr. Marshall on the proceedings of the General Medical Council was read.

The letter from the President of the General Medical Council, enclosing the resolution of the Council, requesting the Colleges of Surgeons and Physicians to reconsider their resolution to exclude the Society of Apothecaries from the Conjoint Board was read, and it was decided to hold an extraordinary meeting to the Council on March 24th to consider the subject.

The following memorial from the teachers of surgery in London was read:—

To the Council of the Royal College of Surgeons of England.

MR. PRESIDENT AND GENTLEMEN,—We venture to bring to your notice the anxiety that is felt by those who are directly concerned in the teaching of Surgery in London with reference to the proposed extension of the buildings in Lincoln's Inn Fields, inasmuch as the present moment offers an unique opportunity for the establishment and endowment of an Institute for the Advancement of Surgery by Research.

The progress of Surgery largely depends upon the facts obtained by research in the following branches of science: (1) Morbid anatomy, including histology; (2) Experimental pathology, including bacteriology; (3) Experimental operative surgery.

The present Museum, which offers a splendid field of study, can never be considered a complete memorial of Hunter's work, and can never be thoroughly utilised for the benefit of surgical science until a laboratory is added to it for the pursuit of the objects above indicated.

In view of the increased power and wealth of the Royal College of Surgeons of England, we hold that any Fellow or Member who is competent to carry out scientific investigations should be able to do so without inconvenience and without expense.

Within the walls of our own College fresh knowledge would thus be gained, new methods of surgical treatment would be brought to light, and British Surgery would no longer be compelled to lean upon the information derived from foreign laboratories for the solution of the many problems which surround its progress.

We therefore earnestly hope that in the contemplated enlargement of the College adequate provision will be made for the study of these most important branches of our art.

(Signed)

St. Bartholomew's Hospital.
Alfred Willett
John Langton
Bowater Vernon
Howard Marsh
Henry T. Butlin
W. J. Walsham
Harrison Cripps
W. Bruce Clarke
Anthony Bowlby
C. B. Lockwood

Charing Cross Hospital.
Richard Barwell
Edward Bellamy
J. Astley Bloxam
James Cantlie
John H. Morgan
Stanley Boyd

Guy's Hospital.
N. Davies-Colley
Charles Higgens
R. Clement Lucas
C. H. Golding-Bird
W. H. A. Jacobson
Charters J. Symonds
W. A. Brailey
J. H. Targett

King's College Hospital.
Henry Smith
William Rose
W. Watson Cheyne
A. Boyce Barrow
Lewis Buck

London Hospital.
John Couper
Walter Rivington
Waren Tay
Jeremiah McCarthy
Frederick Treves
H. A. Reeves
C. Mansell-Moullin
E. Hurry Fenwick
Frederic S. Eve
J. Hutchinson (junior)

Middlesex Hospital.
Henry Morris
Andrew Clark
A. Pearce Gould
J. Bland Sutton
Arthur Hensman

St. George's Hospital.
Timothy Holmes
James Rouse
T. Pickering Pick
Warrington Haward
W. B. Dalby
R. Brudenell Carter
William H. Bennett
Clinton T. Dent
W. Adams Frost
G. R. Turner
William C. Bull

St. Mary's Hospital.
A. T. Norton
Edmund Owen
Herbert W. Page
G. Anderson Critchett
Geo. P. Field
Walter Pye
A. J. Pepper
A. Quarry Silcock
Henry E. Juler

St. Thomas's Hospital.
Alexander O. Mackellar
E. Nettleship
H. H. Clutton
Wm. Anderson
Bernard Pitts
G. H. Makins
J. B. Lawford
Samuel G. Shattock
William Hy. Battle
Chas. A. Ballance

University College Hospital.
Marcus Beck
Arthur E. Barker
Rickman J. Godlee
John Tweedy
Victor Horsley
S. J. Hutchinson
Bilton Pollard

Westminster Hospital.
George Cowell
Thos. Bond
A. Marmaduke Sheild
James Black

March, 1887.

The memorial was referred to the committee on the extension of the College premises.

A communication received from the medical faculty of University College, Bristol, expressing a hope that the degrees in medicine and surgery, which it is proposed to give to students who have satisfied the Conjoint Board, may not be reserved only for students who had pursued their clinical studies in London, was referred to the committee of delegates of the two Colleges.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1887. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Meetings of the Council will be held on April 13th, July 13th, and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, March 24th, June 23rd, and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary*.

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,
THE VALUE OF HAMAMELIS, THE VALUE OF PURE TEREBENE.

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE, and on the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE, are now closed.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, and HABITS OF INTEMPERANCE, a full Report on OLD AGE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the Hackney Town Hall, on Thursday, March 17th, at 8.30 P.M. The chair will be taken by Dr. Herman. A paper on Puerperal Convulsions; their Cause and Treatment, will be read by J. Williams, M.D., President of the Obstetrical Society. Visitors will be welcome.—J. W. HUNT, M.D., Honorary Secretary, 101, Queen's Road, Dalston.

BORDER COUNTIES BRANCH.—The spring meeting will be held at the County Hotel, Carlisle, on Friday, March 18th, at 6 P.M. Dr. Haddon, Hawick, will read a paper and introduce a discussion on Typhlitis and Perityphlitis. Dr. Eaton (Cleator Moor): The Coroner's Court from a medical point of view. Dr. Altham, Penrith, will read a paper on a Case of Compound Fracture of the Patella, and a Note upon the Antiseptic Treatment of Hydrocele. Notices of papers for reading, patients or morbid specimens for showing, should be sent to the Secretary without delay.—HENRY A. LEDIARD, M.D., 41, Lowther Street, Carlisle, Honorary Secretary.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.—A conjoint meeting of the above Districts will be held at the Grand Hotel, Brighton, on Wednesday, March 30th. Dr. J. H. Ross will preside. Gentlemen desirous of contributing papers, etc., should communicate with the Honorary Secretary for East Sussex, 97, Montpellier Road, Brighton. The Chairman will offer a few remarks on a Case of Small Pox, with especial view to the possibility of Auto-Infection in this and other Zymotics.—T. JENNER VERRALL, G. B. COLLET, Honorary Secretaries.

SOUTH EASTERN BRANCH: EAST KENT DISTRICT.—The spring meeting of the above district will be held at the Albion Hotel, Broadstairs, on Thursday, March 17th, at 3 P.M.; Mr. Raven in the chair. The dinner will take place at the above hotel at 5 P.M. All gentlemen proposing to dine are requested to inform the Chairman by Tuesday, the 15th, that proper arrangements may be made. Agenda:—3 P.M. Etiology of Phthisis, with Special Reference to the Inquiry of the Collective Investigation Committee: Dr. Isambard Owen. The High Altitude Treatment of Phthisis: Dr. Tyson. Two Cases of Myxœdema and One of Early Multiple Cerebro-Spinal Sclerosis: the Chairman.—W. J. TYSON, Honorary Secretary.

THAMES VALLEY BRANCH.—The next meeting of the Branch will be held at Richmond, on Wednesday, March 30th. Members willing to read papers or show cases are desired to communicate as soon as possible with CHARLES C. SCOTT, M.B., St. Margaret's, Twickenham, Honorary Secretary.

MIDLAND BRANCH.—A special general meeting will be held at Grantham, on Thursday, March 31st, for the purpose of discussing "the question of the payment of the travelling expenses of the representatives of the various Branches of the Association for their attendance at the four quarterly meetings of the Council." Members desirous of reading papers or exhibiting cases to this meeting are requested to communicate at once with W. A. CARLINE, M.D., Honorary Secretary and Treasurer.

NORTH WALES BRANCH.—A meeting will be held at the Owain Glynd wr Hote Corwen, on Thursday, March 17th, at 2 P.M., to discuss the exclusion of the Apothecaries' Society, etc. Papers will be read by Dr. Lloyd Roberts and Mr Richard Williams.

LANCASHIRE AND CHESHIRE BRANCH.—An intermediate meeting of this Branch will be held at Birkenhead, on Wednesday, March 30th. Members wishing to read papers, make communications, or show cases, are requested to communicate without delay with Dr. Glascott, Honorary Secretary, 28, St. John Street, Manchester. The programme of the meeting and other details will be published as soon as they have been approved by the Council of the Branch.—Dr. GLASCOTT, Honorary Secretary, 23, St. John Street, Manchester.

ABERDEEN, BANFF, and KINCARDINE BRANCH.—The March meeting of the Branch will be held in 198, Union Street, Aberdeen, at 8 P.M. on March 16th when the President, Dr. Urquhart, will take the chair. Business: 1. Minutes and ballot for admission of Dr. Gunn, Buxburn, and Dr. A. Wattie, Greentree Lodge, Echt. 2. Note on Rapid Pulse, by Dr. Blaikie Smith. 3. Case of Leucoderma with exhibition of patient, by Dr. Ruxton. 4. Case of Cerebral Abscess following Purulent Tympanitis, by Dr. Mackenzie Booth. 5. Exhibition of Cases and Specimens: (1) Case of Locomotor Ataxy, by Dr. Blaikie Smith. (2) Boy from whom 600 ounces of Ascitic Fluid had been removed by Dr. W. S. Cheyne. (3) Malformed Heart from Cyanotic Infant, by Dr. Mackenzie Booth.—ROBERT JOHN GARDEN, J. MACKENZIE BOOTH, Honorary Secretaries.

GLOUCESTERSHIRE BRANCH.—The next meeting will be held in the Board-room of the General Hospital, Cheltenham, on Tuesday, March 15th, 1887, at 7.30 P.M., under the Presidency of Dr. Batten. Agenda: 1. To discuss the advisability of the payment of travelling expenses of Branch Representatives to the Four Quarterly Meetings of the Council of the Association in London. 2. A discussion will be opened on "The Present Position of the General Practitioner with reference to Cases of Insanity," by Dr. Currie Lydney. 3. To bring before the Branch for discussion the Report of the Subcommittee on Coroner's Inquest of the Manchester Medico-Ethical Association.—G. ARTHUR CARDEW, Honorary Secretary.

SOUTHERN BRANCH: SOUTH-EAST HANTS DISTRICT.—Ordinary meeting, Grosvenor Hotel, Queen's Gate, Southsea, on Wednesday, March 16th, 1887. The chair will be taken by the President, Dr. James Watson, at 4.15 P.M. Agenda: 1. Statement of accounts and election of officers. 2. Pathological specimens, by J. P. Williams-Freeman, Esq., M.B. 3. Living specimens, by Dr. Ward Cousins. 4. Microscopic specimens, by Dr. F. J. Driver. 5. Remarks by the President. 6. Pelvic Abscess, by Surgeon-Major J. D. Crowe. 7. New Mouth-Gag, with Throat-Guard, by Dr. Ward Cousins. Gentlemen who are desirous of introducing patients, exhibiting pathological specimens, or making communications, are requested to signify their intention at once to the Honorary Secretary. Dinner will be provided at 6.30 P.M.; charge, 5s., exclusive of wine, etc.—J. WARD COUSINS, Honorary Secretary.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIFTH ANNUAL MEETING.

THE fifty-fifth Annual Meeting of the British Medical Association will be held at Dublin, on August 2nd, 3rd, 4th, and 5th, 1887.

President: Withers Moore, M.D., F.R.C.P., Senior Physician to the Sussex County Hospital, Brighton.

President-elect: John T. Banks, M.D., D.Sc.(Hon.), F.K.Q.C.P.I., Regius Professor of Physic in the University of Dublin.

President of the Council: Sir B. Walter Foster, M.D., F.R.C.P., Professor of Medicine in Queen's College, and Physician to the General Hospital, Birmingham.

Treasurer: C. Macnamara, F.R.C.S., Surgeon to the Westminster Hospital, London.

An Address in Medicine will be delivered by W. T. Gairdner, M.D., F.R.C.P.Ed., Professor of Medicine in the University of Glasgow.

An Address in Surgery will be delivered by Edward Hamilton, M.D., Fellow and Professor of Surgery in the Royal College of Surgeons in Ireland.

An Address in Public Medicine will be given by the Reverend S. Haughton, M.D., F.R.S., D.C.L., Senior Fellow, Trinity College, Dublin.

The scientific business of the meeting will be conducted in eight Sections and two Subsections, as follows, namely:

MEDICINE.—*President*, William Moore, M.D. *Vice-Presidents*, H. C. Bastian, M.D., F.R.S.; J. Magee Finny, M.D. *Honorary Secretaries*, T. Gilbart Smith, M.D., 68, Harley Street, Cavendish Square, London, W.; C. J. Nixon, M.D., 2, Merrion Square, Dublin.

SURGERY.—*President*, Sir George H. Porter, M.D. *Vice-Presidents*, Alexander Ogston, M.D.; John Fagan, F.R.C.S.I. *Honorary Secretaries*, W. Thomson, M.D., 34, Harcourt Street, Dublin; R. J. Godlee, F.R.C.S.Eng., 81, Wimpole Street, London, W.; C. B. Ball, M.D., 16, Lower Fitzwilliam Street, Dublin.

OBSTETRIC MEDICINE.—*President*, A. V. Macan, M.B. *Vice-Presidents*, T. More Madden, M.D.; A. L. Galabin, M.D. *Honorary Secretaries*, Wm. J. Smyly, M.D., 56, Fitzwilliam Square, Dublin; Wm. Duncan, M.D., 6, Harley Street, Cavendish Square, London, W.

PUBLIC MEDICINE.—*President*, Sir Thomas Crawford, M.D., K.C.B. *Vice-Presidents*, John S. Taylor, M.D.; R. Thorne Thorne, M.D. *Honorary Secretaries*, John Wm. Moore, M.D., 40, Fitzwilliam Square West, Dublin; John F. W. Tatham, M.D., Town Hall, Salford.

PSYCHOLOGY.—*President*, J. R. Gasquet, M.B. *Vice-Presidents*, Frederick Needham, M.D.; Oscar T. Woods, M.D. *Honorary Secretaries*, Conolly Norman, F.R.C.S.I., Richmond District Lunatic Asylum, Dublin; T. Lyle, M.D., Rubery Hill Asylum, Bromsgrove, Worcestershire.

PATHOLOGY.—*President*, Samuel Gordon, M.D. *Vice-Presidents*, A. W. Foot, M.D.; David J. Hamilton, M.D. *Honorary Secretaries*, Theodore D. Acland, M.D., 7, Brook Street, Grosvenor Square, London, W.; Henry T. Bewley, M.B., Willow Park, Booterstown, Co. Dublin.

THERAPEUTICS AND PHARMACOLOGY.—*President*, Wm. Whitla, M.D. *Vice-President*, Matthew Charteris, M.D.; D. J. Leech, M.D. *Honorary Secretaries*, Chas. Y. Pearson, M.D., 42, King Street, Cork; Michael McHugh, M.B., 25, Harcourt Street, Dublin.

OPHTHALMOLOGY.—*President*, H. R. Swanzy, M.B. *Vice-Presidents*, D. Argyll Robertson, M.D.; Priestley Smith, M.R.C.S.Eng. *Honorary Secretaries*, A. H. Benson, M.B., 42, Fitzwilliam Square, Dublin. A. W. Sandford, M.D., 13, St. Patrick's Place, Cork.

SUBSECTIONS.

OTOLOGY.—*Chairman*, E. Woakes, M.D. *Vice-Chairman*, J. B. Story, M.B. *Honorary Secretary*, D. D. Redmond, L.R.C.S.I., 14, Harcourt Street, Dublin.

LARYNGOLOGY AND RHINOLOGY.—*Chairman*, W. H. MacNeill Whistler, M.D. *Vice-Chairman*, Kendal Franks, M.D. *Honorary Secretary*, R. A. Hayes, M.D., 56, Merrion Square South, Dublin.

Local Honorary Secretary.—George F. Duffey, M.D., 30, Fitzwilliam Place, Dublin.

TUESDAY, AUGUST 2ND, 1887.

9.30 A.M.—Meeting of Council.
10 A.M.—Service at the Roman Catholic Cathedral.
11.30 A.M.—First General Meeting. Report of Council. Reports of Committees; and other business.
4 P.M.—Choral Service at St. Patrick's Cathedral.
8.30 P.M.—Adjourned General Meeting from 11.30 A.M. President's Address.

WEDNESDAY, AUGUST 3RD, 1887.

9.30 A.M.—Meeting of Council.
10.30 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Second General Meeting. Address in Medicine.
9 P.M.—Soirée given by the President of the Association and by the Dublin Branch.

THURSDAY, AUGUST 4TH, 1887.

9.30 A.M.—Meeting of Council.
10.30 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Third General Meeting. Address in Surgery.
7 P.M.—Public Dinner.

FRIDAY, AUGUST 5TH, 1887.

10 A.M. to 1.30 P.M.—Sectional Meetings.
3 P.M.—Concluding General Meeting. Address in Public Medicine.
4 to 6 P.M.—Garden Party.

SATURDAY, AUGUST 6TH, 1887.

Excursions.

ANNUAL MUSEUM.

THE Annual Museum will be held on August 2nd, 3rd, 4th, and 5th.

The Museum will be arranged in the four following Sections, and intending exhibitors are requested to communicate with the Secretary of the Section or Sections in which they propose to exhibit.

SECTION A.—Food and Drugs. (Honorary Secretary, F. J. B. Quinlan, M.D. Univ. Dub., 29, Lower Fitzwilliam Street, Dublin.)

SECTION B.—Recent Books, Instruments, and Appliances—Medical, Surgical, and Electrical. (Honorary Secretary, John Lentaigne, F.R.C.S.I., 29, Westland Row, Dublin.)

SECTION C.—Anatomical and Pathological Specimens and Drawings, Microscopes and Microscopical Preparations. (Honorary Secretary, Alex. B. McKee, M.B. Univ. Dub., Royal College of Surgeons, Dublin.)

SECTION D.—Hygienic and Sanitary Appliances. (Honorary Secretary, H. C. Tweedy, M.D. Univ. Dub., 2, Gardiner's Row, Dublin.)

Particulars should be supplied to the Secretaries of the objects proposed to be exhibited and the amount of space required. No show-cases will be allowed

As it is intended to print a catalogue, with appendix of advertisements, it is requested that inquiries be addressed to the Secretaries as early as possible.

Chairman of Museum Committee—Wm. Thornley Stoker, F.R.C.S.I., 16, Harcourt Street, Dublin. Vice-Chairman—D. J. Cunningham, M.D., 69, Harcourt Street, Dublin.

FRANCIS FOWKE, *General Secretary.*

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Hypodermic Injections in Bacterial Affections.—Telepathic Remedies.—Benzoate of Soda in Catarrh of the Primæ Viæ.—Cucaine in Lithotrity.

Many diseases are caused by micro-organisms, and as every microbe has its known microbicide, it is important to determine how the latter can be injected subcutaneously. M. Meunier believes that he has discovered a vehicle for the injection of all parasiticides that are not actually dangerous to the human organism, without causing either swelling, abscess, or pain. This vehicle is pure vaseline (density 0.820), which dissolves thymol, menthol, the essences of eucalyptus, cubebs, santal, copaiba, mint, and cinnamon—in a word, all the hydro-carbons whose formula is $C_{2n}H_{2n-4}$ and $C_{2n}H_n$; and also carbolic acid, camphor, chloride of camphor, creasote, sulphide of carbon, iodoform in solution in the essences, and even alkaloids, such as cucaine, digitaline, etc. Many microbicides, antiseptics, and other remedies may, therefore, be employed subcutaneously, which are not easily digested and absorbed by the gastro-intestinal canal. The following are the general formulæ which M. Meunier proposes for subcutaneous injections:

1. Essence of eucalyptus	...	...	5
Vaseline chemically pure (density 0.820)		...	20

A Pravaz-syringeful of this contains 20 centigrammes of eucalyptol. The mixture should be well shaken, then left to settle, and filtered through three papers, after which the solution will be found to be clear. The solution of the essences whose formula is $C_{2n}H_{2n-4}$, that is to say, the essences of cubebs, thyme, santal, copaiba, mint, etc., should be prepared in the same way. These essences may be combined, care being taken that the proportion of the essence to the vaseline is 1 to 5, in order to avoid pain and swelling.

2. Eucalyptol	...	...	5
Iodoform...	...	...	0.25
Vaseline ...	...	...	20

Dissolve the finely-powdered iodoform in the essence, add the vaseline, agitate and filter through three papers. One Pravaz syringe contains 20 centigrammes of eucalyptol and 1 centigramme of iodoform.

3. Sulphide of carbon	...		1
Vaseline ...	...	...	15

Mix and filter as above. Clinical observations will indicate the number and strength of the injections to be employed in different maladies. M. Meunier concludes that, with vaseline as a vehicle, injections of the non-toxic microbicides may be made in the subcutaneous connective tissue, and probably in all the other tissues, without inflammatory reaction or pain, and that the dose may easily be determined for each tissue according to its degree of tolerance. The development of microbes may by this means be arrested.

At a recent meeting of the Biological Society, M. Luys gave the results of his researches on the effects of telepathic remedies in hypnotised subjects. His researches confirm those on the same subject communicated last year to the Congress of Grenoble by MM. Burot and Bourru. They may be summarised as follows. 1. Hypnotised subjects acquire a special hyper-excitability, in consequence of which they react in a particular manner when certain substances are brought into their vicinity. 2. These substances, both mineral and vegetable, produce various effects on the organism, such as convulsions, motor and sensory paralysis, hallucinations, etc. 3. The effects, both bodily and psychical, differ according to the point of contact, and according to the side experimented upon. 4. M. Luys exhibited a series of photographs of a hypnotised subject, which showed that a substance, when presented on the right side of the patient, caused expressions of emotion of a nature altogether different from those produced when it was presented on the left side. Thus, when the substance was presented on one side, joy, gaiety, and laughter were produced; whilst on the other side it caused fear, and in certain cases the most violent terror. In one case, on placing ipecacuanha near the patient, nausea and vomiting were produced; and when the substance was held in front of the thyroid body, a series of strange phenomena was observed, namely, the facial expression characteristic of exophthalmic goître, swelling of the thyroid, cyanosis and congestion of the face, sudden expression of terror, and prominence of the eyeballs. These physical conditions appeared or disappeared according as the tube containing the medicinal agent was brought

near or taken away. The neck instantly became swollen, as if by the application of a cupping-glass, to such a degree that a neck which measured 31 centimètres in its normal state measured 36 centimètres after the application of the tube. The photograph of the patient, taken while in this state, gives a good idea of the alteration of his physiognomy when compared with the photograph taken in the normal state. Respiration often becomes difficult, and the heart-beats are hurried. In such cases certain substances which have an effect on the thoracic viscera should be handled with great circumspection. 5. The method of operating consists in placing a small quantity (one or two grammes at most) of the substance to be experimented with into a tube, which is then hermetically sealed, and placed near the back of the neck of the hypnotised subject without speaking to him. The tube is placed on the left or on the right side, and, after a short time—usually about five minutes—the subject enters into a state of lucid somnambulism; it is at this moment that the action of the substance is displayed. 6. These experiments show the possibility of a new method of treating diseases of the nervous system, which M. Luys has, in fact, already tried with success in the case of two patients, who for several years had suffered from hystero-epileptic convulsions. In these cases both the intensity and the frequency of the attacks were decidedly lessened.

M. Ruault has made a communication to the Société Clinique of Paris on benzoate of soda in catarrh of the primæ viæ. He has given the drug in increasing doses for catarrh. The results so far have been encouraging, but he has not yet studied the physiological action of the drug, nor the mode of its elimination. Benzoate of soda acts only in doses of four to six grammes. M. Ruault has given these doses to a great number of patients suffering from common colds, that began with coryza, and were followed by tracheo-bronchitis. The medicine was administered at the "period of coction." Expectoration was produced in one or two days, and the secretion dried up two or three days later. By giving the drug at the onset of the disorder, a cure was generally effected in seven or eight days. In a case of catarrh of the larynx there was marked improvement after only three days' treatment. The author thinks that erythematous sore-throat, with concomitant tonsillitis, may be advantageously treated with doses of six to eight grammes daily. The drug was found useful in the chronic forms of such affections, but it is inferior to terpine in chronic catarrh of the larynx.

In a communication made to the *Société Médicale du IXe Arrondissement*, Dr. Dubuc described several cases in which he had employed cucaine in lithotrity. In the first case, that of a patient suffering from chronic cystitis and phosphatic calculus, lithotrity was performed nine times in one year. Cucaine was first used in solutions of 2½ and 3 per cent., and finally in solutions of 4 and 5 per cent. About 30 grammes of the solution were injected into the bladder. The patient was made to assume various positions in order that the solution might come into contact with every part of the mucous membrane. Each operation lasted from 15 to 18 minutes, and the effect of the cucaine was most satisfactory. In the case of a patient suffering from uric acid calculi, with considerable epithelial desquamation of the bladder, a 5 per cent. solution of cucaine was twice used. After the second time there remained only one fragment of stone; the dry *débris* weighed 4 gr. 35 centigr. Where the bladder is perfectly healthy, a 5 per cent. solution may prove insufficient. In a case of this kind a 10 per cent. solution was employed, with excellent results; there was no sign of absorption of the cucaine from the bladder. Thirty grammes of the solution should be administered. The last case described by Dr. Dubuc was that of a patient whose bladder was almost healthy; the urine was slightly turbid. Thirty-five grammes of a 15 per cent. solution, equivalent to 5 grammes 25 centigrammes of cucaine were injected. At the end of 6 minutes, the patient turned pale, and felt a disposition to vomit. The bladder was immediately emptied and washed out with a solution of boric acid. The pulse was 72 and regular; the intelligence was unimpaired. After five or six minutes, all unpleasant symptoms passed off. Lithotrity was then performed without pain. It was done four times, owing to the number of uric acid calculi in the bladder; 10 per cent. solutions of cucaine were employed. On the second and fourth of these occasions, 30 grammes of this solution were used; at the third sitting, only 15 grammes were given, and this injection was therefore less successful. The dry *débris* weighed 7 gr. 50 centigr.; a certain quantity of impalpable dust was washed away in the solutions. From these experiments, Dr. Dubuc concludes that cucaine may be employed with beneficial results in operating for stone when the *débris* do not exceed 10 grammes in weight. When the stones are large and hard, and furnish a considerable quantity of *débris*, chloroform is indicated. The strength of the cucaine solution must depend on the condition of the mucous membrane of the bladder; 10 per cent. solutions should be used in cases in which the bladder is healthy; 5 per cent. in those in which the vesical epithelium is diseased, and absorption is therefore likely to be active. In examining the bladder, a few drachms of cucaine-solution applied to the prostatic region, and the neck of the bladder, proved very useful.

THE RIVIERA.

Medical details of the Earthquake at Mentone.

Dr. J. H. Bennet, of Mentone, writes to us as follows:—Your readers will have already learnt from the daily journals the history of the severe earthquake which has visited the Riviera, and spread gloom and desolation on its sunny shores. A few medical details, however, will no doubt prove interesting.

First, I wish most emphatically to deny the report published in one of the leading newspapers that all the Mentone doctors had fled, and that the wounded had been attended by the doctor to a yacht lying in the harbour. All the English medical men practising here—myself, Dr. Siordet, Dr. Marriott, Dr. Gent, Dr. Fitz Henry, Dr. Randall Stanley, and Dr. Fitzgerald—were at their post, are so still, and, as far as I know, intend to remain so as long as there is likely to be any use for their services. As Britishers, we have nailed our colours to the mast come what may. The local medical men, who practise all the year, are also all at their post, as are most of the other continental doctors. Some of the latter are gone, because, as they say, all their patients have left and they expect no others.

The published reports of the earthquake at Mentone and of its results have been very much exaggerated by the correspondents of the various papers. I have just left the Mayor, sitting in conclave with a committee of architects, and have also seen this afternoon Dr. Farina, the head surgeon of the Mentone Hospital, and they both authorise me to state, first, that there has not been a single death amongst the natives and not a single case of crushing or fracture, only about a dozen cases of contused wounds by the falling of plaster from the ceilings. The reports of the physicians practising amongst the visitors are the same—no death, no fractures, merely a few contused wounds from falling plaster.

There are only twenty houses, including the old town, that are condemned to be pulled down, and only twenty more that are to remain under architectural superintendence, as possibly, but not certainly, dangerous to inhabit. Thus the entire population of the old and new towns can return if they like to their tenements, which they are doing rapidly; with the fear, however, that another similar earthquake might bring their houses down on their heads. This fear, although not reasonable, for a recurrence is most improbable, will remain until time and immunity dispel it. In these reading times, everyone had read or heard of the dreadful scenes that occurred at Casamicciola in Ischia, two or three years ago, and of similar scenes in Spain last year. In these disasters, the stronger stone-built houses fell to the ground, and crushed their inmates. The two shocks on the morning of February 23nd, at 6.10 and 6.30, were so severe, that everyone expected that the town would be levelled to the ground, so that the entire population rushed downstairs or out of doors, camped out the following night, and remained out several nights, in improvised tents, or in carriages. All the visitors in the Western Bay, the worst treated by the earthquake, adopted this plan for three, four, or five nights; many in the Eastern Bay, although the hotels and villas have suffered very little damage in that region. The scene was very curious—hundreds of tents, thousands of people of all classes camping out. Four thousand of the natives camped out on an open wooded promontory called the Cap Martin for several nights. Fortunately the weather was and has remained sunny, dry, and fine, although rather cold; night minimum from 38° F. to 42° F.

To the great astonishment of the natives and continentals generally, but not to mine, the night air, under cover, did them no harm whatever—indeed, rather improved their condition, a great triumph for ventilation. There were a few sore throats and colds, that is all. I must say that I have heard of an old lady aged 73, with bronchitis, who got pneumonia, and died, through the exposure it is stated. Indeed, there has been no bad result, not even influenza as an epidemic, which one might have expected.

As time passes, however, other pathological conditions, or rather anomalous psychological symptoms, have manifested themselves in many of the visitors. The panic was general, and drove hundreds and thousands away within forty-eight hours. The railroads were besieged; trains left every half hour. But the singular fact is that

many who remained perfectly calm and self-possessed for days succumbed to the panic feeling, became nervous, excited, or depressed, and could neither sleep nor eat. When I saw that such was the case, if consulted I advised them to leave not only Mentone, but the Mediterranean earthquake area, to go, say, to Pau, Arcachon, Biarritz, or home. These cases have become so numerous among the at first brave ones, without apparent reason, for we have now only an occasional faint oscillation, that Mentone is rapidly losing its remaining visitor population.

I believe these after-effects of mental shock are often observed under other circumstances. Thus I am told that a man may fight a duel calmly, bravely, without in any way showing the white feather; and yet, the day after, his nerves may entirely give way at the thought of the danger past, and he may become a prey to serious nervous symptoms. An Italian gardener of mine, who was seven years in the Italian army, recollects a case of the kind. A sergeant, a brave man of 29, fought a duel and killed his adversary, being himself unhurt. He remained calm for some days, and then had an attack first of nervous prostration, then of excitement, which necessitated his being removed from the regiment.

I and my colleagues are daily seeing cases of this kind, and sending our clients away. The symptoms appear rather to increase than to diminish if they remain, and the only real remedy seems to send them away. These remarks apply not only to women, but to sedate, intelligent, middle-aged, or even old men. This psychological condition throws a light upon many of the psychological phenomena or epidemics of the Middle Ages.

It must be borne in mind that the entire Mediterranean is a volcanic region, and that earthquakes may have constantly occurred in every part of it of which we have record, as, no doubt, in others of which we have none. The buttresses and arcades that connect the houses in the narrow streets of the old towns of the Riviera speak of earthquake fears and precautions in these regions in former days. Except as a precaution against earthquakes, these arcades have no reason to be, and they were, no doubt, built for that purpose. Nice has been an important fortified town for many hundreds of years, and has records which narrate severe earthquakes in 1212, 1564, 1612, 1618, 1637, 1644, 1664, 1702, etc., several of which were even more severe than the one we have just gone through. No doubt they extended over the entire Riviera. The fact must be accepted, as we accept it of Italy, Sicily, and elsewhere in the Mediterranean. If the houses are built, as of old, on the rock when possible, with strong stone walls, there is little or no danger. All the houses and hotels in the Eastern Bay, with the exception of a few tumbledown old tenements, being thus built have all but entirely escaped the visitation. The houses that partly fell, and have alarmed the visitors and the natives, are new lath-and-plaster, rubble, thin-walled houses, run up for sale or profit, at the outlet of the valley in the Western Bay, on alluvial soil. They came down in part with a run at the second shock, which was all but to be expected. Visitors must now look at the thickness of the walls of a house before they take it, and architects and contractors must build for earthquakes. This I shall do myself. I am building a villa (on the rock) to retire to, and have given orders to increase very considerably the intended thickness of the walls thereof: to build for a future earthquake half a century hence.

I was in bed asleep at the time it occurred, and had the feeling of the house and myself in it being frequently and violently shaken, as a rat is by a dog. I now think the sensation was a reality. I have been in a railway collision—we were going at full speed, and ran into a train of wagons laden with sand, lying on the line. We struck and rebounded several times. I believe the earthquake wave came from the sea, struck the base of our mountains, 4,000 feet high just behind, and 7,000 feet a little further inland, rebounded, as did the train, and then went on to the regions beyond.

What gives an appearance of truth to this theory is that the earthquake action evidently went up the Riviera Valley, and there did its greatest mischief. All the Riviera towns injured or destroyed are at the mouth of wide valleys, or high up in them. This would explain at Mentone the comparative immunity of the rock-built houses in the Eastern Bay, as compared with the valley-built houses on the other side. I have a tower, a thousand years old, 65 feet high, in the Eastern Bay, on the rock 350 feet above the sea, which is quite free from injury, although it must have rocked enough to stop a timepiece in an upper room. I feel so secure, on the ground of my house being built on a rock, that I sleep there now constantly at the top, to the astonishment of the frightened villagers near me. Two friends of mine, in recently rock-built houses in this bay, have elegant towers, three stories high above the house, very slight, which have entirely escaped injury.

SWITZERLAND.

[FROM OUR OWN CORRESPONDENT.]

Antefebrin in Febrile and Non-Febrile Diseases.—Disease of the Tricuspid Valve.—Syphilitic Hydrocephalus.—Hæmorrhage in Tapping the Abdomen.—Accidents during Tonsillotomy.—Injurious Effects of Hypogastric Truss.—Peripheral Neuritis in Tabes.—Actual Cautery in Diphtheritic Angina.

ANTIFEBRIN is at present being extensively tried in Switzerland. At a recent meeting of the Société Vaudoise de Médecine, Dr. Louis Secretan stated that he had used the new drug in twelve febrile and five non-febrile cases. The best results in lowering the temperature were obtained (*a*) in typhoid cases, the remedy being given in two morning doses of 0.50 to 1.0 gramme, and producing antipyrexial effects equal to four or five grammes of antipyrin; and (*b*) in pulmonary tuberculosis, where the temperature often fell after a single daily dose of 0.50 gramme. The drug proved less satisfactory in acute rheumatism. It had no effect in two recent cases of rheumatic sciatica. In one-gramme morning doses, however, it completely cured a case of facial neuralgia in two or three days. On the whole, Dr. Secretan found that the antipyretic action of the drug was as sure but not so lasting as that of antipyrin; it also caused more disturbance of the digestive organs than the latter. Moreover, antifebrin gave rise to profuse perspiration of several hours' duration, with a temporary feeling of weakness. In two cases true collapse occurred. Dr. Goetz, of Geneva, gave antifebrin in daily doses of 0.30 to 0.60 gramme (divided into two parts, to be taken at an interval of half an hour) in a considerable number of febrile cases, especially pulmonary phthisis. The results were uniformly excellent; in no case did the drug cause collapse or erythema, or any gastric disturbance. Dr. Goetz lays stress on the fact that it produced very little diaphoresis. He considers antifebrin most valuable in pulmonary affections. Dr. Armin Huber has tried the drug in twenty-one cases of typhoid fever, tuberculosis, pneumonia, etc. In all 95 daily doses, varying from 0.1 to 4.5 (mostly from 0.5 to 1.0) grammes, were given. The results were negative on two occasions, and of very slight duration on seven. In the remaining observations, complete defervescence took place an hour after the administration; this effect was particularly lasting in the phthisical cases where a morning dose of 0.5 gramme kept down the temperature for the whole day and night. In the typhoid cases one 0.5 gramme dose lowered the temperature for 4 or 5 hours, and one of 1 gramme for 6 or 7 hours. The temperature usually rose again by degrees, but sometimes, especially after large doses, pyrexia came on suddenly, accompanied by rigors. Rigors occurred in 20 out of 95 cases, whilst after antipyrin they are observed only in ½ per cent, and after thallin in 12 per cent. Dr. Huber states that the administration of doses of 0.5 gramme, or more of antifebrin is almost invariably followed by very profuse perspiration. He also saw a condition resembling collapse in a patient from an hour to an hour and a half after taking antifebrin. In one case the drug caused a papular eruption, principally on the face, forearms, and hands. In Dr. Huber's experience it did not produce sickness. Antifebrin is remarkably cheap, being only about 1½d. a gramme.

Among 224 bodies examined by Dr. J. P. Sierro at Professor Zahn's Pathological Institute at Geneva, he found in thirty-eight cases either thickening or chronic ulceration of the tricuspid valve. The following are his conclusions. 1. Chronic ulceration of the tricuspid valve is not a rare affection. 2. The lesion is always secondary, being a consequence of more or less prolonged rise of the blood-pressure in the pulmonary artery. 3. It does not resemble the condition left by acute endocarditis. 4. It occurs mostly in advanced age. 5. It is an anatomical proof of tricuspid insufficiency.

Dr. Georges Sandoz, working under the direction of Professor Demine, of Berne, has made a contribution to our knowledge of the subject of hydrocephalus due to hereditary syphilis. His conclusions (based on four cases at Jenner's Hospital for Children, and on several cases of Baerensprung's) are as follow. 1. There is a distinct syphilitic form of hydrocephalus. 2. It is congenital, or shows itself during the first months of life. 3. It probably arises from some inflammatory process of syphilitic origin in the ependyma of the cerebral ventricles.

Drs. Maunoir (of Geneva) and Schuler (of Rorschach) report some minor "calamities of surgery" which have recently occurred in their practice. The former, in tapping a child's abdomen for ascites, met with hæmorrhage to the extent of about two tablespoonfuls. No bad consequences ensued. Dr. Schuler, in excising the tonsils with Mathieu's tonsillotome, met with a more serious accident. The middle (cutting) ring of the instrument suddenly gave way, and a piece about

one centimètre long fell out, but was promptly picked out of the patient's mouth. In a similar accident which recently occurred in the practice of a colleague of Dr. Schuler, the patient swallowed the part of the knife which had become detached. A third case of the kind was lately published in the *Union Médicale*, No. 43, 1886, by Dr. Edmond Barré. The circular knife was broken into two pieces, one of which was extracted from the pharynx, while the other (two and a half centimètres long) was swallowed by the patient, and expelled by the anus three days later.

Dr. V. Gautier draws attention to the injurious effects of the so-called hypogastric truss or bandage, which is largely used, especially in France, in cases of uterine retroflexion and prolapse. He mentions the case of a woman, aged 30, suffering from retroflexion, in whom the use of the truss, continued for a period of three years, caused pelvic congestion, hyperæmia of the womb, fungous endometritis, with leucorrhœa, constipation, increase of retroflexion and prolapse. The patient made a speedy recovery after discontinuing the bandage which had been immobilising her uterus.

Professor J. L. Prevost, of Geneva, in dealing with the subject of peripheral neuritis in tabes dorsalis, relates a case occurring in his own practice. The patient suffered from ataxy for the last seventeen years of his life, the symptoms being more pronounced in the upper extremities. About a year before his death spontaneous fracture of the right humerus occurred just above the elbow. Shortly before this, whitlows, sacral abscess, and other trophic lesions had occurred. At the *post-mortem* examination the usual changes were found in the posterior columns of the spinal cord, especially at its upper part, and also in the posterior roots; there was marked degeneration of the nerve-tissue, which was more visible in the cutaneous branches than in the nerve-trunks. Professor Prevost is inclined to believe that changes of sensibility, trophic symptoms, and visceral lesions in tabes are caused mainly by peripheral neuritis.

Dr. Henry Secretan, of Lausanne, quickly cured a severe case of diphtheritic angina in a girl, aged 11, by the local use of actual cautery.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

Victoria University.—Sir Henry Roscoe's Record of Work.—Maternity Hospital.—Deputation to Mr. Goschen.

THE number of candidates who have intimated their intention of presenting themselves for examination for degrees in medicine and science is larger than was announced last week.

Sir Henry E. Roscoe has just issued privately a "Record of Work done in the Chemical Department of the Owens College from 1857 to 1887," that is, during the thirty years he held the Chair of Chemistry in the College. In 1857 the number of students in the College was 34, and of these 15 worked in the chemical laboratory; while in 1886-87, in the chemical department alone, there were 333 attending the day-class and chemical laboratory, a large proportion of these being medical. Sir Henry justly remarks that "the personal and individual attention of the professor is the true secret of success;" and it is for this reason that such success has been attained in this and other departments of Owens College. Sir Henry enters into a history of the evolution of the chemical department in its various branches, and he cites a lengthy list of original contributions by himself and his pupils, many of whom occupy most important offices in teaching institutions all over the country.

Manchester has long felt the want of a maternity hospital, and steps are being taken to supply this deficiency.

Victoria University is making strenuous efforts to bring before Mr. Goschen its case for an annual grant from the Treasury. The deputation to the Chancellor will be very large and influential, and one in thorough sympathy with the object desired.

THE MARGARET STREET INFIRMARY.—At a meeting of the Medical Board of the North London Consumption Hospital, held on March 7th, the following resolution was carried: "That the Medical Staff of the North London Hospital for Consumption and Diseases of the Chest are unanimous in their sympathy with the action of the members of the Margaret Street Infirmary, Drs. Hawksley, Cholmeley, Carr Beard, Phibbs, Willis, Walford, and Powell, who lately resigned their appointments under painful circumstances, and, further, that the secretary be instructed to forward a copy of this resolution to Dr. Hawksley, late Senior Consulting Physician to the infirmary, and ask him to convey the substance of this resolution to his former colleagues."

CORRESPONDENCE.

THE COLLEGE OF PHYSICIANS AND THE APOTHECARIES' HALL.

SIR,—In forecasting the result of the appeal made by the General Medical Council to the two Colleges, it is important to remember the constitution of the College of Physicians.

There all important matters are decided not by the Council, but by the Comitia, to which every Fellow is summoned, and where he has an equal vote.

It is to be presumed that Sir Henry Acland will, as a Fellow, avail himself of this privilege, and will attend to advocate before the Comitia the adoption of the course recommended by the General Medical Council.

I am only "Parcus Collegii cultor et infrequens;" but it is my intention to attend the special Comitia, and to support Sir Henry Acland in the position I anticipate he will assume.

If all the other eighty odd provincial Fellows would do the same, the question would be settled in the interest of the public and of the profession, and also, as I believe, in the true interest of my College.—I am, Sir, yours obediently,

A PROVINCIAL FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS.

THE CONJOINT SCHEME IN IRELAND.

SIR,—The question as to the admission of the Apothecaries' Companies to take part in the conjoint examinations about to be established by the Colleges of Physicians and Surgeons, both in England and Ireland, is one of such importance to the whole profession that I venture to ask space briefly to give a summary of the reasons which influence the King and Queen's College of Physicians to decline to join with the Irish Apothecaries' Company. I do not purpose to refer to the question as it affects the English Company, because I am not in a position to know the grounds on which the College of Physicians, London, base their refusal.

The Irish Apothecaries' Company base their claim to be admitted to participate in the conjoint examination mainly on two grounds:

1. That they were some thirty years ago placed on the schedule side by side with the Colleges of Physicians and Surgeons, and that the General Medical Council endorsed, by a resolution subsequently passed, their claim to be considered a body capable of granting a licence to practise medicine, and that ever since their licence has been accepted as equivalent to a licence in medicine by the Army and Navy Medical Departments, and by the Local Government Board.

2. That they are in every respect analogous to the Apothecaries' Company of England whose right to examine in the science and practice of medicine cannot be disputed.

With respect to the first, the College points out that its licentiates are registered simply as apothecaries, and that such registration confers no power or privilege greater than those conferred by the Act of Parliament which incorporated them; and as to the second, that it was obtained by a misconception of the merits of the case, several of the members of the Council believing that the Irish Apothecaries Company was in all respects analogous to the English one, and further that, no matter how obtained, the resolution was merely an expression of opinion by the members of the Council, and of no legal value.

The Irish Apothecaries' Company was instituted by an Act of Parliament, for the purpose of "inspecting and directing all chemical and compound preparations and experiments," and further, was given powers to examine persons wishing to become "apprentices or journeymen," to certify that such persons were qualified to learn the business of an apothecary, and, after serving an apprenticeship of seven years, to grant, on their passing an examination, a certificate empowering them to keep open shop, and to act in the "art and mystery of an apothecary" in Ireland.

(*a*) The College deny that any clause in this Act, or any possible straining of it, justified the assumption of the Apothecaries' Company (Ireland) to examine in the theory or practice of medicine, or to grant a licence to practise medicine, and point out that it is only of recent years that they commenced to examine in medicine, and that it was not till after the year 1860 that they introduced into the certificate they granted a clause stating that the holder had been examined in medicine.

(*b*) The King and Queen's College of Physicians further contend that there is no analogy between the English Apothecaries' Company and the Irish one. The former by its Act is authorised "to ex-

amine all persons applying to them in the science and practice of medicine," while on the other hand the Irish Apothecaries' Company is restricted to granting a certificate as to the candidate's knowledge of the "business of an apothecary," no power, as already observed, being given to it to examine in medicine.

(*c*) Another objection raised by the College of Physicians here is based on the fact that it is constituted a court of appeal from the Apothecaries' Company; if any person be rejected three times by the Apothecaries' Company, he can appeal to the King and Queen's College of Physicians, is examined by them, and, if he passes, is granted a certificate which confers all the privileges of that granted by the Apothecaries' Company. This right of appeal has been often exercised, and it seems to the College most inconsistent to join for examination purposes with the body from which there is an appeal to it. The King and Queen's College of Physicians are also by Act of Parliament appointed inspectors of apothecaries' shops in Dublin and within a radius of ten miles; in both these respects it possesses powers with respect to the Irish Apothecaries' Company which the London College of Physicians does not with respect to the English Apothecaries'.

(*d*) The question of apprenticeship raises another difficulty. The Apothecaries' Company are prohibited under penalties to take apprentices for a shorter period than seven years. It has got rid of this difficulty by simply ceasing to require apprenticeship at all; and it seems probable that the violation of the Act in this respect might, if tested by judicial decision, produce very grave consequences; at any rate, it is not to be expected that the College of Physicians would, even were the Apothecaries' Company admitted to join in the examination, connive at an evasion of the Act. They would, I presume, require from all candidates who sought to obtain the Apothecaries' licence a strict compliance with the requirements of the Act.

(*e*) But the reason which probably weighs most with the majority of the Fellows of the College of Physicians is, that they hold that the constitution of the Apothecaries' Company makes it altogether an unsuitable body to which to commit the selection of examiners and the superintendence of medical education, in the proper acceptation of that term. It is virtually a joint-stock company, has an extensive place of business, established not alone for the preparation and sale of drugs, but also for the sale of all those articles usually exhibited in a chemist's shop, such as toilet requisites, brushes, etc. A meeting of its shareholders is held annually, for the declaration of a dividend, and for the transaction of business, and, at this meeting, the governor and directors are elected. The only persons qualified to vote at the election of directors are duly qualified apothecaries, who must also be shareholders in the company; the qualification then for both voters and directors (who are also the examiners) is virtually as much a money one as anything else, and it is obvious that the elector will, in giving his vote, be likely to be influenced as much (possibly even more) by his wish to see elected a good business man, one likely to push the business of the Company, as by his fitness to be an examiner. It must be borne in mind that the fact of a man being a licentiate apothecary, no matter how great his attainments, does not qualify him to become a director or examiner, unless he also has a money interest in the company.

As I wish merely to state the facts of the case as they appear to the majority of the College, I refrain from any comment, and leave the profession to decide for itself in the matter.—I am, etc.,

A FELLOW OF THE KING AND QUEEN'S
March 5th, 1887. COLLEGE OF PHYSICIANS.

DR. SKENE KEITH'S STATISTICS OF ABDOMINAL SURGERY.

SIR,—Dr. Skene Keith evades all the main issues of my complaint, and raises only one point on which I need trespass much on your space.

Let me, however, briefly restate my case with comments in reply to Dr. Skene Keith, for the points are not merely personal, they bear strongly on the customs of our profession and the proper methods of estimating the value of statistics.

Dr. Skene Keith took a fraction of one year of my work, because he found the mortality high, and most unfairly applied his comments to the whole of my work. He further applied a phrase of mine, which was used exclusively concerning simple exploratory incisions, and applied it to the most fatal classes of operations—hysterectomies and the incomplete removal of sarcomata. Dr. Skene Keith is perfectly silent on these two points.

My complaint that I had in vain through five years asked for a chance of seeing Dr. Keith doing a hysterectomy, he answers merely by saying that I was present at an ovariotomy, and not for two minutes, but for over twenty, as we time the use of the cautery. He does not deny that he prevented me being present at the proposed hysterectomy on July 13th, 1886, and I have a letter from his father disavowing any share in that action, so that the responsibility was entirely that of Dr. Skene Keith, and as he has assumed so much, and evidently does not recognise my right to be present at the practice of the Edinburgh Royal Infirmary, it is my intention to bring his action before the Board of Managers. He may have a right to invite strangers, but he has no right to keep me out.

Dr. Skene Keith asserts that I had stated in different parts of the country that Dr. Keith had something to conceal. I never said anything of the kind. I complained in Edinburgh and Glasgow that I had been continuously begging for five years to get a chance to see Dr. Keith perform hysterectomy, and had failed. I made these complaints openly and freely, as I had made them to Dr. Keith himself, and to Dr. Skene Keith. If there was nothing to conceal about hysterectomy, why was I so freely permitted and invited to see ovariotomies, and so carefully excluded from hysterectomies? Simply because the Keiths knew I had nothing to learn in the one case, and I knew and said I had much to learn in the other. Again, why did Dr. Skene Keith so fully avail himself of opportunities and favours from me, and refuse me one thing, all that I had ever asked for? That there was something to conceal from me I firmly believed, and I believe it still, but I never said so. Others did say so, however, and very freely. But this excuse of Dr. Skene Keith accounts at most for only four months of the five years I have waited.

Both Dr. Keith and his son rejected the case I operated on in the south of Scotland on February 19th. I first heard of the case on November 3rd, 1886, from Dr. Calvert, of Melrose, who wrote: "Dr. Keith twice refused many years ago to operate. His reason was that the condition of her heart would not allow of it." Dr. Calvert told me, on the morning of the operation, that he had again communicated with Dr. Keith and Dr. Skene Keith about operating on the case, and they refused on the ground that she had suffered from shocks and great depression after her confinement, which had occurred last June. The patient has made an easy recovery.

The present correspondence has brought me quite a budget of letters from Scotland about cases refused and mistakes in diagnosis made by Dr. Skene Keith within the period embraced by the series he has recently published, and concerning which he said no mistakes in diagnosis had occurred. In one of his own letters, which was sent for my inspection, an excuse for a blunder in refusing another case, is made in the sentence that "mistakes occur in the best regulated families." They clearly do; and it is these family mistakes, and the family dovetailing, which so qualify the value of Dr. Skene Keith's statistics as to make them perfectly useless for comparison with those of anybody else.—I am, etc.,

LAWSON TAIT.

THE LUNACY LAW AMENDMENT BILL.

SIR,—I perceive that this Bill passed through Committee in the Lords last night; and, unless it meets with opposition in the Commons, this production, with certain most objectionable clauses, will shortly become law.

There is one provision which, I trust, may be opposed, namely, Clause 11, which for the future will prevent "a lunatic pauper from being received into any asylum, hospital, or licensed house, under an order under the hands of an officiating clergyman and overseer or relieving officer." Now the framers of this prohibitory clause against the occasional use of such officials in the certification of and removal to an asylum of lunatic paupers must be profoundly ignorant of the question they undertake to legislate upon, when they propose to do away with this most useful provision under the existing laws. Thus, it not infrequently happens that patients are admitted labouring under the greatest possible excitement, rendering it impossible to remove them without a strait jacket, and using such frightfully obscene and disgusting language as to strike horror into all those forced to listen to them. Now, to take such unfortunates to a police-court, or before a county court judge, is simply scandalous. In all such cases I invoked the aid of the functionaries whose services are for the future to be dispensed with—why or wherefore I am utterly at a loss to understand. They are, at the least, as respectable as an ordinary justice of the peace.

Then, again, in rural districts, the difficulties of removal, already very great, will be intensified by thus ceasing to employ the services of the clergyman and relieving officer, for a magistrate or county court judge is not easily available; and so the quiet, etc., of the poor man's house, with its limited accommodation, is to be indefinitely disturbed, and the chances of recovery of the lunatic diminished, solely because the Lord Chancellor holds distorted views on the subject of insanity and its early control. I understand that the present Bill has

been mainly drawn up by him, and that in his remarks respecting medical men he has been the reverse of complimentary.—I am, Sir, yours obediently,

JOSEPH ROGERS.

31, Montague Place, W.C., March 2nd, 1887.

THE MEDICAL DEFENCE UNION.

SIR,—Kindly grant me space to inform Mr. "Puzzled" that the balance-sheet, as presented on February 23rd at the general meeting, and which was adopted by the meeting, subject to the audit of Messrs. Quilter, Ball and Co., should be sufficient. I do not feel disposed to enter into a detailed correspondence with anonymous writers, but to anyone who really has medical defence at heart, and who is not afraid to disclose his real name and address, it will always be my endeavour to give any information which may be in my power.—Obediently yours,

CHARLES F. RIDEAL, General Secretary.

17, Bedford Row, March 9th.

VENTROTOMY.

SIR,—There is much need for a single and simple word to express the operation of opening the abdominal cavity, for whatever purpose. "Abdominal section" is long, and has to be supplemented by saying for what object the proceeding was undertaken; thus, one would have to say, abdominal section for the exploration or removal of an ovarian or uterine growth. "Laparotomy" strictly means section of the flank. "Malacotomy," recently suggested by Mr. Rabagliati, simply means cutting soft parts, and can correctly be applied to other regions. I would therefore suggest the use of an etymologically hybrid word, namely, "ventrotomy." "Gastrotomy" is properly limited to operations on the stomach, and as I know of no English word or combination sufficiently short and explicit, the word suggested seems to me to answer the purpose. At first sight, it would appear that such words as gastrotomy, nephrotomy, etc., suffice; but these organs can be reached by various ventrotomies, and in statistical comparisons precision is necessary. We have it if we speak of a median, anterior, lateral, and posterior or lumbar ventrotomy; thus, the first is through the linea alba, the second at the outer border of the rectus, the third in the flank, and the fourth in the loin. If I wished to accurately describe a gastrotomy done through the linea alba, I should say median ventro-gastrotomy; if to describe a lateral one done beneath the costal cartilages, I could say, sub-chondral gastrotomy. Similarly, one could accurately describe operations on the kidneys by making use of the terms median, anterior or posterior ventro-nephrotomy or nephrectomy. It may be said that the prefix "ventro" is not necessary, but I urge that, for purposes of accuracy in record, it is not merely desirable, but actually necessary.

Last year, I suggested at the British Gynæcological Society that the nomenclature of kidney-operations would be made more accurate by the addition of a few letters, for nephrotomy may be done on a healthy kidney or in one containing pus or urine, and that the term pyo- or hydro-nephrotomy would sufficiently define operations done for pyo- or hydro-nephrosis; and that, if a stone be removed from a suppurating kidney, the term nephro-pyolithotomy, though rather long, has the great advantage of being accurate, and shorter than saying or writing its equivalent in accuracy, namely, nephro-lithotomy in a purulent kidney. The abdominal wall may be incised without opening the peritoneal cavity, and I would provide for this by prefixing the word "superficial." My object in this communication is to gain, if possible, the assent of surgeons to the employment of a useful though hybrid word, which is at once short, expressive, and accurate. While on the subject, I would say that the operation of opening the colon and stitching it to the abdominal wall is still called colotomy, though doubtless the correct term is colostomy.—I am, etc.,

H. A. REEVES.

78, Grosvenor Street, W.

SUPRAPUBIC ASPIRATION OF THE BLADDER IN RETENTION OF URINE.

SIR,—The profession is keenly alive to the *dicta et verdicta* of the Medico-Chirurgical Society, and it would be unfortunate if the discussion at that Society upon Mr. Bennett's valuable paper on Suprapubic Aspiration, which you report in the JOURNAL of February 26th, should be read in the light of a condemnation of that procedure. The paper was, I apprehend, rather levelled against the indiscriminate and haphazard method of employing the operation, and was calculated to disabuse the professional mind as to its complete security. If, however, the balance of professional judgment should descend to the opposite extreme, and suprapubic aspiration fall thereby into undeserved discredit, the loss would be a severe one both for patient and practitioner. I would point out, therefore, that the writer of the paper unfortunately did not submit to the Society a comparative statistical record of the risks incurred in the two operations now in vogue for the relief of non-catheterisable retention, namely, suprapubic aspiration and perineal section; and, without some such comparison, we cannot judge, much less condemn.

There are three points of comparison: 1, ease in operation; 2, mortality; 3, length of time required for healing the wound. On all three points suprapubic aspiration compares most favourably with perineal section. On the first count there is no comparison, "Der hoher Blasenstich kann im Finstern gemacht werden" (Dittel). 2. The mortality of perineal section is 20 deaths in 322 cases (Schuh, Dummreicher, Syme, Reybard, Dittel). 3. The time required for healing in external urethrotomy was 2 months 21 days (*Wien. Allgem. Zeit.*, 1865. Dittel).

That suprapubic puncture is not invariably a safe procedure everybody who knows the sparsely scattered death-roll (for example, Van Buren, 1885) of the 251 writers upon puncture of the urinary bladder will freely admit; but is it more dangerous than perineal section? A disaster with a "safe" procedure impresses us, and sways our judgment more than many successes, and the former are the very cases which remain unpublished. I would suggest, then, that material be collected, and that these two operations be compared; for it is difficult to accept the first four of Mr. Bennett's propositions without data. There is only one death recorded in the London Hospital *post-mortem* record from 1832-1886, and Potain's modification of Dieulafoy's aspirator is invariably used there if the urethra prove impassable; unless, of course, extravasation complicates the case. That fact is of some importance when we realise that, partly from the character and the greatness of the area it drains, and partly from its vicinity to the shipping, no hospital can compare with the London Hospital in its work with severe retention cases. Again, Dittel has had 52 cases without a misadventure.—I remain, Sir, yours truly,

E. HURRY FENWICK.

George Street, Hanover Square, W., February 26th.

THE SURGICAL TREATMENT OF PARALYTIC LARYNGEAL STENOSIS.

SIR,—If not trespassing too far on your courtesy, I beg very briefly to be permitted to defend a "suggestion" relating to "a modified operation in laryngeal stenosis from paralysis," which in the JOURNAL of January 15th was strongly criticised by Dr. Felix Semon.

In the short paper offering the suggestion, no attempt was made to elaborate the range of cases in which the modified operation was to be done, or the extent to which obstructive tissue was to be removed; and consequently an apparent carelessness in this direction has been construed as an imperfect statement as to matters of fact. For instance, Dr. Semon seems to deny that paralysis of one abductor, as producing a serious dyspnœa, should come within the limits of operative procedure, and emphasises his statement by the results of his well-known studies on the subject. Clinically, however, there do exist frequent instances of grave respiratory difficulty intercurrent with a unilateral paralysis—perhaps provoked in the course of frequent attacks of laryngitis involving the sound side, or where a chronic irritation of the trachea or bronchi, or a cardiac lesion, may make a precautionary measure one of vital importance. Aside from personal observation, a typical example in point is furnished in Cohen's work on *Diseases of the Throat*, where tracheotomy became imperative, and was performed by the author.

Bilateral paralysis of abductors is, without saying, universally conceded to demand operative interference.

The proposition advanced for the relief of dyspnœa in progressive paralysis was that of exposing the larynx by a thyrotomy, and the "removal of so much of the paralysed cord, together with any overhanging tissue, as seriously obstructs the lumen of the glottis. In other words, the treatment is that indicated in any form of neoplastic laryngeal obstruction that cannot be reached by the open method."

The claims I wish to make for this as yet untried substitute for tracheotomy are that the operation is a radical one, in the sense that a permanent glottic opening restores the larynx to its best normal conditions of respiration, which, in some cases at least, must be of great importance to the patient as favouring the highest physical conditions; that the mechanical irritation to the trachea, as well as the dangers to displacement or obstruction, from the permanent use of a tube, no matter how well fitting or how ingeniously constructed, are at once dispensed with.

With reference to the loss of the voice-function, while undoubtedly the injury once created would be permanent, yet as it is proposed to

remove only sufficient tissue to establish a free opening, and not the entire cord or cords, enough would be present to ensure a certain voice-tone, which, it seems to me, would amply compensate for the comfort and confidence that would be acquired. These conditions are notably supported in the sequelæ of operations done for the removal of tumours involving these parts.

Finally, it is not contended that the tracheal cannula is necessarily to be considered as leading to a shortened life—numerous examples other than those cited by Dr. Semon, and particularly one case in this city, extending over forty years, abundantly certify to the fact; but, on the other hand, it can hardly be claimed that the employment of the cannula as a permanent relief for dyspnœa answers to the most favourable prognosis of the disease.

It is hardly necessary to add that no reference was made to "tubage" as an alternative in the disease.—I am, etc.,

Metropolitan Throat Hospital, New York, February 17th. G. B. HOPE, M.D.

THE HEALTH OF ROME.

SIR,—Although I intend shortly to publish, in a complete form, the results of my experience of the Roman climate, and of the researches which I have made, during the six years I have practised in Rome, into the subject of malaria and the general sanitary condition of the city, perhaps I may briefly call attention in the JOURNAL to a few facts connected with the death-rate amongst Anglo-American visitors and its causes during the last ten years.

Hitherto it has been difficult to ascertain the number of deaths amongst Catholic visitors, owing to the way in which the records are kept at the Campo Verano, but I have, through the kindness of Signor Trucchi (who now has charge of both cemeteries) been furnished with a complete record of the names, ages, cause of death, etc., of all who have, during the last ten years—October 1st, 1876, to October 1st, 1886—been registered at the Protestant Cemetery at the Porta San Paolo.

The total number of deaths was 160 (average 16 per annum), and of these 28 were due to typhoid fever (average 2.8 per annum; 3.2 for the first quinquennium and 2.4 for the second). During the last twelve months there was not a single death from typhoid or from fever of any kind, except that of a child, aged 4, certified by an Italian doctor to have died of *perniciosa* on July 31st, 1886, outside the Popolo Gate. The other three cases of malarious fever in the ten years were American. From diphtheria we have 3 deaths out of the 160; whooping-cough, dysentery, puerperal fever, each 1; septicæmia, 2. Twenty-nine died at the age of 65 and upwards, and 21 at 70 and upwards, the average age of the former group being 74.68, and of the latter 78. Eight were upwards of 80 years; and 1 was 97. The great majority were due to chronic organic diseases of the heart, liver, lungs, kidney, etc.

The British Consul estimates the number of English visitors each season at 10,000, and the number of Americans can hardly be less.

When I commenced practice at Rome, it was generally believed that fever was more common in the hotels than in private apartments. During the last five years, however, 5 out of the 12 fatal cases of typhoid, and 2 out of the 3 deaths from malarious fever in the city occurred in private apartments.

So satisfied was I of the improved sanitary condition of Rome, with its inexhaustible supply of pure water, uninterrupted by night or day, which it has enjoyed for two thousand years, that I ventured to predict that, during the frightful cholera epidemic in Italy in 1884, the disease would not be able to gain hold of the capital, and advised my patients and friends spending the summer in the Tyrol, or in the summer resorts of Italy, to return to Rome for safety; and although I well remember how the Neapolitans and others fled to Rome "in their thousands," only some half-dozen imported cases were received into the lazaretto on the Aventine.

As the only English physician in Rome who has spent an entire summer (twenty-two continuous months) in the city, during which I only slept one night out of Rome, I am in a position to testify to its salubrity even during the cholera summer.

Sir John Lumley, Her Majesty's Ambassador, authorises me to publish the fact that, having only slept out of Rome fourteen nights during more than three years, he has, during that time, enjoyed more than ordinarily good health; and I could mention similar cases by the score.

I hope hereafter to show what the class of disease is that we encounter here, and by very clear evidence to demonstrate how ill-founded and exaggerated is the widespread popular notion of the insalubrity of Rome.—Yours, etc., EDWARD DRUMMOND, M.D.

3 Piazza di Spagna, Rome, February 24th, 1887.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, March 10th.

LUNACY ACTS AMENDMENT BILL.

ON the question that the report of amendments to this Bill be received,

The LORD CHANCELLOR explained the character of the amendments he proposed to make in the Bill, pointing out in particular that subsection 11 of Clause 3 would be omitted, and that after Clause 4 an amendment would be inserted giving an alleged lunatic power to require a magistrate, or a county court judge, or a justice, to examine into his mental condition. This amendment was as follows:

"When a lunatic has been received in an asylum, hospital, or licensed house, or as a single patient, under an order of a judge of county courts, magistrate, or justice, and has not been personally seen or examined by such judge, magistrate, or justice, the lunatic shall have the right to be taken before or visited by the judge of county courts having jurisdiction in the district within which the lunatic is detained, or, if the lunatic so elects, before a stipendiary magistrate or justice named by the lunatic and having such jurisdiction, unless the medical superintendent of the asylum or hospital, or the medical proprietor or attendant of the house, or the medical attendant of the single patient, within twenty-four hours after his reception, signs and sends to the Commissioners a certificate in the Form 3*a* in the First Schedule, that the exercise of such right would be prejudicial to the lunatic. If such certificate is not signed, the superintendent or proprietor of the asylum, hospital, or house, or the person having charge of the single patient, shall within twenty-four hours after the lunatic's reception, give him notice in writing of such right in the Form 3*b* in the First Schedule, and shall ascertain whether the lunatic desires to exercise the same, and if the lunatic, within seven days after his reception, expresses his desire to exercise the same, such superintendent, proprietor, or person shall procure him to sign a notice in the Form 3*c* in the First Schedule, and shall forthwith send by post, in a registered letter, notice in writing of the desire of the lunatic to exercise such right to the judge of county courts having jurisdiction in the district within which the lunatic is detained, or if the lunatic has named a stipendiary magistrate or justice having such jurisdiction, then to such magistrate or justice, and it shall thereupon be the duty of such judge, magistrate, or justice to procure the lunatic to be brought before him by such superintendent, proprietor, or person, or, at the option of the judge, magistrate, or justice, to visit the lunatic. The judge, magistrate, or justice shall, forthwith, after the lunatic has been brought before or visited by him, send by post to the Commissioners a report upon the lunatic, and the Commissioners shall thereupon take such steps as may be necessary to give effect to the report. If any superintendent of an asylum or hospital, or any superintendent or proprietor of a licensed house, or any person having charge of a single patient, omits to perform any duty imposed upon him by this section, he shall be guilty of a misdemeanour."

The Earl of SELBORNE thought that the magistrate who should examine the lunatic should be the magistrate who made the original order for his confinement in an asylum.

Lord HERSCHELL considered that this proposal would impose a most onerous and disagreeable duty upon a magistrate selected by the lunatic. There were many magistrates who would prefer to be struck off the Commission of the Peace rather than accept such a duty; and, moreover, there would be great practical difficulty in working the proposed amendments, because the lunatic would be able to call upon any one of the magistrates in the county in which the asylum was situated.

The LORD CHANCELLOR: The amendment applies to magistrates within whose jurisdiction the asylum is.

Lord HERSCHELL pointed out that the magistrate selected by the lunatic might be in a distant part of the district, and that it would be a hardship to compel him to visit the lunatic. Moreover, the magistrate might be residing in London when his services were required; and, if that were so, what course would be pursued? The noble lord also showed that it might interfere with the duties of county court judges to be obliged to see lunatics at irregular periods. He thought the best person to give the order would be a member of the Visiting Committee of the county magistrates.

The LORD CHANCELLOR said that the right to claim to be examined by a particular magistrate would only be enjoyed by the lunatic when there had been no previous examination by a magistrate. With regard to the selection of the magistrate it was clear that somebody would have to make it, and it appeared to him most reasonable that it should rest with the person alleged to be insane. With regard to the county court judge, if he had to make the examination, that examination would not take place until he could make it convenient to attend the asylum or licensed house in which the alleged lunatic was confined. He was prepared to accept a more satisfactory amendment if one could be suggested.

The Earl of KIMBERLEY did not know why the functions of the ordinary visiting justices were to be superseded by some chance magistrate.

The LORD CHANCELLOR pointed out that it was not magistrates generally who were to be chosen from, but a certain selected body.

He should be glad to amend his proposal by limiting it to magistrates resident within the petty sessional division within which the asylum was situated.

After some further discussion, subsection 11 was omitted from Clause 3.

The LORD CHANCELLOR'S amendment was then understood to be agreed to, the noble and learned lord intimating that he would be glad to accept alterations at a future stage of the Bill.

The Earl of SELBORNE intimated that, after the third reading on the question that the Bill do pass, he would move an amendment to the effect that the examining magistrate should be the magistrate who gave the original order for the confinement of the alleged lunatic. He should take the sense of the House on that amendment.

Several formal and verbal amendments were agreed to. The Bill then passed the report stage.

HOUSE OF COMMONS.—Thursday, February 24th.

Vaccination and Syphilis.—In answer to Mr. CHANNING, Mr. RITCHIE said he was informed that the mortality of children from syphilis had increased not only from 1853, when compulsory vaccination was introduced, but from the first year of which any records exist, namely, 1848. The increase from 1853 to 1885, the last year for which the figures are published, was not most conspicuous among children under one year of age. On the contrary, it was much greater among children from one to five years old than among children under one. The increase in 1854, as compared with 1853, was greater than in any other year as compared with its immediate predecessor. But the increase, so far from being most conspicuous among children under one, was vastly less among them than among children over one and under five, and even less than among adults, or rather persons from five years upwards, so that it was quite impossible to attribute the increase in 1854 to the introduction of compulsory vaccination.

Outbreak of Anthrax in Essex.—Lord J. MANNERS, in reply to a question with reference to the recent outbreak of anthrax at a farm near Chelmsford, whereby sixty out of sixty-two head of cattle either died or were slaughtered, stated that an inspector had been sent to Chelmsford, but did not succeed in obtaining any evidence as to the cause of the outbreak. No change, it was stated, had been made in the management of the cattle, and no fodder, litter, or manure had been brought on to the farm from foreign sources. It would, he said, be remembered that specimens of the different articles of food of which the cattle partook and some of the drinking-water were being used for the purpose of ascertaining by experiment whether they contained any of the infective matter of anthrax.

Prison Sites and Workmen's Dwellings.—Mr. MATTHEWS stated that he had received an offer for the site of Coldbath Fields Prison from a society whose object it was to provide cheap and healthy homes for the working classes. Any proposal, either from the Metropolitan Board of Works or from the Clerkenwell Vestry, for the retention of a portion of the site as an open space would receive careful attention.

Friday, February 25th.

The Pollution of the Upper Thames.—In answer to Colonel DAWNAY, Mr. RITCHIE said the Conservators of the Thames had prepared a series of by-laws, Art. 14 (9) of which renders it an offence to cast or throw into or to cause or to suffer to fall or flow into the river any sewage, rubbish, or other offensive matter or thing.

Coroners' Inquests.—In reply to a question by Mr. PAULTON, Mr. MATTHEWS said he had no power to dispense with the obligation imposed by law, from a very early period, on a coroner's jury to proceed only on view of the body.

Monday, February 28th

Wrongful Detention in a Lunatic Asylum.—Mr. STUART WORTLEY, replying to a question by Mr. W. CORBET, as to the confinement in a lunatic asylum for seven years of a female alleged to be insane, recently brought under the notice of the Paddington Union, said that the woman referred to was not an inmate of a county asylum, but of the asylum at Darenth, belonging to the managers of the Metropolitan Asylums Board. The President of the Local Government Board was making inquiries as to the case.

Compensation for Injuries by Dogs.—Mr. ADDISON'S Bill, to render the owners of dogs liable for injuries done to any person by such dogs, was brought in and read a first time.

Brompton Cemetery.—Mr. Plunket, replying to Mr. Baggallay, stated that since 1840 there had been 135,617 burials in Brompton Cemetery, the average number in the last three years being 5,000. The graves were of different depths, and the coffins placed in the ground subject to restrictions laid down by the Home Office. It had been stated to him that the neighbourhood was not more unhealthy in consequence of the existence of the cemetery, which had sufficient open space about it. No limit could, unless by Act of Parliament, be fixed to the number of interments, except that each year there was less space available for the purpose.

Vaccination Statistics.—Mr. RITCHIE, in reply to a question by Mr. BARRAN as to small-pox in Leicester, Keighley, and Bingley (where the Vaccination Acts were practically a dead letter) said that there had been no small-pox epidemic worth mentioning in any of the nineteen great provincial towns during the last ten years. In the Leicester district, however, the death-rate from the disease had been nine in the million, which was higher than in Portsmouth, Norwich, Plymouth, Bristol, and Bradford. Keighley and Bingley contained three-fourths of the population of the registration district of Keighley, where, from 1871 to 1880, the annual death-rate from small-pox was 270 per million—more than in twenty-five of the thirty-two remaining districts of the West Riding, and more also than in Hull, Bristol, Manchester, Leeds, Oldham, Bradford, or Brighton.

Tuesday, March 1st, 1887.

Vaccination.—Mr. RITCHIE stated, in reply to Mr. T. ROBINSON, that the Government could not consent to an inquiry into the subject of vaccination.

Friday, March 4th.

Rivers Pollution Prevention Act (1876) Amendment Bill.—On the motion of Mr. THORBURN, leave was given to bring in a Bill to amend the Rivers Pollution Act (1876), and the Bill was subsequently brought in and read a first time.

Post-Office Medical Officers.—Mr. PICKERSGILL asked the Postmaster-General whether it had been the practice to appoint medical officers attached to post-offices upon the recommendation of the Secretary of the Post-Office; and whether, in some instances recently, the Postmaster-General had set aside the Secretary's recommendation in favour of persons nominated to him through other than official channels.—Mr. RAIKES replied that the practice, as he understood it, had been to submit to the Postmaster-General the names of several medical officers recommended by the local officers, and one of these gentlemen had usually been formally recommended by the Secretary. But the Postmaster-General had always exercised his own judgment in making the appointment. There was no ground for suggesting that the Secretary's recommendation had been slighted.

Dangerous Stray Dogs.—The HOME SECRETARY, in reply to Mr. W. M'LAREN, said he believed the existing laws to be sufficient for enabling farmers to protect themselves and their property from dangerous stray dogs, and he had no intention of introducing a Bill on the subject.

Monday, March 7th.

Fogs in the House of Commons.—Mr. PLUNKET, in answer to Sir A. BORTHWICK and Sir H. TYLER, said that Dr. Percy, during a November fog many years ago, had made the experiment of filtering the air through cotton-wool, and that it was so far successful as to impress him with the hope that the interior of the House of Commons might thus be rendered fog-proof at but a trifling expense. The extension of the system to all the lobbies, corridors, and adjoining apartments would entail a large expense. Dr. Percy had been requested to make the necessary experiments.

BUTTERINE.—A deputation, representing the butterine manufacturers in this country and on the Continent, has had an interview with Baron de Worms, M.P., at the Board of Trade offices, with reference to the proposed legislation on butterine. Their desire was stated to be that action should be taken to prevent any compulsory change in the name of the article which was sold as butterine. Baron Henry de Worms, in reply, said that the only object of the Government was to protect the public against possible fraud, and not to protect one branch of industry against another. The Bills to which the deputation objected were private bills, and it was for the House of Commons to decide in the matter.

SUGGESTION AS A THERAPEUTIC AGENT.—At a recent meeting of the Biological Society, MM. Fontan and Segard communicated several cases of cure by suggestion. A sailor suffering from arthritis, a soldier suffering from urethritis, and another affected with concussion of the brain, were greatly relieved, and even cured, by magnetism in one or two sittings. The treatment succeeded best with young Bretons, who are generally good subjects for hypnotism.

DATE OF HOSPITAL SATURDAY.—It has been decided to change the date of Hospital Saturday from June 25th to June 11th.

HOSPITAL AND DISPENSARY MANAGEMENT.

OUR HOSPITALS AND VIVISECTION.

THE anti-vivisection party is now attempting to divert subscriptions from our hospitals; and the following correspondence which has been forwarded to us for publication may, therefore, interest those who are anxious to check this new development of the attack upon science and scientific work. The first letter is from a subscriber to the Secretary of the Samaritan Hospital; the second is the reply.

"Norwood, February 15th, 1887.

"SIR,—I have received the enclosed paper, which I perused carefully. I observe your consulting surgeon is Sir Spencer Wells, a surgeon well known for his approval, and, to a certain extent, his practice, of vivisection. As I would not trust myself in the hands of any surgeon holding such views, and acting on them, I make it a rule to subscribe to no hospital where such surgeons hold appointments; for we should never be instrumental in subjecting the poor to risks one would not choose to incur oneself.

"I enclose a few stamps, knowing the expense entailed by canvassing.—I remain, Sir, your obedient servant,

"_____ _____."

"Samaritan Hospital, February 17th, 1887.

"SIR,—In reply to your note of the 15th, I write to inform you that no experiment or operation upon any living animal (not human) has ever been performed in this hospital; nor has the consulting surgeon, Sir Spencer Wells, performed any such experiment or operation anywhere during the last twenty years. About twenty-five years ago, in order to avoid trials of new methods of operation upon hospital patients, he made such trials upon a few dogs, rabbits, and guinea-pigs—about twenty in all—not in this hospital, but in the dissecting-room of a medical school, in which he was a teacher. All the operations were performed while the animals were rendered insensible by some anæsthetic; and, after the necessary lapse of time, they were all painlessly killed by Dr. Richardson's method.

"Although doubted by a few, the great majority of medical men believe that, by these few experiments, Sir Spencer Wells was able to improve an operation, which has added to human life and lessened human suffering, and will continue to do so throughout the world in all future time. He desires me to say to you, with his compliments, that, with all due respect to the feelings of any one who may have been justly shocked by the abuse of so-called 'vivisection' by a very few experimenters, he cannot sympathise with the outcry raised by the misanthropical zoophilists, who are endeavouring to render illegal all experiments made on the lower animals with the object of lessening human suffering and saving human life, and who do this while freely admitting that these animals may be slaughtered for food, clothing, and sport, and may be devoted to the use of man for any purpose whatever, provided it is not scientific.

"May I beg, then, that you will reconsider your decision, and, in addition to the postage stamps, for which I thank you, favour me by such a contribution as will show that you appreciate the successful efforts made by the medical staff of the Samaritan Hospital for the good of suffering women.—I am, your obedient servant,

"GEORGE SCUDAMORE, Secretary."

MEDICAL ATTENDANCE ORGANISATION COMMITTEE.

A FURTHER important meeting of this committee was held on March 8th, Sir T. Spencer Wells in the chair. There was a full attendance. The two points to be considered were: (1) Fees for persons requiring immediate attendance. (2) Fees for persons suffering from chronic illness.

Before these points were considered, the following resolution, dealing with ordinary members, was proposed:

"All candidates for membership must be approved by the medical officers under whom they wish to be registered. Ordinary members to pay an entrance fee of 1s., and to be free to benefit in four weeks from the date of joining."

After some discussion the first part was agreed to, and it was resolved that the second part, as to entrance fee and probationers, should be considered at the next meeting.

The following resolution was passed dealing with the first point:

"Persons requiring immediate attendance must pay an entrance fee of 2s. 6d., which shall entitle them to treatment for one week, after which, should they continue ill, they shall pay 1s. a week, if able to call upon the medical man, and 2s. 6d. a week if visited at home. Upon recovery they shall be expected to continue as ordinary members with the consent of the medical officer."

It was pointed out in favour of this resolution that, as the wage-limit had been fixed at 30s. a week for a single person—at 45s. for a family—it was not reasonable to expect that such persons could pay more than 2s. 6d. at one time; and that the small after-fees, which would continue during the whole of the illness, would at the least protect the medical man against loss.

As an amendment, it was proposed that the payments should be 1s. per week if able to call on the medical man, and 2s. if visited at home. The proposer of this resolution did not agree with the 2s. 6d. entrance-fee, as he believed it would tend to drive people either to the hospitals or the cheap dispensary. It was far better to take people as they were, instead of striving to compel them to be provident. He would like to see the small ready-money system and the provident system running side by side.

It was proposed, as a further amendment, that the payments should be 2s. for the first week, and 1s. for the three following weeks, if able to call on the medical man; if visited at home, 2s. 6d. a week for four weeks.

A long and exhaustive discussion followed these proposals, after which the original resolution was carried.

Upon the second point, the following resolution was proposed:

"The rates are calculated for persons joining in fair health and who, in the opinion of the medical officer whose services are required, are not subject to any constitutional ailment or chronic infirmity; other persons (not requiring immediate attendance) may be admitted at special agreed rates, subject to the approval of the medical officer."

The following was proposed as an amendment to this resolution:

"Persons who, in the opinion of the medical officer, should not be admitted as ordinary members on account of suffering from chronic illness, may be admitted upon payment of the ordinary rates, in addition to a fee of at each attendance."

After some discussion this amendment was withdrawn, and the resolution was carried unanimously.

It was resolved that, at the next meeting (on Tuesday, March 22nd), the midwifery fees, fines, and general rules should be considered; after which the Committee will proceed to consider the second part of their inquiry—namely:

The desirability of forming a union between hospitals and dispensaries.

As this was considered to be, perhaps, the most important part of the inquiry, members of the Committee were especially requested to send notice of any motion they intended to move, so that each member might be furnished with a copy.

PROVIDENT DISPENSARY SYSTEM.

WE have received a printed copy of a letter addressed to the *Pendleton, Salford, and Broughton Reporter* on the provident dispensary system. This letter points to a real danger which threatens the provident scheme, namely, that it is only too likely to be made use of for the purpose of sham charity, in the interest of the lower class of practitioners, of those who make their living out of so-called charitable institutions, and of the numerous persons who want to get medical treatment without payment, at least without paying the proper price. However, the committee now sitting on the subject, under Sir Spencer Wells's presidency, is fully aware of the danger, and, we hope, will make adequate provision against it.

ROYAL GENERAL DISPENSARY.

THE annual report of the Royal General Dispensary records that, during last year, 11,050 cases came under treatment, 3,684 being new cases; 546 patients had been visited at their own homes. The pence contributed by patients amounted to £92 1s. 8d. The financial position was satisfactory.

LONDON FEVER HOSPITAL.

IT was stated at the annual meeting that the number of admissions to the London Fever Hospital in 1886 was 524; 501 were cases of contagious fever, and 23 of diseases other than fever; 492 patients had been discharged, 17 had died, and 73 remained under treatment. The rate of mortality was 3·3 per cent. Mr. Shirley Murphy, in moving the acceptance of the medical report, spoke of the value of the hospital in minimising the spread of infectious diseases.

GENERAL LYING-IN HOSPITAL, YORK ROAD, LAMBETH.

THE medical report of this charity shows that 383 women have been confined in the hospital during the year, of whom one had died, and

366 women had been attended at their own homes, with two deaths. The pupils, midwives, and nurses who entered for training last year had considerably increased in number; there were fourteen midwives, eight of whom had obtained the diploma of the Obstetrical Society of London.

VENTNOR HOSPITAL FOR CONSUMPTION.

THE Duke of Cambridge will preside at the festival dinner of the Ventnor Hospital for Consumption on April 19th; during the summer, Princess Beatrice will open a new block of houses for twenty additional patients, making 138.

THE HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST AND THROAT, ST. LEONARD'S-ON-SEA.

THE home was opened on October 18th, 1884, as Friedenfels Home, with 12 beds, and was intended for males suffering from diseases of the chest and throat. During the first year, 82 patients were admitted, 65 of whom came from London; 101 were received during the second year, the metropolis contributing 90. Five fresh beds were added, so that the home now contains 17 beds. The Charity Organisation Society has four beds. Patients from all parts of the kingdom are eligible for admission, irrespective of creed, as the home is entirely unsectarian. Patients are admitted even in the most advanced stages of the disease.

Friedenfels Home having proved so successful, it has been decided to enlarge it, and re-name it the Hospital for Consumption and Diseases of the Chest and Throat. It is intended for the reception of both male and female patients. A site for the new building has been kindly given by the late C. G. Eversfield, Esq., on the West Hill, facing the sea, and with a southern aspect. It is estimated that the new hospital will cost about £10,000.

NAVAL AND MILITARY MEDICAL SERVICES.

THE WAR OFFICE BUNGLE ABOUT RELATIVE RANK.

AN eminent and disinterested correspondent of great military experience writes to us:

The eloquent articles in your two last numbers on the rank of medical officers have sounded a trumpet-note of warning which has made no small commotion, both within and without the ranks of the Medical Staff. Some have been greatly agitated, whilst others hold that the warning was premature. The Secretary of State for War has declared that medical officers are in no way affected by the recent warrants, and in a medical paper of last week, there is an article (officially inspired?) which professes to give the real interpretation of the Warrant. It is pointed out (truly enough) that their rank is secured to medical officers by paragraph 125*a*, and it is further stated that the abolition of relative rank (in name at least) is due to some difficulties which have arisen with regard to combatant officers; but as to whether the difficulties have to do with the medical or other departments reacting upon the combatant officers or not, we are left quite in the dark. I do not myself think that, in the present instance, any blow has been designedly aimed at the Medical Staff (or the Veterinary or the Chaplains' Department, who are in the same position); but nevertheless the whole situation suggests some consideration. The first thing that strikes one is that, if it were necessary (for some unknown reason) to abolish relative rank, it has been done in the most bungling, illogical way that could have been conceived. Hitherto there have been three kinds of rank recognised—substantive rank, confined to combatant officers; relative rank, which has hitherto regulated the position of all other officers; and honorary or titular rank, which has recently been conferred on the Commissariat, Ordnance Store, and Pay Departments, and is, as it were, an outward and visible confirmation of their relative rank. But relative rank being abolished, it naturally occurs to the officers of those departments who had no other that they have been deprived of all military rank whatsoever; and not only to them but to many combatant officers as well, some of whom at least would not be sorry for an opportunity of treating doctors, vets. and parsons as mere camp-followers. But now comes in paragraph 125*a*, which directs that these officers shall rank respectively with the various ranks of combatant officers as before, from lieutenant to major-general. One rubs one's eyes and asks: "What does this mean? Substantive rank we know, and honorary rank we know; but what is this? It looks like our old friend Relative Rank; but we have just been told it is abolished!" Medical officers may well be excused if they look askance at this strange bantling, and consider it a thing that "no fellow can understand."

But there is another point that suggests itself. The evil that Governments do live after them, and a part of the anxiety which has arisen is due to the fact that officers who know the history of the Medical Department of the Army can have but little faith either in Royal Warrants or in Ministerial declarations. They know only too well that nothing has ever been obtained from Governments except under pressure, and they know further how soon and how often privileges have been taken away, either secretly and surreptitiously, or openly and even insultingly. Even at the present time there are such preposterous absurdities as sanitary committees (such as those at Woolwich and Aldershot), on which there is not a single medical officer as a member, apparently for fear he might sit above some heaven-born colonel or major.

Although, as I have already said, I do not think any attack has been really intended against the medical staff, and although I feel sure that the present Director-General is quite alive to the necessity of defending its position, the anxiety felt by medical officers is not unnatural, and is mainly due to the bungling language in which the Warrant has been couched.

HOSPITAL DRESSING MATERIALS OF THE FRENCH ARMY.

THE French military authorities are causing all the stores of materials for surgical dressings to be rendered antiseptic, as was done a short time ago with the field hospital bandaging materials in the German army. The necessary processes for the purpose are being carried out in accordance with a recent order from the French War Office, in which minute instructions have been issued regarding the steps to be taken in the proceeding. The principal dressing for wounds in the French army is still charpie, which in a great measure takes the place of the lint, cotton wool, and tow, employed so largely in English hospitals. The order states that the whole of the charpie existing in the military hospital establishments, and in the stores and packages provided for active service in the field, is to be rendered antiseptic; a certain proportion being antisepticised by phenic (carbolic) acid, another by boric acid, and a third proportion by *bichlorure* (perchloride) of mercury. As soon as the charpie is rendered antiseptic, it is to be compressed and packed in parchment paper, which is tinged red for the "charpie *bichlorurée*," blue for the "charpie *boriquée*," and left plain for the "charpie *phéniquée*." Each packet is to be plainly labelled and hermetically sealed, and no packet is on any account to be opened until it is required for use.

The steps to be taken for purifying the charpie before rendering it antiseptic, and the mode of imbuing it with the several kinds of antiseptic preparations are laid down with great precision. To purify the charpie, four litres of boiling water are to be poured on each kilogramme; this is to be allowed to cool, and the charpie is then to be removed and washed freely in fresh water until the water passes off perfectly clear. The charpie, after the water has been pressed out, is next to be soaked for three quarters of an hour in six litres of a solution, 1 in 30, of chloride of lime, and again washed in water until all odour of the chloride has disappeared. The charpie is then put into six litres of dilute hydrochloric acid, 1 in 30, and half-an-hour afterwards, is withdrawn and washed, until it does not redden litmus paper. It is now pressed, dried, and rubbed until it is sufficiently supple.

The following are the preparations employed for rendering the purified charpie antiseptic. For the charpie *bichlorurée*, 1 gramme of the bichloride of mercury is dissolved in 100 grammes of alcohol; and this solution, together with 10 grammes of glycerine and 10 grammes of Senegal gum, is added to 2½ kilogrammes of distilled water. Into this solution 1 gramme of the purified charpie is plunged; and, in order to distribute the bichloride throughout its substance, the liquid is pressed out and reabsorbed several times. It is then withdrawn, dried, and packed as previously mentioned.

To prepare the boric charpie, 100 grammes of crystallised boric acid are dissolved in a sufficient quantity of water; 100 grammes of glycerine, and 20 grammes of Senegal gum previously dissolved, are added to the solution; and pure water is added to make up the amount to 2½ kilogrammes. One kilogramme of charpie is treated in this solution in the same manner as has been described with the mercurial charpie.

To prepare the carbolised charpie, two plans are given, but the following is the one recommended as the most simple and equally effective. A layer of the purified charpie is laid on a piece of oiled silk (*taffetas gommé*), and over this is placed a piece of filtering paper of sufficient size. The paper is sprinkled with carbolic acid dissolved in alcohol of 95° strength. The whole is then rolled up in the

oiled silk, secured firmly by cord, and placed in a chamber at a temperature ranging from 68° to 77° F. If the charpie is required to be carbolised 10 per cent., the blotting-paper is sprinkled with 100 grammes of the carbolic acid dissolved in 50 grammes of alcohol at 95°; if 5 per cent., then with 50 grammes of the carbolic acid in 50 grammes of alcohol at 95°.

The cost of the several preparations is described as being very small, and the manipulations very simple.

We regret that in the list of medical officers who died or were killed in late wars, several omissions and misprints occurred. The honoured name of J. B. Porter, Brigade-Surgeon and Principal Medical Officer, who died in Afghanistan, was omitted; as was that of Civil Surgeon Cobbin, killed in Zululand; and that of Surgeon Stace, who died on the Nile of fever in 1885; and that of Civil Surgeon Garland, who died at Utrecht, South Africa, in May, 1879, during the late Zulu war. Mononi should have been Morini; Pouter should have been Porter; Lesley should have been Lesly. The rank also of all the officers from C. B. Lewis downwards should have been that of Surgeon, not Surgeon-Major.

Royal Navy Surgeons.—The following gentlemen, who competed at the examination recently held at Burlington House, for appointment as surgeon in the Royal Navy, have been granted commissions:—

	Marks.		Marks.
J. D. Hughes	3255	C. Dickinson	2780
W. J. Colborne	3240	J. E. Coad	2745
J. H. Stenhouse	3180	H. Holyoake	2740
J. A. Moon	3070	G. Wilson	2700
R. Hardie	3015	J. Moore	2680
C. Bradley	2980	E. Griffin	2620
G. T. Collingwood	2960	J. D. Menzies	2615
R. Miller	2910	H. St. D. Griffiths	2550
G. F. Collins	2810	W. Bowden	2510

BRIGADE-SURGEONS IN INDIA.

Colonel Hughes-Hallett will ask the Secretary of State for War whether he will take into consideration the case of brigade-surgeons on the Medical Staff in India, having regard to the severe examinations they have to pass for their promotion, with a view to placing them, as was contemplated by the Royal Warrant of December 2nd, 1879, on the same footing as brigade-surgeons in all other parts of Her Majesty's dominions as regards pay, position, and pension, instead of allowing them to remain, as at present in India, on the same pay after twenty-five and thirty years' service as surgeons-major, and subject at times to routine duties under medical officers of the latter rank who may be their juniors.

VOLUNTEER MEDICAL STAFF CORPS.

The presentation of the year's prizes to the Volunteer Medical Staff Corps was recently made by Lady Crawford at the St. James's Hall, when Surgeon-General Sir Thomas Crawford (Director-General of the Army Medical Department), Surgeon-General Sir W. Guyer Hunter, M.P., and others, were present. The Director-General spoke in high terms of the flourishing condition of this young corps, which is raised chiefly from the students in the London hospitals. Surgeon Cantlie, the commandant, reported that there were 404 on the roll, of whom 371 were efficient, and 222 had gone through a week's training at Aldershot. Sir Thomas Crawford remarked that eight or ten companies of such men would be required to complete the army corps at Aldershot, which would indicate how largely the new movement must be extended to provide for the volunteer force as well.

The annual general meeting of the Volunteer Medical Staff Corps was held on Saturday last in the board-room of Charing Cross Hospital; Surgeon-Commandant James Cantlie occupied the chair. The balance-sheet showed a deficit of £230 11s. 11d. The chairman pointed out that this deficiency would be partly wiped out by the extra 5s. per head Government capitation grant, which for the 400 men would amount to £100. He hoped that he would see the erection of suitable head-quarters for the corps begun before long. The scheme which they wanted to carry out eventually included an ambulance-wagon station, with stabling and horses, and, as in New York, he would have horses standing in harness always ready for any emergency.

MEDICAL SERVICE FOR THE VOLUNTEER SERVICE.

Dr. W. P. Mears, Surgeon, Tynemouth Artillery Volunteers, writes: In regard to the letter of "Regimental Surgeon" in the Journal of February 12th, I am glad to say that, in reply to my application recently for leave to join the School of Instruction for Medical Officers at Aldershot, I was informed that the usual allowances would be made—namely, five shillings a day, with travelling expenses, and two and threepence a day in lieu of quarters, which could not be provided. As the next class will be commenced in August, a month when work is, as a rule, less pressing, a good attendance of volunteer surgeons may be expected.

Undoubtedly the "proficiency" examination should be made compulsory for volunteer surgeons as it is for all other volunteer officers. The fact that the surgeons alone should be excepted shows how lightly their services and utility have been regarded, and places them in an undignified position.

The annual inspection of the regimental ambulance, to which "Regimental Surgeon" alludes as desirable, will no doubt be enforced before long, at any rate, in the northern district, where a circular has been issued to the various corps by the general commanding, dealing with the necessity for the provision of ambulance instruction and equipment in each corps.

It would seem desirable that volunteer medical officers should be responsible professionally to a medical staff officer in each district (called, say, inspecting officer of, or officer commanding, the auxiliary medical staff), rather than to the combatant inspecting officer, who must necessarily be more or less unacquainted with the details of the work. Many difficulties in regard to organisation, precedence, etc., at reviews and brigade manœuvres would thus be lessened, and some cohesion introduced amongst our isolated units. The Volunteer Medical Association should be able to give much assistance in raising the service from the low position it now occupies.

VOLUNTEER AMBULANCE DEPARTMENT.

The class which has for some time past been under instruction at the Guildhall at the hands of Acting-Surgeon W. Pearce, M.D., of the Artists' Rifles, including the following medical officers, Surgeon W. C. James, M.D., Honourable Artillery Company; Surgeon O. M. White, and Acting-Surgeon J. W. Jackson, Tower Hamlets Rifle Brigade, and altogether about forty non-commissioned officers, has been officially inspected by Surgeon G. S. Robinson, of the Scots Guards. The efficiency of the class in bandaging and other details of their work was highly praised. Owing to the courtesy of the governors and staff of St. Mary's Hospital, the members of the class have had the privilege of visiting the wards of a large general hospital, and of seeing the practical use of medical and surgical appliances. The next ambulance class will assemble after Easter, on Wednesday, April 13th.

ABOLITION OF RELATIVE RANK.

Sir,—It is hard for plain people to comprehend all the ins and outs of this abolition of relative rank of medical officers of the army. To judge from the statements made in the House of Commons, the abolition is not a matter of moment. But, on the other hand, it is contrary to common sense to suppose that the abolition of the rank would be formally promulgated in a Royal Warrant, and expressly announced in the House of Commons, without some importance being attached to the fact of the abolition. It may be all a muddle and a blunder which some one has made, and no one knows how to get out of; but it is certainly easier to conclude that it signifies something, and what that is time will show. The army medical officers are universally grateful to the Journal and the Committee of the Association for the resolute manner in which this matter has been handled. Mr. Stanhope is a civilian who does not understand all the rules of the Horse Guards; and it is quite possible that he, too, has been imposed upon. Anyhow, the declarations which have been elicited by Sir Guyer Hunter constitute interpretations of the new regulations which will be publicly binding, and which may warn those who dictated the change which Mr. Stanhope is instructed to declare unmeaning from being used for any sinister purpose. What was the original intention of an alteration which, it is announced, makes no change, and of an abolition which abolishes nothing, may never be disclosed. But, if not, the service will owe a debt of gratitude none the less to the Parliamentary Committee of the Association and its Chairman for their precautionary protest, and for the apologetic declarations which they have elicited, that "there is nothing in it," and that no harm is meant. The service has been more than once bitten by alterations of the Army Warrants, and they are naturally "twice shy."—Yours faithfully,

Common Sense.

*** We have received a considerable mass of correspondence protesting against the abolition of relative rank, which, in view of the reiterated declaration of the Secretary for War, we do not publish. This incomprehensible and unexplained incident has caused much excitement amongst army medical officers, and has produced a very bad effect.

THE PUBLIC SERVICES.

B. A. writes: I shall feel obliged if one of your readers will be so good as to compare the relative advantages and disadvantages of the three "services," namely, the Army, Indian, and Naval Medical Services. I am thinking of entering in August next, but for which of the three I have not yet decided.

*** Our correspondent should apply to the Directors-General of the Medical Department, Royal Navy, 44, Spring Gardens, S.W.; of the Army Medical Department, 6, Craig's Court, S.W.; and to the Military Secretary, India Office, St. James's Park, S.W., from whom he will officially receive printed statements of the advantages in pay, emoluments, and prospects of each of the three public services. He will also find at pages 529-31 of the Journal of September 11th, 1886, a detailed statement of the regulations to be observed by candidates for admission into the Naval, Army, and Indian Medical Services. The advantages and disadvantages of each of the three services are now very fairly balanced, but in the selection of one or other as an occupation, much must depend on individual predilection, whether a life at sea, a comparatively fixed career in India, or a life with frequent changes of locality and residence such as belongs to the general army service, is regarded as most to be desired.

UNIFORM OF THE MEDICAL STAFF.

X. Y. Z. writes: In a recent number of the *Army and Navy Gazette* appeared a letter advocating a further change in our uniform. Medical officers on duty invariably wear, or ought to wear, their cross-belts, which are unlike any others in the service, and quite sufficient as distinguishing marks, which fact the writer in question appears to have overlooked. As staff-surgeons we are fully entitled to wear staff-jackets and staff-stripes, with the distinguishing mark noted above, as we in the older days wore the uniforms of some of the best regiments of the army without any difficulty being experienced.

*** Suggestions for changes in the uniform of medical officers are so frequently put forward, and are dictated from such opposite points of view, that no importance can be attached to them. We believe that the officers of the army generally, as well as the medical officers themselves, are satisfied with the existing uniform of the medical staff, and no information has reached us of any change in it being contemplated.

ADMINISTRATIVE APPOINTMENTS IN THE ARMY MEDICAL SERVICE.

SIR,—I wish to draw your attention to the stagnation existing and in prospect for the senior executive officers of the medical staff of the army. Under existing regulations, a surgeon-major has no chance of promotion to the grade of brigade-surgeon until he is on the verge of 50 years of age; two of the last twelve surgeons-major promoted were over 50 years of age, and they were all, on an average, in the 49th year. The average age of the last twelve brigade-surgeons promoted to the rank of deputy surgeon-general was 52 years and 10 months, close upon an average of 53 years; one was just entering his 55th year, and two were over 54. Their average service was over 30 years each. It is thus evident that it is only when an officer is becoming enfeebled and worn out by age and service that he has any hope of attaining to administrative rank. But bad as this condition of the department is, the prospect is still worse. By referring to the official quarterly Army List, it will be seen that the four senior surgeons-general have already enjoyed over 40 years' administrative rank, and that they have in prospect close upon 20 years more, making a total of over 60 years' administrative rank for these four officers! In the case of the deputy surgeons-general, the four seniors on the list have already reaped the advantages resulting from 20 years in administrative rank, and have in prospect over 23 years more, making a total of over 43 years' administrative rank!

The effect of this monopoly in the medical administrative appointments of the army is most prejudicial to the interests of the department, and makes the chances of promotion of the senior executive officers to administrative rank so remote and uncertain that their energies are paralysed, and all hope and zeal deadened within them.

Upon the re-organisation of the Medical Department in 1879, when the present rigid system of selection for the rank of brigade-surgeon was introduced, it was never contemplated that the prizes and chief appointments of the department should be held by a few, and that advancement to administrative rank should be delayed until an officer was rendered less efficient by age and service, and all spirit and energy crushed out of him.

For the efficiency and well-being of the Army Medical Service, it is absolutely necessary that a limit should be placed to the tenure of administrative appointments, and that the reform in this respect that has been found necessary and ordered for the corresponding departments, and for the army generally, should be authorised for the Medical Department also. The advantages of this reform have become so apparent that the new Royal Warrant for the army just published still further limits and fixes the period during which an officer can remain in command of a battalion, namely, four years; whilst, in the Commissariat and Transport staff, a deputy commissary-general of the late Commissariat Department is placed on the retired list on attaining the age of 60 years, or on completing seven years in the rank, whichever may first happen. In the Ordnance Store Department, the same regulations are in force; and in both the Commissariat and Ordnance Store Departments it is enacted that a commissary-general shall retire on attaining the age of 60 years, "or after the completion of five years' service in the rank, whichever may first happen." In the Indian Medical Department, also, the tour of service of a surgeon-general or deputy surgeon-general is limited to five years; it is true they are eligible, if not disqualified by age, for appointment to a second tour of duty in the same grade, or, in the case of a deputy surgeon-general, for employment in the higher grade of surgeon-general; but the chances of re-appointment in the same grade are hampered by so many conditions of unemployed pay and English furlough-pay, whether the officer resides in India or in England, that its occurrence is so rare as to be almost practically unknown.

The higher appointments of the department are intended as a reward for officers who, by their ability and merit, have proved themselves worthy of advancement; but when the regulated flow of promotion is stopped, as is the case in the Medical Department, by the senior officers holding the best appointments for such a lengthened and almost unlimited period, there are just grounds for disappointment and complaint. No matter how distinguished an officer may be, professionally or otherwise, or what administrative ability he may display, he is debarred, by the regulations which at present govern the department, from obtaining a fair share of the promotions which he has a reasonable right to look forward to. The evils of the system are not confined to the officers who suffer by it—it reacts upon the department and service generally by producing a dispirited and disappointed body of officers.

Amendment of the regulations which govern retirement is urgently called for, in order that the existing obstruction may be removed, and that a due proportion of the officers may have the prospect of a fair participation in the administrative appointments of the department. The desired reform could be introduced by limiting the time of service in the administrative rank to such period as, in the interests of the department and of the service, would be considered just and fair—say, five years for a deputy surgeon-general, and seven years as deputy surgeon-general and surgeon-general combined. It could be carried out without injuriously affecting the interests of the administrative officers concerned by adopting the provisions of Paragraph 31 of the last Royal Warrant for the Army Medical Department, dated November 27th, 1879 (Army Circulars, Clause 1 of 1880), whereby officers compelled to retire under somewhat similar circumstances were compensated for any net loss incurred, taking into account, in like manner, the advantages they have derived from the above-named Royal Warrant of November 27th, 1879, from the substitution of 60 for 65 years as the age for retirement, and their consequent promotion to administrative rank so many years earlier than they otherwise would have been.—I have, etc.,

MEDICAL STAFF.

*** We fully sympathise with the grievance complained of by our correspondent, which is one belonging not only to the Army Medical Staff, but to the legal and ecclesiastical, and, indeed, to all professions in which the functionaries are many and the dignities few. The Army List shows, as "Medical Staff" states, that the four senior surgeons-general have together held administrative rank over forty years, or, in other words, that each of them has served rather more than five years as deputy surgeon-general and five years as surgeon-general; but we are hardly prepared to admit this is excessive. On the one hand, there is the necessity, in the interest of the public, of not discarding, within reasonable limits, the advantages of experience and the special training resulting from it, as well as of not increasing the already large amount of non-effective pay in retiring pensions; on the other hand, there is the disadvantage to individuals who are unable to attain the higher positions, and this is an evil which probably is only capable of being met by adequate remuneration in proportion to the length of service.

THE MEDICAL STAFF.

THE date from which Surgeon-Major S. MOORE, M.B., is granted retired pay, with the honorary rank of Brigade-Surgeon, is January 22nd, 1887, and not as stated in the *Gazette* of February 11th, 1887.

The undermentioned Surgeons on probation are appointed surgeons:—F. J. MORGAN, W. H. HORROCKS, M.B., C. H. HALE, H. C. THURSTON, B. H. SCOTT, W. C. POOLE, M.B., O. R. A. JULIAN, G. RAYMOND, M.B., E. A. BURNSIDE, T. M'CULLOCH, M.B., A. B. HINDE, A. Y. REILY, M.B., J. W. COCKERILL, J. RITCHIE, M.B., H. ST. G. S. HORE, S. MACDONALD, M.B., E. CORCORAN, A. O. C. WATSON, M.B., E. W. GRAY, M.B., D. STIELL, M.B., L. E. A. SALMON, G. A. WADE, M.B., J. MINNIECE, M.D., R. H. PENTON, M. P. C. HOLT, W. L. GRAY, M.B., E. G. BROWNE, J. C. MORGAN, H. I. POCOCK, G. HILLIARD, M.B., C. R. ELLIOTT, M.D., C. A. YOUNG, J. W. BULLEN, M.D., J. C. WEIR, M.B., B. J. INNISS, R. C. THACKER, W. N. MURPHY, M.D., S. F. CLARK, M.B., E. M. HASSARD.

Deputy Surgeon-General P. B. SMITH, M.D., has been posted to the officiating administrative medical charge of the Allahabad Division of the Bengal army.

Brigade-Surgeon T. H. WHITE, M.D. (Acting Deputy Surgeon-General) is posted to the officiating administrative medical charge of the Meerut Division of the Bengal army.

Surgeon-Major G. D. BOURKE, on arrival from England, is ordered to do duty at the station-hospital at Secunderabad, Madras command.

Surgeon H. M. ADAMSON, M.B., on arrival from England, is directed to do duty at the station-hospital at Bellary, Madras command.

Surgeon S. L. DEEBLE, who has been doing duty at the station-hospital at Secunderabad, Madras, is to do duty at the station-hospital at Wellington.

Brigade-Surgeon JOHN H. HUNT died at the North Camp, Aldershot, on February 23rd, at the age of 53. He entered the service as Assistant-Surgeon March 10th, 1858; became Surgeon March 1st, 1873; Surgeon-Major, April 1st, 1873; and Brigade-Surgeon, December 12th, 1883. Brigade-Surgeon Hunt served in the Zulu war in 1879, as sanitary officer, and was present at the battle of Ulundi; he was mentioned in despatches for his services, and received the South African medal with clasp.

THE INDIAN MEDICAL SERVICE.

THE services of Surgeon-Major J. O'M. MCDONNELL, Bengal Establishment, are placed at the disposal of the Chief Commissioner of Burma for employment as Civil Surgeon of Mandalay.

Surgeon A. DUNCAN, M.D., Bengal Establishment, officiating in medical charge of the 23rd Native Infantry, is appointed Medical Officer to the 14th Sikhs, *vice* Surgeon-Major J. O'M. McDonnell.

Surgeon J. C. C. SMITH, Bengal Establishment, is appointed to the medical charge of the 16th Lucknow Regiment, *vice* Surgeon-Major G. A. Dundas, who has been transferred to civil employ.

Surgeon-Major H. J. HAZLETT, Madras Establishment, Civil Surgeon, Salem, is appointed to be Surgeon of the Fourth District, Madras, in succession to Brigade-Surgeon A. Porter, M.D.

Surgeon M. E. REPORTER, Madras Establishment, is reported as having passed the examination in Persian by the lower standard.

Surgeon E. W. YOUNG, Bombay Establishment, is permitted to return to duty from sick furlough.

THE VOLUNTEERS.

ACTING-SURGEON G. O. WILLIS, of the 2nd Oxfordshire, has resigned his appointment, which bore date May 28th, 1884.

The undermentioned gentlemen have been appointed Acting-Surgeons to the corps specified.—R. S. F. BARNES, M.D., to the 3rd Middlesex Artillery; Lieutenant C. E. DOUGLAS, M.D., to the 1st Fife (Dr. Douglas has been a Lieutenant in this corps since January 26th, 1884); G. A. BARR, to the 5th (Isle of Wight Princess Beatrice's) Volunteer Battalion of the Hampshire Regiment; and C. J. MACALISTER, M.B., to the 5th Lancashire (the Liverpool Rifle Volunteer Brigade).

BEQUESTS AND DONATIONS.—Mr. Howard and Mr. Charles Morley (sons of the late Mr. Samuel Morley) have each presented to the Deaconess Institution and Hospital, Tottenham, the munificent gift of £2,250, in order that the debt of the third wing of the hospital, lately built, may at once be removed.

MEDICAL SOCIETY OF LONDON.—The annual dinner of the Medical Society of London took place at the Holborn Restaurant on Tuesday evening, March 8th; Mr. R. Brudenell Carter, president, in the chair. There was a very good muster of Fellows, together with several distinguished guests.

MEDICO-LEGAL AND MEDICO-ETHICAL.

LICENTIATES OF SCOTCH AND IRISH COLLEGES.

MR. JAMES GILROY (Birmingham) writes: Relative to your dictum under the above, I wish to respectfully point out that certain bodies called surgical by you have certain rights and immunities in addition to what is implied by their being designated "surgical." The Royal College of Surgeons of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow are empowered by their charters to grant diplomas to practise in Surgery and Pharmacy (*vide* Glenn's *Abstract of Medical Law*, pages 62, 63, and 67). The Fellows and Licentiates of these two corporations are entitled to be registered and to practise surgery and pharmacy in any part of Her Majesty's dominions (Glenn, 67). Greenwood, in his *Laws relating to Medical Men*, states the above as a fact, and refers to the fact of pharmacy being included as the peculiar advantage of these two corporations, distinguishing them from the English and Irish Colleges of Surgeons. Again, at page 238 of Glenn's *Abstract*, we find, relative to apothecaries in England, that "a penalty of £20 may be inflicted on anyone for acting as an apothecary in England or Wales without a certificate from the London Society," but under this there is a note explaining that this does not apply to a person holding a Scotch or Irish diploma which entitled the holder to act as an apothecary either in Scotland or Ireland. This conclusively proves that the Apothecaries' Society of London cannot interfere with either a L.R.C.S.Edin. or L.F.P.S.Glasg.; but it may be observed that, at page 238 of Glenn, it is stated that the graduate of a Scotch university is liable to the penalty. I think the Apothecaries' Society will confirm this statement if you submit it to them.

Under the different qualifying bodies in Glenn's *Abstract* we find that the diploma of R.C.S.Edin. and F.P.S., either Licentiate or Fellow, empowers to practise surgery and pharmacy in any part of Her Majesty's dominions (see Glenn's account of these bodies respectively, in addition to the part quoted about his reference to Apothecaries' Act in England). The Scotch title is, therefore, indubitably Surgeon-Apothecary. This used to be the usual designation adopted (*vide* Sir Walter Scott in his novel of *Rob Roy*, and the biography of Tannahill by the late Alex. Semple, Paisley, in which he says, regarding one of Tannahill's friends, that he was a Surgeon-Apothecary).

*** We have submitted the above communication for the opinion of Mr. J. R. Upton, solicitor to the Association, and clerk to the Apothecaries' Society, who writes: In reference to Mr. Gilroy's communications returned herewith, the point at issue is so clearly raised by [the above] that I will confine myself to dealing with it. In this letter, after quoting p. 238 of Glenn's *Abstract*, he gives the effect of an explanatory note which states that the penalty of £20 under the Apothecaries' Act, 1815, does not apply to persons holding a Scotch or Irish diploma entitling the holder to act as an apothecary either in Scotland or Ireland, and Mr. Gilroy adds, "this conclusively proves that the Apothecaries' Society of London cannot interfere with either a L.R.C.S.Edin. or L.F.P.S.Glasg." Mr. Gilroy has, in my opinion, been misled by the vagueness of the note in question. What that note means, and no more, is that if a Scotch or Irish diploma entitle the holder to do in Scotland or Ireland what the English apothecary (L.S.A.) can do in England, the penalty under the Apothecaries' Act, 1815, cannot be enforced against such person if he practises here as an apothecary. The English apothecary can practise both pharmacy and medicine. The Scotch bodies to whom Mr. Gilroy refers can practise surgery and pharmacy. What is pharmacy? It is the art or practice of compounding substances for the purpose of medicine, but it is not the practice of medicine itself. The two arts are wholly distinct. I repeat, therefore, that the note in Glenn's *Abstract* under discussion is misleading, and if it is to be relied on as an exposition of the law, I say that it is incorrect, and I can only say that the matter stands exactly where it has always stood, namely, that in a purely medical case a Licentiate of the R.C.S.Edin. cannot practise in England without liability to a prosecution under the Apothecaries' Act of 1815, but which prosecution, as I have already explained, would not be entertained by the Society, who refuses to take proceedings against a person on the *Register*, even though only possessing a surgical qualification.

MEDICAL ATTENDANCE IN POLICE-CASES.

DR. RABY (Totnes, Devon) writes: In enclosing a report of the proceedings of the Totnes Town Council, with reference to a claim of seven shillings I made for two separate attendances at the "police-cells," I would request an expression of your opinion on the following points.

1. Is the Council or the county police liable for attendance of a medical officer—the police of the borough being county police?

2. Supposing the parish medical officer is requested by either the police or relieving officer to attend any case at the police-cells, is he entitled legally to claim the usual fee, or is it a part of his duty as parochial officer?

3. Is the parochial medical officer of a borough, by virtue of his office, necessarily obliged to attend any case at the police-cells if so called on by the relieving officer.

I may add that I have hitherto been paid for such attendance, but before the police were transferred to the county.

*** By Article 206 of the general consolidated order of the Local Government Board, the parochial medical officer is required "to attend all poor persons requiring medical attendance within the district assigned to him, whenever he may be lawfully required to furnish such attendance by a written or printed order of the guardians, or of a relieving officer, or of an overseer." A verbal order of the relieving officer would seem, therefore, not to be binding; but if a proper order should be given by the relieving officer to attend a patient in the police-cells, it would be the duty of the parochial medical officer to attend him. In the absence of such an order, the attendance would be professional, and not official, and the practitioner attending would be entitled to his ordinary fee for such cases. The person or body liable to pay those fees would be the person or body at whose request the attendance was given; which must be determined as a question of fact according to what is said in each case.

SPURGIN *v.* NICHOLSON.

MR. CHARLES HARRIS writes: Would you kindly inform the subscribers towards this fund that the defendant paid the debt claimed—£13—into court a few days before the new trial, which should have taken place on February 24th. The plaintiff was refused costs by Judge Ingham. He (the plaintiff) has, therefore, to pay the expenses of the previous trial, with its repeated adjournments; costs for application for new trial, with adjournment; and also for application for fresh costs on February 24th. With counsel's fees, the costs amount to £77 odd; the money collected amounts to £33 14s. 6d. Thus, by an apparently vexatious defence, Dr. Spurgin will have to pay over £40 to recover a debt of £13, whilst a bonesetter and an attorney come out of the affair with flying colours. Further subscriptions:

Dr. Ledlard (Carlisle) .. .. £1 1 0 — Total £33 14 6

ADVERTISING QUACKS.

VOX IN DESERTO writes: By this post I send you a Nottingham paper with two marked advertisements. I wish to know if the editor can be compelled to insert a statement that neither of the names of the "medical" men advertised appears in this year's *Directory?* Surely a fraud is committed on the public when the press is permitted to publish untrue statements under the cover of their being merely advertisements, if no correction is allowed to appear.

*** A newspaper cannot be compelled to insert a correction or contradiction of an advertisement which appears in its columns; but the editor of a respectable paper would probably insert a temperate letter, pointing out that the advertiser had no right to hold himself out as a qualified practitioner. If it can be shown that the advertisement was inserted by the person whose name appears at its foot, he might be prosecuted under the Medical Act for holding himself out as qualified when he is not.

AN INTERLOPER.

A MEMBER writes: Will you kindly give me your opinion on the following case concerning professional etiquette? A. and B. are two practitioners in a small country village of about 1,100 population. A. holds the district union appointment, and B. has been medical officer of health for the whole union for the last seven years. B.'s appointment holds good from March to March; that is, he is yearly reappointed, as he is only M.R.C.S.Eng. About three weeks ago, C., who is a stranger staying at a farmer's two miles from the village of A. and B., sends into the clerk of the union an application for the post of medical officer of health which B. is holding up to March, and which B. hopes to be elected to as usual. This application C. sends in quite unknown to A. and B. An opinion is desired on C.'s conduct in thus applying for a post that is not vacant, which B. has no wish to resign unless forced by C. C. meanwhile is trying to influence the guardians, and is also trying to ingratiate himself amongst A. and B.'s poorer patients. Under the new Medical Act, 1886, is not B., who is M.R.C.S.Eng. of eleven years' standing, qualified to hold Government appointments, such as medical officer of health? If not, many of our well known London surgeons who have only the M.R.C.S. or F.R.C.S.Eng. would be debarred from holding Government appointments.

*** So discourteously unethical a proceeding as that related by "A Member" in regard to the stranger C. is, we need scarcely remark, alike regrettable and reprehensible. With respect to B.'s possible supersession by the intrusive C., as medical officer of health, we are unwilling to believe that the elective body of guardians will so far disregard the claims of an old efficient officer as to vote in favour of a new, untried man, unless the former, from some cause or other, has justly forfeited their confidence. We think, therefore, that B. need be under no apprehension in regard to his re-election; at the same time, we are of opinion that it will be judicious to take precautionary measures to counteract any attempted underhand proceedings on the part of his opponent.

UNPROFESSIONAL CIRCULARS.

SENEX.—With regard to tradesman-like deviations from the well-known custom of the profession, of which the objectionable circular issued by Dr. B., of P—— M——, is an example, until the several colleges, etc., recognise their duties to the profession and to the public, and prohibit unethical practices, under penalty of withdrawal or suspension of the rights and privileges belonging to the diploma held by the offender, we fear there can be no effectual remedy for the evil complained of by our correspondent. It has almost invariably been found that practitioners capable of such questionable conduct are alike insensible to professional remonstrance and editorial condemnation. Nevertheless, we shall continue to protest vigorously against all professional wrong-doers, be who or what they may.

G. S. SCOTT.—The facts stated certainly raise a suspicion of fraud; and if that is proved, it would afford an answer to any action by the vendor for the purchase-money. Before entering on an action, the opinion of some competent counsel, on a full statement of the facts, had better be taken.

UNREGISTERED PRACTITIONERS.

AT the Lambeth police court on Friday in last week, David Thomas, of 19, Peckham Rye, appeared to an adjourned summons, taken out at the instance of Dr. R. H. S. Carpenter (Chairman of the Medical Alliance Society), for having, on January 31st, unlawfully taken a name, title, or addition, implying that he was registered as a medical practitioner under the Medical Act of 1858. In the evidence given upon the first hearing of the case, it was alleged that the defendant had represented himself as "Dr." Thomas, and witnesses were called to prove that. It was, on the other hand, stated that the defendant had only acted as an assistant to a Dr. Day, and that he had not made the representation alleged in the complaint. It was urged that, in answer to a question, he had said that he was "Dr." Thomas. This, however, was denied. The magistrate considered there had been an infringement of the Act, which was to allow the public to distinguish between a qualified and an unqualified medical man. He found that on three or four occasions the defendant had admitted himself to be "Dr." Thomas; and considering the case proved, ordered the defendant to pay a fine of £3 and £4 costs. The magistrate offered to admit of an appeal upon the points of law raised.

BETA writes: A gentleman, holding a position worth £700 per annum, being desirous of insuring his life, I was last month requested by the agent residing in this district to undertake the medical examination, and fill up the necessary papers, his letter concluding with the remark that "the fee would be paid by the company," without, however, specifying the amount of the fee. The papers were duly returned, and a cheque for 10s. 6d. was received last week as value for services rendered. Feeling indignant at such a paltry sum, considering the gentleman's position and income, and the fact of his effecting a policy worth, perhaps, £1,000, I returned the cheque, and informed the agent that my fee was a guinea.

I should like to ask if this is the usual fee, and if you would advise me to adopt legal proceedings in case of the guinea not being paid?

*** The fee seems small, and the office will probably pay if served with a county court summons.

A MEMBER.—A critical examination and careful reading between the lines, so to speak, of the correspondence between A. and B. and C. and B. (a copy of which should have been forwarded with "A Member's" inculpating letter—since, without it, we should have been wrongly impressed as to the real merits of the case—) leave no doubt upon our mind that the inculpated practitioner B. cannot justly be charged with any intentional, much less wilful, interference with the patient referred to—an inference which we venture to think that our correspondent himself cannot fail to deduce from an unbiassed consideration of the facts revealed in the correspondence, endorsed as it is, moreover, by C.'s letter of February 7th to B., in which he courteously exonerates the latter from the imputed charge, as should also, in our opinion, "A Member."

OBITUARY.

DR. EMILE LEUDET.

INTELLIGENCE has been received of the death of this gentleman, which occurred on March 5th, at Rouen, at the age of 61. Dr. Leudet was director of the École Préparatoire de Médecine et de Pharmacie, at Rouen, professor of clinical medicine, corresponding member of the Institut, Chevalier de la Légion d'Honneur, vice-president of the Conseil d'Hygiène de la Seine Inférieure, member of many French and foreign scientific bodies, and author of numerous important medical works. He was partly educated in England, and was well known and much esteemed by English physicians. He last visited England during the meeting of the British Medical Association, when he assisted at the inauguration of the Harvey Memorial at Folkestone. He leaves a widow and one son, who is in the medical profession, and who has also been partly educated in England.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

IN the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons, 5,792 births and 3,776 deaths were registered during the week ending Saturday, March 5th. The annual rate of mortality, which had risen in the three preceding weeks from 19.5 to 21.3 per 1,000, was again 21.3 during the week under notice. The rates in the several towns, ranged in order from the lowest, were as follow:—Bolton, 11.6; Brighton, 14.1; Sunderland, 15.3; Birkenhead, 17.1; Nottingham, 17.5; Leicester, 19.0; Bristol, 19.6; Sheffield, 19.8; Halifax, 19.8; London, 20.2; Derby, 20.5; Leeds, 21.3; Hull, 21.7; Portsmouth, 21.9; Norwich, 21.9; Bradford, 22.3; Salford, 22.4; Birmingham, 22.6; Liverpool, 23.5; Oldham, 24.1; Plymouth, 24.4; Preston, 24.5; Newcastle-upon-Tyne, 24.9; Cardiff, 25.4; Wolverhampton, 26.5; Huddersfield 26.7; Blackburn, 28.1; and the highest rate during the week, 31.2 in Manchester. In the twenty-seven provincial towns the death-rate averaged 22.2 per 1,000, and exceeded by 2.0 the rate recorded in London, which, as before stated, was 20.2 per 1,000. The 3,776 deaths registered in the twenty-eight towns during the week under notice included 152 which were referred to measles, 93 to whooping-cough, 41 to scarlet fever, 34 to diarrhœa, 31 to diphtheria, 31 to "fever" (principally enteric), and 3 to small-pox; in all, 385 deaths resulted from these principal zymotic diseases, against numbers increasing from 341 to 372 in the three preceding weeks. The zymotic death-rate was equal to 2.2 per 1,000. In London the zymotic death-rate was only 1.6, while in the twenty-seven provincial towns it averaged 2.7 per 1,000, and ranged from 0.7 and 0.9 in Halifax and Bradford, to 4.3 in Oldham, 4.8 in Manchester, and 7.0 in Huddersfield. The fatal cases of measles, which had increased from 77 to 140 in the three preceding weeks, further rose to 152 during the week under notice, and caused the highest death-rates in Liverpool, Salford, Manchester, and Huddersfield. The deaths referred to whooping-cough, which had been 125 and 94 in the two previous weeks, were 93 during the week under notice, and were proportionally most numerous in Birmingham, Oldham, Preston, and Plymouth. The 41 fatal cases of scarlet fever showed a decline of 6 from the number returned in the preceding week, and caused the highest death-rates in Manchester, Salford, and Birkenhead. The 34 deaths from diarrhœa showed a slight decline from recent weekly numbers. The fatal cases of diphtheria, which had declined in the three preceding weeks from 42 to 31, were again 31 during the week under notice, and included 19 in London, 2 in Bristol, and 2 in Birmingham. The deaths referred to different forms of fever, which in the four preceding weeks had steadily declined from 40 to 21, rose again during the week under notice to 31, and were proportionally most numerous in Blackburn. The 3 fatal cases of small-pox recorded during the week under notice were all registered in Manchester. Only three small-pox patients were under treatment in the Metropolitan Asylum Hospitals on Saturday, March 5th. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 5.7 per 1,000, and was slightly below the average. The causes of 72, or 1.9 per cent. of the 3,776 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, March 5th, 940 births and 589 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,299,000 persons. The annual rate of mortality, which had been 24.3 and 22.5 per 1,000 in the two preceding weeks, rose again during the week under notice to 23.6, but exceeded by 2.3 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the rate was equal to 17.4 in Dundee, 18.7 in Leith, 19.2 in Greenock, 21.1 in Perth, 22.1 in Edinburgh, 23.9 in Paisley, 25.6 in Glasgow, and 32.4 in Aberdeen. The 589 deaths registered during the week under notice in these Scotch towns included 98 which were referred to the principal zymotic diseases, against 103 and 99 in the two preceding weeks; of these, 32 resulted from whooping-cough, 27 from measles, 19 from scarlet fever, 11 from diarrhœa, 5 from diphtheria, 4 from "fever," and not one from small-pox. These 98 deaths were equal to an annual rate of 3.9 per 1,000, which exceeded by 1.7 the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic death-rates in the Scotch towns during the week under notice were recorded in Edinburgh, Perth, and Aberdeen. The fatal cases of whooping-cough, which had steadily increased from 19 to 33 in the five previous weeks, were 32 during the week under notice, of which 18 were recorded in Glasgow, 5 in Edinburgh, and 5 in Aberdeen. The deaths referred to measles, which had been 16, 23, and 30 in the three preceding weeks, declined during the week under notice to 27, and included 19 in Aberdeen, and 8 in Glasgow. The 11 fatal cases of diarrhœa differed but slightly from recent weekly numbers. The deaths from scarlet fever, which had been 25 and 17 in the two previous weeks, rose again during the week to 19, of which 13 occurred in Edinburgh, and 4 in Glasgow. The 5 fatal cases of diphtheria exceeded by 2 the number in the preceding week, and included 2 in Glasgow and 2 in Edinburgh. The 4 deaths referred to different forms of fever were within 1 of those recorded in the previous week, and included 2 in Glasgow. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 5.9 per 1,000, against 5.7 in London. The causes of 76, or nearly 13 per cent., of the 589 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

IN the week ending Saturday, February 26th, 492 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 29.5 per 1,000 of the population. The deaths registered during the week under notice in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 0.0; Belfast, 31.4; Cork, 24.7; Drogheda, 12.7; Dublin, 30.1; Dundalk, 21.8; Galway, 40.3; Kilkenny, 42.3; Limerick, 35.1; Lisburn, 24.2; Londonderry, 28.5; Lurgan, 25.7; Newry, 21.1; Sligo, 28.9; Waterford, 39.4; Wexford, 17.1. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.0 per 1,000, the rates varying from 0.0 in nine of the districts to 4.8 in Sligo: the 6 deaths from all causes registered in the last-named district comprising 1 from whooping-cough. Among the 135 deaths from all causes registered in Belfast are 2 from typhus, 2 from whooping-cough, 4 from enteric fever, and 6 from diarrhœa; the 16 deaths in Londonderry comprise 1 from diphtheria; and the 17 deaths in Waterford comprise 1 from enteric fever. In the Dublin Registration District, the births registered during the week amounted to 219—109 boys and 110 girls—and the deaths to 208—99 males and 109 females. The deaths represent an annual rate of mortality of 30.7 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 30.1 per 1,000. There were but 16 deaths from zymotic diseases registered, being 14 below the average for the corresponding week of the last ten years; they comprise 2 from scarlet fever (scarlatina), 2 from whooping-cough, 3 from simple continued and ill-defined fever, 5 from enteric fever, 2 from diarrhœa, etc. Forty-seven deaths from diseases of the respiratory system were registered, being 17 under the number for the preceding week, and 10 under the average for the corresponding week of the last ten years; they comprise 32 from bronchitis and 10 from pneumonia or inflammation of the lungs. The deaths of 20 children under 5 years of age (including 13 infants under 1 year old) were ascribed to convulsions. Four deaths were caused by apoplexy, 12 by other diseases of the brain and nervous system (exclusive of convulsions), and 14 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 27 deaths, mesenteric disease 3, and cancer 7. Three accidental deaths and 1 case of suicide were registered. In 40 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

IT appears, from statistics published in the Registrar-General's return for the week ending March 5th, that the annual death-rate recently averaged 31.0 per 1,000 in the three principal Indian cities; it was equal to 23.3 in Bombay, 29.8 in Calcutta, and 41.4 in Madras. Cholera caused 16 deaths in Calcutta, and measles 11 in Bombay; fever mortality was very considerably greater in Madras than in either Calcutta or in Bombay. According to the most recently received weekly returns, the annual death-rate averaged 28.0 per 1,000 persons estimated to be living in twenty of the largest European cities, and exceeded by no less than 6.7 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 30.4, and showed a decline from the still higher rate in the previous week; the 540 deaths included 22 from "fever," 17 from scarlet fever, and 13 from diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 22.6, and ranged from 21.5 in Stockholm to 23.8 in Copenhagen; diphtheria and croup caused 6 deaths in Copenhagen, and 6 in Christiania; whooping-cough 7 in Copenhagen; and scarlet fever 3 in Stockholm. In Paris, the death-rate was 28.1, showing a further increase upon recent weekly rates, and was 6.2 above the rate that prevailed during the corresponding week in London; the deaths included 55 from diphtheria and croup, 45 from measles, 42 from typhoid fever, and 4 from small-pox. The 197 deaths in Brussels, of which 5 resulted from measles and 2 from diphtheria, gave a rate of 22.7, showing a decline from the rate in the previous week. No returns from Geneva have been received since the beginning of this

year. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 26.2, considerably higher than in recent weeks; the several rates ranged from 21.4 in the Hague to 27.2 in Amsterdam; in Amsterdam the deaths included 8 from diphtheria and croup and 7 from measles, and 4 deaths from whooping-cough occurred in Rotterdam. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 27.3, and ranged from 20.9 in Dresden and 23.2 in Berlin, to 32.2 in Prague and 36.8 in Buda-Pesth. Small-pox caused 18 deaths in Buda-Pesth, 3 in Vienna, and 2 in Prague; 11 deaths from typhoid fever were returned both in Hamburg and Berlin; and the greatest mortality from diphtheria was recorded in Hamburg, Breslau, Buda-Pesth, Dresden, and Berlin. The mean death-rate in three of the largest Italian cities was 34.4, and ranged from 29.4 in Venice to 39.6 in Turin; small-pox caused 8 deaths in Rome, 2 in Venice, and 1 in Turin; the deaths in Rome also included 6 from diphtheria and 6 from measles; and 9 fatal cases of measles were returned in Turin. In Cairo the death-rate was 40.8, and in Alexandria 43.7; diarrhœal diseases caused 84 deaths in Cairo and 34 in Alexandria; 13 deaths from typhoid fever were returned in Cairo, and 3 from small-pox in Alexandria. In four of the largest American cities the recorded death-rate averaged 22.8, and ranged from 16.9 in Baltimore to 27.4 in New York. Small-pox caused 3 deaths in New York; measles 49 in New York, and 14 in Brooklyn; and diphtheria showed considerable mortality in New York, Brooklyn, and Philadelphia.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the necessary examinations, were, at a meeting of the Board of Examiners on February 24th, admitted Licentiates in Dental Surgery, namely:

C. H. Buckley, 54, Shaw Road, Oldham; I. Clifford, 8, Grosvenor Street, W.; G. Cunningham, 2, King's Parade, Cambridge; A. B. Dalby, 33, Rodney Street, Liverpool; K. W. McAlpin, 36, Tregunter Road, South Kensington, S.W.; A. F. C. Thomson, 108, Guilford Street, Russell Square; P. R. T. Harris, M.R.C.S., 24, Chapel Street, Penzance, Cornwall.

UNIVERSITY OF DUBLIN.—At the Spring Commencements in Hilary Term, held according to custom on Shrove Tuesday, February 22nd, 1887, in the Examination Hall of Trinity College, the following degrees in Medicine and Surgery were conferred by the University Caput in the presence of the Senate:

Bachelor in Medicine.—T. Bell; S. E. Bouchier-Hayes; P. S. Dobson; R. M. Foley; J. E. Hadden; J. H. R. Glenn; H. F. Lawrenson; A. W. Orr; H. G. Smeeth.

Bachelor in Surgery.—T. Bell; S. E. Bouchier-Hayes; N. M'I. Falkiner; R. M. Foley; H. F. Lawrenson.

Doctor in Medicine.—G. P. L'E. Nugent (*stip. cond.*).

UNIVERSITY OF DUBLIN. — SCHOOL OF PHYSIC IN IRELAND, TRINITY COLLEGE, DUBLIN.—At the Hilary Term Examination, 1887, for the degree of M.B., the successful candidates in order of merit are as follows:

W. I. Buchanan; A. H. S. Todd; R. H. W. Jackson; J. E. Hadden; J. H. N. Glenn; H. G. Smeeth; A. W. Orr; H. F. Lawrenson; R. M. Foley (*supplemental*).

At the B.Ch. Examination, the candidates passed in order of merit as follows:

H. F. Lawrenson; A. H. S. Todd; R. M. Foley; T. Bell.

The qualification in State Medicine was granted to

W. C. Poole; J. W. O'Brien, G. A. Wade (equal); E. W. Gray; J. C. Weir.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received certificates entitling them to practise as Licentiates of the Society on March 3rd, 1887:

Bullock, Roger, M.R.C.S., East Gate, Warwick.
Deacon, George Edward, M.R.C.S., Hethersett, Norfolk.
Fisher, William Featon, M.R.C.S., Bembridge, Isle of Wight.
Gowan, Bowie Campbell, 149, Gloucester Road, South Kensington.
Hubbard, Walter Lovett, 4, the Grove, Clapham Road, S.W.
Williams, William, Esgair Gawr, Dolgelly, Wales.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM GENERAL HOSPITAL.—Resident Surgical Officer. Salary, £130 per annum, with board, etc. Applications by April 2nd to Henry Fox, R.N.

CASTLEREA UNION.—Medical Officer. Salary, £100 per annum, and £10 per annum as Consulting Sanitary Officer. Applications by March 12th to M. Flanagan, Esq.

CENTRAL PROVIDENT DISPENSARY, Bedford.—Medical Officer. Applications by March 19th to W. Jessopp, Esq., Honorary Secretary, 3, St. Paul's Square, Bedford.

CHELSEA HOSPITAL FOR WOMEN, Fulham Road, S.W.—Medical Officer. Salary, £60 per annum, with board, etc. Applications by March 12th to the Secretary.

CHELTENHAM GENERAL HOSPITAL.—House-Surgeon. Salary, £80 per annum, with board, etc. Applications by March 31st to the Honorary Secretary.

CHILDREN'S HOSPITAL AND DISPENSARY, Manchester.—Medical Officer. Salary, £180 per annum. Applications by March 24th to the Chairman of the Medical Board.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Pathologist. Applications by March 21st to the Secretary, 24, Finsbury Circus, E.C.

DERBYSHIRE GENERAL INFIRMARY.—House-Surgeon. Salary, £100 per annum, increasing to £150, with apartments, etc. Applications by March 26th to the Secretary.

DERBYSHIRE GENERAL INFIRMARY.—Resident Assistant House-Surgeon. Applications by March 21st to the House-Surgeon.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell.—Resident Clinical Assistant. Board and lodging. Applications by March 28th to the Secretary.

GLAMORGANSHIRE AND MONMOUTHSHIRE INFIRMARY AND DISPENSARY, Cardiff. Ophthalmic Surgeon. Applications by March 15th to the Secretary.

HASTINGS, ST. LEONARD'S AND EAST SUSSEX HOSPITAL, Hastings.—House-Surgeon. Salary, £70 per annum, with board, etc. Applications by March 25th to the Secretary.

HOLBORN UNION, Mitcham Workhouse.—Medical Officer. Salary, £100 per annum. Applications by March 14th to the Clerk to the Guardians, Clerk's Office, Workhouse, Gray's Inn Road, W.C.

INFIRMARY FOR CONSUMPTION, Margaret Street, Cavendish Square, W.—Physician. Applications by March 12th to the Secretary.

MALE LOCK HOSPITAL, 91, Dean Street, Soho, W.C.—House-Surgeon. Salary, £50 per annum, with board, etc. Applications by March 15th to the Secretary, Lock Hospital, Harrow Road, W.

NOTTINGHAM GENERAL HOSPITAL.—Resident Medical Assistant. Board, lodging and washing. Applications by March 16th to the Secretary.

NARBERTH UNION.—Medical Officer for District No. 4. Salary £45, with extra fees. Applications by March 19th to J. Thomas, Esq.

OWENS COLLEGE, Manchester.—Senior Demonstrator in Physiology. Stipend, £150 per annum. Applications by March 21st to the Registrar.

OWENS COLLEGE, Manchester.—Junior Demonstrator in Physiology. Stipend, £100 per annum. Applications by March 21st to the Registrar.

ROYAL FREE HOSPITAL, GRAY'S INN ROAD, W.C.—Junior Resident Medical Officer. Applications by March 23rd to the Secretary.

ROYAL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL.—Assistant House-Surgeon. Salary, £60 per annum, with board and residence. Applications by March 24th to the Secretary.

ROYAL SOUTH HANTS INFIRMARY, Southampton.—Assistant House-Surgeon. Applications by March 21st to the Honorary Secretary.

SHEFFIELD FRIENDLY SOCIETIES MEDICAL INSTITUTION.—Resident Medical Officer. Salary, £170 per annum and fees. Applications to W. Johnson, Esq., 63, Nottingham Street, Sheffield.

SMALLBURGH UNION RURAL SANITARY AUTHORITY.—Medical Officer of Health. Salary, £60 per annum. Applications by March 17th to Fairfax Davies, Esq., North Walsham, Norwich.

STOCKPORT INFIRMARY.—Assistant House-Surgeon. Salary, £70 per annum. Applications by March 15th to the Honorary Secretary.

UNIVERSITY OF LONDON.—Examiners in Medicine. Applications by March 29th to the Registrar.

UNIVERSITY OF GLASGOW.—Examiners in Botany, Zoology, Chemistry, and Materia Medica. Applications by March 15th to Dr. Anderson Kirkwood, 145, West George Street, Glasgow.

WANDSWORTH DISTRICT BOARD OF WORKS, Putney Parish.—Medical Officer of Health. Salary, £75 per annum. Applications by March 21st to the Clerk to the Board, Battersea Rise, S.W.

YORK COUNTY HOSPITAL.—Assistant House-Surgeon. Salary, £50 per annum, with board and residence. Applications by March 23rd to the Secretary.

MEDICAL APPOINTMENTS.

BARRY, E. J., M.D.Ed., M.R.C.S., appointed Honorary Medical Officer to the London Skin Hospital, Cranbourne Street, Leicester Square.

BLUMER, F. Milnes, A.B., M.B., appointed Honorary Physician to the Staffordshire General Infirmary, Stafford, *vice* C. H. Crawford, M.B., resigned.

BRADBURY, A. F., M.B., B.S., appointed District Surgeon to the Salford and Pendleton Royal Hospital, *vice* J. Pilkington, M.R.C.S., promoted to the office of House-Surgeon.

BRANSON, J., L.R.C.S., M.R.C.P.Ed., appointed Medical Officer for the Rotherham District of the Rotherham Union.

BULLOCK, B., M.R.C.S., appointed House-Surgeon to the Birmingham General Hospital.

CLARK, D. McC., L.F.P.S.Glas., L.R.C.P.Ed., appointed Medical Officer for the Auston District of the Worksop Union.

COLE, W. R. N., M.D., M.Ch.Irel., appointed Medical Officer for the Seventh District of the Bodmin Union.

COOKE, B. T. E. B., F.R.C.S.Ed., L.R.C.P.Ed., re-elected Honorary Medical Officer to the Scarborough Sea-Bathing Infirmary.

GRIFFIN, A. W., M.R.C.S., L.R.C.P.Ed., appointed Parochial Medical Officer for the Rotherfield District of the Uckfield Union, *vice* M. Mackintosh, M.R.C.S., L.S.A., deceased.

HACKETT, H. E., M.R.C.S., L.R.C.P.Lond., appointed Medical Officer for the Sixth District of the Chorlton Union.

HARRIS, H. E., M.R.C.S., L.R.C.P., appointed Assistant Medical Officer and Dispenser to the Paddington Workhouse Infirmary, *vice* T. E. Hillier, M.B., resigned.

HOLTHOUSE, Edwin H., M.A., M.B.Cantab., F.R.C.S., appointed Assistant-Surgeon to the Western Ophthalmic Hospital.

JONES, John Owen, M.B., C.M.Edin., appointed Medical Officer to the St. Asaph Union, *vice* Robert Roberts, L.R.C.P., deceased.

JONES, J. T., M.R.C.S., L.S.A., appointed Medical Officer for the Laughton District of the Rotherham Union.

KING, C. G., M.B., C.M.Glas., appointed Sanitary Medical Officer for the Parish of Eastwood, Glasgow, *vice* W. Walker, M.D., resigned.

LEWIS, Percy G., M.R.C.S. and L.S.A., late House-Physician to King's College Hospital, has been appointed Junior House-Physician to the Royal Hospital for Diseases of the Chest, City Road, E.C.

LLEWELLYN, E. G. F., L.F.P.S.Glas., M.R.C.S., appointed Medical Officer for the Sixth District of the South Molton Union.

LYTH, J. B., M.R.C.S., L.R.C.P.Ed., elected Honorary Surgeon to the Rotherham Hospital and Dispensary, *vice* H. Foote, M.D., deceased.

MARSHALL, Arthur, M.R.C.S., appointed Resident Clinical Assistant to the Hospital for Consumption, Brompton.

POCOCK, W., M.R.C.S., L.S.A., appointed Honorary Medical Officer to the London Skin Hospital, Cranbourne Street, Leicester Square.

POTTER, E. F., L.R.C.P.Lond., M.R.C.S., appointed Medical Officer to the Victoria Hospital for Sick Children, Hull, *vice* J. Souther, L.R.C.P.Lond., M.R.C.S., resigned.

SEMON, Dr. F., appointed Laryngologist to the National Hospital for the Paralysed and Epileptic, Queen Square, W.C.

SMITH, Anderson, M.D., appointed Resident Clinical Assistant to the Hospital for Consumption, Brompton.

SMITH, J. A., M.B.Lond., M.R.C.S., appointed Resident Clinical Assistant at the Brompton Hospital for Consumption and Diseases of the Chest.

STARTIN, J., M.R.C.S., elected Honorary Medical Officer to, and Lecturer at, the London Skin Hospital, Cranbourne Street, Leicester Square.

STYAN, T. G., M.A., M.B., M.R.C.S., appointed Honorary Surgeon to the Ramsgate and St. Lawrence Royal Dispensary, *vice* R. Lyddon, M.R.C.S., resigned.

TAYLOR, J. W., M.D., M.R.C.S., re-elected Honorary Medical Officer to the Scarborough Sea-Bathing Infirmary.

TOWNSEND, S., M.R.C.S., L.S.A., appointed House-Surgeon to the Birmingham General Hospital.

TYRRELL, E. M., M.B., C.M.Edin., appointed Junior Assistant Medical Officer to the Garlands Asylum, Carlisle, *vice* T. D. Greenlees, M.B., resigned.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—MEDICAL SOCIETY OF LONDON. Mr. E. H. Fenwick: On Urethral Clottage. Mr. Bruce Clarke: On Certain Conditions of the Bladder that simulate Stone in Children.

TUESDAY.—PATHOLOGICAL SOCIETY OF LONDON, 8.30 P.M. Mr. Doran: Fibroma of Ovarian Ligament. Mr. Fenwick: Metastatic Carcinoma of Prostate. Mr. Clutton: Large Dermoid Cyst over Sternum. Mr. Eve: Cystic Disease of Testicle. Dr. Pye-Smith: Gall-Stone which caused Obstruction of the Bowel. Mr. Bowlby: Multilocular Cystic Epithelioma of the Jaw. Dr. Silcock: Cystic Epithelioma of Neck. Mr. Hutchinson, Jun.: Alveolar Ulceration in a Child: General Tuberculosis. Card Specimens.—Mr. Godlee: Malignant Disease of an Undescended Testis, with Secondary Growths. Mr. Stonham: Pelvis of a Child with a Persistent Fœtal Condition of Peritoneum. Mr. F. W. Clark: Sub-pleural Lipoma of Diaphragm. Dr. A. H. Robinson: Drawings of Charcot's Joint-Disease. Dr. Ormerod: Subdural Hæmatoma.

THURSDAY.—HARVEIAN SOCIETY, 8.30 P.M. Dr. W. H. Day: Habitual Constipation in Children and the Methods of Treatment. The President: A Case of Congenital Syphilis.

PARKES MUSEUM OF HYGIENE, 5 P.M. Dr. E. F. Willoughby: George Varrentrapp, Sanitarian and Philanthropist.

FRIDAY.—SOCIETY OF MEDICAL OFFICERS OF HEALTH, 7.30 P.M. Dr. W. N. Thursfield: (1) A Contribution on the Etiology of Congenital Deformities, with a special bearing on State Medicine. (2) A Recent Case of Contagious Carbuncle in the Human Subject.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement.

MARRIAGES.

ROULSTON—HORSFALL.—March 3rd, at the Parish Church, Lillington, Leamington, by the Rev. J. May Ward, M.A., Vicar, William Roulston, M.D., of Wakefield, to Marian Florence, second daughter of Francis Horsfall, L.R.C.P. and M.R.C.S., of Newland House, Lillington, Leamington, formerly of Wakefield.

LLOYD-MORGAN.—On the 3rd of March, at the Parish Church, Llanarthney, by the Rev. Prebendary Harries, Vicar, Morgan Lloyd, L.R.C.P., M.R.C.S., Vale Villa, Pontyberem, to Mary, eldest daughter of the late David Morgan, Bank House, Lampeter.

POISONED BY TINNED MEAT.—A family, consisting of father, mother, and several children, at Grimsby, who were taken seriously ill after having partaken of tinned meat, were pronounced by the medical man to be suffering from the effects of ptomaine poisoning. Emetics were administered, and the family, it is satisfactory to state, are progressing favourably.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY ..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY .....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's —1 30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY .....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY .....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, M., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

QUERIES.

DRESS OF ADMIRALTY SURGEONS.

M.D. wishes to know whether an Admiralty surgeon and agent can wear uniform, or not. And, if he can, where is information to be got as to the proper kind?

WATERING-PLACE ON THE SOUTH COAST.

NORMAN WALKER, M.B. (Dalston, R.S.O., Cumberland), writes: I shall be much obliged if any of your readers will let me know of some watering-place on the south coast where the climate is warm and the country comparatively level. My patient suffers from double aortic and mitral disease, and chronic Bright's disease, and has just recovered from pneumonia and empyema. He would like to be within easy reach of some lively place where he could find some amusement.

TREATMENT OF CORNS.

CHIROPS asks for advice in the treatment of a corn on the inner side of the little toe: it does not differ in appearance from the skin immediately surrounding it; it is not raised, and is not tender on manipulation, but the moment the foot is placed in the most capacious shoe or boot it causes pain. The usual caustic and softening remedies have been used without avail; would electrolysis be of any use in such a case?

ANSWERS.

DR. HENRY R. TOWNE (Stamford, Conn, U.S.A.) is referred to the Hydro-therapeutic establishment, The Hall, Bushey, near Watford; or to Dr. Watson's hydropathic establishment, Bournemouth, of which full particulars are to be found in our advertising columns.

TREATMENT OF OBSTINATE CONSTIPATION.

DR. JOHN LUCAS (Ramsgate) writes: I would suggest to your correspondent, "O. R. T.," to try the stimulating action of massage on the intestines, by causing the abdomen to be gently kneaded, in the direction of the colon, regularly once daily at a certain fixed time, the patient being got to solicit nature thereafter; this should be continued for some little time, until, in fact, regular natural action of the bowels is the result. The patient should get into the habit of soliciting nature at the same hour daily, even if the solicitation be unsuccessful sometimes. The kneading may be aided by some sort of embrocation, such as camphorated oil or oleum sinapis. The salutary effects of physical exercise and suitable diet would materially promote the desired result.

WILLIAM OSBORN, M.D., 1791.

J. D. writes:—Callison mentions a Dr. William Osborn, Lecturer on Midwifery, and physician to a lying-in hospital in London, as the author of the following works: *An Essay on Laborious Parturition*, etc., 1783; and *Essays on the Practice of Midwifery*, etc., 1793; second edition, 1795. Perhaps this is the physician "D. V." inquires about.

INSTRUCTION IN MASSAGE.

X. Y. Z.—Lectures and demonstrations are given at the West End Hospital for Epilepsy, Paralysis, and Diseases of the Nervous System, 73, Welbeck Street, Cavendish Square.

NOTES, LETTERS, ETC.

AN OLD SUBSCRIBER and MEDICUS have not enclosed cards.

THE FINAL L.R.C.P.

LÆTUS complains that the final examination for the Licence of the Royal College of Physicians is fixed for Easter Tuesday—an obviously inconvenient day.

UNQUALIFIED ASSISTANTS.

DR. JOHN L. BINGHAM (Alfreton) writes: "Physician's" letter (p. 491) is no answer to mine. I dare not venture to doubt that, after the six months' course, thirty-one labours, there must have been a most stringent examination, and, perhaps, in many more cases besides "Physician's." Here is a man in this district, without any hospital practice or lectures, who received his licence in the way I said. It may be one of the evils resulting from fees being a perquisite. The latter part of "Physician's" letter does not require notice.

CHINESE ACUPUNCTURE IN LIVER AFFECTIONS.

DR. M. R. RYAN, M.S., writes: In No. 148 of the *Philosophical Transactions*, published June 10th, 1683, there is an article giving an account of a book by one Wilhelmi ten Ryne, M.D., which treats, among other subjects, of acupuncture as practised in China and Japan. At page 232 the account says: "The needle is chiefly used in diseases of the head and lower belly, and is applied to the head in headaches, etc., to the abdomen in colick, dyssentery, want of appetite, hysterical disorders, surfeits, pains of the belly and joynts, *obstructions of liver and spleen, etc.*"

COMMUNICATIONS, LETTERS, etc., have been received from:

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BOOKS, ETC., RECEIVED.

Before Trial: What should be done by Client, Solicitor, and Counsel. By Richard Harris. London: Waterlow Brothers and Layton. 1886.

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Clinical Studies of Disease in Children. By Eustace Smith, M.D. London: J. and A. Churchill. 1887.

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AN ADDRESS
ON
THE PHYSICAL TRAINING OF GIRLS.

Delivered to the Gloucestershire Branch of the British Medical Association, February 1887.

By RAYNER W. BATTEN, M.D.Lond., M.R.C.P.,
Senior Physician to the County Infirmary, Gloucester.

Gentlemen,—Allow me at this, the earliest opportunity, very genuinely to thank you for the compliment you have paid me. It would indeed show that I had failed entirely both to appreciate that compliment aright and to understand my own true position, did I attempt to-night to deal with any medical subject at all exhaustively; I shall therefore content myself with simply introducing the following question: What are the causes of, and the remedies for, the anæmia of young women? using the word "anæmia" as including all those cases of so-called anæmia, oligæmia, spanæmia, and chlorosis which are not associated with marked organic disease.

Most striking is the extreme commonness of this condition, not merely amongst those who are consciously unwell, but very largely too amongst those who are in regular daily work, and to themselves in apparently good health. To me it is almost saddening to note the colourless faces of so many of the young women who pass me in the streets, of the servants in our homes, of the nurses in our hospitals, of those in workshops and houses of business, and of others, too, who throughout their lives seem to have had around them nothing but healthy influences. A simple colour-test will tell much; for just as blue is the favoured colour of the self-conscious convalescent, so, too, is very marked the large proportion of those wearing strong varieties of red in bonnet or bow, who do so to bring warmth to a face utterly devoid of it; and also the number of those similarly wearing shades of green, in the vain hope of bringing out its complementary colour on the cheek, and reducing the general yellow tone of a chlorotic complexion.

The importance of this question cannot be overrated; it is unnecessary for me to touch upon the symptoms of this anæmia—the vascular disturbances, the caprices of digestive, blood-forming and reproductive organs, and the more serious revolt of the sensory and emotional, and even of the volitional and intellectual, centres—but it is needful to point out that this condition, once set up and long continued, tends to become the normal state; and that when thus established, it may undoubtedly be transmitted. If this be so, and if it be true also that the offspring largely and chiefly take their physical characteristics from the mother, then indeed a very serious responsibility is thrown upon our own profession.

There is a very natural tendency to consider sexual evolution and the reproductive organs as the cause and the seat of mischief in female anæmia; but, on fuller consideration, there are facts in these cases not to be thus explained, and probably it is more true to say that there is in many girls a condition of constitutional instability which, intensified at the youthful climacteric, renders them peculiarly sensitive to external influences, and the question, therefore, with which we are now concerned is, What has produced this mobility and unstableness? Of heredity as a cause there can be no doubt; constantly we find the girls in a family exhibiting that anæmic condition which has been a life-long characteristic of the mother, and that, even when the girls have been placed under varied surroundings; we find them also following her in the habit of early menstruation, one of the commonest precursors of chlorosis; and we see, too, the anæmic and neurotic consequences of inherited syphilis and gout.

The effect of climate, too, is clear. I need not dwell upon it, but would point out that in valley-anæmia we have a survival of a malarial condition; the "ague climate" of yesterday has become the "relaxing climate" of to-day. Let me read to you an extract from the letter of an intelligent salmon fisherman residing in one of the Severn side villages: "By what I know of my forefathers, ague prevailed here as late as sixty or seventy years ago. The name of ——— was a terror to strangers dreading the ague; even the poor hirelings at Gloucester Mop would shun the place, and, if heedlessly engaged, would refund their earnest money when acquainted with the direful consequences of living here. I remember the old inhabitants would hasten home at sunset to evade the chill evening, fearing the ague. Since the draining of the land it has gradually subsided." True, ague itself has gone; in five-and-twenty years I have only seen one case contracted in the Severn vale; but it is only necessary to look at the nature of the grasses growing in the low-lying lands to recognise that the drainage and storage of water have not yet been carried out to their full and proper extent.

Before passing to that which, in my opinion, is the great predisposing cause of this constitutional instability, let me mention some of the exciting causes which might be brought under control. There are unhealthy occupations in ill-ventilated and crowded workrooms, and young women working for pay and for length of hours that no man could stand; there are wretched homes, with insufficient light and air and food; there are little children, themselves weak and still growing, taking charge of younger children, and carrying them about until the altered pelvis, and the yielding spine, and the flattening foot only too clearly tell of the injury that is being done; these and similar evils might certainly be remedied or lessened by wise legislation, and by increased powers to the medical officers of health. One tithe of the money now spent on human destruction, if devoted to the providing of healthful homes and health-giving recreations, would put an end to many a social question that now finds no solution.

But some of the causes named would affect both sexes equally, and hence we must look further for the cause of this instability of constitution in women. There is no difficulty in seeing it, for most evidently it is to be found in the one-sidedness of girls' education. There is the cultivation of the intellectual and emotional sides of their nature; but there is little, or at best no adequate, training and development of the physical. It is not, as some would say, that the mental training of girls is really too high, or the school-pressure too great; it is merely that they become so because there is not at the same time all that is needed to meet the physical requirements of the system. To me it seems that the education of girls to-day combines the double aim of education—mental training and knowledge-acquisition—far more perfectly than that given to boys; whilst I cannot, provided the individuality of each child is fully considered, cry down the examination system, the only one which can test the teacher's powers and the children's progress. The education and the examination are safe enough to the many, if there be also sufficient food and wise and full physical training. With proper physical health, the more educated the woman the better; for it is chiefly through the development of the intellectual, that the emotional and animal parts of the human nature are kept under control.

During the last five-and-twenty years an enormous change has taken place in girls' education. The old dame school has given place to the Board school, whilst high schools and ladies' colleges (which I shall now include in the one term "ladies' colleges") are clearly soon to supply the needs of those amongst the upper classes who cannot be educated at home. But, whilst we find that the education has become more thorough, and recognise too that it is destined to become still more so as women enter more and more into business competition with men, we anxiously notice also that there is little or no corresponding change in the physical training. Compare for a single moment the bodily training of any public boys' school with that of the most wisely conducted ladies' college, and there ceases to be any surprise at enfeebled health and mental break-down; the only marvel is that the condition is not invariable.

The physical training of girls is clearly a far more difficult question than that of boys; for the majority of boys are boarders, and, as a matter of course, readily conform to the playing traditions of the school; and again, when they are day-boys, they are allowed, from a very early age, to go where they please out of school hours, and hence they easily find companions and recreation; and, lastly, social considerations do not with boys enter into the question. But with girls all this is different. If they are boarders, there are no playgrounds of adequate size; and if they are day-scholars, in very few instances are there either places to play in or companions to play with; whilst in most of the ladies' colleges there would be but few hours to spend in recreation, even were it otherwise possible. I grant at once that there has been a change for the better. Girls are allowed much more freedom than formerly; there is much more constant mixing of the sexes; whilst amusements are now sanctioned which would have scandalised the last generation.

But let us inquire what is really being done in the matter. I have by me letters from abroad, from our own Education Department, and from women who have gone through our ladies' colleges, and who have taken high University honours. I have purposely avoided making inquiries of the governing bodies or the heads of these colleges, for naturally they are prejudiced in favour of the form of management which therein prevails, and believe implicitly in the

system of education by which they have made their own very marked success. I shall mention no names, and shall not even pointedly allude to some very honourable exceptions, but shall merely state that which represents the almost invariable custom.

From the Education Department I received a letter, from which I quote all that is important: "My Lords are not aware of any evidence as to the physical training of girls having been taken by any authoritative committee.....No compulsory rules are laid down by the Department as to the nature or amount of the physical exercises in girls' schools, nor has any special report of this kind of training been issued by the Education Department."

We find, then, that throughout this country, in the girls' elementary schools, whilst the Government carefully tests the mental progress, not one word is said, and no official oversight of any kind is considered necessary, in the matter of the physical development of the children. The little that is done is due entirely to the wise action of a few School Boards; the children take the matter into their own hands, and their physical health depends upon the recreation of the streets.

America and the continent of Europe are not very much, if at all, in advance of ourselves. And in our ladies' colleges what do we find? I do not know of more than one which has such a thing as a proper playground; whilst a leading college, if not the first in the country, with abundant means and ample opportunities, makes no pretence of having any playground at all. A gymnasium exists in almost all; and there is seemingly compulsory drill in them for twenty minutes twice in the week; but whilst in some a suitable costume is the rule, I will ask you to imagine the value of twenty minutes callisthenic exercises to a girl with her skirts tied tightly round her knees by a string or elastic cord, as is the custom at one of our leading colleges. Moreover, even this small benefit is denied to the senior girls, who need it most, for those who are going in for the higher examinations can easily obtain exemption.

The drill twice or thrice a week, and the hour's walk, so insufferably dreary, and ranking neither as exercise nor recreation, is nearly all that is done to promote physical health in our college boarding-houses during the greater part of the year. In summer there may be tennis for the few, and at other times there may be also an evening game or dance in the unwholesome atmosphere of a gas-lit room.

To the girls themselves such a state of things must be both physically and morally harmful. What would be the physical and moral tone of our boys' schools were it not for the sports and games? But there is an injury, too, to the college itself, for it is in the playground and not in the class-room that the boy acquires that pride in his school and warm feeling of attachment to it which so largely form the reason of its continued success. Let a ladies' college remain as now, nothing but a teaching-place, with comparatively few pleasant memories gathering around it, and however successful it may be to-day, that success may at any time be ruined by the action of comparatively trivial causes.

Let us consider what physical training is really necessary; and I would here point out that such training needs to be scientifically considered and intelligently carried out, so that all groups of muscles and all parts of the frame may equally in turn be exercised; no one amusement or exercise will do everything; look at the contracted chest and the stoop of a mere cyclist, or notice even the build of a boating man or cricketer, and it will at once be seen that more than one form of exercise is needed for full and perfect development. Moreover, it must be understood that girls must be treated as individuals; there are exercises suitable to some which others cannot safely indulge in; whilst amongst the elder girls there will be times when all violent exercise is undesirable; these are matters easily arranged.

First, then, there must be drill and a gymnasium, with a lady-instructor, thoroughly trained in some scientific system, such as the Swedish; and this gymnasium-work must be compulsory for every girl in the college.

But, secondly, drill and callisthenic exercises are not enough; for—they are not practised in the fresh air or sunlight—they are mere exercise, not recreation, doing much to develop muscles and stimulate internal organs, but not influencing the mental faculties, or rousing the animal spirits; and they can do nothing towards the creation of a feeling of pride in the school itself, or towards the breaking down of cliqueism and social narrowness. For physical health there must be recreation as well as exercise; and at present, in our ladies' colleges, the exercise, with the exception of tennis, has little of the recreative element in it. I need not specify what athletic sports or games are to be indulged in: swimming, fencing, cricket, football, fives, tennis, games of speed and endurance, such as prisoners' base, cross-touch, and many others; but it would be well, and this could easily be arranged, that some of these games should be played under "Ladies' Association rules."

But first there must be college playgrounds—not dreary places "closed in by narrowing nunnery walls"—but large spaces, open to the fresh air and sunlight, and surrounded only by a suitable iron railing; so that, under and together with their teachers, the girls may play perfectly freely, and girls and passers-by alike become accustomed to the playing-dress.

Secondly, all girls must be made to play in suitable "flannels," for there can be no proper play or full physical development in the ordinary dress; whilst the wearing of such "flannels" will ensure the necessary thorough change on the return home; the extra handkerchief round the neck, and, in the case of the elder girls, a longer skirt put on over the playing-dress at the close of the game, will be all that is needed for the walk home. I yield the latter in deference to public opinion; I attach no high moral value to it myself, for I have known some latitude of conduct even with the fullest length of petticoat.

Thirdly, subject to health conditions, every girl must be made to play; and two half-holidays a week at least should be given for that purpose.

Fourthly, the games must be varied; no one continues for long to do that which they are conscious of not doing well; every girl will soon find out her strong and weak points in play as well as in work; and if the game is to be a recreation, she must be allowed to choose her own form, the only obligation being that she is to play, and that no books or work are to be brought on the playground.

What are the objections to such a course? 1. That girls will cease to be "lady-like," and that the "figures" will be spoiled. As to the one point: there are no girls more pleasant in themselves, or making more genuine ladies, than those brought up in a family of brothers, and who have consequently shared in and enjoyed boyish sports and amusements; as to the other, this is merely a matter of opinion, for nothing is more certain than that high physical training will lead to good figures. There might be a trifling increase in the size of the waist, but this would soon be pardoned; young husbands will soon learn that a twenty-inch waist is a fleeting thing, and without "staying" power of any desirable kind; and older ones will feel that a slightly larger waist, and a crease here and there with the natural movements of an almost stayless body, are as nothing when compared with the mental energy, the moral brightness, and the muscular vigour that come with a healthy body. 2. There are social difficulties. These need not be greater in the playground than in the class-room; let it be the understood thing that in both places all are equal, and that in the playground all are perfectly free to play together, but that outside the college precincts they are not expected to take notice of one another. No parent will object to such a rule who realises the gain resulting from it.

Lastly, it will be said that there is no time, and this plea carries with it its own condemnation; what is true of "Jack," according to the rhyme, is equally true of girls; there cannot be the highest mental brightness without playtime and play.

Wisely regulated recreation will involve no real loss of time; far from it, there will be a real gain; for the quick bright spirit of the healthier child will carry her through her work with a thoroughness and an ease which will more than compensate. Let two half-holidays a week be the rule of the colleges; and, if necessary, let some of the educational subjects give way to allow of this. If one-half of the time now given by many girls to piano-learning were devoted to healthy recreation instead, both music and the world generally would alike benefit. On the one hand, there would no longer be "heard in the land" an immense amount of so-called music of purely mechanical value; and, on the other, there would largely be an end to the hysteria and neuroses which are the curse of the present day. We should daily hear less and less of young women condemned for months to lie upon the couch; whilst all the skill and ingenuity now expended in inventing new forms of pessaries would be diverted into other and healthier channels.

I have but imperfectly sketched out changes which, in my opinion, are absolutely demanded by reason of the alteration which has taken place in girls' education and woman's work;—no reform begins from below; private families and small schools cannot take this matter up; the initiative must come from the ladies' colleges. No reasonable reform, with common sense on its side, can long be resisted; and, if the colleges will but move, there will soon not be a private school in which high physical training is not invariably the rule. To bring this about is a duty thrown upon our own profession; the heads of colleges have not themselves felt its need or realised its advantages; they can scarcely, then, be expected to be very enthusiastic in its favour.

In this Branch, there are those who are officially connected with some of the finest educational establishments in the kingdom; and this must be my justification, if excuse at all is necessary, for my bringing this subject before the Association to-night.

OBSERVATIONS ON SUPRAPUBIC LITHOTOMY.

A Paper read before the Harveian Society of London, February, 1887.

By Sir WILLIAM MAC CORMAC, F.R.C.S.,
Surgeon to, and Lecturer on Surgery at, St. Thomas's Hospital.

(*Concluded from page 555.*)

Indications for Suprapubic Lithotomy.—In pre-anæsthetic days, an operation which could be quickly completed possessed enormous advantages, and the lateral operation is performed in favourable cases and by accomplished operators more rapidly, perhaps, than any other great operation in surgery. But in some respects it is a dive in the dark; important structures may be and have been wounded; and we do not see what we are cutting. In case of hæmorrhage, the bleeding is difficult to arrest, and in children the parts are so small that there is a considerable risk of pushing the neck of the bladder before the tip of the finger, in which case the viscus will not be reached, and the stone may never be found. The high method occupies more time, but everything is visible while being divided; there is no considerable hæmorrhage, and that which does occur can be promptly and readily checked. Dulles (*American Journal*, July, 1875, and April, 1878) speaks favourably of the high operation, and thinks it merits further trial; but he finds by statistical comparison that, in regard to mortality, the suprapubic is far less favourable than the lateral operation for stones below one ounce in weight. There is but little difference where the calculus is between one and two ounces; but for calculi above two ounces the high operation is much more favourable than the lateral. Sir Henry Thompson formulates a similar opinion when he says, "I believe in the hands of most surgeons the suprapubic proceeding is a safer and far easier method than lithotrity for hard stones of an ounce and a half to two ounces in weight. A stone of two to three ounces cannot be extracted by the lateral method without much tearing and bruising of the neck of the bladder. No proceeding is comparable to the suprapubic for large stones." It is generally admitted that for large calculi the lateral operation is so dangerous as to be practically set aside in favour of the high method, and we have to consider its applicability to cases of smaller stones in adults, to women, and to children. But for adults lithotrity is generally applicable for ordinary-sized stones. It is an operation very safe as regards risk to life, yet of difficulty in unpractised hands, while in all there is a liability to recurrence of the stone—according to statistics, about 1 in 7. It may be fairly assumed that the larger number of these cases of relapse are due to the fact that some fragment has been left behind.

After lithotomy recurrence is very rare; only 40 out of 1,030 individuals were operated on a second time. In Sir Henry Thompson's cases of lithotrity there was recurrence in about 13 per cent., which constitutes a serious drawback to the operation. Up to an ounce and a half in weight, lithotrity is superior to lithotomy, so far as mortality is concerned; above that weight, say from an ounce and a half to three ounces, lithotomy is probably more safe and successful.

Surgeon-Major Keegan has lately demonstrated (*Lancet*, 1886) that lithotrity may be successfully employed in quite young children, and also for very much larger stones than have hitherto been dealt with in this manner. He has successfully removed a mulberry calculus of four ounces in weight, and a phosphatic one of eight ounces, by lithotrity in a single sitting.

He found the urethra in boys larger than has hitherto been supposed, and that a No. 7 lithotrite will pass into a bladder of a boy of 2 years. A No. 6 catheter will even enter the bladder of a child 1 year old, through which a fair sized stone may be evacuated. He does think the lateral operation is frequently followed by emasculation, and while he admits the suprapubic to be the easier method in young children, he does not consider it so successful. Freyer, for instance, has cut 143 boys for stone in India by lateral lithotomy without a death, and Dr. Keegan does not think that in India the high operation will obtain much vogue as a substitute either for lateral lithotomy or lithotrity.

The usual indications for the performance of the high operation are the presence of a large stone in a contracted bladder, a calculus projecting into the urethra, encapsulated and very hard calculi, cases of numerous stones, foreign bodies which cannot be broken up or otherwise extracted, ricketty deformity of the pelvis, and ankylosis of the hip-joint. Some would include amongst indications, considerable hypertrophy of the prostate, stricture of the urethra, irritable bladder, and cases of "bleeders." The high operation certainly affords the straightest, shortest, and broadest way to the bladder; each step is under the eye of the surgeon, and the operation throughout is capable of being done antiseptically. The stone can be easily removed, the whole interior of the bladder may be explored by the finger, or its surface examined by means of a suitable light. In cases of encysted calculus this method of operation affords obvious advantages. There is never subsequent incontinence of urine, and fistula is very rare, nor can sexual impotence happen. A hernial protrusion along the line of cicatrix may possibly take place, especially if any transverse division of tissue have been made. By a combined distension of the bladder and rectum the former is pushed forward and upward, the vesical wall closely approaches the abdominal, and an ample area of the bladder, where it is uncovered by peritoneum, is exposed for the purposes of safe incision.

One risk to life is the possibility of septic infection. It is scarcely possible to purify the bladder effectively when there is a stinking catarrh. In such cases the perineal incision is to be preferred to the high, as it affords better drainage. Good drainage is difficult to ensure after the suprapubic lithotomy, and unhealthy inflammation is then not unlikely to occur, for in no tissue does an infective process spread more readily than in the subserous areolar layer divided in the operation. After all, the question must mainly be decided by an estimate of the comparative mortality. Cadge states that in cases of stone weighing more than three ounces the deaths after lateral lithotomy in Norwich were 46 per cent. In such as these the suprapubic method would probably be much less dangerous. In children with fairly large stones the high operation possesses great advantages, and in adult women, when lithotrity is inapplicable, it will probably supplant all other methods.

The collection of statistics by Dulles and others, which I here quote, shows that hitherto the suprapubic operation has proved more dangerous to life than lateral lithotomy.

Mortality Statistics of the Suprapubic Operation for Stone.

Authors.	All Ages.		Adults.		Children to 15 years old.	
	No. of Cases.	Mortality.	No. of Cases.	Mortality.	No. of Cases.	Mortality.
		per cent.		per cent.		per cent.
Gunther, 1561-1851 ..	257	23.7	54	44.4	59	20.3
Flury, 1851-1878	92	32.6	37	48.6	48	20.8
Garcin, 1879-1883	94	24.4	48	29.2	43	14.0
Tuffier, 1879-1883	120	27.0	—	—	—	—
Dulles, 1561-1875	364	28.2	231	32.4	133	21.0
Murray-Humphry	104	29.8	—	—	—	—
Recent Foreign Cases ..	101	21.4	46	19.6	55	23.6
Recent British Cases ..	90	31.0	57	31.0	33	0

Many have accomplished admirable results with the lateral operation. Zett, in 106 cases, had three deaths. Surgeon-Major Freyer, as before stated, performed the lateral lithotomy in boys in 143 cases with uniform success. Werewkin has given 147 cases of children operated on by the perineal method, with a mortality of 6 per cent., the last 72 being without a death. Heusinger records 222 cases, with a mortality of 6.7 per cent. The results of the high operation cannot be favourably compared with these.

Schmitz divides his series of high operations into two groups: 18 cases were in what he calls the pre-antiseptic period, from 1870 to 1877, attention being only paid to cleanliness, while the *technique* of the operation was not quite so perfect as now. Only 8 of these patients recovered, and 10 died, a mortality of more than 50 per cent. In consequence of this, Schmitz abandoned the operation for four years. In 1881 he began to operate again with every possible antiseptic precaution. Of 20 patients thus treated, 16 recovered and 4 died, a mortality of 20 per cent. which, although very greatly reduced, is still high. The figures, however, do not differ materially from those collected by previous observers, *vide* table. He has been able to trace the

causes of death in 82 cases, peritonitis and suppuration in the cellular tissue being the most frequent, *vide* table.

Causes of Death in a Collection of Eighty-two Cases.

	Cases.
Peritonitis	30
Pericystitis	20
Pyelonephritis	18
Cystitis	3
Gangrenous urethritis	1
Collapse	4
Erysipelas	2
Marasmus	1
Result of necropsy negative	3

Kidney affections seem to occasion an unusually large proportion of the deaths, probably on account of the number of cases of large stone, and the long duration of the cases operated upon; this explanation, however, does not apply to the more recent cases.

Dittel, and the French authors, are against suture of the bladder. Schmitz never practised it. In Garcin's collection of 94 cases the average mortality is 24.4 per cent., but in 20 cases where bladder suture was practised there were seven deaths, or 35 per cent. Tuffier gives a similar result, and Jacobson, Etienne, and Meyer, are also opposed to the introduction of sutures. Sir Henry Thompson does not suggest it.

However, nearly one-third of the cases of suture of the bladder have healed by first intention, and where the suture has given way the most dangerous period of the first three days has passed by. Tiling introduces outside the row of interrupted sutures a second continuous suture, which may be of advantage. I am of opinion that primary union of the wound is the object to strive for. Immediate suture is the ideal method of after-treatment; but it is difficult to carry out, and in cases of putrid urine it would probably do harm.

In Meyer's collection of forty-one cases of bladder-suture the wound re-opened seventeen times, and eight died from sepsis. I believe, nevertheless, the future of the operation depends in a large measure on the possibility of successful suture; and in the light of several recent successful cases of suture after the high operation, and two successful cases of suture after intra-peritoneal rupture of the bladder reported by me in the *Lancet* (December, 1886), I think that an endeavour should, as a rule, be made to suture the bladder after extraction of the stone, if the urine and bladder-wall be healthy.

Mr. C. A. Ballance and Mr. R. J. Langley have taken much trouble to obtain for me the cases recently occurring in English hospitals. All the London hospitals, and a large number in the provinces and Scotland, were applied to. A list of ninety cases has been thus obtained, which afford matter for some interesting conclusions.

List of Cases of Suprapubic Lithotomy since January 1st, 1885, from Accounts published in English Journals, and through the courtesy of Sir Henry Thompson and the Surgeons and Registrars of Hospitals in London and the Provinces.

Children under 15:

Recoveries	31	
Deaths	0	
Result not stated	1	
Still under treatment	1	
	—	33

The bladder was sutured in 18 cases; primary union obtained in 8.

The weight of the stone varied from 2¼ ounces to 35 grs.

Adults:

Recoveries	35	
Deaths (2 not due to operation; see analysis)	18	
Result not stated	2	
Still under treatment	2	
	—	57

The bladder was sutured in 8 cases; primary union obtained in 2.

The weight of the stone varied from 24 ounces to 10 grs.

In one case operation was discontinued owing to peritoneal reflection completely covering bladder	1
Total number of cases	91

In regard to the use of a permanent catheter, it was observed that, in the eight cases where primary union was obtained in children after suture of the bladder, the urine ran alongside the instrument rather than through it, and it was in all instances withdrawn within two days; and where the bladder was not sutured, the urine escaped by the abdominal wound, so that the catheter proved useless. In adults it proved equally ineffective for the purpose of drainage, and was never kept in for more than a day or two.

Stated Causes of Death in 19 Cases:

1. Ruptured rectum; 18 ounces of fluid injected.
1. Uræmia. Operation complicated by lateral lithotomy; stone 24¾ ounces.
1. Asthenia. Patient aged 70.
1. Double pneumonia. Temperature at time of operation, 102.4°.
1. Peritonitis.
1. Cardiac and renal. Calculi in kidney.
1. Renal. Operation performed by desire of patient, against advice of operator.
3. Surgical kidney.
5. Suppurative nephritis. Of these, one had calculi in kidneys, and one was complicated by perineal lithotomy.
2. Unconnected with operation. Both patients were discharged as cured, one subsequently dying from "some disease of liver," the other from apoplexy.
2. Cause of death not stated. Condition of patient complicated by "very large prostate."

A sufficient number of cases of the modern improved method of operating does not yet exist upon which to base either a positively favourable or unfavourable judgment. The high operation has certain inherent risks which may jeopardise the patient's life. Septic causes appear to account hitherto for the largest proportion of deaths, arising for the most part from putrefactive changes in the abdominal wound. In Tuffier's statistics of 120 cases, as much as 34 per cent. of the deaths are ascribed to infiltration of urine of a septic character; and Meyer records an even greater percentage of deaths from this cause. But the seat of operation is open; the actual removal of the stone is rendered very easy; one can remove a large stone or numerous stones with less danger and less trouble; and we possess means of maintaining the wound aseptic in the larger proportion of the cases.

The high operation is a new one as regards the employment of antiseptics, and the best means of using them is not yet fully worked out; but we cannot, by any form of after-treatment, wholly exclude the risks which result from putrid urine. Trendelenburg's abdominal position affords, perhaps, the most efficient means of drainage; but it is extremely irksome, and cannot be carried out in all cases, especially in those who have often most need of it, those in whom the bladder-affection has been of long continuance, those suffering from pyelitis, or in old persons with a fatty heart.

In the discussion on suprapubic lithotomy, at the meeting of the Deutsche Gesellschaft für Chirurgie, 1886, Ebermann, of St. Petersburg, quotes the mortality after the lateral operation as 1 in 7. Thompson puts it at 1 in 8.2. Professor Ssinnisin, also of St. Petersburg, performed 154 lateral operations, with seven deaths, or 1 in 22. The age varied from 13 months to 56 years. Neither of these Russian surgeons believes in the occurrence of impotence as a result of the lateral operation. On the other hand, Langenbeck regarded it as frequent. Haemstadt, of Pottsville, Pa., says that, out of eighteen persons who came under his observation, grown to manhood and married, who had been cut when boys, only one had issue (*Lancet*, April 10th, 1886). The avoidance of all possible injury to the genital apparatus is, therefore, an argument in favour of the high method.

The mortality of the suprapubic method is, as we have seen, a high one; it varies between 22 and 30 per cent. The average mortality of the lateral operation in adults is almost the same as after the high operation. Probably for all stones of two ounces or more in weight, in which lithotrity is inapplicable, the high operation should be performed. In children, the danger of the high operation, according to records coming from abroad, contrasts very unfavourably with that of the perineal lithotomy; while, in the English cases collected by me, although not very numerous, there has been hitherto an unbroken series of successful results. If the rate of mortality in adults cannot, however, be reduced, the high operation must, I fear, be reserved in the future, as it has been in the past, mainly for the removal of large stones, or for those cases in which lithotrity and perineal lithotomy are for some reason inapplicable.

The collection which I have been able to make, although a limited one, appears to point to a much more hopeful prospect of successful operation in children than any previous statistics would warrant.

Mr. President and gentlemen, I have to thank you for your courteous attention.

ABSTRACTS OF

THE GULSTONIAN LECTURES,

ON

THE NATURE OF FEVER.

Delivered at the Royal College of Physicians of England, March, 1887.

By DONALD MACALISTER, M.A., M.D., F.R.C.P.,
hysician to Addenbrooke's Hospital, Lecturer in Medicine at the University of Cambridge.

Lecture II.

Dr. Macalister commenced his second lecture by referring to the views enunciated by Dr. Burdon Sanderson, in 1875, and pointed out that certain researches made since that date had helped to supply data then missing, and had enabled us, he said, to advance further towards a true theory of fever than was thought twelve years ago to be possible, though the "unsolved physiological problem of the normal relation of temperature to thermogenesis" is not yet fully solved.

We start with this: that fever of necessity implies—(1) A disorder of the thermotaxic mechanism; (2) an excessive production of heat associated with excessive chemical changes in the tissues, the excessive production being more or less than that of a normal person on full diet (perhaps oftener less than more), but more than that of a normal patient on fever diet; and (3) that the body temperature, depending on the state of the balance between production and discharge, fluctuates as one or the other is in the ascendant, and is not *per se* a true measure of either, or of the consumption of tissue which may be going on.

The source of heat-production in health was the oxidation of the tissues of the body at large, and not of any particular substances. Of all the tissues, the muscles were the most important in this connection, not only because of their bulk, forming something like one-half of the whole mass of the body, but because even at rest the rate of oxidation in muscles was higher than in any other tissues, and was greatly increased in exercise, so that the quantity of carbonic acid exhaled during severe muscular work might be five times the normal. (Fick).

Next to the muscles come the various secreting glands, and the alimentary canal in digestion. But in fever their functional activity was to a great extent in abeyance, and then probably could not be credited with any large share in the genesis at least of febrile heat. As regards the muscles, however, they were estimated to contribute four-fifths of the body heat in health; in fever their proportion must be higher still. Briefly, then, it might be said, that the muscles were the chief furnaces of the body, both in health and in fever.

The assumption had generally been made by writers on this question that some necessary thermo-dynamic connection existed between the function of work-producing and the function of heat-producing, between the motor and the thermogenic activities of the muscle; and it had been sought to define the nature of the assumed connection in terms of a small number of variables. But it must be asked whether in all circumstances heat must be produced when a muscle contracts? If heat is produced without contraction, may not contraction take place without heat?

Dr. Macalister then described some experiments he had made in Professor Ludwig's laboratory on this point. I found, he said, that a sensitive thermometer, with a fine-drawn bulb, could be introduced beneath the skin of a pithed frog into the natural intermuscular cleft between the muscles of the thigh, so as to be surrounded on all sides by living flesh, but without injuring anything. When the sciatic nerve was suitably stimulated, the muscle contracted tetanically and the temperature rose. The rise was easily legible, amounting to four or five tenths of a degree. When several successive tetanic contractions were induced, the rise of temperature grew less and less, and at last could not be read at all, though the contraction was quite marked. In a word, the muscle was fatigued as a heat-producer before it was fatigued as a work-producer. These experiments were performed in winter on frogs collected in autumn, and I observed that as spring came on the heat-production in the muscles under uniform conditions gradually grew less and less, though the tetanic curves given by them on stimulation were excellent. I attributed this to the gradual exhaustion of the frogs by their long winter fast. But the point of interest was that the heat-producing power was sooner exhausted than the work-producing power of the muscles. Fatigue from repeated stimulation, exhaustion from long abstinence, each appeared to differentiate the thermogenic function from the motor function. I next proceeded to inquire whether in warm-blooded animals it might not also be possible to separate the two functions, to show that, though generally called into play together, they were capable of being performed independently. Using dogs, guinea-pigs, and rabbits, narcotised with chloral in all cases, I made a number of experiments on the fatigue of the thermogenic function, and almost accidentally discovered another method of practically abolishing it, while the motor function remained nearly if not quite intact. By controlling the temperature of the whole animal, including that of the muscle under observation, I found that I could vary within wide limits the relation between the work and the heat produced. It is not necessary to give the experimental details at length; suffice it to say that by enclosing the profoundly narcotised animal in a box with double walls, through which water of any desired temperature could be made to circulate, I was able to raise or lower its body-temperature at will. Artificial respiration was maintained for hours together. The temperature of the blood in the aorta, in the rectum, and in the mass of the calf-muscles could be ascertained from minute to minute by means of fine thermometers; the mechanical work done by the muscles of the calf could be estimated by the motion of a cord fastened to the Achilles tendon; and, lastly, the sciatic nerve, severed from the spine, could be electrically stimulated.

To take, first, an experiment at about 35° C. As soon as the muscle contracts, its temperature rises, and continues to rise for some time after the contraction ceases. The animal is then cooled to, say, 19° C. On stimulation the muscle contracts forcibly, but the rise of temperature is trifling or absent. On rewarming the animal to something like its first temperature, we once more restore the rise of temperature on contraction. There are several other points of interest exhibited in these curves, but I do not propose to dwell on them at present. I will only say that the post-tetanic rise of temperature, when it exists, is due to the post-tetanic flushing of the muscles with blood that is warmer than the muscle. When the blood is cooler than the muscle, as sometimes happened, we have a post-tetanic fall of temperature. Some plethysmographic experiments convinced me that this explanation, based on what in Germany is sometimes called "das Gaskell'sche Phänomen," is applicable to all the peculiarities of the curves. A study of these peculiarities, moreover, shows that the absence of thermal phenomena was not due to any perceptible impairment of the vaso-motor mechanism of the muscle at the lower temperatures. The lesson taught by these experiments appears to be, first, that the motor function may persist while the thermogenic function is in abeyance; and, secondly, that cold is capable of abolishing or notably depressing the latter function, while the former is still but little or not at all affected. The therapeutic bearing of the second lesson is not unimportant.

Since 1881, two investigators, also working in Professor Ludwig's laboratory, have carried on the research in other directions. The outcome of these experiments by Dr. Meade Smith and Dr. Lukjanow (Dubois Reymond's *Archiv*, 1886) may thus be expressed: The effect of stimulating a muscle through its nerve is to start in it two processes—one, as it were explosive, and manifested by change of form and the performance of mechanical work; the other more continuous, and manifested by the increased development of heat. Each process has its own laws. This independence, I think, justifies us in assuming that the two processes are largely independent and co-ordinate. The heat developed in the second or thermogenic process is not simply a thermo-dynamic waste-product—an excretion of no greater dignity than urea or carbonic acid.

The considerations I have adduced, and especially those relating to the power of recovery in a fatigued muscle under the influence respectively of rest and of the blood-supply, point to the conclusion that the two metabolisms are in some way different; in other words, that the "contractile stuff" in the muscle is not the same as the "thermogenic stuff." Both of them are stored in the muscle; so far as function is concerned, they are the muscle. The store of each can be exhausted by repeated stimulation; but in some cases the thermogenic store sooner than the other. Both can be upbuilt again by the circulating blood, but in some cases the contractile store sooner than the thermogenic. Both the metabolisms are affected by cold, but the thermogenic much sooner and much more intensely than the contractile. We know little of the exact nature of the chemical changes involved in either form of metabolism. Oxygen is taken up in each, and carbonic acid is discharged, but the processes passed through between these terminal stages are much more complex than simple oxidations. The evidence rather goes to show that it is the living substance as a whole, contractile stuff and thermogenic stuff,

which is continually being decomposed and as continually being re-composed by the blood. The net balance shows only gain of carbonic acid and loss of oxygen, but the nitrogenous parts also of the working substance have in the process undergone partial destruction and equivalent reconstruction. This is in health; but if the reconstructive part of the process is inadequate or absent, the balance of accounts will give evidence of a nitrogenous residuum which is morbid. The muscle substance will appear to be itself consumed; it will no longer be what I may call merely the circulating medium of consumption.

The thermogenic metabolism of the muscles, so long as the blood-supply and nerve-supply were intact, was a continuous process increased by contraction, but not interrupted by rest. When we stimulate the nerve going to a muscle, the lecturer continued, two obvious processes are set up in the muscle-substance. The one issues in temporary contraction, the other temporarily increases the production of heat. When a muscle is poisoned by curare, which abolishes the function of the peripheral nerve-endings, and thus blocks the way for the transmission of impulses from the nerve-trunk to the muscle, both these effects are lost. The thermal behaviour of an animal in whom the thermogenic tissues are thus cut off from the influence of the nervous system is very remarkable. The vaso-motor mechanism is intact, but the animal can no longer maintain its temperature. If it is plunged in a cooler medium, its temperature steadily falls; in a warmer medium, it steadily rises. Still more remarkable is the change in the quantity of its oxidative metabolism, as manifested by the consumption of oxygen and the exhalation of carbonic acid. Both of these fall in the cooler medium to a mere fraction of the normal (Röhrig and Zuntz, Pflüger's *Arch.*, 1871). The circulation remains unaffected; the respiration can be artificially maintained. Two inferences are inevitable: (1) that the thermogenic function of the muscles is primarily dependent on their innervation; and (2) that the share of the muscles in the oxidative metabolism, the combustion processes of the body is so great that, when they are excluded, a mere fraction of the whole alone remains. This second inference confirms and justifies the attention we have concentrated on the muscles as the chief sources of heat, normal and febrile. The first inference leads us from the muscle to the nerve; but if, when no contraction is going on, the normal muscle is continually undergoing an active oxidative metabolism, and if this metabolism is dependent on active innervation, we must conclude that through the nerve-trunks at all times there is kept up a continuous stream of nervous influence; in other words, that in the resting muscle a constant thermogenic tonus is maintained. Now as the vascular tonus is the result of a strained equilibrium between the opposing impulses given to the unstriped muscle of the arterial wall—the opposing impulses sent along the vaso-constrictor and the vaso-motor fibres—and as the nervous tonus of the respiratory centres is in like manner due to what I have called a rhythmic balance or periodic equilibrium between motor and inhibitory influences, so I am fain to regard the thermogenic tonus of the muscles as the manifestation of a balance between two opposing innervations.

What are the two tendencies that are balanced in the thermogenic tonus? The answer is: first, the tendency to the upbuilding and storing of what I have bluntly called the "thermogenic" stuff of the muscle—the thermogen, if I may coin the word; and, second, the tendency to disintegrate this by a process involving oxidation. At Cambridge we are accustomed to speak of the upbuilding aspect of metabolism as anabolic, and the unbuilding aspect as catabolic. If I were to compress what I have ventured to suggest to you into a formula, it would be: the thermogenic tonus of a resting muscle is dependent on a balance between the nervous impulses subserving anabolism and those subserving catabolism of thermogen. The words have a formidable sound, but I trust the idea they are meant to convey is clear enough. They emphasise the particular processes referred to in general terms by Dr. Broadbent in his admirably terse article in Quain's *Dictionary of Medicine*. "If a theory of the febrile process is to be formed," he says, "it must be based upon a theory of the relation between the nervous system and the processes of nutrition and oxidation, and especially the latter." A few years ago such a theory of the relation of the nervous system to the processes of anabolism and catabolism would have been at best a pure speculation. Imperfect understanding of the true nature of one whole side of the relation—namely, the anabolic side, stood in the way of every attempt at demonstration. Now, however, thanks in great part to the suggestive work of my colleague, Dr. Gaskell (*Journal of Physiology*, 1886), we are beginning to have clearer light on the subject; he has given a basis of facts for a new and comprehensive generalisation, and has opened out a vista for research whose limits we cannot now estimate. The lecturer then described Dr. Gaskell's researches on the innervation of the heart, dwelling especially on the fact that the sympathetic branches were equivalent to the motor nerves of the vessels—the vaso-constrictors; while the vagus, which was an inhibitory nerve, corresponded to the vaso-dilators. It seems to me, he said, in conclusion, that from the considerations advanced in this lecture, it is not rash to proceed to a provisional generalisation. It is this: that not the visceral and vascular muscles only, but all the muscles of the body, have their double nerve-supply. The one set of fibres are essentially catabolic; they set up disintegrative changes in the muscle, which are manifested first by thermogenesis, and secondly by contraction. The other set of fibres, whose path is perhaps anatomically different, are essentially anabolic; they set up reconstructive changes in the muscle, which are manifested by inhibition of motion on the one hand, and the absorption of energy on the other. Does the motor fibre also subserve the thermogenic function? Does the same catabolic nerve convey the stimulus which determines motion, and the stimulus which determines the evolution of heat? Or, are the stimuli only quantitatively, not qualitatively, different? Or, again, as I have suggested, is the stimulus the same, but the "stuffs"—contractile and thermogenic—different, one impulse starting two kinds of catabolism, as when the same electric spark simultaneously fires a mixture of two explosives? These questions are as yet unanswered, though I am persuaded that the answer is not far off. Meanwhile, we have brought our argument to this: that the heat-production in the muscles, the chief furnaces of fever, is probably carried on under the influence of a two-fold nervous mechanism, the one part exciting to thermogenesis, accompanied by destructive metabolism, the other staying thermogenesis, and subserving constructive metabolism. The thermogenic tonus is the manifestation of the normal balance between these two parts. In other words, the character of the nervous mechanisms subserving heat-loss is paralleled by an analogous two-fold character in the nervous mechanism subserving heat-production. The relations of this nervous mechanism to the central nervous system and to the thermotaxic mechanism will occupy us in the next lecture.

ABSTRACTS OF LECTURES

ON

THE DEVELOPMENT AND TRANSITION OF THE TESTICLES, NORMAL AND ABNORMAL.

Delivered at the Royal College of Surgeons of England, February, 1887.

By C. B. LOCKWOOD, F.R.C.S.,

Demonstrator of Anatomy and Operative Surgery in St. Bartholomew's Hospital; Surgeon to the Great Northern Central Hospital; Hunterian Professor of Anatomy, Royal College of Surgeons.

Lecture III.

Before describing the transition of the testicle, the position which it occupies within the abdomen was mentioned. The most reliable information upon this point was to be obtained from suitable microscopic sections through whole embryos. Beginning with human embryos of about the fifth week of intra-uterine life, the rudimentary testicle and the Wolffian body lay at the lower and outer part of the kidney, and at about the level of the lower third of that organ. It was explained that this position was lower than that which obtained in many of the lower animals. Following this branch of the subject, it was stated that owing to the ascent of the kidneys, the diminution of the Wolffian bodies, and the development of the pelvis (Fig. 9), the testicles or ovaries attained a situation between the lower end of the kidney and the internal abdominal ring. However, the kidney was so low in the abdomen that the distance of the testicle from the site of the internal ring was exceedingly small.

About this time, the third month of intra-uterine life, and in either sex, the gubernaculum makes its appearance. This structure is, at first, a band which extends from the vicinity of the internal abdominal ring to end above upon the genital string. The expression "genital string" was used by the lecturer to indicate the cord formed by the junction of the oviduct and Wolffian duct upon either the right or left sides of the body; so that each testicle, or ovary, possessed a genital string of its own; the union of the genital strings of opposite sides

of the body formed a larger and thicker cord, the common genital string; a structure which formed the uterus in the female, and helped to form the prostate in the male. It was pointed out that this early attachment of the gubernaculum to the genital string, close to the place at which it becomes uterus, explains the anatomy of the

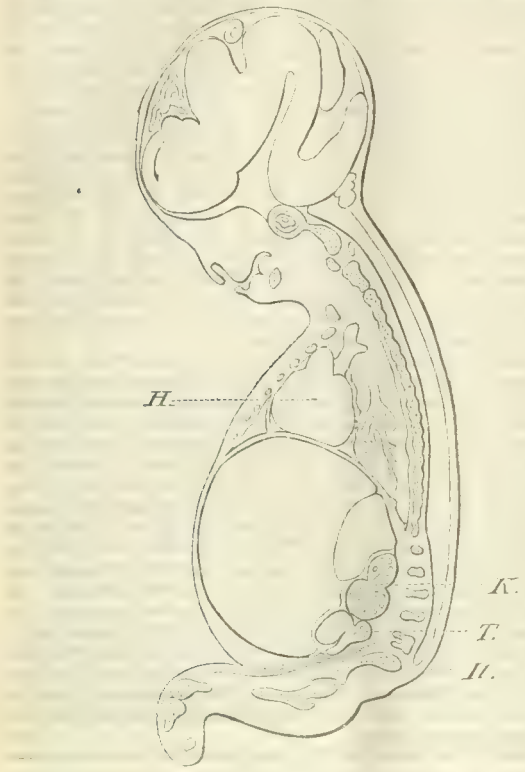


Fig. 9.—Human embryo, 10 wk. (?) × 4 times. To show relation of testes and Wolffian body to kidneys and pelvis and to the front wall of the abdomen. *H.* = heart; *K.* = kidney; *T.* = testicle; *Il.* = ilium.

round ligament in the female. Afterwards, in males, the upper attachments of the gubernaculum are much more extensive, and its

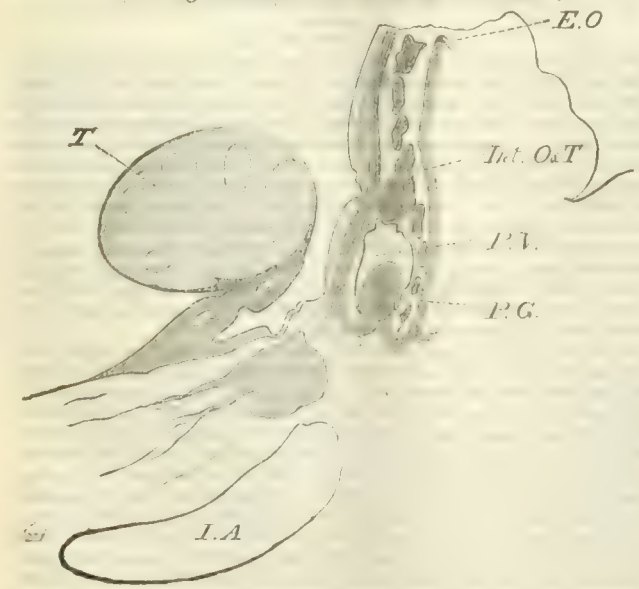


Fig. 10.—Six months' fœtus. To show processus vaginalis cut in transverse section. *T.* = testicle; *E. O.* = ext. oblique; *P. V.* = processus vag. *Int. O. & T.* = int. oblique and transversalis; *P. G.* = plica gubernatrix; *I. A.* = iliac artery.

fibres may be seen to reach along the genital string to the epididymis, the body of the testicle, and onwards to the plica vascularis—a structure mentioned further on—and to the peritoneum of the posterior wall of the abdomen. From its earliest beginning the gubernaculum seemed sufficient to hold the testicle near the abdominal ring, and to prevent its ascending with the kidney.

At the sixth month the testicle still lay close to the internal abdominal ring, and preparations for its actual transition down the inguinal canal had reached an advanced stage. (Fig. 10.) Whilst lying upon the brim of the pelvis in front of the psoas muscle, the testicle and epididymis began to acquire a mesentery — the mesorchium; as this grew, the gland became free and mobile in the abdomen. The mesorchium consisted of two parts: an upper, the plica vascularis, which extends upwards from the testicle in front of the kidney towards the diaphragm, and contained ultimately the spermatic vessels; and a lower fold, the plica gubernatrix, which passed downwards towards the internal abdominal ring, and contained the gubernaculum testis. Continuing the description of the plica vascularis, some muscular fibres which it contained were mentioned and recognised as upward prolongations of the gubernaculum testis, and then the termination of the plica vascularis upon the cæcum, ilium, and vermiform appendix was described. The influence of these attachments in the causation of congenital cæcocele was discussed, but an important part was also claimed for the muscular fibres contained in the plica vascularis. Next, the relation of the last-named fold to the undescended testis was alluded to, and the lecturer, after discussing the pathology of that condition, described a case in which the non-descent of the gland was due to an absence of the upper attachments of the gubernaculum, which muscle, instead of being fastened to the vas deferens or epididymis, ended in a brush of fibres lying free in the peritoneal cavity. (Fig. 11.)

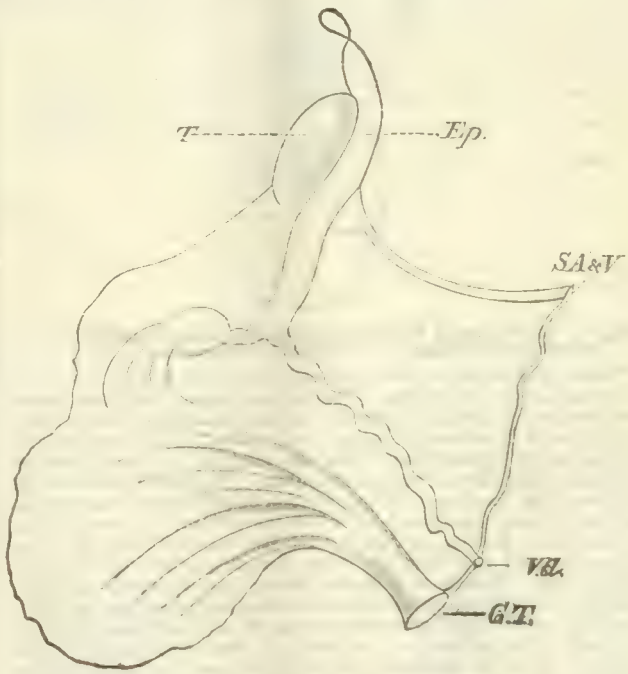


Fig. 11.—Gubernaculum unattached to testicle. *T.* = testicle; *Ep.* = epididymis; *V. d.* = vas deferens; *G. T.* = gubernaculum testis; *S. A. & V.* = spermatic artery and vein.

The lower fold of the mesorchium was then described, and seen to terminate in a sort of tube of peritoneum, the processus vaginalis, which had already protruded down the inguinal canal. The formation of the processus vaginalis was then described, and the impossibility of its having been formed by the pressure of the advancing testicle was considered to be clearly proved by sections made through the pelvis of fœtuses of the sixth month of intra-uterine life; in these the testicle was to be seen lying upon the psoas muscle, whilst a deep peritoneal recess in the abdominal wall marked the commencement of the processus vaginalis. In other sections nearer the middle line, the processus vaginalis was simply a tube cut in transverse section, and gradually tapering until it terminated (Fig. 10). The fibres of the

gubernaculum blended with its extremity, and were, by means of the plica gubernatrix, closely connected with it, and were, the lecturer thought, chiefly accountable for its formation, and also for the ultimate passage of the testicle into the scrotum.

The structure of the gubernaculum was next considered, and it was said to consist, whilst the testicle lay in front of the psoas, of two different elements; first, of a central band of unstriped muscle-fibre; and, secondly, of a number of striped elements prolonged upwards, behind the peritoneum, from the abdominal wall. As the gubernaculum brought about the migration of the testicle, these ascending striped fibres were, as John Hunter pointed out, drawn down to become the greater part of the cremaster, but not the whole of that muscle, because long before the testicle had arrived in the inguinal canal the muscular fibres of the abdominal wall might be seen in microscopical sections looping downwards towards the scrotum.



Fig. 12.—Infantile hernia, to show band of fibres passing upwards from back of testicle to hernial sac. *T.* = testicle; *S.* = hernial sac.

Various theories which were supposed to account for the transition of the testicle were referred to. The lecturer divided the phenomenon into two stages: first, the apparent movements within the abdomen, due to growth of surrounding parts; and, secondly, the actual migration down the inguinal canal into the scrotum, due to the traction of the muscular fibres of the gubernaculum. The recent revival of an old theory was mentioned. The migration of testicle into the scrotum had lately been considered to be of the nature of a perpetuated hernia (Bland Sutton, *An Introduction to General Pathology*). But it was pointed out that the term hernia was used in two different senses. Sometimes it implied merely an anatomical condition, namely, the escape of organs from their containing cavities; at other times the word hernia was used to connote a pathological change; but used in its pathological, and not in its anatomical, sense, it was clear that the word hernia ought not to be used in explaining the transition of the testicle, for the simple reason that the pathology of hernia was quite undecided. The question still remained to be settled whether inguinal hernia was due to (*a*) a defect in the abdominal walls; (*b*) an elongation of the mesentery; or (*c*) to a general defect of the peritoneum. The lecturer then pointed out the closeness of the attachments of the peritoneum to the front walls of the abdomen, and its exceeding looseness posteriorly. The influence of this condition in facilitating the locomotion of the peritoneum of the back of the abdominal cavity, and, at the same time, the locomotion of the viscera contained in the various reflections of the serous membrane, was commented upon. After discussing the completion of the processus vaginalis, and the passage of the testicle and its mesorchium down its posterior wall, the mode of closure of the processus was mentioned. The absence of any sort of adhesion was urged; more particularly the absence of any adhesion capable of becoming the sac of an encysted hernia. The various specimens included under that heading belonged to the infantile variety, and were similar to the case described by Hey. The formation of the sacs of infantile herniæ was attributable to the action of that part of the gubernaculum which is contained in the plica vascularis, because muscular fibres recognisable as a part of that prolongation were, in many specimens, found attached to the extremity of the sacs of infantile herniæ. (Fig. 12.) Without doubt all the sacculations found at the back of congenital hernial sacs were not attributable to this cause. A specimen was shown to demonstrate the existence of numerous recurrent branches of the spermatic artery to the peritoneum, and these were considered as affording evidence that the vessel must have moved downwards to a greater extent than the serous membrane. The presence of these recurrent branches upon the walls of hydrocele sacs and of herniæ was mentioned, and a specimen was shown in which a recurrent branch was thought to have influenced the formation of a pouch upon the posterior wall of a congenital funicular hernia. Other structures, in addition to those which had been mentioned, accompanied the testicle in its descent. It was not unusual in fœtuses to observe that the subperitoneal fat had also migrated with the testicle and cord from the abdomen. An overgrowth of this fat was considered to account for the not infrequent occurrence of lipomata of the spermatic cord.

The inferior attachments of the gubernaculum were then referred to, and their variations at different periods of intra-uterine life considered. At the sixth or seventh month, fibres could be seen piercing the lower part of the abdominal wall, and extending into Scarpa's triangle; others were attached to the pubes and root of the penis; and others, rather later on, to the bottom of the scrotum. Moreover, at the eighth month, sections through suitably prepared fœtuses demonstrated that many of the lowest fibres of the gubernaculum passed into the perineum, and ended over the tuberosities of the ischium, or by blending with the sphincter ani. These dispositions of the fibres of the gubernaculum were supposed to account for the occasional passage of the testicle into Scarpa's triangle or into the perineum. In the latter case, it was usually found that the organ was attached by a band either to the tuberosity of the ischium or to the sphincter ani.

In conclusion, the lecturer begged to thank a great many friends for their kindness in sending him material for investigation; and also to thank Dr. Vincent Harris for the use of his department, and for generous aid and advice; and Mr. D'Arcy Power for facilities for obtaining and preparing specimens.

POST-MORTEM EXAMINATIONS OF CENTENARIANS: WITH REMARKS.

By G. M. HUMPHRY, M.D., F.R.S.,
Professor of Surgery in the Universitiy of Cambridge.

(*Concluded from page 565.*)

One of the most interesting features in advancing age is the lessening size and weight of the cell-multiplying and blood-producing organs, the spleen, the lymphatic glands, and Peyer's glands—coincidently with the lessening of nutritive activity and therefore of the demand upon the blood factors. These organs are, as we should expect, at their maximum in early life, when the growing and reparative work of nutrition is at its height, when the body is most increasing in size, and is most active in function. The thymus gland fades soon; its special contribution, whatever it be, to the blood-compound, ceasing, as we may infer, to be required a few years after birth. The lymphatic glands are large in childhood and youth, and are easily excited to inflame, to enlarge unduly, and to take on other morbid conditions. As age advances, they become functionally and pathologically less active, and they are at their minimum in the centenarian.

It is not a little remarkable that, whereas the greatest appreciable wasting is in the spleen and other organs which have relation to blood-making, the greatest increase is in the heart, which has relation to blood-propelling, and which is, indeed, the chief agent in that work. This increase in the heart is not a little due to the accumulation of fat which often takes place upon it in advancing years, as well as to some thickening and other changes which affect its valves and fibrous tissues. Moreover, although the volume of the blood may be lessened in old age (and it does not appear that it always is so, for twenty-four of our centenarians are reported as full-blooded[3] the thickened, less elastic condition of the arteries, with the less perfect smoothness and evenness of their interior, renders the circulation of the blood a more laborious task for the heart, and causes some hypertrophy of its muscular structure.

[3] See table and remarks appended to the JOURNAL, December 11th, 1886.

The slight increase in the weight of the lungs observed by Boyd in males is probably due to some thickening of their mucous and other tissues, associated with the lowered respiratory capacity which is caused, in great measure, by the diminished elasticity of the thoracic walls and of the lungs, and a consequent limitation of the respiratory range. This is evinced by the measurements of the chest girth of our centenarians, which, on the average, do not show more than half an inch difference between inspiration and expiration (see table and analyses and remarks with JOURNAL of December 11th, 1886).

The degenerative changes in the arteries—a substitution of fibrous, atheromatous or calcareous matter, for the elastic and muscular tissue, attended with thickening, dilatation and roughening—are less than might be expected. Though marked in Holyoke and Miles, and spoken of as a cartilaginous condition in Keill's case, they were confined to the commencement of the aorta in Rolleston's, and are not mentioned by Harvey. Of 28 returns in our table, the arteries are reported "knotty" in 6, "even" in 18, and appear to have been large, tortuous or visible in 15. The loud systolic *bruit* in No. 13 of the table indicated a roughening of the aorta, which was unattended with any obvious ill-effect; and the arteries were even, though tortuous and visible, in this person. There was nothing of the kind in the other two persons (12 and 23) whom I examined, and it is not mentioned in any of the other cases reported in the table, which possibly may be because attention was not specially directed to this point.

The cartilages of the ribs were ossified in Miles and Holyoke, but were as soft as natural in the cases reported by Harvey, Keill, Rolleston[4] and myself. The brain was found shrunken, with widened cerebral fissures; "hydrocephalus *in vacuo*," in Holyoke, also in the woman aged 103 examined by me. It was firm and hard in Parr and in Keill's case; and the convolutions were rounded and, to some extent, atrophied in Rolleston's. This shrinking of the brain, common in old age, and observed also in persons wasted by long illnesses, in habitual drinkers, and some others, is to be associated with the inability to maintain active and strong bodily and mental exertion, which, as our tables show, is commonly first manifested by fatigue, by weakening of memory for recent events, and is further manifested by impairment of control over emotions and thoughts and impulses as well as over bodily movements, and may go on to complete imbecility, with or without tremor or loss of muscular power, the latter being usually first observed with regard to the urinary bladder.

The kidneys were cystic in Parr, Holyoke, and Pratt, and contained grains of sand in the last and in Keill's case. In Pratt the bladder was fasciculated, the prostate large and its ducts large, and pediculated growths projected from the third lobe. It will be observed that, out of 33 returns in the table, the micturition is reported to be natural in 25. It is also stated to have been so in most of the cases which I have since received (BRITISH MEDICAL JOURNAL, March 5th, p. 502); and it is not reported to have been difficult or painful in any. All this is confirmatory of the statement that the prostatic and vesical affections, which cause the larger proportion of urinary troubles of advancing years in men, commonly manifest themselves in those who are predisposed to them about or before 70, and do not, for the most part, permit the sufferers to attain to great age.

The following are taken from Dr. Boyd's tables of the weights of the human body and internal organs.[5]

He states (p. 261) that the average height of the adult male varies from 67.8 to 65 in.; of the female, from 63 2 to 61.6 in. The average weight of the adult male varies from 112.12 to 91.5 lbs.; of the female, from 95.2 to 76.9 lbs.

The examinations were made in 2,086 cases in the St. Marylebone Infirmary, and in 528 cases in the Somerset Lunatic Asylum; and he says they show a preponderance in the insane male of 6 lbs., and in the female of 8 lbs., as compared with the sane. (This is probably due to quiet and good feeding in asylums.) Mr. Roberts, in his letter in the JOURNAL of January 1st, states that "the average stature and weight of English men and women of all classes is 5 ft. 7½ in. and 155 lbs. for males, and 5 ft. 2½ in. and 123 lbs. for females.

From these tables it appears that, in persons above 80, the height and weight of the body remaining nearly the same (though in women, from whom the greater number of measurements were taken at above 80, there is a diminution in height and weight), the cerebral and the abdominal organs, including the kidneys, have wasted, whereas the thoracic organs have gained in weight; and the contrast between the wasting of the spleen, which has relation to blood-making, and the increase in the heart or blood-propelling organ, to which I have already alluded, is very marked.

[4] With reference to this, Rolleston (p. 153) remarks: "Old age causes very opposite changes to take place in bone; possibly it may act upon cartilages in equally differing ways."

[5] *Philosophical Transactions*, 1861.

Tables of the Average Weights of the Human Body and the Internal Organs.

	Sex.	Weight.	Height.	Encephalon.	Lungs. Right.	Lungs. Left.	Heart.	Stomach.	Liver.	Spleen.	Kidneys.	Pancreas.
		Lbs. oz.	Ft. ins.	Oz.	Oz	Oz.	Oz.	Oz.	Oz.	Oz.	Oz.	Oz.
From 30 to 40 years	M	98 5	5 6.5	48.2	28.47	24.29	11.36	5.72	58.11	7.12	11.35	3.47
	F	87 0	5 2	43.09	18.74	17.64	9 45	5.34	53.61	6.13	10.34	3.05
Number examined, 103 males, 85 females.												
Upwards of 80 years	M	99 0	5 6.7	45.34	30.46	24.30	12.1	4.99	41.01	4.27	8.25	2.83
	F	79 8	5 0	39.77	18.22	15.23	10.27	4.49	34.64	3.46	6.86	2.37
Number examined, 24 males, 75 females.												

PAROTITIS AFTER INJURY OR DISEASE OF THE ABDOMEN OR PELVIS.[1]

By STEPHEN PAGET, M.A., F.R.C.S.,
Assistant Surgeon to the Metropolitan Free Hospital.

AMONG Graves's Clinical Lectures, there is one on the "Connection between the Diseases of Various Organs." "You are aware," he says, "that some organs, when labouring under disease, are apt to implicate other organs, giving rise to various deranged conditions, which are developed sometimes simultaneously, but in general consecutively, and in sequence. It is of the greatest importance to study each link in this morbid chain, and to ascertain the nature of its connection, so as to have a distinct conception of the whole." To illustrate his meaning, Graves gives four cases of acute arthritis, followed by jaundice, and this again by urticaria; and three cases where chronic disease of the spleen was followed by superficial ulceration of the legs —a sequence noted long ago by Aretæus. He adds that, if we bear in mind such sequences as these, we may, as he himself did in two cases, "predict the appearance and form of disease, and inspire the patient with confidence."

But, apart from their clinical interest, these sequences in disease have great pathological interest; for they demonstrate relations between distant organs which are not visible in health. For example, abscess of the kidney and abscess of the heart are much more common in pyæmia due to acute necrosis than in pyæmia due to amputation. I have collected and arranged some hundreds of cases of pyæmia, and I find that in 18 cases of pyæmia from acute necrosis, 10 had abscess of the heart and 1 had endocarditis, and 11 had abscess or infarction of the kidney. On the other hand, in 140 cases of pyæmia from amputation, only 1 had abscess of the heart, and a few others had slight changes in it, and not one had abscess of the kidney. That is to say, in pyæmia from acute necrosis, abscess of the heart and abscess of the kidney each occur in 61 per cent. of the cases; but in pyæmia after amputation they occur only in 1 per cent., or even less often than this.

[1] Read before the Medical Society of London.

To take another example: abscess of the liver and of the spleen is much more common in those cases of pyæmia where the primary lesion has involved the medulla of bone, than in those where it has involved only the soft parts. Thus, out of 67 cases of pyæmia after injury of the soft parts only, abscess of the liver occurred in 4 cases, and abscess of the spleen in 3. On the other hand, in 217 cases of pyæmia after injury involving the medulla of bone, abscess of the liver occurred in 56 cases, and abscess of the spleen in 28. That is to say, in pyæmia from injury of the soft parts only, abscess of the liver and abscess of the spleen occur in 6 per cent. and in 4½ per cent. of the cases; but in pyæmia from injury involving the medulla of bone they occur in 26 per cent. and in 13 per cent. of the cases.

In this way, disease may disclose relations between organs which are latent in health. Physiology is of no help towards discovering them; we know of nothing that corresponds to them in the healthy body.

There is a great deal to be made out in these matters, and I hope to be able to make a regular study of these morbid sequences, not only in pyæmia, but in other diseases as well; and I shall be truly grateful to anyone who will advise or help me in any way.

To-night I have the honour of calling the attention of this Society to a sequence of great interest—the inflammation of the parotid gland which follows injury or disease of the abdomen or pelvis. Of this form of parotitis I have collected 101 cases. Of these 101, 10 were due to injury or disease of the urinary tract, 18 were due to injury or disease of the alimentary canal, and 23 were due to injury or disease of the abdominal wall, the peritoneum, or the pelvic cellular tissue. The remaining 50 were due to injury or disease or temporary derangement of the generative organs. By "temporary derangement," I mean slight injuries or natural processes—a slight blow on the testicle, the introduction of a pessary, menstruation, and pregnancy.

It is true that parotitis may follow injury or disease of other parts of the body besides the abdomen and pelvis; but, after a long search, I have found only 13 cases of this kind. Moreover, in every one of these 13 cases, the parotitis was only part of a true general pyæmia, with other secondary abscesses and effusions like itself.

Again, parotitis may occur in the course of one of the specific fevers, generally toward the end of the disease; thus, of 2,000 typhoid patients in the London Fever Hospital during the years 1870-1885, 13 had parotitis. But out of 7,000 scarlet fever patients in the hospital during the same period, only one had it. Perhaps, so far as the occurrence of parotitis is concerned, typhoid may be regarded as a disease of the abdomen.

Again, the parotitis of mumps, with its so-called metastases, chiefly to the generative organs, has many points of resemblance to the parotitis which is the subject of my paper.

But this parotitis which follows injury or disease of the abdomen or pelvis, though it is in some ways allied to those forms of parotitis which I have mentioned, is in other ways different from all of them. I am anxious to collect many more cases of it, and I shall be very grateful for any help.

This form of parotitis after abdominal or pelvic injury or disease is not, as a rule, accompanied by signs of septicæmia or pyæmia. Thus, out of 101 cases, there are only 15 where mention is made of "septic symptoms," or "septicæmia," or "pyæmia." Even if we add to these 15 cases as many more where septicæmia or pyæmia may have been present, though nothing was said about them, there still remain many cases where there was not any trace of septicæmia or pyæmia. There are also a few cases which are directly contrary to any such explanation of this form of parotitis.

Out of all the 101 cases, there are only 7 in which it is recorded that other secondary lesions, such as abscesses in the lungs or kidneys, were present. And, among these 7, there is not, so far as I can find, a single case where the pyæmia attacked any of the joints. That is to say, parotitis, when it follows injury or disease of the abdomen or pelvis, is in 93 per cent. of the cases a solitary event, unaccompanied by any other lesion like itself. We have seen that parotitis after injury or disease of other parts of the body is never isolated in this way, but is always part and parcel of a true general pyæmia, with abscesses and effusions into the joints. This isolation of the parotitis which follows abdominal or pelvic injury or disease suggests that it cannot, at least in most cases, be due to any ordinary form of pyæmia.

Out of the 101 cases, 37 died. But, out of these 37 who died, 3 were over 80 years old, 3 had internal cancer, 2 had perforation of the bowel, 2 had strangulated hernia, 7 had undergone severe or even very severe operations, involving abdominal section, and 13 died of septicæmia or pyæmia. If we add to these deaths 1 from infantile syphilis, 1 from marasmus, and 1 from heart-disease, we shall see that these 37 patients died, not from their parotitis, but from the primary lesion, or from some form of blood-poisoning after it. Thus it is not possible to say how far this form of parotitis is in itself dangerous; the danger lies not in it, but in the primary lesion.

This form of parotitis does not appear to have any settled period of incubation. Thus, out of 27 cases where it followed ovariotomy or oöphorectomy, the date of its invasion is given in 18 cases. In 3 of these it occurred on the third day after the operation, in 3 on the fourth, 4 on the sixth, 2 on the seventh, 1 on the eighth, 2 on the ninth, 3 on the eleventh, and 1 on the twelfth.

Out of 12 cases where it followed gastrostomy, herniotomy, and similar operations, the date of its invasion is given in 7 cases. In 1 it occurred on the third day after the operation, in 2 on the sixth, 1 on the seventh, 1 on the ninth, and 2 on the tenth.

Out of 8 cases where it followed delivery or abortion, the date of its invasion is given in 7 cases. In 1 it occurred on the fifth day, in 1 on the eighth, 1 on the ninth, 2 on the twelfth, 1 on the thirteenth, and 1 on the nineteenth.

To these cases may be added one where it occurred on the very next day after a man had been sounded for stone; and one case, most perplexing of all, where it occurred on the morning of the day fixed for operation.

Whatever may be the explanation of this last case, it is clear that this form of parotitis has no fixed period of incubation. It would only be misleading to say that it occurs, *on an average*, on the seventh day after ovariotomy, or on the tenth day after parturition. But it is worth observing that, when it occurs after parturition, it comes later, as a rule, than when it follows any form of operative interference with the generative organs.

The onset of this form of parotitis varies much, as regards the general health. As a rule, there is no marked disturbance of it, no rigors, no high fever. Thus, in most of the cases of parotitis after ovariotomy, where any rise of temperature is mentioned, it is expressly said to be "slight" or "not marked." In some, indeed, there seems to have been none at first; though naturally there is some feverishness during the course of the inflammation. However, this is not, as a rule, severe; so that when a German surgeon says that he treated a case of parotitis, which followed an operation for fæcal fistula, with parenchymatous injections of carbolic acid, and in this way kept down the patient's temperature from rising above 101°, we may fairly decline to agree with him. On the other hand, in some cases the onset of the parotitis was marked by great disturbance of the general health, with high fever. In four cases rigors are recorded, and only in four. Of these, two were old men, aged 80 and 85, with urinary diseases; and two were women who died of pyæmia after complicated labours. In a case of parotitis after pelvic hæmatocele, there was "high fever, with great prostration;" and in two cases of parotitis after peritonitis the inflammation attacked both glands, and there was "high fever, with delirium," though it is especially noted there were no signs of pyæmia. In a case of parotitis after herniotomy, there was great restlessness, with refusal of food, for two days before the parotid swelled, and violent delirium at the time of its swelling. And in two cases of parotitis after child-birth, there was also puerperal mania. But, in the majority of cases, this form of parotitis comes on without any serious derangement of the system. It is of such cases that Dr. Macdonald speaks, in an account of two cases of parotitis after ovariotomy. "In neither of these cases," he says, "was there temperature or other symptoms to lend the least colour to the opinion that the parotid inflammation was septic. It merely complicated the convalescence a little by the pain and concomitant slight degree of fever it induced." In the same way, Dr. Goodell, of Philadelphia, says of a similar case: "Convalescence was retarded by great and painful swelling of both parotid glands, without any marked rise in the temperature, without acceleration of pulse, and without suppuration. There was not present the slighest evidence of septicæmia." And it would be easy to quote many other similar observations. Moreover, there are several cases in which—if I may use an old phrase—the parotitis is critical, not symptomatic; cases where it occurs toward the end of the primary lesion, disappears in a few days, and is at once followed by rapid recovery.

It does not seem to attack one gland more than the other. It sometimes attacks both; thus, out of 25 cases of parotitis after ovariotomy, both glands were attacked in 9 of them; while, in 3 of these 25 cases, the submaxillary and sublingual glands of the same side as the parotid suffered as well as the parotid, or instead of it. This double form of parotitis, and this implication of the submaxillary and sublingual glands, seem to me to be more common after ovariotomy than after other abdominal or pelvic lesions. The sweating of the skin over the parotid, which is not uncommon in cases of salivary fistula or stric-

ture or obstruction of the duct, does not seem ever to occur in the cases which we are now considering.

As regards the termination of this parotitis, whether by resolution or by suppuration, the figures are as follows: Out of 78 cases, which give information on this point, 45 suppurated, and 33 were resolved without suppuration. And now comes a curious fact: out of the 45 that suppurated, 24 died; but out of the 33 which were resolved without suppuration, only one died, and she died of cancer. But the suppuration of the parotid was not the cause of death in the 24 who died; they died of the primary injury or disease, as I have said, some being over 80 years old, others being the victims of malignant disease, or perforation of the bowel, or acute peritonitis, or septicæmia, or pyæmia. If the expression may be allowed, they did not die because their parotitis went on to suppuration, but their parotitis went on to suppuration because they were going to die.

As regards the fact that, in those who had septicæmia or pyæmia, the parotitis always went on to suppuration, such cases are perhaps parallel to those cases of pyæmia after compound fracture, where suppuration has occurred around simple fractures which had been inflicted at the same time as the compound fracture. Experimentally, the same thing has been shown by Chauveau, Loeffler, and others, who produced simple fractures in animals, then introduced septic fluid into their veins, and thus produced suppuration round the simple fractures.

The pus generally breaks its way into the meatus, or into the mouth; and it may do this in spite of being let out by a timely incision. It may also burrow backward over the mastoid process, or down the neck, making counter-openings necessary. Belladonna and poultices give relief; but the old rule is universally observed, "Parotitides omnes ante maturitatem aperiendæ," and very great relief is given, even if no pus is found.

Through the kindness of Mr. K. Thornton, I made a *post-mortem* examination in the case of a woman, who died with parotitis ten days after the removal of a large sarcomatous growth from the mesentery. The operation was one of great severity, and she never thoroughly rallied from it. The parotitis set in three days before death, without any violent inflammation.

Post-mortem examination, seven hours after death. No rigidity of limbs or of neck; but the jaws were firmly clenched, and could not be opened. Abdomen flat; operation wound healed. In the left parotid region a firm non-fluctuating enlargement; the œdema, which existed during life, had disappeared. The mucous membrane of the mouth was soft, clean, and free from sordes or ulceration. Pus welled freely from the mouth of the duct, when pressure was made over the gland; there were one or two minute points of hæmorrhage under the mucous membrane at the mouth of the duct. A bristle passed freely up it. The loose areolar tissue over the gland and in the anterior triangle of the neck was œdematous; the lymphatic glands at the angle of the jaw and in the neck were enlarged and soft. The parotid, on section, was found evenly and in every part infiltrated, not with pus, but with reddish, slightly turbid fluid, so that it looked not unlike a section of spleen. There was no abscess anywhere; but just in the proximal end of the duct, where it leaves the gland, lay two or three drops of healthy pus, and a tiny calculus, not bigger than a millet-seed. The microscope showed the lymph-spaces round the acini invaded by masses of small round cells; the acini themselves were separated, confused, and breaking up; and here and there were seen ducts filled with the same small round cells as were infiltrated among the acini. The interlobular septa of fibrous tissue were for the most part unaltered, and free from cell-proliferation; it was a true inflammation of the secreting elements themselves.

With regard to the presence of micro-organisms in this form of parotitis, Rosenbach had a case of parotitis after the operation for strangulated hernia. The man died of "acute septic peritonitis," and Rosenbach made cultivations both from the blood of the arm and from the purulent fluid infiltrating the parotid. The cultivation made from the blood remained sterile, but from the parotid he got large numbers of colonies of staphylococcus pyogenes aureus. This, however, is the commonest of all the micro-organisms found in acute suppurations, and has no specific value.

Finally, I venture to suggest a view of this form of parotitis which seems to me in accordance with the evidence. We have seen that this form of parotitis, which follows injury or disease of the abdomen or pelvis, is in many ways a peculiar lesion. So far from being due to pyæmia, it was, in 93 cases out of 101, an isolated lesion, unaccompanied by any other inflammation like itself. So far from being developed at a regular interval after the infliction of the primary injury, we have seen that it has no fixed period of incubation, and runs no regular course. Its invasion is not marked, as a rule, by rigors or by any great rise of temperature; indeed, it seems in many cases to be what old writers called a "critical" inflammation. It may subside, and swell up, and subside again; or may recur with each successive pregnancy or menstruation. Out of 33 cases, where it was resolved without suppuration, only one died; and that was a woman with cancer of the sigmoid flexure, who died of the local disease a month after colotomy.

These facts make it impossible for us to say that this form of parotitis is due to any ordinary form of septicæmia or pyæmia.

Next, it is not due to inflammation extending from a parched and sordid mouth up the parotid duct into the substance of the gland. Many of the cases cannot possibly be brought under this theory. Again, the socia parotidis, which lies so near the mouth, was only affected once or twice in all the 101 cases. Again, the mouths of patients with abdominal or pelvic lesions are not, as a rule, more parched than the mouths of other patients. This theory could explain only a few of the cases; nor is it supported by any real evidence.

Nor is it due merely to inflammation of the lymphatic tissue which is in the substance of the gland. Even if this tissue were inflamed early, or before the rest of the gland, the clinical features of these cases prevent us from classing them as mere swellings of lymphatic glands.

Admitting that the general condition of the patient, especially in cases of septicæmia and pyæmia, is concerned in the production of this form of parotitis, must we not also take into consideration the reflex action of the nervous system? The influence, both direct and reflex, of the nervous system upon the salivary glands is shown in countless ways, both in health and in disease. Thus, if a loop of intestine be drawn out from the abdomen of a dog, the action of the gustatory nerve is inhibited, and the secretion of saliva is diminished or arrested, until the loop of intestine is put back.

Now, if we find one and the same lesion followed by salivation in one patient, by arrest of the salivary secretion in another, and by swelling of the salivary glands in a third, must we not conclude that these results are only different workings of the same agent?

For example, gastritis may be followed either by salivation, or by arrest of saliva, or by parotitis. So, too, parotitis may follow gastric ulcer, gastrostomy (2 cases), duodenal ulcer, enterostomy (3 cases), hepatic abscess, removal of umbilical or abdominal tumours (4 cases), operation for strangulated hernia (6 cases), perityphlitis (5 cases), cancer of the liver or intestine (2 cases), colotomy, penetrating wound of the abdomen, and acute peritonitis (8 cases). It has also followed division of stricture of the rectum, and operation for hæmorrhoids: and with these two last cases may be compared the fact that salivation has been observed as an early symptom of cancer of the rectum.

To take another example. Derangement of the generative organs, like derangement of the alimentary canal, may cause either salivation, or absence of saliva, or swelling of the salivary glands. The salivation of pregnant women, and their longings for sapid food, are well known. Dr. Goodell gives two cases—one of repeated salivation at each menstrual period; the other of a lady with a painful left ovary, in whom the left parotid did not secrete during her menstrual periods, so that that side of her mouth remained dry and painful. Must not parotitis, under similar circumstances, have a similar cause? Parotitis has followed various slight injuries, or temporary derangements of the generative organs, in 5 cases; it has been known to accompany each successive pregnancy, to replace or accompany the menstrual flow (2 cases), and to occur after the menopause (2 cases). It has followed delivery or abortion in 8 cases, pelvic cellulitis or pelvic hæmatocele in 3, operations on the vagina or uterus in 8, and ovariotomy or oöphorectomy in 27.

As regards parotitis after injury or disease of the urinary passages, it has followed the use of the catheter (3 cases); the use of the sound, renal abscess, and chronic cystitis (5 cases).

It is certain that, in many of these cases, there was neither septicæmia nor pyæmia, nor anything of the kind. Must we not, therefore, assume, in some of them, the influence of the nervous system as at least part cause?

This influence of the nervous system is the more probable, if we consider how often retention or suppression of urine follows abdominal or pelvic operations; here the influence of the nervous system cannot be doubted. Again, attention has lately been drawn to the fact that in many cases of disease of the thoracic or abdominal viscera, there is inequality of the pupils; they differ not only in size, but also in their susceptibility to light; and this difference between them may change as the disease goes on. This inequality of pupils is, it is said, most often found in those diseases which not only affect

the system generally, but which, like pneumonia, pleurisy, and hepatic and renal colic, are also definitely localised.

In the same way, with regard to parotitis after abdominal or pelvic lesions, we may admit that the general condition of the patient may help to cause it, without denying the local influence of the reflex nervous system.

Finally, it seems probable that this change brought about in the gland is not a spasmodic closure of the duct, such as Verneuil describes, but some change in the gland itself—not a retention, but a suppression. Retention of saliva, as shown by many cases collected by M. Terrier, causes a mere passive dilatation of the gland, which varies in a transient fashion with every meal, never suppurates, is never accompanied by disturbance of the general health, and vanishes when a probe or a catheter is passed up the duct.

Perhaps this parotitis may be due, as Mr. Knaggs of Huddersfield has suggested, to a reaction consequent on long-continued constriction of the arteries of the gland. But here I will take to heart the warning given by Graves in the Clinical Lecture already quoted. "I shall leave the *explanation*," he says, "to my juniors, who always explain matters, according to my observation, much more readily than their seniors."

Note.—It may be observed that Dr. Gowers, in his work on *Diseases of the Nervous System*, chap. i, p. 92, gives a case where the patient, "thirteen days after a stab-wound in the abdomen, which healed well, had an attack of parotitis, with facial palsy; on the fortieth day there developed paralysis of the tongue, vocal cords, and limbs; and on the sixth day after the onset of these symptoms he died from respiratory palsy. Extensive peripheral neuritis was the only nerve-lesion."

REPORT OF TWO CASES OF MALIGNANT PUSTULE.[1]

By ROBERT Z. PITTS, M.R.C.S., L.S.A., Chelmsford.

On Thursday, January 27th, 1887, a serious outbreak of anthrax—or splenic fever, as it is called by veterinary surgeons—occurred at Brick Barns Farm, Chignal St. James, near Chelmsford, resulting in the death, between the Thursday and Friday evening of January 27th-28th, of forty-nine cows from the disease and the slaughter of eighteen others. Professor Penberthy, of the Royal Veterinary College, made a microscopic and *post-mortem* examination of some of the beasts, and pronounced the disease undoubtedly anthrax; but previous to the Professor seeing the animals, some of the carcasses had been sold, and ten were conveyed through Chelmsford to Springfield Wharf, a distance of about three miles, where they were dressed by two butchers, brothers, from 7 o'clock on the Thursday evening till about 4 o'clock on the Friday morning, they not taking any extra precautions in dressing them, and only using cold water to wash their hands.

On Monday evening, February 7th, one of the brothers, J. M., came to my surgery and stated that on Sunday, February 6th, that is ten days after the dressing, he felt an itching of the right forearm, which continuing, he looked at his arm, when he noticed a small pimple, which he says gradually got larger, and more swollen, and became so troublesome by Monday evening that he thought he had better show it to me. On examining his arm, I saw a dark brown eschar seated on an indurated base, about the middle of the right forearm, and surrounded by a redness of the skin. My friend Mr. Cox also saw the case with me, and we both pronounced it to be the so-called malignant pustule. The patient not then being in a satisfactory condition to undergo an operation under chloroform, I sent him home and told him to come again in the morning; and on his presenting himself I found the dark brown eschar surrounded by a ring of vesicles, around which was a livid red area and extensive brawny œdema extending over two-thirds of the right forearm; no swelling of the axillary glands could be detected, and he did not complain of any pain in any other part. I sent him home to bed, and immediately followed him with Mr. Holland and Mr. Cox, and under chloroform freely cut out the so-called pustule, removing a piece 2½ inches square, with the pustule in the centre, taking care to remove everything down to the fascia of the muscles, and then thoroughly mopping the wound with pure carbolic acid kept fluid by a few drops of glycerine; it was then dressed in the usual way with carbolic oil.

The patient next day began to develop a sharp attack of delirium tremens, which lasted four days, when he slept, and since then he has continued to get well, without the slightest bad symptom or return of the disease; and on February 21st was so far well that he was able to go out. The wound healed quickly, and was encouraged by skin-grafts, which lived and filled it up in a short time.

[1] Read before the East Anglian Branch, Essex District, at Chelmsford.

On Friday morning, February 11th, the other brother, L. M., presented himself, having the same well-marked pustule, with vesicles round it, and brawny œdema of the forearm; it was in exactly the same condition as his brother's, and in the same position, but on the left forearm. In this case, I took some of the serum from the vesicular ring, and examined it under 600 diameters (Hartnack), and found the field full of bacillus anthracis, similar to the plates in Professor Greenfield's article on Malignant Pustule, in Quain's *Dictionary of Medicine*. The man was also seen by Mr. Holland and Mr. Cox. We sent him home at once, and operated precisely in the same manner as in the first case, being most careful to well sponge the surface of the wound with carbolic acid; and in this case, also, the patient recovered without the slightest bad symptom.

The medicinal treatment in these cases consisted of salicylic acid, perchloride of mercury, and bark. In neither case did the temperature go up much, although in the first case it reached 101° F. on the two evenings on which the man was suffering from delirium tremens.

Dr. Downs was present with us at the last operation, and has the removed pustule in spirit; I had hoped to have been able to have shown you a section to-day, but at present it has not been hardened sufficiently.

Remarks.—These cases help to show the period of incubation of malignant pustule; both men were exposed to the inoculation at the end of January 27th and the beginning of January 28th, and in one case it was first noticed on February 6th, and in the other on February 7th, giving a period of incubation of between ten and eleven days.

They also go to prove that where cases of malignant pustule are operated upon in time, that is, before the bacilli have got into the general system, the patient has a very good chance of recovery, and as in these cases, without the slightest return of the poison or any detriment to the constitution.

SURGICAL MEMORANDA.

REVOLVER BULLET LODGED FOR FOUR YEARS IN THE BASILAR PROCESS: RECOVERY.

This case is so remarkable that I venture to publish it. In August, 1883, my friends, Drs. S. Hill and T. B. Turner, of Holloway, sent for me to a case of attempted suicide by a young gentleman, a victim of religious monomania and of its most frequent cause, who had placed a revolver in his mouth, and fired. By some miracle, after severely lacerating the soft palate, the ball (a large one) was found merely lodged in the basilar process. It could be felt with the finger, but was, of course, most tightly wedged in—so much so that the soft bone had, as it were, closed in over the base of the bullet. As I could not make out any symptoms beyond shock and fright, I determined to leave it alone, and not attempt to remove it. In the first place, from its peculiar position, no forceps could clutch it; and, secondly, any scoop or elevator, however carefully used, stood a chance of cutting through the soft tissue of which the basilar process is formed, and so threatening the medulla. The wound in the palate healed, and the young man's mental symptoms healed, too; the ball is still in his basilar process, encapsuled, no doubt. He is in perfect health, and following his occupation as a clerk—possibly a wiser man; his experience should make him a better man.

Edward Bellamy, F.R.C.S.,
Wimpole Street. Surgeon to the Charing Cross Hospital.

A MONSTER TRACHEOTOMY TUBE.

A man, A. P., aged 60, is now under my care. He states that, in December, 1885, he had tracheotomy performed for "paralysis of the vocal cords" at St. Bartholomew's Hospital, after an illness of two years. He remained in hospital four months, and, when he left, was wearing an ordinary rubber-tube. The tube he wears now is a rough copy of the former made by himself, and of the following extraordinary measurements: length, 4½ inches; diameter, ¾ inch.

Alfred Sheen, M.D., Cardiff.

CLINICAL MEMORANDA.

CHRONIC VALVULAR DISEASE OF THE HEART.

The following may be interesting in connection with Sir Andrew Clark's paper on disease of the heart known to have existed for over five years, without causing serious symptoms, which has recently been published in the Journal. The patient, a medical man, who will soon be 94 years of age, has been under my care for the past nine

years, and has mitral systolic murmur. His present wife tells me that to her own knowledge it has existed during the past thirty-one years, and she believes it has done so during a great portion of his life.

I can learn that he had a serious attack of acute rheumatism before he was 20 years of age; and, before his first marriage, Sir Astley Cooper told his friends that if he fainted there was every probability he would never rally. Consequently, I am led to the belief that the heart-disease has existed since his attack of rheumatic fever. He has always been an active and strong, but very abstemious, man, has never suffered from shortness of breath, and was able to play cricket until an advanced age; I believe his last attempt at batting was in his 80th year, at which time his friends considered him as active and young-looking as most strong men at 70.

I have seen him through several most serious illnesses, but never found the condition of heart such as to give me any cause for anxiety. It has been known that he has an intermittent pulse for more than fifty years. His average pulse has always been 72; occasionally, when out of health, decreasing to 60, but rarely going above 84, unless feverish. Belonging to the old school, he has been regularly bled twice or oftener during the year, until his 85th year, and to this he has always attributed his good health.

In the course of my practice I can remember many cases where valvular mischief has existed for years, but where compensation has been so thoroughly established as to cause no inconvenience either during good health or during the progress of disease.

Belgrave House, Sandown, I.W. W. E. GREEN.

DISLOCATION OF THE HEAD OF THE FIBULA FORWARDS AND "UPWARDS."

As instances of this luxation are very rare (*vide* last edition of Erichsen's *Surgery*), I venture to send a short account of a case which came under my care some years ago, the notes of which I have just discovered amongst a bundle of old papers. A healthy, muscular non-commissioned officer, aged 24, employed as Assistant-Instructor in the Garrison Gymnasium, was practising on the "parallel bars" what is known to gymnasts as the "hand-spring," that is, the performer, standing between two parallel bars, about twenty-three inches apart, and forty-five inches high, raises himself off the ground by his hands resting on and grasping the bars, swings his body backwards and forwards till sufficient momentum is gained, and throws a "back somersault." A straw mattress was placed to break the shock, but from use had become uneven and depressed towards the centre, and the patient "felt his right leg bend in under him, and something give below the knee." When seen, the nature of the injury was at once apparent, and its diagnosis confirmed by two other medical officers, but all attempts to reduce it failed; consequently he was sent on to the Garrison Hospital to be put under chloroform or ether, as considered most advisable, should a fresh attempt to reduce it fail, but much to my surprise, on reaching the ward, it was found that the bone had become reduced as follows: the patient was "hopping" across the verandah on his sound leg, leaning on the shoulders of two comrades, the injured leg dependent and semi-flexed, at about an angle of 40° or less, when he felt conscious of a "sudden snap" at the injured part, with immediate lessening of state of pain, tension, and stiffness. When placed in bed, stripped, and examined, it was found that the head of the fibula had slipped back into its proper position, evidently during the above hopping action, requiring only a pad and bandage to secure it; and he returned to duty in a week, keeping on the pad and bandage as a precaution. What emboldens me to send these notes to you is not so much the rarity of the dislocation, as its "mode of reduction," which may give a hint to brother practitioners for dealing with a similar case should they come across one.

J. E. FISHBOURNE, M.D., F.R.C.S.I.,
Honorary Brigade-Surgeon (retired).

INTESTINAL CAST.

R. F., aged 32, subject to deep-seated sciatic pains of nearly four months' duration, passed on the 18th February an intestinal cast, sixteen inches in length, one end distinctly corrugated and constricted like the anus, while the other end presented the characters of the large intestine. The positions of the columnæ recti and follicles were well marked, and at first sight the cast appeared to be a piece of intestine. Its passage was attended with much tenesmus, but was not accompanied with fæces. There was no hæmorrhage, and nothing unusual was noticed previous to its passage. The patient was for some time treated with hypodermic medication and liniments rubbed in along the course of the sciatic nerves, which gave him relief. He passed another piece about three inches long the following evening. The cast was soft and gelatinous, allowing of examination under water only. It was composed of mucous and epithelial cells, some bacteria, and amorphous matter. I am inclined to think that it was of diphtheritic nature. It was gradually dissolved out in the water and proof spirit that had been successively changed.

MONTAGUE D. MAKUNA, M.R.C.S.Eng., L.R.C.P.Lond.

FOREIGN BODY IN THE INTESTINAL CANAL.

NOTICING Dr. Stewart's case of the above in the JOURNAL of February 26th, I should like to record a case of a similar nature which came under my notice about two years and a half ago, while I assisted Dr. Lyall, J.P., of Leven. A nail weighing fully half an ounce, two inches and a half long, and having a large round head two inches in diameter and three-quarters of an inch long, was swallowed by a boy aged about 7 years on September 14th, 1884. I saw the boy on the 15th, and advised rest and "expectancy." On the 20th, as there was slight pain (no fever) in the region of the cæcal valve, I ordered a small dose of senna-tea, and on the 21st, on my visit, was shown the nail, which had been passed without pain that morning. The weight and roundness of its head probably assisted its safe journey through the intestinal tract.

R. BALFOUR-GRAHAM, L.R.C.P., L.R.C.S.Edin.
Falkland, Fife, N.B.

THERAPEUTIC MEMORANDA.

JÁMBÚL SEEDS IN DIABETES.

As far back as 1883, Mr. Banatrala called attention to jámbúl as a remedy in chronic diabetes (*Medical Record*). Since then, I do not think this drug has received as much attention from the profession as it deserves, and it is in the hope of securing for it a wider trial that I beg you to insert this short note.

The seeds are the product of *Eugenia jambolana*, and must not be confounded with "jumble beads" or jequirity seeds, an infusion of which was introduced a few years ago as an application for granular lids.

I lately tried powdered jámbúl seeds in a case of diabetes in which the patient had been ill for over six months, was greatly emaciated, and quite prostrate. He was suffering from great thirst and ravenous appetite; there was also great restlessness. The urine had a specific gravity of 1040 to 1042, and from 7 to 7½ quarts were passed in the twenty-four hours. Five grains were given six times in the twenty-four hours for a fortnight. At the end of that period, the patient was able to get up, and walk out for an hour at a time, was neither thirsty nor abnormally hungry, and was passing 4 to 5 quarts of urine of a specific gravity of 1020; he could sleep well, and felt strong. During the time he was taking the jámbúl his diet was not restricted in any way. I hope that others who try this drug will report results.

Blackpool. GEO. C. KINGSBURY, M.D.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

GUARDS' HOSPITAL, LONDON.

UNUSUAL CASE OF CUCAINE-POISONING.

(Under the care of Dr. JAMES MAGILL, Surgeon-Major, Coldstream Guards.)

THE employment of cucaine is now so general, and its advantages so great, that it would seem to be the duty of every surgeon to record any untoward or unusual symptom produced by it.

On January 31st, Dr. Magill, intending to slit up the prepuce for phimosis in a Guardsman of fine physique, injected one grain of cucaine dissolved in a few drops of water into the foreskin. Returning to the man's bedside in a quarter of an hour, Dr. Magill was struck by the patient's extreme pallor, and did not proceed with the operation. The patient complained of pain about the præcordia. His

pulse was very slow and most irregularly intermittent (quite unlike the feeble wave which is felt in the radial when ordinary syncope is impending), but the apex-beat was distinct. This grave condition lasted about twenty minutes.

From an examination of the numerous published records on this subject, it would seem that toxic symptoms have followed the administration of cucaine in doses almost infinitesimally small, as well as when a larger quantity has been used, the time of the onset of these phenomena being also most variable. "A few drops of a 2 per cent. solution" are reported to have caused alarming results (JOURNAL, January 9th, 1886). Again, as far back as November, 1885, seventeen cases in ophthalmic practice were collected by Dr. Ziem, of Dantzig, in which serious effects followed the introduction of very minute doses into the eye (JOURNAL, November 21st, 1885); while in several instances the injection of one grain hypodermically has brought on faintness, vomiting, etc. On the other hand, most surgeons agree that, for the production of complete insensibility, one grain is the minimum which is necessary, as a general rule. One operator mentions having used 14 drops of a 10 per cent. solution in a boy, aged 8, who had disease of the heart; a second injects 2 grains at once; and a third expends 4 grains at a single time—all with the best results; while a remarkable instance of the amount which can be taken is given in the *Lancet* of December 18th, 1886, where a patient (the subject of morphinism) is recorded to have survived the hypodermic use of 23 grains in one day.

The foregoing facts suggest the following inquiries: Is there any way of recognising those who would be likely to bear cucaine badly? Is rapidity of absorption a factor to be taken into account? Are its occasional ill effects to be put down to personal idiosyncrasy, for want of a better explanation?

The subjects of the toxic influences of this drug have in so many instances been patients in feeble health or women, that the case narrated above appears worthy of publication.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MARCH 11TH, 1887.

W. H. BROADBENT, M.D., F.R.C.P., President, in the Chair.

Pneumothorax.—Dr. DE HAVILLAND HALL communicated a case which he had had under observation, with notes of four other cases. Case I.—A clerk, aged 24, was sent to Dr. de Havilland Hall by Dr. W. D. Penny on June 27th, 1885. The account given by Dr. Penny was that, on May 8th, the patient complained of sharp pain in the left side of the chest. In the mid-axillary line, low down, there was pleural friction, with slight dulness on percussion and tubular breathing. The dulness only covered a very small area, and the rest of the chest was quite normal; pulse 110; temperature, 100.4° F. The patient was sent home to bed, and next day there was hyper-resonance all over that side, and extending half-an-inch to the right of the sternum. Breathing was replaced by amphoric roaring and loud tinkling, except that at the angle of the scapula the respiratory murmur was faintly audible. The heart-sounds were muffled, apex-beat half an inch inside the right nipple; pulse 140; temperature 99° F. The patient stated that while getting into bed he suddenly felt faint, and had a peculiar sensation about the heart. In the course of a month the symptoms slowly subsided, the heart returned to its natural position, and the breath-sounds returned. A fortnight later there was a return of pain and shortness of breath. When examined by Dr. Hall the patient had just come from business. There was only slight complaint of pain, and there was not much dyspnœa; the pulse was 120. The heart-sounds were clear. There was impulse in the epigastrium. The left side of the chest hardly moved at all. There was general hyper-resonance and obliteration of the cardiac dulness. No breathing sounds were audible over the left side. The bell-sound could not be elicited. The right lung was normal. The urine contained a trace of albumen. On September 30th, the patient was again examined, and both lungs were found perfectly free from disease. Case II (notes supplied by Mr. B. Rix, of Tunbridge Wells).—J. W., aged 39, mason's labourer; his previous health had been good, and he had been in constant work for the past eleven years. While sweeping, he had been seized with sudden pains just above the left nipple, and came over faint. He continued at work for five days, but, owing to increasing dyspnœa and pain, had to take to his bed on the fifth day. On examination, there were the physical signs of pneumothorax on the left side. He was under observation for seven weeks, during which time the heart gradually resumed its normal situation, the hyper-resonance disappeared, and normal breathing returned. Case III. (recorded by Dr. Delgrange, see *London Medical Record*, 1881, p. 196).—A healthy youth, aged 19, while exhibiting the powers of his chest, suddenly felt severe pain in the left side, his face became blanched, and he experienced great oppression. During an effort to vomit he was seized with a sense of something tearing in his side, followed by syncope; there were unmistakable signs of pneumothorax. The patient recovered after about eight days. Case IV (recorded by Biermer, *Würzburger Med. Zeitschrift*, Bd. i, p. 385).—K. D., a law student, aged 19, while dancing, was seized with a peculiar sensation in the region of the heart, accompanied with giddiness, oppression, and sweating; when examined four days later, there were the physical signs of pneumothorax on the left side accompanied by a moderate amount of liquid effusion. In seven weeks all objective signs of the pleural affection had disappeared. Case V (recorded by Ricker, *Wien. Med. Wochensch.*, March 28th, 1860).—A badly developed young man, aged 18, was seized, while coughing, with a stabbing pain in the left side. A week later, he complained of considerable shortness of breath, and the physical signs were those of pneumothorax. The distress increased so much that he was punctured, and the operation was followed by an alleviation of all his symptoms. Two months later, he presented a more healthy aspect than before his illness. After remarking on the comparative rarity of cases of pneumothorax occurring among the apparently healthy, Dr. Hall drew attention to the cases collected by Dr. Samuel West, in a paper read before the Society in 1883, and to the cases reported to the Medical Society in March, 1886, by Dr. Whipham. Dr. Hall considered that the explanation of great preponderance of males over females in the subjects of this affection was to be found in the greater muscular exertion of males compared with females, and that, whatever might be the predisposing cause, the immediate cause of the pneumothorax was some strain. He had no doubt that, in a majority of cases, the rapid breaking down of a small tuberculous mass before a secondary pleurisy had had time to set up adhesions was by far the most frequent cause of pneumothorax. The paper concluded with some remarks on the diagnosis and treatment of pneumothorax.—Dr. BURNEY YEO said that, during ten years' experience at Brompton, he had never met with such a case as those described by Dr. Hall. He would suggest that sufficient stress had not been put on dry pleurisy as a cause of the condition. This form of pleurisy might easily escape notice, or be discovered only by accident.—Dr. STEPHEN MACKENZIE quoted the case of a young gentleman who was seized with symptoms of pneumothorax while apparently in perfectly good health. He had noticed "stitch" in the side on several occasions.—Dr. SAMUEL WEST said he had had one or two cases which bore out the statement which had been made. In a man, aged 50, the symptoms of pneumothorax were so obscure that he was several days in the hospital before it was remarked. He died soon after, and the disease of the lung was limited to a nodule. He thought most cases were tubercular. He had recently been making some experiments on the pressures at which healthy lungs would burst; and without giving any precise details, the pressure seemed to be much greater than that which would be caused by respiratory movements. He mentioned that he had never met with a case of pneumothorax after accident or injury to the ribs.—Dr. COUPLAND said that pneumothorax most rarely occurred with fractured ribs. In Dr. Hall's case it was probably due to small foci of tubercle. The interesting fact was that these cases recovered. He had had two cases, both in young men apparently healthy. He did not think much excitement was necessary for the production of pneumothorax, if there was a small focus of suppuration. It was a wonder that coughing did not often set up pneumothorax. One of his patients, a clerk, walked quickly to his office; he soon had pain and distress in breathing, and pneumothorax of the left side. In a month he was discharged well. Another patient of the kind, five days before coming to the hospital, had caught a cold, and, after two days, pain in the side began. Pneumothorax was found, but not pyrexia. He left after three weeks, and ten days later was quite well.—Mr. G. R. TURNER confirmed the opinion that pneumothorax with fracture of the ribs was extremely rare.—Dr. JOSEPH TYSON said that a cause of pneumothorax not yet mentioned was pyæmia. He had had a fatal case of the kind, accompanied by emphysema.—Mr. RIVINGTON had seen only two or three cases of pneumothorax with fractured ribs at the London Hospital in seventeen or eighteen years; but emphysema in such cases was common. In such a case of pneumothorax, Mr. Herbert Page had aspirated the thorax and cured the patient.—Mr. HOWARD MARSH described the case of a boy admitted to St. Bartholomew's Hospital with desperate injury to the lung, which had been quite torn away from its bronchus. He died

in three or four days. He had fallen, and the visceral pleura was badly rent, although the ribs were not broken. He had pneumothorax. Another boy, riding on a donkey, fell, and had pneumothorax, without fractured ribs. Often pneumothorax, if present, might be overlooked, as the patient was very ill, and the air was soon reabsorbed.—Mr. BERNARD PITTS briefly described another case, that of a child with pneumothorax, upon whom aspiration was twice performed, with benefit, though death eventually occurred. No blood in that case came with the air through the aspirating-needle, though a rupture of the lung was afterwards found.—The PRESIDENT considered pneumothorax in apparently healthy patients was more common than was usually considered to be the case. He had seen three instances. In the third case the pneumothorax was obscure, and there were extensive adhesions in the pleura. All three of his patients were young men; in two of them the lesion was on the left side.—Dr. HALL, in replying, said he could not agree with Dr. Yeo that pleurisy was a common cause of pneumothorax; traumatic pneumothorax was uncommon.

Intra-peritoneal Excision of the Rectum, with Recovery.—Mr. F. S. EVE described a case. The patient, a woman, aged 34, had suffered with symptoms of cancer of the rectum for nine months. The growth encircled the rectum, and it was thought that the finger could be passed beneath its upper margin. The usual operation of excision was undertaken; but, as the upper limit of the growth could not otherwise be reached, the peritoneal reflection encircling the bowel was divided, and the diseased portion removed with the écraseur. The bowel excised measured nearly six inches in length. The upper end was readily brought down to the anal margin. The patient was now, five months after operation, in good health. There was good recovery, without symptoms of peritonitis. Remarks in recent researches on the experimental production of peritonitis tended to show that this operation should not theoretically be exceptionally dangerous, and that the limits of cases deemed fit for operation might be determined.—Mr. HARRISON CRIPPS said that probably in about one in five of the 25 cases of cancer of the rectum which he had removed it had been necessary to open the peritoneal cavity and remove part of the peritoneum; and there had been no fatal case. How much might be taken away with advantage to the patient was a question. When the disease had advanced so far as to attack the peritoneum, it usually recurred within a year after operation. But where the peritoneum was not invaded, there was often freedom from recurrence for two or three years after operation. If the disease recurred, Mr. Eve could perform colotomy, and had so far done the best for his patient.—Mr. GOLDING-BIRD asked how far the patient could now retain her motions.—Mr. EVE was surprised to hear from Mr. Cripps that the peritoneum was so frequently opened in these operations. Two such cases were mentioned in Mr. Cripps's book, and Mr. Morrant Baker had had one case. By dividing the peritoneum all round the bowel, he (the speaker) had found that he could easily pull down the bowel and examine it carefully. The patient had not mentioned in her last letter to him if she could now retain her fæces; she could not do so at first. The operation was begun in the usual way; he thought he had left the external sphincter muscle. A German surgeon with the chisel removed the left part of the sacrum, and then the rectum, and finally united the upper part of the rectum to the anus. Stitches had been inserted in his own case.

A Case of Scoliosis.—Mr. KEETLEY said that having received from Mr. Bernard Roth a paper on the results of the gymnastic treatment of scoliosis, he had asked that gentleman for permission to see the treatment. Mr. Roth consented, on condition that Mr. Keetley should send him a case (of the hospital class) for treatment. This condition being fulfilled, Mr. Roth (with Mr. Keetley's consent) exhibited the patient at the Clinical Society twice, once before and once after a course of gymnastic treatment. Mr. Roth's views of this case had been stated (with illustrations) in the Clinical Society's *Transactions*. Mr. Keetley, while acknowledging that the patient's spirits and muscular strength were improved by the gymnastics, stated that she had lost in height, and that the scoliotic curves had undoubtedly increased during the treatment.—Mr. BERNARD ROTH said the patient had been sent to him by Mr. Keetley, with a request to do what he could for her, and no intimation was given of an intention to read a paper until March 5th; further, he had applied in vain to know what line of criticism Mr. Keetley intended to follow. He defended his history of the cases reported in the *Transactions*, and protested against Mr. Keetley's paper being published by the Society unless his answer was appended. The patient in question had suffered from lateral curvature for ten years, and had been under various treatments. In spite of plaster jacket, etc., she had become frightfully deformed, and her deformity had gradually grown worse. He had told Mr. Keetley that he would do his best, and would make her independent of spinal supports in three months, though the osseous deformity would of course remain. He showed photographs and tracings of the ribs. The patient was shown at the Society in November, 1885, and again after the three months' treatment in March, 1886, and Mr. Keetley then made no objection. Both patients were present, and had been examined by members. If his reply could not be appended, he would urge the appointment of a committee to report upon the cases, as well as on the case which he had shown in April, 1883.—The PRESIDENT thought that the best course would be to appoint a committee.—Mr. HEATH said that Mr. Keetley had applied to the Council because he felt aggrieved that a case of his had been used without his permission in support of views which he was not prepared to endorse. He had received permission to read a paper on scoliosis, but it had not been anticipated that it would be of such a controversial nature. He agreed that the appointment of a committee was desirable.—Mr. HOWARD MARSH thought the question as to the pathology and treatment of scoliosis was open, and that a small sub-committee on the subject might do much good. The committee's labours would be great, and they would probably not be able to report for a year or two. The proposition was put to the Society, and carried unanimously. Messrs. Heath, Haward, Marsh, Rivington, and the Surgical Secretary (Mr. R. W. Parker), were nominated to form the committee.

Living Specimens.—The following were exhibited: By Mr. ROBINSON and Mr. PARKER: Congenital Deformity of Hands and Feet in three generations.—By Mr. BERNARD ROTH: Two Cases of Scoliosis.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MARCH 15TH, 1887.

Sir JAMES PAGET, F.R.S., F.R.C.S., President, in the Chair.

Morbid Growths Committee.—The report on Mr. Butlin's case of recurrent tumour of the breast was read by Mr. SHATTOCK. The opinion was expressed that the growth was a villous carcinoma, originating in connection with the ducts of the breast, in distinction from the acini.

Fibro-myoma of the Ovarian Ligament.—This specimen, which was exhibited by Mr. ALBAN DORAN, showed a small spherical tumour in the substance of the left ovarian ligament. A microscopic section was also shown; it proved that the tumour was made up of plain muscular fibres, mingled with white fibrous tissue; in fact, it was a "fibroid" precisely similar to several other fibroid growths which, in this case, were found in the uterus. The ovarian ligament was a prolongation of uterine tissue, its fibres passing into the parenchyma of the ovary. Hence it was subject to fibro-myoma, like the uterus, whence it was derived; and hence, also, fibro-myoma was sometimes developed in the ovary into which it ran. It was probable that fibro-myoma of the ovarian ligament had been sometimes mistaken for a so-called supernumerary ovary. In this case the latter condition existed on the right side.—Mr. SHATTOCK inquired how Mr. Doran was able to decide that the tissue was not fibrous but muscular.—Mr. DORAN admitted the difficulty, but thought that the nuclei were better marked in muscular tissue. He also found support for his view of the nature of the tumour from the analogy of other conditions in the same neighbourhood.—Mr. EVE agreed that the tumour was composed of unstriped muscular tissue.

Secondary Carcinoma of Prostate.—Mr. HURRY FENWICK showed a specimen of metastatic or secondary carcinomatous deposit in the prostate. He could only find four examples of this class of carcinoma of that gland in literature, recorded by Mercier, Langstaff, Guyot, and Lebert. In three of these cases the primary growth was found in the stomach, and in the last the dura mater was the site of the initial deposit. The specimen was removed from a man aged 26, whose first symptom was great lumbar pain. The duration of the entire illness was 2½ months. The spinal cord finally became attacked, and paraplegia ensued. The necropsy revealed that the lung was primarily affected, and the liver, spleen, kidneys, prostate, and cord secondarily. The growth was of the scirrhoid type.

Large Dermoid Cyst over the Sternum.—Mr. H. H. CLUTTON showed a large dermoid cyst removed from a woman, aged 39. When the patient was six weeks old a small body about the size of a pea was first noticed in front of the sternum. At ten years of age it was tapped, but no fluid withdrawn. At nineteen years of age it was of about the size of a hen's egg. It remained stationary for many years, or increased very slowly, but during the last five years it had more than doubled in size. The tumour had undoubtedly always been situated over the centre of the sternum. The tumour depended from the centre of the

sternum on a level with the breasts and measured 13 inches in circumference. It felt like a soft and flaccid cyst, but was not translucent. After drawing off some of the contents, it was ascertained that the bone was free from any hole or depression. The cyst was therefore removed entire, and the wound healed by first intention. On examination of the cysts, the lining membrane appeared to the naked eye to be skin, and one hair could be seen projecting from its surface. The microscope, although it did not reveal the presence of sebaceous or hair follicles, confirmed this impression. The contents, which measured 11 ounces, were composed of epidermis, cholesterine, and fat.—Mr. EVE had examined several dermoid cysts which did not contain sebaceous glands or hairs. Dermoid cyst occurred in various situations, as over the scapula, where they were in no relation with the branchial clefts or with the middle line of closure, but were to be traced to displacements of the epiblast.—Dr. ANGEL MONEY referred to a case recorded in the *Journal de Médecine de Bordeaux* of apparent dermoid cyst, communicating with the central canal of the spinal cord, at the level of the lower end of the cervical enlargement.—Mr. JONATHAN HUTCHINSON, jun., said that he had seen three cases of dermoid cyst in the middle line, at the junction of the nose and forehead.—Mr. STEPHEN PAGET said that in men with hairy chests there was generally a regular parting at the angulus Ludovici, the hair above growing upwards and below growing downwards. This fact might point to some developmental peculiarity of the dermoid structures at this point, which might help to explain the occurrence of dermoid cysts in this situation.—Mr. BLAND SUTTON said that the forehead at the root of the nose where the cysts described by Mr. Hutchinson, jun., occurred was a common site for meningoceles.—Mr. HUTCHINSON, jun., said that in his case the cysts were undoubtedly dermoid cysts, and not meningoceles.—Sir JAMES PAGET said that he had removed three such cysts, and in none was there any connection with the interior of the skull; but in one case a pedicle extended between the nasal bones. In his opinion, the cysts were undoubtedly dermoid. It was a curious coincidence that in one case there was also a spina bifida. He asked Mr. Clutton whether unusually rapid growth of the dermoid cyst had been noticed at the time of puberty, when there was an increased activity of the organs derived from the epiblast.—Mr. A. A. BOWLBY had observed two undoubted dermoid cysts on the forehead at the root of the nose.—Mr. CLUTTON said there was no evidence of increased growth until five years before it was removed; but it had grown rapidly during that time, which corresponded with the period during which she was bearing children. He had removed two cysts from the forehead at the root of the nose, which were undoubtedly dermoid. Such cysts occurred in any part of the body, though most commonly in the middle line or along lateral fissures.

Cystic Disease of the Testicle.—Mr. EVE made a communication on cystic disease of the testicle. The paper was based on a microscopic examination of twelve selected specimens and a table of twenty-eight recorded cases in which a microscopic examination had been made. There were three forms—cystic fibroma, cystic myxoma, and sarcoma, the second being intermediate between the other two. In the cystic fibromata the cysts and tubules were commonly lined with spheroidal or flattened epithelium, but some, in most tumours, with columnar, and in five specimens with columnar ciliated epithelium. Unstriped muscle was not rarely, and cartilage was generally, present in a fibrous stroma. Cystic myxomata were composed of mucous and fibrous connective tissue containing tubules of columnar, ciliated, and occasionally flattened epithelium, very like some tumours in the breast. In cystic sarcoma the cysts were a less prominent feature, and more commonly lined with columnar than flattened epithelium. The characteristic components of cystic fibromata—namely, ciliated epithelium, unstriped muscle, and cartilage—were present in sarcomata; and in three cases striped muscle was found. After reviewing the evidence regarding the origin of these tumours, the following conclusions were stated: 1. No specific difference exists between innocent and malignant cystic tumours; 2, they originate in the hilum testis; 3, there is probably a new formation of epithelium or adenomatous growth; 4, the prototype of this is found in the tubules of the vasa efferentia of the rete testis, and coni vasculosi, which are formed from the Wolffian body; 5, there are grounds for believing that the epithelial formations in cystic tumours originate from certain outgrowth from the Wolffian body described by Klein as interstitial cells, and normally occupying the hilum; 6, it is incorrect to attribute their origin to the organ of Giraldés, as this lies outside the testicle.—Mr. C. B. LOCKWOOD said that it would be most desirable if a specimen could be obtained in a tolerably early stage, to make a series of complete section through the whole, with a view of detecting remains of the Wolffian body.

Gall-stone which caused Obstruction of the Bowel.—Dr. P. H. PYE-SMITH showed a large gall-stone which had caused obstruction in an old lady, aged 78. She had never suffered from jaundice, and gave no history of biliary colic. She had always been very constipated; obstruction finally ensued, and after some temporary relief became complete. The abdomen was tumid, fuller on one side than the other, but no localised tumour could be felt by palpation through the abdominal walls. On rectal examination, however, the finger could just reach a smooth, hard, movable tumour, and it seemed probable that there was malignant disease of the colon. After thirteen days' complete obstruction, however, the large gall-stone exhibited was passed, and the patient recovered quickly, and had subsequently remained free from trouble. The gall-stone had probably ulcerated from the gall-bladder into the duodenum. Such cases were not very common, but Dr. Pye-Smith was able to show a second specimen also passed by an old woman, under the care of Dr. Hammersley, who had suffered from obstinate constipation, not amounting to obstruction. In neither case was it possible to fix the date at which the fistulous communication between the gall-bladder and duodenum occurred.—Dr. HAMMERSLEY observed that it was a point of great interest, especially to the patient, to determine whether another stone was present; this seemed probable, as the calculus passed was facetted.—Mr. SHATTOCK mentioned a case under the care of Dr. Bristowe, in which the remains of the gall-bladder, which was very small, communicated directly with the intestine. A gall-stone in the small intestine had produced complete obstruction, apparently owing to spasm, and not to mechanical impaction.—Dr. SIDNEY COUPLAND thought it improbable that in the second case there was any stone left, as the opening between the gall-bladder and the duodenum must be large.

Multilocular Cystic Epithelioma.—Mr. ANTHONY A. BOWLBY showed a specimen of multilocular maxillary tumour. The patient was a young woman who, when aged 24, applied at St. Bartholomew's Hospital with a tumour which expanded the left lower jaw. The growth was removed, but in a year began to recur, and finally it attained a very large size; twelve and a half years after the growth was first noticed, the left half of the jaw was removed. The growth was cystic, the cysts containing blood-stained fluid. The solid part of the growth consisted of fibrous tissue into which processes of spheroidal and flattened epithelial cells projected. The cysts probably originated from such cell-columns.

Cystic Epithelioma of the Neck.—Three cases of cystic epithelioma of the neck were described by Mr. QUARRY SILCOCK, who exhibited specimens from two of the cases. Case 1.—A man, aged 32, was admitted into St. Mary's Hospital with a large inflamed suppurating swelling under the lower third of the left sterno-mastoid muscle; he had first noticed a small lump in that situation about three months earlier; it was painful, and the patient, who was a strong, healthy man, began to lose flesh and strength. The swelling had been opened, and after admission Mr. Owen scraped away large portions of the growth with temporary relief. After death, though no complete necropsy was allowed, it was ascertained that the growth occupied the posterior as well as the anterior triangle, and infiltrated all the structures. There was a large cystic cavity lined by large papillary granulations which were found to consist almost entirely of epithelial cells, the most highly developed being of the squamous type, but not prickled, forming well marked nests and long columns running downwards into the mass of the tumour. The enlarged lymphatic glands, lying over the growth, were found to be due to inflammatory irritation only. Case 2.—A man, aged 56, was admitted with a large partly cystic tumour on the right of the neck, which had been growing for about five months. He was emaciated. The cyst was incised by Mr. Pepper, and a quantity of glairy yellow fluid escaped. The cyst, which was lined with papillary granulations, subsequently suppurated. Examination after death revealed the same macroscopical and microscopical appearances. Case 3.—A man, aged 64, was admitted with a large tumour on the left side of the neck, lying in greater part beneath the sterno-mastoid muscle, but involving both triangles; it extended from the jaw to the clavicle, up to the middle line in front, and to the mastoid process posteriorly. Mr. Silcock tapped the cyst and drew off a thick yellow grumous fluid, which was found to contain numerous large epithelial cells, so that there could be little doubt that the condition was the same as in the two previous cases (from which microscopical specimens were shown). Mr. Silcock said that in none of the cases was there any evidence of a primary growth elsewhere. He thought the only hypothesis which could be entertained was, that they owed their origin to the development of some belated portion of epiblast, perhaps the representatives of a branchial cleft, although the advanced age of the individuals in whom they were usually found appeared to negative such a supposition.

Card Specimens.—Mr. GODLEE: Malignant Disease of undescended Testes with Secondary Growths.—Mr. STONHAM: Pelvis of Child with Persistent Fœtal condition of Peritoneum.—Mr. F. W. CLARK: Subpleural Lipoma of Diaphragm.—Dr. C. H. ROBINSON: Drawings of Charcot's Joint Disease.—Dr. ORMEROD: Subdural Hæmatoma.—Dr. MAGUIRE: Bullet Wound of Heart.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MARCH 2ND, 1887.

JOHN WILLIAMS, M.D., President, in the Chair.

Specimens.—Dr. GALABIN showed a uterus removed November last by Porro's operation. The patient made a good recovery.—Dr. HORROCKS exhibited a fibro-myoma from a case of Cæsarean section. The patient in this case died.

President's Address.—The PRESIDENT delivered his inaugural address, in which he discussed the progress of obstetric medicine and science. He noted that in midwifery, even more than in the treatment of diseases of women, the progress of knowledge had revealed new methods of saving life. Our knowledge of the use and application of the forceps, of the mechanism of labour in deformed pelves and of pelvic measurement, and of the means at hand for abolishing craniotomy had saved many lives. The most important innovation, however, was the introduction of antiseptics into the practice of midwifery. In that branch of obstetric medicine which dealt with the diseases of women, the most striking fact was the marked change which had come over it during the past thirty years, during which period it had acquired a surgical character. Passing over the triumphs of abdominal surgery, it must be admitted that all pelvic and uterine surgery of the past could not be considered as triumphs, but rather as disasters. There was hardly one among the diseases of women for which some surgical proceeding had not been suggested. How was this to be explained? Was it to be ascribed to the failure of medical science, or to the slowness with which medical treatment accomplished its objects? Or was it due to impatience and hurry on the part of the practitioner? Or did it arise from a plethora of surgical genius in one department? Or might not other causes play an important part in bringing about the present phase of the practice of the diseases of women? As with the diseases of other parts of the body, many of those which affected the female pelvic organs were not amenable to treatment of a medical kind; and in some of these the art of the surgeon intervened rightly and beneficently. There were others again in which the art of the surgeon had been practised in vain, or with evil consequences, which had been subdued by the skill of the physician. There were others again which were cured neither by the skill of the physician nor by the dexterity of the surgeon, and this fact we should not have the shortness of memory to forget nor the recklessness to overlook in practice. Hitherto, surgery had proved of the greatest use in the removal of excrescences and the repair of injuries. When it had ventured beyond this, it had been productive of more evil than good. We were also struck by the number of operations which had been devised, suggested, and practised, by the extraordinary divergence of the opinions held by authorities with regard to their value, and by the number of them which had been practised for a time, and then had been entirely, or almost entirely, discarded. This was a state of things which existed in no other department of medicine, nor in the surgery of any other part of the body. Had the many operations which had been proposed and practised been based upon carefully ascertained *data*—*data* acquired by honest scientific labour? Or had they been based upon hypotheses, the offspring of a too active imagination? Or had those who had been opposed to the present surgical wave failed to appreciate ascertained scientific truths? The fact that many operations which had been proposed and practised, especially in the treatment of vaginismus and dysmenorrhœa, had proved useless or injurious, and had been discarded, indicated that such operations were proposed on insufficient and unreliable grounds. The mischief arising from the too ready acceptance of surmises could not be exaggerated. The President gave a further illustration of it from the other branch of obstetric medicine. About a quarter of a century ago Dr. Braxton Hicks enunciated the scientific method of treating placenta prævia. For nearly five and twenty years this was overlaid by a mass of teaching based upon false hypotheses and exceptional occurrences, and had only recently been rescued, and reintroduced to us through a German medium. Hypotheses and their ready acceptance had been the bane of obstetric science during recent years. We should prove all things, and especially hypotheses burdened with operations. The wonder-inspiring character of many of the operations practised for pelvic diseases also accounted for the present surgical aspect of practice in the diseases of women. This was the side of them which appealed to the public, and unfortunately also to a large number of the profession. Like the most dangerous feats of the acrobat, and of the performer on the tight-rope, they appealed irresistibly to a quality of mind which was far from uncommon. How often did we hear the greatest admiration expressed for a medical man, not because he was learned and skilful, but because it was "kill or cure with him." This quality came out in a very marked manner in the love of quackery shown by those who could not profess ignorance as an excuse for their folly. The President then spoke of contemporary medical literature at home and abroad. To America, he remarked, we owed much that was excellent in midwifery and in the treatment of disease. In that great country much of the energy of the profession was, however, devoted to the impossible, to setting the coping before the foundations had been laid. At the same time, many of our brethren there were devoting themselves to clinical and pathological work. But there was one questionable phase of the work done in their Obstetrical Societies, and that was the practice of publishing imperfect reports of operations before the results, immediate and remote, of the operations were known. No good could result from publishing operations on a Thursday which were performed on the previous Monday, and no practice was more likely to be productive of unalloyed mischief. It was a practice which the President hoped would never be introduced into our societies. If it were intended to benefit science, the intention must fail; and if it were for purposes of advertisement, no words could be found bitter enough to express our contempt for it. Were this Society a mere advertising medium, the President would neither hold office in it, nor be a member of it for an hour. It was, however, an excellent advertising medium, and it was right that it should be such. We did not light a candle and place it under a bushel, nor did we bring new facts and new discoveries into this room to hide them, but for the enlightenment of one another and of the profession. The President then expressed satisfaction at the number of good scientific papers which the Society had in hand. Through science the time might come when some President of the Obstetrical Society would be able to announce to his audience that obstetricians of the present day possessed the means of preventing the growth of ovarian tumours, or of fibroids, or of cancer. In conclusion, he hoped that obstetricians would rely not on doubtful surgery, based on guesses at truth, but rather on careful observations by the bedside and in the laboratory. To clinical research the country medical man could render brilliant services.

At the conclusion a warm vote of thanks was proposed by Dr. GRAILY HEWITT and seconded by Dr. BRAXTON HICKS, which was carried by acclamation.

The discussion of the paper on Galactorrhœa, which was read at the previous meeting by Dr. Gibbons, was opened by Dr. MATTHEWS DUNCAN, who noticed the neglect of the science of lactation and the deficiency of literature connected with this important and interesting department of practice. He believed Dr. Gibbons's paper to be the fullest account of the subject. Galactorrhœa required definition, for there were many kinds. That prolonged and exhausting suckling which led to depression and melancholia might be, but was not, classed as galactorrhœa. In Dr. Gibbons's case there was no excessive flow, for thirty ounces a day could only be regarded as a case of long continuance of the flow in quantity, nearly what was secreted by an actively nursing woman. Dr. Matthews Duncan had seen in a healthy young woman a constant flow so excessive as to run through the bed and over it to the extent of many pints a day, but not for many weeks. Another kind of excessive flow was not very rare in rich-blooded young women—milk running from the idle breast while the other was being suckled. He had watched such a case when the wasted milk was apparently more than the child could be swallowing, the flow going on only while the opposite breast was stimulated by the sucking infant. The unilaterality of Dr. Gibbons's case was interesting, but it was not rare in ordinary healthy nursing. In Dr. Gibbons's case cure came at once on the appearance of delayed menses, and it was most natural to ascribe the arrest of lacteal secretion to the appearance of menses, the one function alternating with the other, as the growth of stags' horns with the rutting.—Dr. CLEVELAND drew attention to what he preferred to call "incontinence of milk." In this condition, the infant at the breast would cry more than usual, not being satisfied; it would not sleep so long as it should, and could not present the appearance of thriving. On inquiry as to the suckling, the frequent reply was that "there was plenty of milk, and that it ran away." Dr. Cleveland was satisfied that, when a primipara suffered from this form of galactorrhœa, she would prove an inefficient nurse. It seemed that there must be a dispropor-

tion between the glandular activity of the breast and the storage capacity of the milk-tubes or reservoirs; and, when the "draught" came, the milk ran out so fast that much was lost, and the child was consequently imperfectly nourished.—Dr. JOHN PHILLIPS mentioned a case, as did Dr. HORROCKS; and the latter compared the physiology of excretion of saliva with that of milk, and suggested that galactorrhœa might be due to vaso-motor or pure nerve-influence. The secretion of milk was intimately associated with the ovaries, but the nervous pathology had not yet been fully ascertained.—Dr. C. H. ROUTH wished to speak more especially regarding the treatment of these cases. First, as to the breast itself. Amid the many remedies adopted, why was not local pressure of the breast carried out? It was a well known method of treatment in cases of orchitis, or swelled limbs. Dr. Routh remembered a case where a lady continued to secrete milk long after the weaning of her child, and which persisted about three years, and then became restricted to one breast. It yielded partially to treatment by pressure, but completely stopped when treatment was directed to the womb. There was remarkable sympathy between the womb and breasts. Mammodynia, induced by uterine or ovarian disease, would remain till the womb or ovaries were treated. In Dr. Gibbons's case, as soon as menstruation was established, the galactorrhœa ceased. Dr. Routh thought that, by the introduction of a piece of caustic within the uterus, as suggested by Sir James Simpson, the flow of blood or menses might have been determined, and the cure of nature anticipated. Dr. Routh had often induced a bloody discharge from the uterus by this method, and very speedily too.—Dr. PLAYFAIR knew a good deal of the practice of the late Sir James Simpson, but was not aware that he ever adopted or recommended the treatment named by Dr. Routh.—Dr. GALABIN and Dr. DAVSON related their experience.—Mr. J. BLAND SUTTON said he had found galactorrhœa in the cow, due to tubercular disease of the ovaries; and in a case of unilateral galactorrhœa in a kid, there was a cystic ovary on that side.—Dr. HERMAN asked if the mammary abscess from which Dr. Gibbons's patient had suffered might not be the explanation of the unilateral character of the galactorrhœa, one breast not secreting because of destruction of gland-tissue by the abscess?—Dr. CHAMPNEYS said that Dr. Gibbons's case exemplified the antagonism or alternation between lactation and menstruation. There were cases in which secretion of milk coexisted with uterine hæmorrhage. He had seen a case in which the more the breasts swelled the greater was the uterine loss. Nursing was stopped, ergot was given, and the breast soon subsided. With regard to treatment, Dr. Champneys could not see why eczema need have prevented the application of pressure. A drying-powder on lint or cotton-wool could have been used with strapping over, the straps reaching more than half round the body. He thought there was evidence in favour of the use of ergot in these cases. Derivation to the uterus by hot foot-baths was also not mentioned. Dr. Champneys could imagine that uterine hæmorrhage might be caused by the introduction of caustic within the womb, as named by Dr. Routh, but such hæmorrhage could not be considered menstruation. Dr. Champneys had heard of wholesale spaying of milking-cows in Texas, with the result that the milk had gone on to the owner's satisfaction for a long time—in one case for eleven years.—Dr. HEYWOOD SMITH thought the discussion would lead us to give more attention in such cases to the condition of the uterus and ovaries.—Dr. W. J. COLLINS had seen lacteal secretion in infants, male and female. He would like to hear what the condition of the breast was in Dr. Gibbons's case after the arrest of secretion. Was it atrophic? From analogy with the salivary glands, the galactorrhœa might be of the nature of a paralytic secretion.—In reply, Dr. GIBBONS said that the eczema was due to constant saturation of the skin with the milk that flowed away, and that his case was so entirely unilateral that not a drop of milk could be squeezed from the right breast. When the patient was well, the left breast assumed a normal appearance.

The Mechanism of the Third Stage of Labour: 1. The Separation of the Placenta.—Dr. CHAMPNEYS read the first of a series of papers on the above subject, reviewing the facts furnished by our knowledge of the clinical course of natural labour, and by that derived from Porro's operation. From the former it was known that, until the birth of the head, the placenta was not detached, and that after the birth of the head it was not at once detached. Leinser found, by examination of 168 women, that the placenta was completely detached as soon as the child was born. As regards Porro's operation, the inferences drawn from it must be regarded with suspicion on account of the great interference which had taken place with the uterus. The facts derived from these two sources did not tally. He next discussed the theories of the cause of placental detachment: A. By contraction and retraction alone, through reduction of the placental site. B. By contraction and retraction indirectly: (*a*) by separation of the centre, which was less firmly attached than the edge, leading to aspiration of blood; (*b*) by squeezing blood towards the surface during contraction; (*c*) by rapid diminution of intra-uterine pressure, consequent on the birth of the child. C. By detrusion (Leinser); the placenta being forced in the direction of least resistance, namely, the axis of the parturient canal. He then discussed the theories of the modes of placental detachment: A. According to the situation of the placenta. B. From the edge. C. From the centre. D. According to the firmness of attachments of its parts. He then considered the evidence furnished by the various facts, and showed that the question was whether the separation of the placenta was independent of rupture of utero-placental vessels as a cause. The decision depended on (*a*) proved hæmorrhage behind the placenta in normal labour; (*b*) on the mode of expulsion of the placenta. He concluded (pending the decision of the two above questions to be dwelt with in a subsequent paper) that hæmorrhage to a moderate amount played a certain though subsidiary part in the mechanism of the detachment of the placenta.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, MARCH 10TH, 1887.

J. W. HULKE, F.R.S., President, in the Chair.

The PRESIDENT announced that Mr. James Dixon, Consulting Surgeon to the Royal Ophthalmic Hospital, Moorfields, had presented a complete series of Von Graefe's *Archives* from the beginning up to the year 1875.

Ophthalmoplegia Externa.—Dr. C. E. BEEVOR showed a case of ophthalmoplegia externa without other symptoms. It was that of a woman, aged 40, who had rheumatic fever six years ago, after which the right eye suddenly turned outwards, but it was doubtful whether the left eye was affected. The patient did not know that her eyes were fixed till told so. The up-and-down movements were weak, but there was almost complete paralysis of the lateral movements. There was a considerable degree of ptosis, but this was probably due to the consensual movement of looking, which was very deficient. The pupils were equal, and reacted to light and accommodation; convergence was lost. The optic discs were normal. There was no history of syphilis, and no evidence of tabes, but some improvement had followed treatment with iodide of potassium.

Pupillary Movement in Lateral Deviation.—Mr. MARCUS GUNN showed a case of pupillary movement in association with lateral deviation. The boy, aged 10, had a blow on the left eye with a cricket-ball two years ago, which had left the sight dim on that side. There was considerable lenticular opacity, and no fundus reflex; there was bare perception of light; projection was extremely defective, being accurate only outwards. On fixing a distant object with the right eye for some seconds, nystagmus commenced in the left only, slight in degree, and lateral. On looking strongly to the left, both eyes exhibited nystagmic movements. On lateral deviation to the left, both pupils contracted, while they did not change on lateral deviation to the right, nor in association with any other muscular movement except convergence, when they acted normally. Both pupils reacted well to light, but the left alone contracted feebly to exposure from the great defect of vision. The downward movement of the left eye was somewhat impaired, and on looking upwards the left was strongly divergent.

Picture painted after Extraction of Cataract.—Mr. BRUDENELL CARTER showed a picture painted after recovery from extraction of a senile cataract. The artist was about 55, and was operated upon for mature senile cataract of the left eye in November. The right lens was at that time partially opaque, and became completely so by the end of 1885. It had not been operated upon, and the picture was painted in October, 1886, with the left eye only. The drawing showed the entire absence of astigmatism, the correcting lens being spherical only.

Fibroid Degeneration of the Ciliary Muscle.—Mr. KAROP showed a case of (?) fibroid degeneration of the ciliary muscle.—Dr. BRAILEY was not satisfied that there was fibrous degeneration; it might be that the muscle had been displaced and stretched and extended. He said that there was an abnormal layer of nuclei, but he did not say it was fibrous.

Paralysis of External Recti.—Mr. J. G. MACKINLAY showed a case of paralysis of both external recti, probably congenital. The patient was a girl, aged 16. There was no diplopia, nor had there ever been. No other muscles were affected. The pupils reacted well to light. Acuity of vision was greater in the left eye. There was astigmatism of both eyes. Partial deafness existed on both sides.

New Vessels in Vitreous Body.—Dr. ERNEST CLARKE showed a case of new formation of vessels in the vitreous body.

Cases of Vitreous Hæmorrhage.—Mr. BRUDENELL CARTER showed a case of large spontaneous vitreous hæmorrhage in a young man which had been almost completely absorbed.—Mr. C. HIGGENS showed a case in a boy, aged 7, of hæmorrhage in the vitreous body with a peculiar deposit behind the retina (? inflammatory).

Associated Movement of Upper Lid and Eyeball.—Dr. SIDNEY PHILLIPS showed two cases of associated movement of the upper lid with movement of the eyeball. The patients were brothers, and the condition was seen in one at the age of six months. The eyeball being directed to one side the opposite upper eyelid drooped, and also on the side used, though this latter was rendered less apparent by an effort which contracted the occipito-frontalis muscle.

New Formation in Vitreous.—Mr. ROCKLIFFE related two cases of new formation in the vitreous; in the first there was high myopia, in the second there was a history of a blow. There was no syphilis in either patient, and in each the eye was quite blind. He also narrated a case of ossification of the choroid, causing sympathetic ophthalmia. There was no history of syphilis or injury, but there had been an attack of kerato-iritis eight years previously. After removal, an extensive layer of bony tissue was found in the choroid extending in all directions from the site of the disc; the lens, which was entirely absorbed, was encapsuled in a bony shell.—The PRESIDENT observed that the first two cases were clearly instances of inflammation and not new growth. He had seen true bone formation, but doubted if it was really in the choroid or rather in inflammatory products.—Mr. ROCKLIFFE could not give a definite answer to the last question.

Tubercular (?) Disease of Choroid: Extirpation of Both Eyes.—Dr. BRAILEY and M. HARTLEY communicated this paper. Five years previously the patient's left eye was struck with a piece of metal. No notice was taken of the accident, but in June 1886 the eye was tender, and he applied for relief. A small triangular piece of metal was then discovered resting upon the iris at its lower part. Faint horizontal streaks of opacity were also visible in the lower half of the lens. The metal, with the iris to which it was adherent, was removed by a downward iridectomy, and the eye seemed to become quiet. In about a month, however, the patient returned, complaining of intense pain in the left side of his head, with some diminution of sight in his right eye, which before was normal. Then R. E. V. = $\frac{2}{6}\frac{0}{0}$; cornea bright, but surrounded by distinct zone of pink injection. No pain or photophobia in this eye; only "dulness" of sight. L.E. Intense vascular injection of the whole eyeball, which appeared enlarged. Cornea uniformly opaque; tendency to bulging of iris at the upper and lower ciliary margins. V. = nil. T. + 2. This eye got rapidly worse, in spite of treatment, so that in a day or two it was extirpated. The right eye, meantime, was being vigorously treated with biniodide of mercury, leeches, atropine, etc.; but on August 4th the notes said there was pain in the right eye and the right side of the head, much chemosis, V = barely fingers. On August 21st there was marked prominence of the ciliary region—cornea slightly hazy (from altered T. ?)—eyeball as a whole large and prominent. Iris swollen and pupil obliterated. T. +. V. = nil. Pain and swelling continued. Eye eventually extirpated. Examination of eye by Dr. Brailey: Globe slightly enlarged (generally), especially in antero-posterior diameter. Cornea small, probably opaque, and flat when fresh. Extensive and prominent bulging of ciliary region, especially above and below. Anterior chamber was probably wanting or shallow when fresh. Optic nerve larger than normal. In antero-posterior vertical section through cornea and yellow spot: lens in situ: vitreous, gathered up so as to occupy only the anterior half of its cavity; a thin fluid fills up the remaining space. Retina in situ, but thickened and much wrinkled. Choroid in situ, but much changed in appearance, at and near the posterior pole much thickened; this thickening closely surrounded the optic disc It tapered off forward to the ora serrata, but even there it measured two or three times its normal thickness. Great thickening began again at the ciliary body, and extended thence to the iris, diminishing towards its pupillary margin, which hardly appeared implicated. In the iris the new growth appeared mainly posterior to the uveal pigment layer, which appeared scarcely altered. In the ciliary body the uveal pigment was scattered, and the new growth appeared both internal and external to it. The sclero-corneal tissue was abruptly thinned at the anterior termination of the ciliary body, and enormously stretched. This change extended over an antero-posterior space of at least 5 millimètres. The vastly thickened base of the iris was pushed close into the projecting part. Thus was constituted the ciliary bulging. A thin, pretty uniform layer of new formation and slight consistency was found between the retina and its pigment epithelium layer, and appeared to be due to the coagulation of a fluid effused in this position. The growth did not seem to have extended either into the substance of the sclerotic or into the retina, or to have perforated the lamina vitrea of the choroid. It was fairly consistent and non-pigmented.—The PRESIDENT thought the evidence of tubercle was indistinct, there was no history of it, and it was not proved by the microscope.—Dr. BRAILEY said that the growth in the second eye was clearly tubercular, there were well marked giant cells and broken down matter; no bacilli were found, but he laid no stress on that, as it might have been due to the Müller's fluid.—Mr. LAWFORD said that this did not interfere with the detection of the bacilli.—Dr. SHARKEY considered the anatomical peculiarities of tubercle much more characteristic than the bacilli; even in cases of general tuberculosis, he had failed to find them in any of the organs. The earlier the tubercles the less the chance of finding them.—Mr. NETTLESHIP thought that apart from the histology, a peracute destructive sympathetic inflammation would satisfy all the conditions found.—Mr. HARTLEY, in reply, said that there was nothing in the accident or in the behaviour of the first eye in favour of sympathetic inflammation.

On the Closure of Sclerotic Wounds by suturing the Conjunctiva only.—Mr. SIMEON SNELL (Sheffield) said that for a long time he had been convinced that it was unnecessary and undesirable to suture the sclerotic directly for wounds of that tunic. Perfect apposition was obtained by suturing the conjunctiva only; a needle threaded with carbolised catgut or silk was passed well underneath the conjunctiva on either side of the scleral wound, and the grip thus obtained allowed, on tying the suture, the lips of the wound to fall into perfect apposition. The resulting union was perfect. He referred to his article in the *Ophthalmic Review* for 1884, where he related cases and advocated this method; more recent experience had confirmed his opinion as to its value. He had employed it in a large number of cases where he had incised the sclerotic to remove or search for foreign bodies with the electro-magnet, as well as in several cases of accidental wounds, examples of which he related. The method advocated avoided passing a suture through the sclerotic, choroid, and retina, and left no loop in the interior of the eye to act in some degree as a foreign body in a cavity where the vitreous was already broken up; it made the deep wound into a subcutaneous one; it did not disturb union by removing sutures; the insertion of needles in the sclerotic often increased the loss of vitreous; this was avoided.

Case of sudden and lasting Lateral Nystagmus, most marked when looking to the left.—Mr. JESSOP mentioned the case of Charles W., aged 70, who came to the Central London Ophthalmic Hospital on November 12th, 1886. Three days previously, he noticed, on waking, that fixed objects moved and rocked laterally. His previous general health had been good, but he had been troubled with slight diplopia for fifty years, which he attributed to his anisometropia. For the last week he had been giddy, but had never fallen down. No syphilitic history or signs. Fourteen years deaf with his right ear, and five years with left. Eyes: no apparent squint, and fields for diplopia showed the images a very little distance apart. Lateral nystagmus most marked when patient looked to the left, scarcely seen when looking to the right. Pupils equal, acting to light and accommodation. Hippus irregular as to time and degree, not synchronous with respiration, pulse, or nystagmus, and not altered by looking to the right or left. He said that, on looking to the left, objects passed to the left, but he did not see them come back again. The nystagmic movements were not increased by pressure on the ear, as in Dr. Hughlings Jackson's case in the *Transactions of the Ophthalmological Society*, vol. iii, p. 261. The nystagmus was increased by active movement, especially coming down stairs turning to the right. Knee-jerks normal; heart, loud mitral systolic murmur. Urine normal. Mr. Cumberbatch had examined the ears, and said that the deafness was the ordinary deafness connected with chronic middle ear catarrh.—Dr. HUGHLINGS JACKSON, after remarking on the great value of the case Mr. Jessop had brought forward, and on the thoroughness with which it had been investigated, and after expressing his admiration of Dr. Gowers's paper, said that he had long held that nystagmus and tremor signified paralysis. He believed that, notwithstanding the complete excursions of the globes, there was loss of some few ocular movements in the case of Mr. Jessop's patient. It was of very great importance to distinguish between loss of power of muscles and loss of movements. In nystagmus there was, he thought, loss of some movements and development, and sometimes over-development, of other movements of the very same muscles. He considered that in miners' nystagmus and in other professional cramps (writers' cramp, for example) there was loss of some movements, with forcing of other movements of the same muscles. If, after gazing out of a rapidly moving railway carriage, we look at the seat, the seat seems to move; here is a negative after-movement;

here is loss of a few ocular movements with over-development of other movements. Is there not here nystagmus in the making? It was submitted that there was temporary exhaustion of some cells of the lowest motor centres for certain ocular movements. If one might make the ridiculous supposition that a man's occupation consisted in looking out of a railway carriage window, he might come in time to have railway travellers' nystagmus, the genesis of which would point to a paralytic element—loss of some movements owing to atrophy of some cells of lowest motor centres, with over-development of other movements. Dr. Hughlings Jackson then adverted to a case of hemiplegia from disease of the upper part of one-half of the pons Varolii with turning of the eyes from the side of the lesion—that is, to the side paralysed—which had been investigated by Dr. Gowers and himself (*Medical Times and Gazette*, January 3rd, 1874). It was well known that there were in cases of epileptiform seizures the mobile counterparts of ordinary hemiplegia with deviation of the eyes from the side paralysed. Dr. Jackson thought he had twice recently seen the mobile counterpart of the hemiplegia from disease of the pons he had mentioned—nearly tonic spasm of the limbs of one side, with turning of the eyes to the other side, presumably depending on discharge beginning in some part of the pons. He mentioned the case of a boy, reported to the Medical Society in November last, who had fits when his head or face was touched. In the fits the eyes turned to the right; there was hemiplegia of the left side. A case of more direct ophthalmological interest was that of a patient who had paroxysms of lazy clonic, almost tonic, spasm of the right side of the face, but of the two obiculares palpebrarum, and turning of the two eyes to the left. Fully aware that face fits occurred from limited discharges of the mid-cortex, he believed the face fit mentioned to belong to the class of ponto-bulbo-spinal fits (lowest level of evolution). The work the ophthalmologists were doing in precisely distinguishing losses of ocular movements from paralyses of ocular muscles was of vast interest to the neurologist. Dr. Jackson had never seen loss of ocular movements in cases of general paresis, except, perhaps, in one case in which there was a want of smoothness in the excursions of the globes, not amounting to nystagmus. Theoretically, loss of some movements would be expected, and, theoretically, a change so slight as not to amount to that supposed to occur in nystagmus. —Mr. W. H. Jessop, in reply, said there was hippus during convergence, and in right lateral deviation also.—Dr. Gowers, in reply, alluded to the fact that in nystagmus objects sometimes appear to move in the same direction as the quick movement of the eye as of great importance, as probably affording grounds for ultimately distinguishing the functional relations of the phenomenon in different cases. It brought the movement into relation with vertigo, with which it is sometimes associated, and in which the sense of movement in the individual and in external objects usually agrees in direction. The explanation of the agreement is to be found in the motor character of vertigo, and in the fact that any resulting movement is secondary, and falls short of the actual motor tendency which is felt as a sensation. If a person turns round, and an object remains opposite to his eye, he infers that the object moves in the same direction as he does, and a sensation of movement leads to the same inference; actual movement would only prevent the interference if it were equal to the tendency, and there would only be a sensation of movement in the opposite direction if the actual movement were in excess of the tendency.

Conjugate Palsy of the Ocular Muscles and Nystagmus.—Dr. Gowers first drew attention to the forms of conjugate palsy of the lateral movements of the eyes caused by disease on one side of the pons. The lateral movement was excited by the sixth nucleus on one side acting through its own nerve on the external rectus, and through the posterior longitudinal fibres (and cells and fibres of the opposite third nucleus and nerve), on the opposite internal rectus. It was probable that these third nerve-fibres did not actually arise from the sixth nucleus, but that their cells were connected with those of the sixth. It had been sometimes assumed that the centre for this lateral movement was the sixth nucleus, but this view was erroneous; the centre was possibly the superior olivary body, which, according to Betcherew, was connected with the sixth nucleus, the auditory nucleus, the cerebellum, and the spinal cord. There were three classes of palsy from disease of this region: 1. Paralysis of the sixth nerve only, from disease of its fibres within the pons, causing absolute palsy of the external rectus and deviation of the eye inwards; 2, disease of the nucleus of the sixth, causing the total palsy just mentioned, with, in addition, loss of the associated action of the opposite internal rectus, so that this eye could not be moved inwards beyond the middle line, except in some instances, in convergence or alone; the facial nerve was also involved in these cases. (An instance of this form was described); 3, disease above the sixth nucleus causing palsy of the lateral movement of both eyes, but without the total palsy of the external rectus, and consequent deviation of the eye inwards present in the first two forms. If the eyes were moved towards the opposite side, they could be brought back as far as the middle line, but not further. Thus the affected muscles could bring the eyes back from the position produced by the action of their antagonists, although they could not effect a primary movement. Hence, this return movement must be excited in some other way than through the path by which the same muscles caused a primary lateral movement. The excitation for the return movement was probably due to the influence of the centres of the opposite side. Thus, in disease of the right side of the pons, in which the eyes could not be moved to the right, if they moved to the left, the centres on the left side excited the corresponding centres on the right side to bring the eyes back to the middle line; to move them further, the interrupted right path was necessary. It was, perhaps, a special instance of the associated action of opponent muscles, continuing longer in the centres for the opponents than in those for the primary movement. This consideration simplified the problem of the immediate mechanism of nystagmus, reducing it to the causation of the intermissions of the primary contraction. Given intermitting contraction, and the return movement, the oscillation, necessarily followed. It was probable that a tendency to intermission was inherent in the centres, but was normally restrained, and the contraction rendered uniform by some influences, perhaps complex. One such influence might be the mutual action of opposing centres. A case was mentioned of disease of one side of the pons, with loss of the movement towards that side, in which there was nystagmus in the movement towards the opposite side; and, two years ago, he had brought a case before the Society, in which an acute lesion on one side of the pons caused deviations towards the opposite side, with nystagmus. But many more facts as to the position of lesions causing nystagmus were required, before the speculation as to its mechanism could, with profit, be carried further.—Mr. Priestley Smith asked whether nystagmus of a kind corresponding to the normal movements of convergence and divergence had ever been met with. He had looked for such cases for years, but had seen none. How was it that convergence was not at times disturbed in this particular way, when so many other co-ordinations were apt to become nystagmic? The fact that the movements in nystagmus were sometimes of a simpler or more isolated kind than those which we could produce by efforts of the will, favoured the supposition that the disturbance was in lower rather than in higher centres of co-ordination; thus, in some cases, the obliques only appeared to be involved, and, in certain rare cases, vertical nystagmus of one eye only was present. The higher volitional centres never produced these forms of movement otherwise than in co-ordination with others. In illustration of the interrupted character of even healthy ocular movements, to which some reference had been made, he referred to a phenomenon which might be observed by any one whose retina happened to be, for the time being, somewhat too retentive of after images. Looking from one side of the landscape to the other, while the sun was pictured on the retina, the after-image was not a continuous streak of light, as it would be if the movement were unbroken, but a series of adjacent images of the sun, representing so many halts in the movement of the eye.

BRITISH GYNÆCOLOGICAL SOCIETY.

Wednesday, February 23rd, 1887.

G. Granville Bantock, M.D., President, in the Chair.

Removal of Uterine Tumour.—Dr. Heywood Smith exhibited a tumour he had removed from a single woman, aged 35; on examination it did not present the usual characteristics of a uterine fibroid. It was soft enough to be perforated with the finger, and contained a substance that looked like the grey matter of the brain. It had a distinct capsule. The patient was doing well. The tumour was referred to Mr. Bland Sutton for examination.

The Use and Abuse of Pessaries.—Dr. Meadows in opening the discussion on Dr. Fitzgerald's paper, said that many cases of displacement gave rise to few and comparatively unimportant symptoms. The suffering arose less from the flexion than from the other attendant conditions; namely, congestion, inflammation, enlargement, etc. The vascular arrangement was not sufficiently kept in view. The blood from the fundus did not travel back to the cervical portion; consequently it could not be prevented doing so, however acute the flexion. The reposition of the uterus was not, on this account, so imperatively called for; at the same time he fully recognised the value of pessaries. He was convinced that in many severe cases of flexion no simple vaginal instrument could possibly command the flexion,

and an intra-uterine stem was required. He was satisfied that, with proper precautions, it was perfectly safe and completely successful.—Dr. ROUTH held it had been conclusively proved that anteversion was the normal position of the maiden uterus. Acute flexions of the uterus did take place after a fall, lifting heavy weights and other causes, giving rise to great pain. If not at once reduced, it might give rise to inflammation or chronic flexion. A Hodge pessary often only fitted into the bend of the flexion, in no way replacing the organ, and yet gave great relief. This was because with flexion and version there was also a certain amount of prolapse which was remedied by the pessary.—Dr. MANSELL-MOULLIN pointed out that the generally accepted theory of the lever action of the Hodge pessary was erroneous. Its action was twofold; it raised the uterus in the pelvis by restoring the vagina to its natural shape, when that organ was prolapsed, and so drew the cervix upwards and backwards, and it acted as a railing behind the uterus, preventing it falling backwards. If the posterior *cul-de-sac* of the vagina was too short to admit the pessary rising well behind the uterus, that organ simply remained retroflexed or retroverted on the top of the pessary. Such cases were often met with. He looked upon the use of stem-pessaries as a last resource when other means had failed.—Dr. HEYWOOD SMITH said a pessary should not be inserted with the view of rectifying a malposition. The uterus should first of all be replaced, and the pessary introduced to maintain it in its normal position. Stem pessaries were dangerous unless the uterus was first prepared to tolerate them.—Dr. EDIS and the PRESIDENT took part in the discussion.—Dr. FITZGERALD then replied.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 14TH, 1887.

J. HUGHLINGS JACKSON, M.D., President, in the Chair.

DR. HUGHLINGS JACKSON, on taking the chair for the first time, thanked the Society for the honour they had done him in electing him President. The usual votes of thanks were passed to the retiring officers.

Clottage of the Ureters.—Mr. HURRY FENWICK submitted for criticism an operation which he had termed clottage of the ureters. The procedure consisted in an attempt on the part of the surgeon to block or to cork up a ureter with clot. He argued from statistics that it ought to be performed in those cases where the surgeon has to combat profuse and ungovernable hæmaturia from a kidney hopelessly crushed by an accident or affected with advanced carcinoma; that it was a conservative operation; and that it ought to rank immediately before the operation of nephrectomy. The procedure consisted in introducing into the bladder the author's ureter-aspirator (*Lancet*, September 18th, 1886, Suction of the Male Ureters). The ureter of the damaged kidney is then sucked into the eye of the instrument, and the blood-clots in the ureter. Light pressure is now made with the beak of the instrument against the opposing finger in the rectum, and the ureter is thereby tightly nipped, thus giving time for the clot to collect a little in the pelvis of the kidney. A case in which the operation was successfully performed was related, of a man aged 51, with right renal carcinoma, whose hæmaturia, of thirteen months' duration, had been profuse and intermittent, after the operation was clear to the day of death, six months later. No necropsy could be obtained.—Mr. JACKMAN showed his instrument for nipping the orifice of the ureter and explained its use.—Mr. MORRIS quoted cases which showed that plugging of the ureter with clot was followed by enormous distension of the kidney by blood.—Mr. R. W. PARKER and Mr. BRUCE CLARK advocated direct surgical treatment of the kidney, provided hæmostatics failed.—Mr. BERNARD PITTS said the danger was usually from peri-renal or intra-peritoneal extravasation of blood, rather than from its escape into the bladder. He asked if this instrument could be used to remove a clot from the ureter.—Mr. FENWICK, in reply, said that clots were usually adherent to the ureter, and could not be removed by suction.

Some Conditions of Bladder in Children simulating Stone.—Mr. BRUCE CLARKE called attention to some cases recently under his care in which the whole of the interior of the bladder was coated with a phosphatic deposit, making it rough like sand-paper, and giving rise to pain on micturition, incontinence, and other symptoms like those of stone. Under treatment by alkalies, milk-diet, and rest in bed, the urine, which was alkaline at first, became acid, and the deposit disappeared.—Mr. R. W. PARKER had found tenesmus and diarrhœa the chief symptoms of stone in girls.—Mr. M. SHEILD mentioned three cases of pelvic sarcoma in children which gave rise to calculous symptoms.—Mr. HENRY MORRIS explained the condition as being due to over-acidity of the urine when secreted setting up cystitis. He had proved this by washing out the bladder, and then testing the urine secreted during the following ten minutes.—Mr. BRUCE CLARKE, in reply, said he looked upon vesical irritability as a valuable symptom of stone, coupled with the presence of blood in the urine. He proposed to adopt Mr. Morris's suggestion at the next opportunity.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, MARCH 4TH, 1887.

J. E. EDDISON, M.D., in the Chair.

Abdominal Section for Tubercular Peritonitis.—Mr. LAWFORD KNAGGS showed a girl in whom abdominal section had been done for tubercular peritonitis. There was complete recovery.

Raynaud's Disease.—Dr. ERNEST JACOB showed a patient, and described two cases lately under his care. Case 1. A lad, aged 20, from his 9th to his 12th year was accustomed to handle a wet chain in a colliery. His hands became stiff, blue, and cold, and subject to much pain. There was no arterial disease, and his general health was good. He improved under the use of iron internally, and stimulating liniments with friction to the fingers. Galvanism applied locally seemed to have no effect. Case 2. A laundress, aged 57, began to suffer from coldness and numbness of the hands thirty years ago, with severe pain of lancinating character, and which recurred whenever her hands were exposed to cold. Two years ago she became worse, the fingers becoming black, and remaining so for two or three weeks, when they would become red and the nail drop off, being succeeded by a new nail. Gradually gangrene supervened, and the tips of the first and second fingers of the left hand had disappeared. On the right hand the first finger had lost the two terminal phalanges, and the little finger the last. The general health was not good, and though the arteries seemed healthy, there was an aortic regurgitant *bruit*. She had since been an in-patient in the Leeds Infirmary under the care of Mr. McGill, the gangrene having further progressed. Pathologically the disease was a disorder of arterial innovation, and clinically it was connected with the "night palsy" of Dr. Weir Mitchell, paroxysmal hæmatinuria, epidermic acrogina, and various other kinds of vaso-motor spasm.—Dr. CHURTON referred to a case where a patient, suffering from senile gangrene, seemed much benefited by treatment directed towards relaxing gouty arterial spasm.—Mr. LITTLEWOOD spoke of the beneficial effects of local galvanism.—Dr. ALLBUTT thought the lesion was purely local and referred to the intolerance of cold shown by a part which had been partly frostbitten.—Dr. JACOB, in reply, considered the symmetrical and gradually invasive character of the disease indicated a central rather than a peripheral origin.

The Treatment of Mastitis.—Mr. C. J. WRIGHT described a number of cases of painful lactation and inflamed breast in which he had found firm uniform pressure with a bandage or towel of great use in relieving the pain and aiding resolution. It could be used in conjunction with antiseptic opening of abscesses. He thought poulticing should be avoided if possible.—Mr. A. ROBERTS spoke of the advantages of fomentation with ammonium carbonate.—Dr. PURDY had been disappointed in the results of the above fomentation and of pressure.—Mr. J. TEALE thought pressure of great service, and that many of the advantages of belladonna plaster were due to the pressure and support it afforded.

Dangers of Cucaine.—Mr. A. ROBERTS had amputated a breast for persistent neuralgic pain after the injection of sixty minims of a 6 per cent. solution of cucaine. No pain was felt, but the patient became blind, and talked incoherently for some hours; there was complete recovery.—Dr. ALLBUTT referred to a symptom described by some after the use of cucaine, namely, dreams, in which writhing worms formed an important object. He had experienced this himself after applying cucaine to his throat.—Mr. HEWITSON spoke of corneal opacities produced by the use of cucaine in ophthalmic operations where a mercurial antiseptic was used.—Mr. LITTLEWOOD had felt a severe depression half an hour after the injection of cucaine for the removal of a nævus from his hand, but soon recovered. He had seen great loquacity and subsequent faintness produced in an old man in whom three grains had been injected.—Mr. OAKLEY had seen bad effects from strong solutions, but found that the desired effect could be obtained by the use of not more than thirty minims of a 4 per cent. solution. He had found nitrite of amyl useful as an antidote.—Mr. MAYO ROBSON had had two cases only out of a large number which had caused him any anxiety, namely, one in which severe syncope followed an operation for circumcision, and another where aphasia lasting four hours followed the use of cucaine for the removal of a nasal polypus.—Dr. WARDROP GRIFFITH, after the injection of

cucaine for the incision of an abscess on his finger, experienced a feeling of languor and weakness, like that produced by morphine, and a condition of general anæsthesia, in which he could pierce his tongue and limbs with needles without feeling pain.—Dr. PURDY had seen severe pain in the eye caused by a cucaine disc. He spoke of the convenience of carrying the drug in half-grain powders, which were easily dissolved.—Mr. HARTLEY had seen no bad results in a large number of cases in which weak solutions were used.—Mr. J. TEALE thought it important that the maximum safe dose should be decided. —Mr. PRICE and Mr. C. S. WRIGHT had used cucaine (a 5 per cent. solution in lanolin) satisfactorily in cases of vaginismus.

Last Days of a case of Graves's Disease.—Dr. CLIFFORD ALLBUTT was called to a lady almost moribund, with symptoms of failing heart, accompanied by dropsy and congestion of lungs. The heart's action was quick, but no valvular lesion could be detected. The action resembling that found in Graves's disease, inquiry was made, and a clear history of enlarged thyroid and exophthalmos elicited. These symptoms disappeared two years before.

Syphilitic Coma.—Dr. ALLBUTT described the case of a lady, aged 50, who had had attacks of coma (seven or eight) lasting from two to five days. On two or three occasions there was slight hemiplegia. He regarded these as due to syphilis, of which there was a clear history in the case, and he referred to a paper by Dr. Althaus on the subject, in which a number of cases were recorded.

Pathological Specimens.—Acute Atrophy of Liver.—Dr. HUTCHINSON showed a specimen, with microscopical sections. Jaundice was present for nine days before death. There was some old cirrhotic as well as recent atrophic change.—Mr. LITTLEWOOD showed fresh cut sections of an alveolar sarcoma from the back of the sacrum.—Dr. JACOB showed microscopic sections of a "duct" cancer of breast from a case under the care of Mr. T. P. Teale.

BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, MARCH 3RD, 1887.

E. NOBLE EDWARDS, M.R.C.S., President, in the Chair.

Rhinolith.—Mr. CRESSWELL BABER read notes of a case of rhinolith occurring in a girl aged 12. There had been offensive discharge and bleeding from the left nostril for six years. In the left nasal passage, which was impervious and blocked with granulations, a hard body was detected about an inch and a half from the tip of the nose. On removal through the nostril, it proved to be a filbert-shaped calculus, having a nucleus of tightly pressed folds of rag. No diseased bone was detected, and the case did well.

Pulsating Vessel on the Posterior Wall of the Pharynx.—Mr. CRESSWELL BABER mentioned the case of a lady who consulted him for deafness, in whom, on examining the pharynx, a vertical pulsating vessel, forming an eminence of the diameter of a slate pencil, was seen in the position of the left salpingo-pharyngeal fold. The vessel was probably an enlarged ascending pharyngeal artery.

Lithotrity.—Dr. UHTHOFF read notes of a case of lithotrity in a boy aged 13. The stone was oxalate, and weighed about 50 grains.

Spina Bifida.—Dr. WHITTLE showed a case of spina bifida the size of a Tangerine orange, springing from the nape of the neck. The child was six weeks old, and the swelling had increased in size since birth. Pressure on the tumour immediately produced laryngeal spasm, from which the child suffered frequently even when not touched. No operative treatment was proposed.

Antifebrin.—Mr. MORGAN mentioned several cases of fever in children, in which the temperature had rapidly fallen after the administration of antifebrin.

Unusual Cases of Disease in Children.—Dr. MACKEY read a paper on this subject, and showed two cases. One was a boy aged 6, who had not grown since he was 3. He resembled in many points a case of Duchenne's paralysis, but was possibly a "rickety dwarf." Another was a girl aged 6, with congenital dislocation of both hips, whose gait was compared with that of the boy. Dr. Mackey read notes of (1) case of Duchenne's paralysis in a girl aged 3; (2) five cases of spastic paraplegia, all dating from birth; (3) four cases illustrating absence either of moral sense or of control-power in children intellectually acute, also the performance of purposive and apparently conscious acts in the post-epileptic state; (4) a case of probable cerebral and spinal sclerosis, or tumour, developing nine months after injury; (5) a case of aphonia, depending probably on laryngeal growth, in a child aged 3; (6) two cases of empyema in children recovering after two aspirations in each.—The PRESIDENT doubted if the loss of memory in the post-epileptic state entailed loss of responsibility.—Mr. SANDERSON and Dr. UHTOFF questioned the diagnosis of Duchenne's paralysis in the case shown.—Mr. PALEY asked whether Dr. Mackey's remarks as to aspiration in empyema applied to adults as well as children. In his experience, free incisions and washing out the chest with weak iodine-water had in adults been most successful.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, FEBRUARY 16TH, 1887.

JAMES HARDIE, F.R.C.S., President, in the Chair.

Infantile Spastic Paraplegia.—Dr. EDGE showed a case of this disease in which there was an almost complete absence of cerebral symptoms, such as are usually found in these cases. The conclusion was therefore drawn that, in this instance, the lesion was, in all probability, a spinal one. The patient was six years of age, and was improving.

Multiple Sarcomata.—Mr. JONES exhibited a man, aged 38, with numerous subcutaneous sarcomata on the back. Some had disappeared under treatment, which consisted in the application of glacial acetic acid, while iodide of potassium was taken internally. A large swelling near the lower angle of the right scapula consisted of an aggregation of such tumours. The skin over it had given way, and sloughy masses of the growth had escaped through the opening. He was admitted into the Infirmary with the object of having this offensive tumour removed; but as the urine contained a large quantity of albumen, operation was declined. Since then other tumours had developed on the back, and one of considerable size below the margin of the lower jaw on the left side.

Immediate Treatment of Ruptured Perineum.—Dr. BRIERLEY remarked that the accident was, in many cases, unavoidable; but young practitioners had a foolish idea that it might be attributed to a want of skill on their part, and hence did not frankly admit the condition. Success was absolutely certain if the operation were done immediately after delivery. The wound having been cleared of all clots, its edges should be brought together with antiseptic sutures passed deeply, and not tied too tightly. The dressing should be done by the medical attendant, and in no case entrusted to the nurse. Instructions as to quiet and position should be given directly to the patient, and not through the nurse. If it were necessary to draw off the urine, an india-rubber catheter could be used from behind without disturbing either the patient or the wound.

Parovarian Cyst.—Dr. WALTER showed a parovarian cyst removed from a married woman, aged 38, who had suffered from menorrhagia and dysmenorrhœa; the uterus measured three inches and a quarter in length. The chief interest of the case lay in the close resemblance of the physical signs to those caused by a myoma attached to the posterior wall of the uterus. The cyst contained one quart of colourless fluid, and was very adherent to Douglas's pouch and the neighbouring parts. The patient was now almost convalescent.

WEDNESDAY, MARCH 2ND, 1887.

Some Points in the Pathology and Treatment of Fever.—Dr. JAMES NIVEN read a paper on the subject. The points considered were formulated in four propositions. 1. Self-protective fevers tend to become milder the longer they are settled in a community. The protection conferred was regarded as an adjustment of the tissues, which would be handed down from generation to generation in the case of any disease which was spread over the greater part of the community. In co-operation with this adjustment is the elimination by death of people specially liable to the disease. In opposition to it is the tendency of children to take disease in the same manner as the parent. As illustrations were considered typhoid fever, measles, smallpox, yellow fever, and syphilis. 2. The second proposition was that the phenomena of fever are probably due in the main to chemical poisons. It was attempted to be shown that chemical matters, either matters secreted by the fungi or dead fungi, were sufficient to account for the phenomena of fevers; while in some diseases it was taken as proved that only chemical poisons were admitted into the circulation. 3. The third proposition was that the nervous system is the liberator and controller of heat in fever. It was contended that a large amount of heat was due to metabolism of muscle, but the experiments of Pflüger and Samuel had shown that muscle, under normal circumstances, underwent this metabolism as the effect of nervous impulses. While admitting the vaso-motor system and heat-inhibitory centres as probable causes of some pyrexial conditions, it was suggested that excitation of the anterior cornual cells in the spinal cord, and of their congeners in the medulla and brain, would better explain the pyrexial conditions of such fevers as typhoid and typhus. Reasons were given for regarding the figures arrived at by Dr. Burdon Sanderson, from calculation of the excreta in health and in fever, as showing an in-

crease in fever of heat requiring to be eliminated. 4. The fourth proposition was that the proper treatment of fevers is partly dietetic, partly calmative. The treatment on these lines was sketched. Easily assimilable materials, such as peptonised meat and milk, and sugared fruit, are necessary to maintain the strength, and to prevent complications and tropho-neuroses; perforation in typhoid may be regarded as in part a tropho-neurosis. Calmative treatment, such as a skilful nurse free from fuss, removal of irritations, and antipyretic treatment, are necessary for the same objects. Antefebrin was regarded as, perhaps, the best antipyretic.—Drs. SIMPSON, MORGAN, RANSOME, LEECH, DRESCHFELD, ROSS, RAILTON, Mr. STOCKS, and Dr. HUTTON took part in the discussion which followed the reading of the paper.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, MARCH 3RD, 1887.

W. J. CLEAVER, M.B., C.M., President, in the Chair.

Hypertrophy of Heart.—Dr. MARTIN introduced a boy, aged 15, with enormous hypertrophy of the heart. He had had rheumatic fever two years before. During the past two months he had suffered from continued fever. The area of heart-dulness extended from the upper border of the fourth rib four inches and a half in the vertical direction, and from the right border of the sternum to a point three inches to the left of the nipple. There was a mitral stenotic but no aortic murmur. The pulse was regular, but weak.

Injury to Popliteal Artery.—Mr. GARRARD related three cases, each ending in amputation of the thigh at periods varying from ten days to thirteen months. In the first case there was subluxation of both knees; the posterior crucial ligament was torn off; the left popliteal vein was torn and the artery stretched, rupturing the inner coats. Gangrene commenced on the ninth, and amputation was performed on the tenth day. The popliteal artery was plugged with firm clot at the seat of amputation. In the second case, a man had a slight sprain of the knee six weeks before, and went on working until a large swelling appeared in the ham. When first seen, it was almost impossible to distinguish between abscess, aneurysm, and soft malignant growth; but the case proved to be one of small popliteal aneurysm, the size of a walnut; this had ruptured. There had been no pulsation. Amputation was performed six weeks after the injury. In the third case there was a severe fracture; the calf was bruised and the popliteal artery wounded. A false aneurysm resulted, and became consolidated. The limb was useless, and was amputated thirteen months afterwards.—Dr. KEELING, Mr. JACKSON, and Mr. WALKER made remarks in support of the line of treatment adopted by Mr. Garrard.

Case of Hodgkin's Disease.—Dr. PORTER showed the enlarged suprarenal capsules from this case. The patient, a woman aged 51, had suffered from enlarged glands on both sides of the neck, the original enlargement on the left side occupying most of the posterior triangle. There was also a large mass of mesenteric glands, forming an abdominal tumour; and smaller enlargements of the axillary and inguinal glands. The tumour on the left side of the neck had occasioned great pain from pressure up the side of the neck and face and down the left arm. The external carotid and radial pulses were barely perceptible. There was also œdema of the left hand, and the arm ultimately became useless. One symptom had been flushing and profuse perspiration, at first more or less limited to the left side of the face, due to pressure on the sympathetic. The patient died of gradual exhaustion. At the *post-mortem* examination, the tumours were found to be entirely glandular. There was enlargement of the right lobe of the liver, and of the spleen; but no lymphoid nodules or bands were visible in either organ. The suprarenals were very large. There was no enlargement of the solitary intestinal glands.—Remarks were made by the PRESIDENT, Mr. ATKIN, Dr. KEELING, and Messrs. JACKSON and GARRARD.

The Middens of Sheffield.—Mr. ARTHUR JACKSON read this paper, explaining the defects of the present sytem, and pointing out the difficulties in the way of dealing efficiently with the matter, owing to vested interests, and the magnitude of the task.—Remarks were made by the PRESIDENT, Dr. WHITE, Dr. MARTIN, Mr. BROWNING, Dr. LAW, and Dr. KEELING.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.

THURSDAY, MARCH 10TH.

HOOPER GALTON, F.R.C.S., in the Chair.

Uterine Contractions during Pregnancy.—Dr. J. BRAXTON HICKS read a paper on the contractions of the uterus during the whole of pregnancy, and their value in the diagnosis of pregnancy both normal and abnormal, embodying his original researches first brought before the profession fifteen years ago. He showed: 1. That, during the whole of pregnancy, alternate contractions and relaxations of the uterus occurred at intervals of varying length (generally five to twenty minutes), each contraction lasting three to five minutes. 2. That if we place the examining hand on the uterus during the contraction, it will be found firm and pear-shaped, and the fœtal parts not readily, if at all, detectable; but if we place our hand on during the state of rest, the outline of the uterus is scarcely to be felt, whereas the fœtus can be more or less clearly made out, and can be pressed by the fingers of the hand outside into various positions, even as early as the fifth month. 3. By noting these facts, we are enabled with ease to diagnose the existence of normal pregnancy, and to distinguish between it and abnormal uterine and other tumours, such as fibroma, extra-uterine pregnancy, ovarian tumour, distended bladder, etc., and have a most valuable aid in our practice.

Treatment of Pyrexia.—Dr. PYE-SMITH contributed a valuable paper on the treatment of pyrexia, describing, first, the various methods of direct application of cold to the surface of the body; and, secondly, the uses and values of the various antipyretic drugs now in use, including the quinine, salicin, and chinolin compounds (chinolin, kairin, antipyrin, thallin), and antifebrin (phenyl acetamide).

Specimens and Cases.—Interesting clinical cases were shown or described by Dr. MILLER (Wrist-Drop), H. G. PLUMMER, Esq. (Melanotic Sarcoma of the Foot), Dr. J. H. GALTON (a Complicated Ovariotomy), and led to animated discussion.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, FEBRUARY 4TH, 1887.

H. R. HATHERLY, M.R.C.S., President, in the Chair.

Poliomyelitis.—Dr. HANDFORD showed a case of acute anterior poliomyelitis in a girl, aged 13½ years.

Lupus.—Mr. CHICKEN showed two patients lately suffering from lupus in illustration of his mode of treatment.

Removal of Uterine Appendages.—The PRESIDENT exhibited left uterine appendages recently removed by him for chronic salpingitis and cystic ovarian degeneration. The patient, single, aged 27, had undergone treatment by various medical men, without relief, for upwards of six years, and recently the pain had become so severe that she could not attend to her household duties. He held that in this case operation was imperatively called for. The right appendages were found healthy and were not removed, and the patient, who made a good recovery, had since menstruated without pain.

The Habit of Opium-taking as induced by Hypodermic Injections.—Mr. JOSEPH WHITE read a paper in which, after alluding to the great value of the hypodermic use of morphine in acute disease attended with severe pain, he urged that, in chronic cases, when the injections had to be given for a long time in increasing strength and frequency, the opium-habit was likely to be acquired. In the treatment of this condition, drugs were of little value. Atropine had rarely been found of much service, and nervine tonics had failed. Moral control of the patient by a trustworthy attendant afforded the best chance of cure. In view of the danger of inducing so disastrous a habit, Mr. White had, for more than five-and-twenty years, never sanctioned the hypodermic use of morphine in cases likely to be of long duration.—A discussion followed, in which the PRESIDENT, Messrs. CHICKEN, HANDFORD, STANGER, and COLLINS took part.

Specimens.—Mr. PRYCE: Fatty Liver and Gall-stones from a woman, aged 50, who died of cancer of the liver.—Dr. HANDFORD: 1. Larynx from a case of Hydrophobia; 2. Dilatation of Œsophagus; 3. Œsophagus, Larynx, and Trachea from a man, aged 60, the larynx showing tubercular deposit; 4. Epithelioma of Œsophagus, with secondary deposit in the lungs, also microscopic sections of the same; 5. Rupture of Aortic Aneurysm into Œsophagus.—Mr. ANDERSON: Epithelioma of the Penis.—The PRESIDENT: Cancer of the Breast, for Dr. Roberts.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, FEBRUARY 16TH, 1887.

LLOYD OWEN, F.R.C.S.I., President, in the Chair.

Advancement of Recti Muscles.—Mr. EALES showed a man, aged 33, on whom he had performed several operations, and had "advanced" one external and both internal recti with complete success, for the cure of divergent strabismus, caused by previous unsuccessful teno

tomy by another surgeon. The result was an almost complete restoration of abduction and adduction, which were seriously impaired, and of good binocular vision for all purposes, including near vision. $H = \frac{1}{10}$ $V = \frac{1}{20}$ with each eye. Mr. Eales was not aware of any previous case in which three recti muscles had been advanced.

Progressive Muscular Atrophy.—Dr. SUCKLING showed a man, aged 48, who was suffering from progressive muscular atrophy, the atrophy having commenced in the shoulder-muscles. The deltoid of each side was much atrophied, and lineæ albicantes were present on the anterior folds of the axillæ. The hands were cold and blueish, and there was slight wasting of the thenar and hypothenar eminences. Fibrillary twitchings were constantly present in the deltoid and the other shoulder-muscles. There was no history of working in lead, or of syphilis; but the man had done a great deal of hard labour.

Imperforate Rectum.—Mr. BARLING showed a specimen taken from the body of a male infant, who died eight weeks after anterior sigmoid colotomy had been performed. The child was three days old when first seen, was deeply jaundiced, cyanosed, and suffering from vomiting. There was an anus with a slight *cul-de-sac* leading from it, and an unsuccessful attempt was made to find the rectum through the perinæum. After the colotomy, the child suffered from recurring attacks of vomiting and diarrhœa, which eventually wore it out. The necropsy showed a large dilatation of the rectum at its lower extremity; this was entirely surrounded by peritoneum, and was dilated to the dimensions of a moderate-sized orange. It was suggested that the attacks of vomiting and diarrhœa were due to the retention of fæcal matter in the dilated rectum, and that the dilatation itself was due to the same cause.

Mr. L. TAYLOR showed a similar specimen from a child aged 2 days. Twenty-four hours after birth, the child was brought to the hospital, suffering from vomiting and abdominal tenderness, no meconium having been passed. On introducing the finger into the anus, a *cul-de-sac* about half an inch long was felt, the rectum being completely occluded at the end of this. A director was passed through the obstruction, and meconium escaped; a pair of dressing-forceps was then introduced along the director and the opening dilated. The symptoms were relieved, but the child died the next day. On a *post-mortem* examination, the rectum was found to have been occluded by a fibrous cord.

Compound Fracture of the Patella.—Mr. CHAVASSE showed a case of compound fracture of the patella, which he had wired two years before. There was complete osseous union of the fragments, and good movement of the joint. The patient was able to follow his occupation as a heavy porter.

Dr. MALINS read a paper on A Year's Work in the Obstetric Department of the General Hospital, Birmingham.

BERMUDA BRANCH.

SATURDAY, FEBRUARY 12TH, 1887.

Deputy Surgeon-General GRAVES-IRWIN in the Chair.

Public Health in Bermuda.—Surgeon H. J. BARNES read a paper on Public Health in Bermuda, in which he showed, from the Registrar-General's statistics, that the death-rate was higher than that of most English towns, reaching 22 per mille among the civil population, in spite of advantages of climate, isolation, and absence of malaria. An analysis of the causes of death showed that one-half the deaths were due to preventable causes. After remarks on ventilation, in which the great prevalence of phthisis among the lower classes was traced to neglect of this important means of health, the subject of enteric fever, diphtheria, diarrhœa, and other filth-diseases, was dwelt on, and these were traced to the cess-pits which exist behind every house, contaminating the water-supply and the soil-air; which latter was a frequent cause, owing to the utter absence of any impervious foundation to the houses, and the porous character of the coral soil (35 per cent. air). After drawing attention to the utter waste of good manure by the present method—the cess-pits being rarely or never emptied, and, even when emptied, being found almost empty from soakage of the material into the surrounding soil—the various methods of sewage-removal were discussed. That by a system of sewage-pipes into the sea was rejected at once as being utterly unsuitable, owing to the expense which would be entailed, and also to the fact that both Hamilton and St. George's, the two towns, were on the shores of almost landlocked harbours. The dry-earth system, while acknowledged to be useful in detached and country dwellings, was also considered unsuitable, as it did not provide for removal of two-thirds of the excreta (the liquid portion) or of slops, and also for the reason that the resulting material was too much diluted with useless matter to be of much use to the farmer as manure. Preference was, therefore, given to the method of wet removal by hand, in which the whole of the excreta, house slops, etc., were carted away nightly, and applied directly to the land, which was ploughed up and planted as soon as possible. This method was shown, by the experience of various towns in England and on the Continent, to be capable of paying for itself, or even of being a source of profit to the ratepayers, while removing all danger to the public health from the excreta. It was also pointed out that corporations and local vestries possessed full powers, by the Health Act of 1867, to enforce any regulations they might consider necessary to protect the public in this respect; and should they not think fit to take any steps, the General Board of Health (otherwise the Governor and Council) could, by the same Act, compel them to do so. Attention was also drawn to the necessity of a medical officer or officers of health being appointed to act as the adviser of the Board of Health on matters of hygiene.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

WEDNESDAY, MARCH 2ND, 1887.

Professor GRAINGER STEWART, M.D., F.R.C.P.E., President, in the Chair.

Specimens.—Mr. A. G. MILLER showed a leg amputated on account of a peculiar form of gangrene.—Dr. CARMICHAEL showed a brain from a case of meningitis.

New Microtome.—Dr. ALEXANDER BRUCE exhibited a new form of radial microtome, which had been devised by him in conjunction with Mr. Fraser. The instrument was less costly than those which had been already introduced, and cut equally finely.

Cerebral Abscess from Ear-Disease.—Dr. M'BRIDE read a paper on the Diagnosis and Operative Treatment of Cerebral Abscess due to Ear-Disease. Three distinct cerebral lesions might follow in the wake of chronic ear-disease: abscess, meningitis, and sinus-phlebitis. These, according to Dr. M'Bride's experience, could not be differentiated by the symptoms alone. In a certain proportion of cases, the symptoms were sufficiently distinct, as, for example, when the pulse and the temperature were continuously lowered, when optic neuritis was present, or when, apart from disease of the mastoid cells, there was puffiness over that region, or thickening or pain down the course of the internal jugular. But such symptoms, after all, only gave rise to a probability. With regard to the help afforded by examination of the ear, Dr. M'Bride analysed the statements of Toynbee and the statistics of Roosa and of Gull and Sutton. It was questionable whether cerebral disease ever followed suppuration of the external meatus. Roosa found that over 50 per cent. of all his cases were those of secondary cerebral abscess. Dr. M'Bride thought that this must include some cases of diffuse suppurative meningitis. His own statistics of 42 cases showed cerebral abscess, 15; purulent meningitis, 12; cerebellar abscess, 7; thrombosis or sinus-phlebitis, 8. He found that cerebellar abscess more frequently followed on disease of the internal ear than cerebral. Granting this, the tuning-fork test would come to be of value. If sound-conduction were well preserved in the affected ear, the abscess was probably cerebral, while, if it were lost, cerebellar mischief was indicated. Mr. Hulke had attempted to establish that cerebral abscess was commoner in the young, cerebellar in the adult. The evidence for this was not satisfactory. With respect to treatment: when cerebral abscess was diagnosed, there could be no question that trephining was the justifiable course. In operating, it must be borne in mind that the abscess was generally in direct, or, at least, in close relation to the source of mischief in the ear. Therefore they must open the skull as near to that point as possible. The best course seemed to him to dissect out the auricle and get down to the skull about ¼ inch above, and just in front of, the external auditory meatus. The bone was fairly thin, they were near the roof of the tympanum and far removed from the danger of injuring large vessels. Dr. M'Bride concluded with some strictures on Professor Greenfield's case of cerebral abscess, recorded in the JOURNAL of February 12th. No sufficient reason had been given for the diagnosis, and the site of operation was open to much criticism.—Mr. MILLER mentioned two cases in which, after consultation with Dr. M'Bride, he had operated in the way suggested. Unfortunately, both patients succumbed to septicæmia, but the good done by the operation was in each instance very manifest. Mr. Miller drew attention to the relation which frequently existed between sudden cessation of the otorrhœic discharge and the supervention of formidable head symptoms. This appeared to offer an important indication for treatment.—Professor ANNANDALE said that when severe head symptoms developed in the course of ear disease, the operation of opening the skull was perfectly justifiable. He thought Dr. M'Bride's site was the scientific one, as being nearest the source of the mischief, and comparatively easy of access. In view of the serious symptoms which

occasionally developed, Mr. Annandale advocated the more systematic adoption of free drainage in chronic ear disease.—Professor GREENFIELD justified his diagnosis in the case recorded by him. The case was, in many aspects, a peculiar one, and presented greater difficulties than Dr. M'Bride seemed inclined to admit. Having come to the conclusion that a cerebral abscess was present, the further question presented itself how to explain the unusual accompanying symptoms of paralysis of the third and fifth nerves. The conclusion to which he finally came was reached rather by parallelism with other cases, which he had examined *post-mortem*.—Dr. BRAMWELL said that, during the five years he had been pathologist in Newcastle and Edinburgh, he had met with only two cases of cerebral abscess following ear disease. An important distinction must be drawn between an encapsuled and a non-encysted abscess. He did not see that the former could, apart from its possible history, be diagnosed from cerebral tumour. Further, certain stages of uræmia and lead-poisoning resembled closely cerebral abscess clinically. Much had been made of optic neuritis as an indication for interference. It must be remembered that optic neuritis might be recovered from, and did not really signify the approach of the fatal issue. From the frequency of the occurrence of abscess in the tempero-sphenoidal lobe, they might expect, more especially when the lesion was left-sided, the appearance of the group of symptoms, which had been classed as word-deafness, a condition which should always be sought for. He illustrated this by a case from his own practice.—Mr. FRANCIS CAIRD defended the site of his operation in Professor Greenfield's case. He did not wish to refer to the points which suggested that the abscess reached far forwards. But admitting that it did, he trephined where he did, just as he would open a psoas abscess, which was pointing in the groin. The result gave the best proof of the wisdom of the line adopted. The further question was of course raised how they should deal with the original cause of the mischief, as in the case of the ultimate treatment of the spinal mischief, which led to the psoas abscess.—Professor CHIENE thought the paralytic symptoms in Professor Greenfield's case justified the selection of the site for operation.—Dr. HUGHES BENNETT (London) said that cerebral abscess in connection with ear disease was, in his experience, rare. He should certainly advise operative interference in any case where dangerous symptoms had supervened. He had taken part in a large number of such operations for epilepsy, and had only seen one fatal issue. In operating for epilepsy a portion of the dura mater must be removed along with the bone.

ACADEMY OF MEDICINE IN IRELAND.

FRIDAY, FEBRUARY 4TH, 1887.

LOMBE ATTHILL, M.D., in the Chair.

OBSTETRICAL SECTION.

Fibroid Tumour.—Dr. M'MORDIE, of Belfast, exhibited a fibroid tumour which had been removed from a single woman, aged 25 years, in consequence of excessive hæmorrhage.

Ovarian Tumour.—Dr. LANE exhibited an ovarian tumour. Dr. Macan assisted him in the operation, and, from taking part in it, they both became affected with boils and abscesses on their hands, while Dr. Macan got them on his arms and chest. A considerable quantity of the fluid got into the patient's peritoneal cavity. She made a good recovery.

Cases of Ovariotomy.—Dr. W. K. M'MORDIE described a case of double ovariotomy, in which he used strong silk with the Staffordshire knot for the pedicle of each cyst. For the incision he used silver wire sutures, and between the first and second sutures from the lower angle he left in a Keith's glass drainage-tube, which was removed on the fourth day. Antiseptic dressings were used, and the sutures were removed on the tenth day. The woman made an excellent recovery, and returned home one month after the operation. He also described a case in which he removed both ovaries where confirmed masturbation resulted in insanity. The woman practised the habit regardless of the presence of others, even in the presence of her husband and children. The operation completely cured her of the pernicious habit; but up to the present her mental condition was not much relieved. In the left ovary was a small cyst about the size of a hazel-nut filled with a thin dark-coloured fluid.—Dr. MACSWINEY said it was of great importance to ascertain whether the masturbation was the cause or the consequence of the insanity.—Dr. THORNLEY STOKER refused to endorse such a treatment for masturbation and the relief of a mental condition without some other treatment having been previously attempted. Another operation for cases of masturbation which had got into disrepute was that of clitoridectomy. He would certainly prefer it to that which involved the destruction of the woman's sex, particularly in a case where the patient was only 33 years of age. About a year and eight months ago a young woman, aged 19, was brought to Swift's Hospital, who was as mad as could be, and who was a victim to the habit. She lost flesh, and had all the symptoms of hopeless insanity. After everything had been tried with her in vain, he removed her clitoris, and she never made any attempt to masturbate afterwards. She was now perfectly sane, and earning her living respectably. He was convinced that castration ought frequently to be done in male lunatics. It corresponded to ovariotomy in the female, and was quite as justifiable.—Dr. MORE MADDEN believed that more could be done by acting on the moral nature of the woman, sedative treatment, change of air, and occupation.—Dr. MOLONY said that if the woman had an insane history, and if the attack were a second one, she would have recovered if she had been left alone.—Dr. BYRNE said that as the whole genital tract was involved in masturbation, there was not much use in removing a small organ like the clitoris.—Mr. THOMSON said that an actual relation in the way of cause and effect between insanity and masturbation had not been made out. The records of the English asylums showed only 1½ per cent. of cases of lunacy traceable to masturbation. That being so, it was a very serious matter to excise healthy ovaries on the supposition that it would cure the habit; and Mr. Lawson Tait alleged that the removal of the ovaries did not destroy the sexual instinct. If so, what was to be gained in cases of masturbation and insanity by removing the ovaries?—Dr. SMYLY said the disease resulting from this habit was a nervous one, and Hegar, whose work on the diagnosis of nervous complaints was most exhaustive, had confessed his inability to come to a certain diagnosis as to the cause. In the majority of cases of the kind in question the ovaries were not normal.—Professor DILL approved of Dr. M'Mordie's proceeding.—The CHAIRMAN said he considered that in many cases the removal of the ovaries was a most valuable operation. Nevertheless, he thought the number of cases in which the operation was performed elsewhere was greatly in excess of what was absolutely necessary. He did not think that the removal of ovaries had any great influence on sexual desire. His impression was that the masturbation was the result, and not the cause, of insanity, so that the value of the operation in those cases was not established.—Dr. M'MORDIE said he could not expect that the somewhat new method he had adopted of treating masturbation with insanity would meet with unanimous approval. He was not an advocate of the wholesale removal of slightly diseased ovaries, and he saw but few cases where he thought it justifiable.

MEDICAL SECTION.

FRIDAY, FEBRUARY 25TH, 1887.

JAMES LITTLE, M.D., President, in the Chair.

Diphtheria.—Dr. MOUILLOT read a short account of an outbreak of diphtheria which occurred in the female school of the Gorey Workhouse. Eighteen children were affected, and there was a remarkable difference in the severity of the cases. In seven, the appearance of the throat was that considered characteristic of diphtheria, and in three of these the local and constitutional symptoms were very severe. In ten cases, there was no means of distinguishing the appearance of the tonsils and pharynx from ordinary tonsillitis. In one case, the disease appeared to begin in the larynx. Out of the eighteen cases, three had laryngeal diphtheria, with two deaths; two cases were followed by diphtheritic paralysis, and sixteen had distinct enlargement of the cervical glands. Dr. Mouillot traced the disease to a foul smell arising from a choked drain immediately under the school-room and dormitory window. He considered that even the mildest cases were really diphtheria, because (1) all were produced by the same cause and at the same time; (2) one of the least severe cases was followed by paralysis of the palate; (3) the cervical glands were enlarged; (4) the children with mild sore throats were put in the same ward in the fever hospital with the certainly diphtheritic cases, and none of them caught a second attack, though the infectious nature of the disease was shown by a child in another ward, who was convalescent from typhus, catching it.—Dr. FRAZER, having seen a good many cases of diphtheria, could only satisfy himself that two had any connection with bad drainage. He once saw a child suffering from a severe attack. That anything was wrong with the drainage was denied; but, three months afterwards, the floor of the room in which the child lived having been ripped up, a foul sewer was discovered. The second case was also that of a child who had been in the habit of playing beside a filthy water-butt. The child infected several other person with diphtheria, which proved fatal in two of the cases.—Dr. A. W. FOOT recalled the fact that the outbreak of diphtheria in the Schloss at Hesse-Darmstadt, resulting in the death of the Princess Alice and three of her children,

was traceable to bad drains. But real diphtheria was not as common as many believed. It comprised five conditions: (1) early and remarkable swelling of the lymphatic glands of the neck; (2) extreme fœtor of the breath; (3) albuminous urine; (4) subsequent paralysis in some shape or other, either confined to a strabismus, or involving the four limbs, or, still worse, the central circulation; and (5) nearly all, or at least 50 per cent., had a fatal result.—Dr. FINNY agreed with Dr. Foot that genuine diphtheria cases were few and far between. There were many cases attended with exudations of the throat which were not of the true diphtheritic nature. Diphtheria was a constitutional disease, with local manifestations; and physicians were too much inclined to look for the latter before forming a positive opinion. There was a difference between croup and diphtheria.—Dr. DUFFEY considered that Dr. Mouillot had demonstrated that the epidemic of diphtheria which he recorded was due to imperfect sewerage. No doubt there were ordinary cases of sore-throat due to the same cause. True diphtheria was indicated by constitutional symptoms and the sequelæ rather than the mere local manifestations.—The PRESIDENT said his observation of diphtheria accorded with Dr. Foot's in enabling him to set down the rate of mortality as at least 50 per cent. He had been disposed also to limit true diphtheria to cases having the four signs present which Dr. Foot had enumerated; but Dr. Mouillot's cases did not present those four characteristics, and yet the fact that they occurred together, and were followed by paralysis, indicated true diphtheria. Albumen in the urine was a very important characteristic, but there might be albumen in the urine in cases of sore-throat, too. He regarded croup and diphtheria as distinct diseases.—Dr. MOUILLOT, in reply, submitted that his cases demonstrated that diphtheria was not so fatal as was generally supposed.

Purpura Hæmorrhagica.—Dr. MOUILLOT also read notes of two fatal cases of purpura hæmorrhagica. One died in a few days from weakness of the heart, producing œdema of the lungs. The second case was remarkable from the difficulty of restraining bleeding from the gums. The patient died after seven weeks' illness, from cerebral hæmorrhage.—Mr. DOYLE mentioned that he had a patient who, having seen an intimate friend immediately after death from purpura, had ever since been subject to annual attacks of purpura about this time of year, and one severe attack was followed by paralysis. As to treatment, 40-grain doses of acetate of lead three times a day had proved successful.—Mr. PRATT, having been himself attacked with purpura four times, could tell whether the attack was going to be severe or not by the height to which the spots came out. In an ordinary attack, the spots appeared up to the knees; in a severe attack, up to the waist, some of the spots being as large as a shilling. Five-drop doses of turpentine three times a day cured him in three or four days.—The PRESIDENT said that he had had a lady under treatment who was in danger of bleeding to death from purpura. Mr. Edward Hamilton, however stopped each bleeding point with perchloride of iron, and ultimately, with the aid of nourishment, iron, and turpentine, the patient recovered.—Dr. MOUILLOT, in reply, said the critical cases were those which were accompanied by hæmorrhage in the internal organs; for instance, in a *post-mortem* examination of a woman he had found the Fallopian tubes full of blood.

Notes on Cases of Insanity.—Mr. JOHN MOLONY read clinical notes of cases which he had grouped as types of "fixed delusions" occurring in various forms of mental disease. He also referred to the habit of eating fæces in some forms of insanity, for the purpose of eliciting a discussion on the pythogenic origin of enteric fever, and pointed to the apparent impunity with which some lunatics can devour decomposed fæcal matter.—Dr. FOOT suggested that the dirt-eating propensities indicated either the return to a degraded state, or that the insane found in it some nourishing substance which supplied a want.—Mr. CONOLLY NORMAN remarked that the cases of fixed delusion lasting a length of time, and of an incurable character, presented hereditary taint. Cases of fixed delusion did not break down with the rapidity of those of mania and melancholia, which, if they did not recover, generally passed into imbecility. Recent investigations of Dr. C. K. Mills showed a tendency to abnormality in cases of monomania or fixed delusion—namely, an alteration, so to speak, of the architecture of the brain, the fissures running together.—The PRESIDENT said there were cases of definite monomania which did not last a year, and were curable partly by medical treatment and partly by moral influence before drifting into an asylum, where they were generally incurable. Care on the part of friends, and suitable change of scene, often prevented delusions from being stereotyped.—Mr. MOLONY, in reply, said that monomania was a misleading term of nomenclature; nor did he think there was true monomania. For instance, a man fancying himself a king did not act up to it, but wheeled a barrow or turned a mangle when his time came. Opium was a sheet-anchor in most cases, particularly of active melancholia.

REVIEWS AND NOTICES.

HANDBOOK OF GEOGRAPHICAL AND HISTORICAL PATHOLOGY. By Dr. AUGUST HIRSCH, Professor of Medicine in the University of Berlin, Vol. iii.—DISEASES OF ORGANS AND PARTS. Translated from the Second German Edition. By CHARLES CREIGHTON, M.D., London. The New Sydenham Society. 1886.

IN pathology there is very great need of wide views; in the early stages of the development of a department of science such as this, which rests almost entirely on observation, the student is overborne by the mass of detail, and discouraged by the difficulty of grasping the inter-relation of detached facts. Whether the time has come for some great generalisation, whether it already exists to our hand in the Darwinian hypothesis, or whether we have not yet gathered together sufficient masses of fact to permit the great hypothesis to be framed, it would be rash to determine. Still we would venture to protest against the onslaught which has been made by the *Quarterly Review* on English practitioners of medicine, in a notice of the three volumes of Dr. Creighton's translation of Professor Hirsch's book. Our venerable contemporary, renewing in its old age the truculence of its youth, would not only deny that there is any honest study of English literature in England, but ventures to declare that Dr. Gregory's pessimistic prophecy that it was "more than probable that in fifty or a hundred years the business of a physician will not be regarded in England as either a learned or a liberal profession," has, "to a certain extent, come true." This terrible misfortune has fallen upon us because we have neglected "historical development and continuity," and have "no English modern history of medicine, nor even a translation of a foreign work." We will not stay to inquire whether there is any modern foreign history of medicine worth translating, nor to dispute the point whether there are or are not in the English language monographs on disease which adequately treat historical subjects, but, though recognising that it is not a direct disproof of the reviewer's charges, we may make bold to say that if it had not been for English industry in the observation, record, and classification of clinical and statistical facts, Dr. Hirsch's book would never have been written. But English medicine has done a great deal more than supply the "unmanageable heap of materials" with which Dr. Hirsch has dealt; in almost every subject of which he treats, from Cholera to Rickets, it has supplied not only facts, but criticism and hypothesis. Let us pay all honour to the industry and sound judgment of Dr. Hirsch, but let us not endeavour to exalt the Berlin Professor by ungratefully denying the value of the work done by the many acute thinkers and patient students who have in this country, and in its colonies and dependencies, accumulated the materials of which Professor Hirsch has made such excellent use.

In notices of the earlier volumes of this great work, its scope has been sufficiently indicated. The third volume contains the chapters on Diseases of Organs and Parts. Owing to a somewhat arbitrary system of classification, we find diphtheria under the head of diseases of the respiratory organs, and mumps under the head of diseases of the digestive and circulatory organs, instead of both appearing under the head of acute infectious diseases. Dr. Hirsch, without hesitation, traces diphtheria in the writings of the physicians of a somewhat remote antiquity, and describes at length the great Spanish epidemics of the sixteenth and seventeenth centuries, and the subsequent almost universal prevalence of the disease in the eighteenth century. He shows that for the first sixty years of the nineteenth century it only occurred, outside France, in sporadic cases, or in small epidemic; but that for the last five-and-twenty or thirty years it has become a prevalent disease throughout the northern temperate zone. The chapter on Pneumonia is probably the best in the volume, and that section of it in which a detailed account of all the recorded epidemics is given is a marvel of industry and erudition. Dr. Hirsch's general conclusions are that, though it is not proved that fibrinous pneumonia always depends upon infection, there can be no doubt of the occurrence of infective forms of pneumonia, though we are unable to state the nature of the infecting substance, or even to say whether it is always identical.

Passing over the chapters on Dysentery and Hepatitis, which are of the comprehensive character which experience of the author's method, gained from the first volume, would lead the reader to expect, special attention may be directed to the chapters on Epidemic Cerebro-spinal

Meningitis, on Tetanus, and on Sunstroke. The remainder of the article on the Nervous System is disappointing, and is, in fact, the least satisfactory part of the book, the omissions being very serious. The only cutaneous disorders treated of at any length are the Oriental Boils, Tropical Phagedæna, Madura Foot, and Elephantiasis. Chapters on Rickets and on Rheumatism close the book, and on the very last page Dr. Hirsch reiterates his opinion that rheumatic fever is to be mentioned among the acute infective diseases.

In taking leave of these volumes, we have again to express gratitude to Dr. Creighton for having supplied to the English reader so good and exact a rendering of a work which, whether we look upon it merely as a repository of facts and references, or as containing the mature opinions of one of the chief living epidemiologists, is an invaluable possession, especially to those members of our profession who practise in distant countries, or in the army or navy.

Die Chirurgische Behandlung des Kropfes. I. Theil. By Dr. Anton Wölfler. Berlin: August Hirschwald. 1887.

The first part of this work deals only with the history of the treatment of goitre from the earliest times down to the present day. The methods of treatment may be grouped in four periods. In the first period, from Celsus to Rulandus (first to thirteenth century), the tissue was destroyed by the actual cautery or by caustics, and cysts were opened and scraped out. In the second period, from Rulandus to Friedrich Vogel (1250—1770), the treatment chiefly employed was the use of setons or ligature along with caustics. The third period extends from 1771 to 1875, and includes the methodical extirpation of nodules, of half the tumour, or finally total extirpation, with previous ligature of the vessels. During this period, also, cysts of the thyroid were treated by puncture and injection of irritating fluids, free incision, or extirpation. In the fourth and last period, we have the extirpation of goitre in various ways with antiseptic precautions.

As a summary of the literature of this subject, more especially of the foreign literature, this little volume may prove useful; it will, apparently, be followed by a second part, discussing in detail the present state of the subject.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

BAG-TRUSS FOR INFLAMED TESTICLE.

I wish to bring to the notice of the profession a bag-truss lately introduced by me, which I have found of signal service in the treatment of chronic orchitis. It is composed of a light, porous, elastic web, oval in shape, and having a constricting band of somewhat stronger material. Its advantages over the old plan of strapping with adhesive plaster are as follow: it exercises a more definite and even pressure, thereby causing more speedy absorption of the effused products; it is comfortable to wear, can be removed and reapplied at the patient's wish, and entirely does away with the bulk and dirt caused by adhesive plaster. I would also recommend its adoption as a palliative treatment for varicocele and irreducible scrotal hernia. It is to be had of different sizes from Messrs. Fannin and Co., Grafton Street, Dublin.

F. G. Adye-Curran, M.B., Surgeon-Major M.S.

A SAFETY CLINICAL THERMOMETER.

We have received from Messrs. J. C. Fell and Co., Queen Victoria Street, E.C., one of their clinical thermometers in a patent safety case. The object of the inventors has been to secure a tightly fitting case which shall prevent the instrument being broken by the fall of the case. The case is supplied internally with longitudinal rubber projections, the tangental pressure of which firmly supports and suspends the thermometer along the axis of the case, the bulb and stem alike being firmly grasped. All shock and jar are thus minimised. Without going to the extent of endorsing the use of the term "unbreakable thermometer" in describing an instrument which is only rendered unbreakable when in its case, we are, however, of opinion that the case well fulfils the useful purpose for which it is designed.

The Directors of the Tower House Retreat and Sanatorium (Limited) at Westgate-on-Sea have declared an interim dividend of 7 per cent. for the eight months ending December 31st, 1886, being at the rate of 10 per cent. per annum.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1887.

Subscriptions to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 161A, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 19th, 1887.

THE COLLEGE OF SURGEONS AND ITS DUTIES TO THE PROFESSION.

The minutes of the last meeting of the College of Surgeons suggest rather than disclose proceedings of much interest. Some signs of public spirit and independence of thought are becoming visible in the Council, which has too long been dominated by a sentiment of pure officialism, and in which individual thought as to the affairs of the College and the profession has had too little scope. On the question of the disposal of the plans for the outlay of part of the Erasmus Wilson bequest, a discussion was raised on the minutes, and it is greatly to be regretted that there is no record of such discussion. In this instance it was evident that the widespread and strong expression of opinion against the proposed large outlay on bricks and mortar to which we first called attention has had the effect of arousing a corresponding sentiment in the minds of a large proportion of the Council.

Government by committees is the fate of most corporations, and it is the bane of the College of Surgeons. Everything is settled by committees. Such committees almost inevitably include a majority of the old official element, and their reports are framed in accordance with the preconceived intentions of what are called the experienced members of the Council who have sat there for years, and by dint of age, seniority, and attention to the affairs of the Council, are in fact supreme. It is, of course, easily to be understood that, in a Council which has the privilege of disposing among its own members of a large number of posts of considerable emolument varying from £300 to £500 a year, it requires no small independence of mind for anyone who is looking forward to an examinership to make himself disagreeable. Even the postponement of such appointments is a serious disappointment, not only as a matter of emolument—with regard to which the majority of the members may well be considered to be free even from an unconscious bias—but as posts of dignity and as stepping-stones to higher office in the College and higher consideration in the profession. It is a melancholy element in the constitution of the College, which contains so much that is anomalous and contrary to public interest, that the examinerships and other offices of emolument and honour are commonly distributed within the Council. There are few men who care to be noted as troublesome early in their Council career; and a man who opposes the views of his seniors, and disputes the decrees of the committees, quickly becomes noted as troublesome. It is probable that nothing short of the strong expression of outside opinion, which we are pleased to have been the means of calling forth, would have sufficed to raise the discussion which

occurred last Thursday on the question of confirming the minute as to the expenditure on the new building. That minute recited an intention to expend £50,000, although it only authorised an expenditure of £15,000.

Attention was called to the preliminary recital, and an amendment was moved that it be omitted. It was, however, plausibly explained that the resolution itself committed the College only to the expenditure of the smaller sum, and that no steps whatever would be taken in respect to any larger expenditure in the future until after full consideration. The weakness of such an explanation is at once self-evident. If it were not intended to commit the Council quietly to the whole expenditure, why retain any reference to it, and why not leave the future unpledged? This view commended itself to a considerable minority of the Council; but, nevertheless, the obvious wishes of the honorary members, and the customary deference of the Council to its committees, prevailed. It is satisfactory, however, that the assurance was obtained that no further outlay should be made in bricks and mortar until the whole matter had once more been fully discussed. This will give time to those whose minds are open to the considerations urged in the memorial, which we published last week, from teachers of surgery in the Metropolitan Schools, to give to that powerful representation the careful attention which it deserves; and it leaves the hope that the committee element of the Council will take more seriously into consideration than they have hitherto done, the obvious feeling throughout the whole profession, that the Erasmus Wilson bequests should be expended chiefly, if not solely, in the creation of properly appointed laboratories, in which surgical, pathological, and physiological research may be prosecuted in a manner worthy of this great country, and of the position which it has so long held in the forefront of medical progress.

It was a good sign also that when the resolution of the General Medical Council calling upon the College to reconsider its decision to exclude the Apothecaries' Society from the Conjoint Board of England was read, it was not dealt with summarily and on the spot by a pre-arranged negative. A resolution to refer the matter to a subsequent special meeting of the Council was received with some surprise, and not without some signs of suppressed indignation. It was, however, carried. For reasons which we need not once more recapitulate, we have but little hope that the Council will deal with this matter in any spirit of fresh and candid investigation. If it were to take the course dictated by deference to professional opinion, and by the rules of just and statesmanlike procedure, the Council of the College would call a meeting of its Fellows and Members, and would lay before them its reasons for whatever course of action it now proposes, and ask their assent to it. The Council has before it a resolution on the subject already passed in its own theatre, and in the presence of its official members. It has before it the resolutions of a number of independent bodies in different parts of the kingdom, and especially it has now before it the practically unanimous resolution of the General Medical Council of Education and Registration. It is well aware that the decision which it will take is one which affects very little or hardly at all any of the members of the Council itself, which is with one exception entirely composed of hospital surgeons. It has professed a general desire to be guided on matters of high policy concerning the whole profession by the opinions of the great body of Members and Fellows of the College. It goes through the ceremony of convoking its Members and Fellows in conference from time to time. It has assuredly never had before it a question of such momentous importance to the whole body of its commonalty, including the Fellows, as this.

If it hesitates to take counsel with the whole body of the commonalty on this subject, it will declare in fact that its announced desire to act in great matters in accordance with the whole body of the College is a pretence or an official form. The object of conference is to influence conduct, and the resolution to come into conference only after this great transaction is irrevocably completed, would be an idle, hollow pretence. If then the Council of the College has any regard for the principles of constitutional action, for its own avowed principles, or for what appear to us to be the obvious dictates of duty and justice to the profession, it will not hesitate to call a conference of its Fellows and Members, and to submit this question to their ultimate decision. That it will take this course, however, we have but very little hope.

PROFESSOR VIRCHOW ON MYXŒDEMA.

In his address on Metaplasia, delivered before the International Congress at Copenhagen, Professor Virchow expressed the view that the affection first observed in this country, and described by Sir William Gull under the name of "A Cretinoid State in Adult Women," and later on by Dr. Ord under the name of "Myxœdema," represented a condition of retrogressive metaplasia, the subcutaneous fat being changed into mucoid tissue. This opinion was based, as he himself now states, more upon apparent analogies between the myxœdematous and other undoubtedly metaplastic processes than upon a personal study of the first-named disease. During a recent stay in London, opportunities were given to the great pathologist of becoming acquainted with the affection and its allied conditions by Dr. Ord at St. Thomas's Hospital, and by Mr. Horsley, at the Brown Institution. Patients, photographs, macroscopic and microscopic specimens, were demonstrated to him at the former place, and a full insight into the experimental aspect of the question was afforded at the latter. The subject largely engaged Professor Virchow's attention, and the interest he took in it was of more than a temporary character, as is shown by a paper read by him some time after his return to Berlin, at a meeting of the Berlin Medical Society, and since published in the *Berliner klinische Wochenschrift*, No. 8.

Remarkable, like everything from Professor Virchow's pen, this paper will have a special interest for the British reader on account of the high compliments which the distinguished author pays to British clinical medicine and experimental research in the persons of the above-named investigators. But apart from this, the paper is most important on account of the very broad view the author takes of the subject, the new aspects under which he views the question, and the scientific scepticism with which he regards some of the explanations which have been offered of certain phenomena. Full justice could be done to it only by a verbal translation, and it is, considering its absolutely original line of thought, and the diversity of allied questions which are brought into connection with the main subject, almost impossible to give in an abstract a correct idea of its contents. We can only touch here on a few of the most important questions raised by the author. After stating that the main purpose of his paper was to draw attention to the affection, which had hitherto been too much neglected in Germany—only three German cases having been reported up to the date at which he wrote

—he refers to the old views on the influence of the thyroid gland upon the blood, reminds his hearers of the parallelism he had tried to establish between the tissue of the thyroid gland, the cortex of the suprarenal capsules, and the larger lobe of the pituitary gland, and then passes to Mr. Horsley's view, according to which the thyroid gland is a hæmatopoietic organ. Whilst acknowledging that Mr. Horsley has succeeded in finding in the stroma of the gland certain aggregations of lymphoid elements, Virchow expresses some doubt whether these elements could exercise any notable influence upon the composition of the blood, considering that their aggregate quantity is minimal in comparison to the numerous other sources from which the blood receives its constituents. Apart from this, whilst not questioning for a moment Mr. Horsley's statement that he has found 7 per cent. more white blood-corpuscles in the blood of the thyroid vein than in that of the thyroid artery, he doubts whether this proportion is a regular and constant one. In short, he is still of opinion that the thyroid gland has not much influence upon the constitution of the blood.

Turning next to the clinical aspect of the question, Virchow gives a short sketch of the symptomatology and of the physical changes witnessed in the disease, of Dr. Ord's microscopical and chemical investigations, and of the reason which induced the latter to give to the affection the name of myxœdema. In the discussion on this point—the presence of mucin in the tissues—we come to one of the most interesting parts of the whole paper. Whilst describing the features of the microscopic specimens which were shown to him by Dr. Ord, he says: "After looking through these specimens, I must say that my premises were false. No metaplasia of fatty tissue into mucoid tissue takes place. True, the fatty tissue gradually atrophies, but the appearance is not that found in instances of transformation into mucoid tissue. On the other hand, to my surprise, I observed something for which I was not prepared. It was seen that, in the cutaneous and superficial subcutaneous layers, decided proliferation of the connective tissue had taken place. Numerous divisions of nuclei and cells were found, so prolific, indeed, that in some instances large accumulations of purely cellular nature, almost granulation tissue, were produced. With this, the process recedes from the range of the—if I may so express myself—passive or purely atrophic processes; it rather assumes an irritative character; it shows a relation with active processes, and with those connected with positive new formations; it even approaches the inflammatory processes." Continuing in this line of thought, he reminds us that not only in cartilaginous, but also not uncommonly in other tissues, a certain quantity of mucin is found as soon as any irritative processes take place in them. He is, therefore, not quite convinced that mucin is a specific constituent of the products in the human disease, as the name would seem to imply. On the other hand, he admits that the state of matters produced by the experimental removal of the thyroid gland in monkeys seems, indeed, to show that a general mucinous dyscrasia, a sort of "myxæmia," results from the loss of this gland, and he is at present not disposed to object to the view developed by Mr. Horsley in his Brown lectures, that the normal thyroid gland acts as regulator of metabolic processes, and that after the loss of its function the albuminates, instead of being transformed into the final products of decomposition, remain in the mucinoid state. In this respect, Professor Virchow believes that everything depends upon the results of Dr. Halliburton's chemical examinations of the tissues being generally corroborated. If, as those who are acquainted with the admirable work done by this careful experimenter will fully expect, this corroboration is afforded them, in Professor Virchow's opinion the curious function of the thyroid gland suggested by Mr. Horsley would afford valuable help in the explanation of the external tumefaction witnessed in myxœdema. But Virchow maintains that under any circumstances this tumefaction is not a mere state of retention, but that an active, irritative process takes part in its production.

The description of the nervous symptoms of myxœdema, with which the second part of the paper begins, leads in a natural way to the questions of the relationship of the disease to cretinism, and of the latter to goître. The historical retrospect which the author gives of the latter question, and his impartial analysis of the similarities and differences between myxœdema and cretinism, give clear proof of the obscurity in which these questions are still shrouded. It would far exceed the space at our disposal were we to give an account, however short, of the considerations upon which Professor Virchow's arguments rest. In spite of all the apparent contradictions, however, he is inclined to fix upon the loss of the thyroid gland as the essential cause of the changes witnessed in myxœdema, and he finds considerable support for this view in the phenomena witnessed after extirpation of the thyroid gland, which have been described by Professor Kocher under the name of "cachexia strumipriva," and to the almost complete identity of which with those of myxœdema attention was first drawn by Dr. Felix Semon.

The paper concludes with comparison of the two forms of cachexia to which changes connected with the thyroid gland appear to give rise: the one the "cachexia exophthalmica" (Graves's or Basedow's disease), in which the existence of the usually enlarged, frequently hyperplastic, gland is necessary for the production of the different effects upon the heart, the brain, the eyes; the other forming a series, and comprising myxœdema, cretinism, cachexia strumipriva, in which the loss, or at any rate a considerable atrophy, of the gland appears to be the essential factor. "One might, perhaps," Professor Virchow concludes, "if one be very sceptical, say, 'That is all very well; but, exactly speaking, it is by no means yet proved that the centre of the disturbance is situated in the thyroid gland.' I will admit that much is still to be done. I, too, find that on no aspect of the question have conclusive results been obtained; but I must at any rate declare that what is before us is certainly so remarkable as to deserve that all members of our profession keep their eyes a little open in their practice, in order that material may be accumulated a little more quickly, and the possibility of an inquiry into the details be somewhat hastened. That is, gentlemen, what I wish."

THE RECENT AMENDMENTS OF THE LUNACY ACTS AMENDMENT BILL.

SINCE the Lunacy Acts Amendment Bill, 1887, was introduced, several changes have been made in the provision as to the manner in which magisterial intervention should be carried out. At first it was proposed that the judge, magistrate, or justice, who (under the future Act) has been petitioned to make an order for the reception of a lunatic, shall give the alleged lunatic notice thereof, unless he has satisfied himself that this course would be prejudicial to the alleged lunatic or dangerous to the public; that he may also have an interview with the alleged lunatic if he thinks it necessary or desirable to

do so; and that such interview shall be compulsory if demanded by the alleged lunatic.

Meeting with opposition, the above provisions were omitted in Committee on the Bill, and were replaced by new ones, to the effect that, upon the presentation of the petition to make an order for the reception of a lunatic, the judge, magistrate, or justice, having considered the evidence of lunacy appearing by the medical certificates, and having also considered whether or not it is necessary for him to see and examine the alleged lunatic, may, if satisfied, make the order forthwith, or, otherwise, not until after having been satisfied by his interview and examination that such order may properly be made. But if the lunatic has been received without having been visited by the judge, magistrate, or justice, he shall have the right to have the omission made good, unless the medical attendant, medical superintendent, or proprietor shall certify that such right would be prejudicial to the lunatic, and send such certificate to the judge, magistrate, or justice; or if such certificate be not made and sent, the lunatic, within twenty-four hours after his reception, shall receive notice in writing from the same parties of such right; and if the lunatic, within seven days after his reception, desires to exercise such right, the superintendent, or proprietor, or person having charge of the lunatic as a single patient, shall forthwith give notice thereof in writing to the judge, magistrate, or justice, who shall thereupon either visit the lunatic, or procure the lunatic to be brought before him by the superintendent, proprietor, or other person.

In the report stage, the latter provisions underwent considerable modification and amplification, and three new forms were cast to meet the further requirements of the subsection dealing with the matter; one, for the person having charge of the patient to send to the Commissioners, within twenty-four hours after the patient's reception, if the exercise of the aforesaid right would be prejudicial to the lunatic; another, on which notice of the said right is to be given to the lunatic, in case the former certificate (of the first form) is not made and sent; and a third, for the lunatic to sign if he desires to exercise the right to be seen by judge, magistrate, or justice. The lunatic, also, may elect to be taken before, or visited by, the judge, or before a particular stipendiary magistrate or justice named by himself, and having jurisdiction in the district within which the lunatic is detained.

The above-mentioned series of successive proposals appear to us to be progressively less and less desirable or workable. The last proposals would provide for magisterial intervention under circumstances quite unnecessarily detrimental to all concerned; to the lunatic there would be the harm of two sets of examinations instead of one, and one of these a sort of trial on appeal by the lunatic; to the magistrate it would often be gravely inconvenient to be called upon by any alleged lunatic in his district to deal with his case; to the medical men and friends concerned—to all who send or receive the lunatic—the proposals are fraught with special dangers which they ought not to be called upon to run. For the lunatic may make his claim to see the public functionary a week after his reception, and between the expression of his desire and its fulfilment some additional space of time must intervene. An acute case may, therefore, have recovered, or may have so far recovered after admission that a judge, magistrate, or justice may not feel it necessary, or may feel unable, to make the order for detention at the date on which he sees and examines the alleged lunatic. Or, at that time, there may be a comparatively quiescent condition of the mental affection. Under circumstances such as these, the working of the provisions would prove to be a fertile source of litigation for acts done in perfect good faith, and not only justifiable, but, in fact, the best measures for the good of the lunatics themselves.

We submit that it would be far better to enact that, upon the presentation of the petition and satisfactory certificates, the judge, magistrate, or justice should forthwith see the alleged lunatic in all cases (sent under "petition," etc.). If it be objected to this that the delay caused thereby would be prejudicial in some cases, we reply that, for urgent cases of this nature, the Bill fully provides by the separate machinery of the "urgency orders," and the various provisions connected therewith.

PROFESSOR GUSSEROW has been nominated by the University of Berlin to succeed the late Professor Schröder.

THE deaths of Dr. Eichler, Professor of Botany in Berlin University, and of Dr. Bonancy, Professor of Anatomy in the Toulouse School of Medicine, are announced.

THE report of Lord Justice Fry's Committee on the reform of the University of London was before the Senate for a short time on Wednesday last, but its full discussion has, we understand, been deferred until a special meeting summoned for Wednesday next.

ON Wednesday evening, March 23rd, a paper on "Some of the Conditions affecting the Distribution of Micro-organisms in the Atmosphere" will be read before the Society of Arts by Dr. Percy Frankland, F.C.S. The chair will be taken at 8 o'clock by Professor Burdon Sanderson.

EPIDEMIC OF TRICHINOSIS.

AN epidemic of trichinosis is at present prevailing in the province of Leeland, in Holland. Trichinosis being unknown in Holland up to the present time as an epidemic, the disease spread for some time before its true nature was ascertained.

ANOTHER FASTING MAN.

THERE is another fasting man, a Norwegian named Cetli, who commenced to fast on March 10th, at Berlin. He is being closely watched by a scientific committee, of which Professor Virchow is said to be chairman. Perhaps the most interesting fact yet reported is that the Berlinese have discovered a new descriptive term for a fasting man; they call him a "*Hunger Virtuoso*."

DEATH OF DR. CARRINGTON, OF GUY'S.

THE announcement that Dr. Robert Edmund Carrington died on March 16th of pleuro-pneumonia after an illness of three days will be read with the most sincere regret by old students of Guy's Hospital, and by his many friends within the profession in London. It seems but the other day that Dr. Carrington was appointed on the staff of Guy's Hospital, yet he had already become the senior assistant physician; he was fast gaining for himself a sound reputation as a pathologist and clinician, but will perhaps be best remembered in the future as a teacher and for his share in bringing out the treatise on Medicine, left incomplete by his former teacher, Dr. Hilton Fagge, whom he was destined so soon to follow to the grave. The funeral will take place at Norwood Cemetery this day (Saturday) at 3.30 P.M.

CONVALESCENT HOMES FOR WORKING MEN.

A VERY excellent and practical way of commemorating the Queen's Jubilee was suggested by a deputation of working men, representatives of various trade institutions, who waited upon the Lord Mayor on Wednesday. The deputation asked his aid in support of a scheme to commemorate the Queen's Jubilee by securing the permanent en-

dowment of a number of beds at seaside convalescent homes for the benefit of working men. The further suggestion that some of the funds which were being received for the Imperial Institute might be applied to this scheme drew from the Lord Mayor the obvious reply that to expend money contributed to the Imperial Institute in this way would be to divert it from the purpose for which it was intended. He added that he would consider the suggestions made, which included a proposal to hold a public conference, and would communicate with the deputation.

"AMYKOS" IN CATARRH AND GONORRHŒA.

In the *Russkaia Meditzine*, No. 46, 1886, p. 793, Dr. J. J. Trusewicz, of St. Petersburg, draws attention to "amykos," an antiseptic fluid prepared in Upsala and extensively used all over Sweden and Finland. Its essential constituents seem to be boracic acid and thymol. Diluted with two or three volumes of water, amykos makes a good injection or irrigation in acute and sub-acute coryza and syphilitic rhinitis. The author also found solutions of amykos very useful as collyria in acute conjunctivitis and as irrigations in catarrhal otitis. The best results, however, were obtained in acute and chronic gonorrhœa; the burning pain on micturition was immediately relieved, and after two or three days the discharge became mucous instead of purulent. It is well to begin with weak injections (one part of amykos to four parts of water). After two or three days the strength of the solution may be gradually increased. In mild cases the disease was cured in about a week. When the mucous discharge does not cease about that time, some astringent, such as sulphate of zinc or acetate of lead, should be added to the amykos solution.

THE DENTAL HOSPITAL OF LONDON.

The jubilee commemoration dinner of the Dental Hospital of London was a brilliant success. Sir James Paget presided, and in a speech which has been widely reported in the daily press, dwelt with his accustomed eloquence and happy skill in phrase on the great benefits, alike of an æsthetic and of a practical nature, conferred on suffering humanity by the dentists' art. Sir E. Saunders replied to the toast of the evening. Mr. John Wood gave "The London School of Dental Surgery," to which Mr. Morton Smale responded. Mr. S. W. Sibley proposed "The Royal Colleges of Physicians and Surgeons," and Sir Risdon Bennett and Mr. Christopher Heath answered for their respective Colleges. Among those present were Sir William Mac Cormac, Professor Flower, Dr. George Johnson, Mr. Macnamara, Mr. Ernest Hart, Mr. Henry Power, Dr. Frederick Roberts, and Dr. D. W. Buxton.

OBSTETRICS IN DRESDEN.

Professor Leopold has recently published in the *Centralblatt für Gynäkologie* an account of the management of the Royal Lying-in Institution at Dresden from the time when he began his official work there, that is to say, from September, 1883, to September, 1886. Excellent arrangements have been made to increase the efficiency of the institution as a hospital, as a training-school for midwives, and as a school of clinical obstetrics for medical students; and provision has been made for the comfort of the resident staff and pupils, hygienic considerations not being neglected. Four thousand one hundred and twenty-eight deliveries occurred in the three years; 43, or 1 per cent., died; 20 of these, or 0.48 per cent., dying from septic infection, 13 of the 20 succumbing during an epidemic in the course of the first year; 3 of the same series were already septic when admitted. The 20 cases of death from infection were thus distributed over the three years: first year (epidemic), 14 cases; second year, 4; third year, 2. After the subsidence of the epidemic in the first winter, the strictest rules were enforced from May 1st, 1884, at the same time that corrosive sublimate was introduced as an antiseptic. From that date till September 1st, 1886, 3,196 deliveries took place, with 7 fatal septic cases (0.21 per cent.); subtracting 3 of these cases, which were admitted septic, 4, or only 0.12 per cent., succumbed to septic influences received in the institution. Between May, 1884, and the end of July, 1885, 1,686 deliveries without one fatal septic case occurred; this series included many very severe instrumental cases. In the total 4,128 cases, there were 463 operations (11.2 per cent.). This list includes 64 turnings, 54 craniotomies, 5 embryotomies, 29 induced premature labours, 25 detachments of adherent placenta, 33 removals of products of abortion, and 15 Cæsarean sections. Puerperal convulsions occurred in 1 in 158 cases, placenta prævia in 1 in 137, contracted pelvis in 1 in 7.3, and severe laceration of cervix, repaired by Emmet's operation, in 1 in 179. The forceps were used in 1 in 28 deliveries. These statistics speak highly for the value of the Dresden Lying-in Institution, both as a hospital of the greatest service to suffering women and as a rich field for clinical instruction.

MEDICAL EXAMINATIONS AT CAMBRIDGE.

The dates fixed for the examinations for the degree of Bachelor of Medicine at Cambridge are as follows: The first and second examinations will begin on Tuesday, June 7th; the third (Part I) on Tuesday, May 10th; (Part II) on Wednesday, May 11th. The examination for the degree of Master in Surgery will commence on Friday, May 13th. The names of candidates for the third examination and for the examinations in Surgery must be sent to the Registrar (through the Prælectors of their respective Colleges) on or before Thursday, April 28th; those for the first or second examinations on or before Saturday, May 21st.

LUNACY IN RUSSIA.

Professor Kovaleffski, of the Kharkov University, has stated that there are at least one hundred thousand lunatics in Russia. Only one-tenth can be accommodated in asylums, where moreover the treatment is generally defective. The keepers are for the most part rough men, who maltreat the unfortunates if not bribed to kindness by relatives. The nourishment is insufficient and of bad quality. Thousands of lunatics who cannot be accommodated in public or private asylums are to be met with everywhere in the country, often ill-used by the heartless, and sometimes taking their revenge by setting houses on fire or mutilating children.

SIR WALTER FOSTER'S PARLIAMENTARY CANDIDATURE.

Sir Walter Foster has commenced his candidature in the Ilkeston division of Derbyshire with great vigour. The polling has been fixed for March 24th. Sir Walter Foster proved himself so able a representative of the profession during the short time he served in a previous Parliament that we may venture to express the hope that, in the interests of the profession, he may be returned to the House on this occasion.

A NEW LOCAL ANÆSTHETIC.

At a recent meeting of the Medical Society of Berlin, Dr. Lewin made a communication on the physiological effects of a resinous extract prepared from kava (piper methysticum), to which he attributes a local action similar to that of cucaine. When placed on the tongue, it produces a sensation of heat, which is soon followed by anæsthesia. Applied to the eye, it at first causes smarting, with an abundant flow of tears; this is followed by complete and lasting anæsthesia of the cornea and conjunctiva. Subcutaneous injections produce insensibility of the neighbouring tissues without setting up inflammation.

THE OPHTHALMOLOGICAL SOCIETY.

At the meeting of this society last week, Dr. Gowers contributed a most valuable paper on conjugate paralysis of the ocular muscles and nystagmus, and Mr. Jessop related an unusual case of sudden and lasting nystagmus in an old man. These papers drew from Dr. Hughlings Jackson and Mr. Priestley Smith some very interesting observations on the nature of nystagmus. Amongst the patients exhibited before the meeting may be mentioned Dr. Beevor's case of

ophthalmoplegia externa without obvious cause; a case of bilateral paralysis of the external rectus, apparently congenital, shown by Mr. Mackinlay; Dr. Sidney Phillips's cases of ptosis in association with the action of the internal rectus; and Mr. Marcus Gunn's patient, whose pupils contracted when the eyes were deviated strongly to the left. Altogether the evening was one of considerable profit for those interested in the medical aspects of ophthalmology.

SANITARY REGISTRATION OF BUILDINGS BILL.

At a meeting of the Council of the Sanitary Assurance Association, on March 14th, it was decided to hold a conference to consider the principle and details of the Sanitary Registration of Buildings Bill. It was agreed that the first meeting of the conference should take place on Monday, April 4th, at 3 o'clock. Other kindred associations are to be invited to join in the conference, which, it may be hoped, will result in such modifications in the principles of the Bill as may render it workable.

A CASE OF RABIES.

A man named Turner, aged 25, residing at Apperknowle, near Dronfield, has died of hydrophobia. On December 29th, Turner was bitten on the thumb of the left hand by a dog said to be rabid, though the police failed to discover any evidence of the disease. Immediately after the bite, the wound was cauterised by a surgeon, and soon healed. The deceased continued well until the 10th of the present month, when he complained of rheumatic pains in various parts of his body. During the following night a feeling of suffocation and inability to swallow liquids came on; the patient became delirious, and expired on Monday, March 14th.

BUTTER SUBSTITUTES IN PARIS.

The anti-butterine law recently promulgated in Paris imposes a penalty of from six days' to six months' imprisonment, and a fine of from 50 to 3,000 francs on persons guilty of the wilful sale of sham or adulterated butter. Concealment of the name of the maker or vendor is to be construed as wilful sale. The magistrates have power to advertise the judgment, or placard it on the shop doors. Any substitute for butter is to be labelled "margarine," "oleomargarine," or "*graisse alimentaire*," and within three months a system of inspection is to be organised. It should be mentioned that the passing of this law is due not to aggrieved consumers, but to the complaints of farmers making genuine butter, who have found themselves unfairly supplanted in the market.

ICHTHYOL.

Unna describes ichthyol as a very soluble preparation of sulphur, having special properties, and producing effects of extraordinary importance. He considers this drug as a powerful antiphlogistic, rapidly producing anæmia of all the tissues to which it is applied. It should only be employed, however, where the epidermis is unbroken, otherwise excessive absorption takes place, and phlyctenulæ or vesicular eruptions are the consequence. As an internal remedy for catarrh, it is administered in doses of 1 to 2 grammes for adults, and 20 to 50 centigrammes for children. Ichthyol is especially indicated in subcutaneous swellings and in inflammation of the skin where the epidermis is intact, also in rheumatism, and in most of the skin diseases. It may be used as an application in acne rosacea, at a strength of 2 per cent.; and in eczema and pruritus a strength of 10 per cent. gives very good results. Ichthyol should also be given internally in all affections of the skin.

THE PHYSIOLOGICAL AND THERAPEUTIC ACTION OF URETHAN.

Dr. A. P. Langovoi, of Moscow, gives (*Vratch*, No. 7, 1887, p. 179) the following summary of the results of his own experiments on the physiological and therapeutic effect of urethan. 1. The hypnotic effect of urethan manifests itself in different kinds of animals in different degrees. Thus, it produced a powerful effect on rabbits, while it acted very slightly on dogs. 2. Even large doses of urethan had not any marked poisonous effect on the heart, nor did they depress the arterial tension. 3. Breathing is quickened by urethan. 4. The drug is well borne by patients, has not a disagreeable taste, and does not cause any gastric disturbance. 5. Given in ordinary medicinal doses, urethan does not produce any unpleasant secondary effects, such as failure of the cardiac action, etc. 6. Its chief effect is on the brain; it does not seem to act on the peripheral nervous system. At all events, in cases of sleeplessness from cough or pains, it has no marked effect. 7. Urethan is not a powerful hypnotic, and in certain cases it is inactive or nearly so. Nevertheless, as it has no tendency to produce any untoward secondary effects, it may be regarded as a fairly useful addition to our therapeutical resources. It is a useful hypnotic in nervous insomnia, as well as in sleeplessness in the course of acute fevers.

EXAMINATION OF THE HIP-JOINT THROUGH THE RECTUM.

Valuable information as to the condition of the acetabulum may be obtained by examination with the finger in the rectum. Three cases are reported by Schmitz in the *Centralblatt für Chirurgie*, in which this mode of examination proved useful. The patients were children from 3 to 5 years of age, in whom symptoms of coxalgia had existed for three, six, and twenty-one months respectively. In all three the thigh was slightly flexed, abducted, and rotated inwards. In one case rectal palpation revealed a well defined tumour in the acetabular region; in the others, abscesses varying in size from a hen's egg to a nut were detected. Movement of the femur during anæsthesia produced no friction. Resection was performed in all the cases, and the head of the femur, with its cartilage, was found to be quite healthy, but the acetabulum was extensively diseased. Schmitz recommends the use of this method of examination in all cases of suspected hip-disease.

ARTIFICIAL COLOURING MATTERS IN WINE.

The *Gazette des Hôpitaux* of January 20th, 1887, publishes an account of some recent experiments on the colouring of wine by Dr. Cazeneuve, Professor of Organic Chemistry and Toxicology at the Faculty of Medicine at Lyons. The following are the results: 1. Matters extracted from coal and used for colouring wine: sulphur compounds of fuschine, Bordeaux red and purple, and rocelline red, may remain for years in wine, and be afterwards found there unchanged on analysis. 2. The chemical modifications that wines undergo (among others, the settling of new wines) precipitate a portion of the artificial colouring matter. 3. The microphytic diseases which attack wines make the colouring matter rapidly disappear. 4. From a toxicological and hygienic point of view, the modifications which artificially coloured wines undergo need give rise to no anxiety. The artificial colouring matter becomes insoluble in the lees, and is therefore not absorbed. The formation of new products, which may, perhaps, be soluble and poisonous, is of no consequence, for the wine is thereby made unfit to drink. This is the case when wines undergo putrefaction.

AN IMPROPER DEATH-CERTIFICATE.

At an inquest held last week at Tinsley Park, near Birmingham, on the body of a child three years of age, some remarkable facts were brought to light. The child in question had been attended by the unqualified assistant of Mr. Dearden, surgeon, and the death-certificate was apparently signed by the latter to the effect that death was due to "epilepsy and convulsions." Owing to some strange but fortunate confusion of ideas in the registrar's mind, instead of entering the certified cause of death in the register, he ascribed it to a fall which had occurred some months previously. An inquest was deemed necessary, at which it was elicited that the certificate of death, which purported to have been signed by Mr. Dearden, had in reality been given by the unqualified assistant who attended the case. Mr. Dearden ascribed the

circumstance to hurry and a misinterpretation of his instructions, but this explanation was received with considerable distrust. The *post-mortem* examination, made by Mr. C. Atkin, showed that death had been caused by tubercular meningitis. This flagrant instance of a breach of the registration laws will be brought by the coroner to the notice of the Registrar-General, who will doubtless take the necessary steps to vindicate the law on the subject. Mr. Dearden, of course, has committed no offence beyond the ethical one of allowing an unqualified assistant to take entire charge of his cases, but the latter has seriously committed himself. Coroners are not always alive to the grave social danger which attends irregularities in the giving of death-certificates, and Mr. D. Wightman is to be congratulated on his conduct of the case. The most curious fact in this case was the odd incident of the erroneous entry, which led to an inquest being held, but we cannot always rely on the chapter of accidents to call attention to similar improprieties.

MOVABLE SPLEEN.

Dr. M. A. Lükin, of Cronstadt, reports (*Proceedings of the Cronstadt Marine Medical Society*, No. 2, 1886, p. 15) an interesting case of extreme mobility of the spleen in an epileptic woman, who died at the age of 40. At the *post-mortem* examination, the spleen, measuring 15.5 by 7 by 3 centimètres, and enclosed in a smooth tense capsule, was found in the left iliac fossa. The hilus was connected with the centre of the greater curvature of the stomach by means of a band 9 centimètres in length and 6 in breadth, and the spleen could be easily and freely moved into every corner, however remote, of the pelvis and abdomen, without stretching the band. The splenic substance was of a dark red colour, and presented numerous thin whitish strips of connective tissue. Dr. Lükin thinks that the epileptic fits of the patient might possibly have had something to do with the extreme mobility of her spleen. He says that this is the only case of the kind which he has met with in 8,152 necropsies made by him during the last fifteen years.

TREATMENT OF MALIGNANT PUSTULE.

The *Paris Médical* of January 29th publishes notes of three cases of malignant pustule, described by Dr. D. Frederico Rivas, which were cured with a paste composed of quinine powder and essential oil of turpentine. The first case was that of a woman suffering from a pustule on the metatarso-phalangeal joint. Various methods of treatment were tried without success. On the application of the quinine and turpentine paste the pain immediately ceased and the œdema disappeared; a scab alone remained, which came away on the fourth day. The paste was equally successful in the case of a shepherd who had been stung by a fly in the lower portion of the temporal region; intense œdema of the head and neck ensued. A third case of malignant pustule was cured by the same treatment. The powder and essence should be employed in sufficient quantities to form a soft paste, which should be often renewed, as it dries rapidly.

THE ACTION OF CUCAINE ON THE SYMPATHETIC.

Dr. Dürdüfi, of Moscow, draws (*Vratch*, No. 7, 1887, p. 175) the following conclusions from experiments which he has lately made. 1. When introduced into the circulation, cucaine gives rise to prominence of the eyeballs and dilatation of the pupils, phenomena dependent on stimulation of the sympathetic centres situated in the spinal cord. 2. Constriction of the vessels and quickening of the heart's action are also produced, probably through stimulation of the vaso-motor centres, as well as of the accelerating cardiac centres.

ACETONURIA.

According to Moscatelli, acetone is never found in urine, except in the pathological state. Vitali reports two cases of persistent acetonuria. In one of them, the patient, a woman aged 35, was suffering from diabetes; her urine always contained acetone, whatever diet she was put upon. During the six months that she was under treatment, she did not show the least sign of acetone poisoning. In the other case, the patient was affected with cancerous stricture of the intestine, with frequent sickness. Acetone was found in the matters vomited, indicating that this substance may be formed in the stomach.

DR. EDWARD WATERS OF CHESTER.

The ceremony in the Town Hall of Chester on Saturday last, briefly reported in another column, when Dr. Edward Waters was presented with a portrait of himself as a mark of the esteem and affection with which he is regarded by his neighbours, has more than a local interest. Dr. Waters has made his name so well known by his untiring efforts in the cause of medical reform, that the whole profession throughout the country will take pleasure in adopting the hearty words of praise and regard uttered by the Duke of Westminster and the other speakers at the Chester meeting. The first public meeting in connection with the testimonial was held on November 3rd, and the subscription list, which, with a few exceptions, such as Professor Gairdner and Dr. Haughton, was strictly confined to the locality, was closed in December, so that the substantial proportions which it attained in so short a time, and the hearty support given by Dr. Waters's professional brethren in his own county, may be some gauge of the unanimous expression of feeling which would have been evoked throughout the country, had not the characteristic modesty of the recipient limited it to Chester and its immediate neighbourhood.

PROFESSOR HORNER, OF ZURICH.

The whole profession, and more especially those members of it who are interested in ophthalmic work, will have heard with deep regret of the death of Professor Horner, of Zurich, which took place on December 15th, at the comparatively early age of fifty-five. Horner completed his student career in 1854, and immediately went to Vienna, where he studied dermatology under Hebra, and diseases of the eye under Rosas and Fr. Jaeger. "Ophthalmology" could, perhaps, hardly be said yet to exist; but the new field of knowledge had recently been opened by Helmholtz's discovery of the ophthalmoscope, and Ed. Jaeger was working in it at Vienna. At this time, the fame of Albrecht von Graefe was beginning to attract men from al parts of Europe to Berlin, and we soon find Horner proceeding thither. Almost of the same age, with the same aims, and much similarity of character, Horner and Graefe soon struck up a firm friendship, which continued till the latter's death. For about a year Horner acted as Graefe's clinical assistant, the relations between them, however, being those of a close personal friendship rather than of master and pupil. From Berlin he went to the School of Paris, where he worked under Nélaton, Ricord, and the elder Desmarres, and returned home in 1856. In the autumn of 1857, he was one of those who with Graefe founded the Heidelberg Ophthalmological Society, and in the same year he went to the Congress at Brussels, made memorable by the reading of Graefe's paper on Iridectomy. Horner was an able teacher, and a clear writer. He attended the International Medical Congress held in London in 1881; but, having written no systematic treatise, he is perhaps less known to English readers than many other authors. He was, however, an able practitioner, and made many valuable contributions to periodical ophthalmic literature. We lose in him another of the immediate disciples of von Graefe.

AN INQUIRY INTO THE CONNECTION BETWEEN THYROIDECTOMY AND MYXŒDEMA.

The Committee appointed two years ago by the Clinical Society of London to inquire into the nature of myxœdema has completed its work in so far as concerns the general etiology, symptoms, and morbid anatomy of the disease, and the main result is that the most constant, if not the only constant, change found after death is atrophy or morbid destruction of the thyroid body. The only part of the investigation as yet incomplete is that relating to the effects of removal of

the thyroid body for disease, and the Committee is about to issue a circular letter of inquiry to all surgeons known to have performed the operation. This letter, which contains a description of the disease and a photograph of a typical case, asks the recipient to state whether the "cachexia strumipriva" of Kocher (the "*myxœdème opératoire*" of Reverdin), which is believed to be the same disease as myxœdema, has been observed after total or partial removal of the thyroid gland. We are requested to state that the Committee is particularly anxious to obtain as many answers as possible, and that cases in which no symptoms of myxœdema have followed extirpation of the thyroid body would be at least as valuable as those in which they have. Any surgeon who finds himself omitted, or who has performed the operation without reporting the result, should communicate with Dr. Felix Semon, 39, Wimpole Street, London, W., who is acting for the Committee in this matter.

SCOTLAND.

THE CHAIR OF PHYSIOLOGY AT EDINBURGH.

Professor Haycraft, of Birmingham, has been offered, and has accepted, the post of substitute-Professor of Physiology in Edinburgh University during the leave of absence of Professor Rutherford. We understand that, in the event of Dr. Rutherford subsequently resuming the duties of the chair, Dr. Haycraft will be offered a permanent position on the teaching staff of the University.

NEW TOWN DISPENSARY.

At the annual meeting of the supporters of the New Town Dispensary, Thistle Street, Edinburgh, held on March 11th, Mr. J. T. Mowbray, W.S., presiding, it was stated in the report for the past year that over 9,500 cases had been treated, of which more than 1,000 were for diseases of the respiratory system; 2,310 patients were visited at their residences; and over 1,000 vaccinations had been performed. The treasurer's report showed a satisfactory increase of balance at the credit of the institution, as compared with last year. Nearly £91 had been obtained by the penny-fee paid by the patients for each prescription dispensed.

SCOTTISH ODONTO-CHIRURGICAL SOCIETY.

The Odonto-Chirurgical Society of Scotland held its annual meeting in Edinburgh on March 11th, the retiring President, Mr. W. Bowman Macleod, in the chair. The following were elected office-bearers for the ensuing year: President, Dr. W. H. Williamson, Aberdeen; Vice-Presidents, Mr. Malcolm Macgregor, Edinburgh, and Mr. J. Moore Lipscomb, Kilmarnock; Treasurer, Mr. George W. Watson, Edinburgh; Secretary, Mr. John S. A. Moore, Edinburgh; Curator and Librarian, Mr. J. Stewart Durward, Edinburgh; Councillors, Messrs. J. Macintosh and Bowman Macleod, Edinburgh, Walter Campbell, Dundee, and Rees Price, Glasgow. Several papers of considerable interest were read, and one of these was illustrated by micro-photographs of a rare form of abnormality in a third molar tooth. Mr. Bowman Macleod read a communication regarding Cunningham's method of facing hard rubber plates with metal, the object being to prevent the congested condition of the gums which is frequently ascribed to the plain vulcanite plates. He also delivered a short valedictory address, in which he referred to the satisfactory condition of the Society.

DUNDEE ROYAL INFIRMARY.

During the last nine months the patients treated in the Dundee Royal Infirmary have numbered 1,881, an increase of 170 as compared with the corresponding period of the preceding year. At the quarterly meeting recently held, the chairman stated that this increase had been due to the outbreak of fever, which was, however, now abating. During the year, 1,040 patients had been received into the Convalescent Home at Barnhill, of whom two-thirds were from the infirmary and the remainder from the general public. It was stated that a misapprehension existed as to admission to the Convalescent Home, namely, that only cases from the infirmary could be admitted, whereas any person recovering from illness would be admitted if certified by his medical man. This is an important point, as there are many patients who prefer the independence of treatment at home, but who are unable to take the necessary change afterwards.

GLASGOW EYE INFIRMARY.

A singular course of action has recently been taken by the House Committee of the Glasgow Eye Infirmary. Dr. Johnstone Macfie, who has been one of the surgeons for some years, was informed, at the beginning of a new year at the infirmary, that he had not been re-elected, and that, in future, his duties would be discharged by someone else. Dr. Macfie's appointment was *ad vitam aut culpam*. The House Committee has offered no reason for its extraordinary step, and it becomes a very important question for members of the staff of medical institutions whether a medical officer is liable to have his appointment thus summarily cancelled without the possibility of redress. Dr. Macfie has appealed to the directors of the infirmary for reasons for the action of their House Committee, and it is understood that, if necessary, he will take further steps. He is well known in Glasgow, and the absence of any conceivable reason makes the action of the committee all the more extraordinary. One part of the business which has elicited specially unfavourable comment is that Dr. Freeland Fergus received Dr. Macfie's post without any delay; in fact, Dr. Macfie was made aware of his own dismissal and of the appointment of Dr. Fergus in the same letter, this being the first intimation of the state of affairs which he received. The vacancy was not advertised, and no opportunity was afforded for any other candidate to present himself. We are informed that Dr. Freeland Fergus's father, Dr. Andrew Fergus, is one of the directors of the Eye Infirmary.

GLASGOW UNIVERSITY AND THE ROYAL INFIRMARY.

The University Court has reported on the memorial of the managers of the Royal Infirmary to the Secretary for Scotland, asking that it may be constituted a College of the University. The University Court is opposed to the project in its present form, but thinks it might be possible to meet the wishes of the memorialists in some other way. The Court believes that the incorporation of a medical college, whose professors are to be appointed by the managers for the time being of a charitable institution which is not subjected to the control and government of the University, would lower the standard of medical education. Any application of the affiliation principle would require to be limited by the indispensable conditions that the appointment of professors should be entrusted either to the Crown or to a body selected with a special view to such educational functions, and that the arrangement and control of the teaching and examinations should be in the hands of the University authorities. Affiliation, once conceded, could not be limited to the Royal Infirmary; the Western Infirmary and other bodies might claim the same privilege. The court concludes by expressing its willingness to co-operate with the managers in promoting the interests of the Infirmary in connection with education in any way that is not inconsistent with those of the University and its medical school. The University Court, therefore, does not reply with a definite *non possumus*, but seems to suggest that it is prepared to concede something that would satisfy the managers of the Royal Infirmary, though it might not satisfy the aspirants to university chairs who are stimulating the managers to make these demands. No one can say how far this deliverance of the University Court agrees with the views of the Senate. It may be taken for granted, however, that the Senate will be even less disposed to go forward. This negative attitude on the part of the University will certainly not command the respect of the public; indeed, it will do much to secure sympathy for the Royal Infirmary. The University would have made its position much stronger if, after exposing the undoubted weaknesses of the claim of the Royal Infirmary managers, it had made some definite counter-pro-

posals which, if carried into effect, would have secured the clinical material of the infirmary for teaching purposes, without the evils inherent in the present scheme.

IRELAND.

TRIPLE BIRTHS.

Two cases of triplets have occurred in Belfast recently, one in the practice of Dr. Clements, and the other in the Union Maternity Hospital.

WATERFORD UNION.

At a recent meeting of the guardians a resolution was adopted to the effect that the House Committee should prepare an estimate as to the cost, also plans and specifications, for the increased accommodation necessary in the hospital.

JACOB TESTIMONIAL.

The list of subscribers to this fund, which now amounts to over 450 names, showing nearly £500 collected, will be closed in a few days. Subscriptions may be forwarded to Professor Edward Hamilton, F.R.C.S.I., 120, Stephen's Green W., Dublin.

BELFAST MAIN DRAINAGE SCHEME.

The opponents of this scheme are now busily engaged obtaining evidence in support of their views, and for this purpose Mr. Vernon-Harcourt, the eminent engineer, was lately in Belfast, making a survey of the town. The grounds of objection are that the scheme is partial and imperfect, and that it neglects the urgent question of the purification of the River Lagan.

THE CITY OF DUBLIN HOSPITAL.

The annual public meeting of the friends and supporters of this hospital was held on March 12th. The report of the directors stated that during the past year 927 patients were admitted into the hospital, and over 4,000 cases had been treated in the out-patient department, as well as 630 extern accidents. Dr. Banks, consulting physician to the hospital, moved the adoption of the report. Mr. Thomas Pim, jun., in seconding the motion, said that the expense of keeping up the hospital was £4,000 per annum, and the income raised from all sources amounted only to £3,000; they were, therefore, 25 per cent. short of their requirements. Some further resolutions having been passed, the proceedings terminated.

WM. BEAMISH, M.D., FORMERLY OF CORK.

We record with regret the death of a well-known Cork physician, who left that city five years ago to reside in Dublin. Dr. Beamish studied in Dublin and Edinburgh, and at the latter place obtained the degree of doctor of medicine in 1836. While in Cork he held several appointments; among the rest, that of physician to the Fever Hospital, and to the county and city gaols. In 1864 he acted as Inspector of Anatomy for Queen's College, and for the Province of Munster. He was also a Lecturer on the Practice of Medicine in the Cork School of Medicine, and Corresponding Member of the Hunterian Medical Society of Edinburgh, etc. He published monographs on Asiatic cholera and on fever.

BELFAST MEDICAL STUDENTS' ASSOCIATION.

A very successful conversazione, in connection with this Association, was held in the Queen's College on February 10th. Tea was served in the examination hall; *tableaux vivants*, chemical experiments, etc., were shown at intervals, and some good music was performed during the evening. The Association was founded to promote the interests of the students of the Belfast Medical School, and it has already attained a considerable degree of success. The President and both the Vice-Presidents are members of the staff of the Royal Hospital.

CORK WORKHOUSE.

The present overcrowded state of the hospital and infirm-wards in this workhouse has recently been under the consideration of the Visiting Committee of the house. It appears that on a given day there were 200 men sleeping two in a bed, including 10 lunatics and 24 blind, and nearly all these were in the infirm and able-bodied wards. Some time ago the Committee suggested an arrangement by which the overcrowding might have been prevented, but the recommendation was not carried out. The Committee proposed also to fit up the present able-bodied day-room as a dormitory for the able-bodied, and to reduce the size of the mattresses to 2 feet 9 inches, each being separated from the next one by a 9-inch plank fixed on edge. If this plan were adopted, separate beds would be provided for 116 in No. 9 ward, in which 130 slept, and the remainder might be accommodated on brackets attached to the pillars in the centre. These and certain other changes would give an increased accommodation of 132 beds, and still leave 58 sleeping double, for which at present the Committee see no remedy. The report has been adopted.

MOXON MEMORIAL FUND.

President—Sir William Jenner, Bart., K.C.B., M.D., F.R.S.

The following contributions have been received since those announced on March 5th.

Second List.

	£	s.	d.		£	s.	d.
Laundy Walters, Esq.	10	10	0	F. J. Hindle, Esq.	1	1	0
W. S. Savory, M.B., F.R.C.S.	5	5	0	A. B. Elliott, Esq.	1	1	0
D. P. Loe, Esq.	5	5	0	W. Hale White, M.D.	1	1	0
H. R. Williams, Esq.	5	5	0	C. E. Winckworth, Esq.	1	1	0
Thomas Joyce, Esq.	5	5	0	Percy Gardner, Esq	1	1	0
Christopher Gayleard, Esq.	5	5	0	W. Bramley Taylor, Esq.	1	1	0
Edward Cock, F.R.C.S.	5	0	0	A. J. Harrison, M.B., J.P.	1	1	0
Joseph May, Esq., Junr.	5	0	0	Bransby Roberts, M.D.	1	1	0
J. H. Lloyd, Esq.	3	3	0	F. Gordon Brown, Esq.	1	1	0
Mrs. Laundy Walters	2	2	0	E. Baxter Forman, M.D.	1	1	0
F. Charlewood Turner, M.D.	2	2	0	George Padley, Esq.	1	1	0
P. Horrocks, M.D.	2	2	0	Thomas Stevenson, M.D.	1	1	0
James Beddard, M.B.	2	2	0	J. J. Nason, M.B., J.P.	1	1	0
F. T. Roberts, M.D.	2	2	0	W. Reynolds, Esq.	1	1	0
H. Kenneth, Esq.	2	2	0	B. N. Dalton, M.D.	1	1	0
Byrom Bramwell, M.D.	1	1	0	Hugh Bennett, Esq.	1	1	0
J. H. Hind, M.D.	1	1	0	J. B. Trapp, Esq.	1	1	0
E. W. Brumwell, Esq.	1	1	0	T. S. Morley, M.D.	0	10	6
Chauncy Puzey, Esq.	1	1	0	Walter Kidd, M.D.	0	10	6
A. Carrol Otway, Esq.	1	1	0	J. H. Gibson, Esq.	0	10	6
R. H. Perks, Esq.	1	1	0	Surgeon E. S. Marder	0	10	6
N. Davies-Colley, M.C.	1	1	0	B. Walker, Esq.	0	10	6
F. B. Baldwin, Esq.	1	1	0	C. T. Griffiths, Esq.	0	10	6
H. P. Berry, M.D.	1	1	0				

Third List.

	£	s.	d.		£	s.	d.
Subscriptions announced	407	9	6	J. F. Goodhart, M.D.	2	2	0
E. Homan, Esq., J.P.	10	10	0	Sir J. Fayrer, K.C.S.I.	1	1	0
Editors of the *Lancet*	5	5	0	Owen Bowen, Esq.	1	1	0
J. Braxton Hicks, M.D., F.R.S.	5	5	0	Joseph Coats, M.D.	1	1	0
Professor Humphry, M.D., F.R.S.	5	5	0	Arthur Pearson, Esq.	1	1	0
John Hall, M.D.	5	5	0	Herbert Lund, M.B.	1	1	0
W. Blasson, Esq.	5	5	0	William Ewart, M.D.	1	1	0
Professor W. S. Greenfield, M.D.	3	3	0	Barnard Woods, Esq.	1	1	0
G. N. Pitt, M.D.	3	3	0	C. D. Higham, Esq.	1	1	0
E. H. Lushington, Esq.	3	3	0	W. H. Lamb, M.B.	1	1	0
H. Cosmo Bonsor, Esq., M.P.	2	2	0	S. W. Bradnack, Esq.	1	1	0
T. Charrington, Esq.	2	2	0	George Turner, Esq.	1	1	0
F. E. Carey, M.D.	2	2	0	Shirley F. Murphy, Esq.	1	1	0
W. C. Toulmin, Esq.	2	2	0	J. C. Uhthoff, M.D.	1	1	0
John Brackwell, Esq.	2	2	0	W. Makeig Jones, Esq.	1	1	0
Henry Davy, M.D.	2	2	0	R. M. Harvey, Esq.	1	1	0
W. H. A. Jacobson, F.R.C.S.	2	2	0	George Abbott, Esq.	1	1	0
Edward Collin, Esq.	2	2	0	L. A. Dunn, B.S., F.R.C.S.	1	1	0
G. R. Burnett, Esq.	2	2	0	E. C. Roberts, Esq.	1	1	0
M. Harbottle, Esq.	2	2	0	Robert Cuff, M.B.	0	10	6
				E. W. Du Buisson, Esq.	0	10	6
				S. W. MacIlwaine, Esq.	0	10	0

All subscriptions should be forwarded to the Honorary Treasurer, R. Clement Lucas, B.S., F.R.C.S., 18, Finsbury Square, E.C., by whom they will be acknowledged, and cheques should be crossed "City Bank."

Errata.—The name of T. A. Spalding was the name on the cheque for £2 2s. sent by Dr. L. E. Shaw, which was thus twice acknowledged on March 5th. F. Monser and R. Monser should be F. Manser and R. Manser.

THE JACOB TESTIMONIAL FUND.

THE Honorary Secretaries and Treasurers beg thankfully to acknowledge the following additional subscriptions received or promised since last week:

	£	s.	d.
Amount already acknowledged	460	17	3
Richardson, B. W., London..	1	1	0
Harte, M. A., Fleet-Surgeon, R.N.	1	1	0
Cummins, W. J., Cork ..	1	0	0
Taggart, W. J., Antrim ..	1	0	0
Camack, P. G., Dervoch ..	1	0	0
Clugston, W. A., Ballyclare	0	10	0
Kelly, Dillon, Mullingar ..	1	0	0
Rainsford, W. J. R., A. M. Staff	1	0	0
Carleton, W., Delvin.. ..	0	10	0
Daly, T. J., Multifarnham ..	0	10	0
Gordon, W. S., Mullingar ..	0	10	0
Middleton, W. H., Mullingar	1	0	0
Murray, T. S., Sligo	1	1	0
Beaumont, T., Deputy Surgeon-General	1	1	0
Ridley, J., Tullamore ..	1	1	0
Moorehead, G. A., Tullamore	0	10	6
White, H. W., Blueball ..	0	10	0
Mackay, W., Kilgobbin ..	0	10	0
Morewood, S. K., Drapers-town	0	10	0
Fitzgibbon, J. E., Castlerea ..	0	10	6
O'Kelly, R., Ahascragh ..	0	10	0
Henry, R., Pomeroy.. ..	0	10	0
Whyte, N. C., Dublin ..	1	1	0

Cheques to be made payable to the Honorary Treasurers—Professor Edward Hamilton, 120, Stephen's Green, W., Dublin; or Dr. Thomas Purcell, 71, Harcourt Street, Dublin; or to any of the County Treasurers, or to the Honorary Secretaries—Professor E. D. Mapother, 6, Merrion Square, N., Dublin; Dr. J. H. Chapman, 122, Pembroke Road, Dublin; and Mr. G. F. Blake, Royal College of Surgeons, Dublin.

MEDICAL SICKNESS ASSURANCE SOCIETY.

IN the report of the meeting of the Committee of the Medical Sickness, Annuity, and Life Assurance Society published last week, there is an important omission. The names of the Trustees are given as Sir T. Spencer Wells, Mr. Ernest Hart, and Dr. Ord. To these should be added the name of Mr. J. R. Upton (14, Austin Friars) who has been a trustee since the foundation of the Society.

THE NEW EXAMINATION HALL.

THIS ugly building, of which the Queen laid the foundation-stone on March 24th, 1886, is now rapidly approaching completion; the secretary of the institution has, in fact, been enabled to enter into possession of his offices during the present week, and an examination of students for the conjoint diploma will be held in the building on March 29th. The builders will have completed their work six weeks before the stipulated date. The front of the building is towards the river. The block of granite laid by the Queen as a foundation stone is visible from the Embankment. There are three entrances to the building; one, for examiners and other persons, in the centre of the frontage, which conducts at once to the central hall. On the left of this are offices, reception-room, etc., whilst to the right are two examination-rooms. The two side entrances are for students. The candidates, upon entering, will go at once to the hat and cloak room in the basement at either end of the building; then they will ascend a side staircase to the upper parts, where the first, second, and third floors are entirely devoted to examinational purposes. The first and second floors are exactly alike: they comprise a central hall, fifty or sixty yards long, and two wings shut off by big folding doors. Each has its lavatory and similar offices. The rooms are well lighted, though the windows which face the river are sufficiently high above the floor to prevent anything which passes outside from being seen by those engaged within. Outlets for ventilation purposes are placed near the ceiling; these will be kept constantly open; the inlets of the Tobin's pipes are situated about six feet from the floor, and can be opened or shut at pleasure. The rooms are heated by stacks of hot-water pipes, arranged in sets close to the wall. These and other parts of the building are lit by Wenham gas-lights, of which there are twelve in each central large room, and in each of the wings. The walls are at present pink, with a dado coloured chocolate. The upper floor is divided into two distinct portions; that to the east is being fitted up as two rooms, for examinations in practical chemistry. Each room will accommodate forty candidates, each of whom will have a share of the long benches, with his own chemical reagents, water-supply, and gas-burner. The western half will be used for practical anatomy and physiology; and here around the walls are arranged cupboards, in which may be kept specimens, etc. These rooms being on the top floor, have sky-lights. At each end of the building is a lift, by which the basement communicates with the top floor; the lifts will be used for "subjects," etc. There are hydrants on each floor, for use in case of fire. Returning to the entrance hall, we find the lower windows on the main-staircase filled with coats of arms; in the centre are the royal arms, to the left those of the College of Physicians, and to the right those of the College of Surgeons. The housekeeper and two porters will reside on the premises, and have their rooms in the basement, where are also the hat and coat rooms, wash-house and laundry, boilers for the heating apparatus, storerooms, and museum. Behind the building are two corridors connecting the extreme wings, in the basement and on the ground floor respectively. Altogether, the building seems to be well calculated to fulfil the purpose of its construction. The hot-water apparatus is already in action, and is fast drying the walls. The whole building is just now a busy scene; and the plans of Mr. Stephen Salter, the architect, which certainly do not err by subordinating the useful to the beautiful, are being rapidly pushed to completion by the builders.

THE DUBLIN MEETING OF THE BRITISH MEDICAL ASSOCIATION AND THE MEDICAL STAFF.

WE have much pleasure in learning that a movement is on foot among the officers of the Medical Staff quartered in Ireland to use the opportunity afforded by the annual meeting of the Association, to be held in Dublin next August, as a means of showing their appreciation of the services rendered to the Department by the Association, and as a mark of professional good fellowship. In addition to the various entertainments which will be provided by the Local Reception Committee, the officers of the Medical Staff, with the warm approval and liberal support of Surgeon-General Hassard, C.B., Principal Medical Officer in Ireland, have signified their desire to take a prominent share in doing honour to the Association on this occasion. This proposal has been most warmly welcomed and accepted by the committee in charge of the arrangements for the Dublin meeting. The form the proposed entertainment will take has, we believe, yet to be decided upon; it will, of course, depend largely upon the amount of support the movement receives. It is, however, we understand, generally felt, and we think rightly so, that any funds collected should be expended in a special entertainment given by the Medical Staff to the Association, and should not be handed over, as originally proposed, to the local reception fund. The British Medical Association has, indeed, always been a staunch supporter of the Medical Staff, and invariably worked for the good of the army medical officers at all critical periods of reform in their service. On the part of the Association at large we may express the general satisfaction with which such a tribute to the value of the assistance given to the officers of the Medical Staff by the Association and by its JOURNAL will be received and appreciated. We look upon the movement as one which will prove a memorable and significant feature in a meeting which already gives many promises of being a most successful and important one.

Surgeon-Major L. Corban, M.S., 17, Ailesbury Road, Dublin, will receive any subscriptions that may be forwarded to him for the fund.

PRESENTATION TO DR. WATERS, OF CHESTER.

IN Chester Town Hall, on Saturday, in the presence of a large and distinguished assembly, which included a representative gathering of his professional brethren, Dr. Waters was presented with his portrait and a cheque for £296, in recognition of his laborious efforts in the cause of medical reform, and of his valuable services as physician to Chester Infirmary. The ex-Mayor (Mr. C. A. Dickson) presided, and among those on the platform were the Duke and Duchess of Westminster, Col. Scotland, His Honour Judge Thomas Hughes, Q.C.; His Honour Judge Horatio Lloyd, Col. Evans Lloyd, the Rev. Dr. Haughton (Dublin), Dr. Davies-Colley, Dr. Dobie, Dr. Taylor, Dr. Haining, Dr. Grainger, Dr. W. H. Dobie, Dr. Roberts, Dr. F. P. Weaver (Frodsham), Dr. Watson, Dr. Moreton (Tarvin), and Dr. Henry Churton.

The DUKE of WESTMINSTER, in making the presentation, referred to Dr. Waters's past career. In 1848 he became President of the Paris Medical Society, and was connected also with the German Society; in 1851 he came to Chester (armed with the highest testimonials from the most eminent autho-

rities who were well aware of his merits and medical abilities), and entered upon the duties of Physician to the Chester General Infirmary. In 1859 he filled the office of President of the Lancashire and Cheshire Branch of the British Medical Association; to which he was re-elected in 1884. In 1866 he was elected President of the British Medical Association itself, and then came the important epoch in his history, when in 1867 he was chosen Chairman of the Committee appointed by the British Medical Association to go into the question of medical reform. The operations of that Committee lasted for nineteen years, and happily Dr. Waters had lived to see the result of his labours. In 1875 he retired from the office which he had filled so well in connection with the Chester Infirmary, and received the cordial thanks of the Board of Management. In 1882 he became President of the Irish Graduates' Association. Referring to the nineteen years' labour of Dr. Waters on the Committee of the British Medical Association, His Grace said he believed no one out of the profession or out of Parliament knew the extent of his work during that period. He was the leader in the battle, and upon him all the main part of the work fell. It was in 1886, at last, after the report of the Commission on the question, that a Bill was brought in and eventually passed, carrying out to some extent his own views and the views of that Committee, in conformity with the report of that Royal Commission, and then Dr. Waters was able at last to see the fruit of his labours. The Bill secured the public against the placing upon the *Register* of imperfectly qualified medical practitioners, because now they had to undergo a thorough examination in medicine, surgery, and midwifery. The examination was now controlled by a Council of direct representatives of the profession, of the universities, and of the corporations; it was, therefore, free from all bias or interest, and had regard only to the thorough qualification of the candidates. The Act, besides protecting the public, would tend to raise the standard of the profession, socially as well as medically, throughout the country. The greater part of that very important national reform was owing to their friend, Dr. Waters. The best proof of that consisted in the fact that only last year he received the gold medal of the British Medical Association, which, since its institution ten years ago, had been awarded to only three persons for distinguished merit. With those remarks, in the name of the subscribers, he presented to Dr. Waters his portrait, painted by Mr. Frank Holl, R.A., along with a cheque for £296.

Dr. WATERS, in acknowledging the presentation, returned his heartfelt thanks to the members of his profession, to the dispensing chemists of Chester (to whom he paid a high compliment), and to the general public of the city and county who had subscribed so munificently for the testimonial. To the passing of the Medical Act of 1886 he had, he said, devoted the best energies of his life. That Act was not so perfect as he could have wished, but its defects lay at the door of Parliament, and were due to that difficulty in legislation which compels compromise to conciliate opposition, even when the interests of the public were clearly known to be involved. In hygiene, or preventive medicine, the immense advance made during our present Queen's reign had materially added to the length and happiness of human life. By the Medical Act of 1886 provision was made for the registration of certificates of competence in sanitary science; and such certificates would doubtless be in future required for medical officers of health, who would exert greater influence in respect to sanitation than hitherto. The registration of partial qualifications would be prevented by the same Act; and, lastly, the measure secured the admission of direct representatives of the profession in the Medical Council—men whose great object it would be to extend and improve the education and attainments of medical men, and who would have no interest in filling the coffers of licensing corporations with fees gained through laxness of examination. That Act, to which the Queen referred as effecting important improvements in the medical profession, contained provisions of the greatest importance to the public, by providing (1) certificates in sanitary science, based on examinations conducted under the supervision of the reformed Medical Council; (2) complete qualification of every future registered member of the profession; and (3) a Medical Council containing independent members, having no corporation interests to watch over.

Professor SAMUEL HAUGHTON, F.R.S., in a humorous speech, conveyed the congratulations of the medical practitioners on the other side of St. George's Channel.

Dr. F. P. WEAVER returned the thanks of the committee to the Duke of Westminster for taking such interest in the testimonial and for presenting it on that day.

The proceedings closed with votes of thanks to Dr. W. H. Dobie for acting as honorary secretary; to Dr. Roberts for his services as honorary treasurer; and to the ex-Mayor for his conduct in the chair.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held at the Offices of the Association, No. 429, Strand, corner of Agar Street, London, on Wednesday, the 13th day of April next, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

March 14th, 1887.

NOTICE OF QUARTERLY MEETINGS FOR 1887. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on April 13th, July 13th, and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, March 24th, June 23rd, and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,
THE VALUE OF HAMAMELIS, THE VALUE OF PURE TEREBENE.

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE, and on the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE, are now closed.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, and HABITS OF INTEMPERANCE, a full Report on OLD AGE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 161a, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

THAMES VALLEY BRANCH.—The next meeting of the Branch will be held at Richmond, on Wednesday, March 30th. Members willing to read papers or show cases are desired to communicate as soon as possible with CHARLES C. SCOTT, M.B., St. Margaret's, Twickenham, Honorary Secretary.

LANCASHIRE AND CHESHIRE BRANCH.—An intermediate meeting of this Branch will be held at the Town Hall, Birkenhead, on Wednesday, March 30th, at 2 P.M. The following papers and communications have been promised:—Dr. Walter will show a large fibro-myoma of the vagina. Dr Ashby will read a communication on Intubation of the Larynx in Croup by means of O'Dwyer's tubes. Dr. Leech will read notes on Strophanthus. Dr. Wallace will read a note on Extra-uterine Pregnancy with reference to Intra-peritoneal Hæmatocele and Abdominal Section (specimen). Mr. Edgar Browne will read a paper on an Ophthalmic Subject. Dr. Dreschfeld will make some remarks on Special Forms of Bacteria. Mr. Thomas Jones will describe a case of Acute Traumatic Suppurative Osteomyelitis of the Humerus successfully treated by Early Trepanation. Dr. Vacher will present notes on Fourteen Years of Sanitary Work in Birkenhead. Mr. William Berry will call attention to the necessity for a revision of professional fees paid for attendance at sessions and assizes, and move a resolution. At the close of the Branch meeting, a meeting of those members interested in the question of medical defence will be held. Dinner at the Woodside Hotel at 5.30; tickets 7s, exclusive of wine. —Dr. GLASCOTT, Honorary Secretary, 23, St. John Street, Manchester.

MIDLAND BRANCH.—A special general meeting will be held in the Board Room of the Hospital at Grantham, on Thursday, March 31st, at 2 P.M., when the question of the payment of the travelling expenses of the representatives of the various Branches of the Association for their attendance at the four quarterly meetings of the Council" will be brought before the meeting. The following papers will be read and discussed:—1. Dr. Goodhart: Cases of Angina Pectoris. 2. Dr. Handford: Some of the Complications and Sequelæ of Enteric Fever. Dr. Handford will also exhibit drawings of a case of Fatal Cerebral Hæmorrhage, following Thrombosis of the Venous Sinuses, in a child 6 years old. 3. W. J. Cant, Esq.: Conical Cornea, and a New Method of Treating it.—W. A. CARLINE, M.D., Honorary Secretary and Treasurer.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the London Hospital on Thursday, April 21st, at 8.30 P.M. The chair will be taken by C. Macnamara, Esq. A demonstration of interesting surgical cases will be given by W. Rivington, Esq., surgeon to the hospital. All visitors will be welcomed.—J. W. HUNT, M.D., Honorary Secretary, 101, Queen's Road, Dalston.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.—A conjoint meeting of the above Districts will be held at the Grand Hotel, Brighton, on Wednesday, March 30th. Meeting at 3.30 P.M., dinner at 5.30 P.M., charge 6s., exclusive of wine. Dr. J. H. Ross will preside. The meeting will be asked to nominate a representative for Sussex on the Council of the Association. The following papers are promised:—1. The Chairman: Remarks on a Case of Small-pox, with especial view to the possibility of Auto-Infection in this and other Zymotics. 2. Dr. Walter Griffiths: Antiseptics in Practical Midwifery. 3. Dr. Ranking: Cases of Fæcal Tumour. 4. Mr. Verrall will show a specimen of Strangulated Intestine.—T. JENNER VERRALL, G. B. COLLET, Honorary Secretaries.

SOUTH-EASTERN BRANCH: WEST SURREY DISTRICT.—The next meeting of the above district will take place at the Surrey County Hospital, Guildford, on Thursday, March 31st, 1887, at 3.30 P.M., Charles Ede, Esq., of Wonersh, in the chair. The dinner will take place at the White Lion Hotel, Guildford, at 6 P.M. Papers to be read:—1. Dr. Boxall: On the Sources of Puerperal Fever and its Preventive Treatment. 2. Dr. A. W. Leachman: A Case of Pregnancy Neph itis. 3. Mr. S. G. Sloman: On Country Practitioners' Charges, with a suggestion to form a Medico-Ethical Branch of the South-Eastern Branch. Gentlemen wishing to read papers or cases should write at once to the Honorary Secretary, A. ARTHUR NAPPER, Honorary Secretary, Broadoak, Cranleigh.

BERMUDA BRANCH.

THE annual general meeting was held at the Town Hall, Hamilton, at 4 o'clock P.M., February 12th, Deputy Surgeon-General C. GRAVES-IRWIN, M.A., P.M.O., in the chair. Sixteen members were present. The accounts of the branch for the year 1886 were laid on the table and passed.

Election of Medical Officers.—Deputy Surgeon-General C. Graves-Irwin, M.A., P.M.O., was unanimously elected president, and Dr. Eldon secretary and treasurer for the ensuing year.

Surgeon H. J. BARNES, M.S., read a paper on Public Health in Bermuda.

Votes of thanks, etc.—The meeting proposed a vote of thanks to Dr. Barnes for his paper, and were unanimous in agreeing that it should be forwarded to his Excellency the Governor for the consideration of the Central Board of Health. The President called on members to bring and exhibit at the meetings any cases of interest they might have in their practice. Votes of thanks were proposed to the President and Mayor of the town of Hamilton.

GLOUCESTERSHIRE BRANCH.

THE last meeting was held at the General Infirmary, Gloucester, on Tuesday, February 15th, Dr. BATTEN, President, in the chair; there was a large attendance of members.

Dr. BATTEN delivered the Presidential address for 1887, taking for his subject "The Physical Education of Girls." It is published in full in this day's JOURNAL, p. 605.

Dr. WALTERS (Stonehouse) proposed and Mr. WILTON (Gloucester) seconded a vote of thanks to Dr. Batten for his address, and it was carried by acclamation.

Mr. BOWER (Gloucester) showed some interesting eye-cases: 1. Tattooing of Leucoma; 2. Plastic Operation for restoring Eyelids lost by Cicatrical Contraction following Burns.

WEST SOMERSET BRANCH: SPRING MEETING.

THE spring meeting of this Branch was held at the Railway Hotel, Taunton, on Thursday, March 3rd, at 5 P.M. There were present sixteen members and one visitor.

Chairman.—A telegram was read from the President, T. J. OLLERHEAD, Esq., Minehead, saying that he was not well, and was very sorry that he could not come to the meeting. Henry Alford, Esq., was voted to the chair *pro tem.*, and soon afterwards, on the arrival of the ex-President, J. B. Sincock, Esq., Mr. Alford resigned the chair to him, and Mr. Sincock presided for the remainder of the meeting.

Routine Business.—The minutes of the last meeting were read and confirmed, and letters from several absent members were read.

Communication.—Brigade-Surgeon HENSMAN gave particulars of a case of Epithelioma of the Rectum, which presented several points of unusual interest; and he exhibited a wet preparation beautifully showing the diseased structure and neighbouring parts.

Discussion on the Etiology of Phthisis.—Dr. ISAMBARD OWEN, attended as representative of the Collective Investigation Committee and opened the discussion on the Etiology of Phthisis, by delivering a very interesting address on the subject.—Dr. ADAMS, Dr. MEREDITH, Mr. SINCOCK, Mr. HENSMAN, Mr. COLLYNS, and others joined in the discussion which followed, and Dr. OWEN replied.

Vote of Thanks.—Dr. Owen was warmly thanked for his address, and for having kindly attended the meeting and so ably opened the discussion.

Payment of the Travelling Expenses of Branch Representatives.—A letter, dated February 17th, 1887, from the subcommittee appointed by the Council of the Association to ascertain the wishes of the Branches on the above subject, was read.

It was resolved thereon:

"That this Branch is content with the existing plan of representatives paying their own travelling expenses for attending the quarterly meetings of the Council of the Association in London, and have no wish to make any rule on the subject."

Coroners' Inquests.—A letter, dated March 1st, 1887, from the Manchester Medico-Ethical Association, requesting that this Branch would consider a report which was enclosed on the subject of coroners' inquests, was read.

It was resolved thereon:

"That the matter be referred to a sub-committee of the Branch, consisting of Dr. Meredith, Dr. Colles, and Mr. Cornish, and that they be requested to give it their consideration, and report the result at the next meeting."

State Honours to the Medical Profession.—A letter, dated March 2nd, 1887, from the Shropshire and Mid-Wales Branch, requesting that the above subject might be considered by this meeting, was read.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.

THE spring meeting of the above district was held on Thursday, March 10th, at the Queen's Hotel, Upper Norwood; EDMUND HOOPER GALTON, Esq., F.R.C.S., of Brixton Hill, S.W., in the chair.

Representative on Council of Association.—Dr. Holman, of Reigate, was nominated unanimously for re-election as representative on the Council of the Association.

State Honours for the Profession.—A communication from the Honorary Secretary of the Shropshire and Mid-Wales Branch on the subject of State honours for the medical profession, enclosing a memorial from Shropshire to the Prime Minister, was brought before the meeting. It was resolved "That the Honorary Secretary be requested to acknowledge the receipt of the communication."

Dinner.—After the meeting, twenty members dined together.

Next Meeting.—The next meeting was fixed for Thursday, May 12th, at the Greyhound Hotel, Croydon, T. A. Richardson, Esq., of Croydon, in the chair.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Micro-Organisms in the Alimentary Canal.—Acids of the Stomach in Health and in Disease.—Caffeine as a Diuretic.

M. NETTER showed some time ago (*Archives de Médecine*, 1884) that two of the micro-organisms found in the alimentary canal in its normal state are also found, up to a certain distance, in the bile-duct. He now inquires whether, under certain conditions, these micro-organisms may not pass from the bile-duct into the blood, and thus be the cause of serious lesions. According to M. Netter, the micro-organisms present in the bile-duct are not found in the gall-bladder; but, if the former be tied above its duodenal orifice, micro-organisms may be found in the latter on the following day. In that case, however, the bacilli go much further than the gall-bladder; they penetrate the small ducts of the liver, and pass from thence into the blood. The micro-organisms found in the blood and in the bile are the *staphylococcus pyogenes aureus*, and a bacillus which gives rise to culture colonies of an opaque white colour, and very rapid in growth. These two micro-organisms, however, are not always found together; one or the other may be absent. If the infection is due to the staphylococcus, the rectal temperature of the animal experimented on rises to 41° C. (105.8° F.); if, on the other hand, it be due to the bacillus, the rectal temperature falls to 34° C. (93.2° F.). M. Netter thinks that similar infection may be produced in the human organism in disease of the liver, as he has already found these two micro-organisms in different affections of that organ. He found the bacillus in the inflamed parts of the bile-duct,

in a case (brought before the Société Anatomique by M. Potocki) of inflammation of the duct complicated with calculus, and also in the blood of a patient examined by M. Martha (*Arch. de Physiol.*, July 14th, 1886). He found the staphylococcus in the blood of a patient during an attack of bilious fever arising from lithiasis, and in a case of jaundice complicated with general miliary tuberculosis. In a case of jaundice from hypertrophic cirrhosis of the liver, in which there was fatty degeneration caused by alcoholism, M. Netter found both the staphylococcus and the bacillus; in another severe case of jaundice, he found the staphylococcus in the blood. Finally, he mentioned a case reported by M. Brieger, in which the same staphylococcus was found in a case in which the bile-duct was blocked up by a calculus.

Drs. Cahn and von Mering (*Ann. de la Société Médico-Chirurg. de Liége*) have lately been investigating the subject of the acids present in the stomach in health and in disease. They find that—1. The quantity of lactic and hydrochloric acid in the stomach can be determined. 2. In the healthy subject, hydrochloric acid is found in the stomach half an hour after taking food. 3. Under a diet consisting exclusively of meat, hydrochloric acid alone is found. 4. Under a mixed diet the stomach, whether healthy or diseased, contains hydrochloric, lactic, and volatile acids, in quantities varying according to the length of time the food remains in the stomach. 5. In fever and anæmia, hydrochloric acid may be wanting; but it is always present in amyloid degeneration, and it is only exceptionally absent in carcinoma of the pylorus. Violet of methylaniline does not form a reliable test for the presence or absence of hydrochloric acid in the stomach.

What is known of the physiological action of caffeine does not explain the diuresis which often follows the use of this medicament under certain conditions. This result cannot be accounted for by the action of the pulse or the increased tension of the circulatory system. M. Schröder is therefore studying experimentally the action of caffeine on urinary excretion.

THE RIVIERA: NICE.

Dr. W. Allen Sturge writes to us as follows:—To the medical man the studies afforded by the earthquake shocks, to which we have recently been subjected on the Riviera, have been interesting in the psychical rather than the more strictly medical aspects. We have had presented to us a curious and very interesting study of panic—panic prolonged, and with a future of uncertainty. It has brought out the real character of people more, perhaps, than anything else could have done; has suddenly plumbed the depths or the shallows, as it may be, of their nature; and in one moment has shown which was real solid material and which was mere veneer. People rushed from their hotels, and, in not a few cases from the town in which they were at the time, minus wigs, teeth, and all the various improvers of their attire. All this has been told many times over in the daily papers; but I have not found that much has been said of the other artificial make-believes that were left behind in the hotel bed-rooms—courage, coolness, self-restraint, thought for others, common sense—all of which qualities would doubtless, on the previous day, have been claimed as their own by each one of the motley crowd that paid high prices to the cabmen to take them off as hard as they could drive to the railway station, and who, by their own showing, fought and elbowed their way to the ticket-offices, with no thought for the large aged and invalid population that would require the help of the strong; careful only that they personally should stand no chance of danger. The spectacle was not an edifying one. It was, I suppose, to be expected; but what one would scarcely have expected to see, was the bold face put upon their proceedings by the fugitives; the assumption that there could be nothing to be ashamed of in this wild stampede; the careful description of their doings in signed letters to the papers.

Fortunately for humanity, this was not the only aspect of the panic. For this side one can feel little but contempt, and we will pass it by without further word. It is a more grateful task to speak of those who, equally frightened, and in many instances unnerved, maintained their self-control, faced the possibilities of danger, and, while doing what they could to minimise their personal risk—as all are in duty bound to do—cheerfully accepted the situation, and sought in what way they could be of assistance to others. I am not going to say that any very great amount of heroism was required to do this rather obvious duty; indeed, one would have thought that it was only such as might have been found in most men and women. The event, as we have seen, proved the contrary; but I am glad to be able to record that there were very many exceptions to the rule of *sauve qui peut*, and in not a few instances there was something very like real heroism. The behaviour of many of the invalids was admirable. A paralysed lady-patient of mine, living on the second story of a somewhat rickety house, elected to remain in bed, rather than run the risks of exposure out of doors; and she alone stayed in the house on the following night, with the certain knowledge that she would be out of the reach of help in case of any renewal of the shocks. This was done in no spirit of foolhardiness, but with a full appreciation of the consequences, and after careful weighing of the certain risks against the problematical; but none the less did it require a high degree of moral courage to pass through that solitary night in the panic-stricken town. A young lady recovering from pneumonia quietly remained with her nurse on the fifth story of a large hotel—the only occupant of the upper stories—until my visit, and was quite prepared, if told to do so, to stay where she was. I could give many instances of a similar kind, where persons helpless from age or infirmity remained calm and collected under very trying circumstances. Some of the nervous invalids were, indeed, stimulated by the presence of danger, acquired temporary strength in the midst of the weakness of others, and, far from being thrown back by the shock, seemed for the time to be improved in health. With them, however, as with very many others who kept up at the time, there has been a period of reaction, with which the medical men have now to contend. The only treatment for this condition is, in most cases, to send the patients away from the scene where they experienced the shock. Sleep, which has refused to return as long as they are in the bed where they had their fright, comes back as soon as they have made a slight change. People have become extraordinarily sensitive to earth-tremors. Of these we have had a considerable number, most of them very slight; but the slightest movement of the bed suffices in the case of many nervous people to wake them up with a frightened start; and a dream of earthquakes is, as might be supposed, a common form of nightmare.

Of actual disease induced by exposure there is less than might have been expected. Many colds were, of course, caught, but few were of a severe nature. Physicians at Mentone will probably have a sadder tale to tell in this respect than we have at Nice from our personal experience. I am glad to say that my patients came through the very trying ordeal very much better than I could have expected.

MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

Victoria University.—Owens College.—Southern Hospital.—St. Mary's Hospital.

The number of candidates belonging to Owens College who intend to present themselves for the examinations for the medical degrees of the Victoria University are as follows: Twenty for the Preliminary in Science for the M.B., twenty-seven for the March examination, and nine for the July examination for the Intermediate M.B. For Part I of the final M.B. there are ten, and for Part II four. To these there have to be added the candidates who intend to present themselves from University College, Liverpool. This is a very large number of candidates, seeing that the examinations for medical degrees were established only about three and a half years ago. The examinations begin on Friday (this day).

A very influential deputation, representing the north of England, waited on the Chancellor of the Exchequer last week, and pressed the claims of Victoria University as an institution deserving the practical support of the State. They asked for an annual grant of the modest sum of £2,500. Without promising anything, Mr. Goschen said he would give the question his "benevolent consideration." It is stated that the University authorities have asked for the smallest sum on which it is possible for them to carry on the working of the university. At present only the external examiners are paid for their labours, the internal examiners receiving a merely nominal honorarium. Should the grant not be obtained, then the maintenance of the university will fall on the colleges, which are already sufficiently pressed for funds.

Sir Joseph Whitworth has left £5,000 to Owens College.

The managers of the Southern Hospital, Manchester, have resolved to establish a lying-in hospital in connection with this institution, and already negotiations are in progress for securing temporary premises. This will help to supply a longfelt want; besides, the institution is in close proximity to Owens College, and its material will, it is hoped, be available for teaching purposes.

It is also proposed to enlarge St. Mary's Hospital. It is intended to raise a Jubilee fund for the purpose; and already £10,000 has been subscribed for the scheme.

CORRESPONDENCE.

THE SOCIETY OF APOTHECARIES AND THE COLLEGES.

SIR,—The JOURNAL of March 12th contained two important communications concerning the present state of affairs at the College of Physicians and the College of Surgeons in London, which, read in connection with the past history of the course pursued by the governing bodies of these Colleges towards the Society of Apothecaries, appear to me to demand thorough and authoritative commentary, and to call for the very serious consideration of the members of the governing bodies as well as of the whole body of the profession. It is the time now, if ever, to throw aside official reserve and secrecy, and to handle this great matter with openness. It is no time for standing on what was once picturesquely described as our "twopenny dignities." The Colleges ought to deal with this matter openly in the face of the profession, and plead their case face to face with the commonalty of the respective bodies. The communications to which I have referred are (1) the letter of "A Provincial Fellow" calling upon the provincial Fellows to attend the Comitia with a view of supporting the efforts which Sir Henry Acland is called upon officially to make as President of the General Medical Council to bring about a reconsideration of the hasty decision of the College, and (2) the statements in the public minutes of the proceedings of the last meeting of the Council of the College of Surgeons that that Council will be especially summoned to consider the communication. I am in a position to assert that this great question has not only not been adequately discussed in either of the Colleges, but that it has been carried through with a haste and a want of consideration which is as ludicrous as it is discreditable, and, indeed, almost incredible.

Let me briefly recapitulate the actual course of events within the sacred precincts of the respective council chambers as it is known to the initiated few. An application from the Apothecaries' Society to be admitted to the conjoint scheme was addressed to the Colleges in July, 1886. During the whole of the autumn recess it was pigeon-holed. After the holidays it was dealt with summarily by being referred in each College to a small committee of delegates of the two Colleges. This was done without discussion. When this small, highly select, and highly official joint committee of delegates met, they resolved, as everyone knows, to recommend the Colleges to reject the application. It is now very well known that they neither understood nor foresaw all the consequences of that step. I can say positively that they by no means imagined that they were acting counter to the general wishes of the profession; nor had they considered that in doing this they were creating a new class of general practitioners, who would receive their diplomas in the metropolis outside the influence of both Colleges, and who, casting away, as they will be entitled to do, the long-misunderstood title "Apothecary," will be known as Licentiates in Medicine and Surgery. The recommendation to refuse the Apothecaries' Society admission to the Conjoint Board was brought before the two Colleges without having been previously circulated among the members either of the Comitia of the one body or the Council of the other. It was dealt with in the driest official manner. When it came before the Council of the College of Surgeons, it was considered in the ordinary course of business, and disposed of with singular rapidity; there was practically only one speech. Mr. Marshall, in bringing up the report, supported it on three grounds. The first was, that the College of Surgeons was pledged to act in unison with the College of Physicians; that the College of Physicians would have absolutely nothing to do with the Apothecaries' Society, and that if the College of Surgeons consented to the proposition, the College of Physicians would break away from the existing arrangements, and leave the College of Surgeons in the lurch. This "argument of the stick" was pressed home with great force, and the Council of the College of Surgeons possessed too little independence to resent the open use of this weapon of intimidation. The second argument was that the Apothecaries' Society had been too little importunate in the matter. It was true that the Apothecaries' Society had throughout the previous negotiations played an active and honourable part; that an agreement had, in the first instance, been come to by which the three bodies should unite, and that this agreement had been completed in all particulars, the Apothecaries' Society having shown itself public-spirited, reasonable, and anxious to promote union. But then it was complained by Mr. Marshall that it had not been continuously importunate, and that when this proposed combination had, by no fault of the Apothecaries' Society, fallen through, and when, subsequently, the College of Surgeons and the College of Physicians had completed a joint compact, to the exclusion of the Apothecaries' Society, the latter had not again stood at the door, cap in hand, begging for admission. Mr. Marshall altogether left out of view the fact that this voluntary co-operation between the two Colleges was not a compact for creating a Joint Board for Great Britain, but was solely a family arrangement made between the two Colleges, with the avowed object of consulting their own interests, and with the express and deliberate intention of excluding the Apothecaries' Society, which had no legal status or claim at that time. For, be it noted, this compact was prior to the Medical Acts Amendment Bill of 1886, which gave to the Apothecaries' Society a presumptive right to the establishment of a legal qualifying surgical examination, and thus put it on a footing on which it could go with much better chance of being heard, and with a good legal claim to the two Colleges for admission to the Conjoint Board. Misleading as was this second branch of Mr. Marshall's argument, there was not found one member of the Council to expose its sophistry, and it produced a marked effect. The third and final point was that an inferior class of degrees was useful for practitioners among the poor; and that the Apothecaries' Society might well be left to give this inferior licence. One member only spoke on this, to thank Mr. Marshall for his statement, and to withdraw objections which he had intended to urge in favour of the Apothecaries' Society. It was on this basis that the resolution, passed at the meeting of Fellows and Members in the College Theatre, was trampled on in contemptuous silence, and that the superior wisdom of the Council decided, in secret conference, to settle this great professional question, which will affect the future prospects of the general practitioner for long years to come.

The history of the matter, so far as it concerns the College of Physicians, is less noteworthy. There also the report settled by the delegates was brought up to the Comitia without having been previously printed and circulated. It was declared by the President to be one of the secrets of the College. No one had studied the question, no one understood it, and it was passed practically as a mere register of the decrees of the delegates. A resolution to be quit of the apothecaries naturally commended itself to the consulting physicians of the London hospitals, who constitute the Comitia, and who call themselves the College of Physicians, regardless of the fact that they are but a small caste, in no way authorised by the profession to decide such questions for them; and only capable of considering them from one, and that a most partial, point of view. I have good reason to know that the Councils of both bodies have been not a little surprised and hurt to find themselves arraigned before the bar of public and professional opinion. But for the resolute action of the JOURNAL, the whole matter would have passed unknown—without discussion. The two Councils are accustomed to pass their decrees in silence, and to see them registered without debate and without murmur. Unfortunately, their constitution makes it difficult to do anything else than protest; until a new page is turned in their history, and a new constitution obtained, it is only too likely that the course on which they have entered will be followed with perseverance, and that in the future, as in the past, the profession will be absolutely powerless to control their proceedings.

As to what remains, there is no doubt still some room for hope, but I cannot profess to entertain much. It is too much to expect that the provincial physicians will rally in any considerable numbers to the appeal of your correspondent, and however eminent and influential he may be, he can hardly expect that an unsigned letter in the columns of the JOURNAL will produce the effect which he desires. If he is in earnest, he and those who think with him should at once communicate with all the provincial Fellows, and with as many of the metropolitan Fellows as are likely to be accessible to argument, and should endeavour to organise that free discussion from which alone anything can be hoped.—I am, etc.,

BEHIND THE SCENES.

SIR,—As one who has some acquaintance with the mode of procedure followed by those who have the conduct of the business of the College of Surgeons of England and the College of Physicians of London, I cannot share the sanguine hopes which some of my younger friends have built upon the resolution of the General Medical Council, deprecating the exclusion of the Apothecaries' Society from the Conjoint Board in England and Wales. Sir Henry Acland, as the President of the General Medical Council, has officially communicated the resolution to both Colleges, but these bodies have been too long accustomed to treat the General Medical Council with contempt, and are too well aware of the diplomatic and amiable character of Sir Henry Acland, to fear much either from its resolutions or from the sternness and determination of its President's advocacy.

It is very unlikely that any serious discussion will take place unless a very determined organisation be made to ensure it, and then those

who raise it must expect to be met by an official *non possumus*. The College of Surgeons professes to be bound by the irrevocable will of the College of Physicians; the College of Physicians professes to feel it its duty to act upon the decision of the conjoint delegates, and so on. In truth, the whole matter is settled by a handful of gentlemen whose traditions and reputation for judgment and determination are bound up with the successful accomplishment of the scheme to which they have so unfortunately committed themselves; even if they were convinced, it would be against their will, and for all public purposes they would probably remain of the same opinion still. The argument will be freely used, that it is necessary that we should have an inferior class of practitioners, and that the Apothecaries' Society is destined, by Providence, by legislation, and by their good-will, to continue to license this inferior class of practitioners. Of course the real fact is that the hope was entertained, when this plan was devised, that the Apothecaries' Society would be crushed out of existence, and when the Conjoint Board was created, it was openly declared by the authorities of both of the Colleges, that it was formed to provide for the general practitioner of England a licence which would meet all the exigencies of the State. The new plea that a lower grade of competing general practitioners will be useful is a happy after-thought, or perhaps a very unhappy after-thought.

You stated the case on the other side briefly when you said that the practitioners among the poor need at least as good an education as the practitioners among the rich. The diseases of the poor are not less serious, and the facilities for treating them are not greater. "The deliberate creation of an inferior class of practitioners to practise among the poor" is an invention, which does far more credit to the ingenuity of those who devised it than to their conception of the conditions of modern society, or, I will even venture to say, the demands of humanity.

Do those who rely on this short-sighted argument adequately consider that the class of inferior practitioners licensed to practise among the poor cannot be confined to that class of practice? They will equally invade practice among the rich, and, being removed from collegiate and university influences, and stigmatised from the outset by the College officials as an inferior class, they will be likely to avenge themselves on the superior class both by their modes and principles of conduct. That either Council or Comitia will receive the resolutions of the General Medical Council with any disposition candidly to reconsider their course is almost beyond hope; but it may be trusted that something like organised action will be taken by the profession to prevent in the future a recurrence of such dismal blundering and mismanagement, and to give to the whole profession such a voice in the management of the Colleges as Sir Walter Foster demanded in his address at Birmingham (JOURNAL, March 5th, p. 532) and as the constitutional principles of government in this country evidently require. Meantime, let those who think they can influence either the members of the Comitia or of the Council of the two Colleges use all their influence in the hope of averting what seems now to be an inevitable decision, but one which will none the less be disastrous to the profession and to the public.—I am, etc.,

NESTOR.

THE IRISH CONJOINT SCHEME AND THE APOTHECARIES.

SIR,—Your correspondent of last week (a "F.K.Q.C.P.I.") devotes his letter to prove (*a*) that the Irish Apothecaries' Hall possessed under its original Act no *locus standi* whatever to issue licences in anything but pharmacy; (*b*) that it is not even now a respectable institution with which colleges could be expected to associate.

Let these conclusions be granted; they do not materially affect the propriety of the conjunction now in dispute. It is admitted by all except by the "Hall" itself that, up to 1863, it was a drug-selling and drug-controlling establishment pure and simple, notwithstanding its proclamation of its pretensions as a doctor-making institution. But what of that? In 1858 it was promoted by the Medical Act to rank and privileges exactly identical with those then conferred upon the medical and surgical licensing bodies of the kingdom.

Then and there, notwithstanding the vehement protests of the College of Physicians, the "original sin" of the "Hall" was wiped out, and it became what it now claims to be—the equal in law of any or every licensing college. Lest there might remain any doubt on this point, the General Medical Council in 1863 by formal vote set its seal upon the status and privileges newly granted to the "Hall;" and the army, naval, and poor-law authorities capped the transaction by officially recognising the licence of the "Hall" as a full and sufficient qualification in medicine.

Is it not therefore waste of time for the College of Physicians to attempt to argue down the status of the "Hall" upon its original charter, ignoring the subsequent law and decisions upon which its present pretensions solely rest? "F.K.Q.C.P.I." objects to his College making what he considers a *mésalliance* with a drug-controlling and drug-selling body. So would I, and so would everyone outside the "Hall" itself, if there were any other way of settling the difficulty which the new Medical Act has created. But I submit that there is no other tolerable alternative; either the Colleges must accept the unsavoury conjunction, and by merging their plebeian spouse into their own aristocratic family extinguish her fault of birth, or they must be prepared to see her raised, by an alliance with the Medical Council, to a position which will entitle her to hold up her head in their very exclusive circle of "society," and even mayhap to smite them and drive them to the wall.

I would ask "F.K.Q.C.P.I." whether it is not wiser to minimise the power of a competitor whom you cannot crush, by neutralising his efforts and absorbing his influence, than to raise him to authority and power by making him an antagonist. And, in this instance, there is so little reason for sticking to the stupid policy. All the interests of the College of Physicians, all the force of public and professional opinion, urge conciliation and conjunction; only the *non possumus* of aristocracy intervenes to prevent friendly relations, just as it mars the amiability of the ladies' afternoon tea-table; and it seems that the Fellows of the College of Physicians are unable to see beyond the social barrier which forbids Mrs. Twopenny to "know" Mrs. Threehalfpenny, because she is not of the right "set."

Such an impediment to the consummation of a strong conjunction to rule over Irish medical education is ridiculous and contemptible, and I wish the Fellows of the College of Physicians joy of all the honour and glory which, in future time, their petty little exclusiveness of to-day will reflect upon their College. The College of Surgeons in Ireland have, I hope, more sense. They are well able to retain any of their dignities which are worth maintaining, but they are not going to spoil the future of medical licensing in Ireland for any old-womanly *amour propre*, and I venture to say that if they persist in their determination, the gain of dignity will eventually be with them, and not with the College of Physicians.—I am, etc.,

F.R.C.S.I.

SIR,—The BRITISH MEDICAL JOURNAL of March 12th contains a letter from a Fellow of the King and Queen's College of Physicians, "giving a summary of the reasons which influence the College to decline to join with the Irish Apothecaries' Company," and stating "the facts of the case as they appear to the majority of the College." After giving an *ex parte* view of the subject, "he leaves the profession to decide for itself in the matter." He asserts that the Irish Apothecaries' Company base their claim to be admitted to participate in the conjoint examination mainly on two grounds: "That, thirty years ago, they were placed on the schedule side by side with the Colleges of Physicians and Surgeons; and that their claim to be a body capable of granting a licence to practise medicine was subsequently endorsed by a resolution of the General Medical Council; and that, ever since, their licence has been accepted as equivalent to a licence in medicine by the Army, Navy, and Local Government Board."

These reasons alone might convince any impartial person that the claim of the Hall is based on a very firm foundation; not so, however, the College majority. They have arrived at the conclusion that the Imperial Parliament, in the years 1858 and 1886; the General Medical Council in 1862; and the Army, Navy, and Local Government Boards have blindly erred in recognising and confirming the medical status of the Irish apothecary.

It is unnecessary to answer in detail all the objections to the claim of the Irish Hall to take a part in the conjoint scheme—objections now declared insuperable by the King and Queen's College of Physicians; they are all either based on erroneous interpretations of the Apothecaries' Act of 1791, or were put aside by the College itself, a few years since, as too unimportant to stand in the way of a harmonious combination of the three Irish Corporations. The following letter, copied from vol. x of the General Medical Council's *Minutes*, will prove the accuracy of the latter assertion:

"King and Queen's College of Physicians in Ireland,
"Dublin, July 24th, 1873.

"Dear Sir,—I am directed by the President and Fellows of the King and Queen's College of Physicians in Ireland to inform you that the Apothecaries' Hall has, with the full consent of this College, now joined the scheme for a conjoint examination; and that it is permitted

to nominate three examiners in Practical Pharmacy instead of one, as stated in the scheme (dated April 30th 1872).

"I have the honour to be, Sir, your faithful servant,

"(Signed) J. MAGEE FINNEY, Registrar.

"To G. E. PAGET, Esq., M.D., President of the
"General Medical Council."

The Governor and Court of the Apothecaries' Hall hope that the profession will now be enabled to form a clear judgment in the matter.—By order.

ROBERT MONTGOMERY, M.R.C.S.Eng., Secretary.

The Apothecaries' Hall of Ireland, Dublin, March 14th, 1887.

SIR,—The letter from a Fellow of the King and Queen's College of Physicians, in the JOURNAL of March 12th, in reference to the conjoint scheme in Ireland, states many reasons, and good reasons, why the Apothecaries' Hall of Ireland should not have been placed on the schedule of the Medical Act of 1858, but seems to me to have no bearing on the question as to how the present crisis in medical affairs should be dealt with.

We have to face the fact that the Apothecaries are on the schedule, and have a legal right to grant licences in medicine, and to combine with a surgical corporation to grant registrable diplomas in medicine, surgery, and midwifery, and that, if they fail, after using their best endeavours, to enter into such a combination, they are entitled to have assistant examiners appointed for them, which will enable them to grant diplomas of the same legal value as any in the kingdom.

Your correspondent proves, to my satisfaction at least, that they are unfit to be entrusted with these most important duties; that their being so endowed would be a calamity, disastrous to the public welfare and most injurious to the profession. How do the King and Queen's College of Physicians propose to meet this state of things? How, but to fold their hands and allow things to take their course, let who will suffer!

Would it not be more in accordance with the duty they owe to society and the profession to seize the reins, and use their endeavours to prevent all this detriment to the public welfare? This could be easily done by taking the Apothecaries into the combination between the Colleges of Physicians and Surgeons, whereby their power for doing harm would be neutralised, and in a short time they themselves would be lost sight of by being absorbed into the two great bodies with which they would be connected.

Such a combination would no doubt be distasteful to both Colleges; but in all new arrangements vested interests have to be provided for, however unpleasant it may be. Of this a recent instance presents itself in the Dental Act, by which dentists have been raised to the status of a profession, but at the expense of being obliged to take with them men whose claims were very inferior indeed to those of the Irish Apothecaries.

If the two Colleges pursue a similar course, and absorb the Apothecaries within their ranks, they will, in my opinion, raise themselves in public estimation, and confer a great benefit on the profession.—I am, etc,

A FELLOW OF THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

March 13th.

THE ROYAL UNIVERSITY AND UNION HOSPITALS.

SIR,—I have received a communication from the Privy Council, in which marked prominence is given to the fact that the utilisation of Union Hospitals is still under the consideration of the General Council. One member of that body fell into the strange error of stating that these hospitals lacked material for teaching.

The Irish Local Government Report for 1886 will show that 52,000 were admitted (in 1885) in sickness, from the outside. These were all cases that were, of course, too sick to be treated in the dispensaries. They were admitted under 25th and 26th Vict., which opened up these hospitals to the general public, and of whose existence our critics seem to be unaware. That report will further show by its table of the causes of deaths, that at least 24,000 sick paupers were likewise entitled to be placed among the *bonâ fide* clinical material.

The further pretence of the Royal University, that they could not exercise proper supervision over such hospitals, is met by their own action in recognising other hospitals over which they could not exercise it, and in their not exercising it where they could do so.

The time is not far distant when self-respecting provincials will be able to defend their own interests.—Yours, etc.,

Cashel, March 14th, 1887. THOMAS LAFFAN.

MEDICAL DEGREES FOR LONDON STUDENTS.

SIR,—I have been much interested in the accounts in the JOURNAL re the discussion of the position of medical men educated in London.

I am quite satisfied to have taken the three London qualifications: L.R.C.P., M.R.C.S., and L.S.A. My grandfather and father were medical men before me, and they never saw the necessity of the London University.

I have settled abroad, and I find that the position is changed. Many of the Scotch and Irish and American graduates of universities, or possessors of the title of M.D., are very arrogant about their own titles, and very insulting towards the position of London men, and now I feel that my pastors and masters in London have not dealt fairly with me, although all Guy's men must be proud of the Guy's clinical and other teaching.

The only advantage of university teaching is, that, as a residence is necessary, *emollit mores nec sinit esse feros.*

I would be willing to appeal to anyone of experience to prove that the London men abroad, and especially in New Zealand, have kept up their reputation and position as medical gentlemen.

To a man of any sense the influence of a large hospital is educative.

If a man earns fairly the title of M.D., let him use it to his honour; but, in justice, let him add the name of the university from which he sprung. But the time has arrived when London teachers must make such arrangements that the pupils they send into the world shall be at least entitled to be addressed as "doctor," and to put the same term on their cards.

Relying on your advocacy not to forget those abroad, I am, etc.,

Sunnyside, Christchurch, New Zealand, W. E. HACON.

January 15th, 1887.

DR. SKENE KEITH'S STATISTICS OF ABDOMINAL SURGERY.

SIR,—Mr. Tait continues his efforts to throw doubt in the eyes of the profession on the validity of my statistics published in the JOURNAL. The results I have given are absolutely correct, and there was no mistake at the operation in any of the cases, as I have stated in my paper.

The main point of Mr. Tait's complaint appears to be my drawing attention to his hospital results in 1884. The complaint is answered by my referring to Mr. Tait's letter of February 12th, where he draws attention to his hospital results in 1886, when these were good, although they had nothing to do with the paper I criticised. As Mr. Tait deems it right to use one year's results when these are good, it is also right to use one year's when these are bad. As soon as Mr. Tait furnished the results for 1885, I added them to those of 1884, thereby reducing the mortality from one in seven to one in twelve. The other phrase he objects to occurs in the same paper on ovariotomy.

Mr. Tait says that he has asked to see a hysterectomy for five years. On November 3rd of last year, he wrote that he had waited nearly two years. Nearly two years and four months falls far short of five years. He also says that I answered his complaint that he had not seen a hysterectomy by saying that he had been present at an ovariotomy. Had he read my letter carefully, he would have seen that this answer was given to his statement that it was difficult to see the operation, although he knew, from his own experience, that this was not a fact. He says that he was present at this ovariotomy for over twenty minutes. The operation lasted sixteen minutes, and Mr. Tait was not present for a fifth of that time. Had Mr. Tait cross-examined his American friend more carefully, he would have learned that, while I most decidedly objected to his being invited, after the way he had spoken of my father, though Mr. Tait says that what we heard was exaggerated, I mentioned that he had walked in once, and could walk in again. What he says about the Board of Management, his American friend would probably describe as "tall talk."

Mr. Tait knows perfectly well why he did not see a hysterectomy; if he thinks he has a grievance, he is welcome to publish his correspondence with Dr. Keith on the subject. The talk about gratitude is a little out of place. Mr. Tait stayed here one night, after dinner, and before several American surgeons, scoffed at the drainage-tube, was taught how and when to use it, went back to Birmingham with Dr. Battey, claimed two cases, and wrote to say that one at least would certainly have died without the tube. I stayed with Mr. Tait two or three nights, and learned that it was not necessary to wait until a woman was bedridden before removing her uterine appendages. Perhaps Mr. Tait has most to be grateful for.

Mr. Tait appears to have reduced the ovarian cases he operated on, which he said had been refused, from two to one, and this one appears to have been a cyst of the broad ligament, seen by Dr. Keith ten and

fifteen years before, and tapped, not refused. Dr. Calvert writes me that I had answered a letter addressed to Dr. Keith. I have no recollection of what Dr. Calvert's letter contained, but he appears to have given a very bad account of the patient's general health, and after telling him of Dr. Keith's illness, I advised against operation, making the mistake of advising about a patient I had never seen.

I have now shown that every statement which Mr. Tait has made in his last letter of sixty lines is incorrect, and I decline in future to have to do with one who is so indifferent as to matter of fact. The profession can judge between us.—I am, etc.,

SKENE KEITH.

2, North Charlotte Street, Edinburgh.

THE SURGICAL TREATMENT OF PARALYTIC LARYNGEAL STENOSIS.

SIR,—My only reason for troubling you with the following lines, in reply to Dr. G. B. Hope's letter, published in the JOURNAL of March 12th, is that my silence might be interpreted to mean consent. Far from consenting, however, I believe that Dr. Hope has materially damaged his case by his defence. He begins by excusing himself for not having elaborated in his original paper the range of cases in which the operation suggested by him was to be performed, and now attempts to supply the deficiency. But in doing so he simply changes issue altogether. In his first paper he spoke plainly enough of "removal of so much of the paralysed cord, together with any overhanging tissue, as seriously obstructs the lumen of the glottis." This obviously can only mean that the lumen of the glottis was seriously obstructed by the paralysed cord itself, together with the "overhanging tissue," which latter expression is altogether incomprehensible to me. I then stated, in my letter published in the JOURNAL of January 15th, that paralysis of one abductor in adults never *ipso facto* caused serious obstruction of the air-passages. In reply, Dr. Hope, instead of justifying his original contention, now speaks of "frequent instances of grave respiratory difficulty, intercurrent with a unilateral paralysis, perhaps (!) provoked in the course of frequent attacks of laryngitis involving the sound side, or where a chronic irritation of the trachea or bronchi or a cardiac lesion may make a precautionary measure one of vital importance." Clearly, Sir, this is shifting the ground with a vengeance! It is no longer the obstruction caused by the paralysed cord itself, for the removal of which the serious interference advocated by Dr. Hope is to take place, but the possibility of certain intercurrences. As to these, of which Dr. Hope speaks as "frequent," I can only say that, so far as my personal experience and my literary knowledge go, the dangers so vividly painted by him are purely theoretical. I have never seen, and fail to see, why laryngitis should frequently attack in such cases the sound side, and why tracheal or bronchial irritation or a cardiac lesion should so considerably diminish the passage of air through the half-open glottis that the unfortunate patient—who in most cases of this sort suffers from serious organic central or intrathoracic disease—should additionally have, as a "precautionary measure," thyrotomy performed upon him, and a part of the paralysed cord removed. That in exceptional cases of unilateral abductor paralysis so serious a spasm of the glottis may occur as to threaten life and necessitate tracheotomy is possible, but such spasms occur also, for example, in locomotor ataxy and in cases of irritation of the pneumogastric nerve, without any previous unilateral abductor paralysis having taken place, and the laryngeal crises of the first-named disease might with almost equal right be regarded, because they may be fatal, as furnishing a suitable indication for prophylactic cutting out of parts of the vocal cords, as any of the indications now put down on second thought by Dr. Hope, and materially differing from his original suggestion. To me the procedure appears in both cases simply unwarrantable.

It seems unnecessary to discuss Dr. Hope's theoretical objections to tracheotomy in cases of bilateral abductor paralysis, and his equally theoretical further recommendations of his proposal.—I am, etc.,

FELIX SEMON, M.D.

THE EPIDEMIC OF DIARRHŒA.

SIR,—In reply to Dr. Herringham's request that other medical men would give information upon the prevalence and situation of the attack of diarrhœa epidemic in London, I should like to record my own experience.

During January and the early part of February I had quite a run of cases of diarrhœa, which at that time of the year is practically unknown. Adults and children were both attacked, and the characteristic features were as follows. The patient was more or less suddenly seized with violent abdominal pain, which, in some cases, had a tendency to remain after the diarrhœa had ceased, and continuous vomiting, with watery stools of a bad odour, and great flatulence. The diarrhœa was frequent. I found bismuth and soda bicarbonate with opium very useful, with sometimes an addition of aromatic confection, but in some cases where this treatment failed, dilute sulphuric acid and opium at once arrested the trouble.—I am, etc.,

101, Northcote Road, S.W., March 4th. M. G. BIGGS.

SIR,—In a rather large district, extending from Catford Bridge, Lewisham, to Penge, I have had about eighteen or twenty cases of diarrhœa, mostly in persons of the upper middle class, some having been of a very sharp character, attended with severe cramp of the muscles of the calf of the legs and abdomen, with slight collapse. The other cases presented similar symptoms to those observed by Drs. Herringham and Kerr. The epidemic (if such it can be called), which lasted about five or six weeks, has entirely ceased. I can only attribute it to the peculiarly sudden and great changes in the temperature we experienced during the latter part of December and all through January.—I am, etc.,

Gresham House, Forest Hill, S.E., March 5th. AUGUSTUS S. MAY.

THE MORTALITY AFTER LAPAROTOMY FOR EXTRA-UTERINE PREGNANCIES.

SIR,—By a strange oversight I did not see Dr. Harris's letter which was published in the JOURNAL of February 19th until this morning, when my attention was drawn to it by a friend.

In May last I received from Dr. Harris, as he says, a carefully ruled and arranged table, and I replied later on that I was not prepared to hunt up the references, but that most of the cases had been published. This is the fact; but I was, and still am, indisposed to comply with Dr. Harris's request for many other reasons. In the first place, he is an accomplished and estimable gentleman, without, so far as I can learn, any acquaintance with practical surgery. His great delight is to collect masses of figures together, and arrive at what he is pleased to call the mortality of particular operations. His industry is amazing; but I have had many occasions, some private and very many public, of pointing out to him and others that his is a most fallacious method of statement to which I object *in toto*, and I will not permit, if I can help it, any statistics of mine to be used for such purposes as his.

Let me show by another example what it really amounts to. A little while ago, I saw a paragraph to the effect that, in a particular country, ovariotomy had a mortality for a certain period of nearly 70 per cent., and that this murderous work had been done by about twenty-five or thirty surgeons, each of them contributing one or two cases of the operation. This is not *the mortality of ovariotomy*. It is the mortality of a number of experimenters, most of whom had no business whatever to touch the cases. The true mortality of an operation is the best that can be got from a reasonable series of cases by a limited number of surgeons of large experience.

Thus, if I take the mortality of my *confrères*, Dr. Bantock, Dr. Savage, Mr. Knowsley Thornton, and the two Keiths, together with my own, excluding from the results all experience of the clamp, I should arrive at something like a bulk of three thousand cases of ovariotomy, with a total mortality which would certainly not exceed 4 or 5 per cent. It would be quite fair to say that this is "the mortality of ovariotomy," and to base any kind of conclusions or comparisons about other work upon it as a basis. But a higgledy-piggledy collection of figures giving a mortality of 50 per cent. would only give the mortality of the operators, not of the operation.

I therefore strongly object to Dr. Harris dealing with my statistics, when he desires to bring down somebody else's mortality in extra-uterine pregnancy, by the addition of my own cases, from 90 to 33 per cent. Dr. Harris is perfectly welcome to make his own researches; but in future I beg he will not trouble me with any more inquiries, which up to the present time have been complied with at great personal inconvenience to myself.

I have already published, and have in course of publication, a great deal of material concerning the treatment of abdominal pregnancies; but Dr. Harris must permit me to do my work in my own way and at my own time, and he must at least see that I do not care to have my publications anticipated.—I am, etc.,

Birmingham, March 12th. LAWSON TAIT.

"THE MEDICAL DEFENCE UNION."

SIR,—I must freely confess that my sympathies are with "Puzzled." I have been waiting patiently to hear that the Medical Defence Union had done something for the long-suffering practitioner. I was bold enough to suggest that they might well take up the interesting

question of prescribing chemists, and Mr. Rideal promised they would consider it. I suppose, after the lapse of twelve months, it has not gone beyond the "consideration" stage.

I have done a little in this town towards getting some subscribers for the union, but I shall certainly decline to do so again unless Mr. Rideal can show me that our money has been laid out for the purposes which we anticipated it would be.—I remain, etc.,

T. GARRETT HORDER.

29, Charles Street, Cardiff, March 15th.

MR. LOCKWOOD'S LECTURES ON THE DEVELOPMENT OF THE TESTICLE: A CORRECTION.

SIR,—Will you kindly allow me to correct an error which occurs in the abstract of the first lecture upon the Development, etc., of the Testicle? I intended to make it quite clear that, both in the chick and the rabbit, the Wolffian duct had, in my opinion, a mesoblastic origin.—I am, etc.,

C. B. LOCKWOOD.

Upper Berkeley Street, W., March 14th.

OUR HOSPITALS AND VIVISECTION.

SIR,—It was with much surprise that I saw in your JOURNAL of March 12th two letters referring to the subject of vivisection, one of them bearing my signature. As these letters were a private correspondence, their publication does not receive the approval of the Committee, and they have been inserted without my knowledge.—I am, etc.,

GEORGE SCUDAMORE, Secretary.

Samaritan Free Hospital for Women and Children,
Lower Seymour Street Portman Square, W., March 14th.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Monday, March 14th.

The Smoke Abatement Bill.—Lord STRATHEDEN and CAMPBELL presented a Bill dealing with the abatement of smoke in the metropolis.—The Bill was read a first time.

HOUSE OF LORDS.—Thursday, March 17th.

Pharmacy Acts Amendment Bill.—The Earl of MILLTOWN, in moving the second reading of this Bill, stated that the Pharmaceutical Society consisted of members and associates, having separate qualifications, and requiring to pass separate examinations, and registered apprentices. The apprentices were intended to pass a preliminary examination before admission, and, after three years' apprenticeship, a qualifying examination. The Pharmaceutical Society had found itself almost powerless to require such qualification. It had framed by-laws for remedying this defect, and establishing a sufficient curriculum; but the Privy Council, to which all by-laws had to be submitted, was of opinion that the statutes of the Society did not empower it to frame such by-laws. In consequence of that, this Bill had been introduced to remedy the defect. It had the unanimous assent of the Council of the Pharmaceutical Society, and was approved of by the Lord President of the Council, subject to a few slight amendments, which could be made in Committee. The second clause gave a dispensing power to the Committee of the Pharmaceutical Society in cases where persons had acquired sufficient technical knowledge in England, or in any other part of the United Kingdom, or colonies, to dispense with the three years' curriculum, but not with the qualifying examination. The Bill would not refer to Ireland, because in the Pharmaceutical Act of 1875, dealing with that country, the difficulty did not arise. Under the present Bill, a uniform system of examination and qualification for the whole of the United Kingdom would be established.—The Bill was then read a second time.

LUNACY ACTS AMENDMENT BILL.

On the order for the third reading of this Bill,

The LORD CHANCELLOR said he intended to move the insertion of a new clause, the general effect of which was the result of an understanding which had been arrived at between himself and other noble and learned lords. He should do no more than ask their lordships to adopt the clause. He could not accept the amendment of which Lord Selborne had given notice.

The Bill was then read the third time.

On the question "That this Bill do pass,"

The LORD CHANCELLOR moved the insertion of the following clause:

Page 8, after Clause 4, add a new clause:

1. When a person has been received as a lunatic in an asylum, hospital, or licensed house, or as a single patient, under an order of a judge of county courts, magistrate, or justice, without having been personally seen or examined by such judge, magistrate, or justice, the person shall (subject as hereinafter mentioned) have the right to be taken before or visited by a judge, magistrate, or justice, other than the judge, magistrate, or justice under whose order he has been received, except so far as the medical superintendent of the asylum or hospital, or the medical proprietor or attendant of the house, or the medical attendant of the single patient, within twenty-four hours after his reception, in a certificate signed and sent to the Commissioners (in the Form 3*a* in the First Schedule), shall state that the exercise of such right would be prejudicial to the person so received.

2. Subject to any such certificate, the superintendent or proprietor of the asylum, hospital, or house, or the person having charge of the single patient, shall, within twenty-four hours after reception, give to the person so received as a lunatic a notice in writing, in the Form 3*b* in the First Schedule, and shall ascertain whether he desires to exercise such right as aforesaid; and if he, within seven days after his reception, expresses his desire to exercise the right, such superintendent, proprietor, or person shall procure him to sign a notice in the Form 3*c* in the First Schedule, and shall forthwith transmit it by post in a registered letter to the judge, magistrate, or justice, who shall thereupon arrange, as soon as conveniently may be, either to visit the person giving the notice, or to have him brought before him by the superintendent, proprietor, or person as the judge, magistrate, or justice may think fit. After any such personal interview, the judge, magistrate, or justice shall send by post to the Commissioners a report thereupon, and the Commissioners shall take such steps as may be necessary to give effect to the report.

3. For the purposes of this section, the notice shall be sent to, and the jurisdiction exercised by, any judge, magistrate, or justice, other than the judge, magistrate, or justice who made the order for reception, then present within the petty sessional division or borough where the person received is, who shall be in such notice named by the person desiring the interview, or if no judge, magistrate, or justice is so named, any justice who shall, under arrangements which shall be for that purpose from time to time made amongst themselves by the justices in such division or borough, undertake such jurisdiction; and the notice shall, in such last mentioned case, be sent to the justices' clerk of such division or borough for transmission to the justice.

4. The judge, magistrate, or justice shall be entitled, if he desires so to do, before making his report, to see the medical certificates and any other documents upon the consideration of which the order for reception was made.

5. If any superintendent of an asylum or hospital, or any superintendent or proprietor of a licensed house, or any person having charge of a single patient, omits to perform any duty imposed upon him by this section, he shall be guilty of a misdemeanour.

The Earl of SELBORNE moved to omit from subsection 3 (lines 2 and 3) the words "any judge, magistrate, or justice other than." The effect of the amendment was to require the magistrate who had signed the order for the detention of an alleged lunatic to perform the subsequent duty of examination. He held that this magistrate would be best fitted to discharge the function, as he was likely to be best acquainted with the facts of the case. He would have had all the materials placed before him by reason of which the lunatic had been placed in custody. If this magistrate were not to make the examination, but the duty were to be handed over to some one else who had not had so good an opportunity of judging of the facts; it would be rendering this latter person a court of appeal against the decision of the committing magistrate.

On a division, the Earl of Selborne's amendment was negatived by 40 to 22.

Lord HERSCHELL took exception to that part of the Bill which provided that the magistrate who should be required to make the examination should be selected by the alleged lunatic himself. He was of opinion that the county court judge, magistrate, or justice should be selected by the justices of the county or borough. He moved the insertion of words modifying the measure in this sense.

The LORD CHANCELLOR assented to the amendment on the understanding that Lord Herschell had satisfied himself that the alteration could be effected without injuring the machinery of the Bill.

The amendment was agreed to.

Several verbal amendments were agreed to, and the Bill passed.

HOUSE OF COMMONS.—Friday, March 11th.

Brigade-Surgeon Graves.—Colonel HUGHES HALLETT having asked that the promotion of Brigade-Surgeon Graves, who while serving on the Indian Medical Staff for eleven years had been passed over eleven times, he being on sick leave but on full pay, be antedated, Mr. STANHOPE replied that it was a rule of the medical department that an officer could not be promoted to the rank of brigade-surgeon unless he was physically fit for general purposes. He could not accede to the request.

NOTICES OF MOTION.

Mr. BIGWOOD: Select Committee to inquire and report on the state of the River Thames during the summer months in the neighbourhood of Twickenham, Richmond, and Brentford, and to consider what remedies can be employed.

Mr. CHANNING: To call attention to the inhumanity and lack of decency in the arrangements for the accommodation of prisoners waiting trial in many courthouses in England and Wales, as revealed in the report of the Departmental Committee of the Home Office just issued; and to move a resolution.

NAVAL AND MILITARY MEDICAL SERVICES.

RELATIVE RANK.

THE following is the answer of the Secretary of State for War to the Chairman of the Parliamentary Bills Committee.

War Office, Pall Mall, March 9th, 1887.

Sir,—I am directed by the Secretary of State for War to acknowledge your letters, dated severally 28th February and 7th instant, relative to the disuse of the term relative rank in the case of officers of the Army Medical Staff.

In reply, I am to acquaint you that, during the recent discussion upon the subject which took place in Parliament, the Secretary of State gave full expression to the views which he holds thereon, and I am to call your special attention to the statement that the abolition of this term of relative rank has not affected the position of medical officers in any way whatever.—I have the honour to be, Sir, your obedient servant, (Signed) RALPH THOMPSON.

ERNEST HART, Esq., British Medical Association, 161A, Strand.

Sir Ralph Thompson's reply leaves the case exactly where it stood, and nothing can be more unsatisfactory. It will be seen that the Under-Secretary treats the term "relative rank" as a mere "expression" that never had any real meaning, or in any way affected the position of army medical officers; and he repeats the assurance given by his superior in Parliament, that the position of the service is in no way affected by the abolition of relative rank. To all this the answer is obvious; the term was never understood in the army in the sense indicated by Sir Ralph Thompson; the contrary is notorious, and we have the best reason to know that, in the opinion of military men, its abolition leaves army medical officers without any tangible status at all. What they say is, "relative rank is abolished by a War Office Warrant, a binding document; what is substituted is a verbal promise or assurance on the part of a War Minister, in no way binding on officers in command, who may either disregard it, or put any interpretation they please on it."

We have done our duty in calling attention to what, all assurances to the contrary notwithstanding, appears to us, and to officers of great experience, to be a blow struck at the Medical Staff of the army, a great discouragement to its officers, and an affront to the whole profession. In this light we regard it still. Only two explanations of this unwise measure are possible, and the War Office must make its choice between them. Either it was intended to gratify combatant officers at the expense of the Medical Staff, or it was a bit of bungling administration; if the first, it was a mean conception, meanly carried out; if the second, it adds one more to the blunders, failures, and exposures which daily startle the public and bring the military administration into well-merited contempt.

Whether or not the leaders of the profession, or any of them, have interposed on behalf of their brethren in the service, we are not in a position to say. It is probable that if anything of the kind was done, the "explanations" of the War Office sufficed to satisfy them. One voice that would have been uplifted is, alas! silent in the grave. When Ranald Martin established himself in London, on his return from India, a friend of his, a modern Mr. Worldly Wiseman, asked him "if he wished to succeed?" "Certainly," was the reply. "Then," said Mr. Worldly Wiseman, "cease to be the advocate of your profession in the army." "Sir," was the prompt rejoinder, "I do not want success on such a condition."

At the meeting of the Parliamentary Bills Committee, at which the Chairman was authorised to address the above-mentioned communications to the Secretary of State for War, it was resolved, if the reply was unsatisfactory, that further steps should be taken by way of deputation. Sir Guyer Hunter—with whom the Chairman of the Parliamentary Bills Committee has been in correspondence on this matter—has obtained from Mr. Stanhope the promise to receive a deputation on Tuesday next. Sir Guyer Hunter will, it is expected, in addition to representatives of the Parliamentary Bills Committee, have the support of Colonel Hughes Hallett, M.P., Colonel Duncan, M.P., General C. Fraser, M.P., and Dr. Farquharson, M.P., and possibly of some other members of the medical profession.

HAKIM writes: I regret to see by the copy of the letter addressed to the Secretary of State for War, published in the JOURNAL of March 5th, that the Chairman of the Parliamentary Bills Committee did not ask for honorary rank for army medical officers, as I think the present time affords a good opportunity for doing so. You have on many occasions stated, when the question of honorary rank was mooted, that most medical officers did not want it; but I feel certain that none would object to it, and that very many think, as I do, that army medical officers have certainly more claim to it than other non-combatant officers to whom it is granted, notably schoolmasters and inspectors of schools.

I think also that honorary rank is as likely to be granted as relative rank, as the latter rank has been abolished in the army, and to re-establish it would be a confession of error on the part of the authorities, a course they very much object to.

Relative rank is of little use to retired medical officers, as their present titles are so cumbrous and unfamiliar to civilians that they never use them, and so there is nothing in the ordinary mode of addressing a retired army medical officer to distinguish him from a civilian, and I fail to see anything more incongruous in addressing an army medical officer as Captain or Major ——, than to so address an army schoolmaster or Commissariat officer.

SIR,—It is indeed true that the recent action of the Secretary of State for War has caused a widespread feeling of alarm and disgust. However, your clear and forcible leader in the JOURNAL of February 26th is one more proof that our old friends, the British Medical Association, are as true to us as of old, and fortunate indeed it is that we have your powerful aid in what seems our present helpless state.

It is only a few months ago that Mr. Secretary Smith stated in the House of Commons that "the army medical officers were deserving of anything that could be done for them." Lord Stanley, ex-Secretary of State for War, said in Parliament that the medical officers had come out of their campaigns "with flying colours." Are we then, in this the Jubilee year, when we might have reasonably expected some little concession, such as honorary rank, already granted to all other departments, to have the small shred of relative rank swept away, and to have our intelligence insulted by being told that a clause in a Royal Warrant abolishing our rank means nothing at all?

Your leader will cause a widespread and wholesome stir, for it is strongly suspected that this latest blow has been aimed at us by the Adjutant-General and his followers, whose plan of campaign is, "Snub the doctors; sit on the principal medical officers."

Are all the rights won for us by the British Medical Association and the force of character and sterling talent of Sir William Muir to be thus frittered away? Let the Director-General be consulted. He can easily give the numbers of medical officers, killed, wounded, or died of diseases in past campaigns since the Crimea—a long and honourable roll that will be; while small indeed will be the consumption of Government stationery in recording those killed and wounded among the other departments.

Medical officers go into action with their men, and frequently get killed and wounded, to say nothing of the risks they run from epidemics. The commissariat officers and paymasters at the base of operations are safe doing their work, and infinitely better off in the way of food and shelter. The ordnance officer, at a safe distance, can furbish up his "flexible weapons," and complacently forward his "jamming cartridges" and other defective munitions; yet these are the officers John Bull delights to honour with real rank, while he duly impresses on medical officers, notwithstanding their long death-roll of comrades and their valuable services in all climates, that, after all, "you are mere doctors, and as such are 'SMALL AND OF NO REPUTATION.'"

ANOTHER correspondent writes: With reference to the correspondence on the subject of the abolition of relative rank in the army, which seems to have greatly distressed many medical officers, will you allow me to point out that our position and status are in no way altered by the recent change, which is, after all, a mere verbal one? The new Warrant distinctly lays this down, and the Secretary of State for War has, in the House of Commons, confirmed the same.

The term "relative rank" was always somewhat meaningless, while honorary rank, that is pure military or combatant title, is not suited to medical officers, although it has lately been given to other departmental branches, commissariat and paymasters. We are now ranked with military officers according to the dates of our commission, and on the old lines, so that a surgeon has not the relative rank of captain, but he ranks with a captain, a surgeon-major with a major or lieutenant-colonel, and so on in all their grades. This rank carries with it precedence, allowances, quarters, pensions, etc., just as it did before, so that the change may be described as a "distinction without a difference."

As our present designations are very misleading, I should like to suggest for the consideration of the Director-General that our exact military rank should be shown in all grades, with our medical title first, thus: surgeon-lieutenant, surgeon-captain, surgeon-major, surgeon lieutenant-colonel, and so on; this would prevent all mistakes as to position and rank, and would, I know, be welcomed by medical officers as a body.

Again, I have no doubt that if Her Majesty was moved to confer on us the title of "Royal Medical Staff," in commemoration of her Jubilee, she would, in so doing, bestow on a body of officers and men who have always done her good service a distinction that would be highly prized. It would entail no expense on the country, and it was recommended by Lord Morley's Committee.

*** Numerous letters on this subject stand over for want of space.

GRIEVANCES OF ARMY MEDICAL OFFICERS.

THE following petition of the President and Council of the Royal College of Surgeons in Ireland has been presented to the House of Lords by Lord Ashbourne, and to the House of Commons by Dr. Cameron, M.P.

The petition of the Royal College of Surgeons in Ireland humbly sheweth—

That your petitioners, having been charged by charter with the duty of "providing a sufficient number of properly educated surgeons for the service of the army," are concerned to represent that the medical officers of Her Majesty's army suffer under substantial grievances deserving of consideration and redress by your Honourable House.

That medical officers entering the Army Medical Service are placed at a disadvantage, as compared with officers of similar rank and seniority entering the Indian and Naval Medical Services, inasmuch

as their commissions do not date from the period at which they have passed the examinations necessary to their admission, but from a date subsequent to their period of service in the Army Medical School.

That officers of the Army Medical Staff when ordered to serve in India are not allowed the pay granted to other officers of the rank which they held under Her Majesty's Warrant, their monthly pay (under five years' service) being Rs. 317 8 0, to include all expenditure for transport and field duty, as compared with Rs. 415 6 0 *per mensem* allowed to combatant officers of the same rank under similar circumstances.

That army medical officers suffer great injustice from the fact that, when incapacitated by disability incurred by and in the discharge of their duty, they are not allowed, as combatant officers are, to count all their sick leave (beyond a period of six months) towards seniority, and are not entitled to pension or gratuity of equivalent value to that granted to combatant officers of their rank.

That, if army medical officers become so incapacitated before the tenth year of their service, they are not entitled, under the terms of Her Majesty's Warrant, to receive any pension or gratuity equivalent to that granted to other officers of similar rank.

Your petitioners, therefore, humbly pray your Honourable House to take such steps as may be necessary to cause the medical officers of Her Majesty's Service to be placed in the same position, in these respects, as that occupied by other officers of equal rank and period of service.

And your petitioners will ever pray, etc.,

WILLIAM STOKES, Knt., President.
ANTHONY H. CORLEY, Vice-President.
ARCHIBALD H. JACOB, Secretary of the Council.

A DEPARTMENTAL COMMITTEE.

A COMMITTEE has been appointed to fix the number of horses and servants required by medical officers on active service and in the field. Sir A. Alison, K.C.B., is president, and Sir T. Crawford, K.C.B., and Colonel Methuen, C.B., are among the members.

CHANGES OF STATION.

THE following changes of station among the officers of the Medical Staff of the Army have been officially notified as having taken place during the past month :—

	From		To
Deputy Surg.-General T. N. Hoysted ..	Dublin ..	..	Bengal.
,, ,, A. F. Bradshaw ..	Egypt ..	..	York.
Brigade-Surgeon H. F. Paterson, M.D. ..	Bengal ..	..	Dublin.
Surgeon-Major J. R. Murray, M.D. ..	Bengal ..	..	Gosport.
,, C. Healy ..	C. of Good Hope	..	Leeds.
,, J. H. Reynolds, V.C., M.B.	Gibraltar ..	..	Dublin.
,, H. Stannard ..	Bombay ..	..	Kilkenny.
Surgeon G. A. Hughes, M.B. ..	Woolwich ..	..	Devonport.
,, W. Keays ..	Dublin ..	..	Waterford.
,, C. Quarry ..	Devonport ..	..	Madras.
,, O. Todd, M.B. ..	Bengal ..	..	Colchester.
,, B. T. M'Creery, M.B. ..	Waterford ..	..	Dublin.
,, A. P. O'Connor ..	Dublin ..	..	Curragh.
,, A. Asbury ..	Dublin ..	..	Madras.
,, G. H. Sylvester ..	Cardiff ..	..	Devonport.
,, H. J. R. Moberly ..	Madras ..	..	Portsmouth.
,, R. E. R. Morse ..	Netley ..	..	Egyptian Army.
,, W. W. Pike ..	Hong Kong	..	Curragh.
,, R. H. Clement ..	York ..	..	Liverpool.
,, J. R. Forrest ..	Egypt ..	..	Colchester.
,, F. J. W. Stoney ..	Egypt ..	..	Cork.
,, C. J. W. Tatham ..	Canterbury	..	Dover.

MEDICO-LEGAL AND MEDICO-ETHICAL.

PAYMENTS FOR *POST-MORTEM* EXAMINATIONS.

MR. SAMUEL WILSON, of Hackney, writes: Has a coroner the power to disallow a medical witness his fee for a *post-mortem* examination on the ground that the head of the deceased person was not opened, even although a sufficient and self-evident cause of death were found in the thorax or abdomen?

At an inquest recently attended, the coroner disallowed my fee because I had made a *post-mortem* examination without having previously received his order, although the deputy coroner had told me to make *post-mortem* examinations in cases of inquests when I thought them necessary. The coroner at the inquest in question informed me that I had no right whatever to make a *post-mortem* examination without his order, and added that a *post-mortem* examination without an examination of the head was no *post-mortem* examination at all, and that he would refuse my fee. I have also to complain of the discourteous manner in which the coroner addressed me, as well as other witnesses. For this I presume there is no remedy.

*** The Act of Parliament which regulates the fees payable to medical men for making *post-mortem* examinations distinctly states that no fee is payable to a medical witness for making a *post-mortem* examination unless he has previously received an order from the coroner for so doing. Unless the head is examined, the *post-mortem* examination is not complete, although the cause of death may be discovered elsewhere. In the printed order-form signed by the coroner, requesting a *post-mortem* examination, it is enjoined that the surgeon shall examine all the organs of the body, viscera, etc., and the only optional matter is as to an analysis of the contents of the stomach, which is now usually made by an expert specially employed for the purpose. Under all circumstances, we should advise our correspondent not to make *post-mortem* examinations for inquest purposes until he receives the written authority of the coroner, despite the discretionary power which the deputy appears to have given him.

We regret that he has to complain of want of courtesy on the part of the coroner; and from what we have further heard of the case, it would appear that he has had considerable cause for so doing.

"COVERING" AN UNQUALIFIED PRACTITIONER.

ANTI-HUMBUG.—In reply to the letter of "Anti-Humbug," it is well known that in the cases where an unqualified person is "covered" by a qualified person, it is very difficult to prosecute; but if there be evidence that the unqualified person by himself, and without calling in the qualified person, does anything which only the qualified person can legally do, "Anti-Humbug" may be assured that the Society of Apothecaries will at once prosecute the unqualified person; it is necessarily powerless to prosecute the qualified person (however wrong, from a moral point of view, his conduct may be), because it has no legal power of doing so. The unqualified person is liable to a penalty under the Medical Act of 1858, if it be proved that he "wilfully and falsely" pretended to be a medical man when he was not; but, as is well known, the proof of a man doing so is a very difficult matter, and hence convictions are very rare under this statute; nor do we gather from "Anti-Humbug's" letter that there has been such a sufficient "wilful and false pretence" within the meaning of the statute, as would ensure the conviction of the unqualified person.

CHARGE OF MANSLAUGHTER AGAINST A MEDICAL ASSISTANT.

SIR,—For the information of those gentlemen who signed the petition to the Home Secretary in Mr. Irvine's favour, may I ask you to be good enough to insert a statement of what has since transpired in the case.

Some months ago, Dr. Littlejohn applied to the Home Secretary for permission to have an examination made of the bottle of medicine which was in the possession of the authorities in Manchester. This bottle was eventually forwarded to Edinburgh, and given to Mr. D. Brown of that city, for analysis. On February 8th Mr. Brown wrote to me....."the mixture marked 'Mrs. Darling, AHS$_2$,' sealed with the seal of the Manchester police, contains—*morphia*, 1.12 grains in the free state per fluid ounce, equal to 1.38 grains of morphia hydrochlorate (the clear solution also contains traces); *sodium carbonate*, 13.56 grains of air-dried salt per fluid ounce; *chloride*, a considerable quantity; *sulphate*, traces; *ammonia*, in small quantity; *meconic acid*, *none*.' The smell of the mixture resembles that of opium, but it is not the genuine opium flavour. The absence of the meconic acid reaction must, I think, be taken as very strong evidence that no such quantity as three ounces of tinct. opii P.B., had been added to it. A mixture containing only two drachms gives the reaction."

Now, on October 18th, 1886, Mr. Thompson wrote to me....."*I did not apply the tests for meconic acid*, but I have little doubt.....that there was meconic acid present, because this medicine possessed the odour of opium, and was also dark coloured." (The italics are mine.)

It is unfortunate that Mr. Thompson did not test for meconic acid—the only certain indication of the presence of laudanum in a mixture. Had he done so, and found, as he undoubtedly would have found, that there was less than forty minims of laudanum present, counsel for the prosecution would have had much difficulty in impressing the jury with the "gross negligence" of the prisoner.

In conclusion, Sir, can some use not be made of this astounding revelation? What becomes of Mr. Sydney Smelt's sample of laudanum found pure, but never named at the trial?—I am, etc.,

C. R. ILLINGWORTH, M.D.

Clayton-le-Moors, March 7th, 1887.

THE ADMINISTRATION OF ANÆSTHETICS TO PATIENTS ORDINARILY ATTENDED BY OTHER PRACTITIONERS.

A MEMBER asks what a medical man ought to do when summoned by a dentist to administer gas, etc., and he finds on arrival that the patient is a stranger to him? May he simply administer the gas without asking any questions, or ought he to ascertain the patient's usual medical attendant, and hand the case over to him? If the latter course is correct, what bearing on the point would the alleged unfitness of the ordinary medical attendant for giving gas, ether, etc., or the distance of his residence from the dentist's, have?

*** In the absence of any ethical rule that directly bears on the exceptional case described by "A Member," we are not in a position to do more than express the opinion, based on the general principle laid down in the *Code of Medical Ethics*, that, under the circumstances, it would be the duty of the practitioner to ascertain whether the patient was resident in the neighbourhood, and whether it was possible to procure the attendance of the family medical adviser without any reference to his possible "unfitness for giving gas, ether, etc." In the event of the patient being a non-resident, and the case one of more or less urgency, "A Member" would, in our opinion, be justified in administering the gas or other anæsthetic without previous communication with the ordinary attendant, but not otherwise.

ADVERTISING DENTISTS.

MR. JUSTICE DENMAN and Mr. Justice Mathew, in the Lord Chief Justice's Court, recently heard a motion "In *re* Partridge." Mr. Finlay, Q.C., moved for a *mandamus* to direct the Medical Council and their Registrar to restore the name of Mr. Partridge to the *Register* as a dentist under the Act of 1878. The case, he said, raised an important question which had given rise to considerable discussion in the Medical Council. The Act of 1878 said that the Council and their Registrar should register any person who was a licentiate in dentistry, and any person who had previously been engaged in the practice of dentistry. Mr. Partridge had been engaged as a dentist in London since 1867, and in 1878 he obtained a diploma in dental surgery from the Royal College of Surgeons, Dublin, so that he had two qualifications for registry, and he became, in fact, registered as a licentiate. In 1885 the Dublin College of Surgeons withdrew his diploma upon the ground that he had advertised in the course of his business as a dentist; thereupon the Medical Council removed his name from the *Register*. It was now, however, submitted to the Court that the Council had no power on this ground to remove the name. The Act of 1878 specified certain grounds upon which names might be removed from the *Register*, but there was nothing that would extend to such a case as that upon which the Council acted. Rule granted.

DUTIES OF MEDICAL PRACTITIONERS UNDER THE CRIMINAL LAW AMENDMENT ACT.

DR. ALEX. W. WALLACE (Dumbarton) writes: I would earnestly protest against your decision in the case referred to by you in reference to the Criminal Amendment Act. Would you hold that if a medical man was called to see a child, and found its throat cut, he should give no information to the authorities, and leave it to the parents to do so if they pleased? Surely to know that a crime has been committed and to give no information is to become an accessory after the fact.

*** There is no real analogy between the two cases. In that propounded by our correspondent, it would clearly be the duty of the practitioner to notify the facts to the authorities, with a view to police investigation. As regards the case, however, on which we commented in reply to "P. S. R's" interrogatory, we still fail to see why the medical attendant should act as an informer and medical detective, and, so far, relieve the parents (who are the parties more immediately interested) of their natural duty. In cases, however, in which the parents or next-of-kin are probably ignorant of the law on the subject, it may be well that the practitioner in attendance should make it known to them.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

OLEOMARGARINE.

A BILL has been introduced into the House of Commons by Sir Richard Paget, M.P., regulating the sale of "oleomargarine," which is defined as comprising all substances prepared in imitation of butter, whether mixed with butter or not. This Bill enacts that every package or case containing oleomargarine shall be so marked on the top, bottom, and sides in large printed capitals, and when it is exposed for sale in an open plate or vessel, a label is to be attached marked in large printed capital letters "Oleomargarine," so as to be clearly visible to the purchaser. Moreover, the purchaser is to be informed at the time of sale that the substance sold is not butter.

To escape conviction the seller must produce a written warranty from the person from whom he purchased the article to show that he purchased it as butter, and that he had no reason to doubt its being so. The penalty for infringement of the provisions laid down is £20 for the first and £50 for subsequent offences.

HEALTH OF IRISH TOWNS: ANNUAL SUMMARY.

THE respective death-rates represented by the deaths from the principal zymotic diseases registered during the year in the fifteen urban sanitary districts are as follows, ranging in order from the lowest to the highest:—Kilkenny, 0.6; Wexford, 0.7; Armagh, 0.9; Lisburn, 1.1; Drogheda, 1.1; Sligo, 1.2; Newry, 1.2; Galway, 1.2; Dundalk, 1.3; Limerick, 1.3; Waterford, 1.8; Cork, 2.1; Lurgan, 2.1; Belfast, 2.4; and Londonderry, 3.2. The 667 deaths from all causes registered in the last named district comprised 33 from measles, 4 from typhus, 19 from whooping-cough, 2 from diphtheria, 2 from simple continued fever, 9 from enteric fever, and 23 from diarrhœa and dysentery. Measles caused only 77 deaths; there having been in the previous year 709 deaths from this affection; scarlet fever 120 deaths, or 67 under the number; typhus 71, or 17 below the average; enteric fever 147, or an increase of 76; whooping-cough 123, or less than one-half of the mortality in the year preceding.

HEALTH OF BELFAST.

THE monthly report for February, presented to the Town Council at their last meeting, is as follows: "During the four weeks ending February 19th the births numbered 575 and the deaths 461. The deaths included 37 cases of zymotic diseases. The average death-rate was from all causes 26.7; from chest affections 11.2; and from zymotic diseases 2.2. The general death-rate, as seen by the foregoing statistics, is 1 in the 1,000 lower than in the preceding month, two less in lung affections, and one higher in zymotic diseases. There has been an increase in the cases of typhus returned by the medical officers of health, while the number of enteric cases has been less, but, on the whole, I may say we have been free from any zymotic disease in an epidemic form."

TYPHOID FEVER IN YORK.

MR. S. W. NORTH has recently presented to the City Council a very able and comprehensive report on the prevalence of typhoid fever in York during 1886. The report deals with two topics: 1, the persistent appearance of the disease from year to year; and 2, a serious outbreak occurring last October, and continuing to the end of the year. The wide area over which the cases have been distributed seems to point to the existence of some abiding cause, and Mr. North shows that the ordinary conditions of the city are such as to cause an annual average of 159 cases. So large an amount of this specific disease is significant, and a convincing proof that the elements of danger are present to such an extent as to render outbreaks probable whenever climatic or other conditions are favourable. The evidence adduced by Mr. North as to the agency of milk in propagating the fever at the end of the year is the outcome of much painstaking work, which of necessity occupied time, and required careful consideration. York is essentially a midden city, nearly eight thousand middens being known to exist. These are not cleansed in a regular or systematic manner. The sewers are badly ventilated, seldom flushed, and to a large extent are subject to deposit; the street-gulleys are defective, ill-contrived, built of brick, allowing the deposit of solid matter, and, when old, the escape of fluids into the soil. Mr. North has never been able to discover any evidence that disease was due to the supply of the Waterworks Company, but considers that the only effectual means of limiting the prevalence of typhoid fever will be the re-arrangement of the sewerage of the whole city.

GRATUITOUS MEDICAL RELIEF IN IRELAND.

DUBITAS writes: I was called to see a patient on a "red" or "visiting" ticket, and did so, prescribing the necessary medicine. I subsequently found out the patient's father was possessed of twenty-one acres (Irish), two horses, a donkey and cow, besides a couple of tenement houses from which he drew rent. On my being sent for the second time on the following day, I refused to go, stating that they were not entitled to a ticket, and that I would bring the matter before the dispensary committee on the first opportunity. But on my bringing the matter under their notice (four being present), they refused to cancel the ticket on the grounds that (1) the patient, (girl, aged 18) was at service previous to her illness, and, moreover, was, as it was, lodging in her father's house, who is also a workman, having only come in for present possessions about eight months ago; (2) that the father is in debt to several parties, including two out of the four committee-men present. Is there any limit by valuation or otherwise which regulates the administration of gratuitous medical relief in Ireland?

*** Although the case as reported to us by our correspondent has the aspect of extreme hardship, and although it exhibits in a striking manner the loose way in which the red tickets are distributed in the sister island, we do not see what more he can do to obtain redress, except by laying the facts he has furnished to us before the Local Government Board for Ireland. That department has generally exhibited a very kindly disposition towards its dispensary medical officers, and it is just possible that they might write to the dispensary committee and ask for an explanation of the loose and partial way in which they have acted in refusing to cancel the ticket which, in our judgment, should never have been issued.

FEES FOR EXAMINING PAUPER-LUNATICS.

L. N. writes: The relieving officer of my district has recently, in all cases of suspected insanity, sent me the usual order to visit the case and report upon it. If I report insanity, the patient is at once removed to the workhouse without a previous visit from a magistrate or clergyman. No fee is allowed to me in any case, pauper or no pauper. I shall feel obliged if, through the columns of the JOURNAL, you will kindly inform me whether instructions which justify this new plan have been issued by the Local Government Board. As a poor law medical officer, I should expect some notification of new duties expected from me; I have received none.

*** We are not aware that any special order has been issued by the Local Government Board authorising the relieving officer to do that of which our correspondent complains, but it is more than probable that he has acted under the instructions of the Local Board. The relieving officer, having been so instructed, can direct the removal of an alleged lunatic to the workhouse without requiring the presence of a magistrate or clergyman to see him, and no fee is allowable to the district medical officer, as his visit comes within the scope of his duty. Of course, it would be more courteous if the relieving officer had intimated to our correspondent the order he had received from the Board of Guardians; but that class of official does not ordinarily exhibit any excess of politeness towards his colleague the district medical officer.

OBITUARY.

DR. FERDINAND VON ARLT.

Dr. Ferdinand von Arlt, Emeritus Professor of Ophthalmology in the University of Vienna, died in that city on March 7th. Born in rather humble circumstances, in 1812, near Teplitz, in Bohemia, the fourth of a family of six children, he gained by his own efforts a world-wide reputation. His merits were recognised by the Austrian Government, not only by his professorship, but, among other orders, by that of the Iron Crown, which conferred upon him the patent of nobility. Destined by his parents for the priesthood, Arlt nevertheless succeeded in following his natural bent, and entered in 1831 as a medical student at the University of Prague, where he graduated in 1839. In 1840 he became assistant to the Professor of Ophthalmology, Dr. Fischer, who was at that time, perhaps, the most distinguished of the Prague professors. Six years later he filled the place of Fischer during the illness which, in 1849, proved fatal. Then Arlt succeeded to the Professorship of Ophthalmology, in which capacity he had the honour of receiving Von Graefe as a student, and of giving him his first impulse towards the study of eye-disease. Called to Vienna in 1855, he only resigned his chair there in 1882, on reaching his seventieth year. The cause of his death was gangrene of the left leg, for which he twice underwent amputation of the limb, first below the knee, and afterwards in the middle of the thigh. These painful operations were endured most heroically without chloroform, the use of which was contra-indicated by his general condition. For a time he rallied sufficiently to take carriage exercise, till a fatal relapse gradually brought all his sufferings to an end.

Von Arlt married, in 1842, the daughter of Dr. Dittrich, who had often befriended him in his poor student-days. He leaves a daughter and two sons, one of whom, Dr. Ferdinand Ritter von Arlt, succeeds him in his practice.

Von Arlt's principal work is his well-known *Text-Book of Eye Diseases*, published 1851-6, in three volumes. In 1881 he brought out what was intended to be only the first instalment of his clinical lectures, comprising the diseases of the conjunctiva, cornea, sclerotic, and uveal tract. From Von Arlt was first derived the idea of scientifically constructed tests of vision, which was afterwards elaborated till it resulted in the test-types of Von Jaeger, Snellen, and others. He also was the first to recognise the importance of refraction as a remedial means. Till his time the prescription of spectacles was in the hands of shopkeepers, and was thought to be simply a mechanical matter, rather beneath the dignity of a learned profession.

Nearly fifty years of sound and beneficent work entitle Von Arlt to a place in the front rank of ophthalmologists, and his attainments and example have done much to elevate the department which he so successfully cultivated into a most flourishing and reputable branch of medical science.

SURGEON JOHN BRODIE, A.M.D., M.B.GLASGOW.

Surgeon John Brodie died on Tuesday morning, March 15th, at the Royal Victoria Hospital, Netley, where he was stationed for duty. He joined the service on February 4th, 1877. He distinguished himself in the Afghan war, and was highly commended, but received no official recognition. He served on the West Coast of Africa, where he contracted malarial fever, which undermined his constitution.

ROBERT BRYCE GILLAND, M.D., L.F.P.S.GLASGOW, ETC.

Dr. R. B. Gilland died at Sevenoaks, on March 8th, aged 49. Educated at the University of Glasgow, he obtained his degree in 1860, became one of the house-surgeons of the Royal Infirmary, and was afterwards appointed assistant medical superintendent at Gartnavel Lunatic Asylum. From this time he devoted himself to lunacy practice. After two years' residence at Gartnavel, he removed to Essex County Asylum as assistant to the late Dr. Campbell. On the establishment of the Berks County Asylum, he became medical superintendent of that institution. Here Dr. Gilland worked for seventeen years, with a conscientious thoroughness beyond all praise. He was peculiarly fitted for the task which he had undertaken, and he kept himself abreast of every advance in knowledge or improvement in practice in his own department. He may be said to have died in harness, for it was only when his health had broken down under the strain of anxious and uninterrupted labour that he could be persuaded to resign his responsible post. Dr. Gilland was unmarried.

MEDICAL NEWS.

King and Queen's College of Physicians in Ireland.—The undermentioned Licentiate in Medicine of the College, having duly complied with the by-laws relating to Membership, pursuant to the provisions of the Supplemental Charter of December 12th, 1878, was admitted a Member on Friday, March 4th, 1887.

E. R. H. Pollard, Lic. Med. 1877, Staff-Surgeon, Royal Navy.

At the ordinary monthly examinations for the licences in Medicine and in Midwifery of the College, held on Monday, March 7th, and three following days, the undermentioned candidates were successful.

For the Licences to Practise Medicine and Midwifery.—J Exley, Hunslet, Leeds; W. I. Fern, Macclesfield; H. R. Hancock, Hanley, Stafford; F. W. Ord, Glasgow; G. S. Passmore, Glasgow.

For the Licence to Practise Medicine Only.—S. Boake, Dublin; A. E. Clarke, London; W. B. Dick, Kingstown, Co. Dublin.

Society of Apothecaries of London.—The following gentlemen, having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received certificates entitling them to practise as Licentiates of the Society on March 10th, 1887:

Charlesworth, George, Elstead, Godalming, Surrey.
Down, Arthur Reed, Newton Square, Bampton, Devon.
Paterson, George Snider, Toronto, Canada.
Vinter, Sydney Garratt, 29, Monmouth Road, Bayswater.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM GENERAL HOSPITAL.—Resident Surgical Officer. Salary, £130 per annum, with board, etc. Applications by April 2nd to Henry Fox, R.N.

CENTRAL PROVIDENT DISPENSARY, Bedford.—Medical Officer. Applications by March 19th to W. Jessopp, Esq., Honorary Secretary, 3, St. Paul's Square, Bedford.

CHELTENHAM GENERAL HOSPITAL.—House-Surgeon. Salary, £80 per annum, with board, etc. Applications by March 31st to the Honorary Secretary.

CHILDREN'S HOSPITAL AND DISPENSARY, Manchester.—Medical Officer. Salary, £180 per annum. Applications by March 24th to the Chairman of the Medical Board.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Pathologist. Applications by March 21st to the Secretary, 24, Finsbury Circus, E.C.

DERBYSHIRE GENERAL INFIRMARY.—House-Surgeon. Salary, £100 per annum, increasing to £150, with apartments, etc. Applications by March 26th to the Secretary.

DERBYSHIRE GENERAL INFIRMARY.—Resident Assistant House-Surgeon. Applications by March 21st to the House-Surgeon.

EASINGWOLD UNION.—District Medical Officer. Salary, £26 per annum and fees. Applications by March 31st to F. J. H. Robinson, Esq.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell.—Resident Clinical Assistant. Board and lodging. Applications by March 28th to the Secretary.

HASTINGS, ST. LEONARD'S AND EAST SUSSEX HOSPITAL, Hastings.—House-Surgeon. Salary, £70 per annum, with board, etc. Applications by March 25th to the Secretary.

HUDDERSFIELD INFIRMARY.—Junior House-Surgeon. Salary, £40 per annum, with board, lodging and washing. Applications by March 28th to F. Eastwood, Esq., the Infirmary, Huddersfield.

MACCLESFIELD GENERAL INFIRMARY.—Junior House-Surgeon. Salary, £70 per annum, with board and residence. Applications by March 26th to the Chairman, House Committee.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer. Salary, £150 per annum, with board and residence. Applications by March 31st to W. L. Saunder, Esq.

NARBERTH UNION.—Medical Officer for District No. 4. Salary £45, with extra fees. Applications by March 19th to J. Thomas, Esq.

NATIONAL SANATORIUM FOR CONSUMPTION AND DISEASES OF THE CHEST, Bournemouth.—Junior Honorary Physician. Applications by March 31st to T. G. Parrott, Esq.

OLDHAM INFIRMARY.—House-Surgeon. Salary, £80 per annum. Applications by March 25th to Honorary Secretary.

OWENS COLLEGE, Manchester.—Senior Demonstrator in Physiology. Stipend, £150 per annum. Applications by March 21st to the Registrar.

OWENS COLLEGE, Manchester.—Junior Demonstrator in Physiology. Stipend, £100 per annum. Applications by March 21st to the Registrar.

QUEEN'S JUBILEE HOSPITAL, Gloucester Terrace, Queen's Gate, S.W.—Registrar and Anæsthetist. Applications by April 5th to the Secretary.

QUEEN'S JUBILEE HOSPITAL, Gloucester Terrace, Queen's Gate, S.W.—Surgeon. Applications by April 5th to the Secretary.

ROYAL FREE HOSPITAL, Gray's Inn Road, W.C.—Junior Resident Medical Officer. Applications by March 23rd to the Secretary.

ROYAL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL.—Assistant House-Surgeon. Salary, £60 per annum, with board and residence. Applications by March 24th to the Secretary.

ROYAL SOUTH HANTS INFIRMARY, Southampton.—Assistant House-Surgeon. Applications by March 21st to the Honorary Secretary.

UNIVERSITY OF LONDON.—Examiners in Medicine. Applications by March 29th to the Registrar.

WANDSWORTH DISTRICT BOARD OF WORKS, Putney Parish.—Medical Officer of Health. Salary, £75 per annum. Applications by March 21st to the Clerk to the Board, Battersea Rise, S.W.

YORK COUNTY HOSPITAL.—Assistant House-Surgeon. Salary, £50 per annum, with board and residence. Applications by March 23rd to the Secretary.

MEDICAL APPOINTMENTS.

BRISTOW, Wm. Moss, M.R.C.S.Eng., L.R.C.P., and L.M.Ed., appointed Administrator of Anæsthetics to the Liverpool Royal Infirmary, *vice* H. Briggs, F.R.C.S., resigned.

COLLINSON, F. W., M.B., C.M.Edin., M.R.C.S.Edin., appointed Senior House-Surgeon to the Preston and County of Lancaster Royal Infirmary, *vice* W. F. Moore, M.B., L.R.C.P.Lond., resigned.

HAWKINS, H. Cæsar, L.R.C.P.Edin., M.R.C.S.Edin., appointed Resident Medical Officer to the Boscombe Provident Infirmary, Bournemouth, *vice* F. H. Pott, M.R.C.S.Eng., resigned.

MURRAY, John W., B.A., M.B., C.M., appointed House-Surgeon and Apothecary to the Chorley Dispensary, *vice* S. Farmer, M.R.C.S., L.R.C.P., resigned.

O'DONOHOE, F. G., L.K.Q.C.P.I., appointed Medical Officer to the Castlerea Union, *vice* M. O'Donohoe, L.K.Q.C.P.I., resigned.

TAYLOR, V. O., L.R.C.P.Edin., L.R.C.S.Edin., appointed Assistant Medical Officer to the Worcester Friendly Societies, *vice* J. R. Polson, M.R.C.S., L.R.C.P., resigned.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—MEDICAL SOCIETY OF LONDON. 1. Mr. R. Brudenell Carter: A Case of Swollen Optic Disc, in which the sheath of the optic nerve was excised, behind the eye. 2. Dr. Ralfe: Renal Calculus passed after the use of Solvents. 3. Dr. Allchin: Case of Intussusception. 4. Mr. J. Astley Bloxam: Case of Congenital Malformation of the Diaphragm.

TUESDAY.—ROYAL COLLEGE OF PHYSICIANS, 5 P.M. Croonian Lecture III: Dr. Broadbent on the Pulse.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M. Mr. Godlee: On a case of Obstruction of one Ureter by a Calculus, accompanied by Complete Suppression of Urine. Mr. R. W. Parker: On a Case of Suppression of Urine following Injury to a Sacculated Kidney containing Calculi, the other kidney being entirely disorganised. Dr. Warner and Dr. Fletcher Beach: A Case of Chronic Meningitis, probably Syphilitic, and causing Progressive Dementia.

WEDNESDAY.—BRITISH GYNÆCOLOGICAL SOCIETY, 8.30 P.M. Specimens will be shown by Dr. Pearse, Dr. J. Mansell-Moullin, Dr. Edis and others. Mr. Lawson Tait: Methods of Cleansing the Peritoneum. Council, 8 P.M.

HUNTERIAN SOCIETY, 8 P.M. 1. Dr. Turner: Actinomycosis. 2. Dr. Dundas Grant: (*a*) A Case of Caries of the Vertebra from a Fish-Bone in the Throat; (*b*) Laryngeal Growths; (*c*) Carcinoma of Œsophagus.

THURSDAY.—ROYAL COLLEGE OF PHYSICIANS, 5 P.M. Lumleian Lecture I: Dr. Priestley on the Pathology of Intra-uterine Death.

FRIDAY.—CLINICAL SOCIETY OF LONDON, 8.30 P.M. Mr. Davies-Colley: On Contraction of the Metatarso-Phalangeal Joint of the Great Toe (Hallux Flexus). Dr. Samuel West: Cases of Internal Suppuration, Acute and Chronic, without Fever. Mr. Treves: A Form of Glandular Swelling that is cured by Arsenic. Mr. Parker and Dr. Robinson: Inherited Congenital Deformity of the Hands and Feet; Plastic Operation on the Feet.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTHS.

OAKES.—On March 9th, at Merimbula, Priory Road, N.W., the wife of Dr. Arthur Oakes, of a daughter.

STEWART.—On March 16th, at Glenbarr, Mapperley Road, Nottingham, the wife of Donald Stewart, M.D., of a son.

MARRIAGES.

GUNNING—HANDS.—On February 17th, at St. Matthew's Church, Longwood, St. Helena, by the father of the bride, Robert Cardwell Gunning, Surgeon Army Medical Staff, to Eva Lydia, eldest daughter of the Rev. J. C. Hands, Vicar of St. Matthew's, and officiating Chaplain to the troops.

LOWNDS—IMRAY.—On March 16th, in the Chapel Royal, Savoy, by the Rev. Henry White, M.A., Chaplain of the Savoy, and Chaplain in Ordinary to the Queen, Henry Arthur Lownds, L.R.C.P., L.R.C.S., of Kirkburton, Yorks, to Ethel, daughter of John Imray, Esq., M.A., of Leagemere, East Finchley.

DEATH.

CUNNINGHAM.—On March 14th, at her temporary residence, Mount Charles, Belfast, Louisa Amelia, the beloved wife of Surgeon-General J. P. Cunningham, M.D., late Army Medical Department, and daughter of the late Hugh Hilton Bradshaw, Esq., formerly of the 11th Hussars.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY—9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY—10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY—9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY—9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, M., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 161A, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 161A, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 161A, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

QUERIES.

WILL any member kindly inform A. B. of the climatic influence of Grenoble in chest diseases, more especially asthma?

THE ROYAL MEDICAL BENEVOLENT COLLEGE, EPSOM.

A. M. B. M. A. asks for information of the above College from members of the profession; some time ago it was, he believes, under a cloud; this has been, he hopes, removed. He wishes to place two sons in the school if it can compare favourably with our other public schools, having a strong feeling that he ought, as a member of the profession, to give it support.

JUVENILE INCONTINENCE.

MEMBER has a case of "juvenile incontinence" in a boy, aged 14 years, after measles six years ago. There are no worms, stone, or urethral mischief; belladonna has been pushed and made matters worse. Will any member kindly suggest treatment?

TREATMENT OF NEURASTHENIA.

M.D. asks whether there are any institutions which take cases of neurasthenia to undergo the Weir-Mitchell treatment?

ANSWERS.

A.—You might certainly offer a fee, and, if declined, make a present of corresponding value.

B. M. O.—We cannot profess regret that the examiners maintain an adequate standard for the final examination, and act upon it, though we sympathise with our correspondent's disappointment. It is a common delusion with gentlemen who fail at examinations that "just one question" proved fatal to them. Such an impression is soothing, but rarely well founded.

CLIMATE FOR CARDIAC AND RENAL DISEASE.

DR. JOHN LUCAS (Ramsgate) writes: In reference to the inquiry by Mr. Norman Walker, M.B., in the JOURNAL of March 12th, it is of paramount moment in recommending a patient suffering from valvular disease of the heart, complicated with chronic Bright's disease, a change of air, to bear in mind the dangers which attend even the comparative extremes of climate which exercise a prejudicial influence on the lungs and kidneys. Great care must be enjoined by the physician in the prevention of pulmonary and renal mischief. The tonic effects of a change to the seaside would be more than militated against. On the south coast of England, I believe, no place is better suited than Bournemouth, which is well sheltered and favourably situated as regards even temperature, warmth, sunshine, picturesque scenery, nice gardens for general exercise, either on foot, Bath chairs, or carriage drives. The climate there is, *par excellence*, bracing, tempered by a mild and even temperature, moderately dry, permitting of outdoor recreations, which form the suitable features in such cases. There is ample amusement to be found in the place and neighbourhood.

TREATMENT OF CORNS.

DR. MARTIN F. BUSH recommends "Chirops" to use salicylic acid and collodium applied with a camel hair brush to the inner side twice a day.

NOTES, LETTERS, ETC.

THE EPIDEMIC OF DIARRHŒA.

MR. M. I. FINUCANE (Northwich, Cheshire), writes: The prevalence of diarrhœa seems not to be confined to London. For the last three weeks there has been quite an epidemic in this neighbourhood. The attacks appear to come on very suddenly, with "twisting" pains all over the abdomen, and vomiting, the stools being of a particularly watery character. In nearly every case there has been a rise of temperature, in one case to 103°, but the pyrexia only lasted for two or three days, the other symptoms continuing. In one case (that of a servant girl), she returned from her situation with intense diarrhœa, vomiting, and pain, the number of stools in one day being twelve. Her mother, who nursed her for two days, suffered similarly; and the husband, who attended on mother and daughter, was then attacked. The stools in these three cases were very offensive. There was pyrexia in all, with great prostration. The internal administration of permanganate of potash, in three-grain doses, subsequently increased to five grains, with hot applications over the abdomen, and careful regulation of diet in ten cases, never failed to stop it. Other remedies, such as opium, etc., seemed of no avail. Inquiry failed to elicit any cause, in the majority of cases, for the attack; but the above case seemed to me to point to the infectiousness of the emanations from the stools.

DR. A. D. ROE (Wandsworth) writes:—There have certainly been an unusual number of cases of diarrhœa in this district; I have treated a large number in my own practice, and have heard of many others. It appeared to be most prevalent about the middle of January, and, in the cases I attended, seemed to have arisen through sudden variations in temperature. In many the stools were light in colour, and the diarrhœa yielded best to small frequent doses of hydrarg. c. creta.

DR. J. F. SYKES, medical officer of health, writes: There is no epidemic of diarrhœa in St. Pancras. The inquiries made amongst medical men and also amongst milk purveyors elicit the fact that there has been here and there a case of diarrhœa, but nothing beyond what catarrh or errors of diet would account for.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. H. K. Lewis, London; Mr. W. R. Deeping, Leicester; Mr. E. G. Hunt, Bembridge; Mr. J. Gilroy, Birmingham; Mr. W. M. Bristow, Liverpool; Dr. Mickle, London; The Secretary of the Royal College of Surgeons of Ireland, Dublin; Mr. R. Davies, Bath; Mr. W. A. Thomson, Ampthill; Dr. W. A. Carline, Grantham; Dr. T. Laffan, Cashel; Dr. J. Weaver, Southport; Mr. W. Watson Cheyne, London; Dr. R. Petch, York; Mr. C. W. Beresford, Dunstable; Mr. C. Cooper, Chester; Mr. N. Davies-Colley, London; Dr. Brailey, London; Dr. H. O'Neill, Belfast; Dr. J. Parkinson, Sacramento; Mr. R. Montgomery, Dublin; Dr. Edwardes, London; Mr. G. Scudamore, London; Mr. C. S. Blair, Newcastle-on-Tyne; Dr. D. T. Smith, Preston; Mr. M. F. Bush, St. Andrews; Mr. E. L. Adeney, Tunbridge Wells; Mr. R. Z. Pitts, Chelmsford; Dr. Brunton, London; Mr. Lawson Tait, Birmingham; Mr. C. G. Campbell, Saddleworth; Dr. J. Rogers, London; Dr. Rabagliati, Bradford; Mr. H. C. Howard, London; Dr. Myrtle, Harrogate; Dr. J. W. Moore, Dublin; Dr. J. Lucas, Ramsgate; Mr. P. Smith, London; Honorary Brigade-Surgeon Fishbourne, Lewisham; Dr. W. A. Sturge, Nice; Surgeon A. Hayes, Cairo; Messrs. Woollams, London; Mr. J. A. H. Joy, Crewe; Mr. T. A. Gifford, London; Surgeon-Major Magill, London; Dr. R. Neale, London; Mr. D. Vinrace, Birmingham; Dr. W. Sykes, Mexborough; Mr. W. A. Frost, London; Colonel Hughes-Hallett, London; Mr. T. C. Browning, Rushden; Sir J. Sawyer, Birmingham; Mr. J. C. Snowdon, Jesmond, Newcastle-on-Tyne; Mr. S. Barwise, Birmingham; Mr. E. Owen, London; Dr. R. Liveing, London; Dr. Idelson, Berne; Mr. J. Ackery, London; Dr. A. H. Jacob, Dublin; Sir C. A. Cameron, Dublin; Dr. Styrap, Shrewsbury; Mr. J. W. Harrison, Sheffield; Mr. J. A. Byerley, Portsea; Dr. Uhthoff, Brighton; Mr. J. Vesey Fitzgerald, Birmingham; Mr. C. Norman, Dublin; Dr. S. W. Smith, Pershore; Dr. A. Duncan, Thelan, India; Mr. G. R. Keeling, London; Mr. G. E. T. Greene, Ballycarney Ferns; Dr. Jamieson, Victoria; Mr. K. Thompson, London; Mr. G. E. Williamson, Newcastle-on-Tyne; Dr. Hacon, Christchurch, New Zealand; The Secretary of the Jacob Testimonial Fund, Dublin; Dr. Sheild, London; Dr. D. P. Ross, Sierra Leone; Mr. W. Watson Pike, Enniskillen; Mr. R. S. Bowker, Sydney, New South Wales; Dr. J. H. Bennet, Mentone; The Secretary of the Local Government Board, London; Mr. F. B. F. Eminson, Scotter; Dr. J. Haycraft, Birmingham; Dr. Glasier, Lincoln; Mr. H. A. Lawton, Poole; Dr. Church, London; Dr. C. S. Taylor, London; Dr. Francis, Woburn; Mr. H. H. Murphy, Twickenham; Mr. G. F. Blake, Dublin; Dr. W. S. Haslam, Birmingham; The Secretary of the Sanitary Assurance Association, London; Mr. Shirley Murphy, London; The Secretary of the Royal Infirmary, Leicester; Our Manchester Correspondent; Mr. H. A. Hamshaw, Leicester; Surgeon Lamprey, London; Mr. T. J. Verrall, Brighton; Mr. G. Russell, Oudtshoorn, Cape of Good Hope; Mr. F. E Cockell, Dalston; Mr. Clement Lucas, London; Dr. Cameron, Liverpool; Dr. Kidd, Dublin; Mr. R. S. Armstrong, London; Messrs. Oppenshaw, London; Mr. C. H. Wise, Walthamstow; Dr. Collier, Oxford; Deputy-Surgeon Kilkelly, Dublin; Sir W. Mac Cormac, London; Dr. Wile, Philadelphia; Dr. Tatham, Salford; Dr. Norman Kerr, London; Dr. S. Keith, Edinburgh; Dr. Duncan, Croydon; Dr. F. C. Turner, London; Dr. G. N. Pitt, London; Mr. W. J. Heslop, Manchester; Mr. R. Graveley, Chailey; Mr. A. A. Napper, Cranleigh; Dr. D. A. Fraser, Totnes; Dr. F. P. Atkinson, Surbiton; Mr. J. Crocker, Bingley; Dr. Student, Glasiough; Mr. C. H. Wise, Walthamstow; Mr. S. J. Moore, Bingham; Mr. J. Sibson, West Vale; Mr. R. Buttany, Gloucester, etc.

BOOKS, ETC., RECEIVED.

A Reference Handbook of the Medical Sciences, by various writers. Edited by A. H. Buck, M.D. Vol. IV. New York: Wm. Wood and Co. 1887.

Through the Fields with Linnæus. Two Vols. By Mrs. Florence Caddy. London Longmans, Green, and Co. 1887.

The Essentials of Histology. By E. A. Schäfer, F.R.S. Second Edition. London Longmans, Green, and Co. 1887.

Treatise on Diseases of the Skin. By T. McCall Anderson, M.D. London: Charles Griffin and Co. 1887.

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THE CROONIAN LECTURES
ON
THE PULSE.

Delivered at the Royal College of Physicians of London, March, 1887.

By WILLIAM H. BROADBENT, M.D., F.R.C.P.,
Physician to St. Mary's Hospital; Consulting Physician to the London Fever Hospital; and President of the Clinical Society.

Lecture I.

The subject I have chosen for the lectures which I have the honour to deliver before you, if it is to be judged of by its importance to the medical man, is well worthy of the attention of the College. It is to the pulse that we look first of all for trustworthy information as to the condition of the patient who seeks our aid, and the knowledge obtained from it is a sort of foundation upon which is built up the opinion we form from the collective symptoms he exhibits and from the results of our physical examination. On the other hand, since the pulse has been the object of attentive examination on the part of every physician here, from the first moment of his entering upon the study of medicine up to the present time, and by countless generations of physicians from the time of Galen onwards, it may appear to be an act of presumption on my part to bring before the College a subject with which every Fellow is equally familiar with myself.

I might reply to this that there has been a great reawakening of interest in the pulse; that new methods of study and of investigation have been brought to bear upon it; that greater precision has been introduced into the descriptive terminology of its variations. But the justification I would plead is simply this, that I have myself learnt much, and still find that I have much to learn, with regard to the pulse, with regard to the significance of the changes observed in it, and especially with regard to the indications for treatment to be obtained from it.

We examine habitually the pulse at the wrist, and, at first sight, it seems strange that the radial artery, which supplies merely the structures of a part of the hand, a few small bones with their articulations, a few muscles and tendons, the skin and the nerves distributed to it, should afford the varied and far-reaching knowledge we look for in the pulse. The hand is not essential to life; it contains no organ of any importance, and *a priori* it might have been supposed that the variations in the circulation of the blood in so small a member could have no significance. We know, as a matter of observation, however, that the pulse of the wrist indicates the condition of the circulation generally, and on reflection it is seen that, as a branch of the great arterial system, it receives every impulse starting from the heart, and reveals the frequency and force of its beats; and not only this, but as fluid pressure is equal, or tends to become equal, in all parts of a freely communicating system of tubes, it shows the degree of freedom of the general outflow through the capillaries as well as the kind of propulsion by the heart. The very fact that the hand has no special circulation of its own liable to extreme variations for functional purposes, such as, for example, those which occur in the salivary glands, makes the radial pulse a more trustworthy index of the general circulation.

A preliminary question, upon which a distinct understanding must be arrived at, is the following: the pulse, what is it; and what is the exact information it furnishes? Now, it is not, as is commonly understood, and as is explicitly stated in text-books of physiology much read by our students, an expansion of the artery. This, at any rate, is not what we feel or what is recorded by the sphygmograph. A moment's reflection as to the volume of blood discharged by the left ventricle into the aorta, and a comparison of this with the capacity of the entire arterial system, will convince us that it is altogether inadequate to produce any expansion of the smaller arteries appreciable to the touch. The aorta and its primary branches are, it is true, dilated somewhat by the injected blood, but even in a vessel the size of the carotid, it is difficult to measure the increase of diameter, so minute is it; whereas in the radial, in which it must be much less, the sphygmograph, if its trace were taken to indicate actual enlargement of the artery, would show it to be considerable. Nor is the pulse a sinuous movement of the artery in its bed from elongation, which throws it into curves. To feel the pulsation in an artery, or to take a sphygmographic trace, a certain degree of pressure must be applied to the vessel, and, as is well known, there must be a bone behind it against which it can be compressed. What happens, then, is as follows: In the intervals between the pulsations, when the resistance by the contained blood is at its lowest, the tube of the artery is more or less flattened, then comes the so-called wave of blood propelled by the systole of the left ventricle, or, to speak more accurately, the liquid pressure in the vessel is increased, and this forces the artery back into the circular form. It is this change of shape from the flattened condition impressed upon the vessel by the finger, or by the sphygmographic lever, to the round cylindrical shape which it assumes under the distending force of the blood within it, which constitutes for us the pulse. Such a pulsation can be felt on a large scale by placing the foot on the unyielding and inelastic leather hose of a fire-engine in action, or shown in a schema of the circulation with inelastic vessels. It is not, then, an increase in the diameter of the vessel, but an increase of the blood-pressure within it, created by the systole of the ventricle of the heart, which constitutes the pulse.

Another common misconception must be cleared up, namely, that the pulse signifies onward movement of the blood in the artery. Since a certain amount of blood is propelled into the aorta at each systole, it would seem, at first sight, that there must be a corresponding propulsion of blood along the vessel which is under the finger, and misapprehension has been carried so far that the pulse-wave has been understood to mean the actual transport of the blood, and even to indicate the rapidity of such motion. Short of this, it is more commonly taken for granted that the rate of movement of the blood in the vessels is directly proportionate to the strength of the pulse—that a good strong pulse implies a vigorous rush through the capillaries, and a weak pulse a languid flow. The stream from a divided artery and the pulsatile jet seem to countenance this conclusion. It is, however, an erroneous idea; if the radial is compressed close to the hand the pulsation above is not extinguished, but exaggerated; and when an artery is tied, the pulsation up to the ligatured point is more vehement than before. Pulsation is thus no evidence of onward movement of the blood, and resistance in the arteries and capillaries will have *pro tanto* the effect of a ligature, hindering or even arresting the onward current, and there can be no doubt that peripheral obstruction does at times reach a point which almost stops the flow from the arteries to the veins, the pulse appearing to be all the stronger on this account; in fact, we infer the existence of obstruction in the cerebral circulation from the exaggerated carotid beat on that side. This is a consideration which, it seems to me, is not adequately borne in mind. I think it enters into the explanation of dropsy, and especially of the varying amount of dropsical effusion under apparently similar conditions, and that it also helps to clear up obscurities in the relation between circulatory conditions and head symptoms.

The pulse, then, indicates simply the degree and duration of increased pressure in the arterial system caused by the ventricular systole. There is a certain mean blood-pressure maintained by the elasticity of the large arteries, varying greatly in different individuals, which keeps up the flow through the capillaries, and the level of which is determined by the resistance in the capillaries and the amount of force stored up by the elastic walls of the large arteries. This pressure is lowered by the outflow through the capillaries into the veins, and is re-inforced by the successive contractions of the left ventricle, and the pulse marks and indicates the minimum and the maximum pressures, with the gradation from one to the other. The term "tension," as applied to the pulse, means simply the degree of fluid pressure within the artery, putting its walls on the stretch. Distension might, perhaps, be more expressive than tension, if less exact and technical. With these preliminary observations, we may proceed to consider the factors of the pulse.

There are three factors in the production of the pulse, and the influence of each on the variations observed in it must be understood. I shall not enter upon them minutely here, but certain observations are necessary to a full comprehension of the effects which will be studied later. The three factors are—1. The action of the heart. 2. The elasticity of the great vessels. 3. The resistance in the arteries and capillaries. The heart determines unconditionally the frequency and regularity or irregularity of the pulse, and, with certain qualifications, its force or strength. The great vessels, acting as an elastic reservoir, convert the intermittent jet issuing from the ventricle into a more or less continuous stream, impressing at the same time certain characters upon the pulse, according as the elasticity of their walls is perfect or impaired, and according as they are kept fully distended or only slightly on the stretch. The capillaries and arterioles, by the varying resistance which they offer to the passage of blood through them, determine the character of the pulse, and influence materially the action of the heart. Each of these must be considered in some detail.

It has just been said that the heart determines absolutely the frequency of the pulse; and this is true, in so far that the number of beats of the pulse corresponds with the number of the heart-beats, except when a certain proportion of the latter are too weak to reach the wrist, or when very little blood enters the ventricle during its diastole; with the exception, again, of that curious modification of the heart's action in which there are two heart-beats coupled together for every beat of the pulse. It must not be lost sight of, however, that resistance in the peripheral circulation reacts upon the rate of the heart's action, as well as upon its character, the frequency being increased as resistance is lessened, and *vice versâ*; subject, however, in both cases, to the intervention of the nervous system. The rhythm as well as the rate of the pulse is determined by the heart; and the pulse, generally speaking, is regular or irregular according as the action of the heart is regular or irregular. The pulse, however, may be made irregular, when the heart is acting regularly, by beats failing to reach the wrist; and irregularity of the heart's action may be greatly exaggerated in the pulse.

With regard to the strength or force of the pulse, again, this must be directly dependent upon the strength of the ventricular systole. The pulse cannot be strong or forcible when the heart's action is weak, and it will not, as a rule, be weak when the heart's action is vigorous. But the volume of blood discharged by the ventricle into the aorta is another element in the production of the pulse. If from any cause the ventricle is not properly filled, as may be the case when there is obstruction in the pulmonary circulation, or when the mitral orifice is greatly narrowed, or when the ventricle has not time to dilate, as may happen in palpitation, the systole will have little effect in increasing the pressure in the arterial system; and there may, under such circumstances, be powerful action of the heart with a feeble pulse. As will be seen, however, when the influence of peripheral resistance is discussed, the apparent strength of the pulse may not correspond with the energy of the ventricular contraction, even when the amount of blood propelled is normal, and tension, or the degree of distension of the arteries while it is maintained by the heart and is dependent upon the pressure supplied by the ventricular systole, is by no means proportionate to its vigour.

The principal effect of the large arteries is to act as an elastic reservoir, which converts the intermittent jet of blood which issues from the ventricle into a continuous stream. They are kept in a state of continual distension, which is increased momentarily by each ventricular systole, and runs down to some extent in the intervals, but never during life, to a point at which the elastic coats of the vessel cease to exercise some compression on its contained blood. The force of the heart is thus stored up and delivered out gradually in the form of a steady pressure, which keeps up an almost uniform flow through the vessels of the periphery. The regular current of blood sustained in this way is essential to the functional efficiency of the central nervous system.

But the elasticity of the great vessels is concerned in the production of the dicrotism of the pulse, a phenomenon which has attracted the attention of all who have studied the pulse, and has been much discussed. I would refer especially to Dr. Galabin's paper on the subject for a clear exposition of its mechanism. The conditions favourable to its manifestation are low tension in the arteries and sharp contraction of the heart.

When the outflow by the capillaries is rapid, the pressure in the aorta and great vessels will run down speedily during the cardiac diastole, and there will be a great and sudden rise with the systole. There being, moreover, comparatively little resistance to the blood entering the aorta from the ventricle, its systole takes place rapidly. The force of the systole is divided; there is, at the same time, a launching forwards of the column of blood, and an expansion of the great vessels laterally, their elastic coats not being on the stretch, and so yielding easily. A rebound follows, which starts along the arteries the dicrotic wave from the closed semilunar valves.

When, on the other hand, the onward movement of the blood in the periphery is obstructed, the pressure in the great vessels cannot reduce itself, the aorta is distended, and its coats are on the stretch, there is little room for the contents of the ventricle, and the exact converse of the effects above enumerated will hold. There will in particular be little or no dicrotic wave. In proportion as the distension is extreme, the condition obtaining in the arteries will resemble those which would be present in a system of inelastic tubes.

When, from atheromatous or other senile changes, the aorta and its primary branches have lost their elasticity, the resemblance to a system of inelastic tubes is more complete, and the pulse-curve, not being modified, resembles that of the ventricle.

Not less important than the action of the heart in its influence on the circulation of the blood, and even more important in the modifications it produces in the character of the pulse, is the resistance in the arterioles and capillaries. It is by their resistance in front, and the force of the heart's action behind, that the mean pressure in the arterial system is determined. If the outflow through the capillaries is free, then no amount of blood which the heart in a normal condition can pour into the arteries, and no degree of energy with which this is projected into the aorta, will maintain the general arterial pressure at a high point. It is possible that great frequency of the heart's action, with the discharge of a full volume of blood by each systole, may pour blood into the arteries more quickly than it can run off by the capillaries even when relaxed, in which case the pressure would rise; but this is a rare occurrence, except for brief periods in excitement or the early stage of effort. On the other hand, when the passage through the capillary network is obstructed, the blood is dammed back in the arteries, and the pressure within them is raised, it being understood always that the heart is capable of supplying the requisite force, which must, of course, be sufficient to overcome the peripheral obstruction and keep up some onward movement of the blood, or life would cease.

This average or mean tension present is a most important part of the knowledge to be obtained from the pulse; it is measured by the degree of fulness and resistance in the artery between the beats; the variations in the character of the pulse contributing to an accurate estimate of it.

It follows, from theoretical considerations, which need not be here discussed, and it is proved both by observation and experiment, that the higher the constant or mean pressure in the arteries, the less is the difference between the maximum and minimum; or, in other words, the more full and firm the artery is between the beat, the less marked will be the pulse, and, *vice versâ*, the lower the tension and the more conspicuous the pulsation. The significance, again, of the constant or mean and the variable or pulsatile pressure is different. The mean pressure tells most with regard to circulation and the circulatory system. The variable pressure or pulse tells most with regard to the general state of the individual.

These variations in the pulse, and the way in which they are produced by changes in the arteries and capillaries must now be considered.

When the peripheral vessels oppose little resistance to the passage of the blood through them, the pressure in the arteries will not only be low, but it will also be variable. It will rapidly run down in the intervals of the ventricular systole and rise suddenly with each systole. This would be the case even were the rapidity of the individual contraction constant and uninfluenced by the amount of force to be overcome; such, however, is not the case, for with diminished resistance the ventricle expels its contents more rapidly. The pulse, then, will be more sudden or sharp, and will seem to be more vehement. The artery at the wrist and elsewhere will allow itself to be flattened more easily and completely, as there is little pressure of blood within it to resist the external pressure; it is then suddenly distended and resumes its cylindrical form, repelling the finger and jerking up the sphygmographic lever. This effect is all the more marked from the fact that the walls of the artery will be relaxed and its diameter increased.

The converse effect will be produced by peripheral resistance. With a higher mean pressure, the variations will be less; and the rise of pressure, which constitutes the pulse, more gradual, this difference being accentuated when the artery is contracted. But another consequence flows from the varying resistance in the peripheral arterioles and capillaries. A given volume of liquid will pass more rapidly through a large channel than through a smaller under the same pressure. When, then, the resistance in the periphery is weak—which is equivalent to the channel being larger—the pulse will be short, that is, the wave is sudden and soon over; and, conversely, it will be long when the resistance is considerable. It is easy to confound the fulness of the artery between the beats with a prolonged beat; but, although these two conditions are often met with together, they are distinct, and must be kept so in our minds.

The sphygmograph has been invaluable in research; it has given precision to our ideas, and, in the hands of Marey and others, has made clear and comprehensible many intricate and doubtful problems of the circulation. It is capable, too, of rendering important aid in clinical investigation, especially where demonstration and records of changes in the circulation are required. To me personally the sphygmograph has been of immense service. I worked with it under the eye of Sibson, and shared Anstie's enthusiasm with regard to it when he and Professor Burdon Sanderson took up the instrument with which Marey endowed medical science. It is not, therefore, from ignorance of, or want of familiarity with, the sphygmograph that I

have come to the conclusion that it is not specially useful in practice—that in any form known to me it is not a clinical instrument for every-day work. It is rarely necessary for diagnosis, and scarcely ever to be trusted in prognosis. The indications obtained from it are not like those of the thermometer, independent of the observer. Skill and practice are required in applying it, judgment is called for in determining the position and pressure which give the best trace, and, indeed, in deciding which of the traces obtainable is the best representative of the particular pulse; the personal equation of the observer, therefore, comes in, and if any special result is greatly desired an enthusiastic investigator can obtain it, and may without the least conscious intention, twist facts in the required direction. It is necessary, also, before a trace can be interpreted with any degree of confidence, to know what form of sphygmograph has been employed. Marey's is still, in my opinion, the best, and his traces appear to me to correspond most closely with traces taken without instrumental multiplication and magnified by the lens. English modifications of Marey's sphygmograph often magnify the pulsation too much, and in doing so introduce exaggerations due to the rapid movement of the writing lever. Pond's and Dudgeon's instruments are extremely handy and convenient, but a gratuitous provision for exaggerations and for extraneous jerks and vibrations exists in the loose and unmechanical way in which the motion of the intermediate lever is communicated to the writing lever and in the weight which acts as counterpoise in the last-named lever.

The pretence, again, to measure the exact pressure employed in taking the trace, and thereby to obtain corresponding knowledge of the intra-arterial pressure, is illusory. To say nothing of the varying thickness and resistance of the skin, which would of itself vitiate all conclusions of this kind in at least three ways—by difference of flexibility, by affecting the position of the spring, and by varying the area of the button or pad actually in contact with the skin—the size of the artery would introduce an element of uncertainty. Hydraulic pressure is equal at every point of the containing surface, and its force is multiplied by increase of area; the greater surface, therefore, of a large vessel would exercise greater lifting-power, so that the same blood-pressure would appear to be higher or lower according to the diameter of the artery. For the same reason, buttons or pads of different size resting on the vessel would affect the degree of force required in order to compress it, as would slight differences of adjustment. A knife-edge resting transversely across the vessel eliminates some of these uncertainties, and gives a more accurate trace, but requires delicate adjustment of the strength of the spring. The above would be true if the pressure exercised by the spring were accurately graduated, but this is far from being the case in any sphygmograph known to me, and graduation by the eccentric commonly employed is ridiculously inexact.

While, then, I think that every student ought to be familiar with the sphygmograph, and will gain from a study of its indications a comprehension of the pulse in its different forms obtainable in no other way, I am of opinion that we learn by means of the educated finger all that the sphygmograph can teach, and more. It is invaluable as a means of educating the sense of touch, and of cultivating the faculty of observation; it is most useful in resolving doubts as to the difference between the pulse of the two sides in some cases of aneurysm, and in recording pulses in the graphic form; but it is not an infallible court of appeal, and there are niceties of information which are out of its reach.

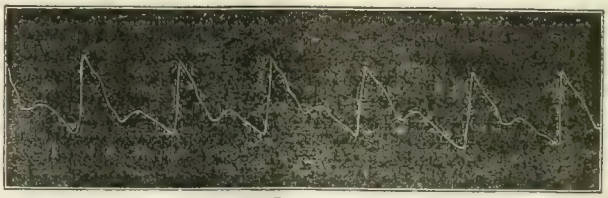
I need only point to the groups of pulse-tracings exhibited, which are by experts, to show that a sphygmogram does not speak for itself but requires interpretation. One set is a series of normal traces made for me by the late Dr. Mahomed to illustrate my lectures at St. Mary's; the other is a copy from Marey's pulse of aortic regurgitation. Another tracing, by a Dudgeon's sphygmograph, shows the vagaries of which it is capable.



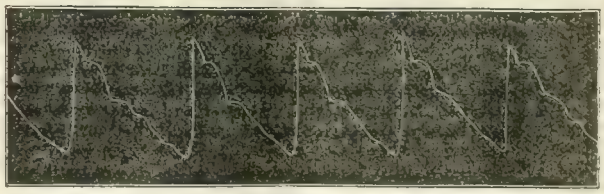
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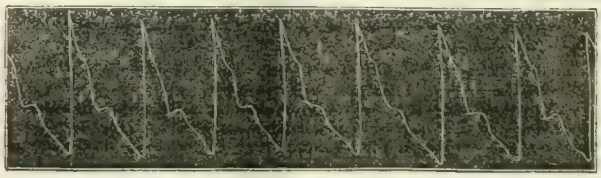
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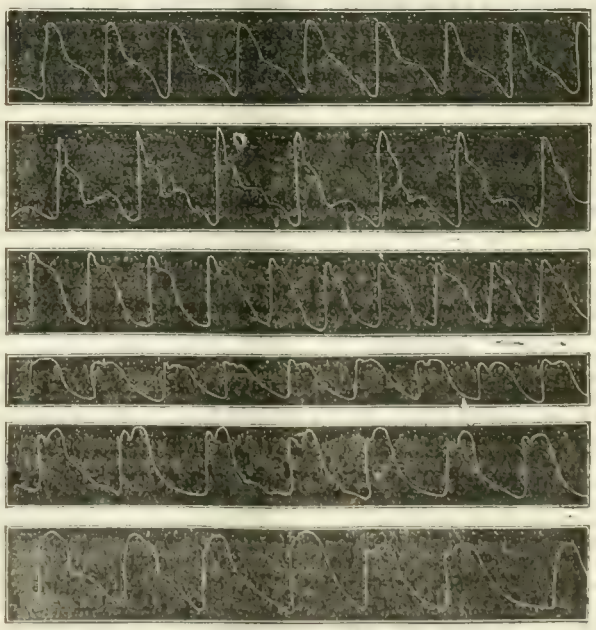


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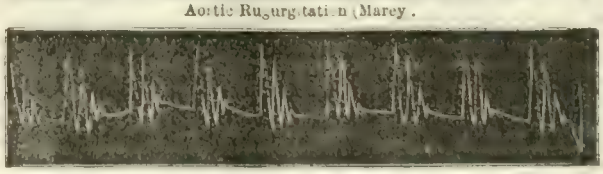


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Normal traces (Mahomed)



Aortic Regurgitation (Marey.



To illustrate untrustworthiness of Dudgeon's sphygmograph.

In examining the pulse our object is to obtain the most complete and exact knowledge attainable as to the circulation, and to interpret accurately the facts we observe, and I must be the more careful in

describing the method to be followed, as I do not propose to refer to the sphygmograph. The point first noted is the frequency, the number of beats per minute, and the regularity or irregularity of the beats, with regard to time, and their equality or inequality in force. This is simple and easy. We should naturally wish, in the next place, to estimate the force or strength of the pulse, but considerations which modify the idea derived from the impression made on the fingers may first be conveniently discussed. It will be well, therefore, after counting the pulse, to give attention to the size of the artery. This varies greatly in different individuals, and may differ in the two wrists of the same person. It varies again greatly, according as the muscular coat is relaxed or contracted. We have, then, to distinguish between congenital differences in the diameter of the vessels and variations induced by physiological or pathological influences. Now a large artery will communicate a more perceptible impression to the fingers, placed lightly upon it, than a small one, and the beat will seem more forcible. On the other hand, the pulse wave can usually be arrested more readily by pressure in a large artery, and the pulse is more compressible; one mode of examination thus controls or corrects the other. When the artery is small, and especially when it is rendered small by contraction of its muscular coat, there appears to be little pulsation in it, and the pulse may easily be set down as weak; but let an attempt be made to obliterate it by compression, and it often seems as if the pulse grew stronger as the pressure on the vessel increased.

An important point to be investigated is the degree of constant pressure prevailing in the arteries. The constant intra-arterial pressure, or pulse tension, is determined first by rolling the artery transversely under the three fingers, or endeavouring to do so. In a pulse of average tension, the vessel only stands out so as to be felt distinctly during the actual beat, and subsides gradually or rapidly in the interval; it cannot, therefore, be rolled by the fingers at all periods, though it may generally be distinguished with care, even between the beats, especially when the skin is thin and flexible. In a pulse of low tension the vessel can scarcely be said to be felt as such at all; it starts up with the beat, and is at once lost again when the brief wave has passed. In a pulse of high tension, on the other hand, the artery stands out among the structures of the wrist like another tendon, and can be rolled like a cord under the fingers, and followed often halfway up the forearm. While the vessel is thus being rolled about, the pulsation in it may scarcely make itself felt, and the artery can often be seen distinctly, if the skin is thin, projecting on the surface without any appearance of pulsation, except where it is thrown into curves. Pressure, however, brings out the pulsation and develops its force.

The character of the beat is another matter for study; and, brief as is the period occupied by it, each pulse-wave presents a rise, duration, and fall. It may strike the finger suddenly, or lift it deliberately; the distension of the artery may be momentary only, or it may persist for a time; the fall of pressure finally may be abrupt or gradual. For the most part, a sudden rise, brief duration, and abrupt fall go together and constitute the short pulse of large arteries and low tension, while a gradual rise, persistent fulness, and slow decline are usually associated, and give the long pulse of contracted arteries and high tension. Exceptions, however, occur, and they are often of great significance. There may be a large vessel and sudden pulse when the tension is relatively high with dilatation of the left ventricle and a small artery, slowly and feebly filled, in extreme low tension with cardiac weakness.

We are now prepared to estimate the strength of the pulse. Three fingers are placed on the vessel, as is supposed to be the case from first to last. With that nearest the heart, pressure is made till the wave is arrested, so as not to be felt by the other fingers, or, if necessary, two fingers are employed to extinguish the pulsation. In this way, by the degree of pressure required, and by varying the pressure with one, two, or all three fingers, an idea is obtained of the force with which the heart is propelling the blood onwards. Account will have been taken already of the size of the vessel, and the method of noting the tension will have brought out other points which enter into consideration.

I have spoken of the manœuvre of rolling the vessel transversely under the fingers as a means of estimating the pressure and tension by which it is maintained in the cylindrical form. Another manœuvre by which the state of the coats of the artery is ascertained is to carry the skin along it longitudinally with varying pressure; curves in its course and bulging in its walls are thus detected; inequalities of thickness and density in the coats are felt, sometimes mere thickening and hardening, at others actual patches of rigidity and calcareous deposit; or the entire vessel may be found to have a thick, leathery, inelastic feel, or may be converted into an irregular hard calcareous tube, or may feel like a string of beads under the finger.

One more question of observation must be taken up; the recognition of dicrotism. For this purpose the fingers must rest as lightly as possible on the vessel, and uniform gentle pressure must then be made by all three. The dicrotic wave, when well within physiological limits of variation, will be felt like an echo of the principal beat, and when well marked is extremely distinct. A complete account of the pulse then should specify (1) the frequency—that is, the number of beats per minute, with a note of any irregularity or intermission or instability of the rhythm; (2) the size of the vessel; (3) the degree of distension of the artery between the beats; (4) the character of the pulsation, whether its access is sudden or gradual, its duration short or long, its subsidence abrupt or slow, note being taken of dicrotism when present; (5) the force or strength of both, the constant and variable pressure within the artery, as measured by its compressibility; (6) the state of the arterial walls. How far the description of the pulse usually given, even in cases in which much turns upon it, falls short of these requirements it is unnecessary to state.

It is impossible to examine with attention a large number of pulses, whether among the healthy or sick, without being struck by the extraordinary diversity of frequency, size, character, tension, and force met with. This diversity prevails quite independently of disease, in both sexes and at all ages, especially with regard to diameter of vessel and tension and force of pulse. If we judged only according to the size of the blood-channels, together with the pressure within them, we should be compelled to estimate the amount of blood flowing through the arterial system as three or four times as much in some persons as in others. But the amount of blood actually put in circulation is determined by the volume of blood discharged at each systole, and the number of contractions a minute, and, assuming that the ventricles empty themselves at each contraction, there is no such difference in the capacity of the ventricle or in the rate of the heart's action as would corroborate the above estimate.

Still, taking everything into account, there must, when we compare the small, short, compressible pulse of one man with the large, firm, and long pulse of another, be great differences in the rate and energy of the movement of blood through the capillaries in different individuals, and clearly there are great differences in the circulation of the same person at different times. The fact that such differences are compatible with health and vigour is conclusive evidence that nutrition and functional efficiency, even of the nerve centres, are not in such close relation with and intimate dependence upon the blood supply as we are sometimes apt to suppose; and additional evidence, pointing in the same direction, is furnished by certain cases of valvular disease of the heart, as, for example, mitral stenosis, and of such functional derangements, for example, as that in which the pulse-rate is only 35 or 40 a minute, and there are two beats of the heart to one of the pulse, which will render the transit of blood through the heart more slow. There must, in effect, be provision for a very large margin of excess beyond the minimum blood-supply required for the purposes of the tissues and organs generally. It is a noteworthy fact, too, that in acute disease, which is attended with weakness and wasting, the circulation of the blood is accelerated, as is indicated by the larger diameter of the vessels and the increased frequency of the heart's action.

I have not been able to connect differences in the circulation with any constant bodily or mental character. A marked tendency to obesity appears usually to be associated with small arteries and low tension; and the thin, wiry individual commonly has large arteries, which are conspicuous, not only from the thinness of the skin and absence of subcutaneous connective tissue, but also because, together with their size, they are markedly full between the beats. People with low arterial tension seem to wear out less quickly, and to furnish most of the examples of longevity; but they appear to have less power of resistance in acute disease. These, however, are given as mere impressions. Speaking generally, I have found physical strength, energy, and endurance impartially associated with small low tension pulse, and with large arteries and high tension, and the reverse. I can say the same of intellect, perseverance, courage, and force of character generally; they appear to be absolutely independent of circulatory conditions.

It is, indeed, clear that the circulation is not the determining influence in the production of the differences which are found to exist in respect of bodily or mental energy. The circulation is the servant and not the master; and, physiologically, it is tissue activity which conditions the blood-supply, and not the blood-supply which conditions the tissue changes. In disease, again, the modifications of the circulation which are observed are far more frequently effects than causes, and the pulse is an index not so much of a more or less rapid movement of the blood, to be taken into account as a factor in the morbid

processes, as of the state of the nervous system and of the body generally which has determined its rate and character.

It would be impossible to discuss systematically all the indications afforded by the pulse in the course of these lectures, and it would be most undesirable to attempt it. Many of them do not depend upon a comprehension of the circulatory conditions which the varieties of pulse denote, or, indeed, upon a knowledge of the circulation at all. Observant physicians before the time of Harvey could gauge thoroughly the state of the patient in fever from the pulse, and it is not for the purpose of estimating the movement of the blood that we ourselves, in a case of fever, count the beats and note their force and volume. We calculate from the data thus obtained the strength of the sufferer, and the effect upon him of the disease; and we might or might not do this more accurately than our predecessors. On the other hand, it is only through a knowledge of the conditions which govern the circulation that such facts as the connection between kidney-disease and cerebral hæmorrhage can be understood, and that the prognostic significance of the hard pulse which betrays this connection can be appreciated.

The ordinary diagnostic and prognostic indications of the pulse, then, which are learnt only by experience, and which would gain nothing by exposition in lectures, will not be considered, and I shall take up only such points with regard to the pulse as illustrate either effects of circulatory derangements or advances in our knowledge obtained by the more profound investigations of recent years.

I propose, then, to consider, first, deviations from normal frequency, and abnormalities of the rhythm, which I hope to dispose of in this lecture; next, variations of tension, their causes and consequences, and the indications for treatment which they furnish—these, with perhaps the pulse of heart-disease, will occupy the second lecture; the subject of the third will be the pulse and cerebral affections.

Frequency.—The rate of the heart's action, with which the frequency of the pulse corresponds, is governed by various influences. Resistance to the onward current of blood in the arteries, or, in other words, increase of pressure in the arterial system, whether produced by compression of large vessels, such as the femorals and brachials, or by obstruction in the arterioles and capillaries, tends to slow the action of the heart, and render the pulse less frequent, and conversely diminished resistance or lowered tension accelerates the heart and pulse-rate. But more direct and powerful than these varieties of the arterial pressure, and entirely overruling their tendency, are nervous influences, of which the channels are the pneumogastric and sympathetic nerves. It is not my intention to enter at all upon a discussion or explanation of the respective action of these nerves; this would help us very little clinically, and knowledge with regard to them has not yet reached a perfectly stable condition. The question, too, is rendered complex by the fact that nervous influences reach the arterioles and capillaries as well as the heart, and modify the outflow of blood and the arterial tension; and an effect upon the heart, apparently direct, may be brought about indirectly through variations in the degree or resistance in the circulation.

Almost all departures from a normal state of health are attended by increased frequency of the pulse, and it would serve no useful purpose to enumerate and attempt to classify the causes of pulse-frequency, while its prognostic indications are so varied and delicate that they would elude description. They are, besides, among those matters of experience which are independent of scientific investigation and are excluded under the rule which I have taken for my guidance.

There are, however, cases in which frequency of the pulse, or, rather, of the heart's action, constitutes in itself the disease, or, if not actually the disease, yet at least a source of danger and suffering. Such frequency is one form of palpitation of the heart. The fugitive attacks of hurried and violent action of the heart, induced by indigestion or emotion or over-exertion, need not occupy our attention; and I shall not do more than allude to the persistent frequency of the pulse in Graves's disease, or in hysterical conditions, or associated with aortic pulsation.

Persistent Frequency of Pulse.—Persistent frequency of pulse is one of the consequences of over-strain of the heart by exertion. It is met with in young men who have overtaxed their powers in rowing, training for races, or heavy gun-drill, and was observed on a large scale in the American war. The name "irritable heart," employed as a descriptive term, may very well be accepted. Besides the beating of the heart of which the patient is conscious, there are breathlessness on exertion, nervousness, depression of spirits and anxiety, sensations of faintness, sleeplessness, and incapacity for sustained exertion. In all the cases of this kind which I have seen, the pulse-tension has been high. The great remedy for this condition is rest, and one to three weeks in bed, however irksome and wearisome at this period of life, may be well spent in allowing the heart to settle down.

During and after middle age, persistent frequency of pulse may be induced by a single act of excessive exertion, such as running to catch a train. The effects upon the heart of such an imprudence vary; there may be dilatation of the heart, with or without insufficiency of the mitral valve, or a valve may be actually damaged, or the action of the heart may become irregular; but besides these it may become hurried without irregularity, and the frequency may persist till the strength of the patient is worn out. Here, again, the arterial tension is, according to my experience, high; spasm of the peripheral vessels contributing to the effect, so that the distension of the arteries is not simply the result of blood being driven into the arterial system in consequence of the increased frequency of the heart's contractions. No satisfactory explanation has been given of these cases, and I have none to offer. Perhaps the most plausible is that the plexus of minute nerve-ganglia and network of fibres copiously distributed beneath the endocardium may have been stretched and rendered unduly irritable.

Paroxysmal Palpitation.—It is late in life that paroxysmal palpitation, with frequency of pulse, is most commonly a cause of suffering and danger, shortening life and rendering it miserable. It may complicate heart-disease of any kind, and may possibly sometimes be one of the consequences of the disease, but it may occur independently of valvular affection or of any structural change sufficiently advanced for recognition, and it has seemed to me that when disease of the heart is present, the palpitation is often rather a complication than a consequence. The exciting cause may be indigestion and flatulence, or the mere act of taking food, lying down, emotion, apprehension of an attack at a particular hour, or under given circumstances, associated with former attacks; but, whatever this may be, the onset of the paroxysm is frequently accompanied by a sudden relaxation of the arteries, and the palpitation seems to resemble the excited action of the heart set up by nitrite of amyl or nitro-glycerine. Resistance to which it is habituated is suddenly removed, and the heart starts off like the engine of a locomotive when the wheels fail to bite the rails. In the course of a prolonged attendance upon a medical man advanced in years and long subject to gout, who suffered greatly from palpitation, this occurred more than once when my hand was on the pulse; the artery became large and soft, there was a flutter of the heart, which then bounded off. A remarkable complication occurred in this case which is worthy of being related. Early one morning the patient began to bring up bloody fluid from the lungs, and in the course of twenty-four hours expectorated several pints of it. A pink froth covered the bright red liquid to the depth of half an inch, and the whole looked very much like the boiling red-currant juice in the process of making jelly. There was no rise of temperature, the flux of blood-stained serum gradually ceased, and palpitation did not recur for several months, when, after imprudent fatigue and exposure, it returned, and ultimately wore out the patient. It should be added that there was no valvular disease, and only moderate dilatation and hypertrophy with old-standing high arterial tension.

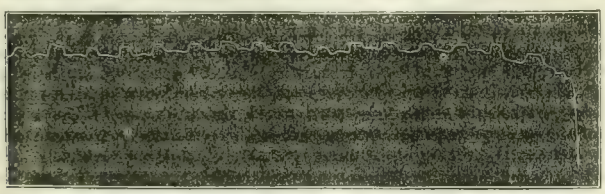
There still remains for notice the extraordinary rapid action of the heart, which can only be referred to some neurotic condition, lasting for days or weeks or months, of which numerous examples are on record. One of the most remarkable is that recently brought before the Neurological Society by Dr. Bristowe, to whom I am indebted for the following particulars. The patient, a man, was 19 years of age, and there was reason to think that the affection dated from the age of 8, the attacks of rapid action of the heart recurring from time to time. When he entered St. Thomas's Hospital, he was suffering from anasarca and pulmonary apoplexy, which had supervened in the course of an attack which had lasted some months. The pulse varied, but often numbered 200 or 240. Under the influence of iron and digitalis, the action of the heart quieted down to about the normal, but was easily excited, and during one visit to the hospital the beats were counted at the rate of 304 or 308 a minute. He had resumed work as a draper's assistant, and on Saturday, February 26th, was at work till midnight. On Sunday morning he did not seem much the worse for it, but at midday, while playing the piano, he suddenly stopped and fell down dead. The heart was somewhat enlarged and dilated, but the valves were normal, and no other disease was discovered.

For particulars of another interesting case, with *post-mortem* examination, I am indebted to Dr. Dreschfeld and Dr. R. Maguire. The patient, a labourer, aged 36, who had had syphilis and had been a heavy drinker, had suffered, when first seen in October, 1883, from attacks of palpitation for twelve months, which came on suddenly after a heavy supper, and were attended with vomiting, and usually lasted from fourteen to twenty days. The pulse-rate was found to be 215—230. No cardiac or other disease was discoverable. He improved under digitalis, the pulse falling rapidly to 96. He was again

seen in December, 1883, and March, 1884, with relapse of palpitation and a pulse of 200—215. On this last occasion, while under treatment by convallaria, he died in an attack of convulsions. The heart was large, and its structure presented degenerative changes, but nothing was found which could explain the rapid heart-action.

Several cases have come under my observation in hospital or in consultation of which the course and sequel have not been known to me. In one seen with Mr. Stanley Smith in the course of last year, the patient, a lady, aged 64, died after seventeen days' illness, during which the pulse ranged from 150 to 200, the heart being apparently worn out. In one case I saw the patient, a lady of about 45, almost daily for about three weeks. The pulse was never under 200, usually 240, and there was every reason to believe that the heart was beating at the same rate during the whole of the time. The artery was small, full between the beats, not easily compressible, and the pulsation felt more like a vibration than a beat, and gave the impression of there being little or no onward propulsion of the blood. The heart-sounds were short and equidistant, and reminded me of the puffing of a distant locomotive. There was no opportunity of examining the pulse or heart during sleep, but the sleep was broken, and the feelings attendant on the palpitation were always present. This was a second attack after an interval of some years. I saw her in the first, which lasted about five days, and left her looking old and worn. She survived the second for at least two years, since which time I have not heard of her, but with shattered health.

Another case was brought to me by Dr. Seccombe, in April, 1886. The patient, a gentleman, aged 56, was stout, and had a good colour, had lived freely in all respects, and worked hard. He had been suffering from palpitation night and day for three weeks, sleeping for two hours only, and then restless all night. The pulse was 160, and had the character described in the last case ; a trace is here shown. There



was a reduplication of the second sound of the heart, best heard near the apex. The liver and spleen were large. Three weeks later the patient still looked extremely well, and his appetite was good, but he was subject to feelings of suffocation, during which he flushed, and his eyes had an expression of distress ; these were brought on by very slight exertion, or by stooping. He refused to consider himself an invalid, and went about much as usual. He could lie in any position, but when on his left side required a pillow under the side. He usually slept till 3 A.M., and then woke up suddenly. The palpitation had never ceased ; the pulse was always 160 ; the heart was not much enlarged, the sounds equidistant, the aortic second having a ringing note at the right second space ; slight jugular pulsation was visible on the right side, and the liver was large ; crepitation was heard in both lungs posteriorly, as high as the angle of the scapula. In June, when seen again, the palpitation continued, having lasted now three months. He had been out of town, and looked as well as ever, but evidences of stasis in the circulation had made their appearance, the legs had suddenly swollen, he could not lie down, and the liver was extremely large. The pulse was still 160; the heart beats as before—equidistant. Various lines of treatment had been tried without effect, and digitalis seemed to do harm. I have not seen the patient since, but I learn from Dr. Seccombe that he continued to suffer very much until November, when improvement began, and the patient was recently said to be so much better as to wish to resume his official duties. A later account, however, describes him as having had an attack of hemiplegia.

This rapid action of the heart is, so far as I know, unexplained, except by referring it to some obscure neurotic influence. It is met with almost at all ages (Dr. Bristowe's patient appears to have been subject to it from the age of 8, and died of it at 19, and I have seen it in a child of 10) although it is more common after middle life than before ; usually there is some apparent exciting cause, such as would put stress upon the heart ; over-work and anxiety are the most common, but the predisposition, which is of more consequence, eludes us ; sooner or later sudden death is the result.

It is interesting to speculate on the condition of the circulation. Clearly it is not accelerated, and the dropsy in Dr. Bristowe's and Dr. Seccombe's cases show that the tendency is to stasis. The pulse, too, gives one the idea of vibratory alternations of pressure with little onward movement. The question then arises, What is the condition of the left ventricle ? Either it does not fill in diastole, or it fails to empty itself on systole. It may be that in some cases it is contracted, and refuses to dilate to receive blood from the auricle, and that in others it is in a state of over-distension ; but it seems to me that the former is the more probable condition. I have usually found the heart of the normal size, whereas persistent distension would sooner or later give rise to dilatation. Again, the cardiac impulse is often extremely powerful—I have seen the stethoscope lifted through a woman's stays—and this is inconsistent with over-distension.

It might be asked, again, whether the peripheral arterioles and capillaries played any part in the phenomenon ; or the pulmonary circulation? These are questions which I am unable to answer, and it is a satisfaction to me to know that the subject is engaging the attention of Dr. Bristowe.

THE LUMLEIAN LECTURES
ON
THE PATHOLOGY OF INTRA-UTERINE DEATH.

Delivered at the Royal College of Physicians of London, March, 1887.

By W. O. PRIESTLEY, M.D., F.R.C.P., LL.D.,
Consulting Physician to King's College Hospital ; and late Professor of Obstetric Medicine, King's College.

Lecture I.

The subject I have chosen for these lectures is one of great importance, not only in its general aspects, and from a statesman's point of view as influencing the law of population, but it has a special interest for the pathologist and medical practitioner. For the pathologist it is so linked and intertwined with other morbid processes, and the pathological changes observed in the embryo and its appendages are so illustrative of alterations going on elsewhere, that they become in some measure types of deviation from a normal condition in other organs, and furnish aid to further research. For the medical practitioner the question is constantly cropping up, How can intra-uterine death be obviated ? The death of a fœtus *in utero*, either in the earlier or in the later periods of utero-gestation, is often regarded by parents as an affliction little less than if the child had died in infancy, and in its results on the mind and body of the mother exposes her to certain serious dangers. The repeated abortions which unhappily occur to some women lead not only to grievous disappointment, but seriously impair the general health. Whatever Malthusian views may be held now or in the future as to the desirability of limiting offspring, either for economical reasons or for the purpose of convenience, there can be no question that, for reasons just given, the investigation of the causes of death *in utero*, with a view to their prevention, is a subject eminently worthy of careful and conscientious study.

The causes of intra-uterine death are many, and the subject covers a large extent of ground. When I first undertook to deliver these lectures, I purposed to go over the whole field of pathological inquiry relating to it, but I soon found that it would be impossible to treat the subject exhaustively, and therefore I must content myself with giving in outline a sketch of its broader dimensions, while I dwell with greater detail on those sections which have more especially excited my interest, or in which I have personally made some investigation.

Many disjointed contributions have been made in various parts of the world ; but, so far as I know, no adequate attempt has been made, in this country at least, to systematise the knowledge which has been gained ; and the work of many authors appears in separate fragments, appearing at long intervals of time, and scattered over a wide area of medical literature. In saying this, I do not undervalue the excellent summaries which are given in such modern works as Barnes's, Playfair's, Lusk's, Tarnier and Budin's, and Spiegelberg's *Systems of Midwifery*—nor the more elaborate sections on intra-uterine pathology to be found in Charpentier's *Traité d'Accouchements*, to which I am indebted for many references.

In the limited field of Placental Pathology, we have several valuable and more or less systematic treatises, among which I may mention

Simpson's, Charpentier's, Bustamente's, Verdier's, and Whittaker's; and, besides, we have the well known contributions, illustrating special diseases of the placenta, from the pens of Robin, Virchow, Hyrtl, Hegar, Rokitansky, Ercolani, and others.

It is obvious that a general treatise on Obstetric Medicine can scarcely find room for a full discussion of all that has been done in this branch of pathology; and, in reference to the special treatises or monographs on placental disease, it may be said that some of them, at least, are out of date. Like all other branches of morbid anatomy, the investigation of diseases in the placenta has made in recent years considerable progress, and opinions and views formerly held in reference to the nature of some of the alterations observed are now regarded as untenable.

Besides examining many fresh specimens, I have gone carefully over the preparations bearing on the causes of intra-uterine death in all the London museums and some of those on the Continent, and it has been an interesting study, in inspecting these preparations, to compare them with the various pathological views which have been expressed by authorities, both in this country and abroad.

I may state at the outset that the complex and intricate anatomical structure and the alterations associated with the rapid development of the contents of the gravid uterus, even in the normal state, render all investigation very difficult. When pregnancy goes its natural course, and development follows its normal progress, the changes which take place are incessant and varying. From the time at which the decidua is first formed in the interior of the uterus, to become the outermost of the fœtal membranes, to the formation of the fully-grown placenta, there is no pause or cessation in the active changes which characterise the process of growth. The cells and fibres which build up the tissues day by day undergo progressive change, and the vessels equally undergo modification in size, form, character, and in their relation to surrounding parts. The vegetative process is, indeed, so active that if any derangement occurs, either from accident or disease, the morbid change thus initiated is, or may be, impressed with the same activity, and rapid degeneration takes place, or abnormal growths are produced with surprising quickness.

It can scarcely be a matter of surprise, therefore, that pathological researches into these unstable and ever-changing structures should be beset with difficulties, and that equally conscientious and accurate observers hold different views concerning the nature of some of the pathological results hereafter to be described. The earlier the period of gestation, the greater apparently is the difficulty of pursuing investigations. Then all the tissues are so fragile and delicate that if specimens are procurable their efficient injection is well nigh impossible, and they are likely to be so contused and broken that their true condition is not easily determined. Notwithstanding all the difficulties, researches have been attempted by very competent observers at every period of pregnancy, and the accumulated results so recorded may to a certain extent be formulated, and some at least of the pathological conditions be thoroughly understood.

Many of the causes which either remotely or directly bring about intra-uterine death are very difficult to trace, and some are so subtle in their influence as to be impossible to detect. Thus the child dies *in utero* with some women in successive pregnancies, and without any clearly assignable cause. The "habit of aborting" has been spoken of, as though it were independent of disease. It is not infrequent to hear of women apparently healthy aborting or losing their children in the later months of gestation ten, twelve, or thirteen successive times. Charpentier mentions the case of a woman who had no living child until the eighteenth pregnancy, and this was born at eight months. Both parents were apparently healthy.

Some women are so prone to miscarriage at any period of gestation that the slightest imprudence seems to be enough to endanger the existence of pregnancy, and lead to a detachment of the ovum.

This is in marked contrast to other and apparently not healthier women, who will bear an extraordinary amount of violence or injury without disturbance to pregnancy. Mauriceau[1] relates the case of a woman in the seventh month of pregnancy, who fell from the window of a house, and broke her arm, dislocated her wrist, and, besides, received extensive bruises in various parts of her body, without bringing on labour. Dr. Henry Davies saw a pregnant woman, who, in throwing water out of a window, lost her balance, and fell into the street, breaking both thighs, but she recovered without aborting. Dupuytren has put on record the case of a woman who had severe traumatic tetanus during pregnancy, and who nevertheless went to her full time. M. Brillaud Laujardière relates the case of a peasant who took his wife, while pregnant, behind him on horseback, and started off at full gallop, with the object of bringing on abortion. After shaking her thoroughly in this way, he dropped her suddenly on the ground without stopping. This treatment he repeated twice without success.[2] I have on more than one occasion failed to bring on abortion when extreme peril to a woman called for this interference, by passing the sound deep into the uterine cavity, and stirring up its contents; and one case is on record in which an intra-uterine pessary was unwittingly introduced into the womb of a pregnant woman, and was worn for some time without provoking abortion.

The frequency of embryonic death in the earlier stages of gestation is approximately shown by the tables of Whitehead.[3] These were taken from the records of the Manchester Lying-in Hospital, and give an estimate so far as it relates to women of the poorer classes. Whitehead interrogated 2,000 pregnant women, whose average age was a fraction below 30 years, and he found the sum of their pregnancies had been 8,681, or 4.34 for each; of which about one in seven had terminated abortively. Seven hundred and forty-seven women had aborted once at least, some oftener; their average age was 32.08 years; the number of their pregnancies was 4,775; that of their abortions 1,222, or 1.63 for each person.

These figures, however, do not accurately represent the frequency of abortion throughout the whole child-bearing period, and a considerable proportion of the women were pregnant for the first time. In any case, they only afford a calculation of the average number of abortions in the first half of the reproductive period; and inasmuch as abortion is alleged to be more frequent in the latter half of the child-bearing period, it is probably much below the average of the whole. This is rendered the more probable by some further statistics of Dr. Whitehead, which he nevertheless admits are too limited to warrant a general conclusion. Of sixty-four women who were living in wedlock until after the final menstrual crisis, only eight had escaped having an unsuccessful pregnancy, the percentage of those who had aborted being eighty-seven.

Hegar[4] reckons that there is about one abortion to every eight or ten full-time deliveries.

Quite recently I attempted to draw up some tables on the basis of 1,000 cases concerning which I possessed notes of private patients. It seemed to me that as Whitehead's figures were taken exclusively from the poorer classes in a manufacturing town where, according to his account, they were exposed to many privations, and to causes which deteriorate general health, there might be some difference as to the proclivity of abortion in the well-to-do classes. Unfortunately I found that, so far as many of the cases were concerned, the accounts of miscarriage were so untrustworthy or so indistinct as to be valueless. A large number of women had expressed themselves as having had "many" or "several" abortions, and some had persuaded themselves that miscarriage had occurred when there was no satisfactory evidence that pregnancy had occurred at all. I took therefore the figures representing 400 patients in whom the evidence was distinct and unequivocal. All the women had reached at least their 40th year, and hence the history included for most of them the whole of the childbearing period of life.

The results were as follows: 400 women had been pregnant 2,325 times. Of these, pregnancy had resulted in living children 1,783 times, and there had been 542 abortions. The proportion of abortions to children was therefore 30.40 per cent., or about 1 in 3, while the proportion of abortions to pregnancies was 23.32, or about 1 in 4. The number of women who had borne children but had never suffered abortion was 152 in the 400, or 38 per cent., while the number of women who had borne no living child and only had abortions was 27, or 6.75 per cent. The sum of the pregnancies in 400 women being therefore 2,325, or 5.81 for each, and the sum of the abortions being 524, it was 1.35 for each.

It will be seen that the proportion of abortions to full-time pregnancies is considerably higher than Hegar's computation. The proportion approximates more closely to Dr. Whitehead's figures; but there is a larger average of abortions, as the calculation embraces a longer portion of the reproductive period; and there is another notable difference, which may, perhaps, be put down to easier circumstances and exemption from bodily toil, namely, that if a comparison is made with Dr. Whitehead's limited data, concerning those women who had passed the menstrual epoch, it will be remarked that while among the poor of the manufacturing town as many as 87 per cent. had incurred abortion, only 62 per cent. of the women in better circumstances had suffered in this way.

Granville, in his work on *Abortion*, states that, of 400 women, 128 of them had miscarried, and among them there had been 305 abor-

[1] See Tyler Smith, *Manual of Obstet.*, 1858.

[2] See T. Gallard, *De l'avortement, etc., au point de vue méd.-légal.*

[3] *Abortion and Sterility*, 1847.

[4] *Monat. für Geburt.*, Band xxi, Sup.

tions. Bland[5] computed that, out of 515 mothers, 147 of them had miscarried. Dr. Tyler Smith, writing on this subject in 1858, remarks that, as, according to the last census, the married female population in England and Wales between the ages of 15 and 55 amounted to 2,553,894, the loss of fœtal life based on Dr. Whitehead's or any other calculation must be enormous.

TABLE I.—*Analysis of number of Women who had and had not Aborted.*

	Women below 30 years of age (Whitehead).		Women over 40 years of age (Priestley).	
	Number.	Percentage of Whole.	Number.	Percentage of Whole.
Women who had not aborted	1,253	62.65	152	38.00
Women who had aborted	747	37.35	248	62.00
Total number of women under observation.....	2,000	100.00	400	100.00
Women who only aborted—that is, who had borne no living child..	—	—	27	6.75

Table I illustrates the point that whereas among the younger women the proportion who aborted was about 1 in 3—that is, one aborted to two who did not—among the older women the proportion was almost exactly reversed, and two aborted to one who did not.

TABLE II.—*Analysis of Pregnancies in reference to Abortions and to Fecundity.*

	2,000 Women below 30 years of age (Whitehead).			400 Women over 40 years of age (Priestley).		
	Number.	Percentage of whole.	Number per Woman.	Number.	Percentage of whole.	Number per Woman.
Children	7,459	85.92	3.73	1,783	76.68	4.46
Abortions	1,222	14.08	0.61	542	23.32	1.35
Total Pregnancies	8,681	100.00	4.34	2,325	100.00	5.81

Table II shows that the older period is more productive of pregnancies than the younger in the proportion of 5.81 to 4.34 (or 4 to 3); but that the percentage of them terminating in abortions is also much greater in the older period than in the younger (23.32 against 14.08). Table III illustrates the last point in another manner.

TABLE III.—*Ratios of Abortions to Pregnancies and Children.*

	(Whitehead.)		(Priestley.)	
	Percentage	Being about 1 in	Percentage	Being about 1 in
Ratio of abortions to pregnancies	14.08	7	23.32	4⅓
Ratio of abortions to children....	16.39	6	30.40	3⅓

As to the particular pregnancies in which abortion most frequently takes place, considerable difference of opinion exists. Dr. Tyler Smith regarded the danger as greater in first pregnancies, particularly among the upper classes, and in those later pregnancies which occur before the cessation of the menses. Whitehead believed that the third and fourth and subsequent pregnancies, and in one or two of the last near the termination of the fruitful period, are most commonly unsuccessful. Schroeder[9] says that there are 23 multiparæ who abort to 3 primiparæ. I am bound to say that I do not think these computations at all satisfactory or conclusive, inasmuch as various elements are not considered which become important factors in making the calculation. Age has a marked influence on the continuance of pregnancy, be it the first or latest gestation, and the social circumstances in which the woman finds her place in life are not without effect on her successful child-bearing. Thus, women of the better classes incur much more risk of aborting in their first pregnancies than their poorer sisters, from the prevailing fashion of taking long journeys immediately after marriage. If conception begins then, it is very likely to break down, as the result of the shaking and fatigue incurred, combined with the irritation often set up in the reproductive organs, as the result of the new conditions of life.

The preceding remarks refer more particularly to abortion in the earlier periods of pregnancy.

Concerning the amount and frequency of fœtal mortality *in utero* in the later periods of gestation, no very large amount of information is accessible. There are abundant statistics by Collins, MacClintock, Sir James Simpson and others, concerning the number of still-born children resulting from tedious, difficult, and complicated delivery, and with these are included a certain number of children who died antecedent to the supervention of labour. But taking these two together it is obvious that the sum of both forms only a small proportion of the absolute mortality which occurs in the later periods of gestation. Of 16,654 children born in the Dublin Lying-in Hospital, and recorded by Collins,[7] 1,121 were still-born. Of these still-born children, 801 were either premature or, if at the full time, were putrid, and their deaths were therefore not due to injuries during delivery, or what may be called traumatic causes.

The relative period of utero-gestation in which intra-uterine death most frequently takes place has been variously stated, and for certain reasons cannot be very precisely determined. It is probably very frequent in the form of abortion during the early weeks of pregnancy, and then it may produce so little disturbance in a woman's health as to be scarcely noticed. Among the poor this is certainly the case, and consequently an estimate of its frequency among them is practically impossible. Madame la Chapelle[8] regarded it as most frequent in the sixth month of utero-gestation. Cazeau[9] believes abortion to be most frequent in the two or three first months, and Depaul[10] states its greatest frequency to be between two and a half and three and a half months. Jacquemier,[11] on the other hand, declares abortion is not less frequent in the sixth month than in the first half of pregnancy. Whitehead's figures show that of 602 cases of abortion, 275 occurred between two and a half and three and a half months, and 147 between three and a half to four and a half months. (See Table.)

TABLE IV.—*Showing the Period of Pregnancy at which Abortion occurred in 602 cases, the Relative Number of Still-born and Living Children, and the Number living at the end of a Month after Birth (Whitehead).*

Period of Pregnancy at which Abortion occurred.	Number of Births at each Period.	Number still-born.	Number living at Birth.	Number living at the end of a Month after Birth.
2 months ..	35	—	—	—
3 ,, ..	275	—	—	—
4 ,, ..	147	—	—	—
5 ,, ..	30	—	—	—
6 ,, ..	32	24	8	—
7 ,, ..	55	38	17	3
8 ,, ..	28	23	5	1
Total ..	602	85	30	4

The stage at which development has arrived, about three to three and a half months, points to a period when, *pro tanto*, abortion may be supposed the more readily to be brought about, and so coincides with Whitehead's statistics just quoted. Then the villi of the chorion have become more concentrated on the decidua serotina, and the young placenta is in progress of formation. There is great increased vascular activity in all the tissues, and yet a certain instability, for the vascular loops projected from the maternal circulation are beginning to surround the fœtal villi in a delicate sort of network, and the spaces which intervene between the membranes, so obvious in the earliest weeks, are not yet obliterated. Besides, the union between the membranes and the uterine walls is less stable than later on, and so separation more readily occurs. Hence a greater liability to blood extravasations not only into the layers of the decidua, but also between the several membranes, and more especially between the decidua reflexa and the chorion. From the twelfth to the sixteenth week the phenomenon of "quickening" occurs, and if anything hinders or prevents the ascent of the uterus into the abdomen, abortion is precipitated. Morgagni and Desormeaux[12] are of opinion that abortion is

[5] *Calculations, etc.* 1781.

[9] *Lehrbuch der Geburt.*

[7] *Practical Treatise on Midwifery*, 1835.
[8] *Pratique des Accouch.*
[9] *Traité des Accouch.*
[10] *Leçons de Clinique Obstét.*
[11] Art. "Avortement," *Dict. Encycl.*
[12] *Vide* Charpentier

more frequent with female than with male embryos, but give no statistics, and Cazeau's reason for thinking this may be true is scarcely a sound one, namely, because at term there are 16 boys born to every 15 girls.

Some of the indirect causes which lead to intra-uterine death may be regarded as general rather than specific in their effect. In the case of domestic animals we find abortion, which is not infrequent among them, attributed to a series of indefinite causes, as bad and wet seasons, insufficient and unsuitable food, etc.; and in women, apart from injuries and specific diseases, abortion and death of the fœtus during pregnancy are by most authors regarded as brought about by influences which impair the general health and lower vitality, as well as by mental and emotional causes, which are necessarily more potent in the human subject than in the lower animals.

An inquiry into all the circumstances which conduce to, or more directly produce intra-uterine death, extends, therefore, over a wide range of subjects, and embraces a variety of pathological considerations. Not only does it involve a minute inquiry into the several morbid constitutional states in the woman, which may tend to destroy the offspring, but it involves also an inquiry into various deviations of health which may produce a like result on the side of the male parent. It includes various morbid changes which take place in the uterus and its appendages, in the fœtal membranes and placenta, and, lastly, in the embryo itself. Various classifications of the causes of intra-uterine death have been made by Spiegelberg, Leopold, Barnes, and others.

I do not propose to follow closely any of these classifications, but shall take first the causes acting through the male parent; then those which act through the intervention of the mother; and, lastly, those which more particularly belong to the fœtus itself, although possibly remotely related to both parents.

1. *Causes of Intra-uterine Death referable to the Father.*—Authorities concur in stating that the death of the embryo, after conception, is due, in some cases at least, to defects in the male parent. The fault is, as it were, *ab initio*. Conception takes place, but it is vitiated from the beginning by some alteration in the fecunding fluid. The male parent may be too young or too old to impart the necessary potency to the spermatic fluid, and so the product of conception breaks down and drops like untimely fruit, because it does not possess the necessary amount of vitality to prolong its development. The same thing is seen in plants as in animals. The pollen-cells are sometimes imperfectly developed, as the result of an unhealthy state of the plant; or the pollen may be injured or spoilt, before or during the time it is applied to the pistil, and the result is an imperfectly formed seed or fruit, which never reaches maturity. This is particularly noticeable in dioecious plants, and in these experiments can readily be verified. In birds' eggs, again, it is often observed that they cannot be hatched, although no imperfection can be discovered in them. The fault here is probably to be sought in the imperfect impregnation by the male. It seems probable also that some of the forms of monstrosity are due to faulty conditions in the male parent, and these, in a large proportion of cases, lead to abortion or premature fœtal death. Debauchery, various diseases and injuries from which men suffer, may so deteriorate the constitution as to impair the procreating power, and so cause abortion in the woman.

Devilliers [13] points out that procreating power is essentially distinct from that of development; and hence, that a man may possess the power to fertilise, but his whole strength may be expended in this act, and may not extend beyond, so that there is no further development. He further states that the faculty of development is relative. Thus a weak man may impregnate a robust woman, and, by so much as she has strength to impart, the vitality of the germ may be carried on entirely under the influence of the woman. Instances are recorded of women who have aborted in every pregnancy by a first husband, and by a second have gone to the full time. I know of one case where a man, the subject of slight albuminuria, married a young woman apparently in perfect health. They had one child, delicate and fragile, within a year, and the wife aborted successively in three subsequent pregnancies—the husband growing weaker year by year, and eventually dying of uræmia. Since then, I have inquired of several authorities on renal affections, whether they had remarked a special proclivity to abortion in the wives of men who were the subjects of albuminuria, or saccharine diabetes. I have not been able to procure any precise information on the point; but the general outcome of opinion is that, during the progress of these maladies, the vital powers become so exhausted, that sexual power and desire fall into abeyance; and that it is only during the slighter forms of disease that they are likely to continue. My friend, Dr. Frank, of Cannes, has related to me the case of a diabetic man married to a healthy young woman. Their first child was born alive, the diabetic tendency being slight. After this the wife had a series of abortions, generally in the fourth or fifth month, the diabetic condition in the husband having become more confirmed. Singularly enough, the wife herself eventually died after her husband of albuminuria.

In the *Archiv. Gén. de Méd.*, 1860, is a curious paper by Constantin Paul, in which he shows that lead-poisoning, or saturnine intoxication as it is called, not only injuriously affects the child *in utero* when the mother is the subject of it, but indirectly also when the father is affected. In this way it may lead to the death of the fœtus *in utero*, and produce abortion or premature expulsion. In many cases, also, where the child is born alive, the poison may so lower its vitality that it does not long survive its birth. Thus, of 7 women whose husbands suffered from lead-poisoning, there were 39 pregnancies. Out of these there were 11 abortions and 1 dead-born child, and of 27 children born alive 18 died in early infancy, while only 9 survived.

Syphilis.—Perhaps the most potent of all poisons in producing intra-uterine death, at all stages of pregnancy, is the poison of syphilis, and this whether the disease exists in the male or in the female parent. I shall have to speak more fully afterwards of its effects when the woman is the subject of syphilis. Here I propose to say a few words only on its influence on conception in the male. It is readily understood that if a man be affected with syphilis he may communicate the disease directly to a woman *in coitu*, and the usual result will be a local affection, followed by constitutional symptoms, and a general poisoning of all the fountains of life—so much so, indeed, that the fecundated germ, as part of the material system, is blighted from the first. But it is, perhaps, not so readily understood that when a woman has shown no indication of syphilis in her own person she may become impregnated by a spermatic fluid, which carries with it so potent a syphilitic virus that, in its development, it sooner or later kills the product of conception, and this, in its turn, so poisons the maternal blood that the woman eventually becomes tainted with constitutional syphilis. Charpentier, in his *Traité d'Accouchements*, gives a good illustration of this indirect influence of syphilis in the male on conception, and it is but typical of facts accumulated by other observers.

A student of medicine who had contracted syphilis married two years after, being apparently cured, and showing no indication of the affection. His first child was syphilitic, and four other unsuccessful pregnancies followed, the wife, in the mean time, being in good health, and showing no sign of syphilis. Nearly seven years now elapsed without pregnancy, both parents having been carefully treated for syphilis in the interval, when a healthy and vigorous child was born for the first time.

The idea that syphilis could be transmitted directly from the father to the fœtus without visibly affecting the mother, was long doubted and combatted, but it has been sustained in later days by Trousseau, Depaul, Vidal, Ricord, and by Diday, whose treatise on Syphilis has been translated for the Sydenham Society. In our own country, Professor Harvey [14] and Mr. Jonathan Hutchinson also have adduced very cogent evidence in proof that the mother may be infected by syphilis through the medium of the fœtus, and there is every reason to believe that, in many instances where syphilis is, so to speak, latent in the husband, it is not communicated to the wife unless she becomes pregnant by him; in other words, that coitus without conception does not impart the venereal taint to the woman.

It has occurred to me on more than one occasion to treat cases of pregnancy in which there was a strong presumption that the male parent not only begot a syphilitic child, but that the child in its turn infected the mother. For instance, a young man having suffered from both primary and secondary syphilis two years before, and being apparently cured, as all external signs of venereal disease had disappeared, married a healthy wife about his own age. The wife soon became pregnant, and seemed to go on well until the fourth month of gestation, when, about the time of quickening, she began to have great irritation of the vulva, and mucous tubercles made their appearance all over the vulva and round the anus. The throat became affected about the same time, and syphilitic psoriasis made its appearance on the face and chest. Pregnancy went on to the end of the seventh month, when the woman was delivered of a dead child, putrid, and of a placenta infiltrated with nodules of whitish deposit. The mother distinctly stated that she had no sore in the earlier part of her pregnancy, and there was no indication of her being the subject of syphilis until nearly halfway in her gestation.

As remarked by Lancereau,[15] the difficulty in this class of cases is

[13] *Dict. Méd. et Chir. Pract., etc.* (Jaccoud), art. Avort.

[14] Vide *On the Fœtus in Utero*, by Alex. Harvey, M.D., 1886.

[15] *On Syphilis*, trans. by Sydenham Society, 1868.

to determine when the contamination took place. The father may have had some sore hidden in the urethra and not detected, and the mother may have had some primary lesion which had passed unperceived. In further proof, however, of what has been stated, and of the persistence of syphilis when apparently cured, Vidal[16] refers to three physicians who, believing themselves cured of syphilitic affections, married. The children, the issue of these marriages, presented, a few days after birth, evident traces of syphilitic affection, their mothers never having manifested any suspicious lesion. Lancereau remarks that "this collection of facts furnished by men well informed, and placed in conditions of observation often very different from each other, cannot leave any doubt as to the exclusive action of the father in the inheritance of syphilis."

Baerensprung, the latest authoritative writer on this subject, in his work *Die Hereditäre Syphilis*, cites forty cases occurring in his own experience of hereditary transmission by the father, and although infection in all his cases did not lead to the death of the fœtus *in utero*, yet they afford evidence of the point under discussion, namely, the infection of the ovum directly by the male parent. Diday quotes several instances where syphilis was thus transmitted by fathers; and Baerensprung gives fourteen cases in which the father was exempt from any manifestation of syphilis—it was, so to speak, latent—and yet both the mother and child were infected by him. Baerensprung further concludes, from numerous observations made by him, that syphilis in the father is transmissible during the primary and secondary periods only, not in the tertiary period, or, if so, in a much slighter degree.

2. *On the Part of the Mother.*—Before speaking of the specific diseases and local pathological causes which may produce intra-uterine death on the part of the mother, it may be well to glance at the general conditions which conduce to this end. The same general causes which influence sterility, and which have been indicated by Dr. Matthews Duncan,[17] are concerned in a greater or less degree in the production of abortion and premature death of the fœtus. Thus constitutional conditions, external agencies which depress the general health, unhealthy habits and occupations, extremes of heat and cold, climate, locality, underfeeding and overfeeding, prematurity or old age; in fact, anything in the mother which tends to deteriorate strength and vigour, must be counted as productive of embryonic death. Some of these influences, as we have seen, are indefinite in their effects, equally in the human subject as in the lower animals. Others are more specific and better defined. Thus, as wild animals in confinement are apt to bring forth abortions, so deviations from normal modes of living, in an insidious way, mar the reproductive faculty in women. Unnatural ways of dressing, particularly tight lacing and the like, late hours, absence of healthy exercise in the open air, confinement in close rooms, all tell in the long run in producing deterioration of the individual; and just as the unhealthy tree will produce monstrous leaves or flowers, or shrivelled or seedless fruit, so we have the analogues in abortions, dead fœtuses, sickly children and monstrous products of women. The change from a temperate to a hot, relaxing climate, I have noticed, predisposes women not only to over-profuse and frequent menstruation, but also to abortion. English women going to reside in India are prone to abort. This may in part be due to the luxurious habits of life and the relinquishing of healthy exercise so often superadded to the hot climate. These especially produce sluggishness in the portal circulation and congestion of all the pelvic blood vessels.

So far as I know we have no data by way of enabling us to determine the relative effect of over- or under-feeding on intra-uterine life. That both have an effect is undoubted. We have the analogy shown in the vegetable kingdom, where starved trees and plants produce abortive fruit and seeds. On the other hand, over-manuring or over-nourishment of plants leads to a great growth of tissue, but it conduces to sterility or imperfectly developed fruits. In the poorer class of patients, reported upon by Dr. Whitehead, as we have seen, 87 per cent. had suffered abortion, but in the more affluent class from which I have taken my figures, 62 per cent. only had aborted. But these figures do not throw much light on the effects of over- or under-feeding, as happily it by no means follows that the majority of women who can afford it feed to repletion; nor, on the other hand, are women who become hospital patients, as a rule, so imperfectly fed as seriously to interfere with the processes of nutrition and reproduction. I hold a strong conviction, nevertheless, that over-feeding is more pernicious in its effects on the product of conception than under-feeding. The indulgence in larger quantities of food and stimulating drinks certainly tends to produce sterility, and in like manner it imperils the safety of the germ, when once fertilisation has been effected. Besides overloading all the tissues with more material than they can assimilate, and in this way disturbing every function, it more especially disturbs the portal circulation, leads to a congested condition of all the pelvic viscera, and thus favours blood-extravasations into the fœtal envelopes, or provokes abnormal uterine conditions. Among authors who have noticed this kind of influence I may mention that Stolz[18] has observed that fat women are often sterile, and if they conceive they are apt to abort. He believes this depends on nutrition taking an abnormal direction, and the nutritive fluids destined for the nutrition of the embryo are thus insufficient for its development.

I have notes of the effects of anæmia, of prematurity and advanced age, of high altitudes, of inter-breeding, of plural births, of too frequent or too rapidly succeeding pregnancies, and of temperament, as influencing pregnancy adversely; but I must not dwell upon these in detail. Anæmia in the mother is a well-recognised cause of fœtal death, and large and sudden losses of blood from the maternal circulation may also cause death of the child *in utero*. Convulsions are said to have been produced in the child before its death, when the mother has suffered from much depletion, and syncope in the pregnant woman, long continued, will so suspend the utero-placental circulation as to kill the unborn child.

Of the effect of age in the mother, it may be enough to say that old age is not favourable to the continuance of pregnancy. An old bitch, as Dr. Duncan has told us, often ends her career by producing a dead or premature puppy, and it is a prevalent opinion that the last born of women may either be an abortion or an idiot. It is certainly a fact that the children born of the later pregnancies in women are often not so well developed physically nor mentally, nor so well endowed, as the earlier children; and this disparity is the more marked if in the meantime the mother's health has deteriorated, from disease or vicious habits, such as drinking, etc. It is a noticeable feature in the cases occurring in my own practice which I have analysed, that abortion frequently ends the reproductive faculty in wives; but whether this fact means that the function of the generative apparatus is exhausted *per se*, or that the general powers of the constitution have been so expended on previous child-bearing, or from some other cause, as to preclude the growth and nourishment of further offspring, is not clear. Jacquemier asserts that it is not uncommon to see women abort with the greater facility the nearer they approach to the age when aptitude for fecundation ceases. Depaul[19] does not admit this, but Dr. Duncan's remark on the influence of age on sterility has a direct bearing on this point. Dr. Duncan says: "I know of no cause of sterility or its allies—excessive production, pluriparity, abortion, etc.—that can be compared with age in extent and power."

Broadly, then, general causes contradistinguished from the specific, resolve themselves into any adverse influences which enfeeble and depress the general health of the individual parents, and so impair the procreative power. There seems to be a rule, to which, however, there may be exceptions, that a certain measure of vitality meted out to the individual may be sufficient to maintain and prolong individual life indefinitely, but there must be a superfluity of this vitality to ensure the successful procreation of healthy offspring. In many cases where the death of the embryo arises from obscure or apparently inscrutable causes, there is no doubt that some inherent weakness exists in the body of the parents, which, while it permits conception, affords so small an amount of initial vitality to the germ, that it dies down, out of mere feebleness, and the death of the embryo thus only antedates, as it were, the death of the feeble children in infancy who have just survived long enough to be expelled living from the interior of the womb.

Some writers, as Madame Boivin[20] and Madame Lachapelle,[21] have spoken of epidemics of abortion; but these, when inquired into, have been found to be associated with famines, sieges, and the like. Nägele and Hoffman[22] have made some observations on the subject, and during the siege of Paris in 1870-71 abortion was noticed as particularly frequent. "The children born at that time are said to be one and all of a very weak constitution, and are still called '*enfants du siège*'."[23] Here emotional causes and constant dread of "the Prussians" were no doubt important factors in bringing about the results mentioned; but the utter weakness and want of food suffered by large classes of people must also have told in a marked degree. When epidemics of abortion have been studied in domestic animals, they

[16] *Traité des Maladies Vénériennes.*
[17] *Lectures on Sterility*, 1884.
[18] *Des Accouchements.*
[19] *Leçons de Clinique Obstét.*
[20] *De l'Art des Accouchements.*
[21] *Pratique des Accouchements.*
[22] *Vide* Charpentier, *Traité Pratique des Accouchements.*
[23] *Pall Mall Gazette*, April 3rd, 1884.

have probably been due to some epidemic disease or plague making havoc among them, of which abortion was the secondary effect; or to the presence of ergot either in the grain or on the grasses upon which they had been fed.

Professor Nocard, of the Veterinary School of Alfort, speaks of an epidemic of abortion among cows which is essentially propagated by infection. He says: "L'avortement épizootique semble bien être une maladie microbienne du fœtus et de ses enveloppes, maladie à laquelle la mère reste absolument étrangère.[24]

Principal Veterinary Surgeon Fleming points out that Franck, of Munich, originally demonstrated that epidemics of abortion in cows depended on the presence of microbes, and he shows that there is abundant evidence of this fact published by observers both in France and Germany.[25]

Some recent authorities seem to doubt whether ergot in grasses is so frequently a cause of abortion in cows as was supposed. Mr. Harker,[26] of the Agricultural College, Cirencester, is among these; and the experiments of Dr. Wright, referred to by Christison, seemed to indicate that ergot had no power of inducing abortion in the lower animals. Nevertheless there is some curious evidence in favour of ergot in grasses producing abortion in cows in *Land and Water* for 1884; and it is elsewhere stated that abortion among cattle in New Zealand was comparatively rare until the introduction of rye-grass, and its becoming affected with ergot, when it caused great losses to the farmers (Fleming).

I have now to speak of the

Direct and Specific Causes in the Mother.—Some acute diseases of a specific kind in the mother have a very marked and direct influence in destroying fœtal life. This is especially observed in reference to forms of illness which are attended with pyrexia and increase of temperature, and the danger to the child *in utero* bears a strict relation to the height of the temperature and the amount of systemic disturbance. It may indeed be asserted that, *cæteris paribus*, in proportion to the gravity of the maternal affection so is the danger to her progeny. It is well known how serious is the complication of some febrile affections with the puerperal state, and it seems almost to be the rule that if a pregnant woman is attacked by any of the exanthemata, or in fact by any disease which is attended by pyrexia, and the attack assumes a severe form, death of the fœtus is brought about, and is followed by its ultimate expulsion.

Take, for example, small-pox. Serres, quoted by Charpentier, states that in twenty-seven cases which he records, there were twenty-three abortions with twenty-two maternal deaths. This is a sufficient indication of the serious complication small-pox is, when combined with pregnancy. Cazeau[27] asserts that there is a great difference in reference to the effects of small-pox both on the pregnancy and on the life of the mother, according as the affection is discrete or "confluent" in its character. When "confluent" small-pox attacks a pregnant woman, it acquires by the fact of pregnancy existing a particular gravity, and abortion is the rule, followed by the death of the mother. Abortion is stated to be most frequent at the suppurating stage, but it may be at any period in the progress of the affection, and in the later periods of pregnancy the child is sometimes expelled living and sometimes dead. Dr. Barnes, who published some cases of pregnancy complicated with small-pox in 1868,[28] lays down the proposition that Nature hardly tolerates the concurrent progress of an active disease with pregnancy, and that abortion in these cases may in some sort be regarded as a conservative process. In the three cases he records the children were born alive, and he concludes that the morbid poison of a zymotic disease, aggravated by further blood-poisoning resulting from arrested or disordered secretory function, sets up uterine contraction and so expels the fœtus without interfering with its vitality. When the child dies a variety of causes have been assigned for its death, the state of the maternal blood, the infection of the child by the mother, and the increase of the maternal temperature acting injuriously on her child. The fœtus once dead, it becomes *ipso facto* a foreign body, and must be expelled.

It has been observed that uterine hæmorrhage is frequent at all stages of pregnancy during the progress of small-pox. This hæmorrhage, according to Spiegelberg and Hervieux,[29] is due to hæmorrhagic endometritis, which separates the membranes from the uterus, and in the earlier months leads to abortion, or later to premature labour.

When the child dies in the later months as the result of small-pox, Brouardel[30] regards the death as due to alterations in the maternal blood, which becomes charged with an increased quantity of carbonic acid, and both asphyxiates the child, and brings on premature uterine contraction. Spiegelberg and Charpentier regard the death of the child as due to the increase of maternal temperature incident to the disease, and consider that hæmorrhage, when present, although it may favour uterine expulsion, yet plays only a secondary part in producing fœtal death. It seems established that during the suppurating stage of small-pox the temperature is the highest, and then expulsion from the uterus most frequently takes place. Children thus expelled, if born alive, have been observed to die soon after from convulsions. Whether this is due to the disease having been conveyed by the mother to the child can only be surmised. Be this as it may, the mother can no doubt communicate the disease to the infant *in utero*, for children have been born covered with small-pox pustules, generally less advanced than those of the mother. In some cases, however, the mother and child have taken the disease simultaneously and the pustules have shown the same stage of development in each. Scarlatina, measles, erysipelas, diphtheria, typhoid fever, and its congeners, come within the same category as small-pox; each and all are inimical to pregnancy.

Pneumonia.—Of the non-specific forms of disease attended by fever, I may instance pneumonia, which has always a special gravity when complicated by pregnancy. If severe, it almost invariably leads to emptying of the uterus, and then it depends, to some extent at least, upon the date of the pregnancy and the rapidity of its expulsion as to whether the child is born alive. I have on more than one occasion seen abortion produced in the earlier months as the result of a sharp attack of pneumonia or pleuro-pneumonia; and I particularly recollect one case I attended with my friend Dr. Guéneau de Mussy, where, during an attack of pneumonia, a fœtus was expelled at the fourth month, of a deep red colour, and the placenta was retained. The complication thus arising was a very serious one, as with the activity of change going on in the body of the patient the retained placenta showed signs of very rapid decomposition going on, and consequent contamination of the maternal blood. The placenta was at length removed, but with great difficulty, on account of the rigid contraction of the uterus, and from that moment there was an amelioration of all the symptoms, and the patient eventually recovered.

The causes of the expulsion and death of the fœtus during pneumonia are said by Churchill,[31] Cazeau, and others, to be the violence of the cough and other attendant symptoms. Grisolle[32] considers that the importance of the organs affected, the suddenness of the attack, the intensity of the fever, and the number of sympathetic phenomena, disturb all the bodily functions, and are sufficient to account for the interruption to pregnancy.

Ricau[33] and Chatelain[34] state that the hindrance to respiration accumulates carbonic acid in the blood, which thus becomes inimical to fœtal life, and induces uterine contraction. Ricau, who wrote an interesting thesis on this subject in 1874, collected forty-three cases of pregnancy complicated with pneumonia, and in these the fœtus was expelled prematurely in twenty-one cases, or nearly half, eleven of the children being not viable.

Pleurisy may also, if severe, imperil pregnancy in the same way. The feverish state which follows surgical operations frequently leads to abortion and premature labour, if the constitutional state of the mother is seriously disturbed, and this apparently apart from the reflex effect of such minor operations as, for instance, tooth-extraction, which has been followed by abortion. I have repeatedly noticed, after surgical operations on pregnant women, that as soon as there were distinct evidences of the patient going wrong from septic poisoning, uterine disturbance has set in, and if the symptoms increase hæmorrhage begins, which is followed by the expulsion of the embryo. In other cases the emptying of the uterus has been almost the last act of vitality before the death of the patient. Thus, in the case of a woman who, being five months pregnant, had submitted to colotomy for obstruction of the bowels, irritative fever set in after the operation, and she eventually died of blood-poisoning. A few hours before death, the uterus was emptied by a sudden expulsive effort, the child being extruded enveloped in the membranes and placenta entire. There was scarcely any flooding, and the uterus contracted firmly afterwards. It seemed, so to speak, that Nature, finding life was surely departing from the mother, made an effort to save her offspring, the last and final act of her being. Since the child was too premature to be viable, the effort was unavailing.

[24] See *Times*, October 18th, 1886.
[25] *Vide* Fleming, *Veterinary Obstetrics*.
[26] See *Times*, October, 1886.
[27] *Traité des Accouchements*.
[28] *Obstet. Trans.*
[29] *Gaz. des Hôpit.*, 1864.
[30] *Vide* Charpentier.
[31] *Vide* [illegible].
[32] *Traité de Pathol. Intern.*
[33] *Thèse*, 1884.
[34] *Vide* Charpentier.

The study of the way in which acute diseases, attended with elevated temperature, bring about intra-uterine death and expulsion of the embryo is very interesting.

In 1833, Hohl[35] found that the temperature of the mother not only influenced the child, but he found also that it increased the pulse of the fœtus, and a diminution of heat made the fœtal pulse slower. Huter[36] made similar observations in 1861. In six cases he noted a marked increase of the fœtal pulsations corresponding to increased frequency of the maternal pulse. Fiedler,[37] in 1862, watched two cases of typhus with pregnancy, and he found the pulse of the fœtus was increased in frequency like the mother's pulse, and it showed similar morning remissions and evening exacerbations. In the charts he made, he found the fever-curve of the mother's pulse parallel with the frequency of the fœtal heart. Kaminsky,[38] during an epidemic of typhus and recurring fever in Russia, in 1866, saw 87 cases with pregnancy; 55 were in the first half of gestation, 32 in the second half. As soon as the temperature of a pregnant woman reached 40° C. (104° F.), he observed the child to become disturbed. (1) There was increased activity of its heart, parallel with the increased temperature of the mother. (2) Increased restless movements of the child, the higher the maternal temperature. These signs were marked until the temperature reached 42.5° C. (108° F.), when the movements ceased, and he inferred the child was dead. Danger began at 40° C., and increased with each advance of temperature. The more intense the feverish state of the mother, the surer was the death of the child. The child so killed was not necessarily thrown off immediately, but might be retained for some time. In only two cases in the latter half of pregnancy was uterine hæmorrhage observed, while it was much more frequent in the first half. Similar observations were made by Winckel,[39] in 1869; and Löhlein, in a grave case of erysipelas, counted the child's heart-beats at 200 in the minute.

These observations suggested to Runge the idea of making some experiments on the effects of high temperature on the gestation of lower animals, and in the *Archiv. für Gynäkol.* for 1877 his results are published. He placed a series of pregnant rabbits in a well-ventilated box, and raised its temperature in ten minutes to 50° C. (122° F.). The temperature of the animal increased 1° in each five minutes, and the animal died in forty minutes from "heat-stroke"—analogous, I presume, to sun-stroke—if not removed from the box. But the remarkable thing was that the fœtuses *in utero* died when a certain temperature was reached which was not sufficient to kill the mother. Runge took the maternal temperature every ten minutes, and killed the animals, with certain precautions, when it reached an elevation varying from 39° to 42° C. On the uterus being opened, the fœtuses were found sometimes dead, sometimes living, and their temperature was constantly found some tenths of a degree higher than that of the mother. They were dead every time the temperature rose to 41.5° C. (106-7° F.), and were always alive when the maternal temperature was not higher than 40.5° C., or a little over 104° F. At intermediate temperatures they were sometimes dead, sometimes living. The chief lesions were dilatation of the right ventricle of the heart, which was distended with blood, and retraction of the left ventricle, which was hardened by contraction.

From these experiments Runge concludes that:

1. The temperature of the fœtus is habitually higher than that of the mother, and keeps higher when the mother's heat becomes abnormal.

2. That the fœtus dies solely from the heat before it becomes fatal to the mother.

3. That the temperature of the mother, if only raised for a short period to 41.5° C., is fatal to the fœtus.

In reference to this last deduction, it has been remarked that the danger probably does not at once cease with the reduction of the mother's temperature to normal, for Claude Bernard has seen animals submitted to experiment die several days after being removed safe from a heated stove.

These experiments of Runge's are extremely interesting, and I thought it might be easy to ascertain whether the inference he draws from them is correct, that the animal heat is proportionately higher in the fœtus than in the mother, even when no abnormal condition is present. In order to elucidate this point, Mr. Tyrell Brooks, of the Physiological Laboratory in King's College, kindly undertook to make some experiments under my direction. It seemed at first an investigation of no great difficulty, and yet it was less easy than might be supposed. It was necessary, in order to avoid the infliction of pain, to put the animals under chloroform, and rabbits were found so sensitive to the anæsthetic that their ordinary temperature was speedily altered, and it sank progressively with the depth of the anæsthesia. Nevertheless, by careful management, and by wrapping the body up in warm flannels, the heat was fairly kept up during the continuance of the experiment. Dr. Sclater, of the Zoological Society, was good enough to lend me the very sensitive thermometer which had been used for taking the temperature of the python during incubation at the Zoological Gardens, and in this instrument the column of mercury would run up the entire length of its fine tube in from three to six seconds. This we used in one experiment, but it was found that good sensitive clinical thermometers answered practically very well, and it was necessary to use three at the same moment, so as to make the temperature in the several localities relative. Thus, one was placed in the vagina, the temperature being taken there; afterwards an incision was made into the abdomen and uterus, a thermometer was placed in the cavity of the womb, and another in some part of the body of a fœtus, the vaginal thermometer still being retained, and its variations carefully watched. The result showed that in all the experiments where vitality was not so suddenly lowered by the chloroform as seriously to disturb the animal temperature, there was a marked difference between the vaginal, the uterine, and the fœtal temperature. Thus, in a large pregnant white rabbit marked with black, the vaginal temperature was 100° F., the uterine temperature 101.4°. Both temperatures were taken simultaneously. A fœtus being found, a thermometer was introduced into its mouth, and another into the uterine cavity. The uterine temperature was then 100°, the fœtal 100.6° Ten minutes later a second observation was made on another fœtus, three thermometers being used. The uterine temperature was then 99.1°, the fœtal (taken in the mouth) 99.3°, the vaginal 98° In another ten minutes the other cornu of the uterus was opened, and a third observation taken. The uterine temperature was then 99°, the fœtal 99.5°, and the vaginal 98.5°. The fœtal temperature in this case was taken in the cavity of the peritoneum, which probably accounts for the higher relative temperature. After another ten minutes' interval a fourth fœtus was exposed, and the temperatures were—uterine 97.9°, fœtal (taken in the mouth) 98.8°, vaginal 97.7°. The natural temperature of the rabbit is about two degrees higher than in the human subject, but it will be observed that the animal heat gradually sank during the experiments, apparently as the result of the anæsthesia. The relative height of the temperatures nevertheless remained the same, the fœtal being invariably the highest.

The temperature of the cat is nearly that of the human subject, and in one of these animals near the full period of pregnancy, deeply chloroformed, the vaginal and uterine temperatures being taken simultaneously, the former was found to be 99°, the uterine 100°. Some time was here lost on account of hæmorrhage occurring from divided uterine veins. A fœtus at length being secured, the temperature was taken and found to be: vaginal, 98°; uterine, 99.6°; fœtal, 99.5°. There was probably some error here, due to the placenta of the fœtus being separated from the uterus several minutes before the temperature was taken, for in two other observations on fœtuses in the same uterus the temperature was as follows:

Vaginal, 98.2°	Vaginal, 96.5°
Uterine, 98.4°	Uterine, 99°
Fœtal, 99°	Fœtal, 99.3°

These experiments were repeated on other animals, but these details are a fair sample of the whole. In all the uterine temperature was relatively higher than that of other parts of the pregnant animal, and in all, except in one instance, where a shock was given to the vitality of the fœtus, the fœtal temperature was higher, sometimes considerably higher than the general temperature of the body of the mother. Further, the temperature of the fœtus, although not sinking so fast as the maternal temperature, was manifestly influenced by it, declining at a somewhat less rapid rate, but still keeping a sort of relation to the heat of the mother's body.

All these facts collectively are very instructive. It follows that if the temperature of the mother is raised, either as the result of experiment or from diseased action, the temperature of the fœtus will rise with it, and inasmuch as this is higher from the first, the fœtus will arrive at the heat indicating danger before the mother does; and Winckel indeed remarks that it is probable the fœtal warmth rises in quicker proportion in the fœtus, because the liquor amnii, part of whose function it is to conduct heat from the fœtal body, becomes itself overheated and so ceases to control the fœtal temperature. I may mention that I have taken the temperature of the fœtus while *in utero* in a case of breech presentation. In this case I put a clinical thermometer into the fœtal anus, and the temperature then was five-tenths of a degree higher than in the maternal vagina. Gusserow has shown that

[35] *Die Geburtshülf Explor.* 1833.
[36] *Monatsschr. für Geburts.* 1861.
[37] *Archiv. der Heilkunde.* 1862.
[38] *Moskauer Med. Zeit.* 1866.
[39] *Pathol. der Geburt.* 1869.

the temperature of the fœtus immediately after birth is constantly from 0.1° to 0.3° above that of the uterus and vagina.

It seems to be well known to physiologists that wherever great activity of function is going on in animal bodies there will be an increase of temperature. Professor Gerald Yeo informs me that there is increase of heat in the liver, beyond what is observed in other parts of the body, and this is most notable after a meal. The observations of M. Valencienne and Dr. Sclater have demonstrated that a considerable increase of heat is generated in the body of the female python during incubation ; but the remarkable thing, and one perhaps which has not been sufficiently appreciated, is that regions of the body in mammiferous animals, where rapid nutrition or change are going on, may have a considerably higher temperature than the rest of the body, and it is just possible that some suggestions for treatment by way of controlling local temperature may arise out of this.

The next point of inquiry or conjecture is, how does increase of heat destroy the fœtus *in utero?* In other words, what is the *modus operandi?* Is it from "heat-stroke," somewhat analogous to "sun-stroke," which, according to Runge, killed the adult rabbits when long exposed to high temperature. Houlier[40] has stated his belief that death is owing to degeneration of the myocardium. The heart at first becomes excited, then paralysed, and there is coagulation of the myosin. The same author states that in a child born of an eclamptic mother with a temperature of 40° C. at the moment of birth, he found granular degeneration of the cardiac vessels. I am, however, informed that it would require a temperature of 60°C. to coagulate myosin, so that some other explanation must be sought for. From the highly congested appearance of the fœtus expelled during the continuance of high fever temperature in the mother, it is obvious, that as the result of the heat, all the capillary blood vessels become overcharged, and a state of hyperæmia is engendered which is quite incompatible with fœtal life. Not only is the cutaneous surface of a deep livid colour from distension of the capillaries, but every tissue in the interior of the fœtal body is gorged with blood, as in a state of active inflammation. These changes of themselves one may imagine would be sufficient to account for the movements of the fœtus first becoming restless, then convulsive, and at last ceasing altogether. On microscopic examination of the congested tissues, I found the capillaries distended with blood, and the globules heaped up in confused masses, with here and there indications of rupture, and more or less of extravascular exudation.

It will be observed that, while the heat-theory affords a tolerably clear explanation of the cause of death *in utero* during the progress of diseases in which the maternal temperature is raised largely above the normal standard, it yet furnishes no adequate explanation of those cases in which the fœtus is frequently and rapidly expelled from the uterus, alive or dead, during the progress of some of these affections. It is true that the child may die from increased internal temperature, and be long retained after its death. It is also true that, in a large number of instances, the fœtus is expelled alive ; and if sufficiently developed it may continue to live, although it is prone to succumb after birth, even if near the full time.

The explanation of this tendency to forcible uterine contraction is, I take it, to be found in some observations of Brown-Séquard[41] in 1851. This distinguished physiologist showed that the circulation of dark venous blood—that is, blood imperfectly aerated, or from any cause rendered impure and charged with carbonic acid—had a remarkable effect in stimulating the nervous centres and contractile tissues. He made the deduction that oxygen gave and created contractile force ; carbonic acid brought contraction into play. These elements, properly correlated and balanced, are in consonance with the continuance of pregnancy. If blood accumulates in the uterine sinuses, not only does distension act in promoting rhythmical contraction, but the carbonic acid of the blood is still more potent in bringing the uterine muscles into play, and so stagnation is prevented. Anything, therefore, which disturbs the systemic circulation, and more especially anything which prevents or retards the proper aeration of the maternal blood, acts as a direct incentive to uterine action ; and if this passes beyond the normal physiological limits, abortion or premature labour is the result.

In pneumonia, in the eruptive fevers, in other diseases or injuries attended with febrile excitement, we have this pathological state directly induced, and hence the liability to emptying of the uterus. The same explanation would apply to asphyxia in the mother. It is recorded[42] that, during a razzia in Algeria, conducted by the Duc de Malakoff, hundreds of Arab women were suffocated in the caverns of Dahra, and it was found that many of those pregnant had aborted. The same thing occurred in a similar exploit under the celebrated Chevalier Bayard. In some forms of heart-disease, and in some of the other acute or chronic lesions of the circulation, similar pathological conditions may be produced, and so lead to premature uterine action.

There is still another complication occurring in connection with pregnancy, and said to be attended with remarkable increase of heat, which can scarcely be passed over without notice.

In eclampsia, or puerperal convulsions, it is well known that great peril attends the child. If labour and rapid delivery follow the supervention of convulsions towards the end of pregnancy, the child may survive, but convulsions are almost uniformly fatal to it if labour does not come on. The child is then expelled later, marked by such changes as are peculiar to the longer or shorter time it is retained *in utero.* The nearer the attack of convulsions comes on to the completion of pregnancy, the greater the chance of its preservation, and the chance is the greater if convulsion comes on for the first time during labour, and the case admits of speedy delivery. The cause of fœtal death in eclampsia has been attributed to the convulsions interfering with the hæmastosis of the blood—that is, producing asphyxia.

Braun[43], of Vienna, believes uræmia to be the cause of death. The fœtus is impressed by the first or second access, and almost always dies after a certain number of attacks. If the mother dies, and the child is removed by the Cæsarean section, it is always dead. It is asserted that if the child is perchance born alive, much urea is found coming from the cord ; if dead, much carbonate of ammonia is found in the blood. It is further asserted that uræmia may kill the child without eclampsia having come on, and that the children of eclamptic patients are often albuminuric.

In seeking for the explanation of fœtal death in puerperal convulsions, Winckel[44] claims that he first pointed out a remarkable rise of temperature in the mother during the paroxysms. The French dispute his priority, and Charpentier, in controverting his claim, makes an attack upon him which shows that the anti-German feeling has permeated even the realm of science. He endeavours to show that Kien, a pupil of Hirtz, made the first serious researches with the thermometer in eclampsia, and after him Bourneville,[45] a pupil of Charcot's, who, in 1871 and 1875, made observations on thirteen patients, to which he adds four of Budin. Bourneville concludes that the temperature increases from the beginning of the attacks to the end ; it may run up to 43° C. or 109.4° F. In the intervals, a high temperature is maintained, and this is slightly increased with each paroxysm. If the case terminates fatally to the mother, the temperature goes on increasing until death, but, if better symptoms supervene, the temperature declines.

In view of the researches of Runge, therefore, it may be that fœtal death in eclampsia is due to such elevation of temperature in the mother's body as is incompatible with the safety of the child. When the temperature does not reach so high a standard, the death must be attributed to uterine contraction producing imperfect aeration of the blood, or vitiation of the blood from uræmic poison.

It is stated that there is a very marked contrast in the temperature of the patients suffering from puerperal eclampsia and those stricken with convulsions the result of general uræmia, and it is asserted that the thermometer indicates a positive diagnosis between the two ; for while in eclampsia the temperature always rises, and may run up, indeed, to 43° C., in uræmic convulsions and coma—and equally in men and women—the temperature invariably falls progressively, and sometimes falls to 30° C. With some exceptions, it falls until death. The authors mentioned, therefore, conclude that eclampsia is not from uræmia, because the temperature is different in the two cases.

There are some diseases of women attended by abnormal increase of temperature, in which the tendency to abortion and premature labour is greater than in healthy women, and yet in which the higher temperature probably plays but an unimportant part in contributing to fœtal death.

In Phthisis there is an admitted fertility among women which is almost abnormal, and the tendency to abortion and premature delivery, although not very striking, is yet greater than among healthy women. We are indebted for much precise information on this subject to theses published in France by M. Ortega and M. Gaulard.

I must pass with mere mention diabetes, jaundice, heart-disease, and malignant cholera, simply remarking that these and allied morbid conditions may destroy the product of conception by poisoning it *in*

[40] See Charpentier, *Traité*, etc.
[41] See *Journal de Phys.*
[42] Tyler Smith, *Man. of Obstet.*
[43] *Lehrbuch der Gesamml. Gyn.*
[44] *Berichte und Studien.*
[45] *Archiv. de Tocol.*, 1875.

utero, or by inducing uterine contraction and premature expulsion. These and allied morbid conditions, if they stop short of producing expulsive efforts, may yet produce congestion and possible extravasation of blood in the placenta. They may thus so injure the nutritive and depurative functions of that organ as to compromise the life of the fœtus. These congestions and extravasations in moderate degree may interrupt the utero-placental circulation, and destroy the child without leading to its immediate expulsion; but if more intense and rapid, so as to produce at once irritation of the uterine walls as well as disturbance in the placenta, they excite the uterus suddenly to contract, and delivery speedily follows.

I have spoken of certain morbid poisons acting upon the product of conception through the paternal organism. There are some specific poisons, both inorganic and organic, which, getting an entrance into the maternal blood, act more directly on the contents of the gravid uterus, and either kill the child or lead to its premature expulsion before it is capable of maintaining a separate existence.

I have no time to go into the proofs, which are now ample enough, that poisons can be transmitted through the maternal organism and destroy the product of conception, sometimes, indeed, without much perceptible effect on the mother, so far as the specific poison is concerned. Thus lead-poisoning acts deleteriously on pregnancy in the female as well as on the male. Other poisons have been named, both organic and inorganic—arsenic, mercury, savin, and the like.

The morbid organic poison which is probably the most pernicious, and has the most extended adverse influence on fœtal life, is syphilis. I have spoken of the effects when transmitted by the father. Its power in destroying fœtal and infantile life, when the mother is the subject of venereal disease, is now almost universally admitted by authors, both in this country and abroad.

Syphilis was mentioned in this relation as long ago as Astruc. And yet it is curious to note, considering the unanimity of opinion about it at the present time, how comparatively recent is the recognition of its lethal power in this respect. Dr. Whitehead was one of the earliest and best writers on abortion in this country, and on turning to his book, published in 1847, I find the following: "The complaint in question was not suspected of being so frequent a cause of abortion as it has since appeared to be, nor did it until very recently engage a particular share of attention. I remember it was the opinion of my lamented and eminent friend Mr. Fawdington, that abortion in a great proportion of cases was occasioned by a condition induced by the venereal taint." And he goes on to express his entire confidence in the accuracy of his friend's observation. Since then the evidence has so accumulated concerning the influence of syphilis in destroying children *in utero*, both early and late in gestation, as to be overwhelming. For example, in some comparatively limited statistics of Mr. Scott Battams, given in the *Lancet* for 1883, 10 syphilitic mothers produced 40 children, of whom 12 had died, and they had suffered among them 20 abortions, or half as many as they had borne children. Of 53 syphilitic women observed by Fournier[46], 28 only went to the full time, and there were 25 abortions or premature deliveries. Of 390 pregnancies with syphilis recorded by Lepileur, 249 went to term, and there were 141 abortions or premature births. In the larger tables collected by Charpentier[47] from the data of Fournier, Lepileur, Weber, and others, it appears that of 657 pregnancies in syphilitic women there were 426 deliveries at term, many of the children, however, being still-born, and there were 231 abortions, or 28.4 per cent. of the whole. Evidence, indeed, might be multiplied almost indefinitely, and, viewed in this respect alone, the ravages of syphilis appear most deplorable.[48]

The non-professional public can, of course, know little of the insidious and noxious influence of syphilis so manifested, and of the way in which it affects large numbers of women and children, innocent of any trace of immorality. Did they fully realise the disastrous consequences of permitting a diffusion of this loathsome disease without let or hindrance, they would bestir themselves to adopt preventive measures against its propagation, and until such a time as it could be absolutely prevented would be glad to aid partial projects for its diminution, even when such projects seem in some degree to clash with the generally understood idea of the liberty of the subject, or run counter to cherished notions on what has been termed the "State regulation of vice."

[46] *Syphilis.*
[47] *Loc. cit.*
[48] It is, besides, abundantly proved that syphilitic disease may not only destroy the embryo at all stages of its development *in utero*, but also that if the child is born at full term it may show evident traces of venereal taint at its birth, or if apparently healthy when born of syphilitic parents, it will develop infantile syphilis before many weeks or months of its life have elapsed, and either die or remain a miserable object afterwards.

In women who are the subjects of syphilis, abortions often succeed each other in frequent repetition, and with a persistency belonging to no other cause. It has, moreover, been often remarked that when there are no external indications of maternal syphilis, the succession of abortions, or of dead children in more advanced pregnancy, is traceable to a latent form of the disease which manifests itself in this fashion. Fournier especially dwells on this point, and holds that women who are most deeply and viscerally affected are most liable to abortion, although it may happen to those affected in all degrees, even the most lightly. Confirmatory evidence of Fournier's position is educed by the effect of anti-syphilitic treatment, which very frequently succeeds in stopping the tendency to abortion. Some cases of abortion, without apparently syphilitic symptoms in the mother, are no doubt due to the transmission of venereal taint from the father.

The effect of syphilis has been now so carefully studied that some general laws have been formulated concerning its effects on human gestation. Thus it has been proved (1) that if a woman has syphilis before conception she is much more predisposed to abortion than a woman taking the disease after conception; (2) if conception and syphilis commence together, abortion or premature labour with a dead child are the rule, but treatment is more potent in preventing them; (3) syphilis acquired after the mid-period of pregnancy has less influence on the child, and it may escape altogether.

Perhaps the worst feature in the relation between syphilis and pregnancy is its persistent and extended influence. It is impossible to say when the effect of the poison will be expended; and long after all outward signs of the disease have vanished in the bodies of both parents, the tendency to abortion may remain, or there may still be the production of dead children, or of feeble emaciated children if born alive, showing external evidences of venereal taint; or, lastly, in the absence of these, so small an amount of vitality that the children are reared with difficulty.

One of the ways in which syphilis brings about intra-uterine death, as will be seen later, is by producing disease in the fœtal appendages. There can be no doubt that the venereal poison is transmitted to the embryo through the maternal blood, and thus it may affect all the tissues in the gravid womb, sometimes manifesting itself in one locality, sometimes in another. Thus it may attack the body of the fœtus or its placenta and membranes. We have both the direct evidence of such transmission, and also the collateral evidence derived from the transmission of other agents through the maternal circulation.

Belonging to this section of the subject as recognised causes, under certain conditions, of intra-uterine death, are local derangements of the generative organs in women; for example, uterine congestion and inflammation in its several varieties; leucorrhœa, dwelt upon by Whitehead and others; various displacements and special diseases of the uterus, acute and chronic; affections of the uterine appendages and neighbouring pelvic structures; besides these, pelvic adhesions, noticed by Madame Boivin[49] as causing abortion, direct irritation, or injuries of the uterus and vagina, oxytoxic medicines, etc. These I must not stop to discuss; they are mentioned in this relation in most modern works on obstetric medicine. With your permission I will conclude with a few words on the reflex causes of abortion.

Reflex Causes.—The late Dr. Tyler Smith[50] drew attention to the frequency of reflex or excito-motor causes of abortion, and particularly to the effect of irritation of the mammary nerves. He averred that he had seen abortion produced during lactation from the irritation of constant suckling. He inferred that it was not mere weakness or exhaustion producing the effect, because the mammary secretion may cease on the occurrence of impregnation, but a plentiful supply of milk returns after the occurrence of abortion. It is well known that the uterus may be made to contract after delivery by putting the child to the breast; and Professor Scanzoni, in view of these facts, has proposed irritation of the mammæ as one of the methods of inducing premature labour. The results of the method have proved too uncertain for general adoption. But reflex motor actions originating in other organs besides the mammæ are acknowledged to have the effect of inducing abortion in some cases. Thus irritation of the trifacial nerve during the cutting of a wisdom-tooth, or from toothache, are said to have this effect. I have seen abortion brought on by the extraction of a tooth, but I do not think this peculiar to dental operations, as I have seen it follow other minor surgical proceedings, apparently from the nerve-disturbance they produced, as there was no marked increase of temperature.

Quite recently I was confronted, not for the first time, with the question, "Is it desirable to remove the breast by surgical operation

[49] *Recherches sur une des Causes de l'Avortement*, 1828.
[50] *Loc. cit.*

during pregnancy?" The patient was about thirty years of age, six months pregnant, and she had a tumour, believed to be malignant, in the right breast. It had somewhat rapidly developed, and the axillary glands were enlarged. The whole aspect of the patient was unhealthy, if not cachectic, and it was deemed advisable to remove the breast as speedily as practicable. The eminent surgeons consulted in the case hesitated to operate during the continuance of pregnancy, as one of them at least had recollection of similar cases ending disastrously, abortion coming on after the operation, and the patient dying as the result of the double injury. From my own experience, I was able to say that abortion seemed chiefly to have been provoked under such circumstances when the breast wound was going wrong, and there were evidences of constitutional irritative fever. In fact, that although there is such well known and intimate sympathy between the nerves of the breast and the uterus, the abortion was less due to reflex action than to elevation of maternal temperature associated with septicæmia. In these days of antiseptic surgery, where healing by the first intention is the rule, removal of the breast and other similar operations may certainly be undertaken with less risk of abortion than formerly. In view, nevertheless, of the fact that abortion sometimes comes on from the reflex effect of all operations, however trivial in character, it is well to abstain from surgical proceedings during pregnancy, unless urgently required. In the case I have referred to it was at one time proposed to bring on premature labour, and to operate on the breast as soon as the puerperal period was passed. The proposal was eventually abandoned, because some time must elapse before the child would be viable, and the disease in the breast was extending. Consequently the operation was performed at once, and the patient made a good recovery without aborting.[51]

In undertaking any operation upon a pregnant woman it is important to recollect that the uterus is more irritable at times which correspond to the catamenial periods. It is well, therefore, to avoid these periods.

Intense and persistent gastric irritation has also been known to bring on abortion, and this notwithstanding the fact that a pregnant woman will sometimes be brought almost to death's door, by continued nausea and vomiting, without provoking any sign of uterine contraction. Vesical, renal, and rectal irritation may act in like manner. Lastly, ovarian irritation undoubtedly favours the occurrence of abortion, and consequently there has been observed a marked tendency to abortion at times corresponding to the catamenial periods, more especially in women who have been the subjects of ovarian dysmenorrhœa.

Nearly akin to excito-motor causes are the effects of mental emotion on pregnant women. There is, no doubt, greatly increased nervous tension in all pregnant women. Fright, anxiety, a sudden impression made upon the mind or body, may not only initiate uterine contraction at any period of pregnancy, but there is reason to believe that a sudden mental shock may at once kill the embryo or child, even if it be retained some time afterwards. Repeatedly it has occurred to me, as to others in practice, to have patients dating the exact time of their child's death *in utero* to some alarm or shocking occurrence which has profoundly affected the whole nervous system. The immediate effect described was, first, violent perturbation and undue active movement of the child for a brief interval, followed by cessation of fœtal movement, and absolute quiescence in the future. In a few rare instances the woman has been mistaken in supposing her child to be dead after a shock or fright she has experienced, but in a large number of cases the relation between the cause and the effect has been too clear to be accounted for by mere coincidence, and the child has sooner or later been expelled dead, possibly both dead and putrid.

It is no uncommon thing for a woman in early pregnancy, on the receipt of bad news which much perturbs her, to be seized with uterine hæmorrhage, which may eventuate in abortion. Condemned women prior to execution have been known to abort beforehand, and, under the influence of terror and pain, martyred women in former days are said to have aborted at the stake. So potent is mental influence on the stability of pregnancy, that I have had reason to believe the mere dread of miscarriage has in some women been an important factor in bringing it about; and I have known pregnant women who had previously miscarried get into such violent mental agitation as the time approached when they had aborted before, that the event they feared was precipitated, and pregnancy was brought to a premature conclusion.

[51] According to Mussot (Schmidts' *Jahrbuch*) and Cohnstein (Volkmann, *Samml. Klin. Vorte.*, 1875) operations on the genito-urinary organs are most likely to be followed by abortion; and Spiegelberg says that no operation on pregnant women should be performed at the time of the menstrual epoch, as abortion is more likely to occur then.

ABSTRACTS OF

THE GULSTONIAN LECTURES,

ON

THE NATURE OF FEVER.

Delivered at the Royal College of Physicians of England, March, 1887.

By DONALD MACALISTER, M.A., M.D., F.R.C.P.,
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Lecture III.

I have to confess that we know little or nothing as yet of the anatomical course of the thermal nerves of the muscles. The motor trunks would appear to contain the thermogenic fibres—if, indeed, they are not identical with the motor fibres. But as to the course of the anabolic fibres we can only conjecture, and the analogies which we have to guide us are too obscure for me to dwell on here. It has been known from the time of Sir Benjamin Brodie that section of the spinal cord is in some cases followed by a surprising rise of the body temperature. In other instances the temperature falls; and some observers have found that according as the animal is exposed to a warmer or cooler medium, according as it is wrapped up or naked, its temperature will ultimately rise high or sink low. Professor Wood has shown how these inconsistencies may be reconciled by measuring the actual heat produced by an animal before and after section. As the result of many rigorous experiments, he is able to state that "section of the spinal cord above the origin of the splanchnic nerves is usually followed by an immediate very decided increase in the amount of heat dissipated from the body, and also by a decided lessening of the amount of heat produced." The vaso-motor tracts being divided in these experiments, it is certain that vaso-motor paralysis has a great deal to do with the increased loss of heat, while the paralysed muscles, being cut off from their regulating nerve-supply, are apt to have their thermogenesis increased or diminished by the high or low temperature of the surrounding medium, much as when they are poisoned with curare. The temperature of the body is thus the resultant of a number of diverse thermal tendencies; and as one or the other is in the ascendant the temperature rises or falls. Successively, higher and higher sections of the cord at length carry us to a level above the highest or dominating vaso-motor centre in the medulla, and not till then do we get results that are fairly uniform and intelligible. If the medulla is divided close to its junction with the pons, the vaso-motor mechanism appears to remain intact. In the dog at least there is generally a rise of temperature; but whether this happens or not, the rate of heat-production is invariably augmented. Heat-loss is also increased, but it seldom keeps pace with the heat production. Moreover, the increased heat-production is not simply transient, it goes on for a long time, and in some instances is greater twenty-four hours after operation than it is at first. Again, when the same region—namely, the part of the medulla which immediately adjoins the pons—is mechanically irritated by a puncture, in several instances a marked temporary fall in the rate of heat production has been observed (Wood), though in others electrical stimulation of the part is said to have been followed by a prompt rise of temperature at least.

These experiments certainly suggest the hypothesis that the region in question is traversed by some of the anabolic or inhibitory fibres. Severance of them is followed by a disturbance of the balance I have called thermogenic tonus; the inhibitory influence being cut off, the excitor influence has full sway. Irritation of the same tract is followed by a temporary diminution of thermogenesis, just as irritation of the vagus tract is followed by a temporary diminution of the contractile activity of the heart.

Professor Wood has gone further in his attempts to trace upwards the inhibitory tract, and appears to have shown that severe injury of certain regions in the cortex or beneath it is, in the dog at least, followed not merely by rise of temperature—that is of secondary importance—but by increased production of heat. This cortical area is just posterior to the crucial sulcus, and corresponds in Hitzig and Ferrier's scheme to the motor region for the muscular masses of the limbs. The experiments in which stimulation rather than destructive injury of this region was attempted are neither numerous nor altogether

satisfactory, but, so far as they go, they agree with the older experiments of Eulenburg and Landois, in which local electrical stimulation of one of the areas was followed by a slight temporary *cooling* of the opposite extremities.

[Attention was then directed to the experiments of Aronsohn and Sachs, of Berlin.] When a puncture with a fine needle is made through the brain of a rabbit in such wise as to pass vertically through the medial side of the corpus striatum, near the *nodus cursorius* of Nothnagel, the temperature in the muscles and in the rectum promptly rises from 1½° to 2½° C., or say 2½° to 4½° F., and remains high for many hours, returning ultimately to the normal. The animal appears to be but little affected by the operation; but the result seems invariably to follow, and it can be reproduced again and again in the same animal. It is not due to irritation or injury of the cortex, or of the white matter immediately underlying it, for superficial or shallow punctures are without effect. The sensitive region is of no great extent, and can be defined with considerable precision. By a highly ingenious method Aronsohn and Sachs succeeded in passing a weak electric current through the sensitive region, and that without exciting any of the neighbouring parts. The result was striking. The temperature in the muscles rose with every passage of the current, and could at will be kept at a febrile height for many hours together. The rise of temperature appeared thus to be unmistakably due to stimulation and not to injury. The febrile condition could hardly be due to any contraction of the cutaneous vessels, or to any retention of heat, for it was observed that the temperatures of the skin, the muscles, and the rectum, rose and fell together. Moreover, the oxygen consumed, and the carbonic acid given off, were found to be increased during the artificial fever to about the same extent as in ordinary fever of like intensity, and the excreted nitrogen in the twenty-four hours after the puncture was something like 25 per cent. greater than in the twenty-four hours before the puncture. From all these facts the conclusion is hardly to be resisted—that by the stimulation of a particular region to the inner side of the corpus striatum the thermogenic function of the muscles is abnormally increased, and therewith their catabolic or oxidative metabolism; and this, without encroaching upon the motor tract, without exciting the motor function, and without any action that can fairly be called vaso-motor coming into play. If the evidence is worth anything, it proves that the region is connected intimately with the thermogenic tract; that the catabolic fibres which proceed to the muscles and in them excite the thermogenic function, are here capable of being reached and stimulated apart from the motor nerves.

There is another aspect in which we may view these experiments. During the period in which the sensitive spot is being at intervals electrically stimulated, the animal is in a state of fever. When the stimulation ceases the fever subsides. In other words, we have generated a fever by a direct action on the central nervous system.

High temperature is not necessarily fever, and fever is not necessarily accompanied by high temperature. We may have a *febris sine febre*, a morbid thermogenesis without high temperature, the increased heat-production being compensated, or more than compensated, by increased heat-loss. And we may have a rise of temperature even with diminished thermogenesis, if the heat-loss is so diminished as no longer to balance even the diminished production. The former would be fever, though the patient were cool; the latter would not be fever, even though the patient were hot. It is the excessive thermogenesis, with the excessive catabolism of nitrogenous tissue which that involves, that constitute fever. Without this condition the mere temperature may run for a time to a "paradoxical" height, to a point at which we might expect the albumens of the body to coagulate; and yet the patient may recover, and promptly too, for there has been no excessive combustion, no consuming of the tissues. The difference between the rate of heat-production and the rate of heat-loss at any moment is measured not by the temperature, but by the gradient of the temperature. The temperature itself, when it reaches its height, indicates the time it has taken for the one process to gain upon and at length overtake the other, but tells nothing as to the absolute activity of either. High temperature may thus be an indication of mere sluggishness or lagging, and is not, *per se* an indication of increased heat or of increased combustion.

There is thus a certain order of progression observed in the disturbance of the thermal relations of the body. First and most easily disturbed is the thermotaxic nervous mechanism. If that is all that is disturbed, we shall have strange risings and fallings of temperature as the independent variations of production and loss are concurrent or the reverse, but there need be no fever. The balanced rhythm of anabolism and catabolism in the muscles is not disturbed; there is no excessive oxidation, and no excessive inhibition. And the balanced rhythm of the respiration and the cutaneous circulation is also maintained, and with it the process of heat-loss; but the latter need never be very excessive or very deficient. All that happens is that the two rhythms do not harmonise. Cases of this thermal ataxia are not wanting where there is no evidence of increased thermogenesis, no wasting, no failure of nutrition.

The next degree of disturbance is that in which there is not only thermal ataxia, but disorder of the parts of the nervous system subserving heat-production; there is under-action of the anabolic nerves with diminished construction, and diminished absorption of energy; there is over-action of the catabolic nerves, with increased oxidation and thermogenesis. Both factors of the normal thermogenic tonus are probably disordered together; but as I believe there is good reason for regarding the anabolic mechanism as "higher" than the catabolic, so there is reason for the view that it is in many cases the first and the most disordered. Weakening or abolition of the inhibitory influences, with defective upbuilding of the "thermogenic stuff" in the muscles, probably precedes excessive catabolic action, and to this may be due the pre-febrile discharge of urea which is occasionally observed. But soon the other factor of the thermogenic mechanism is disordered also, and there is excessive heat-production. The net result is apparent wasting or "combustion," and generally high temperature. The thermotaxic mechanism is in abeyance; the immediate adjustment of heat-loss to heat-production is consequently hindered, the thermogenic mechanism gets a start, as it were, before the heat-discharging mechanism is called into play. Once the temperature is somewhat raised, the latter mechanism, if it is not itself disordered, is capable of increased activity, and presently overtakes the work thrown upon it. But the "lagging" of the one process behind the other finds expression in the heightened temperature. This is ordinary pyrexia, and the nervous disorder does not in general go further. But there is another stage—namely, when the mechanism of heat-loss is also profoundly disordered, so that the rise of temperature from the antecedent excessive thermogenesis does not stimulate it (or does not stimulate it enough) to make it overtake the latter until the temperature reaches an excessive, or even a fatal, height. This is hyperpyrexia.

To resume. The thermal nervous system has three parts; let us call them briefly the thermotaxic or adjusting, the thermogenic or producing, and the thermolytic or discharging mechanism. Disorder of the first implies irregularity of temperature only; disorder of the first and second implies, in general, heightened temperature and increased body heat—that is, ordinary fever; disorder of the first, second, and third implies, in general, hyperpyrexia, dangerous increase of heat, and steadily rising temperature. In the ascending scale of evolution we seem to rise from the thermolytic to the thermogenic and then to the thermotaxic nervous system. Cold-blooded animals possess the mechanism that in mammals becomes thermolytic—a nervous mechanism that controls the vessels and the breathing. The thermogenic system in them is ill-developed, and probably not well differentiated from the system of motor and inhibitory nerves that subserves locomotion. The frog in a normal condition hardly needs to generate heat in his muscles, but when the motor trunks are artificially stimulated heat can be produced in them. But his oxidative thermogenic metabolism is at best feeble, and we cannot easily throw him into an enduring fever. In young mammals the thermogenic system is developed before the thermotaxic. The instability of an infant's temperature is its chief characteristic. A little sends it into a high fever; a little restores it again. As the child grows, the range of its power of regulation increases, its temperature grows stable, and the thermotaxic mechanism is evolved.

Regarding thermal mechanisms as a functional and evolutional hierarchy, I look upon fever as a "dissolution," a progressive negative process, a relaxation of control from above downwards, in the same sense (and with the same reserves) that the term is used by Dr. Hughlings Jackson in his most suggestive Croonian Lectures of 1884. Thermogenesis is no mere by-end of our nature, no mere casual but unavoidable concomitant of chemical processes performed for another primary purpose. I would put it in the vital scale a little "higher" than circulation and respiration, and a little "lower" than voluntary muscular action. The motor function of the muscles is related to the highest centres; their thermogenic function connects them with the lower or animal centres; and the innumerable variety of causes which disturb or "dissolve" the controlling nervous mechanism, the readiness of "fever" to result from injurious influences of so many kinds, is the expression of the fact that the habit of stable temperature is, so to speak, recently acquired. As a last test of the "dissolution" hypothesis, consider what happens in recovery from a typical febrile attack. First, the thermolytic mechanism is waked to adequacy, there is a critical sweat or a relaxation of the vessels of the skin, and a gush of

heat from the surface brings down the temperature with a run. But the thermogenic centres have not yet recovered, and the temperature will swing backwards and forwards for some days, and an epicritical excretion of urea takes place. Thermogenesis becomes less and less excessive, and is vigilantly counterbalanced by thermolysis; but thermotaxis is yet feeble. The patient's temperature is down, but it is still far from stable. As convalescence proceeds, the stability increases, and at length thermotaxis, the first to be disturbed and overthrown, is the last to be restored.

The task which I proposed to myself is fulfilled; it was to set before you, if not an idea, at least the germ of an idea, concerning the nature of fever. A coherent theory is better than none, if only as an aid to the ordering of our facts; and as I have found this manner of looking at fever useful to myself, not only as a pathologist but as a physician, I have ventured thus imperfectly to propound it. I have said nothing of the many clinical facts which might be adduced in support of the nervous origin of fever; Dr. Hale White has done so once for all in an excellent paper in the *Guy's Hospital Reports* (1884). I have said nothing of the therapeutics of fever, for, indeed, there is probably no Fellow of the College here present who could not teach me many lessons as to its treatment. And if, lastly, I have said nothing about etiology, that has at least this advantage, that you have been spared even a single allusion to bacteria.

ABSTRACT OF LECTURES
ON
THE ACTION OF NERVE-CENTRES AND MODES OF GROWTH.

Delivered at the Royal College of Surgeons of England.

By FRANCIS WARNER, M.D., F.R.C.S.,
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Lecture II.—The Study of Modes of Growth.

In making a systematic study of movements in man, we study one function in one class of subjects. We observe the movements as signs of the time and quantity of action in the loci of nerve-tissue which produce them; thus we learn much concerning vital action in one kind of tissue. If the methods and principles found useful in studying this one function in one tissue have been properly considered, they are likely to be useful in studying other functions in other living subjects.

In studying movements, we learnt to note the parts of the subject capable of acting separately. We learnt next to study the intrinsic attributes of each movement, and also its antecedents and sequents. Having studied the nervo-muscular apparatus of man as our special subject, and deduced certain principles therefrom, we proceed to apply these to the study of various problems. We shall find that many phenomena of growth are determined by the forces which control the time and quantity of growth in the units of living tissues.

The study of movements requires the observation of a definite number of parts of the body, and a definite number of loci of brain tissue; in growth the number of parts, or units, capable of separate action, is practically indefinite. Movement is in many cases a reflex act; growth is, I suppose, never spoken of as a reflex action; movement often follows quickly upon an impression; if growth results, it is slow in its manifestation. Movements in man are often signs of intellectuality; acts of growth are never said to be signs of mind. The many beautiful adaptations of growth in plants are not considered signs of intelligence in the plant, but the movements of an insect in visiting the flower are considered the signs of its instinct. The results of growth are material changes, and, as such, are permanent records of action, capable of preservation; movements do not necessarily leave any permanent record in the subject, of such kind as can readily be seen and preserved.

In speaking of movements as signs of action in nerve-tissue and of growth, we deal with two functions in the body. The outcome of nutrition in the child will vary at different ages; in the early years much nutrition is consumed in making weight; in adult life much energy is consumed in movement. In a child becoming choreic, the weight falls, and movement increases. If we believe in one series of laws of nature governing movement and growth, we must expect the forces controlling movements to be those affecting growth.

We may observe the time of any movement, vital act, or act of growth; we commonly speak of relations in time as the order of growth, in describing the processes of development, the order of development is most important. We more commonly study the time of movement than that of growth, because the processes of growth are slower, and observation must be continued for a longer period to see any change, than is the case in observing movement. Visible movement indicates its own time to the observer, but does not necessarily leave any permanent record; growth is a process which usually does not impress the observer with the time of its acts, but leaves a result in visible form. A visible effect of movement in man is to produce some fresh posture, or condition of temporary equilibrium. With regard to observation of the effects of forces upon the subject, in the case of growth a much longer interval usually elapses between the stimulation of the subject and the sequential effect than that which takes place in a reflex movement. Hence more instances of growth are called "spontaneous" than in cases of movement.

In flowers, cross-fertilisation often results from the fact that the anthers are, in certain cases, ripe before the pistil. The time of dentition, the time when hair grows upon the scalp, face, or pubes, are characters of the normal process. The second intrinsic attribute of growth is its quantity. Many phenomena may be described and receive some kind of explanation by noting the ratios of growth in the parts compared. To note the ratios of growth in a specimen is analogous to studying postures which are due to ratios of action in the nervo-muscular apparatus; this suggests the hypothesis that the forces which lead to certain postures in man may be those which control his growth. Illustrations were drawn from the modes of growth seen in the development of buds, and from comparison of wild and cultivated plants. The ratios which indicate growth in man are the subjects of anthropometry; ratios indicate the differences in growth of young and old leaves, and in the parts of man at successive ages. Unequal proportional growth of bilateral parts is a common cause of curvatures; this is seen in the increasing curves of bones in the fœtus as development advances, and is abundantly illustrated in the stems of plants.

In the two halves of the body, and in the corresponding members, the ratios of growth are usually equal, but the right arm is often larger than the left in girth, probably owing to the greater amount of stimulation it receives from the brain.

Among the forces producing certain ratios of growth we see that light increases the size of leaves, while it diminishes growth in internodes, and does not control the growth of flowers. Light diminishes growth in the side of the stem of a plant which is most illuminated, and curvature towards the light results. Mechanical pressure, heat, electricity may, to some extent, control quantities of growth. Gravity, in plants, causes upward curvature of the stem and downward curvature of the root. If a circular hole be made in an iron plate, heat causes equal extension of the metal in all directions, and the hole is enlarged, but remains circular. For similar reasons, in the growth of bones in which uniform extension is taking place in all directions, the foramina enlarge, retaining their shape; this is seen, to a certain extent, in the foramina of the pelvis. In the skull of the infant, the anterior fontanelle becomes larger in the early stages of growth.

If in the processes of growth one tissue or one part grow in greater quantity than others, that tissue or part is said to be hypertrophied. The sequences of proportional growth are many. In a composite flower, the increased growth which occurs in the style after the anthers have discharged their pollen is followed by cross-fertilisation. The ratios of the growth of parts may bring about asymmetry of form; malformations, or variations in development, and consequently in the use of parts; examples are seen in descriptions of short-horned and long-horned cattle, and in the proportions of the beaks of pigeons.

Look at a germinating seed; it consists of an embryo enclosed in its testa or covering. Germination begins by the swelling and growth of the embryo; but the testa does not grow; it may stretch a little; but soon the unequal increase in size of the embryo and seed-case is followed by splitting of the testa.

We often speak of one subject growing similarly to another, or of the growth of two subjects being similar. It often happens that the similarity of growth is in part due to equal ratios of growth in the two. In this sense similarity of growth may occur in unlike subjects, if the ratios of growth are equal in each. We find that movements in two men may be said to be similar when they occur in the corresponding parts of each, and are alike in their time and quantity. In like manner, acts of growth are sometimes said to be similar when they occur in the corresponding parts of two or more subjects at the

same time and in the same quantity, as in two pea-seeds grown under similar circumstances.

Similarity of growth may be partial; in two subjects the growth may be similar as to time, or quantity, or kind. When two processes of growth are different in kind, they may be similar in time; the growth of leaves and of underground tubers may occur at the same time, and this may be the only point of similarity between the two processes of growth. (Illustrative examples were given.)

In classifying facts concerning the processes of growth, according to such intrinsic attributes as are observable, our object is to seek the causation of the attributes observed. Having classed a number of facts as examples of unequal bilateral growth, we may seek to determine the causation of unequal bilateral growth. In pursuing such methods of inquiry, we follow methods similar to those which aided us in studying the motor functions of the brain. Thus we have lines of thought to guide observation. It is possible, and, I think, highly desirable, to arrange a museum in which specimens are classified according to the attributes of their growth and the forces that stimulated their growth and produced that special ratio of their attributes. It seems to me that this was in part the principle followed by John Hunter.

A catalogue was shown in which specimens were thus arranged.

The rules that should be followed in making analogies were pointed out. It was shown that we can only compare things or acts as to the characters or attributes which they possess in common; we may compare like functions as to their time and quantity; it is only as to the time of action that we can compare unlike functions; we do not directly compare the material things, but the attributes of their functions. Growth in a child and in a plant were then compared, and other examples were put forward.

In our desire to give some kind of explanation of facts in Nature, we used processes of analogy. Acceptance of the hypothesis of evolution encourages the study of analogies; our purpose in making analogies between processes of growth is to classify examples in the best manner for seeking their causation.

The term "reversion" is used to imply that the outcome of growth observed is similar in its intrinsic attributes to others that have previously been observed. The reversion is a repetition or reappearance of vital acts, similar in their intrinsic attributes and occurring in similar subjects.

The following proposition was enunciated as an epitome of the principles illustrated: "Every vital act, or act of growth, requires among its antecedents a supply of pabulum and stimulation by some force incident to the subject."

NOTE ON PIANISTS' CRAMP.

By WARRINGTON HAWARD, F.R.C.S.,
Surgeon to St. George's Hospital.

I HAVE read with much interest Dr. Vivian Poore's lecture in the JOURNAL of February 26th on certain conditions of the hand and arm which interfere with piano-playing. It seems to me that cases of functional failure in pianists have become much more common in recent years; and as it is convenient to have some name for the condition, probably that of "pianists' cramp," which has already been applied to it, is sufficiently characteristic, and has the advantage of suggesting its alliance with the well-known affection, "writers' cramp."

No doubt, as Dr. Poore says, failure in piano-playing "may depend upon a variety of causes," and he alludes to the effect of gouty, rheumatic, and other changes in the disabled members. But the condition for which the name of pianists' cramp may be used is quite peculiar, and is always the result of over-fatigue of the affected part. Of course, "over-fatigue" is a relative term. An amount of piano-playing that can be practised without harm by one pupil will over-fatigue another; and in the dyspeptic, anæmic, and ill-nourished the muscles will break down under less prolonged use than in the healthy. But in the majority of cases of failure of the muscles of piano-playing, which occur without obvious disease or injury, over-use of the muscles will be found to be the essential cause. A potent predisposing cause is very frequently to be found in the anæmia and general ill-nourishment of the body which result from too much confinement within doors, and the accompanying dyspepsia and lack of appetite; and this has, in several instances within my knowledge, been aggravated by the change in diet, climate, and other habits of life involved in leaving an English home for residence and study on the Continent.

My experience of these cases is much less than Dr. Poore's, and all that I have seen have been young people, during or just emerging from the period of pupilage. In one rather severe case, accompanied by much muscular aching, the little and ring fingers of the left hand became, on any attempt to play, cold, benumbed, and purple; and these, I think, are the fingers specially liable to give way. I have recently seen an instance of a precisely similar condition affecting the little and ring-fingers of the right hand, with pain in the flexor muscles, in a rather delicate young lady given to much and rapid knitting.

Of the treatment of this condition, doubtless, as Dr. Poore points out, the most important part is rest and attention to the general nutrition of the body. Careful maintenance of the warmth of the affected limb (which is usually cold) has also seemed to me to be helpful; and I am sure that I have seen marked benefit from moderate and intelligently applied massage, even in cases where there has been nerve-tenderness; in two cases the pain always being relieved thereby. I think that, at least in some instances, the muscular tension involved in what Dr. Poore has well called the "steadying" of the limb for piano-playing, produces a considerable amount of venous congestion; and it is noticeable that long practising is apt to make the hands cold.

I am glad to see that Dr. Poore does not approve of the division of the fibrous bands which connect the extensor tendons of the ring-finger to the tendons on either side of it, which has been proposed as a means of giving greater freedom to the ring-finger of pianists. Can anyone suppose that the delicacy or power of touch of any of our great pianists would be improved by this absurd and unscientific proceeding!

TINNITUS AURIUM, AND ITS TREATMENT BY A NEW METHOD OF ALTERNATE INJECTION AND EVACUATION OF AIR.[1]

By JOHN WARD COUSINS, M.D. LOND., F.R.C.S.,
Senior Surgeon to the Royal Portsmouth Hospital, and to the Portsmouth and South Hants Eye and Ear Infirmary.

[*Concluded from page 447.*]

A FEW words now with reference to prognosis. It is not always an easy matter to express a confident opinion at once as to the complete or only partial restoration of the organ. In favourable cases the intensity of the aural symptoms often undergoes great variation from time to time. As a general rule, whenever the hearing power improves, the tinnitus is less disturbing; so that these symptoms appear to rise and fall alternately, and under very slight differences of tympanic pressure. Tinnitus, when dependent solely upon middle-ear disease, may be regarded as a curable disturbance; and, even in chronic cases, the relief obtained is often very considerable, and bears a direct relation to the amount of hearing power regained. On the other hand, the issue is always doubtful and unsatisfactory whenever there is repeated evidence of a deficiency in the cranial conduction of sound, especially when this loss of conducting power has been long associated with gradually increasing deafness and tinnitus. There is frequently, too, a marked relation between the degree of deafness, and the unvarying character of the aural confusion; and, in some cases of total and hopeless loss of hearing power, the persistent tinnitus forms the most distressing part of the disorder.

Let us now briefly consider the question of treatment. Many internal remedies have been recommended for this aural affection, but I have very little confidence in any of them, as in my hands they have done very little good, even when administered for a considerable period. The fact is, we know of no specific remedies for tinnitus aurium. The removal of this symptom wholly depends upon the successful treatment of the special morbid process by which it is excited. If we can succeed in curing the aural disease, and in restoring the integrity of the organ as a sound-receiving instrument, all the concomitant disorders will at once disappear.

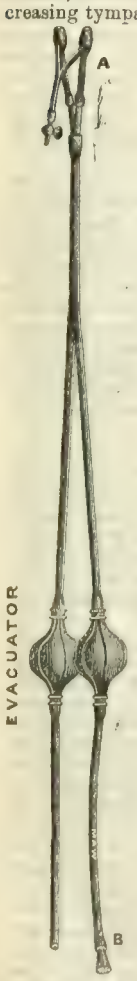
With these preliminary remarks, I shall proceed at once to the treatment of tinnitus dependent upon disease of the middle ear; and this, permit me to remind you, is the special topic of my address. Theoretically, the treatment of this form of tinnitus is a very easy matter, and simply consists in promoting free and healthy communication between the tympanum and the pharynx, and so restoring the normal balance of pressure on both sides of the membrana tympani. If pent-up fluid exists in the cavity, it must be evacuated, and its mucous surface stimulated to healthy secretion. If chronic changes are present, producing collapse of the drum and immobility of the bony chain, our efforts must be directed to promote the normal elasticity of these parts, and, if possible, to re-establish their intrinsic

[1] Address delivered before the South-East Hants Medical Society.

movements. On the other hand, if the Eustachian tubes are obstructed by secretion, our remedies must be employed for the purpose of clearing the canals, and restoring the normal condition of the naso-pharynx and throat.

The application of the air-douche has long been recognised as an invaluable method of treatment, and it is especially serviceable in the early stages of middle-ear disease. But in chronic cases, attended by obstinate tinnitus, it tends to aggravate the tympanic pressure. It often succeeds in opening up the tubes, but the simple injection of air is followed by a distressing sensation of distension, and a temporary increase of all the symptoms. The disturbance, however, generally soon subsides, as the imprisoned air gets rapidly absorbed. When the cavity is filled with mucus, the air-douche increases still more the abnormal pressure, and fails to dislodge the pent-up secretion, so that the membrana tympani becomes unduly and dangerously tense, and, in this condition, accidents have occasionally occurred.

The treatment which I have practised during the past two years, with very great success, consists essentially in the injection of air, and its immediate evacuation. Sometimes the air is medicated by the vapour of some volatile substance, for the purpose of reducing the sensibility of the cavity and stimulating the mucous surface. In many cases the operation removes at once the abnormal pressure, and yields immediate relief. It is a simple modification of the ordinary air-douche; but, at the same time, I maintain that it renders this method far more efficient in a large number of cases of middle-ear disease, and removes the risk of causing aural discomfort, and of increasing tympanic tension.



The apparatus which I employ for this operation is represented in the engraving. It consists of two parts: 1. A special nasal piece for hermetically closing the nose. 2. Two powerful hand-balls, which are connected with the former by an india-rubber tube. The nasal piece is composed of two tubes, with their extremities enclosed in inflatable bags made of very thin and soft rubber. The inflating tube has a separate connection with the lower part of each bag. The hand-balls are fitted with recoil springs, which impart force and rapidity to their expansion. One hand-ball is marked for injection, the other for evacuation, and their converse action is obtained by simply reversing the valvular arrangement, so that the outlet valve is fixed to the connecting tube on one side, and the inlet valve on the other.

When medicated air is to be injected, the selected fluid must be dropped upon a pledget of cotton-wool placed in the conical vulcanite receptacle (B), which is attached to the end of the injecting-tube. By the action of the hand-ball the air is drawn through the perforated lid, and thus charged with vapour. In this way I often employ chloric ether, chloroform, creasote, iodine, carbolic acid, iodoform and ether, either alone or in some combination.

The operation of alternate injection and evacuation of the tympanum is performed in the following manner. The nasal orifices are, first of all, carefully wiped dry with cotton-wool, the nasal piece is placed in position, and the bags are inflated so as hermetically to close the nose. The patient, supporting the vulcanite stem between the left forefinger and thumb, is directed to take a full inspiration, and then, while holding firmly the breath and pressing the lips together, to perform a muscular movement, just as if he were in the act of blowing through a tube. The operator now compresses the evacuating-ball with the left hand, and with the other hand-ball he injects air by two or three contractions of the right hand. The left hand is then suddenly relaxed, and the evacuator expands by the force of its elasticity, aided by the recoil-spring within it. After three or four of these movements, which with a little practice can be done with great rapidity, the patient is requested to breathe again, and then to take another full inspiration. In this way the injection and evacuation of air can be repeated several times in succession at one sitting. The hearing power should always be tested with the watch, both before and after each operation; and, during its performance, the otoscope can be employed with advantage, but the operator may generally rely upon the intelligent observation of the patient regarding the movements of the drum, and the entrance of air into the tympanic cavity.

The alternate method which I have described presents many advantages over other forms of tubal inflation. It promotes the immediate discharge of pent-up secretion into the pharynx, and aids in establishing the drainage of the tympanum. By the injection of air, the mucus is disturbed from its position, and by reversing the action it can be drawn towards the tube, and its passage to the throat greatly accelerated. It proves also of material assistance in the treatment of collapsed and adherent membrane. In chronic cases the mobility of the bony chain has been long impaired by the morbid condition of the middle ear; but, by gentle and repeated agitation in both directions, the adhesions between the ossicles are loosened and their normal oscillation restored, so that sonorous vibrations can be again transmitted from the drum to the fluid within the labyrinth.

With reference to the repetition of the operation, in every case we must simply be guided by results. In recent cases, very considerable relief is often obtained at one sitting, and patients put off another operation until they get a recurrence of their aural trouble. Many of my patients derive so much benefit from the treatment that they return again and again at irregular intervals to have it repeated. In chronic cases, however, improvement is generally slow, and the operation has to be perseveringly continued for several weeks. It is my usual plan to practise it two or three times every week, and to excite the to-and-fro movement of the membrana tympani freely at each sitting. With intelligent patients, especially those residing at a distance, I often teach them to perform the operation gently every day with my simple aural inflator, a description of which has already appeared in this JOURNAL.[2]

Now, it would be very easy for me to relate many instances of success in cases of obstinate tinnitus aurium, even after the persistent trial of other forms of treatment; but it will be quite sufficient for my purpose if I briefly mention two or three examples, with the hope that my experience in a large number of similar cases may induce some of my friends to test and criticise my treatment.

CASE I.—E. S., an officer in the Royal Navy, had suffered for some months from deafness and aural confusion. The attack followed from exposure after syringing the ears for the removal of impacted wax. The tinnitus was often intolerable, and he said that it would drive him mad if it continued. He had tried blistering, the air-douche, and other remedies. The operation of alternate injection and evacuation was performed three times a week for one month, and then only occasionally. He expressed great relief at each sitting, and in three months he completely recovered normal hearing power, and lost all the distressing symptoms caused by tension within the tympanum.

CASE II.—M. M., a married lady, consulted me, about eighteen months ago, for deafness on the left side and distracting tinnitus. She had been treated by several surgeons, and had been recommended to use the ordinary Politzer's bag; but this always increased her trouble. I at once commenced the treatment of alternate injection and evacuation, and directed an anodyne and stimulating liniment to be rubbed behind the ear. The operation was repeated several times with permanent benefit.

CASE III.—F. S., a commercial man, had suffered from deafness and noises in the head for twelve months. The symptoms had been very variable, and an aggravation of the tinnitus occurred whenever his hearing power was much disturbed. In all other respects he appeared a healthy man, and the disorder was wholly dependent upon aural mischief. He had been blistered freely, and had taken a great deal of medicine. After three weeks' treatment the deafness cleared away, and he completely lost the tinnitus, which had constantly distressed him for many months.

In acute disorders of the middle ear, the operation is also often of great value. The tinnitus and pain which attend catarrhal inflammation are immediately relieved by the double action of my instrument. By its gentle application the tension caused by increased secretion is removed, and the fluid escapes into the pharynx. Of course other local remedies, such as hot fomentations and leeches, are useful in these cases, together with general treatment by purgative and sedative medicines. In acute suppuration of the middle ear, with bulging of the tympanic membrane, evacuation in this way may sometimes succeed, preventing the rupture of the drum, and obviating the necessity of puncture. But in the severe forms of suppurative otitis which follow scarlet fever and other zymotic diseases, or which occur in connection with long-standing aural mischief, there must be no delay; for it is the bounden duty of the surgeon to be an eye-wit-

[2] October 3rd, 1885 (page 641). Messrs. Maw, Son and Thompson are the makers of my aural instruments.

ness to the evacuation of the pent-up pus, and to rely only on the timely performance of paracentesis.

I must now refer to several matters which interfere with the easy and successful performance of my operation at the onset. Some patients are timid and excitable, and, under these circumstances, it often requires a little tact to gain their confidence and obtain their voluntary assistance. Another difficulty arises from the imperfect closure of the nostrils. For the successful application of the apparatus, it is absolutely necessary to adjust the inflatable nose-piece, so that the orifices are securely and completely plugged. I have at hand several nasal tubes, and it is always easy to select one to suit the nostrils of the patient. Again, it is equally essential to attend to the closure of the lips, and the fixing of the muscles of the chest and pharynx. After taking the full inspiration, the patient must perform the muscular movement of forced expiration, without permitting the discharge of air by the mouth. In this way, by the action of the tensors of the palate and the muscular structures of the pharynx, the cartilaginous orifices of the Eustachian tubes are drawn downwards, and rendered patent, so that air can readily pass in and out of the tympanum. The muscular movements which take place during deglutition act directly upon the open ends of the tubes; and, for this reason, it is often very useful, during the early stages of the operation, to get the patient to swallow a little water several times at regular intervals.

Another cause of delay and difficulty arises from those chronic disorders of the throat and naso-pharynx which are so intimately associated with middle-ear disease. A relaxed and congested condition of these parts must be treated by the persistent application of local astringents, applied regularly and freely several times during the day. If the tonsils are enlarged and indurated by inflammatory changes, the ordinary operation of excision will be necessary. When a thick muco-purulent secretion from the pharyngeal follicles occludes the Eustachian orifices, it requires to be constantly washed away, and the mucous surface of the cavities stimulated by deodorising solutions. These applications can be very efficiently made by the patient himself, and he should be instructed to introduce them into the nostrils with a syringe, and then to draw them over the back part of the velum palati into the mouth, and thus dislodge the mucus.

Sometimes the naso-pharynx is blocked by adenoid growths of very variable consistency. These vegetations seriously obstruct the tubal openings, and cause obstinate deafness, with derangement of tympanic pressure. Now, before my method is applied for the relief of the aural symptoms, it is essential that these mucous outgrowths should be removed. A very effectual plan is to explore the pharynx thoroughly with the forefinger; and then, wherever vegetations are detected, to scrape them off at once with the nail. I have performed this little operation for some years, at the suggestion of Mr. Cresswell Baber, of Brighton, with excellent results. Sometimes it excites so much struggling and retching that the administration of an anæsthetic is necessary for its successful performance. Sir William Dalby has recently introduced a steel nail for the removal of these pharyngeal growths. It is secured over the end of the finger without covering the point; and by its aid, he states, the cavities can be cleared with great facility at one sitting.

In many cases of chronic and complex aural disease, in which tinnitus is dependent upon disorder of both the nervous and conducting structures of the organ, very considerable benefit is obtained by the operation of alternate injection and evacuation. It is especially, too, in these cases that the induced current proves of much value as an auxiliary measure. It acts directly as a stimulant to the nervous and muscular structures. The morbid changes in the tympanum have been followed by wasting and paralysis of the intrinsic muscles; and the tinnitus, often of a very depressing and continuous character, is occasionally complicated with attacks of aural vertigo. I always employ a weak current, and conduct it directly on to the tympanic membrane, near its posterior border, by means of a loop of silver wire enclosed in a vulcanite speculum. The electrical stimulant generally excites some contractions in the facial muscles, and sometimes seems to increase for a time the sensibility of the auditory nerve. By repeated and judicious application, relief is often obtained; and this result can be fairly attributed to increased tonicity of the tympanic muscles and a reduction of the abnormal tension upon the nervous apparatus of the organ.

In conclusion, many cases of tinnitus are undoubtedly aggravated by morbid conditions of the blood, and diseases of the general system. When anæmia, gout, syphilis, or rheumatism are present, appropriate remedies must be employed, and patients must be strictly enjoined to live regularly and temperately.

As regards the treatment of tinnitus in cases of severe and hopeless deafness caused by disease of the deep recesses of the labyrinth, some benefit may be obtained by the application of the induced current, and by the use of stimulating applications behind the ears. The injection of air into the middle ear containing a little of the vapour of either chloroform, ether, or carbolic acid, is also serviceable, and can be advantageously employed by the patient himself whenever the symptoms are urgent. But respecting the treatment of these obscure aural orders, I have really no suggestion to offer. A combination of deafness and tinnitus, produced by abnormal tension within the tympanum, is the most common of all aural derangements; and I can confidently recommend the alternate injection and evacuation of air as an improvement upon the local measures which are at present adopted for restoring the normal equilibrium of pressure within the tympanic cavity.

DRUMINE.

By JOHN REID, M.A., M.D., C.M.Glas., Melbourne, Australia.

Drumine is an alkaloid obtained from Euphorbia drummondii (Boiss). Euphorbia drummondii, N.O. Euphorbiaceæ, has the following botanical characters. Prostrate or diffuse much-branched plant, closely resembling the European E. chamæsyce (Linn.), and when flowering the first year easily confounded with it; but always quite glabrous, and forming at length perennial thick or woody rhizome. Leaves opposite, orbicular ovate or oblong, obtuse or notched, entire or serrulate, very oblique, at the base two to four lines long, firmer than in E. chamæsyce. Stipules entire fringed or lobed. Flower heads very small, shortly pedicellate in the upper axils. Involucre about half a line long, the glands with a narrow white border, entire or nearly so. Capsule under one line long, glabrous. Styles notched only, varying from almost none to nearly as long as in E. chamæsyce. Seeds rugose, E. chamæsyce, E. Ferdudi, E. Drummondii and E. Dallachyana (*Baill. Adans.* vi, 284-85).

Habitat.—In North Australia: Victoria River and Gulf of Carpentaria. In Queensland: Broad Sound, Thirsty Sound, Brisbane River, Rockhampton, Curriwillighie. In New South Wales: Port Jackson, Lachlan River, Darling River, thence to Barrier Ranges. In New Zealand. In Tasmania: Swanport (found by Dr. Storey). In South Australia: Spencer's Gulf, Murray River, Kapunda, and the Gatoler Ranges. In Western Australia: Swan River and Murchison River. In Victoria: From the sources of the watercourses in the North-West to the Murray River, from those in the North East to the Hume River, including the whole Victorian Alps. *Vide* Müller, *Census of Australian Plants Fragmenta*, vi, p. 182; *Key to System of Victorian Plants*, 1885, p. 11, and Bentham's *Flora Australiensis*, vi, p. 49.

Preparation.—The whole plant, including the rhizome, seeds, etc., is macerated in dilute hydrochloric acid for some days. It is then strained through linen under pressure. (The plant may be boiled in the dilute acid, and strained under pressure.) Sodium bicarbonate is added, stirring while adding it, until an alkaline solution is obtained with precipitated drumine. The product is filtered, and the precipitate is washed with water to get rid of colouring matter, leaving drumine on the filter. This may be dissolved in dilute acid, and evaporated to obtain the hydrochlorate, or other salt.

Properties.—Alkalies precipitate it, the salicylate is very sparingly soluble in water and gives a crystalline precipitate. It may be crystallised from aqueous, spirituous, or chloroform solutions in acicular, the larger ones almost rhombic, under a high power of the microscope, and stellate crystals, all microscopic. The powder is either dirty like morphine, or pure white. The solution is compatible with iron and acids, cyanide of potassium, and a neutral solution precipitate it, not prussic acid; perchloride of mercury is compatible with it; strong nitric acid does not act on it chemically, but dissolves it, as does H_2SO_4.

Uses.—In nasal catarrh, injected into the nostrils, it effects an immediate cure. This may, in chronic cases or otherwise, be used in solution with gr. i corrosive sublimate to the pint, and gr. vi ad ℥ i hydrochlorate of drumine. Spasmodic contractures at anus—solution locally; the same in pruritus. Facial dermatitis, with acne and itching: spermaceti ℥ i, drumine gr. x. Sciatica or lumbago: case of two years' duration, unaffected by other remedies, cured by two injections. Sprains:—Cases of sprained abdominal muscles cured speedily by free injections. Periosteal pain following fracture of the lower end of the sternum, with tenderness, of two years' duration, cured by injections. Burns:—Extensive denudation of skin; very free application to raw surfaces; relief of pain; no constitutional symptoms. Neuralgia:—Dropped into the eye, it gave relief. Opera-

tions:—Used in probing for splinter (producing feeling of deadness); in probing abscess in the foot, etc. Internally:—Relieved the feeling of thirst on a scorching day, and made the tongue moist. On Tongue:—One side may lose the sense of taste for quinine, the other being unaffected (repeatedly tried); also common sensibility destroyed.

Compared with cucaine, it does not dilate the pupil; it does not stimulate prior to paralysing sensation; it produces no constitutional symptoms when applied to extensive surfaces.

Notes.—Mr. Stanley, M.R.C.V.S., found that sheep might eat it for some time without its causing death, and that, when given in poisonous doses, it causes hoven. This supports my views, seeing that the sensory nerves of the gut are paralysed, secretion as well, and so absorption is in abeyance. One cat I experimented on was paralysed in the extremities; but the dose was very large, and a spirituous solution was used. The stomach, etc., in a cat that had tasted neither food nor water for nine days was natural and free from inflammation, etc; the blood was natural; the bowels were empty. I have written quite fully enough to show (1) that the drug is a pure anæsthetic; (2) that it is safe; and (3) that it may be used both internally and externally with advantage. For further particulars, I would refer to my more extended articles in the *Australasian Medical Gazette* and the *Chemist and Druggist of Australasia*. I have given only experiences.

AN OBSCURE CASE OF FRACTURE OF THE SKULL.

By RICKMAN J. GODLEE, M.S., F.R.C.S.,
Assistant-Surgeon to University College Hospital.

On Monday, November 22nd, 1886, at 9 A.M., a boy, aged 15, was thrown from a horse, which fell whilst running away with him, striking and bruising his forehead and nose and both knees. He was apparently not even stunned, but, after sitting still for two hours, and sleeping for ten minutes, he walked home and spoke rationally to his parents, and, indeed, nothing except the bruising was noticed by them until the afternoon of the following day, when he rather rapidly passed into a state of delirium, with high fever. There was at no time any sickness, nor any bleeding from the nose, mouth, or ears.

Some months previously he had suffered from a troublesome discharge from the nose, which, it was thought, might have been caught from examining too closely a horse that had been tracheotomised for a disease known in the stables as "strangles." This had been treated both in England and in Belgium, and was supposed to have been completely cured.

He was seen by Mr. A. B. Kelly on the afternoon of Tuesday, November 23rd, and at 7 P.M. Mr. Kelly and I saw him together. There was then swelling and bruising about the nose and at the lower part of the forehead, the swelling here occupying the middle line, but extending somewhat more to the left than to the right side. There was also redness, caused probably by the application of some arnica, which strongly suggested the idea of erysipelas; but this proved to be erroneous. There was no marked swelling of either orbit, and no subconjunctival ecchymosis, and there was no swelling in any other part of the head. The left knee was distended with fluid, and evidently was both tender and painful.

He was at this time speechless and almost, if not quite, unaware of what was said to him. He moved all his limbs, except the injured left leg, freely; swallowed food when the feeder was applied to the lips, and passed his water spontaneously, but unconsciously. The pulse was rapid and full, about 120; the respirations also were rapid, but regular; and the temperature 105° Fahr.

We examined carefully both the chest and abdomen, and endeavoured to exclude all other conceivable causes of the fever; and thinking that the swelling of the face might possibly be due to erysipelas, we applied fomentations, and administered a mercurial purge. Next day, as the symptoms remained the same, though the swelling of the face was less, we abandoned the idea of erysipelas, and adopted the diagnosis of meningitis; the hair was accordingly cut short, and ice was applied on the 25th, and from this time forward.

He lived till midnight on November 28th, that is 6½ days after the accident, and, in the interval, the following symptoms developed themselves: The right arm became incompletely paralysed and rigid on the 26th; and the right side of the face, including the upper eyelid, on the 28th; but movements of the right leg were still performed. There was slight spasm of the right facial muscles before he died. The reflexes could not be properly compared, on account of the injury to the left leg; ankle-clonus was marked on the right side. The bruise on the forehead became very prominent, and seemed to be pointing. The distension of the left knee increased considerably, and a large purplish-brown patch of ecchymosis appeared on the left calf and inner side of the left foot, evidently tender, and most suggestive of blood-poisoning. He continued to take his food; and he passed his water under him. The lips and tongue were dry, and the breath acquired the peculiar earthy smell often met with after head injuries. The pulse and respirations remained rapid; the temperature once sank to 103°, but stood usually at 105°.

No other symptoms of consequence were observed, and we had thus to be content with the diagnosis of meningitis and acute septicæmia, following a presumed fracture of the skull, which was, as far as outward evidence went, a simple one—a condition of things so rare as to make us doubt the accuracy of our conclusion.

A necropsy was made eighteen hours after death, when decomposition was already somewhat advanced. The clot on the forehead peeled off with the scalp, and was, in this situation, quite superficial to the pericranium. It had suppurated, and the abscess thus formed communicated by a narrow track with a patch of bone, from which the periosteum had been stripped off, extending along the junction of the upper and inner walls of the left orbit. This track thus passed round the internal angular process of the frontal bone. On opening the skull, it was found that there was extensive meningitis, more abundant on the left side than on the right. On the right side, it was principally about the base and the temporo-sphenoidal lobe; on the left, it extended up along the fissure of Rolando over the region occupied by the cortical centres of the face and upper limb, but not obviously reaching that of the leg centres. The brain itself was quite uninjured.

There was a small fissured fracture, commencing 1½ inches above the internal angular process of the left frontal bone, and running down to the upper and inner angle of the left orbit, along which it extended as far back as the articulation between the frontal and sphenoid bones—following, in fact, the suture between the frontal and the ethmoid. For some little distance on each side of this, the dura mater had been stripped off; but it was so injured in removing the brain, that it is uncertain whether or not it had been torn at the time of the accident. The fracture communicated with the posterior ethmoidal cells, which contained pus; and it was found, on chipping away the cribriform plate, that the ethmoidal cells and the sphenoidal sinus on the right side also were filled with pus.

The left knee-joint was distended with pus, and there was some bruising on the inner side of the patella itself. The fluid in the calf was clearly inflammatory, but not actually purulent in the part cut into for observation. The viscera were examined without finding any point of interest.

To explain this very obscure case, two hypotheses are possible. First, that which is most likely the correct one, that the fracture, which was really compound, as it communicated with the posterior ethmoidal cells, became contaminated from the secretion of the nose, hence the suppuration of the clot, the septic meningitis, and the general septicæmia, which was indicated by the suppuration of the knee-joint. If we add to this the possibility of some specific poison remaining from the previous attack of inflammation of the mucous membrane of the nose, possibly caught, it will be remembered, from a horse, the exceedingly rapid development of the symptoms becomes comprehensible.

Secondly, it is conceivable that the patient may have been in the state (analogous to that preceding the onset of acute necrosis depending upon injury) when any extravasation or bruising is almost certain to result in an abscess. This not very common condition will be familiar to most surgeons, but it does not, I think, clear up the difficulties of this case satisfactorily.

On the whole, if merely from the point of view of diagnosis, it seems worthy of being recorded. Acute meningitis following a simple fracture of the skull is, I believe, almost unknown; doubtless instances of it have been described, especially before the bearing of the septic element in the production of meningitis was recognised; but it is more than likely that, in these cases, some minute communication with a sphenoidal sinus, an ethmoidal cell, or, perhaps, the external auditory meatus has escaped detection by the observer.

The *Journal de Médecine* of January 2nd, 1887, contains the following prescription for gastralgia and indigestion recommended by Dacosta. R Bromide of potassium, 8 grammes; calcined magnesia, 6 grammes; cherry-laurel water, 60 grammes; lettuce water, 240 grammes; simple syrup, 25 grammes; extract of thebaia, 40 centigrammes. Shake the bottle before using. Dose: one tablespoonful before meals.

CLINICAL MEMORANDA.

PAROTITIS.

HAVING read Mr. Paget's important paper on Parotitis in the JOURNAL of March 19th, it has occurred to me that it might be of interest to record two cases of parotitis that have occurred in my own practice during the last two years.

The first, in October, 1885, occurred in the course of acute endocarditis. The patient was a young man, aged 19; he had had rheumatic fever fourteen years previously; there was evidence of an old heart affection. About the seventh week from the onset of the attack, the right parotid became acutely inflamed, and I thought it would suppurate; but the acute symptoms passed off after a few days, and the patient convalesced after an illness of about nine weeks' duration.

My second case was in a girl, aged 8 years, the subject of exophthalmic goitre, whom I exhibited at the January meeting of the East London and South Essex Branch of the British Medical Association. The exophthalmos and goitre have almost entirely subsided, and she has quite recently developed parotitis, beginning on the right side, but a few days afterwards involving the left side also. She has decided albuminuria. It is just possible this last case may be an ordinary example of mumps.

Haggerston. MAJOR GREENWOOD, Jun.

FUNCTIONAL APHONIA IN A BOY.

IN January of last year I was sent for to see R. R., a boy, not quite 11 years old, suffering from colic; but what principally frightened his friends was his inability to speak. The boy made desperate efforts to do so, but could not utter a sound. However, just as I was about to leave, he pronounced the words "Yes, sir." I again spoke to him, and he tried to reply, but utterly failed to do so.

Next day I called and found that the colic was better, and the power of speech had returned. In the course of the day, however, he gradually lost it again, and the faculty remained in abeyance for three months, during which time he was only able to speak a word or two on two or three occasions. One of these was when the throat was galvanised, when the voice certainly returned, but was lost again in a few minutes.

I sent him to see Dr. Whipham at St. George's, and Mr. Butlin at St. Bartholomew's Hospital. The boy was of a nervous temperament, and was troubled with enuresis. I can testify that he would have spoken if he could. His age, 10 years and 9 months, appears to me to make the complaint a somewhat interesting one. The voice returned naturally and suddenly. WALTER G. WALFORD, M.D.

South Hampstead.

THERAPEUTIC MEMORANDA.

SYMPTOMS OF POISONING PRODUCED BY CUCAINE.

LAST week I assisted my father in enucleating an eye in a woman, aged 38. She was of a highly nervous temperament, and eight months pregnant. The sight was completely gone, and the pain very severe, so that she insisted on having the eye removed, but declared that chloroform or ether would kill her; and as we did not care much to give her a general anæsthetic, we explained to her the action of cucaine, to the administration of which she consented. A 6 per cent. solution was therefore instilled for about a quarter of an hour. My father then divided the conjunctiva round the corneal attachment. I again instilled cucaine, and he proceeded with the operation, I dropping in the alkaloid at each step. The patient felt little or no pain, only "a nasty sensation," as the muscles were caught up and divided. During the operation I used one drachm of a 6 per cent. solution, which contained 3¾ of a grain of cucaine. A short time after the operation (about thirty minutes after the first instillation) she turned very faint, her face became blanched, and her lips slightly cyanosed. She felt very sick, her pulse was rapid and feeble, but she soon got better again. She was then removed to the next room, and left for about an hour and a half, when, feeling better, she walked home, assisted by her husband, a distance of about 150 yards. About an hour after this I was sent for, the messenger urging me to come quickly, as she was dying. I went at once, but, on my arrival, she was a little better, though I found her faint, with cold extremities and rapid pulse. I gave her some hot brandy and water, and she was soon all right again. The case then proceeded favourably, and, so far (one week) the occurrence has had no effect upon her pregnancy. In the account of Professor Kolomnin's case (JOURNAL, December 18th, 1886), it is not stated whether the cucaine was given hypodermically, or simply as an injection into the rectum. I take it that he used 22 or 23 grains. I used less than 4 grains, and yet, I think, it would have taken but little more in the case just related to have caused a fatal result. R. STEER BOWKER, M.R.C.S.

Sydney, N.S.W.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

NORTH-EASTERN HOSPITAL FOR CHILDREN.

UNUNITED FRACTURE OF THE CLAVICLE IN AN INFANT: RESECTION AND WIRING OF FRAGMENTS: GOOD UNION.

(Under the care of Mr. BILTON POLLARD.)

For the notes of this case we are indebted to Mr. H. DOWNES, House-Surgeon.

E. J., a female child, aged 15 months, was admitted July 12th, 1886. The child's mother stated that, about four months earlier, the child had fallen off a bed and injured her right collar-bone. Surgical aid was not sought until a month after the accident, and then the surgeon who was consulted said the bone was broken, but nothing could be done for it. Later on, the child was brought to the hospital, where the limb was confined to the chest, but no union of the bone took place. The child appeared to be out of health, and presented signs of rickets. It was thought better to defer operative treatment for a time. The child had only been weaned for one month; but, in addition to the breast, it had been fed occasionally with eggs, and bread and milk. The right clavicle was broken at the junction of the middle and outer thirds, and presented the characteristic deformity of that fracture. The fragments could be freely moved on one another, and could be drawn into good position by pulling the shoulder back. The right arm was used very little, but there did not appear to be any wasting of the muscles of the limb. The child's health improved greatly, but no change took place in the broken bone.

On August 21st, about six weeks after admission, the child being under the influence of chloroform, Mr. Pollard made an incision just below the seat of the fracture, exposed the fragments by cutting through some of the fibres of the pectoralis major muscle, and found that they were united by fibrous bands, enclosing a bursal sac between the two ends of the bone, which were themselves covered over by dense fibrous tissue. The false joint was excised by sawing through the bone obliquely, close to the fractured ends, with a small Adams's saw. The broad surfaces of the obliquely-cut ends of the bone were drilled, and tied in accurate apposition by means of a wire suture. The wound was closed with catgut sutures, drained by a few strands of the same material, and dressed with a few layers of carbolic gauze and a quantity of salicylic wool. The arm was held in the position which secured the most accurate co-aptation of the fragments, and immovably fixed by plaster-of-Paris bandages. The carbolic spray was used during the operation. The temperature reached 100° F. on the third day, and then fell to the normal. The wound was dressed on the fifth and tenth days after the operation, as a little discharge showed at the border of the dressing. On the seventeenth day after the operation, the wound was healed, except at two small points; the position of the fragments was good, and they were ensheathed by a large mass of callus. A week later, a little granulation tissue was scraped away from the points above mentioned, and the wire with which the fragments had been sutured was exposed and removed. The wound was soundly healed three weeks later. The plaster-of-Paris case was then removed, and the patient was discharged. She was seen again four and a half months later, and then the clavicle was soundly united in good position, and the right arm was used as freely and as powerfully as the left.

REMARKS BY MR. POLLARD.—It fell to my lot in August, 1885, to assist Mr. Barker at University College Hospital in an operation for ununited fracture of the clavicle in a boy aged 12, and so impressed was I with the simplicity of the operation and the great benefit that followed from it, that I determined to adopt Mr. Barker's method of procedure in my own case, notwithstanding the fact that in some of the recorded cases no great loss of function of the arm occurred, though the fractures remained ununited, and also in the face of the opinion expressed at the Clinical Society that a successful issue to

such a case was almost more than could be expected. The child hardly moved its right arm at all, so I thought that an attempt to unite the bone was quite justifiable, and, indeed, called for. I, however, operated with every confidence that union of the bone would be obtained; for the nutrition of the fragments, as estimated by their size, was good; the bone to be operated upon was composed chiefly of cancellous tissue; and, lastly, though not of least importance, it was possible to secure absolute immobility in combination with strict aseptic surgery. As a rule, a fracture of the clavicle, particularly in childhood, unites even without immobilisation of the bone; and it might be argued from this fact that some very unfavourable conditions must be present in cases of non-union, and that, in consequence, the clavicle would be the very bone least likely to be benefited by operation. It is interesting to note that experience negatives this position; for, in addition to Mr. Barker's case and that now recorded, a third, under the care of Mr. G. A. Wright, of Manchester, has been recently successfully treated by resection and wiring. The small size of my patient in no way rendered the operation difficult, and the subclavius muscle afforded ample protection to the vessels and nerves beneath the clavicle; but the smallness of the parts necessitated a corresponding smallness of the dressing, and to this I attribute the need for changing it so early as the fifth day after the operation.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 22ND, 1887.

GEORGE POLLOCK, Esq., F.R.C.S., President, in the Chair.

On a Case of Obstruction of one Ureter by a Calculus, accompanied by Complete Suppression of Urine. By RICKMAN J. GODLEE, M.S., F.R.C.S.—Up to June 4th, 1884, the patient, a medical man who was then aged 31, had enjoyed good health, with the exception of an attack of blood-poisoning following a poisoned wound whilst he was a student in 1872, and occasional attacks of colic, supposed to be intestinal, which were relieved by morphine. He was then attacked with frequency of micturition and pain in the bladder. A week later sickness began, and right renal pain, with fever and hæmaturia. There was pus in the urine. After a few days these symptoms subsided; but they soon returned, and became worse. Intense tenderness appeared in the right loin, the urine became highly albuminous, and contained large numbers of hyaline and granular casts as well as masses of bacteria, but it was never putrid. On July 13th a deep-seated perinephritic abscess was opened. The kidney could not be discovered. The casts disappeared completely from the urine, and the albumen diminished to a very small quantity. No urine escaped from the wound, which healed without trouble. The patient, after this, remained well, with the exception of occasional attacks of colic, till December 10th, 1885, when an attack of great severity set in, for which he took several hypodermic injections of morphine. On December 14th complete suppression of urine occurred, which lasted a week. No operation was undertaken, because it was assumed that there was only one working kidney, the ureter of which was blocked. On the 19th, however, the left kidney was felt and punctured, but the pelvis was found to be empty. On the 21st he began to pass highly albuminous urine, and the amount and character of this became more and more normal; but he did not rally, and died exhausted on December 26th. *Post-mortem* the right kidney was found to be dilated into a loose bag of pus, and a stone was impacted half-way down its ureter, which was dilated through its whole extent. The left kidney was large and comparatively healthy, but showed signs of chronic interstitial nephritis; the pelvis and ureter on this side were normal. The interest of the case depended on the following facts: (1) that an abscess around a diseased kidney may cause intense albuminuria and the presence of copious casts, even though the other kidney be comparatively healthy; (2) irritation of such a diseased kidney (aided, perhaps, by the presence of a certain amount of morphine in the system) may cause complete suppression, similar to that caused by complete obstruction of the ureters, and not like that occurring in Bright's disease; (3) though the stone was impacted half-way down the ureter, this tube was dilated throughout its extent.

On a Case of Suppression of Urine, following Injury to a Sacculated Kidney containing Calculi, the other Kidney being entirely disorganised. By ROBERT WILLIAM PARKER.—S. C., aged 13, a well-built boy, fell over some steps and struck his right side in the region of the kidney. Up to the time of this accident he was said to have been quite well. The fall caused him great pain, and he had some difficulty in getting home. He went to bed, and remained there for several days. Two days after his accident the boy "passed blood instead of urine." He vomited frequently, and suffered considerable pain at intervals, and the urine continued to contain blood. At the end of a week he appeared to have regained his usual health; but his symptoms all recurred at the end of another week, and he was brought to the hospital, where he remained three weeks, and was then discharged apparently well. Examination at this time failed to detect anything abnormal with or about the kidney. He had some slight pain from time to time, and for two or three days after admission the urine contained blood. In two months' time the boy was brought back to the hospital, with recurrence and aggravation of all his symptoms. It was then elicited, after closely questioning his mother, that the lad had had similar, but less pronounced, symptoms for twelve months past. On his readmission he was found to have a large tense, elastic swelling in the region of the right kidney, extending as far forwards as the umbilicus. This was diagnosed as a traumatic hydronephrosis, and was tapped several times on account of the pain and discomfort which it caused. As it refilled rapidly it was exposed in the loin and a free incision made into it. During the first five days in the hospital the boy passed an average of 45 ounces of urine; in the next four days this average fell to 13 ounces a day; on the tenth day, only 1 ounce was passed. Unmistakable signs of uræmia now set in, and the boy died four days subsequently. The *post-mortem* examination showed that the left kidney was quite disorganised, and converted into a mere sac, in which one large and several small calculi were found. The right kidney (the injured one) was greatly hypertrophied; the calyces were much dilated, in one of these a large calculus was found, and in others smaller calculi. A small calculus was found in the right ureter, at the level of the brim of the pelvis. The author remarked on the awkward nature of the hydronephrotic sac as a complication; it prevented the finger reaching the front of the kidney, and the examination of the pelvis and ureter through the incision in the loin. It was thus impossible to make quite sure of the diagnosis. Calculus was suspected and the kidney was punctured in several places without result. When the urine diminished in quantity, less importance was attached to this fact than it merited, judged in the light of the *post-mortem* evidence; it was thought the urine found its way into the hydronephrotic sac, and that the diminished quantity, voided *per urethram*, represented the product of the other kidney. The treatment adopted was referred to, and the question whether any surgical treatment directed through the loin could have dealt with this case successfully was raised.—Mr. BELLAMY showed a specimen from a case which he described as of the same kind as the preceding, in his own practice, in which he had been unable to find the stone by operation, but in which it was found *post-mortem* in the pelvis of the kidney.—Dr. COUPLAND expressed great interest in Mr. Godlee's case as going to show what were almost a new experience—namely, that a focus of irritation around one kidney should go so far as to produce complete suppression of urine by the other. He was anxious to know more exactly the condition of the kidney that had been thus sympathetically affected. He felt little doubt that it would be much more easily affected if it were not quite sound than if it were normal. He considered the distinction drawn between the states of obstructive and non-obstructive uræmia was a refinement not often to be recognised, though it was made by Sir W. Roberts.—Mr. MEREDITH remarked that Mr. Godlee's case illustrated the advantages that might be gained by abdominal exploration, for he thought that, in his case, a hand introduced through an abdominal section would have recognised that the left kidney was in fair condition, and probably have felt the stone in the right ureter, and that after that it would have been practicable to have made a lumbar incision into the right kidney, drained it, and saved, or at least prolonged, life.—Mr. HOWARD MARSH observed that it was remarkable that in all the three cases that they had heard of that evening, Mr. Bellamy's, Mr. Godlee's, and Mr. Parker's, there had been failure of diagnosis. The kidney was a double organ, and it was essential before operation upon one to find out the condition of the other. Many operations were undertaken without this safeguard, and led to disastrous results. Information could not be got without opening the abdomen in front. That was a difficulty that must be faced, and it was not so formidable now that we were coming to believe seriously that abdominal section was not such a very serious operation. In a case under his own care he had failed to find the kidney through the loin, but had found it later through the abdomen, and removed it with good result.—Mr. A. BOWLBY pointed out that Mr. Godlee's case did not go so far as to prove that sympathetic suppression of urine would occur in a kidney that was quite healthy. He had

seen suppression from injury of one kidney only, but he had not the complete proof needed to show that the other was healthy.—Dr. Douglas Powell asked if the origin of the perinephritic abscess was known; and if it could be due to any leakage of urine from the kidney. It seemed to him, as a physician, that it could hardly be good surgery to treat by abdominal section such a case as Mr. Godlee's, where there was not only perinephritic abscess, but also repeated attacks of severe albuminuria and abundant casts. Again, he felt very sceptical as to the possibility, even supposing the abdominal incision had been made, of making out whether the kidney examined was healthy in its most important functions.—Mr. A. E. Barker agreed in thinking an abdominal operation would have been ill suited to so critical a case. If it had been made, and the stone found in the ureter, he supposed it might have been possible to push the stone back into the kidney, and extract it through the loin, but that would have been almost sure to result in a stricture in the ureter. He should have inclined to a lumbar incision in this case, though he did not by any means wish to exclude abdominal section altogether, nor did he regard it as so very formidable. In a case under his own care, a girl had had paroxysms of hydronephrosis recurring every six days; he had opened the kidney through the loin, and taken out a stone which he found impacted in the infundibulum. As soon as the lumbar opening was allowed to close, the pain returned, for the ureter had contracted at its upper end, where the stone had lain. It was not completely impervious, for he could put milk into it, which was passed by the urethra. The patient had lived very comfortably with a permanent lumbar fistula.—Mr. Barwell suggested that no abdominal section should be attempted if the amount of urea secreted was low, as that showed disease of kidneys.—Dr. Ogier Ward said he had recently seen experiments on the comparison of the urine secreted by each kidney, which would have been useful in these cases, after washing out the bladder. An instrument was introduced to cover one ureter for ten minutes, and then the urine which was drawn off was to be attributed to the kidney whose ureter had not been closed. In answer to the President, he said the instrument was complicated, and he could not describe it exactly.—Mr. Godlee admitted, in reply, that, as Mr. Barwell had suggested, the amount of urea excreted was an important point, one which he had mentioned several times in his paper, but which, if he had appreciated its importance more in the case in question, might have led him to realise that his patient had one tolerably healthy kidney. In that kidney, however, there was considerable interstitial change, and he agreed with Dr. Coupland that that fact rendered it much more disposed to stop work. He thought that the description of "obstructive suppression" given by Dr. Fagge (*Principles and Practice of Medicine*, ii, 387) and Sir W. Roberts, was very appropriate to his case, and, indeed, characteristic. As to abdominal section, he could not think that anyone who had seen his patient in life would have been inclined to apply it to him, for his general condition was too unhealthy; but, if it had been done, he thought it was probable that they might have felt the stone in the right ureter, and the best thing to be done would have been to make a lumbar incision into the kidney and drain it. The stone when in the kidney was very probably the cause of the perinephritic abscess; it had hardly lain long enough in the ureter to lead to a stricture if it could have been taken out. He had heard some years ago of an instrument, something like a lithotrite in shape, which was devised to grasp and close the orifice of one ureter; but it could not have been of any use in the last stage of his case, as there was no secretion from either kidney.—Mr. Parker considered that abdominal section, in the case he had brought forward, would have been practically of little value, though it would have shown him that the left kidney was *hors de combat*, which he did not know. Still, he did not see that that knowledge would have saved the patient.

HARVEIAN SOCIETY OF LONDON.

Thursday, March 17th, 1887.

Edmund Owen, M.B., F.R.C.S., President, in the Chair.

Case of Hereditary Syphilis.—The President showed a girl, aged 15, the subject of hereditary syphilis. She had first come under his care ten years ago, when she had an ulcerated gumma in the groin, ulceration and sloughing of the soft palate and tonsils, deafness on both sides, corneitis, and inflammation of the upper epiphysis of each ulna and tibia. When six months old, she had undergone a course of treatment by grey powders. Mr. Owen prescribed 3-grain doses of iodide of potassium in plenty of water three times a day, under which all the symptoms rapidly cleared up. A year later, the child was again brought with an ulceration of the tonsil, which quickly yielded to the iodide; she had also periostitis of the shaft of the ulna which ended in suppuration, and in the exfoliation of a surface layer of the bone. After eight years' absence, the child was again brought with chronic diffuse osteitis of each tibia, which had caused not only great thickening but also lengthening of the bone. The lengthening was due to chronic inflammation in the cartilages connecting the shaft of the tibia with the epiphysis. There was also ulceration of the skin over the shins. The child was kept in bed, and every night was rubbed with blue ointment after having a hot bath. Under this treatment she was rapidly improving. Mr. Owen called attention to the scars at the angles of the mouth, to the large, square forehead, and to the teeth; the left central incisor was notched, and the central incisors were sloping towards each other.

Treatment of Habitual Constipation in Children.—Dr. Day read a paper on habitual constipation in children and the methods of treatment. Most cases were due to: 1, a sluggish state of the muscular coat of the intestine; 2, to a diminution of secretion from the mucous membrane, or the liver; 3, to improper diet. Children were variously affected by constipation; the bilious and plethoric required a daily evacuation, whilst the neurotic, eating similar food, might have no evacuation for days together without inconvenience. Prolonged constipation was apt to lead to disease of the cæcum, chronic inflammation and thickening of the intestinal walls, dilatation of the tube, and occasionally perforation of the gut. Highly nutritious food, by not furnishing any residuum to be carried into the intestine, was conducive to constipation. As regarded treatment, it was important that the child should make a voluntary effort every morning. Enemata were valuable when the colon was torpid and the rectum blocked. Mellin's food was advocated as a valuable preparation in the constipation of young children. Among drugs, strychnine and belladonna were useful in imparting tone to the bowels, relieving spasm, and lessening flatulence. Nitric acid was recommended in some cases of chronic constipation. An occasional mercurial purgative was useful in constipation from deficient secretion of bile, but, if repeated too frequently, it caused lassitude, pallor of the face, softness of muscle, and irritability of temper. Saline aperients were sometimes useful in children of full habit. Massage was a powerful remedy in chronic constipation, and, if conducted by a competent person, the process was pleasant and soothing to the child. Attention to diet was of primary importance.—The President called attention to the importance of making a digital examination of the rectum in cases of chronic constipation, and quoted a case where such an investigation had led to the discovery of congenital deformity of the bowel.—Mr. Cripps Lawrence remarked on the treatment of typhlitis due to chronic constipation.—Dr. Jelly referred to the value of massage as a therapeutic agent.—Dr. Alderson remarked on the value of mercurial treatment in the case of bilious children.—Dr. Walter Pearce considered that constipation in some cases depended on the child avoiding stool, owing to the pain produced by soreness of the anus consequent on the irritation of thread-worms.—Dr. Sydney Phillips agreed that aperients should not be lightly used; tubercular peritonitis, obstruction from concretions, etc., had to be carefully considered. In many cases there was a deficient formation of bile; in such cases the stools were pale, hard, and scybalous, and the administration of acids and calomel was called for. In many cases the small intestine was at fault, and not the large. The combination of aloes and belladonna was most valuable.—Dr. Day briefly replied.

BRITISH GYNÆCOLOGICAL SOCIETY.

Wednesday, March 9th, 1887.

G. Granville Bantock, M.D., President, in the Chair.

New Specula.—Mr. Spanton exhibited some specula made of fine porcelain, and lined with platinum. They had the advantage of being much stronger than glass, very easily cleaned, and affording a good light. He also showed some pessaries made on the principle of the ring pessary, but having a pad at each end, which made them more comfortable to wear than the ordinary hard pessary.

Uterine Fibroma Removed by Abdominal Operation.—Dr. Meadows exhibited a specimen of uterine fibroma which he had removed from a patient, aged 34. There was a history of menorrhagia and pain for upwards of three years. The patient had been married thirteen years, and was sterile. The tumour rose centrally out of the pelvis, and reached one inch above the umbilicus. The uterus below the tumour was not enlarged; the uterine sound gave a measurement of four inches. Dr. Meadows removed the growth together with the ovaries and tubes, applying the wire below the tumour, about the level of the internal os. The temperature never rose above 99.8°, and the patient was now convalescent.—The President said he was not in favour of the early removal of the *serre-nœud*. He did not think there was

danger of hæmorrhage from doing so after four or five days. On the question of the intra-peritoneal as opposed to the extra-peritoneal method of treatment of the pedicle, he much preferred the latter. The only case of this kind which he had treated by the intra-peritoneal ligature died from hæmorrhage, while those treated extra-peritoneally, thirteen in number, had all recovered.

Vaginal Hysterectomy.—Dr. F. A. PURCELL reported three successful cases of vaginal hysterectomy for malignant disease. The first case, which was operated on on September 23rd, 1884, died eleven months after the operation; particulars of the death had not been ascertained. No recurrence had taken place six months after the operation. The uterus and appendages were shown at the Obstetrical Society on January 14th, 1885. The second case was operated on on October 20th, 1885, and the patient was still free from any recurrence; the specimen was shown at the Gynæcological Society on November 25th, 1885. The third case, of more recent date, was operated on on February 12th, 1887; the specimen—the uterus, and the ovaries and Fallopian tubes—were shown at this meeting; this case was now well. —Dr. BEDFORD FENWICK said that the operation should never be undertaken if the disease had implicated the neighbouring tissues, the broad ligaments, or the pelvic glands.—Dr. EDIS pointed out that the supra-vaginal amputation was far less dangerous to the patient than total extirpation of the uterus, and the results were equally favourable as regards recurrence.—Dr. MANSELL-MOULLIN said that if it could be clearly shown that when the disease recurred its tendency was to spread upwards in the cellular tissue of the pelvis, and not downwards to the vagina, the operation would be worthy of earnest consideration. He should never think of operating in a case where the vagina was already involved.—Dr. GRIGG stated that when in Berlin in 1879, he heard the late Professor Schroeder lay it down as an axiom that the local mischief alone was not an infallible guide to an operation for extirpation of the uterus, and that no operation should be undertaken without a thorough examination of the broad ligaments and lumbar glands under chloroform.—Dr. HEYWOOD SMITH, Dr. FANCOURT BARNES, Dr. ROUTH, Dr. R. BARNES and the PRESIDENT took part in the discussion.—Dr. PURCELL then replied.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 21ST, 1887.

J. HUGHLINGS JACKSON, M.D., F.R.S., President, in the Chair.

Case of Swollen Optic Disc, in which the Sheath of the Optic Nerve was incised behind the Eyeball.—Mr. BRUDENELL CARTER related the case of a young woman who sought advice on November 18th last on account of impaired sight of her left eye and headache, these symptoms being of ten days' duration. The left optic disc was much swollen, and the eye was blind over the temporal half of its field of vision. The patient was admitted into the National Hospital for Epilepsy, Queen Square, under Dr. Hughlings Jackson and himself. Iodide of sodium and mercurial inunction were prescribed. She speedily became mercurialised, but her condition did not improve. Hæmorrhages and patches of exudation appeared in the swelling. On December 28th, Mr. Carter divided the external rectus muscle, rotated the eyeball inwards, exposed and opened the sheath of the optic nerve, and gave exit to the contained fluid. The patient was at once relieved of headache, which did not return for a month. The swelling gradually diminished, and the field of vision was restored. Mr. Carter pointed out that this operation could be accomplished with certainty and without danger, and advised its employment in every case of swelling of the optic disc.—Dr. HUGHLINGS JACKSON thought the case was one of extreme interest, from the monocular neuritis and the blindness.—Mr. JULER said that the operation had opened up a new era in ophthalmic surgery. The pathology in itself was very interesting; but he did not think that the same success could always be anticipated.—Mr. J. ASTLEY BLOXAM asked whether the swelling was due to direct pressure of fluid from the subarachnoid. He had seen extreme distension of the disc in a case of tubercular meningitis, and this had suggested the possibility of draining the cavity of the arachnoid, possibly *viâ* the optic nerve.—Dr. HERRINGHAM did not think that simple elevation of the disc was in itself a sufficient indication for operation.—Dr. S. WEST asked whether Mr. Carter would operate if the affection were bilateral; further, whether many of these cases really became blind, and whether he would do it in dropsy of the nerve from granular kidney.—Mr. CARTER said he did not believe in any neuritis without some loss of sight. He did not think the subjects of Bright's disease would be good cases for operation. He would not operate unless there were some defect of vision.

Case of Renal Calculus treated by Solvents.—DR. RALFE exhibited a specimen of renal calculus passed after six weeks' solvent treatment. It was oat-shaped, eroded on the surface, and measured ½ of an inch in length, and weighed 3½ grains. It was composed chiefly of oxalate of lime, with a few crystals of uric acid scattered over the surface. The remedies employed were lithia and turpentine in a mixture and Dover's powder at night. The patient was directed to drink at least three pints of filtered rain-water daily. Under this treatment the urine, which at first had a specific gravity of 1,025, and contained much blood and pus, became clear, and the specific gravity fell to 1,014, whilst the attacks of colic diminished. Dr. Ralfe's method differed from that proposed by Sir William Roberts in that he did not seek to diminish the size of the calculus by chemical solvents, a doubtful and difficult process, but to check its growth by keeping the specific gravity of the urine low, and also by diminishing existing pyelitis. Dr. Ralfe observed that there were many calculi small enough to pass easily down a ureter, which were prevented doing so by the swollen condition of the orifice. He illustrated this by a specimen which had been retained for several days, owing to the patient suffering from gouty pyelitis, though the concretion was quite minute; as soon, however, as the pyelitis was relieved, the calculus slipped down easily. In addition to distilled water and turpentine, Dr. Ralfe spoke highly of benzoate of lithia or potash. The mode of treatment should be adopted in the following instances: 1, when the calculus was recently formed and still small, and was retained chiefly by the swollen condition of the mucous membrane of the kidney; 2, in recurrent calculi—the pisiform concretions of elderly people, in these cases the calculi passed before the administration of remedies were of the size of a pea, afterwards they diminished to that of a mustard seed (specimen shown), or ceased altogether; 3, in cases when, owing to the obesity of the patient or his broken health, nephro-lithotomy was not advisable. In these instances it might be hoped that the distilled water might at length lead to the disintegration of the calculus, as in a case recorded by Dr. Ralfe (*Path. Soc. Trans.*, vol. xxxiii.), whilst the terebinthine remedies undoubtedly diminished the pyelitis and the tendency to colic.—Dr. MAGUIRE said he thought many patients were sent abroad who might be more advantageously treated at home.—Dr. VEALE asked why distilled water was a better solvent than ordinary water, seeing that a large amount of salt was always taken with food.—Mr. B. JESSETT said that larger calculi than those shown had often been passed without treatment, the benefit of which was rather in the increase of the amount of urinary flow. He doubted whether there was any really solvent action.—Dr. RALFE said he attached the greatest importance to relieving the pyelitis. He certainly did think that a solvent action was produced under favourable circumstances.

Intussusception in a Child.—Dr. ALLCHIN showed a specimen from an obscure case of intussusception in a child six months old. The illness lasted altogether nine days. There was not much sickness and no abdominal tumour.

Congenital Opening in Diaphragm.—Mr. T. ASTLEY BLOXAM showed the diaphragm removed from an infant three months of age; the opening was situated near the *ligamentum arcuatum externum* on the left side.

Renovation of Mouth.—Mr. BLOXAM showed a man for whom he had reopened a mouth which had become almost entirely closed consequent on ulceration.

PATHOLOGICAL SOCIETY OF MANCHESTER.

WEDNESDAY, MARCH 9TH, 1887.

J. DRESCHFELD, M.D., President, in the Chair.

Chondro-sarcoma of the Hand.—Mr. THOMAS JONES exhibited a hand which he had removed for a large sarcomatous tumour springing from the distal extremity of the metacarpal bone of the left thumb. The patient, a healthy woman, aged 62, noticed the growth about three years previously, and for two and a half years it developed very slowly; of late its rate of increase had been much more rapid. A fortnight before the operation, the skin over one part of the tumour ulcerated, and putrid disintegration followed. The hand was removed by circular amputation a short distance above the wrist, and the stump healed in ten days without any suppuration.

Landry's Paralysis.—Dr. DIXON MANN described a case of Landry's paralysis, from which sections of the cord and nerves were exhibited by Dr. Robinson. The disease terminated fatally in eight days. The view taken of the pathology was that of a toxic agency, to substantiate which a quantity of the blood, obtained after death, was examined for ptomaines, but with negative results. The inhibiting influence was inferentially localised in the spongy portion of the grey matter of the anterior cornua in which the pyramidal tracts terminate.

Acute Central Myelitis.—Dr. RAILTON showed sections of the cord

from a case of acute central myelitis, which had been under the care of Mr. W. A. Evans, at the Wolverhampton General Hospital. The symptoms offered nothing peculiar, and death had occurred in three months from cystitis and bedsores. The sections were taken from above and below the main lesion. Those from the part above showed that the central inflammation of the grey matter had extended upwards, and had almost totally destroyed the multipolar cells of the anterior horns, disorganising the posterior horns and the anterior and posterior nerve-roots, spreading into the lateral and posterior columns, and there causing the formation of a number of cysts of various sizes, the larger ones being traversed by delicate trabeculæ. The neuroglia was everywhere increased, and the walls of the blood-vessels were thickened, mainly by an increase of the adventitia. The sections showed, also, ascending degeneration of the columns of Goll and of the cerebellar and Gowers's tracts. In the sections of the cord below the inflammatory focus the grey matter did not appear to have been so seriously affected. There was a disappearance of some of the ganglion-cells of the anterior horns, and a marked thickening of the external coat of the vessels. The neuroglia throughout both grey and white portions was increased, but there were no cysts in the white matter. Secondary descending degenerations were present in the lateral and direct pyramidal tracts.—Dr. SINCLAIR and Dr. DRESCHFELD also exhibited specimens and sections.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, FEBRUARY 4TH, 1887.

J. B. BRADBURY, M.D., President, in the Chair.

Quinsy.—Dr. EASBY (Peterborough) read a paper on quinsy and its treatment. He advised the use of aconite given after Dr. Ringer's method, or ten to fifteen grains of salicylic acid or salicylate of soda given every two hours; this he had invariably found to give speedy relief. Gargles were useless and cruel to the patient. As a local application, a powder consisting of equal parts of tannin and iodoform puffed on to the swollen tonsils was useful in relieving pain. —Dr. LATHAM agreed that gargles were useless, and advised the use of the spray, chlorine water, or some antiseptic; it was especially useful for children. He strongly endorsed Dr. Easby's remarks on salicylic acid and salicylate of soda in the early stage, more especially if there was any association of rheumatic symptoms. In the discussion which followed, Mr. CARTER, Mr. HEMMING, Dr. BRADBURY, and Mr. CRIBB took part.

Note on Stellwag's Symptom.—Mr. WHERRY showed a married woman, aged 32, with marked retraction of the left upper eyelid (Stellwag's sign), no proptosis, and no goitre. There was some throbbing of the carotids and palpitations, but no cardiac *bruit*. She blushed and perspired very easily, and suffered a good deal from indigestion and sleeplessness. The retraction of the lid was extremely well seen when the eyes looked downwards. There was no want of consensual downward movement of the eyelid (Graefe's sign). The pupils were equal and active; V = $\frac{2}{2}\frac{0}{0}$ in both; fundus normal, no pulsation in the retinal vessels; complete power of closing the eyelid; cornea and conjunctiva sensitive. The patient had been married thirteen years, had one child, now six years old, but no miscarriage; had had no illness of late; menstruation quite regular, rather scanty; occasional leucorrhœa. Although there was no exophthalmos and no goitre, Mr. Wherry thought this was probably a case of Graves's disease, and quoted several similar cases which had been recorded. This patient had first noticed something wrong with her eye about a year previously; had been under observation during the past six months; had lately improved under bromide draughts at night and small doses of belladonna twice daily. There was little change, however, in the eyelid symptom, which came on rather suddenly and continued to the present. Mr. Wherry wished to draw attention to this symptom, because the opinion had been expressed by Graefe that cases were not rare in which the only symptoms of Graves's disease in women were rapid action of the heart without hypertrophy or valvular disease and defective mobility of the lid.

Intra-uterine Amputation of Forearm.—Mr. STREET said A. B., aged 22, a healthy young woman, was first seen by him when suffering from inflammation of the left olecranon bursa. From an inch below the elbow the limb was wanting, and, on inquiry, he found that she was born with this deformity; the stump was quite healed at birth, and no evidence of any remains was to be found. The cicatrix was only three quarters of an inch long, and the skin was very little puckered around it; it was not adherent to the deeper parts. There was no history of syphilis in the mother, nor of any accident during gestation.

Immature (Senile) Cataract.—Mr. DEIGHTON read a short paper, in which he discussed the conditions which rendered it advisable to operate in cases of immature (senile) cataract; he also read notes of a case in which he had operated, the patient obtaining V = $\frac{2}{3}\frac{0}{0}$ and 1 J.

REVIEWS AND NOTICES.

LA SYPHILIS HÉRÉDITAIRE TARDIVE. Leçons professées par ALFRED FOURNIER, Professeur à la Faculté de Médecine de Paris, etc. Avec 31 Figures, par Alfred Forgeron. Paris: G. Masson. 1886. Pp. 650.

OF late years much has been added to our knowledge of inherited syphilis, and much has been written on various points connected with it; notably by Kassowitz on the question of inheritance itself, and by the late M. Parrot on the changes in the osseous and other tissues. But, so far as we are aware, nothing has yet appeared which deals with the subject as a whole to anything like the extent that it is dealt with in the present work.

Those who are acquainted with M. FOURNIER'S previous writings will readily understand that any subject he takes up is sure to be fully and ably treated, and we may say at once that the work now before us is in every way worthy to rank with its predecessors.

By *Syphilis Héréditaire Tardive*, the author means all those manifestations of inherited taint which appear in later childhood, adolescence, and adult life, as distinguished from those which appear immediately or very soon after birth, and which come under the head of *Syphilis Héréditaire Précoce*. In the first lecture, M. Fournier states that his object is to establish the following propositions:—that the hereditary influence of syphilis is not limited to producing manifestations in early life, but continues to a much later period; that sometimes it does not show itself at all until a period more or less remote from infancy; that, either with or without manifestations in infancy, it may cause specific lesions either in childhood, youth, or adult life; and lastly, that such syphilitic lesions are nearly always attributed to scrofula.

In proceeding to deal with the subject in detail, the author divides it into three parts. The first of these is devoted to the elements of diagnosis, and here the various clinical signs and symptoms are enumerated, and their comparative value, from a diagnostic point of view, pointed out; special attention being paid to the affections of the eye, ear, and teeth, the association of which in inherited syphilis was first pointed out by Mr. Hutchinson (*Triade d'Hutchinson*). The various malformations of the teeth, both temporary and permanent, are elaborately explained with the aid of numerous illustrations. On this point M. Fournier's opinion is, that while there is no dental abnormality which is pathognomonic of syphilis, that which is associated with the name of Mr. Hutchinson and characterised by a semilunar notch in the cutting edge of the permanent upper middle incisors is by far the most valuable in diagnosis. Indeed, M. Fournier himself has never seen the *dent d' Hutchinson* apart from inherited syphilis.

In the section on the bones the question of rickets and syphilis is of course discussed and, in connection therewith, the late M. Parrot's view, to the effect that the former is essentially syphilitic, had necessarily to be considered. M. Fournier cannot accept M. Parrot's conclusions on this subject, for, while fully recognising the frequent occurrence of rickets in syphilitic children, he believes it to be simply due to the general constitutional disturbance set up by the syphilis. Besides the study of the manifestation in the patient himself, stress is also laid on the equally important and valuable evidence to be gained from the history and examination of other members of his family.

The second part of the work contains a full and systematic description of the manifestations of inherited syphilis as it may affect the various tissues and organs of the body, and of the manifold ways in which the disease may show itself at different periods of life. Here, also, the difficult question of distinguishing between syphilitic and scrofulous affections, especially of the skin and mucous membrane, is considered. The disastrous results of mistaking syphilis for scrofula are pointed out, and much valuable information on the differential diagnosis is given.

The last part of the volume is occupied with the subject of acquired syphilis in children, and the various points in which it resembles and differs from the inherited form of disease are fully noticed, as well as the many accidental ways in which young children may acquire syphilis.

In concluding this brief notice of M. Fournier's admirable work, it must be added that it is written in the author's well-known clear and practical style, and that, while every practitioner of medicine would

do well to read it, no one specially interested in the subject can possibly afford to pass it by.

ST. BARTHOLOMEW'S HOSPITAL REPORTS. Edited by W. S. CHURCH and JOHN LANGTON. Vol. XXII. 1886. London: Smith, Elder, and Co.

THIS volume begins with an obituary of Dr. Frederick Farre, and many pages are taken up with two articles of the archæological type that has been so conspicuous a feature in the *Reports* since they were first issued. The first is a reprint of "Records of Harvey in Extracts from the Journals of the Royal Hospital of St. Bartholomew, with Notes by James Paget, 1846," and the second is a continuation of the history of the drug department at the hospital, prepared by Dr. Church.

The present volume is chiefly remarkable for the great excess of medical over surgical papers. Foremost in interest is a very practical contribution by Dr. Gee, modestly headed "Miscellanies." It contains much that will interest the practitioner, such as the passages on "Head-shaking and Head-banging in Children," "Menstrual Fever," and "Chorea Insaniens." Sir Dyce Duckworth contributes a good clinical paper on "Three Cases of Multiple Peripheral (Alcoholic) Neuritis in Women." Amongst the large number of articles by young physicians is a monograph by Dr. Vincent Harris, "On the Significance of Blood-spitting," which dwells much upon recurrent non-phthisical hæmoptysis, such as the form which appears to be a pure homologue of epistaxis, and that which is connected with syphilis. Drs. Lauder Brunton and Cash have written two joint articles "On Modifications in the Action of Aconite Produced by Changes in the Body Temperature" and "On Absorption of Gas by the Intestines and the Action of Carminatives upon it." Dr. Steavenson's important "Report from the Electrical Department," with a full tabulation of the cases, shows the benefits which have been afforded to patients by the institution of this special department, a somewhat tardy move on the part of the hospital authorities. There is but one purely surgical contribution in the whole volume, but Mr. Bruce Clarke's "Rarer Sequelæ of Gonorrhœa" is a good example of what would now be termed a clinical surgical paper. The excellent system of publishing a yearly appendix to the museum catalogue is maintained, and the volume includes the Hospital Statistical Tables for 1885 prepared by Dr. West and Mr. Bowlby.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

POCKET SURGICAL INSTRUMENT CASE.

WILLIAM DYNE STEEL, M.D., Abergavenny, writes: Messrs. Arnold and Sons, of West Smithfield, have made me a small pocket surgical instrument case, which will, I think, be found a boon to general practitioners. The average surgical dressing case is far too large and cumbersome to be habitually carried about in the pocket; consequently, it often happens that it is not at hand when most wanted. A case is required containing a few of the necessary emergency-instruments, yet so small that it may habitually be carried about, without causing inconvenience by its bulk. The enclosed woodcut depicts such a case, con-



taining scissors, dressing and artery forceps, probe and director, abscess-knife, and gum-lancet, with pockets for sutures and needles. The dimensions are as follows: Length, 3 in.; width, 2 in.; thickness, $\frac{3}{8}$ in.

Pocket cases intended to answer this purpose are sold by several makers, but the instruments being placed in two rows, the case is rendered so thick as entirely to defeat the object with which it is made. In the above case, the few absolutely necessary instruments are laid as flat as possible in one row, and thus the outside thickness of $\frac{5}{8}$ths of an inch is obtained. The case fits easily into the watch or waistcoat pocket.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MARCH 26th, 1887.

THE LONDON COLLEGES, THE APOTHECARIES' SOCIETY, AND THE PROFESSION.

THE meetings of the Comitia of the Royal College of Physicians last Monday and of the Council of the Royal College of Surgeons last Thursday, mark the termination of one act in the drama which is being enacted before the eyes of the profession. The Colleges have deliberately set aside the expressed wishes of their own commonalties and of the general body of the practitioners of medicine in this country. They have determined that a new order of practitioners shall be created, who will be admitted to the profession upon a lower qualification and at diminished fees, but who, once admitted, will claim equal rights, both as regards facilities for practice and medical titles, with those who shall in future enter the profession by the more arduous road and through the more ornate portal designed by the two Colleges. The claim which will be put forward by these doubly qualified Licentiates of the Apothecaries' Hall will be as well founded as that now advanced on behalf of the licentiates of the two Colleges. The difficulty has thus not been fairly met; its solution has been postponed, apparently for an indefinite time, but a decision opposed to the wishes of that large and important class of the profession who are most keenly interested in the maintenance of a high standard for the rank and file, cannot be permanent. The general practitioners, who alone are competent to form an opinion on the subject, dissent from the decisions arrived at by the governing bodies of the Colleges, and the old difficulties, which it was hoped would have been removed by the Act of 1886, will again arise to disturb and delay the steady process of social elevation and scientific growth of the profession.

The Fellows of the Royal College of Physicians, as will be seen by the report of the meeting which appears in another column, rejected the recommendation of the General Medical Council inviting them to admit the Apothecaries' Society to the Conjoint Board; they rejected it, too, with every mark of contumely; nobody dared seriously to oppose the behests of the dominant party; and the hope expressed by one speaker that the exclusion of the Apothecaries Society would shortly lead to its extinction elicited no signs of disapproval.

The centre of interest now shifts again to the General Medical Council, and it will become the duty of the President of that body to summon an early meeting to consider the application addressed to it by the Apothecaries' Society, praying for the appointment of the

necessary examiners in surgery. This application is made in compliance with the Medical Act, 1886 (Clause 5, Par. 1), which enacts that if a corporation is unable to enter a combination for the purpose of holding qualifying examinations, the General Medical Council, on application made, shall, if it think fit, appoint any number of examiners to assist at the examinations for diplomas, conferring on the holders the right of registration under the Medical Acts. The two Colleges having combined to refuse the Apothecaries' Society admission to a Conjoint Board, the fear has not unnaturally arisen that they may attempt, directly or indirectly, to ensure the rejection of the application of the Apothecaries' Society when it comes before the General Medical Council. The opinion widely and strongly expressed, in resolutions of many of the Branches of this Association, by the Members of the College of Surgeons, and by the Association of General Practitioners, by every agency, that is to say, by which the general body of the profession can make its voice heard, must have weight with the Medical Council, which has already formally expressed the opinion that the existence of two competing examining boards in London would be contrary to the public interest.

Should the General Medical Council show such unexpected weakness as to allow itself to be cajoled or intimidated by the Colleges (a result which, since it has been so materially strengthened by the addition of direct representatives, need, perhaps, hardly be feared), the Apothecaries' Society will have the right of appeal to the Privy Council. The chief element of danger is the rapidity with which the business must be got over. There ought, therefore, to be no delay in summoning a meeting of the General Medical Council; for if, by any ill chance, the matter has to go on appeal to the Privy Council, that body will act not as a mere official department, but as a legal tribunal, before which the Apothecaries' Society would have the right of being heard by counsel. It would, however, be a humiliation to the General Medical Council if it were thus to leave the Privy Council to fulfil functions delegated by the Legislature to the former body, a humiliation which it may be hoped, for the honour of the profession, may be avoided.

HOSPITAL FINANCE.

Sir Rutherford Alcock has again addressed the public through the medium of the *Times* (March 19th) on the same important subject which was so ably treated in his former letter. Our readers will find that letter fully discussed in the Journal of January 8th, and we cannot add much to what we then said, for Sir Rutherford's present letter does not carry the subject much farther, though it is not on that account of less importance. In the present busy times, one who wishes to impress his views on the public must bear in mind the American warrior's homely advice, and "keep pegging away." It is only by reiterated shouting that the deaf ears of the multitude can be kept open, and Sir R. Alcock has done wisely in keeping before us the great cardinal fact of the poverty and utter inadequacy of the present provision made by the London public for the hospitals which are our constant boast, while their condition of chronic insolvency is our shame. So far, at any rate, we heartily go with our respected colleague, and wish him all success in his effort. Part of his letter is directed to answering the editor of *The Hospital*, Mr. Burdett, who argues that because the total annual contribution to the London hospitals has increased by about £20,000 per annum in ten years, all is well. Here our author is on safe ground, and has no difficulty in showing that, even if the increase in question were "in any reasonable proportion to the increase of population, or of assessable value in the last decade," it would still leave the total wholly inadequate for its purpose.

Sir Rutherford's attempt to deal with the objection raised by Mr. Bousfield, the Chairman of the Medical Provident Association, and by "some others in the medical press"—among others, by this Journal—that he had "too exclusively advocated the collection of unlimited funds for the maintenance of the present unorganised competition of medical charities" strikes us as less successful. All that he can say in defence is that he did refer to the need of a Royal Commission to inquire into the whole subject, and even hinted that possibly a public "rate in aid" might be found necessary. We admit that he did so, but we still contend that, apart from the need for more money, and even previous to any question of increased subscriptions from the public, an inquiry into our present hospital system is urgently needed, in order to see whether the present subscriptions are spent as they ought to be. Sir Rutherford again refers the pecuniary embarrassments of the hospitals to the fact that they have "the cost of maintenance for over 73,000 in-patients, in addition to the charges incurred for 864,807 out-patients to meet"—as if that charge were a law of nature—as if he had never heard that there had been any allegation of abuse in this indiscriminate "medical charity," so called. And although he does refer cursorily to "a better administrative system" and "the diminution of the numerous special hospitals and small dispensaries" as a desirable object, the whole gist of his letter is simply "more money." Now more money is, we know, urgently needed in some quarters, but we are equally convinced that less money, even no money at all in other quarters, is not less desirable. So long as al institutions which choose to call themselves "hospitals" are lumped together in the public estimation—so long as great institutions like Guy's, King's College, or St. Thomas's are hardly to be kept open, while paltry "special" institutions, which are founded for no public object whatever, but to float some speculative "specialist" into practice, absorb their thousands and tens of thousands—so long, do we say, ought capable and influential writers like Sir R. Alcock unceasingly to impress on the public the necessity for reform in our hospital system as a necessary preliminary to improvement in their financial position.

But on this part of the subject, perhaps, we have said enough in our former article. We would like to take this opportunity of asking our readers to consider how entirely the public is left without guidance in this direction by the great medical institutions, which ought to take charge of the interests of the population as much as of those of the profession, and which show their sense of that duty by equally neglecting both. How is it that the Medical Council and the great Colleges think such vitally important matters entirely beneath their notice? If some wretched speculator tries to make capital out of the year of jubilee to found a "bogus" hospital, the wildest idea that could enter into any one's brain would be that either College would interfere with him, even though the obnoxious nature of the scheme were known to members of their Councils. Private persons, and members of the profession, unassisted by official rank, may work as long as they like in the vain endeavour to promote reforms which are so much needed; but, who ever heard of these rich and influentia corporations troubling themselves about such matters? How long will the great body of the profession submit to the domination of a

few dignified persons, who have no idea of deserving their dignities by any useful service to the persons whom they represent?

RELATIVE RANK.

THE strong feeling which has been aroused among the medical officers of the army by the abolition of relative rank found full expression at the hands of the deputation which met Mr. Stanhope in the Conference Room of the House of Commons, on Tuesday last. The deputation, which consisted of General C. Fraser, M.P., Colonel Duncan, M.P., Dr. Farquharson, M.P., Dr. Cameron, M.P., Dr. Clarke, M.P., Surgeon-General Maclean, Dr. Alfred Carpenter (who, in the absence of the Chairman, Mr. Ernest Hart, represented the Parliamentary Bills Committee of the British Medical Association), Mr. C. Macnamara, and Mr. Francis Fowke, was introduced by Sir Guyer Hunter, M.P., who is a retired surgeon-general in the Indian Medical Service.

The Secretary for War listened in the most patient and courteous manner to the speeches of the deputation. It will be seen from the full report published at page 689, that Mr. Stanhope disclaimed the authorship of the warrant which has caused so much discontent, although, looking at the question from a civilian's standpoint, he was not able quite to see the matter in the serious light in which it is regarded by the officers of the Medical Staff. However, he acknowledged that the discontent that had arisen was founded on an honourable sentiment, and promised in the most cordial manner to take care that when the warrant is redrafted the cause of discontent should be removed.

There was one part of Surgeon-General Maclean's speech which, we think, will commend itself to the service. He pointed out that as relative rank had been declared on the highest authority to be a mere term, with no definite meaning, to restore that meaningless term would never meet the justice of the case, and he respectfully asked that in the matter of honorary rank the Medical Staff of the army should not be placed in a position inferior to that of those who feed and pay the army.

The Medical Staff are under deep obligations to the Parliamentary Bills Committee of the British Medical Association, which was ably represented at the conference by Dr. Alfred Carpenter, whose admirable address expressed, we are satisfied, the opinions of the great Association he so well represented. To Sir Guyer Hunter, also, the Service owes a debt of gratitude. He, unlike many others who have attained to a high position in the estimation of the world, was mindful of the tree from which he was hewn, and stood by his brethren as only a man of the stamp of Ranald Martin would do.

VAGINAL EXTIRPATION OF THE UTERUS.

DR. STAUDE, of Hamburg, has recently published in the *Deutsche medizinische Wochenschrift* (xii, 35, 36, 1886) an account of twenty cases of total extirpation of the uterus through the vagina. He has paid especial attention to the question whether the peritoneum should be closed after the removal of the uterus, or left open and drained, and has come to the conclusion that closing it by sutures is far preferable to drainage. None of his patients died, but troublesome complications occurred only in the cases which were drained. As a preliminary to the operation, he first broke down and removed the cancerous mass from the cervix, applied the cautery to the wound left behind, powdered it with iodoform, and plugged the vagina with iodoform gauze. About three days later he operated. Dr. Staude invariably employed chlorine-water as an antiseptic. He did each operation in three stages. The first stage included the cutting away of the vaginal portion of the cervix, the separation of the bladder, the setting free of the entire cervix, and the laying open of the peritoneum. In the second stage, the base of the broad ligaments was secured and separated; and then the upper part, with or without forcible retroversion of the uterus. Lastly, the uterus was removed. The closure of the peritoneal wound constituted the third stage. Dr. Staude believed that the tubes and ovaries should always be left behind; in one of his cases only was an ovary removed, which was prolapsed. He now closed the peritoneal wound with a continuous catgut suture; formerly, he employed an interrupted suture. The application of the former greatly facilitated the last stages of the operation. He plugged the vagina for two or three days with iodoform gauze, sometimes keeping a drainage-tube in as well, the tube being simply inserted as far as the vault of the vagina. Later on, the vagina was daily washed out with chlorine-water. Out of the twenty cases, one was performed for prolapsus; all the remainder for cancer. Of these, five were cases of cancer of the lower part of the cervical canal, nine of the wall of the cervix, one of the supra-vaginal portion, and four were mixed cases. The first five cases remained free from recurrence till last observed, at intervals of from two months to three and a half years after operation. Of the nine cases in the second group, only three remained without recurrence when Dr. Staude drew up his report, from one to two and a half years after operation. Recurrence occurred in all the last five cases. Altogether, eight out of the nineteen cancerous cases were still in good health. Dr. Staude doubts the advisability of Schröder's supra-vaginal amputation of the cervix for rodent ulcer, and certain early forms of cancer of the cervical walls, as the surgeon could not feel sure how far the disease had extended. Owing to the increasing good results which followed total extirpation through the vagina, that radical measure appeared to be far preferable. Dr. Jaffé, of Hamburg, in commenting upon these cases in Schmidt's *Jahrbuch*, observes that Dr. Staude's arguments were excellent when applied to the results of his series, but that other equally experienced operators had met with much less success. It seemed questionable practice to perform so dangerous an operation for a relatively trifling disorder like prolapsus, when milder measures might effect a cure. We may observe that the operation is certainly not popular in this country in cases of cancer of the cervix, owing to the great difficulty of ascertaining how far the disease may have invaded the neighbouring tissues. In cancer of the breast, a very wide area of healthy tissue, all within sight, is often at the surgeon's disposal. In uterine cancer, the operator is always obliged to cut close to the diseased organ, through structures which lie in the dark, or are at least difficult of access. Neither in total extirpation, nor in supra-cervical amputation, is this disadvantage to be avoided. Hence, it is highly improbable that either of these operations can ever become universally established like ovariotomy, or even supra-vaginal hysterectomy for fibroids.

THE THIRD READING OF THE LUNACY ACTS AMENDMENT BILL IN THE HOUSE OF LORDS.

IN the last number of the JOURNAL we referred in a leading article to the successive series of proposals made in the Lunacy Acts Amendment Bill, in the several stages of its passage through the House of

Lords, with regard to the provision for the exercise of judicial functions by the judge, magistrate, or justice who (on petition) signs the order for the reception of a person as a private lunatic, and for the interview of one of these or of some other judge, magistrate, or justice with the alleged lunatic; and we pointed out that the proposals in question had been progressively less and less desirable. When that article was written, the latest proposal of the Lord Chancellor was that, when a person had been placed under care as a private lunatic on the order of a judge, magistrate, or justice, who had not had an interview with him, the lunatic shall have the right to be taken before, or visited by, the judge of county courts having jurisdiction in the district within which the lunatic is detained, or, if the lunatic so elects, before a stipendiary magistrate or justice named by the lunatic, and having such jurisdiction; unless the medical superintendent, proprietor, or attendant, within twenty-four hours after his reception, makes and sends to the Commissioners a certificate that the exercise of such right would be prejudicial to the lunatic. If such certificate is not signed, the lunatic shall, within the same space of time, have notice in writing of such rights, and it shall be ascertained whether he desires to exercise the same; and if the lunatic, within seven days after his reception, expresses his desire to exercise the same, he shall be procured to sign a notice in the form specified in the Bill, and this notice in writing of the desire of the lunatic to exercise such right shall forthwith be sent by post, in a registered letter, to the judge of county courts having jurisdiction in the district within which the lunatic is detained, or if the lunatic has named a stipendiary magistrate or justice having such jurdisdiction, then to such magistrate or justice. Thereupon the judge, magistrate, or justice shall, at his option, visit the lunatic, or have the latter brought before him, and then shall forthwit send a report on the lunatic to the Commissioners.

Since the article on this subject went to press last week, the debate on the third reading of the Bill took place, on March 17th. The Lord Chancellor moved amendments having the general effect described above, but with the very important exception that in no case shall the notice be sent to, or the jurisdiction be exercised by, and the interview had with, the judge, magistrate, or justice who made the order for reception in the special circumstances supposed in the subsection. The latter provides that the notice shall be sent to, and the jurisdiction exercised by, any judge, magistrate, or justice other than the judge, magistrate, or justice who made the order for reception, then present within the petty sessional division or borough where the person received is, who shall be in such notice named by the person desiring the interview, or if no judge, magistrate, or justice is so named, any justice who shall, under arrangements which shall be for that purpose from time to time made amongst themselves by the justices in such division or borough, undertake such jurisdiction; in which last-mentioned case the notice shall be sent to the justices' clerk of such division or borough, for the justice.

The Earl of Selborne urged that the judge, magistrate, or justice who had signed the order for the reception of an alleged lunatic should also have the subsequent interview with him in any case to which the provisions of the subsection apply, such judge, magistrate, or justice being best acquainted with all the facts of the case, and it being undesirable to render another one a court of appeal against his order. Lord Selborne's amendment, giving expression to his views, was lost, the Lord Chancellor having previously declined to accept it, chiefly on the ground that it would have the effect of making the judge, magistrate, or justice practically hear an appeal from his own order. Looking at all the circumstances of the case, we are not impressed with the cogency of the latter reasoning. In the instances supposed the judge, magistrate, or justice who has signed an order, without having an interview, has exercised practically ministerial functions. With the interview his really judicial functions commence. To that interview he proceeds without prejudice; at it he has to deal with the facts of the case from an entirely different standpoint. No longer dealing chiefly with the regular and orderly condition and the sufficiency of the petition and medical certificates, his duty now is to come to a conclusion on the facts of which he gathers personal knowledge. Throughout he is seeking the good of a person supposed to be suffering from *disease*; he is not weighing the evidence brought on a criminal charge against an alleged law-breaker.

Lord Herschell moved that the magistrate or justice required to see and examine the alleged lunatic should not be selected by the latter himself, but should be selected (as also any judge acting similarly) by the justices of the county or borough. To this the Lord Chancellor assented, on condition that Lord Herschell should be able to satisfy himself that the change could be effected without injury to the machinery of the Bill; and the amendment was agreed to. Although an improvement, this still leaves much to be desired, and we trust that the clause dealing with the point will be recast when the Bill reaches the House of Commons. The chief reasons for this conclusion were more fully expressed in the article which we published last week, which should be read in connection with the present one.

THE Offices of the British Medical Association and JOURNAL have been removed this week to 429, Strand, W.C.

WE are requested to state that the meeting of the Harveian Society announced to take place on April 7th is unavoidably postponed.

THE life of George Varrentrapp, the pioneer of sanitary progress in Germany, afforded matter for a highly interesting lecture given last week by Dr. Willoughby at the Parkes Museum.

DR. VON BASCH has given (in the *Berl. Klin. Woch.*, No. 2) a description of his sphygmomanometer, which resembles an aneroid barometer in construction. The article is valuable also for a copious list of references to the recent literature of blood-pressure.

PROFESSOR VIRCHOW's address on myxœdema has called attention to this disease in Germany, and now another case is reported by Dr. L. Landau in the *Berlin. Klin. Woch.*, No. 2. This makes the fifth reported from Germany; Riess, Erb, and Senator having reported the previous four in the same periodical (1886, No. 5; 1887, No. 1; 1887, No. 9).

THE Emperor of Germany has conferred upon Dr. Lauer, His Majesty's Body Physician, the Order of the Red Eagle of the First Class. The report that Dr. Lauer would receive a grant of 300,000 marks in recognition of his services has not been confirmed.

ON the suggestion of Lord Justice Fry, who has shown great interest in the matter, the report of the Committee over which he presided was referred by the Senate of the University of London at its last meeting to the same Committee for further consideration, in order that the views expressed by certain members of the Senate should be embodied or criticised. The Chairman of Convocation has been authorised to communicate the scheme to the annual Committee of Convocation, and any member was empowered to inform the affiliated Colleges of the nature of the proposed alterations.

A MEETING of Convocation of the University of London will be summoned early next month to take into consideration the best method of commemorating the jubilee of the University and of Her Majesty the Queen. It is understood that a statue, or other suitable memorial of Her Majesty, who is a Visitor of the University, will be erected in the University buildings.

COMPOSITION OF A GRAIN OF STARCH.

M. BOURQUELOT, at the Académie des Sciences, stated that a grain of starch is not formed, as has been believed until now, of one or even two, but of a larger number of carbo-hydrates.

THE LATE PROFESSOR BECLARD.

THE friends and pupils of the late Professor Béclard intend placing his bust beside that of his father upon the tomb where they are buried together. For this purpose a subscription list has been opened.

DEATH FROM HYDROPHOBIA.

A BOY, aged 13, died recently from hydrophobia at Hathern, Leicestershire. On February 16th, he was bitten on the face by a stray terrier, which showed unmistakable signs of madness. This is said to be the first case of hydrophobia which has occurred in the county of Leicester since 1885.

ANOTHER CENTENARIAN.

ACCORDING to the *Rüssky Kürier* of February 1st, 1887, a woman named Ludivilla Christophor died recently, at the age of 118, at Rothdorf, in the Kurland government. The deceased had enjoyed good health throughout her life.

CASTRATION AND RABIES IN DOGS.

IN the *Novorossüsky Telegraf* of January 13th, 1887, M. Karüzo, a South Russian landowner, asserts that castrated dogs never contract rabies. The statement is based on observations made by himself and other persons with like opportunities.

CLINICAL SOCIETY OF LONDON.

A MEETING of the Clinical Society will be held on April 1st instead of April 8th, which is Good Friday. The usual meeting will take place on March 25th.

LEPROSY ON THE CONTINENT.

LEPROSY, according to an official circular in the *Madrid Gazette*, is prevalent in the provinces of Valencia, Alicante, and Almeria. A case, supposed to have been brought from Spain, has ended fatally in a Paris hospital. The French Government is considering the advisability of establishing a quarantine in the ports on all Spanish vessels.

GRANT TO VICTORIA UNIVERSITY, MANCHESTER.

WE understand that the authorities of Victoria University have received official information that the Government have acceded to their request for an annual grant of £2,000 a year, to begin on April 1st next.

THE EDUCATION OF THE BLIND AND DEAF AND DUMB.

REPORTS on the education of the blind and deaf and dumb, in response to a specific reference, were presented by Mr. Roston Bourke at the meeting of the London School Board held last week. The report on the blind showed that the number of scholars under instruction at the end of December was 139, and the number of blind children last scheduled 272, so that 51 per cent. of blind children were under instruction. During the half year ended September last, 22 blind children passed the inspector's examination along with the children who could see. The number of deaf and dumb children under instruction by the Board was 303, and the number scheduled 524. Of this number, 429 only were eligible for instruction. Most of the assistant teachers had been trained in the oral system. One of the great difficulties was the classification of the children, as the system could not be thoroughly taught in less than eight years. It was recommended that a special course of instruction in the use of tools employed in trades should be given during the time the pupils were attending school. It was considered that the valuable information that was being collected by the Royal Commission, and the recommendations that would probably follow, would tend to modify the methods of teaching throughout the country, especially if, as was anticipated, liberal grants from Government would be forthcoming in furtherance of the education of the deaf and dumb.

NEMATODE WORMS IN BEETROOT.

AT a recent meeting of the Academy of Sciences, M. Girard communicated his researches on the propagation of nematodes in beetroot. These worms, which cause the plant to decay, are probably propagated by means of the manure from animals that have been fed on the roots containing the worm. M. Girard has found that nematodes may pass through the digestive canal of animals without being injured.

PHOSPHATE OF LIME IN THE NIGHT-SWEATS OF PHTHISIS.

DR. REBORY has lately published the results of his experience in the use of phosphate of lime in the night-sweats of phthisis. There can be no doubt that the drug has a special effect on the secretions, although the mode of its action is obscure. Phosphate of lime has the advantage of not being at all poisonous; it is easily administered, is well borne by the stomach, stimulates nutrition, and prevents diarrhœa.

DEGREES FOR LONDON MEDICAL STUDENTS.

A MEETING was held at the Westminster Hospital Medical School, on Tuesday last, Mr. C. Macnamara, F.R.C.S., in the chair, to consider the scheme for obtaining the power to grant degrees to London students. A motion in favour of the adoption of the scheme now in the hands of the conjoined Colleges was proposed by Mr. Simpson and seconded by Mr. A. S. Gubb. Dr. Allchin was opposed to the scheme, though admitting the principle, but Dr. De Havilland Hall and Mr. James Black spoke warmly in its favour. The motion was ultimately carried with only three dissentient voices.

STAYS AND MOVABLE KIDNEYS.

REFERRING to the remarks of Dr. A. Myers (JOURNAL, December 11th, 1886) and Professor Graily Hewitt (*ib.*, January 15th, 1887) on the effect of tight-lacing in producing flexions of the womb, Professor V. A. Manassein writes (*Vratch*, No. 8, 1887, p. 206) that he has collected a large number of cases which confirm the fact that movable kidneys are met with, other conditions being equal, in women who wear or have worn stays, far more frequently than in those who have never done so. This is true in regard both to nulliparæ and childbearing women.

METROPOLITAN AMBULANCE CORPS.

A MEETING of hospital physicians and surgeons will be held at St. John's Gate, Clerkenwell, on Thursday, March 31st, at 5 P.M., with the view of considering what measures may be adopted to interest the public in, and to promote, that branch of the work of the St. John's Ambulance Association connected with the conveyance of the sick of all classes. Sir Edward Sieveking has consented to take the chair, and Mr. Furley will explain the system adopted, and give the results of his experience.

CHOLERA IN ITALY.

A GOOD deal of uneasiness is caused in the neighbourhood of Naples by the cholera, which still lingers there. The disease has existed at Catania since November last, and the local authorities are accused of inaction in respect to the necessary precautions. Though the cases are not numerous, they are said to be of a bad type. What is chiefly feared is that it may be carried elsewhere by fugitives. Sicily,

therefore, having on former occasions placed the outer world under a ban, is now itself in the same position. Quarantine was enforced for five days, but has now been discontinued. It was proposed to close all the wells in Catania, and, in place of them, to open a large number of fountains with a supply of pure water. Naples is said to be perfectly healthy, and the local authorities are doing all they can to maintain this desirable state of things. Statistical returns show that the mortality has sensibly decreased this year, there having been several hundred deaths less in January than in January of last year.

INOCULATION WITH VIRUS OF DIFFERENT DEGREES OF ATTENUATION.

M. P. POURQUIER, at the Académie des Sciences, speaking of the deterioration of vaccine, stated that if a human, bovine, or equine subject, being in the most favourable condition for vaccination, be inoculated with two kinds of virus at the same time, each virus possessing a different degree of attenuation, pustules would be produced, the fulness and duration of which would be in proportion to the strength of each virus employed. The pustules thus obtained would progress side by side, each with its particular qualities remaining well defined, and the virus from these pustules, inoculated in others, would produce a vaccine either attenuated or virulent, according to the particular pustule from which the virus is taken. Thus, following the same reasoning, an attenuated virus and a typical virus will develop parallel with each other, each preserving its own character.

DEATH FROM CHLOROFORM.

A LABOURING man, aged 35, recently died in St. Thomas's Hospital whilst under the influence of chloroform. Mr. C. S. Evans, one of the house-physicians, said that the deceased was suffering from empyema following pleurisy. In accordance with the usual practice in such cases, an operation was performed to remove the fluid from the right side of the chest. For that purpose, the usual quantity—namely, two drachms—of chloroform was administered with the patient's consent. After the administration he rapidly sank, and died from asphyxia. A verdict in accordance with the medical evidence was returned, the jury adding that, in their opinion, no blame attached to the hospital authorities.

THE QUEEN'S VISIT TO BIRMINGHAM.

ON the occasion of the Queen's visit to Birmingham on Wednesday last, an address from Queen's Hospital was presented to her by the President, the Right Honourable Lord Leigh, to which Her Majesty replied as follows:

I receive with pleasure your loyal and dutiful address. I gladly recognise the benefits which your hospital confers on the sick and suffering poor of Birmingham and its neighbourhood, and I trust that you may succeed in your praiseworthy endeavours not merely to maintain the present high standard of good management in the administration of this valuable institution, but by structural improvements still further to enlarge its sphere of usefulness.

RECKLESS CHARGES.

ANOTHER instance of the reckless charges made against hospitals was afforded at an inquest held on a woman who was alleged to have been ill-treated while under the care of the maternity department of University College Hospital. Mr. Craig, who was entrusted with the case, immediately obeyed the summons, but on his arrival the child was born. On the next day, finding that the perineum was deeply lacerated, he communicated with Mr. Brown, who stitched it up. The patient was seen every day, twice or oftener, and had vaginal douches of sublimate administered. She died in a few days, collapsing after an attack of diarrhœa of twenty-four hours' duration. Mr. A. J. Pepper made a *post-mortem* examination, and found fatty kidneys and ulceration of the bowel. It seems probable that the extreme kindness and attention shown by Mr. Brown caused the friends to think that Mr. Craig or himself had not conducted the case properly.

PROFESSOR ADAM POLITZER.

THE old pupils and friends of Professor Adam Politzer have arranged to present him with his portrait by an eminent artist of Vienna as a token of appreciation of the great service he has rendered to aural surgery during the twenty-five years he has been teaching in the University of Vienna. The presentation will take place at Easter, at the meeting of the Otological Association, at Vienna. The subscriptions (8s.) may be sent to any of the committee: Professor Vittorio Grazzi (Florence), Dr. A. Joly (Lyons), Dr. Eugen Morphurgo (Trieste), Dr. E. Pius (Vienna), Professor Urban Pritchard (London), Dr. F. Rohzer (Zürich), Dr. A. Rühlman (St. Petersburg).

TRAINING OF SANITARY INSPECTORS.

THE third course of the useful series of lectures arranged by the Parkes Museum especially for the benefit of those desirous of obtaining knowledge of the duties of sanitary inspectors, but open to all applicants, will be given at the Museum (74A, Margaret Street), on Tuesdays and Fridays, at 8 P.M., commencing on April 15th, when an introductory lecture will be given by Dr. Alfred Hill, on the General History, Principles, and Methods of Hygiene. The other lectures will be as follows: on April 19th, on Ventilation, Measurement of Cubic Space, etc., by Captain Douglas Galton, R.E., C.B.; April 22nd, Water-supply, Drinking-water, Pollution of Water, by Dr. Louis Parkes; April 26th, Drainage-construction, by Professor H. Robinson; April 29th, Sanitary Appliances, by Professor W. H. Corfield; May 3rd, Scavenging, Disposal of Refuse and Sewage; May 6th, Food (including Milk), Sale of Food and Drugs Act, by Mr. C. E. Cassal, F.C.S.; May 10th, Infectious Diseases and Methods of Disinfection, by Dr. Thorne Thorne; May 13th, General Powers and Duties of Inspectors of Nuisances, Method of Inspection, and May 17th, Nature of Nuisances, including nuisances the abatement of which is difficult, both by Mr. J. F. J. Sykes, B.Sc.; May 20th, Sanitary Law, General Enactments, Public Health Act, 1875, Model By-laws, by Dr. Charles Kelly; May 24th, Metropolitan Acts, By-laws of Metropolitan Board of Works, by Mr. A. Wynter Blyth, M.R.C.S. A nominal fee of five shillings for the course will be charged to cover expenses; students attending will be granted free admission to the Museum and Library from April 1st to June 1st. Students desirous of attending the lectures should send in their names to the Secretary, Mr. E. White Wallis. The two courses of lectures already held were each attended by over sixty students, and it is proposed to repeat the course twice each year, to suit the requirements of persons preparing for the examinations of the Sanitary Institute of Great Britain; the lectures will comprise all the subjects scheduled for those examinations.

THE MICRO-ORGANISMS OF THE ATMOSPHERE.

IN a paper recently read by Dr. Percy Frankland at the Society of Arts on Some of the Conditions affecting the Distribution of Micro-organisms in the Atmosphere, reference was made to Pasteur's experiments as showing that mountain air was comparatively free from organisms. Dr. Tyndall had conclusively shown the comparatively short time required for suspended micro-organisms to subside in calm air. The various methods used to demonstrate the number of living micro-organisms present in a given volume of air, which were only partially successful, were described. Hesse's experiments had brought to light the rapid gravitation of organisms in comparatively still air, and the more rapid gravitation of bacterial organisms than mould-organisms. He (Dr. Frankland) had availed himself of Hesse's method to test the condition of the atmosphere in London and some country places. At Reigate and in Norwich a smaller number of micro-organisms was observed than in London. In fact, the more remote the place from human habitations, the freer was the air from suspended microbes. The London parks, though containing fewer microbes than were to be found in the streets, contained more than were present in country air. With regard to

sea air, experiments showed that the maximum distance to which, under ordinary circumstances, micro-organisms can be transported across the sea lies between 70 and 120 sea miles. Beyond this distance they are almost invariably absent. Dr. Percy Frankland described his system for remedying the defects in Hesse's method of testing the atmosphere. A definite volume of air is drawn, by means of an air-pump, through a short piece of glass tubing containing two small porous plugs placed one in front of the other. Of these two plugs, the first is constructed of glass-wool only, the second being formed of glass-wool and glass or sugar-powder. The object of this arrangement is that the second plug through which the aspirated air has to pass shall offer more resistance than the first, and consequently, if the second plug is found to be free from microbes, it may safely be assumed that the first plug has been sufficiently obstructive to the micro-organisms in the air passing through, and that they have all been retained by it. Each plug is afterwards transferred to a small flask, where the results of the experiment can be examined.

THE ANTIVIVISECTIONISTS AND THE ROYAL COLLEGE OF SURGEONS.

On Wednesday last, March 23rd, the President of the College of Surgeons received by appointment a deputation composed of Earl Stanhope and a number of gentlemen whose views in respect to vivisection are well known. The deputation presented two memorials bearing a a very large number of signatures, expressing the strongest opposition to the requests contained in the well-known circular addressed to the College, and presented on January 13th. This circular, signed by a large number of leading British scientists, urged the importance of establishing an institution for physiological and pathological research, to be supported by the Erasmus Wilson legacy, and the deputation feared that, if established, experiments on living animals would be carried on within its walls. The President, who first observed that by himself he had no power to move in the matter, notified to the deputation that the College was considering the question of enlarging the museum and the laboratories, but that no idea had as yet been entertained of establishing an institution of the kind which had been recommended in the circular or round-robin presented by the scientists. It was agreed that the two memorials should be in due form laid before the Council. The deputation were afterwards conducted round the museum by the President.

CEREMONY OF DECORATING A FRENCH NURSE WITH THE LEGION OF HONOUR.

General Viscount Wolseley remarks in the last edition of his *Soldier's Pocket-Book*: "It is a fact that up to the present time we have never had an English commander who succeeded in calling forth any great enthusiasm for himself or the cause in hand;" and, by way of contrast, he calls attention to the spirit-stirring language addressed by French commanders to those serving under them, and the subtle but powerful influences exerted by such appeals. The truth of this statement is shown forcibly in French military history by the enthusiastic addresses of commanding officers to the love of honour and patriotic loyalty of their soldiers, and the following abstract from a French report of the ceremonial recently followed in decorating a hospital sister with the cross of the Legion of Honour shows that such susceptibilities are not neglected in comparatively minor matters. The ceremony took place in the *salle d'honneur* of the hospital at Beauvais, and was conducted by General Renaud, in the presence of the colonel and all the officers of the regiment quartered at Beauvais, a deputation of the non-commissioned officers and privates of the regiment, the hospital staff, the Mayor, and a number of the civil functionaries of the place. General Renaud addressed Sister Bathilde in the presence of the assembly: "Sister! your twenty-eight years of admirable devotion have been brought to the notice of the Minister of War, and have not been left without recompense. The President of the Republic has nominated you 'Chevalier de la Légion d'Honneur.' General Faidherbe, the Grand Chancellor of the Order, has delegated to me the necessary powers for delivering the cross to you. As chief of the military family of this district, it is a source of great pleasure to me to be called upon to hand you this cross, which is the greatest honour anyone can receive, and which, before everyone present, I declare you have well merited." The General then drew his sword, pronounced the customary formula, and consecrated Sister Bathilde Chevalier of the Legion of Honour. "My sister, I must embrace you," the General said in finishing his remarks; "it is in the order, in fact;" and this accolade was saluted by warm applause, while, according to the report, all hearts were filled with emotion, and tears were in some eyes. Madame Renaud attached the cross to the breast of Sister Bathilde, and the ceremony was concluded by an address from the Mayor.

ANTHRAX IN ENGLAND.

After all that has been written in scientific journals and parliamentary or departmental reports, after the controversies which have raged, even in the daily newspapers, as to the precise nature and vital habits of the contagium of anthrax, it is a little surprising to find that the Cheshire Chamber of Agriculture was still in doubt whether the disease was communicable or not until instructed early this week by an inspector specially sent down by the Privy Council. The disease, which was first observed last October, seems to have again broken out in several localities in Cheshire, and to have been of the peculiarly acute type to which the French have applied the term *charbon foudroyant*. The two cases of anthrax in butchers who cut up some of the animals which died during the recent epidemic in Essex prove that the persons who have to handle these diseased animals require to be warned of the dangerous nature of the malady. Dr. Pitts, under whose care these two men came, stated in the Journal of March 19th that neither seemed to have been at all aware of the risk they ran. Orders have been issued that the bodies of animals dead of anthrax must be covered with quicklime, and buried entire, under six feet of earth; and it is much to be hoped that the order may be strictly obeyed, as it is well known that the contagium is readily carried in the hides and hair.

THE IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.

The annual general meeting of this Association was held on St. Patrick's Day, March 17th, at 49, Berners Street, London. The following members of Council were present: Sir Thomas Crawford, K.C.B. (Director-General of the Army Medical Department), Dr. Macnaughton Jones, Professor Yeo (Chairman of Council), Professor Alexander Macalister, F.R.S., Dr. Waters (Chester), Dr. G. Smith, Dr. W. H. White, Dr. Phillips (Reading), Dr. R. Fegan, Dr. J. H. Gibson, Brigade-Surgeon Alexander (Honorary Treasurer), Dr. J. Stewart (Honorary Secretary for the Provinces), and Dr. P. S. Abraham (Honorary Secretary for London); and among the other members who attended were Inspector-General Dick, R.N., Dr. H. Fitzgibbon (Dublin), and several others. After the outgoing President (Dr. Macnaughton Jones) had relinquished the chair to Sir Thomas Crawford (now President), the annual report of the Council was read. The number of members on the roll had increased during the past year from 385 to 459. The Council had to regret the loss by death of six, namely: Dr. Thompson (Founder of the Association and late Honorary Treasurer), Dr. Curtin, Dr. Eames, Staff-Surgeon O'Sullivan, R.N., Dr. Sexton, and Deputy Surgeon-General Wolseley. Among the more important matters which had been, and were still, under the consideration of the Council, were the disabilities complained of by graduates who held the higher qualifications of the Dublin Colleges. The Honorary Treasurer's report was very satisfactory, and showed a substantial balance to the credit of the Association. Professor Alexander Macalister, M.D. (Trinity College, Dublin), F.R.S., was then nominated as President-elect. Cordial votes of thanks were awarded to Dr. Macnaughton Jones, who had so

ably occupied the chair for two years, and to Dr. Daniell, on his resigning his post as Honorary Metropolitan Secretary, which he had filled since the foundation of the Association. In the evening the members dined together at the Holborn Restaurant.

COLCHICINE.

At a recent meeting of the Academy of Sciences, MM. Mairet and Combemalle communicated the results of their researches on the effects of colchicine. This drug acts, according to the dose, either as a diuretic or a purgative. The effects produced are more rapid when colchicine is administered subcutaneously. The dose should be from two to three milligrammes to produce diuresis, and five milligrammes when given as a purgative. Colchicine increases the excretion of uric acid, and diminishes the quantity of uric acid in the blood. Its accumulation in the system, however, and its highly poisonous nature make it necessary to use it with caution.

CONDURANGO BARK.

Dr. Riess (in the *Berlin. Klin. Woch.*, No. 10, 1887) devotes a long article to the efficacy of condurango bark in cancer of the stomach. It appears that a remarkable increase in weight often follows the taking of this drug. One patient gained 12 kilogrammes (26 pounds) in 83 days, another 15 kilogrammes in 36 days. The appetite improves, vomiting is lessened, and soon allayed altogether, and the pain is almost always mitigated. Cases are given which seem to point to diminution of pyloric thickenings.

SCOTLAND.

EPIDEMIC OF MEASLES AT BARRHEAD.

The epidemic of measles at Barrhead, which has been raging for some time, has not yet abated, but the cases generally are of a mild type.

BEQUEST TO THE UNIVERSITY OF EDINBURGH.

The late Mr. Alexander Gibson, advocate, has bequeathed the sum of £2,000, free of legacy duty, to the General Fund of the University. This bequest will be a most desirable addition to the Fund, upon which now falls the maintenance of the new buildings, and out of which the annual expenses of the projected academic hall will soon have to be defrayed.

THE EPIDEMIC OF SCARLET FEVER IN EDINBURGH.

The report submitted by the medical officer of health to the Public Health Committee of Edinburgh Town Council, at a meeting held on March 22nd, showed that there was a very satisfactory decrease in the number of cases of scarlet fever under treatment in the City Hospital, and also in the number of cases announced as occurring in the city. He also showed that the epidemic had been largely due to the milk-supply, especially in the district of Dalry, where the disease had been most prevalent. A report was also submitted by the Burgh engineer with regard to defective drainage arrangements and the steps that had been taken to remedy them. The legal advisers of the Council had been consulted as to the legality of establishing a convalescent hospital in connection with the Fever Hospital, and their opinion was favourable to the project, so that such an institution will probably soon be established. In connection with the subject of the Fever Hospital, the leading daily newspaper had a long article on the subject, in which we were pleased to notice that ample justice was done to the untiring efforts of a member of our profession, Dr. J. A. Russell, one of the magistrates, and convener of the Public Health Committee.

THE CHAIR OF PHYSIOLOGY, EDINBURGH.

The report furnished to the newspapers by the Secretary of the Edinburgh University Court of the proceedings of a meeting of the court held on Monday, states that the University Court has approved of the arrangements by which Dr. Caton will examine in Institutes of Medicine in Edinburgh University during the absence of Professor Rutherford, who has been granted leave for six months. The Court also considered a letter from Dr. Herbert Ashdown, concerning the recent unpleasant relations which have existed between him and Professor Rutherford, and was of opinion that his character had been completely vindicated by Professor Rutherford's apology to him, and that it was unnecessary for the Court to take any further steps in the matter. The vindication of Dr. Ashdown's character is thus complete, but that does not restore him to the honourable position he held as a teacher in Edinburgh University—a position in his case, and in that of many others, more rewarded by hard work and whatever honour accrues to it than by pecuniary emolument. It would have been more satisfactory if the court had considered that aspect of the case with a due regard for all Dr. Ashdown has lost.

GLASGOW OPHTHALMIC INSTITUTION.

The eighteenth annual meeting of this institution was held on March 15th. The report stated that, in addition to those remaining on the books at the close of the past year, 3,529 were admitted, of whom 427 were indoor. These figures show an increase of 187 outdoor and 47 indoor patients compared with last year. The average period of residence was 20.71 days, against 24.7 in the previous year. Since the opening of the institution 53,682 patients had been treated. Of the 3,529 treated during last year, 3,287 were cured, 137 improved, and 105 dismissed as incapable of further benefit. The greatest number indoors at one time was 38, and the smallest 14. The operations performed during the year numbered 662. The total income amounted to £1,735 8s. 8d., and the expenditure to £1,332 12s. 7d., leaving a balance of £402 16s. 1d.

HEALTH OF GLASGOW.

The medical officer's fortnightly report shows a death-rate 4 per 1,000 lower than during the same fortnight of last year. But while during that period last year there had not been a death from measles, this year there had been 28. In hospital at Belvidere there were 164 cases of scarlet fever, 67 of measles, 44 of enteric fever, 33 of whooping-cough, 15 of typhus, 7 of erysipelas, and 1 of chicken-pox, a total of 331 as compared with 359 the previous fortnight, and 173 at the corresponding period of last year. The death-rate in the city for the past week was 30 per 1,000, as compared with 29, 26, 25, and 27 in each of the four previous weeks, and 30, 34, 30, 26 for the corresponding weeks of the four previous years. The number of cases of fever registered was 31, of which 21 were of enteric fever, and 10 of typhus. Nine of the cases of typhus were in one house, under circumstances worthy of publication. The house, of three apartments, in a new tenement in a new street, was at the growing end of the street, so that the open fields lay beyond. The stair was well lighted and airy. The total cubic contents of the house were 2,980 feet. There were 16 inmates, but 2 were children under 8, so that there were 15 adults, or an average of 199 cubic feet each. In the kitchen, the parents and the two youngest children slept, 3 adults to 1,140 cubic feet, or 380 each; in the parlour all the males slept, 7 adults to 1,260 feet, or 180 each; in a little room off the parlour, without a fireplace, all the females slept, 5 adults to 580 cubic feet, or 116 each. Of the four sleeping in the kitchen, 2 were seized with typhus, 3 of the 7 in the parlour, and 4 of the 5 in the closet. Dr. Russell wholly failed to find the source of the contagion. The seven healthy inmates were removed to the reception house, and the nine sick to the hospital. A fortnight has since elapsed, and no further cases have occurred.

PERTH INFIRMARY.

On March 21st, a meeting of qualified subscribers and contributors to the City and County of Perth Infirmary was held in Perth to receive explanations from the directors, and take into consideration the relations between them and the medical officers, especially with regard to their failing to re-elect Dr. Bramwell to the position of senior

medical officer. The difficulty arose from the fact that the directors wished to remove Dr. Bramwell from the active staff, and to appoint him consulting physician. Dr. Bramwell could not see his way to agree to this, and resigned. The following motion was proposed: "That the meeting regrets the conduct of the directors, the more so on account of the high esteem in which Dr. Bramwell is held by city and county, and the confidence placed in him as a physician and surgeon, and on account of the injury which the institution is certain to sustain by being deprived of his services; and, further, that the meeting is of opinion that the directors shall reconsider their decision, and restore Dr. Bramwell to his former position, so that he may be enabled to complete his twenty years' connection with the Infirmary, as it is known he is prepared to do." An amendment in favour of the action of the directors was also moved, but the motion was carried by 20 votes to 12. Subsequently, at a private meeting of the directors, the majority of them resolved to resign office.

IRELAND.

THE REV. DR. HAUGHTON, F.R.S., has been re-elected President of the Royal Irish Academy.

DR. NINIAN M. FALKINER, Lecturer on Chemistry in the Carmichael College of Medicine, has been appointed a Visiting Physician to the Whitworth Hospital, in the place of the late Dr. Henry Kennedy.

ROYAL HOSPITAL, BELFAST.

THE Royal Hospital, Belfast, has received a bequest of £100 under the will of the late Rev. S. M. West, whereby Dr. Hawthorne and Dr. Dysart McCaw become qualified as life governors of the institution.

PROPOSED AMALGAMATION OF MEDICAL SCHOOLS.

A NOTICE of motion has been given in the Council of the Royal College of Surgeons in Ireland to consider a proposal for the amalgamation of the School of the College with that of the Carmichael College of Medicine. For some time past delegates from both schools have been engaged in drawing up a scheme whereby the proposed amalgamation might be carried into effect. From the constitution of both bodies there are considerable, but by no means insuperable, difficulties in the way of the accomplishment of the desired union. On a former occasion, which had presented greater facilities for such a consummation than at the present time, a similar attempt failed. The advantages of such an amalgamation of two of the leading medical schools of Dublin are so evident that we trust the efforts made to accomplish it will prove successful.

THE STEWART INSTITUTION FOR IMBECILE CHILDREN.

THE annual meeting of the friends and supporters of this admirable institution was held in Dublin last week. The Medical Superintendent's report stated that there were sixty-five imbecile children in the institution. As regards the occupation of these children, the same unvarying routine is pursued from year to year; the boys are instructed in such work as is most likely to be beneficial to them hereafter, such as agriculture in its primitive stage, weeding, digging, hoeing, the use of the wheelbarrow, gathering of falling leaves, cleaning and gravelling walks. The in-door teaching is mat-making, tailoring, window cleaning, shoe cleaning, etc. In the girls' department, household work takes the prominent place; the parlour and housemaid's duties are very efficiently performed by many, in addition to which the laundry gets considerable help. In the school-room department, very satisfactory progress continues to be made; in reading, writing, arithmetic, Scripture, and singing, some very creditable performances can be witnessed, as also in the use of the knitting needles, crotchet work, embroidery, and plaiting. In the asylum branch of the establishment for the care of the insane, there were seventy-eight patients; sixteen were admitted during the year, sixteen were discharged, and seven died, leaving seventy-one.

PARLIAMENTARY BILLS COMMITTEE OF THE BRITISH MEDICAL ASSOCIATION.

RELATIVE RANK.

DEPUTATION TO THE SECRETARY OF STATE FOR WAR.

IN accordance with the arrangement announced last week, Sir Guyer Hunter, M.P., who had been in communication with the Chairman of the Parliamentary Bills Committee on the subject, introduced on Tuesday last a deputation to the Secretary of State for War (Mr. Stanhope) at the House of Commons, to confer with him as to the question of relative rank. The deputation consisted of Sir Guyer Hunter, M.P.; Dr. Farquharson, M.P.; Dr. Cameron, M.P.; Dr. Clarke, M.P.; General C. Fraser, M.P.; Colonel Duncan, M.P.; as representing the Parliamentary Bills Committee (in the absence of the Chairman, Mr. Ernest Hart), Dr. Alfred Carpenter (Croydon), and Mr. Francis Fowke attended; there were also present Mr. C. Macnamara, late I.M.D., and Surgeon-General Maclean.

Sir GUYER HUNTER, in introducing the deputation, said Mr. Stanhope had been good enough to give him a private interview with reference to this question of relative rank, which materially affected the prospects and welfare of the Medical Staff Corps, and, therefore, he did not intend to enter into any details himself on the subject, preferring that they should be brought more particularly to the notice of the Secretary of State for War by others who were intimately acquainted with the subject, and who would speak on behalf of different interests. In the first place, he would ask Surgeon-General Maclean, who had an intimate acquaintance, in consequence of the position he had occupied at Netley as Professor of Military Medicine, with the hopes, wishes, and prospects of the medical staff corps. He would ask Dr. Alfred Carpenter, who was Acting Chairman of the Parliamentary Bills Committee of the British Medical Association (representing nearly 14,000 members of the medical profession), to say something on the subject; and Mr. Macnamara, who probably would also be disposed to speak, would represent the Indian Medical Service, which was indirectly interested in this great and momentous question.

Surgeon-General MACLEAN said he had held the office of Professor of Military Medicine in the Army Medical School at Netley since the year 1860, and that had given him an opportunity of being very well acquainted with the feelings of the Army Medical Service on this, as on a great many other matters; as he stood in the position of a teacher to them, there was not the least doubt that they would speak and write to him with a freedom which they would never think of using in communicating on a subject of this kind with their official superiors. Without any further preface, he would enter at once, in as few words as he possibly could, into the question of relative rank. In the first place, it was said on very high authority that relative rank never meant anything—that it was a mere "term," a mere "expression." He (Surgeon-General Maclean) had had nearly half a century of experience both in the Indian army and in the army at home, and he could say most distinctly that this was never the impression or the belief on the part of any medical officer in the army, either at home or in India. With a very large acquaintance with military men—nearly every member of his family being a combatant officer—he was able to speak with confidence on this point. It was, indeed, the only rock on which medical officers stood. Relative rank was that which gave medical officers whatever rank they held in the army, and that rank was now abolished. There were now only two ranks in the army: one substantive, the other honorary. Medical officers in the army had neither one nor the other, and, as relative rank was abolished, they were practically left without any army position at all. He was quite aware that Paragraph 125*a* of the Army Warrant conferred certain privileges, and that a medical officer was said to rank *with* a captain, a major, or whatever it might be; but his experience in India led him to see that all sorts of officials ranked exactly in the same way: a telegraph officer had his position defined as ranking *with* a captain, and a member of the Civil Service, according

to his standing, ranked also *with* a military officer of a certain rank; but that carried no military rank or position at all. He had conversed on this point with a great many eminent military officers, who shared his belief that, relative rank being abolished, nothing remained which would give a medical officer any position at all. The position of army medical officers under these conditions was very peculiar. The command of the Army Hospital Corps was confided to them, and their position was this: a quartermaster in the Army Hospital Corps had honorary rank; non-commissioned officers, warrant officers, sergeants, corporals, or what not, in that corps had, so far as it went, substantive rank. They were, in a strictly military sense, literally the medical officers' superiors. That is what appeared to them (the deputation) a very important point. The next point was, that the medical staff of the army now felt themselves to be placed in a position distinctly inferior to the officers of the Pay and Commissariat departments. It was not for him to say anything against those whom he regarded as a highly honourable and useful staff of officers. He would say, however, that the medical officers of the army had to face the risks of war to a far greater extent than those of the Pay and Commissariat departments. Surgeon-General Maclean spoke of the large number of young medical officers who had distinguished themselves at the Army Medical School, who had been cut down in the exercise of their duty in recent wars; and, as an example of many others, instanced the case of Dr. Langdon, who, at Majuba Hill, when mortally wounded, made his way to an unfortunate man who was screaming with pain caused by a very severe wound, and administered to him a hypodermic injection of morphine to allay his suffering, and immediately died. Surgeon-General Maclean spoke of the many risks he had himself incurred in battle, of the comrades who had been shot by his side and literally died in his arms, and how he had been exposed, in passing a line of the enemy, to a long and continuous fire. He would ask to be excused for mentioning these facts; they were honourable risks, and medical officers were proud to face them. But he felt it to be a very great grievance that when they were called upon to run such risks they should be treated as if they had no army position at all. He would go so far as to repeat what a very distinguished officer said to him a few days ago: "Under this new Warrant, medical officers are reduced to nothing more or less than a superior class of camp-followers, with no position at all." That, he assured Mr. Stanhope, was the feeling which pervaded almost the whole service. He (Surgeon-General Maclean) had had some experience in a matter which had a very important bearing on the subject. A very satisfactory Warrant came out after the Crimean War, which was the outcome of the Royal Commission presided over by Lord Herbert. This Warrant placed the medical officer on a footing which gave entire satisfaction. But the ink was hardly dry before clause after clause was nibbled away, until nothing remained. The result of this was that the best men in our medical schools would not enter a service so constituted, and they succeeded only in getting what he might term the *residuum* of the profession. So inferior were many of the men he spoke of (having been one of their teachers) that the late Professor Parkes, who had done more for the health of the army than any man that ever lived, was obliged to bring the matter before the Medical Council of Education. He had that morning been told that in the greatest medical school of this country, that of Edinburgh, where there were nearly 2,000 medical students, more than half of them being Englishmen and men from the colonies, so great a sensation had been created by this unhappy measure, that many of the best men had declared that nothing in the world would induce them to enter a service where they would be placed in so ambiguous a position. A very distinguished officer and a very old friend of his, whose son was about to compete for the service, had told him that no consideration in the world would induce him to allow his son to enter the service, where his position would be so uncertain. In conclusion, Surgeon-General Maclean said that, the authorities having now declared in the most positive manner that relative rank was a mere term, having no value at all, it would never satisfy the Army Medical Service to have relative rank restored to its former position. The medical officers of the army rendered great services to the State, and he thought it was only fair that they should respectfully ask to be placed on the same footing as the Pay and Commissariat departments.

The SECRETARY OF STATE FOR WAR expressed his inability to understand what was meant by "relative rank." Was it contended that relative rank was actual rank?

Surgeon-General MACLEAN said it was the only rank medical officers ever had. They had no army position but what relative rank gave. It formerly gave them all they wanted, and the term, having in the army a distinct and definite meaning, was well understood by all military officers. Every privilege he had enjoyed in the service was derived from that rank.

Dr. ALFRED CARPENTER said he attended as representing the Parliamentary Bills Committee of the British Medical Association, and as acting chairman in the absence of Mr. Ernest Hart, the Chairman of that Committee. He thought it right Mr. Stanhope should know something of what the British Medical Association was, and how it had been moved by the withdrawal of that Warrant. (Dr. Carpenter here gave an account of the Association, the organisation and extent of its Branches, and the representative character of the Parliamentary Bills Committee, consisting as it did of members elected by each Branch.) In continuation, Dr. Carpenter said the alarm that had been felt amongst the medical officers of the army in consequence of the Warrant was reflected upon every civil practitioner all over the country. (Dr. Carpenter here handed to Mr. Stanhope copies of the list of members of the British Medical Association, with the list of Council and Articles of Association under which the Association existed.) The representations which had come from the Branches of the British Medical Association, the letters which had been sent to the Chairman of the Committee, and those which had reached the JOURNAL (the organ through which the views of the profession were expressed), all indicated that there was a serious feeling of alarm amongst the members of the Association, not only in the army, but also amongst the civil members in consequence of the withdrawal of the privileges that the medical officers of the British Army had enjoyed. It was evident that in consequence of this Warrant, the medical officers, who were nominally non-combatant, but who really had to bear all the brunt of some of the worst operations of active service, were placed in a worse position than those who were non-combatant in reality; the Pay and Commissariat. The experience which had been gained since the outbreak of the Zulu War showed that, call them non-combatant as they pleased, medical officers had to bear all the dangers connected with active warfare just as combatant officers, and they had to bear, in addition to that, dangers which combatant officers did not share. That was lost sight of. The dangers to which medical officers were exposed were greater, because they had to face the assassin who struck in the dark; they had to face the plagues, dysentery, fevers, and all the evils belonging thereto. They had to stand between the living and the dead; they could not desert their posts in consequence of illness, though they could send combatant officers to healthier places. This was well shown in the lists of deaths in the Army Medical Service since the Zulu War commenced; eighty-five surgeons had fallen, either on the field of battle, or had died from wounds or disease in active service. Could the Pay and Commissariat departments show anything like that? Dr. Carpenter here related an instance of true heroism, which had been told him, of a medical officer who, when engaged in amputating the leg of a wounded soldier on the field of battle, was not deterred from the discharge of his duty by the whizzing of shells over his head. Dr Carpenter then referred to the heroism displayed by Surgeon-Major Reynolds, at Rorke's Drift, and the presentation to him of one of the only four medals which had been awarded by the Association for distinguished service. They had had numerous instances in which medical men had had to drop their position of non-combatants, and take up the revolver and the sword in a way which showed that they were fully capable when called upon to take part in the defence of their country. Looking at it from the point of view of the position in the army itself, it was very important that the effect of the Warrant should be restored, not in the terms on which it had been in the past, but in an actual way. He recollected the thrill which went through the profession at the end of the Crimean War, in consequence of the incompetence of the medical officers of the army at that time. But the improvement which had taken place since then in consequence of the better education of the younger men had been greatly to the advantage of the country, by giving to the service a class of men who were not obtainable before. The gain to the country had been so manifest in the improved health of the troops, in the diminished mortality which had taken place, and in the great diminution in the number of days that men had been on sick pay compared with what it was formerly, that it was clear that the character of the medical officers in the army had been very much raised. Another proof of this was to be seen (and he thought Surgeon-General Maclean would bear him out) in the higher number of marks obtained, and the higher professional position these men attained before entering the service? What had happened? He (Dr. Carpenter) did not hesitate to say that there was not one of the London hospitals, nor one of the medical schools, in which this question had not been argued, and the young men were thus being

prevented from joining the service. It was, he said, a very important thing that troops should be under efficient medical officers; it was important for their health and important for commanding officers that they should have men of ability with whom to consult as to the best position for a camp, the condition of the water supply, and other questions affecting the health of an army. They should have the best men that could be obtained. He believed recently they had done so, because the evils which had existed had been in a great measure removed, and they had been so removed by the action of the Parliamentary Bills Committee of the British Medical Association, who, from time to time, had sought and obtained interviews with successive Secretaries of State, and brought grievances to his notice. He wished to press the matter with all the force at his command on behalf of the mass of civil practitioners, who felt that whatever was in the army disadvantageous to the profession, was disadvantageous to them at home, and they could not see them suffer without its being reflected on their own position. These were the reasons which led the Parliamentary Bills Committee to take their present action, and he should be very sorry indeed if the grievance should not be capable of redress, for he felt quite certain that if not removed the consequences would be very serious.

Mr. C. MACNAMARA expressed his concurrence with what had been said by Surgeon-General Maclean. What he insisted upon very strongly indeed was that men having entered the army with this relative rank, it seemed to him a great hardship to take it from them now. If it had been said "From the year 1890 there shall no longer be any relative rank," then it would be open to men to enter the service under these conditions, but, having entered under certain conditions, they thought it, whether it was so or not, a matter of considerable importance to them, and one which would disturb the good feeling which had existed with reference to the Medical Service in a very important way. At the present moment he was a professor of surgery in one of the London medical schools, which each year sent up the leading men to Netley. He had recommended many able men to enter the Army Medical Service—men in a much higher position and more qualified in every way than those who formerly entered the service. He felt quite convinced that the present action which had been taken would entirely put a stop to men entering the service who could take the Fellowship of the College of Surgeons—men of that stamp would not enter the service if they felt they were going to be treated in this way. Mr. Macnamara thought it was extremely important that the matter should be reconsidered, and in the direction suggested by Surgeon-General Maclean.

General FRASER supported the contention of Surgeon-General Maclean as to the sense in which relative rank was always understood by medical officers in the service; he never heard a doubt expressed on that subject.

Sir GUYER HUNTER said Mr. Stanhope had heard the observations which had fallen from the gentlemen who had addressed him. Several other members of Parliament had been prevented, by the exigencies of the House, from being present in support of this conference; among them were Sir Richard Temple, Colonel Hughes-Hallett, and others. He repeated what he had already said, that this was really a burning question; he sympathised very much with the feelings prevalent in the Medical Staff Corps, who felt that the position they once held had been taken away from them. They had now no position at all. It depended upon the will of any commanding officer how and in what way they should be treated. Before the abolition of relative rank they felt they had a fixed position, which they held with the respect and esteem of their brother officers in the time of peace, and their admiration in the time of war. He trusted, if Mr. Stanhope did not see his way to restore relative rank, that he would give them some defined position equal to or even better than what they held before, and by so doing he would gratify them and restore that confidence to the Medical Staff Corps which at present they had ceased to have.

Dr. CLARKE, M.P., thought the evidence given by such an experienced officer as Surgeon-General Maclean substantiated everything he himself had said in the House. If any change were made at all, it should be to give the medical officer actual, instead of relative, rank. Unless one or the other were given, it would seriously injure the supply of medical men to the army.

The SECRETARY OF STATE FOR WAR replied as follows: Sir Guyer Hunter and Gentlemen,—I have listened with a great deal of interest to what has been said by the various distinguished members of the profession who have addressed me, and I can assure you that I have not the smallest wish to undervalue the great services which we all know have been rendered by the profession in past times, nor for one moment do I underrate the strong feeling which I know exists among the medical profession on this subject, whether based on good grounds or not. But I should like to assure you on the part of the War Office (though I myself was not personally concerned with the issuing of the Warrant), that it was not in the least the intention of the War Office to alter the position and precedence of medical officers in the army. I do not doubt that every gentleman here really believes that he has lost something in status or position; but though I have listened with the utmost care to every word which has been said, I must say I am very much puzzled now to know what the medical officer has lost. One thing I should like to say in consequence of what has fallen from General Fraser, that I think he can hardly be aware of paragraph 125*a* of the Warrant, by which medical officers rank for the purpose of precedence, pensions, etc.—surgeon-major with lieutenant-colonel, brigade-surgeon with colonel, and so on. I admit (even if it is not quite easy to explain what the actual loss may be) there is a sentiment at the bottom of it all, and sentiments are things to be reckoned with very much in these days. What I will undertake to do is to consider very carefully indeed the terms of the Warrant, and see whether we cannot, in redrafting it, take care so to word it that it shall be made pretty clear that you have not lost anything whatever by the change which has been introduced into the Warrant.

Sir GUYER HUNTER having thanked the Secretary of State for War the deputation withdrew.

THE IRISH CONJOINT SCHEME.

AT a special business meeting of the President and Fellows of the King and Queen's College of Physicians, held on March 18th, the letter from the Council of the Royal College of Surgeons in Ireland, referred to in the JOURNAL of March 12th (p. 585), was considered. The College of Physicians resolved that it would adhere to its original view that it is inexpedient to admit the Apothecaries' Hall of Ireland to the conjoint scheme as already approved by both Colleges. It also expressed its surprise at being informed by the College of Surgeons that, in the event of the College of Physicians declining to admit the Apothecaries' Hall into the scheme, the College of Surgeons contemplated forming a separate junction with the Apothecaries' Hall. In the opinion of the College of Physicians this would be, it stated, clearly a breach of the agreement entered into by both Colleges to form a Conjoint Board between them. The College then proceeded to consider the report of the Committee appointed to draw up a reply to the request of the General Medical Council that the College should reconsider the conjoint examination scheme for Ireland, with a view to admitting the Apothecaries' Hall to take part therein. This statement, of which we have received a copy, is an able and exhaustive document, and with a few verbal alterations was unanimously adopted by the College. It sets forth at considerable length the several reasons which influenced the College of Physicians in declining to combine with the Apothecaries' Hall. The document, after reciting the legal functions of the Hall, states that a judicial decision is required as to its status under the Medical Act of 1886. The contention that the abortive voluntary conjoint scheme for Ireland of 1872-74 included the Apothecaries' Hall, and that, therefore, it should be included in the compulsory conjoint scheme of 1886, is fallacious. Under the provisions required in Section 3 of the latter Act, the College of Physicians holds that the Apothecaries' Hall is not qualified, as required in Section 3 of the Medical Act, 1886; for it is not qualified to grant a diploma in either medicine or surgery—it is empowered to grant a certificate in pharmacy only. It cannot, therefore, in their opinion, enter into any legal combination with either of the other medical corporations in Ireland alone, although it may with two of them, or with a University. The Royal College of Surgeons in Ireland, we believe, holds a contrary opinion. It will probably obtain a legal opinion to the same effect; and it appears to have satisfied itself that, in the absence of any legal engagement between the two Colleges in the conjoint scheme agreed upon between them, and which it now wants to break, the understanding between the two corporations should have no weight in determining the matter.

The statement of the College of Physicians goes on to show that by the constitution of the Apothecaries' Hall of Dublin, its directors, who must be elected annually by shareholders in the company, and who must themselves be shareholders in the wholesale and retail business conducted by the company, are also the examiners for the certificate of the "Hall." But among the existing directors the College contends that efficient examiners are not to be obtained; not one of them is attached to a clinical hospital or medical school; not one of them is known as a teacher or writer on medicine, anatomy, physiology, chemistry, botany, materia medica, pharmacy, or therapeutics.

And yet at the last meeting of the General Medical Council, the Governor and Court of the Apothecaries' Hall, through their representative, Mr. Collins, asked only for one examiner in surgery, to enable the Hall to hold a qualifying examination under the Medical Act of 1886.

Nearly seven pages of the statement are occupied by a summary of the opinions expressed by members of the Royal Commission on the Medical Acts of 1881, by members of the General Medical Council, by Drs. James Glover and Jacob, by a conference of delegates from the licensing bodies in 1884, by the Irish Medical Association, and by the Dublin Branch of the British Medical Association, adverse to the Apothecaries' Hall of Dublin being represented on the medical boards and on the General Medical Council. The fact is also pointed out that in the Medical Bill of 1883, as passed by the House of Lords, these adverse opinions were endorsed, for the two Apothecaries' Societies—that of England as well as that of Ireland—were struck out of the clauses providing for the constitution of the Divisional Boards, and for the representation of the licensing bodies upon the General Medical Council.

Dr. A. H. Jacob, then Member, and now Secretary of Council of the Royal College of Surgeons in Ireland, commenting on the Medical Acts Amendment Bill of 1883, in a paper issued by himself, remarks:

"The Apothecaries' Companies of London and Dublin and the Glasgow Faculty should cease to contribute members to the Divisional Board, having ceased to have any just claim to be regarded as 'medical authorities.' The Irish Apothecaries' Company never had any *locus standi* as such, being simply a trading company, which was chartered for the purpose of controlling pharmacy in Ireland, and which obtained recognition as a medical qualifying body from the Irish Local Government Board by means of a Medical Council intrigue. It has now been superseded in its legitimate function by the Irish Pharmaceutical Society, and grants an utterly insignificant number of valueless licences at 9s. 4d. each. Its chief medical function (as testified before the Royal Commission) is in relieving Irish students who are going to Scotland of the necessity for learning anatomy and surgery."

For these reasons the College of Physicians holds that even granting, for the sake of argument, that the Apothecaries' Hall, Dublin, is legally qualified to examine and license in medicine, there is good evidence that it is a body which is gradually decreasing in numbers, public estimation, and usefulness, and therefore likely at no distant date to come under the disfranchising provision of Section X of the Medical Act of 1886. Indeed, Lord Carlingford, Lord President of the Council, speaking on the occasion of the second reading of the Medical Act Amendment Bill, 1883, observed: "There was an amendment on the paper dealing with the vote in the Irish Board proposed to be given to the Apothecaries' Hall of Ireland, and, upon consideration, he had come to the conclusion that that vote should be withdrawn; for, even if the Government decided to leave the Bill as it then stood, the Medical Council, under the powers proposed to be conferred on them by the Bill, would almost certainly feel bound to take it away."

Finally, by an analysis of the *Medical Directory*, it is shown that the assertion that the Apothecaries' Hall, Dublin, is useful as supplying the general practitioners of Ireland is unfounded, and, in conclusion, the views of the College are summarised as follows:—

First, it is manifestly the intention of the Medical Act of 1886 that any two bodies having the power to grant diplomas in medicine, in surgery, and in midwifery should be free to conduct a combined examination for those qualifications, and should not be hampered in their action by the introduction of other bodies, whose co-operation is not necessary in order to give effect to the intention of the Act. The King and Queen's College of Physicians and the Royal College of Surgeons in Ireland together fulfil all such conditions, and have already agreed to combine for the purpose of a qualifying examination, in accordance with the provisions of the Act of 1886.

Secondly, the Apothecaries' Hall, Dublin, has no right by statute, common law, or otherwise, to grant a licence in either medicine, or surgery, or midwifery, and has no power to examine in these subjects.

Thirdly, it is clearly not the intention of the Medical Act of 1886 that the Apothecaries' Hall, Dublin, should receive any special consideration in the formation of a conjoint examination scheme for Ireland.

Fourthly, it is the duty of the General Medical Council to carry out the intentions of the Act, and not to hamper the action of the Colleges of Physicians and Surgeons in Ireland in their efforts to combine, pursuant to the provisions of the Medical Act of 1886.

Fifthly, the President and Fellows would be unmindful of the interests of the Licentiates of the King and Queen's College of Physicians, and would certainly lower the status of the medical profession in Ireland, were they to admit to a share in the conjoint examination scheme a body constituted as the Apothecaries' Hall, Dublin, is.

Sixthly, the General Medical Council should decline to appoint assessor examiners to the Apothecaries' Hall, Dublin, and should leave that body to discharge its proper duties in accordance with the provisions of the Apothecaries' Act of 1791, under which it was constituted.

Lastly, the President and Fellows of the College consider that they have no option but to adhere to their original resolution, and would point out that if an inferior and low grade of practitioners should be created and perpetuated, the responsibility of this will rest with the General Medical Council, and not with the King and Queen's College of Physicians.

HENRY TESTIMONIAL FUND.

THE amount subscribed to this fund, and already acknowledged in the lists of donors published in the JOURNAL, is £262 13s. 6d. The Council of the Metropolitan Counties Branch, who initiated the fund, and who form the Committee having charge of it, feel that the claims which Dr. Alexander Henry, the recent sub-Editor of this JOURNAL, has upon its many readers should receive substantial recognition. He is now quite incapacitated by illness. Donations should be sent at once to Mr. George Eastes, M.B., 69, Connaught Street, Hyde Park Square, London, W., and will be duly acknowledged in the JOURNAL.

The following donations have been received since the publication of the last list in the JOURNAL of February 26th.

	£	s.	d.		£	s.	d.
Dr. R. L. Bowles	2	2	0	Dr. T. Gilbart Smith	1	1	0
Dr. W. T. Edwards	1	1	0	Mr. J. R. Walker	0	10	6
Mr. R. L. Elliot	1	1	0	Dr. E. T. Watkins	1	1	0
Dr. J. Braxton Hicks	1	1	0	Dr. C. J. B. Williams	1	1	0
Mr. W. Odell	1	1	0	Dr. W. S. Wyman	1	0	0
Sir W. R. E. Smart	1	1	0				

MOXON MEMORIAL FUND.

President—Sir WILLIAM JENNER, Bart., K.C.B., M.D., F.R.S.

THE following contributions have been received since those announced on March 19th.

FOURTH LIST.

	£	s.	d.		£	s.	d.
Subscriptions announced	497	4	6	J. Mitchell Bruce, M.D.	1	1	0
Sir Andrew Clark, Bart.	21	0	0	W. C. Church, M.D.	1	1	0
L. C. Wooldridge, M.D.	3	3	0	J. C. Roberts, Esq.	1	1	0
R. Elphinstone, Esq.	3	3	0	A. E. Maylard, M.B., B.S.	1	1	0
Mrs. Peachey	3	3	0	J. Sykes, Esq.	1	1	0
Brigade-Surgeon J. Wales	2	2	0	E. W. Thurston, Esq.	0	10	6
J. A. Ball, M.D.	1	1	0	O. B. Shelswell, Esq.	0	10	6
James Bunting, Esq.	1	1	0	Staff-Surgeon C. Godding, R.N.	0	10	0
C. F. Pickering, F.R.C.S.	1	1	0	E. Armitage, Esq.	0	5	0
G. A. Wright, M.B., F.R.C.S.	1	1	0				

All subscriptions should be forwarded to the Honorary Treasurer, R. Clement Lucas, B.S., F.R.C.S., 18, Finsbury Square, E.C., by whom they will be acknowledged, and cheques should be crossed "City Bank."

ERRATA.—Edward Coffin should be Caffin, and John Brackwell should be Brockwell.

THE JACOB TESTIMONIAL FUND.

THE Honorary Secretaries and Treasurers beg thankfully to acknowledge the following additional subscriptions received or promised since last week:

	£	s.	d.		£	s.	d.
Amount already acknowledged	477	13	3	O'Shaughnessy, T. H., Ballinasloe	0	10	0
Laird, J., Sligo	1	1	0	Cope, G. P., Dublin	0	10	0
Daly, G. W., Ratoath	1	0	0	Myles, W. Z., Dublin	0	10	0
Yourell, M. J., Dublin	1	0	0	Moore, E. E., Downpatrick	0	10	0
West, G. F., Omagh (additional subscription)	0	10	0	Palmer, B. A., Crossmaglen	0	5	0

Cheques to be made payable to the Honorary Treasurers—Professor Edward Hamilton, 120, Stephen's Green, W., Dublin; or Dr. Thomas Purcell, 71, Harcourt Street, Dublin; or to any of the County Treasurers, or to the Honorary Secretaries—Professor E. D. Mapother, 6, Merrion Square, N., Dublin; Dr. J. H. Chapman, 122, Pembroke Road, Dublin; and Mr. G. F. Blake, Royal College of Surgeons, Dublin.

A NUMBER of persons injured during the violent gale of Tuesday night and Wednesday morning are under treatment at the various London hospitals.

ROYAL COLLEGE OF PHYSICIANS.

An extraordinary meeting of the Fellows was held on Monday, March 21st, at which there was a fairly large attendance. Sir W. Jenner, K.C.B., presided.

Certificates in hygiene were granted to the following gentlemen, who have passed the required examinations: James Cantlie, M.B.; Weston P. Davis; Major Greenwood; Alfred S. Gubb; Thomas J. Hitchins; Charles A. James; John W. Sanders, M.D.; and Charles A. Webb.

A letter was read from the Secretary of H.R.H. the Prince of Wales expressing the thanks of His Royal Highness for the copy of the *Prælectiones* of Harvey, recently presented to him by the College.

A communication was received from the President of the General Medical Council, the purport of which was to inform the College of the terms of a resolution recently adopted by the Council. This resolution requested the Royal College of Physicians of London and the Royal College of Surgeons of England to reconsider their refusal to allow the Society of Apothecaries to enter the Conjoint Board for examination purposes. The important subject thus opened up was discussed at considerable length, and the College had the advantage of hearing what Sir Henry Acland, the President of the Medical Council, had to say in favour of the proposed change. Every other speaker, however, was strongly opposed to the change in question, and finally it was resolved, on the motion of Dr. Dickinson, that the College, having a second time carefully considered the subject, declined to alter the decision at which it had formerly arrived. This resolution was carried *nemine contradicente*.

A letter was read from the Secretary of University College and the Secretary of the King's College, jointly, stating the intention of these two bodies to apply to the Crown for a charter of incorporation as a university in the Faculties of Arts and Science, and inviting the two Royal Colleges of Physicians and Surgeons to make their intended application for right to confer degrees in medicine and surgery simultaneously and in combined action. This letter was referred to the delegates of the two Colleges, as was also a communication from the Medical School of University College, Bristol, which pointed out the injury which would be done to provincial schools and hospitals if medical study in London itself were made a necessary condition of the proposed degree.

Communications were also read from the King and Queen's College of Physicians in Ireland, from the Royal College of Surgeons in Ireland, and from the Association of General Practitioners.

A report was received from the Committee of Management, in accordance with which it was resolved (1) "that candidates who obtain fourteen out of the fifteen marks required to pass the final examination in medicine or in surgery of the examining board, be admitted to re-examination after a period of three instead of six months' additional study;" and (2) that the regulation which now provides that a candidate "will not be admitted to the examination in elementary anatomy and elementary physiology earlier than the end of his first winter session at a medical school," be altered so as to provide that a candidate will not be admitted to that examination "earlier than the end of the first winter session, or than the completion of the first six months' attendance at a recognised medical school during the ordinary session—that is, exclusive of the months of April, August, and September."

On the motion of the President, it was unanimously resolved to present to Her Majesty the Queen an address at the time of the Jubilee Celebration, and the drawing up of such address was entrusted to the Council.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

An extraordinary meeting of the Council was held at the College on Thursday, March 24th. The minutes of the ordinary Council on March 10th were read and confirmed. The Council proceeded to consider the letter of February 25th from the President of the General Medical Council regarding the admission of the Society of Apothecaries to the conjoint scheme of the Royal College of Physicians of London and the Royal College of Surgeons of England. It was carried *nem. con.* that the Council sees no cause to alter its decision regarding the admission of the Apothecaries' Company to the scheme.

Two memorials, one from Bristol and Clifton and the other from Bedminster, signed by several thousand persons, protesting against the objects of the memorial presented to the Council on January 13th, 1887, from several members of the medical profession and other men of science, advocating the endowment of an Institution for the Promotion of Physiological and Pathological Research, were submitted to the Council, and it was resolved to acknowledge their receipt.

A letter was read from the Councils of University and King's Colleges, inviting the College to confer with representatives of those Councils and of the Royal College of Physicians of London on the subject of a joint application to the Crown, on behalf of the four institutions, for powers to grant degrees. The letter was referred to the Committee of Delegates of the two Royal Colleges on the subject of granting degrees in Medicine and Surgery.

The following motion by Mr. John Croft was then considered: "That before each election to the Court of Examiners the list of Fellows who are candidates shall be considered by a small committee to be appointed annually by the Council, who shall have power to recommend to the Council one or more of the candidates for each vacancy." The motion was lost by a large majority, twelve voting against the motion and four in favour of it, four members being absent or not voting.

INDIA AND THE COLONIES.

INDIA.

The Government of India has sanctioned the issue to sick native departmental followers of the condemned hospital clothing and bedding at present authorised only for sick native followers attached to British troops.

The experiment is being tried of placing nursing sisters in the station-hospital at Rawal Pindi.

A Good Example.—The Maharajah of Patiali and Kunwar Sahib have recently been vaccinated by Dr. Bennett, His Highness's medical officer. This example in high quarters, observes an Indian contemporary, should tend to make vaccination popular in the Maharajah's territory.

Lepers in India.—The society started ten years ago in Edinburgh for the purpose of ameliorating the condition of lepers in India is still actively pursuing its useful work, and its secretary, Mr. W. C. Bailey, is at present in Calcutta carrying on the mission. It is calculated that there are 54,000 lepers in Bengal. In Calcutta there are 1,200, whilst the asylum cannot accommodate more than 90.

Medical Science and Practice in India.—The address presented by the Calcutta Medical Society on the occasion of the Jubilee celebration speaks of its improved means and methods of instruction, by which it is now on a level with the medical schools of Europe. It calls attention to the fact that 1,017 students educated in this school have obtained diplomas and degrees, and 1,480 vernacular licences. A similar college has been organised at Lahore for Upper India. Medical schools imparting instruction through the agency of native teachers in the vernacular languages of the country have also been opened at Calcutta, Agra, Nagpore, Patna, Dacca, and Cuttack. The benefits of European medicine and surgery have been very largely extended to the native poor, through the establishment over the length and breadth of the Empire of charitable hospitals and dispensaries, officered by native graduates and licentiates, while in every considerable centre of population duly qualified medical practitioners are available for employment by the wealthier classes.

JAMAICA.

A Nursing Institute and Lying-in Hospital for Jamaica.—The scheme for the celebration of the Queen's Jubilee in Jamaica, which has received the sanction of His Excellency the Governor, is one which will doubtless meet with very general approval. The absence of an adequate number of trained midwifery nurses is the cause of many deaths among infants and of suffering among both mothers and children. His Excellency believes that no institution will confer greater benefits upon the people than one which will meet the want above referred to, and the people are to be asked to subscribe towards the construction of a suitable building. If sufficient subscriptions are forthcoming for this object, His Excellency will appeal to the Legislative Council to provide for its future support by regular annual grants, and he has already received assurance of the willing aid that will be given by the medical practitioners of Kingston. A necessary feature in the scheme contemplated is a lying-in hospital which, apart from the benefit it may confer upon women of the poorer class, will afford the means of instruction to the women under training as nurses. A suitable building, it is estimated, might be constructed for about £4,000 or £5,000.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held at the Offices of the Association, No. 429, Strand (corner of Agar Street), London, on Wednesday, the 13th day of April next, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

March 14th, 1887.

NOTICE OF QUARTERLY MEETINGS FOR 1887. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on April 13th, July 13th, and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, March 24th, June 23rd, and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,
THE VALUE OF HAMAMELIS, THE VALUE OF PURE TEREBENE.

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE, and on the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE, are now closed.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, and HABITS OF INTEMPERANCE, a full Report on OLD AGE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 429, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

THAMES VALLEY BRANCH.—The next meeting of the Branch will be held at Richmond, on Wednesday, March 30th. Members willing to read papers or show cases are desired to communicate as soon as possible with CHARLES C. SCOTT, M.B., St. Margaret's, Twickenham, Honorary Secretary.

MIDLAND BRANCH.—A special general meeting will be held in the Board Room of the Hospital at Grantham, on Thursday, March 31st, at 2 P.M., when the question of the payment of the travelling expenses of the representatives of the various Branches of the Association for their attendance at the four quarterly meetings of the Council will be brought before the meeting. The following papers will be read and discussed:—1. Dr. Goodhart: Cases of Angina Pectoris. 2. Dr. Handford: Some of the Complications and Sequelæ of Enteric Fever. Dr. Handford will also exhibit drawings of a case of Fatal Cerebral Hæmorrhage, following Thrombosis of the Venous Sinuses, in a child 6 years old. 3. W. J. Cant, Esq.: Conical Cornea, and a New Method of Treating it.—W. A. CARLINE, M.D., Honorary Secretary and Treasurer.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the London Hospital on Thursday, April 21st, at 8.30 P.M. The chair will be taken by C. Macnamara, Esq. A demonstration of interesting surgical cases will be given by W. Rivington, Esq., Surgeon to the Hospital. All visitors will be welcomed.—J. W. HUNT, M.D., Honorary Secretary, 101, Queen's Road, Dalston.

LANCASHIRE AND CHESHIRE BRANCH.—Intermediate Branch meeting at Birkenhead, on March 30th, at 2 P.M.—Agenda: In accordance with a request from the sub-committee appointed to ascertain the feeling of the Branches as to the desirability of paying the railway-fares of representative members on the Council to their quarterly meetings in London, the Council of this Branch has passed the following resolution, which will be submitted to this meeting for confirmation or otherwise. Resolved: "That it is desirable that the first-class return railway-fares of the representative members on the Council of the Association be defrayed by the British Medical Association, and that the expenses of the Honorary Secretary of the Branch be paid by the Branch as heretofore." Dr. Walter will show a large fibro-myoma of the vagina. Dr. Leech will read notes on Strophanthus. Dr. Wallace will read a note on Extra-uterine Pregnancy with reference to Intraperitoneal Hæmatocele and Abdominal Section (with specimens). Mr. Edgar Browne will read a paper on an Ophthalmic Subject. Dr. Ashby will read a communication on Intubation of the Larynx in Croup by means of O'Dwyer's tubes, and will show the tubes and accessories. Dr. Vacher will read notes on Fourteen Years of Sanitary Work in Birkenhead. Dr. Dreschfeld will mention a case of Non-ulcerative Endocarditis, and give a demonstration of the Micro-organisms found. Mr. Thomas Jones will relate a case of Acute Traumatic Suppurative Osteomyelitis of the Humerus successfully treated by Early Trepanation. Dr. Imlach will read a short communication on Cancer of the Mamma. Mr. William Berry (Wigan) has given notice that he will call attention to the necessity for a revision of professional fees paid for attendance at sessions and assizes, and move the following resolution: "That the Parliamentary Committee be requested to petition the Home Secretary to revise the fees payable to professional witnesses in criminal cases at the County Sessions and Assizes." Notice.—A meeting of those members interested in the question of medical defence will be held at the conclusion of the general meeting.—C. E. GLASCOTT, M.D., Honorary Secretary, 23, St. John Street, Manchester.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.—A conjoint meeting of the above Districts will be held at the Grand Hotel, Brighton, on Wednesday, March 30th. Meeting at 3.30 P.M., dinner at 5.30 P.M., charge 6s., exclusive of wine. Dr. J. H. Ross will preside. The meeting will be asked to nominate a representative for Sussex on the Council of the Association. The following papers are promised:—1. The Chairman: Remarks on a Case of Small-pox, with especial view to the possibility of Auto-Infection in this and other Zymotics. 2. Dr. Walter Griffiths: Antiseptics in Practical Midwifery. 3. Dr. Ranking: Cases of Fæcal Tumour. 4. Mr. Verrall will show a specimen of Strangulated Intestine.—T. JENNER VERRALL, G. B. COLLET, Honorary Secretaries.

SOUTH-EASTERN BRANCH: WEST SURREY DISTRICT.—The next meeting of the above district will take place at the Surrey County Hospital, Guildford, on Thursday, March 31st, 1887, at 3.30 P.M., Charles Ede, Esq., of Wonersh, in the chair. The dinner will take place at the White Lion Hotel, Guildford, at 6 P.M. Papers to be read:—1. Dr. Boxall: On the Sources of Puerperal Fever and its Preventive Treatment. 2. Dr. A. W. Leachman: A Case of Pregnancy Nephritis. 3. Mr. S. G. Sloman: On Country Practitioners' Charges, with a suggestion to form a Medico-Ethical Branch of the South-Eastern Branch. Gentlemen wishing to read papers or cases should write at once to the Honorary Secretary, A. ARTHUR NAPPER, Honorary Secretary, Broadoak, Cranleigh.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

THE spring meeting of the above district was held on Thursday, March 17th, at the Albion Hotel, Broadstairs, T. F. RAVEN, Esq., in the chair.

Representative on Council of Association.—Dr. PARSONS, of Dover, was nominated unanimously for re-election as representative on the Council for the County of Kent.

Election of Chairman.—W. PUGIN THORNTON, Esq., was elected chairman of the next meeting, to be held at Canterbury, in May.

The Apothecaries' Hall and the Conjoint Scheme.—A resolution was passed in favour of including the Apothecaries' Company in the Conjoint Scheme.

State Honours to the Medical Profession.—A communication from the Honorary Secretary of the Shropshire and Mid-Wales Branch on the above subject, enclosing a memorial to the Prime Minister, was fully discussed. It was finally agreed that the memorial should be adopted, after adding the words "life or otherwise," to the word peerage, in the memorial.

Dr. ISAMBARD OWEN attended as representative of the Collective Investigation Committee, and opened a discussion on the Etiology of Phthisis; the following took part in debate: Dr. BOWLES, Dr. SMITH ROWE, Mr. WACHER, and the CHAIRMAN. Dr. Owen replied.

Dr. TYSON read a paper on the High Altitude Treatment of Phthisis, which was followed by an interesting discussion.

The members afterwards dined together at the Albion Hotel.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.

A MEETING was held at the Board-room of the Great Northern Central Hospital, Caledonian Road, N., on the evening of March 9th, 1887; Dr. BRISTOWE in the chair.

State Honours to the Medical Profession.—The SECRETARY read a letter, dated March 2nd, from the Shropshire and Mid-Wales Branch, requesting that the question of state honours to the medical profession might be considered.

Votes of Thanks.—Votes of thanks to the President of the Branch and to the gentlemen who brought forward cases were duly given.

RABIES IN CHESHIRE.—Three cases of rabies are reported to have occurred recently at Disley, Marple, and Norton, and the police regulations with respect to rabies are now enforced in several of the petty sessional divisions of Cheshire.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Remedies for Cucaine-poisoning.—Anomalous Form of Typhoid Fever.—Salicylate of Lithia in Acute Articular Rheumatism.—Pelada.—New Bipolar Electrode.—Cure of Cirrhosis.—Urea, Sugar, and Phosphoric Acid in Diabetic Urine.—Aconitine in Neuralgia.

M. MARTIN (*Journal de Médecine*, January 2nd, 1887) relates the following case. A child, aged 18 months, drank the contents of a bottle containing 50 centigrammes of cucaine in 15 grammes of syrup of marsh-mallow, which had been prescribed for teething pains. Serious symptoms of poisoning came on. Another practitioner was called in, who prescribed syrup of ipecacuanha, which caused slight vomiting, after which a diuretic was given to counteract the effect of the cucaine on the urinary organs. The general symptoms improved; but there remained considerable irritation of the eyes, which ceased on the administration of two spoonfuls of syrup of caffeine. M. Martin asks whether caffeine may be looked upon as an antidote to cucaine. Dr. Schilling (*American Journal of Pharmacy*) mentions that he has found inhalations of nitrite of amyl useful in cucaine poisoning.

At a recent meeting of the Société Médicale des Hôpitaux, M. Danlos related the following anomalous case of typhoid fever. The patient, an intemperate man, aged 29, had previously been affected with pains in the joints. Four days before admission there were signs of gastro-intestinal disturbance, and on the fifth day the joints became swollen and painful. Articular rheumatism was diagnosed, and salicylate of soda was ordered. A few days later, purpura, epistaxis, and hæmoptysis came on, the temperature remaining almost stationary. On puncturing the knee-joint, a clear fluid was obtained, which contained no micro-organism, and produced no effect on animals inoculated with it. Nevertheless, the patient got worse. The urine contained albumen; the temperature rose to 39° C. (102.2° F.); and death occurred on the eighteenth day. *Post-mortem* examination revealed hæmorrhages in the skin, the mucous membranes, and the lungs, but not in the intestines, which, however, in the lower portion presented eschars and extensive ulcerations.

Dr. Vulpian states that salicylate of lithia is more efficacious than salicylate of soda in cases of acute and progressive sub-acute articular rheumatism. It also has some effect in chronic cases when a certain number of the joints are still deformed, swollen, and painful. Four to 4½ grammes, and even 5 grammes, may be given in the day. If the improvement is not lasting, 50 centigrammes may be added to the daily dose. Sometimes, when the dose is increased to 5 or 5½ grammes, symptoms of intolerance begin to be shown. Salicylate of lithia may be given dissolved in water, in powder, or in unleavened bread, during or after meals, in doses of 50 centigrammes. The physiological effects of the drug are headache, giddiness, and deafness.

M. Ollivier, in the *France Médicale* of February 10th, gives the result of some observations on pelada. He is doubtful as to its being contagious, although it has sometimes appeared successively in children of one family placed under similar conditions. Some modern dermatologists think that pelada originates in the nervous system; identity of cause may thus produce identity of effect in different members of one family. No microbe has yet been discovered, and inoculations have so far been entirely negative. According to some authorities, the disease is a tropho-neurosis. M. Ollivier relates a case of a child which first showed symptoms of pelada after a prolonged fit of terror. In 25 cases of achromatous or pseudo-porrigo decalvans there was no contagion from husband to wife, or from one child to another. Artificial pelada has been produced in a rabbit by section of the posterior branch of the cervical nerve, immediately below the ganglion. M. Ollivier has allowed children affected with pelada to attend the public schools, and has seen no case in which the disease has been communicated.

At a recent meeting of the Academy of Medecine, M. Dujardin-Beaumetz presented, in the name of Dr. Apostoli, a new bi-polar electrode. This instrument consists of a slightly conical ball made of gas-carbon (or platinum), divided longitudinally into halves, which are isolated one from the other by a thin strip of gutta-percha; each half of this ball is connected through a long stem to the poles of a battery. The object of the instrument is to limit the action of a current to a given point of the skin or mucous membrane; to utilise all the current circulating between two poles that cannot be corroded; and to make the use of galvano-cautery more general in practice.

At a recent meeting of the Société des Hôpitaux, M. Féréol again showed a well-marked case of cirrhosis, in which a cure which had already lasted for some months had been effected. M. Rendu mentioned the case of a young officer who, after fourteen punctures, appeared thoroughly cured of this disease. M. Troisier thought that in such cases the diagnosis could not always be relied upon. M. Juyot related a case which had come back to him after two years of perfect health following the first attack. The second attack was accompanied by anasarca, and all the symptoms of cirrhosis, from which the patient finally died.

In the *Journal des Connaissances Médicales*, M. Bretet, of Vichy, gives the result of a number of observations, made with the object of discovering what relation exists between the quantity of urea, sugar, and phosphoric acid respectively excreted in diabetes. The urine of 150 patients suffering from diabetes was analysed. The weight of phosphoric acid excreted during the twenty-four hours was found to be, on an average, one-tenth that of the urea; it fluctuated with the latter, but not in the same proportion, being much less influenced both by the disease and by the treatment. Thus, when the urea was a third less or a third more than in the normal state, the phosphoric acid diminished or increased only one-sixth or one-fifth, rarely a quarter. This variation, moreover, was as constant in the diabetic as in the healthy subject. No such relation was found between the sugar and the phosphoric acid excreted. An interesting fact observed in these cases as well as in others that have come under the author's notice, was the rarity of phosphaturia. Of 798 analyses, only 31 specimens contained from 4 to 5 grammes of phosphoric acid (each specimen being the whole amount of urine passed in 24 hours); in 7 cases, it contained from 5 to 5.60 grammes, and in only one case it rose to 7.20 grammes. The reagents used in these analyses were molybdate of ammoniacum and nitrate of uranium. An analysis of the urine passed at various periods of the day proved in this, as in other cases, that, in order to obtain an exact knowledge of the quantity of the salts eliminated, the whole of the urine passed in the twenty-four hours must be used.

Crystallised aconitine, when properly used, is one of the most powerful remedies in certain kinds of neuralgia. It is most valuable in so-called "essential" neuralgia, especially facial and trigeminal neuralgia. It is best given in the form of granules containing a quarter of a milligramme of crystallised aconitine, or crystallised nitrate of aconitine, the doses being the same. An interval of four hours should be allowed between the doses, the total quantity of the drug administered in the twenty-four hours not exceeding one milligramme. There are forms of obstinate facial neuralgia, however, such as the intermittent variety, which resist the action of aconitine alone, and these likewise prove refractory to quinine alone. In such cases, success may be achieved by combining the two drugs. This may be done in pills as follows: R Hydrobromate of quinine, 10 centigrammes; crystallised aconitine, $\frac{5}{}$ milligramme. One pill containing the above quantity of quinine and aconitine to be taken every four or five hours.

NEWCASTLE-UPON-TYNE.

[FROM OUR OWN CORRESPONDENT.]

Newcastle-on-Tyne Infirmary. — Pathological Society. — Case of Aneurysm of the Abdominal Aorta.

A SPECIAL meeting of the Governors of the Infirmary has been held for the purpose of receiving and considering the report of the Special Committee as to the proposed alterations in the management of the institution. The following report was submitted: "The House Committee and Medical Board have had two meetings to consider the recommendations contained in the report of the Special Committee presented to the annual Court of Governors on February 3rd, 1887, and beg to report as follows: That they agree with the recommendation to abolish letters of admission and make the infirmary a free hospital, subject to the reservation of existing rights of life governors and to the receipt of regular periodical contributions from the workmen on Tyneside. It is desirable that the Infirmary should still remain a county institution, and it is recommended that a circular should be sent to the subscribers assuring them that due provision will be made to secure admission for patients residing at a distance. With regard to the recommendation to discontinue the reception of children, it seems premature to commit ourselves to its adoption." While not prepared to endorse the setting apart a special ward for paying patients, they recommend that steps be taken to secure whole or part payment of maintenance from those patients whose pecuniary circumstances do not warrant their receiving gratuitous treatment. The report next went into the subject of economising expenditure as regards food, stimulants, surgical appliances, drugs, etc., the consideration of the diet cards, and the systematic instruction and training of

the nurses. It was recommended that the casual department be remodelled, and the outpatient department be confined to such cases as have already received treatment in the wards; also that male venereal cases should be strictly excluded from receiving benefit from the hospital. It was recommended that a composition fee of six guineas (or two guineas for one year's attendance) be charged all students in medicine availing themselves of the advantages of the institution; that the House Committee and Medical Board be amalgamated, and that the method of election of the honorary staff should be altered so as to avoid the cost of personal canvassing among the governors, and that for this purpose a committee of selection should be appointed, taking care that it be sufficiently numerous and of a representative character.

The Pathological Society held its final meeting for the session 1886-87 this month. The agenda paper was an extensive one, and there was a large attendance of members. The Society has had a prosperous session, and the character of the work done has been above the average. In order to have even larger meetings, there has been some talk of a proposal to alter the hour of meeting so as to meet the convenience of both the country and town practitioners. At present the Society meets at 6.30 P.M., and as most of the town practitioners have consulting hours from 6 to 8 P.M., a considerable portion of the meeting is lost to them, and, indeed, many of them stay away altogether. It is thought by having alternate meetings, one at 6.30 P.M. and the next at 8 P.M., that both classes of practitioners would receive equal attention, and that the medical men in town would attend in larger numbers. Such an arrangement would, I am sure, from what I have heard, be beneficial to the Society.

The medical staff of the Infirmary held their first public consultation in the operating theatre of the institution a few days ago, in the presence of a large muster of students. The case was one of aneurysm of the abdominal aorta, under the care of Dr. Limont. The question was as to whether ligature should be performed or not. Dr. Limont and Mr. Page, under whose surgical care the case would come, expressed themselves in favour of ligature. Should this be resorted to, I hope to be able to record a successful result.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

Alleged Contamination of the Bootle Water-Supply.—Death of Dr. Hill.—The Imlach Testimonial.—The Hospital Sunday Question.

CONSIDERABLE excitement has been caused by a report that the water-supply of Bootle is contaminated by sewage. Last week a number of people resident in the borough were attacked by sudden illness, and the water, it is alleged, was observed to have an offensive taste and odour. There is a borehole in Bootle, about 1,000 feet in depth, from which water is obtained. This water, which has hitherto been pure, although very hard, is pumped into a reservoir, where it is mixed with Rivington water, and then distributed to Bootle, Seaforth, and Waterloo. The Liverpool water is obtained from Rivington. The contaminated water is reported to be less offensive now than when the change in quality was first noticed last week. Samples have been sent to a prominent analyst for report. It is supposed that the water in the borehole has become polluted, owing to some chemical and other refuse having been deposited in a neighbouring disused quarry, and the medical officer of health, Dr. Sprakeling, is believed to hold this view. But until the matter has been fully investigated, this is, of course, mere conjecture. In the meantime, active steps are being taken to discover the source of the mischief, and the inhabitants of the districts affected have been instructed to boil the water. It should be added that the borehole passes through sandstone rock.

By the death of Dr. Hill, Bootle has sustained a serious loss. He was not only a representative medical man, but also an active and valuable member of the town council. At the November election he lost his seat in the council, but was almost immediately elected an alderman. He was Mayor of Bootle in 1885, and was also a magistrate for the borough. The funeral took place on March 12th, with full military honours, Dr. Hill having been Surgeon-Major to the 1st Lancashire Engineer Volunteers.

Last week the Committee of the Imlach Testimonial Fund forwarded to Dr. Imlach a cheque for £600. All sections of the community have contributed to this handsome acknowledgment of Dr. Imlach's services to the Women's Hospital. I understand that the intention to have a new trial in the action Casey *v.* Imlach has now been definitively abandoned. The case was to have come on again in December last, but, in consequence of the Christmas holidays being close at hand, it was postponed until this month.

A special meeting of the Hospital Sunday Committee was held on March 14th, the Mayor presiding, to consider further the proposal to change the date of Hospital Sunday. After discussion, it was resolved that a circular should be sent to the various clergymen and ministers asking their opinion as to whether the date should be altered, and if so to what month they would suggest that the change should be made.

CORRESPONDENCE.

THE IRISH CONJOINT SCHEME AND THE APOTHECARIES.

SIR,—My letter, which appeared in the JOURNAL of March 12th, has called forth three in reply. This is satisfactory, for the subject should be discussed freely and fully.

I shall first refer to that from Mr. Montgomery, Secretary to the Hall. It contains little to comment on. He considers it "unnecessary to answer in detail all the objections" raised by the College of Physicians, so he answers none of them, but contents himself by quoting a letter from the College of Physicians written fifteen years ago, when the circumstances were altogether different. At that time an attempt was made to establish a voluntary scheme on the "one portal" system, and delegates were appointed to consider by what means this could be carried out by the junction of all the licensing bodies in Ireland—namely, the University of Dublin, the Queen's University, the College of Physicians, the College of Surgeons, and the Apothecaries' Company. The College of Physicians felt that if the two Universities were willing to admit the Apothecaries, they could not object, and as the other bodies professed to be anxious to form a scheme which would have averted legislative interference then dreaded, the College of Physicians reluctantly consented. The majority by which this was carried being only two, the scheme, as it was foreseen, quickly fell through. There is no analogy in the present case; the conjoint examination is compulsory. Two bodies only are required to unite, provided that one can give a licence in medicine and one in surgery, and not five as was then proposed. The letter which Mr. Montgomery quotes would, as an argument in the present case, apply with equal force to the University of Dublin, which body, equally with the College of Physicians, then agreed and now declines to admit the Hall to take part in their examinations.

The third letter, that from a "Fellow of the Royal College of Surgeons, Ireland," is a calm and temperate appeal to the College of Physicians to permit, under existing circumstances, "a combination which would be," he admits, "distasteful to both Colleges." There is much in his arguments with which I, personally, agree, but the College of Physicians will not agree to this "distasteful" combination.

"A Fellow's" arguments are based on his belief that the members of the General Medical Council will be so unmindful of what is due to their profession and to the welfare of the public as to establish as a licensing body, within the meaning of the Act of 1886, the directors of the Hall, which, he admits, "would be a calamity disastrous to the public welfare, and most injurious to the profession." To this the College replies that on the Council and not on the College must the responsibility of such a "disastrous" Act rest. The former have but to do their duty by refusing additional examiners to the Apothecaries' Hall, leaving them to perform the duties for which they were established, namely, to educate persons "skilled in preparing medicine," and "also to have a drug establishment to supply pure medicines." (*Vide* Act, 31 Geo. III, cap. 34; also Mr. Collins's evidence before Royal Commission, 1881, Question 5,725.)

How intimately the mere question of making a profit from their trade is connected with their desire to become a licensing body is proved by the evidence of Mr. Collins, their present representative in the General Medical Council, on the occasion referred to. Question 5,767 (Mr. Cogan): You gave us to understand, I think, that if you were disfranchised or disestablished the commercial interests of your body would suffer, because you would not be able to sell your shares at the price which they at present realise?" (Mr. Collins): "What I wish to convey is that the two interests are closely united. If we were disestablished professionally we would not get apothecaries to buy our shares, and then the institution would fall into the hands of non-professional persons." The shares, Dr. Collins states, pay 12 per cent.

There is no intention of disestablishing the Hall, or of depriving it of any of the rights conferred by the the Act of Incorporation, but the General Medical Council, according to a "Fellow of the College of Surgeons," is prepared to establish, as capable of granting a licence in medicine, surgery, and midwifery, a body which he, its advocate,

declares to be "unfit to be entrusted with those most important duties."

Your other correspondent, "F.R.C.S.I.," indulges in strong, and somewhat offensive, language. He says that he, too, considers the junction he advocates with the Apothecaries would be "a *mésalliance* with a drug-selling, drug-controlling body;" and, a little further on adds, that "the Fellows of the College of Physicians are unable to see beyond the social barrier which forbids Mrs. Twopenny to know Mrs. Threehalfpenny, because she is not in the set," and speaks of their conduct as being "old womanly *amour propre*." This is smart writing, but hardly likely to further the accomplishment of the "*mésalliance*" he has at heart. Nothing is gained by speaking offensively of a body of respectable traders, or of a number of respected physicians; but let this pass.

The College of Physicians do consider the admission of the Apothecaries would be a "*mésalliance;*" but they hold, further, that the Hall is incapable of furnishing a single person from among the existing directors who is fitted to be an examiner. There is not one among that body who has ever been a clinical teacher, or who has been attached to a clinical hospital or medical school, or who is known as a teacher or writer on medicine, anatomy, physiology, chemistry, or even on botany, materia medica, pharmacy, or therapeutics. How can efficient examiners be obtained from a body so constituted? If further evidence be required to show how unfitted the directors of the Apothecaries' Hall are to conduct an examination, such as it is supposed the General Medical Council requires, and which certainly the public demand, it may be deduced from the fact that, in their opinion, only one examiner in surgery is required to constitute their Court—one fitted to grant a certificate in medicine, surgery, and midwifery; for, at the recent meeting of the General Medical Council, their representative moved that "an examiner in surgery" be granted them by the Council, in order to constitute them a licensing body within the meaning of the Act.

The certificates granted by the Hall would then be both of a low class and cheap, for they are bound by their Act to charge but 10s. for their certificate. Is it possible that the General Medical Council, with all the facts before them, will take the responsibility of establishing such a body, than which nothing possibly could tend to lower more the standard of medical education and the status of the profession in the kingdom? A "Fellow of the College of Surgeons" says they are. I trust that he is mistaken.—I am, etc.,

A FELLOW OF THE KING AND QUEEN'S
March 19th, 1887. COLLEGE OF PHYSICIANS.

DR. SKENE KEITH'S STATISTICS OF ABDOMINAL SURGERY.

SIR,—Dr. Skene Keith's last letter is merely swearing at large, and therefore requires but a brief reply. He again evades all the issues, and brings in a fresh point—about the drainage-tube. Even there he exaggerates and misrepresents the facts. I never scoffed at the drainage-tube; I merely doubted the necessity for it, as Mr. Knowsley Thornton, I think, does still. But Dr. Keith converted me, and I at once publicly made recantation of my doubts, and in doing so acknowledged my indebtedness to Dr. Keith. All this has nothing whatever to do with the present discussion.

Concerning what Dr. Skene Keith is pleased to call my "inaccuracies," let me quote a letter just received, and entirely unsolicited, from Dr. Imlach, of Liverpool, who was present at the operation which Dr. Skene Keith says I incorrectly describe: "Skene Keith surpasses himself. I was present at his 'fifteen minutes' operation. It was a simple broad ligament cyst case. He made an incision six or eight inches long, whereas one inch would have been ample, and he was nearer an hour and a half than an hour over it."

Dr. Skene Keith's statement of the facts of my applications to see a hysterectomy are absolutely incorrect. My first application was made to Dr. Keith by word of mouth in August, 1881. My first written application was made on January 2nd, 1882, five years and two months ago, and these applications were repeated at irregular intervals on an average of every two or three months up till November 3rd last. They never were complied with. On July 12th, 1886, Dr. Skene Keith absolutely and unconditionally prohibited an American visitor from giving me notification of a proposed hysterectomy, which proposed hysterectomy turned out to be the removal of a parovarian cyst. Dr. Skene Keith has not replied to one single question which I have raised about this case and the singular mistakes concerning it.

Dr. Skene Keith advised against an operation—that is, he refused to operate—and so my patient at Hawick got well. Dr. Skene Keith blundered seriously, and Dr. Calvert's statements of the facts as quoted by me are absolutely correct.

I did not say that the second case at Hawick was an ovarian tumour. What I did say was that I had operated upon two cases which had been refused by Dr. Keith, one of which was a parovarian tumour. The other case was a case of gall-stones, and the story of the refusal of that was even more amusing than the story of the refusal of the other.

Dr. Skene Keith declines in future to have anything to do with me. He will find that a wise resolution. Had he not attacked me I certainly never should have thought it worth my while to have troubled about him. He made the vast field of London too hot to hold him in a very short time, and before he had been back in Edinburgh many weeks he succeeded in raising a storm which not all his father's great influence could quell. As I said in the initial sentence of this correspondence, so I now conclude, to the effect that Dr. Skene Keith is a most misguided young man.—I am, etc.,

7, The Crescent, Birmingham. LAWSON TAIT.

THE EPIDEMIC OF DIARRHŒA.

SIR,—I must confess to having expected more responses in your columns to my request for reports of cases of diarrhœa during the past three months. Since my letter appeared I find that there has been an enormous number of cases of an unusual character. The epidemic is not yet over; only on March 14th I was called to three cases in adults, presenting the characteristic symptoms of excessive watery discharge, no abdominal pain, alarming cramps in the legs, prostration, sickness, and low temperature. I have learned that during the last three months a large number of medical men in London have been attacked, some of whom were so prostrated that they were ordered away for a space to recover their strength. The medical officer of health for Marylebone refers to this unusual outbreak, and reports one or two fatal cases.

As such an epidemic of diarrhœa, accompanied by leg cramps and prostration, is so very scarce at this season, it surely is of importance that the cause should, if possible, be ascertained. One of our most accomplished Local Government Board Inspectors has taken a lively interest in the solution of this problem, and I trust that your readers will report in your columns the number and character of any cases of diarrhœa during the recent three months.—I am, etc.,

NORMAN KERR, M.D.

42, Grove Road, Regent's Park, N.W.

SIR,—Referring to Dr. Herringham's letter in the JOURNAL, and to previous and subsequent communications on the subject of an epidemic form of diarrhœa that has prevailed in town and country during the past three or four months, I may mention that a somewhat similar type of the disorder has been seen in the northern and north-western suburbs of the metropolis, characterised by the following features: (1) Profuse and more or less sudden evacuation of a watery fluid, sometimes semifeculent and bad-smelling, containing shreds of epithelium, preceded by a "rumbling" in the bowels, and accompanied by flatulence. (2) Pain, occasionally—a sense of burning heat in some cases—in the abdomen. (3) Diminution of urine, not in any case amounting to suppression. (4) Cramp, sometimes in the abdomen and lower extremities. (5) Nausea and vomiting not infrequent. (6) Extreme prostration, continuing, if the evacuations were not checked, for several days, or even weeks. (7) The tongue and inside of the mouth denuded, in places, of epithelium, leaving a raw-looking, red surface at the close of the attack. (8) Several cases occurring consecutively in one family, and not confined to any particular class. (9) Duration of the disorder for three or four days only if brought early under treatment, but longer if neglected.

The cause of the epidemic, erroneously (as I, with some others, think) attributed to reduced temperature or to the local water, has apparently been some atmospheric impression upon the sympathetic in its abdominal portion. One physician spoke of the disorder as a kind of influenza affecting the mucous membrane of the intestinal canal, instead of that of the bronchial tubes.

No deaths have occurred to my knowledge, except in the case of an old man who, believing that the evacuations were the result of a salutary effort of nature, refused, till too late, to take any medicine to arrest them. He died comatose.

The attacks resemble, so far as I can gather, those met with sometimes in India—either sporadic cases, or preliminary, under favourable conditions, to an outburst of cholera. The treatment consists in stopping the evacuations as quickly as possible. Of medicines, the best perhaps is a mixture of castor oil and laudanum, repeated once or twice, though lessened, if necessary, in quantity, according to circumstances; ol. ricini ʒss, tincturæ opii or nepenthe ♏ xx, would suffice for a first dose. But diet is all important. The most suitable is milk

with lime water—a tablespoonful of the latter to half a teacupful of the former, or chicken (or mutton) broth, or beef tea, thickened with arrowroot, sago, tapioca, or cornflour. This combination—the fluid meat essence with the soft starchy food—is often invaluable, being binding, soothing, and nourishing. Change of air, in case of great prostration, is very desirable.

It would be interesting to investigate the possibility of an atmospheric wave and the direction of it. The disorder was believed by some to be infectious.—I am, etc.,

Brondesbury, N.W. CHAS. R. FRANCIS, M.B.

CASE OF SWALLOWING ARTIFICIAL TEETH, WITH RAPID EXPULSION BY THE RECTUM.

SIR,—Under this head in the JOURNAL of March 12th, I observe the report of a case in which only seventeen hours elapsed between the entrance and exit of the foreign body. Both patient and practitioner are to be congratulated on the happy and speedy termination to the case, but I think the wisdom of the treatment is open to question.

"A laxative diet was ordered." I think most authorities are agreed that a constipating diet is more to be desired. In Holmes's *System of Surgery* (five vols., 1870), vol. ii, p. 701, we read: "It were better to encourage costiveness than establish relaxation of the bowels;" and in Erichsen's *Surgery* (two vols., 1878), vol. i, p. 491, "an abundance of pultaceous food" is recommended. Buns, gingerbread, sponge-cakes, cheese, hard-boiled eggs, etc., have been advised by various authors, with the view of causing a bulky residue of food, in which the foreign body may be encased. This mass, by distending the wall of the gut to a great extent, effaces the folds of mucous membrane, and facilitates the passage of the foreign body, at the same time tending to prevent injury to the sensitive surface from sharp angular edges.

Dr. Dickson (Edinburgh) advocates cut-up thread, worsted or tow being incorporated with the food. In a communication read before the Medico-Chirurgical Society of Edinburgh in February, 1876, he records a case in which worsted cut into finger-lengths, and mixed with thick oatmeal-porridge, was taken by the patient with a very satisfactory result. This novel method of treatment was suggested from having seen the bones of mice neatly wrapped in the fur cast up by hawks. The subject has often been before us as dental surgeons at the Odontological Society of Great Britain, and the unanimous verdict is in favour of a constipating diet, but I think this method of treatment is not so well known to medical practitioners as it should be.—I am, etc.,

JOHN ACKERY,
Assistant Dental Surgeon to St. Bartholomew's Hospital.
24, Queen Anne Street, W., March 14th, 1887.

VENTROTOMY.

SIR,—There is no doubt that a single word is wanted to denote the operation of opening the abdominal cavity, but surely the hybrid term "ventrotomy," suggested by Mr. H. A. Reeves in the JOURNAL of March 12th, is an unnecessary barbarism. May I suggest the use of "cœliotomy," from *κοιλία*, the abdomen, and *τέμνειν*, to cut. The former word is already familiar to us in the name of the widely distributed abdominal artery, the cœliac axis.—I am, etc.,

36, Harley Street, W., March 14th. N. DAVIES-COLLEY.

SIR,—Mr. Reeves may be correct in suggesting "ventrotomy" for abdominal section. Gastrotomy would be a better name, since it is not a hybrid word, but, unfortunately, as Mr. Reeves says, it has been appropriated to a different operation. I am not concerned much to defend my suggestion of "malakotomy," though I think it better than "laparotomy." The great thing is to use words always in the same sense, and the second thing is to save time and circumlocution. Mr. Reeves's suggestions seem admirably adapted to this end, and I hope they will be carried out and extended. Medical naming is, however, in a state at present that may fairly be called pitiable, although suggestions for its improvement, or, rather, resolution, demand the space of a treatise rather than of a letter. What mainly induced me to address you is Mr. Reeves's last sentence, in which he says the word generally written "colotomy" should be "colostomy." I should like to know why he thinks so. Κῶλον, or, more properly, *κόλον*, and *τέμνω* being the roots, whence comes the *s*? If he implies by the term the making of a new exit (*στόμα*), why not write the word "colostoma," and still retain "colotomy" for its proper meaning of simple incision of the colon?—I am, etc.,

Bradford. A. RABAGLIATI.

MEDICO-LEGAL AND MEDICO-ETHICAL.

SPURGIN v. NICHOLSON.

LAST year (in the JOURNAL, October 16th, p. 748) we noticed the judgment given by his Honour Judge Ingham at the Cockermouth County Court in this case. The action was brought to recover fees for medical attendance on the defendant (who is a solicitor) for a sprained ankle, and the defence was that the treatment had been so unskilful as to disentitle the plaintiff to recover, inasmuch as Mr. Nicholson's injury was a dislocation and not a sprain. This rested on the evidence of Mr. Nicholson himself, who described his sensations while under treatment, and of that of a bonesetter, who swore to a dislocation of the fibula of a sort which persons skilled in anatomy know to be impossible. A County Court Judge is not supposed to be learned in anything except law—not always in that—and Judge Ingham, instead of seeing the incredibility of the bonesetter's story, believed and acted on it. Mr. Spurgin lost his case, and was, of course, branded with the stigma of professional incompetence. Fortunately for him, the case excited considerable attention at the time, and many men of high standing in the medical profession came forward to testify that the injury as described by the bonesetter was such as could not have existed. Armed with affidavits from them, and with the aid of a competent advocate, Mr. Spurgin managed to persuade Judge Ingham that the case was so far doubtful that it should be tried again, and a new trial—before a jury this time—was consequently ordered. The sequel is instructive. The judge was with difficulty brought to acknowledge that his original judgment was questionable. But Mr. Nicholson, who, we suppose, understands law if he mistakes medical symptoms, saw that evidence such as was contained in the affidavits given to Mr. Spurgin was too strong for him and his bonesetter, and paid the money instead of trying the case again. As this was done privately, many persons who saw the original slur on Mr. Spurgin's skill may not have been made aware that it has been wiped out, and we think it well to call attention to the fact that the defence based on his alleged unskilfulness has utterly broken down. His reputation is satisfactorily cleared, but the injury done by the original wrong decision is but partly remedied. The costs in the first instance were, of course, ordered to be paid by Mr. Spurgin, who lost the case. These he does not now get repaid. The costs of preparing the case, of applying for and getting a new trial, were necessarily heavy, and though Mr. Spurgin succeeded, the judge would not give him any costs. The result is that Mr. Spurgin has been put to very considerable expense in enforcing what is now admitted to be a just claim, and in protecting his reputation, which now turns out to have been most unfairly attacked. If he had been a poor man without friends he might have been unable to procure the means for applying for a new trial, and might have been ruined professionally and financially by the judgment, which results show to have been wrong; as it is, he has been mulcted in a considerable sum through no fault of his own. We are glad to know that a subscription has been started by his friends and professional brethren, and hope it may be sufficient to bear him harmless. His case, however, is not an isolated one. He may have been—we think he was—hardly dealt with in the matter of costs; but we cannot say that in this respect the judge was actually wrong. In most cases tried in our courts the successful litigant has to pay some costs which he does not recover from his adversary. Any man may find himself involved in a lawsuit, either as plaintiff or defendant, and may have to pay heavily to vindicate his rights. The general public may sometimes avoid the risk of costs by paying hush money instead of fighting. Professional men often are practically obliged to fight for the sake of their character, as Mr. Spurgin was. They must risk having to pay costs, as he did. His is another instance added to those which of late have been numerous enough to show the importance of mutual aid being given to each other by members of the medical profession. Singly, they run great risk of losing even the best claims; united, the case is otherwise.

UNPROFESSIONAL CIRCULARS.

DR. B., of P. M., writes: What I did was, in my opinion and that of others whom I consulted, quite in accordance with professional etiquette. I wished to keep up my practice at P. M. while I formed a nucleus at ——, so engaged an experienced unqualified assistant to live there, and take midwiferies, etc., in my absence. He had no sooner come than a false report was spread among my patients that I was going to leave them altogether, and hand them over to an assistant. As this report was causing great offence to my patients, I was driven in self-defence to write *to my own patients*, and state what I was in reality doing; and to save trouble I had my letter printed. Not one was sent to a person who was not my own private patient. Is it contrary to medical etiquette to act thus with one's own patients, providing none are sent to the

patients of others? My rival at P. M. also keeps an unqualified assistant there, and lives elsewhere.

*** However unwittingly our correspondent erred in the matter of the unprofessional circulars on which we recently commented, he committed a grave mistake in placing an unqualified assistant (and the remark equally applies to the rival practitioner) in so responsible a position, and notifying the fact, moreover, to his patients by printed circulars.

If the circumstances were such as to render it necessary that the reports as to his future intentions should be promptly checked, and if his patients were too numerous to admit of a personally written note being sent to each, he would, in our opinion, have been better advised if he had sent a carefully lithographed *facsimile* of such a letter. It has long been traditionally understood, and has since been distinctly laid down in the *Code*, that it is medico-ethically wrong, not only to solicit practice by card or circular, but also to notify by such means a change of residence and address, or the introduction of a partner—much more that of an assistant, as in the present case. At the same time, as our correspondent assures us that the issue of the printed circulars was strictly limited to his own patients, although unable to acquit him of professional irregularity, we feel justified in exonerating him from all intentional unethical proceeding in the case in question.

CERTIFICATES BY UNREGISTERED PRACTITIONERS.

UNREGISTERED asks whether an unregistered medical practitioner is liable to a penalty for having signed death-certificates on forms other than those issued under the Births and Deaths Registration Act.

*** By Section 37 of the Medical Act of 1858, "No certificate required by any Act from any medical practitioner shall be valid unless the person signing the same be registered." The Registration of Births and Deaths Act, 1874, by Section 20, "in case of the death of any person who has been attended during his last illness by a registered medical practitioner," imposes on such practitioner the duty of filling up the proper certificate; and Section 40 imposes a penalty on any person who wilfully makes any false certificate under the Act. If an unregistered practitioner gives a certificate purporting to be one that is in accordance with Section 20, he must thereby represent himself to be registered, and consequently make a wilfully false representation, and render himself liable to the penalty. If the certificate does not purport to be under Section 20, we do not see what it is wanted for.

AN UNQUALIFIED PRACTITIONER.

A MEMBER writes: Mr. B., lately an unqualified assistant with a Dr. D., has broken his agreement not to practise in the neighbourhood. An injunction has been granted. Since then Mr. B. has signed four vaccination-certificates, leaving in the words "medical practitioner duly registered;" he has also been met in consultation by Dr. X. Would you please say what course should be adopted towards Mr. B. and towards Dr. X., who is cognisant of all the circumstances?

*** If, as we infer, "Mr. B." is still an unqualified assistant, his signature to the vaccination-certificates as a "medical practitioner duly registered" may subject him to a prosecution under the Medical Act. Further, if "A Member's" assurance is well founded that "Dr. X. is cognisant of all the circumstances, and has met Mr. B. in consultation," we would suggest that a courteously worded communication be made to Dr. X. on the subject, and our correspondent's conduct towards him should be regulated by the nature of the reply which he receives.

UNQUALIFIED PRACTICE.

MEDICUS asks: What are the proper steps to take to get an unqualified man removed from the neighbourhood of my surgery, he having started a dispensary in the district, much to the annoyance of the qualified practitioners in the vicinity. He does not act in the behalf of any medical man, and from a most reliable source I learn that he practises on his own account.

*** The best course would be to communicate with Mr. James R. Upton, 14, Austin Friars, London, E.C., Clerk to the Apothecaries' Society.

UNQUALIFIED ASSISTANTS.

A MEMBER asks whether it is legal for a medical practitioner, with club, union, and private practice, to permit his unqualified assistant to perform serious operations, take sole charge during his employer's absence or incapacity for work, and attend serious midwifery cases without assistance; also whether it is usual for medical men to meet such unqualified assistants in consultation?

*** "A Member's" question (although he speaks of the principal as "a medical practitioner") appears to be addressed solely to surgical practice, and to that this answer is confined.

"A Member" is probably aware that any person, although he be unqualified, can, at the risk of being held criminally responsible for the consequences, perform a surgical operation, but no charge can be recovered in any court of law for the performance of such operation—unless, indeed, it were performed under the immediate advice and direction of a properly qualified and registered surgeon; and the attempt to recover any fee or charges would render the person seeking to recover, liable to be proceeded against for a penalty of £5 by the College of Surgeons.

MEDICAL OFFICERS OF HEALTH AND PRESCRIBING CHEMISTS.

CYNIC states that the medical officer of health in his neighbourhood has issued a printed circular, which has been distributed by a chemist who is notorious for prescribing. The circular, which has even been posted up in the window of a fish-shop, states that Dr. C. will attend at the chemist's on certain days of the week to give medical advice to the working classes. Fee, including medicine, one shilling.

Cynic asks what course would be proper for other practitioners to take under the circumstances? Should they meet him? Should they report cases of infectious disease to the sanitary authority as heretofore? Ought the case to be reported to the Medical Council or to the bodies whose licences he holds?

*** The course adopted by the medical officer of health, though a breach of etiquette, is not an infringement of the law, nor, so far as we are aware, an offence against the rules of the College of Surgeons, of which he is a member. If the chemist can be proved to be in the habit of prescribing, complaint should be made to the Apothecaries' Society.

WHO CALLS FIRST?

CEREMONY writes: A. has been living in a country town for some years when B., a qualified married gentleman, purchases a practice about six miles and a half off in a different poor-law district, and in no way connected or clashing with the practice of A. What I wish to know in this case is whether A. or B. should make the first call. A. and B. are acquainted with each other, having met at a friend's house.

*** If our correspondent will refer to the *Code of Medical Ethics*, second edition, chapter iv, page 90, note 1, he will find that it is "expected from members of the profession commencing or changing the locality of practice, in town or country, to call, with as little delay as may be, upon every duly qualified legitimate medical practitioner resident within a reasonable distance of his own selected place of abode, and to courteously announce his intention to practise in the locality, etc." We need therefore scarcely add that the duty of making "the first call" devolves upon "B.," and not "A."

MIDWIFERY.

M.D. writes: A new patient calls to engage me to attend her in her confinemen—the first. The probable date of its occurrence is about the middle of my intended annual three weeks' holiday. Is it incumbent on me to inform her of the coincidence? I always leave a good *locum tenens* in charge of my practice.

*** We are clearly of opinion that, having accepted the engagement to attend the new patient, it is incumbent upon "M.D." either to defer his intended annual holiday until after her confinement, or to inform her at once of "the coincidence" alluded to.

OBITUARY.

ROBERT EDMUND CARRINGTON, M.D., F.R.C.P. LONDON.

IT is not often that we have had to chronicle a death more sad than that of Dr. Robert Edmund Carrington, who passed away on the morning of March 16th. For some time he had been tired out with a particularly arduous winter's work, and several friends noticed, when he read a paper at the Clinical Society about three weeks ago, how jaded he looked; still none suspected such an awfully sudden end. On the morning of Sunday, March 13th, he made a necropsy on the body of a hospital patient who had died from some obscure form of blood-poisoning, thought to be possibly glanders. Dr. Carrington's enthusiasm for his work prevented his leaving an important case such as this to be examined on the Monday. Somehow or other he unfortunately inoculated himself. He knew at once the risk he ran, for, after the necropsy, he said that he should be dead in three days. In about thirty-six hours after the inoculation he was delirious, and evidence of pneumonia developed at the base of one lung. Throughout the whole of his illness the signs of prostration were very great; the temperature and pulse, for instance, both rose but slightly.

Dr. Carrington, who died at the age of 33, was the second son of Mr. F. G. Carrington, for many years editor and one of the proprietors of the *Gloucestershire Chronicle*, and grandson of Mr. N. T. Carrington, the poet of Devon. He was educated at the King's School, Gloucester, under the late Rev. Hugh Fowler; here he took a high standing, and won a scholarship given by the Dean and Chapter. He first studied medicine at the Gloucester Infirmary, and then in October, 1870, entered at Guy's Hospital. He took the second prize at the entrance examination, and, after holding the usual resident appointments, he was in 1877 appointed demonstrator of anatomy. In 1882, after five years spent in the dissecting-room, he became medical registrar; in 1884 the governors of the hospital made him assistant-physician; very shortly afterwards he took charge of part of the work of the *post-mortem* room; and last year he became curator of the museum and sub-dean of the school. At the time of his death he was senior assistant-physician. He distinguished himself many times at the London University. At the preliminary scientific examination in 1872 he took the exhibitions in chemistry and zoology, together with honours in botany. At the intermediate examination in medicine in 1874 he took a first class in physiology, and the medal and exhibition in materia medica. At the final M.B. in 1878 he won the medal in medicine, and honours in each of the other subjects. He graduated M.D. in 1879. He became a Fellow of the Royal College of Physicians in 1886. Soon after his entrance at Guy's, the silver medal for

botany was awarded him by the Apothecaries' Society. As a student one of his greatest successes was his essay entitled "Alcohol as a Food, Drug, and Poison," which obtained a prize from the Physical Society. He had held at various times the appointments of Physician to the Dreadnought Hospital, Physician to the Department for Diseases of the Skin at Guy's, Secretary to his Branch of the British Medical Association, Examiner in Anatomy to the Royal College of Physicians of London, and Honorary Secretary to the Physical Society of Guy's.

At the time of his death, in addition to his hospital appointments, he was Assistant Examiner in Anatomy to the University of London, President of the West Kent Medico-Chirurgical Society, Physician to the Guy's Nursing Home, editor of the *Guy's Hospital Reports*, and one of the members of the Council of the Pathological Society. By his book, *A Manual of Dissections*, he was well known to all students who prepare for the higher anatomical examinations. It was as solid a piece of work as was ever put into a book, accurate from beginning to end, and unique of its kind. He also had a share in bringing out Fagge's *Principles and Practice of Medicine*. The two sides of Dr. Carrington's character, namely, that of the man and that of the physician, went to make up all that is required to form a great physician. Had he lived he would have continued to go about applying his great knowledge and talents quietly and unobtrusively for the good of his fellow creatures, and the circle over which his influence spread would have ever continued to widen. His extreme unselfishness, his kindness, his marvellous capacity for sympathising with his fellow creatures, whether in joy or in sorrow, gave him a host of friends who felt they had in him something more than a clever acquaintance; they knew they had a genuine sympathetic friend. His charity was one of his many charming qualities. Probably never a day went by without his turning out of his path to do some one a kind act, always in such a retiring manner that one felt it was part of his nature; doing kindnesses to others had become with him a habit. He was, as would easily be imagined, most popular with the students, both past and present, and the popularity he enjoyed was of the highest and noblest kind, for it was due to the fact that every student after having been thrown in contact with him felt that in Dr. Carrington he had a friend to whom he could go when in difficulty, and who would help him out of the difficulty, not, so to speak, "officially," but as a fellow sufferer, for so delicately did Dr. Carrington feel for others, that as they suffered so he was pained, and hence the affection of patients as well as students for him. Often have we heard students speak of him, often have we seen him received by them, never have we seen their regard for him on the wane, always have they looked up to him, loved and revered him.

Of the professional part that went to make up the physician we need hardly say much. His reputation and his position speak for themselves. He had two happy faculties, both of which are said to make a genius, that of taking pains, and that of hard work; without both of these none can hope to succeed in our profession, but with them developed to such a degree as they were in Dr. Carrington, brilliant success is certain. The paper he read at the Clinical Society this month, on Rheumatic Hyperpyrexia, showed both these points, and also showed his truth-seeking slowness to jump to conclusions. His best known contributions to medicine were his papers on Hour-glass Contraction of the Stomach, and Cerebro-spinal Meningitis, in the Pathological Society's *Transactions*, and those on the Concurrence of Fever and Cirrhosis, and on Multiple Small Abscesses of the Liver, in the *Guy's Hospital Reports*. The thoroughness of his work was to be seen alike in his dissecting room work, his clinical medicine, and his pathological demonstrations; in all these we have frequently marvelled at his accuracy and the persistence with which he refused to leave any stone unturned that might prevent his arriving at the whole truth.

GEORGE WILSON, M.B.CANTAB, M.R.C.P.

Dr. George Wilson, formerly Physician to the Leeds General Infirmary, died at his residence, Cromer Terrace, Leeds, on March 8th. The deceased physician received part of his education at Trinity College, Cambridge, and took the degree of M.B. at that University in 1832. He became a Member of the Royal College of Physicians in 1860, and in the same year his connection with the Leeds Infirmary ceased. He was also at one time Physician to the Small-pox and Fever Hospitals, and enjoyed a large private practice.

M. François Coppée, the distinguished poet, has written some verses upon M. Pasteur, which are to be recited at a festival organised by the workmen at a glass factory at Aumal, in aid of the Œuvre de M. Pasteur.

NAVAL AND MILITARY MEDICAL SERVICES.

RELATIVE RANK.

A TELEGRAM, under date of March 23rd, has been addressed to Mr. Ernest Hart, as Chairman of the Parliamentary Bills Committee, by the medical officers of both medical services in Burmah, stating that extreme discontent with the abolition of relative rank in the Medical Service is universal, and expressing their strong approval of the vigorous action taken by the Parliamentary Bills Committee in this matter.

UNITAS writes: On behalf of the medical officers of the army you ask for a Royal Warrant which shall clearly define their rank and professional position. They are entitled to this, but there is some undercurrent in the War Office, or nearer home, perhaps, which has misled Mr. Stanhope and other well-intentioned and honourable gentlemen who have sought advice in that quarter.

A short letter of mine was published in the *Army and Navy Gazette*, November 21st, 1868, in which I then recommended a scheme which, had it been adopted, would, I think, have settled the vexed question of title and relative rank, and I still think it worthy of adoption. There is but one rank—substantive rank, and that is held alone by combatant officers; any other must be relative or honorary, that is, ranking with or assimilated to. To quote a very old army regulation: "Such relative rank should carry with it all precedence and advantages attaching to the corresponding rank in our army." One hundred years ago the Corps of Engineers was a civil corps, and, on becoming a military branch of the service, ranked with the Royal Artillery.

One of two courses ought to be adopted: either officers of all departmental corps should possess honorary rank, as in the case of the Commissariat, Transport, Ordinance, and Pay Corps; or each corps should be designated by the prefix, and the affix should convey the rank of its holder, thus:

Commissary	Major-General	Charles Close.
,,	Captain	Robert Knight.
Surgeon	Colonel	Thomas Holmes.
,,	Captain	Henry Browne.
Ordnance	Lieutenant-Colonel	M. Henry.
,,	Major	L. Lloyd.
Paymaster	Captain	W. Jones.
Veterinary Surgeon	Major	Oliver Boyd.

There is no novelty in my suggestion, and its simplicity would secure what you demand—"a recognised military grade known and seen of all men."

*** We print the letter of "Unitas," as we are aware through our correspondence that other army medical officers hold the same views as those which are expressed in it. We are, indeed, led to believe that the number of surgeons in the army who are looking to the addition to their professional designations of the honorary titles ordinarily indicative of different grades of rank in the army as the solution of the difficulties brought about by the abolition of relative rank, is on the increase. The chief impediment in the way of such a change appears to be the fact that in this country all such titles as general, major, captain, etc., have become regarded both in the army and in society as the special property and designation of officers of the combatant branch of the army, so that, while the titles are regarded as substantive titles in their instance, the same titles are regarded only as honorary titles in the instance of the commissariat and any other part of the army in which they may be used. If the military titles referred to were simply regarded as indicating different grades of rank in the army, independent of the particular avocation followed in the military service, as is the case in the United States, in Italy, and some other countries, then, we imagine, there would be no more difficulty in the way of introducing the usage of these titles among surgeons of the British army than there has been in attaching them to the designations of the military surgeons in the countries just referred to.

THE NAVY.

FLEET-SURGEON ROBERT NELSON has been placed on the retired list of his rank. He entered the Royal Navy as Surgeon, April 15th, 1861; became Staff-Surgeon, March 16th, 1874; and Fleet-Surgeon, February 27th, 1884. He was Fleet-Surgeon of the *Téméraire* at the bombardment of Alexandria on July 11th, 1882, and during the Egyptian war, and has the medal with clasp and the Khedive's bronze star for the campaign.

The following appointments have been made at the Admiralty during the past fortnight: JOHN LYON, Staff-Surgeon to the *Ajax;* EDWARD A. SPILLER, M.D., Surgeon, to the *Duke of Wellington*, additional, for disposal; WALTER C. SPILLER, Surgeon, to the *Ganges*, additional, for disposal; WILLIAM BETT, Surgeon, to the *St. Vincent;* H. W. RICHARDS, Surgeon, to the *Boscawen*, additional, for disposal; FREDERICK A. BRICE, Surgeon, to the *Britannia*, additional, for disposal; J. W. SLAUGHTER, Surgeon, to the *Cambridge*, additional, for disposal; JAMES B. CLIBORN, Surgeon, to Lisbon Hospital, to date March 11th; STANDISH T. O'GRADY, Surgeon, to the *Indus;* and CYRIL J. MANSFIELD, M.B., Surgeon, to the *Griffon*, to date March 16th; JOHN D. HUGHES, WILLIAM J. COLBORNE, J. H. STENHOUSE, JOSEPH A. MOON, ROBERT HARDIE, M.B., GEORGE T. COLLINGWOOD, CORNELIUS BRADLEY, M.D., RICHARD MILLER, M.B., GEORGE F. COLLINS, CHARLES DICKINSON, JOHN E. COAD, M.B., HUBERT HOLYOAKE, GEORGE WILSON, M.B., JAMES MOORE, EDWIN GRIFFIN, M.D., JOHN D. MENZIES, M.B., HUGH ST. D. GRIFFITHS, and WALTER BOWDEN, Surgeons, to the *Duke of Wellington*, additional, for service at Haslar Hospital, to date February 28th; JOHN LOWNEY, Surgeon, to the *Landrail;* EDWARD H. MEADEN, Surgeon, to the *Seaflower;* EDWARD A. SPILLER, Surgeon, to the *Martin;* GRAHAM E. KENNEDY, Surgeon, to the *Nautilus;* JOHN E. WEBB, Surgeon, to the *Pilot;* JOHN F. BATE, Surgeon, to the *Scalark;* JOHN ANDREWS, Surgeon, to the *Liberty;* ROBERT HICKSON, Surgeon, to the *Lion;* JOHN Mungle, to be Surgeon and Agent at Elie.

THE MEDICAL STAFF.

Brigade-Surgeon J. Landale, M.D., has been brought on the Administrative Medical Staff of the Bengal Army, *vice* Deputy Surgeon-General J. B. C. Reade, C.B., whose term of service has expired.

Deputy Surgeon-General A. J. Greer died on March 3rd, at Northallerton, Yorkshire, at the age of 56. He entered the army as Assistant Surgeon, July 23rd, 1852; became Surgeon, September 11th, 1860; Surgeon-Major, July 3rd, 1872; and retired on half-pay, July 7th, 1877, with a step of honorary rank. Deputy Surgeon-General Greer served in the Crimea with the 21st Fusiliers in 1854-55, and was at the battles of the Alma, Balaklava and Inkerman, at the siege of Sebastopol, the storming of the Quarries on June 5th, and the attack on the Redan on June 18th, for which he was mentioned in despatches; he had received the Crimean medal with four clasps, the 5th class of the Order of the Medjidie, and the Turkish medal.

Deputy Surgeon-General Edward Mockler, formerly Surgeon to the Queen's Bays and 17th Lancers, died at Oxford Terrace, Hyde Park, on February 17th, at the age of 77. His commissions were dated: Assistant-Surgeon, September 25th, 1835; Surgeon, August 7th, 1846; and Surgeon-Major, October 1st, 1858; he retired on half-pay, March 12th, 1861, with the honorary rank of Deputy Surgeon-General. He served with the 10th Regiment in the Punjab campaign in 1848-49, and was present during the latter part of the operations before Mooltan, was at the surrender of that fortress, and at the battle of Goojerat (medal with clasp).

Quartermaster H. J. Sylvester has been granted retired pay, with the honorary rank of Major. He became Lieutenant of Orderlies, June 25th, 1873 (having previously served as Apothecary); Captain of Orderlies, June 27th, 1879; and Quartermaster, July 1st, 1881. Major Sylvester was in the Zulu war in 1879 (granted honorary rank of Captain and medal), and in the Soudan campaign in 1885 (medal with clasp).

Surgeon-Major James Hector, M.B., has been granted retired pay, with the honorary rank of Brigade-Surgeon. His commissions are dated: Assistant-Surgeon, September 30th, 1864; Surgeon, March 1st, 1873; and Surgeon-Major, September 30th, 1876. Brigade-Surgeon Hector served in the Zulu war in 1879, and in the operations against Sekukuni, for which he was mentioned in despatches, and received the South African medal with clasp.

Surgeon J. F. Williamson, M.B., serving in the Bengal command, has been appointed Honorary Surgeon to the Viceroy.

Surgeon W. H. Lendrum, M.D., serving in Bengal, and Surgeon H. E. B. Flanagan, serving in the Madras command, have passed the examination in Hindustani by the higher standard.

Surgeon-Major F. H. Welch is promoted to be Brigade-Surgeon, *vice* J. H. Hunt, deceased. His previous commissions are dated: Assistant-Surgeon, April 1st, 1861; Surgeon, March 1st, 1873; and Surgeon-Major, March 10th, 1876. Brigade-Surgeon Welch has no record of war-service.

Sergeant-Major Thomas Warrington, of the Medical Staff Corps, is appointed Quartermaster, with the honorary rank of Lieutenant, *vice* H. J. Sylvester, who has been granted retired pay.

The undermentioned officers, serving in Bengal, have been detailed to proceed to England: Surgeon-Major A. A. Macrobin, by the troopship, of March 20th; Surgeon-Major D. C. Grose, by the troopship of April 2nd; and Surgeon W. J. Baker, by the troopship leaving about May 1st.

Surgeon J. M. Nicolls, M.B., serving in Bengal, who was appointed to the charge of the Nowshera Lock Hospital from February, 1871, *vice* Surgeon F. S. Henston, transferred, is confirmed in that appointment.

Surgeon-Major G. D. N. Leake is appointed to be Civil Surgeon of the Mahlaing subdivision of the Meiktila District, Burmah, from December 22nd, *vice* Surgeon-Major Wright, transferred.

Surgeon-Major R. W. O'Donnell and Surgeon P. J. Nealon have passed the colloquial portion of the elementary examination in Burmese.

Surgeon M. L. Hearn, who has arrived at Madras from Upper Burmah, is ordered to do duty at the station-hospital at Secunderabad.

Surgeon G. R. Woolhouse died at Leamington on March 13th, aged 65. He entered the service as Assistant-Surgeon, May 7th, 1858; became Surgeon, May 15th, 1867; and retired on half-pay, December 14th, 1870.

Surgeon John Brodie, M.B., died at Netley Hospital on March 15th, at the age of 38. His commission as Surgeon bore date February 4th, 1877, in which year he was sent to India, where he remained till 1883, when he returned to England. In the following year he went to the West Coast of Africa, and returned thence only a few months since. Surgeon Brodie served in the Afghan war of 1878-80, and was present in the engagement at Charasiab on October 6th, 1879, and in the operations around Cabul in December, 1879, including the investment of Sherpore; he accompanied Sir Frederick Roberts in the march to Candahar, and was present at the battle on September 1st (medal with three clasps, and bronze decoration).

THE INDIAN MEDICAL SERVICE.

Brigade-Surgeon James Keess, M.D., of the Madras Establishment, has retired from the service, which he entered as Assistant-Surgeon, August 4th, 1846, attaining to the rank of Brigade-Surgeon, January 27th, 1884. At the time of his retirement, he was Principal and Professor of Medicine in the Madras Medical College, and Physician of the General Hospital, but does not appear to have had any war experience.

Surgeon G. J. H. Bell, of the Bengal Establishment, is appointed to the officiating medical charge of the 20th Punjab Infantry, *vice* Surgeon K. M. Downie, M.D., on field service in Upper Burmah.

Mr. William G. Prichard, late Inspector-General of Hospitals, Madras, died at Norton Court, Gloucestershire, on February 26th, in his 74th year.

Surgeon J. F. Evans, Bengal Establishment, is appointed to the officiating medical charge of the 23rd Pioneers, *vice* Surgeon H. Duncan, who has been appointed to the 14th Sikhs.

The undermentioned have leave of absence for the periods specified:—Surgeon-Major W. M. Keefer, Bengal Establishment, for one year on medical certificate; Surgeon J. G. Hancock, Bengal Establishment, for 183 days on medical certificate; Brigade-Surgeon H. J. Blanc, M.D., Bombay Establishment, for 32 days in extension on medical certificate.

Surgeon R. James, M.B., Madras Establishment, has returned to duty from furlough.

The services of Surgeon W. G. P. Alpin, Bengal Establishment, Officiating Medical Officer of the Meywar Bheel Corps, are placed at the disposal of the Home Department from February 20th.

Consequent on the temporary transfer of Brigade-Surgeon A. H. Hilson to the Military Department, Surgeon-Major G. G. McLaren, M.B., Bengal Establishment, is appointed to officiate as a Civil Surgeon of the 1st class, and to have charge of the civil medical duties at Agra.

With the sanction of the local military authorities, Surgeon-Major A. McGregor, Bengal Establishment, Medical Officer to the 1st Battalion of the 2nd Goorkha Regiment, is appointed to officiate as Civil Surgeon of Dehra Dun.

Surgeon G. H. Bull, M.D., Bombay Establishment, is appointed to be Civil Surgeon of Myingyan, Burmah, from December 7th, during the absence of Surgeon C. B. Maitland, or till further orders.

Brigade-Surgeon H. J. Blanc, M.D., Bombay Establishment, has been permitted to retire from the service from April 2nd, he having entered it as Assistant Surgeon February 10th, 1859, attaining to the rank of Brigade-Surgeon April 25th, 1886. Brigade-Surgeon Blanc served as Assistant-Surgeon with the Jagir Corps during the war with China in 1860-62. While serving on special duty in Abyssinia in 1867-68, he was made prisoner by the Abyssinians; on liberation he joined the British troops, and was present at the capture of Magdala (received the thanks of Government, Medal).

The undermentioned have obtained leave of absence for the periods specified:—Brigade-Surgeon J. C. Penny, M.D., Bengal Establishment, for 182 days on medical certificate; Surgeon-Major W. R. Murphy, 19th Bengal Lancers, for 182 days on urgent private affairs; Surgeon G. Jameson, Bengal Establishment, for 183 days in extension on medical certificate; Surgeon-Major H. M. G. Archdall, Madras Establishment, for 92 days in extension on medical certificate; Surgeon W. K. Hatch, Bombay Establishment, for six months in extension.

THE VOLUNTEERS.

Mr. A. A. Abraham has been appointed Acting Surgeon to the 5th Durham, and Mr. A. Swann, M.D., Acting Surgeon to the 1st Volunteer Battalion of the King's Own Light Infantry (formerly the 5th West Riding of Yorkshire).

Surgeon Thomas Partridge, of the 2nd Volunteer Battalion of the Gloucestershire Regiment (late the 2nd Gloucester), and Surgeon Anthony Bell, of the 3rd Volunteer Battalion of the Northumberland Fusiliers (late the 1st Newcastle-on-Tyne), have been granted the honorary rank of Surgeon-Major.

Surgeon J. E. Lees, M.B., of the 1st Volunteer Battalion of the Lancashire Fusiliers (late the 8th Lancashire), has resigned his commission, which bore date December 20th, 1884.

Mr. F. E. Streeten has been appointed Acting Surgeon to the 1st North Riding of York Artillery, and Mr. E. F. Potter to the Volunteer Submarine Miners (Humber Division).

The undermentioned gentlemen have been appointed Acting-Surgeons to the corps specified:—James Aymer, M.B., to the 1st Aberdeen Artillery; G. L. H. Milne, M.B., to the 1st Elgin Rifles; and J. E. Scowcroft, M.D., to the 2nd Volunteer Battalion of the Loyal North Lancashire Regiment (late the 14th Lancashire).

Surgeon Bushell Anningson, of the Cambridge University Volunteers, is granted the honorary rank of Surgeon-Major.

Honorary Assistant-Surgeon W. Beet, M.D., of the 1st Volunteer Battalion of the Buffs (late the 2nd Kent), has resigned his commission, which bore date September 1st, 1865.

Mr. H. S. Baumgartner, M.B., is appointed Acting-Surgeon to the 1st Northumberland and Sunderland Artillery.

Honorary Assistant-Surgeon Robert Kirkwood, M.B., of the 1st Ayrshire Rifles, has resigned his commission, which dated from February 27th, 1860.

INDIAN MEDICAL SERVICE.

In consequence of the increased demand for the services of medical officers, the Government of India has decided that the order requiring these officers to pass the examination in the vernaculars is to be temporarily held in abeyance so as to enable the services of the young surgeons to be utilised without delay.

PROMOTION IN THE NAVAL MEDICAL SERVICE.

M.D., R.N. writes:—If the Admiralty would grant promotion to the rank of fleet-surgeon to staff-surgeons after eight years' seniority, it would in part meet the great grievance that at present exists in the Naval Medical Service, that of loss of place on the list through no fault of one's own, and after having had to endure the hardships of compulsory half-pay. Surgeons are promoted after twelve years' seniority in that rank; why should not staff-surgeons get the next step after eight more, especially as fleet-engineers and fleet-paymasters are promoted after four and six years' seniority respectively in the staff rank?

This need not involve any great addition to the wages vote, and would leave a few fleet-surgeons available for service, which at present there are not; for a study of the current *Navy List* shows that every fleet-surgeon is employed while there are nine staff-surgeons losing time on half-pay. Of course it need not affect the existing regulations regarding retirement.

DATES OF COMMISSION.

The difference in the dates of commissioning the medical officers of the three services, of which a correspondent complains, is an undoubted grievance to the army medical officers, for which, however it may have originated, no valid excuse, as far as we are aware, can now be offered. The subject has been frequently brought to notice in the columns of the Journal, and we are in hopes that the inequality caused by the existing arrangements will shortly be removed.

THE MEDICAL STAFF AND THE QUEEN'S JUBILEE.

Ubique officium usque ad mortem writes: The members of the Medical Staff are anxiously looking forward to the approaching celebration of the Queen's Jubilee. The Indian honours recently conferred in commemoration of the auspicious event will be followed by a further distribution this summer, when a big Bath *Gazette* and lengthy list of appointments to various orders will make an appearance, and, at the same time, it will be a seasonable opportunity for Her Majesty to place on record her appreciation of the services of a deserving body of officers, by conceding the prefix "Royal" to their present title "Medical Staff," as well as the motto "*Ubique officium usque ad mortem*" (everywhere duty even unto death); this honour will be revered and appreciated by the medical officers of the army, and it will indelibly record in the annals of the Army Medical Staff Her Most Gracious Majesty's fifty years' propitious and successful reign.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

During the week ending Saturday, March 12th, 5,782 births and 3,836 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons. The annual rate of mortality, which had been 21.3 per 1,000 in each of the two preceding weeks, rose during the week under notice to 21.6. The rates in the several towns, ranged in order from the lowest, were as follow:—Derby, 16.1; Birkenhead, 17.1; Leeds, 17.2; Wolverhampton, 18.1; Nottingham, 18.4; Birmingham, 18.5; Sheffield, 18.8; Bolton, 19.0; Bristol, 19.6; Bradford, 19.8; London, 20.4; Plymouth, 21.0; Brighton, 21.2; Hull, 21.5; Portsmouth, 21.9; Norwich, 21.9; Leicester, 22.2; Halifax, 23.1; Salford, 24.1; Newcastle-upon-Tyne, 24.9; Preston, 25.0; Blackburn, 25.5; Liverpool, 25.9; Sunderland, 26.6; Cardiff, 28.9; Huddersfield 29.0; Oldham, 30.3; and the highest rate during the week, 33.7, in Manchester. The death-rate in the twenty-seven provincial towns averaged 22.7 per 1,000, and exceeded by 2.3 the rate recorded in London, which, as before stated, did not exceed 20.4 per 1,000. The 3,836 deaths registered in the twenty-eight towns during the week under notice included 412 which were referred to the principal zymotic diseases, against numbers increasing from 341 to 385 in the four preceding weeks; of these, 195 resulted from measles, 83 from whooping-cough, 44 from scarlet fever, 32 from diarrhœa, 31 from diphtheria, 27 from "fever" (principally enteric), and not one from small-pox. These 412 deaths were equal to an annual rate of 2.3 per 1,000. The zymotic death-rate in London during the week under notice was 2.1 per 1,000, while in the twenty-seven provincial towns it averaged 2.6, and ranged from 0.0 in Wolverhampton, Derby, and Birkenhead, to 4.1 in Huddersfield, 5.6 in Sunderland, and 5.7 in Manchester. The deaths referred to measles, which had increased in the four preceding weeks from 77 to 152, further rose during the week to 195, and were proportionally most numerous in Salford, Leicester, Bristol, Huddersfield, Manchester, and Sunderland. The fatal cases of whooping-cough, which had declined from 125 to 93 in the three preceding weeks, further fell during the week under notice to 83, and caused the highest death-rates in Liverpool, Norwich, Oldham, and Plymouth. The 44 deaths referred to scarlet fever exceeded by 3 the very low number in the previous week; this disease was somewhat fatally prevalent in Huddersfield. The 32 fatal cases of diarrhœa showed a slight further decline from recent weekly numbers. The deaths referred to diphtheria, which had been 31 in each of the two preceding weeks, were again 31 during the week under notice, and included 13 in London, 4 in Manchester, 2 in Oldham, and 2 in Cardiff. The 27 fatal cases of fever were within 4 of the number in the previous week, and were proportionally most numerous in Portsmouth. No death was referred to small-pox during the week, either in London or in any of the twenty-seven provincial towns. No small-pox patient was admitted to the Metropolitan Asylum Hospitals during the week under notice, and only three small-pox patients were under treatment in these hospitals on Saturday, March 12th. The death-rate from diseases of the respiratory organs in London during the week was equal to 5.2 per 1,000, and was below the average. The causes of 92, or 2.4 per cent. of the 3,836 deaths registered during the week under notice were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

In the eight principal Scotch towns, having an estimated population of 1,299,000 persons, 808 births and 625 deaths were registered during the week ending Saturday, March 12th. The annual rate of mortality, which had been 22.5 and 23.6 per 1,000 in the two preceding weeks, further rose during the week under notice to 25.0, and exceeded by 3.4 per 1,000 the mean rate for the same period in the twenty-eight large English towns. Among these Scotch towns the rate was equal to 14.7 in Leith, 18.9 in Edinburgh, 19.2 in Greenock, 19.4 in Perth, 21.4 in Dundee, 23.2 in Paisley, 29.4 in Glasgow, and 34.6 in Aberdeen. The 625 deaths registered during the week in these Scotch towns included 43 which were referred to measles, 25 to whooping-cough, 14 to scarlet fever, 11 to diarrhœa, 7 to diphtheria, 1 to fever, and not one to small-pox; in all, 101 deaths resulted from these principal zymotic diseases, against 99 and 98 in the two preceding weeks. These 101 deaths were equal to an annual rate of 4.0 per 1,000, which exceeded by 1.8 the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns during the week under notice were recorded in Edinburgh, Glasgow, and Aberdeen. The deaths referred to measles, which had been 30 and 27 in the two preceding weeks, rose again during the week under notice to 43, of which 27 occurred in Aberdeen, and 16 in Glasgow. The fatal cases of whooping-cough, which had been 33 and 32 in the two previous weeks, further declined during the week under notice to 25, and included 13 in Glasgow, 3 in Dundee, and 3 in Aberdeen. The 14 deaths from scarlet fever showed a decline of 5 from the number returned in the preceding week, and included 7 in Edinburgh, and 3 in Glasgow. The 11 fatal cases of diarrhœa corresponded with the number in each of the two previous weeks; 4 occurred in Glasgow and 3 in Edinburgh. The deaths referred to diphtheria, which had been 3 and 5 in the two previous weeks, further rose during the week under notice to 7, and included 4 in Edinburgh, and 3 in Glasgow. The fatal case of fever occurred in Paisley. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 5.7 per 1,000, against 5.2 in London. The causes of 72, or nearly 12 per cent., of the 625 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending Saturday, March 5th, 419 deaths occurred in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 25.2 per 1,000 of the population. The deaths registered during the week under notice in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 10.3; Belfast, 22.9; Cork, 24.0; Drogheda, 12.7; Dublin, 27.6; Dundalk, 26.2; Galway, 23.5; Kilkenny, 8.5; Limerick, 25.6; Lisburn, 9.7; Londonderry, 28.5; Lurgan, 20.5; Newry, 28.1; Sligo, 43.3; Waterford, 13.9; Wexford, 34.2. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.7 per 1,000, the rates varying from 0.0 in ten of the districts to 4.6 in Waterford: the 6 deaths from all causes registered in the last-named district comprising 1 from whooping-cough and 1 from simple continued fever. Among the 103 deaths from all causes registered in Belfast are 1 from scarlatina, 1 from typhus, 2 from whooping-cough, 1 from simple continued fever, 2 from enteric fever, and 1 from diarrhœa. One of the 8 deaths registered in Wexford was caused by simple continued fever. In the Dublin Registration District, the births registered during the week amounted to 201—98 boys and 103 girls; and the deaths to 190—93 males and 97 females. The deaths represent an annual rate of mortality of 28.1 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 27.6 per 1,000. Fifteen deaths from zymotic diseases were registered, being 13 below the average for the corresponding week of the last ten years; they consist of 1 from measles, 7 from scarlet fever (scarlatina), 1 from typhus, 1 from whooping-cough, 4 from enteric fever, and 1 from diarrhœa. Sixty-two deaths from diseases of the respiratory system were registered, being 10 over the average for the corresponding week of the last ten years, and 15 over the number for the week ending February 26th; they comprise 44 from bronchitis and 13 from pneumonia or inflammation of the lungs. The deaths of 20 children under 5 years of age (including 18 infants under 1 year old) were ascribed to convulsions. Eight deaths were caused by diseases of the brain and nervous system (exclusive of convulsions), and 13 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 23 deaths, mesenteric disease 3, and cancer 3. One case of suicide was registered. In 29 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

In the week ending Saturday, March 12th, 452 deaths occurred in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 27.1 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 15.5; Belfast, 26.0; Cork, 19.5; Drogheda 33.8; Dublin, 31.0; Dundalk, 13.1; Galway, 20.2; Kilkenny, 29.6; Limerick, 36.7; Lisburn, 19.3; Londonderry, 30.3; Lurgan, 25.7; Newry, 14.0; Sligo, 9.6; Waterford, 20.8; Wexford, 21.4. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.6 per 1,000, the rates varying from 0.0 in eleven of the districts to 4.0 in Limerick; the 27 deaths from all causes registered in that district comprising 3 from whooping-cough. Among the 112 deaths from all causes registered in Belfast are 4 from typhus, 3 from whooping-cough, and 4 from diarrhœa; and the 17 deaths in Londonderry comprise 1 from measles. In the Dublin Registration District, the births registered during the week amounted to 187, and the deaths to 212. The deaths represent an annual rate of mortality of 31.3 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 31.0 per 1,000. There were but 13 deaths from zymotic diseases registered, being 18 below the average for the corresponding week of the last ten years, and 2 under the number for the week ended March 5th; they comprise 1 from measles, 1 from scarlet fever (scarlatina), 3 from whooping-cough, 1 from cerebro-spinal fever, 1 from ill-defined fever, 4 from enteric fever, 1 from erysipelas, etc. Sixty-two deaths from diseases of the respiratory system were registered, being equal to the number for the preceding week, and 6 over the average for the tenth week of the last ten years; they comprise 39 from bronchitis, and 11 from pneumonia or inflammation of the lungs. The deaths of 18 children (including 15 infants under 1 year old) were ascribed to convulsions. Five deaths were caused by apoplexy; 4 by other diseases of the brain and nervous system (exclusive of convulsions), and 19 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 28 deaths, mesenteric disease 2, and cancer 6. Six accidental deaths were registered. In 30 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending March 12th, that the annual death-rate was recently equal to 24.0 in Bombay, and 40.0 in Madras. Diarrhœal diseases caused 54 deaths in Madras, and measles 15 in Bombay, while "fever" mortality was excessive in both these cities. According to the most recently received weekly returns, the annual death-rate averaged 27.4 per 1,000 persons estimated to be living in twenty of the largest European cities, and exceeded by 5.8 the mean rate during the week in the twenty-eight large English towns. The death-rate in St Petersburg was 31.3, and showed a further increase upon the rates in recent weeks; the 556 deaths included 25 from typhoid fever, 18 from scarlet fever, and 4 from small-pox. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 21.4 per 1,000, and ranged from 17.1 in Christiania to 25.4 in Copenhagen; diphtheria and croup caused 5 deaths in Christiania, 5 in Copenhagen, and 3 in Stockholm; 10 deaths from whooping-cough occurred in Copenhagen, and 4 from measles in Stockholm. In Paris, the death-rate was 27.6, and showed a decline from the high rate in the preceding week, but exceeded by as much as 7.2 per 1,000 the rate during the corresponding week in London; the deaths included 41 from typhoid fever, 46 from measles, and 44 from diphtheria and croup. The 208 deaths in Brussels, of which 6 resulted from measles, and 12 from diphtheria and croup, gave a rate of 24.0. No returns from Geneva have been received since the beginning of this year. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 24.5, the several rates ranging from 22.6 in Rotterdam to 25.3 in Amsterdam; measles caused 8, and diphtheria and croup 10 deaths in Amsterdam, while 2 deaths were referred to whooping-cough in Rotterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 25.9, and ranged from 20.7 and 21.0 in Dresden and Berlin, to 39.2 and 40.8 in Buda-Pesth and Trieste. Diphtheria caused considerable mortality in Berlin and Hamburg; 17 deaths resulted from small-pox in Buda-Pesth and 2 in Prague; and 11 deaths were referred to typhoid fever in Hamburg. The death-rate in three of the largest Italian cities averaged 34.1, and ranged from 30.3 in Rome to 35.2 in Venice; small-pox caused 10 deaths in Rome, 3 in Turin, and 1 in Venice; and 6 deaths resulted from typhoid fever in Turin. In Cairo the death-rate was 38.8, and in Alexandria 40.4; diarrhœal diseases caused 76 deaths in Cairo and 43 in Alexandria; 10 deaths from typhoid fever were recorded in Cairo, and 2 from small-pox in Alexandria. In four of the largest American cities the recorded death-rate averaged 24.1, and ranged from 19.7 in Brooklyn to 27.1 in New York. Diphtheria caused 40 deaths in New York and 12 in Brooklyn; measles 56 in New York and 11 in Brooklyn; 10 deaths from typhoid fever occurred in Philadelphia, and 6 from small-pox in New York.

HOSPITAL AND DISPENSARY MANAGEMENT.

GLASGOW EYE INFIRMARY.

SIR,—Permit me as a director of the Glasgow Eye Infirmary to refer to the paragraph in the JOURNAL of March 19th, headed as above—not at large, but simply in so far as it reflects upon the conduct of Dr. Andrew Fergus as a director. Your correspondent says: "One part of the business which has elicited specially unfavourable comment is that Dr. Freeland Fergus received Dr. Macfie's post without any delay." Then it is added that the vacancy was not even advertised. The inference suggested is that Dr. Fergus, sen., butchered Dr. Macfie professionally, in order to make room for his son. The fact is that Dr. Fergus does not belong to the House Committee which originated and carried through Dr. Macfie's deposition, and that at the meeting of directors which was held on Friday, March 18th, to consider this affair, Dr. Fergus was Dr. Macfie's champion! Then, what about the appointment of young Fergus to the vacancy, without advertising? The truth is there was no vacancy to advertise, and no appointment to be made. There are three assistant-surgeons, Drs. Knox, Macfie, and Freeland Fergus. The House Committee find two sufficient, and for reasons of their own suggest the elimination of Dr. Macfie. Young Fergus remains, as before, junior assistant-surgeon—only junior of two instead of three. This is the slender gain from Dr. Macfie's misfortunes which has elicited the "unfavourable comment" of some persons, and led your correspondent to retail a very painful and absolutely untrue insinuation.—I am, etc.,

March 22nd, 1887. JAS. B. RUSSELL.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Friday, March 18th.

The Pharmacy Acts Amendment Bill.—This Bill was passed through Committee, with a few verbal amendments.

Thursday, March 24th.

Pharmacy Acts Amendment Bill.—This Bill was read a third time and passed.

HOUSE OF COMMONS.—Thursday, March 17th.

Alleged Ill-treatment of a Pauper.—Mr. RITCHIE, in reply to Mr. CORBET, gave a denial to the statement that the woman Elizabeth Ryan was placed in solitary confinement for twelve hours on bread and water, in a cell nine or ten feet beneath the basement, while suffering from inflammation of the lungs, following on chronic bronchitis. The fact was that she was placed on the basement of the main building. Although she had previously been under medical treatment for chronic bronchitis, she had not been under such treatment for the last three months. She was not placed in the punishment-room until after she had been seen by the assistant medical officer. Two days afterwards she attended the funeral of her mother, and owned to having caught a chill while in the cemetery, from which the medical officer and the assistant medical officer concurred in thinking her fatal illness took its rise. It was desired by eleven of the twelve jurymen to add to their verdict that no blame attached to the workhouse officers.

New Bye-laws of the Thames Conservators.—Mr. RITCHIE, in reply to Colonel DAWNAY, stated that the bye-law was intentionally drawn to cover every possible mode of pollution of the river, and with the object of carrying into effect Section 4 of the Thames Conservators Act, 1885, which enacts that it shall be the duty of the Conservators to make special regulations for preventing pollution of the river by the sewage of any house-boat or steam launch. The effect of the bye-law would be to prevent the nuisance now arising from vessels moored or navigating the river.—Colonel DAWNAY expressed his dissatisfaction with the bye-law, which neglected to deal with the nuisance caused by house-boats.—Mr. H. FOWLER having asked whether the proposed bye-law would prohibit house-boats from discharging sewage into the Thames, Mr. RITCHIE replied that he had not consulted the legal advisers of the Board on the question, but he thought that the bye-laws would have that effect.

Metropolitan Distress.—In answer to Captain COLOMB, Mr. RITCHIE said that the Government had determined to institute an inquiry as to the employment, earnings, and other particulars with regard to the working classes in four typical districts in the metropolis; namely, St. George's in the East, Battersea, Deptford, and Hackney. Each district had a population of about 50,000 persons, and was chiefly populated by persons of the working classes. The information sought would be of an exhaustive character, and inquiries would be made from house to house, enumerators acting under the registrars of births and deaths in the several districts. The Registrar General and his department would render all the assistance possible to secure accuracy in the returns, which will be tabulated in the office of the General Registrar, and afterwards submitted to Parliament.

Friday, March 18th.

Unlicensed Public Buildings—Mr. TATTON EGERTON asked whether, taking into consideration that there was no power or authority to deal with buildings not licensed but used for public performances, the Secretary of State for the Home Department would advise the bringing in of a public Bill having the same powers in respect to such private buildings as were now exercised over public buildings now under the Act.—Mr. MATTHEWS replied that the question was engaging the attention of a committee of the Metropolitan Board of Works, but he could hold out no prospect of the Government being able to legislate on the question this session.

Vaccination and Disease.—Mr. M'ARTHUR asked the President of the Local Government Board whether, in order to minimise the risks of vaccination, new instructions had been issued to public vaccinators; whether, in Article 7 of those instructions, direction was given for the careful examination of vaccinifers as to the existence of skin diseases, and particularly of hereditary syphilis; and whether eminent authorities like Mr. Jonathan Hutchinson and Mr. Brudenell Carter had testified that the signs of syphilis were frequently indistinguishable until after the vaccination age.—Mr. RITCHIE, in reply, stated that revised instructions had been issued, but the direction referred to was contained in the old instructions. He was not aware whether Mr. Hutchinson and Mr. Brudenell Carter had testified in the way referred to in the last question, but the Board knew of no evidence of syphilis having been communicated by vaccination from a child not itself presenting signs of syphilis. He was informed that signs of inherited syphilis in a child usually made their appearance within two months after birth, and the customary vaccination age in England is three or four months.

Monday, March 21st.

The Planting of Cinchona.—Sir J. GORST, in reply to Mr. HENNIKER HEATON, said one of the objects, but not the only one, of planting cinchona by the Madras Government, was that of obtaining a febrifuge for the native classes. Government bark was advertised for sale in London, and was brought to England for the manufacture of quinine. Government got quinine for its medical departments at wholesale prices, and made the "red bark" into an effective febrifuge, cheap enough to be within the reach of all classes.

Anthrax.—Mr. W. H. SMITH, in answer to Sir J. SWINBURNE, said that an inquiry was being made by an officer of the Agricultural Department into the prevalence of anthrax. He had no reason to believe that the disease had been more prevalent during the last six months than previously. None of the outbreaks had been traced to the use of railway trucks for the conveyance of foreign hides.

Infant Marriage and Enforced Widowhood in India.—Mr. E. RUSSELL asked the Under-Secretary for India whether the Government had sanctioned or had raised any objection to the following passage in the resolution of the Governor-General in Council on infant marriage and enforced widowhood passed in October last: "When caste or custom lays down a rule which is of its nature enforceable in the civil courts, but is clearly opposed to morality or public policy, the State will decline to enforce."—Sir J. GORST, in reply, said that Her Majesty's Government had neither sanctioned nor had they raised any objection to the passage quoted.

Alleged Neglect at Guy's Hospital.—In answer to Mr. W. CORBET, Mr. MATTHEWS said that the following were the facts of the case:—Stack was brought to the hospital at 7 P.M. on Monday, and was found to be suffering from a simple fracture of the small bone of his leg. He was taken into the accident ward for the night and received immediate attention, and, as is usual in similar injuries, the limb was temporarily placed in sandbags and in the course of a few hours, between 11 and 12, was put up permanently in plaster-of-Paris bandages. Stack was discharged on the following day with a pair of crutches supplied at the expense of the hospital, and without any charge to him or his relatives. He was discharged in the ordinary course, and not for want of room. When Stack came to the hospital every bed in the ward was occupied, but one of the occupants, who was leaving the next morning, was placed on a stretcher, and thus made room for him. The hospital authorities seemed to have done all that was proper on this occasion.

MEDICAL NEWS.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen, having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received certificates entitling them to practise as Licentiates of the Society on March 17th, 1887:

Simson, Francis Taylor, 10, Viceroy Road, South Lambeth, S.W.
Tinker, William, 80, Cromwell Road, S.W.
Wickham, Onslow Arthur, M.R.C.S., 18, Arundel Square, N.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM GENERAL HOSPITAL.—Resident Surgical Officer. Salary, £130 per annum, with board, etc. Applications by April 2nd to Henry Fox, R.N.

BRADFORD INFIRMARY AND DISPENSARY.—House-Surgeon. Salary, £110 per annum, with board, etc. Applications by April 5th to the Secretary.

CHELTENHAM GENERAL HOSPITAL.—House-Surgeon. Salary, £80 per annum, with board, etc. Applications by March 31st to the Honorary Secretary.

CONVALESCENT HOSPITAL, Cheadle (Manchester Royal Infirmary).—Resident Medical Officer. Salary, £150 per annum, with board and residence. Applications by March 31st to W. L. Saunder, Esq.

DERBYSHIRE GENERAL INFIRMARY.—House-Surgeon. Salary, £100 per annum, increasing to £150, with apartments, etc. Applications by March 26th to the Secretary.

EASINGWOLD UNION.—District Medical Officer. Salary, £26 per annum and fees. Applications by March 31st to F. J. H. Robinson, Esq.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell.—Resident Clinical Assistant. Board and lodging. Applications by March 28th to the Secretary.

FARRINGDON GENERAL DISPENSARY AND LYING-IN CHARITY, 17, Bartlett's Buildings, Holborn, E.C.—Honorary Physician. Applications by April 14th to the Honorary Secretary.

GLOUCESTER COUNTY ASYLUM.—Assistant Medical Officer. Salary £105 per annum, with board, etc. Applications by April 6th to the Medical Superintendent.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton. Resident Clinical Assistant. Applications by April 16th to the Secretary.

HUDDERSFIELD INFIRMARY.—Junior House-Surgeon. Salary, £40 per annum, with board, lodging and washing. Applications by March 28th to F. Eastwood, Esq., the Infirmary, Huddersfield.

KENT COUNTY LUNATIC ASYLUM, Barming Heath, near Maidstone.—Assistant Medical Officer. Salary, £120 per annum, with board, etc. Applications by April 4th to F. R. Howlett, Esq., 9, King Street, Maidstone.

LONDON TEMPERANCE HOSPITAL, Hampstead Road, N.W.—Senior House-Surgeon. Salary, £52 10s. per annum, with board, etc. Applications by April 2nd to the Secretary.

MACCLESFIELD GENERAL INFIRMARY.—Junior House-Surgeon. Salary, £70 per annum, with board and residence. Applications by March 26th to the Chairman, House Committee.

NATIONAL SANATORIUM FOR CONSUMPTION AND DISEASES OF THE CHEST, Bournemouth.—Junior Honorary Physician. Applications by March 31st to T. G. Parrott, Esq.

PARISHES OF MID AND SOUTH YELL, FETLAR AND NORTH YELL.—Medical Officer. Salary, £70 per annum. Applications to the Inspector of Poor, Mid Yell, Lerwick.

QUEEN'S JUBILEE HOSPITAL, Gloucester Terrace, Queen's Gate, S.W.—Registrar and Anæsthetist. Applications by April 5th to the Secretary.

QUEEN'S JUBILEE HOSPITAL, Gloucester Terrace, Queen's Gate, S.W.—Surgeon. Applications by April 5th to the Secretary.

ROYAL COLLEGE OF PHYSICIANS, Edinburgh.—Superintendent of the Laboratory. Salary, £200 per annum. Applications by April 10th to Dr. Gibson.

ROYAL GENERAL DISPENSARY, Bartholomew Close, London, E.C.—Resident Medical Officer. Salary, £130 per annum. Applications by April 18th to the Secretary.

ROYAL SOUTH HANTS INFIRMARY, Southampton.—Assistant House-Surgeon. Applications by March 28th to Dr. Thomas, Anglesea Place, Southampton.

UNIVERSITY OF LONDON.—Examiners in Medicine. Applications by March 29th to the Registrar.

MEDICAL APPOINTMENTS.

DOBBIE, James J., M.A., D.Sc., appointed Examiner in Chemistry to the University of Glasgow.

GAULT, A. H., M.R.C.S., L.R.C.P., appointed House-Surgeon to the Ashton-under-Lyne District Infirmary, *vice* T. W. Heywood, M.R.C.S., L.K.Q.C.P.I., resigned.

LEITH, R. F. C., M.A., M.B., B.Sc., appointed Examiner in Zoology to the University of Glasgow.

STODDART, J. W., appointed Assistant Medical Officer to the Leeds Union, *vice* A. Hawkyard, L.R.C.P., L.R.C.S., resigned.

THOMAS, W. J., M.B., C.M.Edin., appointed House-Surgeon and Dispenser to the West Herts Infirmary, *vice* W. F. Lace, M.R.C.S., L.S.A., resigned.

WHITLA, William, M.D., appointed Examiner in Materia Medica to the University of Glasgow.

YOUNG, J. Martin, M.B., C.M.Aberd., appointed Resident Surgeon to the Birmingham and Midland Eye Hospital.

LONDON SANITARY PROTECTION ASSOCIATION.—At the sixth general meeting of the London Sanitary Protection Society, it was reported that the number of houses inspected for the first time during the past year had been 398. The necessity for continued and constant watchfulness was still as great as ever, seeing that the percentage of houses classified as in a bad condition was slightly in excess of the average for the previous five years, being 59 per cent. for 1886, as against 55 for the previous five years. It was those of the "very bad" class which had turned the scale in the manner shown. Mr. Timothy Holmes, the treasurer, reported a satisfactory financial position, the amount of subscriptions being £60 in excess of those in the corresponding period of last year. He strongly urged the importance of periodical inspection even after a house had been put into good order. It was stated that one of the inspecting engineers of the Society, Mr. Richards, had been appointed to superintend the sanitary arrangements of the Houses of Parliament.

VISITATION OF EXAMINATIONS.—The final report by the Committee on Visitation of Examinations, appointed by the General Medical Council, which appeared in the last yearly volume of *Minutes*, is now published as a separate volume, and copies, price two shillings, may be had of the Council's publishers, Messrs. Spottiswoode and Co., 54, Gracechurch Street, E.C.; or at the Medical Council Office, 299, Oxford Street, W.

GRANT FOR SUCCESSFUL VACCINATION.—Mr. Colin G. Campbell, public vaccinator, Saddleworth, Yorkshire, has received a grant of £37 12s. from the Local Government Board for successful vaccination.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—MEDICAL SOCIETY OF LONDON. Dr. J. Hughlings Jackson: 1. A Case of Hemianopsia and of Wasting and Paralysis of one Side of the Tongue in a Syphilitic Patient. 2. A Case of Facial Paralysis with Paralysis of the Palate from Cerebral Disease. Dr. Samuel West: 1. A Case of Post-Hemiplegic Hemichorea in an Adult. 2. A Case of Jacksonian Epilepsy. Dr. de Havilland Hall: Two Cases of Ulceration of the Soft Palate and Pharynx. Mr. Lennox Browne: A Case of Lympho-Sarcoma of the Tonsil and Pharynx.

FRIDAY.—CLINICAL SOCIETY OF LONDON, 8.30 P.M. Sir Dyce Duckworth: A Case of Psoriasis, with associated Rheumatism, which passed into Pityriasis Rubra (Dermatitis exfoliativa). Mr. Bellamy: A Case of Symmetrical Gangrene following Varicella. Mr. Lane: A Case of Intussusception produced by a Tumour growing from the Mucous Membrane of the Great Gut. Mr. Pollard: Three Cases illustrating the difficulties of establishing Natural Respiration after Tracheotomy, and their treatment by Tracheal Catheterisation. Living Specimen.—Dr. Drewitt: A Case of Lupus treated partly by Salicylic Acid, partly by Scraping.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY, 8 P.M. Cases will be shown by Mr. Keetley, Dr. Scanes Spicer, Dr. Seymour Taylor, Mr. Edwards, Dr. Colcott Fox, Mr. Bland Sutton, and others. Dr. W. E. Steavenson and Mr. Bruce-Clarke: A Demonstration upon the living Subject of the treatment of Stricture of the Urethra by Electrolysis. Dr. Alderson: Remarks upon a Case of Fracture of the Patella treated mechanically twenty-five years ago, with Specimen. Pathological Specimens.—Mr. H. Percy Dunn: 1. Epithelial Growth of Pharynx. 2. The Skull from a Case of Traumatic Meningocele. Mr. G. A. Webster: Fracture of the Astragalus. Brigade-Surgeon W. Curran: A Collection of Water-Colour Drawings.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d which should be forwarded in stamps with the announcement.

BIRTHS.

ASHWORTH.—On March 19th, at Halstead, Essex, the wife of J. Henry Ashworth, M.R.C.P.Edin., of a son.

VACHER.—On March 22nd, at 31, Shrewsbury Road, Birkenhead, the wife of Francis Vacher, of a son.

DEATHS.

BRODIE.—On March 15th, at the Royal Victoria Hospital, Netley, Surgeon John Brodie, M.B., Medical Staff, aged 38 years.

HALL.—On March 18th, at his residence, Gorse Bank, Werneth, Oldham, William Hall, M.R.C.S., late of Salford, aged 61 years.

JACKMAN.—On March 21st, in her 34th year, Edith, wife of William Thomas Jackman, M.R.C.S., of 114, Brixton Hill, and daughter of the late Mrs. Edward Radclyffe, of 61, King Henry's Road, South Hampstead.

THORNTON.—On March 20th, at Hastings, William Henry Thornton, J.P., M.R.C.S., of Berkeley Lodge, Margate, aged 65.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY.....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY.....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., S. Eye, M. Th., 2.30; Ear, M., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

QUERIES.

QUERIST asks if any reader can inform him if there is a really good dictionary of medical terms of recent publication somewhat more descriptive than usual; also if there is a good dictionary of scientific terms.

MORTALITY AFTER AMPUTATION OF THIGH.

DR. J. F. DIXON (Bournemouth) asks to be informed of the average mortality in London after amputations through the thigh.

ANSWERS.

JUVENILE INCONTINENCE.

J. H. G. writes that a case of his which resisted large doses of belladonna got well very quickly on threatening a blister; perhaps a hint of actual cautery might be still better. Many cases of nocturnal incontinence, however, are due to epilepsy.

M.D. recommends strychnine.

M.B. would suggest to "A Member" to try blistering or cupping over the nape of the neck.

ROYAL MEDICAL BENEVOLENT COLLEGE, EPSOM.

A PHYSICIAN well acquainted with the Royal Medical Benevolent College writes, in reply to the inquiry as to the present state of the College in the JOURNAL of March 19th, p. 654, as follows: The new Head Master has inaugurated a system of discipline which has already borne good fruits, and promises very well. He enjoys the entire confidence of the Council of the College, who do their utmost to assist him in restoring the *prestige* of the school. The Council have also introduced important reforms with regard to the management of the school and its general administration, which are calculated to exercise a most beneficial influence. The pupils have gained numerous honours, and the best provision is made not only for classical teaching, but also (and in that I believe it to be exceptional among schools) for instruction in natural science.

I have great confidence in the future of Epsom College, and I hope the interest of the profession at large will daily grow, and show itself in a practical manner by increasing its support of this institution, which ought to be a rallying-point of the profession.

DR. R. COLLUM (Surbiton) writes: The best answer that I can give to the inquiries of A.M., B.M., in the JOURNAL of March 19th, is that I have two sons at the Epsom Medical College, and have entered a third for the next term.

A FATHER OF TWO EPSOMIANS writes: I may say that I know that the Council has, in the last two or three years, given much and very special attention to school matters, and that since the advent of the new Head Master, the broom (not the birch) has been freely used, and many wholesome reforms introduced. The tone amongst the boys has undoubtedly improved, and the school ought in my opinion to be rising greatly in repute. An important improvement in the direction of bringing a small working committee of the Council into direct working association with the Head Master at Epsom has just been made.

*** We have received numerous other communications, all giving a favourable account of the present management of the College, many from parents of pupils, bearing personal testimony to the very high qualifications of the Head Master the Rev. W. Cecil Wood, for his post.

TREATMENT OF CORNS.

F.R.C.S., in reply to "Chirops," says that he treated a painful corn on the inside of the little toe with instantaneous relief by anointing the toe with lanoline (Liebreich's), and then enveloping the toe in cotton-wool. The dressing was secured by passing a piece of ribbon-plaster round the fourth and fifth toes together.

TREATMENT OF NEURASTHENIA.

WE are informed that the widow of the late Dr. Mahomed receives cases requiring the "Weir-Mitchell" treatment at 28, York Place, Baker Street. Application might also be made to Medicus, 4, The Quadrant, Buxton.

REFERENCE NOT GIVEN.

A CORRESPONDENT at Liverpool complains that in one of the *Year Books* reference is made to Cohn's investigations on the eyesight, but that it is not stated where Cohn's memoir is to be found. It is to be wished that references to original sources of information always appear in medical annuals and such works.

*** Our correspondent probably refers to H. Cohn, *Untersuchungen der Augen von 10,000 Schülkindern*, Leipsig, 1867. This pamphlet is in the library of the Ophthalmological Society. Most of the information contained in it can be found in Turnbull's translation of Cohn's *Hygiene of the Eye in Schools* (Simpkin, Marshall, and Co., 1886).

OPERATIVE SURGERY AND ANTISEPTIC DRESSINGS.

DR. JOSEPH GRIECO (Foggia).—We know of no text-book of operative surgery in the English language which contains all the information required by our correspondent. He will find the details of every surgical operation clearly described and beautifully illustrated in Christopher Heath's *Course of Operative Surgery*, second edition, 1884. The indications, contra-indications, and results of each operation are given with all necessary fulness in Erichsen's *Science and Art of Surgery*, eighth edition (by Marcus Beck); whilst the principles of antiseptic surgery, together with all the practical details of the method, are adequately explained in Sir William MacCormac's *Antiseptic Surgery: its Principles and Practice*, and in Watson Cheyne's *Antiseptic Surgery, its Principles, Practice, History, and Results*. It need only be added that the last-mentioned work may be taken as an authoritative exposition of the teaching of Sir Joseph Lister.

NOTES, LETTERS, ETC.

C. has not enclosed his card.

ERRATUM.—In Dr. Balfour Graham's clinical memorandum at page 617 of the JOURNAL of March 19th, the head of the nail was stated to have been two inches in *diameter*, instead of in *circumference*.

PRODROMATA *v.* PRODROMA.

DR. W. H. O. SANKEY writes: Allow me a line in the JOURNAL to correct a small error in your last number, in which I am reported at p. 536 to have read a paper on the "Prodromata" of Diseases. I beg to say I used the word "prodroma." I have frequently seen and heard the term "prodromata" used, but prodroma is the plural of prodromon, "a runner before." How prodromata has come into use is not evident. There is another word very often used and equally in error. One often meets with the term "calvarium," meaning the skull; the Latin word is "calvaria," and its genitive is calvariæ. It is as well to use the correct term if at all.

*** We doubt if the nomenclature of our profession can be altered in the way suggested by Dr. W. H. O. Sankey. Dr. Sankey seems to assume that "prodromon" is the singular of "prodromata," and by the rule that Latin substantives of Greek derivation ending in "on" are generally declined like "regnum" in the second declension, it should make its nominative plural "prodroma." It is quite likely that he is so far correct, but it is also possible that he is not. "Prodromata" is evidently the nominative plural of a neuter noun of the third declension, with its nominative singular "prodroma;" derived from a similar (hypothetical) Greek neuter noun. It is more than likely that some writer mistook the plural "prodroma" of the second declension for a singular "prodroma" of the third. But is it not also barely possible that among the medical authors of the sixteenth and seventeenth centuries, a coinage of the necessary neuter substantive may have taken place? The only way to settle the question satisfactorily is to trace the word back through medical literature to the first instance of its employment. But even if this were done, and Dr. Sankey's derivation were shown to be correct, this would be no reason for accepting his conclusion.

In coining a new term, grammatical correctness should be sought after; but a word adopted and used by our best authors during a long series of years becomes as much a part of the language of medicine as many Norman-French words have of that of England, even although some of both medical and Anglicised words are of originally faulty construction. A physician of a past age perhaps invented in a Latin treatise a term for some symptom, disease, or circumstance for which he could not find a classical synonym. Occasionally, no doubt, the coinage would smack of the monkish custom of endowing a good English word with a Latin termination; but generally our ancestors, being necessarily better Latinists than we, were correct in their constructions. Correct or not, however, the term has then descended to us through the works of Lettsom, of Graves, of Stokes, of Roberts, of Fagge, and of many more equally distinguished men, until it has become not an inflection of a Latin noun, but a technical English word itself. Purism in one case of a Latin noun should mean purism in all; yet we do not suppose that Dr. Sankey, who stickles for the accurate nominative plural, would wish to see the genitive plural used. "Prodromôn" without a preposition in the middle of an English sentence would shock even him. The fact is, a word like "prodromata" must be taken in English medical works to be an irregular plural noun, and the only way to improve it, if improvement be necessary, is not to clothe it in more correct Latin, but to form from it a more regular English word (as has already been done by our American cousins, who have "prodromes and prodromal"), or otherwise to use instead of it the words "premonitory symptoms."

For our part, we are quite satisfied for the present to follow such an excellent Latinist as Dr. Fagge (who uses "prodromata" six or seven times in his *Practice of Medicine*). Against "prodroma," however, we set our face as a needless alteration in a wrong direction. "Are we," said Dr. Graves in 1843, "to be perpetually called upon to learn new names? Must an artificial system of forgetting become even more necessary than a 'memoria technica?' We should come forward boldly, and declare that we will not be made the slave of names."

HOMŒOPATHY: A DISCLAIMER.

DR. EDWARD HAUGHTON writes: I did not expect to be obliged to correct any further misstatements respecting my medical views; but, in consequence of recent reports which have reached my ears, I am obliged to protest against the statement that I am a disciple of Hahnemann, or a believer in infinitesimal physic. As a matter of fact, I have always regarded the latter as an absurd superstition; and as for "the doctrine of similars," I regard it as of so indefinite a character, as to be quite unfit to form a rule of action in medicine, much less to form the basis of therapeutics.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Henry Bennet, Mentone; Dr. T. Barr, Glasgow; Dr. L. Sedgwick, London; Dr. E. Haughton, Norwood; Mr. F. Taylor Simson, London; Mr. C. H. Watts Parkinson, Wimborne; Mr. J. H. Gilson, Aldershot; Mr. R. W. Parker, London; Mr. Stephen Paget, London; Dr. J. D. McCaw, Portglenone; Our Liverpool Correspondent; Dr. J. W. Walker, Spilsby; Dr. G. Thin, London; Mr. Gurner, London; Mr. C. P. O'Connor, Greenwich; Dr. Tom Robinson, London; Dr. W. K. Giddings, Calverley; Dr. S. Cookson, Stafford; Professor G. Stewart, Edinburgh; Dr. R. E. Power, Portsea; Mr. H. Taylor, Guildford; Mr. G. Crosten, Bingley; Brigade-Surgeon J. Wales, Upper Norwood; Dr. A. W. Tomkins, Leamington; Dr. Francis, London; Dr. Handfield-Jones, London; Mr. W. A. Evans, Wolverhampton; Dr. Hughes Bennett, London; Dr. Maxwell, Woolwich; Dr. L. Atthill, Dublin; Mr. T. Holmes, London; Dr. R. Collum, Surbiton; Dr. Teevan, Ballarat; Mr. A. W. Stirling, Grays; Mr. T. F. Lloyd, Reigate; Mr. L. T. Carroll, Salford; Dr. J. McNaught, Newchurch-in-Rossendale; Dr. J. W. Moore, Dublin; The Secretary of the British Ophthalmic Hospital, London; Dr. W. A. Jamieson, Edinburgh; Dr. J. J. Lock, Knottingley; Dr. G. Henty, London; Dr. Becher, London; Dr. Mickle, London; Medicus; Mr. G. B. Wray, Kirkby-in-Ashfield; Mr. B. D. Toplin, Melton; Mr. E. C. Montgomery, Maidenhead; Dr. Gubb, London; Dr. Rabagliati, Bradford; Our Manchester Correspondent; Dr. Vail, Glasgow; Mr. N. Walker, Dalston; Mr. F. R. Humphreys, London; Mr. E. F. H. Burroughs, Weston-super-Mare; Mr. H. P. Miller, London; Mr. J. R. Jenkens, Ruthin; Dr. A. H. Benson, Dublin; Mr. R. Clement Lucas, London; Mr. E. Crossman, Hambrook; Mr. A. C. Remble, Salop; Dr. S. Martin, London; Dr. Tatham, Salford; Dr. Russell, Glasgow; Mr. E. Noble Smith, London; Dr. Abraham, London; Mr. T. S. Ellis, Gloucester; Our Newcastle Correspondent; Mr. P. Swain, Plymouth; Dr. T. A. B. Kane, Rich Hill; Mr. B. Graham, Falkland; Mr. H. Ambler, London; Dr. G. H. Savage, London; Dr. Idelson, Berne; Mr. H. R. Hatherley, Nottingham; Dr. J. H. Hill, London; Mr. M. Greenwood, Jun., London; Mr. C. P. Card, London; Dr. A. M. Cash, Torquay; Dr. Railton, Manchester; Mr. R. V. Kelly, Westmeath; Messrs. J. and H. Grace, Bristol; Dr. Skowcroft, Bolton; Dr. Haycraft, Birmingham; Mr. W. Wilson, Birmingham; Dr. Reddie, Glasgow; The President of the Officers' Mess, Netley; Mr. J. F. Dixon, West Bournemouth; Dr. Protheroe Smith, San Remo; The Secretary of the British Gynæcological Society, London; Mr. W. B. Bowater, London; Dr. Spender, Bath; Professor D. MacAlister, Cambridge; Mr. R. D. Pedley, London; Dr. W. Macewen, Glasgow; Mr. C. J. Rideal, London; Mr. Lawson Tait, Birmingham; Mr. Jabez Hogg, London; Dr. J. W. Langmore, London; Mr. F. Nicholls, Colchester; Mr. G. S. Mahomed, Bournemouth; Sir E. H. Sieveking, London; Dr. T. Stokes, Dublin; Mr. W. Young, London; Mr. J. Vesey Fitzgerald, Birmingham; Dr. A. T. Brett, Watford; Mr. E. W. Wallis, London; Mr. W. E. Porter, Lindfield; Mr. A. Fraser, Marlborough; Staff-Surgeon C. C. Godding, Dartmouth; Dr. Styrap, Shrewsbury; Dr. Lomas, London; Dr. C. E. Abbott, Braintree; Mr. P. S. Webster, London; Mr. F. Cadell, Edinburgh; Dr. J. M. Booth, Aberdeen; Mr. H. C. Perrott, London; Mr. Wood, London; Dr. W. Brown, Carlisle; Dr. J. Forsyth Craig, Birmingham; Dr. J. Brindley James, Bermondsey; Dr. Kinkead, Dublin; Mr. W. R. Deeping, Leicester; The Secretary of the West End Hospital, London; Mr. W. C. Wood, Epsom; Dr. Hale White, London; The Secretary of the Jacob Testimonial Fund, Dublin; Professor U. Pritchard, London; Mr. W. Long, Wells-next-the-Sea, Norfolk; Dr. Edge, Manchester; Dr. J. Erskine, Glasgow; Mr. S. Murphy, London; Mr. S. Ryan, Belper; Mr. M. C. Meaby, London; Mr. G. Fischer, Jena; Mr. R. Kershaw, London; Mr. E. Williams, Llandovery; Surgeon-Major Finlay, Aldershot; Dr. A. H. Jacob, Sandygrove; Mr. C. R. Laurie, Loughton; Sir E. Lechmere, London; Mr. A. Houde, Paris; Mr. A. G. Gardner, Darlington; Mr. A. F. Peskett, Leyton; etc.

BOOKS, ETC., RECEIVED.

Griffith's Materia Medica and Pharmacy. Third Edition. Edited by A. S. Gubb, L.R.C.P., M.R.C.S. London: Bailliere, Tindall and Co. 1887.

On Overwork and Premature Mental Decay: Its Treatment. By C. H. F. Routh, M.D., M.R.C.P. Fourth Edition. London: Bailliere, Tindall and Cox. 1887.

The Practitioner's Handbook of Treatment, or the Principles of Therapeutics. By J. Milner Fothergill, M.D. Third Edition. London: Macmillan and Co. 1887.

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THE CROONIAN LECTURES
ON
THE PULSE.

Delivered at the Royal College of Physicians of London, March, 1887.

By WILLIAM H. BROADBENT, M.D., F.R.C.P.,
Physician to St. Mary's Hospital; Consulting Physician to the London Fever Hospital; and President of the Clinical Society.

Lecture II.

Mr. President and Gentlemen,—My first lecture was occupied by certain general considerations with regard to the pulse, after which I began to describe the more important variations in frequency and abnormalities of rhythm. The next to be considered is the infrequent pulse.

Infrequent Pulse.—It has already been remarked that the effect upon the pulse of nearly all departures from a normal state of health is to increase its frequency, and the diseases are extremely few which reduce the pulse-rate in any marked degree. High tension in the aorta—induced experimentally in animals or man by pressure upon the abdominal aorta, or upon a number of the larger arteries—slows the pulse, and the high tension of renal disease has some effect in the same direction, but less than might have been anticipated. In jaundice the pulse falls in frequency, and in various affections of the nervous system this effect is observed; but, except under circumstances which will be discussed later, the reduction is not striking. A pulse is really infrequent when the number of beats is below 40 per minute. A pulse of 60 is not uncommon, of less than 60 rare. Persons are met with, however, in the enjoyment of vigorous health with a pulse of less than 40. I have known an athletic young man, tall, well built, and muscular, who distinguished himself at football and other violent games, whose pulse-rate was 36. Some years after I last saw him, I heard of his death while swimming; he was taken with "cramp," so-called, and sank. In this cramp it is the heart which is brought to a standstill by the resistance in the peripheral circulation, due to the combined effects of arterio-capillary contraction from contact with the cold water, and of pressure on the surface from immersion, and it is not unlikely that slow action of the heart would predispose to this result. Infrequency of the pulse to the degree under consideration is sometimes met with in fatty degeneration of the heart, and is enumerated among the indications of this disease, but it is far more commonly absent than present, even in an advanced stage of fatty change in the heart.

The infrequent pulse, however, is so closely associated with the bigeminal pulse, and with a peculiar modification of the rhythm of the heart, in which only every other beat reaches the wrist, that it will be well to consider these.

In the interesting variety of pulse rhythm called the "pulsus bigeminus," the beats come in couples, a strong beat being followed quickly by a somewhat weaker one, after which there is a pause. The second of the two beats may vary greatly in strength, being sometimes almost as distinct as the first, sometimes scarcely perceptible, and the interval between the first and second may vary somewhat in length.

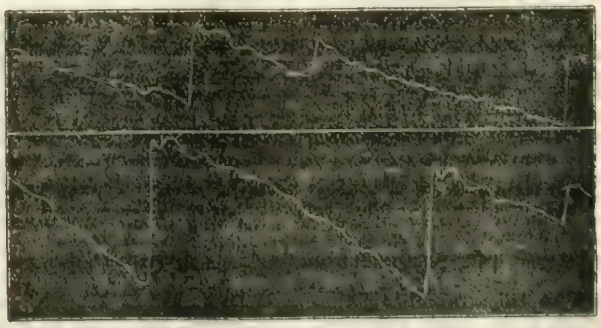
On examining the heart its action is found to correspond; there are two unequal impulses, the second weaker than the first, and usually felt at a different point; and, on auscultation, the sounds associated with the second impulse are less loud, and of a lower pitch. If a murmur is present, usually a mitral systolic, it will be louder and higher pitched with the first, and may be inaudible with the second. I have sometimes heard a mitral murmur with one beat and a tricuspid with the other.

Closely allied to this condition is that in which there are two beats of the heart to one of the pulse, one beat being dropped; not that transitions are common, for, in the absence of valvular disease, the pulse may number 40 one minute, the heart beating 80 in couples, and the next may be perfectly regular at 80. In the form of valvular disease, however, mitral stenosis, in which the pulsus bigeminus and the dropped beat are most frequently met with, the former may be a stage in the return towards a regular mode of action from the latter; and although (in the absence of valvular disease) a systematic bigeminal pulse does not succeed the dropping of a beat, yet an occasional bigeminal beat occurs when the weaker systole happens to raise the aortic valves, so that there is a clinical similarity which permits of their being considered together. Both, as has just been said, are met with in mitral stenosis, and especially when under treatment by digitalis. I have had several cases in which the pulsus bigeminus, or dropping of one beat, could be induced at will by administering this drug.

Taking the more advanced condition, when there are two beats of the heart to one of the pulse, a careful examination of the heart is most instructive. It is often difficult to resist the impression that the two ventricles are acting alternately. The impulse in the first of the two beats will give the sharp apex tap characteristic of an advanced stage of this form of heart-disease, the second will be felt only, or mainly, over the right ventricle. On auscultation, if there is regurgitation as well as stenosis, the systolic murmur and short sharp first sound will be heard at the apex with the first beat, but will be absent at the second, and the same will be the case with the aortic second sound at the base, it will be distinct with the first, absent at the second; while the sounds of the right side of the heart will be heard alone at the second beat with the tricuspid regurgitant murmur, if one is present, and will be comparatively weak with the first and stronger of the two beats; the pulmonary second sound, however, bearing witness that the right ventricle has contracted. When there is no regurgitation, the first beat will have the loud, short, sharp first sound at the apex and both sounds at the base, the second the low-pitched first sound of the right ventricle and a loud pulmonary second sound, but no aortic second sound. Usually the presystolic murmur will have disappeared before the coupled beats under consideration set in.

In the absence of mitral stenosis the double heart-beat with only one pulse is considered by Tripier, of Lyons, to be of very serious import, and to occur only in connection with epileptiform attacks. To quote his conclusion on this point, he says, "il semble donc qu'il n'y a pas de pouls lent avec épilepsie sans déviation du rhythme cardiaque, de même qu'il n'y a pas de déviation du rhythme cardiaque avec ralentissement du pouls sans épilepsie, ou sans l'action du digitale, tout au moins d'après les faits dont nous avons connaissance." Such has not been the case in my own experience, but before relating the cases which seem to me to be in opposition to Dr. Tripier's conclusion, I may add one more to the series which he has collected with so much industry and employed with so much ability, illustrating the connection upon which he insists between epileptiform attacks and the dropped beat and bigeminal pulse.

C. W., a carman, aged 47, but looking ten years older, was admitted into St. Mary's Hospital under my care, March 2nd, 1877. He had had rheumatic fever eight years before, and had suffered from occasional attacks of bronchitis. For eighteen months he had complained of palpitation after hard work, and he had had "fits," of which no exact description was obtained. After a recent attack of



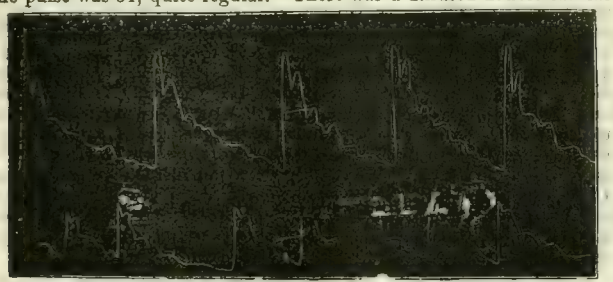
bronchitis, from which he had recovered about three weeks, he had had for a fortnight an increasing sense of palpitation of the heart, with pain, which he called "working pains," across the upper part of the abdomen.

On admission he had an anxious look and the skin was clammy, the temperature 97°; the urine had a specific gravity of 1010, but

contained no albumen; the pulse was 31, large and strong, not quite regular either in force or frequence; at times there was an echo of the beat (pulsus bigeminus), see sphygmograms. The heart was of normal size, the apex beat was distinct and often followed at a brief interval by a second beat. At the apex a low-pitched systolic murmur beginning with an accent was heard; it was soon lost beyond the apex, but within it, was audible over the right ventricle and up to the pulmonary area. The aortic second sound was heard over the entire heart. As a rule the heart-beat was single, but from time to time there was a double beat. When he was made to walk rapidly the patient felt faint, but did not stagger, and secondary beats were more numerous. He was in the hospital two months, and improved much in strength, no fits occurring: the pulse however remaining at 28. At one time, when suffering more than usual from "working pains" all over the abdomen, the pulse was 59 and quite regular. His subsequent history is unknown.

A well-marked example of infrequent pulse with double heart-beat, but without epileptiform attacks or serious effects on the health, came under my notice in November, 1883, in a tall, strong, broad-chested man, aged 52 years, who had been engaged in exciting political agitation, and had suffered a severe domestic loss. He was complaining chiefly of continuous dreaming, and of depression and loss of energy, with heaviness and confusion of the head. Having found a pulse of 40, I wished to examine the chest, but he said this was quite unnecessary, since, whatever else might be amiss, the heart and lungs at any rate were all right, and he declared that he could walk up hill as well as ever, and even run. There was no impulse or apex beat, but on auscultation a normal first and second sound were heard all over the heart; followed, rather sooner than usual, by a first sound without a second, a weak pulmonary second sound, however, being audible when listened for with care. The first of the two beats only gave a pulse at the wrist, the second indeed not raising the aortic valves.

All the symptoms disappeared; but two years later, after another period of excitement and anxiety, he again consulted me, and with similar complaints he had a return of the peculiar action of the heart. The pulse was 34, quite regular. There was a diffused double cardiac



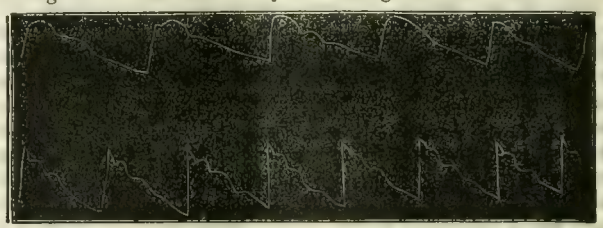
impulse without defined apex beat, one of them strong, giving a pulse, followed quickly by a weaker one which sent no wave to the wrist. The sounds were much as they have been described before, but the first sound of the second weaker beat was almost inaudible at the apex and distinct over the right ventricle. This patient again recovered, and is still making much noise in the world.

In the same year, 1881, I saw a medical man of about 55, who, when rather overtaxed by work, had run some distance on being called to an urgent case. This was followed by strange faint feelings, and an uneasy sensation about the heart. He was not otherwise out of health. He had discovered that his pulse was 40 instead of 70, and on examination this was found to be due to the heart-beating in couples—a strong beat with normal sounds which gave a pulse, followed quickly by a weaker beat with sounds which appeared to belong to the right ventricle only. This had been going on for ten days before I saw him, and continued for ten or fourteen days longer, coming and going towards the end of this time. Rest and change restored the equilibrium of the circulation, and this gentleman is in active practice at the present moment.

In November, 1883, I saw a gentleman, aged 53, who had enjoyed good health until the previous June, when he had an attack of congestion of the lungs, and mitral regurgitation was found to exist. He looked well, but complained of shortness of breath on exertion. The pulse was large, rather tense, perfectly regular at 72 beats a minute, except that from time to time the rate was 36, which was found to be due to the fact that, while this continued, the beats of the heart were in couples, one only of which reached the wrist. The apex-beat was well-defined and forcible, and near the normal situation. A long, smooth, high-pitched musical murmur was heard at and to the left of the apex, and in the back; another murmur of lower pitch was audible along the right edge of the upper part of the sternum up to the sterno-clavicular articulation; the aortic sound was accentuated, the pulmonary masked by over-lapping lung. When the coupled beats were present no second sound followed the later of the two, so that the sounds ran 1 2 1—1 2 1; both the mitral and the aortic murmur were louder with the first beat than when the heart's action was regular, and absent, or scarcely audible, with the second; this second beat, however, gave a loud first sound, so that it was not abortive from mere weakness, but the absence of the murmurs and of the second sound was probably due to an imperfect diastole. A week later, after rest in bed, the physical signs were unchanged, except that, when a series of coupled beats occurred, which was as frequent as before, the second of the two beats was weaker and more precipitate.

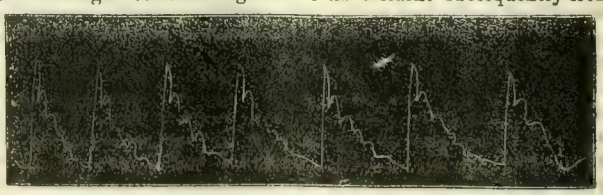
This patient, after a Mediterranean trip, again came under my care in February, 1884, and was then observed to have Cheyne-Stokes respiration, which, however, did not prevent him from going to the City, until thrombosis of the deep tibial veins came on. He died from the effects of thrombosis in the right innominate vein. The peculiar heart-rhythm was never heard again; but the case is the more interesting from the occurrence of this peculiarity in the action of the heart, and later, of Cheyne-Stokes respiration, which Tripier considers to belong to the same order of phenomena.

The double heart-beat for each beat of the pulse was present again in the case of a lady seen in October, 1885. She had worked very hard in her father's parish, which involved much walking up-hill, from April to June, when she began to look ill, and was breathless—which, however, she did not notice herself. She then suddenly broke down, and had been resting up to the time when she consulted me. She looked well, and all the functions were natural, but she felt as if she could sleep continually. The pulse was infrequent, and two beats of the heart, one like an echo of the other, were felt and heard for every pulsation at the wrist. The aortic, as well as the pulmonary second sound, seemed to be audible in the second weaker beat, although no evidence of this systole having raised the aortic valves



is recognizable in the tracing. Under the excitement produced by the application of the sphygmograph the rhythm gradually became normal, not suddenly as is usual.

Another case has recently come under my notice in a gentleman, aged 63, who consulted me on account of faintness and flatulence. He had been nervous about his heart for thirty years or more, and had been afraid of exercise. He had neither over-work nor anxiety; but some months before he consulted me he had had a fall from his horse and had broken his collar-bone, since which he had not ridden. The pulse was at first 108, and regular, but from agitation, or from the effort of taking off his coat, it fell to 54, the number of heart-beats being exactly double, a strong and weak beat being coupled together with sounds belonging predominantly to the left and right ventricle respectively. This continued to the end of the interview, and a tracing of it is here given. I have learnt subsequently from

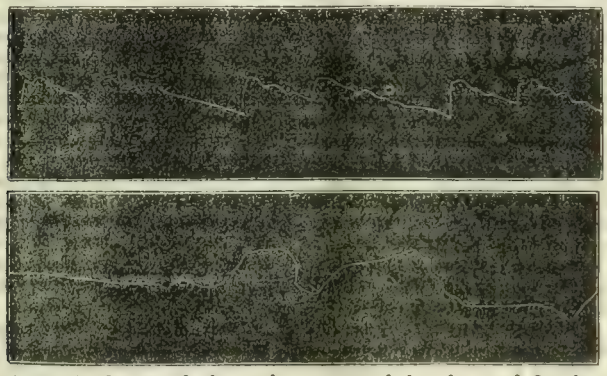


his regular medical attendant that this rhythm has been observed from time to time for years. In none of these cases had epileptiform or syncopal attacks been known to occur.

Still more recently I have seen, with Mr. Stanley Smith, an example, the only one I have met with, except, as I have said before, in mitral stenosis, in which the bigeminal pulse had followed the dropped beat. An old lady, aged 77, had been to Olympia on February 11th. She was ailing on the 12th and 13th, and prostrate on the 14th, complain-

ing of oppression in the chest and respiratory distress. She was found to have a pulse of only 35 to 40, instead of 76, and the double heart-beat. She improved under stimulant treatment, and when I saw her on the 17th had a pulse of 60 in coupled beats, which were about equal in strength and volume, and followed each other rather quickly, the pause being long enough for two more beats at the same rate. The rhythm was that of common time in music, 1, 2, 3, 4—1 and 2 being beats and 3 and 4 silent. No cardiac impulse could be felt, but the beats, as followed by means of the sounds, had the same rhythm as the pulse, and there was a systolic mitral murmur with each. A doubtful abortive systole seemed to be audible at times.

A single instance of the pulsus trigeminus may be given. The patient, a needlewoman, aged 41, employed in St. Mary's Hospital, had been in better circumstances before taking this situation, and after fifteen months in it was set to do laundry work. Lifting and carrying heavy baskets caused blood to well up into her mouth, but in spite of this and of feeling weak and languid, she persisted without complaining for a fortnight, when she was sent into the ward on September 14th, 1885. She looked languid, and had from time to time sharp pain in the cardiac region. The pulse was trigeminal, with two distinct and similar beats, and then an intermission, the third beat, however, being very faintly indicated by the sphygmograph. On auscultation of the heart, which was of normal size, a triple rhythm was observed; the first beat gave perfectly normal sounds, the second a good first sound but a reduplicated second sound at the base, the third beat had no second sound at all and the first was rather precipitate. A cardiogram, taken as well as the sphygmogram by my clerk, Mr. S. A. Tidey, shows the rhythm of the heart. As the



patient gained strength the cycle was extended to four and five beats while in bed, but reverted to the trigeminal type when she began to walk about, and it had this character when she returned to her duties as needlewoman.

It seems to me that the cases cited invalidate Tripier's conclusion that the peculiar modification of the cardiac rhythm, in which every other beat is dropped, is always associated with and due to epilepsy, and usually of very serious import; nor can I accept the other conclusion, that a slow pulse with epileptiform attacks is always due to dropping of alternate beats. The decision is of importance, since upon it turns the question of whether, as Tripier believes, it is the epilepsy which affects the cardiac rhythm, or whether, as I think, it is the slowing of the circulation which causes the convulsions. Before entering upon any discussion on the subject, however, I may bring evidence to show that there may be a slow pulse with syncopal or epileptiform attacks which is not due to abortive heart-beats. I have myself seen a case of fatty degeneration of the heart attended with syncopal attacks, which soon after proved fatal suddenly, in which the pulse was infrequent without any interposed feeble heart-beats being detected on careful examination. The patient, however, was seen only once in consultation. The notes of a hospital case, with numerous tracings, which I think would have corroborated this, are unfortunately missing.

In the *Lancet* for 1885, cases of slow pulse with epileptic seizures are related by Mr. F. St. George Mivart and Dr. A. T. Gibbings (p. 288). Mr. Mivart's patient was a man, aged 61, who had been subject to rapid and violent palpitation of the heart. His first fit was six years before he came under Mr. Mivart's care, and this and most subsequent ones came on while he was stooping. His pulse-rate was 24, and there is no record either of interposed weak beats or of abortive systoles. In Dr. Gibbings's case the patient, aged 65, had for some time had intermittent pulse of about 60. After an attack of bronchitis, he suffered from dyspnœa and faintness, and the pulse was found to be only 44. Still later, he became subject to frequent epileptiform attacks, and the pulse had now fallen to 22, but was full and regular, the heart beats corresponding in time. It is noteworthy that the epileptiform attacks would come on when the patient sat up. The pulse continued to fall, and it reached 12 or 13, the attacks being now so frequent that he went out of one into another; the urine also became albuminous. With a subsequent return of the pulse to 31, the albumen disappeared, and he was so much better as to be able to do a little work. While apparently better, he fainted at stool, and died. Nothing abnormal was found either in the heart or in the nervous centres.

This patient was seen by Sir Andrew Clark and the late Dr. Moxon, and it is distinctly stated that the heart-sounds were normal. We may conclude, therefore, that there were no abortive beats. It is true that it is not expressly stated that they were absent, but in a case of such interest they could not have been overlooked.

The infrequent pulse of fatty heart may fairly be attributed to the structural degeneration of the organ; but an infrequent pulse, when the heart is sound, and especially if it is due to the occurrence of alternate weak beats, can scarcely be explained in any other way than by the interposition of the nervous system. This does not bring us much nearer a true comprehension of the phenomenon, and, as I have already stated, I do not accept the conclusion at which Tripier has arrived that it is an effect of epilepsy. On the contrary, I look upon convulsive attacks, when they occur in connection with an infrequent pulse, as a result of cerebral anæmia, produced exactly in the same way as the convulsions after great hæmorrhage. In Mr. Mivart's case the convulsions came on when the patient stooped, in Dr. Gibbings's when he sat up, changes of attitude being sufficient, in the extremely feeble state of the circulation, to determine such an arrest of the blood-supply to the brain as would give rise to an attack. The late Dr. Moxon, it will be remembered, went so far as to suggest that the initial event in common epilepsy was a stoppage of the heart.

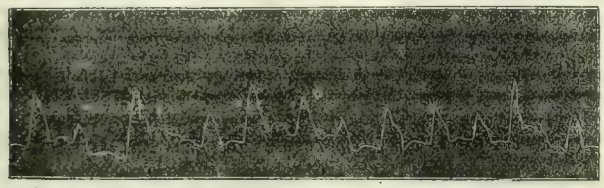
Another question is suggested by some of the cases of dropped heart-beat. In almost all, while the aortic second sound of the weaker beat which fails to reach the wrist is absent, the pulmonary sound is audible. In many the impulse and first sound of the right side of the heart are more distinct than those of the left, and occasionally there is such a difference in the situation of the impulse and in the character of the sounds as to suggest that the two sides of the heart are beating alternately; there may even be a mitral murmur with one beat, a tricuspid with the other. The extreme case is met with only in mitral stenosis under digitalis. Now while it must be taken as demonstrated that there is no such occurrence as an alternating action of the two ventricles, it is certain, from numerous observations, that in the beat which does not raise the aortic valves, the systole of the right ventricle is often forcible, and the pulmonary second sound is usually distinct. This last sign means, of course, that blood has been thrown into the pulmonary artery and not into the aorta, and as the amount of blood which passes through the right and left heart in a given time must be equal so long as the equilibrium between the pulmonary and systemic circulation is maintained, the propulsion of blood from the right ventricle only must be supplementary. In mitral stenosis it is easy to understand that such an extra contraction of the right ventricle might be useful in maintaining the pressure in the pulmonary circulation which is necessary in order to force the blood through the constricted orifice; or, regarding it in another aspect, the abortive contraction of the left ventricle is due to its being inadequately filled during one diastole so that a second is needed. No such necessity, however, is apparent when both valves and walls of the heart are normal.

Intermittent and Irregular Pulse.—With regard to the intermittent and irregular pulse I have nothing to say which will not be familiar to all my hearers. Intermission, occasional or habitual, of the pulse is compatible with health and vigour up to extreme old age, and, in the absence of symptoms, may practically be disregarded. The intermission of the pulse is associated with a hurried and imperfect beat of the heart, of which the first sound is sometimes sharp and following immediately upon the second of the preceding normal beat, at other times it is weak. A weak pulmonary second sound is usually audible. An intermittent pulse may, however, be among the signs of fatty degeneration of the heart, but it will not stand alone. In case of doubt the patient should be made to walk briskly for a minute or two, when the really weak heart will falter, while, if the heart is healthy, the intermission will usually disappear. It will often disappear also during the administration of chloroform.

Marked irregularity of pulse is most frequently met with in mitral regurgitations, next in dilatation of one or both ventricles, but it occurs independently of any disease of the heart. The fact that it is so commonly associated with incompetence of the mitral valve, while it

is rarely observed in other forms of valvular disease, except when the heart is failing, seems to indicate a mechanical rather than a nervous origin of the disturbed rhythm in mitral regurgitation, and it appears to me to be related with the varying pressure upon the heart in respiration. When the mitral valve is incompetent, and the blood can pass back into the auricle as well as forwards into the aorta, the proportion which is driven in one or other direction will be determined by the comparative degree of resistance. Now the dilated left auricle will be supported by a certain amount of pressure during expiration, which will tend to resist distension by the regurgitant blood, but at the end of expiration the conditions are suddenly reversed, and it will be exposed to the negative pressure or suction action which fills the chest with air, so that the reflux is favoured. The sum total of the resistance to the ventricular systole is thus diminished at this moment, and the systole is consequently very rapid, at the same time that less of the blood goes forward into the aorta. At the end of inspiration opposite forces come into play, and the repetition overy two or three beats of these disturbing influences quite accounts for the irregularity of the heart's action. In an early stage the irregularity can be seen to occur coincidently with the end of inspiration and expiration. It is the incompetence of the mitral valve which exposes the ventricle to the respiratory pressure variations, but when, from any affection of the lungs, such as bronchitis and emphysema, the difference between the pressure on inspiration and expiration is greatly augmented, we find the action of the heart disturbed in like manner, and careful watching will show that the chief irregularities coincide with the reversal of the action of the chest.

Irregularity of pulse of nervous origin is illustrated by the disturbance of the cardiac rhythm in dyspepsia and by tobacco; but it may be present in an extreme degree independently of any recognisable influence, and may be habitual. There need be no affection of the general health or impairment of vigour or endurance. In one of the worst cases I have ever seen, the patient, who was for some time under my observation, was, long after the age of 60, in the habit of addressing public meetings. The trace exhibited was taken recently



upon a gentleman, now aged 70, who consulted me twenty years ago on account of irregular action of the heart, and has had it ever since. I am unable to fix any prognostic value on irregularity of the pulse as such, and when it occurs in connection with dilatation of the heart, the prognosis is determined by other considerations.

I now proceed to the consideration of variations of tension, and I shall first speak briefly of low tension.

Tension in the pulse, as has been already stated in the first lecture, depends primarily on the freedom of the flow through the capillary network; and it is low when the capillaries and arterioles are relaxed, allowing the blood to pass readily. As the capacity of the arterial system increases towards the periphery, the branches at each division being collectively larger than the trunk from which they spring, and as the capillary channels are larger still, it is conceivable that the blood might escape as fast as it could be injected by the heart. The actual realisation of this possibility is incompatible with life, as the functional activity of the nerve-centres is dependent upon a continuous flow of blood through them, and under the circumstances supposed it would be intermittent. The resistance, however, in the arterioles and capillaries may be so slight that the blood has still a pulsatile movement when it reaches the veins. Such venous pulsation in the veins of the back of the hand can often be demonstrated in aortic regurgitation, but here it is not so much the diminished resistance in the capillaries as the exaggeration of the pulsatile variations of pressure in the arteries which brings it about. In order to see pulsation in the veins, however, the capillaries must be relaxed by putting the hand in hot water, or there must be pyrexial relaxation of the peripheral vessels, which often renders it very evident. Occasionally venous pulsation is met with when there is no heart-disease or any other cause than abolition of the normal resistance in the capillaries. I witnessed it in a gentleman who was gradually sinking from the effects of alcohol without any of the usual alcoholic disease of liver and kidneys. He took less and less food, and came to live on alcohol, and finally had slight pyrexia and occasional attacks of hæmoptysis. The arteries were large, thin, and soft; and for some time pulsation in the veins of the dorsum of the hand could be rendered visible at any time by dropping the wrist so as to allow the veins to fill.

The characteristic mark of low tension in the pulse is the complete subsidence of all blood-pressure in the artery between the beats. It therefore allows itself to be flattened under the finger in the intervals of the pulsation, and this causes the impact of the pulsation to appear sudden. Further, as we have seen, it must be short. Variations are observed according to the size of the artery and the action of the heart. The artery must be relaxed. When the artery is large and the heart is acting forcibly, we shall have a large, short, strong pulse—the full and bounding pulse of old writers; and dicrotism will usually be conspicuous. When, with a large relaxed artery, the heart is weak, the pulse will be large, short, and weak, still with dicrotism. We cannot have a contracted artery and powerful heart's action with low tension. A feebly acting heart and small artery—the artery being small simply from want of distending force—will give the small, short, weak pulse described as thready; and the absence of a distinct wave of pressure gives it an undulatory character.

One of the most constant effects of pyrexia is to relax the arterioles, and the pulse characteristic of all forms of fever is one of low tension. The pulses above given are, in effect, if also frequent, the pulse of pyrexia in different forms and stages. On these, consequently, I do not dwell.

A low-tension pulse in the absence of pyrexia, unless it is a physiological peculiarity of the individual (and it may be remarked in passing that a pulse of a very low tension may run in families), is indicative of debility. It may go so far as to suggest the existence of fatty degeneration of the heart, except that the pulse of cardiac weakness is usually frequent, while that of fatty decay is more commonly under the average rate. The heart-sounds also are weak and short. The symptoms associated with a pulse of low tension are extremely varied, and they are, for the most part, not the result of the weak pulse, but concomitant effects of a common cause. Many of them are equally common when the pulse-tension is high, and the question is not what symptoms arise out of low or high pressure in the arteries, but, given certain symptoms, what is the state of arterial tension, since this will be an important guide in the treatment. When the tension is low, purgatives are badly borne, and mercurial aperients give rise to great depression. Sometimes, indeed, the subjects of low arterial tension feel much better when the bowels are constipated, and exhausted after each action.

There are no doubt cases in which the chief cause of deficient pressure in the arteries is want of functional vigour in the heart, and it would be of service to be able to distinguish such cases from those in which the primary cause is absence or resistance in the arteries and capillaries, but this is not easy. A low state of arterial tension is not in itself a source of injury to the heart or vessels. It has an important bearing on affections of the nervous system; but questions relating to this are reserved for the third lecture.

High Tension.—I have already said so much elsewhere on the subject of high tension in the pulse, that I shall here condense my remarks into much smaller compass than would otherwise be demanded by the relative importance of the subject. The cause is obstruction to the free flow of blood through the minute arterioles and capillaries to the veins. There is some difference of opinion whether the exact seat of this obstruction is in the arterioles or capillaries. It is probably not in all cases the same. In high arterial tension of purely nervous origin, as, for example, in hysteria, in cerebral and spinal disease, in rigor and the cold stage of fever, there can scarcely be any question that the cause is tightening up of the minute arterioles; but in tension of blood origin, as in renal disease, gout, and allied conditions, it seems to me that the primary obstruction is in the capillaries, contraction of the arterioles being no doubt associated with this, but secondary to it, either by way of continuity, or as a defensive counteraction against the distending internal pressure set up by the obstacle beyond.

I may briefly enumerate some of the reasons which have led me to this conclusion. The most important are derived from an examination of the minute arterioles in the brain, after death resulting from contracted granular disease of the kidney. When there have been uræmic convulsions, capillary hæmorrhages are almost always present in various parts of the cortex, so much so that our late distinguished colleague, Dr. Mahomed, attributed the convulsions to capillary rupture. If the capillaries were protected by contraction of the arterioles, such rupture could scarcely occur. Again, these arterioles are themselves at certain points dilated into miliary aneurysms, and liable to rupture, not where they are given off from larger

branches, but just where they break up into the capillary network, which shows the obstruction to have been beyond, and not in, the arterioles, while not only are the perivascular spaces round them large, as if from distension, but a ring of the surrounding brain substance is pale, as if from pressure. Another reason is that, although the medium sized arteries, such as the radial, and the small arteries, such as the digital, are usually contracted and small in high tension; this is not always the case, and it seems improbable that, in vessels anatomically continuous and physiologically correlated, there should be contraction in the minute arterioles without a corresponding condition of the arteries leading to them. In further support of this view, I may cite the important experiments of Drs. Ringer and Sainsbury on the action of the digitalis group of remedies, related in vol. lxvii of the *Medico-Chirurgical Transactions*, 1884. It is there shown that when all reflex contraction of the arterioles is rendered impossible by destruction of the brain and spinal cord, digitalis and other substances having similar properties give rise to marked diminution of the flow through the arterio-capillary channels. The action is thus proved to be direct upon the contractile structures of the capillaries and arteries, and not indirect through the vaso-motor nerves.

I must, at the risk of tedious repetition, again describe the high-tension pulse. Its distinguishing characteristic is that the artery is full between the beats. So full is it that it can be rolled under the finger as if it were a tendon, and followed like a solid cord some distance up the forearm, and, when the tension is well marked, no pulsation may be felt while this is being done, unless decided pressure is made by the fingers. Above the wrist, when the artery rests upon the muscles of the forearm and not on the radius, it may be difficult to detect pulsation. Not unfrequently, especially when the skin is thin, the artery can be seen to form a distinct projection, but no pulsation is visible in it, unless it is thrown into a curve, when this will be seen to be accentuated at each beat. The artery is usually small from contraction of its muscular coats, unless it has been dilated by protracted distension, when it may have much beyond the average diameter.

When pressure is applied in order to bring out the character of the beat, it is found that this does not strike the finger sharply but rather lifts it powerfully; it persists for an appreciable time, and then gradually subsides with little or no dicrotic echo. It is the long pulse, "pulsus tardus." The size of the vessel will make some difference in respect of all these points; the distinctive features are best marked when it is small; when it is large, both the incidence and the subsidence of the pressure will seem to be more abrupt, especially if the artery is thoroughly flattened by the fingers. With moderate compression, the beat feels less sudden, and has the gradual rise, sustained duration, and slow decline which is characteristic of high tension.

Another character of the high-tension pulse comes out when its strength or force is tested by attempting to arrest the beat. While the fingers rest lightly on the vessel, little pulsation is felt; but, as pressure is employed, the more forcible does it seem to be; and, when the artery is greatly contracted, it is really difficult to distinguish the wave.

While the prime cause of high tension in the pulse is obstruction in the peripheral circulation, the actual pressure in the arteries is maintained by the heart. Usually the increased difficulty in driving on the blood is met and counteracted by increase of the contractile energy of the heart; but it is clearly possible that, while there is obstruction in the arterioles and capillaries, the heart may not rise to the occasion. We shall then have, in feeling the pulse, an artery full between the beats and capable of being rolled under the finger, while at the same time it is compressible. This is, in fact, very common, and we require a term which may be applied to such a condition. I have been in the habit of speaking of it as virtual tension. Now, as the artery allows itself to be flattened, the pulse wave which lifts it into the cylindrical form appears to be sudden, and the pressure, after lasting a certain time, seems to drop suddenly. The artery may be small or large, and the pulse varies accordingly.

We meet with the conditions which give rise to virtual tension at the two extremes of kidney disease. At the outset of acute renal dropsy, while there is obstruction in the arterioles and capillaries, the heart is rendered weak by the pyrexia and low diet, and there is more or less tendency to it throughout the attack. Again, as the heart becomes worn out in the course of chronic granular disease of the kidney, it ceases to be capable of maintaining the high tension which is characteristic of this disease, and virtual tension takes its place. It is at this period that reduplication of the first sound is so well marked. The same course of events is observed after protracted high tension from whatever cause; and as this is the origin of dilated left ventricle, the pulse of virtual tension, in its best marked form, comes to be the characteristic pulse of dilatation of the heart. At the same time that it is expanding the left ventricle, the continued obstruction in the arterioles and capillaries is overcoming the contractile power of the medium-sized arteries, the lumen of which becomes enlarged, while their coats are thickened.

The causes of high tension are now so generally recognised that I shall do little more than enumerate them. They are as follows: 1. Heredity. This is illustrated not only by the every-day experience that paralysis and heart-disease run in families irrespective of the habits and mode of life of different members, which may differ greatly, but by the fact that high pulse-tension and functional derangements arising out of it may be present in childhood and all through life in every member and in successive generations of many families. 2. Kidney-disease of all kinds, except such as is attended with suppuration, but the most marked tension is met with in the contracted granular kidney. 3. Gout and allied conditions, including almost the entire range of affections attributed by Murchison to functional derangement of the liver. 4. Lead-poisoning, with or without renal disease or gout. 5. Anæmia.

Here I may make a few remarks. It is not easy to understand how anæmia can give rise to high tension in the pulse. One would have expected the watery blood to pass readily through the capillaries, and the *vis a tergo* applied by the heart to be deficient, but it is a matter of daily observation that the artery is full between the beats, and that the pulse, if more abrupt than in renal disease, is long. It has been conjectured that the defective oxygen-carrying power of the corpuscles may cause oxidation to be imperfect and so lead to the formation of substances which are not readily eliminated, and which provoke resistance in the arterioles and capillaries, but the instability of the tension is suggestive of the intervention of nervous influences, and there are other peculiarities which lend support to the hypothesis that the arterial contraction and powerful heart-action may be vaso-motor phenomena. However this may be, there are rare and exceptional cases of anæmia with extremely low tension, and it has been an object of attention with me to make out whether any constant difference of another kind attends this difference in the state of the circulation. In particular it seemed probable that there might be some influence on the production of hæmic murmurs which might throw light on their causation, especially from the point of view of Marey's theory, which refers all cardiac murmurs to low pressure beyond the point at which the vibration is set up. Up to the present, however, I have been unable to recognise any distinction between anæmia with high tension and anæmia with low tension, except the difference in the circulatory conditions.

To return to the enumeration of causes of high tension, we have, in addition to those already named: 6. Pregnancy. 7. Constipation. 8. Plethora—an overladen state of the entire vascular system. 9. Chronic bronchitis and emphysema.

With regard to the effects of high tension, again, I shall be almost equally brief, for the reason that I have little to add to what I have before written and said on the subject. The effects upon the heart are easily understood, the high blood-pressure in the arterial system calls for increased contractile energy on the part of the ventricle, in order that it may overcome the pressure and carry its contents into the aorta. If the resistance with which the heart has to contend is augmented gradually it will respond by hypertrophy; if, however, the increase in the resistance is sudden, the heart will be unable to complete its systole and expel the whole of its contained blood. Dilatation is then the result, and it will take place all the more readily if the nutrition of the heart is interfered with. Dilatation of the left ventricle may result from high arterial tension at almost any period of life, and is met with under a great variety of circumstances. It is very common in anæmic girls, and is frequently attended with mitral regurgitation, which is curable, as has been well shown by Dr. George Balfour. Some contributory exciting cause will be traceable. I have known it to be due in several instances to hunting, in others to lawn-tennis, in others to much walking up hill. In one case recovery only took place when the family of the patient left a house in an elevated situation which made every walk terminate in a climb. While curable if taken in time, the dilatation of anæmia often establishes permanent heart-disease. Acute dilatation, which is of far more frequent occurrence than has been supposed, has for its predisposing cause peripheral resistance in the circulation and high pressure in the arteries. It may take place in the course of acute disease or as a sequel, if the pyrexia has not neutralised the habitual tension by relaxing the arterioles. It may again be produced either by too violent or by too protracted exertion, and this at almost any time of life at which high tension is common. The gradual dilatation which occurs

with varying degrees of antecedent hypertrophy in chronic gout or renal disease, or as a result of chronic resistance to the circulation, from whatever cause, need only be mentioned. Valvular changes, mitral and aortic, and the dilatation of the aorta, are also so familiarly referred to high tension that they require no further notice, and the same may be said of cerebral hæmorrhage.

One word may be permitted on the injurious effects of peripheral resistance in aortic or mitral regurgitation. In both these valvular lesions high tension, or rather the tendency to this condition, is disguised by the effects of the regurgitation, and is liable to be overlooked. Actual tension, as manifested by sustained fulness of the artery between the beats, is indeed impossible in aortic regurgitation, since the fulcrum is wanting, and it is not easily recognised in mitral regurgitation. The subjects of such lesions, however, may be gouty or may have renal disease, and the peripheral resistance incident to these affections will not be suspended. The injurious tendency of this resistance will be manifest at once. The greater the force required to drive the blood through the capillaries, the greater will be the force with which it will be driven back through a leak in the mitral valve, and the more powerful the dilating effect on the left ventricle when the protection of the aortic valve is lost. The prognostic bearing of such an influence in the early stages of these valvular diseases makes it important that it should be recognised, especially in the young, when treatment may do much to avert the evil consequences. In aortic insufficiency an idea may be obtained by careful examination of the pulse when the hand is well below the level of the shoulder and of the heart; it should not hang down, as it is then difficult to distinguish between the persistent fulness due to the weight of the column of blood and that due to the obstruction in the capillaries. In mitral regurgitation it will be sufficient to bear the question in mind and to examine the pulse in different positions of the hand. Information may also be obtained from an examination of the pulse of other members of the family.

In connection with the subject of renal disease and gout and high pulse-tension, I must find an opportunity for calling attention to the fact that cases are met with in which the tension is altogether absent, and this not because the heart is weak or failing, but because there is even less than the normal resistance in the arterioles and capillaries. The prognosis when such is the case is extremely unfavourable. It is in connection with the chronic, large, white kidney that we most commonly see a weak, soft, low-tension pulse with albuminuria. The amount of albumen is often very great; it varies from day to day, often without traceable cause, but often, again, it is increased by exertion or mental depression, or constipation, and it is usually greater at night than in the morning. Any development of tension in the pulse is attended with diminution of the albumen. The patient may not have the least appearance of kidney-disease, and dropsy may be entirely absent. Tension, again, may fail to supervene in acute albuminuria, and, when such is the case, a fatal result is, according to my experience, always to be expected. I have come, indeed, to take the development of high arterial tension as one of the chief guides in prognosticating the course and issue of this affection; if it makes its appearance early, and becomes well marked, the prognosis is favourable; there appears to be an increased liability to uræmic convulsions, but the patients bear the treatment required by this and other complications, and usually recover. If the tension is slowly developed, and especially if it is fitful and inconstant, the recovery is slow and uncertain, while, as has been said before, if the pulse remains soft, short, and weak throughout, the prognosis is bad. Dropsy is usually considerable, and there is often an unusual amount of blood in the urine, as well as casts.

In contracted granular disease of the kidney, absence of tension is very rare, and I have no record of a well marked instance in which the diagnosis has been verified by *post-mortem* examination. In the following case I had no doubt as to the nature of the case during life. The patient, aged about 55, was under my observation from time to time, from June, 1880, up to his death in September, 1881. He had suffered from gout and eczema, and, when I first saw him, albumen had just been discovered in his urine, which had a specific gravity of 1011. He had always lived freely, and could not be prevented from taking a considerable amount of whisky. His eczema was removed and his gout relieved, and he usually looked and felt well; the quantity of urine was not far from normal, and the specific gravity usually varied from 1017 to 1021, while a mere trace of albumen was present; and it was only the knowledge that he had albuminuria which induced him to present himself. He was well nourished, had a good colour, and a largish, soft, short pulse; there was no evidence of degeneration in the walls of the vessels, nor any change in the heart.

When the shooting began in September, 1881, he went out as usual, but was more easily tired, and took extra whisky to enable him to go on. On the 14th and 15th he said queer things at dinner. On the 15th, Mr. Martin, of Crawley, saw him, and found him languid and sleepy. After a jalap powder he was better, but in the night of the 17th he was seized with violent convulsions. I saw him with Mr. Martin at 1 P.M. on the 18th, when he was lying on his left side, the left side of his face boring into the pillow, his eyes directed violently to the left, the left arm bent across the chest, with the hand up at the right shoulder, pulling violently at the night-shirt, which was torn. He was smacking his lips loudly. These movements came on in paroxysms, but with such short intervals as to be almost continuous. The left leg was very little affected. Sensation was very greatly impaired in both arm and leg, and might be said to be lost. He was conscious and intelligent, and in the intervals between the paroxysms could direct his eyes to the right, and could give either hand. The convulsions continued, except when he slept, and in the course of the 19th deglutition failed, the breathing becoming deep and loud, and death by coma supervened.

I have entered into these particulars to show that the convulsions were not of the ordinary uræmic character. They were clearly due to cortical irritation, but this is not the place to discuss the character of the lesion, and no *post-mortem* examination could be obtained.

The case is quoted to illustrate the position that absence of arterial tension, where such tension is a part of the disease, is not a favourable sign. The patient had not the look of kidney-disease; he was well nourished, and had a good colour; the heart gave no evidence of disease, and the arteries were soft and flexible; the high tension which predisposes to rupture of cerebral arteries was absent; there was nothing, in fact, suggestive of impending danger.

Functional Effects.—Without recognisable organic change in the heart or arteries, or where the subsequent history shows that such changes as were present were not of themselves the cause, high tension may give rise to the most severe angina pectoris. High tension, again, may produce effects in the way of breathlessness and sudden powerlessness which simulate the effects of the most advanced heart-disease.

Intermittent functional albuminuria, when not traceable to imperfect assimilation of food, is, so far as it has come under my observation, associated with high pulse-tension, and is most readily amenable to treatment which reduces arterial pressure; and the cases of this affection described by Dr. Clement Dukes, of Rugby, and shown in his admirable papers on the subject to be common among boys and adolescents, appear to belong to the same class as mine. When this liability to the appearance of albumen in the urine on exertion or slight exposure is met with in children, I have always found a strongly neurotic family history as well as hereditary high pulse-tension. When it does not come on till the approach of adolescence, there may be no family neurosis, but I have never failed to recognise tension, and to trace its effects in other members of the family.

Treatment.—Although high arterial tension is fraught with so many evil contingencies, it is not to be looked upon as *hostis humani generis*, and attacked whenever found. I have already stated, and exemplified by cases, that, supposing renal disease or gout to exist, the prognosis is unfavourable if the pulse-tension is not high. This is equivalent to a declaration that under such circumstances the high pressure in the circulation serves some useful end. We do not, therefore, treat tension as such, unless it is actually causing suffering, or doing present or prospective harm. For the most part, indeed, the object of our treatment is to remove the condition on which unduly high tension depends.

Among the measures for the reduction of tension, one of the most potent is bleeding. This is usually practised only in extreme cases, and when it is employed it is as a remedy for the high tension itself, or for some of its more serious and dangerous effects, such as convulsions. When cerebral hæmorrhage has occurred it is too late to bleed, but were high tension in the pulse more closely studied, and were less attention paid to the public prejudice against venesection, it would be anticipated and prevented in hundreds of cases every year. Physiological experiment seems to throw doubt on the production of a rapid diminution of pressure in the arteries by blood-letting, but there can be no question as to the effect in the mind of anyone who has practised venesection in a case of uræmic convulsions. The results are more than can be easily attributed simply to the withdrawal of so much blood. In acute nephritis, when bleeding has been necessary because of convulsions, I have more than once seen unaccountably rapid disappearance of the albumen from the urine, and complete recovery. The statement made by trustworthy observers, when blood-letting was common, that at times patients could not be got under the influence of mercury until they had been bled, and that then sali-

vation was induced at once, is evidence of some profound change in the system; possibly a more rapid absorption, resulting from the diminution of intra-vascular pressure, may enter into the explanation, and the taking up into the blood of fluid effused into the cerebral meninges or ventricles.

The spring- and fall-bleeding of our forefathers must have been a great relief to many of those upon whom it was practised, and in some I have no doubt it prolonged life. I have had under my care from time to time an old lady, the only clue to whose age is the fact that her father, who was an historical character, died in 1803, who had been bled fifty times, first for puerperal convulsions and for their prevention afterwards. The punctures at the bend of the elbow had been so numerous that there was no room for more, and the later bleeding had been done from a vein in the foot. I do not think the old lady would have been living now but for the bleeding. When I last saw her, about two years since, she was managing the family of a deceased daughter. All her children are dead, the last, a daughter, who was the only one I saw, died from chronic Bright's disease, her grandchildren by another daughter, who died in childbed, are the subjects of high tension.

Apart from bleeding, tension can be lowered by reducing either the force of the heart or the resistance in the periphery. The former method can be called for only in some emergency, such as threatened cerebral apoplexy, and, if employed, will lay the heart open to dilatation, unless the obstruction with which it is contending is also removed. The latter is the chief indication to be followed, and it can be met in two ways, either by drugs which relax the minute arterioles, such as amyl-nitrite, nitro-glycerine, and the nitrites, or by modifying the blood-condition which provokes the obstruction in the arterio-capillary circulation. The remedies which relax the arterioles are invaluable where either there is active arterial spasm, which is of itself a cause of pain and danger, as in angina pectoris, or when the contraction of the arterioles, without being abnormal in degree, is contributing to overpower the heart. They may thus be of service in high tension of renal origin, and are said to have contributed to the cure of diseases of the kidneys. I have administered nitro-glycerine repeatedly in different forms of renal disease, but without any other effect than temporary relief of some of the symptoms, and improvement in the patient's appearance from the admission of more blood to the pallid surface. I am quite prepared to believe, however, that continued diversion of blood from the diseased organ, which will be one effect of the general relaxation of the arteries, may favour their return to a normal condition.

The blood-condition which gives rise to tension, I have already stated to be, in my opinion, the presence in it of some form of impurity, and, for the most part, nitrogenised waste. The treatment demanded, then, is simply elimination. When the cause of this is disease of the kidneys or liver, the primary object of the treatment will be its cure, but, side by side with this, and often indeed forming a part of it, will be required measures for the removal of the matters which are retained in the blood in consequence of the suspension of the functions of these organs.

Any or all of the eliminating organs and surfaces may be made use of. In certain cases free perspiration is useful. While, however, the altered distribution of the blood which is brought about by the means taken to induce perspiration, such as the Turkish bath, and its determination to the surface of the body is often of service, the cutaneous excretion is chiefly water, and no great amount of organic matter is carried away, except in kidney disease, when an efflorescence of urea may be found on the surface after a copious perspiration. According to my experience, elimination by the skin is rather an accessory than a primary means of keeping down tension.

The kidneys are capable of carrying off a much larger amount of nitrogenised waste than the skin, and diuretics may in this way contribute to the relief of tension. But many diuretic remedies give rise to tension, and apparently produce their effects by raising the blood-pressure. The elimination desired for the purpose we are now considering is best obtained by the diuretics which promote tissue-change and oxidation—by copious draughts of pure water night and morning, which will wash out the tissues and carry off any soluble matters, and by potash and lithia, which are solvents of uric acid. It is not altogether a matter of indifference what salts of these alkalies are used; the citrates can be taken in larger doses, and they will render the urine alkaline quite as easily as the carbonates, if this is desired, but the carbonates appear to have more metabolic influence, and liquor potassæ has a still greater effect of this kind.

The elimination which has the greatest effect on arterial tension is that from the liver and bowels; and of the aperients which are available for the production of purgation, the most efficacious for this particular purpose are such as contain mercury. This is a conclusion based entirely on experience and observation. Whether as regards relief of symptoms associated with high tension, or as regards the effect on the pulse, a moderate and, indeed, scarcely recognisable aperient action by a pill containing mercury in some form or other is much more efficacious than free purgation by other means, and pills of this kind can be taken once or twice a week for years in suitable cases with advantage.

The pulse in heart-disease has been so thoroughly studied, and is so frequently and fully described, that I shall treat it very briefly, and I only refer to it at all in order to insist on the necessity of taking it into account in both the diagnosis and prognosis of affections of the heart. It is not every systolic murmur at the right second space that indicates obstruction of the aortic orifice, and if we must admit that a systolic apex murmur is proof of some mitral reflux, the murmur tells us absolutely nothing of its amount. The pulse must be brought in to interpret the murmur and fix its significance.

Aortic Stenosis.—The effect of narrowing of the aortic orifice is obviously to intercept the pressure of the ventricular systole and retard the current, and, as the blood cannot gain in pressure or speed, the pulse must be gradual and long. But, besides this, the entire arterial system seems to contract down upon the diminished blood-stream, and the pulse is also small. One does not see altogether why, with normal resistance in front, the arteries should not be kept at the usual size by the pressure from the heart, because this pressure takes effect more gradually, but the small diameter of the radial and other arteries is a constant phenomenon, and the pulse of aortic stenosis is, when well marked, one of the most peculiar met with: small, full between the beats, and destitute of anything like impact.

Aortic Regurgitation.—The pulse of aortic regurgitation is too well known to require any description. I would only call attention to the element of size in the arteries as important, to the necessity of ascertaining carefully whether the column of blood is at all sustained in the radial when the arm is held up, or whether the blood drops out of the vessel immediately the ventricular pressure is withdrawn, and to the extraordinary influence of pyrexia in exaggerating the collapsing character of the pulse. The slightest departure from regularity in the collapsing pulse is ominous; when this takes place, it is due at first to an occasional faltering beat, and it rarely reaches any considerable degree.

Mitral Regurgitation.—The irregular pulse of mitral incompetence has already been alluded to. It is by no means constantly met with when a mitral regurgitant murmur is audible; and while it indicates, when present, decided impairment of the functional efficiency of the valves, with secondary effects arising out of this, I am not prepared to assert that irregularity of pulse is an absolutely necessary consequence of even large regurgitation, nor does it always indicate a dangerous failure of compensation.

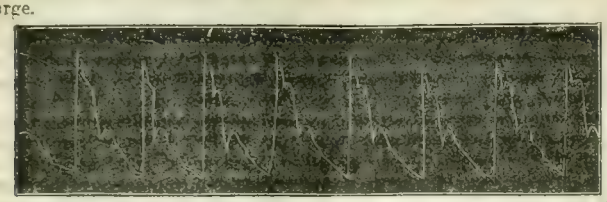
Mitral Stenosis.—In mitral stenosis the pulse is regular, small, and full between the beats. The contracted state of the arteries is probably due to the arterial system accommodating itself to the restricted output of the ventricle. The regularity of the pulse in this form of valvular affection has been called in question, but in the absence of associated mitral regurgitation, and of considerable secondary regurgitation at the tricuspid, it is maintained up to a very late stage of the disease. When, from pulmonary complications or failing adjustment, regularity is lost, the first deviation is in strength of pulse, not in rhythm, then beats fail to reach the wrist, and the pulse is irregular, while the heart is acting regularly. Finally, the irregularity may defy description, and there is apparently no correspondence between the pulse and the heart, and, when both are felt simultaneously, they might belong to a different person.

The pulse of hypertrophy of the heart is that of its cause, and no more need be said of it.

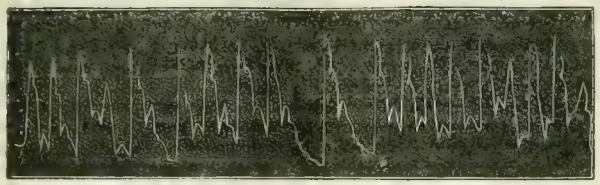
The pulse of dilatation has already been described under the head of virtual tension. A number of sphygmograms from cases of dilatation of the left ventricle are given, but they convey a very inadequate idea of the characters of the pulse as recognised by the finger. Scarcely even in aortic regurgitation can the state of the heart be foretold from the pulse more definitely than in dilatation. The first trace is from a



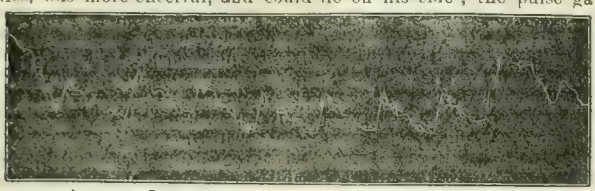
case in which acute dilatation with hæmoptysis had occurred from over-exertion; a mitral systolic murmur remained; the artery was not large.



In the case from which the second was taken there were breathlessness, difficulty of lying down, and enlargement of the liver, all of which were relieved by treatment. The patient whose pulse is represented by the third, was liable to stagger and even fall, on rising from a semi-recumbent position, with momentary loss of consciousness, and, on slight exertion, he would suddenly lose all power. The



artery was always full between the beats, notwithstanding the appearance of the trace. He improved under treatment, could walk eight miles, was more cheerful, and could lie on his side; the pulse gave



the second trace. Later, over-exertion aggravated the dilatation, and thrombosis of the left middle cerebral artery occurred, the case ending fatally.

THE LUMLEIAN LECTURES

ON

THE PATHOLOGY OF INTRA-UTERINE DEATH

Delivered at the Royal College of Physicians of London, March, 1887.

By W. O. PRIESTLEY, M.D., F.R.C.P., LL.D.,
Consulting Physician to King's College Hospital; and late Professor of Obstetric Medicine, King's College.

Lecture II.—Diseases of Fœtal Appendages.

I proceed now to speak of the causes of intra-uterine death which are associated with faulty conditions of the fœtal envelopes and fœtal appendages, and I shall take those first which properly belong to the earlier part of pregnancy.

In the earlier stages of its development, the ovum is in shape like an egg, and consists of the central embryo, with its surrounding envelopes. The outer one, or decidua, which lies next to the uterine wall, is the earliest in its formation, for it appears in the uterine cavity before the descent of the fecundated ovule from the Fallopian tube. It is now well known to be the product of the uterus itself, and to consist of the mucous membrane lining the interior of the womb, thickened and modified in such a way as to fulfil the necessary requirements of a fœtal envelope. A membrane in all respects like this, both in external appearance and minute structure, is sometimes expelled from the unimpregnated uterus at the catamenial periods in cases of dysmenorrhœa. It is then produced by an over-activity of formative elements, which occurs as the result of some reflex irritation, probably in the ovary, and which simulates the commencement of pregnancy. The expulsion of such membranes, therefore, does not always mean that an abortion has taken place, for they may be formed and extruded without impregnation; but, in a considerable number of cases in which these membranes are thrown off by married women, they are the result of conception. This is inferred from their frequent recurrence so long as sexual relations are continued, and their cessation when coitus is intermitted. Besides, the catamenial period is often missed once, at least, before expulsion, in women who at other times are perfectly regular. When entire, these membranes generally appear as membranous sacs, of triangular form, corresponding to the shape of the uterine cavity, and the walls of the sac are thick or thin according to the amount of organised material of which they are composed. The outer surface is commonly rough, and, if the preparation is placed in water, shreds of flocculi float out in the fluid. When laid open, it is a common thing to find the cavity quite empty. The inner surface is smooth, and marked everywhere with the apertures of hypertrophic glandular follicles, but there is no embryo. The ovule has either missed getting into the decidual cavity, or it has been endowed with so small an amount of vitality that it has undergone solution before it could plant itself in the decidual tissue. The reflex stimulus which has come from the ovary or tube, in whichever locality fecundation took place, has been enough to evoke the formation of the decidua in the womb; but the ovule being wanting, development is arrested, no decidua reflexa is formed, and the useless decidua vera is eventually thrown off as a foreign body. Here the fault in procreating power, as distinguished from generative power, may be either with the male or female; and, if the woman is otherwise healthy, it is quite as likely to be some defect in the fertilising fluid as faulty ovulation on the part of the female. These deciduæ of early pregnancy are in many cases found covered with coagulated blood, and the cavity may be filled with clot, soft or semi-fluid, if recently deposited there—firm and partially decolorised, if some time has elapsed since its extravasation. But these membranes are not always expelled in their entirety. More frequently they are thrown off in detached portions or shreds at variable intervals, and mixed with the fluid or coagulated blood which escapes at the same time. It is no uncommon occurrence for a patient, or even the medical man, to infer that the supposition of pregnancy has been erroneous because no substantial mass has been expelled—the discharges being taken for an over-profuse and perhaps deferred period. Eigenbrodt and Hegar,[1] in a memoir "On Apoplectic Destruction of the Decidua," found that in some cases the presence of the elements of the decidua could only be ascertained by the aid of the microscope. This accords with my own observation.

Akin to this is another defect of development, which has been described by Matthews Duncan[2] and copied into the various text-books. This consists, according to the author named, in a defective development of the decidua round the ovum. The egg then comes in contact only with a limited surface of the mucous membranes which corresponds to the serotina, and as it is not supported, as usual, by growth of the decidua round it, it becomes, as it were, pediculated, and is easily detached from its limited adhesion. This is probably one of many faults of development occurring in early gestation. In one specimen I examined, which had been expelled at an abortion, the ovule had evidently failed to get inside the decidual cavity, and began its development on its outer rough surface, attaching itself, as it does in extra-uterine pregnancy, to the surrounding structures. The surrounding structures were partly the outer surface of the decidua, and partly the wall of the uterus, and for three-fourths of the circumference of the ovum the clear transparent chorion was quite uncovered, its villi there being either atrophied or never developed. The decidua seems in some instances to be detached from the uterine wall, and to lie so loosely in the uterine cavity, more especially if atrophied or imperfectly developed, that one can imagine the ovule as it enters the uterus from the Fallopian tube dropping between the decidua and the uterine wall.

We get some sort of idea, now that our knowledge is more precise concerning the formation of the decidua, and of the behaviour of the ovule when it enters the uterine cavity, of the way in which placenta prævia and other variations in the site of the placenta are produced. Ordinarily the thickened decidua fills pretty fully the cavity of the uterus, and the ovule is received into the cushion so formed, and is sustained in the upper part of the uterus. When, however, the decidua is less luxuriant in growth, its cavity will be larger, and the fertilised ovule may then drop down to the lowest part of its cavity, and become implanted there. Dr. Robert Lee[3] has recorded the appearances of a very early placenta prævia, which bears out this idea, and such an anatomical fault favours the occurrence of abortion, although we know by experience that those cases may go on to the later periods of pregnancy.

[1] *Monatsschr. fur Geburts*, Bd. xx, 1863.
[2] *Researches in Obstet.*
[3] *Theory and Practice of Midwifery.*

The varieties of insertion of the ovum into the decidua, and the several forms of hypertrophy and atrophy, with other anomalies of the same membrane, have been elaborately studied by Kussmaul,[4] Hegar,[5] and Dohrn,[6] in special and excellent memoirs, and are well worth perusal. It seems obvious that a too scanty formation of the decidua may lead to the growth of a placenta too small for the needs of the embryo. Charpentier believes that an arrest of development in the decidua reflexa, or its premature destruction, are frequent causes of death in the embryo. The egg then is covered in a large part of its extent only by the chorion, and may be suspended by a sort of pedicle from the decidua serotina. It has thus a very limited attachment to the decidua, and is easily disturbed. Probably, indeed, pregnancy cannot go on with so slight an attachment, and it is a variety of a similar kind which Rokitansky[7] has called "Cervical Pregnancy."

When the ovule has been successfully implanted in the decidua, and the normal development of the decidua reflexa and other structures is going on in progressive series, there is great tendency in some women to go wrong, apparently from mere weakness of the outer structures which form the ovum. The decidua is commonly composed of so lax a tissue, and is so abundantly supplied with blood-vessels undergoing various modifications of size and distribution, that during early pregnancy it is prone to suffer from extravasations of blood into its parenchymatous substance, more especially in delicate women. It is true that the uterus is so suspended in the maternal pelvis as to be affected in the least possible degree by ordinary locomotion and by accidental concussions; yet, in some women, the union between the pregnant uterus and the decidua is so unstable, that a fall or stumble, or a shaking of any kind, may be quite sufficient to detach a portion of the latter, rupture the intervening vessels, and cause extravasation of blood. Small and circumscribed clots produced in this way are frequently found between the uterus and decidua; at other times they are in the meshes of the decidua itself, or both may be conjoined. If limited, these extravasations need not interrupt the continuance of pregnancy. If more extensive, and separating a larger portion of the decidua, they necessarily interfere with the nutrition of the ovum, produce death of the embryo, and precipitate abortion. When the escape of blood from the vessels is confined to a limited space at the upper part of the uterus, it may cause uneasiness, but no external hæmorrhage will be noticed. If it takes place near the cervix, the blood more readily finds exit from the uterus, and is discharged by the vagina, thus becoming a manifest symptom of threatened abortion. Blood-clots in every stage of transition, and every variety of firmness and colour, may be observed in some aborted ova. The latest are deep red or purple, and those older pass through the several tints of chocolate brown to yellow, like apoplectic clots elsewhere.

The same result may ensue from contractions of the uterus, either provoked by local irritation directly applied, or from reflex causes, as, for example, suckling a child after a fresh pregnancy has commenced. It is well known that abortion is frequent if a new pregnancy begins during the time that a mother is suckling her child.

Occasionally, during the very early stages of gestation, blood flows directly into the decidual cavity, and fills it with coagula. The result is either that all traces of the embryo and its immediate surrounding structures are obliterated, or the embryo is compressed and destroyed by the invading flood, rudimentary portions only of it being discovered. More than once, under these conditions, I have found the embryo, wrapped in its small and budding chorion, detached from the decidua and floating in the semi-fluid blood contained in the decidual cavity. The decidua reflexa had not yet been sufficiently developed around it to give it a stable attachment. The small aborted ova of this early period are frequently thrown off entire in triangular or ovoid form, the outer layer being the decidua, which encloses, first, firm layers of fibrin, and, as one proceeds to the centre, soft clot.

In the second to the third months, the decidua reflexa or ovuli is fully formed, and the villi of the chorion are everywhere imbedded in its substance. Then another form of hæmorrhage may occur. In this, the blood is not alone extravasated between the decidua vera and the uterine wall, or into the meshes of the decidua itself, but between the decidua reflexa and serotina, and the chorion or outermost of the true fœtal membranes. In the process of development the villi of the chorion are pushed into the decidual tissue, and are soon surrounded by the blood-vessels which are to form the maternal placenta. The decidua is then a highly vascular membrane, especially at the site of the future placenta, and the maternal vessels which everywhere ramify through it undergo a development which in the human body is unique. Appearing first as capillaries, they rapidly enlarge, and eventually become sinuses which are filled with maternal blood, and in which the fœtal villi are eventually suspended.

It can scarcely excite surprise that these delicate and rapidly dilating maternal vessels should be very liable to rupture. Hæmorrhage taking place in this locality, floods the loose tissue of which the decidua reflexa is composed, and destroys or compresses the chorion villi implanted there. It may be so extensive as entirely to surround the embryo. At the earlier periods, when there is a considerable space between the decidua uteri and reflexa, it may be limited to the circumference of the latter membrane, which, when cut into, is found to contain clot with or without traces of the chorion and embryo. Later, when the decidua reflexa is in apposition with the decidua uteri throughout its whole extent, and the amnion is formed, the cavity, if exposed from within, exhibits eminences or projections from the walls, which may seem like projecting cysts if the blood is imperfectly coagulated; but they represent hard and firm bosses or nodules, when the blood has been long enough deposited to become solid. The force of the extravasation has in fact pushed forward both the chorion and the amnion, and diminished the size of the cavity. There are all possible gradations in the amount of blood so extravasated, and the morbid appearances vary from slight thickening or consolidation to the extreme forms indicated in the drawings. The nutrition of the embryo is necessarily arrested if the extravasation be extensive enough to interrupt the normal circulation through the imperfectly formed placenta, and the embryo may be found stunted and shrivelled, suspended by its umbilical cord from some part of the amniotic cavity. If the ovum has been long retained after these morbid changes have taken place, the embryo will appear small in proportion to the size of its containing cavity, for there can be no doubt that when the central embryo has perished, the membranous envelopes may go on growing until they are expelled by uterine action. In some specimens again, the embryo deprived of its nourishment breaks down and dissolves, leaving only the remains of a slender or rudimentary umbilical cord, and not uncommonly also a distinct umbilical vesicle, imbedded between the chorion and amnion.

These extravasations of blood between the chorion and the decidua constitute the typical "apoplexy of the ovum" described by many authors. It is found in a multiplicity of forms and modifications, and is, no doubt, produced by a variety of causes. Thus it may be produced by faults in early development, or by any cause which produces detachment of the well-formed decidua from the uterine walls, or from rupture of its blood-vessels. Gendrin said he saw one case where blood tore its way through both chorion and amnion, and overwhelmed the embryo, and Hegar gives another. The drawing by Westmacott shows the cavity of the decidua reflexa entirely occupied by a blood-clot, no trace of embryo or its special envelopes being found.

Wagner, in his *Traité de Physiologie*, states that in the majority of cases an extravasation of blood at the time of the formation of the decidua reflexa is the first cause of the death of the fœtus. In some cases, notwithstanding this, the egg may grow, but the embryo is then not properly nourished, and so a disproportion of different parts of the egg occurs. The extravasation of blood may therefore be the cause of disease in the decidua and of malformation in the fœtus.

Hegar says, and Verdier[8] agrees with him, that anomalies in the insertion of the placenta, abnormal insertions of the allantoid and umbilical vessels, predispose to apoplexy, also the hypertrophy and atrophy of the various parts of the decidua.

In examining ova which have been extruded as the result of abortion during the earlier period, one is often struck with the amount of compound granular cells, as they are called, and of distinct fat or oil-particles, not only mixed up with the parenchyma of the decidua, but contained even in the interior of the decidual cells and fibro-cells, thus constituting a true fatty degeneration. Sometimes the decidual blood-vessels, namely, those which permeate everywhere the decidual tissue, and ramify among the villi at the site of the future placenta, have undergone fatty change, and this is more marked near the seat of the hæmorrhages. At one time I thought this was due merely to the after-changes in the extravasations of blood produced by traumatic and other causes, but I subsequently found this fatty change in portions of the membranes distant from the clots, and occasionally I have found the whole decidual structures affected by this form of granular degeneration.

I have elsewhere pointed out[9] that in the parietal decidua which

[4] *Von dem Mangel, etc., der Gebärmutter*, 1859.
[5] *Monatsschr. für Geburts*, Bd. xxi, Supplement. Heft.
[6] *Monatsschr. für Geburts*, 1863.
[7] *Lehrbuch der Path. Anat.*

[8] *Thèse*, 1868.
[9] *Devel. of Gravid Uterus.*

does not take part in the formation of the placenta, a granular or fatty degeneration sets in as soon as its function is superseded by the organisation of the placenta. The drawing there shows the glandular follicles in the third month, filled with fat-granules prior to their final disappearance, and similar fatty molecules are scattered over the parenchyma generally. In the normal condition this fatty degeneration does not extend beyond the border of the placenta, but it can readily be understood that in such close proximity it may invade the placental decidua also, when impaired nutrition or other cause predisposes it to decay.

On becoming acquainted with the remarkable researches of Ercolani,[10] I found he believed the true cause of extravasation and of the formation of clots between the decidua and chorion in early pregnancy, to be this fatty degeneration of the cells of the decidua serotina, which ought to be forming the young placenta. These cells so transformed out of the decidua, when in a state of fatty degeneration, imperfectly support the pressure of blood in the sinuses, and hence, as he says, there is a breakdown and veritable interstitial hæmorrhage. The rupture of the layers of serotina permits the blood to pass from one cotyledon to another, and necessarily produces a slackening of the maternal blood in the imperfectly formed sinuses. Thus a true thrombosis is produced, but preceded by morbid change of structure, not arising out of a normal state as supposed by Bustamente[11], whose views I shall notice presently. Sirelius,[12] of Helsingfors, also attributed hæmorrhage in the early formed placenta to the breaking down or rupture of the decidual structures forming the boundaries of the lacunæ, thus producing coalescence and arrest of circulation, with extravasation.

That the presence of a pathological fatty degeneration in the structures of the decidua will, in many cases, account for the occurrence of hæmorrhage both in the parietal decidua and in the serotina is no doubt true, but there are many cases where no such explanation can apply, otherwise there would be very little chance of checking a threatened abortion when once indications of hæmorrhage have set in. The frequent recovery of patients from the symptoms of abortion, with the successful continuance of pregnancy to the full time, is sufficient proof either that hæmorrhage is due to other causes than fatty degeneration, or that, in particular cases, the degeneration was at least so partial that only a very limited area of the structures was affected. Thickening and fatty degeneration to a marked extent in the decidual structures are noticeable in many instances of recurring early abortion ; and, as we shall see presently, this may be associated with an inflammatory process. In other cases, separation of the ovum is clearly traceable to some violence or traumatic cause ; then the structures show no indication of morbid transformation, and the extruded ovum frequently tears away with it from the interior of the uterus shreds of uterine muscular fibre which are found attached to its outer surface.

Apoplexy of the ovum deserves careful study, because it is a very common cause of embryonic death, and, if one may judge from the large number of specimens preserved in the various museums, compared with others, it is by far the most frequent of all the pathological changes affecting the early ovum. In almost every museum in London are examples of the apoplectic ovum in its various phases, even where there is an absolute poverty of other specimens illustrating diseases of the ovum, and it may be inferred therefore that it is probably the most frequent of the immediate causes producing intra-uterine death in the early months of gestation. The specimens are often wrongly described in the museum catalogues as "tubercular ova," or "cystic ova," and other misnomers are applied to them.

The largest number of the preparations of this kind in our museums are of ova so advanced that the two deciduæ are united in close apposition. This corresponds to about the third month of gestation. The chorion has imbedded its tufts everywhere in the decidua, and the amniotic cavity is distinctly formed. On account of the size of the aborted ova, the morbid changes are so marked that they are obvious to the most casual inspection, and hence they come to be preserved.

We have no accurate means of knowing the comparative frequency of apoplexy and resulting abortion in ova at an earlier stage than this, because in the first weeks aborted ova have less marked characteristics—they are often passed unobserved, or, if noticed, they are, from their fragility, likely to be torn and injured during expulsion. For both these reasons preserved specimens of this kind are much rarer in the several museums than otherwise they might be.

One of the morbid conditions of the decidua, the presence of which is inferred rather than demonstrated, is congestion.[13] The inference is drawn from the fact that in some ova expelled during abortion the decidual vessels are found gorged with blood, not only on the outer or uterine surface, but in the deeper layers, and no evidence of other pathological change is observable. The women chiefly predisposed to it are the plethoric, those suffering repeatedly or habitually from disorders of the portal circulation, from heart-disease, and also those who, from any other cause, are the subjects of pelvic congestion generally. Hegar noticed the uterus proportionately larger in those prone to congestion and apoplexy of the ovum.

It is believed that congestion of the decidua is a sufficient and adequate cause, irrespective of any other, to produce rupture of its blood-vessels and extravasation into its substance. It depends, of course, upon the amount and extent of the congestion and its consequent results as to whether abortion is provoked and pregnancy comes to an end. If blood is extravasated as the result of congestion, it goes through the same changes and phases as when extravasated from other causes. But there is reason to suppose, also, that hyperæmia, arising from whatever cause it may, apart from extravasation, can have the effect, by the distension and irritation it produces, of bringing on uterine action and thus precipitating abortion. This is the more probable as the whole uterus must partake of the congestion, and be proportionately irritable.

Inflammation of the decidua, taking various forms, has been described by Virchow, Hegar, Schroeder, and Spiegelberg. Slavjansky has described an acute form associated with cholera in pregnant women, and leading to hæmorrhage with the death of the fœtus.[14] These inflammations are, however, generally chronic, and are continuations or extensions of previously existing inflammation in the unimpregnated mucous membrane of the uterus, and three forms have been described as producing different alterations in the decidua.

I. The first, "chronic diffuse endometritis," of authors, produces a thickening or hyperplasia of the uterine mucous membrane, which, when conception occurs, renders it unfit for the reception and growth of the fecundated germ. According to Spiegelberg, the hypertrophy consists in a development of connective tissue, which not only thickens, but indurates the membrane, and extends down to the muscular fibres themselves. The arrangement of the hypertrophied tissues is such as often to give rise to the appearance of cysts, which, however, are probably only the "cups" of Montgomery enlarged. Schroeder regards it as a chronic and diffuse proliferation of the mucous cells, both parietal and reflected. The thickened membrane presents, he says, the large cells of the decidua, united *en masse*. By their proliferation, particularly in the deeper layers, they may produce a cavernous structure, and even form cysts. This alteration, he says, produces death of the embryo and abortion, by the irritation which the inflammation produces on the uterine nerves.

Other cases have been described in which inflammation was still more chronic, and where the nutrition of the germ was not interfered with. Madame Kaschewarowa,[15] a Russian woman doctor, whose researches are sufficiently accredited to find a place in Virchow's *Archives*, alleges that she has found the membranes of a fœtus at term thickened, not only by proliferation of connective tissue and decidual cells, but even by smooth muscular fibres of new formation. Hofe [16] has described other alterations of form, and Schroeder [17] and Spiegelberg [18] both state that there may be proliferation of decidual cells, which is secondary to the death of the fœtus, although, if it begins before, it is apt to deprive it of vitality.

In examining early deciduæ thrown off as the result of early abortion I have repeatedly observed a morbid condition, which differs in its histology from the description just given by Spiegelberg, Schroeder, and others, and which does not seem to have been sufficiently noticed. In this the membrane is distinctly thickened and hypertrophied, and its structure is firmer than normal, while its outer surface exhibits none of these floating filaments seen in comparatively healthy deciduæ, but is more or less nodular, and shows indications of being slowly separated from the uterine walls. Microscopic examination shows that there may be an attempt to increase the cell element peculiar to the decidual structure, and that the cells themselves are more frequently split up than usual and otherwise deformed ; but in addition to the cell element there is besides a copious exudation, which is at first simply amorphous or granular, but soon degenerates into fat. The granular deposit is in much larger proportion than the increase of the cell element or of connective tissue, and it may be free

[10] *Delle Malattie della Pl.*, Memoria, 1871, and Translation by Marcy.
[11] *These Inaug.*, 1868.
[12] *Vide* Ercolani.
[13] See Devilliers, *Rev. Méd.*, 1842.
[14] *Archiv. für Gynäkol.*, 1882.
[15] Virchow's *Archiv.*, 1868.
[16] *Archiv. für Gynäkol.*, 1869.
[17] *Lehrb. der Geb.*
[18] *Lehrb. der Geb.*

from fat in some portions of the membrane, but is elsewhere pervaded with compound granular cells and oil globules. A condition somewhat similar to this has been briefly noticed by Hegar. It is, I believe, the result of a low form of inflammation, and as it degenerates, which it readily does if at all abundant, it involves the decidual cells, fibro-cells, and blood-vessels in the same morbid change. The inflammatory action is probably due to an unhealthy condition of the uterine mucous membranes prior to conception, or to impaired nutrition afterwards from faults in the maternal blood. Had the exudation been less abundant, or endowed with greater vitality, it would probably have been converted into connective tissue as described by the authors named.

The engraving of a hypertrophied decidua given by Duncan at p. 292 of his *Researches on Obstetrics* is probably an example of one of the forms of hyperplasia produced by endometritis, syphilitic or otherwise. The membrane is described as much increased in thickness, its walls thrown into prominent folds or rugæ, and the cavity was very large in comparison with the small size of the embryo attached to the fundal portion; the embryo had evidently ceased to grow soon after conception, while the decidua had gone on vegetating.

Dr. Duncan remarks that fatty degeneration was present in this as in other specimens of hypertrophied decidua which he examined, and I may observe that fatty change is noticeable in all preparations of this kind which have been retained after the death of the embryo. It is often difficult to say whether the fatty degeneration was a primary change arising from faulty conditions of the maternal blood, and which caused the death of the embryo; or whether it was secondary to fœtal death from some other cause. In either case the fatty change, by the friability it produces, loosens the attachments of the decidua to the uterus, and so precipitates abortion.

A variety of this chronic diffuse endometritis constitutes the "adhesive endometritis" of Braun.[19] It takes place in the later months and it then attacks the utero-placental mucous membrane, setting up such irritation that it imperils the life of the fœtus and precipitates premature labour. Strictly speaking the affection may be regarded as a disease affecting the placenta. One of its results is to produce adhesions between the placenta and uterus, and so complicate delivery. Its presence is characterised by the fœtal movements giving pain, and often, besides this, acute pain and tenderness are experienced in the walls of the womb, which some have described as "uterine rheumatism." It may be produced by chills, overwork, etc.; and according to Kaschewarowa, it is one of the results of syphilis, or a pre-existing endometritis.

II. A second form of inflammation affecting the decidua has been described by Virchow[20] under the name of "polypoid endometritis."



Fig. 1.—Polypoid Endometritis. (Virchow.) *a*, fine apertures of the glands; *b*, larger apertures of glands; *c*, protuberences, or polypi.

It would seem to be only a more advanced degree of the inflammatory condition just described, but the mucous membrane is thickened to twice or thrice its ordinary depth, and prominences and projections like polypi protrude from the free internal surface. Where the eminences exist, the uterine gland apertures are obliterated, while they are apparent on other parts of the surface. According to Virchow, the microscopic element which grows here in excess is the interstitial mucous tissue, which increases and proliferates in such wise as to cause the hypertrophy. Spiegelberg, Schroeder, Dohrn, and Gusserow[21], have all verified Virchow's observations with some modifications as to detail in structure. Virchow's case was attributed to syphilis, but there was no proof of this in others. This change is only seen in very young ova, and it always produces an alteration in the chorial villi which may be in contact with it, disturbing and altering their form; and in some cases, as pointed out by Dohrn and Müller[22], causing them to show commencing myxoma. The embryo in nearly all the recorded cases had disappeared.

III. A form of inflammation affecting the decidua has been named "catarrhal endometritis." It is characterised by a persistent discharge from the gravid uterus, which constitutes the "hydrorrhœa" of pregnant women. A woman, generally about the sixth month of pregnancy, loses suddenly and at intervals a quantity of transparent colourless fluid, analogous to ascitic fluid. This is succeeded by a dribbling more or less prolonged and without pain. The pregnancy may go on to term; and the membranes, as a rule, are found intact. The affection has given rise to much discussion, and there is an extended literature on the subject. Naegele has seen it persist for sixteen weeks without interrupting pregnancy.

According to Spiegelberg, Schroeder, Braun, and Hegar,[23] the fluid comes from the cavity of the decidua, which is a secreting membrane even during pregnancy, and hydrorrhœa is only a hyper-secretion of this membrane depending on chronic inflammation of the decidual glands. A great diversity of opinion has, however, been expressed as to the source of this fluid. Tarnier and Budin, besides the decidual form, speak of an "amniotic hydrorrhœa," which occurs as the result of perforations of the amniotic sac far up in the uterine cavity, and, on account of the position of the aperture, do not necessarily precipitate labour.

A drawing of a portion of the amnion, with such perforation, is given in their conjoint work on *Midwifery*. It is a somewhat rare

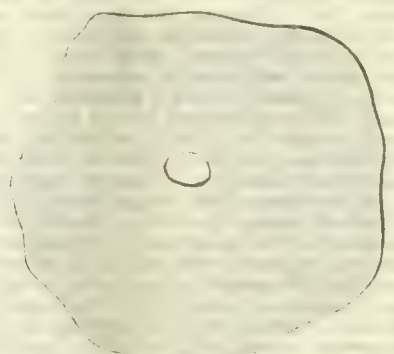


Fig. 2.—Aperture in the bag of membranes found in the upper part of the sac, distant from the usual seat of rupture. (Tarnier and Budin.)

condition, only seventy cases having been collected in the most recent essay on the subject. It is only under exceptional circumstances that simple hydrorrhœa compromises the course of pregnancy; most women affected by it go to the full period. I need not, therefore, dwell further on the subject. Those interested may be referred to the *Thesis* of M. Stapper,[24] and to the *Traité des Accouchements* by Tarnier and Budin, which contains the last and most able exposition of this topic.

A form of catarrhal endometritis I have sometimes met with in early pregnancy, and attended with sero-sanguineous or dark grumous discharges, is more formidable so far as pregnancy is concerned. Its persistence generally indicates chronic disease going on in the fœtal envelopes—of the decidua more especially—and it commonly ends in abortion. There is usually, in such cases, some antecedent history either of injury or of endometritis existing before the advent of pregnancy.

Some of the so-called "moles" consist of the decidua altered and distorted by one of the morbid processes I have just de-

[19] *Gesammt. Gyn.*, 1881.
[20] Virch. *Arch.*, 1861 and 1865.
[21] *Mon. für Geburt*, 1866.
[22] *Bau der Molen*, 1867.
[23] Hegar, *Monatsschr. für Geburt.*, 1863.
[24] *Vide* Charpentier, *Tr. des Acc.*

scribed. A "carneous mole" is so termed because it looks like a fleshy mass expelled from the uterus, and it usually consists of the morbidly thickened decidua which forms the outer covering; and the contents are either laminæ of blood-clot arranged like the layers of an aneurysm, or such remains of the disorganised embryo and its special membranes as have escaped entire destruction. Most frequently, in the case of carneous moles, no trace of the embryo can be discovered.

[*To be continued.*]

ABSTRACT OF LECTURES
ON
THE ACTION OF NERVE-CENTRES AND MODES OF GROWTH.

Delivered at the Royal College of Surgeons of England.

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Lecture III.—The Study of Pathology.

In studying any fact in physiology or pathology, as in studying any scientific problem, we must first describe it in exact physical terms, such as connote what may be observed. In giving descriptions for scientific purposes, it is advisable to avoid using metaphysical terms, as also to avoid speaking of pathological states as special entities. Let us, then, seek to describe pathological states in terms connoting facts capable of observation. The work in hand is divided into two parts:—to describe facts; and to seek their explanation in the antecedents and sequents of these facts. The importance of pabulum and its supply in bringing about pathological processes has often been insisted on; I would insist on the equal importance of the forces or stimuli incident to the subject observed as necessary factors in determining the action in it. There are two great classes in pathological facts—those indicated by movements conveniently called kinetic; those indicated by acts of growth called trophic. The results of movements are postures which may be represented by casts or drawings; the results of growth, normal or abnormal, may be preserved in the museum. If the pathological fact to be studied is kinetic, either active or in a state of equilibrium, we analyse it as we analysed movements and postures; and it will then be found that in many cases, both healthy and pathological, characters often depend upon the antecedents, upon the surroundings, or upon the sequents, rather than upon the intrinsic attributes of the action. Similar relations between normal and abnormal acts of growth will be demonstrated. There is a very prevalent and apparently well-founded opinion among biologists and pathologists that the modes of action termed reversion are potent factors in the production of many of the conditions termed pathological. This idea has principally guided investigation concerning the action of the nervous system, and the origin of morbid growths. I shall not attempt to prove any view, but put forward an hypothesis for the purpose of illustrating what I believe to be the advantages derived from the definite observation and study of movements. The theory may be advanced that "chorea is a condition of the brain analogous to that found in healthy infancy, such brain-state occurring at a period of life when the face, generated by nutrition, is greater than in infancy." A reversion has been defined as a repetition of a series of movements or trophic acts, similar to a series previously existent; the criteria indicating similarity have also been defined. The child can never again become an infant, but it may became "infant-like;" its body is heavier and larger than that of an infant, its quantity of nutrition and movement are greater. In chorea the reversion is indicated by a repetition of the ratio of the attributes of the infantile state; the ratio of kinesis to weight is repeated, it is infant-like in the ratio of kinesis to trophic action.

The nerve-centres are observed at two periods of life, infancy and childhood. Comparison is made as to the quantities and time of their action. Observation shows the combination of movements in the infant and in the choreic child to be similar. There is said to be similarity as to the parts and their order of acting. The quantity of movement depends upon brain-nutrition. The total quantity of brain-nutrition may roughly be estimated by the weight of the body; say 15 lbs. in the infant, and 45 lbs. in the child. The nutrition in the child is three times as great as in the infant. If the ratio of kinesis and nutrition were maintained during development, there would be three times as much movement in the child as in the infant. I believe this is not usually the case; but, as development advances, kinetic action is lessened in its ratio to other functions. We say that in health the ratio of kinetic action to nutrition lessens as growth proceeds; if this ratio reverts to that of infancy, there will be an amount of movement altogether abnormal. It seems to me that this reversion to the infantile ratio between nutrition and movement is what we observe in chorea. Lessened nutrition tends to produce reversion. In chorea the weight falls, and the condition is not removed till it is restored to near the normal. Mitral regurgitation tends to produce irregular supply to the brain.

Coma may be described in terms of lessened movements and reflexes. All movements may be absent, except those of organic life. The head is not turned towards a source of light or sound; the word of command and pressure on the chin are not followed by protrusion of the tongue; there may be subsultus tendinum. The arm, held passively free, falls into the posture of the feeble hand. (See *Physical Expression: (International Scientific Series)* chap. ix.)

Further illustration was given by a comparative study of hemiplegia and hemispasm; the nerve-muscular area is the same in each. The decrease of quantity of motion in hemiplegia is proportional to its increase in hemispasm in the small and large parts respectively. Fatigue and exhaustion of the brain muscular power on both sides are common. If, however, one side of the body or one limb be powerless, there being no evidence of organic disease, then the state is often called hysteria. It appears, then, that a bilateral diminution of nerve-force of short duration is less pathological than a one-sided weakness.

In observing patients as to their movements and postures, note the action of small muscles; for example, interossei causing lateral movements of fingers, as distinguished from flexor movements produced by larger muscles. Asymmetry of action was then dwelt upon; it was suggested that lateral curvature of the spine often commences there. A nervous child was described. Let the child stand up, and observe it: the conditions of growth, make of skin, the form of the features; he is often too tall and too thin, the legs being less emaciated than the body. Let the hands be held out, the left upper extremity is usually at a lower level, the nervous hand posture is probably seen on either side, perhaps more marked on the left. There may be finger-twitching, with flexor or lateral movements; the spine is arched too forward in the lumbar region, often with slight lateral curvature. The face, as a whole, is usually too immobile, but there may be twitchings of the face, eyes, tongue, etc.; the head is often flexed, with inclination and rotation towards the same side. The teeth are often ground.

It has been demonstrated that ratios of growth have much to do with the character and results of acts of growth; we are thus led to seek examples where the pathological character of growth is due to ratios of action. We saw that many forces can regulate proportional growth; they will be seen in some cases as the antecedents of pathological process.

Hypertrophy or overgrowth may be due to an extra supply of blood, as seen in Hunter's specimen of a spur transplanted into the comb of a cock. Growth may be lessened by pressure, as in a Chinese foot, and in atrophy resulting from pressure. Hypertrophy may result from pressure, as in the large heart accompanying arterio-capillary fibrosis. The leaf-stalk of *solanum jasminoides* becomes thickened by pressure when it has twined round a support.

Nerve-force may regulate the quality of growth. In anterior poliomyelitis, the muscles waste; occasionally in hemiplegia the paralysed limb remains shorter in a child.

It has been said that atrophy follows disuse of parts, and that hypertrophy results when they are much used. It was argued that muscles often become atrophied when they receive too little stimulus of nerve-force; and that, when strongly stimulated by incident nerve-currents, their growth is increased thereby. Cases and examples were given in support of this view. It is necessary to inquire, in this place, what is meant by the "use and disuse of parts?" The phrase is usually applied to voluntary action, which is followed by increased growth; lessened growth follows from lessened stimulation by the nerve-centres in disease. In anterior polio-myelitis, the muscles waste becaus not stimulated; in hysterical palsy they do not waste, because nerve-currents do reach them, though not in quantity sufficient for motion. Certain crustaceans from the Mammoth Cave were shown, whose eyes had been lost from their long residence in darkness; other members of the species living in light had perfect eyes. What is called voluntary action appears to produce more growth than chorea, athetosis, etc.; it is probable that in the former cases stimulation is greater.

We may next proceed to demonstrate that many unusual or pathological cases of growth may be due to the ratios or quantities of growth. In the signs of old age we see altered proportional growth; these first mentioned are almost normal to the time of life, the latter are clearly pathological, as tending to destroy the life of the individual. At the approach of old age we see diminished growth; atrophy of the hair, of the scalp, the skin, the muscles, and the heart; while fat may either be absorbed or accumulated about the abdomen, etc. At the same time, increased quantities of growth may occur in the prostate, and in the hair bulbs of the chin of the female; while, in some cases, overgrowth is further seen in the development of epithelioma, sarcoma, and cancer. Examples were then given, showing the results of varying ratios in the growth of different tissues.

Passing on to consider the causes of curvature in ricketty bones, it was suggested that some are produced by mechanical strain, while others are due to unequal bilateral growth of the shafts. Curves which are only exaggerations of the natural curves, and which are symmetrical, are probably due to unequal bilateral growth, such are seen in children who have never walked, and whose muscles are feeble; further, in such cases the skull is often defective in form, being a bony growth, but slightly acted on by muscles at the part most misshapen. It was shown that Glisson put forward very similar views, and facts concerning the growth of stems of plants were used as illustrations of the hypothesis.

Defects in proportional growth are often seen in teratological specimens. Various specimens were shown in support of this statement; in some cases there was a history of inheritance of the deformity. It was argued that inheritance was rather that of a stimulus to nutrition than of the pabulum, while the case of an hypertrophied kidney when its fellow had been destroyed by calculus, was an example of attendant proportion of growth from over-supply of blood. Cases of coincident deformities were given, and it was shown that often the brain is likewise defective.

Analogies may be made as to the distribution or seat of the parts affected by a pathological process. Many skin-diseases are maculated; affecting small loci of tissue, symmetrically or asymmetrically distributed, among young infants; in the spontaneous movements of many small parts we have evidence that separate scattered loci of brain-tissue are in action. Some processes are considered pathological when asymmetrical, but not so when symmetrically distributed; sunburn is normal, freckles less so, one-sided pigmentation abnormal.

Time is an attribute of growths that may give them an abnormal character, as late or irregular dentition, development of pubic hair before adolescence, premature ossification of the skull, etc. These various considerations lead us to study the forces which control the time, quantity, and kind of growth; for example, the effects of light, pressure, or mechanical irritation, etc. Many examples were given. In conclusion it was shown that motor actions may be described in terms of time and quantity of movements, and growth in terms of time, quantity and kind of action in the component parts; and evidence was advanced that these attributes, which give special characters, may be controlled by physical forces.

M. PASTEUR'S TREATMENT OF HYDROPHOBIA.

By DR. A. LUTAUD,

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Medical men have all been acquainted with the discussions that have arisen during the year 1886 concerning hydrophobia, and it has, moreover, excited great interest among the public generally. It cannot be denied that the wonders published by the great chemist of the École Normale have created much enthusiasm, and that, after the announcement of Meister's cure, a fantastic number of supposed rabid individuals flocked to M. Pasteur's laboratory. Up to this day over 3,000 persons have been under the celebrated treatment. But it must be admitted that if the public at large took a frantic fancy to the new method, in many instances medical men were more reserved in their opinions. Some even went so far as to say that M. Pasteur's treatment contradicted pathological and clinical truths; that the patients inoculated at the École Normale were in no danger of hydrophobia, etc., etc.

In the *Journal de Médecine de Paris* I have for my part fought energetically against such crying misleadings, placing myself on a clinical as well as theoretical ground. But time only could definitely settle opinions. Fifteen months have now passed since the world-famous lecture at the Académie des Sciences, on October 25th, 1885, was delivered, in which MM. Pasteur and Vulpian proclaimed that the new treatment was a sure preventive of hydrophobia. As the laboratory of the Rue d'Ulm has been, correctly or not, accused of being silent touching unfavourable facts, it may be of interest to your readers to set the matter in its real light. It is known that, despite M. Pasteur's treatment, a considerable number of persons have died from hydrophobia in 1886. The fact cannot be denied.

In the following table the exact list of persons who died in 1886, after having been treated by M. Pasteur, is given. It only contains the French patients. Many foreigners have also died, as is well known; among them three of the few that came over from England.

In the above statement it is to be observed that nine patients have lately died without presenting the generally known symptoms of hydrophobia; they suffered from paralysis, and it was the points where they had been inoculated, and not those where they had been bitten, that were painful. The symptoms were very much like what is observed in the animals inoculated by M. Pasteur with his artificial virus.

The following observations, made by Professor Germe, of Arras, and communicated to the Academy of Medicine of Paris by Professor Peter, can be considered as typical for the nine cases of paralytic hydrophobia noted in December and January.

L. N., aged 42, a basket-maker, was travelling in the country with a little cart, under which a dog was tied, on November 12th, 1886, near Avesmes le Comte; he let his dog loose, and was immediately bitten on the right leg. He seized the dog, tied him up, and killed him. The dog had never ceased taking food. The *post-mortem* examination of the dog was made at Arras by a veterinary surgeon, who stated that he could find no symptoms proving that the dog was rabid. The corpse was sent to M. Pasteur, and the family is still waiting to know if the dog was rabid or not. N. remained eleven days at M. Pasteur's laboratory, during which he received twenty-two inoculations, to the number of even three in one day. After each inoculation he complained of giddiness, felt sick, and vomited. On his return to Arras, on November 29th, nothing remarkable was observed except increase of appetite, which had also been the case while staying in Paris. During the night of December 10th-11th, intense pain was felt in the parts of the body pricked by the inoculations, the pains rapidly invading the spine, and continuing until the last moment. The patient was restless, and said that he was suffering like after the inoculations in Paris, and was sure he would die. A physician who was called in supposed first that N. was suffering from lumbago, and, later on, from inflammation of the spine. The above symptoms were followed by great difficulty in breathing, salivation, convulsions of the muscles of the face, arms, and thorax; the patient had nightmares, was restless, and sweated profusely; but there were no general convulsions or hydrophobia. He could swallow easily, except on the last two days of his life. On the 14th two physicians were called in consultation, and they were in doubt as to whether it was an inflammation of the spine or the result of the inoculations. Paralysis set in soon after; the sight got weaker and weaker, till it was completely lost; breathing became more and more difficult, and saliva issued abundantly from the sides of the mouth. At last the patient died on December 17th, at 11 P.M.

Although the symptom of hydrophobia was absent, I am of opinion that N.'s death was due to hydrophobia. Considering that the pain was not felt in the parts bitten, nor along the nerves of the leg, but at the points of inoculation, also along the nerves placed between these points and the spine—pains of which the patient never ceased to complain from the first day to the last—it may be allowed to say, without going too far on such a delicate subject, that the unfortunate man N., whose destiny it was perhaps to die sooner or later from hydrophobia, began by dying of *rabbit-derived* hydrophobia.

The other cases of paralytic hydrophobia being very similar to the above case, it would be useless to enter into more details.

But the question now presented itself under quite a new light. Pasteur's method was formerly considered as useless and without any efficacy: must it now be accused of being actually harmful?

Professor Peter, who had silently observed the facts as they occurred during a whole year, thought it was time to take part in the discussion. At the sittings of the Academy of Sciences held on January 11th and 18th, he gave an account of several cases of paralytic hydrophobia, and came to the following conclusions:

1. Has the death-rate from hydrophobia been lowered in France during the year 1886 by Pasteur's method? Answer: No.

2. Does the death-rate tend to rise on account of the intensive method? Answer: Yes.

Then, addressing Professor Vulpian, Dr. Peter continued: "How is it that you, a medical man, did not see that the case of Meister was not a convincing proof, one case having in therapeutics no significance whatever? Could not the child Meister have five chances out

Table giving the Mortality among the French Patients treated in M. Pasteur's Laboratory in 1886.

No.	Name.	Age.	Part of Body bitten.	Date of Bites.	Dates of Treatment.	Description of Treatment.	Date of Death.	Cauterised or not.	Animal.	Observations.
1	Videau, Matthieu	3	Forehead	Feb. 24	Feb. 27—March 7	Spinal cords of 14 to 5 days.	Sept. 24, 1886	Not	Dog	Slightly bitten. Incubation remarkably long. Convulsive hydrophobia. Incubation, 200 days.
2	Lagut, Elvina ..	11	Inferior lip	May 18	May 24—June 2	Spinal cord of 14 to 5 days.	June 17 ,,	Not	Dog	Convulsive hydrophobia, canine.
3	Bouvier, Marius ..	40	Hand	April	——	——	July 21 ,,	Not	Cat	Convulsive hydrophobia. M. Pasteur's supporters say that it was a case of delirium tremens. Incubation long.
4	Cledière, Emile ..	21 mths.	,,	June 17	June 21—June 30	——	Aug. 17 ,,	Not	Dog	——
5	Peytel, Henri ..	6	,,	,, 28	June 30—July 9	——	July 16 ,,	Not	,,	Canine hydrophobia. Incubation, 18 days.
6	Leduc, Zelie ..	70	,,	July 14	July 18 to 25	——	Sept. 10 ,,	Not	,,	Convulsive hydrophobia. Incubation, 50 days.
7	Magneron, Norbert	18	,,	,, 25	August 1 to 7	——	Oct. 16 ,,	Cauterised 3 days after.	,,	Convulsive hydrophobia. Incubation, 81 days.
8	Moerman, Alfred ..	40	,,	June 28	August 11 to 21	——	Sept. 7 ,,	—	,,	Convulsive hydrophobia.
9	Christin . ..	12	Forehead	June	July 1 to 10	——	July 17 ,,	Not	,,	The laboratory says the child died from meningitis; but the *post-mortem* examination, made at the hospital at Evian, goes against that opinion. The child died of hydrophobia after having been bitten.
10	Moulis, André ..	6	Forearm	July 31	August 6 to 12	Spinal cords of 14 to 5 days.	Sept. 8 ,,	Cauterised	,,	——
11	Grand, Louis ..	41	Hand	Sept. 5	Sept. 14 to 28	——	Sept. 8 ,,	Cauterised	,,	——
12	Duresset, Edouard	—	Leg	August	September	——	End of Sept.	?	,,	The death, which happened one month after the inoculations, is said to have been due to pneumonia. The patient was treated by Dr. Yot, at Versailles.
13	Astier, Justin ..	2	Both cheeks	August 4	August 5 to 21	——	Sept. 16 ,,	Cauterised	,,	——
14	Jansen, Louis ..	47	Legs and fists.	,, 18	Aug. 21 to Sept. 3	——	Dec. 31 ,,	Not	,,	Convulsive hydrophobia. Incubation, 146 days.
15	Clergot, Eugène ..	27	Forearm	,, 7	August 11 to 23	——	Oct. 24 ,,	Not	,,	——
16	Lodini, Bernard ..	46	Leg	Oct. 12	October 21 to 31	New treatment, described on Nov. 2, 1886.	Nov. 24 ,,	Not	,,	Paralytic hydrophobia. Pain at the points injected.
17	Leteng, Etienne ..	59	Foot bitten through slipper.	Nov. 3	November 8 to 20	——	Dec. 8 ,,	Not	,,	Paralytic hydrophobia. Pain at points injected, not at part bitten.
18	Née, Leopold ..	42	Leg bitten through trousers	,, 21	November 17 to 26	——	Dec. 17 ,,	Not	,,	Ditto.
19	Gerard, Amédée ..	28	Hand	Dec. 1	December 3 to 13	——	Jan. 3, 1887	Not	,,	Ditto.
20	Reveillac, Louis ..	25	,,	—	—	——	—	Not	,,	Ditto.
21	Rouyer, Arthur ..	12	,,	Oct. 20	Oct. 25 to Nov. 5	——	Nov. 26, 1886	Not	,,	Ditto. (According to M. Brouardel, a case of uræmia.)
22	Goriot, Paul ..	12	Forefinger	Sept.	End of December	——	Jan. 14, 1887	Not	Cat	Ditto.
23	Fou up	30	Hand	Dec. 1	December 12 to 22	——	Jan. 24 ,,	Not	Dog	Ditto.
24	Alphand	42	,,	,, 13	Dec. 20 to Jan. 1	——	Jan. 20 ,,	Not	,,	Ditto.
25	Bergé	40	,,	Sept.	September 12 to 24	——	Jan. 28 ,,	Not	,,	Ditto.

of six, as we all have, of escaping hydrophobia after bites from rabid animals? How could you, a physician, conclude so rashly? How could you imprudently advise M. Pasteur to follow so dangerous a path? How could you, a physician, express yourself as you did when you said: 'Hydrophobia, that terrible malady, against which all remedies have until now failed, has found a cure. M. Pasteur has devised a treatment by which it is possible *with certainty* to prevent hydrophobia from attacking a person bitten by a rabid animal. I say *with certainty*, from what I have seen in M. Pasteur's laboratory, because I have no doubt success will be unfailing when the treatment is carried out thoroughly a few days after the rabid bite.' How could you, by such inconsiderate words, run the risk of compromising the Institute, M. Pasteur, and yourself?"

M. Vulpian replied at the Institute on January 24th, and gave the statistical statements, which the Institute immediately sent out all over France. He said: "We have inoculated 3,000 persons: the death-rate from rabid bites was formerly 160 per 1,000. Without M. Pasteur, then, 320 persons would have died in 1886 from hydrophobia; as only 22 died, we have saved 300 lives."

The arithmetic seems correct; but what is no less evident is that, by M. Pasteur's novelty, the number of persons attacked by hydrophobia is suddenly increased to an extraordinary extent. It must be ascertained how many deaths occurred before M. Pasteur. If the number in 1886 is as high as it was before, it follows that the new treatment is without effect.

What was the death-rate before 1885? An eminent professor, Tardieu, found 25 deaths annually during a period of thirteen years. Professor Brouardel lately, during a period of twenty-three years, has found 30 cases yearly. Tardieu said that nearly all the departments answered his circular. M. Brouardel states that only two-thirds gave him the information he required. Admitting this statement, if 30 is the number of deaths for two-thirds of the departments, 45 will be the number for the whole of France.

Now, in 1886, 39 deaths have occurred. Where, then, are the advantages of the new method?

With regard to the terrible charge brought against M. Pasteur by M. Peter of causing paralytic hydrophobia by his inoculations, M. Vulpian says that the disease is not so rare as is generally believed, and M. Brouardel has recalled one instance spoken of by Van Swieten.

Meanwhile, until M. Vulpian's assertions as to the infallibility of Pasteur's method are confirmed by new facts, I advise my professional brethren to keep to the old method of cauterising the wounds. The statistical accounts prove that out of the 25 fatal cases of hydrophobia in 1886, 3 only had been previously cauterised. This neglect arises from the blind faith in M. Pasteur's treatment which is at present so prevalent.

I may add that nine persons have died during the last two months with strange symptoms of paralysis (paralytic hydrophobia) after having been submitted to the new intensive method. These facts are perfectly conclusive. If M. Pasteur cures hydrophobia, the cure is not a certainty as affirmed by M. Vulpian, and the new intensive method is far from being harmless.

PRESENTATION.—At a public meeting at St. Etienne, France, on March 13th, Dr. Hastings Burroughs was presented with a gold watch in recognition of his services to the McAll French Medical Mission, a branch of which is established in that city.

ON SOME ELEMENTS OF SUCCESS IN EXCISION OF THE KNEE-JOINT.[1]

By WILLIAM THORNLEY STOKER, F.R.C.S.I.,
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THE surgery of to-day is a science of great principles, but an art of small details. In view of the latter part of this postulate, I think it not without interest to relate a few of the practical conclusions I have come to with regard to certain methods to be followed in excision of the knee-joint, which, although small in themselves, help to greater ends. I do not purpose going into the subject generally, but stating some opinions I have formed as a result of my own practice, and my observation of that of others. It is manifestly of interest that surgeons should state their views broadly; we have too much in our current literature of details of cases, and too little of the general ideas arrived at by men of experience. My strong sense of the value of communications of this class is my reason for wishing to state the conclusions I have formed on two or three points connected with excision of the knee, for my operative material has been at least sufficiently large and extended to justify me in putting forward what it has taught me. Besides, in a city so well supplied with hospitals as Dublin, and where they are so close together, surgeons see an amount of the practice of each other which magnifies their opportunities.

While I would not say a word to disparage the operation of knee-excision in suitable cases, I think its results have been too favourably stated, and that many instances recorded early in their history as ones of cure have later on shown a return of disease. In Ireland our experience should naturally be less favourable, as the bulk of our cases occur among tuberculous subjects. Age has been over-estimated as an influence for good or evil in this operation. Two of the best results I have had in my own practice were in patients who were aged 5 and 39 years respectively. The first, a scrofulous subject operated on more than a year ago, is in active health, and able to walk with any ordinary child of her age; the second, a farmer whose right knee I excised seven years ago when he was dying of pain and hectic, leads an active life, and can walk vigorously all day long. It is not correct to teach that removal of an entire epiphysis from a young bone of necessity involves a short limb. The child above referred to had such extensive disease that the entire epiphysis of her femur was removed, but only the upper surface of that of the tibia. She has grown rapidly since the operation, but the limb on which I operated is not an eighth of an inch shorter than its fellow. Nature is a bountiful mother, and a compensatory growth often takes place in those epiphyses which are not removed, so as to preserve activity and symmetry. The immature human being seems to have certain qualities of free and exceptional growth, which are perhaps an approach to the conditions of those lower creatures to whom the human embryo is related more closely than the developed adult.

Given a case of disease of the knee-joint well selected for operation, there are three factors of superlative importance in its prospect of success—

1. Complete removal of all diseased structures.
2. Relative permanence of dressings.
3. Thorough fixation of parts.

1. As regards the first of these I agree with Professor Humphry that prolonged scrofulous suppuration is the most common cause of failure in this operation. It is of paramount importance to remove thoroughly not only diseased bone, but any soft structures which are engaged. The tissue which is at once the most rich in tubercular foci, and the most difficult to remove owing to its complex involutions, is the synovial membrane. I have latterly made it a general practice to divide the flap in the middle line as high as the synovial pouch extends, and to make a careful dissection of the exposed membrane. This is an extremely tedious and troublesome proceeding, requiring the use of the scissors and of Volkmann's spoon as well as the knife. Of late my knee-excisions occupy from an hour and a half to two hours, but surgeons who follow this practice will find their trouble rewarded by their results. I feel that some emphasis should be laid on this point, because it is not always sufficiently attended to; and no better proof of this can be found than the comparatively short period usually occupied by an operation which, in cases where the synovial membrane is much diseased, demands a special expenditure of time.

2. To the relative permanence of the dressings employed, too much importance cannot be attached. To change a dressing soon or frequently means distress to the patient, want of rest to the part, and a greater risk of septic troubles. The thermometer, aiding the educated eye and hand, will tell the surgeon when he must unseal his dressings. In all my late cases, I have found it possible to keep the initial dressing on for from two to three weeks, and have once found the wound completely healed on its removal. The first essential to securing permanence in dressing is that the wound should be absolutely dry and free from all oozing. With a view to the better attainment of this end I have relinquished the use of Esmarch's bandage, which we formerly employed in the Richmond Hospital in most cases of excision of joints. I use no tourniquet; each vessel is secured by a catch-forceps, and tied as soon as possible. The hæmorrhage is extremely small, and, independent of the disappearance of the subsequent bleeding which follows the use of Esmarch's bandage; no matter how skilfully applied, there is less actual loss of blood than when it has been employed. The method of dressing I have found most advantageous has been used in conjunction with such usual strict antiseptic aids as I need not detail, and is as follows:—The wound having been closed, the knee is carefully and evenly bandaged with carbolised gauze or sublimated muslin rollers, which keep the parts evenly and gently supported for some inches above and below the seat of operation. The knee is then enclosed in a thick covering of iodoform cotton, evenly applied with a bandage, so as to give uniform and elastic support. The entire limb is bandaged with flannel rollers, one being applied below the dressings, and a second above them; the splints are then applied.

3. Thorough fixation of the parts is a problem the difficulty of solving which is shown by the variety of splints and methods of suturing the bones which have been proposed. The splints I have used of late years are those of Mr. Patrick Heron Watson, as modified by my colleague, Mr. Thomson—that is to say, they are made of hoop-iron instead of cylindrical metal. When so constructed they can be used without cross-pieces, and are not likely to slip to the side. The bridges opposite the knee afford every facility for changing the dressings without disturbing the splints. The use of plaster-of-Paris as a means of applying the splints I have abandoned; it is likely to get defiled by discharge, if there be any, or by excreta in children, it soon becomes loose, and its removal causes great pain and disturbance to the patient. If the splints are applied with flannel bandages they can be removed without inconvenience, particularly when the bones have been secured by the method presently to be detailed. No splint will, however, give by itself anything like perfect fixation to the divided ends of the bones, and all recorded means of suturing them which I have seen tried have been either defective or actually injurious. In considering this difficulty, I devised a plan of securing the tibia and femur to each other, which I first put into practice on March 3rd, 1886, and which meets the want. I showed a dry preparation to illustrate the method, and a patient in whose case it had been used, at the Academy of Medicine on May 21st, 1886. I also brought the treatment and the result of its application before the Dublin Biological Club on October 16th, 1886, when my friend, Professor Bennett, suggested the application of the term "dowelling" to the procedure—a good explanatory name, and one which I have adopted.

The old saying, that there is nothing new, is borne out in this case, for in the JOURNAL of February 12th of the present year Mr. Morrant Baker records a method of securing the bones, which resembles mine so closely that I might be supposed to have taken the idea from him, as he has used his plan since 1872. It was, however, not derived from the practice of any other surgeon; and, as it differs somewhat from his, and has given most satisfactory results, it may be worth description.

When the wound is ready to be closed, having punctured the skin on each side of the tubercle of the tibia with a tenotome, I insert a steel awl into the bone at each of these points. The instrument is made to enter the tibia in a direction upwards, backwards, and outwards from the middle line of the limb. It is only pushed into the bone for about three-quarters of an inch, so as to penetrate its compact covering, and give the proper direction to the silver dowels afterwards used. A silver wire, a shade larger in diameter than the awl, having its end filed to a chisel-shaped edge, is then pushed into each perforation, and, the femur being held in good relation with the tibia, is made to penetrate the upper bone as far backwards as the compact covering of its popliteal surface. The dowels may be either made to diverge or approximate as they pass upwards. The former direction is best, as they will, when so introduced, give greater fixity and freedom from rotatory motion than when crossed, as directed by Mr. Morrant Baker. They should not be parallel, as they then offer little resistance to vertical displacement. In the case of very young children, one dowel introduced in the middle

[1] Read before the Surgical Section, Academy of Medicine, Ireland, March 18th, 1887.

line below the tubercle, and directed upwards and backwards, will be found sufficient. It is important that the dowels should be a little larger than the awl, so as to fit tightly. The size most suitable is No. 14 Birmingham wire-gauge, that is, about the calibre of a French No. 7 bougie. The soft edge of the silver passes readily through the cancellous tissue, but with difficulty through the compact layer which covers it, and therefore, with a view to avoid entering the popliteal space, silver should be preferred to the steel recommended by Mr. Morrant Baker. It seems to me to be also preferable to the bone pins recommended by Mr. Howard Marsh, more easily introduced, with less injury to the cancellous tissue, and less liable to give way under any sudden strain. The dowels are then cut half an inch from the skin, and their ends included in the dressings. I have usually removed them at the first or second dressing, from two to three weeks after the operation, and generally found the bones firmly united. It is better to use the dowels themselves to bore their way into the bone, once the initial direction has been given by the punctures with the awl, as they fit more tightly, and thus afford greater immobility. They cause no irritation, and the sinuses remaining when they have been withdrawn heal almost immediately. Should these sinuses be found, on larger experience, occasionally to remain open, it would indicate the necessity for bone-drainage, which it seems to me they are capable, under the circumstances, of effecting.

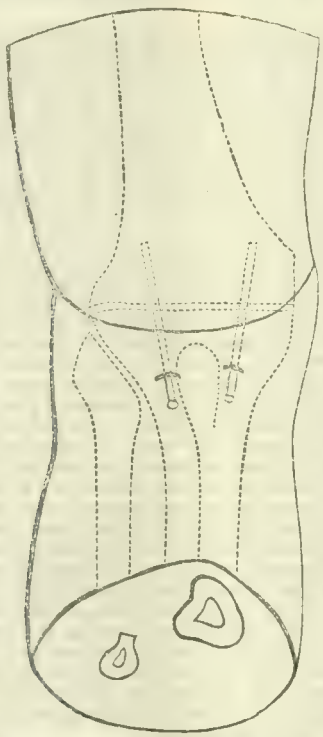


Diagram of front of right knee, to show position of dowels when introduced.

These dowels have been used during the past year not only by myself and my colleagues, Sir William Stokes and Messrs. Corley and Thomson, but by Mr. Franks, of the Adelaide Hospital. They all speak highly of their merits. The fixity of the bones is so complete that the patient is quite free from pain, and does not fear to move the limb or submit it to dressing or manipulation. Those who have seen the pain and terror of examination felt by children after this operation, and the constitutional disturbance due to these causes, will understand the advantage of a method which allows the limb to be moved freely when necessary.

As examples of the advantage of dowels, I may quote three cases in which I have used them.

Case I.—Maggie M., a delicate strumous-looking girl, aged 17, with extensive disease of the bones, cartilages, and synovial membrane of the right knee, and much suppuration about the joint, was operated on in the Richmond Hospital on March 3rd, 1886. The first dressing was on March 17th, when one dowel was removed. The second dressing was a week later, when the second was withdrawn. The part was afterwards dressed occasionally at long intervals, and the patient left the hospital perfectly recovered and able to walk, exactly three months after the operation.

Case II.—Hannah Q., a scrofulous child, aged 5, with enlargement of the epiphyses of most of her bones, and with pulpy disease of the entire synovial membrane of her left knee, and extensive suppuration in the joint, was operated on in the Richmond Hospital on April 5th, 1886. This case recovered without any suppuration, pain, or rise of temperature. It was dressed only twice; the first dressing being fourteen days subsequent to operation. In five weeks from the date of excision the child could walk without pain or assistance, and in a little over six weeks was exhibited at a meeting of the Academy of Medicine, perfectly strong and well.

Case III.—Richard C., aged 10, a delicate boy in a hectic condition, with extensive suppuration and disease of all the hard and soft tissues about his left knee, was operated on in the Richmond Hospital on November 3rd, 1886. The first dressing, when the dowels were removed, was on the sixteenth day. The bones were then firmly attached to each other. He suffered no pain or local inconvenience, but soon developed pulmonary phthisis, from which he died in the February following the operation.

These three cases, all occurring under unfavourable circumstances, both local and constitutional, afford fair examples of the use of silver dowels in fixing the bones. In my own practice I could quote no other group of three such unpromising cases, where the older methods of fixation were employed, where such rapidity of union occurred, and such complete immunity from suffering. These cases are not selected ones; they are the only instances in which I have myself used the dowels, and were taken at random as they offered themselves for treatment. My colleagues, who have all employed the same procedure, can add to the list of its successes.

LICHEN ANNULATUS SERPIGINOSUS (WILSON).

By JAMES NEVINS HYDE, A.M., M.D.,

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On January 8th of the current year there appeared in the Journal a short paper with the title given above, by my friend, Dr. T. Colcott Fox. In it the author briefly describes three cases which came under his observation, and suggests that these represent the disorder termed by American dermatologists "seborrhœa corporis"; and that this was the malady to which the late Sir Erasmus Wilson gave the title, "lichen annulatus (seu circinatus) serpiginosus."

As the subject is both suggestive and interesting, I take occasion to point out a somewhat different view of the disorder, which seems to me indicated by one of these titles. It is proper, however, to begin by admitting very freely that the reproach of dermatology is its bungling nomenclature; and that, in the present instance, it is responsible for a part of the confusion which it is desirable to remove.

The disease which seems to me to be at least included in the description appended by the late Sir Erasmus Wilson to his term lichen annulatus serpiginosus does not correspond with what my American colleagues would generally agree to call seborrhœa corporis; and yet, unless I greatly err, they would be willing to use this latter name as descriptive of the interesting cases described by Dr. Fox.

Now, laying completely aside, for the moment, the several names which have been employed in this connection, let the reader understand, clearly and without reserve of any kind, that there is a particular disease of the skin, *sui generis*, differing from all other cutaneous affections, shading, perhaps, into others at some points, but perfectly distinguishable by an expert in its specific identity, relatively rare of occurrence, and, under different titles, recognised, defined, and limited by a group of authors. This disease is characterised in both sexes, at a relatively early period of life, by a superficial efflorescence, displayed chiefly over the anterior and posterior surfaces of the upper portion of the trunk, less often over the extremities, in the form of multiple, discrete, and at times confluent, definitely circumscribed, ovalish or roundish discs, split-pea to large coin in size. They are slightly elevated, occasionally slightly depressed beyond the general level of the integument; and on careful inspection, these discs are seen to be made up of macules, papules, or maculo-papules, coloured in a faintly rosy, yellowish, tawny, or somewhat darker hue, and covered with typical, scanty, rather adherent,

lightish-shaded, furfuraceous scales of pityriasic type. When these discs coalesce, the composite configuration is the resultant of the outline of the primary disc, which very often is a purely annular lesion with a cleared centre, at times a segment of a ring only.

The subjective sensations are moderate or quite severe pruritus, though it is rare to see the marks of traumatism by scratching upon or about the lesions. With this, there is rarely a slight pyrexia, but more often a distinct malaise, recognised by French authors under their comprehensive term, *courbature*. The disease, beginning with a sudden or gradual onset, seems to have a definite period of evolution and involution, lasting from a few weeks to not more than two or three months. The disease may be expressed in quite numerous multiple lesions over the chest, or in not more than eight to a dozen, of which number one or three may be seen upon the arms or upper thighs, and the rest irregularly scattered over the upper part of the trunk.

I have not been able to recognise the "spores" which Vidal claims to have discovered in these lesions; and, viewing the small number of cases collated, it is judicious to-day to regard the affection as one of uncertain nature. My personal conviction is that it will be one day recognised as a specific exanthem, as distinct as variola or rubeola.

As to the matter of diagnosis, I now believe that, when this subject was first brought to the attention of the American Dermatological Association by my friend and colleague, Dr. Duhring, of Philadelphia, I had not recognised the identity of the disease. Since that date, a careful collation of all the phenomena, coming under my observation in a score of cases, has demonstrated the remarkable similarity of symptoms in all. Touching upon the subject in a late conversation with Dr. Duhring, I found that he agreed with me in believing that a typical case could be recognised by a single glance of the expert at the affected surface, so characteristic is the picture. The latter always particularly impresses me as to three points:

1. A delicate but distinct salmon hue of the discs, difficult to describe in words, but never seen in psoriasic lesions, or those of tinea versicolor or tinea circinata.

2. A decided tendency of the oval-shaped discs to arrange themselves over the trunk, with the long axis at right angles to the vertical axis of the body.

3. Occasionally only, a tendency to fraying of the branny borders of the disc at the line of the contour nearest the poles of the long axis, with a more clean-cut definition of the ring near the poles of the shorter, usually vertically disposed, axis.

Now this disease, of distinct lesions and probably specific character, has been given a number of names by the authors who have made a study of the subject; among the latter may be mentioned Gibert, Bazin, Hardy, Duhring, Horand, Weyl, and Behrend. If Wilson has not included this disease in his descriptions, I am at a loss to name an English author who has made record of his observation of it in person. The names used in this connection are "pityriasis rosea," "pityriasis disseminé," "pityriasis maculata et circinata," "pityriasis rubra," "pityriasis circiné," "pityriasis maculeux," and "pityriasis pseudo-exanthématique."

I am impressed with the conviction that the late Sir Erasmus Wilson observed this disease, and at least included it with others in his description of lichen annulatus serpiginosus, even though his plates do not furnish an accurate portrait of what has been included, in the nomenclature of the American Dermatological Association, as pityriasis maculata et circinata. Wilson stated that the rings in his lichen, for example, were "numerous." This is true of the annular discs I have described above, but it is by no means true of the lesions recognised by Americans as characteristic of seborrhœa corporis. It is within bounds to say that a large number of annular lesions on the chest and back, even if otherwise resembling the patches of seborrhœa recognised upon the body, would by their number alone lead the expert diagnostician to be exceedingly cautious in declaring them to be seborrhœic in character. The lesions of seborrhœa trunci are in fact much more like those described by Dr. Fox as observed by him in his interesting group of cases. Often there are not more than two to six of these ringed patches, seen over the sternum, particularly in adults of both sexes; and, unless I err, more often in those of both sexes with a decided tendency to the growth of sparse long hairs in this region; they are pea to coin sized, dull-reddish, greyish, or dirty yellowish in colour, covered with the characteristic greasy pellicles, more or less closely attached to the underlying integument. When removed with care, the stalactitic prolongations of the crust may be at times discovered on its under surface, resembling the same peculiarities in seborrhœic crusts removed from the face. The greatest possible contrast is therefore presented between the patient having a few of these patches on the front or back of the chest, and another patient, with the front, back, and lateral surfaces of the trunk plentifully sprinkled with the rings and discs of pityriasis maculata et circinata.

Again, in seborrhœa corporis, there is never the "rapid spreading of the rings" to which Sir Erasmus Wilson called attention in his description of lichen annulatus serpiginosus, the process, in the disorder first named, being always chronic in type and slow in evolution. Sir Erasmus also called attention in the malady, or group of maladies, which he termed lichen annulatus serpiginosus, to a "very considerable itching," which is far more true of the pityriasis described above than of any variety of seborrhœa; and, lastly, employed the very phrase to characterise his lichen which should be used of the pityriasic discs I have described above, namely "furfuraceous exfoliation." The pellicle formed in seborrhœa of the trunk is never strictly furfuraceous in character, but breaks up into minute greasy cakes rather than branny scales. Wilson uses the word "mealy" in another connection to describe the character of the exfoliation in the cases under his observation. He mentions further the "yellowish" tint of colour, the "smooth and uniform area rarely presenting any trace of pimples," and the "broken cuticle" at the margin, which I have described above as a species of "fraying."

It is true that the plate portraying Wilson's lichen does not give an accurate picture of pityriasis maculata et circinata. But on this point it should be remembered: 1. That the plates of that date give no very accurate picture of any cutaneous disease, when compared with the artistic excellence of many given to the profession in this day; 2. That very few plates indeed are in such exact correspondence with the features of disease as to serve for their study in the light of a wider knowledge, since both the scientist and the artist have their attention especially attracted to certain definite symptoms which it is purposed at the time to demonstrate in the picture; 3. That it may be reasonably concluded that, if the distinguished author of the great treatise on diseases of the skin were living to-day, he would be willing, in the light of a wider experience and more extended observation, to modify the opinions expressed by him over forty years ago.

In conclusion, then, I beg leave to suggest that Dr. Fox is right in assuming that his cases would be recognized on this side of the Atlantic as instances of seborrhœa corporis; that the lichen annulatus serpiginosus of Wilson may have included cases of that character, but that there is strong ground for believing that the pityriasis maculata et circinata of modern authors was also described by him in the same connection; and, lastly, that at this date it is absolutely essential for the expert in making a differential diagnosis of any annular cutaneous affection of the chest surface, after excluding tinea versicolor, tinea circinata, psoriasis, and the ringed pigmentary syphiloderm, to make a careful distinction between the seborrhœa corporis of the American school and the pityriasis maculata et circinata whose lesions are described above. It would certainly be in the interest of a simpler nomenclature if the word "lichen" were used hereafter only in connection with three relatively rare affections, lichen planus, lichen ruber, and lichen scrofulosorum; keratosis pilaris taking the place of lichen pilaris; the lichen annulatus serpiginosus of Wilson being dropped from its old place in the line. It should stand hereafter as a historical landmark, full of interest to the student who traces the devious path by which science emerges from the mazes of language and gains the broad and open highway of fact.

ABSCESS IN THE BRAIN RESULTING FROM DISEASE OF THE EAR.[1]

By THOMAS BARR, M.D.,

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It is generally admitted that where abscess in the brain is not due to an injury, it depends usually upon some other pre-existing purulent centre, and I shall limit my remarks to that frequent form of abscess in the brain which has its origin in a pre-existing purulent centre in the ear.

What is the situation and what is the nature of the ear-disease in such cases? The situation is almost invariably, in the first case at all events, in the middle ear. Many of the published records mention the internal ear as the source of the mischief. This is a mistake. No doubt the internal ear as well as the external ear is sometimes implicated, but then nearly always secondary to the middle ear affection. The air-filled cavities of the middle ear, especially the tym-

[1] Read before the Medico-Chirurgical Society, Glasgow, in February last, in connection with the discussion on Abscess in the Brain.

panum, the antrum mastoideum, and the mastoid cells, are primarily and essentially the seats of the mischief in the ear. What is the nature of the disease? It is a chronic purulent inflammation in the lining membrane of these cavities.

The acute form of purulent inflammation of the middle ear is very rarely, if ever, the cause of intracranial disease. This chronic inflammation leads to partial destruction of the tympanic membrane, more or less accumulation of decomposing purulent secretion, and frequently to the formation of granulation-tissue or polypi. The long walls of the middle ear are usually sooner or later involved, either by the occurrence of caries or necrosis, or by hyperostotic or sclerotic changes leading to contraction of the normal cavities of the ear, or to the conversion of the mastoid cells into dense osseous tissue of almost ivory consistence. For months or years, or even a lifetime, the sufferers from this disease go about, usually not at all disconcerted, with purulent septic centres in the interior of their temporal bones. This predisposing cause of cerebral abscess is thus constantly with us in the persons of hundreds and thousands of the community. At the Glasgow Ear Hospital alone there are usually 300 to 400 persons who annually present themselves suffering from this affection; but it has been noted by various observers, including myself, that, in addition to this predisposing, there is also usually an exciting cause which provokes the mischief in the brain. An injury such as a blow upon the head or ear, or an irritating influence acting upon the ear, is frequently found to immediately precede the pain in the head or the vomiting which ushers in the graver illness. In nine cases which have come under my own observation, one followed a box on the affected ear, one was due to a blow on the back of the head inflicted with the open hand; in another, the act of diving in the sea, and the consequent rush of cold water into the affected ear, immediately preceded the head-symptoms; in two, the symptoms followed within two or three days of surgical manipulation in the ear, while in the case of the boy who was operated upon by Dr. Macewen, the exciting cause was probably connected with his fondness for "headers" in playing at football. In a certain proportion of such cases there may have been really a cerebral abscess in a latent form, existing perhaps for months or years, manifesting itself by no definite symptoms until the blow or irritation aroused a new and energetic process in the direction of increased formation of pus or of a fresh inflammation in the walls or in the vicinity of the abscess.

What proportion of cases of abscess in the brain depends upon disease of the ear? There is a general consensus of opinion that ear-disease is distinctly the most frequent cause of cerebral abscess. In the synoptical record of seventy-six cases, given by Sir William Gull and Dr. Sutton, in their article on Abscess of the Brain, published in 1872, in Reynolds's *System of Medicine* twenty-seven cases, or rather more than one-third, were consequent upon ear-disease. In Lebert's article in Virchow's *Archiv.* for 1856, vol. x, based upon eighty cases of cerebral abscess, the proportion given is one in four. But in many of the cases not attributed to the ear, given by these authors, the middle ear had not, it was evident, been examined, while in a goodly number the disease was said to have originated in a blow, which may be quite compatible with its real origin in ear-disease. In the article in Reynolds's *System of Medicine*, there are ten, I think, in which no cause is mentioned. We know that up to the time at which these articles were prepared, the hearing organ was very little examined, either in the clinical wards or in the *post-mortem* room. We know also that purulent disease may exist in the middle ear without the knowledge of the friends of the patient, or even of the patient himself. Unless therefore the middle ear had been examined in every one of these cases, we are not in a position to say that these 47 cases in 156 of cerebral abscess give a correct notion of the extent to which ear-disease accounts for cerebral abscess. I am confident that persons die from abscess of the brain, originating in the ear, without the aural origin being known, because the friends of the patient may not be aware of the state of the ear, or may not deem the so-called "running ear" worthy of being mentioned to the medical attendant. Judging from the numerous cases scattered through medical literature and published within the past ten years, during which more close attention has been given to the ear in such cases, and also from the experience of our own hospitals, we are I think justified in attributing fully one half of the cases of abscess in the brain to purulent disease of the ear. As time goes on and as medical men come to use the ear speculum in every case presenting symptoms of cerebral disturbance, the frequency with which ear-disease leads to a fatal issue will be found to be greater than has hitherto been suspected. In looking over the Registrar-General's Annual Reports, I find that the number of deaths in London attributed to otorrhœa, most of which would be due to abscess in the brain, in the year 1882 was eighty-six, and in the eight principal towns of Scotland the number for one year was twenty-six. I think we are entitled to conclude that those numbers, considerable as they are, do not express anything like the real number of victims to this disease who perish annually in London and the eight principal towns in Scotland.

A very important question, especially as bearing upon the operation of trephining the skull in such cases, is as to the most frequent situation of the abscess, and as to the condition of its walls and contents (I speak of course with reference to those originating in the ear). It is unfortunate that in many of the published records these points, especially the state of the walls and contents of the abscess, are not given with that carefulness and minuteness which would have been desirable. In seven cases which came under my own notice, where *post-mortem* examinations were made, the abscess was, in six of them, in the temporo-sphenoidal lobe, above the affected ear. In one of these six there was, in addition, complete occlusion of the lateral sinus, whose walls were converted into a fibrous cord, and there was also a collection of pus in the region of the lateral sinus. In the seventh case the purulent secretion existed between the dura mater and bone, over the posterior surface of the petrous part of the temporal bone. In all my cases the odour from the abscess was extremely fœtid, almost gangrenous, and the pus was generally of a greenish colour. In regard to the condition of the walls of the abscess, there was in three of my cases a distinct limiting membrane, encapsuling the abscess and separating it from the neighbouring brain-tissue. In the others there was no limiting membrane, the neighbouring brain-tissue being soft, broken down, or sloughy. In addition to my own cases I have, in order to gain fuller information especially as to the position of the abscess, gone over the published records of others, in which the abscess in the brain was dependent on ear-disease. The whole included 76 cases, of which the abscess was in the cerebrum, generally described as the middle lobe in 55 cases, or about 73 per cent. of the whole; in the cerebellum, 13; in the cerebrum and cerebellum, 4; in the pons varolii, 2; and in the crus cerebelli in one case. In 9 cases the abscess was said to be encysted, but unfortunately in the greater number there is no information given on this point. As to the condition of the abscess-contents in regard to odour, there is also very little information given in these sixty-nine cases, but when any reference is made to odour, it is described as fœtid. In all, the abscess was on the same side as the ear-disease. Rare cases have, it is well known, been recorded of the abscess being on the opposite side. How is the disease in the middle ear propagated to the interior of the cranium? There are two main directions by which this extension takes place; first, and most frequently, by the roof of the tympanum and antrum mastoideum, to the middle fossa of the cranium, and to the temporo-sphenoidal lobe of the cerebrum above. As shown by the published records of these cases, already mentioned, this is by far the most frequent path by which the disease invades the interior of the cranium. Here the septic purulent focus is separated from the brain above by osseous partition which is never thick, and frequently so thin as to be transparent. It is always perforated with apertures for connective tissue, vessels, and nerves. Gaps are not infrequently found, and at these the dura mater and the mucous membrane of the middle ear are in direct contact, while in childhood a very distinct fissure often exists, through which a process of dura mater, with vessels and nerves, passes down and becomes continuous with the mucous membrane lining the tympanum. By simple continuity and contiguity, therefore, without a carious aperture, the diseased process may readily pass upwards to the dura mater and brain, giving rise to a subdural or a cerebral abscess. I show you here four temporal bones where carious apertures will be seen in this situation in all of them.

The second way, in point of frequency and importance, by which the disease in the middle ear extends to the interior of the cranium, is by the inner wall of the antrum and mastoid cells to the dura mater lining the posterior fossa, and to the cerebellum, giving rise to a subdural collection of matter or a cerebellar abscess, or both. Here we have in the deep concavity of the groove for the lateral sinus only a thin osseous partition separating the walls of the sinus from the mastoid cells. It has also the peculiarities mentioned as belonging to the roof of the middle ear—namely, perforations, and frequently gaps. In two of the specimens shown by me to-night it will be seen that there are carious erosions and perforations; but, without such disease of the bone, simple juxtaposition of the lateral sinus with the ear, in suppurative disease of the latter, is a source of great danger. All surgeons know that phlebitis and thrombosis are very apt to form in the vessels of a tissue which is the seat of purulent inflammation; and is it surprising that phlebitis and thrombosis should be frequently set up in this large venous trunk, so closely contiguous to, and so connected by blood-vessels with, the diseased part? Probably some de-

gree of phlebitis of the lateral sinus is not an infrequent complication of purulent disease of the ear. The mischief is, however, in most cases limited to some thickening of its walls, and to a consequent diminution of its lumen.

In either or both of these situations, therefore, disease of the ear most frequently affects the interior of the cranium; and, while carious apertures are by no means always present there, they are frequently found. They are usually found in the roof of the middle ear when the temporo-sphenoidal lobe is involved, and in the region of the lateral sinus when the cerebellum is the seat of the abscess. In my own cases, five out of seven contained carious apertures; in the other sixty-nine which I have gone over, it is mentioned in twenty-seven cases that caries existed in the petrous or temporal bone, but no precise information is given as to the situation; it was apparent in many of them that this point had not been sufficiently observed. In regard to the mode of extension from the middle-ear to the interior of the cranium, there is no doubt that in some, although not in many, the purulent contents of the middle ear, pent up and hindered by some obstruction from escaping through the outer channels of the ear, burst through a carious aperture or natural foramen, or a gap, into the middle or posterior fossa, burrowing between the dura mater and bone, or, if the dura mater has been previously softened and perforated, making its way into the arachnoid space, or into the tissue of the brain itself. But probably more frequently, even where caries does exist, there is simply a direct transmission, by vessels and lymphatics, of the septic inflammation from the cavities of the middle ear to the dura mater and its sinuses in the first place; and then, by contact, an inflammation of a similar character affects the pia mater and brain. In those cases—which, I think, are not very frequent—where the parts between the brain-abscess and the middle ear seem to be healthy, the propagation probably takes place by the immigration of bacteria from the purulent focus in the ear along the lymphatics surrounding these branches of the internal auditory artery, which anastomose with the vessels of the pia mater, and thus reach the interior of the brain. Multitudes of bacteria have been found in a cerebral abscess a few hours after death. Dr. James Alexander Adams suggests that the bacteria reach the brain through the veins; that, where the lateral sinus is occluded, there is a backward current of venous blood. In this way, it is suggested, bacteria attached to thrombi carried from the ear by the veins which pass into the sinuses of the dura mater find their way into the interior of the brain.

There is no doubt that pus from an abscess in the brain sometimes makes its way into the ear, probably through the roof of the middle ear. In the case in which Dr. Macewen operated there was unquestionably a partial escape of the matter from the brain into the ear for two or three days before the operation, but this was attended by no improvement in the symptoms. Some of the older writers describe an "otorrhœa cerebralis," in which the abscess in the brain was thought to be the primary condition, the discharge from the ear being secondary, and coming directly from the abscess in the brain. The opinion now generally held is that in all such cases the ear-disease is the primary condition and the cause of the brain-abscess. I was very much interested, however, in being informed by Dr. McLeod that he saw a case of cerebral abscess in the frontal lobe due to an injury, and associated with necrosed bone over the seat of the abscess, in which the matter was proved to have made its way along the base of the skull to the roof of the external auditory canal, through which it penetrated, and found exit by the outer orifice of the ear.

Finally, with respect to treatment, the recent cases of Mr. Barker, Professor Greenfield, and Dr. Macewen have inaugurated a new era in the previously hopeless, dismally hopeless, cases of cerebral abscess. Previous to the cases of these gentlemen, I know of only two recorded instances of recovery after opening the skull for cerebral abscess, both due to ear-disease. One was reported by C. Tauckenbrod, of Hamburg, in the *Archives of Otology*, vol. xv, Nos. 2 and 3, 1886. In this case, the mastoid process was opened first, and a quantity of fœtid caseous matter washed out. The opening in the wall of the skull was made by chiselling backwards and upwards for a distance of about three centimètres from the opening in the mastoid. A small rough place was found in the bone, and here a piece was chiselled off, and the dura mater exposed. There was pus between the dura mater and bone; and, on puncturing the brain at this part, a cupful of matter escaped. The abscess-cavity was syringed with a solution of corrosive sublimate. Ultimate recovery took place, and the patient followed his occupation of architect, his only drawback being a certain degree of word-forgetfulness, aphasia having been a striking feature in the symptoms previous to the operation.

The other case was by Dr. Schondorff, described in the *Monatschrift für Ohrenheilkunde*, 1885, No. 2. Here there was a fistular orifice in the skull leading to the brain where the abscess existed. It will be seen that these two cases are different from the recent ones in this important respect—that, in the former, there were affections of the bones of the skull indicating the probable seat of the matter, while in the latter no such indications existed. It is quite clear that, in the future, persons suffering from abscess in the brain, dependent upon ear-disease, should not be left to die as they have been in the past without an effort being made by opening the interior of the cranium to reach and drain the abscess; and an important question—which, perhaps, cannot be settled until further experience has been gained—is, how can the abscess be best reached, and how can it be most efficiently drained?

Speaking of abscess in the temporo-sphenoidal lobe, the most common form, it might be said that if we could penetrate the floor of the middle fossa of the skull through the roof of the middle ear, we would get access to the most dependent part of the abscess in the brain, or to any collection of matter between the bone and the dura mater; such a method would also imitate that by which Nature sometimes attempts to get rid of the matter. This plan has been attempted and it failed.

A case is reported by Dr. Sutphen, of America (*Archives of Otology*, 1884), in which an opening was drilled with a trocar in the roof of the tympanum, and no pus escaped, although after death a large collection was found in the brain above. The great objection to this mode of operating is the difficulty of making and maintaining a sufficiently large opening for the escape of the pus, in such a narrow space as the tympanic cavity, made still more narrow by inflammatory swelling. The plan pursued by Dr. Macewen seems to be the most practicable, namely, to open the skull about two inches above the ear, and, when the abscess is found, to make another opening lower down, nearly on a level with the floor of the middle fossa of the skull. If a current of fluid can be made to pass from the upper to the lower openings, thorough cleansing would be ensured. I am not sure of the desirability of invariably opening into the mastoid cells as preliminary to the larger operation. If a case presented indisputable signs of intracranial mischief, and if there was neither redness, swelling, nor tenderness over the mastoid process, I question the propriety of opening into the latter. No doubt we would often find caseous matter, in examining the cavities of the middle ear after death, in any person who has suffered from chronic suppurative inflammation; although his death may have had no relation thereto, caseous matter would be found. In a person who has possibly meningitis or a cerebral abscess, it is questionable practice to submit the cranium, without a very important reason, to the concussion caused by striking a chisel with a mallet, this having been hitherto regarded as the safest mode of opening the mastoid cells. Again, if the lateral sinus is far forward, which it not infrequently is, great care indeed is required to avoid doing serious injury.

In a temporal bone from a case of cerebral abscess, which occurred in the Ear Hospital in September last, it was seen that only one-twelfth of an inch intervened between that part of the outer surface of the bone where it is recommended that the perforation should be made and the lateral sinus. If an attempt had been made to trephine or drill the bone at this position, there would have been great danger of fatally wounding the lateral sinus.

I may conclude with one remark as to preventive treatment. It is this—that when every member of our profession is sufficiently impressed with the importance of chronic suppurative inflammation of the middle ear, and prepared to efficiently treat this disease in all its stages, the occasion for this operation will probably seldom arise.

CLINICAL MEMORANDA.

CHRONIC VALVULAR DISEASE OF THE HEART.

REFERRING to the cases of chronic valvular disease of the heart, tabulated by Sir A. Clark, I may mention one that came under my observation in India, wherein unconsciousness of the existence of any heart-affection on the part of the individual—a young man in excellent health and much given to active exercise—was followed when he was told of it (he had consulted the surgeon of his station about an attack of "indigestion)," by extreme dejection and visible wasting. He had contemplated emigration, assuring his life, and matrimony. There was a mitral murmur, with a strong and very conspicuous impulse; without irregularity or weakness of the pulse. To encourage the conservative process of hypertrophy is, *cæteris paribus*, in all

cases of heart embarrassment, obviously one of our first duties. An officer of 22, attacked five years previously with rheumatic fever, followed by adherent pericardium, has lived, by following the rules required to promote this condition, to be 63, and he is now well. When yielding in the past to "mess" temptations, and indulging too freely in alcoholic beverages, he in various ways, from time to time, lost ground, and has been treated according to the symptoms of the moment—now for "kidney," now for "stomach," and again for "liver;" the derangements proceeding, essentially, from an embarrassed heart. With them there would be associated increased palpitation, which eventually subsided with the necessary amount of hypertrophy. A weakly lady of 50, with an aortic murmur and anasarca of the lower limbs, lived (after losing, many years previously, all bad symptoms) to be 103. A middle-aged officer of convivial habits, with a mitral murmur, fell down dead when crossing a room. Another, a free spirit drinker (whose heart was in a similar condition), rose from his sofa, feeling "queer," staggered to the table, fell forwards across it, and expired. I have known European and Eurasian loafers in Calcutta—men much addicted to rum—to die suddenly in hospital after but slight exertion. In these fatal cases the ventricles have been much thinned, and the cavities consequently dilated. Where this condition exists (and there is, I believe, no more powerful factor in producing it than alcohol), sudden death may at any time—especially after exertion or strain upon the damaged organ—be expected. The heart fails in propelling power, as in cases of fatty degeneration, where death may ensue (as I have seen) during the cold stage of an attack of intermittent fever. Even in such cases, if the rules for promoting hypertrophy be followed—alcohol being religiously eschewed—comparative health may, under favourable circumstances, be restored, and life be prolonged. The necessary rules may be epitomised thus: 1, rational living; 2, drinking but little; 3, avoiding alcohol, which causes muscular debility and promotes fatty degeneration altogether. Of medicines, strophanthus promises to be the most suitable.

CHAS. R. FRANCIS, M.B.
Brondesbury.

THERAPEUTIC MEMORANDA.

STROPHANTHUS IN CARDIAC DISEASE.

As strophanthus is a comparatively new—and, by many practitioners, an untried—drug, but, at the same time, one having strong claims to be considered an important addition to modern materia medica, it would be of much professional interest if some of those practitioners who have tried it would report their experience of its therapeutic action and value; such publications would, I venture to think, lead to a much more general use of this medicine in cardiac disease, and to a great relief of suffering in many cases.

The fact of its introduction to the notice of the profession, after long and careful investigation as to its nature, by Professor Fraser, of Edinburgh, is a great point in its favour, and entitles it to high consideration as a therapeutic agent. The following is a brief record of the particulars of a case in which I have recently prescribed the drug.

Dr. R., a well-known member of the profession in London, has been for many years the subject of mitral regurgitant disease of the heart, and, during the last few years, a certain amount of œdema of the lower extremities has been developed, which, at the time of his commencing the use of strophanthus, was very considerable, extending to the upper parts of the thighs, scrotum, etc. He had also, during the last few months, been twice aspirated for hydrothorax of the right pleura, on each occasion a large quantity of fluid being withdrawn. He also suffered greatly from very painful and intractable flatulent distension of the abdomen, arising apparently from atonic dyspepsia, which made his life miserable, and necessitated a very restricted diet.

The administration of strophanthus in medium doses of 5 minims of the tincture in half an ounce of water, three times a day, was quickly followed by a marked improvement in his condition. The pulse, which had been for some time 96, and occasionally higher, very feeble and irregular, fell on the second day to 80, and became much fuller, stronger, and comparatively regular. The renal secretion had increased on the third day from about 30 ounces to 80 ounces in the twenty-four hours, and the œdema decreasing *pari passu*, in a few days very little remained. The flatulent distension ceased to trouble him, and no further pleuritic transudation has taken place, while the pulse remains at from 70 to 80, fairly strong, and quite regular. Dr. R. had previously been obliged to discontinue the use of digitalis in consequence of evidences of its cumulative action producing attacks of faintness, so that strophanthus came to his relief as a friend in need, and proved itself in this case a very valuable cardiac tonic and regulator, and a powerful diuretic. He has now taken it steadily for upwards of a month with decided advantage, during which period his strength has been much taxed by an attack of bronchitis, which has considerably retarded his progress, but through which strophanthus has greatly helped him, in fact, in his own opinion, has pulled him through where he would otherwise have succumbed.

In the administration of this drug, it is an important injunction that the tincture, the dose of which is from two to ten drops, should not be diluted except at the time of using. The tabloids which contain two drops each of the tincture are a very convenient and safe form for administration, swallowed whole, with a little water. Both preparations are made by the well-known chemists, Messrs. Burroughs, Wellcome, and Co., Snow Hill, London.

J. HIGHAM HILL, M.D.
2, Bedford Square.

TOXICOLOGICAL MEMORANDA.

A FATAL CASE OF CAMPHOR-POISONING.

SUCH a case seems to be rare, judging by the scarcity of literature on the subject, therefore I venture to send you this case. About 3 P.M. on December 7th, 1886, a message came for me to see a child who had eaten a piece of solid camphor. In my absence, my assistant went at once. He found a female child, aged two years and eight months, in its mother's arms, pale, with blue lips, a very rapid pulse, and having severe convulsions. He irritated the fauces with his finger, which caused vomiting, and an emetic which was administered also caused vomiting. The vomit was partially digested food, smelling strongly of camphor. I soon after saw the case. The child had recovered somewhat from its collapse, but was still having convulsions, and in the intervals was semi-comatose. I obtained a stomach-pump, and washed out the stomach with warm water; the water which came back smelt strongly of camphor. This for a time seemed to check the convulsions, and I left. At 8, I saw the child again, and gave a dose of castor-oil, and ordered three grains of bromide of potassium every three hours. At 10 o'clock the child was no better, and so continued in convulsions all night, and succumbed to them at a quarter to nine on December 8th, eighteen hours after having taken the camphor. The difficulty in treating the case was that the camphor had been taken in a solid form, and its insoluble nature prevented the stomach-pump acting on it in any useful way. I think that the public have no idea of the dangerous nature of the drug, especially to children. It is, as this case proves, fatal in comparatively small doses. The mother said the piece was about as big as a nut (say, half a drachm). Twenty grains have caused serious symptoms in an adult (Taylor).

Bath. RICHARD DAVIES, M.R.C.S., L.R.C.P.

SURGICAL MEMORANDA.

STIFFNESS OF THE GREAT-TOE IN MALE ADOLESCENTS.

I SHOULD be glad to know if any of my fellow-members have met with the following conditions in practice, and, if so, what are the causes, and what treatment (if any) has proved successful?

The cases I have seen occurred in boys soon after puberty. The symptoms complained of are: pain in the metatarso-phalangeal joints of one or both great toes, with inability to dorsi-flex or hyper-extend the toe at the above joint, the attempt being accompanied by pain. They can flex the toe, but cannot bend it upwards, and it remains stiff and fixed in a straight line with the sole. On manipulation of the affected toe or toes, there is pain referred to this joint, and some tenderness in the ball of the toe. No thickening of the joint-ends or apparent hindrance to dorsi-flexion is present, while the other toes are painlessly mobile in both directions.

The patients are generally boys who have a good deal of walking and standing to do, with no history of injury, rheumatism, or gout. An examination of their boots generally shows them to be short when the weight of the body extends the foot longitudinally, while the vertical depth of the toe-cap appears to be less than the thickness of the terminal phalanges of the toe; the soles also were thick and stiff. Probably then the metatarso-phalangeal joint is rendered functionally useless by the long-confined position of the great toe in a straight line, owing to the defects in the boot above mentioned. The joint

becomes stiff, and pain probably prevents active dorsi-flexion, coupled with weakness of the extensors acquired by disuse.

When one toe-joint is affected, the patient limps in walking, dreading to raise himself on his toe—and so places the whole foot flat on the ground and lifts it again without bending it. But with the toes of both sides affected, the patient is crippled, and walks with great pain, after the manner of extreme double splay-foot. Errand and telegraph boys seem especially liable to this affection. Treatment which has proved partly successful consists in painting the joint with iodine, and ordering a longer boot with higher blocked toes, as much rest as possible being also enjoined.

I shall be grateful for any suggestions as to causes, treatment, etc.

Worcester. REGINALD LUCY.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

NETHERFIELD FEVER HOSPITAL, LIVERPOOL.

BRACHIAL MONOPLEGIA, COMPLICATING A CASE OF ENTERIC FEVER.

(Under the care of ROBERT S. ARCHER, B.A., M.B., M.Ch., Trinity College, Dublin, late Physician to the Hospital.)

J. G., aged 22, came under observation about the end of the first or the beginning of the second week of enteric fever. A few undoubted spots were present. The pulse was 100, the temperature ranged between 103° and 104°, and the respirations were 30. Ulceration of the tonsils, which was present on admission, gradually extended, till, on the ninth day, it implicated the uvula and back of the pharynx. The eleventh day was marked by delirium, great exhaustion, and extreme feebleness of the first cardiac sound. There was also about this time consolidation of the base of the left lung. On the following day there were three copious, stinking bloody motions, the only occasion on which anything approaching diarrhœa occurred. The delirium continued, and there was great prostration, the pulse ranging from 100 to 180. For the next two days there were frequent attempts to get out of bed. The pulse ranged between 120 and 138. The temperature, which had fallen in consequence of the hæmorrhage from the bowels, ran up on the fourteenth day to between 103° and 104°. On the fifteenth day there was a complaint of numbness in the right arm, and tremor of the lower jaw was observed. During the next seven days weakness of the right arm became intensified, till, on the twenty-first day, the limb was noticed to be very weak and the grasp of the hand extremely feeble. This period was characterised by occasional profuse sweatings, more or less constant delirium, muscular tremors, picking at the bed-clothes, at times involuntary passing of urine, and implication of the base of the right lung, in addition to the left, by consolidation. Pain, tenderness, and deafness of the left ear were observed on the twenty-second day, and followed by purulent discharge six days later. The temperature reached the normal line on the twenty-first day, but began to rise again on the thirty-fifth, and pursued a febrile course, marked, for the greater part, by considerable remissions till the fifty-second day, when it became permanently normal. Great pain and heat were noted as being present in the right arm and hand on the twenty-eighth day, and continued to trouble the patient for several days. On the thirty-fifth day the dynamometer indicated 8 kilogrammes on the right side, and 40 kilogrammes on the left; there was also considerable wasting of the muscles of the right arm and forearm, as compared with the left. From this time onward the right arm seemed to gain more strength, till, on the thirty-eighth day the patient could lift the arm over his head, could flex the forearm, and pronate and supinate the hand to a moderate extent. For the next ten days the elbow grew gradually more rigid, till it became fixed at a right angle, and attempts to straighten it caused considerable pain. This condition improved till the patient's discharge on the sixty-seventh day, when the elbow could be fairly well extended and flexed, but his hand remained so weak that he could not execute any of the finer movements, such as writing, holding a knife, or picking up small objects. The atrophy of the muscles had considerably improved, and although I did not see the patient again, I have no doubt the limb eventually recovered completely.

REMARKS BY DR. ARCHER.—Paralysis confined to a single limb, or to the area of distribution of a given nerve, is a very rare complication of enteric fever. Indeed, true paralysis of any kind is not of frequent occurrence in this disease. Murchison, in his vast experience, does not appear to have met with a case similar to the one related above; and Fiebermeister does not mention it, so that it must be assumed that he, also, did not observe an example of this complication. A search through several other works on fever has not met with any better success. The only direct reference to this affection that I have been able to find in connection with enteric fever (and it only bears on the subject partially) is in the *International Journal of Medical Sciences*, p. 593, April, 1886, where there is a short notice of a paper by Pitres and Vaillard, in the *Revue de Médecine*, December, 1885, on Peripheral Neuritis in Typhoid Fever. Two cases of paralysis of the ulnar nerve during convalescence from typhoid fever are reported, in which atrophy of the muscles followed. The conclusions arrived at by these authors are shortly summarised as follows:

"1. Among the various nervous affections which may develop after typhoid fever is peripheral neuritis, leading to paralysis of limited groups of muscles, accompanied by pain or anæsthesia, rapid diminution of the electrical excitability, and wasting of the affected muscles. 2. So far, the neuritis has been demonstrated in only one case—that of Bernhardt—but its existence is shown by the analysis of the symptoms and the course of the paralysis. 3. Histological examination shows that, in persons who have died of typhoid fever, the peripheral nervous system is often the seat of parenchymatous neuritis. When these changes are not very advanced, they may be latent, or give rise to only ill-defined symptoms, but, when more severe, they become manifest as the sensory, motor, and trophic disturbances characteristic of peripheral neuritis."

The paralysis in the case I have related above was evidently owing to a neuritis, in which the majority of the branches of the brachial plexus supplying the affected limb were involved. That the whole of the branches did not participate in the inflammatory process is evident from the fact that the patient never lost entire control over the fingers, and was able to execute certain limited movements in connection with the elbow and shoulder joints.

The various paralytic affections observed in relation to the acute specific fevers usually occur in the stage of convalescence, but in this case it will have been noticed that the first symptom of nerve-lesion showed itself at the commencement of the second week of the fever, and the limb had not entirely recovered its functions when the patient was discharged in the tenth week. The secondary febrile attack that commenced about the thirty-seventh day, and continued to the fifty-second, cannot be regarded as a relapse, but was due, at all events in part, to the neuritis.

PUBLIC HOSPITAL, BELIZE, BRITISH HONDURAS.

COMPOUND FRACTURE OF SKULL: RECOVERY.

(Under the care of J. JENKYNS, M.B., C.M., Acting Colonial Surgeon.)

J. F. was admitted on December 28th, 1886, with a compound fracture of the skull, and also a compound fracture of the right humerus in its lower third.

The injuries were inflicted on the night of December 25th, with a machete, which is a sword-like implement with a sharp-cutting edge, and weighing about a pound and a half, and used in this country by labourers for agricultural purposes. Between the time that the injuries had been sustained and his arrival at the hospital three days had elapsed, which were occupied by the patient in travelling in an open boat, with little or no comfort, a distance of nearly sixty miles.

On admission he was in a weak condition, and the pulse was slow and small, the effects of hæmorrhage (which had been considerable) and fatigue; but he was sensible, and able to give a clear and full account of how he had come by his injuries. The temperature was about normal, and the tongue clean and moist. There was an entire absence of cerebral symptoms, and pain in the head was very little complained of.

The fracture of the skull was three inches in length, with a correspondingly sized wound of the soft parts, and extended across the coronal suture, between the parietal and frontal bones on the left side, in an oblique direction downwards and forwards, from about the temporal ridge of the parietal bone. There was a slight depression of the bone at the posterior or lower edge of the fracture, but it seemed more like an elevation of the anterior or upper edge of the fracture, giving it a shelf-like appearance.

The absence of all the symptoms of compression was judged a sufficient reason for abstinence from operative interference, and the treatment adopted was as follows:

After the wound had been thoroughly washed, sutures were inserted,

and cold-water dressings applied, and tolerably large doses of bromide of potassium, combined with minim doses of tincture of aconite, were ordered, along with rest, quiet, and light unstimulating diet. The first night he was quiet and slept pretty well, the pain being very slight, and, on the next day, the temperature was normal, and the pulse 68. The bowels not having been opened for some days, he was given a small dose of castor-oil, which operated freely. The same treatment was followed up throughout, and the sutures were removed on the third day, the wound continuing to heal up very kindly, without a single cerebral symptom and no increase of temperature The patient was sitting up on the 17th day, and on the 23rd day he was able to walk about the ward; while on the 29th day he attended the police-court *re* the assault, and gave evidence. The fracture of the humerus was treated in the usual way, and did well, calling for no special remarks.

The interesting feature of the case, as it appears to me, and which induces me to publish it, is the uninterrupted recovery after such a grave injury (the infliction of which must have necessitated a considerable amount of force), without a single cerebral or other untoward symptom, and with so little pain in the head, a result which is explicable only on the ground that the brain substance, although exposed to view and to the touch, sustained little or no injury.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MARCH 25TH, 1887.

Sir DYCE DUCKWORTH, M.D., Vice-President, in the Chair.

Contraction of the Metatarso-Phalangeal Joint of the Great Toe.—Mr. DAVIES-COLLEY desired to call the attention of the Society to this condition, of which he had been unable to find any description in surgical writings. He had had five cases under his care during the last nine years. The disease consisted simply of flexion of the first phalanx of the great toe through 30° to 60°, with extension of the second phalanx, and some swelling and stiffness of the metatarso-phalangeal joint. All the cases were in young men. It seemed probable that later in life the deformity tended to change to hallux valgus. There was no paralysis of the extensor proprius hallucis, and, as far as he could judge, the flexors of the first phalanx and the plantar fascia were not primarily affected. The two causes to which he would attribute the condition were: (1), an injury to the joint, followed by contraction similar to that which was observed in the knee-joint; and (2), the pressure of short rigid boots upon an abnormally long great toe. The condition was very painful, and the patients walked with difficulty, resting their weight upon the outer border of the foot. In those cases he had subcutaneously divided the inner band of the plantar fascia and the short muscles of the sole about three-quarters of an inch behind their insertion into the sesamoid bones and first phalanx. All these cases were for the time cured, but one returned in two years in a still worse condition as regards flexion, with some outward displacement in addition; in fact, in an incipient state of hallux valgus. In this case a good result had followed resection of the metatarso-phalangeal joint. In two other cases he had excised the proximal half of the first phalanx, leaving the head of the metatarsal bone, with the sesamoid bones, and interfering as little as possible with the attachments of the muscles. Primary union had followed, and the patients were soon able to walk upon the flat sole. In one of them, twenty-two months after the operation, there was no appearance of deformity, and the patient had walked twenty miles without any difficulty the day preceding. Mr. Davies-Colley would suggest that the deformity should be called hallux flexus, and that if the case were too bad for treatment with rest and a splint, resort should be had to subcutaneous section of the muscles or fascia, or, in more severe cases, to the removal of the proximal half of the first phalanx.—Sir DYCE DUCKWORTH said that the last word had not been said on the subject of this class of deformities. He did not think they were caused so much by bad boots, or they would be more common. It might be the expression of a constitutional condition.—Mr. HARRINGTON had recently met with a case of this deformity in a girl of 14. He thought it might be brought about by the extensor tendons.—Mr. CHARTERS SYMONDS had seen a great many such cases. In one case which he had examined both cartilages were fibrous and partially removed; the bone was not exposed. The changes were those of rheumatic arthritis.—Mr. CLUTTON asked Mr. Davies-Colley whether the affection was really due to muscular, and not to ligamentous, contraction. In a case he had examined the contraction was maintained by the ligaments after all the other structures had been divided.—A VISITOR observed that this deformity was seldom or never met with in India, where the natives went barefooted, even though flat-foot was not uncommon.—Mr. GODLEE had amputated three contracted fingers of long standing, and he found that the cartilage which should have been in contact with the bone had become vascularised.—Mr. BARKER asked what operation was finally adopted by Mr. Davies-Colley. He advocated the removal of a wedge of bone, so as to allow of rectification of position.—Mr. DAVIES-COLLEY, in reply, said that the first operation consisted in cutting through the soft parts behind the metatarso-phalangeal joint, and the second in excising the whole of the joint. The latter he had modified by the removal of the proximal half of the first phalanx of the great toe. He usually found the cartilage had lost its pearly lustre, was thin, and the ligamentous tissue was thickened. He did not think flat-foot had much to do with this deformity.

Internal Suppuration, Acute and Chronic, without Fever.—Dr. SAMUEL WEST read notes on several cases. Case 1.—Female, aged 21, admitted with a swelling in the lower part of the abdomen and pelvis, with but little pain or tenderness. There was no history of acute inflammation. The swelling slowly increased, but the temperature was never raised; there were no rigors and no sweatings. The swelling was opened behind the peritoneum, and several ounces of fœtid pus evacuated, after which recovery was rapid and complete. Case 2.—Male, aged 16. Case of suppurative pericarditis (described in the *Medico-Chirurgical Transactions* for 1883), in which the pericardium was twice tapped and then laid open. The boy recovered completely. The temperature was never raised, either before or after the operation. Case 3.—Female, aged 10. Case of suppurating peritonitis (described in the Clinical Society's *Transactions* for 1885). The case was very acute. The abdomen was opened, and fœtid pus evacuated. The patient did not rally after the operation. The *post-mortem* showed the case was one of primary peritonitis. The temperature throughout was not raised. Case 4.—Female, aged 48. Abscess between liver and diaphragm and abdominal walls connected with the rupture of a duodenal ulcer. The temperature was not raised. Case 5.—Male, aged 13. Case of empyema, twice tapped, with removal of 24 and 10 ounces of pus, and then the chest was freely laid open; recovery was complete. The temperature was normal throughout. Cases 2 and 3 were very acute. In cases 4 and 5 the development of pus was very rapid. Collapse was absent in all. Though the explanation was not forthcoming, the fact must be borne in mind, for forgetfulness of it might lead to error in diagnosis.—Dr. RYLE asked whether the absence of tension might not account for the non-existence of febrile symptoms.—Dr. ANGEL MONEY said the question resolved itself into one of absorption of poisonous matter from the seat of suppuration. The inference was that there must be an alkaloid or similar body developed, which operated on the thermogenetic centre.—Dr. C. TURNER thought that it was not the pus, but something in the pus, such as micro-organisms, which caused the fever.—Mr. BARKER asked whether the temperature fluctuated at all, and whether the depression was in the morning or evening?—Dr. WEST, in reply, said that his idea had only been to call attention to a certain class of cases where the circumstances were apparently similar, and in which the temperature did not rise as we were taught it ought to do.

A Form of Glandular Swelling curable by Arsenic.—Mr. FREDERICK TREVES drew attention to the obscurity that attended both the pathology and the clinical history of certain chronic glandular affections. These affections were covered by such terms as the following: hypertrophy of glands, malignant lymphoma, lymphadenoma, Hodgkin's disease, and lympho-sarcoma. These glandular swellings were considered to be un-inflammatory, had no relation to scrofula or syphilis, and were clearly separated from the gland disorders that attended leukæmia. They possessed the common characters of a slow origin without apparent cause, a slow but progressive growth, and an absence of all inflammatory phenomena. Histologically, there would appear to be no means of distinguishing one of these affections from another. Apart from this, objections might well be raised to the terms "hypertrophy" and "lymphoma." Without limiting himself to any special term, Mr. Treves desired to draw attention to the clinical aspects of a certain form of non-leukæmic gland enlargement that could be cured by arsenic. The patients were usually past middle age; they presented no peculiar constitutional defect; there was no suggestion of gout, rheumatism, or scrofula; there was no leukæmia. The neck was usually involved. The gland tumours appeared on both sides without disturbances in the periphery. The masses varied in size from a hazel-nut to a duck's egg. They were soft, elastic, homogeneous, movable, painless, and free from tenderness. They showed

a disposition to spread without limit. The temperature was normal, and suppuration did not take place. Mr. Treves gave instances of the cure of such cases by the use of arsenic. The drug was given in the form of liq. arsenicalis, commencing with a dose of five minims, and increasing to twenty minims three times a day. The treatment had to be kept up for some months—one to six; the glands wasted, some few suppurated, and in some instances the resulting sinuses healed without further treatment. In cases where the whole neck had been filled with great glandular masses, the tumours had wholly disappeared after a treatment of four to six months. Some of these cases, at least, would probably be covered by the term "Hodgkin's disease." Mr. Treves concluded by an allusion to Dr. Köbel's paper on the Treatment of Malignant Growth by Arsenic administered by the Mouth, and also Hypodermically.—Sir DYCE DUCKWORTH said that Mr. Treves had observed that the glands in this class of cases were not apt to suppurate, but in his opinion they not infrequently did so. He recollected that, about eight years ago, when the use of arsenic was under discussion, he had used it in such a case hypodermically, but without much benefit. He mentioned that chloride of calcium had been strongly recommended by Dr. W. Begley in the treatment of these cases. He referred Mr. Treves to the writings of Trousseau, Gowers, and Southey on the subject.—Dr. STEPHEN MACKENZIE agreed that in a certain category of these cases arsenic was very useful. He quoted a case which had been diagnosed as Hodgkin's disease, which rapidly recovered under arsenic. He said that what they wanted was a classification of the cases which would and would not be benefited by this treatment.—Mr. CHARTERS SYMONDS said he had only seen two cases in which a real cure had been effected by means of arsenic. He thought it would be well to try arsenic in all cases, and be content with those that did well.—Mr. TREVES, in reply, said that the cases in which arsenic did good were in people who had passed middle life. He had used chloride of calcium with great advantage in some cases, while in others it had been without effect.

MEDICAL SOCIETY OF LONDON.

MONDAY, MARCH 28TH, 1887.

J. HUGHLINGS JACKSON, M.D., F.R.S., President, in the Chair.

CLINICAL EVENING.

A case of Hemianopsia, and of Wasting and Paralysis on one side of the Tongue in a Syphilitic Patient.—Dr. HUGHLINGS JACKSON showed a patient who had a random association of nervous symptoms from syphilis; a man, 34; primary syphilis five years ago, followed by sore-throat; palate perforated three years ago; fit of some sort five years ago. Present condition: no sense of smell, taste good, hemianopsia, left fields blind (chart by Dr. James Anderson exhibited), optic discs normal, slight distortion of the face to the left, with twitching in region of right zygomatici, and narrowing of the right palpebral apertures—relics of old (Bell's) facial paralysis (?); paralysis and wasting of the right half of the tongue, with turning of its tip to the right on protrusion, and to the left when on the floor of the mouth; deafness of the left ear. The palate was fixed to the back of the throat, the communication of the mouth with the nose being by a hole. The random association of nervous symptoms would, Dr. Hughlings Jackson said, were there no direct and obvious evidence of syphilis, point to intracranial syphilis. With paralysis and wasting of one half of the tongue there was nearly always paralysis of the palate and vocal cord on the same side. In this case, for physical reasons, palatal paralysis was not demonstrable.—Dr. F. SEMON, who at the meeting examined the larynx and found no paralysis, said that a cortical lesion involving the "phonation centre" could not cause unilateral laryngeal palsy. Stimulation of one centre in the cortex always caused adduction of both cords.

A Case of Facial Paralysis with Paralysis of the Palate from Cerebral Disease.—Dr. HUGHLINGS JACKSON also showed a patient recovering from facial monoplegia of cortical or subcortical origin. A man, aged 26, who denied venereal disease, who had neither cardiac nor renal disease, had an attack of numbness of the right arm and leg for about five minutes one week before the attack on February 8th, in which, with right hemiplegia, he was aphasic. One peculiarity of the case was the rapid disappearance of the paralysis of the limbs (two hours) and of the aphasia (about two days); the patient first regained "yes" and "no." When admitted (February 11th) he had right facial paralysis and paralysis of the right side of the palate. He did not feel very light touches on the right hand, but did the prick of a pin. There was no paralysis of the vocal cord (Dr. Semon). The patient's speech (except that he was occasionally at a loss for a word), reading, and writing were good; his articulation was considerably defective. He had lost smell on the left side one month. The facial paralysis was more marked than Dr. Hughlings Jackson had ever before seen it from any destructive cerebral lesion. He exhibited photographs of the face taken by Mr. Stedman, showing, among other things, the great difference in the facial attitude between a "constructed" smile and a real smile when amused (a very important thing pointed out by Dr. Gowers). Dr. Hughlings Jackson had not seen such palatal paralysis as existed in this patient in any other case of cerebral facial paralysis, nor, indeed, in any sort of facial paralysis; it was as marked as the one-sided palatal paralysis occurring in (its usual association) cases of paralysis of the tongue and vocal cord. The uninstructed might have mistaken the case for one of Bell's facial paralysis with paralysis of the palate, a combination of symptoms he (Dr. Jackson) had not yet met with. The electrical reactions were normal. Dr. Hughlings Jackson did not hold the current doctrine of abrupt localisation, and considered that the transitory paralysis of the right limb in this case showed that the part of the brain damaged represented movements of those limbs, although to a trivial extent. No doubt, too, the vocal cords are represented in the region diseased, but their escape is (Horsley and Semon) accounted for by their being also fully represented in the other half of the brain. That the vocal cords might act well when (Horsley and Semon) one of the two phonation centres was destroyed showed that there might be loss of (one half of) the movements of a region without disability in the muscles of that region.

A Case of Hereditary Tremors.—Dr. S. WEST showed a man who was the subject of curious tremulous movements, whose father was also very "shaky." The case is the same as that shown by Dr. West last year.—Dr. EWART asked what was the pathology of this affection.—Dr. HERRINGHAM alluded to the tremors that occurred after lifting heavy weights, which he thought resembled those seen in the patient.

Case of Post-Hemiplegic Hemichorea.—Dr. SAMUEL WEST showed a man, aged 37, who had been a soldier, and had had a sunstroke, which left him hemiplegic. Some years later he was attacked by a dog and frightened, soon after which curious spasmodic movements like athetosis began to affect the face and and subsequently the limbs.—Dr. JACKSON said the movements were certainly more like athetosis than chorea, especially as there was a history of injury.—Dr. EWART quoted the case of a little girl, in whom very similar movements had been observed. It was suggested that syphilitic thickening of the arteries might be at the bottom of Dr. West's case, but Dr. West, in reply, said that no history of syphilis could be traced.

Case of Jacksonian Epilepsy.—Dr. SAMUEL WEST showed a girl whose symptoms dated from a "fit," beginning in the left hand, which she had had two years previously. The fits at first occurred about once a month, but were now much more frequent; consciousness was sometimes, but not usually, lost. He discussed the probable site and relations of the cerebral tumour which was probably the cause of the symptoms, with a view to operation.—Dr. HUGHLINGS JACKSON said that the symptoms certainly pointed to a cerebral tumour, but they were not invariable enough to allow of exact localisation.—Dr. MONEY asked what was the condition of the cutaneous reflexes on the affected side.—Dr. WEST, in reply, said that nothing abnormal had been noticed. The patient could read No. 1 J.

Two Cases of Ulceration of the Soft Palate and Pharynx.—Dr. F. DE HAVILLAND HALL showed two cases of ulceration of the soft palate and pharynx in men, of doubtful nature. Both looked decidedly syphilitic, and had yielded to iodide of potassium; but no history of syphilis could be obtained in either case.—Mr. LENNOX BROWNE made some remarks.

A Case of Lympho-sarcoma of Tonsil and Pharynx.—Mr. LENNOX BROWNE showed a patient with lympho-sarcoma, which commenced in the left tonsil, extended down the pharynx, and invaded the larynx. A large portion had been removed with the ecraseur and other instruments, and galvano-cautery had been afterwards applied.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, FEBRUARY 18TH, 1887.

ALFRED HILL, M.D., President, in the Chair.

A Practical Illustration of the Protective Influence of Vaccination. By C. E. PAGET, Medical Officer of Health for the Westmoreland Combined Sanitary District.—The paper had reference to an outbreak of small-pox in a village in Westmoreland and its neighbourhood, which had lasted from March to September, 1885. The early cases, numbering nine, occurred outside the village, and it was not till seven cases occurred in the village that medical advice was sought. The total number of cases in the outbreak was seventeen, and there was no mortality. All the cases showed marks of "pitting." The chief point of hygienic interest in the outbreak seemed to be in the illus-

tration it afforded how the spread of infectious diseases may be often largely due to the mildness of initial cases. With respect to the influence of previous vaccination upon the outbreak, the paper was illustrated by several tables, which showed, first, that all persons that might be said to have been unvaccinated sickened; secondly, that one child only out of nine under 14 years of age that had been primarily vaccinated and had been exposed to infection sickened; thirdly, that thirteen persons out of twenty-two over 14 years of age that had been primarily vaccinated sickened; and, fourthly, that the only (though very poorly) revaccinated adult sickened, but only in a slight degree. The chief practical interest of the epidemic in respect of the partial protection of persons seemed to be in the enormous mitigation of illness, even where there was incomplete vaccination and a general want of revaccination. It was in the highest degree unlikely that if there had been an absence of even a partial vaccinary protection, the attacks of small-pox would have been mild.—In the discussion which followed, the PRESIDENT, Drs. GIBBON, LOUIS PARKES, SYKES, YARROW, and ASHBY, and Messrs. BUTTERFIELD, LOVETT, EYRE, and MURPHY took part.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.

WEDNESDAY, MARCH 9TH, 1887.

J. S. BRISTOWE, M.D., F.R.S., in the Chair.

Symmetrical Gangrene.—Dr. CLIFFORD BEALE read notes of two cases of symmetrical gangrene, one of the cases being a good example of the disease first described by Raynaud in 1862. A potman, aged 25, the subject of chronic phthisis of the left lung for several years, had become affected, after exposure to a moderate degree of cold, to gangrene of the helices of both ears. The gangrene had come on quite suddenly and with very little pain, and small portions of the margins of the helices had mummified and been thrown off. The new skin was normal in every respect, not scarred, and preserving perfectly acute sensation. The gangrenous process had been repeated several times during the last three years, sometimes in warm and sometimes in cold weather, but always with a like result. A considerable part of the helix in both ears was now wanting. The patient had been intemperate, but there was no history of syphilis. He had never had ague or hæmaturia, but had occasionally lost blood from the lungs. Whilst under observation he had an attack of subacute rheumatism, with marked anæmia and a systolic apex *bruit*. There was at the same time occasionally an appreciable quantity of albumen in the urine, coincident with an outcrop of purpuric spots on one ankle. The second case was that of a young man—a hussar lately discharged—who had suffered much from "fever and ague" in India, and had, on one occasion, passed blood in the urine. He first came under notice complaining of cold, numbness, and pain in the ends of the fingers in both hands, which were cold and bluish, with diminished sensation. The pain became very intense, and the ends of most of the fingers became black and dry, and a well-defined line of demarcation formed. The general health was very good, and there was no albuminuria. The progress of the gangrene seemed to be arrested by keeping the fingers closely wrapped up in cotton wool and gutta percha, and in about four weeks they completely recovered their normal appearance and temperature, only a little epidermal tissue being thrown off. The affection appeared first on a warm day, and did not seem to be influenced by change of weather. The patient's father and two members of his father's family had suffered habitually from cold and numbness of the hands.

Movements in Nervous Diseases.—Dr. C. S. BEEVOR exhibited three cases, illustrating the characteristic movements of paralysis agitans, disseminated sclerosis, and athetosis respectively.

Rhinitis with Spasmodic "Snorting."—Mr. SPENCER WATSON read notes of a case in which a young woman, aged 26, after a great mental shock, was seized with spasmodic inspiratory "snorting," very frequently repeated. This soon became uncontrollable, and continued for many months in spite of treatment, the spasm coming on sometimes every half-hour and sometimes every ten minutes during the day, ceasing, however, during sleep. Large doses of bromide were given with temporary good effect; but, on their being discontinued, the "snorting" soon recurred with its original intensity. On rhinoscopic examination, Mr. Watson discovered great thickening of the turbinated bodies, which were partially removed with very good effect. Subsequently, nasal plugs were used, and the nostrils were freely sponged with hazeline. The "snorting" had not recurred since the last operation (in January, 1887); and the smell and taste, which had been much impaired, were now perfect. The general health had also improved.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, MARCH 16TH, 1887.

JAMES HARDIE, Esq., F.R.C.S., President, in the Chair.

Parencephalus.—Mr. STOCKS showed a girl, aged 16½, whose height was 40 inches, and who weighed 35¾ lbs. in her clothes. During her intra-uterine life her mother had good health; both her parents were healthy. Since her fourth year she had grown very little. She had had measles, and what was said to be typhoid fever. Her intellect was about on a par with the development of her body; sometimes she would talk and at others not. She straddled in her walk, and had a tendency to walk on her toes. Her temporary teeth were shed in the usual manner, but had been replaced only by the incisor, canine, and first lower molar on the right side. There were no indications of puberty, save a slight development of the hips. She could tell her letters and spell short words. She occasionally became cyanotic, though there were no apparent cardiac lesions. Her development appeared to have been arrested when about 5 years old. Her head was 19 inches in circumference.—Dr. Ross pointed out that the tendon reflexes were very marked, as well as ankle clonus, and that the case was one of parencephalus.

The Treatment of Early Syphilis.—Mr. COATES read a paper, in which he pointed out that mercury was often given during far too short a time to eradicate the disease. Mr. Coates advocated the administration of the drug regularly during at least two years.

Multiple Fibromata.—Dr. STEELL showed a case of multiple fibromata (molluscum fibrosum). The patient was a man, aged 40, the surface of whose body was covered by multitudes of tumours, varying from the size of a small papule to that of a pigeon's egg. His right foot presented a remarkable appearance, its sole (the point of the heel excepted) and its inner and outer aspects forming a large mass of uniformly soft growth covered by normal skin, which was thrown into folds by deep furrows. On the inner side of the left knee there was a large mass of flabby consistence, except at its upper part, where hard nodules could be felt. The skin over the tumours was normal, and on some of them the openings of sebaceous follicles were visible. Most of the tumours were sessile, but a few had a distinct pedicle. When manipulated the tumours were found to vary in consistence. There was a good deal of pigmentation of the skin distributed in small patches of varying size. With regard to development, no tumours were observed at birth. Two months afterwards, one was noticed on the scalp. At the age of 18 months, the right foot was noticed to be larger than the left. At the age of 4, tumours were observed over the body and extremities. The mass on the knee began to grow at the age of 10. The patient believed that the tumours had been slowly increasing in size and number throughout his life.

Mediastinal Tumour.—Dr. HUTTON showed a specimen of sarcoma of the mediastinum in a boy aged 8. Eight weeks before death, paroxysmal dyspnœa, mainly expiratory, came on. The specimen showed a sarcomatous growth invading the lungs along the bronchi, and infiltrating the pericardium and upper part of the auricles, as well as involving the glands.

SOUTH EAST HANTS MEDICAL SOCIETY.

WEDNESDAY, MARCH 16TH, 1887.

JAMES WATSON, M.D., President, in the Chair.

Excision of Cascous Glands.—Dr. RICHARD EMMETT exhibited a patient from whom he had removed a mass of indurated glands situated in the submaxillary region.

Amputation at the Hip-joint for rapidly growing Periosteal Sarcoma of the Femur.—The tumour measured twenty-four inches in circumference. Dr. WARD COUSINS exhibited the patient, aged 30, four months after the operation. With the aid of an artificial leg he could now walk short distances without any support,

Gangrene of Intestine in Strangulated Inguinal Hernia.—Dr. WILLIAMS FREEMAN showed this specimen from a man, aged 24, who had been ruptured for years. A knuckle of gangrenous small intestine was cut away, but nothing further was done on account of the collapsed condition of the patient. *Post-mortem* the intestine, for a foot and a half above the hernia, was found to be gangrenous.—Dr. WARD COUSINS remarked that the gangrene of the intestine in this case took place with great rapidity beyond the limits of the sac. During an effort on the part of the patient to reduce the hernia, a rupture of some intestinal vessels took place, the extravasated blood distending the gut, and increasing the constriction at the neck of the sac so suddenly and so intensely that gangrenous changes rapidly set in, followed by putrefaction.

Syphilitic Infiltration of Trachea and Lung.—Dr. WILLIAMS FREEMAN showed a specimen taken from the body of a girl, aged 13, with a clear history of congenital syphilis, who was admitted for urgent dyspnœa. The walls of the trachea were nearly uniformly thickened, the calibre being reduced to the size of a crow-quill for about two inches below the cricoid. The walls of the right bronchus and its smaller divisions were similarly but irregularly thickened, so that the whole lung was nearly solid. The pleura was adherent, thickened, tough, and leathery; the liver had an old calcifying gumma; the larynx and other organs were healthy.

Communication between Trachea and Œsophagus from Pressure of a Silver Tracheotomy-tube.—Dr. WILLIAMS FREEMAN showed a specimen illustrating this condition. Tracheotomy had been performed on a child, aged 2½, for scald of glottis. There was a vertical slit the size of a shirt button-hole, through which healthy mucous membrane was continuous from the trachea to the œsophagus, corresponding with the end of the silver tube. Perforation occurred on the eighth day after tracheotomy. A Baker's rubber-tube was introduced, and there was no sign of any irritation where its end touched the mucous membrane. Death occurred six weeks after the perforation.

The Opium Question in China.—The PRESIDENT remarked that opium was mentioned in Chinese literature early in the eighth century; it was brought with cotton from India in the thirteenth century; and ever since it had been cultivated more or less by the Chinese, who had always smoked, not eaten it, as was done by the natives of India. The amount of opium smoked by the Chinese was inconsiderable until the development of the trade with India. Until the last ninety years the Chinese Government was able to control, if not suppress, the vicious habit. It had always looked with suspicion on the cultivation of the poppy, and had earnestly tried to suppress it. The ill-effects of opium-smoking were similar to those seen in the opium-eater, and in laudanum, morphine, chloral, or brandy drinkers. The Chinese asserted that opium-smoking was first had recourse to by sufferers from rheumatic, neuralgic, and other pains, and the depression of malaria and other ailments. It was now mainly used as a means of procuring a delightful species of intoxication. The effects of the habit were physical and moral. The opium-smoker was peculiarly liable to inflamed eyes; his appetite was irregular, and his digestion was impaired; he suffered from severe colic, and from constipation, followed by distressing diarrhœa; wasting of all the tissues took place; spermatorrhœa and loss of sexual power supervened. He neglected his family and his business, became dishonest and utterly degraded. Many in England believed that the majority of Chinese smoked opium, and that the habit was rapidly ruining the people, physically, mentally, and morally. This was now proved to be a great mistake. Sir Robert Hart, as Head of the Chinese Imperial Maritime Customs, instructed the Commissioners of Customs at the various ports on the coast and on the Yangtsze to report to him the amount of foreign (that is, Indian) opium that passed through the custom-houses, and was thence distributed over the whole country. This was found to be about 100,000 chests. After studying the 20 reports from the Commissioners, Sir Robert Hart calculated that 3_{7} persons in every 1,000, or, in other words, one-third of 1 per cent. of the population, smoked Indian opium. Probably not more than 100,000 chests of native opium were produced; but, supposing this amount was actually consumed, then opium enough was provided to supply another 1,000,000 smokers, which would raise the total number to 2,000,000, or, in other words, to two-thirds of 1 per cent. of the population. The total amount spent by China on Indian and native opium was £25,000,000. The President had treated a considerable number of Chinese who were addicted to the use of the drug, and, so far as he could see, it did not distinctly interfere with their general health in more than 10 per cent. These were, however, in as miserable a state of mind and body as could be imagined.

Pelvic Abscess.—Surgeon-Major CROWE read some notes on a case of abdominal suppuration. The patient, aged 21, was the wife of a soldier, but had never been pregnant. The catamenia had never been normal. She had enteric fever one month after marriage. During convalescence a small tumour appeared in the region of the right ovary. Six weeks before admission into hospital an abscess formed in the right labium, which discharged a quantity of offensive pus. This discharge continued up till about a fortnight before she was brought to hospital, when it ceased, and the tumour then more rapidly increased in size. She lost flesh, suffered from constant diarrhœa and sickness of stomach, and her temperature in the evening rose to 102° F. A uniformly oval tumour, of about the size of a large cocoanut, was found rising out of the pelvis in the median line as high as the umbilicus. The tumour was firm and elastic to the touch. There was no discharge from the vagina or vulva. The uterus was found to be displaced backwards, and the bladder was so pressed upon that the urine constantly dribbled away, in addition to which there was loss of control over the sphincter of the anus. Abscess of the left ovary was diagnosed, but her relatives could not be brought to consent to an operation till she had been four weeks in hospital, when it was evident that if something were not done for her relief, she could not live many days. With the assistance of Dr. Ward Cousins and Surgeon-Major Brown, an incision about two inches in length was made in the median line, midway between the crest of the pubes and the umbilicus. When the peritoneum was reached, a large sized trochar and cannula were pushed into the tumour, giving issue to about three pints of healthy pus. The sac of the abscess was then stitched to the edges of the wound, a drainage-tube was inserted, and a large pad of antiseptic lint and gauze bandaged over the wound. Large quantities of pus came away during the ten days following the operation, but this discharge gradually diminished in quantity; the tumour entirely disappeared, and the patient's health steadily though slowly improved. By the end of September the abscess had entirely ceased to discharge, and soon afterwards the wound healed. On October 23rd she was discharged cured. The patient was seen a month later, when she was able to walk two or three miles without fatigue. Since then she had enjoyed excellent health.—Dr. LLOYD OWEN said that in cases of abdominal abscess safety could be found only in early and free incision. He regarded Surgeon-Major Crowe's case as a good illustration of modern practice.

New Gag and Snare.—Dr. WARD COUSINS gave a demonstration with a new mouth-gag and snare, showing the method of protecting the throat and illuminating the mouth.

SUNDERLAND AND NORTH DURHAM MEDICAL SOCIETY.

THURSDAY, MARCH 17TH, 1887.

B. G. MORGAN, L.R.C.S.I., President, in the Chair.

Myxœdema.—Mr. MORGAN showed a female patient who had suffered from this disease for six years. No cause could be assigned for its appearance.—Dr. WELFORD remarked that he had a case in a young woman, who had aborted three times, and it was after the second abortion that symptoms of the disease first appeared.

Melanotic Sarcoma.—Mr. HOPGOOD showed a patient from whom he had removed a sarcomatous growth which had recurred in the optic nerve after removal of the eyeball.

Paroxysmal Hæmatinuria.—Dr. LOW showed a man who for three winters had occasionally passed blood-coloured urine. He had spent the early years of his life in the fen country, but never had ague. Fifteen years ago he had syphilis. Under mercury and iron the attacks became less frequent.

Living Cases.—Dr. PROWDE: Two Cases of Charcot's Joint-disease; Congenital Cyanosis; Elephantiasis of Scrotum; Elephantiasis of Leg.—Mr. ROBINSON: Scald of Larynx; Spinal Injury.

Pathological Specimens.—Dr. DRINKWATER: Cirrhotic Liver from a patient 14 years old; Patent Foramen Ovale.—Mr. HOPGOOD: Blood-cast from Bronchial Tubes; Eyeball with Steel.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, MARCH 2ND, 1887.

LLOYD OWEN, F.R.C.S.I., President, in the Chair.

Locomotor Ataxy with Joint-Disease.—Dr. SUCKLING showed a man, aged 48, who was suffering from locomotor ataxy, with disease of his knee-joints. Shooting pains in the legs and girdle-pains had begun about a year before, and the knee-joints began to enlarge about nine months before. The knee-jerk was lost on both sides; the pupils were unequal, and responded to accommodation, but not to light. There was considerable swaying on standing with the eyes closed. Dr. Suckling considered the case as undoubtedly one of locomotor ataxy, but the joint-changes exactly resembled those of chronic rheumatic arthritis.

Tumour of Bladder treated by Suprapubic Cystotomy.—Mr. BENNETT MAY reported this case, and showed the parts removed after death, which took place six months after operation. In comparing the two methods of operating, namely, by the median perineal and by suprapubic cystotomy, Mr. May observed that the former was undoubtedly the simpler and possibly safer operation, and was an excellent means of exploring the bladder, whilst it was also quite adequate for the removal of some tumours. For the majority of cases of tumour of the bladder, however, it was far inferior to the suprapubic operation; and for all cases of diagnosed tumour he should operate by the suprapubic method, provided, of course, that the bladder could hold sufficient water. This patient was a man aged 65, who first noticed

his urine redder than natural about a year previously. Before operating there was a good deal of blood in his urine, and he was suffering greatly, his calls to pass urine being almost incessant. The tumour was found to occupy the right side of the floor of the bladder and the neighbourhood of the right ureter. It could not be felt through the rectum. It was diagnosed as malignant, and on exposure was found to be a very extensive, hard, sessile, infiltrating mass, very vascular, and of a deep purple colour. Its removal was considered impracticable, so a large drainage-tube was left in the bladder for permanent micturition. This was a great comfort for a few months, but later on it became difficult to counteract the contracting tendency of the wound, which necessitated the continuous retention of a tube. Mr. May expressed doubts whether in another similar case he would not stitch the mucous membrane of the bladder to the skin, though there might be some risk of inducing urinary infiltration. Eventually the patient died of suppurative nephritis, the kidneys being found riddled with abscesses. On microscopical examination the tumour was shown to be scirrhous, excessively rich in blood-vessels. The orifice of the right ureter was completely occluded.

Periosteal Sarcoma.—Mr. JORDAN LLOYD showed a girl, aged 18, with a large malignant tumour of the forearm, probably a periosteal round-celled sarcoma of the ulna, with large ascending growths in the upper arm, the axilla, and the subclavian triangle. The tumour in the forearm was the first to appear, only fourteen weeks previously. This was cut into for the purposes of diagnosis, and, on microscopic examination, was found to be a small round-celled sarcoma. There was no history of malignancy or of injury.

Injury to Shoulder.—Mr. A. F. CLAY showed a man, aged 77, who had fallen down stairs on his shoulder; he was told by his medical attendant that he had "broken his arm high up." Three weeks after this, Mr. Clay saw him, and found his humerus and clavicle intact; but, about an inch and a half above the lowest part of the anterior boundary of the axilla, a round, hard prominence, the size of a marble, was seen and easily felt. It was then slightly movable, but more in the lateral than the vertical direction. It followed the movements of the humerus. Since then it had become absolutely immovable, and was smaller. The coracoid process on the injured side was not so prominent as its fellow.

Congenital Tumour.—Mr. HASLAM showed a child, aged 3 weeks, with a large congenital growth on the back of the sacrum. It appeared to be made up of cysts, fibrous tissue, and cartilage, and had no connection with the spinal canal.

The Operative Treatment of Strangulated Hernia.—Mr. JORDAN LLOYD read a paper on this subject.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, MARCH 16TH, 1887.

JOHN URQUHART, M.D., President, in the Chair.

Case of Undue Frequency of the Pulse.—Dr. BLAIKIE SMITH read notes of a case where this was the only apparent deviation from health. The patient, a blacksmith, aged 54, was admitted into the infirmary on March 1st, complaining of an uneasy feeling over the præcordia, and shortness of breath on exertion. The apex-beat was invisible, and could not be felt; slight heaving was felt over the epigastrium, but no other pulsation. Auscultation showed the heart's action to be 196 per minute; the sounds were like those of the fœtal heart, and there was no murmur. The heart was not enlarged; the pulse was regular, but feeble and compressible, and its beats corresponded with those of the heart. The lungs were healthy; there were no abdominal symptoms; the urine was normal, and there was no dropsy. Save that for several years he had suffered occasionally and without evident cause from attacks of beating and jerking over his heart, the previous history was unimportant. Shortness of breath and sometimes perspiration attended these attacks, and they subsided abruptly. The present attack came on several days before his admission. Bearing in mind that attacks of undue frequency of the pulse sometimes end spontaneously, the case was simply watched for twenty-four hours. The pulse-rate was then still unchanged, 196 per minute, and the sphygmograph gave a hyperdicrotic pulse-tracing. With the view of lowering the pulse-rate and increasing its tension, tincture of strophanthus (1 in 20) in five-minim doses was ordered to be given every four hours till the pulse-rate was reduced, the quantity of urine being measured. On March 3rd, after three doses of strophanthus, the pulse was 200, regular, and could be counted only by auscultation of the heart and timing with a watch. Sphygmographic tracing showed the pulse to be of still lower tension and feebler character than on the day before; urine 100 ounces. On March 4th, after eight doses of strophanthus, the pulse was 64, natural. Sphygmographic tracing showed a regular pulse, with very characteristic marks of high tension. The heart's action and sounds were normal; the apex-beat was in its usual situation. One hundred and five ounces of urine were passed, and the patient felt well. From that date till he left the hospital on March 8th, nothing further worthy of record occurred. The pulse rose to 80, the sphygmographic tracing became more natural, and the urine fell to the usual amount. Dr. Smith considered that the treatment had conduced to the relief of the symptoms on account of the remarkable changes in the pulse-tracing, and the concurrent increase in the secretion of urine. Dr. Smith had hoped to confirm his opinion by further observation in similar attacks, but the patient, probably alarmed at the frequent use of the sphygmograph, levanted from the hospital before this could be attained.

Case of Leucoderma.—Dr. RUXTON showed a case of leucoderma in a lad, aged 19, an ironworker. The disease had lasted three years, and affected the whole trunk, back and front, and to a lesser extent the extremities. No other member of his family had suffered. The father and mother were dark-skinned, as he was before the onset of the disease.

Intracranial Affection following Purulent Tympanitis.—Dr. MACKENZIE BOOTH read notes of a fatal case of this nature, occurring in a robust boy, aged 5, who had suffered from purulent discharge from the left ear for three years previously. He had suffered from intermittent pain over the occiput and paralysis of the left side of the face for six weeks before he came under observation on October 3rd, 1886. The pupils were equal, and equally mobile; there was no strabismus or ptosis, and no optic neuritis. Examination of the left ear showed an old perforation of the drumhead, but no polypi or granulations or evidence of diseased bone. He scarcely heard the watch on contact; he was not tested with the tuning-fork. Along the anterior border of the sterno-mastoid there was a tender irregular thickening in the course of the jugular vein, to which the boy often put his hand. He was partially comatose, only answering loud questions, and relapsing into silence immediately afterwards. The pulse was 60, the temperature over 100° F., but he was so restless that a correct reading could not be got. The coma became deeper, the pulse faster, rising to 160 before death. Convulsions set in, the muscles of the back being those chiefly affected, and death took place on October 6th. No *post-mortem* examination could be obtained. The occipital pain, the jugular thrombosis, and the absence of ocular symptoms pointed to implication of the meninges in the neighbourhood of the lateral sinus. Dr. Booth referred to three cases recently reported by Drs. Schede, Gowers, and Greenfield, in which life had been saved by operation, and cited other fatal cases from his own experience, showing them to be more common than was usually supposed. He commented on the hopelessness of such cases when left to themselves.

Locomotor Ataxy.—Dr. BLAIKIE SMITH showed a case of locomotor ataxy of eight years' standing, with "scanning" of speech, the Argyll-Robertson pupil, greatly diminished sensibility of the arms, feet, and legs, inco-ordination of muscles of legs, total abolition of knee-jerk, and but slightly marked plantar, cremasteric, and abdominal reflexes. Contrasted with these Dr. Smith showed the excessive reflexes present in a case of descending degeneration in right lateral sclerosis following left hemiplegia.

Large Ascitic Collection.—Dr. CHEYNE showed a boy, aged 9, suffering from mitral incompetence and enlarged liver, following rheumatic carditis, from whom he had removed 600 ounces of ascitic fluid at one tapping. There had been no tendency to recurrence of the dropsy.

Malformation of Heart.—Dr. MACKENZIE BOOTH exhibited a malformed heart from a cyanotic infant of 12 weeks old. It presented three of the fœtal conditions: (1) an opening at the upper part of the interventricular septum, allowing of communication between the right and left ventricles; (2) non-closure of the foramen ovale, the two auricles forming one large cavity; and (3) the aorta and pulmonary artery forming a common trunk as in the fœtal condition.

GLASGOW OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, MARCH 23RD, 1887.

SAMUEL SLOAN, M.D., President, in the Chair.

Amputation of Cervix.—Dr. MURDOCH CAMERON showed a cervix uteri, amputated by Professor Leishman for elongation in a multipara, and advocated the use of the galvanic écraseur in such cases.

Wire Clamp.—Mr. J. STUART NAIRN exhibited two simple forms of wire clamp.

Cucaine Cones.—Dr. SMITH exhibited cones of cucaine and boric acid, recommended by Dr. E. Head Moore for use in primiparæ and cases of rigid os.

Rupture of Spleen.—The PRESIDENT showed the spleen and uterus, with appendages, of a primipara, aged 22, who had died in the Maternity Hospital on the twenty-second day after delivery, after a somewhat unusual illness. The spleen had been adherent, and, on removal, a quantity of grumous material had escaped from a cavity in its upper extremity. In this region it separated into two parts, joined by a mass of fibrinous material, its surface being coated with lymph. Otherwise, the tissue was friable; and Dr. Dalziel had reckoned that the rupture indicated by these appearances must have taken place three to four weeks prior to death. There was no appearance of pus in or around the organ. The uterus measured four and a half inches in length, and with its appendages looked normal, being covered with smooth, glistening peritoneum, and showing no trace of pus or putrefaction. There were no appearances elsewhere of septicæmia or pyæmia. Though the urine contained one-third of albumen on admission, on *post-mortem* examination the kidneys appeared to be quite healthy.

ACADEMY OF MEDICINE IN IRELAND.

SUB-SECTION OF ANATOMY AND PHYSIOLOGY.

OPENING MEETING, THURSDAY, FEBRUARY 10TH, 1887.

J. A. SCOTT, F.R.C.S.I., in the Chair.

The Marsupial Heart.—Dr. CUNNINGHAM exhibited the heart of a kangaroo which he had recently successfully injected.

Absence of the Internal Iliac Artery.—Dr. LEDWICH read notes of the dissection of a male subject in which the internal iliac artery was absent on the left side.—Dr. CUNNINGHAM said he had never seen the condition, and it was a very rare form indeed.—After some remarks by Dr. BROOKS, Dr. FRAZER, and Dr. T. E. LITTLE, Dr. LEDWICH replied, stating that the arteries were altogether normal on the right side.

Variations in the Nerve-supply of the Lumbrical Muscles.—Dr. BROOKS communicated the results of investigations which he had made into the varieties in the innervation of the lumbricals of the hand and foot, with some observations on the perforating flexors.

Exhibitions.—Dr. CUNNINGHAM exhibited (1) four Chinese plates of human anatomy which had been presented to him by Dr. Irwin, of Tientsin; and (2) casts of deformed feet of Chinese women which had been presented to him by Professor Welcker, of Halle. He explained from the cast that the foot was bent into an exaggerated arch, so that the os calcis was brought to lie immediately below the astragalus; but though they distorted the foot, the Chinese seemed to have an appreciation of the importance of the great toe, which was preserved for locomotion.—Dr. FRAZER said he had a book with a series of plates, published 200 years ago, illustrating the Chinese system of anatomy which had been followed for upwards of one thousand years.

SURGICAL SECTION.

FRIDAY, FEBRUARY 18TH, 1887.

W. COLLES, F.R.C.S.I., in the Chair.

Resection of the Pylorus.—Mr. M'ARDLE read a paper on resection of the pylorus, and, as evidence of the importance of this operation, he showed that, of 1,342 cases of cancer of the stomach, the disease was confined to the pylorus in 802, and of this number 496 were suitable for operation, as there was no engagement in the neighbouring glands or adhesions to adjoining viscera. He then detailed a case in which he had removed the pylorus for cancer. The patient died of exhaustion four hours after operation. He called attention to the result in 70 cases of pylorectomy which he collected—62 were for cancer, with 35 deaths; 8 for simple stricture, with 3 deaths. The high mortality of the former depended on extensive adhesions delaying the operation. He showed that, of 289 cases, the tumour adhered to the pancreas in 132, the omentum in 80, the transverse colon in 72, the liver in 4, the small intestine in 1. The conditions under which he considered operation justifiable were: 1, irritable and intractable pyloric ulcer, leading to spasmodic stricture; 2, simple fibrous stricture; 3, circumscribed cancer, without adhesion to pancreas or transverse colon.—After some remarks from Dr. COX, Mr. THOMSON said that although Mr. M'Ardle had condemned gastro-enterostomy, there were certain cases in which that operation ought to be done. It was not universally true that cancerous tumours of the pylorus and stomach were followed in twelve months by death. A case recently under his own care had lived for sixteen months.—Mr. FRANKS said he had had two cases in which, after opening the abdomen, operative procedure was abandoned. In the first, the tumour seemed suitable for pylorectomy. A hard mass about the size of an orange could be grasped, apparently isolated, and moved from side to side; but, on opening the abdomen, he found the pyloric end involved, and also a great portion of the colon behind. The unanimous opinions of surgeons present was to close the wound and proceed no further. In the other case the tumour seemed perfectly movable, but was not well defined, and the abdomen was opened with a view to eradicate it. He found the tumour was a cancer involving the whole thickness and extent of the stomach, and also a large portion of the omentum and duodenum. Accordingly the abdomen was closed.

Œsophagotomy to Remove a Foreign Body.—Mr. BARTON read a paper in which he referred to the removal of a foreign body impacted in the pharynx or œsophagus as a safe and justifiable proceeding in cases where removal through the mouth was difficult or impossible to effect. He detailed the case of a child from whom he had removed by pharyngo-œsophagotomy the steel roller of a sewing-machine, which had been imbedded in the pharynx opposite the cornu of the hyoid bone for three months. The foreign body, which was larger in diameter than a sixpence, could be felt in the neck, and was safely and easily removed. The child made a good recovery, the greatest difficulty encountered being the feeding of the patient, which was troublesome owing to the tendency of food to come through the wound, which did not heal for some time. This was overcome by feeding through a stomach-tube introduced through the wound. Mr. Barton called particular attention to this plan of alimentation, which he considered would prove of much value in the after-treatment of cases of this class.—Mr. WHEELER said that, having removed a needle which was across the pharynx, he had given the patient a sponge dipped in milk, and let him suck down the food. In other cases he fed with a spoon, the head being well thrown back. He never stitched the pharynx, but allowed it to fall together and close of its own accord. Instead of making an incision into the pharynx, he dilated it with a forceps, to avoid cutting the nerves, the implication of which might cause hoarseness.—Mr. W. THORNLEY STOKER indicated that the term œsophagotomy applied to the operation was a misnomer, and that the correct designation was pharyngotomy. If the surgeon could put his finger on the foreign body, he should be able to remove it without making an incision. Recent experiments suggested that swallowing was most easily performed when the patient was leaning his head forward, instead of backward.—Mr. T. MYLES mentioned that in the Richmond Lunatic Asylum he observed patients suffering from paralysis instinctively put the head out straight to facilitate swallowing.—Mr. BARTON replied.

REVIEWS AND NOTICES.

GOUT: ITS NATURE AND ITS TREATMENT. By Dr. W. EBSTEIN. Translated into French by Dr. E. CHAMBARD, with an Introduction by Professor CHARCOT.

SEEING on the title-page of this French translation of Dr. EBSTEIN'S work that it has an introduction by Professor CHARCOT, everybody is naturally attracted to it. On reading the introduction, however, one is much disappointed to find that it is only a page in length, that part of it is taken up with lamentations that Dr. Ebstein has not referred to M. Bouchard's researches, and part with praise of the translation and the chromo-lithographs, leaving barely half a page in which Professor Charcot lauds the physiological and chemical parts of the work. This habit, unfortunately not unknown in England, of publishing books with trivial prefaces by great men, is much to be deprecated, for not only does the poverty of the preface detract from the high estimation of the writer of it, but, by tacking the great name on to the book, it is thrust into a prominence which it does not deserve. Publishers may be assured that, in the long run, the practice will do harm rather than good.

The work is divided into five books. The first is historical; it is well and tersely written. Dr. Ebstein rightly directs attention to the excellence of the clinical descriptions by the older authors. The derivation of the word *gicht* is usually given in medical works and dictionaries as from the English *gout*, that coming from the Latin *gutta*, a drop. Heyne has, however, put forward the view that *gicht* is derived from the Anglo-Saxon *gihda*, which means pain. It will be very interesting to see whether philologists in general allow this. Dr. Ebstein's reference to Paracelsus is noteworthy as showing how history repeats itself. He considered that a substance which was produced by imperfect digestion circulated in the blood, caused many effects, amongst others gout; this view is curiously like our modern one of ptomaines circulating in the blood as a result of indigestion. After reading through the historical account, one notices that, as might be expected, all the best work on a disease so peculiarly English has been done by Englishmen, such, for example, as Syden-

ham, Sydenham, and Garrod; and the author is both just and generous in the tribute he pays to English observers.

The second book, which is concerned with pathological anatomy, is the weakest part of the whole treatise. It begins with a review of the discussion as to whether the salts are deposited in the tubes or in the interstitial tissue of the kidney itself. The author thinks they are deposited in the kidney-substance, chiefly in the medullary part, but also slightly in the Malpighian bodies. The reason why we condemn this part of the book as weak is that it is the part in which the writer shows great want of experience; he seems to have based his account on the microscopical examination of four patients' kidneys, surely an insufficient foundation for a monograph; and when it is discovered that an author is speaking from insufficient data in any part of his book, one is inclined to doubt the sufficiency of his facts throughout. The fourth of his cases is so unusual, that it is a pity to have used it as a basis for a pathological description. The patient is said to have died at the age of 24, from uræmia, due to granular kidney. The joints were healthy, there was no evidence of lead-poisoning, the surface of the kidney was irregular, the cortex a little atrophied, "the small volume of the medullary substance was astounding when compared with the large amount of fat at the hilus," urate of soda was present here and there in the kidneys, there was hypertrophy and dilatation of the left heart, which showed a fatty and fibrous myocarditis, and there was follicular enteritis. The criticisms that may be made on this case are obvious. Is it certain that the kidneys were gouty at all? The patient was only 24 years old, he did not work in lead, there is no hereditary history of gout, his joints were unaffected, the vessels of the kidney are not stated to be thick, there were no cysts, neither the pelvic nor the stellate veins are mentioned as being particularly well marked. The only evidences of gout are the roughness of the surface and the wasting of the cortex, both of which appear to have been very slight; for, considering the frequency of the deposit of urates in young children, they cannot be looked upon as any evidence at all. What the bearing of the observation about the fat at the hilum may be is difficult to say; the same remark may be applied to the allusion to the follicular enteritis, which is common enough in patients who have died from various maladies. Then a fatty, fibrous myocarditis is not the usual condition in gouty kidney. It is to be regretted that the author's data are so few, and that of those few some are insufficient. He lays great stress on the fact that the sequence of events is the formation of little necrotic centres in the tissues, such as the kidney, cartilage, tendon, and muscle, and the subsequent deposition of urates in these necrosed parts. In the kidney, these necrosed patches do not communicate with the tubes; no mention is made of thickened vessels or cysts, both of which we are accustomed to look upon as very common in a gouty kidney, gout being with us a cause of chronic Bright's disease. Nowhere does Dr. Ebstein state clearly the relationship of what he calls a gouty kidney to the kidney of chronic Bright's disease; we cannot help thinking, from his description of the patient who died at the age of 24 years, that he does not regard gouty kidney as a variety of the chronic disease of the kidney named after Bright.

In his account of the affection of cartilage by gout, there is nothing to note beyond what we have said. His observations on the method of deposit in fibrous tissue, connective tissue, and tendons would be very valuable if the number of cases examined had been greater. He is very emphatic that the cause of the necrotic patches throughout the body is the circulation of blood in a uratic condition; urates are deposited in these patches, and subsequently lime-salts combine with the urates thus laid down.

The third book treats of gout in the lower animals, and the experimental production of it either by tying the ureters, or by the subcutaneous injection of small daily quantities of the neutral chromate of potash. The animals died so soon after the ligature of the ureters, that the results obtained hardly bear upon the explanation of such a chronic malady as human gout. Thus the cock whose liver is shown in Fig. 26 only lived twenty-one hours after the experiment, and yet the liver was in a state of extreme granular parenchymatous degeneration. Dr. Ebstein allows that, before this case can be allowed much value, the experiment must be repeated. The animals treated by the chromate of potash method showed the necrotic patches with subsequent uratic deposits chiefly in the liver and the heart, but not in the joints, making it doubtful whether one should apply these results to the explanation of gout in human beings. It is shown that uric acid injected into the animal appears very shortly after in the medullary renal tubes, where it sets up slight inflammatory changes, from which the kidney soon recovers.

The local irritant power of many substances such as uric acid, creatine, xanthine, and hippuric acid, was tested, and it was found that uric acid had a specially irritant action. It will be observed that the difference between the author's teaching and that prevalent in England is that we believe the uric acid sets up the inflammation, whilst he believes that uratic condition of the blood causes these necrotic centres. It is with the discussion of these and allied points that the fourth book is occupied.

The fifth treats of the clinical aspect of gout. It is emphatically laid down that there are two forms—primary gout of the kidneys and primary gout of the joints. It is to be regretted that the cases Dr. Ebstein gives to show the distinction are not derived more from his own experience, but are quoted from other authors. In the articular form, he would seek for the primary cause of the evil in the muscles and bones, although it is quite possible that it may be found in the liver. As might be expected, he finds much difficulty with the chemical part of the work, for we have yet much to learn about physiological chemistry. The one fault we find is that Dr. Ebstein is occasionally too dogmatic; thus, he says it has not been proved that substances of the nature of xanthine and hypoxanthine exist in muscle; but some physiologists distinctly state that they have been found, and it has not been sufficiently disproved for their absence to be used as the basis of a theory of gout. One cannot help wishing that he had seen enough necropsies to enable him to analyse the muscles of a gouty patient, the more especially as he laments that this has not been done. Contrary to the best modern dermatological teaching, he believes in gouty skin-diseases. He also considers that gout will cause cirrhosis of the liver, but is there not a fallacy here? Alcoholic indulgence may cause both, for the distinction that the cirrhosis due to gout is hypertrophic does not hold now that we know that hypertrophic cirrhosis is only a stage of ordinary cirrhosis. Likewise gout is credited with causing functional disease of the heart, fibrous degeneration, and also endocarditis. Atheroma, he thinks, may be caused by gout, and by the influence of bad vessels the nervous system may be affected, but no mention is made of arterio-capillary fibrosis due to granular kidney; he alludes to the possibility of the direct influence of gout on the nervous system, without, however, referring to it as a cause of peripheral neuritis.

Whilst most of the work will repay reading, as presenting many new views of the subject, the last part on treatment will be found to be particularly valuable; the keynote of this portion is, "Do not overdose your patients;" and much sound scientific advice may be found in these pages. So much of the treatment is different from that usually adopted, that we can quite understand the reader saying, "What then am I to do?" Some years ago, Dr. Ebstein published a well-known pamphlet, which we remember reading with much pleasure. It contained rules for the treatment of patients suffering from obesity, and Dr. Ebstein recommends that gouty patients thus affected should be put upon a diet chiefly proteid; but is there not then a danger of excessive formation of uric acid?

Of the paper, printing, plates, and translation, we can only speak with the highest praise. We have rarely seen a medical book which was got up in such an excellent and artistic manner. The chromolithographs are particularly good.

PARALYSIS, CEREBRAL, BULBAR, AND SPINAL. A Manual of Diagnosis for Students and Practitioners. By H. CHARLTON BASTIAN, M.A., M.D., F.R.S. London: Lewis. 1886.

THE title of this book does not by any means convey a just idea of the whole of its contents. It is rather a treatise concerning the lesions giving rise, among other symptoms, to paralysis. The author, for instance, discusses loss of sensation as well as loss of motion. He goes fully into the question of aphasia, and touches upon many other collateral topics related to the problems of regional diagnosis, such as loss of vision, spasms, atrophy. Under bulbar paralysis he includes the cases depending upon lesions of the cerebral nerves.

It would be impossible to give, within the limits of a short review, an adequate idea of the mass of information contained within the 650 pages of this rather closely-printed volume, far less to criticise the author's exposition of the innumerable subjects he presents to the reader. Dr. Bastian is well known as a gifted teacher, and a lucid and accurate writer on the nervous system. But he has the much higher merit of being a discoverer and an original thinker, and, as such, a fearless expounder of what he considers to be the truth in matters controversial. His logical acumen and extensive practical knowledge make the reading of his book most valuable and suggestive. It will be found on the table of every man interested in the latest developments of neuro-pathology, as well as in the hands of those desirous of solving the many problems that await them at the bedside or examination-table.

We need not stop to point out the many individual excellences of the work before us. What we have said of its general tone and method is a sufficient expression of our opinion. Nor would it be worthy of the review of such a work to pick out a few matters of detail with which we happen not to agree, and pretend to set the author right concerning them. Still, we think it only right to say that, in his discussion of the bulbar-motor mechanisms of the eye, Dr. Bastian seems to have overlooked the recent advances of science, as embodied, for instance, in the work of Mauthner on the nuclear paralyses of that organ. It has long been known that the so-called nucleus of the sixth nerve is really the motor centre for the rotation of both eyes to the same side. But we also know now that the nucleus of the third nerve is composed of a series of similar physiological centres presiding over the various motor functions of the eyeball. The ophthalmoplegia interna (or better *interior*, since the former word denotes the inner side and not the interior of the eye) of Hutchinson depends upon disease of the upper part of the third nucleus. Just below this we find the accommodation centre; and, lower down still, mechanisms for convergence, and the various other muscular adjustments for the movements of the eye and lid.

In his next edition, Dr. Bastian will perhaps see his way to discussing in his perspicuous style the still obscure phenomena of tremor and inco-ordination so often connected with paralytic states. For, though, perhaps, the time has not yet come to advance really scientific theories concerning these symptoms, a connected and critical account of the known facts would, no doubt, tend to clear up many misconceptions, and direct further efforts in their investigation.

The book is illustrated with about 140 figures, useful though rough; they illustrate chiefly the various localisations. A list of them would have been useful for reference. We trust, for the sake of neurology, that a second edition will soon be called for, when Dr. Bastian will, no doubt, complete the easy task of making his book perfect.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

MESSRS. BINET FILS AND CO.'S (REIMS) CHAMPAGNE—"DRY ELITE."

SAMPLES of this wine have been submitted to us, by Messrs. Rutherford and Browne, of Old Trinity House, Water Lane, Upper Thames Street (the English agents to Messrs. Binet Fils), which have been subjected to a careful analysis. The makers claim for this champagne that, besides being adapted to ordinary family use, it is especially suited to invalids, particularly those of a gouty diathesis. The analyst's report confirms this statement to a great extent. It is as follows:—"I have carefully tested this wine. It is a good, sound, dry champagne, containing very little unfermented saccharine matter. It has evidently been carefully prepared, and contains all the briskness and sparkling qualities of the best brands of champagne. I have not been able to discover the slightest indication of any foreign matter or sophistication. It is a pure wine. —R. H. HARLAND, F.I.C., F.C.S."

NEAVE'S FOOD.

THIS food has been carefully analysed by Dr. Cameron, Mr. Bartlett, and others, who all report it as containing 14.7 of proteidacious flesh-forming matter, and adequate richness in phosphates and potash. It is claimed to have stood the test of long use, and is reported to be especially useful as a food in the prevention of infantile diarrhœa.

NEW FRONTAL MIRROR.

MR. WRIGHT WILSON, F.R.C.S.Ed., etc., surgeon to the Birmingham and Midland Ear and Throat Hospital, writes: I have suggested, and Messrs. Mayer and Meltzer have carried out, an improvement in frontal mirrors, for either aural or laryngeal illumination, etc. It consists of an ordinary mirror with a horizontal oval aperture, half an inch wide and an inch and a half long, for which I claim the following advantages: (1) That the eye of an observer is permitted to range in a horizontal direction without moving the mirror; (2) he can use his own spectacles; (3) he is allowed the use of both eyes—that is, he need not keep the left eye shut, as is the case with the small rounded or oval apertures of the present day, but, gazing with both eyes, he can work with greater freedom and precision; (4) diffraction fringes are reduced to a minimum, while with small apertures the space which is used for vision is seriously encroached upon by them. The pad is covered with undyed kid leather, which prevents staining of the forehead.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 2nd, 1887.

THE SCOPE OF THE NEW LUNACY BILL, AS AMENDED.

THE Lunacy Acts Amendment Bill having passed through the House of Lords, we propose to refer in brief terms to the principal provisions of the Bill, in its present amended state, as they affect medical men and public and private asylums.

Under the Bill, as it now stands, medical men are protected who sign certificates of the insanity of persons who are not paupers, either in support of a petition to a judge, magistrate, or justice to make an order placing an alleged lunatic under care and control; or who take the responsibility of signing the medical certificates accompanying an "urgency order" signed by a relative, under which the alleged lunatic may, without any authority from a public functionary, be kept under care and control for seven days or less, or until any petition or application for an order for detention of the alleged lunatic, which is pending, is finally disposed of. The protection to the signer of a medical certificate, under the above circumstances, is that he shall not be liable to any civil or criminal proceedings for so doing, if he has acted in good faith and with reasonable care; and any proceedings taken against him on the ground that he did not so act in good faith and with reasonable care may be stayed on summary application to the High Court of Justice, or a judge of that Court, if the Court or judge is satisfied that there is no reasonable ground for the allegations against the good faith and carefulness of the medical man in signing the certificate. Furthermore, no prosecution for a wilful misstatement of any material fact in any medical certificate shall take place except by order of the Commissioners in Lunacy, or by the direction of the Attorney-General or Public Prosecutor. The provision by which a non-pauper lunatic, placed under care without having had an interview with the judge, magistrate, or justice who signed the order, may practically secure a subsequent reconsideration of his case by making a request to that effect within a week after his reception is likely to furnish many occasions of contention between persons who are insane at least at and before their reception and the medical men who sign certificates of their insanity. To this point we have referred in a previous article, and to the other disadvantages attending the amended provisions of the Bill on this part of the subject.

On public asylums the Bill does not exercise any very sweeping effect. The local authorities which control public county and borough asylums are permitted and encouraged to provide accommodation for

private paying patients, either in, or in connection with, the existing asylums, or separately. The county asylum medical service also is improved by the enactment that, when any officer's service has been in more than one county asylum, his service in all such asylums shall count towards pension or superannuation allowance. But a number of the provisions of the Bill fetter the lunatic hospitals to some extent.

As to private asylums, the indirect effect of the Bill will be to lead to a gradual decrease in their number, partly by encouraging the justices, who control the county and borough asylums, to provide accommodation for paying patients, and thus greatly augment the existing competition of public with private asylums; and partly by enacting that no fresh private asylums shall be started, and that the licences of existing ones shall not be increased so as to apply to a larger number of patients. The permission to subdivide joint-licences amongst joint-licensees is a point in favour of those who at present have a pecuniary interest in private asylums.

The following are points in regard to which some further amendment of the Bill, in harmony with the views of the Parliamentary Bills Committee of the Association, seemed to be desirable, and are to the effect:—

That the judge, magistrate, or justice to whom has been presented a petition to make an order for the reception of a non-pauper lunatic should in all cases see and examine the alleged lunatic; and that the Bill should continue, and not omit, the existing requirement that the justice who has been asked to sign the order of reception of a pauper patient into an asylum should, before signing, personally see and examine the alleged lunatic, and satisfy himself that the latter is of unsound mind.

That the same protection as is given to the medical men who sign certificates of insanity should be extended to those who receive and detain the very same patients.

That the punitive provisions in relation to workhouse medical officers should be modified.

That the certificates of the unsoundness of mind of persons under care as being insane, required periodically of the medical superintendent, proprietor, or attendant under the Bill, should suffice, without any accompanying "special report," and that these certificates should be protected in precisely the same way as are the original certificates of unsoundness of mind under which such persons were received.

That a person seeking the discharge of a person detained under care as being insane, and, in pursuance of that object, obtaining permission to have the latter examined by two medical men, called in as partisans, should give adequate security for the payment of all necessary expenses, and that there should be the same restrictions with regard to the medical men who sign certificates under this provision as are made in respect to those who sign the original certificates of unsoundness of mind.

That the provisions relating to the letters of lunatics should be omitted or greatly modified.

That the registered lunatic hospitals should not be subjected to special restrictions and disabilities.

THE portraits of Mr. Savory, the President, and of Mr. Trimmer, the Secretary of the Royal College of Surgeons of England, were on view last week in the studio of Miss Merrick, of Harley Street.

THE NATURE OF FEVER.

VERY few of those who employ the thermometer in their daily work ever consider precisely what they learn by using it. We have been carried away too much by its application, and are consequently apt to be blind to the fact that its use is perhaps more empirical than any other means of diagnosis; for it does not tell us whether the increased temperature is due to an increased production of heat, a diminished loss, or to both these causes. The Gulstonian Lectures on the Nature of Fever will do great good by bringing this fact before the profession, as has been previously done by Burdon Sanderson, Wood, Hale White, and others, who have shown that the production of heat, like the loss, is directly under the control of the nervous system. But Dr. Macalister has done more than this: he has extended our accurate knowledge of heat-production. Although, for many clinical reasons, it is very probable that the motor function is distinct from the thermogenetic function of muscle, we have till now lacked absolute proof; this has been supplied by Dr. Macalister, who, by a series of laborious experiments with both cold and warm-blooded animals, has proved that the motor function may persist while the thermogenetic function is in abeyance, and that cold is capable of abolishing or notably depressing the latter function while the former is but little or not at all affected. We may now hope that the text books on physiology will make it clear that there are two distinct functions of muscles—motor and thermogenetic; for then the student will be able to obtain a much better grasp of the process of fever than he can have at present.

Dr. Macalister has also boldly, and probably correctly, applied the doctrine of anabolic and catabolic nerves to thermogenesis. The stuff which by its chemical metamorphosis produces heat he calls "thermogen." The destructive metabolism of this is induced by the stimulation of the catabolic nerves; thus their function is to make heat, but this is restrained by the anabolic nerves continually building up again the destroyed thermogen. Therefore, as he expresses it, "the thermogenetic-tonus of a resting muscle is dependent upon a balance between the nervous impulses subserving anabolism and those subserving catabolism." Many will no doubt be frightened by the length of these words, but if the reader will only take the trouble to grasp their meaning, it will be found that they express a simple theory of heat-production, harmonious with what we know of the innervation of other parts of the body.

Our knowledge of the course of the thermogenetic nerves is at present in its infancy. The most complete work on this part of the subject has been published by Professor Wood, in various parts of the *Smithsonian Contributions to Knowledge*. Rosenthal (Hermann's *Handbuch der Physiologie*, Band iv, Theil 2) considers that Wood's experiments hardly prove as much as their author thinks, but a careful perusal will probably lead to the conviction that, as Dr. Macalister has said, they bear the stamp of being fully reliable. According to these observations, in dogs at least, there is in the brain a cortical or subcortical region, coinciding in part with the motor region, and concerned in thermogenesis. All Professor Wood's experiments go to show that this centre is inhibitory or anabolic, for when the motor region is destroyed, the temperature rises, the process of catabolism not being affected by the concurrent process of anabolism. Aronsohn and Sachs have shown that on stimulation of the inner side of the corpus striatum, the temperature rises; thus this part of the brain would

appear to be catabolic, and therefore the counterpart of the cortical anabolic area.

It need hardly be said that, in all these experiments, the possibility that the alterations in the temperature were due to vaso-motor changes has been excluded. The amount of heat lost depends chiefly on the cutaneous vaso-motor nerves, and, to a less degree, on the amount of air expired. To the whole mechanism for the giving off of heat the term "thermolytic mechanism" is applied. Therefore, concerned with the production of the temperature of the body, we have a thermogenetic and a thermolytic mechanism, each of these being double, the former consisting of anabolic and catabolic mechanisms, the latter of similar mechanisms, but better known as vaso-constrictor and vaso-dilator. To these Dr. Macalister adds a thermotaxic, or adjusting, mechanism; thus he says the thermal nervous system consists of three parts—a thermotaxic, a thermogenetic, and a thermolytic. It may be doubted whether it is necessary to speak of a thermotaxic part of the nervous system; for example, it is conceivable that, as the result of increased thermogenesis in muscle, certain substances are conveyed by the blood to either the local or central vaso-motor centres, and, acting as a stimulus to them, produce the increase of the thermolytic action. In the same way disordered thermolytic action may react on the thermogenetic centre; in other words, as blood is constantly flowing from the thermogenetic to the thermolytic mechanism, may not this be the thermotaxic mechanism? But even if this mechanism be nervous, it will be simple compared to the other two, for there are afferent nerves from muscle, and it is only necessary to imagine that the increased or diminished heat-production causes them to convey impulses to the vaso-motor centres, and conversely to imagine impulses passing from the cutaneous blood-vessels to the thermogenetic centres.

The conclusion of these Gulstonian lectures contains some very important remarks, pointing out that the theory of the nature of fever set forth in them explains how it is possible for an increased thermogenesis without high temperature to be present, the increased production being compensated for by increased loss; thus there may be the symptoms of fever without any rise of temperature, a condition that may be met with in mania; and conversely there may be a high temperature without any fever. Lastly, Dr. Macalister takes a comprehensive view of differences between warm-blooded and cold-blooded animals. The three mechanisms are successively evolved, both as we ascend in the animal scale, and also in the life of the individual; for example, a cold-blooded animal possesses little more than a thermolytic mechanism; an infant has a thermolytic and a thermogenetic only, as is shown by the instability of its temperature; whilst an adult has all three—thermogenetic, thermolytic, and thermotaxic. Fever is a dissolution process, the last mechanism evolved—the thermotaxic—being the first to give way, then the thermogenetic, and lastly the thermolytic. Conversely, when a patient gets well, first the action of the thermolytic mechanism is restored, then that of the thermogenetic, and lastly that of the thermotaxic. The only thing to be regretted about these philosophical lectures is that there are but three of them. They leave off just at the place where they have begun to be most interesting in their application at the bedside, but this much at least we have gained clinically, namely, that now in each case of fever that presents itself to us, we know which are the parts of the mechanism that may be perverted, and also in what manner they must be perverted in order that fever may result. Dr. Macalister has propounded a comprehensive and coherent theory, which not only links together many well-known facts, but also harmonises with the theories applied to analogous phenomena in the body.

M. PASTEUR'S TREATMENT OF HYDROPHOBIA.

In publishing the communication of Dr. Lutaud, the able editor of the *Journal de Médecine* of Paris, we follow our usual custom of giving space in these columns to all well-argued opinions. Dr. Lutaud's facts and inferences must, however, be received with some reserve. It is now certain that M. Pasteur was too confident in declaring last year that his method was absolutely efficacious, and that M. Grancher was much nearer the truth when he maintained, at the recent discussion on rabies at the Académie de Médecine, that M. Pasteur's preventive had not always proved, and would not always prove, successful. But it would surely be rash to claim more for any prophylactic, more especially in the early and tentative days of the study of its mode of action, its dose, its methods of preparation and of application.

M. Pasteur's prophylactic is certainly not an infallible preventive of rabies. M. Pasteur himself has published the statistics of his failures, which include 31 deaths from bites inflicted by dogs, and 7 from bites inflicted by wolves. On the other hand, Dr. Lutaud puts the number of deaths among Frenchmen, for the same period of time as that covered by M. Pasteur's statistics, at 21, while M. Pasteur acknowledges only 18. The difference is so slight that the three cases might be set down against M. Pasteur without sensibly modifying the result. Moreover, it will be observed that Christin, Daresset, and Rouyer, who are classed in M. Lutaud's statistics as Nos. 9, 12, and 21, are stated by M. Pasteur, on the strength of medical certificates, to have succumbed to maladies other than rabies. When this circumstance is taken into account, both sets of statistics are in perfect harmony. Before pronouncing in a definitive manner for or against M. Pasteur's method, it will be prudent to give it a much longer trial. That the treatment has a certain value however, seems to be borne out by the following facts:—

M. Leblanc, who several years ago made an extensive research into the deaths resulting from bites by mad dogs, found the mortality to be 16 per cent. Now, if we examine M. Pasteur's statistics of the persons bitten by dogs which were proved to have been suffering from rabies by the results of experimental inoculations of their medullæ, by the development of the disease in other persons or animals bitten at the same time, or by *post-mortem* examination made by a veterinary surgeon, we find that the total number of cases is 2,164, with a mortality of 29, or only 1.34 per cent., which is a much lower percentage than that given by M. Leblanc. For greater security, we have not taken into account the persons bitten by animals only suspected of being mad, although in M. Pasteur's statistics two cases of this kind proved fatal. The whole question of prophylaxis against rabies—a malady of which scarcely anything is known clinically—is in a stage at which it would be dangerous to pronounce definitively one way or the other, although the results so far seem rather to favour M. Pasteur than his critics.

In conclusion, we may cite a very interesting fact connected with the cases treated by M. Pasteur. When divided into groups of cauterised and non-cauterised patients, it is found that among the latter there were 0.81 per cent. of deaths, while among the former the deaths amounted to 1.56 per cent. At first sight this would seem to

indicate that cauterisation immediately after being bitten increased the intensity of the disease, but this cannot be the case. The greater mortality among cauterised patients is easily explained by the fac that those who have recourse to cauterisation are generally those who have been deeply bitten; on the other hand, cauterisation is not always performed immediately.

THE AUTOCRAT OF THE COUNCIL-TABLE.

POETIC justice has overtaken the Council of the College of Surgeons of England. It has long ignored the right of its commonalty to have any hand in managing its affairs, and has sought to impose its will without granting to that commonalty more than the semblance of a right to discuss questions even of the most vital importance. It has been supposed to be an oligarchy in which the fortunes of the many were committed to the irresponsible governance of the few. Recent events have shown that within this oligarchy there is an autocrat. As we announced last week, Mr. Savory, who is at present President of the College of Surgeons, received in solitary state an aristocratic deputation, which lodged a protest against the utilisation of the Erasmus Wilson Fund for just the very purpose for which its benevolent founder intended it to be used—the advancement of surgery.

The petition which some well-meaning persons, learned, no doubt, in all points concerning their own professions, but obviously quite unacquainted with the requirements and successes of modern medicine and surgery, had been induced to support, contained nothing beyond the usual misstatements, and need not detain us at the present moment. But there is one point of view from which the incident deserves most serious attention. No more lamentable breach of the constitution of the College has ever come to light than the premature—we fear we must also say hospitable—reception of that deputation by Mr. Savory, in his full and official capacity as President of the College. In thus ignoring even the existence of the Council by presuming to receive such a deputation without previous sanction, Mr. Savory has acted in a manner which is entirely without precedent, and the circumstances under which he acted aggravate the offence and intensify the insult. So far as we are aware, no similar act of high-handedness has ever been recorded in the annals of the College. And for what purpose? We hardly like to surmise. It will be noted that Mr. Savory arranged to receive the deputation on the day just before that fixed for the meeting of the Council. But why the day before? Simply, we believe, because he was well aware the Council would have nothing to say to the automata forming the embassy of agitation. Was it impossible for Mr. Savory to wait two or three days until he could consult the governing body of the College before endeavouring thus to commit the College to his own personal views by his autocratic action? The Council of the College of Surgeons will no doubt in future take steps to frustrate the absurdly self-opiniated attempts of the President to take the reins of government into his own hands, but the whole incident is a striking example of the essentially vicious constitution of the College of Surgeons. If the principle of representation were once frankly admitted, no President would ever dare to act on his own authority in any matter likely to pledge the College to a course of future action. At the present time it would appear that the President is an uncontrolled autocrat.

But, besides thus transgressing every law of constitutionalism and courtesy which surround the honourable office in which he has been placed, Mr. Savory has, by sheltering himself behind a technical error, given it to be understood that he will not receive any deputation formed from among those who signed either the circular presented to the Council by all the leading authorities in biological science (including, of course, physiology and pathology), or the circular we published three weeks ago, which was signed by all the teachers of surgery in London (not on the Council), with "two incomprehensible exceptions." That the President of the College of Surgeons of England should by unconstitutional means welcome the enemies of his own profession, and at the same time contemptuously refuse to listen to suggestions offered by the foremost representative men of science, as well as the teachers of surgery, reveals a state of things which is almost incredible in this nineteenth century. An immediate remedy lies in the hands of the Council of the College, and in making it perfectly impossible in the future for anyone, however arrogant and influential, to plan such a stab in the dark as that which Mr. Savory has just dealt his own colleagues and profession, the members of that Council will do something towards earning the confidence and esteem of the practitioners they represent as the trustees of English surgery.

WE regret to hear that M. Pasteur is seriously indisposed.

THE Queen has sent a cheque for £100 to the Queen's Hospital at Birmingham.

DR. ALFRED MEADOWS has been elected an honorary member of the Philadelphia Obstetrical Society.

DR. ROBERT BARNES has been elected a vice-president of the Gynæcological Section, and Dr. Edis of the Section of Obstetrics, of the International Medical Congress to be held at Washington in September.

A MEETING of the Convocation of the University of London will be held on April 19th, to consider the best method of celebrating the jubilee of the University and the Queen's connection with its foundation and progress.

IT is stated that the members of the Committee of the Pasteur Institute have decided to refuse the site offered by the Paris municipality, and to purchase ground beyond the Mont Parnasse station for £17,200. They have also agreed on plans for the erection of four buildings to cost £24,000.

ILLEGAL OPERATIONS.

CASES of illegal operations performed upon women for the purpose of procuring abortion have been extremely numerous of late. Two women, of whom one is a midwife, and a man who described himself as a medical botanist, have this week been committed for trial by the Sheffield coroner on the charge.

A HYGIENIC INSTITUTE.

A PETITION has been presented to Her Majesty in Council by the Duke of Cambridge, the Duke of Northumberland, the Duke of Westminster, and a large number of sanitary authorities, on behalf of the Parkes Museum of Hygiene and the Sanitary Institute of Great Britain, acting conjointly, praying for the grant of a charter of incorporation. The petition will be considered by a Committee of the Privy Council on May 6th. In the interests of sanitary science, this combination is greatly to be desired, as progress is retarded by the present multiplicity of societies and associations working in the same field with similar objects.

MORTALITY AMONG SIBERIAN CONVICTS.

DURING the decade 1876-86, 218,578 prisoners passed along the highway between Tiumen and Atchinsk, which leads to Siberia; and, of this number, no fewer than 2,867 died on the way. The report which furnishes this information gives no record of the probably larger number who perished on the latter part of the journey, nor of the causes of death, nor of the hardship and suffering which doubtless had much to do in producing so high a mortality.

GUY'S HOSPITAL FUND.

AT a meeting held on Wednesday last in support of the Guy's Hospital Fund, it was stated that £56,000 had been subscribed, and the governors had a promise of £10,000, provided that £100,000 was forthcoming by May 1st. It was decided to raise subscriptions in the district by circulars and collecting-cards. Dr. Serjeant was appointed treasurer of the local fund. A collection, which amounted to £62, was made at the close of the meeting.

TURPENTINE IN IMPETIGO.

DR. SAERBS recommends essence of turpentine as a local application in impetigo of the scalp or other hairy parts. The preparation should be well rubbed into the skin and the roots of the hair with the fingers. After about five minutes it should be washed off with carbolic soap, and afterwards with warm water. Tincture of iodine should be next applied. This treatment should be carried out once or twice a day; it causes slight itching, but is not painful. The author has found it successful where other modes of treatment have failed.

MEDICAL DEGREES FOR LONDON STUDENTS.

THE delegates appointed by the Colleges of Physicians and Surgeons to take steps to obtain for the two Colleges acting together the right to grant degrees in Medicine and Surgery met on Tuesday last. A draft petition, to be presented to the Queen in Council, was discussed, and ordered to be submitted to the Councils of the two Colleges for approval. The draft charter, in which, we understand, the term "Grand Council of the Royal Colleges of Physicians and Surgeons" has been used, instead of the word "University," will be discussed at a meeting to be held this day (Saturday).

IMPROVED DWELLINGS FOR THE WORKING CLASSES.

ONE of the most important results of the progress of sanitation is seen in the erection of improved industrial dwellings for the working classes which are now to be found in many parts of the metropolis. On Wednesday last a new block, called "Stalbridge Buildings," erected in Lumley Street, Oxford Street, by the Improved Industrial Dwellings Company, which has done so much in this direction, was formally opened by the Duke of Westminster. Nine blocks are being erected on a portion of the Duke's estate lying between Grosvenor Square and Oxford Street, which will accommodate 2,000 persons; the cost of the whole will be £80,000.

SMALL-POX AT BLACKBURN.

SMALL-POX of a rather virulent type has been imported into Blackburn, and a number of cases have already been isolated in the Small-pox Hospital. That hospital is a small wooden building, which has done good service in its time, but, as it is only capable of accommodating a few cases of one infection at one time, it is doubtful whether the sanitary authority could properly, at the present moment, isolate any fever cases if they required to do so. These circumstances should lead the Town Council to consider whether their town, with its 100,000 inhabitants, is at present adequately provided with infectious hospital accommodation.

BRITISH OPHTHALMIC HOSPITAL AT JERUSALEM.

SIR CHARLES WARREN presided on Wednesday last at a meeting held in the Jerusalem Chamber, Westminster Abbey, in support of the British Ophthalmic Hospital of the Order of St. John at Jerusalem. The Chairman, in opening the proceedings, remarked upon the prevalence of blindness in the East, and upon the confidence with which the afflicted people look to Europeans to mitigate their sufferings. The report of the resident medical officer, Mr. J. H. Ogilvie, showed that during the year 3,359 patients—of whom 121 were in-patients—were treated at the hospital, while there had been 13,462 consultations at the dispensary. The patients were of various creeds, and most of them had come from long distances—from Jaffa, Gaza, or the Desert.

A NEW TEACHER OF VACCINATION IN SOUTH LONDON.

THE Local Government Board has appointed Mr. Victor A. Jaynes, M.R.C.S., L.S.A., one of the Public Vaccinators of the St. Olave's Union, Southwark, to be a Teacher of Vaccination for the purposes of the Order in Council of December 1st, 1859. Mr. Jaynes is not authorised to grant certificates to persons whom he has not himself instructed at the station, and cannot give certificates except to persons who are found competent, are more than eighteen years old, and are engaged in *bonâ fide* medical studentship with the intention of entering upon medical practice. The certificate is of no legitimate use to other persons in this country; but an exception to the rule is made in the case of persons who are going as missionaries into uncivilised countries, and who may usefully carry with them a proper knowledge of the operation of vaccination.

LABOUR AND MORTALITY IN MINES.

FROM a parliamentary paper, giving an abstract of the annual report of the Inspectors of Mines for the year 1886, it appears that of the 519,970 persons employed under the Coal Mines Regulation Act, 4,131 were females working above ground: that during the year there were 807 fatal accidents, and 953 deaths, the number of accidents being the same as in the previous year, but the number of deaths 197 less. There was one fatal accident for every 644 persons employed, and one death for every 545. These figures compare favourably with the corresponding averages for the ten years 1874 to 1883, which were 587 and 446 respectively. The total number of persons employed under the Metalliferous Mines Regulation Act was 41,122, of whom 1,439 were females employed above ground. There were 62 fatal cases and 65 deaths, the number of accidents being 3 more and the deaths 1 more than in the preceding year.

THE CONTAGIOUS DISEASES ACTS QUESTION AT WOOLWICH.

AT a meeting of the Woolwich Board of Guardians, the Rev. J. Jordan moved a resolution condemning the suspension of the Contagious Diseases Acts, saying that he came to Woolwich some years ago believing the Acts were undesirable. He now, as a clergyman of one of the worst districts of the metropolis, was prepared to give evidence, on oath if required, that not only was prostitution more disgusting and coarse than while the Acts were in force, but that the number of juvenile prostitutes and bad houses had greatly increased. He then mentioned two very bad cases which would have been impossible while the Acts were in force. The motion was seconded and carried after some discussion.

THE PIGMENT OF MELANOTIC SARCOMA.

MANY discrepant accounts have appeared of the black pigment which is found in melanotic sarcoma and in the urine of patients suffering from this form of tumour. Some observers have, for example, stated that it contained iron; others that it does not. Mörner has recently had an opportunity of making a careful chemical examination of the pigment, and has come to the conclusion that it always contains iron, a fact which bears out the idea that it is a derivative, though a remote one, of the hæmoglobin of the blood. The pigment, however, is not a simple one, and it consists of two bodies, one of which is soluble in acetic acid, the other insoluble, while both contain carbon, hydrogen, nitrogen, sulphur, and iron in their composition. Patients suffering

from melanotic sarcoma sometimes pass black-coloured urine, even when the kidney-substance is not affected. If this may be regarded as an excretion of the pigment, it is interesting as showing how a very insoluble body may be assimilated and then eliminated by the kidney-protoplasm.

THE STAFF OF THE MARGARET STREET INFIRMARY.

We are requested to state that at a meeting of the Council of the Metropolitan Counties Branch of the British Medical Association, held on Friday, March 25th, it was unanimously resolved: "That the Council fully approves the conjoint action taken by Dr. Thomas Hawksley, Dr. W. Cholmeley, Mr. Carr Beard, Dr. Featherstone Phibbs, Dr. Julian Willis, Dr. Robert Walford, and Dr. Scudamore Powell, in resigning their appointments at the Margaret Street Infirmary, and trusts that their action will strongly recommend itself to the approval of members of the profession generally."

OFFICIAL CRITICISM OF PASTEUR'S PROPHYLACTIC METHOD.

The Belgian Government, in consequence of requests made in the Chamber of Deputies, lately deputed three Belgian physicians residing in Paris—Drs. Grandjeau, De Bruyn, and Peeters— to investigate and report on M. Pasteur's method of preventive treatment of hydrophobia, and to decide upon the advisability of founding a Pasteur Institute in Belgium. The report of these gentlemen, as the Chamber has just been informed, is decidedly adverse to such a step. It was decided by the reporters that Pasteur's method is not as yet sufficiently established, and one of them, Dr. De Bruyn, doubted whether there was any efficacy at all in the treatment. In this last view, Van der Corput "Belgium's chief specialist," coincides.

A DOUBLE MONSTER.

Dr. Siegenbeek van Henkelom describes in the *Weekblad van het Nederlandsch Tijdschrift voor Geneeskunde*, No. 10, the anatomy of a double monster which was recently presented to the Boerhaave Laboratory by a Dutch practitioner. The labour was a very difficult one, and was only accomplished by decapitation of the first child, which, however, was already dead. The placenta was normal. The monster consisted of two nearly perfect female children adherent to one another by the thoraces and abdomens, and therefore facing one another. The resemblance between the two faces was very remarkable. There was a single liver of irregular triangular form, with a line in the centre showing where the junction between the two halves had taken place. The heart was single, and of tolerably simple construction. There were two stomachs and two duodena, which, however, ran together, forming a single jejunum, the ileum again being double.

BACTERIOLOGICAL LABORATORIES IN SIBERIA AND RUSSIA.

While the Royal College of Surgeons of England is hesitating about establishing a bacteriological laboratory in the capital of England, the Medical Society of Irkütsk, the capital of Eastern Siberia, has found no difficulty in adopting a scheme prepared by Dr. Eliashevitch, and a "bacterioscopic station" will soon be in operation in the little Siberian capital, with its 40,000 inhabitants. The Kharkov Medical Society, moreover, has received from the Kürsk Government Zemstvo (country assembly) 1,500 roubles (about £150) for establishing a bacteriological laboratory in Kharkov; and, in addition, the Zemstvo promised to give 700 roubles yearly to support the institution. Perhaps these examples may cause some light to break in upon the more than Cimmerian darkness which reigns in Lincoln's Inn Fields.

INHALATIONS OF OXYGEN IN ECLAMPSIA.

Lvoff (*Journal de Médecine*, January 2nd, 1887) describes the case of a primipara who was attacked with eclampsia at the beginning of labour. Delivery was effected with forceps; but the attacks continued, although chloroform and chloral were given. Inhalations of oxygen were then prescribed; but, in spite of this, the symptoms grew more serious, the attacks became more frequent, and the respiratory stertor increased. The patient was cured by subcutaneous injections of hydrochlorate of pilocarpine. Nevertheless, M. Lvoff recommends inhalations of oxygen in such cases, because, as he asserts, eclamptic attacks stand in direct relation to the accumulation of carbonic acid in excess and the want of oxygen in the blood, the latter circumstance being the cause of the diminished circulation, the greater arterial tension, and the disturbance of the circulation or nutrition of the nerve centres.

PUBLIC HEALTH IN THEATRES.

The unhealthy effects of the late hours and foul air of the average theatre are very generally admitted, and it cannot be denied that the hygienic condition of theatres during a performance is such as to cause at any rate a passing disturbance of the comfort and health of the audience. This is not surprising when the ordinary requirements of ventilation are considered side by side with the difficulty in a crowded theatre of complying with even moderate demands. Even if we concede, however, that certain disadvantages, from a health point of view, are inseparable from an evening spent at a theatre, we are by no means satisfied that even ordinary efforts are made to render the visit as little harmful as possible. Even in theatres of the size and importance of the Royal Italian Opera House the most disagreeable smells are to be noticed in the corridors, and even in certain boxes in proximity to the closets and "ladies' rooms." These retreats are, as a rule, unventilated and uncared for, and it is not surprising if neglect results in the unpleasant consequences to which we have alluded. It would not be too much to ask that the closets and urinals should be overhauled, and provision insisted upon for proper flushing and cleanliness.

VENTILATION OF STREET SEWERS.

A correspondent directs our attention to the perplexities of local authorities as to the best way to ventilate street sewers. Ventilating openings in the roads, it is urged, are often sources of nuisance and perhaps of injury to health. As matter of fact, however, it is perfectly possible to construct a sewer in such a manner that no offensive odours shall be observed in connection with it; for this purpose the sewer must have a sufficient fall, must have no irregularities of surface which would give rise to retention of contents, must be provided with ample means for flushing, and for the passage through it of an adequate supply of fresh air. If these conditions be observed, sewers will never give rise to complaint, nor indeed is there any reason to anticipate that they will cause injury to health. It is not uncommon when nuisance is detected at any ventilating opening for this opening immediately to be closed, leaving the pent-up air to find other means of escape where it will give rise to further difficulty. The remedy which is probably needed is the provision of additional openings, and at the same time it should be ascertained whether any circumstance has led to stagnation of the fluid contents of the sewer. It should be borne in mind that injuries which have resulted from sewage have been where this material has been confined, and has impregnated the air with its emanations; there is no evidence that well-ventilated sewers give rise to disease. On this point may be quoted the healthiness, as shown by low rates of mortality, of many towns having a water-carriage system; and although it is not uncommon to find much opposition to the sewerage of towns by those ratepayers who have to bear the brunt of the expense, the change from a cesspool or other system is generally accompanied by a diminution in the mortality.

PROVIDENCE FOR NURSES.

In an article published last October we directed attention to the unfortunate position in which trained nurses, who were incapacitated by age or sickness from following their vocation, were placed, owing to the absence of any provision on an adequate scale for pensions or

annuities; and it was pointed out that it would not be impossible to organise a provident scheme if only it were based on a sufficiently wide field of operation. We are glad to notice that the idea has been taken up and somewhat extended by the Hospitals Association, and that a scheme prepared by the late Mr. Cornelius Walford and Mr. King (Actuary) for a "National Pension Fund for Hospital Officials and Trained Nurses" is already so far ripe that the Secretary of the Association (Mr. H. J. Collins, Norfolk House, Norfolk Street, Strand, W.C.) has opened a register for the names of persons desirous of joining. Assuming, as we presume may be done, that the whole scheme will be submitted to an independent actuarial authority for criticism, and that the financial basis is thus rendered secure, its ultimate success will depend entirely on its receiving wide support from nurses and hospital officials throughout the country. It is a subject to which matrons and lady-superintendents of hospitals should give immediate and constant attention and criticism.

DECOCTION OF MALLOW IN LEPROSY.

LEPRA MACULOSA is not universally recognised as a separate form of leprosy, entirely distinct from the tubercular and anæsthetic varieties. It is, however, considered to differ from these by Mexican physicians, two of whom, Drs. Lucio and Alvarado, have written a good deal on the subject. Quite recently it has been stated that a cure has been found for this form, Drs. Velasco and Egea having each successfully treated a very severe case in a hospital in Mexico (*Gaceta Medica de Mexico*). The remedy was very simple, and was suggested by Don Joaquin Rodriguez, a student, who had seen it used with advantage. It consisted merely of a strong decoction of a malvaceous plant which grows in gardens in Mexico, and is known there as the "ball of fire" (*bola de fuego*). Of this from one to two pints are given daily. In both the cases in which it was given a marked improvement rapidly occurred, recovery with cicatrisation of enormous ulcers taking place in about four weeks. It is worthy of remark that these two patients, the one a man, the other a woman, were not in isolated buildings, but occupied beds in the general wards of the hospital, the authorities apparently disbelieving in the infectious character of leprosy.

MISLEADING ALLEGATIONS AGAINST HOSPITALS.

PERHAPS it is hardly to be expected that our daily contemporaries should all of them seek to ascertain whether a statement is true before they publish it, for were they to do so, many of their most sensational catchpenny articles would never be printed. The case is particularly hard when a statement about "alleged inhuman conduct," as one of the evening papers put it, concerns a large charitable institution, and especially when, like Guy's Hospital, it is appealing for funds. The accounts of the patient Stack in the papers recently were most misleading. The facts are, that he went to Guy's with a broken fibula on March 14th, at 7 P.M., was immediately washed and put to bed, and had sandbags placed on either side of the injured limb, which was put up in a plaster-of-Paris splint at 11 P.M.; the patient was discharged the next day with a pair of crutches, after it had been seen that the splint was in good order. The points to be noted are that it is the usual custom that a simple fracture of the fibula should be taken in for a plaster-of-Paris splint to be put on, and that the patient should be discharged with crutches next day, when the plaster has set. There is in reality no room in Guy's, or in most of the other hospitals, for mere accidents, and therefore cases of slight fracture, such as those of the fibula, cannot be kept as in-patients. On the south of the Thames the pressure is exceptionally felt, there being no hospital nearer in a westerly direction than St. Thomas's, and none whatever o the east of Guy's. On the night during which Stack was in the hospital, the accident ward was so crowded that one of the patients had to sleep upon a stretcher, and the dresser in charge put up five fractures in the wards between dinner and bed-time. The man's statement that he was charged two shillings for a pair of crutches is absolutely untrue. Usually the hospital authorities make those patients who require to take crutches out with them deposit two shillings, which is returned when the crutches are given back; this rule was waived in this patient's case. Dr. Steele's letter, which appeared in the daily papers the next day showed, as do the above facts, that there was in reality no foundation for the allegation of inhuman conduct. Unfortunately, the allegation is much more likely to remain in people's minds than the denial of it, and people who do see the denial are generally but too ready to shrug their shoulders and say "there must be something in it after all." It would be a real kindness to hospitals, equivalent to many subscriptions, if the newspapers would be charitable enough to refrain from publishing allegations until the reporter who supplies the "copy" has paid a visit to the hospital, and "interviewed" the house-surgeon or other official on duty.

A VEGETARIAN DINNER.

THE indefatigable partisans of food reform gave a dinner at the "Orange Grove" Vegetarian Restaurant on Friday, March 25th. A large number of guests, mostly medical men, were present, and partook of the anything but frugal repast provided. After dinner, the objects of the society were discussed by Mr. A. F. Hills, who divided them into moral, scientific, and economic. Dr. C. R. Drysdale contested Liebig's theories regarding food-stuffs, which he said had been considerably modified by more recent observations. He alluded to the difference between the English working man, with his average yearly consumption of 110 pounds of meat, and the Italian, with an average of 30 pounds annually. It was, however, pointed out that this argument might be construed quite differently, and made to weigh in favour of an exactly opposite view. Professor Mayor, dealing with the etymology of the word "vegetarianism," said it did not mean an exclusively vegetable diet. He supported his views by copious quotations from Galen, Pliny, Parkes, and proceeded to attribute the stunted growth of Laplanders to their undue indulgence in animal food. Dr. Bristowe, in proposing a vote of thanks to the chairman, asked where they proposed to draw the line in refusing to assent to the slaughter of animals. For his own part he thought that the moderate use of flesh as food was beneficent, and even necessary to the maintenance of health. While there seemed to be a general consensus of opinion that a vegetable diet was not necessarily wanting in variety or taste, it was evident that nothing short of a prolonged trial could be expected to demonstrate its practicability, to say nothing of its desirability for the average human being.

GOVERNMENT DOLES OF VACCINE LYMPH.

IN a recent presidential address to the West London Medico-Chirurgical Society, Dr. Alderson, of Hammersmith, discussed the wants of the general practitioner of the present day. His address, which has since been published as a pamphlet by Baillière, Tindall, and Cox, will be found worth reading as a sufficiently accurate reflex of current medical opinion on some professional topics. Amongst other suggestions, he makes the somewhat remarkable proposal that every general practitioner who desires it should be appointed a public vaccinator. There are many practical difficulties in the way of this, to which adequate consideration is not given in the pamphlet; but we quite agree as to the importance of "medical men being well supplied with lymph taken from the children of their own patients, whom they know something about," which is one great reason why Dr. Alderson proposes the change. He asks, with much truth, "Who of us has not failed over and over again when we have vaccinated either from tubes or with points supplied by Government? Who is there who is not occasionally annoyed, and the cause of disappointment to a patient, by having no store of lymph by him that he likes to use? To write to the Local Government Board occasions delay, and then we only obtain two points or one tube; and if we require to vaccinate two or three children, this is not sufficient." The theory of the National Vaccine Establishment appears to be that a medical man

should so arrange his vaccination-practice that he should be able to keep up a constant succession of cases for himself, and continue vaccinating every week from arm to arm. Hence the very meagre and insufficient supplies which it doles out to practitioners requesting lymph. Complaints as to the inertness of the lymph and the inadequacy of the supply granted reach us with unfailing regularity. One reason why Mr. Ernest Hart pressed upon the Government, in 1879, the necessity and importance of setting up a central animal vaccination station was that a constant and easily expansible supply of vaccine would thus be available for practitioners whose patients are unwilling to allow their children to be vaccinated with lymph taken from the human arm. There ought to be no difficulty, with reasonably good management, in giving out as much calf-lymph as could possibly be wanted. It is only a question of vaccinating an extra calf or two. And as to human lymph, there are many first-class vaccinators who are not on the list of suppliers to the National Vaccine Establishment, and whose supply of vaccine now, so to speak, runs to waste. Some effort on the part of a practitioner to make himself independent of perpetual recourse to the central station may very reasonably be required; but the hard-and-fast rule that denies to a medical man—pressed for time, and, perhaps, in presence of an epidemic—more than the accustomed dole of points or tubes, might, we think, be relaxed with great advantage to the practitioner and no disadvantage at all to a station which can at will create a practically inexhaustible supply of lymph.

QUARANTINE VAGARIES IN THE RIVER PLATE.

A CORRESPONDENT who has just returned from Buenos Ayres sends us the following facts as to recent quarantine vagaries in the River Plate during the cholera scare:—All mails and passengers from Europe where there was no cholera were put in quarantine, the former being fumigated, and so successfully that in one case thirty sacks were burned off the face of the earth; whereas from the interior, where the cholera was raging, mails, passengers, and goods were allowed to come and go freely. When the disease first broke out, the port of Monte Video was completely closed to Buenos Ayres; consequently, anybody wanting to go to Monte Video, a distance of 150 miles, had to go to Europe and back, a distance of 13,000 miles. I know a case of a man upon whom it was imperative to get to Monte Video, and he had to do that. If I, a stranger, knew of one case, the probability is there were a good many more. At Corrientes, up the Paraguay, they used to send mails and passengers across country about 100 miles to a town where there was a fumigator, and then allow them to come back. In view of the futility of these "precautions," it is instructive to bear in mind the way in which the cholera was brought into the country. A large Italian steamer called the *Perseo* arrived with nearly 1,000 emigrants on board. Under ordinary circumstances, they would have been kept under observation for some days, as there had been a case of sickness resembling cholera on board. But among the first-class passengers was a friend of the President of the Republic, and to please him they allowed all the passengers to land. Most of the emigrants went up to Rosario, where, after a few days, two or three cases of cholera appeared. The disease spread rapidly, and reached its climax in Mendoza, where the deaths were nearly 50 per cent. of the cases.

VISCOUNTESS STRANGFORD.

THE death of Viscountess Strangford, which occurred on March 24th on board the steamship *Lusitania* in the Mediterranean, when on her way to Port Said for the purpose of organising and opening the new hospital for British seamen, which has been erected there by subscription, will be a source of profound regret to the many persons with whom she has been associated in charitable and philanthropic work. Lady Strangford took a deep interest in hospital nursing, and had gone through a course of training in order to obtain practical knowledge of the subject. The society known as the National Association for providing Trained Nurses for the Sick Poor owes its origin to her exertions, and many other nursing institutions are indebted to her for her assistance and co-operation. Lady Strangford took a large and important part in the raising of the fund for the relief of the Bulgarian peasants at the time of the Bulgarian atrocities in 1876, when nearly £30,000 was collected and applied by her, with the assistance of Sir Vincent Kennett-Barrington and others, to the relief of the sufferers. In 1877 she raised a fund, which amounted to several thousand pounds, for the relief of the Turkish sick and wounded in the war between Turkey and Russia. In order to save the wounded from the delay and suffering of removal, she went with her staff of nurses to the front, and there opened and maintained her hospital. Then it was that Lady Strangford was taken prisoner by the Russians, and underwent hardships from which she never fully recovered. In 1882 Lady Strangford, at the request of the St. John Ambulance Association, proceeded to Cairo, where she established the Victoria Hospital for the reception and relief of the sick and wounded during the Egyptian war. For these services Her Majesty the Queen conferred on Lady Strangford the distinction of the Red Cross.

PERSISTENCE OF MULLER'S DUCT IN A MALE SUBJECT.

DR. RELIQUET has published in the *Progrès Médical* of March 12th the first part of a remarkable case, in which a man, aged 45, died with hydronephrosis of the right kidney, and dilatation of the ureter, and calculous pyelonephritis of the left kidney, which was much hypertrophied. The clinical history and the description of the pathological appearances of the kidneys are both of high interest. The only point on which we desire to dwell, however, is the presence of Müller's duct, a rare condition in man. From the degenerated right kidney two large ducts ran towards the bladder, one being a dilated ureter; the other, which arose from the upper part of the kidney, proved to be Müller's duct. On opening the bladder, an abnormal pouch was found in the trigone, above the verumontanum, which was normal as to the orifice of the seminal ducts. The left ureter opened outside the pouch. The right ureter and Müller's duct opened within the pouch, or, more correctly speaking, the pouch proved on careful dissection to be a dilatation of the vesical end of the persistent duct. It was also discovered that Müller's duct had compressed the right ureter against the posterior part of the outer surface of the bladder, that is to say, just before they both entered the bladder. In consequence, the ureter had become obstructed. Müller's duct did not exist on the left side. It must be remembered that these ducts are the origin of the Fallopian tubes, the uterus, and part of the vagina, and are generally supposed to be reduced to the verumontanum in the male, where any trace of their persistence is extremely rare.

THE CAUSE OF CHRONIC GASTRIC ULCER.

THE pathology of chronic ulcer of the stomach, in spite of the great mass of clinical and anatomical facts collected, remains unsolved. The usually accepted theory as to its cause is that it is the result of self-digestion by the stomach over an area of mucous membrane the vessels of which have been blocked by embolism or thrombosis. This theory is very plausible in appearance, though no facts directly tending to establish it have been discovered. Rasmussen, of Copenhagen, has lately suggested another theory, which he considers will explain many cases of ulceration of the stomach. It is, for example, not uncommon to find, after death, a groove on the stomach extending from about the middle of the lesser curvature obliquely towards the greater curvature. This groove is often marked by a distinct thickening of the serous membrane, and may be continuous with a similar groove on the liver. In some cases the mucous membrane beneath the sulcus is atrophied; in others it is normal, and lies in folds. The groove of the stomach takes the direction of the left ribs, and is caused by pressure on the organ through tight-lacing. Rasmussen compares the number of cases where this groove is found with the number of scars of ulcers in actual ulcers found in the cases. In the hospital from which the cases are taken, and which is reserved for the incurable and the aged poor, he finds scars, representing old ulcers of the stomach, in seven

per cent. in men and thirty-two to thirty-six per cent. in women over forty years of age, the majority of the scars being in the same position as the groove caused by pressure. A closer examination of many cases showed that the groove of pressure was present, and was accompanied by a scar of the mucous membrane lying underneath. Rasmussen further states that if tight lacing be considered the cause of ulcer of the stomach, it is readily understood why the scars observed *post-mortem* are often symmetrical on each side of the lesser curvature, why they are more numerous on the posterior surface of the organ, and why they are usually about the middle of the lesser curvature. Ulcer of the stomach, according to this idea, would therefore be considered as a pressure necrosis.

HONOURS EXAMINATION IN PSYCHOLOGICAL MEDICINE.

We had occasion, some time ago, to draw attention to the examination in psychological medicine instituted by the Medico-Psychological Association, and conducted twice in the year in London, Edinburgh, and Dublin. We understand that the opportunity thus afforded of obtaining a certificate of efficiency in this department of medicine has been taken advantage of. As it becomes more known it is sure to be widely appreciated. It meets the same want in medical psychology which the separate examination, introduced by the College of Physicians, supplies in regard to hygiene. We are glad to observe from a notice which has appeared among our advertisements, that the Medico-Psychological Association has now added to the above pass examination an examination for honours. This has been rendered all the more easy to carry out in consequence of the sum of £1,000 having been placed at the disposal of the said Association by Mrs. Holland, the sister of the late Samuel Gaskell, Esq., who died some months ago. He was, as is well known, one of the most efficient of the Commissioners in Lunacy, but had been obliged, from ill-health, to resign his post for some years. Mrs. Holland has approved of the application of the interest to this object—an honours prize in psychological medicine—and desires it to be a memorial of her deceased brother. The course adopted by the Council of the Association would seem to be the best that could be devised. We observe that candidates must be at least 23 years of age, and that they must have been qualified medical officers in one or more asylums for a period of two years. It is hardly necessary to add that it can only be competed for by those who have successfully undergone the pass examination. The prize will consist of money and a medal. It is noteworthy that there is no restriction as regards sex, which is but right, if for no other reason than that Mrs. Holland entertains decided opinions in favour of women's rights in the walks of medical science. It is another proof of the growing importance attached to psychological medicine in the curriculum of medical study that the University of London has decided to substitute mental psychology, especially in relation to mental disorder, for logic and psychology in the M.D. examination. Last November candidates for the degree had the option of taking one or other of these subjects, and this was only fair. We strongly approve of the change which has been made at Burlington House, and have no fear that physicians of the London University will be less "logical" in the practice of their profession than they were before, while we are quite sure their patients will benefit in consequence of those who prescribe for them having to undergo an examination which requires some knowledge of mental disorder. We regret, however, that the terms of the new examination should not have been more explicit, and hope that at no distant time the Senate will substitute the simpler and much more practical term "mental disorders," without any reference to physiology.

EXPERIMENTS WITH KOCH'S CHOLERA-BACILLI.

The second part of the Scientific Memoirs of the Medical Officers of the Army of India contains an interesting account of further experiments by Dr. D. D. Cunningham with choleraic comma-bacilli. In the present paper, Dr. Cunningham mentions experiments on the subcutaneous injection of these organisms into guinea-pigs. The bacilli employed were obtained from a case of cholera on January 21st, 1886, and the material used for injection was a mixture of bacilli in 0.8 per cent. salt solution. Five guinea-pigs were injected with quantities varying from one drop to one cubic centimètre; three of these five animals died. The animals were generally well on the following day, but on the second day they became ill, and died with symptoms and appearances in several points resembling cholera. In one case, there was considerable depression of temperature, with frequent muscular twitchings; and, in two cases, there was marked sinking of the eyeballs. In the third case, there was distinct diarrhœa. In all three cases, comma-bacilli were present in large numbers in the contents of the intestinal canal; in two cases, desquamation of the epithelial lining of the intestinal canal formed a conspicuous feature; in all, there was great loss of weight. The peritoneal cavity contained flakes of lymph, in which large numbers of comma-bacilli were present; but this is not the case in man. Dr. Cunningham does not commit himself to a definite opinion as to the significance of these facts; but observes that the points of agreement between cholera in man and this morbid condition are very noteworthy, and that the deviations may possibly be ascribable to the nature of the animals experimented with, the quantity of the pathogenic medium introduced, and the site of its introduction.

ASPHYXIA ON DESCENDING INTO WELLS.

At a recent meeting of the Paris Biological Society, M. Gréhant stated that workmen, while descending into wells or cesspools, or going into cellars where the must is fermenting, are suddenly asphyxiated owing either to deficiency of oxygen or excess of carbonic acid. Three men recently perished in that way in a well at Clamart. The first one that went down called for help, and the two others shared his fate in trying to succour him. There is a precaution, pointed out by M. Gréhant several years ago, which would prevent such deplorable accidents. It is only necessary to put into a cage or basket some little animal, such as a rabbit, a guinea-pig, or a bird, and lower it into the well by means of a cord, allowing it to remain there for an hour or so. If, on pulling up the cage, the animal is found to have suffered no inconvenience from its sojourn below, the workmen may go down without fear; but, if the animal be dead, then the air in the well must be renewed, and no one should go down until a fresh experiment gives a satisfactory result. As it is not an easy matter to renew the air in a well, the following directions may be found of use. A stove-pipe, three or four mètres longer than the depth of the well, is firmly fixed in the axis of the well by means of wires. At the level of the surface, a circular grate is placed around this pipe. A second pipe of greater diameter is then slipped over the first, and allowed to rest on the outer edge of the grate. A fire is then lighted, which heats the inner pipe, and a draught is caused which draws the vitiated air from the bottom of the well. It is necessary to heat the air in the inner pipe from the outside, as otherwise the gases from the well might put out the fire.

REVELATIONS OF PREHISTORIC TARTAR.

Some curious evidences of the diet of our prehistoric ancestors of the "stone age" were recently brought before the Odontogical Society of Great Britain by Mr. Charters White. Whilst examining some dolicho-cephalic skulls found in a "long" barrow near Heytesbury, in Wiltshire, Mr. White was struck with the thought that as particles of food become imprisoned in the dental tartar, sealed up in a calcareous cement, and can be made to reveal themselves on solution of this material, it would be an interesting revelation if the tartar found on these teeth of the stone age could be made to give up its secrets in a similar manner. He accordingly carefully decalcified some small portions with dilute hydrochloric acid and examined the sediment under the microscope. The sediment consisted of small, drab-coloured masses, apparently composed chiefly of altered and disintegrated epithelial scales mixed with the contents of starch cells. Throughout

these masses were scattered grains of sand in great abundance; polarised light showed these to be of two kinds, some being composed of silex and others of quartz or granite. Their presence was to be accounted for by the method of grinding corn between two gritty stones practised in those times, and the grinding surfaces of the teeth were worn down in the most extraordinary manner from the same cause. Besides these, scattered through the sediment, Mr. White was able to identify portions of husks of corn, hairs from the outside of the husks, spiral vessels from vegetables, husks of starch, the point of a fish's tooth, a conglomeration of oval cells, probably of fruit, barblets of feathers, portions of wool, and some fragments of cartilage, together with some other organic remains which he failed to recognise. "Long" barrows are considered by archæologists to be older than the round barrows, and it is thought probable that they contain the relics of the earliest inhabitants of Britain of whom any sepulchral monuments exist. This opinion is based upon the fact that no weapons or implements of metal of any kind have ever been found in them, though weapons of bone and stone are occasionally met with. The pottery, also, found in them is of the rudest kind, and quite devoid of ornament. The fact that vegetable tissue should be found in such a state as to be easily recognisable after the lapse of probably not less than three thousand years is certainly remarkable; whilst the presence of fragments of wool and feathers would seem to indicate that these people were accustomed to eat their food in an uncooked condition.

"MASSAGE" FOR THE TREATMENT OF CORNEAL OPACITIES.

THERE are, perhaps, no affections of the eye which cause more disappointment to both surgeon and patient than the opacities of the cornea which are left by keratitis and ulceration. After prolonged and varied treatment, the inflammation, which has perhaps undergone many remissions and relapses, finally subsides, only to leave an eye which is practically useless, owing to the loss of transparency of a great part of the cornea. So many different modes of treatment have been suggested for this condition, and, after trial, have been abandoned as useless, that there is much natural scepticism as to the efficacy of any new proceeding, and most surgeons trust to the effect of time and Pagenstecher's ointment. In a paper, read before the British Medical Association at Brighton, Mr. Snell re-directed attention to friction or "massage" as a mode of hastening the disappearance of corneal opacities. Although not capable of effecting all that was at one time claimed for it, it has now stood the test of time, and may fairly be said to have met with more success than any other single mode of treatment. First proposed by Pagenstecher, in 1872, as a means of hastening the absorption of corneal opacities, it has since been advocated by many writers. But Dantziger (*Archiv für Ophthal.*, xxxi, 3, 187) has shown that its sphere of usefulness can be considerably enlarged, if it be preceded by the mechanical removal of the opaque corneal tissue by scraping. The employment of "massage" during cicatrisation then prevents the newly deposited tissue becoming opaque. Although there is some difference of opinion on points of detail, the following is probably the best mode of employing the "massage." The inner surface of the eyelid should be lubricated, preferably with Pagenstecher's ointment; the pulp of the finger is then laid on the lid, and the latter moved to and fro over the cornea with great rapidity, in a direction radiating from the centre of the cornea. The operation is continued for about a minute, and repeated daily, as long as improvement continues to take place. The results of Dantziger's cases would encourage us to persevere for a considerable time. In a patient in whom a corneal opacity had existed for four years, and in whom vision was reduced to the counting of fingers at six feet, gradual improvement continued to take place during the whole five months during which the "massage" was continued: vision being fingers, at 15 feet after two weeks; 12 J. after twelve weeks; and 20-200ths and 8 J. at 5 inches after five months. No doubt the necessity for continuing the treatment for so long a time has hindered its adoption; but an intelligent patient can easily be taught to perform the "massage" for himself. The preliminary removal of the corneal opacity would seem best adapted for cases of dense opacities affecting a limited area. Cucaine produces sufficient anæsthesia, the reaction is considerable, and usually lasts till the fifth or eighth day. The "massage" may be commenced as soon as the epithelium has been reformed, the presence of vessels on the cornea not being considered a contra-indication. Some cases seem to be unsuited for this treatment, and suffer after the "massage" from prolonged injection of the conjunctiva; but cases of old opacity, in which all inflammatory symptoms have long subsided, appear to be more benefited by it than by any other mode of treatment.

THE PRACTICE OF MEDICINE IN FRANCE.

THE following are the principal features of the new Bill about to be presented to the Chamber of Deputies relative to the practice of medicine in France. Medical practice in France is forbidden to all persons excepting those who hold the diploma of Doctor or of Officier de Santé, which is granted by the French Government after examination by a medical faculty, preparatory school of medicine, or school of pharmacy, recognised by the State. Foreign physicians of whatever nationality are only allowed to practise their profession in France on passing the examinations required by the French medical faculties. A dispensation, however, may be granted in such cases, in accordance with a decree of the Council of Public Instruction; but in no case shall this dispensation extend to the whole examination. Officiers de Santé must be assisted by a medical man, except in urgent cases, in all important surgical and obstetrical operations. They are forbidden to practise in the chief towns of departments and arrondissements, and in cities of over 10,000 inhabitants. Experts, whether physicians or surgeons, can only be replaced in law courts, hospitals, and asylums, by Doctors. The practice of dentistry is forbidden to all persons not provided with the diploma of Doctor or Officier de Santé. Nevertheless, any dentist over 30 years of age, who can show by his license that he has practised his profession for two years before the promulgation of the present Act, is allowed to continue to do so. This permission, however, does not include the right of administering anæsthetics. Midwives are permitted to practise only when provided with a diploma of the first or second class, delivered by the French Government; they are forbidden to use instruments or to prescribe medicines, except in extreme cases, but they may vaccinate. Doctors, Officiers de Santé, and midwives are required to have their diplomas registered within one month after taking up their abode in the place where they intend to practise. Medical students who are hospital assistants, and those who have finished their studies, are authorised to practise without a diploma in the case of an epidemic, or as substitutes for a Doctor of Medicine. The simultaneous practice of medicine and pharmacy is forbidden, even to persons holding both diplomas, except in cases where the nearest drug-shop is over 4 kilomètres from the medical man's residence; in that case, he is authorised to dispense medicines for the exclusive use of his own patients. Whoever illegally practises as a medical man is punished with a fine of 100 to 500 francs; and in the case of a second offence, the fine may be doubled and accompanied by imprisonment (fifteen days to one year). The wrongful assumption of a title is punishable by a fine of 1,000 to 2,000 francs; for a second offence this may be doubled and accompanied by imprisonment (six months to one year). The use of a foreign medical title without previous receipt of a diploma from the French Government comes under this category. Doctors, Officiers de Santé, and midwives, practising pharmacy are fined 100 to 500 francs, which is doubled in the case of a second offence, with the addition of imprisonment (fifteen days to one year). Whoever practises as a Doctor of Medicine without having first registered his diploma is fined 100 to 500 francs. In the case of legal proceedings against persons guilty of the illegal practice of medicine, Doctors, or associations of Doctors regularly authorised and interested in the proceedings, may

claim damages. In the case of condemnation for crime, forgery, theft, swindling, etc., the right to practise may be suspended or withdrawn; but in no case shall this punishment be inflicted for political offences.

SCOTLAND.

LUNACY LAW IN SCOTLAND.

THE Marquis of Lothian and the Lord Advocate received on Monday last an influential deputation from Scotland to urge that, in any Bill that the Government introduced for the management of lunatics in Scotland, care should be taken that the districts should be small, and that the governing bodies should be directly elected by the ratepayers. The Marquis of Lothian replied that he was in entire sympathy with them in having moderate-sized districts, both in the interests of the patients and of economy.

EDINBURGH MEDICAL SCHOOL.

THE winter session in the medical classes of the University and Extra-Mural School in Edinburgh terminated on Friday, March 25th. The preliminary examinations in arts have been held, and were very largely attended. The first professional examination in botany, chemistry, and natural history is now being held, and next week the second professional examination will take place.

COTTAGE HOSPITAL, HAWICK.

THE annual meeting of the subscribers to Hawick Cottage Hospital was held last Monday. During the year, seventy-four patients had been admitted to the hospital, and there had been so many applications, that the necessity for increasing the accommodation, both for indoor and dispensary patients, was fully demonstrated. The accident ward is to be erected as a memorial to the late Earl of Dalkeith; the money required for it is lying ready in the bank. The income for the year covered the expenditure.

ANDERSON'S COLLEGE DISPENSARY, GLASGOW.

THE Directors of Anderson's College Dispensary, Glasgow, stated in their annual report that during the past year 4,288 visits had been made to the sick poor, and at the dispensary there had been 17,470 consultations, 12,708 of which were new cases, and 17,979 prescriptions had been dispensed.

INDIGENT SICK SOCIETY, DUNDEE.

DURING the past year the income of the Indigent Sick Society, Dundee, amounted to £269, of which £212 has been distributed in necessaries among the deserving poor.

THE FEVER TERROR IN THE HEBRIDES.

AN epidemic of fever of a very bad type having broken out in the island of Pabbay, parish of Barra, many of the houses of the township have several inmates struck down. The effect has been to produce much terror among the inhabitants, and apparently to paralyse the sanitary authorities (if there be any such). A condition of matters exists which is alike disgraceful to the people and to the authorities. Here is the statement taken from the daily press: "One man named Allan McIntyre, a widower, died about midnight on Friday, March 18th; he and two of his children all occupied one bed, their only attendant being another child, a young boy, who was himself only recovering from the disease; he was so weak that, after his father's death, he was unable to lift the other children from the bed, and there they lay beside their father's corpse till Saturday, when assistance came. A coffin was procured, and on Sunday the children, with their own hands, managed to coffin the body, and then dragged the coffin out at the door, whence it was carried away and buried, no one venturing to enter the house. In another house, Andrew Sinclair, his wife, father-in-law, and sister-in-law, are all lying ill, with no one to attend them but a child of five or six years. The disease is attributed to want, overcrowding, and dirt; but the local sanitary authorities have done nothing, the police constable being the only man who seems to have any humanity and any energy to act in the painful circumstances." We can only hope these painful details are exaggerated.

IRELAND.

DR. JOHN KELLY, of Glenties, is a candidate for the vacant coronership of West Donegal.

MR. JAMES GOOD CURTIS, F.R.C.S.I., of Cork, has been appointed Inspector of Anatomy for the Province of Munster.

DR. ADDERLEY has been elected medical officer to Glengariffe dispensary district, in the room of Dr. Lewis resigned.

SIR GEORGE H. PORTER, High Sheriff for Wexford County, while attending the assizes last week, gave a donation of £21 to the Wexford County Infirmary, in honour of Her Majesty's Jubilee.

THE CO. WESTMEATH CORONERSHIP.

FOR the vacant coronership, Drs. John White and John Kerrigan are candidates. Both gentlemen, in their published addresses, claim the votes of the electors on the ground that they are Nationalists—one, indeed, mentioning that he is a member of the National League. Unprejudiced persons will probably consider that the contest ought to be decided by the merits of the respective candidates, and not on account of the political opinions they hold.

THE NATIONAL EYE AND EAR INFIRMARY.

THE annual meeting of the supporters of this institution was held last week. From the report which was presented, we learn that 371 patients were admitted during the year, and that the number of days spent in hospital was 9,012. In the out-patient department, there was a further increase in the average daily attendance of patients. In the dispensary for diseases of the throat, which was established three years ago as an adjunct to the ear department, 124 new patients have been treated during the year, and of these a large proportion consisted of aural patients who were found to have throat complications.

THE DUBLIN BRANCH.

WE regret to learn that Dr. William C. Neville has been obliged to resign the Honorary Secretaryship of this Branch, in consequence of the state of his health. In accordance with the urgent advice of his physicians, Dr. Neville feels reluctantly compelled to leave Dublin for some months; and is, consequently, forced to dissolve his official connection with the Branch at a time when the approaching Annual Meeting in Dublin made his assistance especially valuable. The Council of the Branch have appointed Mr. L. Hepenstal Ormsby to succeed Dr. Neville, and have passed a unanimous vote of thanks to that gentleman for his services to the Branch. From Mr. Ormsby's well-known energy and business capacity, we anticipate that, while the Secretaryship of the Branch is in his hands, it will steadily increase in usefulness and in numbers. He takes office at an important period in the history of the Branch, and will have a prominent part to take in the arrangements for the Annual Meeting.

MIDLETON UNION.

THE Midleton Guardians recently adopted a resolution calling the attention of Dr. Lawton, dispensary medical officer of Midleton district, to his practice of issuing medical certificates to parties who, on being examined by the medical officer of the workhouse, were found to be quite well, and utterly undeserving of such certificates. Dr. Lawton, in his reply, denied that he acts as alleged, and stated that he only issued recommendations to hospital of people who had no homes to be treated at. The only case given for this wholesale

condemnation of Dr. Lawton's certificates by the medical officer of the workhouse appears to have been that of a man suffering from intemperance, whom he (Dr. Foley) did not consider a suitable person for admittance. After hearing the explanation given by Dr. Lawton, the guardians unanimously passed a resolution to the effect that they objected, when able-bodied persons, who are able to maintain themselves outside, are discharged by order of the Board, that Dr. Lawton, by issuing medical certificates, should compel the relieving officer to admit them, to the great disturbance of the hospital, and in disobedience to the order of the Board.

A CASE OF "PROLONGED SLEEP."

In response to our request, Dr. J. Keser, writing on March 29th, has sent us the following account of the case of "prolonged sleep" which has attracted so much attention in the daily press:—

I have now under my care a case of "prolonged sleep," which has already been reported, more or less correctly (without my knowledge), in the daily papers, and I send you a short account of it, thinking that it might prove interesting to your readers.

The patient is a powerfully built man, named Chauffat, about 38 years of age, whose left arm was amputated near the shoulder-joint after the Franco-German War in consequence of a severe wound. There is a scar on the left frontal eminence. He came to London on Monday, March 21st, and, in answer to questions, said that he intended to place himself under medical treatment. On Tuesday evening he went to a club and afterwards to a house of ill-fame, where he is said to have been robbed of his money and watch; he returned to his lodgings, 36, Greek Street, Soho, early on Wednesday morning. During that day he remained in bed, and said he did not want to eat or drink. He slept well during the night and all through Thursday, Friday, and Saturday, passing no water all that time. A card, found in his pocket, shows that he has been under the treatment of Professor Charcot (to whom I have written), and that he has been subject to fits and attacks of prolonged sleep.

The man came under my care on Sunday afternoon, and I have examined him repeatedly. He generally lies on his back or slightly on his left side, but hardly ever makes any voluntary movement; the eyes are closed, the jaws firmly clenched; there is a good deal of rigidity in the muscles of the extremities; pulse 68 to 84, regular, soft; respirations 18 to 20, quiet, noiseless; temperature, lowest 97.7 F., highest 98.5 F. Percussion with the finger on any part of the body causes, after an interval of about half a second, a sudden start, sometimes localised and sometimes general. The pupils are of medium size, and react well to light; when exposed to a strong light for several minutes they became dilated on Sunday, but to-day they remained contracted. The eyes have a tendency to roll upwards; the fundus appears to be normal, but will be examined again. No motion has been passed since last Wednesday, in spite of enemata; on Monday afternoon I drew off with the catheter about 800 grammes of high-coloured, clear urine, which contained a trace of albumen, but no sugar. To-day the bladder contained only about three ounces of urine. On Sunday afternoon I lifted up the right upper eyelid with my finger and threw a ray of light into the eye by means of the ophthalmoscopic mirror; after one or two seconds the other eye opened itself, and both began to follow the movements of the mirror. They afterwards remained open for about half an hour, but the man said nothing. I succeeded in making him swallow a small quantity of wine and water. At every movement of deglutition there was a start of the whole body; the patient opened his mouth, but to a slight extent only, when the spoon touched his lips. During the day he pronounced a few words, such as *canaille* (scoundrel), *voleur* (thief); he also mentioned the number 13,198, which is believed to be that of his stolen watch, but since Sunday he has said nothing.

This afternoon I woke the patient up again, and gave him about four ounces of *bouillon*. The pulse, which was 68, went up at once to 84, and an abundant perspiration showed itself on the forehead. When left to himself he soon falls asleep again, and no amount of shouting seems to make any impression upon him. When awake he can be sent to sleep again at once by simply closing one of his eyes with the finger; the other eye soon closes itself, and the head droops to the side.

The man will be examined very carefully again to-morrow by several well-known medical men, and this is only a preliminary communication. Some "marvellous mesmeric experiments" had been performed on him before he came under my care, but I will only speak of what I have seen.

P.S. (March 30th).—I have just received a telegram from Professor Charcot, saying that Chauffat is subject to hysterical attacks of sleep, followed by dumbness, and stating that a letter will be sent later on.

The patient was seen to-day by Dr. Buzzard, Mr. Brudenell Carter, Sir William Mac Cormac, and several other medical men. The arm and legs remain quite rigid in the position in which they are placed until gently stroked with the hand or touched by a hair, when they fall back on the bed; pressure on the median nerve at the wrist produces flexion of the fingers; patellar and cremasteric reflexes normal; slight plantar reflex, no ankle clonus. Friction of the skin on the chest with the nail produces goose-skin, and then a well-marked *tache cérébrale*. According to Mr. Brudenell Carter, all the retinal vessels are very small.

During the afternoon, the patient was rather restless, spoke as in a dream of police and thieves, and made some movements with the hand, but he never answered any questions. At that time, the cataleptic condition of the limbs was only present when the eyes were closed; it disappeared when the patient looked at the mirror. The patient takes liquid food now in good quantity every two hours. Temperature 98°; pulse 80; respirations 20.

Dr. De Watteville writes to us, under date March 31st, as follows:

On Dr. Keser's invitation, I proceeded to examine with him the man Chauffat, in whose case so much interest has been taken. I saw him on Wednesday and Thursday of this week.

The condition appears to have been from the beginning one of lethargy, with a condition of muscle combining some cataleptiform plasticity with well-marked tendency to rigidity on mechanical excitation. The eyes were closed and upturned, but could be opened, and made to fix and follow a light.

Remembering the cases I had seen at the Salpêtrière, and the descriptions given in Dr. Richet's celebrated book on *La Grande Hystérie*, I suggested that passive movements should be communicated to the arms, legs, and face. Such movements, once started, were continued for an indefinite time when the patient was left to himself. An attitude of menace (closed fist) given to the arm was accompanied with a corresponding expression of the face, amounting to ferocity. Such phenomena are characteristic of the hypnotic condition in hystero-epilepsy.

Prolonged faradisation of the facial nerve produced a persistent contraction of the corresponding side of the face. On application of powerful faradisation to the septum of the nose, signs of uneasiness were manifest, the patient moving the head away, and even turning with the upper part of the trunk. These movements suddenly made way for an epileptiform seizure, the whole body being violently shaken by rapid clonic spasms of the whole muscular system. Renewed applications of faradism were followed sometimes with left pleurosthotonus, sometimes with rigidity of all the extremities, which were stretched out upwards, and maintained indefinitely in this position (the patient lying on his back).

I distinctly noticed, after these cutaneous excitations, that the cataleptic plasticity of the limbs was much more perfect than before, and did not subside under gentle stroking of the skin. The tonic rigidity induced by mechanical excitation of the muscles, on the other hand, still disappeared instantly under the same influence. The influence of light did not seem to have the same distinct effect upon the cataleptiform and hyper-excitable states of the muscles as is seen in some hypnotised hystero-epileptics. In the latter, closure of the eyelids immediately induces muscular catalepsy; when their eyes are open they pass into the hyper-excitable state. In good cases, one half of the body may be thrown in the former condition, whilst the other half shows the characteristic phenomena of the latter. No such sharp distinction could be made out in this case.

Chauffat appears to me to belong to the group of aberrant hystero-epileptics of which many instances will be found described in Dr. Richet's work. The typical clonic and tonic phases of the attack can be obtained in him by cutaneous excitation; and his present condition may be described as one of hypnotic lethargy, with plasticity and hyper-excitability of nerves and muscles.

THE IRISH CONJOINT SCHEME.

A WELL-INFORMED CORRESPONDENT writes:—The majority of the Council of the Royal College of Surgeons in Ireland—who, as usual, followed the dictates of their leader in collegiate matters—have received a surprise by the legal opinion with which they have been furnished concerning their desired amalgamation with the Apothecaries' Hall, Dublin. It would seem that it has now been pointed out that there is a doubt whether the Hall is capable of giving a diploma in medicine, and therefore in a position to enter into a legal combina-

tion with a corporation qualified to grant a diploma in surgery and in midwifery. This is the opinion which has been put forth from the commencement of this discussion by those whom the advocates of the views of the College of Surgeons call in the medical journals "old women," and in the General Medical Council "boys." The Council of the College of Surgeons has therefore, we understand, informed the President of the General Medical Council that it is prepared to entertain a proposal to enter into a combination with the Apothecaries' Hall in addition to that already agreed upon with the College of Physicians when it is satisfied that the licence of the Hall is a Diploma in Medicine within the meaning of the Act of 1886. It is suggested that this should be done by a judicial decision. We are not informed if it is suggested how the Apothecaries' Hall should obtain the proposed judicial decision, or what body is to pay for it when it is obtained. It is well, however, that it should be recognised, even though late in the day, by the Council of the Royal College of Surgeons in Ireland, that a body conferring a qualification to practise, and entitled as such to be registered under the Act of 1858, is not now necessarily "in the same set" with those capable of granting a registrable diploma in medicine under the Act of 1886.

ANOTHER CORRESPONDENT writes with reference to this subject:—The Royal College of Surgeons of Ireland has been advised by counsel that the agreement with the College of Physicians need not prevent it from entering into another combination with the Apothecaries' Hall, and that the College of Surgeons can enter into such combination with the Apothecaries' Hall if it be a body empowered to grant a registrable qualification within the meaning of the Act of 1886. As to this there is not, in my opinion, the slightest doubt. The Apothecaries' Hall was recognised by the Act of 1858 and by the deliberate vote of the General Medical Council subsequently taken on this very point; it was again recognised when it was asked to co-operate with the other Corporations in Dublin to form a conjoint board, a scheme which only failed owing to the impossibility of completing the financial arrangements; it was also recognised by the Act of 1886. It is therefore very surprising that the question should have been raised. No one can seriously doubt the result of the appeal which will be made to the General Medical Council at its next meeting. That body by its resolution of October 10th, 1884, declared that no person could be admitted to the register who had not passed a qualifying examination in medicine, surgery, and midwifery. The Act of 1886 gave to this recommendation all the force of a legislative enactment, and contains special provision to meet the case of a corporation which failed to combine with another corporation or corporations to fulfil this requirement. It only remains for the General Medical Council to put this clause of the Act into operation, and thus preserve its own dignity, which would be imperilled if upon a purely professional matter an appeal had to be made from it to the Privy Council.

THE APOTHECARIES' HALL AND THE CONJOINT SCHEME.

A MEETING took place on Friday, March 25th, at the rooms of the Royal Medical Benevolent College (Dr. J. S. BRISTOWE in the chair), of the Council of the Metropolitan Counties Branch of the Association and the Committee appointed at the special general meeting held on December 3rd, 1886, to receive the answers from the Royal Colleges of Physicians and Surgeons to the resolutions which had been forwarded to them, and also the answers from the English Branches of the British Medical Association at which the question of the exclusion of the Apothecaries' Society had been discussed.

The Colleges had been requested to receive deputations on the subject, but the request was not acceded to.

The replies received, so far, from the Branches of the Association were almost unreservedly in favour of the admission of the Apothecaries' Society to participation in the conjoint scheme.

Dr. HARE said that the College of Physicians could hardly be expected to unite with a trading company such as the Apothecaries Society.

Mr. WICKHAM BARNES deplored the state of affairs, and said that 99 per cent. of the poor-law medical officers had expressed an opinion favourable to the admission of the Hall.

Mr. TIMOTHY HOLMES said that in this matter the College of Surgeons had followed the lead of the College of Physicians with the most illogical conclusions to their premisses that could possibly be.

Dr. BRISTOWE objected to the allegation of Mr. Holmes, on the ground that whatever had been done was done by both Colleges. At the same time, the matter was of more importance to the surgeons than to the physicians, seeing that the latter were enabled to give a complete qualification by themselves. He attributed the exclusion of the Apothecaries' Society mainly to their want of action at the proper moment. The proper moment for the Society to have intervened was while the negotiations between the Colleges were pending, and not on their completion. He thought, too, that there were very good reasons why the Society should not be admitted. He deprecated class distinctions in the profession, but thought the only way to sink them would be finally to separate medicine and surgery from trade, and this could not be done if the Apothecaries were assimilated.

It was decided not to proceed further in the matter at present.

TESTIMONIAL TO DR. EDWARD WATERS.

THE Lancashire and Cheshire Branch of the British Medical Association, desirous of marking its sense of the great services which have been rendered by Dr. Edward Waters, of Chester, to the cause of medical reform, decided at a recent meeting of the Council of the Branch, to raise a testimonial in recognition of Dr. Waters's earnest devotion through many years of self-sacrifice to that cause. A large and influential committee has since been formed, consisting of the Council of the Branch, the President of the Association, the President of Council, a large number of presidents of the different Branches of the Association, and many leading medical practitioners throughout the country, in furtherance of this object.

In a circular issued by Dr. C. E. Glascott, the General Secretary of the Lancashire and Cheshire Branch, a slight sketch is given of the work perseveringly carried on by Dr. Waters for a course of years, in the interests of the medical profession, in which it is pointed out that, "as Chairman of the Medical Reform Committee of the British Medical Association, Dr. Waters continued to devote his energies with unremitting assiduity, sparing neither time nor money to the work which culminated in the passing of the Medical Bill, 1886, and in the subsequent election of direct representatives on the General Medical Council."

The precise form the testimonial will assume has not yet been finally decided upon. The following subscriptions have already been received:—

	£	s.	d.		£	s.	d.
Sir Andrew Clark, Bart.	20	0	0	Christopher Johnson, Esq.	1	1	0
Dr. John Harker	5	0	0	Dr. Glascott	1	1	0
Dr. Wade	3	3	0	Dr. Shuttleworth	1	1	0
Alfred Baker, Esq.	5	5	0	Dr. Dreschfeld	1	1	0
Dr. James G. Glover	2	2	0	Dr. Ball	1	1	0
C. N. Macnamara, Esq.	5	5	0	Dr. Leech	1	1	0
Dr. Wm. Powell	1	0	0	Wm. Hall, Esq., jun.	1	1	0
Dr. Eaton	0	10	6	Dr. Fitzpatrick	3	3	0
Dr. Withers Moore	3	0	0	Dr. Watkins	1	1	0
A Friend, per do.	2	0	0	Dr. Davidson	2	2	0

The Honorary Treasurer of the fund is Dr. J. W. WATKINS, Stone Leigh, Newton-le-Willows.

MEDICAL ATTENDANCE ORGANISATION COMMITTEE.

THERE was again a full attendance at the seventh meeting of this committee on Tuesday, March 22nd. In the absence of Sir T. Spencer Wells, the chair was taken by Mr. W. BOUSFIELD. The following resolutions were passed:

1. "That all persons making application to join as ordinary members shall pay a registration fee of 1s. on a family or single card, which shall be the only payment on joining. They shall be free to benefit in four weeks from the date of joining, when their contribution shall commence."

2. "That any single person or member of a family joining as ordinary members, on paying the 1s. registration fee, should they fall ill during the first month, shall have the option of being dealt with under the rule for immediate attendance, in which case the 1s. registration fee shall be credited to them."

3. "That the fee to be paid to the medical men for attendance on midwifery shall be 21s., and to the midwives 7s. 6d., such fees to be paid by the members at their option by instalments of not less than 2s. 6d. Wives, being members, and not having had their confinements conducted by one of the medical staff, shall not be entitled to receive medical treatment until two weeks have elapsed from the date of confinement."

An animated discussion took place on this resolution, several lay members of the committee expressing an opinion that the 21s. fee was higher than could be obtained by the members of the dispensary generally, especially in poor districts, and it was feared that if this fee was insisted upon, the members would be driven to get the midwifery done elsewhere, and often by incompetent persons. Eventually the resolution was carried by a large majority.

Premature Confinements. It was resolved:

"That local committees should be requested to secure that the medical officers are properly remunerated in cases of premature confinements."

It was resolved to meet again on Tuesday, March 29th, and that an effort should then be made to finish the remaining points of Part 1, so that Part 2, namely, the connection of provident dispensaries with the hospitals, should be taken at the first meeting after Easter.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held at the Offices of the Association, No. 429, Strand (corner of Agar Street), London, on Wednesday, the 13th day of April next, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

March 14th, 1887.

NOTICE OF QUARTERLY MEETINGS FOR 1887.

Meetings of the Council will be held on April 13th, July 13th, and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, (March 24th), June 23rd, and September 29th, 1887.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,
THE VALUE OF HAMAMELIS, THE VALUE OF PURE TEREBENE.

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE, and on the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE, are now closed.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, and HABITS OF INTEMPERANCE, a full Report on OLD AGE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 429, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the London Hospital on Thursday, April 21st, at 8.30 P.M. The chair will be taken by C. Macnamara, Esq. A demonstration of interesting surgical cases will be given by W. Rivington, Esq., Surgeon to the Hospital. All visitors will be welcomed.—J. W. HUNT, M.D., Honorary Secretary, 101, Queen's Road, Dalston.

YORKSHIRE BRANCH.—The spring meeting will be held at the Queen Hotel, Harrogate, at 3 P.M. on Wednesday, April 27th, 1887. Members intending to read papers are respectfully requested to send in their names at once to ARTHUR JACKSON, Secretary, Sheffield.

SOUTH-WESTERN BRANCH.—Preliminary Notice.—The annual meeting of the Branch will be held at the Athenæum, Plymouth, on Wednesday, May 18th, 1887, under the presidency of Paul Swain, Esq. Members who propose to read papers, or to bring forward communications or motions, are requested to intimate the same to the Honorary Secretary without delay.—P. MAURY DEAS, Honorary Secretary.

GLASGOW AND WEST OF SCOTLAND BRANCH.

THIS Branch held its annual general meeting on February 11th, in the Western Infirmary, Glasgow. The President-elect, Dr. D. FRASER, of Paisley, was in the chair.

Surgical Cases.—When the customary reports had been read and adopted, Professor G. H. B. MACLEOD showed and made some remarks on a number of interesting surgical cases. These included:

1. Two cases of Arthritis Deformans.
2. Malignant Disease of Hip in a lad of 19.
3. Dislocation of Thumb forward; also an instrument of his own invention for reducing Dislocation of the Thumb.
4. Case of Supernumerary Rib, which had been mistaken for Fractured Clavicle.
5. Hilliard's Apparatus for the Treatment of Spinal Disease by Continuous Extension.
6. Case of Enlarged Prostate; Catheter *coudé*.
7. Cases of Amputation at Shoulder for Small-celled Sarcoma, and of Leg for Epithelioma.
8. Cancer of Face, originating in Lachrymal Duct.
9. Cases in which Cucaine was used as an Anæsthetic.
10. Calculus having a Hairpin for its Nucleus, from an insane female patient.
11. Calculus which had ulcerated its way from the Female Bladder, escaping by an Abscess in the Perineum.
12. Calculus weighing 6 ounces, removed by Suprapubic Operation.
13. Irrigation Apparatus.

Medical Cases.—Professor M'CALL ANDERSON showed and described:

1. A case of Pericardial, Pleuritic, and Peritoneal Effusion.
2. A well-marked case of Purpura Rheumatica.
3. A case of Musical Heart-murmur, Diastolic in Rhythm and Aortic in Origin, heard without the stethoscope and at a distance from the patient.
4. A case of Tinea Favosa Epidermidis.

Pathological Specimens.—Dr. JOSEPH COATS showed a series of sixteen preparations illustrating the Pathology of Myoma of the Uterus (Uterine Fibroid), and made some remarks on the subject. These remarks were further illustrated by several microscopic preparations.

Election of Office-bearers.—At the election of office-bearers, Dr. Joseph Coats was chosen President-elect for the year 1887, and Dr. Bruce Goff the Branch's representative on the Council of the Association.

List of Office-bearers for 1887.—President: Dr. D. Fraser, Paisley. *President-elect:* Dr. Joseph Coats. *Vice-Presidents:* Dr. R. Munro, Dr. James Morton. *Representative on the Council:* Dr. B. Goff. *Honorary Secretaries:* Dr. A. Napier, Crosshill, Glasgow; Dr. A. Robertson, 16, Newton Terrace, Glasgow. *Ordinary Members of Council:* Drs. Macewen, Thomas, Frew, M'Vail, Christie, Willis, M'Laren, Wood-Smith, Goff.

THE GLOUCESTERSHIRE BRANCH.

Address by Mr. Jonathan Hutchinson.—The last meeting was held at the General Hospital, Cheltenham, on Tuesday, March 15th, Dr. Batten (President) in the chair. A letter was read from Mr. Jonathan Hutchinson accepting the invitation of the Branch to give an address at Gloucester on May 17th.

Conjoint Meeting of Branches.—Proposed by Dr. E. T. WILSON and seconded by Dr. ROOKE, that a conjoint meeting of Branches be held at Gloucester on May 17th, and that the Bath and Bristol Branch and the Worcestershire and Herefordshire Branches be asked to assist in forming it. Carried.

New Member.—Proposed by Dr. WILSON and seconded by Mr. CARDEW, that Mr. Montagu Smith (Cheltenham) be elected a member of the Branch. Carried.

Payment of Travelling Expenses.—Proposed by Dr. WILSON and seconded by Mr. GABB, that the travelling expenses of the Branch representatives should be defrayed entirely by the Parent Association.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

AN ordinary meeting of this Branch was held at 198, Union Street, Aberdeen, on Wednesday, March 16th, at 8 P.M., the President, Dr. Urquhart, being in the chair.

Minutes and New Members.—The minutes of last meeting were read and approved, and Dr. J. W. Mackenzie Gunn (Buxburn), and Dr. Wattie, Greentree Lodge, Echt, were balloted for and unanimously admitted members of the Branch.

Summer Meeting.—A letter from the secretary of the Northern Counties Branch, suggesting a conjoint summer meeting at Buckie, was read by Dr. GARDEN, who was instructed to intimate the Aberdeen, Banff, and Kincardine Branch's strong desire to meet them if possible at or near Cullen, which place had been fixed on last year for the 1887 summer meeting.

Payment of the Travelling Expenses of Branch Representatives.—A letter from the sub-committee of Council of the Parent Association, appointed to ascertain the wishes of the Branches on this subject, was read, and the secretaries were instructed to intimate in reply that it was the unanimous desire of the Branch that the travelling expenses of its representative should be entirely paid by the Parent Association;

also to furnish the information required by the sub-committee regarding the Branch's annual subscription and financial position.

BATH AND BRISTOL BRANCH.

THE fourth ordinary meeting of the session was held at the Grand Pump-Room Hotel, Bath, on Thursday evening, March 17th, C. Gaine, M.R.C.S.Eng., President, in the chair. There were also present thirty-one members and one visitor.

New Members.—The following gentlemen were elected members of the Association and Branch: Claud Wilson, M.D. (Bath), C. A. Wigan, M.D. (Portishead), W. B. Brown, M.B. (Fishponds), and J. W. White, M.R.C.S.Eng. (Nailsea).

Travelling Expenses of Branch Representatives.—At the request of the General Council, the opinion of the Branch was asked with regard to the payment of the travelling expenses of Branch representatives to the four quarterly meetings of the Council of the Association in London. It was resolved thereon:

"That this Branch is content with the existing plan of representatives paying their own travelling expenses for attending the quarterly meetings of the Council of the Association in London."

Communications.—Dr. A. W. FOX read notes of two cases of Death from Chorea, which gave rise to a discussion, in which Drs. Spender and Brabazon and Messrs. Mason, Griffiths, Scott, Pagan Lowe, and Gaine took part.—Dr. E. CROSSMAN read a short paper on the Treatment of Burns.—Dr. A. B. BRABAZON gave the notes of Clinical Cases of Forcible Extension of Ankylosed Joints in Rheumatic Arthritis. Dr. Spender and Mr. Green made some observation on this subject.—Mr. C. T. GRIFFITHS read a paper on the Progress of Valvular Disease of the Heart, which gave rise to some remarks from Dr. Skerritt and Mr. Lawrence.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Infectious Pneumonia.—Treatment of Diphtheria.—Spontaneous Fracture in Infantile Paralysis.—Poisoning by Bismuth used as a Surgical Dressing.—Improved Uterine Injector.—Instrument for Removing Sutures.

AT the Société Médicale des Hôpitaux, M. Sevestre recently read an interesting paper on a form of infectious broncho-pneumonia of rheumatic origin, seen in ill-fed children in the Salle des Sevrés at the Hôpital des Enfants Assistés. The onset of the disease is marked by gastro-intestinal disturbance and fœtid diarrhœa. This is followed by fever, occasional vomiting, dry but infrequent cough, dyspnœa, crepitant and sub-crepitant *râles*. The affection occurs under two forms: one mild and seldom met with; the other characterised by dryness of the tongue and serious typhoid symptoms, complicating the ordinary phenomena of pneumonia. In the latter form, simple erythema, or pemphigoid vesicles are sometimes observed on the skin in cases which afterwards terminate fatally. *Post-mortem* examination reveals red patches in the large and small intestines, with marked tumefaction of Peyer's patches. The mesenteric glands are congested, and hæmorrhage occasionally takes place. Patches of broncho-pneumonia are discovered, and the bronchial lymphatics and glands are congested. There is fatty degeneration of the liver. M. Sevestre is of opinion that poisoning by fœcal matter is the cause of the broncho-pneumonia and of the infectious symptoms. He prescribes calomel at the outset, and subsequently naphthaline. M. Hayem considered that if the blood of the children were examined in order to discover if there were an increase of blood-fibrin, it might be decided whether this broncho-pneumonia was a simple inflammation or an infectious fever.

Among new suggestions for the treatment of diphtheria recently made, may be mentioned M. Delthil's plan of fumigation with oil of turpentine and coal tar; that of MM. Renou and Bouchard with carbolic, salicylic and benzoic acids; M. Moty's treatment with powdered camphor; and M. Bitterlin's antiseptic vapour of a solution of alcohol and carbolic, salicylic, and thymic acids. The success of these methods, however, has not been particularly brilliant. Another new plan of treatment, based upon antiseptic principles, has just been proposed by Dr. Brondel, of Algiers. It consists in the exhibition of benzoate of soda, to which is added sulphide of calcium, either in syrup with or without carbolic acid, or in granules of one centigramme. At first, a tablespoonful of a 150 gramme mixture, containing 4 to 5 grammes of benzoate of soda, according to the age of the child, is given every hour; sulphide of calcium is given at the same time, either in granules or in syrup. Finally a 10 per cent. solution of benzoate of soda is sprayed into the throat every half hour, day and night, together with the continuous application of the vapour of carbolic acid, and of the oils of eucalyptus and turpentine. This medication is supplemented by a strengthening diet, composed of beef-tea, eggs, and underdone meat, if the state of the throat permits; tonics such as arseniate of strychnine, quinine, aconitine, or antipyrin are given at the same time. In addition to this, the windows are opened and the linen disinfected. Under this treatment, the false membranes become pale, lose their consistence, and disappear, leaving the parts underneath cicatrised. M. Brondel has treated two hundred cases in this manner during the last five years, and has not lost a patient. M. Barbot has tried Renou's treatment for diphtheria, with great success. During a period of three years he has treated 51 cases of diphtheria with 48 recoveries. The details of the plan are as follows. On a petroleum stone is placed an earthen pot, full of boiling water, into which is put a tablespoonful of Renou's solution (containing carbolic, salicylic, and benzoic acid) every two hours for adults, and every three hours for children from 1 to 10 years. The room is kept at a constant temperature of 20° to 25° C. (68° to 77° F.), or still higher, if possible. If the room is large, the patient's bed is surrounded with sheets nailed to the floor, thus forming a small room, in which a high temperature can easily be maintained. The patient's throat is never touched. He is fed with roast meat, boiled eggs, soups, milk, and good wine. It is stated that 94 per cent. of the lighter cases are cured by this treatment.

Comparatively little attention has hitherto been given to the trophic disturbances which occasionally occur in a limb affected with infantile paralysis. M. Paul Berbez, in the *France Médicale* of February 10th, describes the case of a girl, aged 18, suffering from atrophic infantile paralysis, whose left arm was several times the seat of spontaneous fracture. Some near relations of the patient had been attacked with convulsions, followed by paralysis. At the age of 3, her left arm became suddenly paralysed; it became thin and wasted, but grew in length with the rest of the body. Atrophy came on in five or six days. Three years before coming under notice, the patient struck her arm against a staircase. The blow was slight, but the humerus was broken transversely below the surgical neck. Consolidation was effected in about three weeks with the aid of a sling. Five months later, a slight fall caused a fracture of the middle portion of the humerus. Consolidation was rapidly effected. In thrusting the arm into her sleeve, the patient broke it a third time. The arm measured six centimètres in circumference, and had the appearance of a rounded stick. The forearm was flat, and rather larger than the arm. The hand was atrophied, and remained in the position of supination. The first phalanges of the fingers were extended, the others were flexed. There was no cutaneous lesion. The shoulder was atrophied, the bones projecting on all sides. The patient could hardly move the shoulder, and could not flex the forearm; electricity caused a few contractions in the biceps. After a course of massage, the patient was able to bend her fingers slightly, and to use her hand to some extent.

M. P. Dalché recently brought a case of poisoning by subnitrate of bismuth dressings under the notice of the Société de Médecine Légale de France. A woman, aged 30, was under the care of M. Peyrot for two burns. One of these was of the third degree, and extended from the lower angle of the shoulder-blade to the gluteal region, occupying the entire width of the back. The other was a large burn on the left arm. On September 26th these wounds were dressed with subnitrate of bismuth. The dressing, though changed every second day, became very offensive. The general condition of the patient had been improving; but on October 11th the throat became sore, and she complained of dysphagia. False membranes of a white colour were seen on the palate, the uvula, and the tonsils. On October 13th the patches had spread; the mucous membrane round them was black; and the edge of the gums of the lower jaw was rough, and dark brown in colour. There was also a patch of false membrane on a base of blackened mucous membrane on the lower lip. The general condition was, however, still good, and there was no albumen in the urine. A few days later the breath became offensive, and there was gangrene of the palate. On the 26th the patches above described had partly disappeared, but there was a burning sensation under the tongue. There was violent diarrhœa and continual vomiting. Some patches of false membrane on the buccal surface of the cheeks had a rough black edge. The bismuth dressing was then given up. Up to November 1st, vomiting, diarrhœa, and hiccough persisted, and there was albumen in the urine. On November 5th there was pain along the œsophagus. Several of the patient's teeth became loose. In spite

of this, she continued to improve, and recovery was complete by the middle of December. M. Dalché is convinced that the bismuth dressings were the cause of the lesions observed, which were not the lesions characteristic of diphtheria, nor of any known form of stomatitis. The bismuth was pure; it was present both in the fæces and in the urine.

An improvement has been made in the instrument of Doléris for dilating and washing the uterus; it now consists of a lateral screw fixed to a movable piece which slides along the blades. By this means they can be separated at will, and this can be done as near the orifice of the uterus as may be desired. A stopcock in the handle of the instrument regulates the current passing through it. The instrument is found very serviceable, and is very easy to use.

Deroubaix's instrument for cutting the wire in sutures has been modified by M. Classen. It resembles a pair of tweezers, and has on the end of one of the blades a small hook that serves to seize the wire, while by means of a lever the sharp end of the other blade cuts it.

CORRESPONDENCE.

THE COLLEGES, THE APOTHECARIES' SOCIETY, AND THE PROFESSION.

SIR,—In discussing the question whether the Apothecaries' Society ought or ought not to be admitted to the Conjoint Board in London, it is only just to take account of the considerations which have swayed the Council of the College of Surgeons, and the arguments which have led it to reject the application of the Apothecaries Society. In order to state the case succinctly it will be necessary for me briefly to recall the history of the negotiations which have taken place; when the case is fully stated it will, I think, be recognised that the two Colleges, in the course they have followed in this matter, have been influenced by a sincere desire to do their duty by the profession.

The first proposal, made a good many years ago, was that the two Colleges and the Apothecaries' Society should combine to give a single licence. Then came the proposal to include in the scheme the four English universities then in existence, a proposal debated at very great length by a joint committee, but resulting in no definite action. Next in order of time were the Committees of both Houses of Parliament and the Royal Commission, which took a great deal of evidence, most of it distinctly unfavourable to the continued existence of the Apothecaries' Society as a licensing body. In Lord Carlingford's Bill, as it passed the House of Lords, the Apothecaries' Society was actually deprived of its privilege to nominate a representative on the General Medical Council, a deprivation which would have extinguished its power to grant a licence to practise.

Still proceeding in chronological order we come now to a most important epoch, that, namely, which saw the birth of the present Conjoint Board. The College of Surgeons and the College of Physicians, weary of legislative delays, determined to act in the spirit of Lord Carlingford's abortive Bill, and, excluding the Apothecaries, established the Conjoint Examination. The complete success of this conjunction is in itself a powerful argument against disturbing the existing arrangement by the introduction of a third body of dissimilar constitution. The establishment of a Conjoint Board involved an important elevation in the standard of medical education in London, and thereby affords a sound basis for the demand which is about to be made, that the combined Colleges should have the right to grant degrees to their alumni. It is believed that the hope of attaining this end, which is so much to be desired in the interests of London students, would be diminished, if not destroyed, by the admission of the Apothecaries' Society. Why should the Colleges jeopardise the success of a scheme which they have so much at heart by admitting to their counsels a body which never sought admission until the Act of 1886 threatened its very existence by rendering useless the imperfect qualification which it had so long granted after examinations which have been declared by a Royal Commission to have been not satisfactory? What logical reason can be given? It cannot certainly be urged that the admission of the Apothecaries' Society could enlarge the scope or increase the stringency of the examinations of the Conjoint Board, for it is not pretended that these examinations are lacking in comprehensiveness.

That the Apothecaries' Society had little expectation of being admitted to the Conjoint Board is shown by the fact that the Society's representative on the General Medical Council urged the immediate nomination of the examiners in surgery, and voted against the appeal to the two Colleges, which, as was foreseen, has failed. The Apothecaries' Society makes no secret of its willingness to be left out of the combination; it prefers to retain its independence. True, the College of Physicians, while the Act of 1886 was before Parliament, protested against the Society receiving power to examine in surgery; but the Council of the College of Surgeons made no such protest; the reason for its passive attitude was twofold. In the first place, we thought it unfair to deprive the Apothecaries' Society of the privilege, which it had so long enjoyed, of giving a registrable qualification; and in the second place we felt that, this being so, it was most important that the main idea of the Act, that every registrable qualification should be obtained only after examination in medicine, surgery, and midwifery, should not be endangered.

It has been sometimes said that the Act of 1886 was intended to establish one portal in each kingdom. That this was not the intention of the Legislature is shown by this very provision with regard to the failure of any corporation to combine. The Legislature thus deliberately recognised the possibility or probability of more than one portal, and the Colleges are, therefore, not to blame for the disappointment of the hopes of those who believe that the one-portal system is desirable. Of these I am not one. The Licentiates of the Society in the future will have to pass a treble examination in medicine, surgery, and midwifery, an examination which it will be the duty of the General Medical Council to inspect in order to ascertain that the standard it has laid down is maintained. Moreover, if the Apothecaries' Society is to compete with the Conjoint Board, it must be by making its licence as well worth having; that is to say, by raising its standard of education and examination.

As a matter of fact, the standard of the Conjoint Board has now been raised so high, that there are many students whose mental capabilities, or inclination, or opportunities for study, do not qualify them to pass its examinations, and such men are not always idle and careless; many of them in time develop into respectable and capable practitioners. Heretofore they have been driven, by repeated rejections in London, to go to Scotland or to Ireland in search of a double qualification. Hereafter they will be able to obtain from the Apothecaries' Society a complete qualification.

Finally, let me refer to the fear that the power possessed by the Society to prosecute irregular practitioners may be lost to the profession owing to the demise of the Society. I have already expressed the opinion that the Society will not succumb; but, even if it did, there ought to be no difficulty in transferring the power to the General Medical Council, the body in which, in the opinion of many experienced persons, it ought even now to reside.

AUDI ALTERAM PARTEM.

SIR,—As you have shown a decidedly partial view of the question of admitting the Apothecaries' Society into the Conjoint Examining Board, may I be allowed to express my opinion as one of the Licentiates of that Society?

In 1860, after examination, being permitted to practise medicine within ten miles of London—an antiquated restriction—I was duly impressed with the high opinion entertained by boards of guardians of the L.S.A. qualification, an estimate to which I do not at present attach a high value. But now this handmaid of a wholesale and retail drug-shop is struggling to mix up surgery in the concern, and to force herself into society where she is not welcome. These futile efforts are, perhaps, allied to the erratic movements which frequently precede dissolution. In my opinion, the Apothecaries' Hall should ally herself with the Pharmaceutical Society, and should no longer perpetuate (by her association with our profession) one of the most vulgar prejudices that I have had, and yet have, to fight against, namely, the everlasting idea that drugs occupy the first place in our treatment of disease. While rendering to the Society of Apothecaries full credit for her early improvements in education, I submit that, in the highest and best interests of our profession, now is a fitting time for a divorce; the Hall has her own proper course to hold; but, on matters of high training, example, and social prestige, she may now write on her walls, "Obsoleta per orbem dicor."—I am, etc.,

RICHARD DAVY,
Surgeon to the Westminster Hospital.

33, Welbeck Street, W., March 25th, 1887.

THE IRISH CONJOINT SCHEME.

SIR,—The JOURNAL of March 26th contains a critique on "an able and exhaustive document" "prepared by a Committee of the College of Physicians, and adopted by the College, in reply to a request of the General Medical Council that the College should reconsider the conjoint examination scheme for Ireland, with a view to admitting the Apothecaries' Hall to take part therein."

The document is certainly a remarkable specimen of clever special

pleading; therefore, deceptive and misleading. The legal functions of the Hall are thus described in the document: "It is empowered to grant a certificate in pharmacy only;" yet I read on page 7 of the College "statement" that "the claim of the Hall to examine and license in medicine requires an authoritative judicial decision before that body can be admitted to a conjoint examination under Section 3, subsection 1, of the Medical Act, 1886." Does not this indicate that the College has but little faith in its own interpretation of the legal functions of the Hall? The document goes on to show that the examiners must be shareholders in the business of the company; that among existing directors efficient examiners are not to be obtained; not one of them is attached to a clinical hospital or school, or known as a teacher or writer. If this be a truthful statement, how is it that for years past, and up to the present time, the first half of the examination for the licence of the Hall, conducted by these self-same examiners, has been accepted by the College in lieu of, and as equivalent to, its own examinations in pharmacy, materia medica, chemistry, botany, anatomy, and physiology; and why were apothecaries informed that they might become Licentiates of the College, and continue to keep open shop for the compounding and sale of medicines? Every member of the General Council of the Hall and all the examiners, with the exception of the examiner in clinical medicine, are Licentiate Apothecaries, and, therefore, well educated medical practitioners. One of the examiners is a writer on medical subjects, and was for years a clinical hospital physician; another was a professor or lecturer, and two others demonstrators in our Dublin medical schools. The College and Hall examinations have been twice inspected by visitors appointed by the General Medical Council; the reports of the visitors indicate little or no superiority in the examinations of the one corporation over the other.

The fact that the Hall asked only for one examiner in surgery to be nominated by the Medical Council is no proof that the Hall did not intend themselves to select and elect other new examiners; when the position of the Hall is defined, the Hall will know how to fulfil the responsibilities of that position. As to the lengthened summary of opinions, adverse to the "claim" of the Hall, expressed in past days, it is satisfactory and creditable to the Hall that these opinions are now more or less largely modified. The number of Hall Licentiates resident in Ireland is about three times larger than that set down in the "statement." The chief and reiterated objection of the College to the "claim" of the Hall is that the Hall is not empowered by the Act of 1791 to examine in medicine; while by the Act of 1815 the London Hall was so empowered, and so recognised as a medical corporation. But the medical status of the London Society of Apothecaries was not dependent on the 1815 Act; it was established in 1703, on appeal to the House of Lords in the case of "Rose in Error, *v.* the College of Physicians of London."

The Irish Act of 1791 empowered sixty apothecaries practising in Dublin or its vicinity to provide a Hall where reliable medicine might be obtained, "and to regulate the profession of an apothecary throughout the kingdom of Ireland." "Regulating the profession of an apothecary" is construed by the College regulating the practice of pharmacy and no more; but the Act intended that the Hall authorities should make regulations for the proper education and examination of their apprentices, assistants, and Licentiates in both medicine and pharmacy. The apprentices and assistants could only appeal to the General Council of the Hall; the rejected candidate for the licence could appeal first to the Council, and then to the College of Physicians, whose examiners had to take the oath prescribed in the Act for the Hall examiners, and who were plainly intended by the Act to examine the appellant as to his knowledge both of pharmacy and medicine. The opinion of the Right Honourable Sir Joseph Napier, subsequently Lord Chancellor of Ireland, is explicit on the subject: "The appeal given under the 23rd section to the College of Physicians in a case of a rejection of a candidate Licentiate by the Apothecaries' Company, clearly implies that the science of medicine should be a main subject of the examination of such a candidate for a certificate. The appeal to the Physicians, and a re-examination by them, would otherwise be anomalous." Sir John further states: "In Ireland it has been the uniform course for the apothecary to charge or be paid for attendances, and also for medicines. In the scale of fees prepared for the Apothecaries' Company in 1784, attendance is a separate item; so in the scale adopted in 1804, which was authoritatively published, and since acted on." "That the Irish practitioner had a right to compensation for attendance as well as for medicine I have always considered as a matter free from doubt, nor have I ever known it to have been made a question." The arguments in the "statement" striving to evade the importance of the recognition of the medical status of the Irish apothecary in several Irish and Imperial Acts of Parliament are simply absurd. I quote from two Irish Acts. The 3rd Geo. III, ch. 28, enacts, "that if any prisoner appears afflicted with sickness, and to stand in need of medicines, the said minister or curate is hereby empowered to employ a physician, apothecary, or surgeon, and to pay for such medicines as shall be by them, or either of them, prescribed and made use of." The 17th and 18th Geo. III, ch. 18, provides "that justices of the peace shall have power to appoint an experienced surgeon or apothecary, at a stated salary, to attend each gaol or prison respectively, who shall be directed to report to the said justices, by whom he is appointed, the state of the health of the prisoners under his care or superintendence." The College of Physicians entered into a voluntary combination with the College of Surgeons and with the Hall in 1872-74. The statement alleges that this was done reluctantly; but the Registrar's letter, a copy of which recently appeared in the JOURNAL, stated that it was done "with the full consent of the College." The College now refuses to combine with the Hall, contrary to the recommendation of the General Medical Council and to the known intentions of the framers of the Medical Act, 1886. By both Medical Acts, registered practitioners are entitled to charge for medicine and appliances supplied to their patients, as well as for advice and visits; such offensive epithets and like expressions as "respectable tradesmen" are, therefore, as insulting to the general practitioner everywhere as to the Irish apothecary.—I am, etc., M.D.

Dublin, March 28th, 1887.

EDUCATION OF GIRLS.

SIR,—There is an important omission in the excellent address of Dr. Batten, of Gloucester, on the better education of girls. He does not set forth that both the physical and mental education of girls should be greatly governed by the manner in which menstruation is being performed. By all means let girls have more time for recreation and a greater variety of outdoor games, as Dr. Batten suggests; but these games would often require to be varied, apportioned, or forbidden during the menstrual periods of many girls, as do their studies. For this reason it is impossible, with due regard to the health of girls, to manage a large girls' school on "cut-and-dry rules," as can be safely done in large schools for boys. I have repeatedly pointed out in my works on diseases of women that the cause of most of the sexual diseases in single women can be traced to habitual injudicious conduct during menstruation, from its first appearance; and unless great care can be taken, the adoption of more active exercises for longer play-times is sure to lead to extensive mischief. Medical supervision is necessary to ensure good results from the great increase of more active exercise in the open air in the education of girls. Medical men can teach an intelligent matron how to manage most girls at the catamenial period, but he himself should prescribe the amount and kind of exercise suitable in cases of amenorrhœa, deficient menstruation, anæmia, chlorosis, and habitually abundant menstruation, as well as the nature and amount of mental labour at the periods. Each case requires its own treatment, but there are some general rules that I ask medical men to take into consideration.

1. However normal menstruation may be, all violent exercise should be prohibited, as well as cramming for examinations and the working out of complicated problems of arithmetic or otherwise during menstrual periods.

2. When a deficiency or an absence of the menstrual flow is caused by chlorosis or anæmia, moderate and varied exercise is advisable at menstrual periods when there is no sign of ovario-uterine disease.

3. It is best to forbid exercise and to advise rest on the sofa if the menstrual flow be too abundant or too painful, and a similar abeyance of all mental work.—I am etc., EDWARD JOHN TILT.

Mentone.

THE MEDICAL DEFENCE UNION.

SIR,—As letters of complaint (however groundless the complaint may be) are apt to be misconstrued, I ask your kind permission to be allowed to say that in the statement of account which, together with the report of the general meeting, has been supplied by Mr. Horder, it is mentioned that

"A copy of the *Transactions of the Medical Defence Union*, which will contain a detailed list of members, digest of the Union's work (other than financial) since its formation, and an account of its actions in the large number of matters which have been brought before it, as well as counsel's and solicitor's opinion upon various points of interest, and which it is believed will form an instructive and useful compilation for those who are interested in the work of medical defence and reform, will be forwarded to each member in the course of a few weeks,"

and until this is published it is hardly fair to pass judgment upon what the Union has or has not accomplished. At the same time, we

have every reason to believe that the Union will be able to give a very good account of its work in the past, and the election of the gentlemen mentioned in the report of the general meeting (most of whom have already accepted office) is a sufficient guarantee for its conduct in the future. I must respectfully ask Mr. Horder to recollect that his suggestion regarding "prescribing by chemists," is only one of some scores we have received for consideration, and if he will wait patiently (remembering fully that the Union is at present only about seventeen months old) he will find that his suggestion will not be neglected nor lost sight of, although it is a very minor one in comparison to the objects for which the Union was specially established.—I am, etc.,

17, Bedford Row, W.C., March 21st, 1887. CHARLES F. RIDEAL, General Secretary.

A DRAMA IN THREE ACTS, WITH A MORAL.

SIR,—The following short sketch of a drama in three acts, in which I have been an unwilling performer, may, I think, prove instructive to some of my fellow-practitioners:

Act I.—One fine day in August, when most of my professional neighbours were enjoying their holidays, I was presented with a magistrate's order, directing me to visit and report upon a supposed lunatic. I did as I was ordered; found that the individual was undoubtedly insane, and certified to that effect. Next day she was brought before the magistrate, who satisfied himself by personal examination of the correctness of my opinion, and signed an order for her removal to a public asylum, where she was detained for two months.

Act II.—Some months afterwards I am served with notice of an action, then with a long list of "interrogatories," and finally I am put to the inconvenience of a trial extending over four days, at the conclusion of which the jury without hesitation find a verdict in my favour, the judge awards me costs, and I am overwhelmed with the congratulations of my friends.

Act III.—After another interval of a few months, the plaintiff having professed herself a pauper, I am presented with a bill of costs amounting to £240 8s. 1d., together with a suggestion that it is open to me to institute proceedings in bankruptcy against my opponent. But, having had enough of law for the present, I do not feel much disposed to fall in with the suggestion, and a sale of hardly-earned investments concludes the piece.

The moral is obvious: let all medical practitioners bear it in mind, and be warned by the fate of—Yours, etc.,

ONE WHO DID WHAT HE CONSIDERED HIS DUTY.

VENTROTOMY.

SIR,—The criticisms of Messrs. Davies-Colley and Rabagliati are valuable, and certainly correct philologically, but the term "cœliotomy" is open to the practical objection that if pronounced in the orthodox Greek fashion it would probably be confounded in the minds of most students with kelotomy. This, however, may not be a very weighty objection. I welcome the term as an advance in the right direction of accuracy in operative nomenclature, and shall adopt it as synonymous with ventrotomy in a forthcoming work on Abdominal Surgery. The latter term, though a mongrel one, as I stated, is free from ambiguity in pronunciation and meaning.

With reference to Mr. Rabagliati's suggestion to write colostoma instead of colostomy, I think that the affix *my* is so familiar in operative nomenclature that any derivative error must be excused in favour of surgical convenience. Pure classicism is good, but for working surgeons a handy though hybrid term is better.—I am, etc.,

78, Grosvenor Street, W. H. A. REEVES.

BERMUDA AS A HEALTH RESORT.

SIR,—At page 628 of the JOURNAL of March 19th, under the head of "Bermuda Branch," is published a paper which was read by Surgeon H. J. Barnes reflecting most unfavourably on the sanitary condition of the islands. The want of proper disposal of sewage, general contamination of water, etc., were dealt with.

It is not stated whether this paper was accepted by the members of the Branch in Bermuda as correct in its sweeping statements, nor whether there was any discussion on it raised by the local general practitioners whose names have been published as members of the Branch.

Having spent many years of my life in Bermuda, and being in constant correspondence with relatives there, and in the habit of discussing all the general topics of the day, I am not prepared to accept the statements in Surgeon Barnes's paper as correct, and therefore protest against them.

Such a paper, written by an officer of Surgeon H. J. Barnes's limited medical experience, would, under ordinary circumstances, be taken on the spot for what it is worth; but it has gone forth to the world in the columns of the JOURNAL, and may do immense injury to Bermudians and Bermuda. The JOURNAL has a large circulation in the United States of America and through the different provinces comprising the Dominion of Canada, where Surgeon Barnes's paper may be read as if its correctness were guaranteed by its appearance in your columns.

Of late years Bermuda has become a favourite winter resort for invalids from all parts of the North American continent; much capital has been expended in building hotels on the most approved sanitary principles, and in providing accommodation in various parts of the islands. In the season a steamer leaves New York every Thursday, and arrives at Bermuda on Sunday morning, returning to New York on the following Thursday. These steamers have accommodation for over 100 first-class passengers. I enclose cuttings from the *Bermuda Colonist* showing the passenger lists to and fro for two weeks.

Surgeon Barnes's paper, under your supposed guarantee for its truthfulness, might produce such an exodus as did the earthquake from the Riviera—only by imaginary instead of real danger.—I am, etc.,

A BERMUDIAN.

NEPHROLITHOTOMY: A CORRECTION.

SIR,—Permit me to correct an error in your report of the Medico-Chirurgical meeting of January 22nd.

In my case of nephrolithotomy (or attempted) the stone was not in the pelvis of the kidney, or I am pretty sure to have found it, but low down in the ureter, about on a level with the brim of the true pelvis.—I am, etc.,

Wimpole Street, W. EDWARD BELLAMY.

NAVAL AND MILITARY MEDICAL SERVICES.

RELATIVE RANK.

THE initiatory action taken by the Parliamentary Bills Committee of the British Medical Association in its representations to the Secretary of State for War with respect to the abolition of relative rank of medical officers in the army has brought to the Chairman of the Parliamentary Bills Committee, and to the Committee, not only a host of letters of approval from all parts of Great Britain (only a tithe of which it has been possible to publish), but telegrams from the medical officers of Burma, Lucknow, and Rawal Pindi, heartily approving of the steps taken.

Although the medical services in India cannot possibly know the particulars of the interview with the Secretary for War at the House of Commons on March 22nd, they were aware that action was being taken to bring the question of relative rank to the notice of the War Minister, and the telegrams and letters which have reached us, all express warm approval of the steps in contemplation. We are not surprised at this, because it is in India, even more than at home, that the meaning of the new and deceptive term "*ranking with*" is understood.

We now venture to advise all those interested in this question to await patiently the action of Mr. Stanhope in this matter. We think this is due to the Minister for his courtesy, and the patience with which he listened to what was said to him by the members of the deputation, the fatigue of an "all-night sitting," notwithstanding; nor should we overlook the fact that at the very time given up to the deputation a hot debate was going on in the House, involving the existence of the Government in which Mr. Stanhope holds high office.

WITH reference to the statement which has been published elsewhere that the abolition of the term relative rank is not confined to medical officers alone, but applies also to the officers of the adjutant and quartermaster-general's staff, and to all the departments of the army, a correspondent points out that the officers of the adjutant and quartermaster-general's staff are combatant officers, holding staff appointments, completely outside any question of relative rank, and, therefore, unaffected by its abolition.

The abolition of relative rank does not equally affect all the departments of the army, for three out of the six—namely, the commissariat, ordnance store, and pay—have been granted honorary rank, a distinct advance on relative rank

while the remaining three have, according to the recent Warrant, no rank beyond that granted to an Indian civil servant, who, for purposes of precedence, etc., ranks with a major or colonel.

Whatever happens, the medical officers of the army will be grateful to the JOURNAL for the position it has taken up in this most important question. Under the new Warrant there exist but two ranks, substantive and honorary. The medical officer has neither. In future it will be somewhat difficult to define the relative positions of the officer commanding a bearer company who has no rank, his quartermaster who has honorary rank, and his sergeant-major who has substantive rank. Such an organisation would not be allowed for a moment in any other corps of the army. The time has come for a War Office committee to be assembled to consider the whole question of the reorganisation of the medical staff, and on such a committee the medical officers of the army should be largely represented.

ONE WHO KNOWS writes: As it is self-evident that relative rank in the army has been abolished with some ulterior object, and as that object has not been stated openly or with candour, it may, I submit, be fairly inferred that the object in view is a sinister one. It is probable, as stated in your issue of March 12th, that the object is to deprive medical officers of some of their privileges that are supposed to give them too favourable a position from a combatant officer's point of view, but I have reason to believe that the question of the pay of a large section of the Army Medical Staff has also something to do with the matter. A question is about to be raised (and the authorities know it) regarding the pay of junior officers serving in India, and their grievances could be easily disposed of if the authorities could state that medical officers belonged to a service having its own special grades, that they received the rates of pay granted to the grades in which they stood in their service, and that as they held no army rank they had no claims to the pay of the relative rank they had hitherto held. This is the point that pinches juniors in India, where, until the issue of the late Warrant, they ranked as captains, though they actually received less pay than officers of their service received twenty-five years ago, when they ranked as lieutenants. If, therefore, their late rank were continued to them it would be difficult to explain or extenuate the loss of pay to which they are subjected in India when the matter is brought, as it shortly will be, before the House of Commons.

Perhaps these facts may help to solve the conundrum that is at present disturbing the service; and, with your permission, I would like to direct attention to them.

*** It is not at all improbable that a desire to escape from the cost which would be entailed in giving to medical officers in India the rates of pay which the relative rank conferred on them by recent Warrants, if accepted by the Government of India, would entitle them to may have been at the bottom of the abolition of all relative rank. Time will, no doubt, clear up this point, as well as others connected with the subject which so far remain unexplained.

GRIEVANCES OF NAVAL MEDICAL OFFICERS.

ON Tuesday, March 22nd, Dr. Tanner, in a debate on naval affairs, stated that discontent existed amongst the medical officers, on which he wished to state a series of facts, but was prevented doing so on the ground that the Medical Naval Service was not in the vote under discussion. Dr. Tanner may treasure his "series of facts" for the special occasion of that vote whenever it may be under consideration of the House, and possibly he may have some startling facts to reveal, at least as concerning the incapacity of the officials at Haulbowline Docks, whether they be medical or others; or they may have a wider or more general scope; for such a sweeping charge, implying serious discredit on individuals in Government employ, ought, we imagine, to be inquired into by those before whom it has been made with so much assurance by a medical member of the House.

For ourselves, we know well that grievances of officers of our profession are not rare, and that it is extremely difficult to get them redressed through any extra-official channels, and the sufferers have only to submit to them with patience; while there are others of a more general nature, reflecting on the well-being of the service itself, by causing such dissatisfaction as leads to an insufficiency of candidates to perform the executive medical duties, which we are happy to know does not exist at present. It would cause regret to us to find that this should be disturbed.

Long experience teaches us that a timely consideration of such matters is the best, if not the only, means for preventing embarrassing results; and communications succinctly setting forth the nature of the alleged grievances will be carefully considered.

We are convinced that Dr. Tanner must be in possession of well-founded facts, which it behoves him to bring to the eyes of the profession at large by his stating them freely from his seat in Parliament.

BRIGADE-SURGEONS IN INDIA.

SUBSCRIBER writes: The personal wrong inflicted on Brigade-Surgeon Graves is of little comparative moment, but the injury done the service, in permitting a breach of faith to exist by violating the conditions of a Royal Warrant, is a serious consideration, and such action is universally condemned by the professors and teachers of the medical schools, the officers of the Medical Staff and by the officers of every other branch of the army, combatant and non-combatant. We would be sorry to see an apparent, much more a real, blot permitted to exist in the Medical Staff during the period of Sir Thomas Crawford's administration, and we still look to him to see that justice is done by causing Brigade-Surgeon Graves to be restored to his original place in the Army List, and thereby remove the present existing discontent caused by Mr. Stanhope's answer to Colonel Hughes-Hallett's question in the House of Commons, when he asked that Brigade-Surgeon Graves's promotion might be ante-dated so as to place him in his original position in the Army List, he having been passed over no fewer than eleven times while on sick leave but on full pay.

THE PUBLIC SERVICES.

SURGEON R.N. writes: It is very difficult for one to answer in general terms the question of your correspondent "B.A.," which appeared in the JOURNAL for March 12th, as the considerations which influence one when deciding for which service to enter oneself have so very varying a weight according to one's own individual tastes. However, I may say that if "B.A." likes the sea and fancies travelling, if he has a taste for some other intellectual pursuit as well as for medicine, if, finally, he is in no hurry to marry, let him join the Royal Navy, where, among the traditions of a glorious past, he will see the world under the best auspices, will pass his time very pleasantly, will have but little therapeutic work to employ him—perhaps too little, hence the need for some additional interest—and if he is a man of energy and ability he will find many problems whose solution will tax all his knowledge and ingenuity. He will not be underpaid; may, if he please, save on his pay; and if, improbably, he finds he has made a mistake in joining us, he can retire on gratuity sooner than in the sister services. If, on the other hand, he cannot live in a ship, and (more shame to him) hates the sea, if he takes little interest in the less civilised parts of the world, he had better join the Medical Staff; or if he be very anxious for strictly medical work, the Indian Medical Department. Perhaps, in conclusion, I may say that, should he in the next six months avail himself of every opportunity of studying fevers at home, he will not when he joins be at all a less efficient Surgeon R.N.

MEDICO-LEGAL AND MEDICO-ETHICAL.

SCOTCH AND IRISH LICENTIATES.

MR. JAMES GILROY writes: Mr. Upton asks, What is pharmacy? and proceeds to define it. I ask, What is an apothecary? and may give a liberal definition, as he does. It is a French word coming from the Greek αποθήκη, a hiding place, and signifies one who deals in drugs, that is, one who practises pharmacy. That is an apothecary literally. The diplomas of the Colleges I named, R.C.S.E. and F.P.S.G., have the inherent right to license in the arts of surgery and pharmacy, and the wording of the diplomas is both explicit and full. I do not care for making assertions without proving them, and I advanced quotations in my previous letter from current Scotch literature to prove that the title in Scotland was long ago recognised as Surgeon-Apothecary. In addition to that I may add that in Glasgow and the West of Scotland the Licentiates, as a general rule, keep the orthodox apothecary-shop. Why, the Faculty of Glasgow has in Glasgow the very same right as the London Society in London to inspect apothecary-shops and examine the quality of the drugs sold in the city. It appoints inspectors of drugs, as far as I know, till the present day. It is true that London apothecaries have departed from ancient tradition, and prefer as a rule to adopt the pseudonym of "surgeon," towards which surgical colleges and Licentiates of them show a similar forbearance that the Society of Apothecaries do to persons on the *Register*. As to the note on the subject in Glenn being vague, I cannot admit that. As to its being incorrect, Mr. Glenn must answer for that. I would undertake to bring direct testimony as to the practice of Scotch Licentiates as apothecaries at any time. It is a privilege which is centuries old, and which is in operation to-day as it has been. Mr. Upton can hardly mean to limit the art and practice of pharmacy as he says, or how came the apothecaries to get their charter?

In conclusion, I may say my sole aim has been to clear what is a misconception of Scotch privileges and practice under the charters of the R.C.S. and F.P.S.

*** We have received the following comments from Mr. J. R. Upton, solicitor to the Association, and Clerk to the Apothecaries' Society: I have read Mr. Gilroy's letter of March 13th. He says, "Mr. Upton asks What is pharmacy? and proceeds to define it." The definition was not mine; it was taken from Webster's *English Dictionary*; see also *Imperial Dictionary*. I do not, however, understand Mr. Gilroy to dispute its correctness, but I cannot admit that the definition is a "liberal" one, for, on the contrary, it is most exact. This, however, is not the matter immediately under discussion.

If my letter which appeared in the JOURNAL of March 12th is referred to, it will be seen that, in order to emphasise and explain the distinction between the English and Scotch apothecary, I added in brackets after the words "English apothecary" the title he bears, and alone has the right to, namely, that of L.S.A.

The Licentiate of the Society of Apothecaries exists and is created under the Apothecaries' Act of 1815. By force of that statute and the licence conferred on him thereunder, he is entitled to practise medicine—an art which I reaffirm, and without fear of contradiction, is one wholly distinct from that of pharmacy It is not therefore a matter of liberal definition, it is one of actual fact (see "Apothecary," Webster's *Dict.*, *Imp. Dict.*, and the article under that heading in the last edition of the *Encyc. Brit.*)

The fact that the Faculty of Glasgow has the same power as the Society of Apothecaries to visit shops is obviously outside the matter under discussion, but I answer it by stating that it is only one of various powers belonging to the Society, and has nothing to do with their power to examine and qualify medical men.

I did not state in my last letter that Mr. Glenn's note was incorrect, only that if relied on as an exposition of the law it was incorrect; but, though vaguely expressed, I do not admit that there really is any difference between

what Mr. Glenn defines the law to be and myself. May I, in conclusion, be allowed to reaffirm the propositions which appear in page 486 of the JOURNAL of February 26th on my authority, and which give a just and clear exposition of the law as it stands?

PAYMENT FOR TREATMENT OF FRACTURES IN FORESTERS' CLUBS

T. B. F. E. wishes to know whether it is customary in the profession to attend cases of fracture in club patients without extra remuneration. He has charge of a Juvenile Foresters' Society of thirty-three members at 2s. per annum a head. The rules require him to attend the members in illness and to supply necessary medicines, but specify nothing further.

*** In looking into the rules which determine the obligations and payment for the services given to members of senior Foresters, we find that in cases requiring appliances, such as bandages and splints, they are only supplied on loan; therefore, if retained by the injured member, must be returned or paid for. Nothing is said, however, as to any distinctive payment for putting up and looking after the injured limb. It appears to us that our correspondent having entered into a bargain, however hard it may be, is bound by the terms of it, and therefore has no valid claim sustainable by law for the recovery of any additional consideration for his services.

A QUESTION OF CAB-HIRE.

A. and B. are in partnership, and have in their agreement the following clause: "Each partner shall, at his own sole cost, provide and maintain for his personal use all such horses and carriages as shall be requisite for enabling him effectually to carry on the same partnership," etc. A., the senior partner, has a carriage, but after a time drops it, and, soon after, taking cabs freely, enters them as a firm account. He says that he takes them as he gets tired out, while at the same time he declines all offers of assistance in visiting the patients. What should and what should not be entered as fair and reasonable travelling expenses under the above agreement?

*** The clause in the agreement seems clear. Unless there is some other clause to qualify it, the cab-hire should be paid by the partner who uses the cabs, and not charged to the firm account. The fact of the partner preferring to use cabs instead of keeping his own carriage can make no difference in his obligations under the agreement.

"FRIENDLY VISITS."

MEDICUS writes: I am in professional attendance upon a certain nobleman. Is it etiquette on the part of a neighbouring practitioner, who I believe on a former occasion had attended some of the family, to call twice in one week, under the pretence, I presume, of a social visit, and see my patient? He may or may not have volunteered advice; he is capable of doing so.

*** Although there is not, to our knowledge, any ethical rule that directly prohibits such presumed social visits as those to which, under the circumstances related, our correspondent justly takes exception, there is one which indirectly does so (see *Code of Medical Ethics*, second edition, p. 72, s. 14), so far as to enjoin that, in cases of consultation, etc., when the ordinary medical attendant has resumed exclusive attendance, the consultant should not, under any pretext, make friendly calls upon the patient unless justified by previous personal intimacy; even in the latter case, they are better omitted for the time.

AN ADVERTISING PHYSICIAN'S "LITTLE BILL."

X. Y. Z. writes: I have been advised by several medical friends to submit the following case for the favour of your opinion.

Suffering some time ago from occasional attacks of ——, of a chronic nature, I was recommended to apply to Dr. ——, who advertises a work on this disease in the daily papers. I accordingly consulted him by letter, and, in reply, received instructions to forward my urine for analysis. I then received some medicine; this was repeated about nine times. After the first letter from him, I wrote to ask what his charges were, but received no reply; finally, however, after some time and further pressing, I received a letter from him stating that his fees were £18 18s. As the number of letters received from him or his secretary did not exceed twelve, and the medicine sent amounted only to about nine bottles and nine boxes of pills, I complained of the charge, and requested to be supplied with items; this he refused to do, informing me that it was not customary for physicians to send in items.

Referring to a medical directory, I find that this gentleman is M.D. of a German or Swiss university, and Licentiate of the Apothecaries' Company of London. The latter qualification, I know, gives him power to demand and recover reasonable charges for professional aid, advice, and visits, and the cost of medicine supplied, but at the same time protects the patient from overcharge, by entitling him to be furnished with particulars of visits, medicines, etc. Does the foreign M.D. qualification give the privilege of recovering fees for attendance and charge for medicine, and exempt, also, at the same time from supplying items?

Dr. —— has now placed the matter in the hands of his solicitor, preparatory, I presume, to taking proceedings, and I therefore venture to solicit the favour of your opinion; and, if not contrary to professional etiquette, I would also ask what would be a fair remuneration for his services. I may add that I have not had a personal interview with Dr. ——, who, indeed, wrote to say that it was not necessary—he could treat just as well by correspondence, his letters being written by his secretary, and merely signed by himself.

I enclose my card and also the copy of the advertisement for your satisfaction, but not for publication.

*** There is nothing to prevent "X. Y. Z.," in case proceedings are commenced against him, demanding full particulars of claim. Having regard to the total absence of any law as to what are reasonable and proper charges, and to the charges in each case depending on the evidence as to what is reasonable and proper, it is impossible to forecast what will be the result, even when particulars are furnished. "X. Y. Z." will probably be made a wiser and a sadder, if not a healthier, man by his advertising physician, and he must remember that some persons have to pay very dearly for experience.

THE ROYAL COLLEGE OF PHYSICIANS AND MODERN MALTHUSIANISM.

MR. HENRY ARTHUR ALLBUTT, M.R.C.P.Edin., L.S.A.Lond., writes: As you are doubtless aware, I have been cited to appear before the Fellows of the Royal College of Physicians of Edinburgh, at their quarterly meeting in May, to show cause why I should not be deprived both of the Membership and Licence of the College, "for having" (so this indictment is worded) "published and exposed for sale an indecent work entitled *The Wife's Handbook*, and for having published or attached thereto advertisements of an unprofessional character, titled 'Malthusian Appliances.'" Now as this case is exciting much comment in the profession, may I ask you in common fairness to allow me to state that I have a full answer to all charges, and shall be able to vindicate myself completely? Without recording the lines of my defence, I may say that I have full moral and legal justification. I would beg of you to publish in whole or in part the enclosed petition of the Malthusian League on my behalf. This petition is being sent to every Fellow and Member on the roll of the College.

*** The petition is too lengthy for insertion. It sets forth the familiar facts with regard to the high average birth-rate in various counties, and expresses the opinion that the plan of late marriages recommended by Malthus is less desirable than the general adoption of a "physical check against large families."

DISTRICT MEDICAL OFFICERS AND PRIVATE PRACTITIONERS.

M.D.—In prescribing for the patient without previous communication with M.D., the district medical officer no doubt violated professional etiquette. Our correspondent should have written to him, and courteously asked for an explanation of his conduct.

SPURGIN *v.* NICHOLSON.

THE Secretary desires us to state that the publication of the next list of subscriptions is, owing to an accident, unavoidably postponed.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE GLASGOW EYE INFIRMARY.

SIR,—The JOURNAL is unfortunate in its Glasgow correspondent. It is only some four weeks since several misstatements in his letter were published in your columns respecting a recent discussion on cerebral abscess at the Medico Chirurgical Society. These were so grossly incorrect that the Sectional Council felt called upon to correct them, through their Secretary, in the next number. Again, in the JOURNAL of March 19th, the same writer, I presume, with reckless assurance, distinctly insinuates that Dr. Fergus took advantage of his position as a director of the Eye Infirmary to arrange a vacancy on the staff, in order that his son might obtain promotion. Except for the sake of those who have no personal acquaintance with Dr. Fergus, it did not require Dr. J. B. Russell to tell, as he does in this week's JOURNAL, that this statement is absolutely untrue; for the profession here well know that Dr. Fergus is incapable of such conduct. Very great indignation is felt that such an insinuation should have been made against a gentleman who is so widely known and greatly respected, both by his professional brethren and the general public. Your correspondent's conduct is most censurable, and certainly it is incumbent on him to publicly apologise.—I am, etc.,

March 28th, 1887. ALEX. ROBERTSON.

SIR,—If any justification were needed for the paragraph with the above heading in your issue of March 19th, it has been supplied by Dr. Russell's letter, published last week.

It is now plain that a small committee of the directors of the infirmary can initiate and carry through the summary deposition of one of the medical officers, after he has rendered nine years of service, without assigning reason on their part or fault on his, and without consulting the medical members of the directorate or the board of which they are a committee. Moreover, it is also clear that such a committee can maintain its action on appeal to the directors, in spite of the championship of medical representatives on the board. This is a state of affairs which demands the very serious attention not of the profession only, but also of the public. It is because the proceedings raised a very important question relating to the management of such institutions as the Eye Infirmary that the paragraph in question was written.

The relationship of Drs. Andrew and Freeland Fergus to the proceedings is, after all, only a secondary question. Nevertheless, one is entitled to ask how it comes about that the action of the House Committee was homologated, *after it had been accomplished*, by the directors without the most active and vigorous protest on the part of the medical representatives on the board. Were Drs. Fergus and Russell both absent from the meeting of directors at which the action of the House Committee was *first* brought up and by which it was approved? At the special meeting held on March 18th, "Dr. Fergus

was Dr. Macfie's champion," but Dr. Russell does not state what was the nature of the championship. Was it Dr. Macfie's champion who suggested (or, without being its originator, did he approve the suggestion) that Dr. Macfie should be asked to return to the Infirmary, not, however, to his old position, but on the footing occupied by Dr. Freeland Fergus up to the date of his dismissal? That position was, properly, simply that of a supernumerary, with none of the privileges belonging to one of the surgeons, but with the prospect of stepping into the first vacancy that accident or circumstance might create. Such a proposal was one which Dr. Macfie could not, with any self-respect, accept.

Even if Dr. Russell's explanation were accepted, that the House Committee found two assistant-surgeons sufficient, why was the man who had given nine years' service dismissed, and the man who, at the best, had not given a third of that, retained?

Dr. Russell's letter renders the need of further explanation only more clamant in the interests of the Infirmary and of its wise administration.—I am, etc. YOUR GLASGOW CORRESPONDENT.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday. March 24th.

Capital Punishment.—In answer to Mr. BROOKFIELD, Mr. MATTHEWS said that a Departmental Committee was appointed last year to consider the best mode of carrying out the sentence of death. The chairman, Lord Aberdare, was abroad, and the proceedings of the committee were in abeyance.

Friday, March 25th.

The Outbreaks of Anthrax in Cattle.—In answer to Dr. CAMERON, Lord J. MANNERS said the Anthrax Order of 1886 provided for the destruction of carcasses of animals dead of anthrax by exposure to a high temperature, or by chemical agents, and local authorities in districts where the necessary appliances exist had been authorised to adopt such modes of destruction instead of burial. Where burial was adopted, failing other means, local authorities had been warned that carcasses should be buried entire, and well covered with lime. There was reason to believe that when carcasses were so buried as to exclude the air, the power of infection did not continue for any great length of time.—In answer to Dr. CAMERON, Mr. RITCHIE said the danger of anthrax being communicated to human beings was one almost exclusively incurred by those who had to deal with hides, or who opened bodies of infected animals; and obedience to the order of the Privy Council of September 16th, 1886, as to dealing with such animals and their carcasses, would practically get rid of that danger. No other measure was regarded as called for. The report of the medical officer of the Board for 1882 contained a memorandum which gave the means of recognising anthrax, as it affected people dealing with hides, which he thought might be useful as guarding against error in diagnosis in districts where actual anthrax had appeared.

Monday, March 28th.

Surgeon-Major Moore.—Dr. ROBERTSON asked the Secretary of State for War whether it was the case that Surgeon-Major Sandford Moore, who originated and introduced into the army the present ambulance system for the removal of the wounded from the field of battle, had been obliged to retire on the lowest rate of pension in consequence of total and permanent blindness, induced, in the opinion of a medical board, by his extra literary duties; and whether, under the circumstances, he would take into consideration the justice of granting to that officer some additional pension.—Mr. STANHOPE said that, with every disposition to approach the case—which was a very sad one—with the utmost possible indulgence, he regretted that he felt unable to grant an additional pension.

The Troops in Upper Egypt.—Mr. STANHOPE, in replying to Mr. EDWARDS-MOSS, said that Her Majesty's Government were quite aware of the dangers which might be caused to the health of British troops by keeping them at Assouan during the hot weather, and he hoped that the condition of the frontier might soon be such as to enable them to reduce that risk to a minimum.

Tuesday, March 29th.

Inoculation for Anthrax.—Lord JOHN MANNERS, stated, in reply to Mr. GARDNER, that experiments in inoculation with the virus of anthrax and other diseases were being carried on, but that up to the present the results were not so satisfactory as to justify its general adoption in this country.

House-boats on the Thames.—In reply to Colonel DAWNAY, Mr. RITCHIE said: I have been in communication with the Conservators of the river Thames on the subject of their proposed by-law prohibiting the casting or suffering to fall into the river any sewage or offensive matter, and the effect of that by-law with regard to house-boats and steam-launches. The Conservators have forwarded to me a copy of a letter which, as soon as the by-law referred to has been approved, they propose to address to the owners of house-boats and steam-launches requesting that they will, without delay, make the necessary arrangements in the fittings of their vessels in order to comply with the by-law referred to. They state that any closet communicating with the river would obviously be an infraction of the by-law, and cannot therefore be permitted.

Mr. WALTER M'LAREN: To ask the President of the Local Government Board whether the Committee appointed to inquire and report on the subject of M. Pasteur's treatment of hydrophobia is still sitting, and, if so, whether he will request it also to inquire and report on the Buisson system of treating the same disease, which many persons believe to be more successful; and whether it is a fact that the Duke of Cambridge has ordered Veterinary Surgeon J. A. Nunn to go to Paris and attend M. Pasteur's laboratory, and, if so, whether he will order the same person, or some one of equal position, to study the Buisson system, so that both may be placed on an equal footing.

OBITUARY.

W. H. THORNTON, J.P., M.R.C.S.

THE medical profession in Margate has sustained a great loss by the death of one of its oldest and most valued members, Mr. W. H. Thornton. Mr. Thornton was admitted a Member of the College of Surgeons in 1845, and had been in practice in Margate for more than forty years. He had been ailing for about a year, and died at Hastings on March 20th.

At the time of his death he was consulting surgeon to the Royal Sea-bathing Infirmary, having a few months previously resigned the post of visiting surgeon. He had also been surgeon to the Deaf and Dumb Asylum for twenty years. Mr. Thornton had, throughout his life, worked hard in a large private practice, and had acquired a rare practical insight into disease. He was of the brightest and most sanguine temperament, cheering his patients by his kind sympathy, and also by eagerly noting any encouraging features in their case. The same kindly disposition made him always see the best side of his friends and acquaintances; he never made an enemy, and was beloved alike by rich and poor. He leaves two sons in the profession, one of whom succeeds him in his practice.

J. C. MADDEVER, M.D., C.M. Glasgow.

DR. JOHN COOMBE MADDEVER, of Rothesay, who died of erysipelas on March 18th, at the age of 63, was born at Linkenhorne, Cornwall, and studied at the University of Glasgow, where he obtained the degrees of M.D. and C.M. in 1850. After practising for some time in Strone, he finally settled in Rothesay. He had an extensive practice in the town and throughout the Island of Bute, and was highly esteemed by all classes.

Dr. Maddever was the medical officer for the parish, medical officer of health for the borough, medical officer to the Coastguard, and Surgeon-Major to the 1st Renfrewshire Rifle Volunteers. He served for some years as a councillor and bailie of the burgh, and was a member of the School Board from its formation until a couple of years ago. He was twice married, and has left a widow and two sons.

MATTHEW HILL, M.D., Bootle.

ON March 9th the flag was lowered to half-mast over the Town Hall, Bootle, in token of respect for Dr. Hill, ex-mayor of the borough, whose early death has deprived the town of a most conscientious public man and an able and kindly physician. Dr. Hill died in harness, having gone out about a fortnight before his death to a consultation late at night, and got a chill which resulted in pneumonia.

Dr. Hill, who was born in 1842, studied in Dublin, and took the degree of M.D. at the University of Durham. His first connection with Bootle was as house-surgeon to the local hospital; he soon made an opening for himself in practice. He took a leading part in getting the present Bootle Borough Hospital built, to which, on its completion, he was appointed physician. Dr. Hill took a great interest in the institution, and mainly through his exertions the hospital has been recently much enlarged. Dr. Hill was elected a member of the Town Council of Bootle in 1880, and, being shortly afterwards appointed Chairman of the Health Committee, he was able to do exceptionally useful work. More especially he

exerted himself in making provision for the isolation and treatment of patients suffering from infectious disease, which proved of incalculable service during the outbreak of small-pox last year. Dr. Hill advocated, and lived to see established, public baths and a free library in the borough. In 1885 he was appointed chief magistrate. As Mayor and Chairman of the Health Committee, Dr. Hill was enabled to initiate many sanitary reforms, and to secure better building regulations—a matter of no small importance in a place like Bootle, the population of which has risen since 1861 from 16,000 to 45,000. Dr. Hill by inclination was a studious rather than a public man, and it was not without some difficulty that he was induced to engage in the strife of the municipal arena. He was never married. Dr. Hill was a good art critic, and a collector of much judgment and knowledge. The profession of Liverpool and the neighbourhood, and a large section of the public, will miss a kindly, hearty friend, whose abilities were of a high order, and always at the disposal of anyone he could help. The attendance at his funeral proved the general esteem in which he was held.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE HIGH MORTALITY IN DUBLIN.

THE sanitary condition of Dublin has a bearing of great importance upon the well-being of the people, in the widest sense, at the same time that the prosperity of the people affects in a very palpable way the sanitary condition of the inhabitants. This may be said to be nothing new, and as a fact was recognised by the ancients. Familiarity with the matter in theory should not, however, induce us to neglect the application of the doctrine in practice. It is well, therefore, that the proceedings of associations in Dublin have frequently drawn attention to the necessity for action for the promotion of a better state of things.

At the annual general meeting of the Dublin Sanitary Association, the President, Dr. Grimshaw, observed: "Is it not a melancholy result that among all the great towns in the United Kingdom, Dublin alone presents an increased death-rate, after having for ten years enjoyed, in common with other cities, the advantages of improved sanitary laws, and the opportunities for improved administration? We are, however, not without some set-off against this deplorable state of affairs, for during the past three years there has been a manifest improvement." The speaker then proceeded to point out certain alterations in the machinery of administration of the laws of public health which seemed to him desirable.

A very serious mortality amongst children under 5 years of age in Dublin was attributable, in the opinion of the same authority, to "poverty, hunger, and dirt, and all the insanitary conditions connected therewith." Moreover, it is in the class denominated by Dr. Grimshaw as the "general service class," which includes labourers, porters, hawkers, etc., that infant-mortality rises to the high figure of 112.1 per 1,000, while for children of the same ages, that is, of under 5 years, among the profesional and independent class, the mortality is but 16.5.

That want of care and neglect cause much loss of life as well as suffering—in not a few cases life-long—is evident from the fact that "burns and scalds" cause a considerable percentage of the deaths of children.

The figures which justify the statement by the author quoted above have to some extent a misleading effect, for the ordinary reader would naturally at once infer that due carefulness and attention were not attributes of the Irish mothers of the labour classes towards their offspring; an inference which would not be just, in the great majority of cases, towards a class who are in general good and kind mothers.

The circumstances which lead to such sad results are due to several causes. Ireland is, unfortunately, at present, and has been for some years, in a very unsettled state; Utopian prospects have been offered to a people, never, as a nation, over-industrious; while a fall, to a certain extent, in the value of home-produce, though accompanied by cheaper food, has led to much disturbance of the public mind on the land question, with serious losses to the property classes, and the inevitable consequences of a great diminution of employment for the labouring classes in town and country.

Numbers of men have been put out of employment, partly by these causes and partly by their determined opposition to any agreement to work at a lower rate of pay for what work is to be had at home; in many cases fathers have left Dublin to seek employment elsewhere—some through disappointment, some through dissipation, and some from political reasons, from loss of health—leaving a helpless family to be sustained by the mother's exertions alone, which often obliges her to absent herself from her family for many hours, during which not a few accidents arise. Such a state of things is often, however, mitigated through the kindness of neighbours, and through the operation of the *crèche* system, which is carried on to some extent in Dublin.

Very many instances of the devotion of mothers to their offspring are little known, except by the medical man or the clergyman. Families wholly supported by the mothers' exertions, owing to the illness, the idleness, the dissipation, or the desertion of them by the fathers, are by no means uncommon occurrences. Consequent overwork on the part of the mother renders her liable to illness, premature death, or in some cases drives her to stimulants to complete the chain of misery in which the whole family becomes involved.

Together with poverty comes the use of insufficient or inferior food, which, combined with bad housing, overcrowding, and deficient clothing, all render the poor more and more prone to illness.

To mitigate the many co-operating causes which have given a high mortality to Dublin, more charitable institutions, independent of the public rates and other Government aid, are, probably, to be found there than in any other city in the world of the same population and resources. There are many hospitals for the sick and suffering of each denomination; some of these, it is true, possess subsidies from Government or municipal funds, or from the rates; others possess only pecuniary aid from private sources, aided, in a few cases, by payment by the patients themselves, occupying, it may be, private wards. One or two institutions are wholly devoted to private cases, and are thus maintained. In this way, there are several medical and surgical hospitals, fever-hospitals, and three for maternity cases and for diseases of women, as well as out-service for maternity cases attached to the hospitals. There are hospitals for children, for incurables, and for imbeciles; also convalescent homes, not only for those unable to pay, but also for persons of the class of shop-assistants and others able to pay a small weekly sum for their maintenance.

There are also in Dublin several institutions founded by private charity for persons of small means, and unable, from age or infirmity, to increase the same by their own exertions; institutions for the blind, for the deaf and dumb; and hospitals for eye, ear, and throat cases; loan funds, visiting societies, and nurses for the sick and poor, clothing and coal funds, ragged schools,—all these have an important influence in mitigating the sufferings of those who, living in a comparatively poor country, would be much worse off without such numerous means of help in their time of need. The Corporation of Dublin, the Artizans' Dwellings Company, the sanitary associations, public-spirited private citizens, have also done much to lighten the misery of the poorer classes.

With all these varieties of active charity in operation, it is pleasant to perceive an improvement in regard to certain classes of disease compared to what existed in more prosperous times in Ireland, notably in the case of typhus and small-pox, and of blindness and other sequelæ of disease. There are further considerations in relation to the causation of disease and suffering in Dublin which cannot be entered on in the present instance for want of space.

ERYSIPELAS AFTER VACCINATION.

THE Local Government Board has just issued the report of its Inspector, Dr. Airy, on three cases of fatal erysipelas after vaccination which occurred in the Sudbury Union in October and November of last year.[1] The facts which Dr. Airy elicited during his inquiry are of much value in showing the nature of the risks to which recently vaccinated children are exposed, and the precautions which can alone ensure safety from similar accidents.

The three children who died from erysipelas after vaccination were vaccinated by different operators, in different parts of the district; two of them were operated upon by public vaccinators, the third by a private practitioner. In two cases, other children besides the subjects of this report were vaccinated from the same vaccinifer; and in the third case, which had been vaccinated with calf-lymph obtained from Dr. Warlomont's London establishment, other children were vaccinated with lymph from the same bundle of tubes, without erysipelas occurring among them. The vesicles of each of the three children were found to be broken when they were brought for inspec-

[1] To be purchased from Eyre and Spottiswoode, East Harding Street, Fleet Street, E.C.; Adam and Charles Black, North Bridge, Edinburgh; or Hodges, Figgis, and Co., 104, Grafton Street, Dublin.

tion on the eighth day, but otherwise they presented no abnormal appearance. Dr. Airy proceeds to discuss the circumstances under which the children may have received the virus of the disease which attacked them in the second week after their vaccination, and he shows that one was undoubtedly exposed to infection at the time of inspection through a woman suffering from erysipelas, who was also present in the operator's surgery. In the other two, histories of personal infection could not be obtained; but the children were living under very insanitary conditions, and there were other cases of erysipelas in the neighbourhood. In some way or other which could not be ascertained they doubtless became infected through their broken vesicles, which gave sufficient opportunity for absorption of any virus to which they were exposed.

Erysipelas after vaccination usually occurs in the manner described in Dr. Airy's report. There have been cases in which infection has been received at the moment of vaccination, but then usually there has been flagrant disregard of the instructions of the Local Government Board. If accidents such as those described by Dr. Airy are to be prevented, it is obviously by recognising the injury to which children are liable who have abraded surfaces. Dr. Buchanan, in a preliminary paragraph of the report, has shown that, apart from vaccination, almost one in every 1,000 children under one year of age dies from septic poisoning, while not one-fifteenth of this number of children die from erysipelas following vaccination. Doubtless, even this number would be reduced if parents could be taught the necessity of absolute cleanliness in their treatment of children's arms after vaccination; and the report will do good service if it leads vaccinators to enjoin this precaution upon those who are in charge of recently vaccinated children.

THE LUNACY ACTS AMENDMENT BILL, 1887.

Dr. J. Higham Hill (Bedford Square) writes: The letter of Dr. Joseph Rogers, which appeared in the Journal for February 26th, drawing the attention of workhouse medical officers to the injustice which it is proposed to perpetrate upon them by the provisions of the above Bill, debarring them by statute from receiving any remuneration for the examination and certification of lunatics received into the workhouse of which they may be the medical officers, will, I hope, have the effect of calling special attention to the subject, and of causing a satisfactory ventilation of the provisions of this Bill as affecting the medical profession generally on its passage through the House of Commons. Unfortunately, the profession of medicine is neither so strong in *esprit de corps* or in representation in our legislative councils as that of the law, to the great disadvantage of the former.

In reference to the question as affecting workhouse medical officers, I am strongly of opinion, from extensive experience in past years, that they are, in most cases, far better judges of the state of mind of their patients alleged to be insane than are ordinary medical men, having much greater opportunities of forming correct opinions. There are also other important advantages which point to them as the most suitable persons to be the examiners and certifiers. In this opinion I am supported by that of the Commissioners in Lunacy, expressed in the following letter, which refers to the case of a female examined and certified to be a lunatic while in the insane wards of St. Pancras Workhouse, by a medical man, a stranger to the case, during the time I was the medical officer to that establishment, and who died shortly after her removal while physically unfit for the journey to Hanwell Asylum, the removal taking place in opposition to my expressed opinion.

"Office of Commissioners in Lunacy, 19, Whitehall Place, S.W.,
"September 30th, 1873.

"Sir,—The Commissioners in Lunacy, having had under consideration the circumstances attending the death of Amelia Hopkinson shortly after admission to Hanwell Asylum, desire me to request you to inform the guardians of the St. Pancras Union that they think it is to be regretted that, in this instance, the magistrate making the order should not have called to his assistance the medical officer of the workhouse, who was acquainted with the case and had the patient constantly under his observation.

"It will be noticed that the law gives *to the examining medical man only* the power of certifying, in writing, that a lunatic patient is 'not in a fit state to be removed,' and had Dr. Hill been in the position to do so (from having originally examined the patient), he would probably have felt it his duty to give such a certificate, and the casualty would then have been avoided.

"The Commissioners cannot interfere with the discretion of the justices to call in what medical man they think best under the particular circumstances of each case; as a rule, however, there are, in the opinion of the Commissioners, many advantages in securing the assistance of the medical officer who has been in attendance on the patient, whether in the workhouse or elsewhere.

"Should the guardians concur in this view, the Commissioners hope that they will use their influence with the examining justices to induce them, whenever it can properly be done, to prefer the certificate of the medical man in charge of the case to that of a stranger.

"I am, Sir, your obedient servant, Chas. J. Perceval, Secretary.

"The Clerk to the Guardians, St. Pancras Union."

The opinion of such an experienced and authoritative body as the Commissioners in Lunacy ought certainly to be of value on such a subject, and if it can be shown that the workhouse medical officers are the best persons to examine and certify as to the condition of mind of their supposed insane patients, why should the beneficial effects of their services in this capacity be debarred by statute, and lost sight of? They have the responsibility and anxiety as to the care and treatment of these cases while in the workhouse insane wards, which in large establishments is no slight matter, and it has always been felt to be an injustice, in those parishes where the practice exists, that although the workhouse medical officer may have had all the trouble connected with the patient, yet, so soon as a fee is derivable, a medical man unconnected with the case, and in many instances wholly inexperienced in lunacy, is called to the assistance of the certifying magistrate, who examines as to the mental condition and who pockets the fee. I trust the attempt to make this injustice, which at present only exists in certain parishes and at the discretion of the certifying magistrate, general and statutory will be frustrated.

I may add that I have no personal interest in the matter, having left the poor-law service some years ago.

DIPHTHERIA AT KIRKBY-IN-ASHFIELD.

The epidemic of diphtheria at Kirkby-in-Ashfield is not of so serious a nature as the reports in the daily press would imply. The outbreak, dating from about February 18th last, and affecting six children, all under 6 years of age, has, we are informed by the medical officer, Dr. Boobbyer, up to the present time led to only two deaths. The primary infection is thought to be plainly traceable to the neighbouring village of South Normanton, in the Mansfield district, where twelve deaths from diphtheria were registered during the last quarter of 1886.

THE PLACE OF RESIDENCE OF MEDICAL OFFICERS.

Brown holds two parishes, living in No. 1, five miles from No. 2. If Jones, a doubly qualified man, was to settle in No. 2, is there any regulation of the Local Government Service which would make it incumbent on the Guardians to offer Jones the appointment before confirming Brown in the office?

There is already a medical man in No. 2 who originally held the post, but who resigned, and I take it that the post was given to Brown because there was no other medical man residing within the district.

*** There is a regulation which enjoins that the medical officer shall reside in the district to which he is appointed, but it is continually disregarded by Boards of Guardians, with the sanction of the Local Government Board, and therefore Brown might be continued in the dual appointment subject to an annual re-election.

It is not unlikely, however, that someone would be found to stir up the subject, and, if Jones has friends possessing influence on the board, or with the poor-law inspector of the district, that Brown may be displaced and Jones appointed.

HEALTH OF ENGLISH TOWNS.

In the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons, 5,516 births and 3,977 deaths were registered during the week ending Saturday, March 19th. The annual rate of mortality, which had been 21.3 and 21.6 per 1,000 in the two preceding weeks, further rose to 22.4 during the week under notice. The rates in the several towns, ranged in order from the lowest, were as follow:—Birkenhead, 13.9; Halifax, 16.5; Brighton, 17.2; Portsmouth, 17.8; Norwich, 18.0; Nottingham, 18.4; Hull, 20.1; London, 20.4; Leicester, 20.4; Bradford, 20.7; Wolverhampton, 20.7; Bolton, 21.8; Preston, 21.9; Birmingham, 22.0; Salford, 22.9; Blackburn, 23.2; Derby, 23.3; Huddersfield 23.8; Plymouth, 24.4; Cardiff, 25.0; Leeds, 25.1; Sheffield, 25.1; Liverpool, 26.6; Sunderland, 27.0; Newcastle-upon-Tyne, 28.6; Oldham, 29.6; Bristol, 33.1; and the highest rate during the week, 33.2 in Manchester. In the twenty-seven provincial towns the death-rate averaged 24.1 per 1,000, and exceeded by 3.7 the rate recorded in London, which, as before stated, did not exceed 20.4 per 1,000. The 3,977 deaths registered in the twenty-eight towns during the week under notice included 213 which were referred to measles, 112 to whooping-cough, 45 to scarlet fever, 35 to diarrhœa, 32 to "fever" (principally enteric), 24 to diphtheria, and one to small-pox; in all, 462 deaths resulted from these principal zymotic diseases, against numbers steadily increasing from 341 to 412 in the five preceding weeks. The zymotic death-rate was equal to 2.6 per 1,000. In London the zymotic rate was 2.2 per 1,000, while in the twenty-seven provincial towns it averaged 2.9, and ranged from 0.0 in Brighton and Birkenhead, to 6.3 in Bristol, 6.4 in Huddersfield, 7.0 in Oldham, and 8.9 in Sunderland. The fatal cases of measles, which had steadily increased from 77 to 195 in the five preceding weeks, further rose during the week to 212, and caused the highest rates in Norwich, Leicester, Bristol, Salford, Manchester, Hull, and Sunderland. The deaths referred to whooping-cough, which had declined in the four previous weeks from 125 to 83, rose again during the week under notice to 112, and were proportionally most numerous in Bristol, Huddersfield, and Oldham. The 45 fatal cases of scarlet fever showed a slight further increase upon recent weekly numbers, and caused the highest death-rate in Bristol. The 35 deaths from diarrhœa differed but slightly from those returned in recent weeks. The fatal cases of fever, which had been 31 and 27 in the two preceding weeks, rose again during the week under notice to 32. The deaths referred to diphtheria, which had been 31 in each of the two previous weeks, declined during the week under notice to 24, and included 13 in London, 3 in Liverpool, 3 in Oldham, and 2 in Portsmouth. The fatal case of small-pox occurred in Sunderland. Only two small-pox patients were under treatment in the Metropolitan Asylum Hospitals on Saturday, March 19th. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 5.9 per 1,000, and was below the average. The causes of 119, or 3.0 per cent. of the 3,977 deaths registered during the week in the twenty-eight towns were not certified either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, March 19th, 855 births and 655 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,299,000 persons. The annual rate of mortality, which had increased in the three preceding weeks from 22.5 to 25.0 per 1,000, further rose during the week under notice to 26.2, and exceeded by 3.8 per 1,000 the mean rate during the same period in the twenty-eight large English towns. Among these Scotch towns the rate was equal to 16.8 in Dundee, 19.5 in Edinburgh, 20.8 in Leith, 24.3 in Perth, 25.4 in Greenock, 26.5 in Paisley, 30.2 in Glasgow, and 41.7 in Aberdeen. The 655 deaths registered in the week under notice in these Scotch towns included 112 which were referred to the principal zymotic diseases, against 98 and 101 in the two preceding weeks; of these 50 resulted from measles, 28 from whooping-cough, 11 from diarrhœa, 9 from scarlet fever, 8 from "fever," 9 from diphtheria, and not one from small-pox. These 112 deaths were equal to an annual rate of 4.5 per 1,000, which exceeded by 1.9 the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic death-rates in the Scotch towns during the week under notice were recorded in Paisley, Glasgow, and Aberdeen. The fatal cases

of measles, which had been 27 and 43 in the two preceding weeks, further rose during the week under notice to 50, of which 14 were recorded in Glasgow, and no fewer than 35 in Aberdeen, where a serious epidemic of measles prevails. The deaths referred to whooping-cough, which had declined in the three previous weeks from 33 to 25, rose again during the week under notice to 28, and included 19 in Glasgow, 3 in Paisley, and 4 in Aberdeen. The 9 fatal cases of scarlet fever showed a further decline from recent weekly numbers, and included 6 in Glasgow, and 2 in Edinburgh. The 11 deaths from diarrhœa corresponded with the number in each of the two preceding weeks. The 8 fatal cases of fever considerably exceeded those recorded in any recent week; 4 occurred in Glasgow and 2 in Aberdeen. The deaths referred to diphtheria, which had increased in the three previous weeks from 3 to 7, were 6 during the week under notice, and included 2 in Leith, and 3 in Glasgow. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 6.2 per 1,000, against 5.9 in London. The causes of 69, or nearly 11 per cent., of the 655 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending Saturday, March 19th, 454 deaths occurred in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered during the week under notice was 27.3 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 31.0; Belfast, 31.4; Cork, 26.0; Drogheda, 12.7; Dublin, 28.1; Dundalk, 17.5; Galway, 6.7; Kilkenny, 16.9; ; Limerick, 27.0; Lisburn, 9.7; Londonderry, 32.1; Lurgan, 20.5; Newry, 17.6; Sligo, 14.4; Waterford, 25.5; Wexford, 29.9. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.4 per 1,000, the rates varying from 0.0 in twelve of the districts to 5.3 in Londonderry: the 18 deaths from all causes registered in that district comprising 2 from measles and 1 from diarrhœa. Among the 135 deaths from all causes registered in Belfast are 1 from measles, 1 from scarlatina, 2 from typhus, 1 from whooping-cough, 1 from diphtheria, 1 from simple continued fever, 1 from enteric fever, and 4 from diarrhœa. In the Dublin Registration District, the births registered during the week amounted to 197; and the deaths to 198. The deaths represent an annual rate of mortality of 29.2 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 28.1 per 1,000. There were but eleven deaths from zymotic diseases registered, being 18 below the average for the corresponding week of the last ten years; they comprise 2 from scarlet fever (scarlatina), 1 from ill-defined fever, 3 from enteric fever, 1 from diarrhœa, 2 from erysipelas, etc. Deaths from diseases of the respiratory system fell last week to 47, which is 3 under the average for the corresponding week of the last ten years; 34 of the 47 deaths were caused by bronchitis and 4 by pneumonia or inflammation of the lungs. The deaths of 15 children under 5 years of age (including 12 infants under 1 year old) were ascribed to convulsions. Five deaths were caused by diseases of the brain and nervous system (exclusive of convulsions), and 17 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 34 deaths, mesenteric disease 3, and cancer 5. Five accidental deaths and one case of suicide were registered. In 36 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending March 19th, that the annual death-rate recently averaged 32.1 per 1,000 in the three principal Indian cities; it was 25.7 in Bombay, 28.9 in Calcutta, and 41.9 in Madras. Cholera caused 10 deaths in Calcutta, measles 16 in Bombay, and diarrhœal diseases 63 in Madras; "fever" mortality showed the largest excess in Calcutta. According to the most recently received weekly returns, the annual death-rate averaged 28.7 in twenty-one of the largest European cities, and exceeded by no less than 6.3 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 31.8, showing a further increase upon the rates in preceding weeks; the 565 deaths included 21 from "fever," 14 from scarlet fever, and 3 from small-pox. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 24.9, and ranged from 18.5 in Christiania, 25.4 in Stockholm, and 26.1 in Copenhagen; diphtheria and croup caused 9 deaths in Copenhagen and 7 in Christiania; measles 6 in Stockholm, and scarlet fever 3 both in Stockholm and Christiania. In Paris the death-rate was 28.6, and exceeded by no less than 8.2 the rate that prevailed during the corresponding week in London; the deaths included 48 from measles, 37 from typhoid fever, and 10 from small-pox. The 191 deaths in Brussels, of which 2 were fatal cases of measles, were equal to a rate of 22.0, showing a decline from the rates in recent weeks. No returns have been received from Geneva since the beginning of this year. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 26.9, the several rates being 25.2 in Rotterdam, 26.2 in Amsterdam, and 27.5 in the Hague; the deaths in Amsterdam included 10 from measles, and 6 from diphtheria and croup; 2 deaths from diphtheria were also returned in the Hague. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 28.0, and ranged from 21.5 in Berlin and 22.8 in Munich, to 38.3 in Trieste and 42.1 in Buda-Pesth. Small-pox caused 20 deaths in Buda-Pesth and 5 in Prague; "fever" caused 16 deaths in Hamburg; and diphtheria and croup showed the greatest mortality in Hamburg, Buda-Pesth, and Berlin. The mean death-rate was 33.3 in three of the largest Italian cities, the rate being 31.1 in Rome, 31.2 in Venice, and 36.2 in Turin; small-pox caused 14 deaths in Rome and 2 in Turin; diphtheria and croup 6 in Rome and 6 in Turin; and measles 7 in Rome and 8 in Turin. In Cairo the death-rate was 37.3, and in Alexandria 34.3; diarrhœal diseases caused 75 deaths in Cairo and 27 in Alexandria; typhoid fever 15 in Cairo and 3 in Alexandria; and small-pox 3 in each of those cities. In four of the largest American cities the recorded death-rate averaged 23.1, and ranged from 19.1 in Baltimore to 24.8 in New York. Diphtheria caused considerable mortality in each of these American cities, and 15 deaths from typhoid fever were reported in Philadelphia.

Cremation in New York.—The New York Cremation Society has 132 ordinary members. Two members who died last year were duly cremated at the Society's crematory, and altogether 84 persons were cremated there during the year.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Chelsea.—*Need for Municipal Sanitary Authority for London: Accuracy of Dispensing of Prescriptions.*—The prevention of small-pox in London is the text of an able and exhaustive article by Dr. Edward Seaton in his annual report for 1885. In a previous report he devoted considerable attention to this subject, and he repeats his arguments for the establishment of a municipal sanitary authority for London, which shall be empowered to take all practicable measures for preventing epidemics of small-pox. The year was not specially remarkable in point of epidemic sickness. Measles was most prevalent, and caused 47 deaths. The mortality from diphtheria was high compared with other urban districts. Dr. Seaton's experience tends to the conclusion that defective house-drainage has very little to do with the production of the disease. The small proportionate number of 19 deaths from enteric fever seems to him still further to strengthen this view, otherwise it might be expected that the deaths from enteric fever would be more numerous. Only 7 deaths were attributed to scarlet fever. The completion of the new disinfecting station will afford very material help in limiting outbreaks of scarlet fever. An important work was undertaken by Dr. Seaton during the year for the purpose of ascertaining whether the quantity of drugs ordered in a physician's prescription are usually dispensed with accuracy. Allowing a wide margin of error, and setting the limit at 10 per cent. over or under the amount of the drug prescribed, it was found to have been exceeded in seventeen out of fifty samples taken. Dr. Seaton thinks some amendment of the Food and Drugs Act may be found necessary in order to protect the public in this respect.

Holborn.—*Unhealthiness of Model Dwellings*—The general death-rate in this district, in common with those of the other districts of Central London, maintains the unenviable characteristic of being higher than the death-rate of London as a whole. Dr. Septimus Gibbon estimates the rate for 1885 at 23.73 per 1,000, which was 4 03 above the general rate of London, and 0.73 above that for the central districts generally. The birth-rate, however, was very low—only 26.8 per 1,000; but this was probably due to the fact that, among the Irish and foreign population, many births escape registration. There was a considerable decrease in the number of deaths from measles, scarlet fever, and whooping-cough. Small-pox proved fatal to one person in the district, and to six residents who were sent to the small-pox hospitals. Dr. Gibbon has a strong opinion on the value of vaccination as a protection against this disease. He regrets that the Contagious Diseases Acts, which "have done more good than all other sanitary Acts put together to improve the health and thereby the morals of the people," have been erased from the statute-book. The report proceeds to state that some of the so-called model dwellings are as yet not more healthy than the old ones. In the Evelyn Buildings there occurred during the two years ending Midsummer, 1885, 76 cases of preventable disease, or 33 per cent. of the population. In Brook's Market, where the houses are for the most part built back to back, and without adequate ventilation, the percentage was only 18.1 per cent.

St. George's, Hanover Square. — *Regulation of Lodging Houses.*—Professor Corfield has signalised his fourteenth annual report by issuing the first true death-rate yet arrived at for the parish. The method hitherto adopted of assigning to the parish a proportional share of deaths in public institutions has been set aside; and the actual numbers in 1885 being at the command of the health-officer, he is able to arrive at an absolutely accurate death-rate of 16.11 per 1,000. From the birth- and death-rates, Dr. Corfield compiles some interesting tables of the mean duration of life in the parish, and in each of the sub-districts during 1885. In Mayfair, it was 79.44 years, or an increase of 9½ years since 1875, and in the whole parish 56 11 years. Dr. Corfield considers there can be no doubt that the steady diminution of the death-rates, the most important cause of the increased mean duration of life, is largely due to improved sanitary conditions. There were no serious outbreaks of zymotic sickness. Enteric fever appeared at the Home of the House-Boy Brigade, and one of the cases proved fatal. Certain important sanitary defects were discovered, which have since been remedied. Dr. Corfield tells a story of a regulation made by a subcommittee, respecting lodging-houses, which was declared by the magistrates to exceed the power conferred by the Act. This committee, acting on the advice of Lord Hobhouse, their Chairman, had previously reported against the admission of the clause. The Local Government Board, however, having insisted on its insertion in the by-laws, Dr. Corfield advised that the clause should not be acted upon, unless and until

higher judicial authority had declared the decision of the magistrates to be erroneous.

HAMPSTEAD. — *Small-pox and the Hampstead Hospital.* — In order to show the healthy condition of Hampstead during the year 1885, Dr. Gwynn goes at considerable length into the statistics for London, quoting freely from the Registrar-General's returns. The death-rate was 11.5 per 1,000, the lowest but one on record, and an improvement on that for 1884, which was 12.5. This was, no doubt, due to the low birth-rate, which was considerably below that of the whole metropolis, inasmuch as the mortality of young children is always relatively high. There were 134 deaths from zymotic diseases, being equal to a death-rate of 1.4 per 1,000. Measles caused 20 deaths, against 4 in 1884. Scarlet fever has shown a steady decline in Hampstead for some years; of the 19 deaths registered from this disease, only 4 were those of Hampstead parishioners. Dr. Gwynn attributes this decrease to improved isolation. The epidemic of small-pox which broke out in May, 1884, did not terminate until July, 1885, when the possible danger of the small-pox hospitals becoming centres of infection began to be recognised, and it was resolved to remove all cases of small-pox to the hospital-ships at Long Reach, unless the condition of the patients at the time of removal was such that the journey down the river would be dangerous to life, or prejudice the patient's chance of recovery. This step was further followed by the closing of the North-Western Hospital against the reception of small-pox patients on July 23rd. The closing of the hospital marked the termination of the epidemic in Hampstead, for after that date no case occurred. Dr. Gwynn quotes several authorities in support of his opinion that the hospitals of the Asylums Board, "in their present shape, continue to cause an increase of small-pox in their several neighbourhoods."

KENSINGTON. — *Comparison of Zymotic Mortality, 1859-70 and 1871-82.*—The years 1885 and 1886 were, according to Dr. T. Orme Dudfield's reports, fairly healthy ones in this district, but not so healthy as the two preceding ones, the death-rates being 16.1 per 1,000 in 1885, and 15.9 in 1886, compared with 15.5 and 15.1 in 1883 and 1884 respectively. The mortality from the principal zymotic diseases was below the decennial average in both years. In 1885, small-pox mortality was just average, that of scarlet fever less than an eighth of average; diarrhœa was below average, and typhoid fever less than half average. The mortality from whooping-cough was below, and that from diphtheria slightly above, the average. There was no death from typhus or from simple continued fever. In 1886, small-pox, typhus fever, and simple continued fever were entirely absent as factors in the Kensington mortality, and measles, scarlet fever, whooping-cough and diarrhœa were considerably below the average, the only disease showing an excess of fatality being diphtheria, the number of deaths (30) being 10 in excess of the corrected decennial average. One hundred and eighty cases of small-pox were recorded during the year, and in 1885 the deaths were 25, but there were only 3 cases (and 1 death) in 1886. An interesting comparison is made by Dr. Dudfield of the statistics of twenty-four years in respect of the zymotic diseases. Comparing the number of deaths in the first half period (1859-70) with those of the second half period (1871-82), when the district had the advantage of hospital accommodation, he shows an increase in the number of deaths from small-pox and whooping-cough only, and assigns various causes for this result. So highly does he value the provision of hospital accommodation, that he ranks it chief among the causes in the decline of the death-rate, which fell from 3.6 per 1,000 in 1859-70, to 2.8 per 1,000 in 1871-82. It would be idle to attempt to make an abstract of Dr. Dudfield's most excellent and complete reports. They constitute a compendium of the general sanitary history of the year.

MEDICAL NEWS.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen, having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received certificates entitling them to practise as Licentiates of the Society on March 24th, 1887:

Carter, Robert James, 104, The Grove, Camberwell, S.E.
Jecks, Cyril William, 30, Hilldrop Road, Camden Road, N.

A ROYAL CONCERT.—The Princess of Wales, accompanied by the Princesses Louise, Victoria, and Maud of Wales, visited the Brompton Hospital on March 25th, and honoured the patients and nurses by taking part in a concert.

AT Gonville and Caius College, Cambridge, the Shuttleworth scholarship for proficiency in botany and comparative anatomy has been awarded to Francis Henry Edgworth, B.A., scholar of the College. The scholarship, which is of the annual value of £60, is tenable for three years, and is open to medical students of the University of not less than eight terms' standing.

HOSPITAL SATURDAY FUND.—At a meeting of the delegates of this fund, held on Saturday last, it was reported that as the result of the first year of the Surgical Appliance Committee 540 persons had been supplied with surgical instruments at an average cost of 10s., the attendance recorded being 695. The delegates agreed upon a grant of four per cent. for the purchase of appliances for requirements of the present year.

RINDERPEST IN BESSARABIA.—A telegram from Bucharest, under date of March 30th, states that a strict cordon has been established on the Roumanian frontier to prevent the importation of cattle from Bessarabia, where the rinderpest is very prevalent.

THE CENTENARIAN "MAID OF KENT."—Miss Catherine Heathorne, "The Maid of Kent," who resides at Week Street, Maidstone, celebrated her 103rd birthday on March 25th. She was in excellent health, and received several presents and congratulations upon the occasion.

THE Baroness Burdett-Coutts has accepted the presidency, and Mr. Burdett-Coutts, M.P., the office of treasurer, of the Committee of the Ladies' Jubilee Hospital Fund for North London.

ST. JOHN AMBULANCE ASSOCIATION.—Two courses of lectures for the *employés* of the Metropolitan Railway Company, conducted by Surgeon-Major Platt, V.M.S. Corps, have been attended by 107 of the servants of the company.

THE Medical Staff Corps will take part in the operations of the camp which will be formed at Strensall, near York, in the months of May, June, and July.

A NEW day nursery or *crèche* and mission buildings, recently erected in East Street, Baker Street, were opened on March 30th by Princess Mary, Duchess of Teck.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.—A public dinner, in aid of the benevolent fund of this Society, will be held at the Freemasons' Tavern on May 17th.

DR. EDWIN HAWARD has been elected a Vice-President of the North London Hospital for Consumption at Hampstead.

DR. G. HALES PARRY has been for the third time awarded the grant from the Local Government Board for the Docking Workhouse and District for successful vaccination.

PROFESSOR MICHAEL FOSTER has been appointed the representative of the Cambridge University on the Council of the Marine Biological Association.

MEDICAL MAGISTRATE.—The Lord Chancellor has added the name of Sir James Sawyer, M.D., to the Commission of the Peace for the Borough of Birmingham.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM GENERAL HOSPITAL.—Resident Surgical Officer. Salary, £130 per annum, with board, etc. Applications by April 2nd to Henry Fox, R.N.

BRADFORD INFIRMARY AND DISPENSARY.—House-Surgeon. Salary, £110 per annum, with board, etc. Applications by April 5th to the Secretary.

BRIDGE UNION, Canterbury.—Medical Officer. Salary, £30 per annum, and fees. Applications by April 6th to Allen Fielding, Esq.

CHELSEA HOSPITAL FOR WOMEN, Fulham Road.—Honorary Physician. Applications by April 9th to the Secretary.

FARRINGDON GENERAL DISPENSARY AND LYING-IN CHARITY, 17, Bartlett's Buildings, Holborn, E.C.—Honorary Physician. Applications by April 14th to the Honorary Secretary.

GLOUCESTER COUNTY ASYLUM.—Assistant Medical Officer. Salary £105 per annum, with board, etc. Applications by April 6th to the Medical Superintendent.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton. Resident Clinical Assistant. Applications by April 16th to the Secretary.

KENT COUNTY LUNATIC ASYLUM, Barming Heath, near Maidstone.—Assistant Medical Officer. Salary, £120 per annum, with board, etc. Applications by April 4th to F. R. Howlett, Esq., 9, King Street, Maidstone.

LONDON TEMPERANCE HOSPITAL, Hampstead Road, N.W.—Senior House-Surgeon. Salary, £52 10s. per annum, with board, etc. Applications by April 2nd to the Secretary.

PADDINGTON GREEN CHILDREN'S HOSPITAL.—House-Surgeon. Salary, £80 per annum. Applications by April 16th to the Secretary.

QUEEN'S JUBILEE HOSPITAL, Gloucester Terrace, Queen's Gate, S.W.—Registrar and Anæsthetist. Applications by April 5th to the Secretary.

QUEEN'S HOSPITAL, Birmingham.—Obstetric and Ophthalmic House-Surgeon. Applications by April 23rd to the Secretary.

QUEEN'S JUBILEE HOSPITAL, Gloucester Terrace, Queen's Gate, S.W.—Surgeon. Applications by April 5th to the Secretary.

ROYAL COLLEGE OF PHYSICIANS, Edinburgh.—Superintendent of the Laboratory. Salary, £200 per annum. Applications by April 10th to Dr. Gibson.

ROYAL GENERAL DISPENSARY, Bartholomew Close, London, E.C.—Resident Medical Officer. Salary, £130 per annum. Applications by April 18th to the Secretary.

MEDICAL APPOINTMENTS.

BRADSHAW, Thomas R., M.D., B.A., appointed Honorary Physician to the Stanley Hospital, Liverpool.

CANDLER, Wallace, M.R.C.S., L.R.C.P., appointed Resident Clinical Assistant to the East London Hospital for Children, *vice* W. H. Smart, M.R.C.S., resigned.

CRISP, John, M.R.C.S., L.R.C.P.Lond., appointed Resident Assistant House-Surgeon to the Derbyshire General Infirmary, *vice* J. Acton Southern, M.R.C.S., L.R.C.P., L.S.A., resigned.

DOYLE, Henry M., M.R.C.S., L.S.A., appointed Receiving Room Officer to the London Hospital.

GILLARD, Richard, M.R.C.S., L.S.A., appointed Medical Officer and Public Vaccinator to Ugborough and North Huish, Totnes Union.

LEWIS, Percy G., M.R.C.S., L.S.A., appointed Junior House-Physician to the Royal Hospital for Diseases of the Chest, *vice* W. J. Best, M.R.C.S., L.S.A., resigned.

LYON, T. G., M.A., M.D., M.R.C.P., M.R.C.S., appointed Assistant Physician to the North-West London Hospital, *vice* John Shaw, M.D., resigned.

PECK, E. G., M.A., M.R.C.S., appointed Medical Officer to the Chelsea Hospital for Women, *vice* Septimus Sunderland, M.D., M.R.C.S., L.R.C.P., resigned.

PHILLIPS, Edward England, L.R.C.P.Edin., M.R.C.S.Eng., L.S.A.Lond., re-appointed Medical Officer of Health for the Southend Urban Sanitary District for three years, and for the Rochford Rural Sanitary District for one year.

POWER, D'Arcy, M.A., M.B.Oxon., F.R.C.S.Eng., appointed Surgeon to the Metropolitan Dispensary, Fore Street, E.C., *vice* Alban Doran, F.R.C.S.Eng., resigned.

RUDD, C. F., M.R.C.S., L.S.A., appointed Medical Officer of Health to the Smallburgh Union Rural Sanitary Authority, *vice* J. S. Clowes, Esq., resigned.

SHAW, John, M.D., appointed Obstetric Physician to the North-West London Hospital.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—MEDICAL SOCIETY OF LONDON. Sir Dyce Duckworth: A Case of Ulcerative Endocarditis. Mr. R. W. Parker: On the Alleged Dangers of Starch-containing Foods during the Period of Infancy. Dr. Whipham: A Case of Exfoliating Eruption of the Tongue.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN, 8 P.M. Casual communications by Messrs. J. Ackery, F. Henry Weiss, Boyd Wallis, C. V. Cotterell, S. J. Hutchinson, W. Harrison, and J. Penfold. Mr. F. Newland Pedley: On the Pathology of Pyorrhœa Alveolaris.

TUESDAY.—SOCIETY FOR THE STUDY AND CURE OF INEBRIETY, 4 P.M. Annual meeting. Dr. Norman Kerr: Presidential address on the Pathology of Inebriety.

PATHOLOGICAL SOCIETY OF LONDON, 8.30 P.M. Mr. Hutchinson, junior: Alveolar Ulceration in a Child; General Tuberculosis. Dr. Joseph Coats: 1. Hypertrophic Goître with Secondary Tumours in Bones of Skull. 2. Tumour of Pineal Gland. Mr. Lawson Tait and Mr. Doran: Specimens illustrative of Chronic Inflammatory Disease of the Uterine Appendages. Mr. Bowlby: Congenital Dislocation of Hip. Mr. Lunn: Disease of the Humerus. Dr. Hale White: Meningeal Hæmorrhage with Secondary Degeneration of Spinal Cord. Dr. Pitt: Carcinoma of Spine and Liver. Card Specimens—Dr. Hale White: 1. Peripheral Neuritis. 2. Dilatation of Ureter and Hydronephrosis of One Side Secondary to Urethral Stricture. Mr. Shattock: Two Specimens of Osteomalacia showing Metaplasia of the Osseous Substance into Fibrous Tissue. Mr. Lockwood: Fœtus showing Absence of Margin of Acetabulum and other Abnormalities. Dr. Turner: Congenital Stricture of Jejunum. Mr. D'Arcy Power: Sequel to Case of Endosteal Sarcoma. Dr. Thin (for Dr. B. Rake): Drawings of Leprosy Bacillus. Mr. F. W. Clark: Acute Pericarditis.

WEDNESDAY.—OBSTETRICAL SOCIETY, 8 P.M. Specimens will be shown by Dr. M. Handfield-Jones and others. Dr. Champneys: The Third Stage of Labour—(1) the Separation of the Placenta; (2) the Expulsion of the Placenta. Dr. Matthews Duncan: Hæmorrhagic Parametritis.

THE PARKES MUSEUM OF HYGIENE, 5 P.M. Mr. J. Bailey-Denton: Metropolitan Sewage Disposal.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which should be forwarded in stamps with the announcement.

BIRTHS.

DAVIES.—On March 25th, at Snainton, Yorks., the wife of H. Havelock Davies, M.B.Edin., of a daughter (stillborn).

MACLEOD.—At the East Riding Asylum, Beverley, on March 28th, the wife of M. D. Macleod, M.B., of a daughter.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY.....10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY.....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's —1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY.....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's, Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, M., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

QUERIES.

THE FINAL EXAMINATION FOR THE DOUBLE QUALIFICATION.

O. P. Q. asks: What are the best books for students preparing for the "Final" of the double qualification in surgery and medicine?

*** We have referred "O. P. Q.'s" question to an experienced teacher, who writes: "For the final examination for the double English qualification, read Bryant or Holmes's *Surgery*, and be sure you know your anatomy. In medicine there is no book quite suitable. Bristowe is rather too large, but read all the important diseases in it, and learn as much as you can from your clinical teachers.'

ANSWERS.

FEES FOR INSURANCE EXAMINATIONS.

DR. JAMES CROCKER writes: In reply to "Beta," most of the companies for whom I examine pay half-a-guinea for reports where the sum assured is under £300, and a guinea above that amount. An examination and report made a short time ago on a life accepted for a policy of £5,000 brought me a fee of two guineas.

ALBUMINURIA IN HEALTH.

A. W. S.—Dr. Isambard Owen, Secretary to the Collective Investigation Committee, informs us that an inquiry paper was issued on "Albuminuria in the Apparently Healthy" in 1884. As only a small number of returns were received to it, it was withdrawn in 1886, and no report has been published.

THE PINEAL EYE.

J. D. MCREDDIE, M.D., Glasgow.—The article by Baldwin Spencer is entitled "On the Presence and Structure of the Pineal Eye in Lacertilia," and will be found in the *Quarterly Journal of Microscopical Science*, vol. xxvii, part 2, October, 1886, p. 165.

DICTIONARIES OF MEDICAL AND SCIENTIFIC TERMS.

DR. THEODORE MAXWELL (Woolwich) writes: "Querist" will probably have what he requires when the New Sydenham Society's new lexicon is finished; at present, twelve parts are out, which only include as far as H. The best complete dictionary is Dunglison's, but the last edition was published in 1864, and I rather think it is out of print. Thomas's is a new American dictionary, but its descriptions are very meagre. The work for "Querist"—only it is in French—is Littré's *Dictionnaire de Médecine*. The last (5th) edition was published in 1884. It gives descriptions, with illustrations, and is very reliable; the old chemical notation is, however, retained. It is in a single volume, and is sold in England, bound, for about £1. Of course, "Querist" is acquainted with Tanner's *Index of Diseases*, which fully covers one branch of the subject. There is a good Italian medical dictionary by Pini and Buonsanti, but, curiously enough, no modern German one of moderate size that I have been able to hear of, if we except Gruenberg, which is a mere terminological glossary in Latin, German, French, and Russian.

NEW TREATMENT OF PHTHISIS.

"REYNOLDS."—We know nothing of Dr. McLaughlin's treatment; but from the accounts of it which have lately appeared in the lay press, it is doubtless the same as that of Professor Bergeon, of Lyons, which was fully described by Dr. J. Henry Bennet in the JOURNAL of December 18th, 1886, p. 1207.

PERFORATED EARS.

MARY KENNEY.—We have referred our correspondent's question to Dr. Ward Cousins, who writes: Earrings are very ancient ornaments, and they have been employed as popular remedies for sore eyes in this and other countries. The process of "boring the ears" excites temporary inflammation, and may act as a slight counter-irritant in some cases. The ears are never "bored," however, by ophthalmic surgeons for this purpose. In cases requiring counter-irritation, much more efficient methods can be employed.

NOTES, LETTERS, ETC.

RELATIVE MERITS OF SALICYLATES OF SODA AND POTASH.

H. A. L. writes: I quite agree with Dr. Otho R. Travers as to better results being obtained from the potash salt than from the soda salt, in the treatment of rheumatism. The method I adopt is to give the freshly prepared potash salt with excess of potass. bicarb.; for example, five to seven and a half grains of acid salicyl., and ten to fifteen grains of potass. bicarb. for a dose.

These doses are quite large enough, and I cannot help thinking that the heroic doses of salicylic acid and salicylate of soda that one reads of have much to answer for in the usual sequence recorded, namely, a fatal result.

DR. WILLIAM J. STEPHENS (Brighton) can also thoroughly endorse Dr. Travers's remarks. He has used salicylate of potash instead of salicylate of soda in cases of acute rheumatism. It was at first made for him (by a local chemist) about three years ago, since which time he has used it considerably, and is convinced that it gives better results than salicylate of soda. Though he has had but little experience as yet in the use of salicylate of lithia, his impression is that it will give even still better results.

STROPHANTHUS-LANOLINE.

THE Editor of the *British and Colonial Druggist* (W. Lascelles Scott, F.C.S.), says in the issue of February 12th, 1887:

"I have just made some experiments which illustrate, at one and the same time, the penetrating power of lanoline when applied to the skin, and the action of strophanthin upon the heart. With a mixture of two parts lanoline and one of petrogell, 1 per cent. of strophanthin was intimately mixed. Of this ointment, twenty grains was rubbed upon my left arm, the skin having been first freed from the normal oleaginous exudations by the use of a little weak ammonia and a soft cloth.

"The strophanthin ointment was allowed to remain on until my heart-beats (which, very conveniently, have been abnormally high of late) were diminished in number from 103 to 100 per minute, which was the case eighteen minutes and a half from the commencement of the experiment. The pulse continued to recede until a minimum was reached at 94, some fifty-two minutes from the time the ointment was first applied, no further change occurring for several hours afterwards."

THE JOURNAL IN BULGARIA.

A very good translation of Professor W. von Zehender's excellent lecture on the Parasitic Diseases of the Eye (from the JOURNAL, December 4th, 1886, p. 1073) has just appeared in the Bulgarian periodical *Meditzinsko Spisanïe* (February 20th, 1887), published by the Varna Medical Society. In a December issue of the same journal, an able summary of Mr. H. Power's lecture on Bacteriology in its Relations to Surgery (from the JOURNAL, December 11th, 1886, p. 1142) may be found. Indeed, it may be said that a glance through a file of the *Meditzinsko Spisanïe* shows at once that the editors, in their eagerness to have the "last word of science" on every subject of current interest, are bringing their readers into a closer intellectual connection with English authors than the latter may suspect.

ANTIFEBRIN.

DR. PERCY BOULTON writes that he has been using the above in several cases of high temperature, and that its action is certain and quick, far more so than antipyrin, and in most respects there are no disagreeable after-effects, but he would caution the profession against its use in very feeble patients, as he has found great exhaustion follow its administration, in 15-grain doses on two occasions. In one case the above dose was given at 8 P.M., the temperature then being 103.4°F. At 9.30 P.M. the temperature was 100°, the patient being in a profuse sweat, and very faint and exhausted. In another instance there was a fall in two hours of 3.2°, and the same disagreeable after-results. Probably a smaller dose may be satisfactory in asthenic patients, but Dr. B. thinks a larger dose might be dangerous.

THE RECENT EARTHQUAKES IN THE RIVIERA.

DR. PROTHEROE SMITH writes: During a visit nineteen years ago to Malta, Sicily, and Naples, I saw Vesuvius, Etna, and Stromboli in a state of active eruption. The results of my investigations as to the genesis of the overwhelming force producing earthquakes, and the phenomena I then witnessed, were published in the *Daily Telegraph*. Having had the privilege of being at San Remo for upwards of two months, I am conversant with all the seismic events which have recently created so much alarm and injury. It is worthy of notice that, whilst in this immediate vicinity four villages on the hills have been wrecked, with a loss of between 300 and 400 lives, San Remo has enjoyed an entire immunity from such disasters. This advantage I attribute to the circumstance that this town, though founded on the rock which characterises this mountain-region, nevertheless stands in a deep and extensive bed of thick, clinging, yet yielding pleiocene clay, which necessarily must to a certain extent still or modify the vibrations of the rock beneath, when trembling under the influence of earthquakes. I was confirmed in this idea when lately standing on the grounds of the hotel in india-rubber over-shoes, which effectually prevented my feeling a smart secondary shock which was clearly perceptible to others standing around.

In addition to the well-known fact that earth-works and sand-bags resist the force of projectiles better than stone and solid masonry, I have found, in my practice as a physician, that india-rubber placed under the feet of beds and sofas prevents jars and shocks to persons occupying them. This is well known to coach-builders, who, to prevent vibrations in carriages, connect their springs and make the tyres of their wheels with india-rubber. So the finger or soft stop is used to arrest sound in musical instruments. I make this suggestion in the hope that, should it be confirmed by others, it might in some slight degree help to modify, if not to minimise, the fatal consequences of these terrific visitations.

In conclusion, I will recount my own personal experience during the late earthquakes. I and my party, consisting of two ladies and a maid, occupied the fourth floor in the West End Hotel, recently and substantially built, its thick stone walls being strengthened with iron girders throughout. The weather of the day preceding the shock was remarkably serene, with uninterrupted sunshine. The sea was calm, but it was remarked that it had receded and left some rocks exposed which had not before been visible. At about 6.20 A.M. on February 23rd, however, the Mediterranean was observed to be agitated, and it became white from foam or wavelets, like simmering water. These abnormal conditions ceased after the occurrence of the first shocks, which were the most powerful. My attention was called to it at first by certain loud noises, as I thought from the adjoining room, as though of a great scuffling and dragging about the bed, etc. This was succeeded by terrific deep sounds, as of a railway-train running under the house, accompanied by a dull groaning and roaring, as of a rushing mighty wind. Having before experienced the results of an earthquake, I quickly recognised it from the violent vibrations and swaying to and fro of my room, and from the sudden displacement and jingling of the furniture. This shock, which lasted about twenty seconds, seemed to come from the west or north-west. Though very severe, it only upset a lamp and stopped some clocks, brought down some of the ceilings, cracked party walls, loosed chimney-pieces, with other minor damages. The worst result, however, was the uncontrollable nervous dread of the majority of the inmates, and especially of those invalids who had been much weakened by previous illness. The panic was most pitiable and general. Although the earthquake was chiefly felt on the upper floor of this hotel, I did not think it necessary to leave it, endeavouring by example, as well as precept, to calm the general alarm. At every recurrence of the earthquake, or, as it became at last, earth-shudder, there was a general rush into the garden and adjacent open spaces, to which many fled, having their clothes sent after them, and so passing the day and night away from the hotel and other buildings. We are now free from shocks, having, as it were, but an occasional earth-shiver. In fact, those amongst us who have been most terribly shocked and terrified by the late awful visitation are now suffering more from *tremblement de cœur* than *tremblement de terre*.

WILLIAM OSBORN, M.D.

MR. F. COCKELL, jun. (Dalston) writes: During last week, whilst looking through some old works, I encountered the manuscript of an essay on "Retroversion of the Gravid Uterus," by Mr. W. Cockell, of Pontefract, dated May 2nd, 1785, and dedicated by him to "Doctor Osborn, Licentiate in Midwifery, Physician and Man Midwife to the General Lying-In Hospital in Store Street, and Lecturer on Midwifery in London." This is probably the Dr. Osborn concerning whom D. V. seeks for information.

A Consulting-Room Thief.

Dr. A. E. T. Longhurst writes: As a hint to my professional brethren, I send a line to say that a man called at my house about three o'clock yesterday afternoon, and asked if I was in; my servant saying no, he asked when I was expected; on being told in about half an hour, he said he would wait, was shown in, and took up the newspaper to read. In a very short time he was seen by my servant leaving the hall, saying he would call again, having a little business to transact. I need hardly say he did not, having taken with him my pocket-case and a binaural stethoscope, together valuing £4 to £5. He was of middle height, dark complexion, about 40 years of age, and called himself "Mr. Kerr."

A New Field for Women.

The *Cumberland Pacquet* announces the death of a Mr. George Dennison, who is described as a "celebrated bone-setter." "Deceased's skill as a bone-setter, and indeed that of his father before him, was," our intelligent contemporary continues, "generally acknowledged; and it is no exaggeration to say that he had successfully treated some hundreds of cases, many of them of a difficult character. Deceased will be a much-missed man, but his mother, who has had thirty years' practical experience in bone-setting, and who has actually been attending to her son's business during his illness, intends to follow up the profession which has for so many years been carried on by her deceased son and her husband. The latter is now too old and feeble to work himself."

Rapid Staining of the Tubercle-Bacillus.

Henry S. Gabbett, M.D., writes: I can strongly recommend the following slight modification of Neelsen's method of staining the tubercle-bacillus in cover-glass preparations. The stain is made by dissolving 1 part of magenta in 100 of 5 per cent. watery solution of carbolic acid, and adding 10 of absolute alcohol. Heat this fluid over a spirit-lamp till steam rises freely. Float the preparation (made in the usual way), cover, and leave for two minutes. Then immerse in a solution of methylene blue in 25 per cent. sulphuric acid (made of a dark blue colour) for one minute, keeping the watch-glass in motion. Finally, rinse the cover-glass in distilled water, dry, and mount in balsam. The whole process occupies about five or six minutes.

Possibly this method may have been already suggested; if so, it has escaped my notice. The only novelty in it is the combination of the decolorising fluid and contrast stain, which are used separately in Neelsen's method. I find the results far better than those obtained by any of the other rapid methods; and Neelsen's carbolic solution of magenta is distinctly preferable to any of the preparations made with aniline.

Juvenile Incontinence.

W. would recommend a course of bromide of iron, beginning with 5 grains three times a day, which may be increased during a fortnight to 15 or 20 grains for a short time. The syrup is the best preparation. The patient should sleep in loose flannel drawers, to prevent any chill to the lower part of the body or the thighs.

A triangular blister over the sacrum is a very efficient remedy. Whether the cantharidine has any good effect on the bladder-sphincter, or whether (which I think is the way it acts) it is beneficial by preventing the patient sleeping on the back, is a question. Care should be taken that the bladder is emptied before the patient goes to bed, and again before the house is shut up for the night. I have never known punishments or threats to have any good effect.

The Epidemic of Diarrhœa.

Dr. L. M. Snow (Brabourne, Kent) writes: I have watched with interest the result of Dr. Kerr's letter in the Journal of February 12th, and am surprised that no country practitioners have recorded their experiences, as one would think the epidemic was confined to London. During the last three months I have had an unusually large amount of diarrhœa cases presenting the same symptoms as Dr. Kerr describes, except that the abdominal pain seemed more severe. My cases have been among the small farmers and better class of working people; but I am at a loss to find any cause for the prevalence of the attacks; they are all about three or four miles apart, and consequently all have different milk and water supply, etc. In two or three families, from two to four members in each have been affected, and in two the wife was affected, then the husband, which circumstance seemed to me to point to some infection.

All my cases yielded quickly to dilute sulphuric acid and opium. I have had six or seven cases during the last fortnight, so that the epidemic does not seem over.

Foreign Body in the Intestinal Canal.

Mr. Caspar R. Laurie (Loughton, Essex) writes: Having noticed two or three cases of foreign body in the intestinal canal lately reported in the Journal, I should like to record yet one more, which came under my care a week or two ago. The china leg of a doll, one inch and a half in length, with an angular foot half an inch long, was swallowed by an infant eight months old at 7 A.M.; it was safely passed without pain at 3 A.M. the next day, having been twenty-one hours in completing its journey. As in the other cases, "expectancy" was the only treatment.

Case of Swallowing Artificial Teeth.

M.D. writes: With reference to Mr. Ackery's letter, a patient of mine recently swallowed a plate (gold, with two teeth), and I immediately adopted a practice recommended to me some years ago by Sir James Paget in a similar case. I made him eat three good-sized slices of bread and swallow four tablespoonfuls of flour and water made into a fairly thick mass. I then administered an emetic, and the teeth returned entangled in the tenacious vomit. I may add that the first case was equally successful, and that something of this sort is habitually done at police-stations when prisoners passing false coins swallow them.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. H. A. Allbutt, Leeds; Dr. C. F. Moore, Dublin; Mr. W. J. Penny, Clifton; Sir W. Smart, London; Mr. H. A. Latimer, Swansea; Dr. A. W. Edis, London; Mr. H. A. Reeves, London; Mr. W. S. Manning, London; Mr. O. Hehner, London; Mr. W. C. Wood, Epsom; Mr. J. Whitehouse, Sunderland; Dr. D. A. Fraser, Totnes; Dr. A. Robertson, Glasgow; Mr. W. M. Bristow, New Brighton; Messrs. Grindlay, Groom, and Co., Bombay; Mr. S. Murphy, London; Mr. H. T. Wood, London; Mr. H. J. Collins, London; Mr. W. Weiss, London; Dr. G. H. Parry, Docking; Mr. T. P. Maynard, Newcastle-on-Tyne; Dr. J. A. Rigby, Preston; Mr. S. D. Wells, Plymouth; Dr. W. Shaw, Maidstone; Dr. Platt, London; Mr. W. Horrocks, Blundellsands; Mr. J. Dixon, Dorking; The Secretary of the Parkes Museum, London; Dr. Gubb, London; Mr. T. Gibson, Seaham; Mr. J. Greig, Bergen, Norway; Rev. S. A. Barnett, London; Mr. C. W. Martin, Purton; Mr. M. G. Biggs, London; Mr. J. M. Ryan, Colchester; Mr. G. F. Smythe, Dover; Sir E. Sieveking, London; Mr. G. B. Batten, Dulwich; Dr. A. D. L. Napier, Dunbar; Dr. E. Crossman, Hambrook; Mr. T. Hill, Ledbury; Mr. J. H. Williams, Southport; Dr. Maxwell, Woolwich; Mrs. M. Briggs, Frome; Dr. D. McKeown, Manchester; Mr. J. Hinkley, New York; Mr. Deas, Exeter; Mr. A. Jackson, Sheffield; Surgeon H. Hathaway, Mogome, Upper Burmah; Dr. C. R. Francis, Brondesbury; Surgeon-Major Rogers, Cairo; Mr. H. L. Browne, West Bromwich; Mr. L. Colborome, London; Dr. R. Barnes, London; Mr. Timothy Holmes, London; Mr. A. H. Benson, Dublin; Mr. J. Gilroy, Birmingham; Mr. A. Warburton, Pontypridd; Dr. Galabin, London; Surgeon-Major R. Boustead, Bombay; Dr. D. H. Tuke, London; Mr. C. G. Campbell, Saddleworth; Dr. Tibbits, London; Mr. C. P. Creed, London; Mr. R. Gillard, South Devon; Dr. Styrap, Shrewsbury; Dr. H. de Variguy, Paris; Mr. G. P. Field, London; Mr. F. A. Neal, Leven; Mr. L. J. Botting, London; Mr. R. A. Campbell, Newcastle-on-Tyne; Dr. Tatham, Salford; Dr. W. A. Jamieson, Edinburgh; Dr. W. Hale White, London; Captain F. Handley, London; The Secretary of the National Dental Hospital, London; Dr. A. P. Wells, Douglas; Mr. W. L. Reade, Bristol; Dr. Simon Fitch, Halifax, N. S.; Mr. W. H. Maling, Sunderland; Dr. R. Gooding, London; Dr. Park, Crosshill; Dr. D. Newman, Glasgow; Dr. S. Martin, London; Mrs. M. Kennet, London; Mr. P. Boobbyer, Nottingham; Mr. J. Bowes, Herne Bay; Mr. J. Moore, London; Mr. Johnston, Glasgow; Mr. H. W. Thornton, New Richmond, Canada; Mr. L. D. Powles, Bahama; Mr. A. Fielding, Canterbury; Mr. C. T. Knight, London; Mr. K. Treves, Margate; Mr. C. Jackson, London; Dr. J. M. Atkinson, London; Dr. A. Longhurst, London; Mr. W. S. Scott, Manchester; Mr. J. Logan, Glasgow; Dr. J. Keser, London; Dr. Davies, York; Mr. C. Harris, Whitehaven; Dr. E. J. Tilt, Mentone; Dr. Braidwood, Birkenhead; Mr. M. Thomson, Boxmoor; Mr. R. Davy, London; Mr. W. Cox, Winchcombe; Dr. W. Galletly, Elgin; Mr. Dix, Hull; Dr. Norman Kerr, London; Mr. R. W. Savage, London; Dr. P. H. Pye-Smith, London; Mr. J. E. Edwards, Carmarthen; Mr. A. Hulme, Birmingham; Dr. T. Williams, London; Professor Roy, Cambridge; Mr. F. Treves, London; Mr. J. McNaughten, Winchester; The Secretary of the Brompton Hospital, London; Dr. Myers, London; Dr. L. Snow, Brabourne; Messrs. Shelly and Co., London; Dr. J. F. Howard, Sandycroft; Surgeon D. F. Franklin, Sandgate; Dr. Gabbett, Eastbourne; Dr. Richard Neale, London; Dr. Rentoul, Liverpool; Dr. G. S. Brady, Sunderland; Mr. S. D. Wells, Plymouth; Dr. Ward Cousins, Southsea; Dr. T. G. Lyon, London, etc.

BOOKS, etc., RECEIVED.

Wear and Tear: or Hints for the Overworked. By S. Weir Mitchell, M.D., LL.D. Fifth Edition. Philadelphia: J. B. Lippincott Co. 1887.

Nervous Diseases and their Diagnosis. By H. C. Wood, M.D., LL.D. Philadelphia: J. B. Lippincott Co. 1887.

Electrical and Anatomical Demonstrations. By Herbert Tibbits, M.D. London: J. and A. Churchill. 1887.

Bronchial Asthma. By J. C. Thorowgood, M.D., F.R.C.P. Third Edition. London: Baillière, Tindall, and Co. 1887.

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THE CROONIAN LECTURES
ON
THE PULSE.

Delivered at the Royal College of Physicians of London, March, 1887.

By WILLIAM H. BROADBENT, M.D., F.R.C.P.,
Physician to St. Mary's Hospital; Consulting Physician to the London Fever Hospital; and President of the Clinical Society.

Lecture III.

Mr. President and Gentlemen,—Examples of the effect upon the pulse of diseases of the nervous system might be multiplied indefinitely, but I propose to ask your attention to the converse of this, namely, to effects produced on the brain by abnormal conditions of the circulation.

The nutrition of the brain, as of all parts of the body, is dependent upon the supply of an adequate amount of healthy blood, but the functional activity and efficiency of the brain are even more dependent upon the blood-supply than its nutrition, and are influenced by it to an extraordinary degree, so that blood which would maintain the structural integrity of the brain might be altogether unfit to minister to its functions. The presence of alcohol in the blood, for example, does not interfere with the nutrition of the nerve-centres, but it deranges their action, and poisons generated in the system or retained excretory matters may have a similar effect. The liberation of nerve-force has been represented as an explosive action, and this implies the presence in the nerve-cells of a substance ready, on the application of the proper stimulus, to combine instantly with the oxygen brought by the blood. The formation of such material, its maintenance at a given state of chemical tension, so to speak, which differs in the different centres, in the cortex, in the central ganglia, and in the medulla and cord, is not paralleled by any other nutritive operation. There is, moreover, the further requirement of a due supply of oxygen.

An illustration of the relation between cerebral functions and the circulation is seen in the anæmia of the cortex of the hemispheres during sleep. This bloodlessness is essential to sleep, and, if it can be induced, sleep follows. It is not clear, however, whether it is primarily the shutting off of the blood which determines and compels sleep, or the exhaustion of the nerve-cells and the periodic cessation of activity organised in the experience of the nervous system by the succession of night and day, which disposes to sleep, and provides for it by causing the cortical arterioles to contract so as to produce the anæmia.

Sleeplessness is extremely common, and may be due to a great variety of causes, to excitement during the day or in the evening, to grief or anxiety, to exhaustion or over-work, especially work of an intellectual kind carried on far into the night, to late meals, errors in diet, indigestion and flatulence or other functional derangements, to tea or coffee. On the recognition and removal or avoidance of any such disturbing influences the sleeplessness will disappear.

We are frequently called upon, however, to relieve habitual sleeplessness which cannot be referred to any of the above causes, and in many instances it is associated with abnormal conditions of the circulation. Not to speak of heart-disease, all forms of which are prone to disturb or interfere with sleep, or of palpitation, which is apt to come on at night, there are two distinct conditions of the circulation to which sleeplessness is very often due. One is the state of high tension, absolute or virtual. There may be little beyond the sleeplessness of which the patient complains, or the loss of sleep may merely be one of a long train of symptoms—depression, apprehension, loss of memory, want of energy, and the like. The artery at the wrist may be large or small, but it is full between the beats, and can be rolled under the finger; the pulse may be long and gradual, or somewhat abrupt in its beat, and ending suddenly, according to the condition of the heart.

It appears to me probable that the cause of the sleeplessness in the class of cases under consideration is the inability of the arterioles of the cerebral cortex to overcome the excessive blood-pressure within them, and shut off the blood so as to induce the anæmia requisite for sleep.

In common with the peripheral arteries generally, their muscular walls are all day putting forth an abnormal amount of contractile force, and at night are unequal to the further task of exercising sufficient additional contraction to narrow the channels to sleeping point. In such cases sleep is often at once procured by reducing the general arterial tension, and a mild mercurial aperient is the most efficient hypnotic. The cases are numbered by scores in which I have found this line of treatment efficacious in habitual sleeplessness, many patients having been rendered independent of sedative draughts to which they had been driven. At first it is not unusual for the patient to suppose that a new and powerful opiate has been given, and the good effects do not wear out by repetition. It is not by unloading the bowel that the aperient acts; it has often to be given to induce sleep when the bowels are acting regularly and freely, and it is to be remarked that it is within an hour or two of the pill having been taken, and many hours before an evacuation results, that the patient sleeps. The general intra-vascular pressure being lowered, the cortical arterioles are no longer resisted by the pressure within them, and they can respond to the call for exclusion of the blood from the hemispheres.

The desired effect may often be attained by other means—by a hot bath, by the sitz-bath and wet bandages employed in hydropathic establishments, by standing in cold water and then rubbing the feet well with a rough towel, and by a variety of other measures, which either relax the cutaneous vessels generally and so lower the arterial tension, or set up a local hyperæmia which diverts the blood from the head. A method of courting sleep, which I have known to be adopted by subjects of high arterial tension, is to lie with the back of the neck on a hot water bottle. Sometimes, however, the object is defeated by some collateral effect, as, for example, when a hot bath sets the heart beating violently, and, when successful, such measures often having the defect of dealing with the effect and not removing the cause.

An opposite state of the circulation, extremely low tension, may be the cause of sleeplessness. It is more common after middle life and in men of sedentary occupation, and may be traceable to overwork or anxiety, or simply to close attention to business and neglect of holiday. It is not often that there is excess in eating or drinking; more frequently the patient is distinctly abstemious. Without apparent cause he begins to lose his sleep at night. In the day-time, however, he is disposed to sleep, and, not infrequently, unless engaged in actual work, he drops asleep at any moment; not only after dinner, when sleep in such cases is irresistible, but when reading his newspaper in the morning after breakfast. Not unnaturally, it is supposed that the after-dinner nap spoils the night's rest, or that the bad night causes the drowsiness during the day, but attempts to rectify this state of things by preventing sleep after dinner and similar measures fail. The sufferer may try to secure a good night by going to bed soon after dinner, but at this time, as at the usual hour for retiring, as soon as he lies down he is wide awake and so remains. After a time it will be discovered that it is position which induces or prevents sleep. In the sitting posture sleep is almost irresistible, in the recumbent position almost impossible. The patient will sometimes get out of bed in the night and sleep in his chair, as we see sufferers from advanced heart disease. Under such circumstances I have found the circulation unstable, the pulse, during the same interview, at one time short and weak, and at another presenting the characters of virtual tension—that is, full between the beats, but compressible, sudden and not sustained, and the power of the heart low. There is a want of tone in the muscular tissues of the arterioles and a want of driving power in the heart, and the distribution of the blood thus becomes unduly influenced by gravity. In the sitting position, when the heart is not stimulated by exercise, nor afflux of blood to the convolutions determined by mental work, the blood is not lifted to the height of the brain with sufficient energy, the contractile tendency of the cortical arteries is not opposed by intra-vascular pressure, and sleep-producing anæmia of the hemispheres results. On the other hand, this same want of tone in the arterioles allows them to be distended by the increased pressure of the blood within them, which attends the horizontal position. In such cases change of air will often put an end to the sleeplessness at once, and the appropriate remedies are vascular tonics, iron, acids, strychnine, and digitalis.

Convulsions and the Pulse.—Conditions of the circulations indicated by the pulse are unquestionably among the causes of convulsions. The brain responds by convulsions to a great variety of disturbing influences—to direct irritation of the cortex, as has been demonstrated by experiment, and is illustrated by spiculæ of bone, tumours, meningeal hæmorrhage, etc.; to irritation of lower centres and tracts, such as the cerebellum and its superior peduncles, or in the interpeduncular space, and to reflex irritation of the most varied kind; to poisons of

different kinds, but especially to the poisons of specific fevers, such as small-pox, scarlatina, or measles.

With regard to such causes of convulsions as concern us from their relation with the pulse, experiment has shown that convulsions may attend exactly opposite states of the circulation. The final phenomena of death from rapid hæmorrhage, when the cerebral vessels are empty and the pressure presumably at a minimum, are convulsions, and convulsions occur in death by asphyxia, when the blood-pressure is high. These extremes probably meet in the production of stasis of the cerebral circulation, and it seems to me that we have clinical illustrations of convulsions produced by unduly high arterial tension on the one hand, and by excessively low arterial pressure on the other.

The cranium being a closed cavity, the total volume of its contents, brain-structures, blood, and cerebro-spinal fluid, must be a constant quantity. The effusion of liquid into the ventricles or meninges, often found after death, shows that some sort of compression and shrinkage of the brain-substance is possible, but whether this is at the expense of the blood in its capillaries, or of fluid in the perivascular spaces, or of interstitial fluid, cannot be stated definitely; since, however, there may be greater appearance of vascularity in the sulci and white matter at the same time, it cannot be by exclusion of blood that the intra-ventricular or subarachnoid fluid makes room for itself. But whatever may be the way in which the brain-substance accommodates itself to effused fluid, it is not to be supposed that it is compressd into smaller compass at each pulsation of its vessels. This being so, either the blood must escape by the veins exactly in the same amount and at the same time as it enters by the arteries, and therefore more or less in a pulsatile manner, or there must be some shifting to and fro of cerebro-spinal fluid between the cranial and spinal cavities, that is, the expulsion of a certain amount of fluid from the cranium into the spinal canal with each arterial pulsation, and a gradual reflux in the interval. But the spinal canal is also a closed cavity, and, although its walls, being only ligamentous between the vertebræ, are not so rigid as the bones of the skull, there is no provision for variations in its capacity, while the arteries of the cord and its meninges will be distended at the same moment as those of the brain, which would tend to resist the passage of fluid from the cranial to the spinal cavity. The to-and-fro movement of cerebro-spinal fluid, then, which has been postulated as an easy explanation of some of the difficulties with regard to the cerebral circulation, cannot be admitted, and it must be the case that, exactly as the blood enters the cranium by the carotids and vertebral arteries, it leaves it by the internal jugular veins. The movement of blood in the internal jugulars has, in fact, been found to be pulsatile. I have pointed out in my first lecture that neither the expansion of the arteries nor the onward movement of the blood is as great as is usually supposed, and there is a provision both in the carotids and vertebrals for moderating the current (which is present in a still more marked degree in animals which feed on the ground), but, with all this, the intra-cranial circulation is carried on under peculiar difficulties, and any interference with the general circulation may tell with special influence upon it.

In the eye the circulation is under much the same conditions as in the brain, in so far as the effects of high intra-vascular pressure are concerned—the sclerotic being unyielding—and the changes which are known to take place in the retina in renal disease have more than a mere diagnostic or clinical interest. They throw light on changes occurring in the brain, and study and investigation in this direction will be well repaid. We have retinal as we have cerebral hæmorrhages. It is possible, again, that there are intra-cranial conditions like in kind to those of the choked disc, if different in degree, and there may be changes in the brain substance corresponding to the white spots in the retina. All these are, in my opinion, attributable to pressure effects rather than to blood deterioration. Glaucoma, which, in my small experience, has always been associated with high pulse tension, and which I believe to be an effect of intra-vascular pressure, may also have its analogue in the cranium.

Be this as it may, there cannot be any doubt that the intra-cranial pressure varies with each heart-beat and with all variations of the blood-pressure in the arteries or veins. The brain would pulsate if it could, and does pulsate whenever a part of the cranial vault is absent or yielding. The fontanelle of an infant beats with the pulse, rises and falls with the respiratory movements, is tense and prominent when the child cries, hollow when it is asleep, is full and firm when the child is well, depressed when it is weakened, say by diarrhœa, and the same fluctuations can be seen at a trephine opening in the adult skull. The same pressure fluctuations which give rise to the pulsation and varying tension of the fontanelle will, in a greater or less degree, tend to compress the cortex of the hemispheres against the vault of the cranium, and it is conceivable that the compression might be such as to interfere with the free passage of blood through the pia mater of the convolutions, or to flatten, more or less, the veins which run on the surface of the hemispheres to the longitudinal sinus—it might, indeed, arrest momentarily the cortical circulation. Blood stasis in this situation, from pressure against the cranial vault, must occur when the convolutions are flattened by effusion into the ventricles in tubercular meningitis, and it is not unreasonable to suppose that the convulsions and loss of consciousness which mark the final stage of this disease coincide with this event. But there are not wanting evidences of the production of momentary arrest of the cerebral circulation by comparatively slight temporary causes. Some years since I met, at a scientific congress, a distinguished French surgeon who, at the age of fifty-five or sixty, was suffering from whooping-cough; at every paroxysm he dropped down unconscious; and I have met with a case in which, for many years, the patient, who was the subject of chronic bronchitis, fell down with momentary loss of consciousness and slight convulsion whenever he coughed, and this too quickly for the production of cyanosis. In these cases the obstruction would take effect by backward pressure through the jugulars. Short of any such result as loss of consciousness, it is not uncommon for the respiratory concussion attending the act of coughing to be felt as severe pain in the head.

A gradual encroachment on the capacity of the cranial cavity would exert a very similar influence on the cortical circulation by pressure from without to that which I am assuming might be the result of pressure from within, and the effects of such an occurrence are exemplified in the following case seen with Mr. Brend, of Kensington. The patient, a lady, aged about 36, had enjoyed good health all her life, and had had children, when she began to be subject to fits. She was seen by various physicians, and different opinions were given as to the character of the attacks—for the most part they were considered to be hysterical. She was subject to headache and confusion of thought, but not more so than is common; there was no vomiting. When I was consulted, she looked well, was stout, and had a good colour, and was discharging all her family and social duties, though with effort. Just as she had taken off her dress to facilitate an examination of the chest, an attack came on which we were so fortunate as to witness. She turned pale and lost consciousness, there was a slight quiver of the muscles of the face and movements of the arms, but the most striking fact was a complete arrest of the heart for a sufficient time to cause us serious anxiety. This prevented us from adopting the opinion previously given that the fits were of no importance, and our prognosis was soon afterwards verified by the patient's death in one of the attacks. The only morbid appearance found was an extraordinary thickening of the frontal bone, which was as dense as ivory, and more than half an inch thick at the lower part, gradually thinning towards the coronal suture. The inner surface was smooth, and the dura mater little changed.

The following are examples of convulsions associated with high pulse-tension.

A medical friend called on me one morning ten years since, at the bidding of his wife, as he told me laughingly. He said he had had some sort of fainting attack, but that he was perfectly well. His forehead, however, was covered with minute ecchymoses, and it was obvious that he had had severe convulsions. He was 42 years of age, had lived freely and carelessly, but was not intemperate; there was a doubtful history of syphilis, and twelve months previously he had had a severe fall on his head. He had very high tension of the pulse. I was summoned to him early next morning, and found that he had gone from one convulsion into another for the greater part of the night, of so severe a character that artificial respiration was required at the end of each attack. I had no hesitation in attributing the convulsions, the first and last he had ever had, to the state of the circulation, and the patient was bled to about thirty ounces. He had the last convulsion as the blood was flowing, made a rapid and complete recovery, and has had no attack since.

In another very similar case, also that of a medical man, aged about 50, seen three years since, I did not see the convulsions, which had been very violent, but the assurance I felt justified in giving, from the history and from the state of the pulse, that no recurrence need be apprehended if the tension were reduced by appropriate diet and treatment, has been verified up to the present time, and the patient has improved greatly in general health.

A third case, that of a lady, aged at that time 49, came under my observation in May, 1878. She was stout, over-fed, and had marked tension of the pulse, which appeared to be taking effect on the left ventricle. She was said to have albuminuria, but I found no albumen in the urine, and the specific gravity was normal. I was consulted on account of severe and repeated convulsive attacks of an epileptic

character, which came on two or three times a week, sometimes in series of six or seven. The convulsions speedily ceased under treatment by saline aperients, which lowered the vascular tension, and she remained free from them until 1885, when she had cerebral hæmorrhage and hemiplegia, and she died late in 1886, from another attack, attended with convulsions.

In December, 1885, a gentleman, aged 65, working hard as a teacher of music, consulted me on account of convulsions, which had occurred in the previous July before breakfast, and on December 1st after dinner. On the latter occasion there had been sudden loss of consciousness, and a fall, in which a cut on the head had been sustained. He looked and felt well, had a fresh colour, the appetite was good, and the bowels regular, and he slept well. The urine was copious, had a specific gravity of 1015, and contained neither albumen nor sugar. The pulse was tense, but short, the first sound of the heart short, the aortic second accentuated. The condition of the circulation was that of virtual tension. A mild blue and colocynth pill was ordered to be taken once a week and arsenic and nux vomica prescribed as a tonic. In March, while stooping after a heavy meal, he fell forwards and was unconscious for a few seconds, and this is the only attack he has had.

Other illustrations might be given, but I will only refer to one more, which I related in my address as President of the Medical Section of the Brighton meeting of the British Medical Association. The patient, aged 37, came under my observation in November and December, 1885, suffering from headache and oppression, and was found to have an unusual degree of arterial tension, and shortly afterwards I was called to him in consultation with Dr. Wilbe, when he was almost unconscious, overwhelmed apparently by a sense of pressure in the head, and exhibiting violent synchronous contractions of the pectoral and abdominal muscles. The pressure in the arteries was extreme, and the incompressibility of the pulse surpassed anything in my experience. The patient was bled with good effect, but repeated free calomel purging was needed to bring down the tension and complete the recovery. There was an early stage of contracting kidney in this case, but no such change as to give rise to uræmia.

The convulsions which sometimes occur months or years after an attack of hemiplegia have, in my experience, always been associated with high tension, and have often been prevented from recurring by treatment directed against this. In a brain damaged by hæmorrhage, which has left a cicatrix, the circulation is more easily deranged to a point attended with symptoms than before.

It may be considered as proved that, in some way, such a modification of the cerebral circulation may be produced by high arterial tension as is capable of giving rise to convulsions; and, as I have already said, it is, in my opinion, through the intervention of high arterial tension that uræmic convulsions are brought about. There may be extreme uræmic intoxication, ending fatally by coma, without convulsions; urea, the ammoniacal products of its decomposition, and the forms of nitrogenised waste, which may be supposed to accumulate in the blood in renal disease, do not excite convulsions when injected into the blood.

These facts seem to show that it is not simply and directly by the presence of renal impurities in the blood that the convulsions are excited. On the other hand, there are the facts that uræmic convulsions are most common in that form of kidney disease in which high arterial tension is most marked—the contracted granular form—and that they do not occur in the absence of, at any rate, a certain degree of tension. But the consideration which carries, perhaps, the greatest weight, is the remarkable effect of blood-letting in uræmic convulsions. The status epilepticus is cut short, the coma abbreviated, and associated symptoms relieved. These effects, which are remarkably constant, cannot be from elimination of toxic matter; the blood left in the vessels will be both more watery and more impure from resorption of liquid from the tissues. They can scarcely have any other cause than diminution of the volume of blood and lowered pressure in the vessels.

In acute renal dropsy with convulsions a venesection may not only arrest the convulsion, but may exercise a favourable influence on the disease, and in chronic Bright's disease, nearing a fatal termination, bleeding may prolong life and change altogether the mode of dying from convulsions and coma to a quiet asthenia.

Illustrations of the association of convulsions with low arterial tension are less common, but I have seen in a child of 12, belonging to a family in which the pulse-tension is low, and who has the family pulse, a momentary convulsion during vaccination. There was no nervousness or fear, but, on the contrary, the operation was regarded with interest. The child, however, dropped as if shot, with a slight general convulsion, and then immediately got up again, looking very much astonished, but not otherwise affected.

In another low-tension individual, a young man of remarkable courage, the application of a few leeches to the ankle, which had been injured rather severely, was followed by syncope, emergence from which was attended with brief but sharp general convulsions.

In the following case, seen first with Dr. Godson, Mr. White, and Dr. Kane, and later with Dr. Kane, the association of convulsions with an extremely low pulse-tension and their dependence upon a feeble circulation seemed to be very clear. The notes are by Dr. Kane.

"The patient, a lady, aged about 26, florid and healthy, was confined August 3rd, 1886. Second confinement; previous one normal. Three weeks before labour had phlebitis of right saphena vein, with great pain, some pyrexia, but little œdema; it terminated favourably in about fourteen days, leaving a hardened vein. Labour natural. Some membranes were retained, but gave no signs of their presence till the seventh day, when the discharge became offensive. There was pain over the abdomen and slight rise of temperature. The uterus was washed out with Condy's fluid, and the next morning the pain had disappeared. A rigor followed the injection of the uterus, and the temperature rose to 105° F. The discharge continuing fœtid, injections were repeated, and the retained membranes came away. An offensive discharge persisted for a day or two, after which the lochia became sweet and normal. The milk stopped fourteen days after labour.

"From the first rigor dates the commencement of the high temperature. Daily it rose to 104, 105, and even 106; but, at the same time, it invariably fell to normal at one time every twenty-four hours. There was no regularity in the periods of high and low temperature; some days it would rise rapidly to the maximum, and after an hour would fall as rapidly; on other days it would remain about normal most of the day. The pulse, always weak, was most rapid and irregular, sometimes quite uncountable. Terrible rigors occurred almost daily, generally commencing when the temperature was low, and invariably followed by rapid rise of temperature. The patient suffered comparatively little from the high temperature, had no delirium, and seemed to be more comfortable than when the temperature was normal, though the weather at the time was extremely hot. On the seventeenth day after labour, phlebitis occurred in the right saphena. This phlebitis continued to give trouble, on and off, for another ten days, and there was considerable swelling of ankle.

"The rigor and temperature continuing unchanged, in spite of all remedies, it was decided, on September 15th, forty-three days after labour, to remove her to another house. There was the more pressing reason for this, that an expert had decided that sewer-gas entered the house. She bore the move well, and for a time seemed to improve. She had some slight shiverings, but no more rigors. For several days the temperature never rose above 102. She had numerous small boils. On the sixth day after the move (September 21st) her temperature rose suddenly to 106, fell again to normal, and in the evening rose again to 104. She did not seem worse in any other way. About 10 P.M. I was suddenly summoned, the messenger saying she was dying. I found her sitting up in bed, with very flushed face and widely-dilated pupils; she appeared quite unconscious, with gasping respiration, and very rapid and tumultuous action of the heart. I diagnosed cardiac embolism. Soon after my arrival she fell back and passed into a terrible convulsion, face turned to the left, arm drawn up, and legs extended and rigid. This lasted some minutes, and was followed in half an hour by a second, and again, before morning, by a third. After the convulsions, the left arm seemed paralysed, but this passed off before morning. She was very prostrate, and moaned a great deal, and, if moved, screamed out and applied her hand to the right side of her head. No inequality of pupils; passed urine and motions in the bed. Mental condition very excited, at first aphasic and unintelligible, afterwards noisy, singing, crying, and praying. After this she sank into a very depressed condition, with constant tendency to failure of the heart. The slightest attempt to sit up caused giddiness and slight convulsion. She had to be constantly watched, and at times even artificial respiration had to be resorted to. Face sunk, and whole aspect of impending death; temperature 104; pulse utterly uncountable. Such was her state on September 26th, fifty-four days after labour.

"The case was considered hopeless, but it was determined to persevere steadily with large doses of tinct. ferri mur. and digitalis in gradually increasing doses. The result was highly satisfactory. The patient rallied and steadily progressed from this date. Quantities of small boils appeared, and gave her much pain. Delirium continued for some days, and she had some delusions. The slightest attempt to sit up brought on a slight convulsion. The temperature never again rose above 102, and in a very few days fell to normal, and remained

at that. Ten days after the first convulsion she had another severe one, followed by a return of the mental disturbance. She was free from attacks, except slight ones, for about a fortnight, when she had another severe attack, then an interval of three weeks, and a series of terribly severe ones lasting six hours. It being thought that the convulsions might be due to an attempt to restore the catamenia, attention was turned in that direction, and after some time the menstrual flow was established, ushered in by several slight convulsions. All this time her progress to health had been continuous, with the exception of a slight pneumonic attack, with some fever and cough, which disappeared after she had coughed up a patch of deep rusty mucus. She had numerous slight convulsive attacks, generally on waking up from sleep; but they left no after-effects, and she steadily improved until January 26th, six months from the commencement of her illness, when she was well enough to be moved to Hastings, and underwent the journey without any fatigue or after bad result. She is now in capital health; but her pulse has a tendency to become irregular, and she has occasional attacks of threatened convulsions."

The above account has been supplied to me by Dr. Kane. I first saw the case on October 9th, when the pyrexia had been overcome and the convulsions had set in, and had no hesitation in referring them to the exhausted state of the heart, which could not be felt, and could scarcely be heard, while the pulse was all but imperceptible. The fact that the patient could scarcely be raised in bed without bringing on an attack of convulsions was of decisive significance."

I have at present under observation a gentleman, aged 52, who consulted me on account of shortness of breath on going up stairs, and especially on going up the steps from the railway station. He had become so nervous on the subject that his heart began to palpitate and his breath to go before he came to the foot of the stairs. He had palpitation also occasionally at night. He looks the picture of health and younger than his years; is stout and of rather high colour; eats and sleeps well; and has a regular action of the bowels. He rides a tricycle, and has much fresh air and exercise. The pulse is frequent, 90 to 108, small, short, and extremely compressible. The heart is partially covered by lung, does not appear to be enlarged, and gives no impulse or apex beat; the sounds are short and approximated, the second following the first too quickly. The first sound is audible, not only at the apex and right second space, but also in the neck, where both sounds are remarkably distinct. He spoke of having had a fainting attack, and, when this was inquired into, it was described as having occurred as follows. It was in August, and he had had a tricycle ride, had washed and changed, when he bethought him he would like a glass of beer, which he had not tasted for years. Shortly afterwards he felt a peculiar tingling in his feet, and had just time to lie down when he lost consciousness, and did not come to himself for forty minutes or more. This could not have been a syncopal attack, and, whether convulsions occurred or not, was epileptoid. It was further learnt on inquiry that he had had several similar attacks within the last few years, always beginning with the tingling sensation in the feet, and attended with complete loss of consciousness, lasting, on an average, twenty minutes. He had had no fits of any kind as a boy, or until the occurrence of those referred to.

I am not without hope that a careful study of the pulse, and of conditions of the circulation made known through it, may be of service in furnishing indications for the treatment of epilepsy. It is certainly attended with interest, and I think it throws light on different forms of epilepsy, and serves as a guide in prognosis.

Epilepsy is apparently the result of instability in the highest nerve centres, the cells of the cerebral cortex permitting of an indiscriminate general or partial discharge upon lower centres of nerve force, which normally ought to be set free, only in definite degree and in well-defined direction, in response to given stimuli. Such instability is obviously a nutritional defect, which may be due to the inherent want of constructive energy in the nerve-cells themselves, or may be the result of blood which cannot furnish the proper pabulum, or of an inadequate supply of blood. Even in the case first supposed a regular and ample supply of blood, under sufficient pressure to cause a due exudation of nutrient material and of proper composition, will be important, while in the other conditions supposed it will be remedial. But, given more or less of instability, this does not of itself start the convulsive explosion; some exciting cause must be applied. At one time this was supposed to be arterial spasm in certain convolutional areas; but this hypothesis, which never seemed to me to be tenable, has gone out of fashion. There are, however, facts which seem to show that circulatory conditions have much influence in determining the occurrence of attack. For example, the great frequency with which fits come on in the night, sometimes on first going off to sleep, when the horizontal position and the anæmia of the cortex attending sleep produce great changes in the intra-cranial circulation, or more frequently towards morning, when the general circulation has slackened down, as it does during sleep. Another favourite time for attacks is soon after rising in the morning, when circulatory changes of a reverse kind take place.

It is not my intention to discuss the questions which might be raised on the subject here alluded to, but I desire to call attention to a provisional conclusion to which I have been led by my own limited observation. This is, that in essential epilepsy—the epilepsy which comes on during adolescence, the epilepsy met with in neurotic families, and in which the nerve-cells may fairly be assumed to be inherently unstable—the arterial tension is low and variable or fluctuating.

I am unable to affirm that when the attacks are suspended, as they may be for months, the pulse-tension is improved, but it is worthy of remark that pregnancy is not infrequently attended with immunity from fits, and as is well known, one effect of this condition is high tension in the pulse.

On the other hand, when the pulse-tension is decidedly and constantly above the average, it has seemed to me that the epilepsy has been amenable to treatment. Senile epilepsy is, according to my experience, associated with high tension, and scarcely ever fails to yield to a regulated diet with a restricted amount of animal food and little stimulant, aperients and other eliminants being given, according to the requirements of the particular case. Epilepsy with high arterial tension often comes on at a later period than the epilepsy, which has its source in a radical weakness of the nervous system, and, in most of the cases I have met with, the first fit has occurred after the age of 20, and not uncommonly there have been peculiarities, such as a number of attacks close together, with long but irregular intervals, or some well-marked exciting cause. The fits may, however, date from the usual age at which epilepsy sets in. Many years since, a surgeon-major in the army brought his son to me on account of epileptic attacks, which had compelled him to leave the navy. He was a fine, strong, healthy-looking lad, and had a large pulse not easily compressed. Under treatment the fits, which had been so frequent, ceased to come on. He studied for and got into Sandhurst, obtained a commission in an infantry regiment, and has since served through the Afghan campaign. So far as I know he has only had two attacks since he entered the army, one in Afghanistan, when, together with trying work, he had bad food and water, and another in Ireland after great fatigue and a bout of dissipation.

I have several times seen violent maniacal delirium associated in such a way with convulsions as to suggest that a minor degree of the disturbing influence which caused convulsions had given rise to the maniacal excitement—after bleeding, for example, for uræmic convulsions—before and after, or apparently instead of uræmic convulsions—in syphilitic disease of the brain. In the following case the connection between the state of tension of the pulse and ungovernable excitement was recognised by several observers over a long period. The patient was under the care of Dr. Ranking, at Tunbridge Wells, and Dr. Marcus Allen, at Brighton, and in town under Dr. Seton and Dr. Coates, with whom I saw her weekly from March to July, 1884, and again in March, 1885. Dr. Ranking, who has kindly supplied me with the particulars, was called to her in May, 1882, when she was convalescing from a third attack of slight (left) hemiplegia. She was very nervous and apprehensive, and had dilatation of the heart, with an unstable pulse of virtual tension. During the summer she had several anginoid attacks, which were relieved at once by nitro-glycerine, and in the winter attacks of congestion of the lungs, with partial suppression of urine and albuminuria. One day in July, 1883, she became suddenly excited, with delusions, which lasted some time, but went off after one-hundredth of a grain of nitro-glycerine, and she slept. Later in the summer she got into an excited, unsettled, suspicious, and violent state, which persisted, together with high tension of the pulse. Once she was comatose for twenty-four hours, but recovered after nitro-glycerine, and at once became maniacal. In the winter 1883-4, she was under the care of Dr. Marcus Allen, at Brighton. It was found by observation that her mental condition was always worst when the pulse-tension was high, and that the only way of keeping it down was to cut off all meat, and feed the patient chiefly on milk. This was confirmed by our experience when she was brought to town. When the tension was high, she was suspicious, abusive, violent, and unmanageable. When it was normal, she was cheerful and tractable. Mercurial aperients were constantly needed in order to keep down the tension and regulate the bowels. Ultimately she died in March, 1885, with symptoms of meningeal hæmorrhage.

With advancing years there comes a liability to many forms of cerebral affection. Some are examples of structural change which are

clearly traceable to interference with the normal blood-supply. Such changes are local or general softening from thrombosis of individual arteries, or general obstruction to the blood-supply from atheroma affecting all the cerebral arteries. The local arterial change is not the sole factor in the production of the lesions. A state of blood which renders it prone to coagulate or deposit fibrin will predispose to the formation of a thrombus at any point where the walls of the artery are diseased, and want of propulsive power in the heart, or other cause of languid movement in the blood, may antedate the occurrence of degenerative changes attributable to widely distributed disease in the vessels. But an impeded cerebral circulation may, in course of time, so far modify the nutrition of the brain as to give rise to functional affections without structural lesions; and this, in my opinion, is the mode of causation of some forms of insanity which come on late in life, such, for example, as senile melancholia.

The term senile may have two meanings—it may designate an age, or be descriptive of a kind of change. The term "senile" is unobjectionable if it is meant to apply simply to the period of life at which this affection is met with, but it is often understood to mean a certain character of change, and its frequent employment to designate degeneration has led to the common idea that senile and degenerative are convertible terms. This does harm in two ways. Senile changes, if degenerative, are irreversible, and if this view is taken of dementia or melancholia, there will be no object in careful investigation of associated conditions, no other cause than senile decay will be looked for, and no individual treatment will be adopted, based upon the peculiarities of different cases. Furthermore, the reproach of insanity or of neurotic tendencies may be attached to families, when the derangement of the cerebral functions may be as much a result of vascular disease as cerebral hæmorrhage. A family liability to melancholia may consist in hereditary high tension of the pulse, just as a liability to apoplexy may be due to family gout.

Now the complete recovery witnessed in many cases of melancholia is proof that there cannot have been any structural degeneration, and an example like the following may be worth relating.

Some two years since I was asked to see, periodically, a gentleman, aged about 60, who had for four or five years been under the Commissioners in Lunacy on account of melancholia. He had had delusions as to conspiracies against his life, but such delusions as remained related chiefly to wilful and malicious injury inflicted upon him, and attempts to destroy him in an asylum. He spent nearly all his time in bed, scarcely ever left his room, and never went out of doors. He was well nourished, and, except that he was etiolated by his long confinement to the house, looked well, but the pulse was extremely small, soft, and short, and the action of the heart extremely weak. He had eczema, and suffered from constipation and want of appetite, and treatment was prescribed for the relief of these symptoms. His general health improved, but his mental condition remained much the same, and, in particular, the death of a son made little impression on him. In June, 1886, he suddenly shook off all his delusions, and became perfectly sane and cheerful. With this the pulse improved, but never reached an average volume or tension, and in October he remained well, and, after examination by Dr. Maudsley, was discharged from his lunacy. Unfortunately, on February 24th of this year, he became aphasic from thrombosis of the vessels supplying the cortical speech centre.

Pulse and Melancholia.—The connection between melancholia and its allied mental states and conditions of the circulation is more direct and decided than can be traced in epilepsy.

An unbroken series of gradations can be traced from the irritability and depression of spirits attending functional disorder of the liver, up to complete melancholia, with delusions. In a case of temporary hepatic derangement, the state of the temper and spirits might be attributable to the retention in the blood of the impurities which tinge the eyes and complexion, this acting as a poison; or to some reflex influence, inhibiting cerebral functions, or deranging the cerebral circulation by setting up contraction of some of the arteries. When, however, the mental depression is more pronounced and persistent, these explanations are found not to apply; there may be, in the first instance, constipation, a furred tongue, sallow complexion, large liver, etc. But when these evidences of deranged function are removed, the mental condition does not clear up. If the symptoms, therefore, are due to any somatic cause and are not the outcome of a primary cerebral affection, this cause is something more persistent than the functional derangement or reflex disturbance mentioned. This has appeared to me to be protracted arterial tension, or, if it is not itself the cause, it is at least the index of the condition of the state of system on which the mental condition depends.

The method by which high arterial tension may influence the cerebral functions may be conceived to be as follows. The resistance in the peripheral vessels calls for increased contractile force on the part of the left ventricle, and there is a response by a certain degree of hypertrophy. In the course of years, however, the resistance increases, degeneration of the capillaries and thickening of the arterioles being superadded to the original loss of due relation between blood and tissues, while the heart no longer gains in strength. With, then, the same or somewhat diminished driving power and the resistance increased, there will be a slower onward movement of the blood. The pulse may be equally strong—may even seem to be more incompressible—but the capillary circulation will be sluggish. This will be the case throughout the system, but it will not give rise to appreciable effects in most of the structures and organs; in the brain, however, as has already been said, functional activity and efficiency are absolutely dependent upon a due supply, not only of nutrient material, but also of oxygen, and this fails when the flow through the capillaries is sluggish.

In a very large proportion of the cases of melancholia coming on late in life, the evidence of persistent high tension of the pulse has been most marked, and when this has been the case it has seemed to me that persevering endeavours to diminish the peripheral resistance, and at the same time to strengthen the action of the heart, have been more successful than any other line of treatment. The object is so to relieve the heart that it may no longer be mastered by the obstruction in the general capillary circulation; there will then be a general acceleration of the flow of blood through the tissues, and by the increased supply of blood to the brain its nutrition and functional efficiency may gradually be restored. The possibility of this result and the time required for its attainment will depend on various conditions. There must be a capability on the part of the heart to resume its control over the circulation, it must not be degenerate or worn out. The state of the cerebral arteries, again, will have an important influence; if they are extensively diseased, the access of blood to the convolutions may be barred even when the circulation elsewhere is good. Further, the change in the nervous elements must not have gone too far; the longer they have been subjected to the deteriorating influence of imperfect blood-supply, the longer will be the time required for the reversal of the effects. Of these three sets of conditions we can only estimate the first by examination; with regard to the others, the basis of our judgment must be the history. Speaking generally, the more acute the attack and the shorter its duration, the better will be the chances of recovery.

Cases of this kind, many of which have come under my notice, do not lend themselves to narration, especially when seen in consultation only once or twice, and I shall not attempt to bring instances before you. I may, however, relate an occurrence with regard to one such—a most distressing case of religious melancholia in a lady of about 60, with extreme high tension in the pulse. I had explained my views to Dr. Baines, with whom I saw the patient, and had recommended, among other measures, a series of mild calomel purges, when the sister of the patient joined us, in order to learn our opinion. Before hearing this, however, she said there was one more fact which she ought to have told us—namely, that their mother, at very nearly the same age, had suffered exactly in the same way. It seemed as if my hypothesis of the relation of the melancholia to the state of the circulation was at once overthrown, and with it my favourable prognosis. "But," she continued, "in those days they gave calomel for everything; and it was prescribed for her, and she got quite well." Our patient also recovered—only, however, to relapse some time later.

Melancholia associated with extremely low pulse-tension has, in my experience, usually proved incurable, and has in several instances gone steadily from bad to worse to a fatal termination. The case related a few minutes ago is the only instance of recovery I have met with.

I announced that this lecture would be devoted to the pulse and cerebral affections, but I may be permitted to refer to an affection of the lower end of the spinal cord, especially as it furnishes a sort of parallel to the production of melancholia by derangement of the circulation.

Our late colleague, Dr. Moxon, whose loss those who knew him well will never cease to deplore, pointed out in his brilliant and original Croonian lectures, six years since, that common paraplegia, as he called it, was explained by anatomical facts. The spinal cord receives its blood-supply by means of the arteries which reach it along the nerve-roots. These, in consequence of the downward elongation of the spinal canal beyond the cord, get the more oblique and longer from above, downwards, and at the cauda equina are many inches in length, so that the arteries of the lumbar enlargement, which occupies the lower part of the dorsal division of the spine, have to

travel upwards for this distance from the foramina in the lumbar and sacral regions. When, then, the circulation becomes languid, the mechanical difficulties of this arrangement make themselves felt. The symptoms attending the early stage of paraplegia due to failing circulation in the lumbar enlargement of the cord are very interesting. As the nutrition of the lower end of the cord begins to suffer, there is at first muscular weakness and loss of control over the legs only after a night's rest. The patient has some difficulty in standing and walking steadily when he first gets out of bed; but, after he has moved about a little, the legs regain power, and he can walk perfectly. A similar state of things is observed with regard to the bladder. He cannot pass water on rising, but, when he has had a little walking, he empties the bladder easily. Whenever he sits down for any length of time during the day, there is more or less impairment of mobility and strength in the lower extremities, which quickly passes off with movement. Sensation is not affected at first, but there may be feelings of numbness. The coming on of the weakness during the night is due to the slackening down of the circulation which takes place during sleep, and is paralleled by the morning depression in melancholia and debility.

I have met with this train of symptoms at the two extremities of high and low pressure. When there is high pressure it is that the general resistance in the periphery has overtaxed the powers of the heart, so that the whole circulation is sluggish, and the languid flow is most easily brought to a standstill where the difficulties are greatest. Usually the symptoms come on very gradually, but I have known their onset to be determined by the occurrence of acute dilatation of the heart. When the tension is low and the heart weak, no explanation of the impeded circulation is needed.

I end these lectures with a feeling that I have done but scanty justice to the subject, but with feelings also of gratitude for the patience and indulgence with which my poor attempt has been received.

THE LUMLEIAN LECTURES
ON
THE PATHOLOGY OF INTRA-UTERINE DEATH.

Delivered at the Royal College of Physicians of London, March, 1887.

By W. O. PRIESTLEY, M.D., F.R.C.P., LL.D.,
Consulting Physician to King's College Hospital; and late Professor of Obstetric Medicine, King's College.

Lecture II.—Diseases of Fœtal Appendages.

[*Concluded from page 718.*]

Morbid Changes in the Chorion.—The pathological change affecting the outermost true fœtal envelope or chorion which has received most attention is what is commonly called "cystic or vesicular or hydatid degeneration." In this affection small or large quantities of cyst-like bodies are expelled at intervals from the uterus of the pregnant woman, their expulsion being attended with hæmorrhage, and commonly with the discharge of a large quantity of serous fluid of pinkish colour, which has been compared to red-currant juice. Madame Boivin[25] stated that she found this disease occurring only twice in 20,375 pregnancies, but I suspect this account does not represent the true frequency of the affection, for most accoucheurs in large practice have met with it, and specimens of cystic chorion in its various stages are to be found in almost all our museums. In its earlier phases it is not uncommon, but then may be readily overlooked. When fully developed the appearance of the growth is very remarkable, and must at once arrest the attention of the medical attendant. Although commonly thrown off at first in detached portions, a time comes when uterine action fully sets in, and then a large quantity of cysts may be expelled in one mass, which, in some instances, is sufficient to fill a large basin. The vesicles or cysts of which the mass is composed vary from the size of a millet seed to that of a grape, and these are intimately united together at various points by thin stems or pedicles. They have been compared to bunches of grapes, but the cysts do not necessarily terminate the stem on which they are suspended like grapes, but are united in a plexiform arrangement one with another in a sort of network.

In Paré's *Surgery* it is recounted "that the Countess Margaret, daughter to Florent IV, Earl of Holland, and spouse to Count Herman of Heneberg, on Good Friday, in the year of our Lord 1276, and of her age 42, brought forth at one birth 365 infants, whereof 182 are said to have been males, as many females, and the odd one an hermaphrodite, who were all baptized, those by the name of John, these by the name of Elizabeth, in two brazen dishes, by Don William, Suffragan Bishop of Treves." It is added: "the basins are still to be seen in the village of Losdun, where all strangers go (on purpose) from the Hague, being reckoned among the great curiosities of Holland." This account is not regarded by modern authorities as a pure invention. Ambrose Paré was eminently honest, and these 365 children are now regarded as having been merely vesicles of a cystic chorion, magnified into infants by someone whose interest it was to promulgate the illusion.



Fig. 3.—A portion of cystic chorion as seen with the naked eye. The arrangement of the vesicles is seen and also their attachments to the chorion membrane (Ercolani).

The published literature on this single disease of the chorion is more extensive than of any affection of the fœtal membranes, and both detached observations and separate monographs exist in several different languages. Cloquet,[26] Percy[27] and Boivin regarded the vesicles of the chorion as true acephalocysts; but it has been abundantly proved that they are not so, being furnished neither with hooklets nor other minute structures characteristic of true hydatids. Bidlos and Soemmering believed cystic chorion to be a disease of the lymphatic vessels; and Bartolin, Müller, and Cruveilhier[28] a disease of the blood-vessels. Ruysch[29] attributed the formation of the cysts to accumulation of fluid in the cellular tissue which unites the vascular tunics of the fœtal membranes.

Nearly all modern authorities agree in regarding them as the results of pathological changes of one kind or other in the villi of the chorion. The single exception, I think, is Ancelet, who in 1868 published a paper in the *Gazette des Hôpitaux*, and he there reverts to an old idea that the hydatid mole is a disease of the decidua.

[25] *Mém. de l'Art des Accouch.*

[26] *No. 1 de la Faune des Méd.*
[27] *Ancien Journ. de Méd.*, 1793.
[28] *Vide* Charpentier, *Maladies du Placenta.*
[29] *Obser. Anat. Clin.*, 1691.

Velpeau[30] seems to have been the first to indicate that the cysts were not true or independent vesicles. He regarded them as swollen chorionic villi, the terminal extremities being enlarged by the accumulation of fluid, as a sponge is distended by water. H. Meckel[31] and Gierse[32] said there was hypertrophy of the natural structures, with œdema of the villi, which they considered secondary. An excellent description of the different stages of this transformation and its mode of growth after Mettenheimer is to be found in Sir James Paget's *Surgical Pathology;* and Dr. Barnes,[33] Dr. Graily Hewitt,[34] and Dr. Braxton Hicks[35] in this country have further illustrated the various stages of its development in separate papers. In France, C. Robin's observations have attracted much attention, and his views are adopted by M. Cayla, who wrote a well-known thesis on the subject. Probably the most lucid and notable contribution to the pathology of this subject is from the pen of the celebrated Virchow.[36] He points out that the many discrepancies in the ideas promulgated concerning the true nature of cystic chorion are due to incomplete knowledge of the villous structure in normal conditions. According to him, the villi consist of a prolongation of the same mucous tissue which forms the gelatin of Wharton in the cord. The villi have two essential portions—an epithelial covering (exochorion) and a substratum or body of mucous tissue (endochorion), which, non-vascular when the villi first appear as buds on the outer surface of the chorion, later contain blood-vessels. The proliferation of the epithelium which Heinrich Müller[37] regarded as the *point de départ* for the production of cysts, Virchow regards as the expression of regular and normal development. The buds or cysts are formed in the same way as in normal growth, and it is in the interior of the villus—not in its epithelium—that the particular and morbid transformation takes place. In effect, Virchow regards the cystic chorion as a typical form of myxoma, and he avers that he has found the same productions in other parts of the envelopes. Both Ruysch and Virchow have found these cyst-like bodies in the umbilical cord. Virchow noticed certain buds of the external epithelial covering of the villi which contained transparent cavities; these he called "physalides." Single large dilated cells containing a hyaline liquid he called "physalifores." Wedl had previously described them in his *Histological Pathology;* and Virchow, while confirming Wedl's observation, regarded them as accidental products. Ercolani interpreted their presence after another fashion, and as affording evidence of a different theory of cyst development.

Virchow further states that the mucous metamorphosis of cells seen in the villi of the chorion may disappear in fatty transformation, or the cells may be changed into fibrous elements, thus constituting a "myxoma fibrosum." This change I shall describe later.

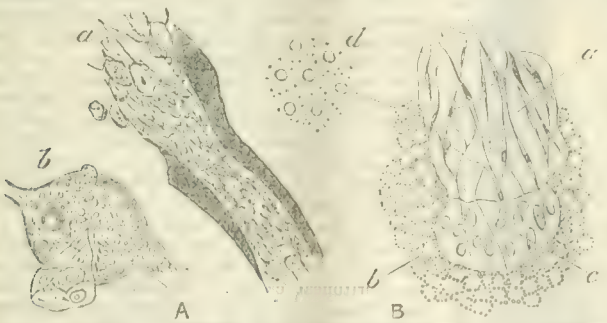


Fig. 4.—A *a*, Extremity of a villus in early stage of cystic degeneration, *a*, shows the first stage of enlargement in the cells of the villus trunk; *b*, a somewhat more advanced stage, showing by a line cells escaping from the ruptured capsules of a young cyst. (Priestley.)

B Terminal villus of cystic chorion, *a*, stellate connective tissue; *b*, *c*, inner and outer layers of wall; *d*, early stage of *b* (Braxton Hicks).

As long ago as 1858,[38] before I knew anything of the researches of Virchow, I had pointed out that the cysts of the chorion were not mere dropsical dilatations of the terminal villi, but that the fluid distending them, in the earlier stages at least, was formed or secreted in the interior of beautiful thin-walled cells, which had their origin in the centre of the villus. The microscopic examination I described in my lectures on the Gravid Uterus as follows:—"Placing a terminal branch under the microscope which seemed to the naked eye nearest to the normal condition, it was seen to be enveloped by a granular covering, probably derived from the altered decidua, the club-shaped extremities were observed to be distended with large nucleated cells, and bearing little resemblance to the small and more uniform cellules composing a terminal villus in a healthy state. By compression, the envelope bounding the villus could be ruptured, and gave egress to the cells. The fully developed cysts had two coats, like a normal villus, the external epithelial, the internal delicately fibrous, but firm and dense. An incision being made through these (if the preparation was fresh) what appeared to be a viscous or gelatinous fluid escaped from the aperture, and this was found to be contained in large transparent cells, with walls of extreme tenuity, assuming the polyhedral form from the pressure to which they had been subject. The entire contents had much the appearance of the vitreous humour of the eye, which has transparent partitions running across, separating the fluid into compartments; the presence of a nucleus, however, in each compartment clearly proved it to consist of largely developed thin-walled cells. In the largest cysts, the pellucid cells were not readily discernible, having probably undergone solution. Scattered over the vesicles and their connecting peduncles were little nodular projections, consisting of cellular buds for new branches, such as exist in healthy villi. The narrow stems uniting the cysts were fibrous with a cellular covering, and sometimes enclosed a small vessel full of blood. Fat granules were copiously deposited in the texture of both stems and vesicles."

There is no discrepancy between this account from actual observation and the view taken by Virchow, that the morbid change is a true myxoma. The only difference is that Virchow seems to look upon the distension of the villi as due to the accumulation of mucus in the inter-cellular tissue, while I found the distension produced during early development at least in the rapid production of thin-walled, nucleated cells. Possibly both may be right; it seems highly probable that, in the smaller cysts, large cells with fluid contents constitute the first stage of the disease, and, later, these cells form themselves into spaces traversed by trabeculæ of connective tissue, and containing the fluid. This is identical with the process by which the gelatin of Wharton is produced in the cord. The exuded fluid in both cases has all the chemical reactions of mucine. It is by no means uncommon to find in the extremity of a comparatively healthy villus one or more large transparent hyaline cells. These represent the beginnings of the cystic change, or the first transformation from the more uniform cell-structures which compose the parenchyma in a normal state.

Ercolani[39] (who wrote in 1876) differs *in toto* from Virchow and other authors in his view of the production of cystic chorion, and, disbelieving in its myxomatous origin, he regards Virchow's appellation for it as misleading. He, like Virchow and Robin, describes a villus as composed of two parts: one internal or parenchymatous (*tissu chorial* of Robin, mucous tissue of Virchow) which is in direct communication, and in fact continuous, with the chorion. Besides this is an external portion, which constitutes an outer envelope or casing to the villus (the exochorion of Robin). Before the villus penetrates the decidua, this outer envelope is constituted of an epithelium which belongs to the fœtal structures, but directly the villus is embedded in the decidua to form the placenta this epithelial envelope disappears, and its place is taken by a layer of cells derived from the decidua, which he calls the "glandular organ," because in this glandular organ he conceives is carried on the process of elaboration by which materials are provided from the mother's blood for the nutrition of the fœtus. Now it is from this outer envelope—the epithelial covering in the primitive chorial villus, or, if the disease begins later, from the glandular organ in the villi of the placenta—that, according to Ercolani, the proliferations take place which form the cystic disease of the chorion, and not from the mucous tissue or parenchyma, as stated by Virchow. Heinrich Müller had in 1843 declared that these morbid changes commence with an enlargement of the external envelope of the villi, and that later these buds or enlargements give place to internal cavities which become vesicles. Virchow so far agreed with Müller that the epithelium is the point of departure for the formation of cysts, but he contends that, in the production of vesicles, the parenchymatous or basic substance of the villi must penetrate the new epithelial product, thus carrying with it the mucous cells continuous with the chorionic structure, which are necessary to the production of the true myxoma. From this view Ercolani emphatically dissents, and he gives various details of in-

30 *De l'Art des Accouchements.*
31 *Handbuch der Mensch. Anat.*, 1820.
32 *Verhandl. der Gesells. für Gebürt.*, 1847.
33 *British and Foreign Medical Review*, 1855.
34 *Obstet. Trans.*, vol. i.
35 *Guy's Hospital Reports*, 1864.
36 *Die Krank. Geschw.*, t. i.
37 *Der Bau der Molen.*, 1867.
38 Lecture on Development of Gravid Uterus.
39 *Loc. cit.*

vestigation to sustain his position. Thus, besides his asseveration that the buds take their origin in the epithelial or glandular layer surrounding the villi, he points out what had before been indicated by Ancelet, that the vesicles in their development do not necessarily spring from the parent villus trunk, but take their origin in other vesicles, and that some vesicles not only proliferate from large vesicles, but also that the largest often spring from those which are much smaller. This he holds is quite incompatible with the idea of the mucous tissue from the chorion penetrating or sending prolongations into all the vesicles.



Fig. 5.—Extremity of a chorion villus, hypertrophied, and beginning cystic degeneration. The cellular structure seen at *h*, is the epithelial covering of the villus. Neoplasms are springing from the surface of the villus (*ee*), and large dilated cells (physalifores) are seen at (*g*). (From Ercolani.)

In limine Ercolani holds that there may be a formation of cyst-like bodies beginning in the epithelial envelope of a villus, when disease attacks the chorionic villi at a very early period. But when the chorion has united with the serotina to form the young placenta, the typical form of cystic degeneration begins in morbid proliferations of the decidual or glandular organ, and so the disease apparently belongs more to the mother than her offspring. It is worth while to appreciate this point, if it be true, as it may afford some clue to subsequent treatment, which must necessarily be on the maternal side. Ercolani's researches and speculations on this subject are marked by great painstaking and ingenuity, but I confess I am not convinced of the truth of his view as opposed to Virchow's. Ercolani has certainly contributed to produce some confusion in the pathology of the condition by describing myxoma of the chorion and myxoma of the placenta as different affections, and giving to each a separate chapter, while there can be no doubt that both are essentially the same disease with but slight modifications.

The general relation of the cystic chorion to the decidua is sometimes very distinctly seen in the incipient stages of the morbid change. Many years ago the late Dr. McClintock showed me in Dublin a preparation which is mentioned by Dr. Montgomery in his *Signs of Pregnancy*, in which a mass of cysts is enclosed between two layers of decidua—the decidua vera and the decidua reflexa. Dr. Graily Hewitt[40] has also figured a specimen in which both deciduæ are well shown, and the relation of the cyst-like structures to the serotina is delineated. When cystic disease is further advanced the relations of the various membranes become so confused that the vesicles are inextricably mixed up with the hypertrophied decidual structures, and separation of the two is impossible.

There are all possible varieties in the degree and stage of the disease to be met with, and the different appearance of the mass which is expelled from the uterus has given rise to a classification of these "moles," as they are called. Thus we have the "vesicular mole," in which the chief part of the substance passed consists of the pellucid cysts just described, varying in size from a pin's head to the size of a grape. With the cysts, however, is always mixed up a certain amount of a denser envelope—the altered decidua—which either adheres to the cysts or is loosened from them and expelled separately. If the thickness of the outer envelope of the mass greatly preponderates over the cystic structures within, we have another modification of the so-called "carneous mole," which may with propriety be named "carneo-cystic," to distinguish it from the other carneous mole I have described as a mere thickened decidua. In this the mass is made up of a more or less fleshy substance, granular in appearance, and blood-stained, with a small proportion of vesicles. Some time ago I carefully examined a specimen of this kind, which had been expelled from the uterus with all the symptoms of miscarriage. The mass was half the size of a cocoa-nut, and, when cut into, was seen to be composed of a granular dark red substance, interspersed here and there, at distant intervals, with vesicular bodies. In this case the chorionic villi had degenerated as in the more marked form of vesicular mole; but the decidua had become proportionately much more morbidly developed than the chorionic villi, and hence the different appearance of the mass. In this and in other instances I have repeatedly examined the microscopic structure of the granular matrix in which the cysts were sparingly or more amply imbedded, and I have rarely failed to find distinct evidences of a definite arrangement of glandular structure, such as exists in the normal decidua. All the elements were, however, enormously hypertrophied; the glandular particles were infiltrated with fat-granules and the *débris* of blood-corpuscles and crystals. The blood-vessels themselves were surrounded with fat-granules and molecules, and crumbling in degeneration. This fatty degeneration must cause a tendency to separation from the walls of the uterus. The mass then becomes a foreign body, which at length excites uterine contraction, and ends in its expulsion.

When cystic disease of the chorion is far advanced, the embryo either entirely disappears, or, if found, it is commonly shrivelled and wrapped in its amnion in the centre of the mass. In some rare cases, even when the embryo is found, no trace of the amnion is present. It has either not been developed, or, once formed, it has disappeared, and the shrivelled and distorted embryo remains attached directly to the inner surface of the chorion.



Fig. 6.—Cystic chorion forcing its way through the muscular walls of the uterus towards the peritoneum. (After Spiegelberg.)

Chorionic villi which have undergone cystic degeneration have a remarkable way of forcing themselves not only through the decidua, but into the very substance of the uterine walls. This is strikingly illustrated in a preparation in St. Thomas's Hospital, which is recorded in the *Obstetrical Transactions* by Dr. Cory. The woman from whom it was taken was forty years of age and had had eight children. When more than four months pregnant, she passed a large hydatid mole. Bleeding, with serous discharge, continuing, the uterus was eventually injected with perchloride of iron. The patient died very suddenly after, and it was found that the iron had penetrated to the peritoneal cavity. The uterus shows a portion of cystic chorion still attached to the interior of its cavity, and the cystic villi have forced themselves along the uterine sinuses so far down into the deep structures of the womb that they are close to the peritoneal surface. There was consequently very little tissue left between the cavity of the uterus and the peritoneal cavity. Somewhat similar cases have been recorded by Waldeyer and Jarotzky,[41] Spiegelberg,[42] and Volkmann.[43] (Fig. 6.)

Cystic degeneration of the chorion is essentially a disease of the membranes in early pregnancy. It has been supposed to begin before the allantois reaches the chorion, and, therefore, before the villi are supplied with vascular loops. That this cannot be always the case is proved by the fact that fœtal blood-vessels are sometimes seen in the stems of the diseased villi and in the vesicles, and also by the cases of partial myxom which have been recorded.

In early gestation, the whole outer surface of the chorion is furnished pretty equally with villi. Those which are to form the placenta, and which are imbedded in the decidua serotina, soon become more developed, and the rest, under ordinary circum-

[40] *Obstet. Trans.*

[41] Virchow's *Arch.*, Bd. xliv.
[42] *Lehrb. der Geburt.*
[43] Virchow's *Arch.*, xli.

stances, remain for a while stationary or retrograde. If cystic disease begins, it is generally at the crisis of development, when the placenta is about to take a definite shape, and the villi are concentrating themselves on the placental spot. Then the villi over the whole sphere of the ovum have about an equal growth, although they may be somewhat more luxuriant at the placental spot; and all may be alike affected by the myxomatous change. Not only do the villi destined to form the placenta dilate, but the chorial villi which should become atrophied increase in volume and hypertrophy. This accounts for the general appearance of the cystic mass when it is expelled from the uterus, the vesicles being pretty equally distributed everywhere through it. There are some few exceptions, in which the placenta is attacked by cystic change after the placenta is already localised; but the disease then rarely shows itself in an advanced form, the dilatations of the villi being comparatively small. Instances, however, have occasionally been recorded in which living fœtuses have been born with the placenta in a state of partial cystic degeneration, and some of these seem sufficiently authenticated by modern observers to be admitted.

Partial myxomas have been described in which one or more branches of villi alone have been affected, the rest remaining healthy and the child well developed. These cases are, however, rare. When the disease does occur, as before stated, it generally attacks all the villi alike. Still rarer are instances which have been recorded where a twin embryo has perished in early pregnancy, and has eventually been expelled with cystic degeneration of its membranes at the same time as a living child with its placenta healthy. Siebold gives an example of this, and Dr. Hall Davis has recorded another in the *Obstetrical Transactions* for 1862.

The crucial question, and one which has been much discussed, is, whether the disease of the chorion precedes the death of the embryo, and so causes its death, or whether the embryo dies first, and the cystic degeneration takes place subsequently, and is in some sense the consequence. Most modern authors regard the disease of the chorion as first in the order of events; but Mikschik,[41] Gierse, and Dr. Graily Hewitt have endeavoured to show that the disease is consequent on the death of the embryo. The reasons advanced for this view are, that, in many cases, the embryo has either been arrested in growth or has disappeared altogether; and, further, that in some twin conceptions one chorion has degenerated, the other remaining healthy until term. This view is vitiated, in the first place, by the recorded instances of living fœtuses where the placenta was cystic, notably by Martin, of Berlin,[45] Villers,[46] and Krieger,[47]; and, further, by the fact that we may have partial myxoma of the chorion with continued growth of the embryo. Graily Hewitt gives, as one of his reasons for regarding the death of the embryo as first in the order of events, its small size in all cases where the chorion has become cystic; the largest he had been able to find was Dr. Granville's example, in which the embryo was only one inch and three quarters in length.

In St. Thomas's Hospital, however, is a fœtus of from three to four months' growth, with cystic chorion fully developed. The fœtus is not shrivelled, as commonly happens in such cases, but seems as though, up to a certain time, it must have been fairly nourished, notwithstanding a very marked twisting of the umbilical cord. The largest portion of the placental mass had in this specimen undergone advanced cystic degeneration, but enough of the villi had, up to a certain time, remained capable of supplying nourishment to the fœtus. A time came at length when the distension of the uterus, from the rapidly-growing chorion, brought on uterine contraction and eventual expulsion of the contents. The placenta in this preparation is seen to be as large as that organ commonly is at the full time.

I take it, therefore, that both the direct and indirect evidence is clearly in favour of cystic disease of the chorion preceding the death, and in most cases being the cause of death in the fœtus. There may be exceptional cases where cystic degeneration takes place after the death of the embryo. This may be the case where one placenta of twins only is affected by disease; but this does not invalidate the main position; it only indicates that cystic change in the villi may take place both before and after the death of the embryo.

As to the cause of the disease, Virchow believes that the original fault is in the decidua, which, becoming inflamed and thickened before impregnation, is incapable of receiving and supporting the chorionic villi which try to take root in it. It is converted, so to speak, into a soil incapable of affording nourishment for normal growth, and the result is the production of a monstrosity, which acquires all the characters of a parasite, and kills the embryo by appropriating all the nutrient materials to its own vegetation. It may not be regarded as fanciful to remark that the various forms of mole seem not only to bear analogy, as previously remarked, to monstrous flowers and fruits, but also that the structural parts of these monstrosities find their counterparts in these abortive masses from the human subject. Thus, the carneous mole, with its overgrown decidua, may represent the deformed calyx, and the vesicular mole the distorted and over-developed corolla, being developed at the expense of the central embryonic portion.

Virchow's theory—that the cause of cystic disease in the chorion is to be found in a faulty condition of the uterine mucous membrane—is supported by the fact that the same woman will often produce several vesicular moles in succession, and Virchow asserts that in these women the decidua bears traces of inflammatory thickening, sometimes with polypoid excrescences on its free surface. Depaul[48] mentions a woman who had the affection three times. There is, nevertheless, abundant evidence to show that a woman may have living children at some later period, after being the subject of cystic disease of the chorion. The only objection to Virchow's view which strikes me is the fact, previously mentioned, that twin ova have been expelled in abortion, one of which had cystic chorion and the other not. It is difficult to understand, if disease of the decidua was the cause of cystic degeneration, how one embryo should be affected and the other escape.[49]

The last point in connection with this subject is the question: Can cystic or vesicular chorion ever occur in women without conception? This question came before a Court of Inquiry in India some years ago, and involved both the character of an unmarried woman and the reputation of a medical man whose opinion had impugned her chastity. The medical man collected the opinions of all the leading obstetricians in this country, and, although the balance of opinion greatly preponderated in favour of vesicular chorion being always the result of impregnation, there was at least one notable dissentient, who believed that the vesicles might be formed in the virgin uterus. We now know so accurately the way in which these vegetations are produced that doubt should no longer exist on the matter. With our present knowledge it would be just as reasonable to suppose that a child might be expelled from an unimpregnated uterus as a true vesicular chorion.

A portion of cystic chorion may be long retained *in utero* without giving rise to active symptoms, and thus unfounded suspicion may arise concerning the chastity of women when this is expelled. The late Dr. McClintock[50] specially called attention to this, and said "Hydatids may be retained *in utero* for many months or years, or a portion only may be expelled, and the residue may throw out a fresh crop of vesicles to be discharged on a future occasion."

There can be no doubt also of the fact, which is well illustrated in Dr. Cory's preparation previously described, that after a cystic mole has been expelled, a portion of the cyst growth may remain behind and proliferate in the uterine walls, thus keeping up exhausting discharges, and imperilling the safety of the patient. In these cases therefore the prognosis should be a guarded one. I need not say that cystic chorion must not be mistaken for true hydatids or acephalocysts, which on very rare occasions have been expelled from the unimpregnated uterus.

Morbid Changes in the Amnion.—The *Amnion* or innermost fœtal envelope bears a very close resemblance to a serous membrane. In its earliest development it may be seen raised like a blister over the whole dorsal surface of the embryo, and as it gradually grows away from the fœtus and becomes a more distinct cavity to surround it, it increases in firmness and density, and at length coalesces with the inner surface of the chorion to form the future bag of membranes. In the early stages of pregnancy the amnion does not always escape the effects of extravasation beginning in the decidual structures. The force of the blood extravasation may be such as to break down the resistance both of the chorion and amnion, and if the cavity of the amnion is invaded, the invariable result is the destruction of the embryo, with abortion sooner or later. The earlier in pregnancy this extravasation takes place, the greater the likelihood of the inner envelope giving way, for it is then most fragile and most easily ruptured. There is great variation in the amount of resistance offered by the amnion in different cases. This is notable even to the end of pregnancy, for we sometimes find the

[44] *Zeit. der Wien. Aerzte*, 1845.
[45] *Monat. f. Geburt*, Bd. xxix.
[46] *Schmidt's Jahrb.*, Bd. xxxix.
[47] *Ibid.*, 1864.

[48] *Leçons de Clin. Obstét.*, 1872.
[49] Underhill asserts that cystic chorion, in the majority of cases, is associated with a cancerous or syphilitic dyscrasia.—*Obstet. Gaz.*, 1879.
[50] *Clin. Mem.*, 1863.

bag of membranes of which the amnion forms an integral part so thin that the first uterine contractions produce escape of the waters, while in other cases the membranes are so tough as to impede the progress of labour and require puncture for its acceleration. Dubois[51] says the feeble resistance of membranes may be due to natural structure, I suppose as some women may have thinner skins than others, or it may be due to alterations consequent on inflammation. However produced, it may, by facilitating rupture and escape of the liquor amnii in early pregnancy and before the child is viable, lead to intra-uterine death, for it is well known that pregnancy cannot continue long after the entire evacuation of the amniotic fluid.

The question as to whether there is true inflammation of the amnion has been discussed, and various supposed pathological results have been pointed out. Jacquemier details three cases which he regards as clearly indicating the occurrence of inflammation on its free surface. One of the patients had peritonitis, and aborted five days later; another had been kicked in the abdomen at the third month, and although she went to the full time, there was a rapid development in size of the abdomen as the result of the injury, and a large quantity of liquor amnii was formed in the uterus. In all the cases the membranes were thickened and traversed by abundant vessels, and in one the containing fluid was cloudy and whitish in colour, with flakes like curd of milk floating in it, which were portions of false membrane detached from the free surface of the amnion.

The adhesions sometimes noticed between the amnion and the umbilical cord, between the amnion and the fœtus, are almost invariably associated with some malformation or monstrosity of the child, and have been attributed to inflammatory action. The difficulty in accepting this theory is the general absence of other inflammatory signs in such cases, besides the mere adhesion and its associated monstrosity.[52] The natural history of such malformations further points to some entanglements of embryonic structures in the process of development, these resulting in distortion and displacement of normal parts.

The condition which has received most attention in connection with the pathology of the amnion is what has been termed "Hydramnios," or superabundance of liquor amnii. The presence of a certain amount of fluid in the cavity of the amnion is necessary to the development of the fœtus, but in some cases it is so abnormally large as to endanger the life of the child, and if it does not necessarily bring peril to the mother, it at any rate places her in very grave discomfort. Dr. Kidd, who wrote on the subject in the *Proceedings of the Dublin Obstetrical Society* for 1878, limits the term "hydramnios" to those cases in which more than two quarts of amniotic fluid are present. The quantity of fluid is sometimes very large. Baudelocque gives one case where thirty pints escaped from the uterus; other authors give thirty or forty pints. Coming on suddenly in some instances, more slowly in others, the fluid so distends the uterus that it acquires a volume entirely disproportioned to the stage of pregnancy. The result to the mother is that she may suffer greatly from the distension. Respiration is impeded, and the patient may not be able to lie down night or day. The digestion is deranged from physical pressure, and the heart's action is disordered, while other secondary symptoms, such as œdema of the lower limbs and blueness of the countenance, may be superadded.

The effect on the child is to impede its development, and, if born alive, it is commonly too feeble to survive its birth. Frequently the child is affected with dropsy, hydrocephalus, or other complication. Of thirty-three cases mentioned by McClintock, nineteen children only were born alive; ten of these died a few hours after birth, and nine survived. Often the fœtus dies *in utero*, and may then be retained a considerable time after its death, thus prolonging the discomfort of the mother. The condition has a tendency to repeat itself in the same woman. I saw a patient some years ago in her tenth pregnancy, who was sent to me by Dr. Matthews Duncan, and who had suffered from hydramnios in nine out of the ten gestations, losing most of her children, the first pregnancy being the only healthy one.

There is an extensive literature on the subject, but little is known as to the cause or causes. Mercier noted traces of inflammation in the amnion, but Dubois and Desormeaux cite cases where there was no appreciable lesion of the membranes, and there are no constant appearances in the placenta associated with the condition. Churchill attributed it to excessive secretory activity in the amnion, and various other explanations have been given, but they do not add much to the precision of our knowledge of its causation.

In the case I have alluded to as occurring in my own experience, there was nothing to account for the phenomena beyond a short residence in India, which had impaired the general health, and I found no albumen in the urine.

It has been said to be rare before the fifth month, but in going through the museums, I find many examples of it in the earlier periods of pregnancy; and both from this and my own experience, I infer that it is far from infrequent in the first half of gestation. In St. Mary's Hospital there is a specimen in which the amniotic cavity is from three to four inches long, and the embryo is not larger than a horse-bean. In St. Bartholomew's, again, there is a large amniotic cavity with no embryo at all.

Merriman,[53] Robert Lee,[54] and others attribute hydramnios to a morbid state of the mother, and particularly to the effects of syphilis. That the liquor amnii may be affected by the state of the mother is evident from many facts. Dr. Duncan,[55] in a paper on Puerperal Diabetes, states that hydramnios is frequent in association with this condition, and sugar has been found in the liquor amnii. Two or three facts have beeen distinctly made out in relation to its pathology.

1. Scarpa[56] noticed a coincidence between this form of dropsy and the presence of twins. This has been fully confirmed by the observations of Winckel,[57] McClintock,[58], and others.

2. In pregnancies complicated with hydramnios, the child often presents some vice of conformation. Monsters are, in fact, common with this affection.

3. The children born with a superabundance of liquor amnii often present evidences of syphilis, and this whether they are born dead or alive.

4. Hydramnios is comparatively rare in first pregnancies as compared with others.

5. It is more frequent with female children than males. Of thirty-three cases collected by McClintock, only eight were males.

The impression derived from a careful study of all the circumstances is, that hydramnios is not a product of inflammation of the amnion, as some have supposed, but that it arises sometimes from constitutional conditions affecting the mother, sometimes from local causes. The idea of local origin, in some cases at least, is strengthened by the fact that it may occur with twins, one only being affected; and Charpentier mentions a case where the abdomen increased rapidly after local injury from a fall at the fifth month, and the woman was delivered of a dead child at seven months with seven to eight litres of liquor amnii. In this instance, the placenta was found to be diseased to a third of its extent. It would thus seem to be due to some fault in development, as cystic chorion is a fault of this kind.

[51] *Dict. en 30 volumes*, Art. Hydrométrite.

[52] Courty says when the phenomena are produced early, it is by the liquor amnii being absorbed, and the membranes then acquire adhesions to the integument of the fœtus. In others, inflammation is the cause, and there are false membranes formed from the amnion.

ON THE ALLEGED DANGERS OF STARCH-CONTAINING FOODS DURING THE PERIOD OF INFANCY.[1]

By ROBERT WILLIAM PARKER, M.R.C.S.Eng.,
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Sir George Cornewall Lewis, in his admirable essay on the Influence of Authority in Matters of Opinion, defines the "principle of authority" as the principle of adopting the belief of others, on a matter of opinion, without reference to the particular grounds on which that belief may rest. I do not think I am wrong in asserting that the belief in the dangers of starch-food during infancy is widespread, and generally accepted in our profession.

It appears to me that it may be advantageous to inquire into the grounds on which this belief rests; whether, in fact, it exists as an abuse of this principle of authority, and whether the grounds on which it rests are sufficient and trustworthy. In order to get a decided expression of opinion on this point from the Fellows present, I will somewhat dogmatically state the opinion I have come to adopt after many years' work in a children's hospital, namely, that the dangers of starch-foods are very greatly exaggerated. I may even go further, and say that I have never myself met with cases in which I could distinctly and directly trace disorder to starch-foods.

[53] *Synopsis*, etc., 1838.
[54] *Theory and Practice of Midwifery.*
[55] *Obstet. Trans.*, 1882.
[56] *Opuscoli di Chir.*, 1825-32.
[57] *Path. der Geburt.*
[58] *Diseases of Women.*

[1] A paper read before the Medical Society of London on April 4th, 1887.

Let me, however, lead up to the position I now hold. For my object in saying that starch-food is not so injurious *per se* as is usually represented is not to advocate artificial feeding in preference to nursing, but to draw attention to what I believe are the real and proximate causes of the immense mortality which obtains among young children, especially among the children of the poorer classes—namely, congenital debility.

The artificial feeding of infants is at present going on to an enormous extent, as may be judged by the great variety of artificial foods now in vogue, and the large way in which they are advertised, If, as a commercial maxim says, the supply is regulated by the demand, the demand must be large indeed.

It cannot be gainsaid that very many artificially-fed children are puny and weakly, and it has come to be generally accepted that the children are puny and weakly because they are so fed. On the other hand, an analysis of any 100 wasted and weakly children will show that a considerable number of them are breast-fed; and further, that of those which are being artificially fed, many were puny and weakly when artificial food was commenced, and that artificial food was either added to the nursing, or substituted for it, because the children were not thriving.

What inferences, then, are to be drawn from these facts? First and chiefly, that many children are congenitally deficient in the vitality and digestive power which are absolutely essential to their healthy development. Such children will be weak and puny on any diet. Such children as these, moreover, are just the kind of children we should expect to be born of women (of parents) themselves weakly, either congenitally or from acquired causes, such as irregular modes of living, drink, poverty—leading as it does to privation of every kind: food, fresh air, light, rest, etc. Can women exposed to such conditions as these be expected to give birth to strong, healthy children, or even to produce good milk in sufficient quantity to nourish their children properly?

Towards deciding the issue raised, I will give an analysis of 100 histories of artificially-fed children, under twelve months of age, taken from among my patients attending the East London Hospital for Children. I have not selected these cases, but have taken them just as they came to hand. I believe the results would not differ much if I had analysed 1,000 instead of 100, nor do I think that any very important divergence would have been found if the cases had been taken from private instead of from hospital practice.

An Analysis of 100 Cases of Artificially-fed Children.

In 3 cases the mother had died, and the child was being brought up by strangers.
In 2 cases (illegitimate) the mother had deserted the child, and it was being brought up by strangers.
In 1 case the child was separated from its mother because she got puerperal mania.
In 2 cases the mother had been sent to prison.
In 17 cases the mother was too weakly to suckle her child entirely.
In 30 cases the milk of the mother was "hungry milk," by which is meant milk "which does not seem to satisfy the child."
In 20 cases the milk-supply was deficient.
In 25 cases the mother was obliged to go out working during the day, leaving the child to be looked after in one way or another.

= 100 cases.

Otherwise stated, in 8 cases the mother was not available for nursing purposes. In 17 cases she was said to be too weak to nurse. In 20 cases the milk supply was deficient in quantity. In 30 cases the milk was deficient in quality; there was a plentiful supply, but it did not satisfy the child. In 25 cases the mother was poor, and had to earn a living for her family.

A third analysis of these cases shows that in 75 per cent. the milk was deficient in quality or quantity from one cause or another. This is another way of saying that the mother herself was deficient in power or overtaxed in strength, obliged, in fact, to be doing heavy manual work during her pregnancy, and up till within a few days or hours even of her confinement. One of the women had had thirteen children in ten years. Several of them had had three, four, or five children in three, four, or five years—that is to say, a child every year. In a few cases there had been a fair supply of milk, but the mother had been advised to feed the child, and not to suckle, because she was of a tubercular habit. One or two of the women were syphilitic, and had not suckled on this account. In 35 per cent. of the cases the mothers were acting under medical advice in not suckling their children. In 92 per cent. of the cases the children had been suckled for varying periods (from a few days only up to weeks or months); in only 8 per cent. of the cases the children had never had the breast at all.

The foregoing details may be finally summarised; they show that in a very large percentage of cases the lowered health-status of the mother is obviously the reason why artificial feeding of their children has to be adopted. It does not need any long experience to enable one to predicate that if the mothers are weakly their offspring likewise will be weakly. It follows, therefore, that the reason why so many children are fed on artificial food is that they do not thrive on the breast-milk of their mothers, or that they do not thrive on that alone.

Thus, in estimating the causes and treatment of marasmus and other kindred diseases in infancy, it seems to me that too little stress is laid on the congenital debilities under which vast numbers of children labour, and too much stress is laid on artificial feeding, especially on the injurious effects of starch-containing food. It is, as I have said, on this point that I particularly desire to learn the experience and the opinions of the Fellows of this Society. The extent to which this starch-food theory is carried and emphasised by the leading authorities in children's diseases may be gauged, in some measure, apart from their writings, by the efforts now being made by the purveyors of infants' food to outdo each other in the completeness with which all starchy particles are broken up into less dangerous and more digestible compounds.

By none, more dogmatically than by me has this doctrine been promulgated in years past. But latterly a more independent and wider view of the subject, its proximate as well as its predisposing causes, have induced me first to question the truth of this starch dogma, and now to doubt it altogether. I stand forward to-night an avowed sceptic of the doctrine that starch-food *per se* is injurious to the infant organism. Let me be quite clear. I do not question the immense value of good maternal nursing, nor underrate the dangers and disadvantages of artificial feeding, nor that infants are unable to digest starch. I simply question the truth of the belief that starch foods are actively injurious, and for the following among other reasons: That many and many a child is now alive and well to testify against such a doctrine; that in years gone by, before malted foods came into vogue, hundreds of children throve upon milk thickened with a little of one or other of the common starch-containing cereals; that there are no experimental investigations to warrant such an assertion; that, as is well known, animals, when fed on starch, do not get rickets and the diseases usually attributed to starch-feeding—they die of inanition; that the starch taken in with the food passes out with the fæces unaltered. If it could be shown that the starch was broken up into other and delcterious compounds, there would be something to go upon, but, as a matter of fact, the starch passes out of the body unchanged.

I cannot doubt that much harm has resulted from the almost exclusive attention which has latterly been bestowed on this element in infantile dyspepsia. It seems, not infrequently, as if the last word had been said, the last effort made, when malted food has been ordered. The question is no mere quibble. So long as we teach and act on the supposition that artificial food is injurious chiefly on account of the presence of starch, so long will the far more important factors continue to exist and to increase.

One of the most deplorable matters in this connection is the growing use of artificial foods. If prepared so that the starch is all or nearly all reduced, there is an idea abroad that they may be safely ordered and given; this idea is not alone confined to members of our own profession, but prevails largely among the public. As a result, much less cogent reasons now suffice than formerly to warrant the substitution of artificial food, either in part or entirely, for the breast-milk. Unfortunately, the privation of mother's milk is seldom the only privation which results from the practice of artificial feeding. Among the poorer classes—and it is essentially among these classes that the worst effects of artificial feeding are seen—deprivation of the mother's milk means deprivation of a mother's care, of the thousand and one little attentions which are as essential as suckling to a delicate infant. Quite irrespective of the diet itself, artificial food needs immense care in its modes of preparation, and I find that the troubles which are attributed to this kind of food, as often as not depend on its faulty preparation and administration. Not in this particular only are the mothers wanting in experience and knowledge. In poor homes, where life is a perpetual scramble, a veritable struggle for existence, there can be very little of that home-teaching which is such an important element in successful housekeeping in better stations of life; the girls grow up, marry, and become mothers without having been

taught any of the duties which pertain to motherhood. Among the better classes there is less mortality among the infants, for all the conditions of life are better. Nevertheless, there are many weakly, athrepsic, and artificially-fed children even among the richer classes, for the congenital debilities of which I have spoken obtain also among these classes; after birth, however, the children, being much better cared for, gradually overcome this debility, and finally grow up notwithstanding.

The advantages of suckling do not rest entirely with the infant. Besides the popular tradition that a woman does not generally conceive while suckling—a tradition I hold to be well founded—it is clearly advantageous to the mammary glands that their function should be allowed to go on in a normal manner; lactation should come to an end after parturition as gradually as it develops into activity during pregnancy. Rapid child-bearing is very debilitating; this is especially the case among poor, overworked, underfed women, and, in my opinion, is one of the most potent of the debilitating influences with which we have to deal in this connection. In a certain proportion of the cases, I find that mothers have adopted artificial feeding because they are not strong enough to nurse. I should like to raise this question, and learn the opinion of Fellows of the Society upon it. I have met with a few undoubted cases, where such a cause, in some shape or other, appeared to be operative; but the cases are certainly uncommon, and it may, I think, be justly asserted that the causes are preventible.

In my analysis I stated that in 35 per cent. of the cases the mothers were acting under medical advice in not suckling their children. Even if the cases be excluded in which there was some physical reason to necessitate such a course, still the proportion of cases is large in which mothers desist from suckling with the consent of their medical advisers; and I am inclined to think that the habit of not suckling is largely on the increase—that slighter causes suffice to justify it now than formerly. Among reasons given and accepted as sufficient are the following—tuberculosis or syphilis in the mother. For myself, I may say that I have never met with a case in which a mother has given any constitutional disease to her own offspring through suckling it. As regards tuberculosis—a very transmissible disease in some families—it would be difficult to prove that it was conveyed by suckling the infant. Surely tendencies to a disease are much more likely to be derived from the far more intimate relation between the mother and fœtus *in utero* than from suckling. As regards syphilis, Colles's law is not known to have any exception.

Not so many years ago, before these artificial foods had been invented, wet nurses were in great request. Such an arrangement was admirable when the supply of milk was sufficient both for the child and the nursling, and when both were allowed to partake of it; but it was disastrous when the child had to give place to the nursling, as was too often the case. But other evils and misfortunes than this tended largely to bring wet-nursing into disuse, namely, the danger of conveying disease either from the foster-mother to the child, or *vice versâ*. I am inclined to think that it was this occasional conveyance of disease to or from a suckling infant which is responsible for the wide-spread belief that certain dyscrasiæ or constitutional conditions may be conveyed by a mother to her child through the breast-milk. My own experience, however, does not furnish me with a single example in point. The mother who bears a child will impress on it any constitutional peculiarity she herself possesses; it appears to me quite impossible that her milk can subsequently convey any further infection. Thus I think that to desist from suckling because the mother may be tubercular is a mistake as far as the child is concerned. The normal discharge of the maternal duties during a normal period, for reasons already alluded to, is clearly as advantageous to the mother as to the child.

I now approach the end of my thesis. The Fellows of the Society will see, from what has preceded, how I have been gradually led to change my views, and have come to regard infantile athrepsia not as the result of artificial feeding, least of all as the result of starch-containing foods, but as a congenital condition—a condition due to the untoward surroundings and mode of life of their parents.

As to the remedies for such conditions, I can do no more than just hint at them. They must be curative and preventive. I will not enter on the very large subject of foods and of diet for such children. Clearly there can be no hard-and-fast line, for there is a strong personal element in each individual case. Briefly, I should say, urge a mother to suckle, entirely if she can, or in part, especially when the child is weakly, and while the child is young; in other than breast-milk must be used, be careful to have it fresh and good and adequately diluted. If a child thrive on milk, so much the better—let well alone; but if artificial food must be added, insist on some simple food, in moderate quantity, carefully prepared and administered, rather than upon some highly elaborated and largely advertised nostrum of the exact nature of which you are ignorant. Let it be remembered that fresh foods are far better than prepared foods, and that the processes of pancreatising and malting tend rather to destroy this freshness.

As regards preventive measures, seeing that I attribute far more influence to the congenital debility and home surroundings of these children than to starch-foods, it will be obvious in what way I should seek to lessen not only the amount of this infantile marasmus, but also the causes which lead to it. So long as adverse conditions of life persist, so long will be born marasmic and wasted infants. For such cases the conversion of the few grains of unaltered starch into dextrose, which each individual child daily consumes, will continue to prove a mere delusion, and be utterly inadequate to affect the question one way or another. Our sanitary inspectors would pronounce absolutely against the wholesomeness of milk produced by cows fed in such places as are occupied in every large town by crowds of child-bearing women, and would condemn the places as unfit for the rearing of cattle intended for human food.

Has not the time come for a reconsideration of the starch dogma, and for a protest, by the whole profession, against the continuation of a system of local government which permits human beings to be bred, born to live and die in holes long since declared unfit for the animals on which they feed? It seems doubtful what will be done with the funds now being collected all over the country, and known as the Women's Jubilee Offering. Can a more worthy object be imagined than the inauguration of conditions of life and living, more suitable than at present obtain, for thousands of the mothers, wives, and children of the poorer classes in most of the large cities and towns of wealthy England?

ON THE REFRACTIVE INDICES OF SOME PATHOLOGICAL FLUIDS.

By C. A. MAC MUNN, M.A., M.D.Dub., F.C.S., Wolverhampton.

In the hope that an examination of the refractive indices of various pathological liquids would help as a means of distinguishing them from each other, I have made a series of observations on this subject.

I may say, however, that I have not arrived at any very definite result from a utilitarian point of view; still, it is possible that, by-and-bye, the calculation of the refractive index, taken in connection with other facts, may be found useful in the diagnosis of pathological liquids. It is for that reason that I venture to publish these preliminary results, and I regret that I have not been able to tabulate a more extensive series of measurements. For the specimens examined I have to thank my friends Dr. Saundby, of Birmingham, and Dr. Batterham, late House-Surgeon at the Wolverhampton Hospital, now of St. Leonard's. I may refresh the memory of any one who may care to look at these figures, and who may happen to have forgotten his "Physics," by briefly showing how to get the refractive index of a liquid. The index of refraction of a prism is the ratio of the sines of the angles of incidence and refraction[1]; or, if μ = refractive index, A = angle of prism, i = difference between direct reading and deviation reading, then we have

$$\mu = \frac{\sin \frac{1}{2}(A+i)}{\sin \frac{1}{2} A}. \quad (1)$$

In the case of liquids, these are enclosed in a hollow glass prism, so constructed that, when filled with the liquid, the refracting angle of the latter shall be a certain angle, generally 60°. My hollow prism was made by Browning, of 63, Strand. A spectroscope, capable of being used as a spectrometer, is necessary; and I may say at once that the ordinary chemical spectroscopes, which are advertised as being fitted for the calculation of refractive indices, are generally useless for the purpose, owing to their prism tables being fixed; for the prism has to be set at the minimum angle of deviation in the case of each liquid examined. In Hilger's spectroscopes, the prism table is always made movable for this purpose. I need not here describe how to get the direct reading of the slit, and how to get the deviation reading when the prism is set at the minimum angle of deviation, as full directions for the adjustment of a spectrometer will be found in Glazebrook and Shaw's *Practical Physics*, and in the *Physical Optics* of the former

[1] "If a ray of homogeneous light fall on a refracting medium at an angle of incidence ϕ, the angle of refraction being ϕ', then the ratio $\frac{\sin \phi}{\sin \phi'}$ is constant for all values of ϕ, and is the refractive index for light of the given refrangibility going from the first to the second medium." (Glazebrook and Shaw.)

author, also in Kohlrausch's *Physical Measurements*. A book of mathematical tables, such as Chambers's, is also necessary.

An example will now make the method of calculation clear. Setting the collimator tube and the telescope tube so that their axes are in a straight line, and illuminating the slit with the sodium flame, having the prism removed from the table, and taking all the precautions mentioned in the above books, we find, for instance, that the reading of the vernier is 27° 13′. The hollow prism is now filled with the liquid—in this example, hydrocele fluid—and the prism set at the minimum angle of deviation for the sodium line; the intersection of the cross-wires of the telescope tube is now made to coincide with the yellow sodium line, the tube clamped, and the reading taken, when it is found to be 51° 49′; hence the angle $i = 24° 36'$. The angle A of prism being 60°, we substitute these data in the above formula (1), which now reads:

(2.) $$\mu = \frac{\sin \frac{1}{2}(60° + 24° 36')}{\sin \frac{1}{2}(60°)} = \frac{\sin 42° 18'}{\sin 30°}$$

Looking up the natural sine of 42° 18′ in the *Mathematical Tables*, we find it to be 6730125, and similarly that of 30° = 5000000, therefore

$$\mu = \frac{6730125}{5000000} = 1.3460$$

to four places of decimals, all that is required. But this only gives the refractive index, which is dependent upon the density of the liquid, and therefore on its temperature. The lower the temperature the greater the density, and therefore the greater the index of refraction. In order to compare the refractive energies of different liquids, "a function of the refractive index is required which does not vary with the temperature, and is therefore constant."

Table of Refractive Indices.

Fluid.	μ Refrac. Index.	Direct Reading.	Deviation Reading.	Difference $= i$.	Sp. Grav. or D.	Specific Refract. Energy.	Remarks.
Urine of case of urticaria.	1.3426	15° 52′	40° 12′	24° 20′	1.030	.3326	
Fluid from ascites.	1.3365	27 13	51 5	23 52	1.010	.3331	
Albuminous urine.	1.3378	27 13	51 12	23 59	1.013	.3334	Recovering from acute Bright's.
Urine	1.3374	27 13	51 10	23 57	1.012	.3334	Chronic Bright's
Urine; chronic bronchitis.	1.3413	27 13	51 27	24 14	1.023	.3336	
Urine	1.3378	27 14	51 12	23 58	1.012	.3338	
Fluid from ascites.	1.3365	27 13	51 5	23 52	1.008	.3338	Hepatic cirrhosis; second tapping.
Albuminous urine.	1.3378	15 52	39 51	23 59	1.011	.3341	Bright's (recent)
Pericardial fluid	1.3417	15 50	40 6	24 16	1.017	.3359	General tuberculosis; no pericarditis.
Fluid from pleura.	1.3430	15 52	40 15	24 23	1.020	.3362	Acute pleurisy.
Hydrocele fluid	1.3404	27 13	51 23	24 10	1.012	.3363	Patient aged 64.
Hydrocele fluid	1.3447	27 13	51 43	24 30	1.021	.3376	Two months' duration; aged 56.
Fluid from pleura.	1.3451	27 13	51 45	24 32	1.020	.3383	First tapping: boy, aged 10.
Ovarian fluid ..	1.3460	27 13	51 49	24 36	1.022	.3385	
Hydrocele fluid	1.3460	27 13	51 49	24 36	1.022	.3385	Second tapping; first 6 yrs. ago.
Urine	1.3438	15 46	40 13	24 27	?	?	Normal.
Urine	1.3421	17 16	41 35	24 19	?	?	Normal.
Pleuritic fluid..	1.3387	27 11	51 14	24 3	?	?	"Heart-disease"
Pleuritic fluid..	1.3451	27 13	51 45	24 32	?	?	Several weeks' standing.
Hydrocele fluid	1.3417	15 54	40 10	24 16	?	?	Congenital.
Urine	1.3382	27 13	51 14	24 1	?	?	"General dropsy."
Aqueous of eye of ox.	1.3360	15 31	39 21	23 50	?	?	
Vitreous of eye of ox.	1.3339	15 45	39 26	23 41	?	?	
Vitreous of eye of ox.	1.3347	15 46	39 31	23 45	?	?	
Pericardial fluid	1.3421	15 48	40 6	24 18	?	?	Acute pericarditis.
Cerebro-spinal fluid.	1.3365	15 49	39 41	23 52	?	?	Tubercular meningitis.

Gladstone and Dale have found that if μ be the refractive index, and d the specific gravity, $\frac{\mu - 1}{d}$ is independent of the temperature. This formula represents the specific refractive energy of each substance. In the above case, the specific gravity was found to be 1.022, hence we substitute for the formula

$\frac{\mu - 1}{d}$ this, namely: $\frac{1.3460 - 1}{1.022}$

or .3385, which is therefore the specific refractive energy of hydrocele fluid.

In this way the calculations in the following table were worked out, of which the first fifteen are arranged in the order of the gradual increase of the specific refractive energy.

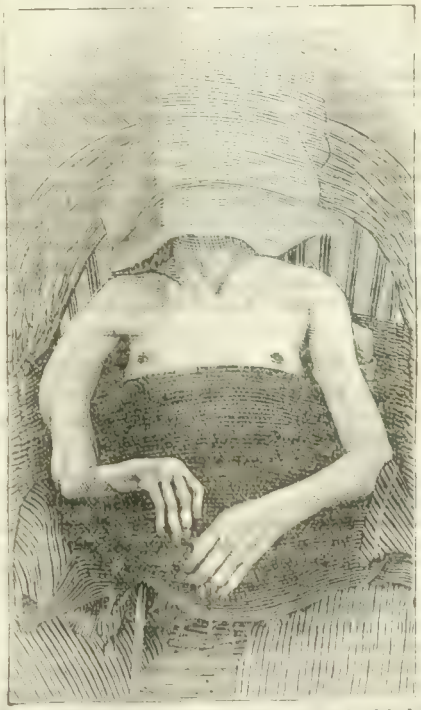
It will be noticed that the specific refractive energy of urine is low, as is also that of ascitic fluid, and the refractive index of cerebro-spinal fluid is also very low. The specific refractive energy of pleuritic fluid is higher than pericardial fluid, and that of ovarian fluid higher than either, except in one instance. It will also be noticed that urine of specific gravity 1030 has a lower specific refractive energy than the albuminous urine of specific gravity 1011.

A CASE OF MOLLITIES OSSIUM IN THE MALE.

By SIDNEY BARWISE, M.R.C.S.,
Late Resident Surgical Officer, General Hospital, Birmingham.

Mollities ossium is such a rare condition, especially in men, that no apology is necessary for recording the following case.

A. M., aged 31, married, an engraver, consulted me on account of pains in his bones. He is an only child, and has no sign of syphilis, either inherited or acquired. When thirteen months old, his mother says, he could walk; he was neither bow-legged nor knock-kneed; as a boy he was a very fleet runner. When three, he had whooping-cough; but his mother never noticed any change in his chest till the last year or two. When six and a half, he had scarlatina; and, whilst convalescing from it, he was knocked over by a dog, and received an injury to his right knee, for which he was taken to the General Hospital; he remained there for ten months, when his leg was amputated, and he left one month afterwards. He became a highly skilled workman, and married when twenty. Seven years ago, he slipped and broke his left thigh, and was again admitted into the General Hospital. He left that institution twelve months afterwards with the



fracture still ununited. A year after this he broke his left humerus; it united in a month, leaving no deformity. Three years ago, he noticed a dull aching in both arms, the least jerk causing severe pains in the muscles and bones. Eighteen months ago, his bones commenced to give way and bend until he assumed his present condition, described below. He has five children, aged 10, 7, 5, 3, and 1. The

three eldest are healthy; the two youngest are markedly ricketty, the elder of the two has undergone an operation for bow-legs. The patient's mother is alive and healthy; his father was a man of good bodily health, but grieved so over his son's condition that he became deranged and destroyed himself.



From a photograph taken when aged 5.

At the present time, the patient's body appears to have fallen into his pelvis; his spine forms more than a semicircle, his head resting close to the pelvis. His sternum comes outwards above; it then bends upon itself to reach the chest, on a level with the seventh rib. It is, the man says, crumpled up with sitting so long. The right humerus describes a curve of three-fourths of a circle, curving away from the body. The right radius and ulna are bent at about an angle of 140° towards the ulnar side, three inches above the wrist. The left humerus (the one that was broken) appears normal. The left forearm is bent anteriorly at its lower third. He has an ununited fracture of the left femur. All the bones can be bent by applying slight force. He is a very intelligent man, and very sensitive about his condition.

THE SEQUEL TO A CASE OF GASTRO-ENTEROSTOMY.

By ARTHUR E. BARKER, F.R.C.S.,
Surgeon to University College Hospital; Teacher of Practical Surgery at University College.

In the JOURNAL of February 13th, 1886, I recorded a successful case of gastro-enterostomy for cancer of the pylorus, and having watched the patient subsequently as long as possible, I am now able to furnish further details as to the subsequent course of the disease, and the effects of the operation. This being a new operation, it is desirable that every item of information regarding it which it is possible to collect should be recorded.

The patient was operated on on January 4th, 1886, at which time the cancerous mass in the stomach was about the size of half a small orange, some few glands being evidently infiltrated in the gastro-colic omentum. She died exactly one year and one week after the operation of generalisation from the cancerous disease. When she left hospital about two months after the operation, she had considerably improved. She was able to walk about a little, which, considering that she had been bed-ridden for six months before she had come under our notice, indicated a considerable gain in strength. I next saw her at her home May 4th, 1886, four months after the operation. She had then still further improved. She walked into the room looking very well and cheerful, and seemed to have gained flesh since last seen. She said that, with the exception of potato, she could take all ordinary diet in moderation. She suffered from dyspeptic troubles, and required conf. sennæ to keep the bowels regular; otherwise she did not complain, and all vomiting had ceased. She was rejoiced when I told her she might go out to walk. I could not detect any change in size or shape of the tumour on manual examination.

After this I saw her at intervals of about a month, and observed no change in her condition until the autumn. Up to then she seemed to eat fairly well, and spoke of enjoying a little beefsteak and roast mutton, with green vegetables. These she was able to cook for herself, and to manage other light household duties. She had occasional attacks of what she called "spasms," which appeared, from her description, to be due to constipation and flatulence. For these she consulted a medical man not far off, who was kindly attending to her. This gentleman (Mr. Lake) tells me that she was able to go to his house, and appeared fairly well. In the autumn, however, she began to get weaker, the characteristic languor of the cancerous cachexia became more and more evident, and she occasionally vomited. At about the beginning of November I found her confined to bed, very weak, and also suffering much pain in the tumour; she was occasionally sick also. The growth was now for the first time sensibly enlarged to the hand. From this time she grew steadily weaker, and suffered much pain, which was relieved by Mr. Lake with anodynes. When I next saw her I found the tumour had become fixed to the abdominal wall, and was coming forward through the latter. On December 2nd I heard from the patient's brother that the tumour had come fully to the surface, and had burst on the day before. After this I did not see the patient, but she was seen by some of my friends, who tried to persuade her to re-enter hospital, in order to have proper attention in her very distressing state. She persistently refused, however, not wishing that any *post-mortem* examination should be made in her case, though very grateful to the end for all that had been done for her. After the external rupture of the growth she lingered on in great weakness and suffering until January 11th, 1887, when she died of exhaustion. No *post-mortem* examination could be obtained, to my great regret.

It is too soon to pronounce upon the position which this operation is to take among regular procedures, but in this case, at all events, there was speedy convalescence, considerable improvement in the general condition for at least nine months, and probably some prolongation of life.

In conclusion, I cannot think that this operation ought to be done in extreme cases, where the patient is quite worn out by disease and suffering. In those instances, however, where the pyloric disease is comparatively early, but where the presence of infiltration of the glands forbids us to hope for thorough extirpation by pylorectomy, it may occasionally prove of great use.

CLINICAL MEMORANDA.

OLD-STANDING VALVULAR DISEASE OF THE HEART.

It was with great pleasure I read Sir Andrew Clark's instructive articles in the JOURNALS of February with the above heading, for my opinions have become much modified with reference to heart-disease during the three years I have been in practice in this Island. It has fallen to my lot here to examine many young and middle-aged men for the army, navy, and naval reserve, among whom I have found much valvular disease. I am sorry now I have not kept a record of all these cases; but I well remember, among the first six examined for the naval reserve, three had systolic regurgitant murmurs; and now, looking over the official reports of the last four months of those presenting themselves for the army and militia, I find, out of thirty-one candidates, I have rejected nine for heart-disease. Now it becomes of interest to notice what is the general appearance and condition of other organs of those affected. They are for the most part strong, robust-looking fellows, who say they have not had a day's illness in their lives; a few own to having had fever when they were young, presumably rheumatic. On further examination, the apex-beat is in the right position, or nearly so, there is no congestion of the bases of the lungs, the extremities are well supplied with blood, and the pulse, as a rule, regular; in fact, otherwise they stand a good chance of passing the severe examination for the army. One point has impressed itself upon me—their deficient chest-measurement. The murmur is generally that of mitral regurgitation, sometimes direct, but rarely have I found the aortic valves affected. The causes of this state of things are not hard to find in the Isle of Man. Rheumatic fever and

rheumatism are household complaints, and the Manx people having intermarried to an alarming extent, one often elicits the answer: "My father (or mother) was troubled with his (or her) heart." But that they are suffering little inconvenience is proved by the hard work in which they are engaged, for the most part in the fisheries, undergoing hardship and exposure for several months in the year. With so many cases before one of valvular disease in those enjoying good health, one can but come to the conclusion that much heart-disease is serious only in proportion as it has a tendency to depart from a quiescent state, producing secondary symptoms, or occurring in those who are determined to live a fast and unnatural life. Otherwise one is not justified, as I think, in resigning them to a glass-case existence, or materially altering the habits of many who seem to have found the art of walking with comfort and freedom on the edge of a precipice.

A. Primrose Wells, M.A., L.R.C.P., Surgeon to the Household of His Excellency the Lieutenant-Governor of the Isle of Man.

PREVENTION OF EPILEPTIC FITS.

Thinking the following treatment for cutting short and aborting an epileptic fit might be of interest, I would ask you to allow me a little of your valuable space to record it.

A lady, aged 23, has been under my care for nearly two years, suffering from epilepsy, which began about five years ago, she attributing it to a knock on the head from a plank a man was carrying. These fits are both of the *petit mal* and *haut mal* varieties, and were very frequent when she first came under my observation, but she can nearly always make them abort by taking a draught of cold water when at hand; not always having it within reach she requested me to give her something she could carry about with her. I gave her some nitrite of amyl globules, five minims in each, and directed her to break one in her pocket-handkerchief and inhale it when she felt an aura. This remedy she has seldom found to fail, and moreover it frequently cuts short a fit, especially in the first stage. I have frequently found this remedy useful in similar cases.

London. F. W. Devereux Long.

THE TREATMENT OF TONSILLITIS.

In the Journal of January 3rd, 1885, Dr. G. Partagas recommends the local application of bicarbonate of soda in tonsillitis "before the pain of swallowing is excessive." Since that date I have tried this treatment in a large number of cases, and have invariably found it give great relief, not only in the early stages of the disease, but also when suppuration seemed inevitable. Many patients who were quite unable to swallow even liquids without acute suffering were, in the course of an hour or two, almost entirely free from pain, and in the course of four or five days the disease was cured. I advise the patient, having moistened the tip of the index finger, to dip it into the powder and then rub it gently all over the tonsil; to repeat this every five minutes for half an hour, and then once every hour for the rest of the day. After that two or three applications a day are sufficient until the inflammation has subsided. Since I commenced this treatment I have never yet had to incise an inflamed tonsil. In one case where suppuration was manifest, the abscess burst under pressure of the finger. The last case I treated was a young soldier just out from home who was suffering from follicular tonsillitis of both glands, with grey patches of exudation, accompanied by a certain amount of fever. He was discharged cured in four days. I can strongly recommend all who have not yet used this treatment to give it a trial.

W. J. Baker, L.R.C.P.Lond., M.R.C.S.Eng., etc., Surgeon M.S.

Ferozepore, Punjab.

SURGICAL MEMORANDA.

STIFFNESS OF THE GREAT-TOE IN MALE ADOLESCENTS.

In the last two years I have seen three cases of stiffness of the metatarso-phalangeal joint of the great-toe (in one case both great-toes being affected). My patients were, like Mr. Lucy's, all young lads, and two were errand-boys. I have found the condition such as Mr. Lucy describes, but, unlike him, have found a history of rheumatism in the family of each patient, though not in himself. The treatment adopted has been the ordinary one—better-fitting boots and rest, together with iodide of potassium internally, and the local application of iodine and iodide of potassium ointment, the basis being lanolin. In no case did I obtain a cure; but all were relieved, one considerably so. None of my friends had met with similar cases, nor had I seen any mention of them till Mr. Lucy's communication. If I get another case, I intend to try a continuous current to the joint and the extensor muscles. I believe the cause to be such as Mr. Lucy suggests; but I shall examine my next case under chloroform, in order to make sure how large a share pain may take in limiting the movement. Certainly the stoppage at a straight line is so abrupt that one would expect to find the condition not at all improved under anæsthetics.

T. Jenner Verrall.

Brighton.

WIRING FRACTURED PATELLA.

On January 13th, I was asked by Dr. Connan, the resident medical officer of the Amalgamated Friendly Society, to see T. S., one of the club members, who, upon New Year's Eve, had fallen down whilst the worse for drink, and broken his patella. He was partly dragged and partly carried by his companions some distance to his home, and, when examined, he was found to have sustained a transverse fracture, with a very small lower fragment. On the 14th, the knee-joint was very swollen and painful. With thorough antiseptic precautions, using Lister's spray, and assisted by Mr. Watson and Dr. Connan, I made a free incision into the joint, washed out a great deal of dark fluid blood and floating coagula with a 1 in 40 solution of carbolic acid, by hard scraping removed the fibrinous deposit from the fractured surfaces, placed a drainage-tube in the postero-external angle of the joint, fastened the fragments together with thick silver wire, sifted some iodoform into the joint, closed the wound accurately, and covered it with dressing upon a long splint posteriorly. In six weeks he walked a distance of a mile and a half to see me. His temperature never rose above 99.5.

Tunbridge Wells. Cleland Lammiman, F.R.C.S.

A NOTE ON THE MOBILITY OF THE CÆCUM.

In a paper by Mr. Treves on Hernia of the Cæcum, in the Journal of February 19th, he calls attention to the mobility of that portion of the intestine. He remarks that, out of a hundred cases examined, in eleven instances the cæcum could be made to touch the liver. Within the last six months two cases have come under my notice confirmatory of Mr. Treves's statement. In the first case, during an abdominal section for intestinal obstruction, I found a cancerous cæcum lying close under the liver. It was not until I had drawn the mass out of the wound, and carefully examined the adjacent intestine that I was convinced that I had to deal with the cæcum; and the recognition was the more difficult as no appendix vermiformis, either then or on careful examination after excision, could be distinguished.

The second case was the removal of a very large ovarian tumour with much solid contents. The sac was everywhere adherent. Close under the liver I clamped a broad adhesion, which seemed to extend up to the under surface of that organ. Subsequently I discovered that the adhesion, which I had fortunately clamped close to the surface of the sac, was at the tip of the appendix vermiformis, and that the cæcum was placed directly in contact with the liver.

Plymouth. Paul Swain, F.R.C.S.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

UNIVERSITY COLLEGE HOSPITAL.

FIVE CASES OF TUMOUR OF THE JAWS TREATED BY EXCISION.

(Under the care of Mr. Christopher Heath.)

[We are indebted for the notes of the cases to Mr. Pollard, Surgical Registrar.]

Case I. *Ossifying Sarcoma of Upper Jaw: Excision of the Jaw: Recovery.*—S. E., a married woman, aged 36, was admitted on June 15th, 1886. She was not aware that any member of her family had suffered from new growths. She stated that about twelve months previously she noticed a hard and painless swelling of the gum of her left upper jaw. She was at the time suffering from toothache in her left wisdom tooth, and attributed the swelling to that cause. About five months later the anterior surface of the jaw became enlarged, and since then

the swelling had steadily increased in size. On admission the left upper jaw was much enlarged, and of bony hardness throughout. The mucous membrane of the alveolus was much stretched, but quite healthy. The left half of the hard palate was considerably depressed; the mucous membrane covering it was superficially ulcerated. The left nostril was blocked, but there was no displacement of the left eyeball; the lymphatic glands beneath the lower jaw were not enlarged. On June 16th, the patient being under the influence of chloroform, Mr. Heath divided the upper lip in the middle line, and prolonged the incision round the ala of the nose, to the inner angle of the orbit, and thence for about an inch along the lower margin of the orbit. After dissecting up the cheek-flap, Mr. Heath found that removal of the growth was impossible without taking away the whole of the left upper jaw. This he did in the usual manner, and in wrenching the bone out of its bed, a portion of the internal pterygoid plate, with some of the internal pterygoid muscle, was torn away. The bleeding was temporarily arrested by sponge pressure, and permanently by the actual cautery. The lip was adjusted by two harelip pins and a twisted suture, and the rest of the flap was stitched with chromicised catgut. The line of the incision was painted with collodion. The mass removed consisted of a bony growth involving the walls of the antrum, and spreading inwards on all sides so as to reduce the cavity of the antrum to the dimensions of a mere cleft. The internal pterygoid plate was much enlarged and involved in the growth. The anterior part of the alveolus and the nasal process were not implicated by the growth. The bone was soft, and could be readily cut with a knife. Under the microscope it was found composed of imperfectly ossified spicules of bone. There were no Haversian systems, and the corpuscles included within the bone had a close resemblance to those between the bony spicules. The soft tissue varied in amount in different parts of the growth; it was composed chiefly of round cells, but in many places it contained spindle cells as well. The matrix in some places was homogeneous, and in others slightly fibrillated. The ossification extended to about a line from the surface of the growth. The surface was occupied by round and spindle cells, and between the growing spicules of bone the cellular elements were much more abundant than in the older portions of the growth. On the third day after the operation the harelip pins were removed, but the twisted suture was not disturbed. On the sixth day some of the stitches were removed, and on the eighth day the rest of them were taken out. The wound had healed by first intention throughout. The cavity was frequently washed out with Condy's fluid, and dusted over with iodoform. The temperature rose to 101.8° F. on the second and third days after the operation, and then fell. The patient made a good recovery in all respects, and was discharged on the eighteenth day after the operation.

CASE II. *Squamous Epithelioma of Upper Jaw: Excision of the Entire Jaw: Death.*—M. H., a woman, aged 57, was admitted on July 29th, 1886. She stated that about ten weeks before she first noticed some swelling of her left cheek. Six weeks later she noticed a sore in the buccal pouch, and on pressing the tumour blood and "matter" escaped from it. The bleeding had recurred frequently since. She had been unable to take solid food for the last fortnight. On admission the left cheek was much bulged by the growth, which raised the lower eyelid and depressed the angle of the mouth and the ala of the nose. The limits of the swelling on the cheek were as follows: outwards to a point an inch outside the outer canthus of the eyelids and half an inch below it, inwards to the nose, upwards to the margin of the orbit, downwards to a quarter of an inch above the outer margin of the upper lip. All the teeth behind the first bicuspid were absent. The bone of the left half of the hard palate was absorbed, and the soft tissues of the palate were extensively ulcerated. No enlarged lymphatic glands could be detected. On August 4th, 1886, the patient being under the influence of ether, Mr. Heath made an incision as in the last case, but prolonged it outwards to the external angular process. The flap was dissected up, and found implicated by the growth. The hard palate was sawn through, and the lower half removed with bone-forceps. A piece of the malar bone was also removed with forceps. The remainder of the growth was removed with scissors as far back as the posterior wall of the spheno-maxillary fossa. The pterygoid plates were also removed. A large mass of the growth near the pillars of the fauces and in the cheek was cut away with scissors. There was free bleeding from the internal maxillary artery, which was arrested with the actual cautery. The upper part of the cavity was packed with wool smeared with chloride of zinc paste. The rest was mopped out with a solution of chloride of zinc (40 grains to the ounce), and dusted over with iodoform. The flap was adjusted as in the last case. Two drachms of brandy were administered at once, and a drachm every hour was ordered to be given during the night. The chloride of zinc plug was removed on the third day after the operation. Some of the stitches were removed on the eighth day, and the rest on the thirteenth. The wound healed well. The mouth was kept clean by frequent washing with Condy's fluid. The temperature kept normal, with the exception of an elevation to 100° on the day after the operation, and 101.2° on the fourth day. The patient at first did very well, but about a month after the operation she began to get feeble, and a fortnight later extensive recurrence was noticed. The patient gradually sank, and died two and a half months after the operation. The growth was a rapidly-spreading squamous epithelioma. The majority of the epithelial cells were small, but in some parts they were squamous and arranged in nests. The tissue between the epithelial elements was embryonic connective tissue. At the necropsy extensive recurrence was found at the primary seat and in the lymphatic glands of the neck, but none was found in the internal organs. The lungs were emphysematous and hypostatically congested.

CASE III. *Squamous Epithelioma of the Alveolus of the Upper Jaw: Excision of Growth: Laryngotomy during the Operation, and Blood sucked from the Windpipe: Death from Lobular Pneumonia.*—E. P., a man, aged 51, was admitted on September 16th, 1886. He stated that, about seven weeks previously he noticed on his left upper alveolus a swelling, which he thought was a gumboil. The swelling had continued to increase in size. On admission there was a new growth involving the left upper alveolus and the adjacent parts of the soft tissues covering the hard palate between the left lateral incisor and the last molar tooth. The second bicuspid and the first two molar teeth had been removed, and the portion of alveolus thus exposed was entirely involved in the growth. There were no signs of distension of the antrum, and there was no sinus leading into it from the alveolar border. The submaxillary lymphatic glands were not enlarged. On September 22nd, the patient being placed under the influence of ether, Mr. Heath divided the upper lip and dissected up the tissues of the cheek for a short distance, and then sawed through the hard palate. The patient's mouth and nose rapidly filled with blood, and respiration ceased. Laryngotomy was at once performed, and the blood sucked out of the windpipe. The hard palate, the alveolus, and the anterior wall of the antrum were raised with an elevator, and removed with bone-forceps. The cavity was plugged with a sponge so as to stop the bleeding temporarily; it was permanently checked with the actual cautery. The soft tissues of the lip were united and the antiseptic treatment of the wound was carried out as in the previous cases. The laryngotomy-tube was removed on the day after the operation. The patient at first appeared to be doing well. His temperature ranged between 99.2° and 101.2° until the fifth day, when it rose to 102.4°. He became restless and delirious. His pulse beat 150 times in a minute, and his respirations quickened to 36 times in a minute. He became very drowsy, and died on the seventh day after the operation. At the necropsy a good deal of muco-pus was found in the large and small bronchial tubes. There were a number of scattered patches of pneumonia in both lower lobes. The majority of these were in a state of red hepatisation, but some of them were turning grey. The other organs were healthy. No secondary growths were found.

CASE IV. *Squamous Epithelioma of Upper Jaw: Partial Excision of Jaw: Recurrence.*—M. G., a woman, aged 66, was admitted on October 4th, 1886. Ten weeks previously she was attacked with severe pain about her left upper jaw and behind her left eyeball. Four weeks later she noticed swelling of her left cheek and the left half of her soft palate, and since that time she had been unable to take solid food. On admission, the left cheek was very full, but the soft tissues of the cheek appeared healthy. The posterior part of the left upper alveolus was much enlarged, and projecting from it there was a mass of new growth measuring one inch and a half in diameter. On the outer side it passed upwards beneath the structures of the cheek, and caused the fulness in that region. It also extended beneath the mucous membrane of the hard palate, but the bone as a whole did not appear to be depressed. The eyeball was not displaced, but the left nostril was partially obstructed. No enlarged glands could be detected. On October 13th, the patient being placed under the influence of chloroform, her head was bent back over the edge of the table, and supported in that position. Mr. Heath dissected the cheek from the lower part of the jaw, and wrenched off the projecting mass of growth with his finger, and then, finding that there was much of the growth remaining, he determined to excise the lower part of the jaw. He divided the upper lip in the middle line, and prolonged the cut round the ala of the nose, and dissected the latter from the margin of the anterior naris. The nose and the cheek were then held out of the way, and the hard palate was divided in the middle line. Mr. Heath

next wrenched off the alveolus with bone-forceps, and then removed a number of fragments of bone and growth with his fingers and with scissors. The bleeding was rather free. A few points were touched with the actual cautery, but as free venous bleeding continued, the cavity was plugged with a sponge, and the head was raised. The sponge was now removed, and no return of the bleeding occurred. The flap of lip and cheek was adjusted as in the other cases, and the subsequent treatment was similar to that followed in them. The evening temperature varied between 100° and 101.2° for six days after the operation, and then the temperature remained normal. The patient was rather feeble for some days, but she nevertheless made a good recovery from the operation, though there appeared to be some recurrence of the growth in the anterior part of the soft palate. The growth presented the usual appearances of a squamous epithelioma. The patient was discharged on the nineteenth day after the operation. Mr. Heath saw this patient some weeks after at her own home with extensive recurrence of the growth.

Case v. *Enamel-organ Tumour of Lower Jaw: Excision of half the Jaw: Cured.*—J. P., a man, aged 34, was admitted to the hospital on January 24th, 1887. He stated that his father died of cancer of the stomach, but, with that exception, there was no family predisposition to new growths. About eighteen years previously he first noticed a lump on the left side of his lower jaw, just behind the left angle of his mouth. A few weeks later the swelling was lanced, but the wound closed; a few months afterwards the swelling increased in size, gathered, and burst into his mouth, and since then there had been a continuous discharge from the sinus. Five years previously the patient was in the hospital, and at that time his left cheek was uniformly swollen; the lower jaw was not enlarged. There was a sinus in the cheek which did not lead to bone. The left upper wisdom tooth had not come through the gum, and it was thought that that tooth might be the source of irritation. The second molar was removed in order to give more room for it. About twelve months later the wisdom tooth came through the gum, but the patient experienced no relief, and since then the lower jaw continued to increase in size. During the last two months before admission to the hospital, the increase in size had been more rapid. On admission to the hospital, the patient's left cheek was much swollen, and the posterior part of the body and the ramus of the lower jaw were found much enlarged. At the anterior part of the swelling there was a sinus leading into the jaw. The greater part of the swelling was hard, but some parts of it were soft and elastic. The lymphatic glands beneath the jaw were not enlarged. On January 26th, 1887, the patient being under the influence of chloroform, Mr. Heath made an incision from the symphysis to the angle of the jaw, and, after separating the tissues from the bone, he found that the ramus of the jaw was extensively implicated, and that the removal of the growth could only be effected by excising half the jaw. This was done in the ordinary way, but some trouble was experienced in disarticulating, owing to the difficulty in depressing the jaw, and to the fragility of the bone, which broke near the condyle in the attempts to remove it. The facial and inferior dental arteries were tied. A branch of the internal maxillary was also tied, but as the latter vessel was found lying exposed in the wound, it was ligatured on each side of the branch and divided. Iodoform powder was blown over the surface of the wound; the skin was adjusted with catgut sutures, an opening for drainage being left, and dressed with iodoform powder and salicylic wool. The parts removed consisted of the entire left half of the lower jaw, which was greatly expanded by a central new growth. The growth was surrounded by bone everywhere but opposite the sinus which was present on the alveolus about one inch and a quarter from the middle line of the bone. The bone was not implicated by the growth, and after hardening in spirit the growth shrank away from the bone, which was left quite smooth. On section it appeared as though there had been a cyst in the jaw, and that by projection into it of intracystic growths the cavity had been filled up. The growth presented microscopical characters which closely resemble the enamel-organ, and which Falkson and Bryk have already described. It would probably be considered by Mr. Eve as allied to the multilocular cystic growths which he has described as springing from the epithelium of the gum. It will shortly be shown at the Pathological Society. The temperature reached 101.2° F. on the first four days after the operation. It then fell, and remained normal after the tenth day. Some loss of power in the lower facial muscles resulted from the operation. The wound healed well, and all the stitches were removed on the thirteenth day after the operation. Convalescence was delayed by the occurrence of much swelling of the cheek, unattended with fever. No suppuration occurred, and the swelling was rapidly subsiding when the patient was discharged about a month after the operation.

Remarks by Mr. Christopher Heath.—The above are good examples of the various growths commonly met with about the jaws. Ossifying sarcoma is a form of disease of comparatively recent recognition, but no doubt many of the cases of osteoma of former years were examples of this growth. It is the least malignant of the sarcomata, and if the whole of the disease is removed there is a good prospect of non-recurrence. The cases of squamous epithelioma, whilst the most common, are the most unsatisfactory of all jaw tumours. The disease has such a persistent tendency to spread that, unless taken in the early stage, it is quite impossible to be sure that the entire growth has been extirpated, and recurrence is probable. The operation in Case 2 was an extremely severe one, every particle of visible disease being removed, and yet rapid recurrence took place and ended in death. In Case 3 the disease was limited to the palate, and it was probably on account of the modification of the operation thus required that time was lost, and the blood got from the mouth into the windpipe. Immediate laryngotomy and suction relieved the urgent asphyxia, but no doubt the lobular pneumonia, which eventually proved fatal, must be attributed in part to the inhalation of blood. It was partly in consequence of the experience gained in this case, and partly on account of the disease projecting principally into the mouth, that the inverted position was adopted in operating upon Case 4. This method has the undoubted advantage of keeping the blood away from the air-passages, but its mechanical inconvenience is very great, and it would be almost impossible to remove the entire upper jaw in this position. Case 5 was an example of the rare "glandular" tumour, which tends to become cystic, and is apt to recur in the form of epithelioma after many years. In all these cases iodoform was freely used, both at the time of operation and afterwards, and, so far as has been seen, without the least toxic effect.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

Friday, April 1st, 1887.

W. H. Broadbent, M.D., F.R.C.P., President, in the Chair.

Inherited Congenital Deformity of the Hands and Feet.—Mr. R. W. Parker and Dr. H. B. Robinson read notes of a case in which a plastic operation had been done on the feet. The patient was a child, aged 3½. The two inner toes were coalesced into a single great toe, and the three outer toes were similarly united into a little toe; the coalescence extended in part into the metatarsal bones, and there was a wide and deep cleft between. The operation consisted in removing the skin from the contiguous parts of the cleft, and then uniting the edges after the toes had been pressed together. A more shapely and more sightly foot was thus obtained. The child was one of several who suffered from a similar deformity, and her mother, herself affected, feeling the inconvenience of such a foot, had taken her to the hospital to see whether something could be done to remedy the defect. The authors showed a family-tree, from which it could be seen that the deformity affected three generations. The first to suffer was the child's grandmother, and of thirty-six lineal descendants sixteen were malformed; the malformation was perpetuated through the female branches of the family. It was singularly uniform in its manifestations, and was attributed originally to a fright. The patient and several members of her family were exhibited.

Psoriasis associated with Rheumatism, which passed into Pityriasis Rubra (Dermatitis Exfoliativa).—Sir Dyce Duckworth gave details of this case. F. A., aged 24, housewife, married seventeen months, mother of a child which she suckled for four months, was admitted into St. Bartholomew's Hospital on November 14th, 1885. She was suffering from well-marked ordinary psoriasis, which had lasted five months, and from rheumatic pains in most of the joints. Ten and five years previously she had had attacks of psoriasis, lasting four or five months, each accompanied with rheumatic symptoms, as at present. She lived at Stratford, on the ground floor of a damp house. The joint-pains preceded the outbreak of psoriasis. When a child, she had rheumatic fever. She knew of no family history of rheumatic fever. She was a fairly well nourished woman, of slender build, complexion pallid, hair light-brown. The heart's apex was displaced outwards, and a systolic apex-murmur was audible. Nothing was found amiss with any other viscera. The urine contained a trace of albumen. The whole body was covered irregularly with patches of scaly eruption, the erythematous area around them being very wide. There was less of the rash on the face and neck, most on the abdomen. There was pyrexia, the temperature varying from 100 to 103.8° during her stay in hospital, with nightly rises. The digestive system was not much

disturbed. The urine was acid, specific gravity 1023, and contained very often a trace of albumen, and sometimes abundant urates. The catamenia had been regular since the birth of her child. At the time of admission to hospital the psoriasis was beginning to pass into a general desquamative dermatitis, and rheumatic symptoms were increasing in severity. Milk diet was ordered. To have an alkaline bath on alternate nights, and olive oil to be rubbed in all over the body. Fowler's solution in four-minim doses in an alkaline tonic mixture was given twice daily. The appetite increased under this treatment. The pain grew worse, and the temperature kept up. Effusion occurred in some joints. Sodium salicylate was next given to the extent of a drachm daily. Soap and spirit lotion was used to remove the hard scales from the scalp, and linimentum calcis to the body generally. No improvement followed from the salicylate treatment, and the temperature was unaffected by it. The skin was now universally affected, and cast off handfuls of scales. The rheumatism was severe, and the patient became very ill. She begged for meat and for better diet than was thought fit for her. The salicylate was increased to eighty grains each day, and sitz-baths given instead of alkaline ones. The joints of the legs and arms were very painful. Hypnotics were required at night. In the third week after admission, the plans of treatment hitherto having been unavailing, a change was made, the quino-alkaline draught being given, and oleate of zinc ointment applied. Mashed potato and custard pudding were added to the diet. The skin improved somewhat after this, but still desquamated freely. The temperature was still pyrexial. The joints improved. No fresh cardiac troubles came on, but "hæmic" basic murmurs developed. Within ten days the morning temperature began to reach normal, but the evening rise was nearly 102° on several occasions. On December 11th arseniate of sodium in 15-minim doses was begun, and full meat-diet was given. In a few days very decided improvement set in in respect of the skin and joints, but the temperature continued high, reaching its highest point, 103.8°, three nights after the commencement of this treatment. Antipyrin was given in full doses without any effect on this. The pulse was 138; appetite very good. The arsenic was increased gradually up to 10 minims at each dose. At the end of December the patient's skin was getting clear, joints improving, and she got out of bed daily. Starch and zinc paste was found useful for the skin at this time. In January the joints were painless, but ached when fully stretched. The wrists and fingers were deformed, joints knotty, and fingers turned out to the ulnar side of the arm. When the patient left the hospital on February 12th, the skin was perfectly smooth and natural. The joints of the wrists and hands were crippled and deformed. The case illustrated the transformation of psoriasis into diffuse exfoliative dermatitis, an occurrence which had been previously noted. The relation of the rheumatic disease, if it was rheumatic, was of interest. Psoriasis was not uncommon in persons rheumatically disposed, especially in subjects of rheumatoid arthritis. The powerlessness for good of salicylate treatment was noteworthy. The same had been noted of this drug in chronic rheumatic arthritis and so-called gonorrhœal rheumatism. The benefit of full arsenical medication was most marked, and no relief was afforded by treatment which commonly proved useful in ordinary rheumatism. The author had not found dermatitis exfoliativa rebellious to treatment by alkaline tonics, baths, and oily inunctions.—Dr. CROCKER thought the paper illustrated a point in the history of pityriasis rubra in its connection with rheumatism and with previous psoriasis. Sometimes, however, it arose independently of any eruption, and might be considered primary in many instances. On the other hand, he believed it might supervene in any form of psoriasis. Last year Brock had recorded a case where excessive inunction of chrysarobin was followed by pityriasis rubra. One man he had seen had had nine attacks of psoriasis, and then several of pityriasis. This man had heart-symptoms, but there was no clear history of rheumatism. Another case was that of a woman who had had previous attacks of rheumatism, in fact her skin-affection only developed any intensity after it. Arsenic did her a little good, and during its administration rheumatic symptoms returned. It was only when the treatment was altered to quinine and good feeding that the patient recovered.—Dr. BARLOW mentioned a case showing the treble association of psoriasis, pityriasis, and rheumatism. The patient was a man with a family history of rheumatism, and he himself had mitral disease. His eruption, originally psoriasis, gradually changed in character, and terminated by copious desquamation. He believed that when psoriasis once assumed the form of pityriasis, it in future kept to that type.

Symmetrical Gangrene (Raynaud's Disease) following Varicella in a Child, aged 4, causing Death on the Fourth Day.—Mr. EDWARD BELLAMY read notes of the case. The patient was admitted under his care on January 19th, 1887. On admission she had spots of varicella over her body and face, which were first noticed on the 16th. On the evening of the 19th, at 7 o'clock, the child complained of her right leg being sore, and a small circular black patch, about as large as half-a-crown, was seen below the inner side of the knee; by 10 o'clock this patch had extended down the leg to the foot, when she was brought at once to the hospital. On arrival a similar patch had made its appearance just above the left ankle, and rapidly extended up to the knee. The patient was unable to stand, complained of great pain in both legs, which increased on pressure. The second, third, and fourth toes of the right leg were exempt from discolouraand the fifth was but slightly mottled. Shortly after admission an oblong patch, about two inches by two inches, appeared on the outside of the left thigh. On the 21st a small patch appeared on the outer side of the right forearm, and a slight discolouration on either side of the spine, on a level with the crest of the ilium, in the afternoon of the same day in either cheek and the conchæ of both ears. The complexion was very white, face sallow, expression dull and heavy, tongue dry and brown but reddish at tip; pulse 150, weak; temperature 100°; heart-sounds normal; breathing normal; both legs cold and insensitive; pulsation in the left femoral was fairly distinct, but could not be felt in the right. Urine, specific gravity 1023, clear, pale; no trace of albumen, and no hæmoglobin could be detected. In the evening of the 21st she became suddenly seized with stertor and died. A full account of the *post-mortem* examination accompanied the paper; perhaps the most interesting points were as follows: There was an enormous opening in the foramen ovale, bounded below by a valve a quarter of an inch deep, having a free crescentic margin. In the dissection of the right leg, the fat and skin and gangrenous parts were dark purple from hæmorrhagic infiltration, and this appearance died away at the apex of Scarpa's space. The obvious gangrene ceased just above the inner condyle, the skin above being apparently normal. The leg, which appeared quite gangrenous, was uniformly purple. There were some petechiæ or small hæmorrhages in the intermuscular plane, the muscles themselves being very strongly contracted in rigor mortis, and appearing almost healthy; but just here and there they showed small hæmorrhages; this was especially the case in the deeper fibres of the soleus. The femoral glands were a good deal enlarged, and either hæmorrhagic or containing a quantity of blood pigment. The saphena vein contained only *post-mortem* clot.—Mr. MORGAN corroborated Mr. Bellamy's observations, and mentioned that the hæmorrhagic or gangrenous patches extended higher on the inner side of the lower extremities than on the outer side. They did not extend further during the patient's stay in the hospital. He mentioned that the foramen ovale was found patent at death.—Dr. COODE ADAMS asked whether any observations were taken with regard to the temperature, the case appearing to him to be a classical one of hæmorrhagic small-pox.—Dr. LONGHURST failed to see any marked indication of the disease being of nervous origin. He was disposed to look upon it as blood-poisoning. The case alluded to might very well be a case of hæmorrhagic small-pox.—Dr. HERRINGHAM did not exactly see why the case was looked upon as hæmorrhagic small-pox, nothing in its description differing from varicella gangrenosa. Such cases were fairly frequent at St. Bartholomew's Hospital.—Dr. LUCAS BENHAM suggested, in view of the fact that it was in January, and that the child was reported to have run about after the illness began, that the case might have been one of frost-bite.—Dr. CROCKER asked whether there was any evident connection between the varicellous eruption and the patches of hæmorrhage in gangrene?—Dr. BARLOW did not think the case fitted in with the appearances of varicella gangrenosa, in which the gangrene was not diffuse as in this case. He had seen a similar thing follow measles. He certainly did not think it was a case of Raynaud's disease. Congenital deformities of the heart were very formidable complications of the exanthemata.—Sir DYCE DUCKWORTH agreed with the last speaker that congenital deformities constituted a serious complication. Judging from Mr. Morgan's drawing of the case he certainly would not consider it one of varicella gangrenosa.—The PRESIDENT thought it was rather a case of gangrene supervening in the course of an exanthem, of which he quoted an example.

Intussusception Produced by the Presence of a Tumour Growing from the Mucous Membrane of the Transverse Colon.—Mr. ARBUTHNOT LANE described a case in which, after an attack of diarrhœa, in a chronic case of hip-joint disease in a child, aged 8, a tumour as large as a walnut was found projecting from the anus. It was much congested; blood oozed from its surface. The nurse in attendance supposed it to be a prolapse of the mucous membrane of the rectum, and attempted to return it within the anus, but was unsuccessful. On examination, the tumour appeared to have a very long pedicle, which gradually in-

creased in thickness, extending beyond the reach of the finger. As there were no symptoms of strangulation, and as the length of the pedicle was doubtful, he returned the tumour within the rectum. It soon passed out of reach. On the following day the tumour could be felt in the middle line, between the umbilicus and symphysis, between the finger in the rectum and the hand on the surface of the abdomen. Some days after, during another attack of diarrhœa, the tumour was again extruded from the anus. On this occasion it was found that the tumour was sessile, and that it was attached to the very congested mucous membrane by a constricted neck, the prolapse of gut being abundant and lax, so that on the first occasion the whole of the thin apparent pedicle must have been formed by mucous membrane and the intestine itself. On the removal of the tumour, the prolapsed gut was readily replaced above the pelvic brim by the finger, and examination on subsequent occasions showed no signs of an intussusception. No tumour could be felt in the abdomen on either occasion in which the growth projected from the anus.—Mr. TREVES said that the symptoms of intussusception, when caused by polypus, were generally mild. The connection between the two was well known, and such cases were common.—Mr. BARKER said he had taken the trouble to investigate the subject, and could find but very few cases where such relation existed. The matter had been brought to his attention by a case which he had. It was a case of intussusception of the sigmoid flexure, which could be drawn partially out of the anus, and was found to be associated with a growth at the apex of the septum of an adenomatous or epitheliomatous nature. The case was about to be published in the *Medico-Chirurgical Transactions*.—Mr. BRYANT said such cases were not very rare. He thought the fact that polypus might be the cause of intussusception in the adult was not as well recognised as it should be. He had a striking example of this in a lady aged 74, who had been suffering from obstruction due to intussusception for fourteen days. He suspected the existence of a growth, and this, after much trouble, was found, drawn down, and removed, the patient making a rapid and perfect recovery.

Living Specimens.—Mr. R. W. PARKER exhibited a case of (possible) Sarcoma of the Kidney; Dr. DREWITT a case of Lupus treated partly by Salicylic Acid, and partly by Scraping.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, APRIL 5TH, 1887.

Sir JAMES PAGET, Bart., F.R.S., President, in the Chair.

Alveolar Ulceration and General Tuberculosis.—Mr. JONATHAN HUTCHINSON, jun., showed some specimens obtained from a child, aged 2 years, who died while under the care of Dr. Stephen Mackenzie. When twelve months old she had had measles, and subsequently became cachectic, and for a considerable time had suffered from ulcerative stomatitis, or "putrid sore mouth," which had caused several of the lower teeth to fall out, and had invaded the lower lip. At the necropsy the peritoneum and abdominal viscera, especially the liver, were found to be the seat of miliary tuberculosis. The tubercles were disseminated throughout the liver, and in its capsule occurred as minute elevations one-tenth of an inch in diameter; they appeared to be of recent formation, though slight caseation had occurred in a few. It was uncertain whether any causal relation existed between the stomatitis and the tuberculosis, as the latter was a rare complication, nearly all the cases of ulcerative stomatitis in children recovering under the use of chlorate of potash or other treatment. Nor did sections of the affected gums and lip show tubercle bacilli or any tuberculous structure. The surface of the ulcers was ragged, and, for a varying depth, was in a necrotic condition, the structures being ill-defined, and not staining well. In the lip the muscular bundles next the surface were matted together, and the striation was indistinct. Micrococci were plentiful in this layer, but the long bacilli found by Lingard and Batt, in ulcerative stomatitis of calves, and in a case of noma, were not present. Under the necrotic layer there was considerable inflammatory cell-effusion. It was stated that ulcerative stomatitis of children could be inoculated (Bergeron), but the microscopic appearances would confirm the clinical evidence that this disease was quite distinct from noma, and from the ulcerative stomatitis of calves and other young animals.—Mr. TREVES thought that ulcerative pharyngitis was frequently followed by scrofulous adenitis of the neck, so that there was some ground for believing that infection might take place from stomatitis, but in that case it would be only reasonable to expect that the glands in Mr. Hutchinson's case would be enlarged.—Mr. HUTCHINSON, in reply, said that the glands were not greatly enlarged.

Hypertrophic Goître with Secondary Tumours.—Dr. JOSEPH COATS showed a case of hypertrophic goître with secondary tumours in the skull. The thyroid gland presented considerable enlargement of both lobes. The tissue of the enlarged gland was that of ordinary goître—namely, greatly multiplied saccules, with occasional colloid matter in them. There were two further changes, both of which evidenced chronicity in the growth—namely, fibroid induration and calcareous infiltration. This latter change was in the indurated connective tissue, and probably in connection with some necrosis. The goître was first noticed sixteen years before death. There were several tumours in the skull, only one of which was visible during life, and had been observed for a year and a half; this was in the occipital region, and it formed here a pulsating swelling. This tumour replaced the bone of the skull over an area an inch and three-quarters in diameter, and projected both outwards and inwards, pushing the torcular Herophili before it. Another projected chiefly inwards, and was adherent to the dura mater. All the tumours apparently originated in the diploë of the skull. Their structure was identical with that of the goître, consisting of innumerable small saccules lined with epithelium, and occasionally with colloid contents. Dr. Coats referred to Cohnheim's case, which was of a similar nature; and he also quoted a case of Wölfler's in which a tumour, removed during life by Billroth from over the eye, was found to have typically the structure of the ordinary goître. This patient was also affected with goître.—Mr. GODLEE mentioned the case recorded by Mr. Henry Morris in the *Transactions* (vol. xxxi) of the Society, of pulsating tumour of the parietal bone, with goître. He inquired whether the structure of a goître did not differ very widely from that of ordinary thyroid tissue; this would be of interest in connection with the fact that the secondary tumours of malignant goître had a structure resembling that of the thyroid gland.—Mr. G. R. TURNER mentioned a case of goître with secondary growths in the lungs and other organs (*Clinical Society's Transactions*).—The PRESIDENT asked what was the microscopical structure of the malignant tumour of the thyroid gland not infrequently seen in old persons.—Dr. COATS said that Wölfler had described thyroid tumours which were cancers and sarcomas. He said that in goître the chief departure from the ordinary structure was colloid degeneration.

Tumour of Pineal Gland.—Dr. JOSEPH COATS showed a large tumour of the pineal gland. The tumour, which consisted of two rounded lobulated masses, measured about three inches transversely, and two inches from before backwards. It was surrounded by a capsule and loosely attached, except at one point, which corresponded to the situation of the pineal gland. In its growth it had dislocated and disturbed the neighbouring structures, the parts affected being there normally in relation to the pineal gland. The corpus callosum, choroid plexus, and velum interpositum, were pushed upwards, the corpus callosum being greatly softened. The corpora quadrigemina were pushed backwards and upwards, and the thalami optici outwards and forwards, these parts being greatly flattened. The bulk of the tumour was in the third ventricle, but it had also extended somewhat into the aqueduct and fourth ventricle. The structure of the tumour was very peculiar, namely, a basis of sarcomatous structure, with pieces of cartilage and epithelial or glandular structures embedded in it. The sarcomatous cells were chiefly spindle-shaped, and some of them in the shape of the nuclei and general arrangement suggested smooth muscle. The cartilage was hyaline, with the cells unusually abundant. The gland-structures were in the form of saccules or ducts lined with epithelium, usually cylindrical. The saccules were occasionally dilated, but did not form true cysts. Dr. Coats was disposed to call the tumour, from its structure, an adenoid chondroid sarcoma. He referred to four other cases of similar forms of tumour, recorded by Weigert, Falkson, Ziegler, and Turner, in all of which the structure was complex, with epithelial or glandular structures, and in three of the cases with cartilage. The observations of Baldwin Spencer on the pineal eye were referred to as indicating the original complex structure of the pineal gland, and it was stated that the embryonic structure indicated that the pineal gland was an epithelial body.

The Pathology of Chronic Inflammation of the Uterine Appendages.—Mr. LAWSON TAIT showed a large number of specimens of the results of chronic inflammatory disease of the uterine appendages, as illustrated by the preparations of sixty-three cases removed during the year 1886. Mr. Tait's remarks will be published in a future number. It was understood that the specimens would be referred to a committee to be nominated by the President.

Specimens illustrating the Development of Tubo-ovarian Cysts as a result of Inflammation of the Uterine Appendages.—Mr. ALBAN DORAN exhibited a pair of appendages which had recently been removed by Dr. Bantock from a woman, aged 23, subject to chronic

pelvic pains and other severe symptoms. The right tube and ovary had undergone complete cystic degeneration, so as to form a cyst with one cavity. The left tube was dilated, and a cyst had formed in that part of the ovary most distant from the dilated tube. Mr. Doran showed a series of diseased appendages from the Museum of the College of Surgeons, where every stage of the process of conversion of chronic inflamed appendages into tubo-ovarian cysts was demonstrated. On the other hand, he had never succeeded in finding a tubo-ovarian cyst developed as a part of the process of development of the common ovarian cystic tumour, a non-inflammatory disease. Hence he believed that tubo-ovarian cysts almost invariably represented an atrophic inflammatory condition.—Dr. W. B. HADDEN thought that pyosalpynx was not uncommon in phthisis; he inquired why the outer part of the tubes was more affected than the inner.—Dr. ANGEL MONEY said that children sometimes recovered from tubercular peritonitis, and he had seen distinct tubercular disease of the uterus leading to pyosalpinx.—Dr. COATS said that tubercular salpingitis was not infrequent, and deserved to be classified by itself. In a large proportion of cases of tubercular peritonitis the tubes were affected, and the peritonitis might heal, leaving the tubes and uterus affected. The infection, he believed, took place by infection from the peritoneum, which would account for the greater enlargement of the outer part.—Dr. W. S. A. GRIFFITH said that there were only about nineteen cases of tubo-ovarian cysts recorded in literature. They fell into three classes: (1) multilocular cysts, of which one loculus communicated with a dilated Fallopian tube; (2) cysts of the character described by Mr. Doran; (3) unilocular cysts, containing a thin fluid not due to any severe inflammation in the neighbourhood.—Mr. LAWSON TAIT said that Mr. Doran was absolutely right in his explanation of the formation of tubo-ovarian cysts; in the specimens he showed there were, he believed, quite nineteen cases. He had only met with one case of tubercular salpingitis, but his remarks were confined to the cases of last year. The greater dilatation of the outer part of the tube was probably due to the walls of the tubes being thinner in that situation.—Mr. ALBAN DORAN, in reply to Dr. Griffith, stated that "tubo-ovarian cyst" was a matter of definition. Many of the observers to whom he referred appeared to apply the term solely to cases where the tube had communicated with a true ovarian cyst.

Old Meningeal Hæmorrhage with Cerebral Softening and Secondary Degeneration.—Dr. HALE WHITE showed this specimen, which was taken from a patient who died owing to the effects of a femoral hernia. From the history, it appeared that the meningeal hæmorrhage took place eighteen months previously. At the necropsy, *ante-mortem* clotting in the cerebral sinuses was discovered. On the left side, over the ascending frontal and parietal, and the back part of the first, second, and third frontal convolutions, there was some soft, yellowish-white material, evidently old blood-clot. The grey matter over the area mentioned had quite disappeared; the white substance immediately underneath was a little altered; no distinct degeneration could be seen in the pons or internal capsule, but the pyramidal tract in the medulla and both the crossed and direct pyramidal tracts in the cord were degenerated, being grey, translucent, and hard-looking; the lateral column was smaller on the affected side than the healthy. The microscope showed the sclerotic changes to be the same as those usually described.

Card Specimens.—Mr. FENWICK: Tumour of the Bladder.—Dr. TURNER: Congenital Stricture of Jejunum.—Dr. HALE WHITE: 1, Peripheral Neuritis; 2, Dilatation of Ureter and Hydronephrosis of one side secondary to Stricture of Urethra.—Mr. D'ARCY POWER: Sequel to case of Endosteal Sarcoma.—Dr. THIN for Dr. B. RAKE: Drawings of Bacillus of Leprosy.—Dr. EDMUNDS: Carcinoma Myxomatodes.—Mr. F. W. CLARK: Acute Pericarditis.—Mr. HUDSON: Colloid Cancer of Stomach.—Dr. ALLCHIN: Perforating Ulcer of Duodenum.—Mr. SHATTOCK: 1, Congenital Dislocation of Humerus; 2, Two specimens of Osteomalacia, showing Metaplasia of Osseous into Fibrous Tissue.

MEDICAL SOCIETY OF LONDON.

MONDAY, APRIL 4TH, 1887.

J. HUGHLINGS JACKSON, M.D., F.R.S., President, in the Chair.

Ulcerative Endocarditis, Simulating Typhoid Fever, and Acute Tuberculosis.—Sir DYCE DUCKWORTH read notes of a case of a servant girl who was admitted on February 23rd, complaining of having caught cold. She suffered from "biliousness," shivering, etc. She had pain in limbs, knees, and wrists, but only the wrists were swollen. Her temperature was above normal, but was not subject to large variations. There was a systolic murmur over the entire præcordia. There was slight increase of splenic dulness. The tongue was furred and covered with white streaks. Gurgling was detected in the abdomen, and the motions were loose and not unlike typhoid stools. *Post-mortem*, the mitral valve was found to be greatly disorganised and covered with soft outgrowths, which obstructed the orifice. Sir Dyce Duckworth pointed out the difficulty of arriving at a correct diagnosis in these cases.—Dr. SANSOM asked whether the pneumonia preceded the endocarditis; there existed a connection between the two, the endocarditis being secondary to the pneumonia. The variability of cardiac murmur was an important indication in these cases.—Dr. HUGHLINGS JACKSON alluded to the value of testing the knee-jerk when called upon to decide between typhoid fever and meningitis.—Dr. HENRY WHITE made some remarks.—SIR DYCE DUCKWORTH replied.

On the Digestion of Starch.—Mr. R. W. PARKER read a paper on this subject which is published in this day's JOURNAL at p. 772.—Dr. GIBBONS suggested that, by way of experiment, a hundred babies should be taken at two months of age and fed on a starch diet.—Dr. ALLCHIN considered starch absolutely harmful up to a certain age, and thought that substances hurtful to the organism might result from its partial digestion. He thought the subject was of sufficient importance to warrant the appointment of a committee for its consideration.—Dr. DE HAVILLAND HALL quoted the case of some puppies who did not thrive on biscuits, but did well again when cod-liver oil was given them.—Mr. R. W. PARKER, in reply, said that as a rule experiments on this subject were very unreliable.

Case of Glossitis Migrans.—Dr. WHIPHAM showed a man suffering from this complaint, and showed microscopical sections. The margin consisted of a dense layer of epithelial cells, piled up above which was a layer of micrococci.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, MARCH 23RD, 1887.

G. GRANVILLE BANTOCK, M.D., President, in the Chair.

Antiseptic Dressings.—Dr. WALTER (Manchester) showed a specimen of Gamgee tissue which had been specially prepared according to his instructions. It was twice as thick as the ordinary tissue, and was rendered antiseptic with corrosive sublimate. Dr. Walter recommended it as an excellent vaginal plug, and as otherwise useful in obstetric practice.

Midwifery Forceps.—Dr. PEARSE exhibited a pair of forceps, with a hinge in the shank, which he had introduced to the profession about three years ago. This allowed of the handle of the first blade being moved out of the way while the other was being inserted.

Mucous Polypus.—Dr. EDIS exhibited a polypus which he had removed from a patient aged 65. The symptoms, which had simulated those of a far more serious condition, had now disappeared.

Placenta showing Traces of Recurrent "Accidental" Hæmorrhage.—Dr. EDIS read notes of this case. The fœtus was expelled at the fifth month. On examination, the margin of the placenta was seen to be continuous with old fibrinous clots of various degrees of age, some quite organised, others partly decolorized. The patient had had repeated attacks of flooding and abdominal pain.

Tumour of Broad Ligament.—The PRESIDENT exhibited this specimen. It was situated in the right lower part of the abdomen, and was believed to be a solid ovarian tumour. On removal, however, it was found to be not directly connected with the ovary, Fallopian tube, or uterus, but appeared to take its origin in the extreme outer part of the right broad ligament and the iliac fossa. The patient had done well.

Methods of Cleansing the Peritoneum.—Mr. LAWSON TAIT gave an address, with demonstration, of his method of washing the peritoneum with copious streams of warm water. The trocar which he employs for tapping the cyst resembles a large double-eyed catheter terminating in a rounded but flattened and sufficiently sharp point. To this is attached a long india-rubber tube. This instrument he also employs as a syphon for washing out the peritoneal cavity. Having first immersed it in a ewer of water of the requisite temperature, an attendant raises it when required, and the water flows through the trocar in a steady stream, which can be directed upon any part desired. Mr. Tait prefers this method to the excessive use of sponges, especially in cases where the peritoneum and intestines are smeared with the adhesive colloid material from a friable cyst. This substance is readily soluble and easily washed away by the warm water. The water is clean water taken from the tap, and no special antiseptic precautions are employed.—Dr. ALFRED MEADOWS had adopted a similar practice fully fifteen years ago. The method he pursued was to fill the abdomen with warm water and empty it again by turning the patient on her side, repeating this again and again if need be. The method described was infinitely superior.—Dr. R. BARNES first saw the syphon prin-

ciple applied to washing out the stomach at Munich several years ago, and he had used it with obvious advantage in the irrigation of a suppurating irremovable ovarian cyst at St. George's Hospital. Mr. Tait's application to abdominal surgery was especially valuable.—Dr. PHILLIPS HILLS thought that by means of the syphon and subsequent drainage, sponging might be done away with entirely.—Dr. INGLIS PARSONS, Dr. EDIS, Dr. HEYWOOD SMITH, Dr. WATSON, Dr. GRIGG, and the PRESIDENT took part in the discussion.—Mr. LAWSON TAIT replied.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, MARCH 9TH, 1887.

Inspector-General LAWSON, Vice-President, in the Chair.

Filaria Sanguinis Hominis.—Dr. STEPHEN MACKENZIE read for Dr. WYKEHAM MYERS a paper on Filaria Sanguinis Hominis, in which the opinion was again expressed that the absence of filarial diseases in South Formosa is due to the absence of the species of mosquito which is capable of acting as the intermediate host to this parasite. He next discussed with great care the ultimate destination of the filaria embryos found in the blood; he pointed out that the presence of a large proportion of oxygen in the blood was favourable to filarial development, and that parturition in the parent worm was continuous and exceedingly prolific. The course pursued by the embryo from birth until its absorption by the mosquito was probably as follows: For a period of not less than twelve hours, and probably in no case exceeding twenty-four, the filariæ remain in the lymphatic system; at some time during this period the favourable conditions in the hæmic circulation lead to their entrance into it. This implied a longer or shorter delay, according to the hour of birth, and might account for embryos being occasionally seen in the blood during daylight. The embryos are able to control, within certain limits, the duration of their stay in the sluggish lymph-current. When the proper time arrives, however, they yield to the flow, and their passage to the now attractive blood is brought about. The last section of the paper dealt with the pathology and treatment of elephantiasis, or lymph-discharges. Dr. Myers discussed in great detail the different views put forward by various writers. Agreeing with Manson as to the filarial origin of these diseases in the majority of instances, he differed from him as to the mechanism by which the filariæ operated. He rejected abortion of the parent worm, and was inclined to attribute the overgrowth of tissues, discharges of lymph or chyle and febrile manifestations to overgrowth of cells, arising from increased plasmic flow (as distinguished from obstruction), due in the first instance to the presence of filaria sanguinis hominis (or in non-filarial cases to an ulcer, eruption, etc.), or some other excitation, and which, when once set up, might persist after the original exciting cause had ceased to operate. With regard to treatment, he advocated, when practicable, removal from a filarially infected region, but when this could not be accomplished, filtering and boiling all water drunk, and, for local treatment, pressure both on the affected part by india-rubber bandages and over the arteries supplying the region, in preference to deligation of arteries.

In connection with the paper, Dr. STEPHEN MACKENZIE exhibited a patient suffering from chyluria contracted in India, and demonstrated the living filariæ in the blood.

In the discussion which followed, Drs. THORNE, WILLOUGHBY, MORTIMER GRANVILLE, and Mr. SMYTH took part.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, MARCH 4TH, 1887.

F. H. ALDERSON, President, M.D., in the Chair.

Cases.—Dr. SCANES SPICER showed some cases of laryngeal and post-nasal disease.

Nocturnal Incontinence of Urine in Children.—Dr. BALL read a paper on this subject, which was followed by a discussion, in which the PRESIDENT, Dr. TRAVERS, Dr. OWLES, Mr. CHAPMAN, Dr. PITT, Mr. BENHAM, Mr. MASON, Dr. SEYMOUR TAYLOR, and Dr. SPICER took part, and Dr. BALL replied.

A Case of Impacted Urethral Calculus, followed by Urinary Abscess: Perincal Section: Complete Recovery.—Mr. BENHAM read a paper on this subject. W. W., aged 36, noticed, a few months ago, that the stream during micturition was smaller, and that the act was accompanied by a tickling sensation, almost culminating in pain at the root of the penis. Retention of urine suddenly came on, with œdema of the penis and scrotum; and, after unsuccessful attempts at catheterisation, perineal section was performed. Considerable difficulty was experienced in passing Syme's staff, which gave, when *in situ*, the sensation that it was in contact with some metallic substance along the side of the urethra. A soft rubber tube was introduced through the perineal wound into the bladder and secured there, and linseed poultices were kept constantly applied to the part. On the third day after the operation, the œdema of the scrotum had somewhat subsided, but the swelling along the left side of the penis had considerably gained ground, giving a sensation of fluctuation. An incision was accordingly made over the most prominent part, which gave issue to about eight drachms of fœtid pus. On passing a probe into the incision it was found to go downwards into the œdematous substance of the scrotum, and upwards it communicated with the urethra. Two days later, as the swelling had diminished, a metal instrument was passed from the perineal wound backwards along the urethra till it projected through the meatus, as no instrument could be passed in the usual way; then, by attaching the rubber catheter to the projecting metal one, and withdrawing the latter, the soft catheter was pulled along the urethra, and so out of the perineal wound, and then into the bladder. A week later, when all the swelling had disappeared, a thickening was found by the author around the urethra, just at the junction with the anterior margin of the scrotum. On passing a probe it came in contact with a hard substance, which was broken into pieces, and extracted with a director; both wounds soon healed.—Mr. KEETLEY and Mr. PICK made some remarks, and Mr. BENHAM replied.

Pathological Specimens.—Mr. H. PERCY DUNN showed the following pathological specimens:—1. Aneurysm of the Thoracic, extending into the Abdominal, Aorta, the lower portion of the Sac of which was formed by the Left Psoas Muscle. 2. Epithelioma of the Lower Third of the Œsophagus, and of the Cardiac Orifice of the Stomach, which had Perforated the Pericardial Sac.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, MARCH 17TH, 1887.

W. J. CLEAVER, M.B., C.M., President, in the Chair.

Conical Cornea.—Mr. SNELL showed a case in which the cone involved chiefly the upper part. The condition of the left eye was very unusually marked.

Tumour of Right Iliac Fossa.—Dr. MARTIN described a case in which the tumour occurred in the neighbourhood of the ileo-cæcal valve; the subsequent course of the case seemed to prove that it was one of fæcal accumulation. Throughout, the bowels were fairly regular and acted well to aperients. It was a month before the tumour disappeared. The general appearance of the patient was suggestive of malignant disease.

The Question of Surgical Interference in Acute Obstruction of the Bowels.—Dr. KEELING read this paper, in which an attempt was made to show—first, that by the use of the statistical method, and the bedside observation of certain symptoms, it was possible to arrive at a tolerably exact diagnosis of the cause of obstruction; secondly, that this cause was frequently very similar to what was found in external strangulated hernias; and thirdly, therefore, that the obstruction could be effectually relieved, as in them, by surgical methods.—The following joined in the discussion: Dr. MARTIN, Mr. KNIGHT, Mr. GARRARD, Mr. JACKSON, Dr. PORTER, Mr. BROWNING, Dr. HARGREAVES, and Mr. PYE-SMITH.

THURSDAY, MARCH 31ST, 1887.

W. J. CLEAVER, M.B., C.M., President, in the Chair.

Specimens.—Dr. HARGREAVES exhibited a Dilated Stomach (Chronic) with Pyloric Constriction.—Mr. KILHAM showed two Surgical Kidneys; they contained several abscess-cavities, and were from a patient aged 75, the subject of stricture.

Eye-Symptoms in Locomotor Ataxy.—Mr. SNELL introduced a woman with small contracted pupils, Argyll Robertson phenomena, optic atrophy, and symptoms pointing to locomotor ataxy.

Double Ophthalmoplegia.—Dr. W. R. THOMAS related this case. On August 17th, the patient, aged 49, became dizzy, fell, and was unconscious for a short time; it was found that his sight was affected. When first seen both eyes were very prominent from paralysis of the ocular muscles. There was ptosis on both sides. The right eye was immovable, as was also the left, but on the left side there was a decided internal squint. The pupils were not affected by light or accommodation. Objects at a distance could be seen better than those near. Vision on the left side was much more indistinct than on the right. There was no history of syphilis, rheumatism, or cardiac disease, and no previous history of head-symptoms. Dr. Thomas thought that, as the attack had come on so suddenly, it was due to hæmorrhage press-

ing upon the corpora quadrigemina on both sides, the floor of the third ventricle, and parts around. The patient was improving.—Remarks were made by Mr. SNELL, Dr. S. ROBERTS, and Mr. RECKLESS.

Acute Dilatation of Stomach.—Dr. DYSON related this case. The patient, aged 41, was seven months pregnant. A miscarriage occurred thirty-six hours after the commencement of the illness, but beyond increasing the debility and collapse, this did not contribute to her death, which took place on the fourth day after her seizure. The immediate cause of the attack was a draught of cold milk, which was taken after severe exertion. This brought on acute gastric catarrh accompanied by the vomiting of large quantities of bile-stained fluid and rapidly increasing distension. The physical signs were those described by Dr. Hilton Fagge. No *post-mortem* examination was obtained. The treatment consisted in nutrient and stimulating enemata, stomachic sedatives, bismuth, morphine, etc., with a small blister to the epigastrium. Most relief to the pain and vomiting was obtained by hypodermic injection of morphine. The patient was too feeble to admit of the use of the trocar or stomach-pump.—The following joined in the discussion: Messrs. THORPE, JACKSON, BALDWIN, Drs. KEELING, HARGREAVES, and MARTIN.

BORDER COUNTIES BRANCH.

FRIDAY, MARCH 18TH, 1887.

JOHN EATON, M.D., President, in the Chair.

Removal of Kidney.—Dr. MACLAREN showed casts of two kidneys which had been removed, and one of the patients.—Drs. MACDOUGALL and SMITH made some remarks.

Typhlitis and Perityphlitis.—Dr. HADDON read a paper on typhlitis and perityphlitis, illustrated by cases, with a chart showing the temperature and the pulse from the onset to the end of an attack. He pointed out that as idiopathic peritonitis was never met with, typhoid fever was the disease most likely to be mistaken for perityphlitis. He recommended treatment by opium.—Drs. MACLAREN, MUIR, TIFFEN, HAMILTON, MACDOUGALL, SPEIRS, LOCKIE, WALKER, LEDIARD, and the PRESIDENT made some remarks, and Dr. HADDON replied.

Compound Fracture of Patella.—Dr. ALTHAM read a paper on a case of compound comminuted fracture of the patella, and showed casts of the leg. The injury was caused by falling from a height of 17 feet on the bare knee. Comminution was so extensive that there was no hope of the bony fragments uniting; they were, therefore, removed, and the wound was dressed antiseptically, free drainage being provided. In six weeks the patient was able to walk about with the limb in splints, and in little more than six months from the time of the accident the knee-joint had almost regained its normal mobility, though there was no patella.—Drs. MACLAREN, I'ANSON, HADDON, MACDOUGALL, and LEDIARD made some remarks, and Dr. ALTHAM replied.

Antiseptic Treatment of Hydrocele.—Dr. ALTHAM also contributed a note on the antiseptic treatment of hydrocele, describing a case in which he had cured a large hydrocele in an elderly man by opening and draining with antiseptic precautions.

Permanganate of Potash in Amenorrhœa.—Dr. MACPHAIL read a note on permanganate of potash in the treatment of functional amenorrhœa, in which he said that it was a useful emmenagogue, although he had seldom succeeded in getting the menstrual flow restored with the "striking rapidity" observed in the cases recorded by Ringer and Murrell. The good effects appeared to be due to the manganese and not to the potassium, for binoxide of manganese had been found equally efficacious. Permanganate of potash appeared to be especially beneficial in cases of amenorrhœa, complicated with insanity. The use of the drug might be continued without any bad effect. In one of his cases the patient had taken the pills for over five months.—Mr. HALL made some remarks.

ACADEMY OF MEDICINE IN IRELAND.

OBSTETRICAL SECTION.

FRIDAY, MARCH 4TH, 1887.

A. V. MACAN, M.B., F.K.Q.C.P.I., President, in the Chair.

Specimens.—Dr. MASON exhibited ovaries removed for menorrhagia.—The PRESIDENT showed a two-headed child which had been delivered without artificial assistance. He also showed a fibrous tumour which he removed from a woman nearly forty years of age.

Double Vagina.—Dr. WILLIAM FRAZER communicated a case of double vagina. The patient had previously borne several children. On examination, it was found that there was a projection, about the bulk of a small apple, from the left side of the vagina, which constituted a perfect partition, extending upwards into the vagina for about an inch and a half; on one side was the usual orifice in the clitoris and urethra, and on the other a miniature opening of a smaller but well-defined second passage. It was capable of distension until two fingers could pass in; above, it terminated in the vagina common to both passages, and the uterus was perfect and normal. The septum in its structure was similar to the labium, and, like it, studded with the usual hairs; the natural orifice had its urethra, clitoris, and the lesser labia of small size; the supplemental opening had minute but distinct lesser labia, and a distinct fourchette; there was no trace of clitoris; the vaginal orifice was distinctly formed, and surrounded by a strong and distinct sphincter muscle.—The PRESIDENT observed that the most uncommon form of malformation was when the septum went up the entire way.—Dr. FRAZER said there was a distinct and separate sphincter to the second vagina.

Dystocia caused by Hydrocephalus and Pelvic Tumour.—Dr. PUREFOY narrated a case in which the os was found widely dilated, encircling a hydrocephalic fœtus; below this, posteriorly, was an oval tumour, very movable and apparently pediculated—this was being driven down before the presenting part during each pain. With considerable difficulty this was pushed up and an opening made in the enormously distended scalp, giving exit to several pints of clear fluid. Even in this collapsed condition, the head was so large that it was found necessary to complete delivery with forceps.—Dr. ATTHILL said he thought the tumour and the hydrocephalic child were mere coincidences. Of course, they increased the difficulty of labour, but not the danger of the case.—After some remarks by Drs. BYRNE and LANE, the PRESIDENT said that, in a bad case of hydrocephalic head, vaginal examination alone should not be depended on, as the head could be seen through the abdominal walls. The process of pushing up a tumour required a good deal of time, and was uncertain as to its results; if the child were dead, the operation would be made easier by perforating the head. If the tumour was fixed in the cervix, and the head could not go down, the fundus pulled the tumour up out of the pelvis. That explained the success with which attempts were made to press fibrous tumours out of the pelvis.—Dr. PUREFOY, in reply, adhered to his belief that the course of endeavouring to replace the tumour before the size of the head was diminished was the correct one.

Vesicular Degeneration of the Chorion.—Dr. BYRNE submitted a case of vesicular degeneration of the chorion, sent by Dr. HAYES, of Tralee, with the following description. It occurred in a woman, aged 60, who had been suffering for a short time from vomiting and uterine hæmorrhage. The os was sufficiently dilated to admit the finger, and soft globular masses could be detected. She stated that it was seventeen years since her last child was born; she had no miscarriages since. She menstruated regularly till nearly four months previously. Ergot was given; after which uterine contraction set in, and a hydatiform mole was expelled. No trace of a fœtus could be seen in the mass.—Dr. BYRNE, Dr. DILL, and Dr. FOOT took part in the discussion that followed.

PATHOLOGICAL SECTION.

FRIDAY, MARCH 11TH, 1887.

WALTER G. SMITH, M.D., President, in the Chair.

Malignant Disease of the Stomach, Pancreas, Liver, Kidney, etc.—The PRESIDENT showed specimens of malignant disease of the stomach, pancreas, liver, kidney, etc., taken from a young man, aged 20. Two years previously he was attacked with vomiting and epigastric pain. Within the last two months he had become much worse, had lost flesh, and slight jaundice had set in. *Post-mortem* the stomach was found to be greatly distended; the pylorus constricted, and its walls dense and white; there was a mass of new growth in the edge of the falciform ligament, and one or two nodules on the liver; the walls of the gall-bladder were invaded by the neoplasm, and there was a dense mass of new growth involving the stomach, pancreas, right kidney, etc., and extending back to the spine. The left kidney was healthy upon section; the abdominal aorta was constricted by the surrounding mass of new growth; the right upper surface of the diaphragm was studded with white nodules. There was an immense number of round, flattened nodules all over each lung. The disease probably originated in the stomach, and appeared to be carcinoma.—Mr. SCOTT had very little doubt that the case was one of carcinoma.—The PRESIDENT, in reply, directed attention to the sections under the microscope on the table.

Fibroma of the Orbit.—Mr. H. R. SWANZY showed a case of orbital tumour.—Mr. STORY said Mr. Swanzy was to be congratulated on the

success of the operation. He had never seen a sarcomatous tumour of the orbit where it was possible to enucleate the tumour, in such a way as had been done in the present case, from the orbit, and at the same time to leave a perfectly sound cavity with sound walls behind. Such tumours frequently had extensions protruding through fissures at the back of the orbit, or else had not originated in the orbital cavity at all, but had made their way into it from other places.

Sarcoma.—Mr. M'ARDLE read a paper on Sarcoma, detailing cases which showed the deterioration of the different tissues of the body, apparently as a result of the disease. He noticed in all his cases a great diminution of the red corpuscles of the blood, and a slow and incomplete coagulation of that fluid. In these cases he met with spontaneous fractures, and on examining the bones he found them brittle, and the red marrow in a state of fatty degeneration. In seeking an explanation of the decrease of red corpuscles in the blood, he concluded that the destruction of the red marrow of the bones led to a diminution of their manufacture. He explained the emaciation of the patient by the lessened oxygenating power of the blood, which, in some of the cases, looked like serum, so poor was it in corpuscles.—In reply to the PRESIDENT, Mr. M'ARDLE stated that in all the cases microscopic examinations of the tumours were made. In every case of sarcoma that had lasted more than three months the patients were perfectly blanched. The central portions of the large bones, where there was no red marrow, were not much affected.—Mr. SCOTT asked how much diminution of the corpuscles occurred? Exact information on that point might supply a means of diagnosis in suspected cases.—Mr. WHEELER said that in many instances he had seen fractures of the shafts of bones occur in places where they were affected with sarcoma. In all these cases the bones were softened or in a state of fatty degeneration at the place of fracture.—Mr. STORY asked what evidence was there of diminution of the red corpuscles? An anæmic appearance in the patient was not enough to prove that the quantity of red corpuscles in his blood was not normal.—Mr. M'ARDLE, in reply, said he had made a microscopic examination of the blood of these patients, but he had not time to attempt an accurate enumeration of the red blood-corpuscles.

Results of Trephining for Epilepsy.—Mr. W. I. WHEELER gave a description of a calvarium and brain after trephining for epilepsy, and exhibited specimens.—Mr. STORY asked what was the use of trephining for epilepsy if the seat of the affection were, as Mr. Wheeler had said, the medulla oblongata or the pons Varolii? Epilepsy was interesting from an ophthalmic point of view, as after epileptic seizures the patients frequently had either transitory or permanent affections of their field of vision. When a patient suffered from a lesion on one side of the brain, whether caused by a tumour or otherwise, his visual apparatus was damaged, but the effect produced was that there was a loss by both eyes of one-half of their field of vision, the halves lost corresponding to the visual centre on the side of the brain affected. But after epileptic seizures the limitation was concentric, though also affecting both sides; and the explanation of this which had been put forward assumed that the seat of the epilepsy was not in the medulla or the pons, but in the cortical centres.—Dr. KNOTT asked if the operation was done with strict antiseptic precautions.—Mr. WHEELER, in reply, said there was nothing wrong with the patient's vision, except that he was a little short-sighted, which he had been all his life, even when he had no fits. The reason why he (Mr. Wheeler) trephined at the place he did was that the patient had pain there, it being the spot where his head had struck a table when he was a boy. Pain was always produced by pressure on that spot, and the pressure also made the patient feel as if he was going to have an epileptic fit. It was common-sense rather than scientific treatment; he did not think of the medulla or the pons Varolii, but only proceeded on the assumption that the pressure of a piece of bone was the cause of the epilepsy, and the result proved that it had a considerable amount to do with the epilepsy, for after the removal of the bone the patient had no more fits. All the antiseptic precautions were used with the exception of the spray.

TESTIMONIAL.—A dinner was given to Mr. J. Wright Baker, consulting surgeon to the Derby Infirmary, on the occasion of his retirement from practice, by members of the medical profession in town and country. The occasion was taken for presenting Mr. Baker with a silver tea-kettle, with an appropriate inscription.

AUSTRIAN PHARMACOPŒIA.—The last edition of the *Austrian Pharmacopœia* was published in 1869. A special commission has been instructed to revise it, and to prepare a seventh edition.

DR. KORTEWEG, Physician to the Jewish Hospital at Amsterdam, has been elected to the chair of External Pathology at the University of Groningen.

REVIEWS AND NOTICES.

DOCTOR JOHANN WEYER, DER ERSTE BEKÄMPFER DES HEXENWAHNS; ein Beitrag sur Deutschen Kulturgeschichte des 16 Jahrhunderts. Von CARL BINZ, Professor der Medizin zu Bonn. Bonn: bei Adolph Marcus.

(DR. JOHANN WEYER, THE FIRST OPPONENT OF THE WITCH-MANIA; a contribution to the history of German civilisation in the 16th century. By CARL BINZ, Professor of Medicine at Bonn.)

IN this interesting medical biography, Professor BINZ gives an account of a very remarkable man, the first physician who spoke a rational word against the superstition of witchcraft. The history of this strange delusion and its cruel consequences is one of the saddest episodes in the history of European civilisation. We say an episode, because though the belief has existed in most nations and through a large part of the world's history, it has generally led to credulity and folly only, not to cruelty. Canidia was not burnt at Rome, and the witch of Endor was at least tolerated. But it was otherwise when such practices were thought to be real and at the same time damnable. Then scepticism became an offence, and toleration was held to be connivance with the most infamous of crimes. Superstition, combined with a perverted sense of justice, generated that horrible nightmare which the Germans aptly call Hexenwahn, or witch-mania. Strange to say, it was not in what we call the Dark Ages, but in a comparatively enlightened period, at the end of the fifteenth century, when the classical Renaissance was in full progress, that the mania reached its acme, and for two centuries longer it continued to afflict Europe. Germany and Switzerland might be considered the chief centres of delusion, but no country was exempt, and numbers of unfortunate persons, chiefly women, were burnt for a crime generally confessed either spontaneously or under the tortures of the rack.

Modern justice might, indeed, sanction the punishment of witches on the ground of fraud or false pretences; but, in old times, they were punished precisely on the ground that their pretences were not false.

Modern science, again, may see in this strange vortex of delirium, which carried away accusers and accused, prosecutors and victims alike, a sort of epidemic madness or contagious nervous disorder, though old belief saw nothing but the supernatural. In truth, modern nerve pathology (as indeed has been shown by Charcot and his school) might have a good deal to say as to the physical conditions which supplied these delusions with their only basis; and sound medical instinct, even without elaborate knowledge, we might suppose, could at any time have found the key to the mystery. However, it was not so. Physicians of the body were quite as much at a loss as physicians of the soul, till the way was led by the hero of Professor Binz's biography. With his name should, however, always be associated that of his master, the great misunderstood genius, Cornelius Agrippa, whose life has been so well written by Professor Henry Morley.

Johann Weyer, better known by his Latinised name, Wierus, was born in 1515 in North Brabant, and became physician to the court of the Duke of Juliers and Cleves. In 1563, under the patronage of this prince, he made his courageous onslaught on the witch finders and persecutors. The curious volume in which he did so, *Wierus de Præstigiis Dæmonum*, is by no means so unknown as Professor Binz supposes to those who care about old medical literature, and, notwithstanding its rational tone, is a great treasury of marvellous stories.

Its fundamental thesis is that the supposed powers of witches did not exist; that their imaginary compacts with the devil and other horrors were physical impossibilities; that their pretensions were based either on conscious fraud or on self-delusion; that, consequently, the clerical persecutors imagined, invented, or even suggested the crimes they punished.

But Weyer could not stop here; he had to give an explanation of the delusion, and his explanation is twofold. First, as an orthodox believer, he could not deny the power of Satan, whom he thought the originator of the witchcraft delusion, though in a different sense from what was commonly supposed. The father of lies suggested these wicked fancies to the imagination of weak-minded women, and persuaded them that they had powers which they did not really possess. Secondly, the persons who thus fell into the power of Satan were in various ways morbid. They were sometimes under the influence of narcotic drugs, sometimes insane. The one horror which recurs with obscene monotony in most of the trials for witchcraft—that of *incubus* and *succubus*—Weyer absolutely rejects, and gives various reasons for thinking it impossible. The only foundation for

such a delusion was a sort of nightmare. In an equally rational manner he shows how untrustworthy were confessions extorted by the rack.

With regard to the supposed injuries caused by the machinations of witches, Weyer has little difficulty in referring the alleged killing of cattle, destruction of crops, and raising of storms to natural causes. On the subject of bewitched persons, the imagined victims of the witches, his point of view is curious. Some of them were really cases of secret poisoning, where death was caused by material, not by spiritual, agencies. Others could be cured by medical and moral treatment. But many were cases of persons really possessed by evil spirits, though not through the instrumentality of witches, who were quite powerless in these matters; for Weyer evidently had no doubt of the reality of demoniacal possession. It was reserved, we may say, for an English physician (Edward Jordan) in the reign of James I. to declare boldly that girls supposed to be possessed by evil spirits were merely suffering from "fits of the mother," that is, hysteria. We need not follow our author into his rational and naturalistic explanations of other supposed facts of witchcraft. His views may seem at the present day natural enough and even obvious, but it is difficult to exaggerate the originality of such opinions in his time, or the courage needed to avow them.

His manly protest had a great, though not an immediate, success. His book went through six editions in Latin, two in German, and one in French, and a smaller book on the same subject was also several times reprinted. That it should provoke bitter opposition from the superstitious and often interested leaders of the witchcraft crusade was natural enough. In the long list of his opponents is found the name of James I of England, whose book, *Dæmonologia*, refers expressly to Weyer. Weyer truly appears among his contemporaries, as Professor Binz says, like a sane man addressing the inmates of an enormous madhouse.

He did not, however, want supporters and followers. The rare and curious volume of the Englishman, Reginald Scot, *The Discoverie of Witchcraft*, published in 1584, was a courageous protest in the same direction, though whether Scot was acquainted with Weyer's writings we cannot say. But the peculiar interest of Weyer's way of treating the question is his clear appreciation of the physiological and medical side of the case, which is certainly more rational than the too hard and mechanical explanation which has been generally accepted: that malice and ignorance attributed to ignorant and innocent persons pretensions and crimes of which they themselves never dreamed. A physiological substratum there undoubtedly was, though it did not account for everything.

Weyer's good sense and acumen are shown also in another book, *De Jejuniis Commentitiis*, where he gives some wonderful histories of "fasting girls," and relates by what judicious treatment he detected and cured one who came under his notice. For these and other interesting matters we must refer to Professor Binz's memoir, which is no less distinguished by its critical judgment than by its learning and literary accuracy.

DRUITT'S SURGEON'S VADE MECUM: a Manual of Modern Surgery. Edited by STANLEY BOYD. Twelfth edition. London: Henry Renshaw, 356, Strand, and J. and A. Churchill, 11, New Burlington street. 1887.

THIS work has been thoroughly edited by Mr. STANLEY BOYD, and many alterations have been introduced; indeed, in the preface Mr. Boyd tells us that scarcely a paragraph of the last edition remains unaltered, and that in most parts only the sense of the old book has been embodied with the material in the new. Endeavours have been made to compress the work, the book is more closely printed, and the chapter on Diseases of the Eye has been omitted; nevertheless, the volume is larger than the previous ones. A great improvement is the use of black letterpress to indicate new subjects.

It is impossible to enter into details in such a comprehensive book. Its chief characteristics are the extent to which the writer is imbued with the principles and practice of antiseptic surgery, with recent surgical pathology, including bacteriology, and with recent improvements in treatment. It might have been better if more details of the various antiseptic methods had been given, even at the risk of somewhat increasing the size of the book, but it is evident everywhere throughout the book that Mr. Boyd thoroughly realises what antiseptic surgery can do. In this respect this new edition excels most other English text-books, and perhaps best represents the surgery of the future. As examples of the thorough manner in which recent operative measures are described, we may refer to the chapters on Brain, Chest, and Abdominal Surgery.

We congratulate Mr. Boyd on the result. The book has been brought up to date both as regards pathology and treatment, and the writing is clear and consise. It will now hold its own alongside of the best text-books in the English language, and will, without doubt, become a favourite with students. Its chief fault is a tendency to be a little too dogmatic and exclusive in recommending particular views and methods, but for teaching purposes this is not, perhaps, a great error.

REPORT ON THE CHARITABLE DISPENSARIES UNDER THE GOVERNMENT OF BENGAL FOR THE YEAR 1885. By A. J. COWIE, Esq., Inspector-General of Civil Hospitals, Bengal.

THIS is a most satisfactory record of an immense amount of medical and surgical work for the relief of the poor of the province, almost entirely carried out by native medical men educated in the Government schools of medicine. There are 230 dispensaries in active operation within the province of Bengal. The medical educational work carried on in the Government medical colleges and schools is of the highest importance to the present and future well-being of the teeming population of India. It is being conducted by the ablest medical officers of Her Majesty's Indian Medical Service. We are not surprised to hear that special commendation is given by the Inspector-General of Charitable Dispensaries to the Dacca Medical School, under the able teaching and superintendence of Dr. Crombie. Of the many distinguished men who have passed through the Army Medical School for the service of India, Dr. Crombie was one of the most accomplished, and it is creditable to the administration of India that this fact has been recognised, and that this able officer is employed in the congenial work of teaching medical science to the zealous students of the Dacca School. It is noted that the medical profession has always been a popular one among the young men of this province. The Dacca students are reported to have attained a high standard in these studies, and even in their physique they are observed to be superior to those elsewhere. The examiners of Dr. Crombie's college reported the students equal to those at home. In proof of the thoroughness of the examination, it is noted that the questions in surgery were taken from a recent examination paper of the Royal College of Surgeons of London, and from those put to Dr. Meadows (himself one of the examiners) on entering the Indian Medical Service. "Every student answered them most satisfactorily, and some did extremely well." These Government medical schools not only supply recruits for the service of the State, but also for the general native population.

We observe with satisfaction that a considerable number of the medical students in Bengal obtain the degree of Bachelor of Arts before commencing their medical studies. It will be well for the profession of medicine at home when this is the rule and not the exception among ourselves.

REPORTS AND ANALYSES

AND

DESCRIPTIONS OF NEW INVENTIONS,

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

PITTUCK AND SNOWDON'S STOPPER-FASTENER OR GUARD FOR POISON BOTTLES.

MR. SNOWDON has invented a simple guard which can be easily adjusted to the neck of a dispensing-bottle. It is not unsightly, and when a catch which slides over the neck of the bottle is closed, the stopper cannot be withdrawn; it is immediately liberated by withdrawing the slide. This manœuvre, though simple and easily accomplished, is sufficient to draw the dispenser's attention to the bottle he has in his hand, and the use of the invention will prevent the disastrous consequences which have sometimes followed fits of absence of mind. The invention is patented by Messrs. Pittuck and Snowdon, of Hebburn-on-Tyne.

BUXTON BATHS.—The Baths at Buxton have been enlarged by the Duke of Devonshire; various novelties have been introduced, and the general arrangements have been improved. The popularity of massage is shown by the special appliances which have been provided; one of these is a shallow bath to allow of massage being conveniently performed while the patient is under water. The bathing appliances have been supplied by Mr. John Smeaton, of London.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 9th, 1887.

THE GOVERNMENT SANITARY SURVEY.

A FEW evenings ago, the House of Commons voted a sum of £1,800 for the expenses of the "sanitary survey" recently carried out by the Local Government Board. Some of the remarks which were made in the course of the short discussion which ensued suggest that all the circumstances of that survey are not generally understood. It may be useful, therefore, briefly to recall attention to the matter, as it has a considerable bearing on current sanitary operations.

Sanitation has made great progress during the last quarter of a century, and the hot-beds of disease which were formerly so numerous are rapidly disappearing, although it is to be regretted that in many cases they are still allowed to linger without any justification. In stimulating this general desire for improved sanitary conditions, the Medical Department of the Local Government Board has, it must be admitted, done good service. But its efforts have been somewhat restricted, having been chiefly devoted to the investigation of outbreaks and prevalences of disease (often some time after their occurrence) in relation both to local sanitary defects and to one another. Yet Dr. Buchanan, as well as his predecessors at the Local Government Board, has always been anxious to extend the usefulness of the department; and, when cholera broke out in the Mediterranean ports in 1884, he hastened to take advantage of the public anxiety thus aroused to urge the necessity for a systematic review of our own readiness to resist the introduction of the disease, or to prevent its spread if, unhappily, it should succeed in passing our "first line of defence." Hence he formulated his scheme for a sanitary survey of the most vulnerable parts of the country—a scheme which he had long desired to see carried out—and the Treasury was prevailed upon to provide for the temporary augmentation of the staff requisite for the purpose.

Immediate attention was given to the ports and other littoral districts which were in special danger by reason of their intercourse with infected countries, but ere long it was found desirable to extend the survey to a number of other districts. It was not contemplated that inquiry should be made into each of the 1,662 sanitary areas of England, but only that such as were to be regarded as most exposed to the risk of the introduction or spread in them of cholera should be visited. These were, first, the port and riparian districts; secondly, the districts which cholera had, in fact, visited most severely during the epidemic of 1866; and, lastly—since unpreparedness against cholera is more or less surely indicated by unpreparedness against other diseases which appear and spread under circumstances of soil, water, or air pollution—a number of districts were selected as more especially requiring inspection for the reason that enteric fever or epidemic diarrhœa was known habitually to prevail in them.

In each district that was visited investigation was made of the general sanitary circumstances of the locality with reference to cleanliness, sewerage and drainage, excrement and refuse disposal, water-supply, and condition of dwellings; also as to the general sanitary administration of the district and the performance of duty by sanitary officers; and, further, inquiry was made as to the provision of means of isolation and disinfection, both as concerns current English infections and in anticipation of the possible advent of cholera. The inspectors were charged to take counsel, in every instance, with the sanitary authority and its executive officers about matters that were capable of amendment, to place their experience derived from other districts at the disposal of every sanitary administration, and, when needful, to leave with the authority a written memorandum of the advice which they had given in conference. This system of inspection and advising was universally pursued; and the volume of cholera reports and papers issued by the department last autumn records the bulk of the results. It shows that where sense of responsibility for sanitary duty had been wanting, the inspections conduced in considerable measure towards its development; and that where local authorities were desirous of performing their sanitary duties towards their own districts and the kingdom generally, they have been greatly aided by the inspectors' visits. In many large towns votes of thanks have been heartily accorded to the inspectors for their advice and help.

One of the most useful results of the survey has been the assistance rendered by it to local health-officers in the discharge of their duties. Especially has this been the case with medical officers of health newly appointed, who, when they have not filled a similar post before, and have not been specially prepared for it, have been most grateful for the opportunity thus afforded them of acquiring a kind of knowledge which they could scarcely acquire at all—certainly not so effectually—in any other way. The success which has attended the undertaking may be said to have been largely due to the fact that the inspectors have not spent their time in preparing detailed reports of minute sanitary deficiencies having purely local interest, and such as ought to be found in the periodical reports of every competent health-officer. The inspector in each case has drawn up his recommendations on broad principles and without delay, and has afforded the authority the opportunity of discussing them with him in public meeting; whilst any special incidence or peculiarity of disease observed by him as being of wider interest has been investigated apart from the general survey.

Altogether about one-third of the sanitary areas of England had been visited when the survey was interrupted in November last, and it is to be regretted that the demand for retrenchment in national expenditure should have involved a check to such useful work. Dr. Buchanan and the medical staff who have worked under him deserve, however, to be congratulated on the good which they have already done. They have awakened many a slumbering authority to a sense of its duties and responsibilities, and have assisted local workers in the promotion of healthy conditions.

MEDICAL EDUCATION IN GREECE.—In Greece there is only one Faculty of Medicine—that of the University of Athens. There are forty-four professors and about nine hundred students.

THE RELATION OF THE SYMPATHETIC TO THE CEREBRO-SPINAL NERVOUS SYSTEM.

In a lecture given at the Royal Institution Dr. Gaskell has stated very clearly his views on this subject, views which are opposed to the teaching hitherto accepted upon the authority of Bichat, that there exist in the human body two distinct nervous systems—the sympathetic and the cerebro-spinal. Dr. Gaskell's observations and views merit more than ordinary attention, and he has been for some time engaged upon this very difficult subject, both from an anatomical and from a physiological aspect. The results he arrives at are that the whole sympathetic nervous system is nothing more than an outflow of visceral nerves from certain nerve centres in the cerebro-spinal system. He is able to trace these visceral nerves from their very peculiar structure. They are extremely fine grey bundles, and he traces them from Lockhart Clarke's column in the cord to the sympathetic ganglia. They pass out from the spinal cord as white medullated nerves, and in their passage through the ganglia lose their white substance and break up into an increased number of grey non-medullated nerves. He maintains that no new fibres spring from the ganglia. In all cases the non-medullated fibres of the sympathetic are simply the fine medullated visceral nerves, which have originally passed from the spinal cord in one or other of the three great visceral outflows—cervico-cranial, thoracic, and sacral. In this way the vaso-motor and visceral nerves all over the body have really a spinal origin, and not a separate or independent sympathetic source.

That two nerve-systems do exist—the one for animal and the other for organic life—Mr. Gaskell admits; they are not, however, separate and distinct as usually taught, but arise from parts of the same central nervous system. The function of Lockhart Clarke's column has not been known, though it has been associated, perhaps most generally, with some of the functions of respiration, and now Dr. Gaskell's researches, and the deductions he draws from them, render the function of this column of greater importance than hitherto conceived. Its nature is evidently allied to, but of much wider scope than, that special function of organic life which respiration represents.

The body, according to Dr. Gaskell's view, is composed of two parts—an inside, or splanchnic part, and an outside, or somatic part. Each part has its own system of muscles; each part is supplied by nerves arranged on the same plan; namely, a ganglionated and a non-ganglionated portion; and each part has its own individual centres of action, the innermost parts of the posterior horns, and inside portion of the grey matter of the cord, containing the centres of the splanchnic roots, that is, the centres of organic life; the outlying horns containing the centres for the somatic roots, that is, the centres for the animal life. These two sets of centres are not arranged symmetrically along the spinal axis; but, as might be expected, two great breaks occur in the centres for organic life, where the outflow of nerves for the limbs occurs, and here the centres of the animal life are highly developed. It has long been known that Lockhart Clarke's column was highly developed in certain parts, and almost altogether absent from others. We have here an explanation of the outflow of what Dr. Gaskell calls visceral nerves in the parts which correspond with this peculiarity in the structure of the cord.

The difficulty of tracing the course of nerve fibres in the cord is well known, but advantage has been taken of the peculiar structure of their visceral fibres, their extreme fineness marking them out in osmic acid sections, and these sections have been made continuously with great care. We must look to pathological conditions to throw important light on this difficult question, and to comparative anatomy and embryology to bring support or contradiction to the views now put forward. But they will probably receive careful attention from anatomists and physiologists, as they will materially modify the teaching hitherto adopted in our schools.

THE ELECTION AT THE ROYAL COLLEGE OF PHYSICIANS.

The election of President of the Royal College of Physicians takes place every year on the Monday after Palm Sunday. The voting is by ballot, the electors being those Fellows of the College who attend the meeting of the Comitia on that day. Of late years the voting has been characterised by almost complete unanimity, but on Monday last a little surprise was in store for the dominant party. Sir William Jenner had allowed it to be understood that he was willing to undertake another, the seventh, term of office, and it was known that a very large number of Fellows were anxious that he should have the opportunity of guiding the final stage of the various important matters now before the College. The result, however, showed that there was a very considerable minority who believed that the time had come for a change, and that among the Fellows were some who would be equal to the duties and worthy of the position of President. At the first ballot Sir William Jenner did not receive the requisite majority of two-thirds of those present, and for the moment it seemed probable that he would interpret this result as an expression of opinion against his continuing in office, for he had intimated that he was only disposed to do so if elected with something like unanimity. The regret, not unmingled with surprise, which this expression of opinion caused was interpreted by Dr. Quain, who was loudly applauded when he said that if the Fellows had been aware of the sentiments of Sir William Jenner on this point, his election would certainly have been almost, if not quite, unanimous. The second ballot was decisive, and so this little family misunderstanding was happily adjusted.

A monthly medical and surgical journal entitled *The Healing Art* is now published in Arabic in Cairo.

Dr. Lewis Sayre's *Clinical Lectures on Orthopædic Surgery* have been translated into French by Dr. Henri Thorens.

The celebrated Greek scholar, Dr. Ernst Curtius, who is 73 years of age, recently left Professor Schweigger's Hospital, after a successful operation for cataract.

Dr. Sinclair Coghill, of Ventnor, has been elected Vice-President of the Section of Materia Medica and Therapeutics in the International Medical Congress to be held at Washington.

Another case has occurred this week of the explosion of a paraffin lamp by the stupid practice of blowing down the chimney to put out the light. The clothes of the unfortunate woman (a widow, aged 50) were set on fire, and she ultimately died from the injuries received.

A conversazione, to which ladies will be invited, will be given by the Metropolitan Counties Branch of the British Medical Association, at the South Kensington Museum, on Thursday, May 26th.

THE ANATOMICAL SOCIETY.

A new scientific society is in process of formation which will have for its scope "Human Anatomy, Comparative Anatomy, Embryology, and Histology, so far as they bear upon human anatomy." We

are glad to be able to announce that the project is receiving influential support in England, Ireland, and Scotland. A foundation meeting will be held at the end of April, and Professor Humphry, of Cambridge, has promised to take the chair on that occasion. Mr. Lockwood (19, Upper Berkeley Street, Portman Square, London) is acting as Honorary Secretary (*pro tem.*), and will be glad to afford information to anyone interested in the project. The time and place of the first meeting will be announced in due course.

PIPERONAL.

PIPERONAL is the aldehyde of piperonilic acid, which is obtained from the oxydation of piperine. It crystallises in small colourless prisms. Its odour is that of vanilla; its flavour like that of menthol, but more lasting. It is insoluble in cold water, but soluble in alcohol and ether. Dr. Riccardo Frignoni first discovered its remarkable antipyretic properties. It is given in doses of 75 centigrammes every two or three hours. When given in larger doses, it causes nausea and eructations, but produces no more serious results. It is principally valuable as an antiseptic.

LOCAL TEMPERATURE IN SMALL-POX.

THE *France Médicale* of January 2nd gives an account of some observations made by Dr. Montefusco, of Naples, on local thermometry in small-pox. He points out that, in that disease, the region of the spleen has always a higher temperature than the hepatic region and the abdominal walls. There is no constant relation between the local temperature of the spleen and the axillary temperature.

A GIANT.

ACCORDING to the *Kievlanin*, January 27th, 1887, a Greek, a Turkish subject, who recently died of pulmonary phthisis at the Simferopol Town Hospital, was 3 *arshins* and 5 *vershoks* (about 7 feet and 9 inches) in stature. He slept on three beds laid close together.

ANOTHER JUBILEE.

ACCORDING to the *Vratch*, No. ix, 1887, p. 221, on April 17th (29th), Professor S. T. Botkin, of St. Petersburg, will celebrate the thirty years' jubilee of his professorship. His colleagues, disciples, and admirers are making due preparations to honour the man whose services to the Russian medical profession cannot possibly by over-estimated.

DANGERS OF THE STREETS.

A CASE in which a plaintiff obtained damages for personal injuries caused by the falling of a number of paving-stones stacked outside the shop of a tradesman in Islington elicited from Judge Eddis last week a well-deserved rebuke of the practice, so common among shopkeepers, of placing goods on the public pavement, to the danger of the public. A verdict was given for the plaintiff for £21 with costs.

INEQUALITY OF PUPILS IN HEALTHY PERSONS.

FROM an examination of 134 healthy recruits, Dr. G. S. Ivanoff, of Kirilov, came (*Vratch*, No. vii, 1887, p. 162) to the following conclusions: 1. Equal or symmetrical pupils, as well as equal or symmetrical halves of the face, are met with but very seldom, the former only in 9 per cent. of the persons examined, and the latter only in 2.2 per cent. 2. The inequality or asymmetry is probably dependent upon an asymmetrical development of the cerebral hemisphere. 3. In 54.5 per cent. of persons, the left pupil, and in 73.9 per cent. the left side of the face, is larger than the right one.

NON-IDENTITY OF CAFFEINE AND THEINE.

IN a paper on Caffeine communicated to the Royal Society on March 31st, Drs. Lauder Brunton and Cash recorded one point of difference between theine and caffeine, which are usually supposed to be identical. They were found to have a different action on voluntary muscle. Theine produced a peculiar rhythmical contraction, lasting for many hours. Both theine and caffeine tend to cause contraction of the muscles somewhat resembling rigor mortis. In one case the authors found that theine produced elongation of the muscle, with rhythmical movements. This phenomenon is very hard to explain on the supposition that muscular fibre contracts only in a longitudinal direction; and they suggest that possibly there might be a transverse contraction as well, which would cause elongation of the whole muscle.

BINIODIDE OF MERCURY AS AN ANTISEPTIC.

DR. P. K. BOLSHESOLSKY, of St. Petersburgh (*Vratch*, No. xi, 1887, p. 220), from numerous experiments made by himself in Professor A. P. Dobroslavin's laboratory, concludes that biniodide of mercury is a more powerful and less poisonous antiseptic than corrosive sublimate. Thus he fully confirms the observations of Bernhardy. A solution of 1 in 4,000 destroys putrefaction-microbes more completely than a sublimate solution of 1 in 2,000. The biniodide dissolved in a solution of iodide of potassium was recently tried, with apparently good results, in three cases of laparotomy, under Professor A. I. Krassowski. For washing the floor, a solution of 1 in 4,000 was employed; for disinfecting the hands, 1 in 2,000; for instruments, 1 in 2,000 and 3,000.

ANILINE INHALATIONS IN PHTHISIS.

PROFESSOR KREMIANSKY'S method (JOURNAL, March 12th, 1887, p. 579) was recently tried by Dr. Nesteroff, of Moscow (*Russkaia Meditzina*, No. viii, 1887, p. 151), in the case of a lady suffering from consumption, whose condition was not at all such as to cause immediate apprehension; in fact, she was about to start for a southern health-resort. Under inhalations of aniline dissolved in oleum gaultheriæ, the patient's state grew steadily worse; and after two weeks of the aniline treatment, she died. Dr. Nesteroff emphatically declares that he will never venture to repeat the experiment: he maintains that the method is not only useless but directly injurious.

IODOL IN DIPHTHERIA.

IN order to test the statements of Dr. Mazzoni, Dr. L. L. Stembo, of Vilna, tried (*Proceedings of the Vilna Medical Society*, No. v, 1887, p. 114) the local use of iodol in seven cases of diphtheria, two of which were severe. The drug was applied either alone, in powder, or in the form of a solution (℞ Iodoli, ℈ss; liq. vini, ʒss; glycerini, ʒ iij s). All the patients recovered after treatment lasting from four to six days. The advantages claimed by Dr. Stembo for iodol are its complete harmlessness, its freedom from unpleasant smell or taste, the painlessness of its application, and the absence of any untoward secondary effects, such as loss of appetite, nausea, vomiting, etc.

THE MICROBE OF TYPHOID FEVER.

AT a recent meeting of the Société des Hôpitaux, M. Chantemesse made an interesting communication concerning the morphological and biological characteristics of the typhoid-microbe. The sporulation of this microbe takes place between 19° and 48° C. (67° to 104.4° F.). It develops in water, even if sterilised. At a temperature of 45° C. (113° F.) the cultivations live for several days; they are destroyed by boiling. This microbe retains its vitality in damp ground. Corrosive sublimate (1 in 20,000) and sulphate of quinine (1 in 800) destroy it. Carbolic acid (1 in 400) has no effect on it; hydrochloric acid is also inert, therefore the acidity of the stomach is not inimical to this microbe.

LANGMORE DEFENCE FUND.

IN reference to the subject-matter of the letter in the JOURNAL of April 2nd, at page 752, signed "One who did what he considered his Duty," it may be mentioned that the victim of the injustice herein described is Dr. J. W. Langmore, of Oxford Terrace, Hyde Park, London. The facts of the case having been brought to the notice of the Council of the Metropolitan Counties Branch of the British Medical Association, the Council have unani-

mously resolved to open a subscription to assist in defraying the expenses to which Dr. J. W. Langmore has been thus unjustifiably put, and subscriptions amounting to nearly £40 have already been promised or received. Gentlemen who may desire to assist the fund are requested to send their donations to Mr. George Eastes, M.B., 69, Connaught Street, Hyde Park Square, London, W., one of the Honorary Secretaries of the Metropolitan Counties Branch. A list of subscriptions will be published in the JOURNAL of April 16th.

ST. JOHN AMBULANCE ASSOCIATION.

A MEETING of hospital physicians and surgeons was held on Friday at St. John's Gate, Clerkenwell, to consider what measures should be adopted to interest the public in that branch of the work of the St. John Ambulance Association connected with the conveyance of the sick of all classes. Sir Edward Sieveking, who presided, was supported by Sir J. Risdon Bennett, Sir Thomas Crawford, K.C.B., Dr. Farquharson, M.P., Sir James Hanbury, K.C.B., Sir William Mac Cormac, Surgeon-General Mackinnon, Mr. John Furley (Hon. Director of Stores), Mr. G. Turnbull, etc. The chairman referred to the work of the St. John Association during the ten years of its existence, remarking that it had received the flattery of imitation among Continental nations, especially in Germany. The ambulance department might be termed the child of the Order of St. John, and the conveyance department the grandchild. Mr. Furley then gave a full explanation of the horse ambulance carriages, litters, and stretchers designed by him. The inventions were favourably commented on by various speakers, and resolutions pledging the meeting to use its endeavours to extend and develop the work were unanimously carried.

CHOLERA.

THE *Union Médicale* of March 2nd gives the following facts concerning the present cholera epidemic. A few isolated cases were recorded at Catania (Sicily) at the very beginning of March; the disorder was said to be sporadic. From later information it appears that it was epidemic. On March 7th, fifty cases were recorded, twelve of which proved fatal. Quarantine has been established in the countries along the Mediterranean for all ships arriving from Sicily. The Sanitary Council of Alexandria alone has not established quarantine. At Malta, quarantine is imposed upon all ships arriving from Sicily. Passengers arriving from the other Mediterranean ports are obliged to produce a consular certificate, stating that they have not been in Sicily for twenty-one days, before being allowed to land. In South America cholera appears to be decreasing. The sanitary measures employed there were of but slight assistance in checking the spread of the epidemic.

HE GENERAL MEDICAL COUNCIL.

A MEETING of the General Medical Council has been summoned for May 10th, and a meeting of the Executive Committee for the preceding day. The most important business before the Council will be the appointment of examiners in surgery at the Apothecaries' Societies in London and Dublin. Another duty of only less urgency will be the selection of inspectors of examinations. The financial question will also come up, as it will be absolutely necessary for the Council to devise some scheme by which its expenditure may be curtailed so as to bring about a satisfactory balance. Sir Henry Acland, it may be remembered, only consented to hold office as President until the next meeting, so that the Council will probably be called upon to elect his successor.

THE ROYAL SOCIETY.

AMONG the candidates for election as Fellows of the Royal Society appear the names of the following members of the medical profession, arranged in alphabetical order: Dr. Thomas Buzzard, Sir Charles A. Cameron (Dublin), Dr. J. Theodore Cash, Dr. William Henry Corfield, Dr. W. Howship Dickinson, Professor J. Cossar Ewart, Sir B. Walter Foster, M.P., Dr. W. R. Gowers, Dr. W. B. Halliburton, Surgeon-Major George King, M.B. (Calcutta), Sir John Kirk, G.C.M.G. (Zanzibar), Professor P. W. Latham (Cambridge), Dr. W. M. Ord, Dr. Urban Pritchard, Dr. Thomas Stevenson, Mr. T. Pridgin Teale (Leeds), Dr. George Thin, Professor C. Meymott Tidy, and Professor Gerald Yeo. Other physiologists or comparative anatomists whose names appear are Mr. W. Saville Kent, Dr. A. Sheridan Lea (Cambridge), and Professor Jeffery Parker.

THE "SLEEPING MAN."

THE man Chauffat, whose case was fully described in the JOURNAL by Drs. Keser and De Watteville last week, remains in much the same condition, though the lethargy is stated to be somewhat less profound. The amount of attention which the case has attracted and the space devoted to a daily description of the patient's condition by the daily papers are out of all proportion to its medical interest. Such cases are no doubt rare in England; but the condition has been fully described by Charcot, Richet, and other French writers. Happily we have comparatively few opportunities of studying the "great hysterics" in England, and it is sincerely to be hoped that the prominence given to this imported case will not determine an epidemic among our more sober-minded population.

A STEP IN THE REFORM OF ENGLISH SPELLING.

PROFESSOR SKEAT, in a recent number of *Notes and Queries*, says: "Those who know the whole history of our spelling from the eighth century to the present time best understand the harm done by the pernicious system of trying to transplant Latin and Greek symbols into the English language. The symbols æ and œ are not English, and are best avoided. Indeed, this is done in practice when once a word becomes common. *Æther* and *ætherial* have been sensibly replaced by *ether* and *etherial*. No one now writes *æternal*. *Solœcism* is now *solecism*, and I trust that *primeval* and *medieval* will soon prevail over *primæval* and *mediæval*. Pedantic spellings are most objectionable, because they are useless and unphonetic." We heartily agree with Professor Skeat, and trust that *diarrhœa*, *leucorrhœa*, *dysmenorhœa*, etc., will soon give place to *diarrhea*, *leucorrhea*, *dysmenorrhea*, etc.

A LATTER-DAY ORIGEN.

IN the *Rüsskaïa Meditzina*, No. v, 1887, p. 93, Dr. Alexëëff, of Kuïaghinin, reports the following singular case of self-castration. The patient, a tall, powerfully-built, married peasant, aged 29, suffered from epileptic fits, and, of late, had become morose, silent, and fond of religious literature. On April 3rd, while reading one of his favourite books, he suddenly, with a single pull, and without uttering a cry, tore away his scrotum, together with the testes. He then rose from the bank where he was sitting and quietly handed the avulsed parts over to his mother, who was sitting near, with the words, "Take that; I do not want it any more." To all questions from his relatives, he answered only, "Pardon me, for Christ's sake, and do not blame me!" On his admission to the hospital on the following day, there was found a lacerated wound as large as the palm of a man's hand, with an uneven base and irregular edges. The patient's general state was quite satisfactory; his pulse was good, his temperature normal, and he did not complain of any pain or discomfort. The wound was dressed with thymol and iodoform, and healed without any fever or the slightest constitutional disturbance, the man leaving the hospital in excellent health on May 4th. In a similar case reported by Dr. Alexëëff in the *Medikinsky Vestnik*, No. xxii, 1882, the same injury was inflicted upon himself by a patient suffering from delirium tremens.

THE DENTAL PROFESSION.

THE improvement in the social and professional status of dentists which has taken place within the last quarter of a century must appear very conspicuous to any person who can look back for that period; how much more, then, must the advance be apparent to one who can look back for twice that period. No wonder that Sir James

Paget found much upon which to congratulate his audience at the dinner of the Dental Hospital of London last month. "As we look back in this jubilee time," he said, "for the last fifty years, one cannot but be happy in seeing what a complete contrast there is between the profession now and such as it was at the beginning of the last half century. There were, indeed, very distinguished men in it at that time, distinguished surgeons who gave themselves to this special work, men whose descendants are still amongst us; but these friends, and working as friends, but with no general influence on the profession, were not chained together as in one body; and, although there were many able dentists, there was no distinction between them and the village blacksmith or carpenter, or any one who would give himself to the business, having usually failed in some other pursuit of life. There was no limit to the extraction of teeth and the fracture of the jaw that went on." But the leaders of those days combined a dental school with a dental hospital, and finally obtained legal incorporation and registration. "From this time onwards," said Sir James Paget, "you will rise, not only in utility, but in public estimation. All those students who are well educated will be admitted to the *Register*, all will be welcome, and all will be held as members in common with the great profession of medicine in England, and they will maintain amongst themselves the highest repute and the highest mutual honour that they can."

A CHANCE FOR ANTI-TOBACCONISTS.

THE Société contre l'Abus du Tabac offers the following prizes: 1. A prize of 500 francs (£20), with a gold medal worth 100 francs (£4), is offered by Dr. Depierris to medical students belonging to any school in France for the best treatise on "Nicotic Cachexia: its Symptoms, Progress, and Effects; demonstrated by at least eight clinical observations, made either in the hospitals or in civil or military practice." It may be written in the form of a thesis, but this is not obligatory. The prizes are open to all students, no matter what their standing. Other medals will be awarded to the authors of any treatise of exceptional scientific value. 2. A prize of 900 francs (£36) (*Prix des Gens de Lettres*), with a gold medal worth 100 francs, is offered by Dr. Depierris for the best treatise on "The Effects of Tobacco on the Health of Men of Letters: its Influence on Future French Literature." 3. A prize of books worth 200 francs (£8) (*Prix de Médecine*) is offered for the four best detailed reports of cases (including etiology, symptoms, termination, etc.) of affections due exclusively to the abuse of tobacco. A medal will also be awarded with this prize. The essays may be written in French, English, German, Italian, or Spanish, and they must be sent in before December 31st, 1887. Full particulars as to the conditions of the competition will be forwarded free, on application to the Président de la Société contre l'Abus du Tabac, 33, Rue Jacob, Paris.

DRUNK OR DYING.

AN inquest was held this week on the body of a labourer named John Brennan, who was taken to St. Thomas's Hospital on Saturday, March 26th, suffering from injuries received, whilst drunk, from a passing tram-car. It was stated in evidence that, on the arrival of the deceased at the hospital, he was seen by a dresser, but not detained. He was then taken to the Battersea Police Station, and charged with being drunk. On the following day he died in Wandsworth Infirmary, and a coroner's jury, in returning a verdict of accidental death, expressed their dissatisfaction at the refusal to admit the deceased into the hospital, and the coroner expressed the hope that such a case would not occur again. From information furnished us by Mr. W. H. C. Staveley, House-Surgeon at St. Thomas's Hospital, we are enabled to publish the following true statement of facts: The deceased, who had been previously examined by a medical man outside, shortly after the accident, was taken, at about 10 P.M. on Saturday, March 26th, to St. Thomas's Hospital, where he was seen by the dresser on duty, Mr. Suzuki, a Japanese student (an M.D. Japan), who states that the man was very drunk, quarrelsome, and could not answer questions coherently; his pulse was quick, his respiration hurried. He made a careful examination of the head, chest, and abdomen, both front and back. He found a small scalp-wound, and two abrasions on the back about two inches long, and a third on one of the lower limbs. There was no tenderness or distension of the abdomen. Without appealing to the house-surgeon, he ordered the police to remove him. The man was restive, but complained of no pain while being dressed. It would appear that, after his removal to the police-cell, he was seen several times during the night, as he was very noisy, and vomited frequently. He made no complaint during the night, but said he was all right, and did not ask to see a medical man. On Sunday morning he complained of pain in the epigastrium, but dressed himself and left the police-station on his own recognisances. He was afterwards found by a policeman, near the station, leaning against a wall, complaining of great pain in the abdomen. He was taken to the nearest medical man, who ordered his immediate removal to the infirmary; he then had symptoms of acute peritonitis, and died the same evening. At the necropsy it was found that there was a small rupture of the duodenum, and a slight rupture of the liver. It was obvious that the deceased was not "run over" by a tram-car, as was stated in some newspaper; but it seems probable that he was jammed between the wheel-guard and the ground. It should be stated that the in-patient dresser, Mr. Suzuki, had no authority to treat or dismiss a case of this description without appealing to the house-surgeon.

STANDARD OF VISION FOR THE ARMY.

SIR GUYER HUNTER, M.P., having been impressed with the unsatisfactory nature of the tests by which candidates for admission in the various branches of the army are examined, as to their eyesight, has on various occasions endeavoured to elicit information from the Secretary of State for War on this subject. The result of these inquiries has been that we have now an authoritative statement to the effect that the Government are satisfied with the conditions laid down in the Military Regulations, paragraph 1,013B, of March, 1887, which direct that the "candidate's vision will be tested by Snellen's Metrical Test Types and colour diagrams. He should be able to read ordinary type, distinguish the principal colours, and perform routine duties without glasses, but for other purposes the use of glasses may be permitted." We agree with Sir Guyer Hunter that with an order of this kind before him the examining medical officer must simply use his own discretion as to passing or rejecting a candidate in the physical examination for the army; there is absolutely nothing to guide him as to the amount of ametropia which disqualifies a man from entering the army, a state of things unsatisfactory both for the public and the military service of this country. These facts have lately engaged the attention of Sir William Bowman, and several of the leading ophthalmic surgeons in London, and they have drawn up a memorial to be placed in Sir Guyer Hunter's hands for the information of the authorities at the War Office. This statement, which is signed by Sir W. Bowman, Messrs. H. Power, G. Lawson, C. Macnamara, G. Anderson Critchett, J. Tweedy, and E. Nettleship, is to the following effect: "It constantly happens that medical men and oculists are consulted as to the range and quality of a candidate's vision, when parents and guardians are anxiously considering whether their sons or wards should embrace a military career, and when it is of great importance that they should not incur expense and occupy time on their preliminary studies, only to find them subsequently excluded from it at the moment of examination, owing to some previously unsuspected or unascertained defect of sight. The oculist turns to the order above referred to, and finds that it does not afford him sufficiently accurate data for forming a reliable conclusion on the question submitted to him, 'whether the army medical examiners will pass him or not' (in the matter of sight), and this in consequence chiefly of a want of precision in the definition of the standard required, a precision specially attainable in the present condition of

ophthalmic science. It is believed to be unnecessary to do more than thus to direct attention to an inconvenience which has long been experienced, and which may perhaps be regarded as amounting to a grave disadvantage, not only to intending candidates, but to the public service itself. No doubt the intelligent authorities of the Army Medical Department are the most competent persons to decide as to the nature and extent of the suggested recast of the rules on this subject. But we would venture, in addition, to remark that in our opinion the best of all remedies for the present difficulty would be found in affording an opportunity, on payment of a suitable fee, of having the preliminary examination as to the range and quality of vision (and possibly of other physical conditions) authoritatively conducted by the army medical examiners themselves at that earlier period when the question first becomes of interest to the parents and guardians, who themselves have not infrequently rather special claims on consideration."

DISINFECTANTS AND THEIR USES.

Dr. Alfred Carpenter delivered an address at the last monthly meeting of the Association of Public Sanitary Inspectors, on "Theory and Practice as to Disinfection." He urged that sanitary inspectors, who had very great power if they used it carefully, should reason out the grounds of the application of any particular mode of disinfection, rather than give a blind obedience to a written order. With regard to small-pox, he pointed out that germs of living protoplasm in the breath of a patient would take root if immediately transplanted to the membrane of a susceptible person, but if floated about in the air for 100 yards they would lose their vitality. Isolation, with ventilation, as rapidly as possible, was necessary in such cases. For disinfecting the furniture of a house after infectious disease steam was preferable, and he advised all local authorities to provide themselves with the means of applying steam heat. Dr. Carpenter did not recommend carbolic acid as a disinfectant in cases of disease, for it was found that the acid preserved the dormant germ from decay. This also held good of alcohol; the use of spirituous liquors as a protection against the evils of impure water was no protection at all. The same argument applied, though in a minor degree, to sulphurous acid. The best disinfectant was a solution of bichloride of mercury. It required to be used with care, but it was rapid in its action, and so powerful that a solution of 1 part in 5,000 of water would in fifteen minutes destroy every living germ, dormant or otherwise, with which it came in contact. The best disinfectant for sewers was sulphate of iron. Dr. Carpenter concluded by saying that the lines on which disinfection should be carried out were: Ventilation, aerial disinfection by chlorine or steam, lime washing, washing floors and furniture with solutions of mercuric chloride; steam heat for clothing, furniture, etc.; and sulphate of iron or chloride of lime in adequate quantities for flushing. If these means were effectively applied infectious diseases would be completely banished from our midst, and any local authority which now allowed of their continuance was doing defective work.

SANITARY STATISTICS OF PARIS.

In an article on the hygiene of towns, published by Dr. Jules Rochard in the *Revue des Deux Mondes*, some interesting statistics are given. The provincial towns of France have generally formed themselves on the model of Paris, without taking into account different conditions which require different plans of organisation. The wide, straight thoroughfares of Paris, imitated in many of the southern cities, are not so well suited to the intense heat of the sun in those regions as the narrow, winding streets, with overhanging houses, which are still seen in the ancient parts of Montpellier and Toulon. With the exception of Marseilles, Paris is better supplied with water than any other French town; the former has a daily supply of 792 litres for each inhabitant, whilst in Paris the daily supply for each person is only 220 litres; less than a century ago it was only 13 tres. When the springs of the Eure are utilised, Paris will be able to have a daily supply of 300 litres for each inhabitant. There will be then no need to have recourse to the Seine for water. In Paris, the total length of the underground drains is 1,175,196 mètres; of these, the sewers comprise 833,702 mètres. The system of sewerage, however, still requires 387,000 mètres to complete it; this will cost about 40,000,000 francs to construct. Each mètre of sewage of the largest size costs 300 francs, and of the smallest size 80 francs. The total expense of the drainage amounts to 1,000 francs a day; this includes the expenses of night-carts, workmen, etc. The entire expense of drainage, removal of dust, and cleansing of streets amounts to 18,212,600 francs a year.

PROGNOSIS IN ALBUMINURIC RETINITIS.

The volume of the *Transactions* of the American Ophthalmological Society, which has lately been issued, contains an important paper by Dr. Stedman Bull on Albuminuric Retinitis. It is an analysis of a hundred and three cases, most of which were under observation a considerable time, and has an important bearing upon the question of prognosis, both as regards vision and the duration of life. In thirty-two cases there was temporary improvement of vision while the patient was under treatment; this was due to the disappearance of retinal œdema, but in no instance did any absorption of the glistening stellate exudation at the macula take place. Dr. Bull confirms the unfavourable prognosis as to the duration of life which the presence of albuminuric retinitis is generally held to imply. It is, of course, nearly always impossible to fix the date at which the disease commenced, but of the hundred and three cases eighty-six died, fifty-seven within a year, and eighteen within two years after first coming under observation. Cases of renal disease due to scarlet fever and pregnancy were excluded, the prognosis in both these with regard to vision being much more favourable.

CLIMATE AND STATISTICS AT THE WASHINGTON CONGRESS.

The "Section on Medical Climatology and Demography" of the ninth International Medical Congress at Washington, which begins on September 5th, has issued a most comprehensive scheme of subjects for papers and discussions. Such general questions as the value of climatology and demography to medicine, and the effects of climate on the human race, are placed first in this scheme. An important question raised is the relative advantages of mountain and sea-side resorts, and co-related with this is the segregation or aggregation of invalids at health stations. The therapeutic value of natural mineral waters will probably afford material for many papers and much discussion. It is desired that the occasion should be seized to impress on Governments that the provision of accurate records of prevailing sickness being a necessary factor in any system of vital statistics, it is the duty of the State to make this provision; in this connection it is proposed to discuss the subject of medical nomenclature. Collective investigation, being capable of contributing numerical data as to the kinds and proportions of prevailing diseases and as to the absolute amount of daily sickness, will come within the scope of this section, as will also the influence of preventive medicine on the physical well-being of a population. Dr. Isambard Owen (5, Hertford Street, Mayfair, W.), is the secretary for this country, and it is particularly requested that persons intending to read papers should give notice before May 1st. The President of the section is Dr. Albert L. Gihon, Medical Director U.S. Navy, Vallejo, California.

RETENTION OF FŒTAL MEMBRANES.

In the *Jürnal Akürsherstva i Jenskikh Boleznei* (the organ of the St. Petersburg Gynæcological Society, edited by Professors A. I. Krassowski, K. F. Slaviansky, and I. I. Smolsky), vol. i, fasc. i, 1886, p. 1, Professor I. P. Lazarevitch, of Kharkov, discusses the subject of retention of fœtal membranes, arriving at the following conclusions; 1. Retention of the decidua with the chorion is a common occurrence, and has no special importance. 2. On the other hand, retention of the amnion or of portions of the placenta occur but rarely, and are

apt to give rise to dangerous symptoms, such as decomposition leading to inflammatory œdema, swelling and softening of the uterine walls, lochiometria, etc. 3. The conditions tending to produce retention of the decidua with the chorion are the following: (*a*) late rupture of fœtal membranes; (*b*) their adhesion to the wall of the uterus owing to overgrowth of the chorionic villi at some spot, to decidual hæmorrhage, giving rise to fibrous adhesion, or to endometritis and choriitis, etc.; (*c*) their early separation from the amnion; (*d*) finally, their abnormal friability. 4. Retention of the amnion, on the other hand, is favoured by an early rupture of the fœtal membranes, by a low situation of the placenta, by operative manipulations within the uterine cavity, by anteflexion of the womb, by thinness, congenital or pathological, of the membrane in question, and by adhesion. To prevent retention of fœtal membranes, Professor Lazarevitch recommends that the placenta should be removed only after straightening the womb (which bends forwards after expulsion of the fœtus).

THE CONNECTION BETWEEN CHEMICAL CONSTITUTION AND PHYSIOLOGICAL ACTION.

At a meeting of the Royal Society on Thursday, March 31st, Drs. Lauder Brunton and Cash made an important contribution to our knowledge of the Connection between Chemical Constitution and Physiological Action. In a former paper, the authors had discussed a number of the compounds of ammonia, and in the present they took up a number of substances allied to carbolic acid. A certain parallelism was observed between the changes of physiological action noticed in the compounds of ammonia and in those of benzene by the introduction of chlorine, bromine, iodine, and hydroxyl. Although these radicals do not modify the action of benzene so much as that of ammonia, yet, both in the ammonia compounds and the benzene compounds, the iodine seems to produce a greater tendency to paralysis of motor nerves, while hydroxyl tends to cause irritation of the nervous centres and tetanic convulsions; so that, both solutions of ammonia and carbolic acid act on the frog as convulsant poisons in somewhat the same manner as strychnine. One marked peculiarity of the benzene compounds, however, is their tendency to cause tremor of various kinds, so that some of them produce in the frog symptoms like those of disseminated sclerosis in man, and others a form of locomotor ataxy.

FATAL RESULT OF LARGE DOSES OF THALLIN.

Professor Ehrlich, who has had very good results from thallin in typhoid fever has had the candour to report a case (*Münchener Med. Wochenschr.*, No. viii) which ended fatally under repeated progressive doses—namely, 0.08 up to 0.58 grammes (one and a quarter grains to nine grains nearly)—of thallin tartrate. The necropsy showed the lesions of typhoid fever in the healing stage, cardiac hypertrophy and dilatation, fresh mitral endocarditis, and hæmorrhagic infarcts in the renal papillæ, the last-mentioned being, as shown by experiment, a characteristic sign of thallin poisoning. Ehrlich assumes that the cardiac condition caused defective excretion and consequent accumulation of thallin. This danger may be completely avoided by fixing as the maximum dose for hourly administration 0.2 grammes of the tartrate (three grains). In the progressive administration of thallin very small doses are used at first—namely, 0.07 or 0.08 grammes—and this amount is increased daily by $\frac{1}{10}$ gramme. Heart-failure of any kind is a contra-indication of thallin treatment; so are the various forms of kidney disease, and also cases which resist the influence of small doses. Professor Ehrlich deserves our sympathy and respect for his conduct in this case, which will have great influence upon the use of thallin in this country.

SALOL.

Dr. Kleefeld (*Berliner klin. Wochenschr.*, No. iv, 1887) gives the following report on the action of salol, a substance composed of 60 per cent. salicylic acid and 40 per cent. carbolic acid:—"The composition of salol induced me to give it a full trial in the town hospital (Gœrlitz) during the last month, and the very satisfactory results compel me to bring it before the notice of the profession. According to our experience of salol in thirty-five cases (in which a thousand separate doses were administered) it has, like sodium, salicylate, and antipyrin, a specific influence in rheumatic polyarthritis, but is preferable to them for the following reasons:—1. No untoward symptoms, such as collapse, vomiting, etc., follow its use. Singing in the ears is rarely complained of, and is never severe. 2. The drug has no taste or smell, and is pleasanter to take than either of those just mentioned. 3. Its cost is low, the wholesale price in Germany being 30 marks per kilo.—30s. for 2½ lbs. The full dose, beyond which we have never found it necessary to go, is two grammes (half a drachm) three times a day, but half this amount has often been sufficient. Finally, I am of opinion that salol is a very acceptable addition to our *Materia Medica*." Dr. Georgi, Dr. Kleefeld's assistant, will shortly publish details of the cases thus treated.

SCOTLAND.

ROYAL HOSPITAL FOR SICK CHILDREN, EDINBURGH.

During the month of March 121 patients were treated in the Roya Hospital for Sick Children, Edinburgh. Of these, 26 were in the hospital at the end of the preceding month, and 65 were admitted during March; 21 were discharged from the hospital cured, and 15 were relieved. The daily average in the hospital was 56. At the Dispensary, 423 patients were treated and 6 were vaccinated, making a total of 429.

LEGACIES TO THE ROYAL INFIRMARY, EDINBURGH.

The following legacies and donations of £100 and upwards have been paid to the Royal Infirmary and Convalescent House during the last half-year:—To the Royal Infirmary, by Miss Christian Wardlaw Bardner, £500 (legacy); by Sir William A. Maxwell, Bart., of Calderwood, Lanark, £450; by Robert Burns, banker, Edinburgh (additional to £730 received on May 15th, 1860), £17 12s.; by William Turnbull, of Menlaws, Jedburgh, £100; by Miss Cecilia Milson, £410 7s. 4d.; by John Grieg, F.R.C.S.E., Inspector-General of Hospitals, £200; by Miss Jane Leslie, £100; by Captain Robert Williamson Ramsay, late of the 42nd Highlanders, £300; donation by David Paton, Alloa, £100; and David Proven, Lasswade, "in memory of his wife," £500. To the Convalescent House, donations by the trustees of the late Miss Marianne Millar, of Earnock, £320.

ST. ANDREW'S AMBULANCE ASSOCIATION, GLASGOW.

The annual meeting of St. Andrew's Ambulance Association, Glasgow, was held on Thursday, March 31st. The report stated that during the year 846 calls had been made on the wagons of the Association, and 2,602 patients had been safely carried in the wagons since the formation of the Association five years ago. During the past year 5,913 pupils had been trained, being an increase of 2,227 over the previous year. The total number of pupils trained by the Association since its formation was 13,314.

EDINBURGH DENTAL HOSPITAL.

The quarterly report of the Edinburgh Dental Hospital states that during the last three months the number of patients treated was 1,855. Of these 876 were males and 979 females. Mr. J. Stewart Durward, L.D.S., has been elected to the senior staff, and Mr. W. Wilson, M.B., L.R.C.S. and L.D.S., to the junior staff.

AYRSHIRE MEDICAL CLUB.

At the annual meeting of the Ayrshire Medical Club, recently held at Ayr, the report submitted showed the financial state of the club to be in a satisfactory condition. Four new members were admitted to the club, which now numbers over fifty members. The members subsequently dined together, and Dr. Dobbie, in proposing "Success

to the Ayrshire Medical Club," referred to the good results proceeding from such meetings in breaking down the asperities and removing the misunderstandings which sometimes unfortunately arose between medical practitioners. An enjoyable evening was spent in the discussion of various topics and questions affecting the interests of the profession. A hearty vote of thanks, on the motion of Dr. Black Morrison, was awarded to the Secretary for his valuable services in connection with the club. A similar compliment was accorded to the venerable President, Dr. Ronald.

IRELAND.

THE LATE SURGEON W. KELSALL.

SOME friends of the late Surgeon W. Kelsall, A.M.D., who died of cholera almost immediately after his arrival at Yemethen, Burma, in December last, at the age of thirty-five, wish to place a memorial panel window in the church of the parish of Booterstown, where he was born. The cost will be about £25. Subscriptions are limited to a guinea. The honorary treasurer of the fund is Mr. N. M. Falkiner, 28, York Street, Dublin.

EPILEPSY DUE TO A SUBDURAL CYST PRESSING ON THE BRAIN.

ON February 22nd Mr. Kendal Franks operated in the Adelaide Hospital on a man aged 25, who had been subject to epileptic attacks for four years, the result of a fall on his head in 1879. Part of the frontal and parietal bones on the left side had been depressed by the fracture. The attacks occurred about once a month, but occasionally there were as many as five and six in a month. Mr. Franks trephined the skull immediately behind the left frontal eminence, and, on opening the dura mater, discovered a cyst the size of a large walnut beneath it, with a corresponding depression on the brain. The cyst contained serum and an old blood-clot; it was evacuated, cleaned out, and drained. The patient recovered rapidly, and was allowed to get up on the twelfth day. Since the operation he has had no return of the epilepsy.

CORK WORKHOUSE.

DR. NUGENT, one of the inspectors of lunatic asylums in Ireland, has recently reported to the guardians as to the accommodation for lunatics in the workhouse. At the time of his inspection there were 172 inmates, and he states that the accommodation for females was very deficient until the recent additions to the building were made. The dormitory provision is in every way satisfactory, the rooms being large, well lighted, and well ventilated; but there is still hardly sufficient day-room accommodation. Dr. Nugent recommends that a shed, which is now used as a day-room, dining hall, and working room, should be extended for a distance of about fifty feet. In the discussion which followed, the question of removing as many lunatics as possible to the district lunatic asylums was raised, and it was pointed out that their presence in the workhouse was injurious not only to the inmates themselves, but also to the ratepayers. If they were in the asylum, the county at large would pay for them, and they would, in addition, receive a capitation grant of 5s. a head from Government. The matter will be considered at an early meeting of the new board of guardians.

STRANGE FATALITY IN BELFAST.

Two girls, aged respectively 15 and 12 years, died on Friday, March 1st, under very peculiar circumstances. They had partaken freely of dinner, consisting, amongst other things, of beef, chocolate, and marmalade, were soon afterwards seized with vomiting and convulsions, and died with all the symptoms of poisoning. The medical man who was called in is stated to have expressed the opinion that "death was due to an irritant, and that in his opinion the beef, marmalade, and chocolate of which the girls partook would be a sufficient irritant to have produced the symptoms from which they suffered and died." A verdict in accordance with this astounding evidence was returned by the jury, and the representative of the police declared himself quite satisfied. It is impossible that so serious a matter can be allowed to rest. That the food in question, if of proper quality, could be the cause of death is difficult to believe, and we must conclude either that the food was of such bad quality as to be actually poisonous, or that poison had been added to it. The circumstances of the case render foul play improbable, but further inquiry ought certainly to be made.

HOME FOR PROTESTANT INCURABLES, CORK.

THE fifteenth annual meeting of the subscribers of this institution was recently held under the presidency of the Lord Bishop of Cork. The patients treated during the year amounted to 68, and of 9 who left, 5 were almost completely restored to health. The income for the year amounted to £1,522 9s. 5d., and the expenditure to £1,368 3s. 6d., or a surplus of £154 5s. 11d.

KING AND QUEEN'S COLLEGE OF PHYSICIANS.

AT the meeting of this College held on April 1st, the following members were duly ballotted for and elected Fellows of the College:—Alexander Duke, Obstetric Physician to Dr. Steevens's Hospital; Ephraim MacDowel Cosgrave, M.D.Dub., Physician to Simpson's and to the Whitworth Hospital; Wallace Beatty, M.D.Dub., Senior Assistant Physician to the Adelaide Hospital.

NIGHT LECTURES.

IN two of the medical schools of Dublin lectures are given in the evening for the convenience of students who are unable to attend during the day. Whilst no doubt there are serious objections to this system, there is a good deal to be said in its favour when it is conducted in strict good faith—that is to say, when the privilege is restricted to students who are occupied during the ordinary working hours of the day in earning their livelihood and the means of education, in offices, counting houses, or pharmacies. This class often includes the most hard-working and intelligent men, and many of them have become excellent and successful practitioners. The fact that the system has notoriously been abused in some instances is no reason why it should be utterly condemned. The standing committee of the Royal University of Ireland, however, has decreed that certificates of night lectures attended after March 31st, 1887, shall not be accepted for any future medical examination.

BELFAST OPHTHALMIC HOSPITAL: ANNUAL MEETING.

THE annual meeting of this institution was held on March 22nd, under the presidency of the Mayor of Belfast. The medical report showed that 1,000 cases of eye disease, 253 cases of ear disease, and 80 cases of throat affections had been treated in the extern department, and that 90 cases had been admitted to the wards during the year. The average attendance at the extern department had been 500 per month. Cucaine had been used in nearly all the operations. A large number of students had availed themselves of the facilities afforded by the hospital for clinical instruction.

HEALTH OF BELFAST.

THE monthly report presented to the Town Council on April 1st showed that there had been 60 fatal cases of zymotic disease returned during the past five weeks, among which were 9 deaths from typhus fever. The average death-rate was 28.8 per 1,000, from lung-disease 12.3, and from zymotic affections 2.7. In the same period there had been 112 deaths from phthisis. The rate in children under one year was 5.8, and in persons at and over sixty years 5.7. The death-rate from typhus fever and from chest affections showed a considerable increase upon the preceding month. The mortality during the severe weather in the middle of March was exceptionally heavy, the deaths during two weeks actually exceeding the births.

THE CESSATION OF THE REGISTRATION OF SINGLE DIPLOMAS.

It having come to the knowledge of the General Medical Council that there are many persons possessing registrable qualifications who are not aware of the full bearings on registration of the Medical Act of 1886, a communication by direction of the President has been addressed by the Registrar, Mr. W. J. C. Miller, to all the licensing bodies, in which attention is called to the following facts: that

"After June 1st, 1887, no person can be put on the *Medical Register* by virtue of a single qualification, such as a diploma in surgery or a diploma or licence in medicine.

"Up to June 1st next, any person can be put on the *Register* by virtue of such single qualification, and, being once on, he may obtain additional qualifications by subsequent examinations, and such additional qualifications may be added to or substituted for those already on the *Register*.

"But after June 1st next, no one can be put on the *Register* who has not passed the qualifying examination required by the Act of 1886, that is, an examination in medicine, surgery, and midwifery, and these three subjects must be taken up together; hence anyone who has now a single qualification, and intends to obtain further qualifications after June 1st next, should take care to be on the *Register* before that day, for if he is not on it, his single qualification will not afterwards entitle him to registration."

This is a matter of considerable importance to persons who have not yet completed their medical education, and one the full bearings of which it is very necessary they should thoroughly understand.

COLLECTIVE INVESTIGATION COMMITTEE:

SUMMARY OF A PRELIMINARY REPORT MADE TO THE THERAPEUTIC SECTION OF THE ANNUAL MEETING OF 1886 ON THE RETURNS RECEIVED IN RESPONSE TO INQUIRIES INTO THE ACTION OF HAMAMELIS AND PURE TEREBENE.

By ISAMBARD OWEN, M.D., F.R.C.P.,
Secretary to the Committee, and Assistant Physician to St. George's Hospital.

Mr. President and Gentlemen,—In the Therapeutic Section of the Annual Meeting of 1885, it was resolved to adopt a proposal of Sir Walter Foster's, and to select certain therapeutic subjects for investigation by the Collective Investigation Committee. A committee was appointed to select the subjects, and it was resolved that the Collective Investigation Committee should be desired to present a report upon the results of the inquiries to the Therapeutic Section of the following annual meeting.

The Collective Investigation Committee are of opinion that upon future occasions, should it be considered desirable to continue these inquiries, it would be better to allow two years instead of one for the presentation of a report upon each set of selected subjects; for, as the general period of vacation follows close upon the annual meeting, it will probably happen, as it did in the present instance, that the selection of the subjects, the composition and adoption of memoranda and inquiry papers upon them, cannot be completed until the official year of the Association is already several months advanced. Moreover, it is necessary that the inquiry should be closed some time before the next annual meeting, in order to allow time for the preparation of a report; so that much too narrow an interval is left to allow of the due circulation of the inquiry-papers, and of the accumulation of adequate observations.

Many observers, too, whose observations would be of great value, will probably not have used the drugs which are the subjects of inquiry at the time of receiving the inquiry-papers from the Collective Investigation Committee, but might be induced to do so by the knowledge that such an inquiry is on foot. Suitable cases for trial of the drugs may not, however, immediately occur, and, unless an interval of at least a twelvemonth be allowed between the first issue and the closure of the inquiry, a large body of valuable experience, which would otherwise be available, will be lost to the mass of results.

In the present instance the whole scheme was new, and both the subjects selected and the details of the method of inquiry required to be carefully considered by the committees concerned. It was not, therefore, until the beginning of March that the first inquiry selected—namely, that on the action of hamamelis—was issued to the members of the Association. The second inquiry, on the action of terebene, was commenced a month later.

The time having been so curtailed, only forty-three returns have as yet been received to the former inquiry, and not more than twenty-eight to the latter. There is no reason to believe that the supply of returns is anywhere near being exhausted, and next winter will probably produce a considerable stock, especially on the latter subject, relating to a drug more often indicated in winter than in summer. The Collective Investigation Committee, therefore, are of opinion that it would be premature to close these inquiries at the present time, and recommend that they should be continued for the course of another year, and the full reports upon the results presented to the Therapeutic Section of 1887. In the meantime, they beg to present to you an *ad interim* report upon the returns which have already come to hand.

1. *Hamamelis.*—The form of inquiry issued on hamamelis proposed the following questions:

What preparation do you employ, and in what doses do you prescribe it?

Have you found it to be efficacious in checking: Epistaxis? Hæmoptysis? Hæmatemesis? Hæmaturia? Menorrhagia? Piles?

Have you found it efficacious in the treatment of any other form of disease?

Have you ever found it give rise to any disagreeable symptoms? If so, what?

The observer was also requested to state on how many cases of each affection his experience was founded.

To this inquiry paper forty-one returns, as above stated, have been received from the following gentlemen:

Dr. Atkinson, Surbiton.	Dr. Hunter, Nottingham.
Dr. Barclay, Banff.	Mr. Jardine, Capel.
Dr. Barker, Sandown.	Mr. Evan Jones, Aberdare.
Dr. Percy Boulton, Seymour Street.	Mr. Fawson Lee, Salisbury.
Dr. Mitchell Bruce, Harley Street.	Dr. Mackay, Elgin.
Mr. Arthur Buckell, Chichester.	Dr. Duncan Mackenzie, Glossop.
Mr. Ernest Buckell, Chichester.	Dr. Mackie, Bedford.
Dr. Macfie Campbell, Liverpool.	Mr. Mahomed, Bournemouth.
Dr. Coghill, Ventnor.	Dr. Morton, Guildford.
Mr. Corbett, Kingston.	Dr. W. Murrell, Weymouth Street.
Dr. Crowe, Worcester.	Dr. Pearse, Haslemere.
Mr. Drinkwater, Llangollen.	Mr. Plimmer, Upper Norwood.
Dr. Duguid, Buckie.	Dr. Creswell Rich, Liverpool.
Dr. England, Dover.	Dr. Robinson, Bolton.
Dr. Ferguson, Cheltenham.	Mr. Rogers, Newport Pagnell.
Dr. Clement Godson, Grosvenor Street.	Dr. Sadler, Barnsley.
	Mr. St. George, Lisburn.
Dr. Gordon, Salisbury.	Mr. Sarjant, Worcester.
Mr. Green, Sandown.	Dr. Scowcroft, Bolton.
Dr. Grigg, Curzon Street.	Mr. Sincock, Bridgwater.
Dr. Stanley Haynes, Malvern.	Dr. Vesey, Rosstrevor.
Dr. de Vere Hunt, Bolton.	Mr. Wood, Dover.

Nineteen reporters have used tinctura hamamelidis, or other galenical preparation, for internal or external use; 14 only hazeline, internally or externally; 9 have had experience both of hazeline and the galenical preparations; in one case the preparation used is not stated.

The interpretation of the replies received to the above questions—at least, to those relating to hæmorrhage—is a matter of some difficulty. The tendency of epistaxis, hæmoptysis, and hæmatemesis, other points of treatment being duly attended to, is, in the great majority of cases, towards recovery, independently of the effect of drugs; and the course of such cases, even when drugs are not given, is so irregular, and marked at times with such sudden cessation of the hæmorrhage, that the most practised observers must find it difficult to estimate the part played by a drug in modifying the course, and may easily be led into over-estimating its effect in producing a favourable result.

With this proviso in mind, it may be generally stated that the majority of the reporters who have sent returns to this inquiry have formed, from their experience of hamamelis, a distinct impression that it has favourably modified the course of the various forms of hæmorrhage mentioned in the inquiry-paper, and has contributed to stopping the bleeding.

The experiences detailed give, on the whole, the same result, whether hazeline or any of the ordinary galenical preparations of hamamelis has been used.

In cases of piles, bleeding or not bleeding, the opinion is generally that benefit is obtained by the use of the drug, the greatest amount of relief being apparently afforded by its internal use combined with its external application as a lotion or injection.

We find the drug, in addition, recommended in the treatment of the hæmorrhagic diathesis, in catarrhs of the air-passages, especially the upper regions, in some forms of diarrhœa, in prolapsed rectum, and in chronic catarrh of the uterus.

The local use of the drug is also recommended in the treatment of hæmorrhage from various regions, of bruises and sprains, of ulcers and wounds, and of several miscellaneous conditions.

In only one case have any symptoms more serious than headache and nausea been attributed to the use of the drug—namely, sickness and great depression, occurring in a patient who was the subject of a dilated heart.

2. *Terebene.*—The form of inquiry issued upon terebene proposed the following questions:

What is your experience of its effects in—Chronic bronchitis? Chronic pharyngitis? Chronic tracheitis? Subacute or chronic laryngitis? Phthisis? Whooping-cough? Pure asthma, not connected with bronchitis? Cystitis or gleet? "Acidity"? Flatulence? As an anthelmintic?

Have you found it efficacious in the treatment of any other affection?

Have you found it give rise to any disagreeable symptoms referable to the alimentary, urinary, respiratory, or any other organs?

The observer was also requested to state on how many cases of each affection his experience was founded.

To this inquiry paper 26 returns were received, as above stated, from the following gentlemen:

Dr. Atkinson, Surbiton.
Mr. A. Buckell, Chichester.
Mr. E. Buckell, Chichester.
Dr. Burnet, Wimpole Street.
Dr. Calvert, Melrose.
Mr. Cardew, Cheltenham.
Dr. Church, Edinburgh.
Dr. Crowe, Worcester.
Dr. Duguid, Buckie.
Dr. W. Ewart, Curzon Street.
Dr. Goodhart, Weymouth Street.
Dr. Hamilton, Hawick.
Dr. Haynes, Malvern.
Dr. Lenton Heath, Cromwell Road.
Mr. Evan Jones, Aberdare.
Mr. Lawton, Lambeth.
Dr. Duncan Mackenzie, Glossop.
Dr. Stephen Mackenzie, Finsbury Square.
Mr. Mahomed, Bournemouth.
Dr. Isambard Owen, Hertford Street
Dr. Pearse, Haslemere.
Mr. Plimmer, Upper Norwood.
Mr. Rand, Dulwich.
Dr. Ritchie, Edinburgh.
Dr. Ronaldson, Edinburgh.
Mr. Sedgwick, Park Place, Upper Baker Street.
Mr. Wood, Ledbury.
Mr. Woodcock, Wigan.

The same degree of difficulty which surrounds the interpretation of the hamamelis reports is not met with in the case of the above statements with regard to the use of terebene. The affections for which it is prescribed are chronic in character, and they are nearly all common maladies, the ordinary course of which is sufficiently familiar to most practitioners.

It may, therefore, not unfairly be concluded from the preponderance of affirmative statements given in these returns that pure terebene is a drug of considerable efficacy in shortening the course of chronic catarrhs of the air passages; though it can hardly be considered on the evidence contained in them, at least when given in the doses and by the methods narrated, a specific, or capable of benefiting more than a proportion of cases.

It is, of course, possible that a more extended use of full doses, or a more frequent use of the local application of the drug than has been reported, in addition to its internal administration, might raise the average of beneficial results.

It appears capable of giving relief in no inconsiderable number of cases of asthma, and of modifying favourably the catarrhal symptoms in cases of phthisis, possibly acting also in the latter as a disinfectant to the secretions. Flatulence and the condition of the stomach commonly known as "acidity" the drug appears not infrequently to relieve, and its good effects are reported by single observers in the deodorisation of fæcal evacuations, in the treatment of acute catarrhs, of nervous dyspnœa, of dysenteric diarrhœa, of the later stages of acute nephritis, and of hay asthma.

No evidence has been given as to its effects in whooping-cough or in cases of intestinal worms.

Beyond various forms of gastric disturbance, ere is no certain evidence of any untoward symptoms being produced by terebene. One observer reports an instance of diarrhœa occurring during its use, and one an attack of giddiness which might possibly have been produced by it. In one case, too, an habitual eczema returned during the administration of the drug.

ADULTERATION OF WINE.—A wine merchant at Bégles has been condemned to ten months' imprisonment by the Cour d'Appel at Bordeaux for selling wine coloured with sulfo-fuchsine.

AT a meeting of the Portsmouth Town Council on Tuesday, a letter from the medical officer of health was read, stating that, as no fresh cases of small-pox had occurred during the last fourteen days, the outbreak might be considered to be at an end.

ROYAL COLLEGE OF PHYSICIANS.

THE annual meeting of the Fellows of this College, for the purpose of electing a President for the ensuing year, was held on Monday, April 4th, and was very largely attended.

A report was received from a committee appointed to consider the best means of carrying into effect the resolutions already arrived at by the College with reference to the augmented Croonian Trust Funds. In accordance with this report it was resolved:

1. That the Croonian Lecturer be appointed annually by the President and Censors, for the purpose of delivering a course of not less than four lectures on one or more subjects in Anatomy, Physiology, and Pathology, with a view to the prevention, control, and cure of diseases.

2. That the lecturer be paid one hundred guineas for the lectures, and that the remainder of the Croonian Trust Fund be employed for original investigation by a past or present Croonian Lecturer.

3. That the lecturer, who must be a Fellow, in accordance with the original trust, shall be eligible for reappointment.

4. That the subjects of the lectures and investigations be selected with the approval of the President and Censors.

5. That the lectures be delivered in the month of June, and that the first course of lectures be given in 1888.

The PRESIDENT then read his annual address, in which he related the history of the College during the last twelve months. The points of greatest interest were his account of the action of the College with regard to the request of the Apothecaries' Society to be admitted into the Conjoint Board, and his statement as to the deliberations, at present incomplete, about the proposed attempt to obtain the power to confer degrees. It was announced that the Examination Hall on the Victoria Embankment was completed and already in use. The address concluded with a sketch of the life and character of the six Fellows who have died during the last year: Dr. Wiltshire, Dr. Nairne, Dr. T. J. Farre, Dr. Chadwick of Leeds, Dr. Moxon, and Dr. Carrington. Nothing could have been more appropriate and appreciative than the eloquent and touching words of the President with regard to these deceased Fellows, and especially, when he spoke of the loss which the College had sustained by the death of Dr. Moxon, he was so overcome by emotion as to be unable for a while to proceed.

Sir HENRY PITMAN having read the by-law which regulates the election of a President, the Fellows proceeded to give their votes by ballot. The result was declared by Dr. C. HANDFIELD JONES (the Senior Censor) to be: for Sir William Jenner, 73 votes; for Sir William Gull, 24; for Dr. Quain, 10; for Sir Andrew Clark, 6; for Dr. Wilks, 2; and 1 vote each for Sir Risdon Bennett, Sir Henry Pitman, Dr. Andrew, Dr. John Ogle, and Dr. George Johnson.

A second ballot being thus necessary, no name having obtained two-thirds of the total number of votes cast at the first, the names of Sir William Jenner and Sir William Gull were then submitted to the College, when 98 votes were recorded for the former, and 12 for the latter.

Sir WILLIAM JENNER, in accepting the office, said that, whilst conscious of the great honour done to him in electing him to the Presidency for the seventh time, he would have been unable to accept it if he had not been elected by what was practically the unanimous wish of the College. He assured the Fellows of his desire to further in all ways in his power the wishes of the College.

SOCIETY FOR THE STUDY AND CURE OF INEBRIETY.

THE annual meeting was held on April 5th in the rooms of the Medical Society of London. The President, Dr. NORMAN KERR, delivered an address on "The Pathology of Inebriety." In the disease inebriety, there was either structural degradation or functional disturbance, in some cases both; but there was a prior morbid condition before the outbreak. Dr. Kerr classed drinkers as (1) voluntary, (2) involuntary. Moderate drinkers belonged to the former class, as a rule. The latter comprised inebriates from heredity, traumatic inebriates, and inebriates from direct or indirect effects of disease. Involuntary drinking was abnormal, and had a pathological antecedent. The transition from moderate to immoderate drinking was often a pathological process. The pathological antecedent might be exaltation, or depression, or some other obscure morbid state. There was depression, for example, after exhaustive hæmorrhage, and during the reaction from a narcotic outburst. Besides the pathology of the inebriate pre-paroxysmal physical antecedent, there was the pathology of the inebriate diathesis. Even in many cases of evanescent inebriety, there was a diseased condition. The majority of drinkers did not respond to excitation to inebriate excess, because they had no inebriate

diathesis. Their inebriate diathesis consisted in a deficient brain and nerve tonicity. The brain and nerve centres were the seat of inhibition, which power was affected by physical states of brain and nerve. A brain imperfectly or improperly nourished heavily handicapped the power of control. This defective tonicity might be (1) inherited, (2) acquired, as also might special susceptibility to narcotics. The alcoholic was the most delicate transmitted narcotic susceptibility. The inebriate diathesis might be (*a*) latent, (*b*) developed. Alcohol was an effectual weakener of control, and specially injured brain and nerve cell, thereby being injurious to intellect, thought, and moral sense. The pathological effects on brain and nerve were often accompanied by other bodily pathological changes. Abnormal nutrition initiated these pathological changes. By a pathological process alcohol begat inebriety. The President described the *post-mortem* appearances he had observed in the bodies of inebriates on whom inquests had been held. After a fatal paroxysm, these appearances were hyperæmia, involving specially the stomach, cerebrum, and meninges. Sometimes this extended to the liver, kidneys, heart, and respiratory organs. In old-standing cases, these lesions were more serious, with neuroglian proliferation and tortuous atheromatous vessels. Dr. Kerr concluded by pointing out that, in many cases where there were no special *post-mortem* appearances, there had been dynamical and pschychical brain disturbances, constituting a true departure from sound health. Only by a recognition of its disease-aspect could inebriety be intelligently treated with a fair prospect of cure.

ORGANISATION OF MEDICAL STUDY IN FRANCE.

In Germany, no one Faculty is separated from the others, and each university has at least four Faculties—those of Law, Medicine, Theology, and Philosophy. In France, even where these four Faculties exist, they are independent of each other. In some towns there is only a Faculty of Medicine. The description of one of these organisations will apply to all, as they are all established on the same system. The Paris Faculty of Medicine has so many chairs that it is better not to take it as a type; that of Bordeaux, founded in 1876, will serve the purpose better. It has a staff of twenty-two professors, six assistant-professors (*agrégés*), and four lecturers (*chargés de cours*). The more strictly scientific chairs have each also a *préparateur* or demonstrator attached to them. There is one professor in each of the following subjects: physics, natural history, histology, medical jurisprudence, experimental medicine, medicine, general medicine, therapeutics, surgery, practical surgery, clinical midwifery, and ophthalmology. Anatomy, chemistry, physiology, and pathological anatomy have each one professor and one assistant-professor; whilst clinical medicine and clinical surgery have each two professors and one assistant-professor. Lastly, there is one lecturer on each of the following subjects: syphilis, diseases of children, diseases of the skin, and mental diseases.

It will be seen from this that every branch of medical science is adequately represented. The usual length of the curriculum is five years, but a student who is anxious to succeed in his profession does not hurry through his studies, but strives to obtain a resident post in a hospital (*interne des hôpitaux*). This can only be gained by competitive examination, and the successful candidate holds his appointment for four years. Until the end of that time he cannot take his Doctor's degree. Those who wish to prolong their tenure of office have to submit to a further competitive examination for the privilege. The successful candidate can spend two years more in residence, and is moreover allowed to graduate. The professors are chosen from among the *agrégés*, who have all to gain their position by competitive examination. The *concours de l'agrégation*, which is always held in Paris, even in the case of the provincial schools, is a very complicated affair. There are nine examiners, or "judges" as they are called. Five of the number are professors, and one an *agrégé* of the Paris Faculty, two are professors of provincial Faculties, and one is a member of the Academy of Medicine. There is first a written examination, then an hour's lecture, for which an hour's previous preparation is allowed; then a second lecture an hour long, for which twenty-four hours' preparation is allowed; finally, a practical demonstration and a thesis which has to be written on a subject fixed by the examiners; a month is allowed for this. These competitive examinations have been a subject of much discussion in France, many being of opinion that in them more importance is attached to the manner in which the candidate gives his demonstrations than to the amount and quality of scientific research which is displayed in them. The fact is that the judges have already made up their minds beforehand. Each one is determined to vote for a certain candidate, whether he acquits himself well or ill under the ordeal of examination.

This is such a thoroughly recognised system, that one of the most eminent professors in Paris makes no secret of the fact that he never listens to the lectures of the candidates. The *agrégés*, whose chief duty is to assist the professors at the examinations, and to give the supplementary lectures of the course, remain in office during nine years. After that time, they have nothing to do; but they are still eligible for the professorship. When a vacancy occurs, the professors meet and select two candidates. The Minister of Public Instruction, as a rule, nominates the one whose name is placed first; occasionally, however, he does not see fit to do so. For instance, it often happens that candidates for provincial Faculties, who are already *agrégés*, are men of proved and notorious incompetence; whilst among candidates who are not *agrégés*, there are men well fitted for the post. Under such circumstances, the Minister appoints a temporary lecturer (*chargé de cours*), who, after a sufficient term of probation, is raised to the professorship. In appointing a professor, the Minister is obliged to ask the advice of the Faculty; but, in naming a *chargé de cours*, no such formality is required.

The administration of the Faculties is organised on a very simple basis. The State is nominally responsible for everything connected with the management, but as a general rule a yearly subvention is given by the town in which such Faculties are constituted. Besides this, the town generally grants the necessary buildings, and places the hospitals (which, under the *Loi sur l'Assistance Publique*, are supported by the towns) at the disposal of the Faculties. The money voted for the Faculty is placed in the hands of the Dean, who disposes of it as the Government may direct. The money received from students' fees is not applied for the purposes of the school, but is treated as part of the national revenue.

THE JACOB TESTIMONIAL FUND.

The Honorary Treasurers and Secretaries beg thankfully to acknowledge the following additional subscriptions:

	£	s.	d.
Amount already acknowledged	483	9	3
Holmes, J., Limerick	0	10	0
Flannery, J. G., Tubbercurry	1	1	0
Palmer, T. D., Sligo	1	1	0
O'Leary, W. P., Milford-Charleville	0	10	0
Gore, A., Brigade-Surgeon, Cairo	1	1	0
Bolland, E. H., Dublin	1	1	0
Hadden, D., Rathmines	1	1	0
Irvine, J. J., Clonmany	1	1	0
Martin, W. T., Surgeon-Major Army Medical Staff	1	1	0
Crosbie, L. Ardfert	1	0	0
Carey, R. B., Borris	0	5	0
Douglas, A., Warrenpoint	0	10	0
Wheeler, W. I., Dublin (additional subscription)	1	1	0
Kennedy, J. M. Prior, Dublin	1	1	0
Keyes, W., Cappamore	0	10	6
Burr, W. T., Templemore	1	1	0
McDonnell, C., Glin	1	0	0
Picken, J., Randalstown	1	0	0
Ahern, M., Brosna	0	10	6
Sheil, R. G., Killyleagh	0	10	6
Greene, G., Ferns	0	10	0

Errata.—D. Brady, Manchester, should have been D. Bradley.

Cheques to be made payable to the Honorary Treasurers—Professor Edward Hamilton, 120, Stephen's Green, W., Dublin; or Dr. Thomas Purcell, 71, Harcourt Street, Dublin; or to any of the County Treasurers, or to the Honorary Secretaries—Professor E. D. Mapother, 6, Merrion Square, N., Dublin; Dr. J. H. Chapman, 122, Pembroke Road, Dublin; and Mr. G. F. Blake, Royal College of Surgeons, Dublin.

MARGARET STREET INFIRMARY.

A general meeting of the Governors of this institution, convened to fill up vacancies on the medical staff, was held at the Infirmary on April 6th. The chair, in the absence of Lord Grimthorpe, was taken by Mr. Robert Thornton. After the usual preliminary business the Secretary read the list of candidates who had been approved by the medical staff for the vacant posts—namely, that of one physician in ordinary, three visiting physicians, and one surgeon. The following is the list of gentlemen whose names were submitted to the meeting: John Beckett, M.D.Glasg., M.R.C.P.Lond., 40, Brook Street, Grosvenor Square, D. H. Cullimore, M.D.Brussels, M.R.C.P.Lond. (candidates for the post of physicians in ordinary); C. L. Tuckey, M.D.Aberdeen, 14, Green Street, Grosvenor Square, — Jameson (address out of London not given), J. Roberson Day, M.D.Lond., Netherhall Terrace, Hampstead (candidates for the post of visiting physicians); Kenneth W. Millican, M.R.C.S., L.R.C.P., 58, Welbeck Street, W. H. Nethercliffe (not resident in London), Eland Stewart, M.R.C.S., 8, Grosvenor Street (candidates for the post of surgeon). It was stated, in reply to a question, that a candidate was not ineligible on account of being a homœopath.

The name of each candidate was put to the vote *seriatim*, and the following were elected. Physician in Ordinary: Dr. Beckett; Visiting Physicians: Dr. Tuckey, Dr. Roberson Day; Surgeon: Mr. K. W. Millican. The appointment of a Treasurer brought the meeting to a close.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held at the Offices of the Association, No. 429, Strand (corner of Agar Street), London, on Wednesday, the 13th day of April next, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

March 14th, 1887.

NOTICE OF QUARTERLY MEETINGS FOR 1887. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on April 13th, July 13th, and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, (March 24th), June 23rd, and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,
THE VALUE OF HAMAMELIS, THE VALUE OF PURE TEREBENE.

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE, and on the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE, are now closed.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, and HABITS OF INTEMPERANCE, a full Report on OLD AGE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 429, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the London Hospital on Thursday, April 21st, at 8.30 P.M. The chair will be taken by C. Macnamara, Esq. A demonstration of interesting surgical cases will be given by W. Rivington, Esq., Surgeon to the Hospital. All visitors will be welcomed.—J. W. HUNT, M.D., Honorary Secretary, 101, Queen's Road, Dalston.

YORKSHIRE BRANCH.—The spring meeting will be held at the Queen Hotel, Harrogate, at 3 P.M. on Wednesday, April 27th, 1887. Members intending to read papers are respectfully requested to send in their names at once to ARTHUR JACKSON, Secretary, Sheffield.

SOUTH-WESTERN BRANCH.—Preliminary Notice.—The annual meeting of the Branch will be held at the Athenæum, Plymouth, on Wednesday, May 18th, 1887, under the presidency of Paul Swain, Esq. Members who propose to read papers, or to bring forward communications or motions, are requested to intimate the same to the Honorary Secretary without delay.—P. MAURY DEAS, Honorary Secretary.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The spring meeting will be held at the Freemasons' Hall, Queen Street, Neath, on Thursday, April 28th. Members wishing to read papers or to make communications are requested to send to one of the secretaries before April 13th. Further particulars in circulars. ALFRED SHEEN, M.D., Cardiff, and D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.

NORTH OF ENGLAND BRANCH.—The spring meeting of the Branch will be held at Durham, in Bishop Cosin's Library, on Thursday, April 21st, at 2.30 P.M. Dr. Drummond will call attention to the question of increasing the number of meetings of the Branch, to alterations in the places of meeting, and to the business of the annual meeting. Dr. Murphy will exhibit a patient after Uranoplasty, with remarks on the operation. Papers will be read by Dr. Drummond on the Symptoms and Diagnosis of Floating Kidney; by Dr. Oliver, on Massage as a Therapeutic Agent; by Dr. Hume, on a case of Congenital Fistula of the Stomach, cured by operation; by Mr. Williamson, a note on the Effects of Tobacco Smoking on Vision. Members wishing to read papers or to bring forward cases and specimens are requested to communicate at once with the secretary. After the meeting the members and their friends will dine together at the County Hotel, at 5.30 P.M.—G. E. WILLIAMSON, F.R.C.S., Honorary Secretary, 22, Eldon Square, Newcastle-on-Tyne.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.—An ordinary meeting will be held at 198, Union Street, Aberdeen, on Wednesday, April 20th, at 8 P.M., Dr. Urquhart, President, in the chair. Business: 1. Minutes, etc. 2. Case of Tumour of Pons Varolii, by Dr. Macgregor, Aberdeen. 3. Case of Extreme Astigmatism after Extraction of Traumatic Cataract, by Dr. Mackenzie Davidson. 4. Remarks on the question of Irrigation of the Anterior Chamber after Cataract-Extraction, by Dr. Mackenzie Davidson. 5. Exhibition of Specimens: (1) Excised Uterus, by Professor Ogston; (2) Excised Surgical Kidney, by Professor Ogston; (3) Case of Hemi-anæsthesia, by Dr. Mackenzie Booth. 6. Report of the Committee appointed to ascertain the feeling as to a Post-Graduate Course in Aberdeen, by the convener, Dr. Edmond.—ROBERT JOHN GARDEN and J. MACKENZIE BOOTH, Honorary Secretaries.

EAST ANGLIAN BRANCH: ESSEX DISTRICT.

AN ordinary meeting was held at the Saracen's Head Hotel, Chelmsford, on March 10th; Dr. ELLISTON, President, in the chair. There were also present twenty members.

Travelling Expenses of Representatives on Council.—The PRESIDENT read a report from the Council of the East Anglian Branch, which included the question of payment of travelling expenses of representatives to and from London to quarterly Council meetings. The following resolution was proposed by Dr. BODKIN, Chelmsford, seconded by Mr. J. TAYLOR, Earl's Colne, and carried unanimously, namely: "That this meeting is of opinion that the travelling expenses of the representatives of the Council of the Association be paid by the Association."

Vote of Thanks to Retiring Secretary.—Dr. BODKIN proposed, and Mr. J. TAYLOR seconded, a cordial vote of thanks to Mr. M. T. Jackman for the efficient manner in which he has conducted the duties of honorary secretary since January, 1885, the date of the formation of the district. Carried unanimously.

New Secretary.—Mr. C. E. Abbott, Braintree, was elected honorary secretary for 1887.

Apothecaries' Society and the Conjoint Scheme.—The HONORARY SECRETARY read the resolutions passed at a special general meeting of the Metropolitan Counties Branch, held December 3rd, 1886, respecting the "exclusion of the Apothecaries' Society from participation in the Conjoint Board of England and Wales." The following resolution was proposed by Dr. BODKIN, seconded by Mr. J. TAYLOR, and carried unanimously: "That this Branch protests against the exclusion of the Apothecaries' Society from the Conjoint Examining Board of England, as tending to create a division of medical interests prejudicial to the public and to the profession."

State Honours to the Medical Profession.—The HONORARY SECRETARY read a letter from the Shropshire and Mid-Wales Branch, enclosing copy of memorial sent by that Branch to the Marquis of Salisbury. Mr. E. H. CARTER proposed the adoption of a similar memorial by this Branch. This was seconded by Dr. BODKIN, and carried unanimously. The Honorary Secretary was requested to forward a copy to the Marquis of Salisbury.

Papers and Cases.—1. Pessaries, their Varieties, Uses, and Abuses: Dr. CLEMENT GODSON, London.

2. Notes on Two Outbreaks of Typhoid Fever, from unusual causes: Dr. DOWNES, Chelmsford.

3. A rare form of Ichthyosis (case shown): E. H. CARTER, Esq., Chelmsford.

4. Record of several Cases of Incontinence of Urine in Children successfully treated by Blisters to Nape of Neck: E. H. CARTER, Esq.

5. Notes on two successful cases of Malignant Pustule: R. Z. PITTS, Esq., Chelmsford.

6. Notes of a case of Charbon: T. H. WALLER, Esq., Chelmsford.

The Next Meeting was arranged to take place at Earl's Colne in July.

Dinner.—The members subsequently dined at 6 P.M.

BORDER COUNTIES BRANCH.

THE Spring meeting of this Branch was held in Carlisle on March 18th. The chair was taken by the President, Dr. Eaton, at 6 P.M. Twenty-five members and four visitors were present.

New Members.—Dr. Cameron (Wetheral), and Dr. Orr (Innerleithen), were elected members of the Branch.

The Apothecaries' Society and the Conjoint Scheme.—A letter from the Metropolitan Counties Branch having been read, the following resolution was moved by Dr. TIFFEN, seconded by Mr. HALL, and

carried: "That in the opinion of this meeting of the Border Counties Branch of the British Medical Association, it is very desirable that the Apothecaries' Society should be included in the proposed scheme of the Royal College of Physicians and Royal College of Surgeons of England for examining purposes, and that a copy of this resolution be forwarded to the authorities concerned."

Payment of Travelling Expenses.—The PRESIDENT having brought forward the question of payment of travelling expenses of representatives to the General Council, moved the following resolution, which was seconded by Mr. HADDON, and carried: "That our Honorary Secretary state to the Subcommittee the amount of our annual subscription, our annual income, and the average balance to our credit; and that this meeting is of opinion that all travelling expenses of Branch representatives to the Council in London should be defrayed by the Parent Association.

Spurgin v. Nicholson.—The PRESIDENT stated that the question of expenses of the trial Spurgin *v.* Nicholson had been before the Branch Council, and that it was his intention to move at the annual meeting that a sum of £10 be contributed by this Branch towards Mr. Spurgin's expenses.

After the reading of papers by Drs. HADDON, ALTHAM, and MACPHAIL,

The members and visitors adjourned to supper at 9 P.M., seventeen being present, and in the course of the evening the PRESIDENT read some verses composed by himself for the occasion, concluding with the following exhortation:

> So with juice of the grain, or vine, or hop,
> Or heaven's own dew, fill your glasses up:
> And drink with enthusiasm true and staunch,
> Success to the Border Counties Branch!

The next meeting of the Branch will be held at some place in Scotland, to be subsequently determined by the Council.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Treatment of Abscess of the Liver.—Presence of Parasites in Uterine Fibroma and Ovarian Cysts.—Belladonna and Opium in Diabetes.—Electricity as a Galactagogue.—Treatment of Gluteal Abscess.—Menthol as an Anæsthetic.—Artificial Production of Cataract in Rabbits by Naphthaline.—Chlorate of Potassium in the Treatment of Epithelioma.

AT a recent meeting of the Académie de Médecine M. Rochard reported a case of hepatic abscess which had been communicated by MM. Ferron and Coustan. He remarked that since the expeditions to Tonquin, Madagascar, and Senegal many fatal cases of abscess of the liver had occurred which might have been cured had they been recognised and operated on in time. The case reported by MM. Ferron and Coustan had done well, as it had been operated upon when the abscess threatened to burst into the pleural cavity. According to M. Rochard, the best way of treating abscess of the liver is by free incision, washing out the cavity with antiseptic fluid, and drainage, the wound being dressed after Lister's method. As soon as a purulent collection in the liver is discovered, prompt action should be taken. M. Trelat agreed with M. Rochard, and remarked that the operation in question was performed every day in the hospitals of Paris. Abscesses of the liver might be opened if there were no adhesions, and if care were taken to unite the edges of the wound in the liver with the edges of the skin wound. The danger of simple puncture arose from the fact that it was not aseptic.

MM. Galippe and Landouzy have been studying the pathology of uterine fibromata and ovarian cysts. Two fibrous tumours which had been extracted from the uterus with the galvano-cautery, under strict antiseptic conditions, were carefully sterilised on the surface and cut with an aseptic knife. Fragments taken from the centre of these growths were placed in different cultivating mediums, such as ordinary broth, sugared and peptonised broth, peptonised and neutralised broth, human saliva sweetened and peptonised, and human saliva sweetened, peptonised, and neutralised. In three days all the cultures proved to be fertile. The microbes were found to be spherical micrococci united in pairs, which were seen either in masses or in long chains; there were also other micrococci of much smaller size, and rods either isolated or united in pairs. In both tumours the micro-organisms had the same forms and behaved in the same way under the influence of the colouring reagents. When sown in tubes of gelatinised broth they produced colonies. The results of these experiments led MM. Galippe and Landouzy to believe that uterine tumours are the result of irritation caused by a parasite. The same observers have also found micro-organisms in the fluid of two ovarian cysts. One of the cysts was unilocular, and had existed for two years. After forty-eight hours the culture-tubes were found to be fertile, the microbes showing marked vitality. The other cyst was multilocular, and had existed for five years. The fluid in the larger sac was grey in colour, and contained a considerable quantity of cholesterine crystals, while that in the smaller sac was yellow, and did not contain cholesterine. No microbes were at first found in these fluids when coloured by the ordinary methods; it was only after three days that the tubes showed signs of their presence. MM. Galippe and Landouzy recommend that the etiology of tumours, both animal and vegetable, should be studied by seeking for parasites in the substance of the tissue.

At a recent meeting of the Academy of Sciences, M. Villemin communicated the following case of diabetes, which was treated with belladonna and opium. The patient, an artilleryman, entered the Val de Grace Hospital in March, 1882, in an extraordinary state of emaciation. He suffered much from thirst, and, though taking a large quantity of food, he continued to lose strength. The urine passed in twenty-four hours amounted to 14.5 litres, which contained 841 grammes of sugar. After being treated in the ordinary way for a week, the patient's condition showed no improvement. Ten centigrammes of extract of belladonna and five centigrammes of opium were given on March 20th, and continued during the following days. On March 27th, the quantity of urine passed had fallen to 10 litres, and the sugar to 400 grammes. The doses were progressively increased up to May 20th, when 15 centigrammes of each drug were given; at this date only four litres of urine, with 20 grammes of sugar, were passed. The dose of each medicine was now increased to 20 centigrammes daily, and in another week the sugar had entirely disappeared. On June 14th the treatment was suspended, and in the course of two or three days the sugar reappeared, to the amount of 16 grammes. On June 17th 20-centigramme doses were again given, and on June 22nd the urine, of which two litres were passed in the day, was found to be free from sugar, and remained so as long as the medicine was taken, reappearing immediately, however, if the treatment was interrupted. A mixed diet had no bad effect, as long as the opium and belladonna were administered in doses of 20 centigrammes each. From August 28th to September 12th these remedies were discontinued, bromide of potassium in increasing doses of 4 to 8 grammes daily being given instead of them. The sugar again appeared and reached 45 grammes, while the urine increased to 11.5 litres. The opium and belladonna again got rid both of the sugar and the over-secretion of urine, but, unfortunately, the case could no longer be observed, as the patient refused to remain in the hospital after December 15th.

M. Pierron states that in 1884 he successfully treated a woman, in whom the usual remedies had failed to increase the secretion of milk, by means of faradic electricity. Since then he has treated a number of similar cases in the same way, and always with complete success. The following are the details of the procedure: The positive electrode, shaped like a spherical cup, is placed over the nipple; while the negative electrode, ending in a ball, is applied under the breast. In this manner the orifice of the gland is the first to be excited. Afterwards the positive electrode is moved over the entire surface of the gland, while at the same time the negative electrode is displaced in such a way that the former may converge towards the latter. The current should not be strong enough to cause pain. Each application should last ten minutes, and should be renewed every twenty-four hours until milk is obtained, which rarely fails to happen after the fourth application. M. Pierron thinks that the application of electricity in this manner would produce a secretion of milk even in virgins.

At a recent meeting of the Paris Surgical Society, M. Trelat reported a case of abscess of the buttock which had been successfully treated by puncture, followed by the injection of ether and iodoform. The patient, a girl aged 17, had had typhoid fever eighteen months previously, and the abscess was diagnosed as necrobiotic, following hyaline degeneration of the muscular fibres. A puncture was made, which gave issue to 450 grammes of pus; and 90 grammes of ether and iodoform were injected into the cavity. M. Trelat asked whether simple abscesses might not be treated in the same way. M. Terrier thought that, in cases like that described by M. Trelat, simple puncture was sufficient. M. Championnière said he had found iodoform very uncertain in its effects, and he considered that the injection of this substance dissolved in ether was a long and painful mode of

treatment. M. Dentu said he had obtained better results with alcohol and chloride of zinc. M. Trelat, in reply, stated that it was important, from an æsthetic point of view, to avoid the cicatrix which always remained after an incision; and this was done by puncture and the injection of iodoform.

Dr. Rosenberg, who has been studying the action of menthol, says that it is useless in cases of acute pain. He has used it in many instances instead of cucaine, in solutions of oil, alcohol, and ether. The mucous membrane of the throat partly lost its normal sensibility, and, with a somewhat stronger solution, complete anæsthesia, lasting two or three minutes, was induced. When feeling returns, the patient feels a slight burning, but seldom an unpleasant sensation, if he is careful to breathe with the mouth open. Menthol may thus be useful for laryngoscopic purposes, but it cannot take the place of cucaine, as the effect passes off too quickly.

M. Charrin has proved that by giving naphthaline to rabbits cataract may be speedily produced. Even if the administration of naphthaline be suspended as soon as the disease appears, the cataract still continues to develop. The period at which the disease shows itself is variable, being, on the average, from the twentieth to the twenty-fifth day. From one and a half to two grammes of naphthaline given daily will produce this result. M. Charrin has also tried naphthol and other similar substances, but without result. Naphthyl-sulphite of soda is found in the urine of rabbits to which naphthaline has been administered. M. Charrin has given this substance to a few rabbits but also without result.

In the *Gazette des Hôpitaux* of March 1st, M. Reclus describes the results of the treatment of epithelioma by chlorate of potassium. He relates the case of a woman suffering from a tumour, about the size of a walnut, situated on the right cheek. The skin over it was tight, of a violet-brown colour, and was cracked in several places. When pressed, the cracks discharged sanguinolent serous matter. There were brownish, squamous spots, slightly cracked here and there, about the size of a lentil, on the forehead and other parts of the face. The patient presented all the symptoms of cutaneous epithelioma of a particular kind, namely, cancroid of the skin, or polyadenoma of the sudoriparous glands. M. Reclus excised the tumour, but a part of the skin remained red, thick, and inflamed. Compresses of a 6 per cent. solution of chlorate of potassium were applied. Tedeschi, in 1847, first treated an obstinate case of epithelioma of the skin with chlorate of potassium. MM. Leblanc and Bergeron employed this substance in the treatment of epithelioma in horses, in 1857. M. Reclus described several cases of epithelioma in which he had used it successfully. It should not be given internally. M. Reclus recommends chlorate of potassium only in cases in which the integument alone is affected; in patients of feeble constitution; in those suffering from any affection of the heart contra-indicating the administration of chloroform; and in extensive epithelioma involving the subjacent tissues, where resection or amputation is necessary.

CORRESPONDENCE.

THE COLLEGES, THE APOTHECARIES' SOCIETY, AND THE PROFESSION.

SIR,—I have read with interest the account in the JOURNAL of April 2nd of the meeting of the Council of the Metropolitan Counties Branch of the Association and Committee as to the conjoint scheme of examination, at which the question of the exclusion of the Apothecaries' Society has been discussed. On the question of exclusion, Mr. Timothy Holmes wisely said, "that in this matter the College of Surgeons had followed the lead of the College of Physicians with the most illogical conclusions to the premisses that could be;" not so Dr. Bristowe, who objected to Mr. Holmes's allegations. He attributed the exclusion of the Apothecaries' Society to their want of action at the proper time, and proceeded with the following remarks: "He deprecated class distinctions in the profession, but thought the only way to sink them would be finally to separate medicine and surgery from trade, and this could not be done if the Apothecaries were assimilated." In reference to these remarks, I would quote the words of a sagacious medical friend. He said to me, "I am not a Licentiate of the Apothecaries' Society, yet I believe it to be the only English corporation that has done anything serviceable to the medical profession. As for the others, they take our fees, and do for us nothing." Even in this neighbourhood, quacks have been lecturing "on sexual disease," receiving the fees of those who have consulted them, taking away with them about one hundred pounds, and all this without let or hindrance. It is time that this should cease; the corporations will not reform themselves, and should be abolished. The British Medical Association must act. We want one State examination for our own protection and that of the public by a body powerful and able to protect us. By all means let the able and the industrious be distinguished, but let the honours be true ones.—I am, etc.,

JOHN HARKER, M.D., J.P., President of the Lancashire and Cheshire Branch of the British Medical Association.

[*Translation.*]

ICHTHYOL.

SIR,—I observe that in the JOURNAL of March 19th you call the attention of your readers, in an editorial note, to ichthyol. As my name is mentioned in connection therewith, part of the responsibility for the communication falls on me. There are two expressions in the note to which I refer which must have surprised English readers, and which make my results appear somewhat unscientific; on these I should like to make some comment, and perhaps you will be good enough to allow this slight correction to appear in the next number of the JOURNAL. The expressions are: 1. Ichthyol is indicated.....*in most of the skin diseases;* 2. Ichthyol should also be given *internally* in *all affections* of the skin.

I thought I had taken special pains to define, with the utmost possible precision, the indications—many-sided as they undoubtedly are—for the use of this new drug.

Internally ichthyol is indicated: (1) in skin-diseases—acne rosacea; nervous forms of eczema in persons of nervous constitution; eczema from teething; lichen urticatus; erythema multiforme; dermatitis herpetiformis; furunculosis—but it is *not* indicated in psoriasis; (2) in the following other diseases (I speak after five years' experience) in acute and chronic rheumatism; bronchial asthma; chronic catarrh of the stomach and intestines, together with catarrh of the bile-duct (icterus); chlorosis, tuberculosis (especially in children), and scrofula; vascular engorgements of all kinds.

I think these indications are precise and sufficient; any practitioner who uses ichthyol will no doubt know in what other cases to employ it.—I am, etc.,

DR. UNNA.

Hamburg, April 1st.

EARLY TRACHEOTOMY IN DIPHTHERIA.

SIR,—Mr. W. Watson Cheyne's essay in the JOURNAL of March 5th, in which he advocates the performance of tracheotomy in diphtheria as soon as it is certain that the larynx is affected, must have been read with great interest by many who, like myself, are unable to accept his conclusions as a useful guide in practice.

My first misgivings were not allayed when, on applying the doctrine to two instances, in which I have recently attended several cases of the complaint occurring simultaneously in the same family, I found that the modifications in the course of the illnesses, which might reasonably have been anticipated had Mr. Cheyne's principle been strictly applied, are as follows:

In the first case, which I shall call A. 1, the patient, a child aged 6, who recovered after an illness of a fortnight, and whose life was despaired of from the ninth to the eleventh days, would have been subjected from the third day to all the risks attending the operation, which might not improbably have been sufficient to turn the balance of events towards an unfavourable issue.

In the case A. 2, sister to the preceding, aged 10, who died from failure of the heart on the seventh day, and in whom there were no marked laryngeal symptoms till the day before death, it is impossible, after the event, to believe that an operation could have been followed by other than bad effects.

In case B. 1, in whom dyspnœa was only slight, I should have thought it criminal to recommend an operation; and perhaps Mr. Cheyne would not have ventured to apply the letter of his precept to this case. The patient, a girl, aged 8 years, made a good recovery after an illness lasting a week.

Case B. 2 is that of a lad, aged 14, brother of B. 1, who died from bronchitis within forty-eight hours of the performance of tracheotomy. On Mr. Cheyne's principle that bronchitis is due to the admission of cold air, the opening of the trachea two days earlier could have led only to a more rapidly fatal termination, as it seems impossible to keep a room at such a temperature as shall not admit of a certain amount of abnormal impingement of cold air after the operation.

All four were well-marked cases of diphtheria, commencing in the fauces or pharynx with early involvement of the larynx.

In A. 1 the dyspnœa was pronounced from the third day onwards.

In A. 2 the laryngeal difficulty was right until the sixth day.

In the lad B. 2 dyspnœa was well marked on the third day, and tracheotomy was performed on the fifth day, with the object of averting impending suffocating.

It seems doubtful whether in any one of these cases, the carrying out of Mr. Cheyne's principles would have been attended with benefit; and it is quite certain, in regard at least to the two that recovered, that an operation could only have done harm.—I am, etc.,

I. B. MUIRHEAD, M.B.

The Lodge, Aylesford, Kent.

THE HOURS OF CONSULTATION.

SIR,—The variety of consulting hours causes so many inconveniences and disappointments to all concerned—that is to say, to consulting physicians and surgeons, to general practitioners, and to the lay public that I have often wondered why no attempt should be made to relieve them, especially as the remedy which I wish to suggest is an exceedingly simple one, and has been proved to work satisfactorily on the Continent.

At present the usual consulting hours of consulting physicians and surgeons are from ten to one in the morning, but there are numerous exceptions to that rule. Some consultants begin earlier or later, other receive until two p.m., some are compelled by life-insurance duties to absent themselves altogether on certain days; again, others see patients in the afternoon at their houses. Junior consultants, who occupy the position of assistant-surgeons or physicians at some of the large hospitals and have to see out-patients, are compelled by the rules of their institutions to leave their homes on certain days of the week early, whilst on other days they receive up to a much later hour; or, on the other hand, they commence practising at home on certain days later than on others, having had to visit their hospitals early in the morning.

In consequence of all these and other causes a state of confusion has been created, which is, I think, in nobody's interest. Over and over again patients from the country are lost to a consultant, because they called without a previous appointment at hours which they had heard were his usual consulting hours, and, not finding him in, could not postpone the consultation until the next day. Over and over again a tedious correspondence has to take place, not for the purpose of making a definite appointment—which, of course, is the most desirable arrangement—but merely in order to ascertain the consultant's hours, and so on.

Why cannot all this be obviated by the exact consulting hours being added to the consultant's name and address in the directories, that is, in the *Medical Directory* and in the *Post Office Directory*, *Red Book*, etc.? The additions, the details of which could be added—as in your own "Hours of Attendance at the London Hospitals"—in generally understood abbreviations, would certainly not increase by many pages the bulk of these directories, the public would soon learn what a boon has been conferred upon it by this simple way of giving information, and we would be spared much unnecessary correspondence and disappointment.

The general adoption of this plan would at once remove objections which might be raised if a few bold innovators ventured to act upon it without general consent.—I am, etc.,

A CONSULTING PHYSICIAN.

*** The suggestion seems to us useful and unobjectionable. It is generally in use abroad, and the practice would be one mutually convenient to medical men and their patients.

SUNSHINE IN ENGLAND.

SIR,—I have been much struck with the observations offered by Dr. Coupland Taylor, comparing, as he does, the bright sunshine at Davos Platz with that recorded at the Undercliff of the Isle of Wight, and beg to offer him the record of bright sunshine at that place for the years 1882, 1883, 1884, and 1885 for further comparison, should he have the necessary data at his command:—

	Hrs.	Mins.
1882	1709	18
1883	1694	24
1884	1561	8
1885	1704	12

Popular impressions are too frequently the result of hasty, vague, and partial observation. This has been remarkably the case with regard to the summer temperature of the Undercliff, the conclusion arrived at being that, as it is comparatively mild in winter, it must be unbearably hot during the summer months, a view that has occasionally taken possession of the minds even of medical men. Whereas the contrary is the fact—the circumstances that render it mild in winter render it cool in summer.

The Undercliff is perfectly unique in its character; it is a stretch of terraced land, extending from Bonchurch on the east to Blackgang on the west, a distance of between five and six miles, with an average width of a third of a mile, and, in consequence of the land trending sharply to the north at each extremity, it may fairly be said to stand out by itself in the British Channel some 18 or 20 miles from the mainland. Its temperature is nearly identical with that of Torquay, but, instead of the humid and relaxing atmosphere of South Devon, it has the full and bracing influence of the sea breeze, without the slightest littoral contamination.

It is, therefore, to its insular position, its direct southern aspect, its terraced formation, and the shelter afforded by St. Boniface Down on the north and the range of high cliffs at its back, that it owes its mildness during the winter, and to its ever present sea breeze, and the fact that it is thrown into shade soon after six o'clock during the summer months by the range of cliffs, thus preventing the sun's rays dwelling on its surface during the evening that it is comparatively cool in summer.

With regard to the equability of its temperature, which is unquestionable, it is only necessary to refer to the valuable meteorological table, extending over a period of 40 years, published by Dr. Whitehead in 1881, which give the following result:—"Mean daily range for 40 years. Winter, 7.10; spring, 10.6; summer, 10.24; autumn, 8.80."

During the last winter it has escaped the heavy snowstorms, severe frosts, and repeated fogs, which were so prevalent over the rest of the United Kingdom. The maximum for January was 43.54; that for February, 44.92. The mean minimum for January, 36.03; that for February, 37.96. The minimum temperature for January was 25.2 on the 17th; that for February, 25.0, on the same day of the month.

The Undercliff abounds with springs of the purest water, while the downs above Ventnor afford the most refreshing air and charming scenery.—Yours, etc.,

J. B. MARTIN, M.R.C.S.

Ventnor.

EPIDEMIC OF DIARRHŒA.

SIR,—During the past few weeks we have had an epidemic of diarrhœa, which has been more prevalent than the summer diarrhœa of last year. It has probably been due to the severe atmospheric changes which we have had, causing catarrh of the bowels. I have found that some patients have been insufficiently clothed with flannel over the abdomen. Infants and young children have yielded quickly to liq. hydr. perchlor. minims 5, liq. morph. minim ½, every hour. In adults, acid sulp. dil., opium, and logwood has been successful.—Yours, etc.,

J. BROWN.

Barwood House, Bacup, April 5th, 1887.

NAVAL AND MILITARY MEDICAL SERVICES.

RELATIVE RANK.

EVIDENCE of the satisfaction with which the action of the Parliamentary Bills Committee in respect to the question of the abolition of relative rank is viewed by medical officers in many parts of India continues to be received. In addition to the telegrams mentioned last week, a further message has arrived from the medical officers at Poona, expressing their high appreciation of the action taken by the Parliamentary Bills Committee of the British Medical Association.

THE following letter on the subject of relative rank, which bears the signatures of a number of well-known and influential retired medical officers of the British and Indian armies, has been addressed to Mr. Ernest Hart, as Chairman of the Parliamentary Bills Committee.

Edinburgh, March 31st, 1887.

SIR,—We, the undersigned retired medical officers of Her Majesty's British and Indian armies, desire to express our thanks to you as Chairman of the Parliamentary Bills Committee of the British Medical Association for the prompt and vigorous action taken on behalf of the members of the Medical Departments of the British and Indian armies.

Knowing from personal experience the importance to medical officers, both in camp and in garrison, of distinctive and officially recognised rank (by whatever term it is designated), we desire to express our opinion that, both socially and officially, they will be injuriously affected by the abolition of "relative rank;" and in the interest of the members of the medical departments and of the military

service generally, we hope that the cause so ably advocated by the deputation to the Secretary of State for War will receive the favourable consideration of Government.—We are, Sir, your most obedient servants,

A. Christison, M.D., Surgeon-General.
James W. Winchester, F.R.C.S.Eng., Deputy Inspector-General.
George Anderson, Deputy Inspector-General.
Hugh Cleghorn, M.D., LL.D., Deputy Inspector-General.
Edmond Hoile, M.D., Brigade-Surgeon.
J. B. Fleming, M.D., Deputy Inspector-General.
H. R. Oswald, M.D., Surgeon-General.
J. Fraser, M.D., C.B., Surgeon-General, Honorary Physician to the Queen.
W. Watson, M.D., Deputy Surgeon-General.
C. H. Fasson, Deputy Surgeon-General.
F. J. Barker, M.D., late Madras Medical Staff.
J. Sanderson, Deputy Inspector-General of Hospitals.
J. Kirkpatrick, M.D., Deputy Surgeon-General.
Andrew Fleming, M.D., Deputy Surgeon-General.
John Pringle, M.D., Deputy Inspector-General.
J. M. Hyslop, M.D., Surgeon-Major.
Patrick Heron Watson, M.D., F.R.C.S.E., F.R.S.Ed., LL.D., late Assistant-Surgeon Royal Artillery, Surgeon-in-Ordinary to the Queen in Scotland.
Geo. Mackay, M.D., L.R.C.P.E., M.R.C.S.E., Deputy Surgeon-General.
R. J. Blair Cunynghame, M.D., F.R.C.S.Ed., late Assistant-Surgeon Prince Consort's Own Rifle Brigade.
Daniel Macqueen, M.D., Deputy Surgeon-General, retired.
Alex. Hunter, M.D., F.R.C.S.E., Surgeon-Major.

ARMY MEDICAL SCHOOL.

The fifty-fourth session of the Army Medical School was opened on April 1st, in the presence of the staff of the Royal Victoria Hospital and a few visitors. The late competition for admission to the school was the severest the examiners ever had to deal with, and resulted in the admission of twenty-five surgeons on probation for the British, and twenty-eight for the Medical Service of India. On no occasion have the marks for both services averaged so high as at this examination. The first candidate on the list for the British service had 3,390, the lowest 2,630; while the leading candidate for the Indian service had 3,435, and the lowest 2,720 marks.

The introductory lecture was given by Professor Aitken, F.R.S. We subjoin a brief summary of this instructive discourse, which we hope soon to see printed in full as delivered.

In the course of his earlier remarks, he referred with great regret to the illness of his colleague, Professor de Chaumont, and the probability of his being unable to take part in the teaching of hygiene during the present session of the school, and mentioned that it had been arranged for his duties to be taken by Deputy Surgeon-General Dr. Marston, the chief of the Sanitary Branch at the War Office, who possessed very extensive experience in the subject of hygiene both at home and abroad, and who would be aided by Surgeon-Major O'Reilly, as well as by the Assistant Professor of Hygiene, Dr. Davies.

Dr. Aitken then gave a general but comprehensive statement as to the kind of investigations which underlie the duties in the future of the army medical officers; and that, in trying to find out the causation of disease, it was desirable to open up new lines of thought and of practical departure in pathology which may lead us to take broader, or at any rate less narrow, views than heretofore as to the origin of diseases. Dr. Aitken said he would attempt to open up to view a new and fresh territory in pathology only just beginning to be explored, in the hope that lines of thought and inquiry might thereby suggest themselves in many fruitful directions for investigation in the future. Dr. Aitken thought it desirable, in the first instance, to get rid of the term "cause;" that our text-books have not been able as yet to specify any single thing as the final cause of any disease; that it ought rather to be our business to try to find out the many and varying factors or conditions which combine to produce diseases; and while we must acknowledge the influence of certain physical agents in aiding and abetting these factors and conditions, we must mainly look to the physiological agencies of our own bodies during life in bringing about disease.

To substantiate this view, Dr. Aitken proceeded to give an account of the recent researches of MM. Gautier and Peter (two eminent French physiological chemists), and of Dr. A. M. Browne in this country, who have furnished numerous facts having the important merit of confirming our belief in "the poisoning or intoxication of the animal economy with its own products." These facts had a chemical and a clinical aspect, which were dealt with. Gautier had especially shown that in dead animal tissues a process of putrefactive decomposition sets in, by which certain alkaloids are elaborated, which have been called "ptomaines;" also that in the living animal tissues—and that by virtue of their vitality—certain other alkaloids are elaborated, analogous to the "ptomaines," and these he has named "leucomaines;" and still further he has demonstrated that in the living animal economy there are elaborated certain azotised uncrystallisable substances, which are as yet undetermined, which we call "extractives," and which are quite as unknown as the x, y, z of an algebraical formula. The nature of these extractives has still to be found out; but this much we know of them all—that, while we are assured that the "ptomaines" are toxic, and that the "leucomaines" are also toxic, these unknown "extractives" are more toxic or poisonous to the system than either.

Dr. Aitken then proceeded to develop the subject in its historical, clinical, and pathological aspects.

PROFICIENCY EXAMINATION FOR VOLUNTEER MEDICAL OFFICERS.

Volunteer Ambulance Department.—A course of lectures will be delivered at 26, King William Street, Strand, W.C., commencing Friday, April 29th, at 8 P.M. Communications to be addressed to Dr. Walter Pearce, at above address.

THE NAVY.

Mr. G. C. Dickson has been appointed Surgeon and Agent at Westhaven.

Staff-Surgeon Thomas Bolster has been promoted to be Fleet-Surgeon. His previous commissions are dated—Surgeon, March 8th, 1867; Staff-Surgeon, December 20th, 1878.

Staff-Surgeons E. R. H. Pollard and R. W. Williams have been appointed to the *President*, additional.

THE MEDICAL STAFF.

Surgeon C. R. Tyrrell, serving in Bengal, having returned from temporary duty, has resumed charge of the civil and medical duties of the Muttra district, in addition to his military duties.

Surgeon M. L. Hearn, who has arrived at Madras from Upper Burma, is directed to do duty at the station hospital, Secunderabad.

Deputy Surgeon-General R. W. Meadows, M.D., who has been serving in the Bombay Command, on being relieved by Deputy Surgeon-General R. A. Chapple, was to proceed in Her Majesty's troopship *Euphrates*, leaving Bombay on March 19th.

Surgeon-General William Rutherford, M.D., C.B., Honorary Physician to the Queen, died on March 24th, aged 71. He entered the army as Assistant-Surgeon July 2nd, 1841; became Surgeon June 11th, 1852; Deputy Surgeon-General Feb. 15th, 1861; and Surgeon-General April 1st, 1874; he retired April 18th, 1876. *Hart's Army List* informs us that Dr. Rutherford served with the 62nd Regiment in the Sutlej campaign of 1845-6, and was in medical charge of the regiment at the battle of Sobraon (medal). He served in the Eastern campaign of 1854-5, including the siege of Sebastopol, and for his services received the medal with clasp and the Turkish medal. In 1857 he proceeded to China on the Staff of the lieutenant-general commanding the expeditionary force, and in 1859 was appointed sanitary officer to the army serving in China. In 1860 he served in the campaign in the North, and was present at the actions of Sinho and Tangku, the capture of the Taku forts, and surrender of Pekin, for which he received the medal with two clasps. In recognition of his distinguished services he was made a Companion of the Order of the Bath in March, 1867, and was appointed an Honorary Physician to the Queen in December, 1880.

THE INDIAN MEDICAL SERVICE.

Surgeon-Major G. A. Dundas, Bengal Establishment, is appointed Medical Storekeeper at Meean Meer, *vice* Brigade-Surgeon C. P. Costello, who is appointed Administrative Medical Officer, Quetta District.

Surgeon C. Mactaggart, Bengal Establishment, is appointed Officiating Medical Officer Meywar Bheel Corps, from the date of assumed charge.

Surgeon-Major Warwick Jackson, of the Bengal Establishment, retires from the service from April 8th; he entered as Assistant-Surgeon April 1st, 1868, and became Surgeon-Major twelve years therefrom. He was engaged in the Afghan War in 1878-79, and was present at the capture of the Peiwar Kotal (medal with clasp). He was also with the expedition against the Mahsood Wuzeerees in 1881.

Surgeon-Major F. C. Nicholson, M.B., Bengal Establishment, has been granted furlough for one year on medical certificate, and Brigade-Surgeon Duncan, M.D., Bengal Establishment, has leave for six months also on medical certificate.

Surgeon E. Hudson, Bengal Establishment, is appointed to the officiating medical charge of the 13th Lancers, *vice* Surgeon-Major E. G. Russell, M.B.

Surgeon-Major C. J. W. Meadows, Bengal Establishment, officiating Civil Surgeon, Dacca, is appointed to act as Civil Surgeon of Patna and Superintendent of the Temple Medical School at Bankipore, during the absence on furlough of Surgeon-Major H. B. Purves.

Surgeon-Major G. R. Dapitary, M.D., Bengal Establishment, Civil Surgeon, Betul, is posted as Civil Surgeon to Hoshungabad till further orders.

Brigade-Surgeon Theobald Mathew, M.B., of the Bengal Establishment, died at Bruges on March 22nd, in his 54th year. He entered the service as Assistant-Surgeon, August 4th, 1855, and rose to Brigade-Surgeon November 27th, 1879; but has no war record.

The undermentioned gentlemen having served twelve years on March 31st, attain the rank of Surgeon-Major from that date:—G. S. A. Ranking, M.D., R. D. Murray, M.B., D. W. D. Comins, P. F. O'Connor, J. Moran, M.D., W. Beatson, W. A. Simmonds, R. Macrae, M.B., T. E. L. Eate, and S. Borah

M.B., of the Bengal Establishment; G. T. Thomas, A. J. Sturmer, and A. Adams, M.D., of the Madras Establishment; A. H. C. Dane, M.D., J. P. Creany, M.D., J. E. Ferguson, G. E. E. Burroughs, and J. M'Closhry, of the Bombay Establishment.

THE VOLUNTEERS.

Acting-Surgeon E. H. Greves, M.D., of the 4th Lancashire Artillery, and Acting-Surgeon W. H. Besant, of the 1st Northumberland and Sunderland Artillery, have resigned their appointments; that of the former was dated July 26th, 1884, and that of the latter, May 16th, 1885.

Surgeon Thomas Buchanan, of the 10th Lanarkshire (Glasgow Highland) Rifles, is granted the honorary rank of Surgeon-Major.

Surgeon J. W. Cavanagh, of the 1st Lancashire, has resigned his commission, which dates from September 26th, 1877. He is granted the honorary rank of Surgeon-Major, and is permitted to retain his uniform.

Mr. John Cameron, M.D., is appointed Acting-Surgeon to the 2nd Midlothian (Midlothian and Peebleshire).

Acting-Surgeon R. de la Poer Beresford, M.D., of the 2nd Shropshire, is promoted to be Surgeon in the same corps.

Surgeon E. A. Burnside has resigned his commission in the London division of the Volunteer Medical Staff, which he joined June 5th, 1886.

MEDICO-LEGAL AND MEDICO-ETHICAL.

THE RIGHTS AND DUTIES OF MEDICAL WITNESSES.

The position of the scientific witness in a court of law is seldom an enviable one, and often very much the reverse; but in this country, as a rule, a man who finds himself in this position has entered it voluntarily, if not willingly. In America, however, it would seem to be otherwise. When once a man is placed "on the stand," as the phrase goes over there, all parties seem to think they are entitled to get as much out of him as possible, even though he has only been subpœnaed as an ordinary witness, and it is not long since a professional brother was sent to prison for refusing to express his opinion unless he was paid as an expert, the judge having ruled that physicians could be compelled to give expert testimony without extra fee, quoting a previous decision of the Supreme Court to the same effect. It is satisfactory to know that such ruling is not universal throughout the country, for in another case the judge is reported to have said: "After many years' study and observation, I decide that a physician's knowledge is his stock-in-trade, and we have no more right to take it without extra compensation than we have to take provisions from a grocery without pay to feed the jury. The witness is not compelled to testify."

In these cases the witness had already been summoned to speak to facts within his own knowledge. So far as we are aware, no precisely similar case has ever occurred in this country; but it is quite conceivable that a medical man might be summoned as an eye-witness of a street accident in a case where damages were subsequently claimed for injuries received, and he might be asked questions as to the probable permanence of the effects of such injuries. He would most clearly be right to refuse unless he was paid as a scientific witness, and we have not a doubt that the judge would support him in his refusal; indeed, it is more than likely that the opposing counsel would object to the witness being allowed to do more than speak to matters of fact. Lord Campbell ruled many years ago that no one need accept a subpœna merely to express an opinion, and it would be manifestly unfair that a man who could not refuse the subpœna because the facts of the case had come under his observation should be compelled to do that which it has been distinctly decided no one can be compelled to do.

The position of the medical expert in regard to most of our law-courts, then, is fairly satisfactory. He need not go into court unless he likes, he can place any value he thinks proper on his services, and he can make quite sure of his fees. A coroner, however, it would appear, is an altogether superior being, and therefore he can subpœna anyone to come and give evidence as to the probable cause of death, and such subpœna may not be disregarded under a heavy penalty. He also can order anyone to make a *post-mortem* examination, and must be obeyed, even though the medical man in question may feel himself to be utterly incompetent to make an examination worthy of the name, and though he knows that it may be detrimental to his practice and even dangerous for some of his patients. What could be worse, for instance, than that a medical man should go from the mortuary to the lying-in chamber? And yet, under the existing law, such an occurrence must take place, and that not seldom. If our legislators could only be made to see this with our eyes, we should very soon have a sufficient number of competent pathologists told off to the various coroners' districts throughout the country.

FEES TO EXPERT WITNESSES.

M.R.C.S., L.R.C.P.E. was summoned (by subpœna) to attend the County Court at 10 A.M., to give evidence in a case of damages for assault, his evidence being for the plaintiff. With the summons a fee of one guinea was received. At 3 P.M. the case was arranged "out of court," a few minutes previous to its being called on. There was an account for 22s. for surgical attendance on the plaintiff, whose solicitor states that the Registrar has taxed the costs, and has only allowed 15s., which he considers sufficient remuneration for the short time (five hours) the medical witness was at the court. The solicitor also states that the "over-pay" will have to be deducted from the 22s.

*** The Registrar's ideas as to payment for a professional man's time do not seem to be liberal. There is a right of appeal from his taxation to the County Court Judge; but when the question is simply as to the amount allowed, his decision would almost certainly be upheld. The solicitor cannot charge his client with more costs than are allowed on taxation by the Registrar, and consequently will have to account for the 6s. struck off; this however is not a matter which concerns a witness who has already been paid: and the fact of the solicitor being out of pocket is no ground for deducting anything from money due to a medical practitioner for services rendered, quite apart from the time when he was summoned as a witness. If an action is brought for the amount due, the solicitor will not defend his claim to deduct the 6s.

"MIDWIFERY ENGAGEMENTS.

Dr. W. Shaw writes:—In Vol. ii of the Journal for 1884, p. 498, you give an opinion on the question of compulsory payment of fees in certain midwifery cases where the agreement has been broken by the patient. As that opinion seems to be at variance with sundry judgments given against some of your correspondents in reference to similar cases (see Vol. ii, 1882, p. 715; and vol i, 1886, p. 665) I should deem it a favour if you would refer me to any instances where judgment has been given in favour of a claim such as the following.

Mrs. W., living a very short distance from my house, called on me one evening in December last, accompanied by a friend, to engage me for her confinement, expected in January. I took her name and the usual particulars, telling her at the same time my fee, which she agreed to pay. About two months having elapsed since the time named, and not having heard anything of her, I called, and was coolly told that the labour took place on January 12th, but that it was so soon over that there was no time to send for me (three minutes' walk), and they were not aware that there was any necessity to acquaint me with the fact of its occurrence. The husband declines to pay the fee, on the ground that no services were rendered.

*** Such cases are not usually reported in the law journals, and we are unable to refer to one just now. The right to recover depends in each case on the contract made. But if there is a distinct agreement that the medical man is to hold himself in readiness to attend, he has legally as well as morally a right to his fees. It would be difficult to obtain a decision which would be binding on other courts, because the facts as to the bargain probably differ in every case. Moreover, there is no right of appeal from County Courts where the amount claimed is under £20, as such fees usually are. A test action might be brought in the High Court, with the knowledge that the plaintiff would not recover his costs if he succeeded; but it does not seem worth while to bring one, as the decision would only be binding where the facts could be shown to be similar. Practitioners should take care to have a clear understanding as to payment at the time they accept their retainer, and so save themselves from much subsequent annoyance.

THE INADEQUACY OF FEES TO PROFESSIONAL WITNESSES IN ASSIZE CASES, AND THEIR REVISION.

Mr. W. Berry, Surgeon to the Royal Albert Edward Infirmary, Wigan, writes: At the intermediate meeting of the Lancashire and Cheshire Branch, I brought forward this important subject, detailing the action of the Wigan Medical Society in the matter, and also the steps taken by Dr. Brady to call public attention to the hardships entailed on general practitioners in attending at assizes. I moved a resolution which was carried *nem. con.*, that the Council of the British Medical Association be requested to take steps to obtain a revision of those fees, which were fixed in 1858. Feeling strongly that this is a matter which affects the whole professional rank and file, I wish, through the medium of the Journal, to bring the matter prominently before our members, and get them interested in the matter; we shall then have some chance of getting these fees revised.

*** A fuller statement of Mr. Berry's views will be found in a paper read before the Lancashire and Cheshire Branch, which will be published next week.

PHARMACIST OR APOTHECARY.

Legal.—The Apothecaries' Act, 55 Geo. III, c. 194, s. 20, forbids any person practising as an apothecary who has not obtained a proper certificate, but it does not appear to contain a clause similar to that in the Medical Act, which prevents unqualified persons recovering their charges. The services charged for in the action seem to be such as might legitimately be charged for by an apothecary. If the plaintiff holds an apothecary's certificate, he would therefore be right in charging as he did; if he has no such certificate, he has rendered himself liable to proceedings for recovery of the penalty prescribed by the above section.

MEDICAL MISSION DISPENSARY FOR WOMEN AND CHILDREN.

H. C. H.—With reference to the leaflet issued by the "Medical Mission Dispensary for Women and Children," conducted by "Lady Doctors," and evidently associated with some charitable religious body, we cannot justly regard it in the same light as an ordinary dispensary. It seems clear that the real object of the "Mission" is to aid, without pauperising, poor persons, who are willing to pay a nominal sum towards the cost of the medicine which they receive. Under these circumstances, our correspondent's virtuous indignation may judiciously be allowed to "defervesce."

UNIVERSITY INTELLIGENCE.

VICTORIA UNIVERSITY.

EXAMINATION LISTS.

(Candidates names are in alphabetical order throughout.)

FACULTY OF MEDICINE.

Intermediate Examination.

First Division.		*Second Division.*	
Kelynack, T. N.,	Owens College	Alcock, R.,	Owens College
Lord, R. E.,	,,	Clegg, J. W.,	,,
McGowan, J. S.,	,,	Lomas, E. C.,	,,
Marshall, C. F.,	,,	Molyneux, E.,	University College
Stansfield, F. W.,	,,	Nuttall, W.,	Owens College
Taylor, C. B.,	,,	Poole, A. H.,	,,
Wood, F. L.,	,,	Porter, T.,	,,
		Ramsden, H.,	,,
		Shaw, J. H.,	University College
		Unsworth, J. W.,	Owens College
		Watson, A. B.,	,,
		Webb, F. J.,	,,

Distinguished in Anatomy.

Marshall, C. F.
Kelynack, T. N.
Lord, R. E.
Wood, F. L.

Distinguished in Materia Medica and Pharmacy.

Lord, R. E.
Wood, F. L.

Final Examination.—Part I.

First Division.		*Second Division.*	
Walker, A. W. H.,	Owens College	Brown, J.,	Owens College
		Merrall, H.,	,,
		Pomfret, H. W.,	,,
		Robinson, F. G.,	,,

Distinguished in Pharmacology and Therapeutics.

Walker, A. W. H.

PATHOLOGICAL RESEARCH AT THE UNIVERSITY OF CAMBRIDGE.

JOHN LUCAS WALKER STUDENTSHIP.

As has been already announced, Sir Richard Webster, Attorney-General, after consultation with Sir James Paget, Professors Huxley and Roy, and other scientific persons, determined to devote to the foundation of a studentship in pathology the sum of £10,000, left to him by Mr. John Lucas Walker to be spent "in the promotion, without regard to sect or party, of scientific or literary research, or of either or both of these objects, in Cambridge, or in the metropolis, or in both places."

The studentship will be, for the present, of the annual value of £250, and the fund will be administered by the Professor of Pathology, the Regius Professor of Medicine, and the Professor of Physiology in the University of Cambridge, with the President of the Royal College of Physicians of London.

To the Professor of Pathology is committed the duty of reporting on the qualifications of all candidates, and of nominating the best qualified for appointment. The qualifications of the candidates may be tested in any way which seems good, with one notable exception, the candidates may not be subjected to competitive examination.

The student need not be a member of the University of Cambridge; during his tenure of office he must devote himself to original pathological research, and must not systematically follow any business or profession, or engage in any educational or other work, which, in the opinion of those entrusted with the administration of the fund, would interfere with his original inquiries. The studentship is tenable for three years, but under exceptional circumstances the term may be extended for two years more. There is no limitation as to sex.

In addition to the studentship, exhibitions or prizes not exceeding £50 in one year may be awarded to persons not holding the studentship, "in respect of any essay, discovery, or meritorious service connected with or conducing to the science of pathology."

The scheme, though vehemently opposed by some members of the University on the ground that it was calculated to favour experiments by vivisection, was accepted by a large majority (140 to 26).

Candidates for the studentship must send their applications to Professor Roy, Trinity College, Cambridge, not later than May 31st, 1887.

THE festival dinner of the Royal National Hospital for Consumption, Ventnor, I.W., will be held at the Hôtel Métropole on Tuesday, April 19th, at 6.30, for 7 P.M., when the chair will be taken by H.R.H. the Duke of Cambridge.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, March 31st.

The Lunacy Bill.—This Bill passed through Committee.

Friday, April 1st.

Lunacy Bill.—On the motion of the LORD CHANCELLOR, this Bill was read a third time and passed.

The Earl of MILLTOWN has given notice of his intention to inquire why the Commissioner of Police has withdrawn the order requiring dogs be either led or muzzled, and whether it is considered that there is less danger of hydrophobia now than there was when the order was in force.

HOUSE OF COMMONS.—Friday, April 1st.

Shop-Assistants.—Mr. SHIRLEY asked whether there were practical difficulties in the way of starting prosecutions under the Act to limit the hours of labour of children and young persons in shops, 1886, and whether the Home Secretary would instruct the police to see that the provisions of the Act were kept exhibited in conspicuous places, as required by Section 4 of the Act.—The HOME SECRETARY replied that his attention had not been called to any difficulty in starting prosecutions under the Act, which did not depend on Government inspection; and it was the intention of the Legislature that it should be put in motion by individuals interested in it.

Monday, April 4th.

The Pharmacy Acts Amendment Bill.—Dr. FARQUHARSON moved the second reading of this Bill, which regulates the examination of candidates for diplomas to practise as chemists and druggists.—Dr. CLARK disapproved of increasing the powers of the Pharmaceutical Society, and moved the rejection of the Bill.

The House divided, and the numbers were:

For the second reading	76
Against	22
Majority	54

The Bill was accordingly read a second time.

Emigration of Pauper Children.—Mr. SAMUEL SMITH: "That it is expedient to relax the restrictions hitherto imposed by the Local Government Board on the emigration of pauper children, and to enter into negotiations with reputable existing emigration agencies to emigrate pauper, orphan, neglected, and deserted children to Canada or others of our colonies, subject to reasonable regulations for the future oversight of the children." He said that the average cost of pauper children in this country was about £100 per head, as against £15 per head, which would be the cost by removing them to Canada. The total number emigrated in the last four years was only 661, a drop in the bucket as compared with the 682,000 children under the care of the State; and there was no difficulty in boarding out children in Canada, even at the age of six years, so that it would be a great advantage to pauper children if his motion were acted upon.—Mr. RITCHIE admitted the extreme importance of the question, but, while sympathising with the views of Mr. Smith, was not prepared to initiate legislation to enable the emigration of pauper children against the will of their parents, although he thought the emigration of deserted and orphan children might be encouraged with advantage. He denied that pauper schools were so bad as had been described, and pointed out that the subject of emigration was entirely in the hands of boards of guardians, subject, of course, to the regulations of the Local Government Board. The motion was ultimately withdrawn.

Dublin Hospitals Commission.—Mr. A. J. BALFOUR, in reply to Dr. KENNY, said he understood the report would shortly be submitted to the Lord Lieutenant. On its receipt the Irish Government would be in a position to consider whether it, as also the minutes of evidence, should be laid upon the table. That was a matter within the discretion of the Lord-Lieutenant.

Tuesday, April 5th.

India Medical Staff.—Sir J. GORST stated, in reply to Dr. TANNER, that the rank of officers of the medical staff of India under six years' service was that of surgeon. Their allowances were more than those of subalterns, but less than those of captains. After six years' service, they were more than those of captains. They received the allowances of their rank. There were no claims appertaining to relative rank, and no loss was suffered.

Pharmacy Acts Amendment Bill.—On the motion to go into Committee on this Bill, Mr. HERMON-HODGE moved the adjournment of the debate, on the ground that the Committee on a Bill of this im-

portance should not be taken at that hour (2.10 P.M.).—Dr. FARQUHARSON declined to accede to the motion; but, after some discussion, the House divided, and the debate was adjourned.

Dr. CLARK has given notice of a motion praying for a Royal Commission to inquire into the condition of agricultural labourers in Scotland, especially in reference to the system of service, hours of labour, housing, and the physical and moral results of the "bothy" system.

Mr. BIGWOOD is about to ask for a Select Committee to inquire into and report on the state of the River Thames during the summer months in the neighbourhood of Twickenham, Richmond, and Brentford, and to consider what remedies can be employed.

Mr. BRYCE will ask the Lord Advocate whether his attention has been called to the recent distressing accidental death of one of the patients in the City Epidemic Hospital at Aberdeen, and to the complaints made as to the management of that institution, and whether he proposes to direct public inquiry into its management.

Dr. TANNER will ask the Secretary of State for War what is the rank of officers belonging to the Medical Staff in India under six years' service; whether they receive such allowances as are allowed to officers of the rank of captain or the rank of subaltern; if they are the only officers with British troops in India who do not receive the allowances of their rank (officers holding brevet rank excepted); and whether such officers, in consequence of the claims appertaining to relative rank not being observed, suffer a loss of £110 per annum.

HOSPITAL AND DISPENSARY MANAGEMENT.

GLASGOW EYE INFIRMARY.

SIR,—With reference to the letter of your Glasgow Correspondent which appeared in the JOURNAL of April 2nd, it seems to me that no useful purpose can be served by discussing the position and interests of Dr. Macfie while he is still in correspondence with the directors of the Eye Infirmary. It is, however, very unfair that unwarranted reflections should be cast upon Dr. Fergus, who has been uniformly Dr. Macfie's friend and advocate throughout the existing differences between him and the directors.

As chairman of the institution, I think it my duty to state that, like myself, Dr. Fergus is not a member of the House Committee, and that neither he nor Dr. Russell was present at the meeting of directors at which it was resolved that Dr. Macfie should not be elected as an assistant surgeon.

I may add that the suggested compromise did not emanate from Dr. Fergus. On the contrary, his best efforts were used to secure the reponement of Dr. Macfie. Indeed, so disinterested was his conduct, that after the meeting he expressed to me an earnest desire that Dr. Macfie might soon be restored to the position of an assistant surgeon, assuring me that when the time came his son, Dr. Freeland Fergus, would readily assent to the placing of Dr. Macfie, as before, in a position senior to himself.—I am, etc., JAMES KING.

12, Claremont Terrace, Glasgow, April 4th, 1887.

NATIONAL DENTAL HOSPITAL.

THE report presented at the twenty-fifth annual meeting of the National Dental Hospital showed the number of cases treated during the year to have been 34,721. Reference was made to the resolution of the committee to admit registered medical female students to the practice of the hospital, and it was stated that the principal object of the committee was to admit those ladies who intended practising in India in connection with the Zenana Mission.

CONVALESCENT HOMES FOR WORKING MEN.

IN reply to the request that a part of the proposed Imperial Institute Fund be devoted to the endowment of convalescent homes for working men, the Lord Mayor has stated that from inquiries instituted he finds that last year the Hospital Sunday Fund voted sums to fifteen of those institutions, containing 1,700 beds, of which from want of funds only 1,100 were constantly occupied. In all, 16,500 patients were admitted during the year. The Lord Mayor expressed his opinion that considerable provision is already made for the needs of the working people of the metropolis during periods of convalescence, and that instead of any new fund being necessary, the public should be asked to strengthen, either directly or through the Hospital Saturday and Sunday Funds, the hands of the existing convalescent institutions, and enable them to utilise their vacant beds for the benefit of the working classes and of the poor.

DR. MACMILLAN, at the recent annual meeting of the Royal Hull Infirmary, signified his intention of presenting an ambulance carriage to the infirmary, as a Jubilee offering.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

EPIDEMIC OF MEASLES AT WARRINGTON.

MEASLES has been more or less prevalent at Warrington since September, 1886, when it appeared that the cases were associated specially with one infants' school, which was closed during the months of October and November, and then came a cessation, but more cases were notified in December. In the month of January the number of notifications was 104, and there were 8 deaths; in February, 141 and 16 deaths; and in March, 371 and 33 deaths, giving a total of 614 cases in the same number of dwellings, and 57 deaths. Dr. Gornall, the medical officer of health, is of opinion that the epidemic has been principally promoted by the children attending school in the early stage of the disease, and returning to school before they ceased to be infective, and by the gross carelessness of parents visiting, with children in the arms, houses where the disease existed, and allowing children to go into infected houses. Amongst the difficulties which medical officers of health have to contend with in coping with an outbreak of measles is the tendency of teachers to induce parents to send their children back to school before the infective stage has passed. Dr. Gornall points out—and this is a very important matter which requires further investigation—that though the Educational Department of the Local Government Board assures the teachers that absence from school on account of epidemic disease will be allowed for in estimating the grant, teachers are loud in their complaints that when the examinations are held this is lost sight of. Several of the schools have been closed, and everything which medical science and sanitation can suggest has been done by the medical officer of health and his staff to stay the epidemic.

HEALTH OF CORK.

THE monthly report for March, presented to the Town Council at their last meeting, shows that during the four weeks ending March 26th the births registered amounted to 136, and the deaths to 132. The annual mortality gives a total ratio of 21.41 per 1,000 inhabitants, and, including 33 deaths in the workhouse, an urban mortality of 15.90. The infantile death-rate was 3.4, and that from infectious diseases 0.1. The birth-rate (22.06) and death-rate are lower by 7 per cent. than for the corresponding month of last year.

WORKHOUSE MEDICAL OFFICERS AND THE LUNACY ACTS AMENDMENT BILL.

MR. WICKHAM BARNES, Honorary Secretary of the Poor-law Medical Officers' Association, invites all workhouse medical officers interested in the Lunacy Acts Amendment Bill to attend the Council meeting on Thursday, April 14th, 5 P.M., at 3, Bolt Court, Fleet Street, as the clause particularly affecting them will be under discussion.

FISH IN WATER-PIPES.

THE Chairman of the East London Waterworks Company, in reply to a question put to him at the last half-yearly meeting of the Company, stated that the result of the Government inquiry had shown only twenty-nine or thirty cases where eels had been found in their water-pipes. "Eels were," he observed "very insinuating things, and when young made their way through very small crevices." That the experience of the East London Waterworks Company in respect to this intrusion of fish into water-supply-pipes is not an isolated one is shown by a letter in a contemporary in which the writer states that some days ago he received a fish three inches long and about half an inch in diameter in the water supplied to him from the New River.

METROPOLITAN ASYLUMS BOARD.

THE report of the Ambulance Committee of the Metropolitan Asylums Board, dealing with land and river ambulance services and the removal and distribution of patients, shows that during three years, 1884-5-6, the ambulance service had removed from homes to hospitals and from hospitals to homes 7,645 fever patients and 27,390 small-pox patients; in all, 35,035 removals in the land service alone. In the conveyance of patients to and from ships, the ambulance-vessels had run more than 20,000 miles in the year.

DUTIES OF WORKHOUSE SURGEONS.

C. writes: I am a workhouse surgeon, making my visits, by arrangement with the guardians, "at least once in every seven days." 1. Should I, as a rule, visit myself, or is my deputy's visit sufficient? 2. Would it be right to charge £3 for

a difficult "forceps case" (in the workhouse)? I say difficult as, in the patient's previous confinement, craniotomy was resorted to.

*** In reply to our correspondent, we are of opinion that it would be hazardous if he habitually made use of his deputy to do his work for him, as the regulations of the Local Government Board distinctly point to his personal attendance. He must know, however, better than we can, to what length he can go without risk to himself in availing himself of vicarious attendances.

As regards the second query, he had better wait until the confinement takes place before making any claim. If it be attended with difficulty or danger, making instrumental aid necessary, we advise that, in sending in his claim for the higher fee, it would be desirable that he should give a description of the case, and the grounds for his instrumental interference. His Board might pay without his doing so, but would be far more likely to do so if it were told the grounds on which such application was made; if the matter should be referred to the Local Government Board for its sanction, it would certainly require it.

METEOROLOGY AND DEATH-RATE RETURNS.

J. V. H. writes: The undermentioned figures are given in our local newspapers, and speak for themselves, as regards two separate weeks' death-rate per 1,000 inhabitants in twenty-eight principal towns, in a way that no east wind or ordinary epidemic will account for in any one place. The intervening line of figures in the memorandum—namely, that for March 16th—is omitted, because Derby, quite in another district, heads the list that week with the lightest rate, namely, 16.1.

March 9th—Bolton, 11.6; Birkenhead, 17.4; Liverpool, 23.5; Manchester, 31.2

March 16th—

March 23rd—Birkenhead, 13.0; Liverpool, 26.5; Manchester, 31.2

Now, if any deductions can be drawn from these returns, it is clearly it is only by comparisons of similarities of population, air, water, situation, and employments; for example, Liverpool and Birkenhead are situated one on each side of the same river, and the populations and employments, as well as markets, are practically the same, as is the air of both; yet, as a rule, by the week or year, Birkenhead stands with a light death-rate list, while Liverpool holds but a middle position in one or the other, both having unlimited smoke. Viewed in this light, the general return of twenty-eight towns shows many anomalies and discrepancies, quite apart from epidemic or endemic attacks. Under these circumstances, I write to ask if any of your correspondents can suggest any mode of arrangement that will remove or explain evident anomalies in district averages, or, in case that be impossible, how it comes to pass that Preston, for instance, which usually has a very high death-rate, for three weeks has been absent from its normal place? So high, in fact, does Preston usually stand in the high death-rate, that the rational conclusion for these three weeks would be that either there was no east wind there, or else that all the infant population had suddenly grown to mature age, and there was no infant-mortality in the seaport of the future.

HEALTH OF ENGLISH TOWNS.

During the week ending Saturday, March 26th, 5,758 births and 4,155 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons. The annual rate of mortality, which had risen from 21.3 to 22.4 per 1,000 in the three preceding weeks, further increased during the week under notice to 23.5. The rates in the several towns, ranged in order from the lowest, were as follow:—Derby, 16.1; Brighton, 16.3; Halifax, 20.4; Birmingham, 20.5; Nottingham, 21.2; Portsmouth, 21.2; London, 21.3; Bolton, 21.4; Leeds, 21.5; Newcastle-upon-Tyne, 21.6; Sheffield, 22.3; Blackburn, 22.8; Birkenhead, 23.0; Plymouth, 23.0; Salford, 23.9; Wolverhampton, 23.9; Leicester, 24.4; Bradford, 24.6; Bristol, 25.0; Liverpool, 28.7; Norwich, 28.7; Hull, 29.4; Preston, 29.6; Cardiff, 29.9; Huddersfield, 30.1; Sunderland, 33.0; Oldham, 34.6; and the highest rate during the week, 35.4 in Manchester. The death-rate in the twenty-seven provincial towns averaged 25.3 per 1,000, and exceeded by 3.9 the rate recorded in London, which, as before stated, did not exceed 21.3 per 1,000. The 4,155 deaths registered in the twenty-eight towns during the week under notice included 465 which were referred to the principal zymotic diseases, against numbers steadily increasing from 341 to 462 in the six preceding weeks; of these, 223 resulted from measles, 97 from whooping-cough, 46 from scarlet fever, 35 from diarrhœa, 32 from "fever" (principally enteric), 26 from diphtheria, and 6 from small-pox. These 465 deaths were equal to an annual rate of 2.6 per 1,000. The zymotic death-rate in London during the week under notice was 2.1 per 1,000, while it averaged 3.1 in the twenty-seven provincial towns, and ranged from 0.4 in Brighton, and 0.5 in Bolton and in Birkenhead, to 5.2 in Huddersfield, 7.0 in Oldham, and 12.5 in Sunderland. The deaths referred to measles, which had increased in the six preceding weeks from 77 to 214, further rose during the week under notice to 223, and were proportionally most numerous in Manchester, Hull, Leicester, Norwich, Liverpool, Oldham, Huddersfield, and Sunderland. The fatal cases of whooping-cough, which had been 83 and 112 in the two previous weeks, declined again during the week to 97, and caused the highest death-rates in Nottingham, Oldham, and Blackburn. The 46 deaths referred to scarlet fever showed a slight further increase upon recent weekly numbers; this disease was somewhat fatally prevalent in Salford and in Oldham. The 35 fatal cases of diarrhœa differed but slightly from those returned in recent weeks. The deaths referred to different forms of fever, which had been 27 and 32 in the two preceding weeks, were again 32 during the week under notice, and were proportionally most numerous in Leicester. The 26 fatal cases of diphtheria exceeded by 2 the number recorded in the previous week, and included 13 in London, 3 in Birmingham, and 2 in Leicester. Small-pox caused 2 deaths in Cardiff, 1 in London, 1 in Portsmouth, 1 in Manchester, 1 in Liverpool, and 1 in Blackburn, but not one in any of the twenty-three other large provincial towns. One small-pox patient was admitted to the Metropolitan Asylum hospitals during the week under notice, and only one was under treatment in these hospitals on Saturday, March 26th. The death-rate from diseases of the respiratory organs in London during the week was equal to 6.2 per 1,000, and was slightly below the average. The causes of 126, or 3.0 per cent. of the 4,155 deaths registered in the twenty-eight towns during the week under notice were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

In the eight principal Scotch towns, having an estimated population of 1,299,000 persons, 869 births and 646 deaths were registered during the week ending Saturday, March 26th. The annual rate of mortality, which had increased from 22.5 to 26.2 per 1,000 in the three preceding weeks, declined again to 25.9 during the week under notice, but exceeded by 2.4 per 1,000 the mean rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 10.8 in Leith, 21.4 in Dundee, 21.9 in Greenock, 23.9 in Paisley, 24.3 in Perth, 24.5 in Edinburgh, 28.4 in Glasgow, and 36.8 in Aberdeen. The 646 deaths registered during the week in these Scotch towns included 55 which were referred to measles, 31 to whooping-cough, 18 to scarlet fever, 14 to diarrhœa, 6 to diphtheria, 3 to fever, and not one to small-pox; in all, 127 deaths resulted from these principal zymotic diseases, against 101 and 112 in the two preceding weeks. These 127 deaths were equal to an annual rate of 5.1 per 1,000, which exceeded by 2.5 the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic death-rates in the Scotch towns during the week under notice were recorded in Edinburgh, Glasgow, and Aberdeen. The deaths referred to measles, which had been 27, 43, and 50 in the three preceding weeks, further rose during the week under notice to 55, of which 32 occurred in Aberdeen (against 27 and 35 in the two previous weeks), and 23 in Glasgow. The fatal cases of whooping-cough, which had been 25 and 28 in the two preceding weeks, further rose during the week to 31, and included 14 in Glasgow, 7 in Edinburgh, 4 in Aberdeen, and 3 in Dundee. The 18 deaths from scarlet fever exceeded those returned in any recent week; 12 occurred in Edinburgh, 3 in Glasgow, and 2 in Dundee. The 14 fatal cases of diarrhœa showed a slight increase upon the numbers recorded in the two preceding weeks. The deaths referred to diphtheria, which had been 7 and 6 in the two previous weeks, were again 6 during the week under notice, and included 4 in Glasgow. The 3 fatal cases of fever showed a decline of 5 from the number returned in the previous week. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 6.1 per 1,000, against 6.2 in London. The causes of 84, or 13 per cent. of the 646 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending Saturday, March 26th, 473 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 28.4 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 20.7; Belfast, 29.0; Cork, 24.0; Drogheda, 42.3; Dublin, 30.4; Dundalk, 34.9; Galway, 23.5; Kilkenny, 25.4; Limerick, 20.2; Lisburn, 24.2; Londonderry, 39.2; Lurgan, 25.7; Newry, 17.6; Sligo, 19.2; Waterford, 23.2; Wexford, 17.1. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.4 per 1,000, the rates varying from 0.0 in Cork, Waterford, Galway, Kilkenny, Wexford, Sligo, Lurgan, and Armagh, to 8.7 in Dundalk; the 8 deaths from all causes registered in the last-named district comprising 1 from diphtheria and 1 from enteric fever. Among the 125 deaths from all causes registered in Belfast are 1 from scarlatina, 5 from whooping-cough, 2 from simple continued fever, 2 from enteric fever, and 4 from diarrhœa; the 22 deaths in Londonderry comprise 2 from measles; and the 10 deaths in Drogheda comprise 1 from enteric fever. In the Dublin Registration District, the births registered during the week amounted to 190, and the deaths to 212. The deaths represent an annual rate of mortality of 31.3 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 30.4 per 1,000. Nineteen deaths from zymotic diseases were registered, being 8 over the number for the preceding week, but 14 under the average for the twelfth week of the last ten years; they consist of 4 from measles, 7 from scarlet fever (scarlatina), 3 from whooping cough, 1 from cerebro-spinal fever, 1 from ill-defined fever, and 3 from enteric fever. The number of deaths from diseases of the respiratory system registered is 53, being 3 below the average for the corresponding week of the last ten years, but 6 over the number for the week ended March 19th; the 53 deaths comprise 33 from bronchitis, 9 from pneumonia or inflammation of the lungs, and 4 from croup. The deaths of 16 children under 5 years of age (including 9 infants under 1 year old) were ascribed to convulsions. Seven deaths were caused by apoplexy, 10 by other diseases of the brain and nervous system (exclusive of convulsions), and 11 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 26 deaths, mesenteric disease 2, and cancer 5. Two accidental deaths were registered. In 35 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

St. Marylebone.—The fifth volume of the sanitary chronicles of this parish contains a retrospect of the year 1885. Mr. Wynter Blyth has again devoted a great deal of time and attention to a study of the influence of tenement life on mortality, and records facts which are of more than local importance. The examples given are numerous, and amply prove that the population occupying one room has, even under the best conditions attainable, a higher mortality than the rest of the district, and a lower mean duration of life. Where the conditions are not good, where "human drift" collects, where drunkenness is rife, and overcrowding prevalent, the number of deaths may exceed the births, and the death-rate be excessive. The epidemic of small-pox affected St. Marylebone but slightly. The greatest number of cases was in the month of February, and amounted to 37. In June the epidemic declined, and in August was quite extinct. The table of mortality shows diarrhœa to have been the most fatal of the zymotic diseases with 114 deaths, measles and whooping-cough following with 97 and 51 deaths respectively. The general death-rate was 20.0 per 1,000.

Sale of Drugs in Russia.—The monopoly in the sale of drugs is to be abolished in the large towns of Russia; it is only temporarily maintained in the small towns and districts.

OBITUARY.

GEORGE BACON SWEETING, M.R.C.S.Eng., L.R.C.P.Lond., L.S.A.

For upwards of thirty years Mr. Sweeting occupied a prominent position in the medical profession at King's Lynn. Born at Bridport in Dorsetshire on March 26th, 1824, he was articled to his father, Mr. William Sweeting. He studied at University College and in Paris, and became a Member of the College of Surgeons in 1848. After spending some years at Bury St. Edmunds, he settled in 1856 at King's Lynn, where he at once made his mark. Although engaged in general practice all his life, his opinion and aid as a consultant, both in medical and surgical cases, were much sought by his brother practitioners.

For a short time he was one of the surgeons to the Lynn and West Norfolk Hospital, but finding the tax on his time too great, he retired and was appointed consulting surgeon. He was a Fellow of the Royal Medical and Chirurgical and Chemical Societies. Of imposing presence and pleasant manner, he was universally respected, whilst his love of field-sports made him popular among his neighbours. He was actively engaged in practice until within four weeks of his death, which took place at Great Smeaton, Yorkshire, where he had gone in search of health. He died on March 25th, 1887, within one day of attaining his 63rd year.

G. W. PETTINGER, M.R.C.S.Eng.

Mr. George William Pettinger was born at Sutton-on-Trent, in 1826. He became L.S.A.Lond. in 1850, and M.R.C.S.Eng. in 1851. He then settled in Manchester, and continued in active practice until a short time before his death, which took place suddenly on March 23rd, from cerebral hæmorrhage. He was highly respected, and at the time of his death held the following public appointments in addition to some minor ones: Consulting Surgeon to St. Mary's Hospital, Certifying Factory Surgeon, and Medical Officer of Health for Stretford.

S. J. McGEORGE, L.R.C.S.Edin.

Mr. Samuel Johnston McGeorge studied at the University of Edinburgh, and on obtaining the L.R.C.S.Edin., in 1840, settled at Liverpool, where at the time of his death he was one of the oldest medical practitioners. He had suffered from paralysis for about four years, which obliged him to give up active work, and he died on March 22nd, aged 70. He was long and prominently identified with Freemasonry in the province, being P.M. and Treasurer of the Merchant's Lodge, No. 241; a P.P.G. lodge officer, and for many years honorary medical officer to the West Lancashire Masonic Educational Institution.

THOMAS ROBERTS, M.R.C.S., L.S.A.

We regret to announce the death of Mr. Thomas Roberts, surgeon, of Twyford, near Winchester, which took place on March 21st, after an illness of only four days. Mr. Roberts was formerly in practice in Staffordshire, where for twenty-five years he held the post of Medical Officer to the Ashby District of the Drayton Union. He then moved into the neighbourhood of Winchester, where he was appointed surgeon to the No. 4 District of the New Winchester Union, and during this period, extending over thirteen years, his upright conduct and amiable manner made him beloved and honoured by all classes. His death, which was attributable to diphtheria, contracted from one of his patients, has been the cause of much sorrow in the village of Twyford. Mr. Roberts leaves a widow and four sons.

W. J. KENNEDY, M.D.Edin., L.R.C.P., L.R.C.S.Edin.

The death is announced, after a short illness, of Dr. W. J. Kennedy, of Kirkcaldy. The deceased gentleman, who was a native of Londonderry, received his professional education at Edinburgh. He was in extensive practice at Kirkcaldy, and was much esteemed. Dr. Kennedy was a Fellow of the Obstetric Society of Edinburgh, medical officer to the Dunnikier Colliery, and a Member of the British Medical Association.

DAYRELL JOSEPH THACKWELL FRANCIS, M.D., F.R.C.P.Lond.

Many Guy's men of a bygone day must have heard with regret of the death of Dr. Francis. His career as a student was exceptionally distinguished; he was conspicuous among the eager throng that hung on the lips or watched the busy hands of Bright, Addison, Babington, Barlow, Key, Cooper, Cock, and Hilton. He gained the botanical prize of the Apothecaries' Society and graduated as M.B. at the University of London with high honours in 1841, going through that ordeal, as he was always pleased to recall, in company with Sir William Jenner and Sir W. Gull. He took the degree of M.D. in 1846. After some years of work in various public appointments, varied from time to time by foreign travel, Dr. Francis became physician to the Northampton County Hospital.

His subsequent career was remarkably successful, and he acquired a great reputation throughout the South Midland district. Feeling the labour of professional duties too severe a strain on him, he had for some time before his death retired from practice. He died at his charming residence at Cranleigh on March 6th, sincerely mourned by all who had the privilege of knowing him.

JOHN BRADY, M.R.C.P.Lond, F.R.C.S.I.

The death is announced of Dr. John Brady, a very old member of the Association, who for many years was a well-known figure in the House of Commons, where he sat as member for the county of Leitrim for twenty-seven years, retiring only a few years back owing to failing health. The deceased gentleman was an Irishman, and a member of the Roman Catholic Church. He was a member of the Medical Society of London, and Deputy-Lieutenant for Cambridgeshire and Leitrim, and J.P. for Leitrim and the Isle of Ely. Dr. Brady, who had attained the age of 74, took an active interest in all matters of medical interest.

JAMES BARRON, M.D.

Great regret is felt at the death of this successful and popular practitioner, which took place at his residence on April 2nd, from typhus fever contracted in the discharge of professional duty. Dr. Barron was a student of the Queen's College, Belfast, where he graduated with great distinction in 1879. He was soon after appointed medical officer of the Templepatrick Dispensary district, co. Antrim, a position which he subsequently resigned to assume the post of house-surgeon of the Belfast Royal Hospital. He acted in this capacity for more than two years, and acquired a high reputation for ability and professional knowledge. On resigning the house-surgeoncy, he was appointed assistant-surgeon to the hospital, and commenced private practice, in which he proved rapidly successful. In 1885 he was elected as dispensary officer of No. 1 District of the Belfast Union, and more recently he became a member of the staff of the Ulster Hospital for Women and Children, and Secretary of the Ulster Medical Society.

On Thursday, March 24th, he was stricken down by typhus fever of a malignant type, to which he succumbed on the tenth day of the disease. He was interred on April 4th in the Carmavey Cemetery, a large concourse of mourners testifying to the esteem and affection in which he was so generally held.

MEDICAL NEWS.

Society of Apothecaries of London.—The following gentlemen having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received Certificates entitling them to practise as licentiates of the society, on March 31st, 1887.

Hebblethwaite, Harold, 15, Grove Terrace, Bradford.
Lingwood, Edgar Henry, 32, Corrance Road, Brixton.

MEDICAL VACANCIES.

The following vacancies are announced.

BRADFORD INFIRMARY AND DISPENSARY.—Dispensary Surgeon. Salary, £100 per annum, with board, etc. Applications by April 16th, to the Secretary.

CHELSEA HOSPITAL FOR WOMEN, Fulham Road.—Honorary Physician. Applications by April 9th to the Secretary.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by April 21st to the Secretary, 24, Finsbury Circus, E.C.

DENTAL HOSPITAL OF LONDON, Leicester Square, W.C.—Dental Surgeon. Applications by April 11th to the Secretary.

FARRINGDON GENERAL DISPENSARY AND LYING-IN CHARITY, 17, Bartlett's Buildings, Holborn, E.C.—Honorary Physician. Applications by April 14th to the Honorary Secretary.

GOREY UNION.—Medical Officer Gorey Dispensary District. Salary, £120 per annum, and fees. Election on April 16th.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Aural Surgeon. Applications by April 22nd, to the Secretary.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton. Resident Clinical Assistant. Applications by April 16th to the Secretary.

PADDINGTON GREEN CHILDREN'S HOSPITAL.—House-Surgeon. Salary, £80 per annum. Applications by April 16th to the Secretary.

POPLAR UNION.—Medical Officer. Salary. £130 per annum, and fees. Applications by April 15th to G. Herbert Lough, Esq., High Street, Poplar, E.

QUEEN'S HOSPITAL, Birmingham.—Obstetric and Ophthalmic House-Surgeon. Applications by April 23rd to the Secretary.

ROYAL COLLEGE OF PHYSICIANS, Edinburgh.—Superintendent of the Laboratory. Salary, £200 per annum. Applications by April 10th to Dr. Gibson.

ROYAL GENERAL DISPENSARY, Bartholomew Close, London, E.C.—Resident Medical Officer. Salary, £130 per annum. Applications by April 18th to the Secretary.

SAINT PANCRAS INFIRMARY, Dartmouth Park Hill, Highgate, N.W.—Dispenser. Salary £100 per annum. Applications by April 18th to A. A. Millward, Esq., Vestry Hall.

SCARBOROUGH FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Medical Officer. Salary, £200 per annum, and fees. Applications by April 21st to Hugh Watson, Esq., St. Mary's Walk, Scarborough.

SMEDLEY'S HYDROPATHIC ESTABLISHMENT, Matlock Bridge, Derbyshire.—Junior Resident Physician. Salary, £150 per annum. Applications by April 16th to the Secretary.

UNIVERSITY OF CAMBRIDGE.—John Lucas Walker Studentship in Pathology.—Annual value £250, for three years. Applications by May 31st to Professor Roy, Trinity College, Cambridge.

MEDICAL APPOINTMENTS.

EDIS, John Butler, M.R.C.S., L.R.C.P., appointed Honorary Surgeon to the Hospital for Women, Liverpool.

FLETCHER, Rory, appointed Resident Medical Officer to the Male Lock Hospital, *vice* G. W. H. French, F.R.C.S.Eng.

HIRST, Herbert, M.B., C.M., appointed Junior House-Surgeon to the Huddersfield Infirmary, *vice* Louis Demetriadi, L.K.Q.C.P.I., resigned.

HOLLOWAY, William G., B.A., M.B., M.R.C.S., appointed House-Surgeon to the Hastings, St. Leonards, and East Sussex Hospital.

HUNTER, Charles Buchanan, M.B., C.M., appointed Surgeon to H. H. The Nizam's Railway, Hyderabad, India.

KENT, A. F. S., B.A., appointed Junior Demonstrator in Physiology to the Owens College, Manchester, *vice* G. J. Haslam, M.D., resigned.

MILNER, E. T., M.A., M.B., appointed Resident Medical Officer to the Cheadle Convalescent Hospital, *vice* W. G. Evans, F.R.C.S., resigned.

ORR, W. Y., M.B., M.R.C.S., appointed Medical Officer of Health to the Putney Parish of the Wandsworth District Board of Works, *vice* Alexander Walker, M.D., resigned.

PACKER, W. Herbert, M.D., L.R.C.P., appointed Medical Visitor to the Shropshire Private Lunatic Asylum, *vice* Edwyn Andrew, M.D., deceased.

STANGER, W., F.R.C.S., appointed one of the Honorary Surgeons of the Wakefield Hospital.

STEWART, George N., M.A., B.Sc., appointed Senior Demonstrator in Physiology to the Owens College, Manchester, *vice* W. H. Waters, M.A., deceased.

TOMLINSON, W. H., M.R.C.S., L.S.A., appointed House-Surgeon to the Oldham Infirmary, *vice* J. J. Weaver, M.R.C.S., L.S.A., resigned.

WARE, George Stephen M.R.C.S., L.R.C.P., L.S.A., appointed House-Surgeon to the Middlesex Hospital.

WILLIAMS, LIONEL, M.R.C.S., L.S.A., appointed Assistant House-Surgeon to the York County Asylum, *vice* T. Birt, M.R.C.S., L.S.A., resigned.

YEATMAN, J. W., M.R.C.S., appointed Government Medical Officer to the Upper Wakefield and Saddleworth Districts, South Australia, *vice* H. F. Harvey, M.R.C.S., resigned.

THE sum of twenty-five guineas has been voted by the Mercers' Company in the aid of the current expenses of the Hospital for Consumption and Diseases of the Chest and Throat, St. Leonards-on-Sea.

THE Duke of Northumberland has offered a site consisting of 3,000 square yards, valued at £1,200, for the proposed new infirmary for the borough of Tynemouth.

ST. JOHN AMBULANCE ASSOCIATION.—Successful classes have recently been held at King Edward VI Grammar School, Berkhampstead, by Dr. R. L. Batterbury, and at Holyhead by Dr. Richardson Rice and Staff-Surgeon R. Turner, R.N.

ASSAULT BY A LUNATIC.—A desperate encounter recently took place at Coventry between a lunatic who had escaped from Hatton Asylum and two keepers who were sent in pursuit. After a protracted struggle, during which one of the keepers received a bullet in the right side, the man was captured and lodged at the police-station.

GLASGOW UNIVERSITY CLUB, LONDON.—The Marquis of Lothian, Secretary of State for Scotland, and Lord Watson, who was formerly the representative of Glasgow University in the House of Commons, will dine with this club on April 29th (Graduation Day), when the chair will be taken by Professor Gairdner, of Glasgow. The club, which now consists of 100 members, has for its object to maintain in London the associations connected with Alma Mater. The Honorary Secretaries are Dr. Heron, 57, Harley Street, W., and Mr. McIlraith, 3, Furnival's Inn, W.C.

BRITISH MEDICAL BENEVOLENT FUND.—The monthly committee meeting of this fund was held at 34, Seymour Street, Portman Square, on Tuesday, March 29th. A donation of £200 by Mr. J. N. Winter, of Brighton, making altogether a sum of £800 contributed by him, was announced. A list of cases, thirty-six in number, was considered, and grants amounting to £236 made to twenty-five of these applicants. Several cases were postponed for further inquiries, one passed over as ineligible, and one refered to the Royal Irish Medical Benevolent Fund, the applicant's husband having been an Irishman, and in practice only in Ireland. Amongst the new cases appears that of a young medical man, aged 30, suffering from advanced lung-disease; and of a medical man, aged 67, partially paralysed and wholly unfit for work; both received grants. £10 was granted towards the payment required to enter a child at the Normal College for the Blind, provided £25 were found by the friends. Since January 1st grants amounting to £620 have been made to sixty applicants.

THE EMIGRANTS' INFORMATION OFFICE.—The circulars issued by the Emigrants' Information Office (31, Broadway, Westminster, S.W.) on April 1st are of the highest value to intending emigrants; the information they contain is most trustworthy, as it is mainly obtained from the various colonial governments and their representatives in this country. The circulars, which may be obtained separately, gratis, by application to the Chief Clerk, deal with Canada, New South Wales, Victoria, South Australia, Queensland, Western Australia, Tasmania, New Zealand, Cape Colony and British Bechuanaland, and Natal. Further details are contained in handbooks also issued by this office, and sold for one penny each. The circulars are designed for the use of farmers, artisans, and labourers, but contain much information which may guide medical practitioners who think of emigrating. The cost of living, house-rent, wages, and the industries in the various colonies afford many useful hints. At any rate, the circulars do not err by taking too sanguine a view of the prospects of emigrants. Revised editions will be issued at the beginning of each quarter.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—MEDICAL SOCIETY OF LONDON. Easter Monday. No meeting.

TUESDAY.—ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M. Dr. J. J. Pringle: A Case of Aneurysm of the Abdominal Aorta treated by Laparotomy and the Introduction of Steel Wire into the Sac. Dr. William Henry White and Mr. Pearce Gould: A Case of Sacculated Aortic Aneurysm treated by the Introduction into the Sac of Thirty-two Feet of Steel Wire.

WEDNESDAY.—BRITISH GYNÆCOLOGICAL SOCIETY, 8.30 P.M. Specimens will be shown by Dr. Edis, Dr. G. Granville Bantock, Dr. Fancourt Barnes, and others. Dr. William J. Sinclair (Manchester): Missed Abortion.

EPIDEMIOLOGICAL SOCIETY OF LONDON, 8 P.M. Dr. Michael Taylor: The Presence of Mould-Fungi in Connection with Diphtheria.

ROYAL MICROSCOPICAL SOCIETY, 8 P.M. Mr. P. H. Gosse: New Species of Rotifera.

HUNTERIAN SOCIETY, 8 P.M. Mr. T. Mark Hovell: The Treatment of Cystic Goitre (with patients). Dr. Dundas Grant: 1. Epithelioma of the Larynx relieved by Tracheotomy; 2. Carcinoma of the Œsophagus perforating the Trachea.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which should be forwarded in stamps with the announcement.

BIRTHS.

BOWES.—On April 2nd, the wife of John Ireland Bowes, Medical Superintendent of the Wilts County Asylum, Devizes, of a daughter.

EAST.—On March 30th, at 16, Upper Berkeley Street, Portman Square, W., the wife of Edward East, M.R.C.S., L.S.A., of a son.

MARRIAGES.

THOMSON—MACPHAIL.—At Free Church Manse, Kilmuir, Skye, N.B., on March 30th, John Thomson, M.B., C.M.Edin., to Isobel Finlayson, fourth daughter of the Rev. John S. Macphail, Kilmuir.

DEATHS.

JACKSON.—On March 31st, at 5, Brunswick Terrace, Brighton, after a short illness, John Jackson, M.D.Cantab., F.R.C.P., late of the Bengal Medical Service. Aged 82.

LOGIE.—On April 6th, 1886, suddenly, at his residence, 47, Queensborough Terrace, Bayswater, Cosmo Gordon Logie, M.D., F.R.S.E., late Surgeon-Major Royal Horse Guards (Blues). In memoriam.

VACHER.—On March 30th, at 31, Shrewsbury Road, Birkenhead, John, infant son of Francis Vacher.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY—9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY—10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY—9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY—9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, M., 9; Skin, Th., 1; Dental, W.S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

QUERIES.

PILOCEREUS SENILIS.

AN INFERIOR PERSON would be grateful to anyone who would help him to extract the kernel of meaning from the tough linguistic nut, *Pilocereus*. Coming from Dr. Moxon, it is to be presumed that the word has a meaning, but unfortunately this, as Carlyle said of a certain author's wit, "continues obstinately latent." Lexicographic oracles are dumb, and all available etymological ingenuity has been taxed in vain.

CLIMATE OF RED BLUFF, CALIFORNIA.

F.R.C.S.E. asks for information as to the climate in the neighbourhood of Red Bluff, California (lat. 40 N., long. 122 W.), especially as to its suitability to a patient with a delicate chest and tendency to fibroid phthisis.

ANSWERS.

NUMBER OF CHILDREN IN THE UNITED KINGDOM.

DELTA.—The number of children in the United Kingdom under 12 years of age, is estimated at about ten and a half millions at the present time, the numbers being distributed as follows:

England	8,042,000
Wales	442,000
Scotland	609,665
Ireland	1,381,000
	10,474,665

We are unable to answer our correspondent's further question as to the number of teetotallers, drunkards, and moderate drinkers in each of the countries mentioned.

PILOCEREUS SENILIS.

JUVENTUS.—The volume of the late Dr. Moxon's essays bearing the above title is published by Messrs. Sampson Low, Marston and Co., and can no doubt be got through any bookseller.

DRUMINE.

M.D.—Dr. J. W. Reid has informed us that drumine can be obtained from Messrs. Burroughs and Wellcome, Snow Hill Buildings, Holborn Viaduct.

ELEMENTARY WORKS ON SANITATION.

W. R. A. (Farningham).—Probably the publications of the National Health Society (44, Berners Street, W.) would best suit your purpose. There is nothing that we know of which exactly meets your wants.

CAN A L.S.A. CALL HIMSELF "SURGEON"?

OMICRON.—If the person referred to by our correspondent does not hold any other qualification than that which is mentioned, he has no right to call himself a "surgeon," and can be prosecuted by anyone under the Medical Act of 1858, Section 40, for so doing. It does not, however, devolve upon the Royal College of Surgeons of England to undertake such prosecution, as the College has no exclusive right to grant diplomas in Surgery. If the person in question were to call himself a Member of the College, by adopting the letters "M.R.C.S.," the case would be different, as those letters are applicable only to the Royal College of Surgeons of England.

PERMANENT FEHLING'S SOLUTION.

TEST will find the information he requires in the following directions. To make Fehling's solution, take cupri sulph. (cryst.) 90.5 grains; Rochelle-salt, 364 grains; caustic soda solution, specific gravity 1.12, prepared by dissolving caustic soda in water in the proportion of 48 grains per 1 fluid ounce, 4 ounces; water to 6 ounces. As the Fehling's solution does not keep indefinitely when mixed as above directed, it is better to make two solutions, thus: Solution *A*. Cupri sulph. 181 grains; water 6 ounces. Solution *B*. Rochelle-salt 728 grains; caustic soda solution, specific gravity 2.24, 100 grains per 1 fluid ounce, 4 ounces; water to 6 ounces. These two solutions will keep, separately, in well-stoppered bottles, without change, for an indefinite time. By mixing them in equal volumes just before using, Fehling's solution is obtained.

To prepare Pavy's ammoniacal cupric solution for diabetic urine, the following formula will suffice. Fehling's solution (prepared as above) 6 ounces; liq. ammoniæ fortiss. (specific gravity 0.88) 15 ounces; water to 50 ounces. It must be remembered that Pavy's ammoniacal solution does not preserve its strength indefinitely, though it will keep longer than Fehling's solution. After some weeks, especially if exposed to light, some of the copper will be found to have undergone reduction by the alkaline tartrate.

NOTES, LETTERS, ETC.

SALICYLATE OF POTASH AND SODA.

DR. WILLIAM DONOVAN (Birmingham) writes: If your correspondent will try a mixture in which equal parts of bicarbonate of potash and carbonate of ammonia have been neutralised by salicylic acid, he will find the result better than that obtained with the single salt. The first made salicylate appears to give better results

JUVENILE INCONTINENCE.

DR. WILLIAM DONOVAN Birmingham) writes: If your correspondent will try a pill containing one drop of creosote at bed time every night, he will be astonished at the result. The creosote has been used by me for several years, and I have not had a case of failure.

EPIDEMIC OF DIARRHŒA.

DR. J. J. O'BRYEN (Wrotham, Kent) writes: In response to Dr. Norman Kerr's request for reports of cases of diarrhœa during the past three months, I beg to record my experience. During my engagement here since last December, first as *locum tenens*, lately as temporary assistant to Mr. J. C. Kent, I have met with a large number of cases presenting the symptoms described by Dr. Kerr, except that many of the patients have complained of severe abdominal pain. All the members (seven) in one family have been attacked. Two women have been affected, one on the second, the other on the third, day after confinement. No case has come under my notice since March 26th. Most of the cases were cured by dilute sulphuric acid and opium, and a regulated diet, such as milk, arrowroot, rice, etc. Any obstinate case yielded quickly to carbolic acid.

FOSTER AND WHEELHOUSE ELECTION EXPENSES FUND.

Treasurer's Account from October 5th, 1886, to March 31st, 1887.

DR.] *Receipts.*

	£ s. d.	£ s. d.
To subscriptions (as per counterfoil receipt book) ..		88 10 0
,, Sir B. W. Foster, M.P.	126 11 7 ..	
,, C. G. Wheelhouse, Esq.	123 10 7 ..	
		250 2 2
Total		338 12 2

CR.] *Payments.*

	£ s. d.
By printing, postages and stationery	272 10 4
,, Advertising	49 8 6
,, Secretarial expenses	14 17 4
,, Treasurer's expenses	0 15 0
,, Audit fee	1 1 0
Total	338 12 2

ROBERT SAUNDBY, M.D., Honorary Treasurer.

Examined and found correct,

CARTER and CARTER, Chartered Accountants, Birmingham.

CALVARIA OR CALVARIUM?

MR. J. DIXON (Dorking) writes: Dr. Sankey says the word calvaria is right, and calvarium is wrong. If he refers to Smith's Latin-English *Dictionary*, he will find that, while the former term is used by Celsus (A.D. 10), Lucius Appuleius (A.D. 150) uses the latter.

DISLOCATION OF THE SHOULDER IN THE HORSE.

MR. NOBLE SMITH writes: The great rarity of this accident in the horse may make the record of the following case of interest to some of the readers of the JOURNAL.

The shoulder-joint in the horse is remarkably strong to enable it to bear the great shocks which it receives in action, and especially in jumping. The elasticity of the whole shoulder consequent on the absence of a clavicle, and the great strength of the muscles surrounding the joint, especially that muscle peculiar to quadrupeds (the trachelo-acromialis) combine to protect this joint from dislocation. So much is this the case that Youatt, in his work on the horse, states that: "This joint is rarely or never dislocated; and, should it suffer dislocation, the muscles of the shoulder-blade and the lower bone of the shoulder are so strong, that the reduction of it would be impossible."

On Saturday last, after an hour and a quarter's hard galloping with hounds over a severe country, my mare did not sufficiently rise in trying to jump a high bank from a lane into a field. I believe that her bent knee must have come in contact with the bank, and that the shock thus produced forced the humerus upwards. I led her into the roadway, a few steps, with the utmost difficulty, and found that the head of the humerus was unmistakably dislocated upwards and forwards on the neck of the scapula (which, in the horse, possesses no acromion process). I left her in charge of a man, walked into the town of Crawley close by, procured some chloroform, rugs, and a truss of straw for her to fall upon, and, returning, placed the horse thoroughly under the influence of the anæsthetic, and then without much difficulty, and unaided (as regards the management and traction of the limb), I succeeded in reducing the displacement. In the first place, I moved the limb a little backwards, then brought it down to the ordinary position (as in standing), then applied traction, and, keeping it up, brought the limb round to a straight position in front of the animal, and increased the traction by throwing my body-weight backwards. The head of the humerus immediately returned to its normal position, its reduction being both seen and heard. After recovering from the chloroform, the mare walked into the town with scarcely a sign of lameness. I brought her up to London the same night, and she is rapidly recovering the use of the limb. I attribute my success (in an operation which some veterinary surgeons consider almost impracticable) to several points which will doubtless be recognised by the readers of the JOURNAL.

1. The parts were as little disturbed as possible after the accident, the horse only being moved a few paces.

2. A very short time was allowed to elapse before the treatment was put in practice.

3. Complete paralysis of the muscles was obtained before any attempt at reduction was made.

4. No great force was applied, but the bone rather levered into position.

P.S.—To day, March 22nd, seventeen days after the accident, my mare trotted round Regent's Park with a light brougham, going perfectly sound, this speaking well for the plan of treatment.

WILLIAM OSBORN, M.D.

WM. WOTKYNS SEYMOUR, A.B. Yale, M.D. Harvard, writes from Troy, New York: "D. V.," in the JOURNAL for February 26th, 1887, seeks for information regarding William Osborn, M.D., 1791. I have before me *An Essay on Laborious Parturition in which the Division of the Symphysis Pubis is particularly considered.* By William Osborn, M.D., Physician and Man-Midwife to the General Lying-in Hospital in Store Street, and Lecturer on Midwifery in London. London: Printed for T. Cadell, in the Strand. MDCCLXXXIII. Dr. Osborn was the operator in the famous case of Elizabeth Sherwood, whose conjugate measured 1¾ inches, and his description of the case is well worth reading by anyone interested in the history of midwifery.

COMMUNICATIONS, LETTERS, etc., have been received from:

Messrs. J. and H. Grace, Bristol; Mr. J. E. Perkes, Redhill; The Secretary of the Victoria University, Manchester; Mr. W. Brown, Fishponds, Bristol; Dr. W. Lomas, London; Mr. A. B. Pearce, London; Dr. C. T. Williams, London; Dr. W. H. R. Stanley, London; Mr. E. Trimmer, London; Mr. C. T. Kingzett, London; Professor Huxley, London; Mr. F. W. Thornton, Huddersfield; The Honorary Secretary of the Jacob Testimonial Fund, Dublin; Dr. F. Smith, Cheltenham; Dr. Galabin London Mr. T. A. White, Territel; Dr. W. Donovan, Erdington, Birmingham; Dr. Falkiner, Dublin; Mr. J. Gilroy, Birmingham; Surgeon L. Pisani, Kohat, India; Surgeon G. A. Harris, Simla; Mr. E. Cotterell, Bicester; Mr. K. W. Ingleby Mackenzie, Ryde; Mr. Watson Cheyne, London; Mr. F. W. Clark, Croydon; Mr. G. E. Williamson, Newcastle-on-Tyne; Mr. W. N. Ashurst, Farningham; Dr. Sheen, Cardiff; Madame Thorens, Paris; Dr. Batterbury, Berkhamsted; Mr. S. Snell, Sheffield; Mr. G. Gresswell, Louth; Dr. G. F. Walker, Coonoor, Madras; Mr. J. L. Griffith, Holyhead; Dr. T. Jenner Verrall, Brighton; Dr. J. Andrews, Devonport; Dr. J. J. O'Bryen, Wrotham; Mr. F. W. D. Fox, London; Mr. C. J. Evans, Northampton; Mr. T. F. Raven, Broadstairs; Dr. W. W. Seymour, New York; Mr. K. Franks, Dublin; Mr. J. Thomson, Kilmure, Skye; Dr. A. S. Patton, Dublin; Mr. W. Adams Frost, London; The Inspector-General of the Recruiting Department, London; Mr. T. Horsfall, Bedale; The Chief Clerk of the Emigrants' Information Office, London; "Juventus;" Dr. W. Sykes, Mexborough; Mr. J. H. Hairsine, Roos; Dr. Burns, Rochester; Mr. A. P. Wells, Douglas; Dr. N. Kerr, London; Mr. J. E. Rees, Llandovery; Dr. Clark Bell, New York; Mr. J. W. Yeatman, Aubain, S.A.; Dr. Gihon, California; Mr. J. B. Smith, Dulwich; Dr. Playter, Ottawa; Our Glasgow Correspondent; Dr. Styrap, Shrewsbury; Dr. J. Horker, Lancaster; Mr. W. Berry, Wigan; Dr. Saunders, Denburn Crail; Mr. E. Clement, Starrington; Dr. R. H. Hilliard, Aylesbury; Dr. Willoughby, London; Dr. A. Mantle, Stanley, R.S.O.; Dr. J. Hutchinson, Glasgow; Dr. Unna, Hamburg; Dr. Phillip, Edinburgh; Our Manchester Correspondent; Mr. W. J. Fleming, Glasgow; Mr. R. Fletcher, London; Messrs. Steele and Jones, London; Mr. J. Cantlie, London; Dr. Saundby, Birmingham; Dr. P. H. Pye-Smith, London; Mr. F. J. Sawdon, Hull; Mr. W. J. Baker, Ferozepore, Punjab; Dr. H. Bartlett, Tooting; Mr. W. P. Dester, Grangetown; Mr. H. Cribb, Bishops Stortford; Mr. J. West, London; Mr. J. S. Wood, London; Mr. C. E. Abbott, Braintree; Dr. Heron, London; Our Newcastle Correspondent; Mr. J. Hogg, London; Mr. J. B. Edis, Liverpool; Mr. J. J. Ideson, Colne; Mr. W. J. Jeafferson, Folkestone; Mr. W. E. Porter, Lindfield; The Secretary of the Royal Medical and Chirurgical Society, London; Mr. J. W. Davidson, Shrewsbury; Mr. J. Willis, London; Mr. J. P. Topping, London; Mr. Meggatt, Dalbeattie; Mr. A. G. Rumley, Bristol; Mr. J. King, Glasgow; Dr. W. H. Packer, Shrewsbury; Messrs. Burroughs, Wellcome and Co., London; Mr. G. S. Ware, London; Dr. J. Neil, Oxford; Mr. H. Littlewood, Leeds; Dr. J. W. Moore, Dublin; Dr. J. S. Coghill, Ventnor; Mr. G. E. Stanger, Nottingham; Mr. W. H. C. Staveley, London; Dr. Tatham, Salford; Dr. J. M. Booth, Aberdeen; A Member; Mr. J. Walser, Hove; Mr. F. T. Simson, London; Mr. J. H. Gornall, Warrington; Mr. Corner, London; Mr. E. East, London; The Secretary of the University College Hospital, London; Mr. P. W. Dester, Cardiff; Dr. J. Kirkpatrick, Edinburgh; Mr. J. Gilson, West Vale; Mr. J. M. Lindsay, Derby; Dr. E. J. Edwardes, London; Dr. W. Ewart, London; Dr. Bond, London; Dr. F. C. Turner, London; Mr. A. H. W. Ayling, London; Mr. J. W. Barnes, London; Dr. W. Jelly, London; Mr. J. Brown, Bacup; Mrs. E. Martin, Hastings; Mr. H. B. Blackburn, London; Mr. C. E. Filby, Brockley; Dr. Maxwell, Woolwich; Mr. A. MacGregor, Huddersfield; Mr. W. Alcock Ballybrack; Dr. Hughes Bennett, London; etc.

BOOKS, ETC., RECEIVED.

Calendar of the Royal University of Ireland, 1887. Dublin: A. Thom and Co. 1887.

Treatment and Utilisation of Sewage. By W. H. Corfield, M.A., M.D. Third Edition. Revised and enlarged by the Author and L. C. Parkes. London: Macmillan and Co. 1887.

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THE LUMLEIAN LECTURES
ON
THE PATHOLOGY OF INTRA-UTERINE DEATH.

Delivered at the Royal College of Physicians of London, March, 1887.

By W. O. PRIESTLEY, M.D., F.R.C.P., LL.D.,
Consulting Physician to King's College Hospital; and late Professor of Obstetric Medicine, King's College.

Lecture III—Diseases and Anomalies of the Placenta.

One of the chief difficulties in studying the literature of these diseases as they have been described by various observers arises from the tendency on the part of authors to regard the particular morbid change which they have had the opportunity of investigating as the chief or only disease with which the organ is affected. All other morbid appearances are for them but consequences or complications of a specific and cardinal lesion upon which the rest depend. To give an example, Charpentier avers that the placenta is attacked by only one morbid change. He accepts the investigations of Robin as illustrating the whole range of placental pathology, and believes that when disease has invaded the placenta, it commences always in fibro-fatty change; and consequent on this, blood extravasations, and successive transformations of effused blood, account for all the various pathological appearances associated with the death or enfeebling of the fœtus.

Verdier and Bustamente take entirely another view of these changes. It seems to me that one cannot long investigate the diseases of the placenta without discovering that they are most complex in their nature, and that they proceed from a variety of causes inextricably intermixed—sometimes one pathological condition having the precedence, sometimes another. The placenta is, in truth, as liable to be affected by a variety of diseases as the liver or the lung, and some of its diseases bear not only a striking resemblance to diseases occurring in those organs, but have affinities with them, and may depend on the same causes. Again, confusion has arisen from investigators describing the same morbid condition under a different name, probably because it was observed only in one stage of progress or with some variations, and some have fallen into the error of ranging affections which are intrinsically different under the same appellations.

After the third month of utero-gestation, the various membranes surrounding the embryo have come into apposition, there is no distinct interspace between them, and the fœtus lies suspended in its liquor amnii in the centre of the ovum. By this time the placenta has assumed a definite form, and the embryo is now chiefly dependent upon it for the supply of those materials which are necessary for its growth. It is as yet, however, in a rudimentary form, and instead of having those sinuses, or cavities, everywhere permeating its substance which are peculiar to its structure at a later period, it consists of villi of the chorion, round which loops of maternal vessels have been thrown, in such fashion as to form a complex, but very distinct, network throughout the placental mass. I have repeatedly seen these maternal loops naturally injected in young placentæ, diseased, as well as normal, for in some forms of indurated young placenta they are almost as distinctly seen as when the organ is healthy, and microscopic sections are more easily made. Their prototypes are seen in the placenta of some mammalia, which have been described more especially by Professor Turner, and I have thrown out the suggestion that by dilatation and further development these maternal vessels, appearing at first in the young placenta as capillary loops, become eventually the sinuses of the maternal portion of the placenta, into which the fœtal villi are suspended as the gills of a fish are suspended in water. There they are bathed by the maternal blood-current, and both absorb materials for the growth of the embryo, and also effect the aeration of the fœtal blood, which is so necessary for its well-being. It is obvious, therefore, that a healthy state of the placenta is necessary for the safety of the fœtus, both in the earlier and later months. Until the placenta is fully organised, the nutrition of the embryo is carried on by the chorion villi more or less over the whole sphere of the ovum. But when the placenta is formed the whole nutritive and respiratory function is concentrated upon it, and the chorion villi degenerate and atrophy over the rest of the chorion membrane.

Extravasations of blood into the young placenta are very common, and they occur as the result of rupture of some of those vascular maternal loops which I have just described. If the extravasations be limited in extent, the life of the embryo may not be compromised; but a more extended apoplexy at once stops its nutrition, and the root-like processes of the young villi become so compressed, that the circulation can no longer be carried on through the minute fœtal blood-vessels which they contain. It is common enough to see clots, in varying stages of change in accordance with the date of their formation, in young placentæ which have been expelled as the result of abortion, and if the ovum has been long retained after extravasation has been of such extent as to kill the embryo, the whole placenta is generally found to have become indurated and in a measure contracted. The clots have been consolidated, decolorised, and contracted, while the villi in other parts of the organ, not in the immediate vicinity of the altered blood-clots, have become atrophied, and so firmly fused together, that it is almost impossible to separate them for microscopic purposes.

Apoplexy takes place into the substance and on the uterine surface of the full-grown placenta also very frequently. There is, however, this marked difference from the earlier period, that now the placenta is larger and thicker, and isolated clots may be deeply imbedded in its substance, only to be exposed by incision. Others may have been formed between the uterine walls and the maternal surface of the placenta, making a deep depression into the centre of a placental cotyledon, and compressing the placental structures. It is further to be remarked, as a difference in the results of blood extravasations in the young and more mature placenta, that in the latter several successive effusions of blood may take place, forming apoplexies of varying sizes and dates, without so seriously jeopardising the life of the fœtus as it would do at an earlier period of gestation. The larger size of the placenta and its more extended surface afford a better chance of so much of the potential part of it retaining its healthy relations, and so carrying on the placento-fœtal circulation that embryonic life is sustained. This may be, notwithstanding that the whole amount of intended pabulum is not furnished, for the simple reason that a considerable portion of what may be called absorbing radicles have been destroyed, or their function impaired by the local lesion.

Apoplexy, and the various morbid changes associated with it, is, perhaps, of all others, the most frequent pathological condition easily recognisable with the naked eye in the placenta. This being so, it can scarcely be a matter of surprise that some authors have regarded it as the chief of placental diseases, being, indeed, the prime factor in all placental disease, and the forerunner of all other pathological appearances. To it has been attributed the occurrence of the so-called tubercle, and also the formation of scirrhus in the placenta.

Sir James Simpson,[59] in his Memoir on Congestion and Inflammation of the Placenta, which is remarkable for its literary research, describes placental congestion as the forerunner of apoplexy. The congestion, according to him, consists of an extraordinary accumulation of blood in the spongy tissue of the placenta. This only requires to be pushed a degree further to lead to rupture of the vascular coats, and escape of blood into the parenchyma or on the maternal surface of the organ. He then goes on to describe the changes which take place in the extravasated blood, and the effect on the placental structure.

In 1839, M. Jacquemier wrote a communication on Extravasations of Blood in the Placenta which was regarded as classical in France, and he gives an excellent description of the pathological appearances observed. He points out that the effects of extravasation vary with the stage at which gestation has arrived. According to him, at an early period the villi of the chorion are so loosely imbedded in the decidua serotina, that there may be said to be space between the two membranes. If, therefore, a rupture takes place in a utero-placental blood-vessel, the extravasation is the more general, and will spread, because of the laxity of tissue, and thus pregnancy is the more likely to be interrupted. In the later period the placenta is more developed and compact—the chorion and decidua have become fused together, and if extravasation occurs into the substance of the placenta it is more limited in extent—generally, indeed, confined to the lobe in which the apoplexy has occurred, although more than one lobe may be affected. Jacquemier describes three varieties of placental apoplexy in the later months, which I need not give in detail here.

Verdier, who wrote a thesis in 1868, entitled *Researches on Apoplexies and Hæmatoses of the Placenta*, goes so far as to say that fibrous changes—scirrhous hardness, fibro-fatty, and those which

[59] *Vide* Obstet. Works, 397.

appear due to inflammation—are due only to extravasated blood and the changes taking place in it.

In 1848, Bustamente published a memoir on Placental Disease, which attracted much attention in France and elsewhere. Admitting the accuracy of previous observers as to the frequent presence of so-called apoplexies in the placental tissue, and their influence in producing death of the fœtus, he contends that the masses of blood so found are not due to vascular rupture and extravasation, but are produced by thrombosis in the maternal sinuses of the placenta. He points out that deposits are very frequent in the deeper structures of the placenta, and even near its fœtal surface. The mechanism of their production he believes to be somewhat as follows: The whole of the villi constituting the fœtal portion of the placenta, and found equally distributed throughout its entire mass, are bathed with maternal blood in the lacunæ in which they are immersed. The maternal circulation through these lacunæ is necessarily slow, because it is poured into the placenta by maternal arteries, and, before passing back into the maternal veins, it must pass through the dilatations which constitute the placental sinuses or lacunæ. Anything, therefore, which disturbs the utero-placental circulation, favours stasis in the placental lacunæ, and more especially in those portions of the placenta which are most distant from the maternal supply. The increase of fibrin observed in the blood of pregnant women, various general pathological conditions which render the blood more readily coagulable, syncope by slowing or arresting the circulation, even for a limited period—all favour stasis of the utero-placental circulation and resulting thrombosis. The villi, once imbedded in the blood of a thrombosis, although at the moment healthy, speedily degenerate. The loops of fœtal capillaries become granular, and eventually disappear. The epithelial covering of the villus and the proper fibroid structure of the stem become fatty and disorganized, and the whole tissue eventually shrivels. But this is not the only change which takes place, according to Bustamente, when placental thrombosis has occurred. The blood-clot itself becomes organized. He quotes O. Weber, in Billroth's *Surgery*, as an authority on the organisation of extravasated blood, and avers that he has himself seen leucocytes in the centre of placental clots, not near living tissue. These leucocytes develop, and form a connective tissue, with nuclei readily seen by the addition of acetic acid, and firmly unite the villi to each other, thus producing a dense and resisting tissue, the component elements of which it is difficult to separate.

Other and later authors have expressed the opinion that no apoplexy takes place into the substance of the placenta, either in the early or later periods of gestation, without some previous degeneration of structure. Charpentier quotes from a contribution of M. Bailly, who endeavours to prove that some morbid change invariably takes place prior to blood extravasation, and in this way the morbid condition bears analogy to apoplexies in the brain and elsewhere. Charpentier himself, in his elaborate essay on *Diseases of the Placenta*, says it is a law that clots are only found in cotyledons of the placenta previously altered by disease. There is a very general consensus of opinion that when effusion of blood takes place into the placenta, it is always, or almost always, from the maternal system; and there are some curious coincidences occasionally noticeable between blood extravasations in the placenta and apoplexies in other parts of the body of the same patient, indicating a feeble resistance in the blood-vessels in more than one organ at the same time. Latour (*Rev. Méd.*, 1843) has put on record the case of a woman who died of cerebral apoplexy after spontaneous abortion at twenty-eight years. A painful case occurred in my own practice some years ago illustrating the point. A lady, most anxious to have children, lost three successively in the latter half of gestation. In each pregnancy uterine hæmorrhage came on, apparently without cause, and ended in the expulsion of the child before it was viable. No disease of the child or placenta could be detected, beyond the fact that the twisting or spiral arteries in the centre of each maternal lobule were found to be in a state of partial fatty degeneration. In the fourth pregnancy, as the result of great care and absolute rest, gestation was carried on to the eighth month, when uterine hæmorrage set in as before. The labour being speedy the child was born alive, but within an hour of what seemed a comparatively happy delivery a sort of convulsive seizure supervened, followed by deep coma, and in two hours later the patient died with all the signs of apoplexy of the base of the brain.

Charles Robin is one of the chief and explicit exponents of the doctrine that morbid change goes on in the placental tissue preliminary to blood extravasation. He differs *in toto* from Jacquemier, Verdier, Bustamente, and others, as to the order of pathological events in the placenta. He insists that no blood extravasations take place in the placenta without previous disease in the tissue, and the morbid change which is the most common forerunner of apoplexy is not mere vascular change, but an alteration of the whole structure of the villus.

As Robin's researches on this subject are regarded in France as the most important contribution of late years, I venture to speak of them in some detail. M. Robin points out that in the early formation of the chorion a certain proportion of the villi do not contain vascular loops, but the centre becomes fibro-cellular, and the nuclei are seen, by the addition of acetic acid, to be of an elongated form. This centre is easily distinguished from the elastic sheath, which retracts and corrugates when lacerated. In some of these non-vascular villi are fine granules and distinct drops of oil or fat, highly refracting the light, and attacked by potash, but not by acetic acid. The fibro-fatty degeneration of villi is, therefore, according to Robin, a normal process, by which useless and non-vascular villi undergo atrophy; but this fibro-fatty change may become a morbid process, and, by extending to other and active villi, may first compress and then obliterate the contained fœtal blood-vessels, thus producing a solid villus which is composed of dense fibro-cellular structures admixed with fat, and whose function is entirely abrogated by the change. This morbid transformation may occur in the mature placenta as well as in the earlier stages of its formation, and the ultimate effect is to produce a firmness and density of tissue, in which it is most difficult to separate the component elements. The amount of fatty deposit and its proportion to fibroid change varies in different cases, and the larger the amount of fatty granules and molecules, the less distinct are the nuclei of the fibroid structures.

According to Robin, extravasations of blood are always consecutive to placental disease of this or a kindred form, and he contends that this prior change is fibrous obliteration of the villi with fatty degeneration of tissue.

I have mentioned the views of M. Robin here because they have a direct bearing on the production of placental apoplexy, and are associated by him, and those who think with him, as cause and effect—the fibro-fatty degeneration being the invariable precursor of hæmorrhage into the placental substance.

Supposing it to be admitted that some pathological change not infrequently precedes blood-extravasation into the deeper structures of the placenta, there can be no doubt that effusion of blood takes place with comparative frequency on the maternal or decidual surface of the placenta from other causes. The most common of these causes is an accident of some kind, or uterine contraction, which tears the utero-placental vessels across, and causes the formation of apoplectic clots between the placenta and uterine walls. Such hæmorrhage may go on to separate the membranes from the uterus down to the os uteri, and then it appears as flooding from the genital passages. If, on the other hand, the results remain at the point of extravasation, the amount of clot may be so considerable that it bulges forward the uterine wall, and can be felt as a projection by abdominal examination, constituting the so-called "concealed hæmorrhage." When the clot is small, it remains in the locality of its formation, and, if pregnancy is not further disturbed, it undergoes all the changes peculiar to retained clot elsewhere. Large or small, the clots before disappearing go through various phases. According to Ercolani, the fibrin assumes a lardaceous, yellowish aspect, the appearance of fibrillæ gives place to two kinds of granulations, the one of proteic nature, soluble in alkalies and acetic acid; the other of a fatty nature, resisting these reactive agents. If a clot is to become organised through the process originally described by O. Weber, and afterwards confirmed by Virchow, it may eventually form a distinct neoplasm in the placenta. These neoplasms are rare, but cases have been put on record by Virchow and also by Danyau.

The interference with the life of the child or with the course of gestation depends upon the amount of extravasation and the excitability or quiescence of the uterine walls under the provocation to contraction.

Inflammation of the Placenta, or Placentitis, has been described by Brachet, Dance,[60] Simpson, Cruveilhier,[61] and other authors. Simpson described it as consisting of three stages, the first being one of congestion, in which the tissue is engorged by an unusual accumulation of blood in the vessels; the second characterised by the exudations of coagulable lymph, producing a greater density of tissue and eventual induration; the third stage being that in which purulent matter is formed.

Brachet, in the *Revue Médicale* for 1828, gave a very full and precise description of four cases in which the placenta bore a resemblance to the red hepatisation of the lungs, was friable, engorged with blood, and dense in tissue. In some sections the structure was yel-

[60] *Report. Gén. d'Anat.*, Tom. iii.
[61] *Anat. Pathol.*

lowish, and strewn with fatty degeneration analogous to fatty liver. He further states that he has seen circumscribed abscesses in the placenta, such as occur in inflammation of other parenchymatous organs. Dance and Brachet both aver that they have seen a deposit of pus covering the entire surface of the placenta, while Jacquemier and Cruveilhier each report the presence of purulent matter as the result of inflammation in the placenta and adjacent uterine veins. Jacquemier teaches that, especially when a portion of the placenta has been separated, inflammation may be set up and pus formed.

In later days a good deal of scepticism has been expressed about the existence of placentitis; at least, so far as its parenchyma or fœtal portion is concerned. Bustamente disbelieves in its existence altogether, and says the evidence rests on the supposed presence of pus, which has been shown to be fallacious; the supposed purulent matter, according to Robin and other observers, being merely pseudo-pus, produced by broken-down fibrin.

It has been further argued that, according to modern theories, inflammation of the placenta is impossible, since there are no capillaries in the maternal portion, and there are no nerves to regulate the contractility of vascular walls in the entire structure. This seems to me not conclusive reasoning. There are fœtal capillary loops in all the active villi, and there are also minute capillaries of maternal origin in processes or dissepiments of the decidua which circumscribe the fœtal villi.

It is true, nevertheless, that the presence of purulent matter in the placenta in most of the reported cases is supported by imperfect evidence. There are only some ten cases of abscess in the placenta recorded, and as no account is given of the microscopic examination of the supposed pus, the evidence is plainly unsatisfactory. Purulent matter has, however, been found and duly authenticated on the surface of the placenta, and in the uterine sinuses at or near the placental site.

That some morbid change analogous to inflammation does take place in the placenta or its neighbourhood is apparently indicated by the firm adhesions which are occasionally formed between the placenta and the uterine walls,[62] and from the traces of an exudation which agglutinates and compresses the villi of the placenta. The progress of such inflammatory action is, moreover, often marked by the presence of tenderness over the gravid uterus, with general indications of pyrexia. Braun, Schroeder, and Spiegelberg regard this placental inflammation as not a form of true placentitis, but of chronic endometritis affecting the mucous membranes of the uterus primarily, and only extending to the fœtal structures incidentally. Hegar and Mäier[63] describe it as a form of interstitial endometritis, in which the villi are agglutinated and compressed by the hypertrophied elements of the serotina, and the development of a new connective tissue.

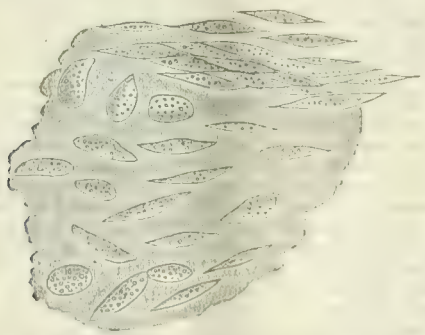


Fig. 7.—Placental tissue showing granular or slightly striated matrix, with elongated decidual cells, constituting the first stage of interstitial placentitis (Hegar and Mäier).

According to Spiegelberg, it is only through the work of Hegar and Mäier that we have got precise knowledge concerning the so-called inflammation of the placenta. Their memoir is certainly an example of careful work, and is well worth perusal. I regret that I must pass it with so brief a notice. This inflammation begins, according to them, in the formation of soft granular exudation, and ends in the production of induration and disorganisation. The decidual tissue normally consists of elongated cells imbedded in a small quantity of amorphous intercellular substance. When inflammation begins there is an enormous development of fusiform cells, with an increase of intercellular granular material. Then the cells become deformed, distended with fine fat granules, and eventually the whole structure is converted into fibroid tissue. It is apt to repeat itself in the same individual, and the chronic morbid condition of the mucous membrane, upon which it depends, may lead to earlier abortion in other prognancies. The recognition of the true cause of this placentitis, as Spiegelberg points out, affords a clue for treatment, and also a hope that its recurrence may be prevented on future occasions.

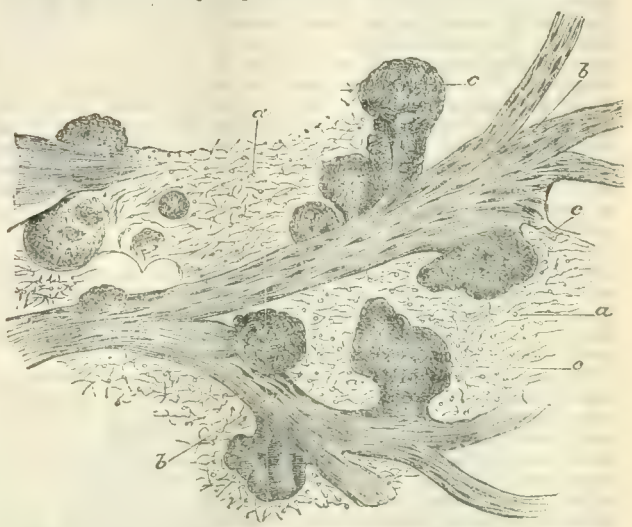


Fig. 8.—a. Strong development of connective tissue taking the place of the earlier cellular formation seen in the normal placental structure. b. Indication of vessels obliterated by the growth of connective tissue. c. Extremities of villi atrophied and in fatty degeneration (Hegar and Mäier).

Under the influence of this morbid change, the utero-placental vessels and the villi undergo varied modifications, of which the constant result is atrophy and degeneration by compression, in such sort that, passing through various intermediate stages, they become hard, whitish nodules or cords, like old cicatrices, imbedded in the spongy substance of the placenta. This chronic and progressive production of connective tissue, on the surface and in the substance of the placenta, constitutes a work of induration, the net result of which is the obliteration of the double system of fœtal and maternal vessels, and secondary disturbances in the circulation which are evidenced in thrombosis or in apoplexy more or less extended. The whole morbid process, say these authors, bears the closest resemblance to cirrhosis of the liver.

Neumann[64] has described a condition which he also regards as produced by inflammation, and which he terms "sclerosis" of the placenta. In this form of disease the villi develop in such luxuriance as to encroach upon the maternal sinuses, and eventually to obliterate them. It may therefore be regarded essentially as an affection of the fœtal part of the placenta. Neumann recognises the fact that this sclerosis of the placenta, in some cases at least, may be the result of an inflammatory process in the decidua, and result in a hyperplasia of its connective tissue.

Meyer, of Freyburg,[65] while he says that he has never found the condition which Neumann calls "sclerosis of the placenta," describes a morbid process which he has carefully investigated, and which consists of hypertrophic proliferation of the connective tissue in the placenta, with consecutive induration. The more this connective tissue grows, the more the proper parenchyma of the placenta dwindles by pressure and wasting of the vessels; the whole organ shrivels, and the diminution in the size of the organ results as much from the loss of normal, as the contraction of newly formed, tissue. In the normal placenta there is, he says, only a small amount of connective tissue, but there is a large amount in these abnormal cases. This author does not agree with Simpson, Rokitansky, Scanzoni, and others, who suppose inflammation followed by exudation to be the cause of the formation of connective tissue.

There is a sort of general resemblance between the descriptions

[62] Desormeaux and Dubois say that inflammation not only makes the placenta adhere to the uterus, but also to the fœtus, and so produces monstrosities. On the other hand, Robin holds that adhesions between the placenta and uterus are not due to inflammation, but result from the persistence of the firm condition of the uterine mucous membrane found in the unimpregnated uterus, instead of softening as usual in pregnancy.

[63] Virchow's *Archiv*, 1871.

[64] *Königsb. Med. Jahrb.*

[65] *Monats. f. Geburt.*

given by Hegar and Mäier of placentitis originating in the decidual part of the placenta and Meyer's "hypertrophic proliferation of the connective tissue in the placenta." The differences are as to the nature of the process and in the details of microscopic change. Henning has further made an important contribution on the subject of placentitis, and explained how it produces adhesions between the uterus and placenta and membranes.

Placental Phthisis.—At different times extending over years, I have seen specimens of a disease of the placenta, which does not correspond accurately with any of these descriptions. In some of its stages, it bears a close resemblance to morbid changes which have already been described by the authorities I have quoted, and I have endeavoured to trace its connection with these other morbid processes. It may, indeed, combine more than one of them in the progress of its development. It differs, nevertheless, in some important particulars of its pathological history, which I shall endeavour to indicate. It has so many analogies to phthisis in the lung, that it may with propriety be named "phthisis of the placenta." Sir James Simpson has previously used the term "placental phthisis;" but he comprehended under this appellation various forms of disease in the placenta which interfere with intra-uterine respiration and nutrition.

In its earlier stages, repeated investigations have convinced me that it is not, primarily at least, a mere increase of the cell structure, nor of the fibroid element in the placenta, as described by Hegar and Mäier, or by Meyer; but that, in its first stage, it consists of an exudation or deposit, thrown out among the villi, and that it is probably due to some modification of a low inflammatory process.

The disease is not really tubercular in its character, nor have bacteria been found in its substance, neither is it primarily or essentially a fatty degeneration, for the deposit is not affected by the reagents which show the presence of fat. Its corpuscles, unlike fat granules, are thoroughly coloured by the material used for staining the microscopic sections. It is not due to changed blood-clot, for there are neither altered blood-corpuscles nor crystals in its substance. Its general appearance, both before and after section in the earlier phases, is rather that which has been described as fibrinous or other analogous deposit, and it has the chemical characters of protein compounds.

I can scarcely go into the minute pathological anatomy of this so-called placental phthisis in these lectures. This I propose to do in a paper to be offered to the Obstetrical Society; but I may state broadly that, in the specimens I have examined, masses of exudation were found in the substance of the placenta which rendered its tissue firmer and denser, and produced, so to speak, "hepatisation" of the part affected. The hepatisation was partial or more general in accordance with the amount of disease present, and the localities affected were commonly the centre of a lobule, but the deposit might be more irregularly placed, and even diffused. Some of the masses were dense throughout, gradually shading off into the healthy surrounding tissue; others were undergoing a process of crumbling or disintegration in their centre, after the fashion of tubercular masses in the lungs; and in a third form the disintegration of the centre had attacked the blood-vessels, blood was extravasated, and apoplectic clots, limited by layers of fibrin, were undergoing all the usual changes in accordance with the date of extravasation. The primary exudation, when recent, was amorphous or finely granular, and somewhat striated, with round interspersed corpuscles, but no fat particles, and it glued the villi together so as to fuse them into a firm mass. Where the tissue was breaking up and becoming disorganised, the villi were wrinkled and broken, and undergoing fatty degeneration. In places, again, where exudation was older and was not undergoing the destructive process seen in the centre of some of the exudation masses, it was being rapidly converted into connective tissue, firmly binding the now exsanguine villi into one solid mass, and completely abrogating their functions.

In the order of successive changes, therefore, the disease runs in somewhat parallel lines with phthisis in the lungs. First comes solidification; then softening, with breaking up of tissue and resulting hæmorrhage. In parts of the placenta where the exudation has been more scanty, or endowed with higher vitality, it does not break up, but forms fibroid connective tissue, bearing some analogy again to fibroid phthisis, or perhaps to cirrhosis of the liver, as remarked by Hegar and Mäier.

A notable feature in many of the microscopic sections was the great hypertrophy of the contractile coat of the fœtal blood-vessels. This was observable in the larger branches, but was most marked in those of intermediate size before they divide into capillaries. A similar hypertrophy of the vascular tissues was observed by Fränkel in a placenta, which he described as syphilitic, and also by Lawson Tait in his description of a form of placental disease where no syphilis was traceable. Lawson Tait regarded it as the result of a compensating effort on the part of the arteries to overcome the obstruction found in the extremities of the villi, which eventually ends in their contraction and closure, and he points out its analogy to the hypertrophy of the vessels observed by Dr. George Johnson in renal disease. Hegar and Mäier had previously spoken of this compensating action as likely to lead to extravasation of blood and apoplexy in sounder portions of the placenta.

There is a marked difference between this affection and primary fatty degeneration of the placenta, which is comparable, for example, to fatty degeneration of muscle. Here there is an adhesive exudation or infiltration distinctly seen to be thrown in among the villi, as the first step of the morbid process. It pushes some villi aside, while it crowds others into small space, stopping the circulation, both fœtal and maternal. When the deposit degenerates because of its adventitious origin—which it may do as one of the results of the pathological process—it produces also degeneration of the villi, which gradually break up and soften. Thus cavities are formed which become full of blood. Women who lose their children from such placental disease as I have described are not necessarily phthisical, but have sometimes a strumous family history, and I have seen like cases associated with anæmia and syphilis. In anæmia it is well-known there is a deficiency of red globules in the blood with a larger proportion of fibrin. All these conditions may predispose to a low type of inflammation, as in other organs of the body, and to such deposits as those described.

It is not an uncommon form of disease, and there is some reason to believe that, although commonly it runs a chronic course, yet occasionally its progress is very rapid. Dead children are sometimes born plump and in good condition, with the placenta so largely affected with the first stage of infiltration that intra-uterine respiration could no longer be maintained. The well-nourished condition of the child seems to indicate that in these instances the disease is of recent origin, and that it killed the child more speedily than in the chronic form usually observed.

Fatty Degeneration of the placenta, as first described by Dr. Barnes[66] in this country, is, according to the author named, analogous to fatty change attacking other organs, as the heart and arteries, for example. In its simplest form it is seen in cases where the death of the child has arisen from some other cause than disease in the placenta. In the case of a child which died near the full time from intra-uterine small-pox, and was retained some time after, all the villi, as well as the maternal portion of the placenta which I examined, were crowded with oil-globules and compound granular fat particles. The villi were swollen and œdematous, and their external covering was readily separated. The entire placenta was paler and softer than usual, and contained an abundance of serous fluid in all its meshes. Dr. Barnes is careful to draw a distinction between this sort of passive fatty change following the death of the fœtus, which he calls "fatty transformation," as distinguished from "fatty degeneration," which, according to him, commences previously in the placenta, and, if extensive enough, kills the child. This he calls "true fatty degeneration," and compares it to the fatty degeneration of the brain, liver, and muscles occurring in the adult. It is characterized by the morbid changes being partial, invading one or more cotyledons, and the diseased masses are often imbedded in the midst of healthy tissue. The child may be living if only limited portions of the placenta are diseased. If the disease is extensive, it kills the child, and there is an intermediate stage in which the child lives; but its nutrition is interfered with, and it becomes puny and starved. Dr. Barnes figures both the decidual cells forming the maternal part of the placenta, and also the fœtal villi studded everywhere with fat globules. The villi are brittle and firmer than natural. Under the microscope they are seen to be thickly covered with oil-globules; the proper structures are disorganized; and the blood-vessels which are empty have their courses marked out by the clusters of oil-molecules which follow their tortuous course.

Kilian[67] had, prior to Barnes, written on "A New Disease of the Placenta," which partly anticipated Dr. Barnes's observations on "fatty placenta;" and, soon after Barnes, C. Robin published his monograph to which I have previously alluded. Robin, as we have seen, does not believe in a purely fatty degeneration, and regards the fibrous transformation of the villi in so-called fatty placenta as the chief lesion, the fatty deposit being associated with it only as a complication in the obliteration of the villi.

The description of Barnes is certainly accurate so far as some phases

[66] *Medico-Chir. Trans.*, 1851, etc.
[67] *Neue Zeitschr. für Geburt.*, 1850.

of placental change are concerned. The question is whether fatty degeneration of the placenta during the life of the child really occurs as a primary pathological change, or is invariably preceded by some exudation or other morbid change which initiates the fatty metamorphosis. Adventitious deposits are more liable to fatty degeneration than normal tissues; and it is to be noted that, in the majority of examples where fatty degeneration has attacked the placenta, the portions affected are not softer, but firmer and denser, than usual, the villi being almost inseparably united together. It is conceivable, nevertheless, that some depraved and impoverished conditions of the maternal blood may lead to such deterioration of vitality in the placenta that it begins to degenerate and die, and thus kills the fœtus.



Fig. 9.—Fatty Degeneration of Placental Villus. (Barnes.)

The deposit of minute fatty molecules and of larger oil-globules is associated with most forms of morbid change in the placenta—in some stages, at least. In consonance with the general law that effete and useless parts of the organism undergo degeneration into fat, and so are more amenable to absorption, the placental structures, when altered by disease so far as to be unfit for the exercise of their normal function, begin to undergo fatty change, and this results in atrophy of the part affected.

Fatty degeneration, whether it occurs as a primary change or is the secondary effect of some other pathological condition which precedes it, may produce softening and disorganisation of the placental tissue, and so favour extravasation of blood or apoplexy. In other placentæ it leads to atrophy. All the structures shrivel and condense, so that the organ seems like a mass of dense fibroid tissue; it undergoes, in fact, the fibrous transformation which I have previously described. The tendency of modern investigators is evidently to regard fatty degeneration not as a primitive change, but a phase or stage of some other morbid condition which precedes it or is associated with it.

Dr. Druitt[68] regarded fatty degeneration of the placenta as a normal condition towards the end of pregnancy, and as preparatory to detachment at the time of delivery. For him, therefore, fatty degeneration was only the extension to a morbid degree of a condition which exists normally to a certain extent towards the end of pregnancy in all placentæ. There is, it is true, some amount of fatty change towards the end of pregnancy in certain portions of the afterbirth which have now no active purpose to serve. This is notable round the margins and in the membranes. The nuclei in the epithelial cells of the amnion are surrounded with a ring of fat particles in nearly all placentæ at the full term; but normally there is no fatty degeneration in the potential villi as pregnancy advances, and it is obvious that the nutritive and respiratory functions have to be carried on for the well-being of the child just as actively up to the termination of pregnancy as at any previous period.

Hiffelsein and Laboulbène,[69] Charpentier, Simpson,[70] Goodell,[71] Whitaker,[72] Cowan,[73] and others, have all made contributions to the subject, and all regard it, however it may arise, as intimately associated with the processes which produce destruction of fœtal life.

Ercolani has described as synonymous with fatty degeneration of the placenta what he calls "cellular hyperplasia and hypertrophy of the parenchyma of the placental villi." He agrees with the general accuracy of Robin's observations in regarding the presence of fat-granules with fibroid degeneration of the villi as an accidental and not essential complication. The firm and dense placentæ, which have been written upon by Bustamente and Neumann as "sclerosis of the placenta," he considers as essentially due to a hyperplasia not of the connective tissue, but to a cellular hypertrophy of the parenchyma of the villi, either simple or complicated with obliteration of the contained vessels, and also in some cases with lesion of the glandular organ or decidual covering.

It is obvious from the description that the disease described by Ercolani is different from fatty degeneration as described by Barnes, and I have not seen any specimen having the exact characters of those described by Ercolani.

Myxoma Fibrosum.—Virchow has described a very curious morbid transformation of the villi of the placenta, which he terms "myxoma fibrosum." It is quite different from the cellular or fibrous degeneration of the villi described by Ercolani and Robin. It consists of such enlargement of the stems and villi by fibroid hypertrophy that they form in some cases distinct tumours in the placental structure. The cases are somewhat rare, but I saw two excellent examples in Copenhagen which have been described in Virchow's *Archives* in 1878, by Storch.

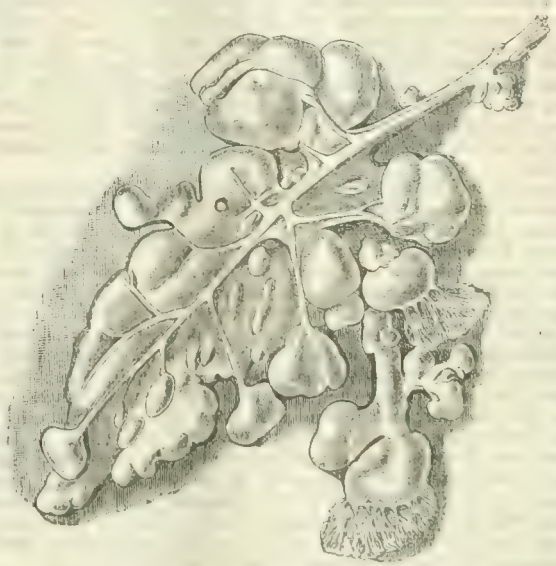


Fig. 10.—Myxoma Fibrosum of the Placenta.—Virchow (after Storch).



Fig. 11.—Section of a Tumour showing Fibroid Structure.

In one, the tumours were as large as hazel-nuts, attached by pedicles to the deeper seated trunks of the placental villi, and, when an incision was made into the substance of the placenta, they projected through the opening like so many adherent hard nodules, or perhaps I may say digitated radishes. Microscopic examination showed that they were composed entirely of fibroid elements formed by a cellular hyperplasia of the central part of the villi, and that they were enlargements or excrescences on the villous trunks, with an external arrangement somewhat analogous in appearance to cystic chorion. Virchow regards the disease as a transformation of the mucous element pertaining to the villus structure into fibroid tissue, instead of the soft myxoma which is seen in cystic chorion. The fibroid change is, however, unlike the cystic chorion, more frequently connected with the later period of pregnancy, although indications of it are sometimes seen in the earlier months, and, therefore, it is described as a disease of the fully developed placenta. Hildebrandt has also described a good example in *Mon. für Geburt.*, Bd. xxxi; and Dr. Sinclair, of Boston, United States,[74] another. It is probable that the case

[68] *Lancet*, 1853.
[69] *Soc. de Biolog.*, 1865.
[70] *Obstet. Works.*
[71] *American Journal of Obstet.*, vol. ii.
[72] *American Journal of Obstet.*, 1870.
[73] *Edin. Med. Journ.*, 1856.

[74] *Journal of the Obstetrical Society of Boston*, 1871.

of sarcoma in the placenta given by Hyrtl is one of the same kind. In Storch's first case the child was born alive, but feeble, and died an hour after birth. If the placenta is only partially affected, the child, though emaciated, may live; if the disease is more universal, the child dies.

I pass over œdema of the placenta, melanosis, calcareous or osseous concretions, cysts and tumours, so that I may be enabled to say a few words on the subject of syphilitic placenta.

Syphilitic Placenta.—It is important, if possible, to answer the question, Is there a syphilitic placenta?—that is, a form of disease in the placenta associated with syphilis which may be recognised by examination. Much diversity of opinion has been expressed concerning this matter, and various descriptions have been given of the syphilitic placenta which do not agree.

That syphilis is a potent cause of placental disease and abortion has been recognised by some of the oldest authors. Astruc mentioned it as far back as 1796, but Murat (according to Deschamp[75]) was the first to describe certain appearances as belonging to the syphilitic placenta. To illustrate the diversity of opinions in recent times, I may mention that Verdier regards a thickening of the arterial walls produced by a form of arteritis in the fœtal part of the placenta as characteristic of syphilis. After thickening, the vascular walls degenerate, and the vessels become obstructed. Rokitansky[76] associated some of the fibrinous deposits found in the placenta with the syphilitic taint. These had a syphilitic aspect on section, whatever that may mean. Lebert[77] before him had observed yellow granulations having the same structure as tubercles, but he did not regard them as of special importance.

Gusserow and Klebs[78] observed a morbid hyperplasia of the decidual cells in a case where the father was syphilitic, but Straussman[79] and Madame Kaschewarowa have since shown the same changes in the placenta where there was no suspicion of syphilis. Virchow,[80] who always brings a certain originality into his work, made some observations on syphilitic placentæ. He points out that in studying this subject we must remember the envelopes consist of two portions, the fœtal and the maternal. He then proceeds to point out that syphilis may produce two forms of endometritis during pregnancy, the one attacking that part of the decidua which enters into the formation of the placenta, the other the parietal decidua, or vera, which is away from the placental spot. The first form produces thickening and fibrous indurations which may cause atrophy of the villi. In the second form the most marked effects were shown upon the decidua vera. It was thickened and covered on its uterine side with growths almost polypoid, composed of very vascular proliferating mucous tissue, with no trace of fatty degeneration. Virchow considers this change is analogous to mucous papulæ, or flat condylomata, observed elsewhere on mucous membranes in connection with syphilis.

Straussman has thrown some doubt on the supposed specific character of this lesion by finding it in the case of a mother who had not the least symptom of venereal disease Henning regards these proliferations as simple angiomas. Virchow's observations on this subject seem to me to refer rather to the effects of syphilis on the ovular membranes in early pregnancy than to the full-grown placenta. Fränkel[81] is the author whose researches in later days have received most attention in Germany and France, and they bear the impress of great care. Fränkel's conclusions, which he says are founded on the examination of over one hundred placentæ, point distinctly in favour of there being a syphilitic placenta, which may be recognised by certain definite characteristics. The placentæ mostly belonged to syphilitic mature, or immature children, and he took the indications pointed out by Wagner, of Berlin,[82] as peculiar to syphilitic fœtuses, to be unfailing evidence that syphilis was present. Wagner has pointed out that in all syphilitic children there is a peculiar band of tissue between the shaft of the bone and the cartilage of the epiphysis, which is in a state of inflammatory irritation. The microscope, as well as the naked eye, shows that the changes thus produced are unlike any other changes, and consequently are specific. Taking this test as a basis, Fränkel states that the evidences of placental syphilis vary according to whether the syphilitic virus is derived from the mother or the father. If from the male parent, the villi constituting the fœtal part of the placenta are chiefly or primarily affected, but the disease may extend thence to the maternal part. The villi undergo a peculiar cellular hypertrophy, with thickening and proliferation of their epithelial covering, which alters and distorts their form in a remarkable manner. There is a particularly marked hypertrophy in the coats of the vessels, with consecutive obliteration of their canals.

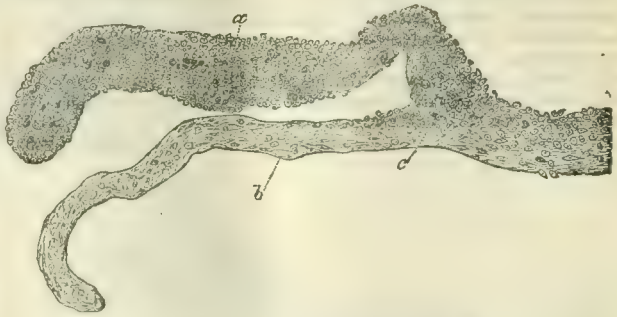


Fig. 12.—Villus of placenta, affected with "disfiguring granulation cell disease." (Fränkel.) *a*, Portion of villus covered with granulation cells; *b*, normal villus deprived of its epithelial covering by maceration; *c*, junction between sound and diseased structure.

This morbid change Fränkel calls by the awkward name of "disfiguring granulation cell disease." The placentæ in their entirety were, in the early stage of the disease, unusually large, notwithstanding that in most cases the fœtuses were atrophied and shrivelled. After the hypertrophy, came one of atrophy, in which the vessels were completely obstructed, the epithelial covering disintegrated, and fatty degeneration in full progress. Fränkel insists strongly on one point, namely, that although fatty degeneration of the villi, blood extravasations, etc., may be present in placental syphilis, they are secondary, the primary disturbance being increase in the normal cells of the villi, a revolutionary growth brought about by diseased blood.

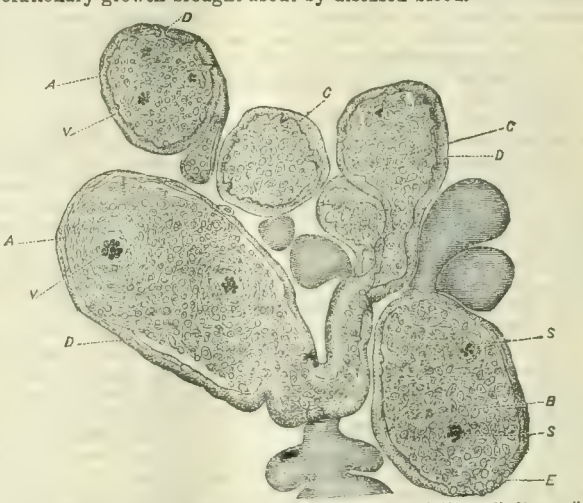


Fig. 13. Section of villi affected with "disfiguring granulation cell disease." AA, Luxuriant cell-development in the interior; VV, lumen of blood-vessels with hypertrophied walls; B, villus in which only a trace of blood-vessels can be seen at SS; C, villus without trace of vascular canal; D, epithelial covering. (Fränkel.)

When the mother was the subject of syphilis the pathological lesion was more complex, and the changes were especially marked in the decidual or maternal part of the placenta, but also might extend by contiguity to the villi or fœtal portion. The changes in the decidua took the form of disease described by Virchow as placental endometritis, or by Slavjansky[83] and Kleinwachter[84] as "placentaris gummosa." These consisted of increased growth of the connective tissue, and enormous hypertrophy of the large decidual cells, these so crowding and compressing the villi that their circulation was interrupted, and the result was interference with the nutrition and placental respiration of the fœtus. I believe Henning was the first to call attention to the intimate relation of the cell-growth to the vessels in syphilitic placenta, and his observations are confirmed by Fränkel. If both father and mother were syphilitic, the lesion was of course a mixed one, and in all there were variations, consisting of changes of

75 *Thèse*, 1880.
76 *Lehrbuch der Path. Anat.*
77 *Comptes Rendus*, 1852.
78 Virchow's *Archiv.*, Bd. xxvii.
79 *Verhandl. d. Berlin. Geburts.*, 1863.
80 *Path. der Geschw.*, Bd. ii.
81 *Arch. fur Gynäkol.*, 1873.
82 Virchow's *Archiv.*, Bd. i, p. 305.
83 *Prager Vierteljahrs.*, 1871.
84 *Ibid.*, Bd. 114.

colour, dark hyperæmic patches, alternating with paler structure, and frequently smaller or larger blood extravasations.

The late Dr. Angus Macdonald,[85] of Edinburgh, wrote a paper confirming these observations of Fränkel, and asserted that although the syphilitic placenta may be mistaken for a fatty placenta, and, in fact, had been so mistaken by Kilian and Robin, this is easily rectified by microscopic examination. In these cases the death of the fœtus is the result of progressively increasing defective blood-supply, owing to the changes described.

I have on different occasions had the opportunity of examining placentæ in the early months of gestation with certain peculiarities of morbid change which I considered were undoubtedly due to syphilis, and which bore some resemblance to Fränkel's descriptions. For example, I examined the placentæ in two separate pregnancies of the same individual. She had contracted syphilis immediately after her marriage, and at the same time became pregnant. During the early part of her pregnancy the vulva became the seat of specific sores, mucous tubercles, and warts. Later her body was covered with patches of syphilitic psoriasis. She miscarried in both the first and second pregnancies in the fifth month. Both the placentæ exhibited changes very closely resembling each other. On the uterine side of the placenta the decidua was much thickened, and there was great increase of all the cellular and fibroid structures which normally constitute that membrane. Prolongations of this dense tissue were sent down into the substance of the placenta, and seemed to terminate about half way through its thickness. The effect of this dense layer was apparently to compress and contract the sinuses or lacunæ, to do away with the spongy character of the organ, and so to prevent the growth of the villi into the sinuses. The villi next to this layer were stunted and atrophied. Those near the fœtal surface were hypertrophied, and were beginning to undergo fibroid or fatty degeneration or both. In all the microscopic sections, hypertrophy of the arterial coats in the fœtal blood-vessels was noted, and those nearest the maternal surface were absolutely obliterated. Here was a case in which syphilis in the mother was clear and distinct, and where the changes in the maternal portion of the placenta were most marked, supporting the doctrine that it is this portion which is most affected when the mother is syphilitic in early pregnancy.

So far as my observation goes, I do not think we are yet able to say with precision that any one specific lesion of the placenta belongs alone to syphilis, although some morbid appearances are more constant than others in connection with syphilis, as, for example, the changes described by Fränkel. In addition to the hypertrophy of the villi described by Fränkel, and the morbid changes in the decidua just described, I have seen fibroid deposits, such as those described by Rokitansky, some unchanged, others undergoing fatty transformation. Again, I have seen the yellowish granulations of varying sizes looking like tubercles, as observed by Lebert, but I have also seen most, if not all, of these pathological appearances where no syphilitic history could be traced. The nearest approach to precision in this respect is to say, as a general rule, when the decidual or maternal portion of the placenta has become so far changed by hyperplasia as to arrest the utero-placental circulation and the full development of the placental villi, that this is probably due to maternal syphilis. It finds its analogy in the changes which take place in the mucous membrane in the uterus and elsewhere when the blood is undoubtedly poisoned by syphilis, and also in the thickening of the decidua during the early pregnancy of syphilitic women, which has been described by Virchow and Dohrn as "endometritis papulosa et tuberosa." When fibrinous and pseudo-tubercular deposits are found in the placenta in connection with syphilis, they are probably only the expression of a depraved or impoverished condition of the blood, which may be equally associated with anæmia or with some form of dyscrasia. When there is marked hypertrophy and degeneration of the villi, the maternal portion of the placenta being less affected, the syphilitic taint more probably comes from the male parent, and the mother may show no signs of the disease. Both Depaul and Tarnier, among modern observers, dispute the existence of absolutely specific lesions in the placenta as the result of syphilis.

De Sinéty, one of the latest writers quoted by Charpentier, did not find placental lesions in all women affected with syphilis, but where lesions were present he was able to demonstrate three important points: (1) Hypertrophy of the placental villi; (2) fibrous degeneration of them; (3) islands of granulation belonging to the caseous form of degeneration. This coincidence of the fibrous and caseous forms of degeneration is found in syphilitic gumma, notably in gummata of the liver. De Sinéty had not found this combined degeneration except in syphilis. He does not know if any other disease may produce the combined changes, and does not decide the question as to a specific placental lesion in connection with syphilis.

In reference to all diseases which affect the placenta, it is to be noted that the effect on the life of the child bears a direct relation to the amount of damage done to its tissues, and impairing its double function as an organ for respiration and absorption. In cases of separation of the placenta, a portion still adherent to the uterine walls may be enough to sustain the life of the child, for a time at least; and, in like manner, when the placenta has become diseased, if some portions of it only remain sound, vitality may still be maintained in the body of the fœtus. If the morbid process be slow and chronic there will probably be progressive emaciation, and if the child be born alive it will have all the appearances of being starved during its development. If the placental disease is more acute and rapid, and affecting a large area of tissue, the child's movements become at first more restless than usual, and then become less marked and distinct as they subside into absolute quiescence. With the aid of the stethoscope the beats of the fœtal heart have repeatedly been noted in cases of suspected placental disease to become slower and slower, and thus to furnish important indications for the induction of premature labour.

Among the further causes of fœtal death *in utero* which I cannot here overtake are the pathological conditions of the umbilical cord, *antepartum* hæmorrhage, extra-uterine gestation, and allied conditions, the malformations and diseases of the unborn child—the most fertile cause of the latter probably being syphilis.

Did time permit I might say something besides, concerning the changes taking place in the body of the fœtus when it is long retained in the uterus after its death; of the inferences to be drawn as to the cause of its death from the appearances it presents after longer or shorter periods of retention, and other kindred topics.

I must, however, hasten to say a few words on the subject of preventive treatment.

Treatment.—It may be asked, what are the remedies suggested for these many and varying causes of intra-uterine death? The answer must, I fear, in regard to a large number of them, be considered as eminently unsatisfactory. Notwithstanding all that has been done, we are yet only on the threshold of those investigations which must reveal to us eventually the best methods of obviating death in unborn children. In the meantime, so far as the prevention of some of the forms of intra-uterine death is concerned, we are absolutely in the dark, and the therapeutics of the subject are still as a closed book.

Fortunately this need not be said of all. A careful study of the several pathological conditions in the parents, combined with the local expression of the results of those conditions, enables us in some cases to formulate methods of treatment and lay down rules for guidance which in practice have been attended with happy results.

Whenever, therefore, a woman has once or more frequently lost the product of conception at an early or later period, careful inquiry should be made into the health of both parents, and any previous history of illness should be accurately scrutinised. If the constitution of either parent be found at fault, measures must be taken to amend this. The question of syphilis is so important, and the venereal poison is so persistent and all-pervading, that no pains must be spared to ascertain whether this is the root of the misadventures. If a patient has once had syphilis it is impossible to say when the effects on the constitution have entirely passed away, and many men who have believed themselves to be cured and free from every taint of the disease find the evidence still remaining in their wives' frequent abortions, or in the indications of syphilis in their living children. When, therefore, either patient has suffered from syphilis in the near or distant past, and the wife has recurring abortion, or has her children die *in utero* at a later period of gestation, the presumption is that syphilis is the cause. Both parents ought at once to be put under anti-syphilitic treatment before a fresh conception is permitted, and this ought to be sufficiently prolonged to give it a fair chance of producing satisfactory results. Diday recommends that the physician should not be contented with submitting both parents to anti-syphilitic treatment prior to the occurrence of pregnancy, but that with each successive pregnancy, as it occurs, the mother should at once recommence a mercurial course, even if she has no visible indications of the disease. I can testify that I have repeatedly seen good effects from small doses of bichloride of mercury, with bark, given during the first three months of gestation, when there has been no opportunity of commencing the treatment before conception began; and under this method, with a careful diet and regimen, women who had repeatedly miscarried before went to the full time.

Similar favourable results have been observed to follow the administration of iodide of potassium. M. Goshkevich, quoted in the JOURNAL (July 1st, 1885) advises its use in habitual abortion, even

[85] *Obstetric Journal*, 1875-6.

when no syphilitic symptoms have been recognised, and testifies to its utility in saving fœtal life. It must be left for the medical man in charge of a case to determine whether in any given case some of the approved forms of mercurial treatment are most appropriate, or a course of iodide of potassium. Possibly both may be judiciously combined, or one course succeed the other. Depaul has such confidence in mercurial treatment that he urges it should be adopted in all cases of recurring abortion, even when no syphilitic history is traceable in either parent. Charpentier, by way of enforcing this precept, records a case in which a woman had four consecutive abortions without known cause, and in which both parents not only denied any knowledge of syphilis, but no traces of the disease could be found upon them. The two parents were then subjected to an anti-syphilitic course, and two children were born subsequently quite healthy, and with no trace of disease upon them.

I may mention, for what it is worth, the case of a patient who had aborted in five successive pregnancies. In the sixth she was salivated by accident in the third month. On this occasion she went her full time, and was delivered of a living child.

In attempting to form a just estimate of the effects of mercurial treatment in syphilitic cases, it is but fair to say that the venereal poison has a natural tendency to attenuate itself and wear out in such way, that, apart from treatment, pregnancy may at length be continued to the normal term in women who have repeatedly miscarried from this cause before. In these cases each successive pregnancy may have longer duration, until eventually a living child is born. The value of mercurial treatment is nevertheless almost universally acknowledged. So far as my reading goes, there is only one notable dissentient to its utility. Despiès, a French author, looks upon mercury as the cause of all the evils which it is expected to remedy, and to be itself a cause of abortion. It is probable that some of the forms of mercury (the bichloride, for example) in very small doses over a continued period, and so regulated as not to produce ptyalism, have a beneficial effect in other than syphilitic cases, for more than one reason. The treatment certainly has a good effect on some constitutions. It restores the secretions, regulates the bowels, and, if combined with bark, improves the appetite and aids nutrition. I have frequently seen patients fatten while taking it. Further, it is an acknowledged remedy for certain forms of uterine hypertrophy, and more especially acts on the mucous membranes. In those instances, therefore, where the uterine walls are thickened, and their elasticity impaired—in those cases were chronic endometritis so hinders the formative power of the uterine mucous membrane that a faulty or diseased decidua is produced—an alterative mercurial course may best fulfil the indication of treatment demanded, and indirectly hinder the repetition of abortion. If inquiry shows that the health of either parent is disordered or deranged from some other cause than syphilis, care must be taken to trace out the nature of the deviation from health, and so to define it that treatment fulfils its purpose. It cannot be too much insisted upon that not the mother only, but the father also must be put under supervision. If there is any constitutional peculiarity or diathesis, it must be met by appropriate means—the strumous diathesis by tonics and cod-liver oil, with such improved climatic conditions as may be feasible; the gouty rheumatic by limitations of diet, careful regimen, and alkaline medicines. The gouty rheumatic constitution is often associated with congestion of the portal circulation, and this may become so important a factor in bringing on abortion that it deserves special mention. The late Dr. Edward Rigby constantly dwelt on the importance of keeping the bowels unloaded by aperients in women liable to abortion, and he preferred saline aperients to aloes or other drastic purgatives, as easier in action and less likely to be injurious during pregnancy. The effect of carefully regulating the bowels is to lessen the tendency to congestion in the pelvic organs, and so aid in averting engorgement of the fœtal membranes and placenta. Care must be taken to choose such laxatives as are not likely to stimulate undue action of the bowels or straining, else the medicines may stir up the very mischief they are given to avoid. Compounds of sulphur, like the German compound liquorice powder, the confection of senna, and salient aperients, seem best to fulfil the needful indications. Venesection has been recommended in cases of general plethora, and local depletion where local congestion seemed to threaten abortion from the pain and sense of engorgement which it entailed. General bloodletting is now rarely employed in these instances. Its advantages are doubtful, and its employment may lead to harm instead of good. Where fainting is produced in the mother, the embryo may be destroyed and abortion follow. Local depletion by leeches is less objectionable, and leeches applied round the anus, as the best point for abstracting blood, will readily relieve tension in the hæmorrhoidal vessels. They may require repetition two or three times during the early months of gestation, if indications of congestion recur, and as a rule they are of most use when applied just before the time which corresponds to the catamenial period.

The constitutional condition which, next to syphilis, seems to hold the most prominent place as predisposing to abortion, is anæmia, and for this it is plain a plan of treatment is called for the very opposite to a depleting one. Preparations of iron must be administered in some form least likely to disturb the digestive organs of the patient; and these should be given not only antecedent to the occurrence of conception, but they should be continued with such modifications and in such combinations as may be suitable during the progress of pregnancy. It has been thought by some that iron is counter-indicated when gestation has once commenced, as it might favour the occurrence of abortion by inducing hæmorrhage. As a general rule there is no ground for such supposition, and iron, if cautiously given, may be taken by anæmic patients throughout pregnancy without harm. There is often the greatest tolerance of it where it is most urgently needed. Cazeau remarks that in ordinary pregnancy a state of chlorosis is produced—there is a relative anæmia, for there is a diminution of red globules, with increase of fibrin in the blood. A slight increase, therefore, of this anæmia may have the effect of deranging the progress of gestation by lessening the nutrition of the fœtus and predisposing to fibrinous deposits in the placenta or membranes.

It is probable that some of the forms of degeneration found in the fœtal membranes and placenta are due to defects in the constitution of the blood in one or both parents. Whether the fault lies with the male or the female parent may not be easily determined. If there is obvious anæmia or deterioration of health in one or other, it may be enough to place the one apparently deranged under treatment; but this indication not being forthcoming, it will be desirable to put both parents on iron, combined, perhaps, with quinine, arsenic, or other tonic remedies, as may seem suitable in each particular case.

Where local conditions have been ascertained or suspected to be the cause of repeated abortion, or of later fœtal death, the treatment must be directed in accordance with the special requirements of the case. Especial care should be taken to remove as far as possible all indications of endometritis prior to the commencement of pregnancy, as an unhealthy condition of the lining membrane of the uterus is regarded by most authorities as a potent cause of disease in the fœtal membranes and placenta.

In all instances where past experience has proved the proneness to miscarriage, it is an essential part of any plan of treatment that the patient should be habitually at rest in the recumbent position, so that the uterus may be affected as little as possible by the effects of gravitation. It is doubful in most cases whether the patient should be entirely precluded from taking exercise and fresh air, lest the general health should so suffer as to undo some of the advantages of rest. This point deserves especial consideration, so far as anæmic and naturally bilious patients are concerned, both suffering if deprived of fresh air and exercise. A moderate amount of walking out of doors may, therefore, be permitted, with repose in the recumbent posture at other times. All carriage exercise and other forms of locomotion likely to jar the body should be sedulously avoided, and a carrying chair may be advantageously used to take the patient up and down stairs.

While this latitude of movement is permitted ordinarily, absolute rest on the sofa or in bed should be enjoined at the times which correspond to the days of the catamenial period. A greater tendency to abort has been noted at those times than at others, and, if abortion does not immediately take place then, damage is done, which culminates in miscarriage later, and is traced back to the menstrual epoch for its first symptoms. At those times, even during pregnancy, there is a nisus often distinctly observable in increased discomfort, or in some other way. It appears like a periodical tidal wave, which, in weakly women or those liable to go wrong, readily overflows its barriers, and ends in abortion. The influence of this menstrual wave is so fully acknowledged at all times in women that, by common consent, operations are avoided during its continuance, by way of avoiding the time of local hyperæmia with which it is accompanied. Charpentier remarks that, in certain women who abort frequently without known cause, there seems to be a peculiar irritability of the uterine fibre. The sphincter uteri seems weakened, and, when pregnancy occurs, the smallest effort promotes its dilatation. Irritability also determines premature contractions, and the sphincter being weak it easily yields, and so abortion occurs. It is obvious that in these cases, whatever else is prescribed, absolute rest in the recumbent posture is imperative so long as the irritability remains.

To Sir James Simpson we owe the suggestion that, in all cases where there is reason to believe the placenta is partially disabled by

disease, chlorate of potash should be given, with the object of keeping the child alive during its further detention *in utero*. Simpson's theory was that, because chlorate of potash contained six atoms of oxygen to one of chlorine and one of potassium, it would sensibly increase the amount of oxygen in the mother's blood, and afford a larger proportion of this element for the placental respiration of the fœtus. The maternal blood-current being thus more abundantly charged with oxygen than under ordinary circumstances, a smaller portion of sound placenta could absorb more for the requirements of the fœtus, and so supplement the function of those parts of the organ damaged or destroyed. Whether this theory be true or not, it is certain that many practitioners have testified to its utility as well as to its harmlessness. Dr. Playfair suggests that it may act, in virtue of its tonic properties, on the constitution of the mother; and I think it may act usefully as an alkaline salt in preventing the formation of coagula and fibrinous deposits in the placenta. It is given in ten or fifteen grain doses three times a day, and may be administered at any period of pregnancy, but it is believed to be most useful in the latter half.

The induction of premature labour, also recommended by Simpson as a means of averting the death of the child *in utero*, is only available in those cases where it dies in successive pregnancies after the expiration of the seventh month. At any period antecedent to this the child would not be viable, or would be so feeble that nothing would be gained by the proceeding. But in a limited number of instances it has been observed that placental disease begins apparently just before the seventh month, and gradually and steadily advances until it kills the child and its movements cease to be felt by the mother. With such experience of past times to guide the practitioner, the induction of labour is perfectly justifiable if the movements of the child continue to be felt after the seventh month is completed; and the operation is the more imperative if the movements grow slower and feebler, and the stethoscope indicates a declension of strength in the beating of the fœtal heart. In this way children's lives have been saved which would probably have been sacrificed by further delay.

In patients in whom intra-uterine death is threatened or feared as the result of some form of poison, inorganic or organic, to which I have alluded, the treatment must necessarily be prophylactic, and consists in the removal of the cause. In those special instances where the progress of zymotic disease or of inflammation in some organ of the patient's body is attended with high temperature, it is possible some attempt may be made to avert the usual consequences so far as the pregnancy is concerned. As the experiments of Runge and others have shown that peril comes to the child *in utero* directly the temperature of the mother rises persistently up to 105°, while the infant's temperature rises still higher, it may be possible, in the progress of science, not only to keep down the general maternal hyperpyrexia, but I would throw out the suggestion that, where it is feasible, an attempt should be made to lower also the temperature of the uterus and of the fœtus, either by the application of ice-bags to the maternal abdomen, or of those tubular appliances so ingeniously invented for the application of cold, and which may be modified to fit any part of the body.

When all our most ingenious methods of diagnosis and treatment are exhausted in attempting to obviate intra-uterine death, there will still be a large number of cases in which no further clue can be found than an obvious constitutional feebleness, permanent or temporary, in one or both parents. In some of these the organic weakness or degeneration in health may be of such character that it is hopeless to expect a remedy, and perhaps it is well for the race in general that such constitutional faults or diseases should not be perpetuated in progeny. But where the constitutional weakness may be but temporary, attempts should be made to resuscitate the health. Everything that science and practice teach to be useful for the restoration of strength in single organs and in the entire system should be called into requisition.

Boerhaave is said to have recommended horse-riding as a remedy for abortion. In any case where it proved useful it would probably be by improving the general health. Apropos of this I may mention a case within my own experience, of a lady in India who, after aborting several times under the most careful system of rest—in some pregnancies amounting to absolute repose for many months in the recumbent posture—at length gave up the hope of bearing children, and took to riding on horseback, not only before a fresh gestation began, but after she had reason to believe that she was again pregnant. As the result she went for the first time to the full period, and was delivered of a living child.

Some of the baths and waters on the Continent have a high reputation for their tonic properties and their favourable influence on pregnancy. Aix-les-Bains is said to be useful in these cases. I have seen courses at Schwalbach and Kissingen followed by happy results. Schwalbach, perhaps, is more appropriate for patients who are more or less anæmic; Kissingen for those in whom the digestion and porta system are at fault. One successful case is fresh in my memory wher a mother who had previously borne healthy children was stricken with severe pleuro-pneumonia, and continued for some time after in comparatively feeble health, although she resumed her place in society again after an interval. Not long afterwards she conceived, and at the end of six months lost her child. A little later a fresh pregnancy occurred, and this terminated, apparently without cause, at the end of four months. After this she went to Kissingen, experienced a notable improvement in health, and subsequently bore two healthy children without misadventure.

My task is now ended, however imperfectly completed, and I thank those who have listened to me so patiently. In giving these lectures, I have had a sense as of rushing rapidly through a plentiful harvest-field; plucking, it may be, a few scattered ears of grain by the way, but leaving an abundant crop to be garnered by those reapers who may come after me, and who will patiently and slowly go over the same ground.

REMARKS
ON "ANALGESICS."[1]

By JOHN KENT SPENDER, M.D. Lond.,
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It is becoming, first, to acknowledge the honour of being asked to open a discussion on "Analgesics" in the Section of Therapeutics and Pharmacology. There are three ways, so it seems to me, in which this duty may be done: (*a*), I might offer you a compilation of what everyone in this room knew before, from dictionaries, encyclopædias, and text-books, some of which my learned friends now present may have written themselves; (*b*), or I might frame a didactic sketch, like a master to pupils, a teacher to disciples, or a preacher to a congregation; (*c*), but there is one other way, which I venture to call the best way, which consists in taking up a few points from a vast subject, and comparing notes with my brethren upon them; bringing the experience of one man to strengthen the experience of another, gathering illustrations from many sources, and garnering the knowledge harvested from all quarters so that it may illuminate the solemn and vital issue which we medical men are expected to grasp and control.

There is a charm of language in what Sir William Hamilton says when he tells us that "pleasure is the result of certain harmonious relations, of certain agreements; pain, on the contrary, is the effect of certain inharmonious relations, of certain disagreements." But Dr. Latham comes more truly home to us when he declares that "things which all men know infallibly by their own perceptive experience cannot be made plainer by words. Therefore, let pain be spoken of simply as pain." So far as the object of this paper is concerned, it is simply a waste of time to speculate upon the pathogeny of pain, or to try and define it with the precision of an axiom. And yet there lurks in every Englishman's mind a fervid desire to know the shape and the look of the enemy he has to battle with. Whenever pain is a sentinel and a beacon to warn us that something in the body is going wrong, it would be as absurd to abolish that pain as to put out the light of a lighthouse, or to obliterate the letters on a sign post; worse than absurd, it would be almost wicked. The faculty of the perception of pain, when needed as a safeguard against bodily peril, is to be cherished rather than destroyed. And it ought always to be distinguished from that disturbance of common sensibility which is purposeless, and therefore aggressive and disorganising.

A curious paradox, then, we have to face at the very opening of our debate—pain may save and pain may kill. The former comes within our scope now only as it may be out of proportion to the object which it serves; the latter claims our eager and quick regard, importunes us with shocks and cries, and will not be put out of court by the bland and trimmed phrases, "You will be better by-and-bye," "We will try and do you good," or by that most jejune formula, "The weather is against you." But, at the outset of our therapeutic business, we shall be met by the warning note which

[1] Read in the Section of Therapeutics and Pharmacology, at the Annual Meeting of the British Medical Association held at Brighton, August 10th-13th, 1886.

has in it the echo of the academy rather than the discipline of the bedside. Before we can relieve a given pain, says the philosopher, we must find out its cause. Wise and deep saying! Then if we fail to know the cause, is the pain to go on unhindered? If we are called to a patient suffering from an extreme intestinal flux, and reduced to the depth of weakness by inability to retain nourishment, shall we hesitate to stay that flux, because for the moment we do not make out the cause? If we see a man bleeding to death, must we refuse to stop the living tide until we know for certain where the blood comes from? If this be the voice of philosophy, it is fortunate that the voice of humanity speaks in a different key. Death has an awkward way of solving some of our difficulties, while we are standing by in a mood of inactive meditation. To quote Dr. Latham once more: pain, he says, may kill, for it may "overwhelm the nervous system by its magnitude and duration." And I may add that when it does not kill, pain may wear and destroy organic structure. Human existence and destiny are greater than logical theories; and it is a splendid function of what we call analgesics, or anodynes, that they will often quell pain and at the same time quiet down the pathological processes by which that pain is caused. If, as has been truly said, the treatment of disease is a part of its natural history, this must mean that it is an essential feature in Nature's economy for herself to try and cure; or, in other words, if right becomes accidentally wrong, it is natural for wrong to strive to become right again, and we may help this struggle in every lawful way.

We now begin to understand exactly the work which we have to do. What is called the "excitability" of nerves and of nerve-centres must be lessened and its assumed antecedents inquired for. Excitability is the first milestone on the road to disturbance and revolt. From these come, on the motor side, spasm and convulsion; on the sensory side, all the grades of feeling which range from discomfort up to pain. The sensation of pain is said to be due to a change in some part of the cerebrum which Ferrier locates in the hippocampal region. Following those paths of physiological anatomy which have been so well delineated by Dr. Lauder Brunton, we must recognise that pain may be of a purely central origin, both as regards brain and spinal cord. In most instances, however, the spinal cord is merely the track along which the dysæsthetic impressions pass from the irritated nerve somewhere on the surface of the body. If this track, however long it is, be free from obstruction between periphery and centre, the thing which hurts the skin is sure to be perceived far above and away in the hidden parts within the cranium; but in any part of this road pain may begin; in any part, pain may be felt; and to know where the enemy is, and how to fight him, is the strategic business which the practitioner has to undertake.

When we have time, therefore, to consider in any case what kind of pain it is, and how to apply our remedies, it is useful to keep this pattern of the nervous system in our minds. It will recall the valuable principle that the paths of physiological anatomy are very often the paths of therapeutic anatomy, and that the one is only the natural corollary of the other. How clear this makes some of our supposed empiric puzzles! Next we shall realise that pain and all increased sensibility point to lowered vitality as the true antecedent cause. So strongly was the late Dr. Anstie impressed with this that he thought lowered vitality was necessarily connoted by pain; and Dr. Radcliffe has even placed the phenomena of pain on a level with those of involuntary muscular contraction as regards their vital significance. Just as the action of vital force would seem to be rather that of restraining muscular contraction than of exciting it, so pain should be represented by a relaxation of molecular laws, a lessening of the cohesion of life, and a tendency downwards to a gross physical condition of things.

If this sketch of what may be styled the anatomy and physiology of pain be true, it will greatly help us to understand our medical function as healers and restorers. We talk in a loose way of deadening pain, a false and vulgar metaphor: a truer creed is that pain as such, and viewed apart from all complications, is a symbol of dying tissue, of tissue which is receding from the standard of life. The lesser artillery, called "indirect anodynes," is countless in its number and variety. Whatever makes us more comfortable and happy, more satisfied with ourselves, and in brighter humour with the world in general, is an indirect anodyne. A change of posture, an adjustment of dress, or a rearrangement of diet, may be anodynes in a circuitous fashion; and so may be the subtle influences of scene and climate, and the thousand trifles of daily life which go to make up the tale of beauty and joy. We brush away this sentimental fringe of our subject, and pass without apology to graver themes.

When pain is part of the natural history of a disease, like rheumatic fever, we hope that the proper antidotes to the disease may so quickly alleviate the pain that it shall not call for a separate line of treatment. Joints cannot swell without neighbouring vessels and nerves being squeezed; swelling in one area means unfair encroachment upon another; organs which dwell together in international comity during health cry aloud when there is pathological war. Peritonitis and pleurisy might be termed peritoneal and pleuritic neuralgia so far as pain is concerned; it is not the mere inflammatory exudation which creates so much mischief, but the pressure on nerve-threads and the profound disturbance of ganglionic centres. Moderate the inflammatory storm, and we moderate the pain; and, if we try to quell the pain by special means faster than Nature quells it, we do so because the shock of neural injury may put very life into jeopardy. It is true that meddlesome physic may be as bad as meddlesome midwifery, and a specific fever cannot be stopped any more than an atmospheric tempest. But some of the complications of that fever may be shortened, or even prevented; and it is always rational, and not meddlesome, to raise the body out of that state in which pain is a new militant element, and never otherwise than a deadly foe.

When the enemy comes in the form of a distinct neuralgia, we seem to wrestle with him at close quarters. It is then that the idea of a suffering structure is most vividly brought before us; there is an agony which we can almost feel and see, and of which the anatomical geography can be marked with pen or pencil. Call it a neuritis, call it what you will; the irritation may be central or peripheral; a tumour may press, gout and syphilis may poison, or a duct is being stretched by a bit of hard stone travelling through it. Postpone for a moment nice speculations about etiology, diathesis, and toxæmia; attend to the one clamouring symptom; and now, we ask, what are our resources, and how do we use them? The urgent message comes: are we ready? We put into our wallet opium, morphine, and atropine; chloroform, ether, chloral, salts of iodine and bromine, and quinine; and along with these a hypodermic needle, measure-glasses, and weights and scales. We count up our treasures, certify that our tools are in working order, and think over our campaign.

Now the primacy of opium as an analgesic is incontestable; it is the type of an absolute remedy, for nothing stops its ruling power either in health or in disease. No scrap of nerve or brain, fibril or cell, is exempt from its jurisdiction; its message goes everywhere, and is felt everywhere. The fault of opium is that its mastery is too strong and its dominion too large. We cannot pick out a seat of pain, and say that only on that painful part shall the benign force of our anodyne be expended. The anodyne energy spreads about and overflows; it dulls the consciousness, and may bring oblivion; it checks and clogs the machinery of many organs, even soiling vital purity by partially stopping the outflow of biological waste. All this is a heavy cost to pay, and in the daily routine of medical work we feel it acutely. Much pharmacological ingenuity has been spent in trying to counteract these drawbacks, and the growing art of medicine brings delicate refinements of administration; but it must be conceded that the best mode of giving opium or morphine in any case can be definitely determined only by carefully considering arterial tension, the sensitiveness of the nervous system, and the medical history of the patient as regards past illnesses and damaged textures.

Suppose, now, that we are summoned at 4 or 5 o'clock in the morning to a person suffering extreme supra-orbital neuralgia, with all its concomitant misery. It would be possible, of course, to crush down immediately a fair percentage of this pain by a coma-producing dose of laudanum; a day of narcotic wretchedness will follow, and in twenty-four hours the rhythmic pain will come back as severely as before. What a piece of clumsy workmanship this would be. And yet our forefathers did not know that ten grains of quinine shorten the paroxysm even while it is going on; and that five or six grains taken at bed-time for a few nights remove the pain entirely. Quinine, then, is a relative analgesic, controlling, without the possibility of failure, pain in one nerve, and yet the ultimate cause of this elective action is quite beyond our ken. Note, please, that the more circumscribed the action, the more infallible it is. We sigh for the same certain remedies for other neuralgias; analogy leads us to hope that they will be discovered some day; but, meanwhile, our art is crippled and our scientific credit impaired. Attach what value we like to gelsemium and croton-chloral, no one would say that they possess any certainty of action at all comparable to quinine.

Suppose, again, that we are summoned at 7 or 8 o'clock in the evening to a patient who, acknowledging a syphilitic contamination, tells us that he was frantic with pain all through last night. We are obliged to say that no alleviation is possible for the forthcoming night, except through heavy opiate narcosis; on the morrow, five or six doses of a so-called specific medicine will quiet the nocturnal pangs, which will utterly go away three or four nights afterwards.

Here too the sequel of cause and effect is as infallible as anything within the range of human agency. But for all that no one claims the potassic and sodic iodides to be other than relative analgesics; there must be the definite enthetic poison, a stage in the evolution of that poison, and the pressure of the syphilitic exudation on the infinite nerve-threads of certain textures.

Salicin and arsenic belong to the same group of relative analgesics, but to another subdivision. There must be, as before, definite pathological conditions; but more time is required for the special effects of the remedies to be developed, and their ultimate action is far less certain. I cannot do more now than just refer to the far-reaching properties of iron, and its power of curing (after a reasonable interval) many forms of neuralgia and myalgia, by simply raising the hæmatinic level of the whole body.

A therapeutic examination of the bromide salts enables us to illustrate a problem which has not been sufficiently studied—the power of sleep by itself to relieve pain. The potassic and sodic compounds of bromine resemble opium in reducing excitability of the whole nervous system; and a mild pain which only frets a little may be thereby abolished—but how? By the simple virtue of the medicine itself, or by the sleep which the medicine brings? If the pain be severe enough to defy sleep, it will defy the medicine by which the sleep would have been brought. The analgesic function of the bromides, therefore, is formulated by their capacity to bring the system to that placid level where pain tends to subside, everything becomes quiet and peaceful, and sleep follows in a natural way. If, however, the sleep be artificially prevented or rudely disturbed, the whole analgesic charm is broken. We all know that a good night's rest is Nature's balm for many troubles; but forced sleep, as it is called, is as much a drug as the drug itself which brings it. It is really a narcosis, a morbid condition which mimics sleep, but is not true therapeutic sleep any more than the gay laughter of delirium is a sign of a light heart and a happy mind.

And now for that pain which shrieks and prays for ease; what have we in our wallet but opium, and its alkaloidal principle, morphine? If I understand rightly my privilege to-day, it is the discussion of certain useful points; and the first which I have to suggest concerning opium is this—before the introduction of hypodermic morphine, all those cases of intolerable pain in which, to use Dr. Bruce's words, "complete and instant relief must be given," were treated by anæsthetic inhalation. There was really nothing else to be done. At any price the agonistic strife must be abated. But the anæsthetic calm was of too short duration; it could be maintained only at the risk of dangerously depressing the heart; and the chance was that when the anæsthesia passed away, the pain would be felt as acutely as before.

On the other hand, it might be urged that hypodermic medication has its perils; and that if the initial dose for a stranger be in the slightest degree too large, a patient would be rescued from one peril only to be plunged into another, with the prospect of cardiac collapse. A person whose morphine susceptibilities we know stands on a wholly different footing from one who has never been under our treatment. Now I plead that the acute and fearful pain of an impacted gall-stone, of some pleurisies, of an obstructive colic, or of a sudden lumbago, should be instantaneously treated by that superb analgesic, hypodermic morphine, and in this fashion, too, which is never dangerous:—Begin with a dose relatively very small, and combined with $\frac{1}{120}$ of a grain of atropine; and within an hour, or an hour and a half, inject another dose of morphine equal to twice the original quantity, the effect of which should be quietly watched. A third dose four hours afterwards may be a timely help. Hypodermic morphine controls, and even cures, those irritating worries which accompany some skin diseases (as lichen and pruriginous eczema). And what else can we do for severe paroxysmal asthma, for the lightning strokes of tabes, and for the "scalding" and "burning" of rheumatoid arthritis?

But this method of giving morphine is much less resorted to than it was twelve or fourteen years ago, although there are the same cancers and neuralgias, and the same travail of body with throbs and pangs. Is this a caprice, a caprice as fitful and unreasoning as the form and fabric of our clothes, or the dainties upon our table? It is clear, I think, that either we practised it too often then, or we practise it too seldom now. There was much encouragement to do what is right in this matter in Dr. Talfourd Jones's paper read at Cardiff last year. To be the victim of therapeutic fashions is not a lofty ideal; and, to save ourselves from this humiliation, we need only to have a tight grasp of sound principles.[2]

[2] Undoubtedly this restraint upon the orthodox and proper use of hypodermic morphine has arisen from the fear of its abuse, which has increased much during late years. This is a good reason against surrendering our therapeutic duties to lay people, but none at all against the judicious administration of a thing under due restrictions.

The administration of medicines by the method of comparatively small and frequent doses has occupied my thoughts for fifteen or sixteen years. The object of the method is shortly this. In a certain number of cases it can be demonstrated that we can get by it nearly all the possible medical good from a drug with the least possible harm; for every potential drug has some shadow of harm going along with it, and this not only when prescribed in an obviously wrong way, but even when ordered according to the common-place style of a medium official dose every four or six hours. A quarter of a grain of tartrate of antimony every four hours will mostly cause horrible sickness and depression; but one-sixteenth of a grain every hour for sixteen hours may be taken with no more physiological disturbance than if we had given so many rations of cold water, and the remedial effect is superior. And so with opium. When we deem it most safe and effective to administer opium by the mouth as our analgesic weapon, we can do so with extraordinary advantage by giving one minim of the wine of opium every five minutes for half an hour, then every ten minutes for the same time, afterwards every fifteen minutes, and so on, withdrawing our remedy by degrees according to the result produced. In this manner we compass that therapeutic end which Dr. Anstie told us to search for—the stimulating power of opium, with as little as possible of its shock-like or deadening power, as represented by sickness, or faintness, or sweating. But there are cases in which the patient counts minutes rather than half hours, as if the pain were more depressing and deadening than any antidote could be; and then it is sound practice to administer half a grain of powdered opium every thirty or forty minutes, until the body is warm and the pulse rises. During this ministry of healing the sufferer is presumed to be in bed, and in a temperate, quiet room.

Time fails me to illustrate this principle in the administration of other medicines; but some analgesic properties of no mean value may be found in the hydrate of chloral if five grains be taken every hour for five or six doses. So likewise of Indian hemp; five minims of the tincture every hour for seven or eight times generally succeed in mitigating the expulsive tortures of dysmenorrhœa. Dr. Anstie prescribed small and frequent doses of this medicine for certain forms of headache. I cannot help being pleased with the fact that the principle and practice which I advocated in the *British and Foreign Medico-Chirurgical Review* nearly fifteen years ago have at length been recognised and sanctioned in all authentic text-books.

That derangement of motor force which is called spasm generally causes pain, not originating in the cerebrum, but as the result of bruised and squeezed nerves in the structure of muscle. Here, then, we must search for a different class of remedies, not primarily analgesic, but analgesic in the secondary sense of unlocking that terrible grip of cramp and convulsion which creates the pain. Belladonna has been praised by many writers (Hyde Salter, John Harley, Ringer, Trousseau, and Sée) for its control of asthma, intestinal colic, and constipation. So far as calabar bean influences the awful agony of tetanus, it must act in the same way; and I once suggested that as ergot raises motor force to a remarkable degree, there is an *a priori* probability that it may cure pain by raising the energy of sensation. There is no room on the present occasion to discuss how far the same purpose is served by hemlock, henbane, stramonium, valerian, and camphor; and we have only just time to hint that careful search is still needed on the manner in which pain is blunted by alcohol, guarana, coffee, and tea. Cod-liver oil must act—at least, partially—by improving the textural integrity of the nervous structure (central and peripheral). And the astonishing way in which pain can be tamed down by blood-letting and purgatives shows how much it depends on what is called vascular tension.

The last point which I venture to introduce is the combination of analgesics, and the economy of therapeutic force which is exemplified by giving at the same time medicines of different shades of anodyne action. Thus, bromide of sodium and morphine make an analgesic compound which has few competitors; and Dr. John Harley says that the addition of henbane to opium produces the best possible hypnotic action. When belladonna is combined with opium, we sometimes obtain the most good from each drug with the least harm.[3] The utility of aconite and quinine together has been highly praised by Dr. H. Macnaughton Jones. Hemlock is of value in augmenting the power of more decisive "anti-neuralgic remedies." Visceral neuralgias are appeased by hydrochlorate of ammonia, iron,

[3] The sphygmograph tells us that opium always diminishes vascular tension, while nearly every other neurotic agent increases it. On the general question of the relation of medicines to arterial tension, see the *Influence of the Sympathetic on Disease*, by Dr. Edward Long Fox, pp. 68-73.

and strychnine. The neural trouble of herpes zoster is wonderfully controlled by quinine and arsenic. An efficacious treatment of gout used to be by quinine and colchicum. But I must close my list of illustrations by a bare reference to bromine and camphor, lobelia and stramonium, belladonna and chloral; and simply add my conviction that in no branch of our therapeutic work is there more legitimate ground for extension than in joining together things of different constitution and yet similar action. And I have not time to do more than express a hope that some here to-day will speak from a larger experience of cucaine, electricity, heat and cold, blisters, and mineral waters as essential parts of our apparatus for gaining a mastery over pain.

The purely chirurgical part of our therapeutic warfare is so large that a bare enumeration of all the means which the surgeon enjoys would occupy much time and space. But when the surgeon has done his operative work, his medical function begins; and it is decidedly more necessary for him to be a good physician than it is for the physician to be a competent surgeon. Both surgeon and physician may, however, lawfully ask the pharmacologist why, in order to blunt the excess of sensibility technically called pain, we are compelled so often to use what Shakespeare calls "insane roots which take the reason prisoner?" The ideal analgesic is one which, however administered, bars the currents that tell of a starved and injured nerve, or of a nerve poisoned by bad blood, and yet spares the consciousness and the intellectual faculties. As yet such a boon is not fully granted, although cucaine seems to be a little step on the road; but I venture to think that this is the direction in which our inquiries and experiments should go. Of general anæsthetic vapours we have almost more than enough; and this type of analgesic is the exact opposite to what we are now in special quest of.

For the present, let us make the most of the possessions we have, using them with definite aims, and under the guidance of recognised physiological laws. The want of harmony among medical men in the prescription of the commonest medicines is a reproach to high scientific pretension; and it is becoming more and more inexcusable. There is a touch of sarcasm about this in Charles Kingsley's *Water Babies*, which deserves to be quoted. On a particular case, he says: "All the doctors were called in to make a report; and, of course, every one of them contradicted the other, else what use is there in having men of science?" May not this contradiction be checked by methodical habits of observation and record? A writer of distinction says that there are two species of so-called practical minds. One sort of mind is constructed according to the carpet-bag pattern, where nothing is put in any order, and, to find any article, everything else has always to be turned out. The other is the museum sort of mind, in which every specimen is arranged and labelled in proper sequence, and whatever is wanted is always easily found. Peep into the *penetralia* of our surgical friends, and behold all their manual apparatus stored in neat and handy array: splints, sutures, lancets, knives, syringes, probes—everything is in its place, and responds immediately to the master's call. Now would it not be an excellent training of the medical intellect if the physician had his little cupboard, duly furnished with analgesic medicines, arranged in therapeutic groups, and always pure and ready for instant use?

To conclude. The spiritual elements and forces around us are the most gracious anodynes, full of consolation and hope. They deserve our thankful commemoration, and a coarse materialism shall never put them aside. A medical man himself may be a good and powerful anodyne, by reason of his truthfulness, self-sacrifice, and loyal care. Without the analgesic touch of sympathy all our cleverness is but dust and ashes. And if we have what Kingsley calls the Christian "fire in the heart," which prompts us to dare and do our best, we shall regard it as the noblest badge of our craft to lighten the sorrowful burden of pain—the penitential heritage of a sinning and dying world.

AN UNCONSIDERED FACTOR IN THE MOUNTAIN-CURE OF PHTHISIS.

By C. CREIGHTON, M.D.

Besides the mechanical action of a rarefied atmosphere on the lungs in phthisis, there seems to be a direct physiological action upon the blood and tissues, which would serve in part to explain the mountain-cure according to one of the theories of the nature of tubercle. The therapeutic action to which I refer is deducible—I am not aware that it has already been deduced—from a research of the late M. Paul Bert on the blood of animals acclimatised to the great altitudes of the Bolivian plateau. The application which that distinguished physiologist made of his facts was not to phthisis, but to the peculiar group of functional disturbances known as mountain-sickness, or *mal des montagnes*. But the physiological adaptation to a rarefied atmosphere discovered by him must have a general value, and my object is to show that it is of such a kind as to be of peculiar service to the phthisical.

In the *Comptes Rendus* of the Paris Academy of Sciences (vol. xciv, 1882, p. 805), M. Paul Bert communicates a short paper "Sur la Richesse en Hémoglobine du Sang des Animaux Vivant sur les Hauts Lieux," of which the argument and facts are as follows: Jourdanet's theory of the symptoms of *mal des montagnes* (hurried breathing, quick pulse, palpitation, giddiness and swooning, troubled sleep, nausea, muscular pains, and fatigue) is, that the oxygen in the blood is suddenly diminished, owing to the individual having moved into a rarefied atmosphere, or an atmosphere where the tension of that gas in the air is much lower than at the sea-level. That theory accords with the well-known physiological fact that the oxygen loosely held in combination with hæmoglobin, forming the compound of oxy-hæmoglobin, is parted with in a vacuum, or under low barometric pressure. The *mal des montagnes* seldom lasts long in men or animals removed to great elevations; they become acclimatised; and the adaptation, according to the theory, consists in the amount of hæmoglobin held by the blood being increased. The tendency to the loss of oxygen loosely held in combination as oxy-hæmoglobin would be made up for by an increase in the capital stock of the hæmoglobin itself.

In order to put that hypothesis to the test of fact, M. Paul Bert resolved to examine the blood of animals acclimatised to great altitudes. A discovery made by a former assistant in his laboratory, M. Joylet, now professor at Bordeaux, showed that decomposition of the blood sent from a distance to be examined in Prais would not matter. This fact was that the hæmoglobin in the blood was not affected by the putridity of the latter. M. Joylet found that putrid blood, when shaken, took up the same amount of oxygen as fresh blood. Accordingly, M. Paul Bert sent out to Bolivia for samples of the blood of various animals; and, after waiting a considerable time, he received from a French resident of La Paz, a town some 12,000 feet above the sea, samples of the blood of seven species of animals, mostly herbivorous, including lamas, sheep, and others. When the specimens of blood were shaken up in air, they absorbed oxygen in various ratios, from 16.2 to 21.6 cubic centimètres per 100 cubic centimètres. As the maximum amount of oxygen taken up by the blood of herbivorous mammals at the ordinary elevations in France is 10 to 12 cubic centimètres per 100 cubic centimètres, it followed that the corresponding animals born at or acclimatised to an elevation of 12,000 feet, had a capacity for oxygen in their blood half as great again as at the sea-level. Such is the argument of the paper in the *Comptes Rendus*, and I do not profess to say whether it is sound at every point. Jourdanet's hypothesis that mountain-sickness depends on a loss of oxygen from the blood, in consequence of the lowered tension of that gas in the air, with the complementary theory that the overcoming of the sickness after a few days or weeks is an acclimatisation to the rarefied atmosphere due to an adaptation in the amount of hæmoglobin, is thus held to be confirmed.

Apart altogether from the question of mountain-sickness, and with reference even to elevations where that group of symptoms is not manifested, there would always be an adaptation in the oxygen-carrying capacity of the blood to a rarefied atmosphere. The effect of going to reside a good many thousand feet above the sea-level will be to increase, by way of natural adaptation, the amount of hæmoglobin in the blood. The loss of oxygen from oxy-hæmoglobin, which takes place under low atmospheric pressure, would be met by providing a larger capital amount of the hæmoglobin to work with. An adaptive increase of hæmoglobin at great elevations may thus be turned to account as a contingent advantage in the treatment of constitutional disease.

Chlorosis is the disease where the contingent advantage is most obvious. By whatever means the hæmoglobin in the blood may be increased, a chlorotic person will be benefited; and it is in a rarefied atmosphere that the hæmoglobin has a natural inducement to increase. Of course, it does not follow that the adaptive powers of the organism are always equal to the call made upon them by circumstances; but there are cases of anæmia (and chlorosis) where benefit has actually been got from high altitudes. The Engadine is frequented by those who suffer merely from anæmia, as well as by those who are truly tuberculous.

It is, however, with phthisis or a tuberculous diathesis that I am here concerned. How does an increased capacity of the blood for oxygen bear upon the therapeutics of that disease? In the first place, it is admitted that there is something antagonistic between high alti-

tudes and phthisis. In the populous towns on the Bolivian plateau, and elsewhere in the Andes, phthisis is practically unknown, although the ordinary exciting causes, such as industrial occupation, sedentary habits, and the like, are the same as at lower levels. It is significant that Professor Hirsch, in treating of this matter (*Geographical and Historical Pathology*, iii, p. 211, English translation), seems to say that the immunity is due to an almost universal or ubiquitous tendency being counteracted. Although Dr. Hirsch accepts Paul Bert's hæmoglobin theory for the *mal des montagnes*, and the acclimatisation thereto (vol. ii, 505), he does not go beyond a mechanical explanation for the mountain-cure in phthisis. Living in a rarefied atmosphere, he thinks, will lead to a sort of pulmonary gymnastics; one must inspire deeper or oftener to cover the requirements for oxygen; and that will lead to a more vigorous development of the breathing organs, and a greater power of resistance on their part to noxious influences from without (*op. cit.*, iii, 212). But it may be questioned whether any such vigorous development of the organs, or more active exercise of their mechanism, does, as a matter of fact, show itself very decidedly in the residents at great altitudes in South America or elsewhere. The only evidence that I know of is the rather vague statement of Archibald Smith for Peru: "In the Indian of the plateaux, the lungs are capacious, bearing a due relation to the tenuity of the air which he inspires" (*Edinburgh Medical and Surgical Journal*, 1842, p. 356).

It may be useful, therefore, to try how a physiological adaptation will work, rather than a mechanical.

The pathological view of the tuberculous diathesis, to which I referred at the beginning, is based upon a certain interpretation of the structural facts of the disease. Although the condition is not one of anæmia in the ordinary sense of the term, yet it may be said to have deficient power of tissue-vascularisation as its most conspicuous feature. According to my reading of the facts, suggested by analogous normal processes in the placenta, of which I gave an account some time ago (*Journal of Anatomy and Physiology*, January, 1879), the caseous decay, the giant cells, and the other pathognomonic characters of tubercle, are explained as being due to growth, renewal, or overgrowth of tissue in circumstances where the power of vascularity is inadequate. I should be going too far afield for my present purpose if I were to discuss the interesting question of how the human body has acquired, or continues to acquire, that peculiar morbid type of tissue-formation, namely a growth redundant or excessive, without being properly vascularised. But whatever view we take of the remote antecedents of the tubercular diathesis and infection, most persons will admit that overgrowth without vascularity—or, perhaps, overgrowth because of non-vascularity—is characteristic of tubercular tissue.

If we go beyond tubercular tissue actually formed, and speak of the tubercular diathesis, inherited or acquired, which favours the local formation of it, we should say that the diathesis meant feeble vascularisation, just as we might speak of a person's innervation being constitutionally feeble.

But the power of vessel-making is at bottom bound up with the power of blood-making. Whatever helps the one will help the other. It is thus conceivable that a general stimulus to the greater production of hæmoglobin in the blood, such as a rarefied atmosphere brings, would directly meet that ingrained or constitutional defect which we know as the tubercular diathesis, assuming, of course, that the individual has any power of adaptation left. That is a somewhat vague position in which to leave this curative effect of altitudes; but it would clearly be hazardous to trace a more particular relation between increased capacity for oxygen in the blood, and that increased power of vascularisation in a redundant tissue, which we have good reason for identifying as the means of cure, or the way to safe repair or obsolescence, in cases where the tuberculous diathesis has actually come to expression. In cases where there is merely the tendency or the constitutional taint, inherited or acquired, the same sort of explanation would serve for the preventive benefits of mountain air. The more complete the adaptation of the blood to the rarefied atmosphere, the more permanently would the tubercular diathesis be held in check. The more naturally or imperceptibly the increased capacity for oxygen (greater richness in hæmoglobin) is called forth by the general environment of the patient, the more fundamentally will the disease be counteracted.

SUCCESSFUL VACCINATION.—Mr. F. W. Lewis, Surgeon and Public Vaccinator for the No. 1 District of the Llandovery Union, has received the government grant for successful vaccination. This is the second time in succession that Mr. Lewis has received the grant.

THE POSITION AND THE VALUE OF THE OPERATION OF INTERNAL URETHROTOMY.[1]

BY G. BUCKSTON BROWNE, M.R.C.S.

FROM the earliest times strictures in the anterior portion of the male urethra, when proving tough and undilatable, have been subjected to treatment by the knife or by trocar or cannula, but the real history of the operation of internal urethrotomy is comprised within the last sixty years. Modifications of the trocar and cannula were devised earlier, but it was not until 1827 that Mr. Stafford, of London, brought forward his urethrotomes, which, to me, appear to be the prototypes of all subsequent instruments. In France and in England, during the next few years, various instruments were invented, but all appear to have been used with fear and trembling; small incisions were made to aid the introduction of gradually larger bougies, and the operation of internal urethrotomy was more the handmaiden of interrupted dilatation than an independent operation, and, as a natural consequence, it languished. In 1851, Professor Syme, of Edinburgh, gave a great impetus to the surgery of stricture. He taught earnestly that to ensure a good result from an incision into a stricture, the stricture must be freely divided, and this be accomplished by external urethrotomy upon a grooved staff. Coming after Syme, Sir Henry Thompson fully accepted his teaching, but not his practice, which he thought unnecessarily severe. He soon satisfied himself that a stricture could be thoroughly divided from the inside with greater ease and less risk to the patient than from the outside, and he has unquestionably, during the last twenty years, established internal urethrotomy upon a scientific and surgical foundation.

During the last twelve years, I have had unusual facilities for ascertaining the opinion of surgeons from all parts of the world on the subject of internal urethrotomy; and I have found that there are still some who never practise the operation, and others who view it with suspicion and distrust. I think this opinion arises from two causes: (1) the possibility of very serious consequences after internal urethrotomy in unpractised hands; (2) the indiscriminate employment of the operation by many of its advocates, and their neglect of trial of simpler and safer methods of stricture-treatment.

Now, with your kind permission to-night, I wish to show that, while in the treatment of stricture internal urethrotomy should be the exception and not the rule, still there are certain cases where it is unquestionably the only remedy, that it affords us really brilliant results in otherwise miserable and, perhaps, hopeless cases of disease, and that, with certain precautions, it may be made as safe as almost any operation in surgery.

In the first place, I would briefly state what I mean by the treatment of urethral stricture by internal urethrotomy. I mean the free division—no scarifications, no nicks, no multiple incisions—but one bold free stroke of the knife through all the fibres of the stricture in the floor of the urethra, since almost invariably the induration is most marked there. I maintain that this can only be done by an instrument which becomes practically a long knife in the operator's hand, and which is entirely under the control of that hand, subject to no mechanical restrictions whatever, and cutting, much or little, when and where, just as the surgeon's tactile sense informs him is necessary. When making an accurate incision into any part immediately under the eye, or, for instance, in carving wood, we instinctively cut towards ourselves, or else from left to right, the hand thus being most appreciative; so in cutting a stricture I prefer to cut from behind forwards, or from left to right, and the instrument which permits of this, and at the same time is simply a knife and nothing more, is the urethrotome usually credited to Civiale, and always recommended and used by Sir Henry Thompson. The blade is protruded beyond the stricture, and then drawn forwards, the stricture divided, the blade then sheathed, and the instrument withdrawn. All kinds of mechanisms have been devised whereby a knife sliding in a groove is driven through the fibres of a stricture, but I can as readily conceive the tendo Achillis being properly divided by a similar mechanism, as I can a urethral stricture. Imagine something being put under the tendo Achillis, and distended until the tendon is tightly stretched, and then a knife running in a groove on this machine, passed under the tendon; would any practical surgeon expect the tendon to be properly divided? If all tendons were mathematic-

[1] Read before the Harveian Society.

ally of the same thickness and toughness, no doubt a blade could be devised that would divide them in this manner, but it is precisely because all tendons and all strictures are not of the same dimensions and densities that I would as strongly deprecate the use of a machine for a stricture as I would for a tendon. Some machine-made articles are excellent—watches for example—but where the article has to suit the individual, and him alone, a machine-made one will not do. Suppose sets of false teeth were made to pattern—never mind how many patterns—no one would ever wear them. I do not claim for internal urethrotomy that it is capable of effecting a radical cure of stricture, although I would not deny that very occasionally it may do so, but, with practically no exception, the periodical use of a bougie is necessary after the operation.

With reference to the special dangers of an incision into the urethra, in the first place, hæmorrhage is rarely severe if the incision is only made through the dense stricture tissue. It is practically always controlled by tying in a large catheter (10-13 English) for twenty-four to thirty-six hours. I have never known a case lost from this cause, although I have certainly two or three times known the bleeding very severe. Two years ago I was called to see a case where a surgical friend had performed internal urethrotomy, and where the bleeding was severe enough to threaten life. No catheter was tied in, but Otis's perineal tourniquet had been applied, and as long as its pressure was maintained all was well, but when the patient wished to micturate, the tourniquet had to be unscrewed and blood flowed freely. I removed the tourniquet, tied in a firm English gum catheter, put on a perineal pad and applied pressure by means of braces and bandages, and in a few days all was well. Urinary fever is largely controlled by opiates, and need excite no anxiety if the patient is only in fair renal health to begin with. Extravasation of urine and abscess are prevented by extreme accuracy in the adjustment of an inlying catheter after the operation and by careful nursing. When a desire to pass water is felt, the nurse simply removes the catheter plug, and the patient is desired to make no effort to micturate, but simply to allow the urine to flow out. There is no operation after which the surgeon's presence is more constantly necessary for the first four or five days. It is always well for the patient to lodge close to the operator, so that the latter's visits may be made frequently, and the catheter kept accurately in place.

All forms and results of blood-poisoning—pyæmia, septicæmia, phlebitis, embolism and thrombosis—may follow an incision into the erectile tissue of the penis; but they are, fortunately, excessively rare, and are only mentioned that my account of the difficulties which may occur after internal urethrotomy may be complete. The most common form of blood-poisoning is inflammation of the veins of the leg; but it is rarely followed by any serious results. Sometimes the calf of one of the legs is alone affected, and this is soon recovered from with proper treatment. Abscess of the buttock, and pyæmic abscesses in various parts of the body (knee, elbow and parotid regions), and even fatal embolism of the heart have all been reported as resulting from a wound of the urethra. But if great cleanliness and care are practised in the performance of the operation, and in the surroundings of the patient, these dangers are not at all likely to occur. In connection with this subject, it should be mentioned that it is highly dangerous to incise a urethra before every trace of gonorrhœal infection has disappeared.

I now proceed to consider the cases of urethral stricture where internal urethrotomy should be performed. They are arranged in ten groups. In some the operation is absolutely indispensable, and in all it is by far the most desirable of all methods of treatment.

1. When time is an object. The patient is perhaps ordered on foreign service, or perhaps, on the eve of marriage, finds that he is the subject of stricture. These instances might easily be multiplied, where it is justifiable to run a little more risk than ordinary dilatation entails in order to get the best and most permanent result possible in the shortest space of time.

2. When the stricture is at the urethral orifice, or in the penile urethra, it will not yield permanently to either continuous or interrupted dilatation, but must be divided.

3. In cases of stricture where the gentlest instrumental interference is followed by rigor and great prostration. If the fibres of the stricture are freely divided, the use of a bougie will cease to be followed by rigor. If, after internal urethrotomy, the use of a bougie is still followed by rigor, it will be because the operation has been incomplete, and it must be repeated more thoroughly. Men are often met with from malarious countries who continue to have aguish attacks when resident again at home. I have not infrequently found this fever to be associated with urethral stricture, and have found that the attacks disappear altogether when the stricture is divided.

4. Internal urethrotomy is required when a stricture rapidly recontracts after dilatation. Such strictures are called resilient.

5. Also, when the deposit round a stricture is obviously large and dense, dilatation is useless, and the stricture must be cut, and sometimes requires more than one cutting operation before a satisfactory result is obtained.

6. When renal or other calculus is impacted behind a stricture, the stricture had better be divided internally, and, if possible, the calculus extracted *per vias naturales;* should this prove impossible, the calculus may be cut down upon, and the division of the stricture and subsequent treatment will prevent the opening made becoming fistulous.

7. No urethral fistula will ever heal as long as the urethra is contracted in front of the fistulous urethral orifice. Divide the stricture, and keep it open by periodical instrumentation, and usually the fistula will close.

8. As age advances, it is not unusual, although the contrary has been stated, for a stricture patient's troubles to be complicated by prostatic hypertrophy, making it necessary for him to pass a part, or the whole, of his urine by catheter. To do so he must have a patent and easy urethra; and as stricture tissue tends to tighten up in elderly people, many of these patients find increasing difficulty in passing a catheter of reasonable size. Here internal urethrotomy comes to our aid, for the stricture is too hard and inelastic to yield to dilatation. I saw lately a gentleman, aged 73, who was obliged to pass a No. 2 gum-catheter every hour night and day, the smallness of the catheter rendered the emptying of the bladder so slow a process, that the poor man simply lived to pass his catheter. I opened the urethra in front of the prostate from the perineum, and gave the bladder complete physiological rest for ten days by means of an india-rubber drainage-tube lying in the wound, and, at the same time, I divided the stricture internally. When the perineal opening was allowed to heal up, the patient returned to the use of the catheter, but he was able to use a No. 9 easily, and was only obliged to use it six times in the day instead of twenty-four times. I have frequently performed internal urethrotomy between 65 and 75 years of age, and always with good result.

9. I have stated elsewhere (*Lancet*, November 10th, 1883) that when about to perform lithotrity through a strictured urethra, I prefer to dilate with steel bougies rapidly, when the patient is under the influence of ether, since an internal urethrotomy wound is likely to become torn and bruised by the lithotrites and tubes, and to become filled with calculous *débris*. But there are cases of stone in the bladder where internal urethrotomy is an incalculable boon to the surgeon. Nearly three years ago a gentleman, aged 65, who for years had suffered from stricture, consulted me in a pitiable plight. Twelve months before he saw me, he had had extravasation of urine, and perineal section had been performed. The wound never healed; he had made no water by the penis for six months; all was by fistulæ, some over the pubes, some in the scrotum, and not only this, but he was obliged to micturate every one to two hours, and each act was accompanied by agonising pains. I suspected vesical calculus, but was puzzled how to make my diagnosis, as no instrument could be passed into the bladder. However, I put the patient under ether, and then managed to pass my finest silver catheter into the bladder; withdrawing it, I then succeeded in passing Nos. 1, 2, 3, 4 and 5, and then my urethrotome, with which I divided the stricture. The bladder could now easily be sounded, and it was found apparently filled with calculus. Owing to the internal urethrotomy, a lithotomy staff could easily be passed, and I then and there performed perineal lithotomy, removing a phosphatic calculus of more than one ounce in weight when dry. He made a good recovery, and all the fistulæ healed. We can easily imagine the state of this man's bladder; no wonder that, in some fourteen months, a phosphatic concretion required removal; this was done by lithotrity, owing to the excellent condition of the urethra. The patient is now alive and well, and, thanks to internal urethrotomy, is a comfortable member of society.

10. I now conclude my instances of the value of internal urethrotomy by drawing your attention to its application in the treatment of perineal abscess when urethral stricture co-exists. I am not aware that attention has before been drawn to this point, which is one of great practical importance. A patient afflicted with a tight stricture, sometimes without definite cause, but usually after excessive or rough instrumentation, finds himself very unwell. His perineum is hard, tender, and throbbing, and he may or may not have a rigor. We all know that a perineal abscess is in process of formation. All surgeons open such an abscess at once, giving vent usually to a large quantity of matter; in a few days urine is passed by the wound, and,

unless the stricture is attended to, a permanent urethral fistula remains; usually the stricture is leisurely attended to by dilatation, and even then the fistula is often obstinate, and a source of annoyance to the patient perhaps for years. Some surgeons are more heroic (for example, the late Dr. Van Buren, of New York); they open the abscess, and then divide the stricture from the outside upon a grooved staff, thus performing a Syme's operation, and remedying the abscess and the stricture at the same time. The result is generally satisfactory, but all will allow that such an operation is a very serious tax upon a patient's powers, and that he must remain a patient, and far from comfortable, for some four, five, or six weeks. Such an abscess as just described is not an extravasation abscess; at first it does not communicate with the urethra, although it does so in a few days; it forms in the perineum outside the urethra, as Sir Henry Thompson has pointed out, just as an abscess may form by the side of the rectum without opening into it. A real extravasation abscess is not so very common; it begins by minute extravasation behind the stricture, but the formation is tedious, and is preceded by a slow-growing cord-like process, which is unmistakable to the touch of the practical surgeon. Now my point is this—and I have lately verified it in three cases—if the surgeon is prompt in dividing the urethral stricture, a true perineal abscess never will communicate with the urethra, and the patient will be saved all the trouble of a urinary fistula. I freely divide the stricture from inside the urethra, pass a 15 or 16 (Eng.) steel sound, and tie into the bladder a No. 12 gum catheter *per penem*. I then put the patient into the lateral lithotomy position, and, with my left forefinger in the bowel, I introduce a sharp narrow knife into the perineum, half an inch above the anus. I go straight in until pus issues, and then withdraw, and in withdrawing divide the skin upwards a little, so that the finger can follow the knife; the finger dilates the opening, and finds a large cavity full of pus, with the urethra filled by the catheter lying above, almost, as it were, dissected away from the surrounding tissues. As a rule this one opening will suffice to drain the abscess, but I have had to make a more dependent opening in the buttock. The catheter should remain in about three days. I have operated in this way upon three cases—one in my own practice, a second seen with Dr. Bayfield, of Wandsworth, and a third with Dr. Herschell, of London; the patients were up and about in less than a fortnight, and no urine was ever seen by the perineal opening. In fact the ease and quickness of the recoveries from severe and distressing symptoms were remarkable.

Gentlemen, there may be none here to-night who have any feeling against the operation of internal urethrotomy, but, as I have said, I know that there are surgeons of great repute who have not accorded to this operation the position it is entitled to. I trust that they will accept this paper as a modest effort to show that there are conditions of urethral disorder where internal urethrotomy is absolutely indispensable, that there are other cases in no other way so remediable, and that with proper precautions the operation is not a dangerous one.

NOTE ON THE PATHOLOGY OF CHRONIC INFLAMMATORY DISEASE OF THE UTERINE APPENDAGES, AS ILLUSTRATED BY THE PREPARATIONS OF SIXTY-THREE CASES REMOVED DURING THE YEAR 1886.[1]

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PREVIOUS to the author's first publication to the Pathological Society on December 6th, 1881, the conditions resulting from chronic inflammatory disease of the uterine appendages had been recognised as far back as the time of Ruysch, but their frequency and their serious character did not attract much attention until within the last ten years. The question of the frequency of these diseases had attracted a good deal of attention of late, but no definite answer upon this point could be given, because no method was known of arriving at a correct statement of either their absolute or relative frequency; but that these diseases were far more common than could have been imagined was seen by the fact that during the year 1886 the author had operated upon sixty-three patients, with the result of only one death in the series. The preparations from these cases he submitted for the inspection of the Society with the exception of five, four of which had been taken possession of by the gentlemen whose cases they were or who had been present at the operations, and desired to have the preparations for the purposes of clinical instruction, and one which had been lost, but which fortunately had been previously reported upon to the Gynæcological Society by Mr. Bland Sutton.

Many of the patients had come to the author from long distances, and all of them had been suffering for years. The etiology of the conditions of the cases now described completely confirmed what the author had said in previous communications. There were four lines on which the causation of these diseases rested: first, that which may be called simply catarrhal; second, that which can be traced clearly to the influence of exanthematic disease occurring at the period of puberty; third, gonorrhœal infection; fourth, the occurrence of inflammatory mischief in the pelvis in the post-puerperal condition, that is, either after a miscarriage or a full-term labour.

To these the author was now disposed to add a fifth, the relations of which still remain to be worked out, but the indications of which were far too clear for him to remain longer silent upon the subject. He expressed himself as having a growing experience for the formation of a distinct group of cases, in which the only explanation available of the occurrence of chronic inflammatory trouble in the uterine appendages was in the existence of an infantile condition of the uterus due to arrested development. In such cases the uterus was generally retroverted, completely fixed, and the enlarged appendages could be found on either side of it; the characters of the uterus itself were always infantile, whilst the appendages were completely disorganised by inflammatory change.

The preponderating influence of the third and fourth causes was at once indicated by the fact that out of the sixty-three cases there were only ten unmarried women. Of these ten single women, there could be no doubt that in at least three of the instances the origin was gonorrhœal. In two of the single women there had been pregnancies, and these were, in all probability, the source of the diseased appendages. In one case, prolonged efforts had been made to cure anteflexion by means of intra-uterine pessaries, and this doubtless resulted in the double pyosalpinx from which the patient suffered. In the four remaining single women, no conclusions as to the causes of the disease could be arrived at, though the author was inclined to regard the condition in two as probably due to scarlet fever.

In the fifty-three women who were married the average age was a little over thirty-three years; of these, twenty-three had never been pregnant, and they had been married on the average ten years. Of the remaining thirty cases sixteen had been pregnant once, the pregnancy occurring immediately after marriage, and being associated in every instance with the history of subsequent pelvic trouble, and then there was no pregnancy afterwards. The average interval in these cases between the pregnancy and the time of the operation was eleven years. Only fourteen of the patients had more than one child, and between the last pregnancy and the time of the operation was an average period of six years.

These facts were enough of themselves to show how completely sterility was produced by chronic inflammatory disease of the uterine appendages. In every one of these women the condition of the appendages was such that the patients could not by any possibility have become pregnant. In a very few of the specimens this was not quite clear now, because the tubes, in being torn from their adventitious beds, had their fimbriated extremities relieved from the field of adhesion by which their occlusion was completed. But the great bulk of the specimens still proved the completely sterilised condition of the patients, and this feature had a great pathological interest. In by far the greater majority of the specimens the occlusion had taken place by the trumpet getting glued on to the ovary. The frequency of this occurrence substantiated, to some extent at least, the tradition that the infundibulum got fastened on to the ovary temporarily at some time or other in connection with the process of ovulation. Formerly the author thought he should be able to prove that this relation did actually occur, but he had never been able to make himself certain of it.

In some cases the trumpet was found to have closed its tentacles like a polyp, and to have had them coalesced in that position, leaving the ovary free. In the group of twenty-three women who had been married for an average period of ten years and had never been pregnant, there could be no doubt, from the clinical histories of nearly a third of them, that the disease arose from old latent gonorrhœas or gleets in their husbands, excited into activity by the indulgence of early married life. In rather more than a third the author believed the disease originated in the exanthematic diseases of girlhood, more especially scarlet fever, and in the others no clue to causation could be obtained.

[1] Read at the Pathological Society, April 5th, 1887.

In the second group of fifteen women, in whom there had been one pregnancy within a short time of marriage, we assume, of course, that at the time of marriage their procreative machinery was intact. In all but two of these cases the story of pelvic peritonitis following their only labour placed them clearly in the group in which puerperal mischief had to be regarded as the cause. In the exceptional two the author believed that he failed to get the history rather from the stupidity of the patients than from an absence of the facts.

A third group was readily formed of fourteen women whose fecundity was not limited to one child. In this group were found the most acute and severe cases. At least eight of these women suffered from sub-acute, or even acute gonorrhœal salpingitis of comparatively recent origin, the average time which had elapsed between the last pregnancy and the operation being three years. On the other hand, in the six other women in this group in whom the author could get no such history (or doubtfully in two of them) fourteen years had, on the average, elapsed between their last confinement and the date of the operation. These facts had a striking pathological significance.

The characteristics of the diseased appendages in the second group of cases were strikingly different from those of the cases of long standing, and there could be no doubt that the changes known in other organs in the various stages of the inflammatory process were exemplified here.

In the acute or early stage the appendages were intensely congested and swollen, and were very friable. In fact, it was a matter of difficulty to remove them entire. In the old standing cases the organs were contracted and atrophied, and few, if any, traces of normal follicles could be discovered in the cirrhotic and densely adherent ovaries. At this stage the tubes generally contained very little fluid, and their contents were sometimes cheesy. They might be purulent on one side and serous on the other. Certain it was that neither the quantity of this fluid nor its pathological characters bore any definite relation to the sufferings of the patient. The pain endured in these cases was related to the adhesion of the organs and to nothing else.

The author had been much interested lately in reading a paper by Dr. Sänger, of Leipsic, in which he determines varieties of tubal disease by the application of the germ-theory, giving to the varieties names based on the kind of lowly organisms found in the contents of the tubes. Thus, when a gonococcus is found, he speaks of salpingitis gonorrhœica; and when he finds actinomycetes, he calls it salpingitis actinomycotica. If it is characterised by Koch's bacillus tuberculosis, he records it as salpingitis tuberculosa. This kind of distinction seemed to the author to have much attraction to the speculative mind, and but little for the practical pathologist. It had, besides, the initial difficulty that it was based on a doctrine which had yet to show that it was not mistaking the phenomena of decomposition for those of disease.

Since reading Sänger's paper the author had given some little attention to the fluid contents of the tubes, and he had found already evidence that, if the distinction of varieties was to be based upon the characters of the lowly organisms found in the fluid, the possibility was that their extension would be indefinite and easily multiplied.

In conclusion, the author submitted a *post-mortem* preparation, for which he was indebted to the kindness of Dr. Littlejohn, of Edinburgh. It was an example of the simple hydrosalpinx without adhesions; and, so far as the clinical history could be ascertained, the patient suffered little or nothing, but was perfectly sterile; also an admirable drawing made by Dr. Keiller, the eminent obstetrician, of Edinburgh, and used in his lectures nearly half a century ago, which showed the condition of occlusion and distension of the tube most beautifully; also some drawings of Dr. Price, of Philadelphia, showing the ovaries and tubes in a condition of acute gonorrhœal inflammation.

COMPARATIVE NOTES ON RÖTHELN, MEASLES, AND SCARLATINA.

By C. HAIG BROWN, M.D.,
Medical Officer at Charterhouse School.

THE somewhat rare opportunity of witnessing a considerable epidemic of rötheln at the commencement of last year, and one of measles in the middle of the year, among members of the same community, has suggested that a recapitulation of the most prominent symptoms in each outbreak, as gathered from notes taken at the time of observation, may be useful; and a few words upon an outbreak of scarlatina at the same time may add to their utility.

One case of *rötheln* occurred at Charterhouse in January, nine days after the reopening of the school, the boy having contracted the malady at a children's party at Cheltenham, on January 13th, where three of his sisters were also infected. From this case (in spite of most active precautions as to isolation and disinfection) 202 others occurred, in batches, 179 of those affected being boys in the school, and 23 children or servants of the masters. From the notes of 159 cases I give the following particulars:

The period of incubation, noted accurately in 75 cases, the remainder being omitted in consequence of doubt as to the exact time of infection:

6 days in 7 cases.	12 days in 10 cases.
7 ,, ,, 3 ,,	13 ,, ,, 6 ,,
8 ,, ,, 1 case.	14 ,, ,, 11 ,,
9 ,, ,, 10 cases.	15 ,, ,, 5 ,,
10 ,, ,, 11 ,,	16 ,, ,, 2 ,,
11 ,, ,, 18 ,,	17 ,, ,, 2 ,,

The highest temperature, noted in 63 cases; in each case it happened that the temperature was at its highest point with the full development of the rash:

105° in 2 cases.	101° in 5 cases.
104° ,, 1 case.	100° ,, 9 ,,
103° ,, 2 cases.	99° ,, 11 ,,
102° ,, 1 case.	98° ,, 32 ,,

Injection of conjunctivæ, present in 112, absent in 47.

Catarrh of fauces and pharynx, present in 103, absent in 56. In 58 there was complaint of sore throat; in 26 the throat was admitted to be sore when the question was put; in 19 it was visibly injected, but swallowing did not cause pain.

Bronchial catarrh, present in 5, absent in 154.

Diarrhœa, absent in all.

Enlargement of posterior cervical glands, present in 75, absent in 84.

Malaise, severe in 2, marked in 7, slight in 75, absent in 73.

Delirium, present in 5, absent in 154.

Rash, very much resembling that of measles, but differing in being less dusky, in each spot "having an areola of its own before coalescence," and in appearing upon the chest before the face:

Appeared on the	first	day in	119	cases.
,, ,, ,,	second	,, ,,	39	,,
,, ,, ,,	third	,, ,,	1	case.

Desquamation, fine and branny, usually limited to the face, in a few cases affecting the chest, in no case involving the palms or soles, present in 55, absent in 104.

Measley odour, noticeable in 5 cases, not detected in 154.

Complications and sequelæ, occurred in 46, did not occur in 113. "Weakness" of the eyes in 8; blepharitis in 4; styes in 1; follicular tonsillitis in 7; persistent cervical adenitis in 5 (in one case terminating in suppuration, with no detectable local cause); Eustachian catarrh in 3; herpes labialis in 4; persistent coryza in 3; laryngeal catarrh in 2; bronchial catarrh in 5; alveolar catarrh (pulmonary) in 2; albuminuria (febrile) in 2; nephritis in 1; boils in 1; purpura in 1. (All these occurred within 3 weeks of the onset.)

Previous Disease:

5	had previously had	rötheln (?),	154	had not.
144	,, ,,	measles,	15	,, ,,
42	,, ,,	scarlatina,	117	,, ,,

Of the 5 supposed to have had rötheln, none had had measles; of the 15 who had not had measles, 14 contracted measles in the summer, that is, a few months after their attack of rötheln.

147 of these cases returned to their friends (after due "disinfection") fifteen days after the commencement of illness, with official permission; 11 returned earlier (none, however, before the tenth day), without official leave, but on the responsibility of their parents. None conveyed the disease to their families.

One case of *measles* occurred at Charterhouse in June, 21 days after the school reopened, the boy having contracted it on May 23rd, while on an afternoon visit to a house in Guildford. Seventy-six cases occurred from this boy, in regular fortnightly batches. I quote from the notes of 60 cases.

The period of incubation was 14 days in all.

The highest temperature, which in each case happened to coincide with the full development of the rash,

105° in 1 case.	102° in 8 cases.
104° ,, 16 ,,	101° ,, 6 ,,
103° ,, 25 ,,	99° ,, 1 case (second attack)

The day of disease on which the highest temperature occurred:

The	fourth	day in	47	cases.
,,	fifth	,, ,,	12	,,
,,	sixth	,, ,,	1	case.

The temperature fell by crisis in 46, by lysis in 12.
The earliest day on which the temperature was normal:
The fifth day in 19 cases. The seventh day in 16 cases.
,, sixth ,, ,, 20 ,, ,, eighth ,, ,, 5 ,,
Injection of conjunctivæ, present in 59, absent in 1 (second attack).
Coryza, present in 51, absent in 9.
Faucial catarrh, present in all. (No complaint made in 16.)
Bronchial catarrh (detectable with stethoscope), present in 28, absent in 32.
Diarrhœa, present in 3, absent in 57.
Enlargement of posterior cervical glands, present in 4, absent in 56.
Malaise, severe in 44, marked in 12, slight in 3, absent in 1 (second attack).
Delirium, present in 9, absent in 51.
Rash appeared at end of third or beginning of fourth day in all.
Desquamation (affecting face and chest only), present in 59, absent in 1 (second attack).
Measley odour, noticeable in 42, not detected in 18.
Complications and sequelæ, occurred in 48, did not occur in 12.
"Weakness" of the eyes in 1; laryngeal catarrh in 2; bronchitis, slight in 24, bad in 4; ulcerative stomatitis in 1; follicular tonsillitis in 1; persistent vomiting in 1; diarrhœa in 3; endocarditis in 1; pericarditis with effusion (separate from the last mentioned) in 1; hæmorrhages (subcutaneous and nasal) in 2; albuminuria (febrile) in 5; persistent anæmia in 2.
Previous Disease.

1	had previously had measles,		59	had not.
19	,,	,, ,, rötheln,	41	,, ,,
20	,,	,, ,, scarlatina,	40	,, ,,

Of the 19 who had had rötheln, 14 had it in the spring of the same year. 51 returned to their friends with official leave on the twenty-ninth day; 7 returned earlier on their parents' responsibility, none before the end of three weeks. In no case was the disease communicated to the family.

In January, 1886, 5 well-marked cases of *scarlatina* occurred in the school, almost simultaneously, seven days after the holidays ended, all of which were traceable to one local cause. Their only point of interest in connection with the epidemic of rötheln is that there was not the slightest resemblance between the scarlatina rash and the rötheln rash. But it occurred in March, 1884, that there were 13 cases of infectious disease at Charterhouse which resembled the rötheln epidemic of 1886 in every point except the rash. This was exactly like the eruption of scarlatina. The temperature in no case rose above 99.6°, there was no vomiting, the throat was only slightly red, the consecutive peeling did not affect the palms or soles, and there was no subsequent nephritis; but the posterior cervical glands were enlarged, there were slight coryza and conjunctivitis, and more important than all symptoms were the facts (1) that of the 13, 5 had previously had scarlatina, and (2) that not one of them contracted rötheln in 1886, though 9 were still in the school, and exposed, like other boys, to infection.

It seems clear, therefore, either that rötheln presents two varieties of rash, one scarlatinal, the other measley in appearance; or that under the name rötheln we are confounding two separate disorders, alike in general symptoms, but dissimilar in form of eruption, while both are distinct from the fevers whose rashes they simulate.

CASE OF MANIA SIMULATING GENERAL PARALYSIS.

By HENRY SUTHERLAND, M.D.,
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Mr. C. E. M., a Jewish merchant, aged 27, was admitted to Blacklands House Asylum on June 22nd, 1886. His uncle was insane. He had had no previous attack; his bodily health had been good, excepting that he was at times bilious.

When admitted he was much excited; his memory was good, and he was only partially coherent. The pupils were dilated, but equal, and there was slight ptosis of the left eyelid. The pulse was 124. The appetite was voracious. Delusions were marked; he offered to pay fabulous sums of money for a horse, a cart, and a harem. He believed that he was going to make a wealthy marriage; and that he could earn large sums abroad. His speech was much affected. He talked with a marked stammer and hesitation, which were not natural to him. His movements were peculiarly jerky in character, and minute fibrillar tremors of the tongue were seen on protrusion. He was very fidgety and mischievous. He offered to buy the asylum, to turn it into a garden, and in the same breath said he was going to leave it. He said he had seduced 300 girls in one afternoon. He masturbated, and would expose himself and take off his clothes in the garden. He was occasionally violent, but was easily calmed by the attendants. He wrote an unintelligible scrawl to his friends. He slept badly, taking paraldehyde, 50 minims, without effect.

On July 13th (three weeks after admission) he had somewhat improved. His speech was not so stammering, and his gait was more steady. He was taking bromidia, 25 minims, with good effect.

On July 14th, he broke a window, and two days later he said he was worth six millions.

On July 23rd, he was sleeping well, without a sedative.

By September 7th he had improved, but still had delusions of grandeur; but there was little or no stammering, and his gait was quite firm.

By September 14th he had given up writing letters about his delusions; and by October 5th he had altogether repudiated his delusions, and was employing himself.

On October 12th there was a slight return of stuttering and feebleness of gait.

By November 2nd he was much improved; and on November 11th left on leave of absence, apparently well. I am indebted to my colleague, Mr. Hall, for the above notes.

The symptoms in the above-mentioned case point to one of two conclusions. Either the case was one of mania simulating general paralysis, or of a remission in the course of general paralysis. At present it is impossible to say; the diagnosis must depend upon the length of time which elapses between the discharge of the patient and either his continued good health, or a relapse. The question is, what period must elapse before the patient is free from danger? Cases have been recorded in which remissions lasted for six months (Mercer), two years (Baillarger), two years and two months (Doutrebente), and four years (Bonnefous).[1] Other eminent writers have insisted that general paralysis is curable.

The above case shows that it is easy to make out that recovery may take place from this fatal disorder, if the possibility of a wrong diagnosis or a remission in the course of the disease be overlooked.

CLINICAL MEMORANDA.

DIRECT OXYGENATION IN CROUP AS A SUBSTITUTE FOR TRACHEOTOMY.

Having seen, in the Journal of December 18th, 1886, the article "On the Employment of Rarefied Air in Lung-Diseases," by A. Gamgee, M.D., I venture to think that a short description of my treatment for membranous croup will be accepted. Having a case in which the parents refused to have tracheotomy performed, I was forced to cast about for other means of relief. Intubation not having been advocated at that time, I resolved to furnish the required amount of respirable air by generating oxygen. Conducting the current of oxygen beneath a cone placed over the child's face, I was soon gratified by seeing him fall asleep.

This and two other successful cases, with one reported to me by my friend, Dr. J. B. Greene, is the extent of my observation; but from the fact that the object of tracheotomy and intubation is to furnish oxygen to the blood, the direct application of pure oxygen seems to me to be worthy a more extended trial. The relief afforded seems to be about the same; perhaps a little more rapid than in tracheotomy. I think the method has these advantages: The membrane cannot extend below the incision, and thus render the operation useless; it does not cause broncho-pneumonia, as intubation sometimes does; and all physicians are not prepared to tracheotomise or intubate, while anyone can generate oxygen and apply it. Also oxygen seems to lend more strength to cast off the membrane, and the trachea is not encumbered by a tube or a false outlet for expulsory air from the lungs.

W. G. Wagner, M.D.
Indiana, U.S.A.

FORMIDABLE SEQUELÆ OF SCARLET FEVER.

The following may be of interest as exhibiting the extraordinary symptoms and causes of death which are sometimes seen in scarlatina. A boy, aged 7, after having got rid of the rash and throat-symptoms, was to all appearances making a good recovery. Some three weeks from the commencement of the illness, he quite suddenly exhibited tympanitis, followed next day by ptosis of the right lid, left facial

[1] Quoted by Mickle in his *General Paralysis of the Insane*.

paralysis, and complete paralysis of the left arm. These symptoms continued for a week, during which the boy was perfectly conscious. Death seemed to be caused by the rupture of an abscess, the contents being drawn into the air-passages. The abscess had been three or four days forming in the throat. During an epidemic of scarlatina which occurred here about five years ago, I do not recollect having met with such a case. F. J. SAWDON.

Hull.

PAROTITIS AFTER INJURY OR DISEASE OF THE ABDOMEN OR PELVIS.

I CAN furnish a case illustrating the connection between parotitis and disease or injury of the abdominal and pelvic organs so well made out by Mr. Stephen Paget in his paper on this subject in the JOURNAL of March 19th. My case occurred thirty years ago, and was that of an infant with imperforate anus, on which I operated on the third day after its birth, having to cut through more than one inch of tissue before I reached the rectal *cul-de-sac*. The child was completely relieved, and continued to do well for about a week, when the right parotid gland began to swell, evidently causing pain and inability to take nourishment, so that it sank in a few days.

In default of any better theory to account for the coincidence, I was led to think that I might have wounded the seminal vesicles in the operation, and that these organs might have the same relation with the parotid gland as the testicles. HENRY TAYLOR.

Guildford.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

MANCHESTER ROYAL INFIRMARY.

STRANGULATED UMBILICAL HERNIA: HERNIOTOMY: LIGATURE OF NECK OF SAC; RECOVERY.

(Under the care of Mr. SOUTHAM.)

[Reported by Mr. W. H. BRAZIL, House-Surgeon.]

E. B., a married woman, aged 63, was admitted into the above institution on December 8th, 1886, suffering from an irreducible umbilical hernia. For some years previous to admission she had suffered from chronic bronchitis, but, with this exception, her general health had been very good. About three years ago she felt (to use her own expression) a "crack" in the region of the umbilicus. No swelling, however, followed until about six months ago, when she noticed a small tumour, about the size of a pigeon's egg, immediately above the umbilicus. She observed, also, that the swelling increased on coughing. During the last few weeks before admission her cough had been more troublesome, and the hernia had been increasing considerably in size.

On December 7th she consulted a medical man, as the hernia was enlarging, and she had been constipated for three days, and had vomited both on that and on the previous day, the vomit consisting simply of the contents of the stomach. This gentleman attempted unsuccessfully to reduce the hernia, and by his advice she presented herself on the following day at the Manchester Infirmary.

Condition on Admission, December 8th.—The patient was a stout elderly woman, apparently about 60. On examining the abdomen, a large swelling was found immediately above the umbilicus. The tumour, which was about the size of the closed hand, hung in a pendulous manner over the umbilicus, the rim of which could be distinctly seen beneath its lower border. The skin over the tumour was somewhat tense and slightly reddened, and the swelling itself was hard and tense on palpation; it was distinctly tympanitic, and yielded an impulse on coughing. On grasping the tumour, it was felt to be distinctly lobulated. The patient had a very troublesome cough; the respiration was hurried, and the pulse 100. Temperature 98° F. The patient had not vomited since December 7th.

As the symptoms were not urgent, it was decided to adopt an expectant plan of treatment. An ice-bag was applied to the hernia, and one grain of opium administered every two hours. No food was given, only a little ice being allowed to quench the thirst.

On December 11th the patient's condition was unchanged. She had not vomited since admission, nor had she passed any motion. Temperature 98.6°; pulse 112. Five grains of calomel were administered, but without effect. On the evening of the same day, the patient vomited for the first time since admission, and the tumour was found to be very tense, while the skin covering it was much reddened and congested. It was now decided to operate, and the patient was accordingly placed under chloroform.

Operation, December 11th.—A vertical incision about two inches long was made over the most prominent part of the swelling, and the various layers of the abdominal wall divided on a director. The sac being thus reached, it was carefully opened and found to contain both bowel and omentum. The latter was firmly adherent to the walls of the sac, the former was reddened and congested, and at one spot it assumed a livid hue. The neck of the sac was notched directly upwards with a hernia-knife, and the bowel was then readily reduced. The neck of the sac, together with adherent omentum, was then ligatured with catgut as low down as possible, and the sac and omentum were excised on the distal side of the ligature. A portion of the redundant skin over the tumour was then removed, and the edges of the integuments brought together by means of wire sutures, two drainage-tubes being inserted, one extending superficially along the whole length of the wound, the other being placed more deeply at the lowermost extremity. The operation was throughout conducted under the carbolic spray.

Progress of the Case.—The morning after the operation the patient felt fairly comfortable. The temperature was 98.4°, the pulse 104.

The following day (December 13th) she had a natural motion. A little milk and soda-water was allowed. The cough was still very troublesome.

On December 14th the wound was dressed for the first time, and was found to be healing well.

On December 18th patient's temperature rose to 101.2°, and some redness and œdema of the skin appeared about the neighbourhood of both ears, extending into the cheeks. The wound was still doing well.

Patient was now removed to the isolation-ward, where she remained until she left the hospital. Lead lotion was applied to the face, and tr. ferri perchlor. given internally. Notwithstanding the attack of facial erysipelas, patient continued slowly to improve. The cough still continued, however, though with less severity. The wound was healing rather slowly, most of the superficial sutures having given way.

On January 4th patient was practically convalescent. The erysipelas had entirely disappeared; the temperature was normal, the wound was granulating up, and the cough improving. On that day she left the hospital, and was made an out-patient.

REMARKS BY MR. SOUTHAM.—This case, like one I reported in the JOURNAL of June 2nd, 1883, illustrates the advantages obtained by ligature of the neck of the sac in umbilical herniæ; not only is the peritoneal cavity at once shut off from the external wound, and drainage backwards into the interior thereby prevented, but a radical cure is also performed at the time of operation. The removal of the sac and redundant skin must materially assist in producing the latter result.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 12TH, 1887.

GEORGE D. POLLOCK, Esq., F.R.C.S., President, in the Chair.

A Case of Aneurysm of the Abdominal Aorta treated by Laparotomy and the Introduction of Steel Wire into the Sac. By J. J. PRINGLE, M.B., M.R.C.P.—The patient was a man, aged 46, admitted to the Middlesex Hospital with the symptoms of aneurysm arising from the upper part of the abdominal aorta; there was no appreciable sign of cardiac or general arterial disease. Treatment for a month by rest, appropriate diet, morphine, and full doses of iodide and bromide of potassium was futile, the increase of the aneurysm being evidenced by aggravation of pain, extension of pulsation, and the development of a diastolic, in addition to the systolic *bruit* previously present. The operation described was performed by Mr. Henry Morris; full details were given in the paper. The principal difficulties encountered were: (1) the introduction of the wire, which was coiled on a roller, into the cannula necessarily held deep in the abdomen; and (2) the adjustment of the cannula between the outward force of the pulsation and the inward force of pressing the wire into the sac. Only about a foot of wire was introduced before an insurmountable kink stopped its further progress. No hæmorrhage of importance compli-

cated the operation. For two days the patient progressed satisfactorily, but he subsequently became almost maniacal, and died of asthenia, five days after the operation, his highest recorded temperature being 100.6° F. At the necropsy both sides of the heart were distended by mixed clot; there was no peritonitis beyond a narrow line of adhesion between the operation-wound in the parietal peritoneum and the subjacent viscera. The aneurysm was found to arise from the aorta at the level of the cœliac axis, and to be very saccular and filled with clot, more than one-third of which was laminated and presumably due to the procedure adopted. The remarks touched briefly upon the significance of the diastolic bruit present, and the advisability of giving ordinary medical treatment a protracted trial in similar cases, but referred principally to the treatment ultimately resorted to. The statistics of proximal compression of the aorta were analysed, and the results regarded as probably less satisfactory than recorded experience would appear to show. The procedure was obviously inapplicable to the majority of aneurysms of the abdominal aorta, which arose too near the diaphragm. The records of distal compression were discouraging, as were those of galvano-puncture in similar cases, whilst the remarkable success obtained by Loreta, of Bologna, by the treatment here adopted justified its trial. The result of that trial presented many encouraging features.—Mr. HENRY MORRIS added remarks commenting upon the advantages of steel wire over fishing-gut or horsehair; advocated in future having the wire coiled on a reel held by the operator to enable it to be paid direct into the cannula, and suggested for discussion the question, "What is the smallest quantity of the foreign body which must needs be introduced to excite the requisite formation of clot?"

A Case of Sacculated Aortic Aneurysm treated by the introduction into the Sac of thirty-two feet of Steel Wire. By WM. HY. WHITE, M.D., and A. PEARCE GOULD, M.S.—The patient, a powerful man, aged 48, had noticed a swelling of the front of his right chest for five months before he came under Dr. White's care. Two months later cough and dyspnœa on exertion supervened. On his admission to the hospital, November 20th, 1886, a prominent swelling was found in the position of the right mamma, extending from the second to the fifth rib, and from the edge of the sternum to the axilla; it was the seat of a forcible expansile pulsation, and over it was heard a harsh systolic murmur. Above the chest anteriorly, and down to the angle of the scapula behind, the resonance of the right chest was much impaired, and the respiratory murmur was distant and weak. The man was kept in bed, on a restricted diet, and was ordered fifteen grains of iodide of potassium three times a day. He continued about the same until the second week in January, 1887, when he was much excited, and the swelling was noticed to increase rapidly in size, and to become very prominent. It was then decided to employ Moore's treatment, and on January 11th Mr. Pearce Gould passed thirty-two feet of steel wire into the aneurysm through a Southey's cannula, introduced in the third intercostal space. A good deal of blood was lost during the operation, but the hæmorrhage was quite stopped by a pad of lint. The tumour became harder, and the pulsation more heaving in character, and from one of the punctures (two had been made) reddish serum continued to drain in considerable quantities for several days. Accordingly, on January 17th, the pad of lint was fastened on more firmly; next day there was observed great swelling of the subcutaneous tissue over the aneurysm, and on the 19th the skin was found to be gangrenous, and in a few hours the patient died. At the necropsy the first part of the arch of the aorta was found dilated to the size of a large orange, and springing from the upper part of this dilatation was a sacculated aneurysm the size of a cocoa-nut. The intra-thoracic portion of the tumour had a distinct but thin sac, but that part which protruded from the chest was destitute of a definable sac, and was limited by infiltrated muscle. The wire, together with loose fibrinous clot, formed a very dense mass, nearly filling, but not adherent to, the sac. The authors suggested that the fatal result was largely due to the absence of a distinct sac to the outer part of the aneurysm, and to the effects of the formation of a very hard solid mass in the aneurysm, combined with rather firm external pressure applied for the arrest of the serous oozing. They submitted the following conclusions, namely, that (1) Moore's treatment was worthy of further careful trial in properly chosen cases; (2) the operation should be performed before there was reason to suspect rupture of the sac; (3) only a small quantity of wire should be introduced at any one time; (4) no firm pressure should be made over the aneurysm afterwards.—Mr. J. W. HULKE rose to read a short account of a somewhat similar case that had been under the treatment of Dr. Cayley and himself. He thought it was only right, whilst Moore's method of treatment was as yet only in what might be called an early experimental stage, that all the evidence that was available upon the subject should be brought forward. In the case that he had to describe he thought the treatment might at least be fairly called innocuous. He admitted that an error of diagnosis was involved, but thought that that made no difference as to the value of the evidence. The aneurysm was in a sailor who had had a severe fall in 1885, cutting his chin to the bone and otherwise injuring himself, so as to be laid up for some nine months in St. Mary's Hospital. After leaving St. Mary's he was admitted to the Middlesex Hospital, August 11th, 1886, with a large aneurysm on the right side of the nape of the neck. The probable position was thought to be in the innominate artery and aorta. Much potassium iodide was given whilst under Dr. Cayley's treatment. When he was transferred to Mr. Hulke, Tuffnell's dietary system was put in practice somewhat severely from October, 1886, to January, 1887. At first there was some improvement, but this was only temporary; the aneurysm went on increasing in size, and when he left the hospital in January, 1887, it was very decidedly larger than when he was admitted. In February, 1887, he returned with a still larger aneurysm; the circumference was 16 inches, the transverse diameter 8 inches, the vertical 6, its upper border was about at the level of the lower edge of the thyroid. On February 23rd he passed about 33 feet of steel wire into it. There was a good deal of blood lost. He allowed an assistant to hold the cannula, and himself with two forceps found no difficulty in passing the wire. A week later (March 1st) there was great increase of tension and violent pulsation, which was decidedly benefited by bleeding. After a fortnight he died. The exact *post-mortem* condition of the aneurysm he had not yet had an opportunity of inspecting, but he had learnt from Mr. Leopold Hudson that the aneurysm which had been thought to be in the innominate and aorta was really in the subclavian and contained a little clot about the wire. There was no inflammation about the wire, so that he thought he would plead that the operation had at least done no harm. A simple little apparatus by which the wire could be uncoiled from a roll and passed through the trocar was exhibited on the table, and he thought would be useful in such cases.—Mr. HOWARD MARSH remarked that he thought that Mr. Morris's question as to the amount of wire to be introduced was an important one, and he could not help agreeing with him that more had been generally used than was necessary.—Mr. BRYANT thought all three cases they had heard were valuable, and tended somewhat to support the proposed treatment. Mr. Morris's case would probably have been cured if he had had strength enough. He should advocate such treatment when no other method could be used. The amount of wire to be introduced was important, but it depended on the size of the sac, and it was practically impossible to determine the size of many thoracic aneurysms; it was more possible with abdominal. He thought that small amounts of wire might be passed in at several successive operations. Steel wire he was disinclined to use, it was too rigid; and it might be seen from Mr. Gould's case how much harm it might do by pressure on the sac. Fishing gut he thought would be better. The end of a steel wire was in the way, and if clipped off just at the level of the skin might prove an irritant to the sac of the aneurysm; he should like to push the end with a blunted trocar deep down into the sac.—Mr. T. SMITH was struck with the mechanical difficulties to the operation which had presented themselves. He had no experience of them himself, but he could gather how considerable they must be from the fact that they occupied skilled fingers so long a time. He imagined a hollow needle was wanted, through which to pass the wire; and that, for such a purpose as Mr. Hulke aimed at, he thought an apparatus already existed in a needle which under various names he had often used for cleft palate and vesico-vaginal fistula.—Dr. PRINGLE, in replying, said he agreed with several speakers that no great amount of wire was needed. It had been lately suggested that electrolysis should be added to the operation, but that he thought would be useless, as the clot formed by electrolysis was always found to be so much softer than that round a foreign body. The point of his case was that it had been an attempt to cure an abdominal aneurysm, and he should be glad to learn what attempt could be recommended as preferable.—Mr. MORRIS thought Mr. Smith's instrument would tend to introduce straight and not coiled wire, which would spoil the operation. Horsehair or fishing gut might be practicable suggestions, if it could be ensured that they would coil when introduced, as Mr. Bryant had assured them. After introduction of any of these foreign bodies retraction of the sac was wanted, and therefore it was desirable not to introduce much of any of them.—Dr. W. H. WHITE, in replying on his case, remarked that the difficulties there arose partly from the impression that the aneurysm they had to deal with was much larger than it really was; it was for that reason that so much wire was introduced.—Mr. A. PEARCE GOULD observed that Moore himself, in his first case, had actually used the blunt trocar Mr. Bryant advised to push the end of

the wire into the sac. In his case he had tried to do the same, but had jammed the blunt trocar and wire in the cannula. He certainly in a second case should not use so much wire again, but he thought they had not yet found precisely the right material. Two successes by this treatment had been obtained: one by Van der Meulen in the case of a brachial aneurysm, and the other the case of Loreta's, which was much more notable because it was in an abdominal aneurysm.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 6TH, 1887.

JOHN WILLIAMS, M.D., President, in the Chair.

Uterus Bicornis.—Dr. HANDFIELD JONES showed a uterus having one cervix and two bodies. The left horn had been recently pregnant, while the right one was enlarged, either from sympathetic hypertrophy or owing to subinvolution after previous pregnancies of the right horn. The woman had died of puerperal eclampsia after her fifth confinement. Douglas's pouch was bipartite.

Anterior Parametritis and Perimetritis.—Dr. W. S. GRIFFITH showed two characteristic specimens of these conditions, with drawings.

The Mechanism of the Third Stage of Labour.—This paper, by Dr. CHAMPNEYS, was the second of a series, and dealt with "The Expulsion of the Placenta." The author reviewed the literature of the subject, including the observations of Lemser, Salin, Duncan, Schultze, Ribemont, and Ahlfeld. He then gave his own observations of 70 cases, carefully observed and tabulated, as regards the manner of the expulsion of the placenta and the blood-loss in each case; the measures of the membranes and presenting point of the placenta were given in the table. The fœtal surface presented in 64, the maternal in 2 (in both of which the cord had probably been pulled upon), the amnion in 4. Adding his results to those of Pinard and Ribemont, Dr. Champneys found that the fœtal surface presented in 127, the fœtal edge in 27, the maternal surface in 5. The presenting point was nearer the lower edge of the placenta in 65, nearer the upper edge in 1, midway in 2, no note of its position in 2. The lower edge, or amnion below the lower edge, presented in 16. In the great majority of cases a point within two inches of the edge presented, but on the fœtal surface. There was a complete absence of fundal attachments. It was found that the presenting part varied in its position with the position of the placenta. The higher the placenta the higher the presenting point, and *vice versâ*. The average loss of blood before the expulsion of the placenta was six ounces, in the membranes or with the placenta six ounces, making an average of twelve ounces for each labour, not including *post-partum* hæmorrhages. Hence a moderate loss of blood was a normal phenomenon of the third stage of labour. Dr. Champneys's final conclusions were: 1. That some measurable hæmorrhage was a normal constituent of the phenomenon of the third stage of labour; 2, the placenta presented in the great majority of cases by a point on the amniotic surface; 3, the presenting point was almost invariably near the lower edge of the placenta; 4, the position of the presenting point varied with the position of the placenta; 5, the "inversion" of the placenta was not due in the great majority of cases to traction on the cord, but was part of the natural mechanism. These observations, therefore, accorded in essentials with those of Schultze, though his diagrams were greatly exaggerated. These observations bore on the opinion previously expressed as to the causes and mode of separation of the placenta. Therefore (1) it was probable that, in addition to reduction of the placental site, some escape of blood played a part in the ordinary mechanism of placental detachment; (2) the slight inversion of the placenta which did take place was probably due to this cause; (3) the effusion of blood was not, in ordinary cases, sufficient to form a large mass bulging into a large uterine cavity behind the placenta.—Dr. MATTHEWS DUNCAN congratulated the Society on the elaborate papers just read, not only on account of their intrinsic value, but also because of their bringing the Society into contributing to the progress of the greatest obstetric work of the century. In the history of midwifery there were only three works of the very highest class as yet achieved. The first in scientific order of progress was done in the eighteenth century by W. Hunter, whose plates of the anatomy of pregnancy were its crown. The second was a work mainly of this century, and was known as the mechanism of parturition, and with it were connected many names, especially those of Solayrer and of Nægele. The third was still incomplete—the greatest, most difficult, and most glorious of all, a work of the nineteenth century, the anatomy of labour. In this country no name was so great in the anatomy of labour as Barbour, and he was actively engaged in it at this moment. No contribution to it had come from London, and the papers of Dr. Champneys he hailed as worthily bringing a part of it before this Society. The anatomy of labour made no progress till the introduction of complete sections of frozen bodies. No such sections had been done in London, and nowhere had such sections been made in the third stage of labour. The work of Dr. Champneys was mainly physiological, and should come after the completion of the anatomy of the third stage, for the subject of his work would not be settled till the anatomy was finished. Failing to find bodies for the sectional anatomy of the third stage, obstetricians had examined the uteri of the operation of Porro. This was an imperfect substitute for frozen sections, and might be very misleading. The Porro uterus examined by Barbour showed that the placental area might be contracted to a diameter of four inches without separation, and the absence in these cases of hæmatoma was hostile to the theory of separation by utero-placental hæmorrhage, but it did not disprove it. Absence of separation with contraction to an area of four inches in diameter seemed to astonish many, and to favour the detrusion theory of separation. Dr. M. Duncan always imagined a much greater contraction as necessary for separation. He referred to his own paper of 1871, which was now a matter of "ancient history," and would not be praiseworthy at this date; yet, admitting its imperfections, he was still an unbeliever in the presence of hæmatoma in a natural separation in a theoretically natural case, and he continued to hold that the cake descended edgewise through the cervix, and referring to Dr. Champneys's table, columns A and B, confirmed this. The old detrusion theory of separation he had found difficult to make intelligible. He could not understand the production of detrusion till after separation. He could not imagine detrusion pushing off the lowest flap (as in the Porro case exhibited by Dr. Galabin) without pushing off all above it. —Dr. GALABIN understood that the author had not come to a decided opinion whether the separation of the placenta was from the periphery to the centre, or *vice versâ*. Dr. Galabin thought this depended on the cause of separation. If the cause were from shrinking of the placental site, separation must be from the periphery inwards. If hæmorrhage were the cause, it must occur away from the margin, and could only effect a separation from the centre towards the periphery. Even if it were admitted that an effusion of blood was normally present, it did not follow that the hæmorrhage was a cause rather than a consequence of detachment. Dr. Galabin thought that the Porro uterus was in favour of shrinking of the placental site, with possibly detrusion as a cause of detachment, and not hæmorrhage. Detrusion, acting as a supplementary cause of shrinking, would cause detachment of the lower margin first. As regards the mechanism of expulsion, he thought it depended on the management of the third stage of labour. In Salin's cases, the placenta presented at the os by its lower margin, and there was no inversion. In Champneys's cases there was partial inversion. In Lemser's cases, the upper edge usually presented. The probable reason was that the management of Salin's cases promoted the best uterine contraction; that of Lemser's the greatest relaxation; that of Champneys an intermediate condition. Dr. Galabin did not think that leaving the uterus unsupported, with the patient on her side and the fundus dependent, would give the most ideally natural mechanism.—Dr. HANDFIELD JONES thought that an ideally healthy labour was bloodless as regards the separation of the placenta, though variable amounts might flow afterwards.—Dr. BOXALL thought there were causes for separation of the placenta not mentioned in Dr. Champneys's papers. After the birth of the child, the conditions were profoundly altered, the flow of blood from the fœtal portion of the placenta to the lungs ceasing, the thin lamina of maternal tissue is deprived of support towards the cavity of the uterus. The position in which the placenta is implanted on the uterus Dr. Champneys had shown to be important, and this again is indissolubly connected with the separation of the membranes. As long as the membranes at the edge of the placenta remained adherent to the uterine wall, inversion of the placenta was maintained. If any portion of the attachment gave way, the adjacent margin of placenta, being no longer supported, became the most dependent part, and the sub-placental hæmatoma found an exit of escape, and the lower the implantation of the placenta, the more easily would this happen. There were other causes that altered the process of detachment, as pulling on the cord and abnormal adhesion. Dr. Boxall explained a series of experiments which he had made to determine the placental presentation by means of staining. He also confirmed Dr. Champneys's remarks on the rarity of fundal attachment of the placenta. He had found the fundus overlapped (to the extent of an inch and three quarters) only once. Out of 100 cases, he should say that the placenta would occupy the upper zone in 21 cases, the middle zone in 77, and the lower zone in 2.—Dr. GANDY wished to know if kneading of the uterus was made use of to expel the placenta.—

Dr. W. S. GRIFFITH thought there was some analogy between the detachment of the membranes in membranous dysmenorrhœa and the detachment of the placenta.—Dr. CHAMPNEYS replied.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, MARCH 16TH, 1887.

LLOYD OWEN, F.R.C.S.I., President, in the Chair.

Chronic Phlegmasia Dolens, leading to Elephantiasis.—Dr. SUCKLING showed a man, aged 38, who had suffered from enlargement of the left leg for nearly four years. The skin was rough and thickened, and could scarcely be pinched up. There was well-marked pitting on pressure. The circumference of the left thigh was three inches greater than that of the right, and the left leg was correspondingly enlarged. The patient had to give up walking about for a time every now and then, as the leg became very painful and the swelling increased.

Renal Calculus.—Mr. MORRISON showed a uric acid calculus that had been removed from a man who had been treated for spinal disease for many years. On admission to the General Hospital, he had several sinuses in the left lumbar region, which led down to a rough body, supposed to be a sequestrum. This on removal was found to be a calculus. The patient made a perfect recovery.

Gastric Ulcer.—Mr. WHITTINDALE showed the stomach of a female, aged 22. For the last four months she had had epigastric pain and vomiting after food, but no hæmatemesis till just before death. All the organs were found to be exceedingly anæmic; the stomach contained a pint of dark grumous material and blood. On the posterior aspect, near the lesser curvature and at the pyloric end, there was a chronic ulcer, the size of a sixpence, the edges of which were much indurated. A large vessel had been opened by the ulceration, but the serous coat was not perforated.

Pyosalpinx.—Dr. MALINS showed a large pyosalpinx removed from a patient, aged 28.

Mollities Ossium.—Mr. SIDNEY BARWISE read notes of a case of mollities ossium.

Rhinolith.—Mr. AUGUSTUS CLAY showed a large rhinolith.

Papers.—Dr. CARTER read two short papers: one on "Observations on the Salicyl Treatment of Acute Rheumatism," the other "A Note on the Action of Colchicum Preparations in Gout."

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, APRIL 1ST, 1887.

J. SPOTTISWOODE CAMERON, M.D., Vice-President, in the Chair.

Some Remarkable Examples of Empyema, selected from Seventy Cases.—Dr. CHURTON related cases in which the pus was difficult to find, and others in which there had been difficulties in the operation required. He also described cases of double and of fœtid empyema, in which the pus came from dilated bronchi.

Double Empyema.—Mr. GODFREY CARTER described a case in a girl, aged 4, which was cured by incision of both sides of the chest.

Statistical Account of Fifty Consecutive Cases of Empyema.—Dr. WARDROP GRIFFITH described the principal cases which had been treated in the Leeds infirmary: 1. As to age: there were 29 in the first decade, 7 in the second, 8 in the third. In a similar number of cases of simple effusion, there were 10 in the first decade, 16 in the second, 9 in the fourth, against 1 of purulent effusion. 2. Sex: there were 33 male, 17 female. The right side was affected in 19, the left in 26, both sides in 1, whilst in 4 there was no record of the side affected. As to results: 35 cases recovered after incision, in 4 of these there was certain or suspected phthisical disease; 5 cases were discharged with a sinus still open; 6 cases proved fatal, 3 from advanced phthisis, whilst in 1 there was double effusion, complicated by hepatic abscess. In 3 cases there was a history of injury. In most cases the effusion seemed to have been purulent from the beginning. Out of 151 cases of simple effusion, of which most were tapped, only two became purulent, suffering respectively from tuberculosis and erysipelas. As to physical signs, there was œdema of the chest-wall in one case only. In children there were great deviations from the classical signs, there frequently being marked vocal thrill, even when there was much fluid. The operations were mostly done under ether, which the patients took well. The spray was used and the incision made behind, as low as possible. No ribs were excised, though in two cases this might, perhaps, have been done with advantage. There was pointing by pus in nine cases, and a spontaneous opening in four; in one case there was pointing behind.—Dr. CLIFFORD ALLBUTT held that resection of ribs was never needed if the operation were done sufficiently early. All effusions of any bulk should be promptly and repeatedly removed. If the case were uncomplicated and the operation and drainage sufficient, the temperature should never be raised. Any rise meant complication, bad operation or dressing. Injections were, therefore, worse than useless.—Mr. MCGILL referred to a case in which a piece of drainage-tube remained in the chest for four years, when it was removed *post-mortem*.—Mr. LITTLEWOOD described a case in which he accidentally penetrated into the peritoneum. The incision was made in the sixth space, extending forwards to the mid-axillary line. Omentum was seen in the anterior part of the incision.—Dr. EDDISON referred to the statistics of forty cases—under the care of Dr. Allbutt, Dr. Churton, and himself—which he had published in the JOURNAL three years before. He had never seen a case in which resection of the lung was necessary.—Mr. LAWFORD KNAGGS spoke against the use of general anæsthetics, preferring cocaine. He recommended aspiration in cases in which empyema was merely a complication of other diseases.—Dr. TEMPEST ANDERSON recommended a double opening made with a curved trocar.—Dr. CHURTON, in reply, said he had known cases in which the temperature remained high for some days even after a perfect operation.

Pathological Specimens.—Mr. LAWFORD KNAGGS: Dermoid Cyst of Broad Ligament.—Dr. ALLAN: Rupture of Bladder by Retroversion of Gravid Uterus, which had become occluded by adhesions.—Mr. MAYO ROBSON: (1) Polycystic Ovary; (2) Uterine Appendages removed for rapidly-growing Fibroid Tumour of Uterus.—Dr. W. GRIFFITH: (1) Thoracic Aneurysm showing thick laminated clot; (2) Case of extreme Aortic Stenosis without Incompetence; (3) Microscopic Sections of Tubercular Tumour of Optic Tract causing Hemianopia.—Dr. ERNEST JACOB: Sections and Microphotographs of a Psorosperm of Coccidium Oviforme in the Liver of a Rabbit. The bile-ducts were greatly dilated, and a condition resembling encephaloid cancer produced.—Dr. BRAITHWAITE: Uterus removed for Cylindrical Cancer by Vaginal Hysterectomy.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, MARCH 4TH, 1887.

E. CARVER, F.R.C.S., President, in the Chair.

Intussusception: Abdominal Section: Recovery.—Mr. STREET read the case of a boy, aged 3, admitted into Addenbrooke's Hospital, under Mr. Carver, on January 20th, 1887. There had been pain, vomiting, and partial obstruction for four weeks, and complete obstruction for three weeks. The abdomen was opened on the day of admission, and the intussusception reduced. The patient was discharged, cured, with the bowels acting regularly, on March 5th.—Mr. ARNOLD INGLE (Shelford) mentioned the case of an infant, five months old, who was attacked one day with pain in the belly, and vomiting the next day. When seen by him on the third day, no abdominal swelling or tumour could be felt, but bloody mucus had been passed twice. An aperient was given and the bowels acted, but the vomiting recurred, the abdomen became distended, and the child died. At the *post-mortem* examination, a diverticulum was found in the ileum, and an intussusception of the bowel.

Cyst of Cerebellum, enclosed in Fourth Ventricle.—Mr. HEMMING (Kimbolton) described the case of a young man, aged 18, who at the age of 12 was attacked with unilateral convulsions; slight paresis of the left side generally followed each fit for a short period; the fits increased in frequency, the mind gradually weakened, and the body ceased to grow. He walked about for two years, but kept his bed for the last four years, gradually losing consciousness. He had not spoken for a year and three-quarters, and there was extreme rigidity of the left side for more than a year. Convulsions at last were bilateral, and the rigidity extended to the right side, neck, and back. On *post-mortem* examination, the dura mater was not very adherent; there was some fluid between the arachnoid and the dura; the brain was rather shrunken, but there was no apparent disease in the motor area of the cortex. The arachnoid of the Sylvian fissure was glued up; the cranial nerves looked healthy, except that the optic appeared small and very firm. The corpus callosum was firm and healthy; the lateral ventricles contained much fluid, but were not much distended; the third ventricle was opened up by fluid, and the anterior commissure was tough; the soft commissure was very tough, and stretched half an inch without tearing. The fourth ventricle was distended into a globular form, lifting up the cerebellum, with thin and transparent walls posteriorly. The cerebellum was firm. On opening the fourth ventricle, a small cyst, containing clear yellow fluid, of the size and shape of a hazel-nut, presented itself on the right side of the under surface of the cerebellum. It was partially embedded in the substance of the right lobe of the cerebellum, causing a sharply defined concave indentation, and

some extra hardening and thinning of the lobe around it. The pons and medulla were sent to Dr. Sharkey, who instantly noticed the size of the right pyramid in the medulla before decussation. No doubt the pressure of the cerebellum in the living state upon the back of the pons and medulla was the cause of the protracted illness, and of the convulsions, paralysis, and rigidity.

Cases of Cerebellar Tumour.—Mr. MARTEN brought forward the case of M. S., aged 52, who had suffered from severe occipital headache, vomiting, double optic neuritis, and a tendency to fall backwards in the middle line. After death, a cyst was found in the cerebellum, pressing on the fourth ventricle, and there was excess of fluid in the ventricles.—Mr. LAURENCE HUMPHRY read the case of a woman, aged 21, who for twelve months had suffered from frontal and parietal headache, dizziness, and vomiting. She had lately become blind, but had no or rigidity. She gradually sank from exhaustion. After death, a round-celled sarcoma, of the size of a Tangerine orange, was found on the upper aspect of the cerebellum, and there was much basic meningitis, and gelatinous thickening of the membranes at the base involving the optic commissure and nerves.

Sarcoma of Testis in a Child.—Mr. STREET showed a spindle-celled sarcoma which had been removed by Mr. Wallis from a child, aged 4. The swelling, which had been first observed nine months before, was as large as a duck's egg at the time of the operation. The child recovered.

STAFFORDSHIRE BRANCH.

THURSDAY, FEBRUARY 24TH, 1887.

W. G. LOWE, M.D., President, in the Chair.

Cast of the Small Intestine.—Dr. MCALDOWIE exhibited a part of a cast of almost the whole of the small intestine passed by a female patient, aged 32, apparently in good health.

Exhumed Bones.—Dr. E. T. TYLECOTE showed portions of a human skeleton, probably female, dug up by drainers in a retired meadow.

Bronchial Cast.—Dr. WHELTON HIND showed casts from a case of plastic bronchitis. The patient was a woman aged 32. She expectorated a bronchial cast daily after dyspnœa.

Hydatid Cysts.—Dr. HIND showed hydatid cysts removed from the liver by operation.

Fibroid Tumour of the Uterus.—Dr. HIND showed a fibroid tumour of the uterus which he had successfully removed.

Diseased Conditions of the Heart and Aorta.—Mr ALLCOCK showed (1) the heart of a boy, aged 16, showing calcareous degeneration of the aortic semilunar valves, with small aneurysmal sac in the site of the sinus of Valsalva; (2), heart and portions of aorta and spinal column of a man aged 54. There were two sacculated aneurysms of the aortic arch filled with laminated clot, and cured. The descending aorta was dilated into a fusiform sac, which caused death by erosion of the vertebræ and compression of the cord.

Successful Removal of a Large Loose Cartilage from the Knee Joint.—Mr. VINCENT JACKSON showed a foreign body of considerable size removed from the right knee joint of a gentleman aged 32. The condition was clearly traceable to an injury of the joint eight years before. The operation was performed with Listerian precautions, and the limb was kept perfectly at rest for a fortnight, when, the wound having healed, movement of the joint was permitted, and complete recovery was soon accomplished. The cartilage was of circular shape, its diameter measuring one and a half inch, and its thickness half an inch.

Papers.—The following papers were read:—Dr. James HINDLE: The Treatment of Acute Alcoholism.—Dr. HIND: Notes of a Successful Removal of a Uterine Fibroid.

ACADEMY OF MEDICINE IN IRELAND.

MEDICAL SECTION.

FRIDAY, MARCH 25TH, 1887.

JAMES LITTLE, M.D., President, in the Chair.

Prevention and Treatment of Disease.—Dr. C. F. KNIGHT read notes, in which he said that a fever might abort at any time—spontaneously or by the administration of therapeutic agents. Acute articular rheumatism might be treated by one of seven plans, namely, alkaline, quino-alkaline, mint-water, salicylic acid and salts, salicin, chalybeate, and eclectic. The advantages of alkaline treatment were rapidity of action, absence of cardiac complications, and rapid defervescence. Quinine, an antipyretic and antiseptic, must be given with great regularity, and in sufficient doses to produce satisfactory results. In 1883 he had given the largest quantity of quinine ever recorded to one patient, namely, 131.25 grains in twenty-four hours; five grains subsequently produced cinchonism. The author believed that mint-water, salicylic acid and salts, and salicin influenced the disease, because they were antiseptics. Cases where rheumatoid fibro-ankylosis of vertebræ and joints existed were well treated with small doses of salicylate of sodium, assisted by massage. The best abortive for diphtheria, croup, mumps, and the exanthemata was red iodide of mercury; dose, $\frac{1}{12}$th grain thrice daily in the form of pilules, the first dose being a double one. Children bore this treatment well; in adults it might cause colic, which could be allayed with an opiate, which increased the action of the mercurial.—Mr. DOYLE said, as regarded contagious disease, his idea was to isolate the patient under hygienic conditions; and as to aborting fevers, where the fever did not take its course, he suspected he was wrong in his diagnosis.—The PRESIDENT drew attention to the fact that some patients in rheumatic fever continued to suffer from the pains, no matter what drug was administered, until milk was excluded from their dietary.—Dr. KNIGHT, in reply, said that when two or three cases of well-marked disease, which had run the ordinary course, occurred in a family, and the members of the same family exhibited similar symptoms, diagnosis could hardly be uncertain; and yet it was shown that in the latter the disease was cut short by using abortives.

Latent Typhoid Fever fatal through Cardiac Thrombosis.—Dr. A. MONTGOMERY, Sectional Secretary, read a case, communicated by Surgeon-Major R. Harman, of latent typhoid fever, which proved suddenly fatal without the disease having been recognised during life. The patient, a dragoon of splendid physique, aged 40, was admitted to hospital for slight eczema of the left leg, which readily yielded to treatment. He never complained of any symptoms, abdominal or otherwise, except a slight cough for which the usual remedies were applied; the temperature was then on several occasions, both morning and evening, without finding any rise above normal. However, on the sixteenth day after admission, after being up and about as usual, he vomited about a pint of fluid resembling coffee grounds, and expired immediately afterwards. A *post-mortem* made three hours after death revealed a dense fibrinous clot, of pale amber colour, occupying the right auricle and ventricle, firmly adherent to the endocardium and tricuspid valves, and extending into the vena cava and pulmonary artery. The parietal and visceral peritoneum was covered with thick masses of recent lymph, and the peritoneal cavity contained about two pints of semi-purulent serum. Just above the ileo-cæcal valve the ileum, on the anterior free surface of the bowel, presented an oval, open gangrenous ulceration, about three inches in length and half the circumference of the bowel in breadth, destroying all the coats of the bowel; although this opened freely into the peritoneal cavity, there was no extravasation of the intestinal contents. There was another gangrenous patch about six inches higher up, and Peyer's patches exhibited every stage of the disease.—Dr. FINNEY said that in enteric fever the ulcerating process might sometimes advance unnoticed until marked by a gush of hæmorrhage. There was no evidence that death was caused in the present case either by thrombus of the heart or embolus of the pulmonary arteries. The action of the peritoneal inflammation, as it became developed, produced weakness in an already fatty heart; and the clot found in the right ventricle was really the result of a failing heart in the death agony, and not the cause of death.—Dr. JOHN WM. MOORE agreed that the pathological appearances in the intestine were those of enteric fever. From the advanced state of the disease in Peyer's patches, and the gangrenous condition described, latent peritonitis resulting from the extension of inflammation from the base of some of the ulcers had probably been going on for some time, and perforation occurred, not as a cause of peritonitis, but subsequent to the presence of a certain amount of peritonitis, and thus was brought on the heart's failure, accelerated by the exertion of walking about. The condition of the lung showed that pulmonary embolism was not the immediate cause of death, the pathological results of pulmonary embolism not being present.—Dr. DUFFEY said that his reading of the case was that death was due to simple collapse, the result of perforation of the intestine—a view borne out by the history of the case.—Mr. FOY indicated that a description of the thrombus would settle the point as to whether it was *ante-* or *post-mortem*?—Mr. DOYLE inquired how and by whom the temperature was taken.—Dr. KNIGHT said the case presented the characteristics of general septicæmia, of which enteric fever might be regarded as a variety; but the enlargement of the viscera and the intestinal ulceration did not constitute sufficient evidence of its being one of true septicæmia.—The PRESIDENT said that he considered this case one of typhoid fever, but it was rare indeed to have such a normal

temperature and an entire absence of severe symptoms before the fatal termination.—Surgeon-Major HARMAN, in reply, said the temperature was taken by the ward-master, an intelligent non-commissioned officer, about a dozen times, by means of the ordinary clinical thermometer, in the axilla, and it was never above 99°. There was softening of the mesenteric glands. The clot found in the heart was of a pale colour, and firmly adherent to the endocardium.

REVIEWS AND NOTICES.

A MANUAL OF THE DISEASES OF INDIA. By W. J. MOORE, C.I.E., Surgeon-General with the Government of Bombay; Honorary Surgeon to the Viceroy of India, etc. Second Edition, London: J. and A. Churchill, 11, New Burlington Street. 1886.

THIS work is a very valuable contribution to the literature of tropical medicine. It abounds with facts and data of importance, brought together with much learning and ability. The author is a man of extensive and mature experience, and well known by his previous writings on the subject of health in the tropics. The present volume takes account of a wide variety of subjects, and every chapter of it will amply repay attentive study. If our own opinions do not always coincide with those of the author, we can never lose sight of the fact that what he holds to be true is by no means to be lightly set aside. If we differ from so high an authority, we do so with considerable diffidence, and always with complete respect, bearing in mind the significant decree of Menu, the greatest of Hindu law-givers, that the punishment for attempting to instruct a Brahmin was none other than to pour boiling oil into the ears and mouth of the presumptuous offender! Dr. Moore's volume opens with a general survey of the past and present value of European and native life in India, and with a review of the chief causes of unhealthiness in tropical climates. The suggestions thrown out as to the best means of averting high death-rates in the future merit deep and anxious consideration. The compendium at the end of the volume might, we think, have been omitted. It would be a great gain if, in its place, Dr. Moore could furnish a careful sketch of the literature, past and present, of tropical medicine. With his learning and wide knowledge of the subject he could do this admirably. Such an essay is much wanted. From many parts of the work before us, it is clear that Dr. Moore is a very independent thinker, and that he is strongly in favour of certain views which have not hitherto been generally accepted. The present has been termed "an age of exploding theories," and if we look to what Dr. Moore writes, for example, about malaria, about fevers in general, and about enteric fever in particular, we at once perceive that he does not evince any inclination to retard the complete explosion of certain time-honoured doctrines which have, in the past, held more or less complete sway in relation to the above-named subjects. Dr. Moore thinks that paroxysmal febrile diseases may be explained "without summoning mystic malaria from its hypothetical home." He is of opinion that the majority of writers confound climatic and other influences with malaria. "In casting off the thraldom in which we have been so long held by malaria," he writes, "I find myself in goodly company." Inman, Burdel, Knapp, Munro, Peacock, Rennie, Sir William Smart, Sir Joseph Fayrer, Dobell, Armand, Aitken, Ziemssen, Dickson, Bascombe, Farge, Oldham, Lyons, Bellew, Planck, Surgeon-General Gordon, O'Connell, and F. Macnamara are all mentioned as, more or less, discrediting the existence of such a thing as malaria. To this long list of names might be added that of Dr. Charles Creighton, who, in his very able and ingenious work on *Unconscious Memory in Disease*, brings heavy artillery to bear on the advocates of malaria, and on microbists in general; who states it as his opinion that "the assumption of a virus or miasm is a departure from those principles of reasoning which are the life and soul of science," and who contends that "nothing more plainly marks the parasitic hypothesis of disease as an *asylum ignorantiæ* than the desire to extend the benefits of it to climatic fevers." Dr. Moore agrees with Dr. F. Macnamara in thinking it possible that what we call malaria may be "the sum of the operations of the various conditions of climate and place by which we are surrounded." Is not this, however, rather vague? It is certainly a significant and deeply interesting fact that many of the authorities who have studied the subject most deeply, and who have had the widest personal experience, now disbelieve, *toto cœlo*, in the existence of malaria. It does appear possible that this word, round which so many wonderful and cherished theories have grown up, after all represents not only a mystery but a myth, one hypothesis after another only adding to the profundity of the *magna caterva* of heterogeneous doctrines regarding its nature. The glamour and prestige of the word are certainly on the wane; and, with many other teachers of the present day, Dr. Moore is evidently desirous of weakening the old traditional order of thought on this subject. He does not consider it reasonable to regard fevers as caused by specific external poisons or germs, none of which have yet been demonstrated. It is indeed possible that we have, in the past, been acting too much up to the advice of Mephistopheles to Faust—taking care of words, and leaving things to themselves; and there is no doubt that the human mind clings to its old creeds even in science, and this too when the basis of such beliefs is violently convulsed. It is not easy to break away from the shackles of traditional thought, and it is the strong "stream of tendency" that at last effects the separation. Those who still most resolutely adhere to the term "malaria" must, we think, admit that it is not easy of definition; that it has no exact scientific signification; and that possibly it is even suggestive (if we may be pardoned the Hibernicism) of that which has no existence in reality. Its hypothetical effects do not afford absolute proof of its independent existence; such effects may be observed in the unmistakable absence of the supposed cause; while many of the conditions formerly believed to be essential to its production are now known not to be so. We are still, however—even with the assistance of those who maintain the latest views—far from having reached finality of knowledge on this subject. The difficulty is not yet altogether solved; the mystery is not yet quite unriddled. Even the latest doctrines appear to us to prove too much in one direction, too little in another; and we must see to it that old speculations are not entirely demolished and swept away only to make room for new ones, which are themselves of questionable accuracy and doubtful precision; unless, indeed, we are prepared to accept as altogether satisfactory and convincing the dictum that the essential and precise cause of paroxysmal fevers is an "upsetting of the functions of the heat-regulating centre, coupled with numberless unknown conditions in the general hydrology of a country." Some may think that this almost amounts to explaining the *ignotum per ignotius*, and that such definitions themselves require definition to render them clear and acceptable.

Dr. Moore's opinions on fevers in general are, to say the least, very advanced and far-reaching. He does not believe in the specific nature of any fever. He regards all fevers (the exanthemata excepted) as merely variations from one typical disease, which may or may not cause any petechial appearance on the skin. He considers that they all belong to one genus, not to distinctive genera; that they are "modified into different types by the influence of attendant circumstances;" that "in their several varieties fevers are further developments of the mildest form, and that they are all dependent on the same causes." He believes that they are not due to any specific poisons. The following is the conclusion at which he arrives: "It appears more probable that they are the result of the combination of all the influences to which we are subjected, and that the greater or less tendency which we show to take on diseased conditions is the result of all the combinations of external influences to which we in our persons, and in the persons of our ancestors, have been subjected." Those who entertain opinions such as these will find them ably advocated by Dr. Moore. Those, on the other hand, who cannot accept such views, will find in connection with them matter enough for anxious thought. For ourselves, if we are to regard the opinions now stated as those of the advanced school, we must confess to being somewhat antiquated in our beliefs. Whilst we quite perceive and recognise the various affinities and general resemblances of different fevers, we do not believe that simple catarrhs, pneumonias, malarial remittents, enteric fever, typhus, and cerebro-spinal fever are all merely degrees of one identical condition. Nor can we feel quite satisfied when we are told that the etiology of all fevers simply consists in "the combination of all the influences to which we are subjected," and that the reason why we are affected by them depends upon "the combination of all the external influences to which we or our ancestors have been subjected." All this appears to us too heterogeneous to be satisfactory, too hypothetical to be convincing, too vague to be really scientific. With regard to "Enteric," Moore believes it to be "simply a phase of fever, and not a specific disease of either pythogenic or miasmatic origin." He regards the enteric spots as "simply a petechial eruption, not of a specific or distinctive nature." He says: "In short, these eruptions of typhoid and typhus, purpura and scurvy appear identical." He does not believe in specific enteric lesions. Indeed he goes the length of saying that "there is not a single symptom during life or after death which can be regarded as pathognomonic of enteric fever in India." We ourselves concur with the opinion of Deputy Surgeon-General Pinkerton (which Moore quotes

at page 285) that "enteric fever is in every respect the same in India as in Europe, and that it has no connection with malarial fever, taking ague as the type." We are inclined also to agree with Wilks, Moxon, and others who hold that the peculiarities of the enteric ulcer are sufficient to distinguish it from all other intestinal ulcers. We are still old-fashioned enough to believe in the specific fæcal origin of enteric, although perhaps not necessarily from the intestines of a previously affected individual. In contrast to the above-quoted opinions of Dr. Moore, it is curious to cite the following sentence from the recently published great work of the lamented Dr. Norman Chevers: "Still, against the arguments of Dr. Lyons and others, I maintain that no two entities in nature are more essentially distinct from one another than are the marsh remittent fever and the true enteric fever of India."

Viewing these diversities of opinion, we are forcibly reminded of the philosophical observation of Lord Bacon, that some minds are so constituted as to be particularly apt to perceive coincidences between things that are dissimilar, while others are as apt to fasten upon distinctions and differences between things that, upon the whole, resemble each other. The diversity of opinion to which we have referred also proves that "science has many sides, and requires many-sided intellectuality of research." The question at issue is one not to be decided by mere writing, and still less by "a 600 horse-power of dogmatism," but by a more extended accumulation of facts, rightly interpreted, and by careful observation and patient thought. Meanwhile the wide varieties of opinion are curious and instructive, and much preferable to the mere re-echoing by each observer of the statements and views of others.

Chapter vi, which extends over 68 pages, is devoted to the subject of Cholera. It is throughout deeply interesting. Dr. Moore carefully refers to all the more important views entertained by different high authorities as to the genesis of the disease; and, in a very truth-seeking spirit, he fairly considers their relative merits. His own opinions are set forth clearly and with precision. He inclines to the belief that the disease is due to a poison, which acts primarily on the nervous system; that this agent is capable, under favourable conditions of matter, atmosphere, and human constitution, of being reproduced *de novo*, and this without any necessary connection with the revitalisation of the germs of a previous epidemic. He believes that the disease may be conveyed through the atmosphere, and also by human intercourse, by cholera excreta, by clothing, by some varieties of merchandise, by water, by food, and by insects—especially flies. He is of opinion that no special meteorological phenomena can be regarded as the cause of cholera, and that too much importance has been attached to this subject. On this point, he has a strong opponent in Dr. Bellew, who, in his elaborate work on cholera, considers that the disease is an intestinal catarrh, essentially due to atmospheric influences and vicissitudes of temperature. We are inclined to think that our author attaches too much importance to the different degrees of intensity of the disease. Although we have had personal experience of the typical algid forms of fever at Peshawur and elsewhere, and also of cases of cholera taking on an intermittent type, in spite of the occasional similarities and affinities of such conditions, we believe cholera and fever to be essentially distinct diseases. We agree with Dr. Moore that the immunity from cholera enjoyed by any locality is probably accidental, and that at some future time such locality may be attacked. We have seen the disease prevailing at Mussoorie, one of the Indian sanitaria, situated well over 6,000 feet above sea-level, where some have gone the length of saying that cholera is practically unknown. As to the freedom from the disease of Laterite formations, the experience afforded by Midnapore, and also several districts in Eastern Bengal, and higher up in the valley of the Brahmapootra, goes to prove that such a view of the matter is far too absolute. The statement made by Dr. Moore that, in all the provinces of India, cholera reaches its maximum in July, certainly does not apply to Bengal proper, and it is at variance with the recorded observations of Macpherson, Cunningham, Chevers, Wise, Bellew, and others. Certain meteorological conditions seem strongly to favour the spread of cholera—if, indeed, they do not actually originate the disease. These are: high atmospheric temperature by day, with humidity of soil, active evaporation, wide diurnal and monthly range of temperature, high barometric pressure, stagnation and haziness of the atmosphere, absence of electricity and of ozone, and an increased temperature of rivers. As to communicability, Dr. Moore states it as his belief that cholera may occur without any possible relation to human intercourse. On the other hand, he alludes to many instances where the disease seemed, beyond all doubt, to be spread by human inter-communication. He believes that it is possibly communicable in different ways; and he emphasises the fact that new arrivals affected with cholera have always come from localities where the disease had been prevailing. We ourselves concur with Dr. Moore in what he writes regarding water, clothing, rags, and merchandise as possible media, under certain circumstances, by which cholera may be conveyed. Dr. Moore very justly points to the fact that quarantine can only be logically supported on the view that cholera is invariably communicated by human intercourse; and that it would be futile to expect any real benefit from quarantine, if cholera can spring up *de novo*, or if it depends essentially on atmospheric conditions, or on the presence of a ptomaine poison. He refers to the important fact, noted by Surgeon-General Gordon, that places under quarantine have suffered when other localities not under such restrictions escaped. He considers that the possible conveyance of cholera by merchandise is "a risk which must be incurred;" that our chief safety lies in local precautions and in good sanitation; and that the enforcing of quarantine in European ports against vessels from India, with a clean bill of health during the voyage (extending over a period longer than the incubation stage of cholera), must be regarded as an absurdity, and an altogether unnecessary vexation. In all this, we entirely concur. We have dwelt on this subject of cholera at some length: but it is one of surpassing importance, as is evidenced by the fact that, "on an average of good years, the registered mortality from cholera in India may be accepted as 100,000; in bad years, half a million."

In the above remarks, we have alluded to some of the more important parts of Dr. Moore's work. Want of space prevents our doing more than this at present. We may add, however, that he has admirable chapters on the following subjects: Tropical Anæmia, Beri-beri, Dengue, Diabetes, Dracunculus, Diarrhœa, Dysentery, Elephantiasis, Goître, Insolatio, Liver Disease, Leprosy, Scurvy, Skin Diseases, Snake-bite, Spleen Disease, etc.

At one part of the work Dr. Moore lays down brief but sound rules as to the particular class of cases that are suitable or unsuitable for transfer from the plains of India to the climate of the hill ranges. Every young medical officer in India should be careful to avoid the very common and very fatal mistake of sending patients suffering from organic disease of the heart, liver, or spleen to the higher hill stations. Patients, on the other hand, who are merely suffering from functional disorders and from enervation, the result of "climate," will almost immediately derive the utmost benefit from a sojourn at high altitudes; and, after they have sufficiently regained strength, marching beyond the hill stations towards the snows will afford enjoyment difficult to describe in words. We believe that a great political future lies in that direction, and that before many years are over large colonies of healthy and happy Europeans will be located in those delightful, cool regions, where a great reserve of national strength will be available in times of need for the protection of our Indian Empire. In future a splendid system of emigration may there be carried out, of equal value to India and to the United Kingdom, and in no way inferior to that which applies to Canada or to Southern Africa. Half the present mortality of the British army in India might be averted by the location, in times of peace, of a large number of European regiments at well-selected Himalayan sites, and in those wide-stretching Arcadian valleys, such as that of Deyrah-Dhoon, which lie between the plains proper and the great mountain ranges beyond. But much more than this might be accomplished in climates admirably suited for the cultivation of all the cereals, vegetables, and fruits of Europe. These facts are now well known. They have been talked about long enough. It is action on a large scale that is now required, which would be grandly remunerative to the nation. There are few men living who have done so much to draw attention to, and excite an intelligent interest in, this most important subject as the author of the very valuable work which we have been noticing, and which we must now reluctantly set aside.

SELECT EXTRA-TROPICAL PLANTS, READILY ELIGIBLE FOR INDUSTRIAL CULTURE OR NATURALISATION, WITH INDICATIONS OF THEIR NATIVE COUNTRIES AND SOME OF THEIR USES. By BARON F. MUELLER, Government Botanist for Victoria. New Victoria Edition, Revised and Enlarged. 8vo., pp. 466. Melbourne: John Ferries.

THIS compilation requires no recommendation; it needs only to be made known to be in the hands of all persons concerned in planting for profit. Not that the work contains much information on practical cultivation, but it supplies a long list of plants cultivable in temperate regions, with notes and remarks on their products, and the conditions under which they flourish. The bulk of the matter originally appeared in the form of a series of articles in the publications of

the Victorian Society for Acclimatisation, and it was subsequently issued as a separate book in Victoria; and more recently the Central government of India brought out an edition for the use of the cultivators of the mountain regions of that country; a German translation has appeared, and a special edition has been printed for use in the United States of America. There is also a modified edition, suitable for New South Wales. Therefore it is unnecessary to say that it has met with very general approbation. One might demur, however, to the term "select" being applied to a book dealing with no fewer than 3,626 different species of plants, although upwards of a third of these are only incidentally mentioned. Indeed the want of selection is the weak point in the book, for the only sense in which there has been selection is in the direction of including as many as possible, even such as are problematically useful or unsuitable for naturalisation. For instance, twenty-five species of the whortleberry genus (*vaccinium*) are admitted, and all that can be said of many of them is that they produce berries of an agreeable flavour.

It is true that greater space is devoted to such as are well known and valued in their respective countries for their productions; but this is hardly sufficient. We will give an example or two of plants belonging to a very vague category: *vaccinium præstans*, Kamschatka, "a minute plant, but with large delicious fruits. It might perhaps easily be disseminated on any alpine mountains." *Vaccinium penduliflorum*, Hawaia, "where it is called the 'Ohelo.' The acidulous berries of this bush are edible." *Vaccinium alatum*, frigid regions of the Andes of Peru; "a tall evergreen shrub, with prickly berries of the size of a cherry. This highly ornamental plant could be grown in subalpine regions." These are specimens of the least useful members of the "select plants," which might have been profitably left out of consideration, as far as practical men are concerned, because their endless variety is perplexing. Now we have said the worst we have to say of the book, we cannot do better than give the reader some idea of its scope, plan, and general character. The arrangement is alphabetical, according to the botanical names of the plants; and the space devoted to each plant ranges from a single line to a page, or, occasionally, a little more. Vernacular names are usually cited, and there is an index to them. We say usually, because no English or other vernacular name is given to *vaccinium vitis-idæa*. A more convenient method of guiding the reader to what he wishes to find would have been to include the vernacular names in the alphabetical enumeration, and give cross references.

Immediately following the descriptive enumeration is a table of the averages and extremes of the temperature of the air in various parts of Victoria, and a table of the average annual rainfall at a large number of stations for a varying number of years. The figures in these tables are interesting. Thus the average annual rainfall at Benak, in the southern part of the colony, for six years, is upwards of sixty-five inches; whereas at Piangil, on the Murray River, the average of ten years is little over thirteen inches. Next come lists of genera, classified, according to their products or uses, as fibre, fodder, hedge, gum, honey, medicinal, oil, etc. Less useful is a systematic enumeration of the genera under their natural orders; and the geographical index, occupying about twenty pages, might well have been dispensed with and the space devoted to a bibliography of the subject. Baron Mueller scrupulously cites the names of the authors of the various items of information he has been unable to verify; but it is very little advantage to the general reader—or almost anybody else, for that matter—to be told that "Mr. P. O'Shanesy recommends *Acimenia Americana* for hedges." It would be most valuable to have a guide to the sources whence the compiler has obtained certain particulars, and where often further details are to be found; and we would suggest this addition in any reissue of the work.

OPHTHALMIC HOSPITAL REPORTS. Vol. xl., Part iii. January, 1887.

IT is with great pleasure that we welcome this number of these once famous reports. Their appearance during the last few years has been so irregular, and the matter occasionally so poor, that we feared they were in danger of extinction. The present number, however, has appeared punctually, and its contents are of more than average value. Messrs. Lang and Barrett's paper on the Action of Mydriatics and Myotics contains much that is of interest, although we think that the information might have been packed in a smaller compass; the list of references would have been valuable if it had been brought up to date, but, as the most recent paper referred to is dated 1881, it might almost as well have been omitted. Mr. Nettleship supplies an interesting series of "Miscellaneous Cases," including five instances of mydriasis without cycloplegia. Mr. Marcus Gunn contributes a most valuable paper on Sympathetic Inflammation, which contains a very large amount of clinical material. We have no space to make abstracts of sufficient length to do justice to it; we merely note in passing that the evidence adduced appears to contradict the opinion often held, that children are more liable than adults to sympathetic ophthalmitis. Both this paper and Mr. Nettleship's are continuations from Part i (Part ii appears to have been an interpolation). The report of the Curator (Mr. Lawford) deals with cases of Dislocation of the Lens, and will be valuable for reference. The House-Surgeon's Notes on In-patients might well have been permitted to stand over and accumulate. Mr. W. J. Collins contributes an interesting case of Ophthalmoplegia Externa, occurring in a child aged 7, and five other cases which are of little general interest. A short but very suggestive paper, by Mr. Gunn, on Retinal Reflexes, concludes the number.

Now that there are so many excellent periodicals on ophthalmic subjects, we can well appreciate the difficulties of editing these *Reports*, and we heartily congratulate Mr. Gunn upon this number.

NOTES ON BOOKS.

Street's Indian and Colonial Mercantile Directory, 1886-7. (London: Street and Co., 30, Cornhill.)—This is a most valuable directory of the English possessions in the East. It not only gives lists of the principal inhabitants and traders, but details of trade-returns, population, books of reference, and weights and measures. The colonial medical officers in each district are duly mentioned.

Shelley and Co.'s Complete Press Directory for 1887. (London: Shelley and Co., 5, Leadenhall Street, E.C.)—This quarto volume of about 230 pages claims to be a full and impartial guide to the press of the United Kingdom. It gives in alphabetical order a complete catalogue of newspapers throughout the British Isles, together with very complete lists of weekly, monthly, and quarterly magazines, reviews, and other periodical publications. In addition to the information usually found in volumes of this kind, the work contains a county gazetteer for England, Wales, Scotland, and Ireland, giving the county towns, list of coroners, lunatic asylums, and other similar information. The book, which is a mine of valuable matter not easily accessible elsewhere, is sold for one shilling.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

MR. PRIESTLEY SMITH'S INSTRUMENT FOR MEASURING THE INTRAOCULAR TENSION.

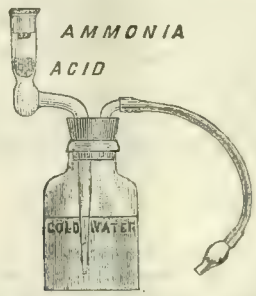
EVERYONE with any practical experience of the subject knows how difficult it is, by means of digital pressure, to form an accurate estimate of the intraocular tension, and competent observers frequently arrive at different conclusions. Some of this difficulty is due, as is pointed out by Mr. Priestley Smith, to the physical conditions, and is unavoidable. For the only way in which it seems possible to estimate the tension is to measure the resistance which the globe offers to external pressure; but this depends not only upon the intraocular pressure, but also on the following conditions: the elasticity of the tunics, their pliancy, the size of the globe, and the curvature of the surface at the point where the pressure is applied. No mechanical or other contrivance seems capable of eliminating or reducing to equality these various factors; but an instrument such as the one before us eliminates the personal equation to which the variation in results is to a great extent to be attributed, and would be extremely valuable in measuring variations in the resistance of the same eye.

The pressure is made by means of a small ivory ram, while another portion of the instrument rests upon the undepressed portion of the sclera. By a most ingenious mechanism, the pressure is prevented from exceeding a fixed amount, and, when this has been reached, the depth of the depression is recorded automatically by an index on a scale. The curvature of the "rest," and its mode of connection, prevent any inaccuracy arising from the instrument being pressed more in one direction than in another.

The instrument has been made by Messrs. Ash and Sons, of Birmingham, from the designs of Mr. Priestley Smith.

BASDON'S CHLORIDE OF AMMONIUM INHALER.

THIS is a very simple and ingenious apparatus, which deserves to be widely known. The ammonia is dropped on to a small sponge plug, which is retained in place by an india-rubber collar. A small cylinder of pumice-stone is soaked in hydrochloric acid, and suspended in the tube below the ammonia. When air is drawn through the mouth-piece, it will be seen that the ammonia, in its descent, meets with the hydrochloric acid in the pumice-stone; the chloride of ammonium thus formed is washed in the water, and is inhaled in a pure neutral



state. The bulb on the tube which contains the pumice-stone is a special feature of the apparatus, as any excess of acid falls into it, and does not reach the water; the neutrality of the washing water is thus assured. The inhaler is packed in a neat box with bottles of ammonia and hydrochloric acid, and the whole is sold at an exceedingly low price by Messrs. J. Carr and Co., pharmaceutical chemists, 171, High Holborn, London, W.C.

A SAWDUST SURGICAL DRESSING.

THE specimen of this prepared wood-dust, which has been forwarded to us by Mr. J. Critchley, 88, Upper Pitt Street, Liverpool, is the result of a number of experiments carried on by Mr. Owen Thomas, of Liverpool, during many years. The formula employed is as follows:—Crude pyroligneous acid, one gallon; bichloride of mercury, thirty grains; water, two gallons; this is used to charge a quarter of a sackful of sawdust. The pyroligneous acid can be got in a crude state from the tar distillers by surgeons who prefer to make the preparation for themselves. The surgeon is recommended to cover the part or bury a portion of the limb in the prepared sawdust, immediately covering the sawdust with either gutta-percha tissue or sheets of tin-foil. Mr. Thomas states that if he uses it for compound fracture of the hand or wrist, he applies bare sheet-iron, and shapes it to the part for the purpose of fixation, and the whole is then covered with an ample quantity of the dust, retained in place by a cloth and bandages. When using it for a compound fracture of the forearm, two hollow sheet-iron splints of suitable length are selected, their concavities are well filled up with sawdust, and applied so as to protect the wound as well as to fix the fracture; should these not be sufficient, a third of similar pattern is added. The same plan is followed with compound fractures of the humerus.

SANITAS AIR PURIFIER.

WE have received from the Sanitas Company, Limited, a sample of their "Sanitas Air Purifier." The preparation consists of a fine wood-flour impregnated with camphoric peroxide, which, in common with the healthful principles generated in pine and eucalyptus, it gives off when exposed to the air. The method of using it consists in placing a quantity in a saucer or plate, and renewing it about twice a week. The perfume is by no means unpleasant.

CONDY'S POWDER.

MESSRS. CONDY AND MITCHELL, Limited, of Turnmill Street, E.C., are now selling Condy's powder for disinfecting purposes in tins. It is free from smell, and is well adapted for the purpose for which it is intended.

THE ANATOMICAL BED-PAN.

'THE Anatomical Bed-pan," patented by Mr. C. F. Forshaw, claims to be an improvement upon the old, round pan with hollow handle, and the "slipper," both of which are difficult to clean, uncomfortable to use, and insufficiently capacious. The present invention is said to be free from all these objections. Being modelled from the human figure, it is convenient to use, whilst the additional height in front, together with the guard of the lid, entirely prevents those accidents which have made the bed-pan, as hitherto constructed, a bugbear to those whom dire necessity has compelled to use it. The "Anatomical Bed-pan" is more capacious, and as the lid is movable, the pan can be easily and thoroughly cleaned. It is suitable for persons of both sexes, and will, it is believed, supply a want felt by medical men, nurses, and patients. The agent for this invention in London is Mr. A. B. Pearce, 39, Ludgate Hill, E.C.

TESTIMONIAL TO DR. EDWARD WATERS.

LIST OF FURTHER SUBSCRIPTIONS.

	£	s.	d.
Subscriptions announced ..	60	18	6
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The Honorary Treasurer of the fund is Dr. J. W. WATKINS, Stone Legh, Newton-le-Willows, Lancashire.

MOXON MEMORIAL FUND.

President—Sir WILLIAM JENNER, Bart., K.C.B., M.D., F.R.S.

THE following contributions have been received since those announced in the JOURNAL of March 26th.

FIFTH LIST.

	£	s.	d.
Subscriptions announced ..	541	0	6
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All subscriptions should be forwarded to the Honorary Treasurer, R. Clement Lucas, B.S., F.R.C.S., 18, Finsbury Square, E.C., by whom they will be acknowledged, and cheques should be crossed "City Bank."

THE JACOB TESTIMONIAL FUND.

THE Honorary Treasurers and Secretaries beg thankfully to acknowledge the following additional subscriptions:

	£	s.	d.
Amount already acknowledged	500	15	0
Browne, S. Cairns, Surgeon H.M.S. "Cambridge" ..	0	10	0
Lane, T., Warialda, N.S. Wales, Australia	2	2	0
Lucas, W., Collooney ..	0	10	6
McGloin, P. F., Aclare ..	0	10	6
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Earl, E. H., Dublin	1	0	0
Cronin, R., Slane	0	10	6
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Delahunt, J., Ballinasloe ..	0	10	0
Whitla, W., Belfast	1	1	0
Laffan, P. M., Tara	1	0	0

Cheques to be made payable to the Honorary Treasurers—Professor Edward Hamilton, 120, Stephen's Green, West, Dublin; Dr. Thomas Purcell, 71, Harcourt Street, Dublin; or to any of the County Treasurers, or to the Honorary Secretaries—Professor E. D. Mapother, 6, Merrion Square, N., Dublin; Dr. J. H. Chapman, 122, Pembroke Road, Dublin; and Mr. G. F. Blake, Royal College of Surgeons, Dublin.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 16th, 1887.

DEGREES FOR LONDON MEDICAL STUDENTS.

UNDER ordinary circumstances the election of a President of the Royal College of Physicians is not a matter of very vital importance to the profession at large, but at the present moment, when the College of Physicians is very gallantly taking the lead in the struggle to obtain for the general practitioners in this country a recognition of their just claims to an academical degree, the election becomes an event of very considerable general interest. The re-election of Sir William Jenner is a matter for sincere congratulation in this connection, for it is mainly owing to him that so much progress has been made towards the attainment by the Conjoint Board of the right to confer degrees on London medical students. If we say that, deprived of the support afforded by his influence, the success of the movement would be seriously imperilled, we by no means desire to ignore the services of Sir Henry Pitman, Dr. Quain, or Dr. Wilson Fox, who have devoted much time and energy to the subject. But the fact is that it required a man of all Sir William Jenner's force of character and commanding influence to drag the authorities of the Royal College of Surgeons into intelligent action. While uninfluenced by the College of Physicians we know that the College of Surgeons declined to consider Dr. Hickman's resolution, passed at a meeting of the Fellows and Members of the College in 1884. This resolution was to the effect "That the Council of the College do obtain a charter to enable the Council to combine with the Royal College of Physicians of London, with the view to amalgamation of the two Colleges into one great College of Medicine, to be endowed with authority to examine and grant licences to practise in all branches of medicine and surgery, and to confer on its licentiates the degrees and titles of Doctor of Medicine and Master of Surgery." It is well to keep the terms of this resolution in mind, for upon it is based all the action that has subsequently been taken in this matter. It is true the Council of the College of Surgeons declined to entertain the idea, and it was not until the Metropolitan Counties Branch of the British Medical Association took up the subject that a persistent effort was made to solve the difficulties surrounding this question; from the first, however, Sir William Jenner, as President of the College of Physicians, has given the scheme his support, and has been able to take the sister College in tow, and by patient waiting, but never losing sight of the point to be attained, has, it may be confidently hoped, brought the question through one stage of its existence. It is now the duty of the profession to combine and help him forward with the difficult task he has undertaken on its behalf. We may go further than this, and assert that neither Sir William Jenner nor anyone else can obtain powers to grant degrees to London medical students on reasonable terms, unless he is actively backed by the profession at large. We would insist on the fact that there should be no shifting ground at the present stage of the proceedings. The resolution above referred to asks the Colleges to combine and form an institution capable of granting London students degrees in medicine and surgery; and, however advantageous it may be to have a teaching university in a combination of the Colleges of Physicians and Surgeons, King's College, and University College, the medical profession has never expressed an opinion on this subject. The profession knows well what is needed. The demand has been repeatedly formulated at meetings held in the College of Surgeons, and under the auspices of the British Medical Association; and we trust that, during this, his seventh, year of office, Sir William may be able to complete the work he has manfully striven to accomplish. As we have already announced, the delegates of the Colleges have had under discussion a draft charter, the terms of which must necessarily be presented to the Colleges of Physicians and Surgeons before it can be forwarded to Government for approval.

Supposing, however, that the Colleges sanction the scheme, then comes the tug of war; for there can be little doubt that the various universities throughout the United Kingdom will strive to the uttermost to prevent a falling-off in their revenues, which would take place when London students can obtain degrees on reasonable terms in London. The arguments against the scheme employed by these interested corporations run much on the following lines:—It is asserted that it is an unheard-of thing for any authorities but those of a university to grant degrees; that the standard of such honours will be lowered if the plan now proposed is carried into effect; and that if the London Colleges obtain such powers, why not grant similar privileges to other institutions of the kind. It is well to remember, however, that at the present time the Archbishop of Canterbury has the power to grant degrees, and further that the Colleges, as such, do not propose to give these titles; on the other hand, they are very jealous to retain their individuality; what they would desire is that, while maintaining their full rights and privileges, they should be enabled to constitute a body competent to grant degrees in no way inferior to those of the universities in the United Kingdom. The reason why they seek for these exceptional powers is simply because they exist under exceptional circumstances, for there has never been, since universities existed, a city so well provided with educational facilities as is London, with its eleven large medical schools, and a field for clinical teaching among its five million inhabitants unsurpassed in Europe, but where students have been practically debarred from obtaining degrees. We say practically debarred because, while the Edinburgh medical students obtain degrees at the rate of about 85 per cent., London students only obtain degrees in London at the rate of about 8 per cent. If the Edinburgh or any other medical students can gain their degrees from a local university at the rate of 85 per cent., the Colleges of Physicians and Surgeons in those cities have no reason to seek for powers similar to those which the London Colleges hope to obtain; the position of the medical students in the localities differ so widely in this respect that it is impossible to argue from the condition of the one as to the wants of the other. It is the duty of all those who have the real interests of the profession at heart

to sink minor differences at the present time; however carefully the delegates of the Colleges of Physicians and Surgeons may have elaborated their scheme for a charter, it will most certainly not please everyone. It ought, however, to receive general support if, while retaining the individual privileges and functions of the two Colleges, it provides a working plan by means of which past and future members of the Colleges may be able to obtain degrees upon terms neither more onerous nor more easy than those of the existing universities in the United Kingdom; this is, in fact, the position we have always held on the subject, and it is to the successful carrying out of these principles that the profession look forward with the keenest interest and expectation at the present time.

DR. BROADBENT ON THE PULSE.

THE Croonian lectures, lately delivered by Dr. Broadbent before the College of Physicians, upon the Pulse, carry one back in thought to bygone times, and raise the drop-scene to display the distance, middle distance and foreground of the progress of medicine from then till now. We could fancy, as we meditate upon "the pulse," and all the history therein embodied, that someone, caught by the idea, and possessed with an intrepidity equal to the occasion, is even now forecasting his own future effort on "the tongue," for the pulse and tongue have ever gone together, and have, with some disproportion, together shared the sunshine and the shade of professional respect. But there is no such civic sentiment around the pulse as attaches to the tongue. There are not many occasions when some knowledge is not to be gained by feeling the pulse, certainly not when judged after the discerning ideal set forth by Dr. Broadbent. To the tongue, on the other hand, come times of the adversity of insignificance, when its examination is nought but a matter of routine, or an innocent pandering (is there such a thing?) to popular prejudice. By this we mean that the pulse is a sign of health or disease which, equally with the varied aspects of the tongue, has struggled through the foibles of the gold-headed-cane age, to which equally with these the memories of bygone bumbledom still in some measure attach, and to which dispassionate critical observation is most serviceable. Fortunately the pulse has had a Marey and a Burdon Sanderson to relieve it of any shadows that may have tracked it, and to demonstrate by instruments of precision which are within touch of the demands of a scientific age, some, at any rate, of its characters under the varying conditions of disease.

Dr. Broadbent, fortified by much patient observation in the field opened by the sphygmograph, comes happily forward now to point us backward, yet onward, by discoursing in scientific terms upon the pulse as our forefathers gauged it by the finger, but the finger enlightened in recent years by a larger physiology than they ever knew. The conditions of the pulse as interpreted by the educated finger form the subject-matter of these lectures, and to what a pitch that education has attained, let him that reads more fully understand. They are no easy reading in many parts; complicated questions and debatable points bristle on all sides, but instruction is decidedly their purpose, and decisively the result of the study.

Dr. Broadbent early dismisses the sphygmograph, except as an aid to illustrate his meaning or support his argument, having come to the conclusion that it is but rarely necessary for diagnosis, and scarcely ever—it might, perhaps, have been said never—to be trusted in prognosis. Those who are familiar with the instrument in question will agree with his criticism, and also that the pressure gauge in the various forms is an illusory pretence, and of no value other than as a ready aid towards adapting the appliance to the particular pulse, and thus facilitating the production of the most characteristic tracing. On the same lines, we think it may be fairly contended that Dudgeon's modification of Pond's instrument is so much more readily applied, that, for what the sphygmograph will teach, it is generally sufficient.

The Fellows of the College will take note of, and those of tender conscience will no doubt wince at, the gentle yet withal merciless exposition of an ideal touch, and with, possibly, just the breath of a thought that no twenty minutes' interview could fully compass it, they will pass on and regain their self-possession as their pioneer next leads them by more familiar ways. Dr. Broadbent discusses, first, abnormalities of rhythm, such, for instance, as persistent frequency, paroxysmal palpitation, the infrequent pulse, the intermittent and the irregular pulse; next, the fluctuations of tension; and, lastly, the special effects upon the nervous system which these tension-alterations entail. Now all these matters are to be met with every day, even by those of limited experience, and no doubt what the lecturer has to say will have been scanned eagerly for guidance. What, for instance, can be more distressing than the several forms of persistent frequency of the pulse, both with and without valvular disease, and how little remedies seem capable to control it? Take, again, the case in which the heart shies and bolts at the rate of two to three hundred per minute. These conditions are by no means uncommon in one form or another. Who is there that can say for each and all of these varied palpitations this remedy will suffice for the one, that for another? Not one. The conditions which originate the wayward activity are apparently too complex to justify any dogmatic therapeutical generalisation. Nor can the Croonian lecturer further us much in this respect.

Then there is the bigeminal pulse and its varieties: the pulse which misses a beat, which beats in pairs and then pauses, or gives a faint shuffle for a beat or makes a first sound and even a second without transmitting a corresponding pulse at the wrist. Who that has listened to and tried to interpret these inward sayings does not turn to Dr. Broadbent with a keen intellectual appetite, which he will find much to sharpen, little to allay. Dr. Broadbent seems to adopt as the explanation for the pulseless beat, that the two sides beat asynchronously. Because of the existence of a pulmonary second sound and the absence of an aortic one; with the feeble beat the presence of a double impulse, one to left and one to right; and the occurrence sometimes of a mitral systolic murmur with the one beat, and a tricuspid systolic with the other. But these are all criteria concerning which it is somewhat difficult to be quite certain, and there is much also to be said for that other view which allows of a greater latitude to irregular and abortive muscular action on the part of the left ventricle.

We may next turn to intermittent and irregular pulses. Common as they are to meet with, we should gladly know of a surety much more about them. How do the irregular pulses which forbode ill to the patient differ from those which allow of a protracted life and average of health? "I cannot," says the lecturer, "fix any prognostic value to irregularity of the pulse as such." And that is about all that can be said, little as it is, to our comfort. Irregularity, as such, tells us little, since it is well known to be compatible with many years of life. It is the condition under which we surmise that it has come into operation, that constitutes the important factor in leading to [a

right construction of the prognostic value of this symptom; and it is not unimportant that this should be clearly stated.

With regard to tension, an interesting subject is opened in treating of the effect of anæmia. It is, as Dr. Broadbent says, not easy to understand how anæmia can give rise to high tension in the pulse; yet the difficulty is, perhaps, one of our own making, for there is no reason why the passage through the tissues of poor blood should not be resisted as actively as any other kind of qualitative change, and there are evidences which could be adduced, both pulmonary and systemic, to show that this is at any rate sometimes the case. It may, however, be doubted whether it is so as often as would seem from the insistance thereupon which has characterised the teaching of the last few years. It is not improbable that some of the difficulty experienced in the reception of this particular teaching is the outcome of the experience that anæmia and a soft pulse are the associated conditions with which most of us are familiar.

The remarks upon the treatment of increased tension are full of meaning—none, perhaps, more so than that, although encompassed by many risks, abnormal tension is not necessarily to be attacked whenever it exists; also that the prognosis in renal disease is unfavourable in the absence of what is the gauge of the ability of the heart to accomplish the extraordinary call. Dr. Hare, we believe, claimed for bleeding and blue-pill that they were, with others, good remedies out of fashion, and Dr. Broadbent fully endorses this. Indeed, the recommendation of blue-pill for a night-cap is so engaging as to make one half wish for a fit of the gout to try it.

But we must pause. In discussing the relation between the nervous system and the pulse, we should be inclined to say that the more attractive theme—the morbid effects produced on the circulatory system by nervous energy—had been discarded for the much better thought out and, on the whole, better understood local effect upon the nervous system of increased arterial tension. But, if this is so, the view taken is perhaps the more inviting to many for that very reason.

The lectures are worth—well worth—the most attentive perusal and after-thought. The pulse, albeit so dominant in practice, is difficult to treat of satisfactorily by word of mouth. Its full meanings—or, perhaps better, all that he has learnt—cannot be imparted by a lecturer, however able he may be; and the opinions, dissevered, as over and over again they must be, from the steps of thought and experience by which they have been arrived at, are open to the criticism of every reader. Any sense of incompleteness that there may be is, therefore, in a great measure incidental to the subject; and probably it is best set forth, as Dr. Broadbent seems to us to have intended, as his ideal of how the pulse is to be studied, and what sort of lessons may be learnt by him who systematically and critically practises himself in seizing and acting upon its suggestions. The pulse lends itself very readily to commonplace verbosity. It is needless to say that Dr. Broadbent's treatment of it is original throughout, and well befitted his distinguished audience, his own position, and the critical demands of the day.

INTRA-UTERINE DEATH.

Dr. Priestley's Lumleian Lectures on this subject will form an important addition to obstetrical literature. Many of our readers must have faithfully studied these interesting lectures, yet a brief review of their contents may prove acceptable, and may prompt others to read them. Amongst the more general causes, some appear referable to the father, for the procreating power is distinct from the developing power, so that, as it appears, a man may beget a fœtus which cannot develop to the end of the normal term of gestation. In the case of the mother, anæmia, starvation, and over-feeding, are active agents in killing the fœtus. Dr. Priestley discusses some important questions respecting the effects of high temperature, the immediate cause of death of the fœtus when the mother is stricken with any complaint where the temperature rises considerably. Runge's experiments show that the temperature in the fœtus is higher than in the mother, and rises proportionately higher when her temperature rises. The fœtus may die solely from high temperature in cases where the mother recovers. Overcharging of the fœtal capillaries occurs in the fœtus, and it is expelled dead by contraction of the uterus, stimulated by the carbonised blood in its sinuses. In puerperal eclampsia, the fœtus is killed either by a rise of temperature, or by uterine contractions which cause imperfect aeration of blood, or by uræmic vitiation of blood. Suckling and mental emotion are given as undoubted reflex causes of intra-uterine death.

The child is frequently killed by disease of the fœtal appendages, generally due to previous inflammation of the unimpregnated uterine mucous membrane. These diseases are chronic diffuse endometritis, polypoid endometritis, and catarrhal endometritis, the hydrorrhœa of pregnant women. Dr. Priestley dwells at great length on cystic disease of the chorion, so that the Journal of April 9th contains a valuable summary of the pathology of that remarkable disease. It is probably the cause, not the effect, of the death of the fœtus. The embryo either disappears in the cystic mass, or is found shrivelled and wrapped in its amnion, or even without an amnion, in the midst of the "mole." Hydramnios is a cause of fœtal death; this affection is associated with twin gestation, monstrosities, syphilis, and female children. It is rare in first pregnancies.

Placental disease plays an important part in causing fœtal death; Dr. Priestley, in accordance with other living authorities, agrees that there must be several distinct diseases of the placenta. The different stages of one disease are liable to be taken for distinct affections. Apoplexy and true inflammation of the placenta, or placentitis, are noted by the lecturer, who then proceeds to speak of a remarkable affection known as placental phthisis. It is not tubercular, no specific bacilli can be found, nor is it essentially a fatty degeneration. A deposit, probably a low type of exudation, is thrown out among the villi. This deposit breaks down and cavities form, which fill with blood. The placenta is thus rendered totally unfit for its functions; and as the dead child is sometimes expelled plump and otherwise in good condition, this placental disease must run a rapid course. We are glad to learn that Dr. Priestley promises to read a paper on the minute pathological anatomy of placental phthisis before the Obstetrical Society; the communication will doubtless form a worthy addition to the valuable series of scientific monographs which have recently appeared in that Society's *Transactions*. True fatty degeneration of the placenta, described by Drs. Barnes and Kilian, and myxoma fibrosum, a fibroid hypertrophy of the villi sometimes forming distinct tumours in the placental structure, are active causes of fœtal death. It appears that we are not yet able to say with precision that any one distinct lesion of the placenta belongs alone to syphilis. Frankel describes a "disfiguring granulation cell-disease," the placental affection which appears to be the most frequently associated with syphilis. He

further notes that the evidences of placental syphilis vary according as to whether the syphilitic virus is derived from the mother or the father.

The treatment of patients subject to bring forth dead fœtuses prematurely cannot be said to be satisfactory. Antisyphilitic drugs are no sure protection against intra-uterine death, even if they do not o themselves kill the fœtus, whilst curing or producing no effect on he mother, as has been suspected on reasonable grounds. Even rest may, in some cases, be an inferior therapeutic agent to certain forms of exercise. The most satisfactory cases are those where fœtal death has been due to anæmia or debility. Aix-les-Bains has been recommended in these cases. Dr. Priestley believes that the baths of Schwalbach have tonic properties for anæmic patients, whilst a visit to Kissingen is appropriate for those in whom the digestive and portal systems are at fault. There is, undoubtedly, much to be learnt concerning the treatment of habitual abortion; and the necessary knowledge may yet be found by a faithful, scientific, and intelligent study of the subject which Dr. Priestley chose for the Lumleian Lectures.

THE Khedive has nominated Dr. Salem Pacha to represent Egyptian medicine at the approaching International Medical Congress.

THE German Surgical Congress has been opened in Berlin. Among the honorary members is Sir Spencer Wells.

DR. ROBERT BARNES has been elected an Honorary Fellow of the Chicago Gynæcological Society.

THE GENERAL MEDICAL COUNCIL.

A MEETING of the English Branch Council has been announced for May 2nd. The principal object with which the meeting has been summoned is the nomination of an inspector, or inspectors, of examinations for appointment by the Council.

PASTEURISM AND ITS RESULTS.

IT is reported that another patient of M. Pasteur's has died in Paris. He was a Spaniard, named Ramon, who was bitten by a wolf on February 15th, and was at once sent to Paris, where he went through the "Pasteurian treatment." This is said to be the forty-fifth death from hydrophobia after treatment by Pasteur.

THE VACANCIES AT GUY'S HOSPITAL.

THE governing body of Guy's Hospital desire it to be understood that it is open to receive applications from physicians not connected with Guy's Hospital for at least two of the vacancies at present existing in the staff of assistant physicians. It is intended to fill up the appointments at a Court of Governors to be held on April 27th, and candidates are requested to send their applications, accompanied by testimonials, to the treasurer before that date.

MORTALITY IN FRENCH PROVINCIAL HOSPITALS.

IN a recent publication relative to the mortality in French provincial hospitals, Dr. Albert Regnard states that it is far greater than that of the hospitals of London or Paris. This is accounted for by the excessive number and faulty construction of the beds, by disregard of elementary hygienic principles on the part of the administration, and, above all, by the insufficiency of the food provided for the patients. Dr. Regnard therefore insists that, in all hospitals where the death-rate exceeds 13 per cent., improvement should be made in those particulars.

HEALTH OF NAPLES.

MEDICAL statistics quoted by the *Pungolo* represent the public health of Naples as being greatly improved. The number of deaths, which in February last year was 1,551, has this year not exceeded 1,407. The diminution of infectious cases is still more noteworthy, for whereas 76 deaths occurred from small-pox in February of last year, the number in the corresponding month of the present year was only 8. No cases of cholera have been declared, and it is confidently hoped that Naples will be free from that scourge this year.

THE LUNGS OF LONDON.

THE Metropolitan Public Gardens Association, which has done so much in the securing of open spaces and the laying-out of public gardens for the metropolis, has been in correspondence, through the Vice-Chairman of this Association, Mr. Ernest Hart, with the First Commissioner of Works, with reference to the plot of ground in Hemming's Row, at the back of the National Gallery, left vacant through the formation of the new street. Mr. Hart asked that the vacant ground might be used as an open space for the benefit of the public, either in perpetuity or until such time as it was required for building. The proposal, however, was not entertained.

INSANITARY DWELLINGS.

THE Local Government Board has addressed a letter to the Bethna Green Vestry with respect to the complaints made to the Board by the Mansion House Council as to the insanitary condition of a considerable number of houses in that parish. The Board recommends that an inspection be undertaken by an officer appointed by the Secretary of State for the Home Department, and two members of the vestry nominated by that body for the purpose.

POISONING BY SAUSAGES.

A CHILD, 4 years of age, died recently at Kew Road after eating some sausages; the other children of the family and the father also partook of the sausages, but deceased ate more than the other children, and shortly after became ill and vomited a great deal. The following evening she grew worse, and a medical man was then sent for, but before his arrival, the child, who is stated to have been a healthy one, expired. None of the other children suffered. The sausages in question had been given to the mother by the landlady, who stated that she had purchased them a fortnight previously at different shops. A verdict in accordance with the medical evidence was returned.

THE CARRIAGE-TAX.

THE continuous efforts to bring about at least a reduction in the carriage-tax deserve to meet with some success. The tax of two guineas is most felt by country practitioners, to whom a vehicle of some kind is absolutely necessary. In many instances it amounts to 15 per cent. on the price paid for the vehicle. But for the tax, moreover, many would keep a one-horse brougham for wet days, and an open trap for fine weather. The modifications which were urged by the deputation which waited upon the Chancellor of the Exchequer on March 1st were, to withdraw the limit of weight (4 cwt.), and let all two-wheeled carriages drawn by one horse remain 15s., as at present; all one-horse four-wheelers, of whatever weight, 20s.; and all pair-horse carriages 40s. By this arrangement a medical man might keep a one-horse brougham for £1, and a two-wheeled carriage for 15s., at a saving on the present rate of £1 2s. If he kept a brougham and phaeton, the charge would be £2, instead of 4 guineas. Any readers who feel an interest in the subject should communicate with the members of Parliament for their districts, asking them to support Sir Edward Grey's motion for the repeal of the tax, which is down for April 19th (Tuesday next).

FEES TO MEDICAL WITNESSES.

THE report of the meeting of the Lancashire and Cheshire Branch, which we publish to-day at page 846, contains a paper which is worthy of the serious attention of our readers, as it refers to a matter which deeply concerns them all. In that paper Mr. William Berry, of Wigan, denounces the extremely inadequate remuneration of medical witnesses at sessions and assizes. All that the law allows in respect of the latter is £1 1s. a day, 2s. for every night the witness is detained,

and second-class return fare. To rectify this injustice is the praiseworthy object of Mr. Berry, and he will certainly have the sympathy and support of the profession in his endeavour. To meet the possible objection that medical men did not often have to attend assizes, or that, if they did, they were not detained for any length of time, a systematic inquiry was made in the Wigan district, from which it appeared that the fourteen gentlemen who responded to the appeal had on an average spent seven days apiece in attending at the assizes during the preceding twelve months. There are two distinct and definite grievances shown in the paper, and clearly pointed out by Dr. C. M. Brady in the letter which appears elsewhere in the present issue. The first is, that one guinea is not a sufficient remuneration for the loss of a day. This is so self-evident that there is really nothing to be said on the subject. The second point is, that the medical witness should be sent for when he is wanted, and not be kept dawdling about the court for several days before the case in which he is summoned is likely to be called on. In the end—as happened to Dr. Brady the other day—the case is often settled out of court, and he goes home knowing that his practice has suffered considerably by his enforced absence, whilst he has not even the satisfaction of feeling that at any rate he has been of some public service in enabling truth and justice to be vindicated. Dr. Brady, by his practical action a few weeks ago in refusing to be bound over to appear at the assizes, and Mr. Berry by his excellent paper, have done their best to bring these grievances prominently forward. If the other Branches take the subject up and deal with it in the same bold spirit, there will be no difficulty in bringing the grievance before the notice of Parliament, and it is reasonable to hope that, at no great distance of time, the Home Secretary may be prevailed upon to remedy the matter, if his attention is directed to it with sufficient persistence, and if the applications made are influentially and heartily backed up.

THE NEW REGULATIONS FOR THE CROONIAN TR T.

THE great increase in the value of the Croonian Trust threw upon the College of Physicians of England the agreeable duty of deciding how the additional income might be most advantageously expended for the advancement of the sciences of anatomy, physiology, and pathology, in accordance with the terms of the Trust. The matter has been long and earnestly discussed, and suggestions almost innumerable have been made. In the multitude of counsellors there is wisdom, and the plan finally adopted is one consonant alike with the ancient forms of the College and with the tendencies of modern medicine, not always too readily recognised by that august body; the historic continuity of the Croonian Trust is not interrupted, but the increase in its value has been happily made an occasion for increasing likewise the benefits it is capable of conferring. There will be a Croonian Lecturer as before, but his duties will be more onerous and his privileges larger. A sum of one hundred guineas, which is equal to about half the annual income of the Trust fund, will be paid to the lecturer as his personal honorarium, while the other moiety will be placed at the disposal of the lecturer of the year, or of one of his predecessors, to be employed in original investigations, connected, presumably, with the lectures. Not less than four lectures are to be delivered every June, and the lecturer must choose some subject or subjects "in anatomy, physiology, and pathology, with a view to the prevention, control, and cure of diseases." The field therefore is wide, but it is understood that there is a desire to encourage the selection of subjects usually classed under the heads of preventive or of clinical medicine. The fund, in fact, will in future be mainly devoted to the furtherance of original research in medicine, and assuredly there is a wide field of work before future Croonian Lecturers and their assistants. It has been, and perhaps still is, too much the fashion to look upon clinical medicine as if it were incapable of being studied for itself and on scientific principles, and yet the "control and cure of diseases" is the great object with which all the sciences contributory to medicine have been studied. We have had frequent cause to lament that while morbid anatomy has been laboriously and minutely investigated, there has been in this country comparatively little opportunity or encouragement for the study of morbid processes. The sum which the College of Physicians is prepared to expend is small, but the terms of the scheme show at any rate that the committee over which Dr. Quain has so successfully presided appreciated the wants of the day; thus the College of Physicians has, with its comparatively humble means, set a good example to the wealthy corporation in Lincoln's Inn Fields.

THE HOXTON MURDER.

HOWEVER much we may regret it, we are bound to admit that the remarks of Mr. Justice Grantham in regard to one of the medical witnesses in the recent trial of the man Currell for murder were fully justified. Years ago it was said by an eminent judge—and apparently it has not been often enough repeated—that a medical man, when he sees a dead body, should notice everything, and it is a saying that will hold good through all time. It would be a useful rule to follow in such cases, that the medical man should ask no questions until he had seen the body and had had an opportunity of forming an unprejudiced opinion from the condition of the body and its surroundings. As for the other medical witness, who was also censured by the judge in respect of the *post-mortem* examination, it appears to us that it is the coroner on whom the blame ought really to fall, for not selecting a trained pathologist. In country districts, under the existing regulations, no doubt it must be difficult to find anyone skilled in this special line of work, but no such excuse can be admitted in regard to London or the suburbs, and for any deficiencies in the pathological evidence it is manifestly unfair to blame a medical man who is compelled to undertake an examination which he may feel himself incompetent to perform satisfactorily. The case affords an excellent instance of the necessity, to which reference was made in our last issue, for the appointment throughout the country of skilled pathologists, who alone should be called upon to give evidence as to the results of *post-mortem* examinations in criminal cases. It is reported that Currell has confessed his guilt. He states that for a considerable period of time before the murder was committed he had been in the habit of taking large doses of chloral and laudanum, and that on the morning in question he was so far stupefied by those drugs that he had no recollection of what took place. A petition will be sent to the Home Secretary praying for a reprieve, on the ground that Currell was not responsible, owing to mental aberration.

REPEATED VACCINATION PROSECUTIONS.

A STATEMENT recently appeared in the columns of a contemporary to the effect that the Local Government Board had advised that parents who from conscientious motives refuse vaccination, and who are not connected with any anti-vaccination society, should only be prosecuted twice for non-compliance with the requirements of the Vaccination Acts, but that in the case of persons belonging to any society the object of which is to set the law at defiance, the prosecutions should go on. We have not succeeded in finding any justification for this statement. From an answer recently given by Mr. Ritchie in the House of Commons to a question bearing on the matter we gather that all the Board has done is to call the attention of Guardians to the now famous letter which the Board addressed to the Guardians of the Evesham Union as long ago as September, 1875. In that circular the Board deprecates action which can have no useful result, and which will only elevate into "martyrs" local agitators who can, not infrequently, rely upon some anti-vaccination society to pay any fines that may be imposed. We greatly fear that some serious experiences are in store for some of those large towns in which the unvaccinated portion of the community has of late been unduly increasing. Compulsion is specially unpleasant when it is considered that a boon is in question, and it would be discarded were it not for the fact that the presence of unvaccinated persons is a danger to the rest of the community, and that the chief sufferers by the neglect of

vaccination are in great measure helpless children who cannot reason for themselves. Dr. Buchanan has well said in a recent report: "To the physician, who realises the powers of vaccination and who knows the malignity of the disease against which it protects, the notion of enforcing the acceptance of such a boon is distressful. But the distress is akin to that with which he himself has at times to force nourishment down the throat of a lunatic who is starving himself; and in the case of vaccination he sees that it is for the security of children otherwise helpless, not of the recalcitrant himself, that compulsion is wanted."

ATROPINE INJECTIONS IN HÆMOPTYSIS.

THE subcutaneous injection of atropine in cases of hæmoptysis was recommended by Tacke in 1882, and Dr. Hausmann, of Meran, has found it to be a most successful means of allaying recurring hæmorrhage from the lungs. (*International Klinische Rundschau*, No. 5, 1887). The great indication is to allow of the formation of a thrombus in the bleeding vessels, as Traube explained, by diminished blood-pressure. The capillary pressure will be lowered when the smaller arteries have their calibre lessened: hence the use of digitalis, restricted diet, and rest. Reflex vaso-motor constriction may also be assisted by astringents or the application of cold. In chronic (and passive) cases iron is recommended. Ergotine, turpentine, morphine injections, and alcohol are favourite remedies. In passive hæmorrhage from congestion some recommend wine, walking about, and deep respirations; in active hæmorrhage, only rest, ice, and morphine. But there are cases which resist all these measures, and in these Dr. Hausmann has found hypodermic injections of atrophine wonderfully efficacious. The following examples are given: 1. A patient with cavities in both lungs had hæmoptysis twice daily for six days to an alarming extent. The hæmorrhage was then arrested by a hypodermic injection of 0.3 milligramme of atropine ($\frac{1}{200}$ grain nearly). After two months the hæmorrhage recurred, and was only arrested by recurrence to atropine. 2. A patient at San Remo was troubled with hæmoptysis all through the winter of 1884, in spite of every care, and it only desisted in the summer. Next winter at Meran he was again similarly affected for a long time, till two injections of atropine (of the same strength as above) arrested the attack altogether. 3. In October last year Dr. Hausmann at once stopped severe hæmoptysis in a lady who had been treated in vain for eight days by ergotine injections, turpentine, etc. The quantities of atropine recommended for hypodermic injection in cases of profuse or moderate hæmorrhage from the lungs, which resists other means of treatment, vary between 0.2 and 0.5 milligrammes ($\frac{3}{1000}$ grain to $\frac{7}{1000}$ grain).

PERSISTENCE OF MULLER'S DUCT IN THE MALE.

IN the JOURNAL of April 2nd we noted a remarkable instance of this condition, recently described by Dr. Reliquet. The right ureter, it should have been said, opened on, rather than into, the pouch formed by the dilatation of Müller's duct. That duct arose from a cystic structure intimately bound by means of connective tissue to the cyst below it, whence the right ureter sprang; but the cavities of the two cysts did not communicate. The remarkable clinical symptoms were due to the compression of the right ureter against the back of the bladder by Müller's duct. When putrid urine had collected in the cystic right kidney and dilated right ureter to an extent sufficient to overcome the resistance of Müller's duct, also distended with fluid, the putrid urine entered the bladder, and was passed during micturition. The orifices of both ureters were very patulous. The pressure of Müller's duct preserved the right ureter from reflux of urine; but that phenomenon had been constant on the left side, hence disorganising calculous disease of the left kidney. In Professor Rémy's case (JOURNAL, vol. ii, 1879, page 382) the patient was a boy aged 6; he died of cystitis and suppurating kidneys, the result of chronic retention of urine. The lower end of Müller's duct formed a pouch in the neck of the bladder, which caused the retention. Dr. Ord's case (*ibid.*, page 697) occurred in a man aged 36, who died of phthisis. Müller's duct ended, without organic connection with any other structure, in the median line of the floor of the prostatic urethra, by a patulous orifice placed just above those of the ejaculatory ducts. There was no obstruction in the genito-urinary canal, as in Reliquet's and Rémy's cases. In all three the duct arose from a cystic structure, or structure above the right kidney. Thus persistence of Müller's duct may produce no symptoms, as in Dr. Ord's case; or may, on the other hand, cause grave chronic or acute obstruction to the passage of urine above the genito-urinary tract.

THE ANILINE TREATMENT OF PHTHISIS.

THE committee appointed by the Moscow Congress to investigate the value of Professor Kremianski's proposal has now issued its report. The members, Drs. Ostrumoff, Subotin, Shervinski, Klein, Vogt, and Bogoslovski, first made a number of experiments on animals in Professor Bogoslovski's laboratory, introducing the aniline combined with oleum gaultheriii into the blood directly, subcutaneously, and by means of inhalations with Professor Kremianski's apparatus. Instead of this being followed by no ill-effects, or only very slight ones, as the professor believed would be the case, all the animals died a few hours after the introduction of aniline with symptoms of paralysis of the respiratory centre, even when very small quantities of aniline had been administered. When given to patients it caused them extreme disgust, and appeared to be utterly useless from a therapeutic point of view. The committee, therefore, has decided to make no further investigations on the subject.

THE PHOTOGENIC FUNCTION OF LUMINOUS MYRIAPODS.

AT a recent meeting of the Biological Society, M. Dubois presented a note on the photogenic function of luminous myriapods, in which he explained the mechanism by which these creatures produce light. According to him, the light does not proceed from special organs, but is due to transitory physiological modifications of the walls of the intestine during the moulting period. He also maintains that this property, as well as the glycosuric function, is independent of the organ, and hence that an anatomical examination of the latter cannot serve to explain its physiological function. In pyrophores it is in the adipose tissue that the light is produced; in myriapods it proceeds from the epithelium of the intestine, whatever may be the organ. The mechanism is always the same; that is to say, a granular disintegration of the cell, resulting from a true auto-digestion of the anatomical elements.

SCOTLAND.

ERECTION OF A HOSPITAL FOR JOHNSTONE.

THE five parishes, including the burgh of Johnstone, which have combined to erect a hospital for infectious diseases have settled on the contracts for the building. The hospital is to be constructed to contain sixteen beds, and the total cost is to be under £2,000.

THE CHAIR OF PHYSIOLOGY IN EDINBURGH UNIVERSITY

AT a meeting of the Edinburgh University Court held last week, arrangements, approved by the Senatus, under which Professor Haycraft, of the Mason College of Science, Birmingham, will take charge of the Department of Physiology and superintend the Practical Physiology classes during the approaching summer session, were confirmed.

EDINBURGH UNIVERSITY RECTORIAL ELECTION.

BY the death of the Earl of Iddesleigh the post of Lord Rector of the Edinburgh University was rendered vacant, but it was decided by the Senatus that the appointment should not be filled up until the usual time, which is the beginning of the winter session, as the meetings and work in connection with the election interfere to

some extent with the work of the session. A large and influential meeting of the University Conservative Association was held last week, at which the Marquis of Lothian, K.T., was unanimously adopted as a local candidate for the Rectorial chair.

THE "JOHN REID" MEDICAL PRIZE.

THE prize, of the annual value of £25, founded by Miss Reid in memory of her brother, the late John Reid, surgeon, Glasgow, for the best original research bearing on any of the departments of medical science conducted in one of the hospitals or laboratories of Glasgow, has been awarded for one year to Mr. R. C. Wakefield for an able paper on "Aneurysm."

COMBE LECTURES TO TEACHERS.

DR. ANDREW WILSON commenced his third annual course of lectures to the teachers of Glasgow on April 5th. The course is free to teachers and others. The subject for this year is "Health as related to the House and the School."

GLASGOW UNIVERSITY.

AT a meeting of the University Court held on March 23rd, it was intimated that the Chancellor, the Earl of Stair, had nominated James King, Esq., LL.D., as his assessor. The following examiners in medicine were appointed for four years from March 31st, 1887: William Whitla, M.D., of Belfast, with special reference to Materia Medica; James J. Dobbie, M.A., B.Sc., of Bangor, with special reference to Chemistry; George Murray, of the British Museum, for Botany; and R. F. C. Leith, M.A., B.Sc., M.B., Edinburgh, for Zoology. The winter medical session of the University closed on April 1st. At the preliminary examinations held during the past week there were no fewer than 450 candidates, the largest number on record. The first, second, and third professional examinations for degrees in medicine have been going on this week. For the first professional examination there are 92 candidates; for the second, 57; and for the third, 61.

GLASGOW BOTANIC GARDENS.

THE Town Council of Glasgow entered into possession of the Botanic Gardens on April 1st, in virtue of the arrangement in connection with the deed of mortgage. The Gardens have now been closed to the public; but the curator and staff are meanwhile retained, and the Gardens will be maintained in working order. To meet the personal obligations undertaken by the directors of the institution till possession was taken by the Council, plants to the requisite value will be set aside. It is expected that arrangements will be made to permit students of botany at the University entrance during the summer session. The Senate of the University has addressed a representation to the Town Council pointing out the great importance and scientific value of the Gardens and collection; they say that, taken as a whole, the conservatories, built at a cost of £20,000, the superficial area of glass being 76,250 feet, stand in excellence next to those of Kew. These are stocked with plants of scientific value in keeping with the houses in which they are lodged. The Senate would, in common with all persons interested in science, feel it to be an irretrievable loss if such a collection were dispersed. Had the recent Bill for the annexation of Hillhead to Glasgow been passed by the Committee of the House of Lords, the Gardens would have been maintained. There is some probability of an effort being made to obtain a re-hearing of the case by the Lords, the decision of the Committee being so contrary to the evidence.

ROYAL LUNATIC ASYLUM, DUNDEE.

THE quarterly meeting of the Royal Lunatic Asylum, Dundee, was held last Monday. The report by Mr. Robertson stated that the debt due to the contractors had now been cleared off, the appeal made to the public (as arranged at the last meeting) having been most generously responded to; and a hearty vote of thanks was awarded to Mr. Robertson for his energy in the matter. At the present time, there are 49 private and 232 pauper patients in the asylum. The amount received for board during the last year was £8,976, a decrease of £80 compared with the preceding year. The building account now due to the bank is £56,453.

IRELAND.

IT is stated that the report of the Dublin Hospitals Commission was presented to the Lord-Lieutenant on April 4th.

AN election for a medical officer to Golden Cross Dispensary, County Tipperary, took place last week in room of Dr. Kennedy, who had resigned. There were two candidates, Messrs. Maloney and McGrath, the former being successful by 11 votes to 9.

THE VACANT DISPENSARY.

SEVERAL candidates are already in the field for the Belfast Dispensary District, vacant by the death of Dr. Barron. Amongst the number are Dr. Dunn, Dr. Taylor, Dr. John Barron, Dr. Howard Sinclair, and Dr. W. R. Scott.

THE PROPOSED CONVALESCENT HOME FOR THE QUEEN STREET HOSPITAL, BELFAST.

A MEETING to further this project was held on March 7th, under the presidency of Mrs. Lavens M. Ewart, Lady President of the Institution. There was a large attendance, including several deputations from the working classes. Collecting cards were issued, and other steps taken for vigorously pushing on the work.

CASTLEREA WORKHOUSE.

THE guardians recently elected Dr. F. O'Donohoe as medical officer to the workhouse, but as the Local Government Board did not consider him eligible, they refused to sanction the appointment. The guardians asked the Board to reconsider their decision, and, upon their refusal, appointed Dr. O'Donohoe as temporary medical officer at a remuneration of £2 a week.

THE LABOURERS' ACT.

AN inquiry was held at Killadysert workhouse last week in reference to the proposed erection of over a hundred houses for labourers. The guardians, however, it appeared, had declined to employ their medical officers to inspect the insanitary houses because those gentlemen very properly refused to make inspection without extra fees, and the guardians considered that as the medical men were paid under the Public Health Act they were sufficiently remunerated, and were not entitled to fees for inspecting houses. Captain Fair, who held the inquiry, showed that the scheme could not be carried out as the law had not been complied with, and the Act of Parliament required that there should be a certificate from the medical sanitary officer, who should be paid for it.

THE LATE STRANGE FATALITY IN BELFAST.

THE two medical men who performed the *post-mortem* examination upon the two girls who recently died in Belfast under peculiar circumstances have replied to the strictures of the press. In their opinion, the probable cause of death was the decomposed state of the beef of which the unfortunate girls partook. This did not appear in the report of the inquest; and even now they merely suggest that the beef may have been decomposed, but of this there is no proof. The public mind will not be satisfied unless this strange affair is thoroughly elucidated.

PROPOSED JUBILEE HOSPITAL IN DUBLIN.

THE Committee that has been formed in the City and County of Dublin for the purpose of arranging the celebration of the Queen's Jubilee in Dublin has adopted a resolution expressing the opinion that a hospital for consumption and diseases of the chest in the county of

Dublin would be the memorial most likely to receive the widest support from the people. This proposal has been warmly opposed by some, and as warmly supported by others. Amongst the latter is the Registrar-General for Ireland, Dr. Grimshaw, who is also the President of the Dublin Branch, and a recognised authority on all matters connected with hospital requirements and organisation. Dr. Grimshaw points out the excessive mortality from phthisis which prevails in Dublin and in Ireland generally, and the consequent necessity for special hospital accommodation for patients suffering from that disease. He says that about one-fourth of all the deaths in Ireland are caused by lung diseases. In Dublin the proportion is much higher; during the ten years 1875-84, the deaths from consumption averaged 1,108 per annum; in 1885 the rate was 1,273; and in 1886 it was 1,270. Other diseases of the respiratory organs caused for the same periods an average of 2,053; for 1885 the number was 2,055; and for 1886 1,766. Consumption, on an average, causes about one-eighth of all the deaths in Dublin; other forms of lung disease about one-fourth; and these two groups of diseases, taken together, are the cause of about one-third of all the mortality in Dublin.

THE MEDICAL STAFF AND THE DUBLIN MEETING.

As was stated in the JOURNAL of March 19th, the officers of the medical staff quartered in Ireland have resolved to give an entertainment during the visit of the British Medical Association to Dublin in August, in recognition of the services of the Association to the department. This movement has been so warmly supported and approved, not only by Surgeon-General Hassard, C.B., Principal Medical Officer for Ireland, and the officers under his command, but also by officers serving in England and abroad, that it is sure to be a great success. It has been decided, with the permission of the Lords of the Committee of the Council of Education, and the cordial approval of the Local Executive Committee, that the entertainment given shall be a *conversazione* in the Museum of Science and Art, in the Leinster Lawn, Merrion Square, on the evening of Friday, August 5th. Ladies will be invited to the *conversazione*, and among the distinguished guests whom it is expected will attend will be the Director-General, Sir Thomas Crawford, K.C.B., the President of the Section of Public Medicine at the meeting. A committee of three Surgeons-Major and three Surgeons, with Brigade-Surgeon Paterson as President, and Surgeon-Major L. Corban as Honorary Secretary and Treasurer, has been formed to carry out the arrangements. Judging from the numerous objects of interest contained in the museum, and the admirable arrangements of military hospitality generally, we feel sure that the *conversazione* of the medical staff will be one of the pleasantest features in the Dublin meeting. We understand that every possible facility to attend the meeting will be given to medical officers in Ireland.

THE MEATH HOSPITAL.

THE annual meeting of the governors and friends of this hospital was held last week; Lord Ardilaun presided. The total ordinary income for the year amounted to £4,055, and the expenditure to £4,374, leaving a balance against the hospital of £258. This deficiency, the annual report stated, has not been caused so much by a falling off of income as by a necessary increase of expenditure. The report contained an acknowledgment of a bequest from the late Mr. John Barber of £4,500. In order to carry out the donor's desire, a building committee has been appointed, and it is hoped that very soon a memorial ward will be erected. The generous gift of Matthew O'Reilly Dease, Esq., D.L., of £200, for the purpose of tesselating the entrance hall and accident corridor, as a first part of a memorial to his father and grandfather, late distinguished surgeons of the hospital, was also acknowledged. The daily average number of beds occupied during the year was 89.96. The number of cases treated, both intern and extern, were as follows: in hospital April 1st, 1886, 99; admitted, 1,217—1,316; discharged, 1,148; died, 76; in hospital March 31st, 1887, 90—1,316; accidental cases treated as out-patients, 2,551; dispensary cases, 8,567; total number of cases treated, 12,434.

THE ST. JOHN AMBULANCE ASSOCIATION.

A MEETING of the General Committee of the Belfast Centre of this Association was held in the board-room of the Royal Hospital on March 6th. Sir Edward Porter Cowan, Lord-Lieutenant of County Antrim, was unanimously elected President of the Centre in the room of the late Earl of Shaftesbury, and Dr. Lindsay was appointed Honorary Local Secretary *vice* Dr. John Moore, resigned. Four courses of lectures—two for men and two for women—had been given in Belfast during the past winter by Dr. Strahan, Dr. Lindsay, and Dr. Lewers. Examinations had been conducted under the auspices of the Central Association in London, and the results had been highly satisfactory, fully 90 per cent. of the candidates having satisfied the examiners.

THE REFORM OF THE UNIVERSITY OF LONDON.

THE scheme for the reform of the University of London, drawn up by the Committee of the Senate over which Lord Justice Fry presided, is so well-intentioned, so distinctly a move in the right direction, that the task of the critic must appear somewhat invidious. A perusal of the report of the Committee, however, does not leave a favourable impression, and a detailed examination of the scheme shows but too plainly that it is in reality a compromise between those who would move a little, but as much as possible along the old lines, and those who would not move at all. One great concession the scheme does make to the demands of the teachers, by indirectly giving to them the right to elect representatives on the governing body. This provision, however, is certain to be hotly opposed by a large section of the graduates in Convocation, and may not improbably be rejected by that curiously conservative body, which appears to be bent on committing suicide.

The new scheme proposes that the University should still be governed by a Senate; but the majority of the members of this body would be elected, in part by Convocation, and in part by the Faculties. The creation of these Faculties is the greatest innovation in the scheme; they would consist of the representatives of the associated Colleges—that is to say, of the teachers.

The educational bodies which should be permitted to become associated Colleges of the University, as well as the number of representatives in the Faculties to be elected by each College, would be determined by a "Committee of Selection." Each Faculty would elect two members of the Senate, or eight in all, and would elect also an as yet undetermined number of members to constitute, along with one examiner in each subject of the Faculty, a Board of Studies. The Board of Studies would have the right to make representations to the Senate with regard to the degrees and examinations, and might be asked to deliberate in conjunction with the Senate, and would thus probably be able to exert a very considerable though somewhat undefined influence on the policy of the University. It may be remarked that a place for the examiners in the constitution of the University is thus very ingeniously found—a place which gives them the right to make their opinions known to the governing body, without, as was originally proposed, giving them the right to elect members of that body.

It will be seen that the main principle for which the teachers have contended, namely, that they should be represented on the governing body, is granted in this scheme, though in a somewhat hesitating manner. Of the three constituent elements of the Senate—that is, the Crown nominees, the representatives of the Senate, and the representatives of the Faculties—the last named, who would alone represent the teaching element, would only number eight, whereas the Crown would nominate sixteen members, and Convocation would have the right to elect three members of the Senate in each division, that is, three by the graduates in Arts, three by the graduates in Laws, three by the graduates in Science, and three by the graduates in Medicine; the Chairman of Convocation being a member of the Senate *ex officio*, Convocation would be much more amply represented than the associated Colleges. This question, whether the graduates of a university have any claim to a voice in its government, is almost as old as the oldest university; twice over it convulsed the University of Paris during the earlier centuries of its existence, but in this country the battle has generally been on the side of the big battalions,

and the final appeal is to the general body of graduates. The new scheme for the London University implies, however, more than this in one direction and less in another; for while the graduates elect rather more than a third of the Senate, thus sharing in the ordinary administration of the University, there is no appeal to them, and their expressed opinions will be liable to be set aside by a combination between the Crown nominees and the representatives of the teachers. In discussing this question some time ago, we observed that there is at present a strong wave of opinion in favour of teachers having the power to test their own work. Lord Sherbrooke at one time succeeded in convincing nearly everybody that education and examination ought to be kept entirely distinct, and to be conducted by separate organisations. This was doubtless an extreme theory, and two things soon became apparent when it was applied to a university; the system bore very hardly and unfairly upon candidates at the higher examinations, and was in practice a failure, because it was impossible to avoid appointing examiners who were also teachers. Now the pendulum is swinging back, and the teachers would no doubt like to see the rebound accelerated. That they will be satisfied with the scheme outlined above is not to be expected; indeed, we are informed that the Executive Committee of the Association for Promoting a Teaching University for London has given it to be understood that it will be asked to be heard by the Privy Council against the scheme when the application for the new charter is made.

A CASE OF "PROLONGED SLEEP."

DR. J. KESER sends us the following additional particulars with regard to the man Chauffat:

According to Professor Charcot, who has written to me on the subject, a large excess of urea, uric acid, and hippuric acid has been noted by Bouchard in hysterical patients; this excess is well marked in Chauffat's case.

The following analysis has been made for me by Mr. Woodland, of St. George's Hospital.

Date.	Reaction.	Specific Gravity.	Urea per cent.	Uric Acid per cent.	Hippuric Acid per cent.	Chloride per cent.	Phosphates per cent.	Albumen.	Sugar.
April 1st	Very acid.	1029	4.13	0.481	0.431	0.01	0.21	None.	Minute traces.
April 3rd	Acid.	1026	1.26	0.301	0.216	In small proportion.		Trace.	Traces.
April 5th	Acid.	1028	1.002	0.312	0.221	*id.*	*id.*	None.	Traces.

Until April 6th there was no marked change in Chauffat's condition. On that day it was noticed that the automatic movements were less easily produced, and that the patient woke up more readily. On Friday, April 8th, he opened his eyes at once when spoken to, sat up in bed, and since then he has been quite awake during the day. He complains of heaviness in the head and of want of appetite. There is complete aphonia and almost complete paralysis of sensation and motion on the left side. The anæsthesia of the pharynx, so common in hysteria, is well marked in Chauffat's case. The vocal cords are normal in appearance and freely movable; but, when the patient tries to speak, they remain separated by an interval of 2 or 3 millimètres.

Chauffat having regained consciousness, and being in a fit state to be removed from his room, I have now ceased to attend him, and he will not be again under my care, unless he decides to come to the French Hospital.

THE CESSATION OF THE REGISTRATION OF SINGLE DIPLOMAS.

THIS heading appeared last week over a somewhat puzzling communication addressed by Mr. Miller, Registrar to the General Medical Council, to the licensing bodies. The first two paragraphs were clear enough; they contained the information that, after June 1st, 1887, no person can be put on the *Medical Register* by virtue of a single qualification, and that up to the same date any person with a single diploma can be put on the *Register*. The third paragraph of the communication is clearly retrospective, and appears to contain two very objectionable statements. In the first place, a student who has satisfied a board or court of examiners before June 1st, and obtained a single qualification, that is, a qualification in medicine or surgery or midwifery alone, will not be able to get registered, and thus gain the necessary privileges of being on the *Register*, unless he either registers before June 1st or else passes an examination in the three subjects. This leads to the second matter for consideration. In the latter case, that is when the practitioner has to go through the ordeal of an examination again, the "three subjects must be taken up together." So must they also be taken together in the case of students qualifying after June 1st. Thus, if the candidate be rejected in one subject, it appears that he will be compelled to take up all three when he next presents himself for examination. This would be grossly unfair to the student, but a terrible injustice to the first class of persons above mentioned.

Another evident effect of this regulation is the exclusion from the right of registration after June 1st of all who have taken a surgical qualification at one date and a medical qualification before or after that date. No degrees, diplomas, or combinations of university degrees with college diplomas will satisfy the regulation for registration if the three subjects be not included in one examination. It appears, we understand, that the Royal College of Physicians happen to have secured special rights, which will exempt those who hold its diplomas from necessarily passing the qualifying examination held by the Combined Board according to the Act of 1886. This may be fortunate for those who qualify at the College of Physicians, but it only increases the complexity of the regulation.

It has been proposed that a short Bill should be introduced into Parliament this session which would have the practical effect of adding a clause to the Act of 1886, obviating the infliction of the hardships involved in the above regulation. This might be done without much difficulty; but it is one thing to introduce a Bill, and quite another matter, in the present state of politics, to carry it through the House of Commons. This is, however, no abstract grievance, as the communication has already caused great anxiety to many persons who have recently qualified.

ROYAL COLLEGE OF SURGEONS.

A QUARTERLY Council Meeting was held at the College on April 14th. The minutes of the last meeting were read and confirmed.

The Council, on the recommendation of the Museum Committee, determined to purchase a very fine specimen of the egg of the epiornis.

Mr. James Berry, M.B., B.S.Lond., Assistant Demonstrator of Anatomy at St. Bartholomew's Hospital, was adjudged the Jacksonian Prize for his essay on the Pathology, Diagnosis, and Surgical Treatment of Diseases of the Thyroid Gland.

The seventh report of the Committee on Charters and By-Laws (which contained the draft of the new supplementary Charter to give effect to the several alterations in the charters agreed to by the Council, including the alteration in the mode of election of the members of the Council) was approved, adopted, and ordered to be entered on the minutes. It was resolved that the necessary steps should be taken to submit the proposed modifications to the Privy Council for Her Majesty's approval.

Mr. Howse's resignation as Examiner in Anatomy was accepted. The vacancy will be filled up at the next meeting of the Council.

The President obtained permission to hold a *conversazione* in the College. (The *conversazione* will probably be held in June.)

Objection having been taken by the Council to the advertisements issued by a Member of the College, and the Member having made a declaration before a magistrate to the effect that he would refrain from such advertisements in future, the Council resolved to take no further action in the matter.

Authority was given to the delegates of the two Colleges to carry out the proposal to erect a statue of Her Majesty the Queen in the Examination Hall. It was referred to the President and Vice-Presidents to prepare an address of congratulation to Her Majesty on the completion of fifty years of her reign. The address will be submitted to the Council for approval.

Petitions were presented from Scotland and elsewhere protesting against the proposal made in a memorial addressed to the Council to devote part of the Erasmus Wilson Bequest to the foundation of a Pathological Institute.

A resolution was proposed by Mr. Thomas Smith, "That a professional auditor be appointed to audit the College accounts annually, in association with the Committee of Auditors."

Sir James Arthur Hanbury, K.C.B., of the Army Medical Staff, was elected a Fellow of the College under Section 5 of the Charter 15th Vict., applicable to Members of twenty years' standing.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1887. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on July 13th and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, June 23rd and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE, and on the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE, are now closed.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, and HABITS OF INTEMPERANCE, a full Report on OLD AGE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 429, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the London Hospital on Thursday, April 21st, at 8.30 P.M. The chair will be taken by C. Macnamara, Esq. A demonstration of interesting surgical cases will be given by W. Rivington, Esq., Surgeon to the Hospital. All visitors will be welcomed.—J. W. HUNT, M.D., Honorary Secretary, 101, Queen's Road, Dalston.

YORKSHIRE BRANCH.—The spring meeting will be held at the Queen Hotel, Harrogate, at 3 P.M. on Wednesday, April 27th, 1887. Members intending to read papers are respectfully requested to send in their names at once to ARTHUR JACKSON, Secretary, Sheffield.

SOUTH-WESTERN BRANCH.—Preliminary Notice.—The annual meeting of the Branch will be held at the Athenæum, Plymouth, on Wednesday, May 18th, 1887, under the presidency of Paul Swain, Esq. Members who propose to read papers, or to bring forward communications or motions, are requested to intimate the same to the Honorary Secretary without delay.—P. MAURY DEAS, Honorary Secretary.

NORTH OF ENGLAND BRANCH.—The spring meeting of the Branch will be held at Durham, in Bishop Cosin's Library, on Thursday, April 21st, at 2.30 P.M. Dr. Drummond will call attention to the question of increasing the number of meetings of the Branch, to alterations in the places of meeting, and to the business of the annual meeting. Dr. Murphy will exhibit a patient after Uranoplasty, with remarks on the operation. Papers will be read by Dr. Drummond on the Symptoms and Diagnosis of Floating Kidney; by Dr. Oliver, on Massage as a Therapeutic Agent; by Dr. Hume, on a case of Congenital Fistula of the Stomach, cured by operation; by Mr. Williamson, a note on the Effects of Tobacco Smoking on Vision. Members wishing to read papers or to bring forward cases and specimens are requested to communicate at once with the Secretary. After the meeting the members and their friends will dine together at the County Hotel, at 5.30 P.M.—G. E. WILLIAMSON, F.R.C.S., Honorary Secretary, 22, Eldon Square, Newcastle-on-Tyne.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.—An ordinary meeting will be held at 198, Union Street, Aberdeen, on Wednesday, April 20th, at 8 P.M., Dr. Urquhart, President, in the chair. Business: 1. Minutes, etc. 2. Case of Tumour of Pons Varolii, by Dr. Macgregor, Aberdeen. 3. Case of Extreme Astigmatism after Extraction of Traumatic Cataract, by Dr. Mackenzie Davidson. 4. Remarks on the question of Irrigation of the Anterior Chamber after Cataract-Extraction, by Dr. Mackenzie Davidson. 5. Exhibition of Specimens: (1) Excised Uterus, by Professor Ogston; (2) Excised Surgical Kidney, by Professor Ogston; (3) Case of Hemi-anæsthesia, by Dr. Mackenzie Booth. 6. Report of the Committee appointed to ascertain the feeling as to a Post-Graduate Course in Aberdeen, by the convener, Dr. Edmond.—ROBERT JOHN GARDEN and J. MACKENZIE BOOTH, Honorary Secretaries.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The spring meeting will be held at the Freemasons' Hall, Queen Street, Neath, on Thursday, April 28th. Members wishing to read papers or to make communications are requested to send to one of the secretaries before April 13th. Further particulars in circulars. ALFRED SHEEN, M.D., Cardiff, and D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of the above district will be held at the Hospital, Gravesend, on Friday, April 29th, at 4 P.M., C. J. W. Pinching, Esq., in the chair. The dinner will take place at The New Falcon Hotel at 6.30 P.M., charge 6s. 6d., exclusive of wine. Gentlemen who intend to dine are particularly requested to signify their intention to the Chairman, C. J. W. Pinching, Esq., 76, New Road, Gravesend, not later than April 27th. All members of the South-Eastern Branch are entitled to attend this meeting, and to introduce friends. Papers to be read:—1. Dr. Firth: On Pyæmia. 2. R. J. Bryden, Esq.: Two Complicated Cases in Midwifery Practice. 3. Dr. Goodhart: The behaviour of Fluid in the Pleura, and the Treatment of Empyema.—A. W. NANKIVELL, Honorary Secretary of District.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.—The next meeting this district will be held at the Deaconesses Institution and Training Hospital, Tottenham, on April 28th, at 8 P.M., when the President of the Branch, Dr. Bristowe, will deliver a clinical address. Dr. Ogier Ward will also read a paper on the Treatment of Diphtheria. A discussion may follow. All medical men are invited.—GEORGE HENTY, M.D., Honorary Secretary.

OXFORD AND DISTRICT BRANCH.—The next ordinary meeting will be held on Wednesday, April 27th, at 3 P.M., at the Radcliffe Infirmary. Members who wish to read a paper or show cases are requested to notify their intention to one of the honorary secretaries on or before April 19th. Members wishing to dine after the meeting (6.30) must send in their names on or before Tuesday, April 26th.—Dr. DARBISHIRE, 60, High Street, Oxford; W. L. MORGAN, Esq., 42, Broad Street, Oxford.

LANCASHIRE AND CHESHIRE BRANCH: INTERMEDIATE MEETING.

AN intermediate meeting of this Branch was held at Birkenhead on Wednesday, March 30th, at 2 P.M., in the new Town Hall, which had kindly been placed at the disposal of the members by the Mayor and Corporation. Dr. HARKER, President of the Branch, having taken the chair, the circular from the Sub-committee appointed to ascertain the feeling of the Branches as to the desirability of paying the railway fares of representative members on the Council of the Association to their quarterly meetings in London was read, and the resolution of the Council of the Branch was submitted to the meeting for confirmation or otherwise. After some discussion, it was proposed by Dr. GLASCOTT, seconded by Dr. ROYLE, and carried unanimously: "That it is desirable that the first-class return railway fares of the representative members on the Council of the Association be defrayed by the British Medical Association, and that the expenses of the Honorary Secretary of the Branch be paid by the Branch as heretofore."

Medical and Surgical Communications. — Dr. WALTER showed a large Fibro-myoma of the Vagina.

Dr. WALLACE read a note on Extra-Uterine Pregnancy with reference to Intra-Peritoneal Hæmatocele and Abdominal Section (with specimens).

Mr. EDGAR BROWNE read brief notes on some points in Diseases of the Eye occurring in Children.

Dr. ASHBY read a communication on Intubation of the Larynx in Croup by means of O'Dwyer's Tubes, and showed the tubes and accessories.

Mr. THOMAS JONES related a case of Acute Traumatic Suppurative Osteomyelitis of the Humerus successfully treated by early trepanation.

Remuneration of Medical Witnesses at Assize and County Sessions Courts.—Mr. WM. BERRY (Wigan) read a paper upon the inadequate remuneration of medical witnesses at sessions and assizes. After stating that the Home Secretary had the power of altering or revising the fees paid to witnesses, he called attention to the fact that the present scale—namely, a guinea a day for medical witnesses—was fixed in 1858, nearly thirty years ago, when the value of a guinea was very different from what it was at present; the cost of living and the general expenses attending medical practice had very much increased, and he was of opinion that the value of the medical testimony given at these Courts was also much increased. He called attention to the fact that, as the railway communication had improved, there were much greater facilities for saving the time of professional men attending as witnesses, yet the Crown had shown no desire to help them, as every medical man knew who had been obliged to attend these Courts, the professional witness being compelled to attend for a number of days, waiting for the particular case in which he was engaged to come on for trial. He spoke of his experience of the hardships entailed upon general practitioners living in towns within a radius of twenty or thirty miles of the assize towns Liverpool, Manchester,

and Lancaster. In many of these towns the railway facilities were so great that it was quite possible for a witness to be in the court within an hour after receiving an intimation that his case was about to be called; and yet these witnesses were compelled to wait about the Court from morning till night, as in the old days, when it would probably have taken a day or more to make the journey. It was even worse than that, for they were not allowed their railway expenses each day, but were supposed to remain in the Assize town until their cases were disposed of, being allowed two shillings each night for a bed; and if they returned to their own homes it must be at their own expense, even in cases where Sunday intervened in very rare instances were they allowed the return railway-fare. He mentioned the case of Wigan, where at least one or two of the general practitioners were obliged to attend at each Assize or Sessions throughout the year, losing on the average six days by each attendance. The Wigan Medical Society felt it such a grievance that one of their members refused to be bound over, in order to call public attention to the matter. They held a meeting, and appointed a sub-committee to obtain counsel's opinion and drew up a petition for presentation to the Grand Jury. The Grand Jury admitted the hardship, sympathised with the Wigan Medical Society, and sent in the petition to Mr. Justice Hawkins, who stated in Court that he could not possibly interfere, that all the arrangements with regard to witnesses, etc., were made before he opened the Assizes, and that he had no power in the matter. The petition was laid before the Grand Jury by the gentleman who refused to be bound over, but who afterwards attended on subpœna; and after he was kept for five days' waiting about the Court, his evidence was not required. The Honorary Secretary of the Wigan Medical Society sent out twenty-two circulars to medical men living in the district, asking them to state the number of days they attended as witnesses during the last two years. To these circulars he received fourteen replies, and on putting them together he found that fourteen medical men in the neighbourhood of Wigan had spent ninety-eight days in attending at Assize and County Sessions during the years 1886-87. Mr. Berry concluded by moving the following resolution, which was supported by members from Southport, West Derby, Stockport, Birkenhead, and Wigan:—

"That a memorial from the Branch be presented to the Council of the Association, requesting them to petition the Home Secretary to revise the fees payable to professional witnesses in criminal cases at the County Sessions and Assizes, the present scale of fees being inadequate." This was seconded by Dr. O'REILLY, and carried unanimously.

Luncheon.—The members present at the meeting were entertained at a luncheon in the Town Hall by the members of the Association and Branch resident in Birkenhead and district.

Excursions.—The day being very fine, a large number of the members availed themselves of one or other of the following excursions which had been arranged by the Birkenhead Reception Committee:—Through the courtesy of the firm, arrangements had been made for a visit to Messrs. Laird Brothers' shipbuilding yards. By the kindness of John Hartnup, Esq., astronomer to the Mersey Dock and Harbour Board, members were conducted over the Bidston Observatory. By the kind permission of the Mayor and Corporation of Birkenhead, the new Town Hall was thrown open to the inspection of members. The medical staff of the Borough and of the Wirral Children's Hospitals invited members to visit the institutions. Dr. Braidwood demonstrated at 4 P.M. his methods of treating reducible hernia in children without spring trusses at the Children's Hospital.

Dinner.—At 5 P.M. fifty-nine members and guests, including the Mayor of Birkenhead and other members of the Corporation, dined together at the Woodside Hotel, under the presidency of Dr. Harker, President of the Branch.

STAFFORDSHIRE BRANCH: GENERAL MEETING.

THE second general meeting of this session was held at the Railway Hotel, Stafford, on Thursday, February 24th, 1887. Present: Dr. W. G. LOWE, President, in the chair, and eighteen members.

New Members.—The following gentlemen were elected members of the Branch: Mr. Arthur Hands, Clyde House, Heath Town; Dr. Charles Reid, the Infirmary, Stafford.

Communications.—Mr. VINCENT JACKSON read letters from the Metropolitan Counties Branch; from the Council of the British Medical Association; from the Association of General Practitioners.

MIDLAND BRANCH.

A SPECIAL general meeting was held at the Hospital, Grantham, on Thursday, March 31st; Dr. NEWMAN, President, in the chair. There were also present twenty-one members.

Travelling Expenses of Representatives on Council.—Mr. SYMPSON opened the discussion on this question; and on the proposal of Mr. WILKINSON, seconded by Mr. COLLINGWOOD, the following resolution was carried, with two dissentients: "That, in the opinion of this meeting, the travelling expenses of the representatives of the various Branches of the Association, for their attendance at the four quarterly meetings of the Council, should not be paid, and that the present state of things should continue."

New Members.—The following members of the Association were elected members of the Branch: Richard Charles E. Boulton, M.B., Bardney; Albert Edward Hindle, Esq., Leicester; Frederick William Bennett, M.D., Leicester; Charles Geo. Wallis, Esq., Derby; Maitland Thompson, Esq., Metheringham; Frank Newcombe, Esq., Ancaster; John Charles Jackson, Esq., Bourne; R. Wilson, Esq., Grantham; Reginald Pratt, M.D., Leicester; H. P. Bailey, Esq., Grantham.

Papers.

1. Dr. GOODHART: Cases of Angina Pectoris.
2. Dr. HANDFORD: Some of the Complications and Sequelæ of Enteric Fever.
3. W. J. CANT, Esq.: Conical Cornea and a New Method of Treating it.

Luncheon.—Before the meeting, the members were entertained at luncheon by Mr. Shipman, of Grantham.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Nutrition of the Eye.—Physiological Action and Therapeutic Uses of Methylal.—Bullet-Wounds made by the New Rifles lately introduced.

M. PANAS has undertaken a series of experiments with the object of clearing up some obscure points relative to the nutrition of the eye. By injecting fluorescine into the veins of a rabbit and under the skin of a frog, he observed that the aqueous humour was secreted behind the iris, and not in the anterior chamber, and that the secretion was entirely produced in the layer of cells which line the ciliary process and the posterior surface of the iris. Injection of fluorescine into the vitreous shows that the exosmotic current of the vitreous humour flows towards the anterior chamber, and not towards the optic nerve, as has been supposed. M. Panas has also further investigated the effect of naphthaline when injected into the crystalline lens. It seems to affect the deeper portions of the eye before inducing the formation of cataract. Numerous crystals are first seen floating in the vitreous, and afterwards patches appear on the retina; in the centre of these patches slight depressions are formed. Later on a striated cataract is formed, the stripes of which proceed from the equator to the poles of the crystalline lens. When mature, this cataract is soft, large, and of a rusty colour. The author concludes that the nutrition of the crystalline lens depends especially on the retina, but also on the vitreous.

For some time past therapeutists have sought for a new hypnotic among acetals. Methylal, which belongs to that group, was first classed by M. Malaguti in 1839. It is highly volatile, boils at 42° C. (107.6° F.), has a density of about 0.85, and is soluble in water, alcohol, and oil. M. Personali's experiments proved that methylal rapidly induced sleep in frogs, after a dose equal to 50 per cent. of their own weight; in rabbits, after a dose of 25 per cent. of their weight; in birds, after a dose of 20 per cent.; and in dogs after a dose of 10 to 16 per cent. A dose of a gramme and a half caused death in a pigeon. Methylal is rapidly eliminated. It modifies the action of the heart, and increases the number of its beats during hypnosis. It lessens arterial pressure, and at the same time lowers the temperature; it reduces the activity of exchange in the tissues, while it modifies the circulation and respiration. If methylal be administered to a warm-blooded animal at the beginning of strychnine-poisoning, the tetanic convulsions are checked, and the poison being eliminated the animal may recover. In the case of cold-blooded animals, in which the process of elimination takes a considerable time, the toxic phenomena are suspended while the action of the methylal lasts, and reappear when it has ceased. Methylal may be administered without difficulty either hypodermically or by the mouth. M. Nicot proposed to administer it externally, prepared with oil of sweet almonds, in the form of a liniment composed of 85 grammes of the excipient to 15 grammes of methylal; or with alcohol at 80, in the proportion of 10 grammes of methylal to 110 grammes of alcohol and 5 grammes of essence of lavender. An ointment might be made with methylal, containing 33 grammes of fatty material and 5 grammes of

the medicament; and an application for toothache might be made with 2 grammes of methylal in a suitable excipient. A draught might be made of 1 gramme of methylal mixed with 150 grammes of water and currant syrup; a syrup with 1½ grammes of methylal to 100 grammes of golden syrup; and an injection with 1 gramme of methylal in 125 grammes of gum-water.

At a recent meeting of the Surgical Society, M. Chauvel communicated the results of his investigations relative to the effects caused by the bullets of the rifles which have recently been introduced. These bullets are made of lead inside, and are enclosed in steel. They are 8 millimètres in diameter, 34 millimètres long, and weigh 16 grammes. They are cylindrical, conical at one end, and end in a steel point 2 millimètres long. Their initial velocity is 550 mètres a second. When fired with a full charge at short range the internal wounds made by these bullets are mortal, whilst the flesh wounds are generally insignificant. In wounds of bone the spongy portions are traversed by a narrow, sharply-defined incision; in the compact tissue of the shaft the injuries are frightful. In the medullary canal considerable damage may be done. In wounds of bone, even when these are severe, the damaged limb may be saved if suppuration be checked by antiseptic dressings. At the same meeting, M. Reclus communicated the results of experiments which he had made on dead bodies with revolver bullets. With a bullet of 7 millimètres aimed at the cæcum, an anterior and posterior perforation of 7 millimètres was made. When the intestine is traversed perpendicularly to its axis, the apertures of entry and exit are generally of the same diameter as the bullet.

GLASGOW.

[FROM OUR OWN CORRESPONDENT.]

Glasgow University.—Medical Societies.—The Abuse of Medical Charities.—The Botanic Gardens.

THE preliminary examinations for medical students, held last week at the University, were attended by a number of candidates in excess of any that ever before presented themselves. Two halls in addition to the large examination-hall, that can be made to hold 160, had to be made use of. If this means any considerable addition to the number of medical students enrolled next session, the pressure for class-room and laboratory accommodation will become painful, and the Senate will be forced to face the question of adding to the existing buildings. The University has plenty of ground surrounding it, and the erection of a large new building for a Students' Union might suggest the desirability of making some addition to the laboratory accommodation in this shape. In May operations will begin for the completion of the tower, for which purpose the University lately received £5,000.

At the recent meetings of the medical societies there has been little of special interest. The Pathological and Clinical Society had two meetings in March, in which nervous diseases were the chief subjects of consideration. Dr. Gairdner and Dr. Coats showed two cases of brain-disease connected with ear-disease, in one of which there was an abscess. Dr. Barr showed the brain and temporal bone of a case of large cerebral abscess, which had been diagnosed as such, in which an operation had been advised but had not been performed. Dr. Barr was able to show at the meeting on March 28th a boy on whom Dr. W. Macewen had performed such an operation for abscess in the temporo-sphenoidal lobe from ear-disease, and who had completely recovered. Dr. McCall Anderson showed a case of bulbar paralysis, and one of hereditary spasm of the diaphragm, and Dr. Dunlop contributed a case of spinal disease. Mr. A. E. Maylard exhibited microscopic specimens of rodent ulcer, and Dr. J. C. Renton showed two cases of evisceration of the eyeball. A paper was read by Dr. Newman before the Medico-Chirurgical Society, on March 18th, on the Diagnostic Significance of the Immobility of one Vocal Cord, with special reference to the Early Detection of Aortic Aneurysm, with illustrative cases.

On March 30th a meeting was called, under the auspices of the Southern Medical Society, to discuss the steps to be taken with regard to the abuse of medical charities. The meeting which was held in the Faculty Hall, under the presidency of Dr. Morton, was the largest meeting of the profession in Glasgow that has been held for some time. Letters of apology for unavoidable absence were read from Professors Gairdner and McCall Anderson, who had both undertaken to speak in favour of resolutions. A more unanimous meeting of the profession has seldom if ever been seen in Glasgow. It was agreed that gratuitous out-door medical relief was so indiscriminate as to be prejudicial to the moral independence of the recipients, the real objects of the institutions, and the best interests of the profession. Vigorous speeches in support of this resolution were made by Dr. Pirie, Dr. Alex. Patterson, and Professor Macleod. The meeting was equally unanimous with respect to a second resolution, on which Drs. Glaister, Gilmour, and McGregor Robertson spoke, to the effect that the time had arrived when such relief should be administered on a definite plan, so that only the really deserving poor should be aided. On the motion of Professor Buchanan, seconded by Dr. Knox, and supported by Dr. Richmond, a large committee was appointed to give effect to the resolution.

Preparations are being made to bring the Glasgow Botanic Gardens to the hammer. The proprietors owe the Corporation of the city something like £50,000, which they cannot pay. The recent rejection by a Committee of the House of Lords of a Bill to annex Hillhead, in which the Gardens are situated, to Glasgow—a rejection due to the opposition of Hillhead—has determined the Corporation no longer to aid in maintaining a garden for people outside its bounds. If the collection is dispersed, the loss to Glasgow will be irreparable, and the University will lose a valuable part of its means of botanical instruction; but the Corporation seems bent on treating the question entirely as a financial one.

NEWCASTLE-UPON-TYNE.

[FROM OUR OWN CORRESPONDENT.]

Newcastle-on-Tyne Eye Infirmary. — Washington Hall. — Annual Report of the Medical Officer of Health.—Sunderland Infirmary.

THE annual meeting of the Newcastle-on-Tyne Eye Infirmary was held last week, and Mr. Jeaffreson, the senior surgeon, read the Committee's report, the first issued since the opening of the new hospital in June, 1885. Since that date, close upon 8,000 free patients have availed themselves of the benefits of the charity, 200 having been treated as in-patients. No fewer than eighty-three operations for cataract—mostly successful—have been performed. The average daily cost of each in-patient amounted to a little over 2s. 4d. Of the working expenses of the institution, rather less than one-third of the total amount has been contributed by those making use of the charity.

The Schools and Charities Committees of the Newcastle Corporation have finally decided to accept the gift of Sir I. Lowthian Bell (Washington Hall), and to utilise it as a convalescent home, each patient making use of it to pay a small sum—six or seven shillings per week—towards his maintenance while resident there, the remainder of the expenses to be paid out of the surplus funds of the Magdalene Hospital Charity. The scheme under which this charity is managed sanctions the application of the surplus income to charitable and medical purposes, and some time ago the Council established a Home for Incurables, with accommodation for twenty-one patients; this number will shortly be increased to thirty. The surplus funds of the charity are increasing yearly, owing to the increasing value of its property; it would be well if some of it could be applied to reduce the debts of the Infirmary, and this would be carrying out the original bequest.

Mr. H. E. Armstrong, Medical Officer of Health for Newcastle, recently presented his annual report to the Corporation, which has been printed in pamphlet form, and presented to the medical practitioners of the city. The statistics show considerable improvement; the birth-rate has increased; the general and infantile death-rates are lower; the mortality from the chief zymotic diseases is considerably less than in 1885; chest diseases have been less fatal; and fewer cases of infectious disease have been notified than in the preceding year. The report enters into an elaborate explanation as to the supposed origin of the various infectious diseases. In many of the cases no means of isolation or of preventing infection were carried out. In no case could the typhoid be traced to milk infection; the prevalence of this disease in one district led to a special investigation, which reported that it was probably due to the open privy system. The report suggests that measles—which previously has not been classed amongst the diseases notified by medical practitioners—should for the future be included among the infectious diseases under the compulsory registration clause. Seeing the extreme prevalence of measles in the district, it is only strange that this suggestion has not been made long ago.

A Workmen's Industrial Exhibition, in aid of the funds of the Sunderland Infirmary, and as a Jubilee recognition, was opened by the Earl of Durham a few days ago at Sunderland. The exhibition has been planned and carried out by the working men governors of the institution. The ceremony of opening was a great success, and it is to be hoped the institution will receive a considerable sum from the undertaking.

MR. F. W. WILLMORE, who is in practice at Walsall, is about to publish a history of that ancient borough.

CORRESPONDENCE.

THE DUTY OF THE GENERAL MEDICAL COUNCIL TOWARDS THE APOTHECARIES' SOCIETIES.

SIR,—The discussion as to the duty which will devolve on the General Medical Council, in reference to the appointment of additional examiners at the Apothecaries' Society in London and the Apothecaries' Hall in Dublin, seems to me to be needlessly prolonged. It is perfectly absurd to question the existence of these two bodies as medical authorities entitled to grant licences; that point has been settled over and over again by different Acts of Parliament, and has also been accepted by the General Medical Council.

The law requires that candidates who obtain the licence of one of these bodies should be examined in medicine, surgery, and midwifery; the law also provides the means by which these bodies can fulfil the duties thus assigned to them by the Legislature. The simplest means for accomplishing this object would no doubt have been the combination of the three corporations in England and Ireland respectively; but, as the Colleges of Physicians and Surgeons in these countries have declined to co-operate with the Apothecaries' Societies, it therefore becomes the imperative duty of the General Medical Council to take care that the examinations conducted by those two bodies are made complete by the appointment of the necessary examiners.

Nothing could be more absurd than for the General Medical Council, on the one hand, to require a complete examination in medicine, surgery, and midwifery, and, on the other hand, to refuse to discharge a duty which it is called upon by law to perform, namely, to appoint the necessary examiners. The Medical Council has not to consider whether it is desirable to maintain the Societies of Apothecaries or not; any attempt to destroy them would be futile. In an appeal to the Privy Council the means are provided by law for preventing the action of trades-unionism which such a proceeding on the part of the corporate bodies represented in the Medical Council would clearly indicate.—I am, etc.,

London. A REGISTERED MEDICAL PRACTITIONER.

THE IRISH CONJOINT EXAMINATION SCHEME AND THE APOTHECARIES' HALL, DUBLIN.

SIR,—The words "a specimen of special pleading" (I will not add "clever") to my mind apply much more forcibly to the letter signed "M.D.," and dated "Dublin, March 28th, 1887," which appeared in the JOURNAL of April 2nd, than to the "statement" of the King and Queen's College of Physicians, which "M.D." attempts to impugn. Because the College calls for an authoritative judicial decision before the Apothecaries' Hall, Dublin, can be admitted to a conjoint examination scheme under the Medical Act of 1886, we are told by "M.D." that "the College has but little faith in its own interpretation of the legal functions of the Hall," according to which that body can grant a certificate in pharmacy only, and is not qualified to grant "a diploma in respect of medicine."

"M.D.'s" letter abounds with bad logic. The foregoing is one sample; another, is the statement that "every member of the General Council (? Court) of the Hall and all the examiners, with the exception of the examiner in clinical medicine, are Licentiate Apothecaries, and, therefore, well educated medical practitioners." This allegation is more complimentary to the Court of the Hall than to the examiner in clinical medicine. But why is it that so few of these "well-educated medical practitioners" are content with the mystic letters "L.A.H." after their names? The directors are fifteen in number. The Governor and Deputy-Governor are Doctors of Medicine of St. Andrews; of the remaining thirteen, one holds the "M.D." of Aberdeen, two are members of the Royal College of Surgeons of England, one is a Bachelor of Medicine of the University of Dublin, one is a Licentiate of the Royal College of Surgeons in Ireland, no less than six hold the "M.D." of Glasgow, and only two are "L.A.H." alone. Eleven of the fifteen directors, then, hold Scotch or English qualifications, those given by the Universities north of the Tweed being special favourites.

"M.D." is in error in stating that the first half of the examination for the "licence" of the Hall is now accepted by the College of Physicians. In the Regulations of the College, the examinations of the Hall, whether previous or final, are not recognised. It is true that they were formerly recognised, but this was through an oversight in the wording of one of the regulations. Equally erroneous is the extraordinary statement that apothecaries were "informed that they might become Licentiates of the College, and continue to keep open shop for the sale of medicines." Every Licentiate of the College, before admission, is required to take a solemn declaration, in which this clause occurs: "I hereby authorise the President and Fellows of the King and Queen's College of Physicians in Ireland to erase my name from the list of Licentiates, and I consent to surrender the diploma received from the College, if I shall, after having obtained the licence of said College, keep open shop for the sale of medicines."

I make "M.D." a present of the single examiner who "is a writer on medical subjects," but question that he was ever a clinical hospital physician.

Another reckless assertion by "M.D." is that "the number of Hall Licentiates resident in Ireland is about three times larger than that set down in the "statement"—namely, 387. According to "M.D.," the number of practitioners in Ireland holding the L.A.H. would be 1,161 out of 1,819 with Irish qualifications. Well, "M.D." is bound to prove his assertion, if he can. He says "the fact that the Hall asked only for one examiner in surgery to be nominated by the Medical Council is no proof that the Hall did not intend themselves to select and elect other new examiners." In saying this he shows that he does not understand the Medical Act, which distinctly provides that the General Medical Council shall supply assessor examiners in the branches in which any corporation is not qualified to examine and license.

"M.D." lays great stress on the ridiculous opinion of Sir Joseph Napier, that the appeal to the King and Queen's College of Physicians from the adverse decision of the Court of Examiners of the Apothecaries' Hall, Dublin, clearly implied that the science of medicine should be a main subject of the examination of such a candidate for a certificate. That it implied nothing of the kind is evident from the wording of the certificate granted by the College to successful appellants from the Hall, namely:

"Notum sit.....A. B.....postquam Examinatione coram nobis institutâ Materiæ Medicæ, Chemiæ, et Pharmaciæ se in his doctum versatumque probasset Licentiam Artis Pharmaceuticæ exercendæ plenam ac perfectam permisisse," etc. And these, be it noted, are almost the identical words of the certificate originally given by the Hall, for example: "September 21st, 1838.—We have this day duly and carefully examined Mr. W. A——, of V———, in the county of C——, in Chemistry, Pharmacy, Materia Medica, and Medical Botany, etc., and we think him properly qualified to commence the profession of an apothecary, and we hereby certify the same."

It was not until 1863 that the wording of the certificate was changed to "in the Principles and Practice of Medicine and in Pharmacy."

Sir Joseph Napier's argument runs thus: There is an appeal from the Apothecaries to the Physicians; the Physicians examine in Medicine candidates for their own licence; the Physicians also examine appellants from the Apothecaries' Hall; therefore, it is proved that these appellants are licensed in and can practise medicine.

I could cap this syllogistic argument by another: The Physicians have the right by law to inspect apothecaries' shops; this implies a knowledge of drugs. Apothecaries have a knowledge of drugs; therefore, Physicians are Apothecaries. Q.E.D.

"M.D." stigmatises the arguments in the "statement" of the College of Physicians as to the status of the Irish Apothecary under certain Irish and Imperial Acts of Parliament as "simply absurd." He quotes two Acts, the 3rd Geo. III, cap. 28, and the 17th and 18th Geo. III, cap. 18. Suffice it to say that the Apothecaries' Hall, Dublin, was instituted in 1791 by the Act 31 Geo. III, cap. 34. What, then, in the name of wonder, have the Acts quoted by "M.D." to say to the question at issue, the status of the Licentiates of the Hall? "M.D." lays great stress on the action of the College of Physicians in reference to the abortive conjoint scheme of 1872-74. It should be a sufficient answer that the said scheme proved abortive. But the circumstances were as different from those now existing as is night from day. That scheme was a voluntary one; the present scheme is compulsory. That was intended to include the Irish Universities and Corporations without exception; now the overtures of the Apothecaries' Hall have been rejected by the University of Dublin, the Royal University of Ireland, and the King and Queen's College of Physicians in turn. Since 1874 a very formidable indictment has been brought home to the Apothecaries' Hall. In 1879 witnesses examined before the Select Committee of the House of Commons on Medical Reform condemned the Hall; in 1881, deadly blows were showered upon it at the meetings of the Medical Acts Commission; in 1883, it was disowned in the House of Lords; in 1884, it failed to find a second spokesman at a large and influential meeting in London of delegates of medical licensing bodies in England, Scotland, and

Ireland. The Irish Medical Association and the Dublin Branch of the British Medical Association have, since 1874, pronounced against the Hall in unsparing terms.

The "Apothecaries' Hall of the City of Dublin" has rushed headlong on its fate, and deserves no pity. Over and over again it has driven a coach and four through the Act of Parliament which was its charter of incorporation. The very name by which it is designated in the Medical Acts of 1858 and 1886, "The Apothecaries' Hall of Ireland," is an assumption of a title for which there is no other legal warrant. It has changed the terms of its certificate in the face of Section 18 of the Apothecaries' Act; it has charged a fee of two guineas for each of its two examinations, although Section 24 of that Act provides that "every such person for every such certificate to open shop shall pay a sum of ten shillings, and no more;" and it has co-opted an extern examiner in clinical medicine, in violation of Section 18 of the same Act, which specifies "the governor, or deputy-governor, and directors" as the sole examiners for the certificate. There is no end to its pretensions or limit to its ambition. Last November, it claimed to license in medicine only, for an examiner in surgery and an examiner in midwifery were asked of the General Medical Council to enable the Hall to hold a qualifying examination under the Medical Act of 1886. Between November, 1886, and February, 1887, it assumed the right to examine and license in midwifery, for in the last-named month an examiner in surgery only was asked for. Perhaps, before the Medical Council meet again, the Apothecaries' Hall, Dublin, will have discovered that it possesses the inherent right to examine and license in surgery also, and will inform the Council that it has commenced to hold qualifying examinations in medicine, surgery, and midwifery. In this way, the Hall will attain its apotheosis, terminating its extraordinary career in a blaze of glory, relieving the General Medical Council of the trouble of debating whether or not it was worthy to receive assessor examiners, and demonstrating once for all the fallacy of the wise saying of old—

NE SUTOR ULTRA CREPIDAM.

Dublin, April 5th, 1887.

REMUNERATION OF MEDICAL WITNESSES.

SIR,—Now that this matter is being brought before the Council by the resolution passed at the Birkenhead meeting of the Lancashire and Cheshire Branch, would you kindly allow me, through your columns, to ask the profession: (1) Is a guinea a day sufficient remuneration for a professional witness? (2) Is it just or fair, either to the public who have to bear the expense, or to the medical witness to compel him to remain waiting about the court for a number of days in cases where he could easily be in attendance if he received an intimation on the morning of the trial?

In a recent case I was kept for five entire days waiting about the Liverpool Assize Courts, and in the end my evidence was not required; of course I received five guineas for my loss of time, but this I do not consider as more than sufficient compensation for the loss entailed by the neglect of my practice for one day. Gentlemen who are not in general practice will say, "Oh, but this does not often occur." Let me say that of the entire general practitioners throughout England, you will find that at least 10 or 15 per cent. of them are summoned as witnesses and kept away from their work for a number of days every year, while of the remainder of the population, scarcely one in every 10,000 is obliged to attend as witness or juryman in the course of twelve months. Of course the hardship is much greater in places where there is a large working-class population; during the past month, the Honorary Secretary of the Wigan Medical Society sent out twenty-two circulars to members living in the district, asking them to give the number of days they were obliged to attend Assize and County Sessions Courts during the past two years. He received replies from fourteen gentlemen, who had spent altogether ninety-eight days in attending these courts during the years 1886-7.

I think it is a matter well worthy of our attention, and I would call upon the other Branches throughout the country to assist the Lancashire and Cheshire Branch in pressing it upon the Council of the Association.—Yours, etc.,

CHAS. M. BRADY.

Wigan.

MORTALITY AFTER PRIMARY LAPAROTOMY IN EXTRA-UTERINE PREGNANCY.

SIR,—Mr. Lawson Tait has replied to my letter published in this JOURNAL for February 19th, 1887, but has not answered the inquiry.

If Mr. Tait has performed in a period of 21 months one-fifth of the operations of this class in the world, and saved all of the six women under his care, he ought to be willing to instruct others in this method. If 23 operators, including such men as the late Professors Schroeder and Spiegelberg, with Professors August Martin, Litzmann, and Stadfeldt, lost 22 out of 24 women, with 12 children; and Mr. Tait has saved in succession three times as many as they all, then he has in his possession a secret that he has no more right to keep from his professional brethren than Peter Chamberlen had to hide his forceps.—Yours, etc.,

ROBERT P. HARRIS.

March 29th, 1887.

PAYMENT OF TRAVELLING EXPENSES OF BRANCH REPRESENTATIVES ON THE COUNCIL OF THE ASSOCIATION.

SIR,—I beg to be allowed to point out a curious fallacy, which might mislead the unwary, in the circular recently issued to the Branches of the Association on the subject of "Payment of travelling expenses of Branch representatives to the four quarterly meetings of the Council of the Association in London." On this question we are told "A subcommittee has been appointed to ascertain the wishes of the Branches." We are further told that "several proposals have been made" on the subject, the first of which is thus stated:

(*a*) "That the entire cost should be borne by the Parent Association.—N.B. Calculated by the Manager to cost about £600 a year if each of the seventy-two members attended the four quarterly meetings."

Now it is quite likely that this estimate of "cost to the Association" might unfavourably influence the opinion and verdict of some of the Branches. It is, therefore, right that they should be reminded that this calculation is fallacious and exaggerated, inasmuch as it includes the vice-presidents as well as the representatives of the Branches. The Council consists of "seventy-two members," but of these twenty-five, or more than one-third of the whole, are vice-presidents, who do not come within the terms of the inquiry, which is limited, as shown by the wording of the circular, to "the Branch representatives." So far as I know, it has never been proposed or suggested that the vice-presidents should be franked as to their travelling expenses; and, therefore, I ask with surprise why their names appear in the Manager's table of "estimated cost."

Now here is a calculation far more to the purpose, and I pledge myself to its absolute accuracy.

For the Session 1884-5.

Attendances of Branch representatives	...116
Cost (first-class return)	£208 3s. 2d.

Session 1885-6.

Attendances	...119
Cost	£192 19s. 0d.

But of course the main object of the proposed change is to secure a more regular attendance of the Branch representatives, especially of the more distant Branches, who now rarely, if ever, attend, and in that case the cost would be considerably increased. Here, then, is an accurate estimate of the utmost possible cost, supposing that every Branch representative attended every meeting: For the Session 1884-5 it would have been £497 10s., and for the Session 1885-6, £504 10s. This calculation includes the Branches (four or five) which, by reason probably of distance and the impracticable expense, do not go through the form of nominating a representative who would never attend. N.B.—The "Manager's" table takes no notice of these Branches.—I am, etc.,

J. DIX.

P.S.—I observe in the JOURNAL of March 19th that the West Somerset Branch at their spring meeting passed this resolution: "That the Branch is content with the existing plan of representatives paying their own travelling expenses, and have no wish to make any rule on the subject." Well, Sir, I find that the representative of this Branch attended but one meeting in the two sessions which I have tabulated, and for the present session two meetings have been held, namely, in October and January, but the representative of West Somerset has not put in an appearance at either of them. And West Somerset "is content with the existing plan."

Hull, March 29th, 1887.

*** This question is under the consideration of a committee, to whom all communications on the subject should be addressed.

PRESENTATION.—Mr. Thomas J. Compton has been presented with a barometer in a massive carved rosewood case, and a marble clock with side ornaments. The clock, which strikes the hours and half-hours on a gong, bears the following inscription: "Presented, by the officers, attendants, and artisans of the Norfolk County Hospital, to T. J. Compton, Esq., M.B., C.M., as a token of regard on the occasion of his resigning the office of senior assistant medical officer of that institution, March 31st, 1887."

NAVAL AND MILITARY MEDICAL SERVICES.

RELATIVE RANK.

THE following important letter has been addressed by Sir Ralph Thompson, Permanent Under-Secretary, to Dr. Alfred Carpenter, who is acting as Chairman of the Parliamentary Bills Committee of the British Medical Association during the absence from England of Mr. Ernest Hart:—

SIR,—With reference to your interview with the Secretary of State on March 22nd on the subject of the abolition of relative rank in the case of officers of the Army Medical Department, I am directed to inform you that Article 125*a* of the Army Warrant of December 31st last will be altered, as shown in the enclosure.

Mr. Secretary Stanhope has been anxious in every reasonable way to meet the views of the very influential deputation which waited upon him, and he trusts that the alteration now made, after consultation with the Director-General of the Army Medical Department, will remove any misconception in the matter above referred to.—I am, etc., 7 Pall Mall, London, April 12th, 1887. RALPH THOMPSON.

PROPOSED ALTERATION OF ARTICLES IN THE WARRANT AS TO RANK.

Departmental Officers.

125*a*. Officers of Departments of Our Army not having Honorary rank, shall rank as follows for purposes of precedence and other advantages attaching to corresponding military rank; but this shall not, except as provided in Articles 265, 348, and 307*a*, entitle them to military command of any kind, to the Presidency of Courts-Martial, Courts of Inquiry, Committees, or Boards of Survey, or to precedence in their own Departments over officers holding a superior Departmental rank.

AS MAJOR-GENERAL:
- Chaplain-General.
- Director-General, Army Medical Department.
- Surgeon-General.

AS COLONEL:
- Chaplain, 1st Class.
- Deputy Surgeon-General.
- Principal Veterinary Surgeon.

AS LIEUTENANT-COLONEL:
- Chaplain, 2nd Class.
- Brigade-Surgeons, ranking among themselves according to their commissions as such.
- Surgeon-Major, after 20 years' service, or under 20 years' service if allowed to rank as Lieutenant-Colonel under Article 420, for distinguished service in the field; junior to all Brigade-Surgeons.
- Inspecting Veterinary Surgeon acting as Principal Veterinary Surgeon in India.
- Inspecting Veterinary Surgeon, but junior of the rank, except for choice of quarters.

AS MAJOR:
- Chaplain, 3rd Class.
- Surgeon-Major, under 20 years' service, except as provided in Article 420.
- Veterinary Surgeon 1st Class, after 10 years' service as such, or under 10 years' service if allowed to rank as Major under Article 420 for distinguished service in the field, but junior of the rank, except for choice of quarters.
- *Veterinary Surgeons promoted to the 1st Class prior to 15th May, 1883, as laid down in Article 384a.*

AS CAPTAIN:
- Chaplain, 4th Class.
- Surgeon.
- *Apothecary.*
- *Captain of Orderlies.*
- *Clerk of Works, 1st Class.*
- Veterinary Surgeon, 1st Class, under 10 years' service as such, except as provided in Article 420.

AS LIEUTENANT:
- Surgeon on probation.
- Veterinary Surgeon.

VOLUNTEER MEDICAL STAFF CORPS: EASTER MARCH.

THE following particulars of the medical arrangements of the Dover marching column have been sent us by the Principal Medical Officer, Surgeon E. Harrold Fenn (Grenadier Guards).

The force, which was commanded by Colonel Stacey, Scots Guards, consisted of 242 officers and 3,639 rank and file. The medical arrangements were carried out by regimental surgeons and their stretcher-detachments, and three companies of the Volunteer Medical Staff Corps, under the command of Surgeon-Major Norton and the adjutant of the corps, Surgeon Lees-Hall, Medical Staff. On Friday the force marched by four routes, the senior medical officer of each column being responsible for the medical arrangements; the officers appointed being: No. 1 column, Surgeon Whitmore, 3rd London, R.V.; No. 2 column, Surgeon Jones, 14th Middlesex; No. 3 column, Surgeon Buck, 17th Middlesex; No. 4 column, Surgeon L. Ogilvie, London Scottish. Each of these officers received a field-companion, surgical haversack, and water-bottle, and had an ambulance and water-cart to follow his column. The detachment of the Volunteer Medical Staff Corps accompanied No 2 column. The movable field-hospital was under the command of Surgeon Lawless, 7th Surrey.

On arrival at Bridge, the field-hospital was pitched by a party of the Volunteer Medical Staff Corps in a field, close to good water, and sheltered from the enemies' fire by a high wall. Fighting had commenced, so the stretcher parties were marched out, under their company officers, and some useful practice carried out, after which they returned to their billets. Between 8 and 9 o'clock the same night Bridge was attacked by the enemy, and on the alarm sounding, the Volunteer Medical Staff Corps turned out very quickly, and fell in under their officers to join the fighting line, taking with them their stretchers and search-lanterns; with these they searched about in the coverts and ditches where the wounded would be likely to take shelter. They returned to their billets at about 10 o'clock. The following morning the whole force marched in three columns to Dover, and the same arrangements were carried out as on the previous day, the Volunteer Medical Staff Corps marching with the centre column. Only eight men of the whole force fell out during the day, which was a wonderful performance, considering that the right column marched twenty-three miles over very rough ground, and dragging guns with them; the ambulance and water-cart had to be left behind owing to the badness of the roads On Easter Monday the Volunteer Medical Staff Corps was attached to the attacking force, and carried out some useful practice in forming dressing stations and treating some imaginary wounded. Several real injuries were also treated by the regimental surgeons and handed over to the Volunteer Medical Staff Corps for carriage to the field-hospital.

At Dover the head-quarters of the corps were marked by a conspicuous white flag bearing a huge red cross. On Monday the corps marched past as two companies, under Surgeon-Major Carson and Surgeon Willett, and the military correspondent of the *Times*, by his report, was evidently much impressed with the appearance of the companies.

An interesting piece of real surgical work, invaluable to the medical officers of the volunteers, and the men of the Volunteer Medical Staff Corps, occurred during the field-day on Easter Monday at Dover. It appears that towards the end of the action three gunners of the 3rd Kent Artillery Force were injured by the premature discharge of a gun. There happened to be no surgeon with the battery, so that their comrades proceeded to render first aid whilst a surgeon was sent for. Mounted officers galloped off in two directions, one to the field-hospital and the other in the direction of the bearer-company. Acting-Surgeon Pearce, M.D.Lond., of the Artist Rifle Volunteers, on duty at the field-hospital at Maydensoule Farm, speedily provided himself with a surgical haversack, and rode across country at once to the scene of the accident. He found that Gunner Whitmoure was most seriously injured. He had been placed on a stretcher made of a hurdle; an improvised tourniquet had been efficiently applied above the elbow, and the shattered hand well bandaged; the wounded man was being carried towards a farm near the scene of accident. He was taken into the farmhouse and laid upon a couple of tables. At this moment Surgeon Raw, V.M.S.C., and Quartermaster Webb, N.M.D., with a detachment of the Volunteer Medical Staff Corps, all of them medical students from St. Bartholomew's, London, Guy's, and St. Mary's Hospitals, arrived in an ambulance-wagon completely equipped with surgical appliances and medical comforts. Surgeon Raw administered chloroform, and the shattered limb was examined by Surgeon Pearce. After reapplication of a tourniquet, setting the fracture, dressing the wounds, and attending to the injury of the eye and scorching of the head, the unfortunate man was placed in an ambulance-wagon and conveyed to Dover Castle Station Hospital, where

the limb was amputated below the elbow by Surgeon-Major Greenhill, S.M.O., Surgeon-Major Slaughter, and Surgeon Bigg, M.S., with the active assistance of Surgeon Raw and Acting-Surgeon Pearce. The other injured men, who were much scorched about the face, were conveyed to the field-hospital, and received attention from Surgeon Boulton, M.S.

The Eastbourne detachment, about fifty strong, under Surgeon Squire, accompanied the marching column to that town. On Tuesday morning, April 5th, a party of fourteen men of the Volunteer Medical Staff Corps, under Sergeant MacLeod, left London, and marched all the way to Eastbourne along with the regular troops who marched at that date. The company was accompanied by a mule litter, and had its own complement of signallers. At Eastbourne a station hospital was established. Throughout the march and the manœuvres the men had ample opportunity of learning what real work meant, and their smart appearance elicited hearty applause on more than one occasion from onlookers. The hospitality of the medical men on the line of march was such that every commissariat comfort was provided for the detachment.

The whole administration for the day reflects great credit upon the medical authorities, and the accidents which we regret to have to record found the medical aid of the volunteer department, of which we have heard so much lately, not wanting when the time of real emergency arrived.

ARMY MEDICAL SERVICE IN INDIA.

E. CLEMENT should apply to the Army Medical Department and to the India Office for the official regulations for examinations.

THE ANNUAL MEETING AT DUBLIN AND THE MEDICAL STAFF.

A.M.S. (Egypt) writes: Seeing in the JOURNAL that the medical officers in Dublin propose to entertain the British Medical Association, allow me to propose that the subscriptions to this should not be confined to medical officers serving in Ireland, but to the department generally, who owe so much to the efforts of the Association on their behalf.

*** The suggestion of our correspondent will doubtless be considered by the Committee, which, as mentioned elsewhere in the JOURNAL, has been formed to make the necessary arrangements for the conversazione to be given by the Medical Staff.

THE NAVY.

SURGEONS H. E. MARSH, H. G. T. STRICKLAND, M.B., ALFRED PATTERSON, MICHAEL RONAN, B.A., J. A. M'ADAM, JOHN DUDLEY, M.B., and D. B. BOOKEY have been promoted to be Staff-Surgeons, they having entered the service March 31st, 1875.

Deputy Inspector-General W. H. SLOGGETT has been granted the honorary rank of Inspector-General of Hospitals and Fleets, in recognition of his services as Inspector of Certified Hospitals.

The following appointments have been made at the Admiralty during the past week: ALFRED PATTERSON, Staff-Surgeon, to the *Mutine*; J. A. M'ADAM, Staff-Surgeon, to the *Penguin*, reappointed on promotion: W. G. JACK, Surgeon, to the *Forward* when commissioned, until then additional; T. C. CROWLEY, Surgeon, to Hong Kong Hospital; H. P. SHUTTLEWORTH, Surgeon, to the *Espoir*; CHARLES STRICKLAND, Surgeon, to the *Hearty*; T. M. SIBBALD, Surgeon, to the *Alexandra*; JOHN DOWSON, Surgeon, to the *Duke of Wellington*; WILLIAM THOMPSON, Surgeon, to the *Wye*.

THE MEDICAL STAFF.

BRIGADE-SURGEON W. A. GARDINER has been granted retired pay with the honorary rank of Deputy Surgeon-General. His commissions are dated: Assistant-Surgeon, September 22nd, 1858: Surgeon, March 1st, 1873; Surgeon-Major, April 1st, 1873; and Brigade-Surgeon, December 10th, 1884. He was present during the operations on the West Coast of Africa in 1863-64.

Surgeons, G. NELIS, S. BUTTERWORTH, J. H. CURTIS, R. G. HANLEY, M.B., H. D. ROWAN, M.B., R. E. GENGE, A. KENNEDY, W. R. D. CROOKE, M.D., and C. L. WALSH, who are serving in Bengal, have passed the examination in Hindustani by the lower standard.

Surgeon-Major D. C. W. HEATHER has received leave of absence in extension from February 15th till the date of his embarkation for service in India.

Surgeon-Major I. B. LYON, Bombay Establishment, Chemical Analyser to Government and Professor of Chemistry and Medical Jurisprudence, Grant Medical College, returned to duty from February 14th.

THE INDIAN MEDICAL SERVICE.

BRIGADE-SURGEON JAMES KEESS, M.D., Madras Establishment, whose retirement we recently announced, has been granted the honorary rank of Deputy Surgeon-General.

Surgeon-Major O. T. DUKE, Bengal Establishment, has retired from the service, which he entered October 1st, 1869, attaining to the rank of Surgeon-Major October 1st, 1881. During the war with the Afghans in 1879-80 he was Assistant Agent to the Governor-General of Beloochistan, and was present at the action of Syud Boot.

The services of Surgeons B. DOYLE and G. W. P. DENNYS, of the Bengal Establishment, have been placed at the disposal of the Punjab Government.

Surgeon M. P. KHAREGAT, Madras Establishment, has returned from Burmah, and will report himself to the Deputy Surgeon-General of Her Majesty's Forces in the Bangalore Division and Ceded Districts for general duty.

Surgeon-Major G. M. GOVAN, M.D., Bengal Establishment, is permitted to retire from the service, which he joined as Assistant-Surgeon December 26th, 1851, having been made Surgeon-Major December 20th, 1871. Dr. Govan served in the Burmese war in 1852-55, and was at the capture of Rangoon (medal with clasp). He was also with the Bhootan expedition in 1864-66, and was at the taking of the Bala stockades (clasp).

MEDICO-LEGAL AND MEDICO-ETHICAL.

LANGMORE DEFENCE FUND.

ON August 20th, 1884, Dr. J. Wreford Langmore, of Oxford Terrace, Hyde Park, London, was served with a magistrate's order, directing him to visit and report on the mental condition of an alleged lunatic. He obeyed the order, found on examination that the patient was undoubtedly insane, and certified to the fact. The patient was in due course brought before the late Mr. Flowers, one of the magistrates at the Marylebone Police Court, who, after a further personal examination, signed an order for her removal to the public asylum at Banstead, where she was detained until October 17th, 1884.

In September of the following year the plaintiff commenced an action against Dr. Langmore and Mr. R. S. Armstrong, of St. Peter's Park, who had previously given information of the case to the relieving officer, charging them with having maliciously conspired together to have her confined in an asylum. This action was tried before Mr. Justice Manisty and a special jury, in November, 1886, and resulted, after four days' trial, in a verdict for the defendants, with costs. The amount of the costs was considerably increased by the fact that, on the plaintiff's petition, one of her witnesses (the medical man who was actually attending her at the time of Dr. Langmore's visit) was examined by special commission; but at the trial the plaintiff refused to put in the evidence thus taken, or to place the witness himself in the box, though it was elicited that he had been quite recently, and it was inferred that he was then, resident in England.

The plaintiff being a person of small means, Dr. Langmore has not been able to obtain payment from her of any of the costs awarded him, and has been called upon to pay legal expenses amounting to £240 8s. 1d., irrespective of personal expenses connected with the action, and the inevitable loss of time and practice.

As stated in last week's JOURNAL, the Council of the Metropolitan Counties Branch of the British Medical Association has resolved to open a subscription to defray Dr. J. W. Langmore's expenses. Gentlemen desirous of assisting the fund are requested to send their donations to Mr. George Eastes, M.B., 69, Connaught Street, Hyde Park Square, London, W., one of the Honorary Secretaries of the Branch.

First List of Subscribers.

	£	s.	d.		£	s.	d.
Mr. W. Adams	3	3	0	Sir W. W. Gull, Bart., M.D...	2	0	0
Mr. C. A. Aikin..	2	2	0	Dr. C. J. Hare	5	5	0
Mr. C. E. Aikin..	1	1	0	Sir W. Jenner, Bart., M.D. ..	10	10	0
Mr. W. Morrant Baker ..	2	2	0	Dr. G. Johnson	1	1	0
Dr. Robert Barnes	1	0	0	Mr. H. Juler	1	1	0
Dr. G. P. Bate	1	1	0	Dr. Norman Kerr	1	1	0
Dr. J. S. Bristowe	2	2	0	Dr. A. W. Leachman	5	0	0
Mr. Lennox Browne	1	1	0	Dr. J. D. Mann	1	1	0
Dr. T. Buzzard	2	2	0	Dr. H. C. Martin	2	2	
Dr. W. B. Cheadle	3	3	0	"Member of the Branch" ..	0	10	
Mr. Willington Clark	2	2	0	Mr. J. J. Merriman	1	1	
Dr. W. F. Cleveland	1	1	0	Dr. T. Morton	0	10	
Mr. G. A. Critchett	1	1	0	Dr. Dawson Nesbitt	1	1	0
Dr. H. R. Crocker	1	1	0	Mr. Edmund Owen	1	1	0
Mr. J. B. Curgenven	1	1	0	Sir J. Paget, Bart.	2	2	0
Dr. W. H. Day	1	1	0	Dr. W. Price	1	1	0
Dr. J. Langdon Down.. ..	1	1	0	Dr. Henry Savage	2	2	0
Dr. J. Matthews Duncan ..	1	1	0	Mr. S. W. Sibley	2	2	0
Mr. A. E. Durham	2	2	0	Mr. Morton Smale	1	1	0
Dr John Easton	2	2	0	Dr. W. V. Snow	1	1	0
Mr W Fuller	0	10	0	Dr. C. S. Ticehurst	1	1	0
Dr. A. T. Gibbings	0	10	6	Mr. J. Smith Turner	1	1	0
Dr. J. F. Goodhart	1	1	0	Mr. A. M. Vann..	0	5	0
Dr. W. R. Gowers	1	1	0	Dr. E. H. Vinen	1	1	0
Dr. W. C. Grigg	2	2	0	Dr. Julian Willis	1	1	0

SPURGIN *v.* NICHOLSON.

THE Honorary Secretary, Mr. C. Harris (The Infirmary, Whitehaven) begs to acknowledge the following further subscriptions to this fund.

	£	s.	d.		£	s.	d.
Dr. Lumb, Whitehaven ..	1	1	0	Dr. Black, Keswick..	1	1	0
Dr. Dickenson, Workington	1	1	0	Dr. Knight ,, ...	1	1	0
Dr. Maclaren, Carlisle ..	2	2	0	Dr. Mathias, Maryport	1	1	0
Dr. Hall ,, ...	1	1	0	Dr. Churchill, Gosforth	0	10	6
Dr. Douie ,, ...	0	10	6	Dr. Stephenson, Brampton ..	1	1	0
Dr. Robertson, Cockermouth	0	10	6	Dr. Ormrod, Workington ..	1	1	0
Dr. Hutchinson ,,	1	1	0	Dr. Braithwaite, Egremont ..	0	10	6
Dr. Forsyth ,,	0	10	6	Dr. Robertson, Penrith ..	0	10	6

As the list will shortly be closed, those who have not already subscribed are earnestly requested to do so at once, as the fund is still more than £30 short of the required amount.

FEES TO WITNESSES.

M.S.P.A.—A medical witness for attending to give evidence in a County Court is entitled, according to the scale, to a fee of from fifteen shillings to one guinea, also to reasonable travelling expenses. The certificate in this case does not seem to be a matter of evidence, but, in the case of a paying patient, should be included in the fees charged to him for medical attendance. If no bargain was made, there may be a difficulty in recovering it from the solicitor.

SCALE OF PAYMENT IN CLUB PRACTICE.

MR. M. G. BIGGS (Wandsworth Common) writes: From time to time letters appear asking for club statistics, with special reference to the amount of work done and the remuneration obtained. I thought the accompanying table, therefore, might be useful. The figures are all taken from last year's entries, and include five clubs. Each member pays one shilling a quarter as usual, but the object of this communication is to set forth the opposite side—the actual work done by the medical attendant with ratio to money paid.

1886.

	Number of Visits.	Attendances at Surgery.	Total Club Money paid. £ s. d.
First quarter ..	124 ..	324 ..	12 5 9
Second quarter ..	62 ..	187 ..	11 13 9
Third quarter ..	14 ..	183 ..	12 4 9
Fourth quarter ..	40 ..	179 ..	12 7 9
	240 ..	873 ..	48 12 0

Highest quarterly total of members, 247.

Medicines supplied.

Bottles.	Powders.	Pills.	Boxes of Ointment.	Blisters.	Plaster.
1103	2	54	21	2	1

The number of members varies slightly; the highest quarterly total was 247, and the lowest 233, and the permanent annual number would be about 240.

Now, adding the visits and attendances together and dividing into the total amount received will give about 10½d. for each personal professional attendance, and it must also be remembered that some of the visits mean long distances. To put it in another way: Take the number of bottles supplied, which only falls short of the total attendances by 10, and this will give just over 10½d. a bottle, a price for which a friend informed me a chemist would dispense his medicines all round, so that, from a pecuniary point of view, I have given powders, pills, ointments, etc., and all the professional skill, as a free gift, and anyone who knows what large bottles the patients bring will not think 10½d. a large sum for each one.

Surely this raises the whole question of club attendances. Why are associations able to obtain services at such a rate? It is simply a question of demand and supply; clubs find that whenever they are in want of a medical officer, there are plenty of candidates for the post at present prices, and they are not likely to raise those prices under such circumstances. Young men starting are often without much capital, and are debarred from advertising, so that they accept such appointments not only as a nucleus, but to be worked so as to be a paying advertisement. An elderly medical man, now deceased, once told me that it was well worth a young man's while to take small appointments and work them well, because in that way, and that way only, could a young man make himself favourably known. There was sound worldly wisdom in the advice. Older men simply keep on their clubs either to keep out fresh competitors, or for the sake of the quarterly ready money, or from having become used to and interested in the members they do not care to give them up. Club patients themselves are well aware of this, for there is a strong feeling in any case of serious illness that the club doctor either is not so good a man as one who does not take clubs, or, at any rate, that he will not exert himself to his utmost for the remuneration, and this leads to unpleasantness and often to a change of medical man. For the same reason, some of the better paid artisans never go to the club doctor unless for some trifling ailment. Moreover, it must not be forgotten that the chief aim in joining these clubs is not so much to obtain medical relief as to insure sick-pay and funeral allowances, the medical man's attendance being a secondary matter. The amount paid to such clubs is often, when the wages are not large, a great drain upon the immediate contributor. Is there any remedy? In the present state of affairs I see none whatever. So far as medical men are concerned, I think it would be a good thing to disassociate medical attendance from such clubs as give other advantages, and allow the members to join some dispensary. This would, at any rate, relieve the medical attendant from the onerous and unpleasant duty of dispensing his medicines for club patients.

MEDICAL ADVERTISING.

MEDICUS.—If our correspondent be an observant reader of the JOURNAL, he cannot have failed to note that, on various occasions during the present and previous years, we have, irrespective of membership or otherwise, commented freely on the subject of his communication; and even so recently as March 12th we remarked that, "until the several Colleges, etc., recognise their duties to the profession and to the public, and prohibit unethical practices, under penalty of withdrawal or suspension of the rights and privileges belonging to the diploma held by the offender, we fear there can be no effectual remedy for the evil complained of by our correspondent; for it has almost invariably been found that practitioners capable of such questionable conduct are alike insensible to professional remonstrance and editorial condemnation." Pending such recognition of their obvious duties, we would suggest to our correspondent the expediency of inducing the profession, or the leaders thereof, in the town to unite in a memorial to the two licensing bodies of which the practitioner in question is a member, and to enclose therewith a copy of the local paper in which the objectionable advertisement appears, and solicit their attention thereto; and if, moreover, "Medicus" will forward a copy addressed to the General Secretary of the British Medical Association, it shall be submitted to the Council for consideration. Meanwhile, it may be well to ask what the governing bodies of the "hospitals" in question, and the colleagues of the offending practitioner are doing in the matter; or, rather, are these institutions private speculations devised for the purely selfish purpose of personal advancement?

POISONING BY ANTIMONY.

WE have received a full report of the trial, which lasted for more than a week, of Thomas Hall, who was convicted in February last at Dunedin, New Zealand, of the murder of Captain Henry Cain. The deceased, who was 70 years old, died in January, 1886, with heart-disease and dropsy after an illness of some six weeks, though he had suffered from the heart affection for a much longer period. The Captain had suffered much from sickness during his last illness, and to a less extent from diarrhœa; the sickness at first occurred only after taking whisky, but when champagne and port were substituted he was sick after them, and he also vomited after taking his cough mixture. It was not until some months after his death that any suspicion of foul play arose, and then his medical adviser succeeded in obtaining an order for the exhumation of the body, which was carried out in September. The *post-mortem* examination was made by Dr. Francis Ogston, and the analysis of the viscera revealed antimony in all that were examined; it was noticed that the viscera were well preserved. Antimony had not been prescribed for the deceased, and would undoubtedly have been the means of accelerating his death, considering the condition of his heart and other organs. As the deceased had been confined to his bed for ten days before his death, and under constant supervision all that time, he could not have taken antimony either wilfully or by misadventure. It followed, therefore, that it must have been administered him by someone.

In May, 1885, much against the old man's wish, Hall had married his stepdaughter, and for a long time Captain Cain would not speak to his stepson-in-law, but during the last few weeks of his life they had become friendly, and at the last Hall was a frequent visitor, calling twice daily, and sometimes oftener, being always left alone when he did call, and on two occasions staying up all night with him. As a motive for the murder, it was shown that Mrs. Hall was joint heiress with her sister of nearly all her father's property, and that Hall was in an extremely embarrassed financial position, having repeatedly had recourse to forgery to avoid paying bills as they became due; the speedy death of Captain Cain was, therefore, a matter of great importance to him. It was further shown that some little while before his marriage he had shown great interest in the subject of poisoning by antimony, having purchased *Taylor on Poisons*, and another work on the subject, and having also bought some tartar emetic, saying it was to be used in cigarettes for asthma.

Thus it was shown that antimony had been administered to the deceased during life, and that its tendency in his then state would be decidedly injurious, and that the prisoner had the motive for and the means of giving the antimony to the deceased, and it was suggested by the prosecution that he put the poison into his whisky, champagne, port, and medicine bottles. It was further shown that the prisoner had anticipated the death of the deceased, and had told several persons that the old man could not live many days longer, when there was no obvious reason for forming so unfavourable an opinion. But even with all the circumstantial evidence against him it is quite possible that the prisoner might have got off had it not been for the fact that he had been caught literally red-handed in the attempt to poison his wife with antimony. This occurred in August, 1886, and was the cause of Cain's body being exhumed. Mrs. Hall, shortly after her confinement, suffered from vomiting and other symptoms of poisoning, and antimony was found in her excreta, and in some ice-water prepared by the prisoner, who, when arrested, had some tartar emetic in his pocket. Of his guilt there can be no reasonable doubt.

SUCCESSFUL CONCEALMENT OF PREGNANCY.

J. writes: I was lately called to attend an unmarried girl in confinement, only discovering the nature of the service required when I arrived at the house. She had effectually concealed her pregnancy up to the last moment, and, by a combination of (for her) lucky circumstances, no one, with the exception of her sister, a married neighbour, and myself, is aware that there was anything further the matter with her than a severe cold; although the confinement took place at her own home, where a large family reside. The child is out at nurse at some distance from here, and the above-mentioned neighbour has undertaken to have it duly registered. Would you kindly say whether you consider it the duty of a medical man to inform her parents, she being a minor.

*** We do not think that, under the circumstances, it is the duty of our correspondent to inform the parents of their daughter's shame. No doubt, however, there are cases in which the medical attendant would be under a moral obligation to disclose the facts to the patient's responsible guardians.

A QUESTION OF LEGITIMACY.

DR. C. H. WATTS PARKINSON.—We have refrained from commenting on the Bosvile case hitherto, because notice was given of the intention of counsel to move for a new trial. But there can be no objection to replying to our correspondent's letter. We have not been able to obtain a verbatim report of the case, but the report now before us is much fuller than that enclosed by him. In it there is no mention of an undertaking by the counsel "to negative the allegation that a man could be the father of a full-grown child born 277 days after cohabitation had ceased," and we do not suppose for a moment that Dr. Priestley and Dr. Barnes would have gone into the witness-box to testify to so absurd a generalisation, but in the particular case in question, there is some reason to think such a proposition might be correct, for Mrs. Bosvile's maid gave evidence as to the state of her mistress's health at the time immediately preceding the elopement, and unless this meant the occurrence of a menstrual period we are at a loss to know why the evidence was tendered. The judge seems to have summed-up in a very impartial manner; he pointed out that the legal presumption was that the child was legitimate, and that this could only be rebutted by facts; he told the jury that the medical evidence did not render it impossible that the husband should be the father of the child. No doubt what chiefly influenced the jury was the fact that the wife had written a letter to her husband but three weeks before the birth of the boy, in which not only did she not make any allusion to her pregnancy, but spoke of their little girl as being "the one link of the past, and all that is left of our short married life."

SUBSTITUTE OR INDEPENDENT?

T.A.W.—DRS. A. and B. have on different occasions attended Mr. P., the former during a late illness, and as A. could not see Mr. P. every day he requested him to call in B., who saw him daily for some time for bandaging, etc. A. neither called upon nor wrote to B. asking him to see his patient. After the illness, to whom should B. apply for his fee, or should he attend gratuitously for his friend A.? Both doctors charge the same fee for visits.

*** Inasmuch as Dr. A. could or would not, for some reason or other, make the necessary or desired daily visit to Mr. P., and requested him, therefore, to call in Dr. B., the latter, having received no communication, either in person or by note, from Dr. A. soliciting his assistance in the case, is, in our opinion, clearly entitled to regard Mr. P. as his own patient, and to charge him accordingly

OBITUARY.

EDWYN ANDREW, M.D., M.S.Lond., F.R.C.S.

By the death of Dr. Edwyn Andrew, of Shrewsbury, the profession in Shropshire has lost not only a prominent and highly influential member, but one who has done much to raise the position of medical men in that part of the country. To Dr. Andrew's philanthropic activity Shrewsbury itself owes much. The Shrewsbury Eye and Ear Hospital, a building of great architectural beauty, erected at a cost of over £10,000, stands as a monument of his zeal and perseverance. Dr. Andrew's skill as an ophthalmologist and aurist was widely recognised among his professional brethren, and in his case, as in so many others, it is a matter for unavailing regret that such highly cultivated powers of observation and such ripe experience should have passed away without leaving any adequate permanent record.

Dr. Andrew's academical career was one of quite exceptional distinction, and his degrees and diplomas were almost dazzling in their number and brilliancy. He graduated as Doctor of Medicine in the University of London in 1857, becoming one of the "happy few" possessors of the title of Master in Surgery in 1866. He likewise won at the examination-table the Fellowship of the Royal College of Surgeons of England. Dr. Andrew was also a Fellow of the Royal Medical and Chirurgical Society, a Member of the Pathological and Ophthalmological Societies, and President of the Shropshire and Mid-Wales Branch of the British Medical Association. He had formerly been Resident Medical Officer at University College Hospital, Assistant Surgeon, St. Pancras Infirmary, etc.; and he held the following public appointments at the time of his death: Surgeon to the Shropshire Eye, Ear, and Throat Hospital, Consulting Surgeon to the Montgomeryshire Infirmary, Certificated Factory Inspector, and Surgeon to Shrewsbury Royal Grammar School.

Dr. Andrew was a well-known and prominent figure at the meetings of the British Medical Association, and at the Brighton meeting he read a paper in the Ophthalmological Section, entitled "Ophthalmic Hints." His death will be much deplored among a large circle of friends.

DANIEL RUTHERFORD HALDANE, M.D., LL.D., F.R.C.P.Ed., F.R.S.E.

We deeply regret to announce the death of Dr. D. Rutherford Haldane, of Edinburgh, which took place at his residence in Charlotte Square, Edinburgh, on Tuesday, April 12th. Dr. Haldane had been confined to the house for some months, owing to the fracture of one leg, which occurred during frosty weather, when there was snow on the ground, about Christmas time. As Dr. Haldane had recovered very quickly from a similar accident a few years ago, good hopes were entertained of his recovery on this occasion also. Such, however, unfortunately, was not the case, as complications occurred which have been too prolonged and serious to permit recovery, and which ended in collapse and death.

Dr. Haldane was born in 1824. He derived his descent from the Haldanes of Airthrey; his father, who was distinguished as an evangelical preacher, was sometimes called the "Whitfield" of Scotland, and was practically the founder of the Congregational Church in Scotland. Dr. Haldane received his education at the High School and University of Edinburgh, his career in both being highly distinguished, and giving good promise of the splendid powers he ultimately displayed. He graduated as Doctor of Medicine in Edinburgh in 1848.

After graduating, he acted as resident physician in Edinburgh Infirmary; then went for prolonged study in the Continental schools, chiefly in that of Paris. Returning to Edinburgh, he again entered the Royal Infirmary, in the University clinical wards. His connection with the Infirmary subsequent to this was a most distinguished and useful one in the various capacities of assistant-physician, staff-physician, and finally, on retiring from active service, as consulting-physician. His wide training and great powers of observation and teaching enabled him to occupy many positions in the Edinburgh Medical School; thus, he was at one time Lecturer on Medical Jurisprudence, at another on Practice of Physic and Clinical Medicine; and again, he was for some years Pathologist to the Infirmary.

Dr. Haldane was, fortunately for himself, in a position to be able to dispense largely with the necessity which compels most men to engage in private practice, and to attach himself to the teaching and licensing bodies. He was one of the most prominent Fellows of the College of Physicians, Edinburgh, taking for many years a keen interest in everything that could advance the interests and scientific status of that institution; and his unwearied labours on its behalf were suitably acknowledged by his having been twice elected President of the College and presented with a service of plate. Some years ago he was appointed representative of his College on the General Medical Council, in succession to the late Dr. Alexander Wood, and his appearances at the meetings of that body will be familiar to all readers of the Journal. For several years, he was one of the representatives of the Royal College of Physicians on the Board of Infirmary Managers; in this position his appointment was amply justified by the consideration he gave to all its concerns, and by the deference with which his opinions were received by his colleagues. As showing the esteem in which he was held, not only by the medical profession, but by men of all professions, he was unanimously appointed assessor of the General Council of Edinburgh University. His university showed its recognition of his merit by conferring upon him the honorary degree of LL.D. in 1884.

With such a career of public usefulness as has been sketched thus briefly it must be obvious that Dr. Haldane could not devote himself to any great extent to practice, even of a purely consulting nature; and those who knew him best doubtless lamented this, for his knowledge of medicine was so surely built on a wide knowledge of pathology, his powers of observation so great, and his practical experience so extensive, that he was well qualified to have taken a leading place among consulting physicians in active practice. Personally he was esteemed for his kindly, unostentatious disposition.

He was interred in the Dean Cemetery, Edinburgh, on Thursday, April 14th. Among those who followed his remains to the grave were the President and other office-bearers and many of the Fellows of the Royal College of Physicians, Edinburgh.

HOSPITAL AND DISPENSARY MANAGEMENT.

GLASGOW EYE INFIRMARY.

Sir,—The letter from the Hon. the Lord Provost of Glasgow, in the Journal of April 9th, is quite satisfactory as regards Dr. Fergus. Unfavourable comments were being made; that there was some apparent reason for the comments is sufficiently evidenced by the fact that Dr. Freeland Fergus found it desirable, immediately subsequent to the action of the House Committee, to write to Dr. Macfie, disclaiming, on behalf of his father and himself, any share in the transaction. The paragraph which has elicited this correspondence has afforded to Dr. Fergus and his friends the opportunity of a wider and more authoritative disclaimer, as well as of setting the comments at rest—a function which the letter of the Lord Provost is well fitted to discharge.

The letter of the Lord Provost is also satisfactory in showing the accuracy of the facts as stated in the Journal. Dr. Macfie was summarily dismissed by the House Committee without consultation with the medical representatives on the directorate, and that action was approved of by the directors, when it came before them in course.

It is to be hoped that the directors will speedily find the only possible solution to the present difficulty, the reponement, namely, of Dr. Macfie in his original position. This is necessary, seeing that the alteration made in the constitution four years ago, making annual re-election of medical officers necessary, does not apply to Dr. Macfie, who received his appointment on the original condition, *ad vitam*, etc.—I am, etc.

Your Glasgow Correspondent.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, April 7th.

Anthrax.—Lord John Manners, replying to Sir E. Birkbeck, said the Government did not propose to give local authorities power to slaughter on account of anthrax, or otherwise to treat it as foot-and-mouth disease was treated.

Dr. Tanner will ask the Secretary of State for War how, and in what way, will the classification of Army Medical Officers regulate their status on board ship or for choice of quarters.

Lunacy Acts Amendment Bill, read the first time; to be read a second time on Monday, April 25th, and to be printed.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE TRUE DEATH-RATES OF LONDON SANITARY DISTRICTS DURING THE YEAR 1886.

In the accompanying table will be found summarised the vital and mortal statistics for 1886 of the thirty-nine sanitary districts of the metropolis, based upon the Registrar-General's returns for that year. Quarterly summaries of these statistics have already appeared in these columns. The mortality figures in the table relate to the deaths of persons actually belonging to the respective sanitary districts, and are the result of a complete system of distribution of the deaths occurring in the public institutions of London among the various sanitary districts in which the patients had previously resided. By this means the precise number of deaths of persons belonging to the different sanitary districts is known, as all deaths occurring in institutions of persons who had previously resided in another sanitary district have been excluded from the total deaths in the district in which the institution is situated, and credited to the districts from which they came. By this means alone can reliable data be secured upon which to calculate trustworthy rates of mortality.

The births registered in London during the year 1886 were 133,690, equal to an annual rate of 32.3 per 1,000 of the population, estimated at 4,149,533 persons. The London birth-rate, which was 35.9 per 1,000 in 1876, has since steadily declined, and was lower during the year under notice than in any year since 1860, when it did not exceed 32.0 per 1,000. In the various sanitary districts the birth-rates showed the usual wide variations, owing to the differences in the age and sex distributions of their populations. In those districts containing an undue proportion of unmarried females, chiefly domestic servants, such as St. James Westminster, Kensington, St. George Hanover Square, and Hampstead, the birth-rates are exceptionally low; while in Shoreditch, St. Luke's, St. George-in-the-East, and Bethnal Green, where the population consists largely of young married persons, the birth-rates show a marked excess.

The 81,189 deaths registered in London during the year under notice were equal to an annual rate of 19.6 per 1,000 of the estimated population, which, with the single exception of 1885, when the rate was 19.5, was lower than in any year since the present system of civil registration was established in 1837. This marked decline in the death-rate of London is to some extent due to the decline in the birth-rate, which naturally diminishes the proportion of young children in the population. Had the birth-rate in the last five years been equal to that which prevailed in the ten years 1871-80, there would have been about 50,000 more children living in London in 1886; and, as the mortality in this early life-period is high, the general death-rate would have been higher than that actually recorded. The lowest rates of mortality among the thirty-nine sanitary districts during 1886 were 14.4 in Hampstead, 14.9 in Kensington, 15.3 in Plumstead, 16.4 in Hackney, and 16.7 in Lewisham. In the other districts the rates ranged upwards to 25.4 in St. Olave Southwark, 25.6 in St. Giles, 27.3 in St. George Southwark, 27.8 in Holborn, and 29.8 in St. George-in-the-East. During the year under notice 11,076 deaths were referred to the principal zymotic diseases in London; of these, 3,941 resulted from diarrhœa, 2,834 from whooping-cough, 2,077 from measles, 830 from diphtheria, 689 from different forms of fever (including 606 from typhoid fever, 70 from ill-defined forms of con-

Analysis of the Vital and Mortal Statistics of the Sanitary Districts of the Metropolis, after complete distribution of Deaths occurring in Public Institutions, during the Year 1886.

Sanitary Areas.	Estimated Population middle of 1886.	Births.	Deaths.	Annual Rate per 1,000 Living. Births.	Deaths.	Principal Zymotic Diseases.	Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric Fever.	Simple and Undefined Fever.	Diarrhœa.	Deaths of Children under one year of age to 1,000 Births.
LONDON	4,149,533	133,690	81,189	32.3	19.6	2.7	11,076	20	2,077	685	830	2,834	13	606	70	3,941	159
West Districts																	
Paddington	111,135	2,808	1,915	26.2	17.3	2.4	266	1	65	11	31	56	—	15	1	86	154
Kensington	186,584	4,148	2,763	22.3	14.9	1.4	282	—	57	10	29	81	—	11	1	93	153
Fulham	146,369	5,501	2,818	37.7	19.3	3.0	433	1	72	25	28	99	—	26	4	178	156
Chelsea	97,716	3,238	2,017	33.2	20.7	2.8	272	—	38	6	28	94	—	13	2	91	161
St. George, Hanover Square	88,176	1,761	1,539	20.0	17.5	1.7	150	—	22	9	24	39	—	11	1	44	153
Westminster	56,484	1,705	1,294	30.3	23.0	2.3	153	—	19	14	11	53	—	4	—	52	178
St. James, Westminster	28,174	545	542	19.4	19.3	1.4	38	—	9	4	2	9	—	—	—	14	191
North Districts																	
Marylebone	150,884	4,648	3,082	30.9	20.5	2.3	346	2	68	13	16	86	1	14	1	145	153
Hampstead	53,758	1,325	770	24.7	14.4	1.5	79	—	15	2	9	20	—	8	—	25	131
St. Pancras	241,557	7,593	4,859	31.5	20.2	2.8	670	2	124	26	45	126	—	29	1	217	158
Islington	319,824	9,814	5,434	30.8	17.0	2.4	760	3	63	26	72	214	2	57	3	320	154
Hackney	224,768	6,666	3,677	29.8	16.4	2.7	594	1	90	73	49	124	—	56	6	195	151
Central Districts																	
St. Giles	41,348	1,286	1,055	31.2	25.6	3.5	146	—	43	6	5	40	—	9	1	42	157
St. Martin-in-the-Fields	15,721	356	336	22.7	21.4	2.6	40	—	6	1	1	13	—	3	—	16	199
Strand	30,114	730	684	24.3	22.8	1.8	54	—	10	2	4	11	—	4	—	23	219
Holborn	31,625	987	875	31.3	27.8	3.8	121	—	20	3	5	43	—	5	1	44	210
Clerkenwell	69,172	2,279	1,472	33.1	21.4	2.7	185	1	19	11	11	42	—	8	2	91	165
St. Luke's	52,000	1,985	1,214	38.3	23.4	3.4	178	—	42	10	13	34	—	5	2	72	161
London City	41,655	824	985	19.9	23.7	1.5	62	—	7	5	9	14	1	7	—	19	159
East Districts																	
Shoreditch	125,508	4,779	2,980	38.2	23.8	4.1	510	—	86	38	21	136	2	32	1	194	185
Bethnal Green	129,895	5,194	3,040	40.1	23.5	3.9	507	—	108	35	21	152	1	25	3	162	171
Whitechapel	68,345	2,534	1,629	37.2	23.9	3.2	218	—	49	23	15	46	1	11	1	72	182
St. George-in-the-East	46,403	1,811	1,377	39.2	29.8	4.6	214	—	33	21	8	41	—	7	—	104	179
Stepney	58,630	2,102	1,495	36.0	25.6	4.3	251	—	41	25	9	61	—	19	2	94	202
Mile End Old Town	111,607	4,067	2,256	36.6	20.3	3.5	387	—	57	47	19	100	1	17	1	145	139
Poplar	178,343	6,307	3,339	35.5	18.8	2.7	474	1	110	51	28	97	—	31	7	149	150
South Districts																	
St. Saviour, Southwark	27,525	916	662	33.4	24.1	2.4	66	—	9	7	7	11	—	4	—	28	170
St. George, Southwark	59,320	2,214	1,616	37.5	27.3	3.2	191	2	37	14	11	55	2	5	1	64	187
Newington	117,870	4,165	2,486	35.5	21.2	2.9	337	—	87	31	26	77	—	11	4	101	165
St. Olave, Southwark	10,502	367	266	35.1	25.4	3.2	33	1	5	1	6	5	—	1	—	14	188
Bermondsey	88,770	3,348	1,984	37.8	22.4	3.4	301	—	71	16	21	80	1	7	1	101	158
Rotherhithe	40,958	1,444	876	35.4	21.4	3.4	137	—	40	8	3	31	—	6	—	49	171
Lambeth	276,731	9,048	5,265	32.8	19.1	2.7	731	2	147	54	61	197	—	28	6	236	152
Wandsworth	265,826	8,894	4,540	33.6	17.1	2.6	683	—	112	27	47	216	—	46	6	229	156
Camberwell	230,001	7,305	4,073	31.1	17.3	2.2	521	2	95	18	36	151	1	35	3	182	157
Greenwich	148,545	5,249	3,010	35.5	20.3	2.1	307	1	111	5	56	104	—	18	2	110	150
Lewisham	56,080	1,718	931	30.7	16.7	2.1	119	—	6	4	19	57	—	9	1	57	130
Woolwich	36,871	1,330	837	36.2	22.8	2.4	90	—	25	—	6	23	—	7	3	26	145
Plumstead	78,750	2,609	1,197	33.3	15.3	2.2	170	—	59	3	18	26	—	7	3	54	121

tinued fever, and 13 from typhus), 685 from scarlet fever, and 20 from small-pox. These 11,076 deaths were equal to an annual rate of 2.7 per 1,000, which was considerably below the average rate in the preceding ten years, 1876-85. The zymotic death-rate during the year 1886 in the thirty-nine sanitary districts did not exceed 2 per 1,000 in Kensington, St. James Westminster, Hampstead, London, City, Strand, and St. George Hanover Square; while it was equal to 3.5 in Mile End Old Town and in St. Giles, 3.8 in Holborn, 3.9 in Bethnal Green, 4.1 in Shoreditch, 4.3 in Stepney, and 4.6 in St. George-in-the-East. In the eastern group of sanitary districts the zymotic death-rate last year was equal to 3 6 per 1,000, while in the rest of London it did not exceed 2.5 per 1,000. Compared with the preceding year, the fatality of each of the principal zymotic diseases, except whooping-cough and diarrhœa, showed a decline. Only 20 deaths were referred to small-pox in the metropolis during the whole of 1886, the number in the preceding year having been 1,317; of these 20 cases, 7 belonged to North London and 8 to South London. No small-pox patients were under treatment in any of the Metropolitan Asylum Hospitals at the end of 1886, the number at the commencement of the year having been 242. Measles showed the greatest proportional fatality in Whitechapel, St. Luke's, Bethnal Green, Bermondsey, Greenwich, and St. Giles; scarlet fever in Hackney and in the east group of districts; diphtheria in Lambeth, Paddington, Chelsea, St. George Hanover Square, and Greenwich; whooping-cough in Stepney, Shoreditch, Bethnal Green, and Holborn; enteric fever in Hackney and Shoreditch; and diarrhœa in Clerkenwell, Shoreditch, St. Luke's, Stepney, and St. George-in-the-East.

Infant mortality in London during the year under notice, measured by the proportion of deaths under one year of age to births registered, was equal to 159 per 1,000, against an average rate of 152 in the preceding ten years, 1876-85. The rate of infant mortality did not exceed 121 per 1,000 in Plumstead, 130 in Lewisham, 131 in Hampstead, and 139 in Mile End Old Town; while it ranged upwards in the other sanitary districts to 191 in St. James Westminster, 199 in St. Martin-in-the-Fields, 202 in Stepney, 210 in Holborn, and 219 in the Strand. In the central districts the rate of infant mortality was equal to 174 per 1,000, while in the whole of London it did not average more than 159 per 1,000.

A PUBLIC MORTUARY FOR HACKNEY.

A NEW public mortuary is to be provided for the Hackney districts. The building will contain a mortuary chamber, *post-mortem* room, and a place for depositing the bodies of persons who have died from infectious diseases. Hitherto the tower of the old church has been used as a mortuary. Inquests, it seems, will still have to be held in the neighbouring taverns, as the question of providing a coroner's room is left in abeyance, as it is thought that the expense ought to fall on the county.

GROWTH OF POOR-LAW MEDICAL DISTRICTS.

DELTA writes: The district in which I reside has a population of about 8,000. The town of which the district is a suburb has several similar suburbs rather more populous, each of which has its separate resident parish doctor. The parish work of my district is allotted with that of another much larger district about two miles away, and within the latter the parish doctor resides. It appears that the secondary allotment has grown large enough to be created into a separate district of the parochial union, and is now served inconveniently from a distance of two miles. How would it do to act with a view to making out a good case for separation and resident service?

*** The population of an urban district frequently amounts to 30,000 or even 40,000 inhabitants before the Local Government Board takes any steps to add to the number of district medical officers, and then not until the Board of Guardians appeal to them to divide the said district, as will be seen by reference to the population of each district in an urban union. It is, therefore, not at all likely that the Local Government Board will divide the district, and then not until some representation has been made to the central department that the district in question is extremely pauperised, and, as such, affords too much work for the district medical officer.

We would not advise our correspondent to be seen moving in the matter, for it should be remembered that the population of an urban district may be 15,000, and is very frequently double and even treble that amount. We would therefore recommend him not to stir in the matter at all.

HEALTH OF ENGLISH TOWNS.

In the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons, 6,022 births and 3,831 deaths were registered during the week ending Saturday, April 2nd. The annual rate of mortality, which had risen from 21.8 to 23.4 per 1,000 in the four preceding weeks, declined again during the week under notice to 21.6. The rates in the several towns, ranged in order from the lowest, were as follow:—Brighton, 14.6; Bradford, 17.2; Birmingham, 18.8; Portsmouth, 19.3; Derby, 19.4; Bolton, 19.5; London, 19.7; Leicester, 20.0; Cardiff, 20.0; Birkenhead, 20.3; Nottingham, 20.7; Salford, 21.5; Hull, 22.0; Sunderland, 22.1; Leeds, 23.1; Sheffield, 23.1; Bristol, 23.6; Wolverhampton, 23.9; Norwich, 24.7; Newcastle-upon-Tyne, 25.2; Oldham, 25.7; Liverpool, 26.5; Preston, 28.1; Halifax, 28.3; Manchester, 28.7; Huddersfield, 30.7; Plymouth, 32.5; and the highest rate during the week, 33.1 in Blackburn. In the twenty-seven provincial towns the death-rate averaged 23.3 per 1,000, and exceeded by 3.6 the rate recorded in London, which, as before stated, did not exceed 19.7 per 1,000. The 3,831 deaths registered in the twenty-eight towns during the week under notice included 239 which were referred to measles, 105 to whooping-cough, 37 to scarlet fever, 32 to diphtheria, 32 to diarrhœa, 25 to "fever" (principally enteric), and one to small-pox; in all, 471 deaths resulted from these principal zymotic diseases, against numbers steadily increasing from 341 to 466 in the seven preceding weeks. The zymotic death-rate was equal to 2.7 per 1,000. In London the zymotic rate was 2.0, and was as much as 1.3 per 1,000 below the mean rate in the twenty-seven provincial towns, among which it ranged from 0.5 in Birkenhead and 0.9 in Bolton, to 5.4 in Blackburn, 5.8 in Bristol, 6.6 in Oldham, 7.6 in Sunderland, and 9.3 in Huddersfield. The fatal cases of measles, which had increased from 77 to 224 in the seven preceding weeks, further rose during the week under notice to 239, and caused the highest death-rates in Sheffield and Cardiff, Liverpool, Newcastle-upon-Tyne, Bristol, Oldham, Manchester, Huddersfield, and Sunderland. The deaths referred to whooping-cough, which had been 112 and 97 in the two previous weeks, rose again last week to 105, and caused the highest death-rates in Bristol and Blackburn. The fatal cases of scarlet fever, which had increased in the four preceding weeks from 41 to 46, declined again to 37 last week. The 32 deaths from diarrhœa showed a slight decline from recent weekly numbers. The fatal cases of diphtheria, which had been 24 and 26 in the two preceding weeks, further rose during the week under notice to 32, and included 14 in London, 4 in Liverpool, 3 in Bristol, 3 in Oldham, 2 in Birmingham, and 2 in Manchester. The 25 deaths referred to different forms of fever showed a decline of 7 from the number returned in the previous week. The fatal case of small-pox occurred in Portsmouth; no death from this disease was recorded during the week either in London or in any of the twenty-six other large provincial towns. The Metropolitan Asylum Hospitals contained only one small-pox patient on Saturday, April 2nd. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 5.2 per 1,000, and was considerably below the average. The causes of 107, or 2.8 per cent. of the 3,831 deaths registered during the week in the twenty-eight towns were not certified either by registered medical practitioners or by coroners.

During the week ending Saturday, April 9th, 5,426 births and 3,641 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons. The annual rate of mortality, which had been 23.4 and 21.6 per 1,000 in the two preceding weeks, further declined during the week under notice to 20.5. The rates in the several towns, ranged in order from the lowest, were as follow:—Portsmouth, 17.0; Birkenhead, 17.1; Brighton, 17.2; London, 17.8; Bradford, 18.1; Bolton, 18.1; Nottingham, 18.6; Birmingham, 19.0; Norwich, 19.1; Derby, 20.0; Hull, 20.1; Plymouth, 20.3; Sheffield, 21.3; Newcastle-upon-Tyne, 21.3; Blackburn, 21.9; Leicester, 22.2; Leeds, 22.4; Halifax, 22.4; Bristol, 22.6; Huddersfield, 22.6; Wolverhampton, 23.2; Salford, 23.9; Preston, 25.0; Sunderland, 25.4; Cardiff, 25.9; Oldham, 28.0; Liverpool, 28.6; and the highest rate during the week, 32.6 in Manchester. The death-rate in the twenty-seven provincial towns averaged 27.3 per 1,000, and exceeded by 9.5 the rate recorded in London, which, as before stated, did not exceed 17.8 per 1,000. The 3,641 deaths registered in the twenty-eight towns during the week under notice included 502 which were referred to the principal zymotic diseases, against numbers increasing steadily from 342 to 471 in the eight preceding weeks; of these, 200 resulted from measles, 117 from whooping-cough, 41 from scarlet fever, 34 from "fever" (principally enteric), 33 from diarrhœa, 24 from diphtheria, and 3 from small-pox. These 502 deaths were equal to an annual rate of 2.8 per 1,000. The zymotic death-rate in London during the week under notice was only 1.7 per 1,000, while it averaged 4.5 in the twenty-seven provincial towns, and ranged from 0.0 in Wolverhampton, and 0.5 in Bolton, to 7.3 in Norwich, 7.7 in Manchester, and 11.7 in Sunderland. The deaths referred to measles, which had increased from 77 to 239 in the eight preceding weeks, further rose during the week under notice to 250, and were proportionally most numerous in Hull, Huddersfield, Cardiff, Oldham, Liverpool, Manchester, Norwich, and Sunderland. The fatal cases of whooping-cough, which had been 97 and 105 in the two preceding weeks, further rose to 117, and caused the highest death-rates in Leicester, Bristol, Preston, Huddersfield, and Blackburn. The 41 deaths referred to scarlet fever showed an increase of 4 upon the number in the preceding week; this disease was somewhat fatally prevalent in Birkenhead, Blackburn, and Bristol. The fatal cases of fever, which had been 32 and 25 in the two preceding weeks, rose again during the week under notice to 34, and caused the highest death-rates in Manchester and Birkenhead. The deaths referred to diphtheria, which had increased in the three preceding weeks from 24 to 32, declined again to 24, and included 15 in London, 2 in Liverpool, and 2 in Oldham. Of the 3 fatal cases of small-pox, 2 were recorded in Cardiff, and 1 in Blackburn. Eight small-pox patients were admitted to the Metropolitan Asylum hospitals during the week under notice, and 9 were under treatment in these hospitals on Saturday, April 9th. The death-rate from diseases of the respiratory organs in London during the week was equal to 4.5 per 1,000, and was below the average. The causes of 93, or 2.6 per cent. of the 3,641 deaths registered in the twenty-eight towns during the week under notice were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, April 2nd, 892 births and 588 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,299,000 persons. The annual rate of mortality, which had been 26.2 and 25.9 per 1,000 in the two preceding weeks, further declined during the week under notice to 23.5, but exceeded by 1.9 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns the rate was equal to 11.5 in Leith, 18.5 in Greenock, 21.1 in Dundee 21.5 in Edinburgh, 24.3 in Perth, 25.3 in Glasgow, 28.2 in Paisley, and 31.5 in Aberdeen. The 588 deaths registered in the week under notice in these Scotch towns included 111 which were referred to the principal zymotic diseases, against 112 and 127 in the two preceding weeks; of these 43 resulted from measles, 31 from whooping-cough, 18 from diarrhœa, 8 from diphtheria, 6 from scarlet fever, 5 from "fever," and not one from small-pox. These 111 deaths were equal to an annual rate of 4.4 per 1,000, which exceeded by 1.7 the mean

zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic death-rates in the Scotch towns during the week under notice were recorded in Edinburgh, Glasgow, and Aberdeen. The fatal cases of measles, which had been 50 and 55 in the two preceding weeks, declined to 43 during the week under notice, of which 34 occurred in Aberdeen, and 8 in Glasgow. The deaths referred to whooping-cough, which had risen from 25 to 31 in the three preceding weeks, were again 31 during the week under notice, and included 12 in Glasgow, 11 in Edinburgh, and 5 in Dundee. The 18 fatal cases of diarrhœa showed a further increase upon recent weekly numbers. The 8 deaths referred to diphtheria exceeded by 2 the number in the preceding week, and included 3 in Edinburgh, 3 in Glasgow, and 2 in Paisley. The fatal cases of scarlet fever, which had been 9 and 18 in the two preceding weeks, declined again to 6, of which 3 occurred in Glasgow and 2 in Edinburgh. The 5 deaths referred to different forms of fever exceeded by 2 the number in the previous week, and included 2 in Glasgow and 2 in Edinburgh. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 5.5 per 1,000, against 5.2 in London. The causes of 67, or 11.4 per cent., of the 588 deaths registered during the week in these Scotch towns were uncertified.

In the eight principal Scotch towns, having an estimated population of 1,299,000 persons, 755 births and 573 deaths were registered during the week ending Saturday, April 9th. The annual rate of mortality, which had been 26.2, 25.9, and 23.5 in the three preceding weeks, further declined to 22.9 during the week under notice, but exceeded by 2.4 per 1,000 the mean rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 14.6 in Perth, 15.8 in Leith, 17.1 in Greenock, 19.3 in Edinburgh, 22.1 in Dundee, 23.9 in Paisley, 25.1 in Glasgow, and 32.4 in Aberdeen. The 573 deaths registered during the week in these Scotch towns included 34 which were referred to measles, 33 to whooping-cough, 12 to diarrhœa, 11 to scarlet fever, 8 to fever, 4 to diphtheria, and not one to small-pox; in all, 102 deaths resulted from these principal zymotic diseases, against 127 and 111 in the two preceding weeks. These 102 deaths were equal to an annual rate of 4.1 per 1,000, which exceeded by 1.3 the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic death-rates in the Scotch towns during the week under notice were recorded in Edinburgh, Glasgow, and Aberdeen. The deaths referred to measles, which had been 55 and 43 in the two preceding weeks, further declined during the week under notice to 34, of which 21 occurred in Aberdeen (against 32 and 34 in the two previous weeks), and 13 in Glasgow. The fatal cases of whooping-cough, which had been 31 in each of the two preceding weeks, rose to 33, and included 11 in Glasgow, 9 in Edinburgh, 7 in Dundee, and 4 in Aberdeen. The 11 deaths from scarlet fever exceeded by 5 the number in the preceding week; 5 occurred in Edinburgh and 3 in Glasgow. The fatal cases of fever, which had been 3 and 5 in the two previous weeks, further rose during the week under notice to 8, and included 6 in Glasgow. The 4 deaths referred to diphtheria showed a decline from recent weekly numbers, and were all returned in Glasgow. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 4.6 per 1,000, against 4.5 in London. The causes of 68, or nearly 12 per cent., of the 573 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending Saturday, April 2nd, 509 deaths occurred in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 30.6 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 5.2; Belfast, 31.1; Cork, 40.2; Drogheda, 29.6; Dublin, 30.4; Dundalk, 17.5; Galway, 23.5; Kilkenny, 29.6; Limerick, 25.6; Lisburn, 43.5; Londonderry, 21.4; Lurgan, 15.4; Newry, 10.5; Sligo, 43.3; Waterford, 39.4; Wexford, 38.5. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.2 per 1,000, the rates varying from 0.0 in Limerick, Londonderry, Waterford, Galway, Kilkenny, Drogheda, Lisburn, and Armagh, to 10.3 in Lurgan; the 3 deaths from all causes registered in the last-named district comprising 2 from diarrhœa. Among the 134 deaths from all causes registered in Belfast are 1 from scarlatina, 1 from typhus, 2 from whooping-cough, 1 from diphtheria, 1 from simple continued fever, and 3 from diarrhœa; the 62 deaths in Cork comprise 2 from enteric fever, and 2 from diarrhœa; one of the 9 deaths in Wexford was caused by typhus; and the 4 deaths in Dundalk comprise 1 from diphtheria and 1 from enteric fever. In the Dublin Registration District, the births registered during the week amounted to 221, and the deaths to 212. The deaths represent an annual rate of mortality of 31.3 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 30.4 per 1,000. Twenty-one deaths from zymotic diseases were registered, being 2 over the number for the preceding week, but 9 under the average for the thirteenth week of the last ten years; they comprise 1 from varicella (chicken-pox), 4 from measles, 4 from scarlet fever (scarlatina), 1 from typhus, 3 from whooping-cough, 1 from ill-defined fever, 4 from enteric fever, 1 from diarrhœa, etc. Fifty-nine deaths from diseases of the respiratory system were registered, being 3 over the average for the corresponding week of the last ten years, and 6 over the number for the week ended March 26th; they comprise 38 from bronchitis and 16 from pneumonia or inflammation of the lungs. The deaths of 15 children under 5 years of age (including 11 infants under 1 year old) were ascribed to convulsions. Three deaths were caused by epilepsy, 9 by other diseases of the brain and nervous system (exclusive of convulsions), and 11 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 26 deaths, mesenteric disease 3, and cancer 7. Five accidental deaths were registered. In 29 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending March 26th, that the annual death-rate recently averaged 27.4 per 1,000 in the three principal Indian cities; it was 22.6 in Calcutta, 23.1 in Bombay, and 35.4 in Madras. Cholera caused 17 deaths in Calcutta, measles 22 in Bombay, and diarrhœal diseases 38 in Madras; while the mortality from "fever" was excessive in each of these cities. According to the most recently received weekly returns, the annual death-rate averaged 28.0 per 1,000 persons estimated to be living in twenty of the largest European cities, and exceeded by 4.5 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 32.5, and showed a slight further increase upon the rates recorded in recent weeks; the 578 deaths included 21 from typhus and typhoid fever, 16 from scarlet fever, and 15 from diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 21.8, and ranged from 18.2 in Christiania to 22.9 in Stockholm; diphtheria caused 9 deaths in Stockholm, 9 in Copenhagen, and 6 in Christiania; and 7 fatal cases of measles occurred in Stockholm. In Paris the death-rate was equal to 28.9, and it showed a slight further increase upon the rates in the two preceding weeks, and exceeded by as much as 7.6 per 1,000 the rate in the corresponding week in London; the deaths included 36 from typhoid fever, 51 from diphtheria and croup, and 7 from small-pox. The 220 deaths in Brussels, of which 8 resulted from measles, and 9 from diphtheria and croup, were equal to a rate of 27.6. No returns from Geneva have been received since the beginning of this year. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 29.9, the several rates being 24.7 in the Hague, 29.0 in Amsterdam, and 33.7 in Rotterdam; measles caused 7 deaths in Amsterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 27.8 per 1,000, and ranged from 21.3 and 21.4 in Berlin and Dresden to 36.8 and 40.2 in Buda-Pesth and Trieste. Small-pox caused 10 deaths in Buda-Pesth and 2 in Trieste; diphtheria showed the greatest mortality in Berlin, Hamburg, and Breslau; and 14 deaths were referred to typhoid fever in Hamburg. The death-rate in three of the principal Italian cities averaged 33.3 per 1,000, and ranged from 28.9 in Rome to 37.3 in Venice; small-pox caused 8 deaths in Rome and 1 in Venice, and 6 deaths resulted from typhoid fever in Rome, and 5 in Turin. In Cairo the death-rate was 33.8, and in Alexandria 46.4; diarrhœal diseases caused 74 deaths in Cairo, and 36 in Alexandria; and 4 fatal cases of small-pox were recorded in Alexandria, and 2 in Cairo. In four of the largest American cities the recorded death-rate averaged 23.3 per 1,000, and ranged from 18.0 in Baltimore to 28.2 in New York. Diphtheria caused 48 deaths in New York, and 8 in Brooklyn; 8 fatal cases of typhoid fever occurred in Philadelphia, and 25 of measles in New York; and 2 deaths from small-pox occurred in Brooklyn, and 5 in New York.

It appears, from statistics published in the Registrar-General's return for the week ending Saturday, April 2nd, that the annual death-rate recently averaged 29.6 per 1,000 in the three principal Indian cities; it was 23.2 in Bombay, 26.7 in Calcutta, and 39.7 in Madras. Cholera caused 19 deaths in Calcutta, showing a slight further increase upon recent weekly numbers; 15 deaths were referred to measles in Bombay, while "fever" was fatally prevalent in each of these Indian cities. According to the most recently received weekly returns, the annual death-rate averaged 29.1 per 1,000 persons estimated to be living in twenty-two of the largest European cities, and exceeded by as much as 7.5 per 1,000 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 33.3, and showed a slight further increase upon the rates in recent weeks; the 592 deaths included 30 from typhus and typhoid fever, 11 from small-pox, and 10 from scarlet fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 19.4, and ranged from 12.8 in Christiania to 21.5 in Stockholm; diphtheria caused 8 deaths in Copenhagen and 4 in Christiania; and 4 fatal cases of measles occurred in Stockholm. In Paris the death-rate was equal to 31.5 per 1,000 (against 28.6 and 28.9 in the two preceding weeks), and exceeded by as much as 11.8 the rate for the corresponding week in London; the deaths included 44 from typhoid fever, 62 from measles, and 31 from diphtheria and croup. The 211 deaths in Brussels, of which 7 resulted from measles, gave a rate of 24.4. No returns from Geneva have been received since the beginning of the current year. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 29.4, the several rates being 23.5 in the Hague, 28.3 in Rotterdam, and 31.3 in Amsterdam; measles caused 12 and diphtheria 3 deaths in Amsterdam, while 3 deaths from whooping-cough occurred in Rotterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 27.4, and ranged from 21.3 and 25.6 in Berlin and Dresden to 33.6 and 38.7 in Trieste and Prague. Small-pox caused 10 deaths in Buda-Pesth and 5 in Prague; diphtheria and croup were fatally prevalent in Berlin and Hamburg, while 8 deaths resulted from scarlet fever in Vienna, and 7 in Berlin. The death-rate in three of the largest Italian cities averaged 34.6 per 1,000, and ranged from 31.2 in Rome to 39.7 in Turin; small-pox caused 6 deaths in Rome and 2 in Venice; measles 6 deaths in Turin and 3 in Venice; and typhoid fever 3 in Rome and 2 in Turin. In Cairo the death-rate was 40.2, and in Alexandria 46.0; diarrhœal diseases caused 83 deaths in Cairo and 40 in Alexandria; 14 deaths resulted from typhoid fever in Cairo, and 2 from small-pox in Alexandria. In four of the largest American cities the recorded death-rate averaged 23.9 per 1,000, and ranged from 19.8 in Baltimore to 26.7 in New York. Diphtheria caused 57 deaths in New York, and typhoid fever 17 in Philadelphia, while 8 deaths resulted from scarlet fever in Brooklyn.

It appears, from statistics published in the Registrar-General's return for the week ending Saturday, April 9th, that the annual death-rate recently averaged 27.5 per 1,000 in the three principal Indian cities; it was equal to 22.2 in Bombay, 23.8 in Calcutta, and 35.6 in Madras. Cholera caused 22 deaths in Calcutta; diarrhœal diseases caused 47 deaths in Madras, and 23 in Bombay; while the mortality from "fever" was excessive in each of these cities. According to the most recently received weekly returns, the annual death-rate averaged 27.7 per 1,000 persons estimated to be living in twenty of the largest European cities, and exceeded by as much as 7.2 per 1,000 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 34.8, and showed a further increase upon the rates recorded in recent weeks; the 619 deaths included 4 from small-pox, 10 from scarlet fever, and 11 from typhus and typhoid fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 24.0 per 1,000, and ranged from 19.8 in Christiania to 26.6 in Stockholm; diphtheria and croup caused 13 deaths in Stockholm, 8 in Christiania, and 5 in Copenhagen; 3 deaths were referred to scarlet fever in Christiania, and 4 to whooping-cough in Copenhagen. In Paris the death-rate was equal to 29.2 per 1,000, and showed a decline from the high rate in the preceding week, but exceeded by as much as 11.4 the rate during the corresponding week in London; the deaths included 51 from typhoid fever, 73 from measles, and 40 from diphtheria and croup. The 225 deaths in Brussels, of which 7 resulted from measles and 2 from fever, gave a rate of 25.9. No returns from Geneva have been received since the beginning of this year. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 27.0 per 1,000, the several rates being 19.2 in the Hague; 26.4 in Rotterdam, and 29.0 in Amsterdam; diphtheria and croup caused 11 deaths in Amsterdam, and 3 deaths were referred to whooping-cough in Rotterdam. The Registrar-General's table includes eight German and Austrian cities, in which the death-rate averaged 26.4 per 1,000, and ranged from 19.8 and 23.1 in Berlin and Dresden, to

35.9 and 36.9 in Buda-Pesth and Prague. Small-pox caused 3 deaths in Prague, 7 in Buda-Pesth, and 5 in Vienna; and diphtheria was fatally prevalent in most of these cities. The rate of mortality in Rome was equal to 37.8 per 1,000, and in Venice to 30.5; the 264 deaths in Rome included 8 from small-pox, 12 from measles, and 5 from typhoid fever; and 4 fatal cases of measles occurred in Venice. In Cairo the death-rate was 36.5, and in Alexandria 36.3: diarrhœal diseases caused 84 deaths in Cairo and 33 in Alexandria; 3 deaths were referred to small-pox in Alexandria, and 13 to typhoid fever in Cairo. In four of the largest American cities the recorded death-rate averaged 23.4 per 1,000, and ranged from 17.5 in Baltimore to 26.8 in New York. Diphtheria caused 34 deaths in New York, 11 in Brooklyn, and 6 in Philadelphia; 28 deaths were referred to measles in New York; and typhoid fever caused 14 deaths in Philadelphia and 4 in Baltimore.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

LAMBETH.—*Influence of Stockwell Hospital in spreading Small-pox.*—The presence of the Stockwell Fever Hospital in this district has always had a disturbing influence on its annual record of zymotic mortality, and Dr. Verdon's report for 1885, with its account of a serious small-pox epidemic, is another link in the chain of evidence as to the injuriousness of the Asylums Board's infectious hospitals, as at present conducted. In his report for 1884, Dr. Verdon brought forward facts which militated against the theory of aërial dissemination, and he further supports them in 1885, by pointing to the immunity enjoyed in the half-mile area by infants under the age of three months, and therefore unprotected by vaccination, and to the distribution of the houses invaded, in relation to their connection with the sewer that receives the hospital drainage. During 1885, 509 cases were reported, the districts in which the disease was most prevalent being Vauxhall and Stockwell. The centre of contagion in the one place was doubtless the Small-pox Hospital, in the other a lodging-house, in which a case was secretly treated at home. The disease rapidly invaded a large number of houses in the vicinity, and, although the cases were removed to hospital with dispatch, rooms and bedding immediately disinfected, and the school in the immediate neighbourhood closed, the epidemic assumed large proportions. Of the 509 cases that occurred, 56 were unvaccinated, and 17 were returned as doubtful. Of these there were 44 deaths in unvaccinated persons, and 12 of whom no statement or information could be obtained. The zymotic death-rate of 2.3 per 1,000 was below the average, and below the metropolitan rate for the same period. All the infectious diseases, with the exception of small-pox, show a decrease compared with 1884. Diseases of the respiratory system, not including whooping-cough, caused the death of 1,575 persons, or 31.2 per cent. of total deaths. The general death-rate was 18.6 per 1,000.

HACKNEY.—*The Homerton Hospital and its Influence on Small-pox Mortality.*—Mr. W. H. Power appears to have a good many disciples in his theories regarding the malign influence of the Metropolitan Asylums Board's hospitals in spreading the infection of small-pox in their immediate neighbourhoods, for we find quite a number of London health-officers devoting a substantial part of their reports to a discussion of his points. Amongst these is Dr. Tripe, whose thirty years of experience as health-officer of Hackney, and whose eminent services in the cause of public hygiene generally, give to his views great weight and importance. Dr. Tripe shows, in his report for 1885, that there was a very decided difference in the incidence of small-pox in the two years 1883-84 and 1884-85, between October 1st and September 30th, inclusive, for each year. The deaths of persons attacked with small-pox in the quarter-mile radius from the Homerton Hospital, dying there or removed thence to hospitals, was 33.6 per cent. of the total deaths in 1883-84, and only 19.9 in 1884-85; and between the quarter- and half-mile radii 35.2 in 1883-84, against 34.7 in 1884-85. Between the half- and one-mile radii there occurred 16.8 per cent. of all the deaths in 1883-84, and 17.3 per cent. in 1884-85, and in 1883-84 only 14.4 per cent. of all the deaths from this disease occurred amongst the residents outside the mile radius, against as many as 28.1 per cent. in 1884-85. The increase in 1884-85 is very striking, the percentage having been nearly double, and affords a great contrast to the mortality in former epidemic years. The large proportion of cases between 15 and 25 years of age amongst the vaccinated, as compared with those between 5 and 15, shows the absolute necessity for revaccination, especially at 12 or 14 years of age; and Dr. Tripe brought this prominently forward during the epidemic. With regard to the dissemination of small-pox, Dr. Tripe is persuaded that aërial infection can and does happen, but he believes that a particular state of the air, as regards moisture and movement, as well as a particular condition of the patients as regards infectiousness, is necessary to spread the disease through the air, especially when only a limited number of patients are contained in one building. He believes also that the large ward system at present in use in the Asylums Board's Hospital is much more likely to be injurious than small wards containing only four or six patients. The death-rate for 1885 was only 17.6 per 1000. The deaths of infants, and also of children under 5 years of age, were somewhat in excess of those in 1884. This was chiefly caused by measles and diarrhœa. The deaths from zymotic diseases, despite the large mortality from measles, were fewer in number than usual, when compared with the deaths from all causes. In showing the number of deaths from these diseases in Hackney during the ten years 1874 to 1883, and in 1884, Dr. Tripe forecasts an immunity from small-pox and measles for a period, and a probable epidemic of scarlet fever at latest in 1887-88.

POPLAR.—*Cutting-off the Water-Supply.*—It is satisfactory to find that this district, although the farthest to the east of the Metropolis, returned for 1885 the low death-rates of 18.6 and 20.8 per 1,000, for the north and south divisions respectively. Mr. F. M. Corner, in reporting upon the latter district, states that there was a heavy mortality from measles, in consequence of which a special inspection was made to ascertain if insanitary conditions of the houses contributed in any degree to its fatality. The returns indicated a negative, and the severely cold and prolonged winter was no doubt the explanation of the high mortality. Diphtheria and croup were not unusually fatal, and diarrhœa, from the mild summer, much less so. There was but little typhoid fever, and when present insanitary conditions were found—chiefly absence of water and foul closets. Mr. Corner calls attention to the evil to which large numbers of householders are subject in the cutting off of the water-supply for non-payment of rates by the landlord. A greater scandal cannot well be shown in matters vital to health, for that disease and death are directly traceable to the want of water no one acquainted with sanitary work can doubt. In one instance—six houses—there was no water-supply for 26 days, and families had to exist with choked drains, yard flooded with sewage, and no water, all because of non-payment of rates by their landlord. Dr. Russell M. Talbot comments on the favourable death-rate in the north district, and says that fewer deaths were recorded in 1885 from zymotic diseases than in any year since 1878. Whooping-cough was unusually fatal, and probably from the same cause as that given for the heavy mortality from measles in the south district, namely, a prevalence of easterly and north-easterly winds in the early part of the year. He draws attention to the conditions which annually cause a number of deaths from diseases of the respiratory organs. He considers them in a measure preventable, but says that on no subject are the working classes so ignorant and so prejudiced as that of ventilating bedrooms. As the majority of these deaths are the result of breathing foul air, it is essential that a knowledge and observance of the laws of hygiene should become more widely spread.

WANDSWORTH.—The medical officers of health for the several parishes comprised in this district are almost unanimous in recording a lower rate of mortality, West Battersea and Wandsworth being the only two exceptions. In the former district, however, the increase was not among diseases of the preventable class, for in zymotic diseases there was actually a decrease as compared with 1884. The zymotic death-rate for the entire district was 2.8 per 1,000. Epidemic diarrhœa was the most fatal disease, whooping-cough and measles coming next in order. Thirty-one deaths of inhabitants of this district from small-pox occurred in the Asylums Board's hospitals, while only 5 occurred at their own homes. Enteric fever caused 40 deaths within the district and 10 without; diphtheria 28 within and 10 without; while scarlet fever only caused 13 deaths altogether. Tables are given showing the local incidence of the mortality from the seven chief epidemic diseases. There were no deaths from small-pox or scarlet fever in either Clapham, Putney, or Streatham. Out of 8,865 children, 7,328 were successfully vaccinated, and the remainder were accounted for by death, insusceptibility to vaccination or postponement on account of illness, except 532, that is, 6.6 per cent; in the previous year 7.5 per cent. were unaccounted for. The gradual reduction in the relative amount of mortality borne by the labouring classes, which has been noticeable for many years, is shown to have continued in Wandsworth during 1885. The total births registered were 8,606, or a rate of 34.6 per 1,000; the deaths numbered 4,192, and, with the addition of those which occurred in external institutions, yield a death-rate of 18.7 per 1,000. The deaths of children under five years of age amounted to 46.4 per cent. of the total deaths.

MEDICAL NEWS.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly Examinations for the Licences of the College, held on Monday, Tuesday, Wednesday, and Thursday, April 4th, 5th, 6th, and 7th, 1887, the undermentioned candidates were successful.

For the Licences to Practise Medicine and Midwifery.

E. S. Lewer, Hong Kong, China; J. Maguire, Cavan; S. McKee, Ballycurry, County Antrim; H. R. H. Peare, Edinburgh; S. Roberts, Dublin; W. T. Steele, Dublin; J. D. Windle, Manchester.

For the Licence to Practise Medicine only.

P. H. Fox, Surgeon, Army Medical Staff; B. H. Hopkins, Castlebar, County Mayo; A. K. F. McCutcheon, Dublin; T. A. Murray, Manchester; M. L. Riordan, Limerick; J. St. Johnston, Birmingham.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received Certificates entitling them to practise as Licentiates of the Society, on April 7th, 1887.

Shute, George Sidney, Gillingham, Dorset.
Wedgwood, William Brackenbury, Fern Bank, East Dulwich.

The following gentlemen also on the same day passed their Primary Professional Examination.

Councell, Richard Watson, of the Bristol School of Medicine.
Gunton, George Andrew, of St. George's Hospital.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM BORO' ASYLUM.—Resident Clinical Assistant. Board and residence. Applications to E. B. Whitcomb, Esq., Medical Superintendent.

BRADFORD INFIRMARY AND DISPENSARY.—Dispensary Surgeon. Salary, £100 per annum, with board, etc. Applications by April 16th, to the Secretary.

BRISTOL ROYAL INFIRMARY.—Assistant Resident Medical Officer. Salary, £80 per annum, with board, etc. Applications by May 3rd to the Secretary.

CARMARTHEN INFIRMARY.—House-Surgeon. Salary, £100 per annum, with board, etc. Applications by May 12th to Mr. H. Howells, 11, Morley Street, Carmarthen.

CHELSEA, BROMPTON, AND BELGRAVE DISPENSARY.—Surgeon. Applications by April 28th to A. Hepburn, Esq.

CHESTER GENERAL INFIRMARY.—Visiting Surgeon. Salary, £80 per annum, with board, etc. Applications by April 20th to the Chairman of the Board.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.—Resident Clinical Assistant. Applications by April 21st to the Secretary, 24, Finsbury Circus, E.C.

CUMBERLAND INFIRMARY.—Assistant House-Surgeon. Salary, £40 per annum, with board, etc. Applications by April 22nd to the Secretary.

EVELINA HOSPITAL FOR CHILDREN, Southwark Bridge Road, S.E.—House-Surgeon. Salary, £70 per annum. Applications by April 25th to the Committee of Management.

GOREY UNION.—Medical Officer Gorey Dispensary District. Salary, £120 per annum, and fees. Election on April 16th.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Aural Surgeon. Applications by April 22nd, to the Secretary.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Two Clinical Assistants. Applications by April 23rd to the Secretary.

GUY'S HOSPITAL.—Two Assistant Physicians. Applications before April 27th to the Treasurer.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton. Resident Clinical Assistant. Applications by April 16th to the Secretary.

LIVERPOOL INFECTIOUS DISEASES HOSPITAL.—Resident Medical Officer. Salary, £85 per annum, with board, etc. Applications by April 26th to the Town Clerk, Municipal Offices, Liverpool.

LIVERPOOL INFIRMARY FOR CHILDREN.—House-Surgeon. Salary, £85 per annum, with board, etc. Applications by April 30th to the Honorary Secretary.

LONDON TEMPERANCE HOSPITAL, Hampstead Road, N.W.—Junior House-Surgeon. Applications by April 23rd to the Secretary.

METROPOLITAN ASYLUMS BOARD, EASTERN FEVER HOSPITALS, Homerton, E.—Assistant Medical Officer. Applications by April 20th to the Clerk to the Metropolitan Asylums Board, Norfolk House, Norfolk Street, W.C.

PADDINGTON GREEN CHILDREN'S HOSPITAL.—House-Surgeon. Salary, £80 per annum. Applications by April 16th to the Secretary.

QUEEN'S HOSPITAL, Birmingham.—Obstetric and Ophthalmic House-Surgeon. Applications by April 23rd to the Secretary.

ROYAL GENERAL DISPENSARY, Bartholomew Close, London, E.C.—Resident Medical Officer. Salary, £130 per annum. Applications by April 18th to the Secretary.

SAINT PANCRAS INFIRMARY, Dartmouth Park Hill, Highgate, N.W.—Dispenser. Salary £100 per annum. Applications by April 18th to A. A. Millward, Esq., Vestry Hall

SCARBOROUGH FRIENDLY SOCIETIES MEDICAL ASSOCIATION.—Medical Officer. Salary, £200 per annum, and fees. Applications by April 21st to Hugh Watson, Esq., St. Mary's Walk, Scarborough.

SMEDLEY'S HYDROPATHIC ESTABLISHMENT, Matlock Bridge, Derbyshire.—Junior Resident Physician. Salary, £150 per annum. Applications by April 16th to the Secretary.

UNIVERSITY OF CAMBRIDGE.—John Lucas Walker Studentship in Pathology.—Annual value £250, for three years. Applications by May 31st to Professor Roy, Trinity College, Cambridge.

WHITECHAPEL UNION INFIRMARY.—Assistant Resident Medical Officer. Salary, £150 per annum, with furnished apartments, etc. Applications by April 23rd to W. Vallance, Esq.

MEDICAL APPOINTMENTS.

ABBOTT, C. E., M.R.C.S., L.K.Q.C.P.I., re-appointed Medical Officer of Health for the Braintree Rural Sanitary District.

AVERILL, C., M.R.C.S., L.S.A., appointed Junior House Physician to the Macclesfield General Infirmary, *vice* J. Mc. H. Gell, M.B., C.M., resigned.

BECKETT, John, M.D.Glas., M.R.C.P.Lond., appointed Physician to the Margaret Street Infirmary for Consumption and Diseases of the Chest.

ELLIOTT, John, F.R.C.S., appointed Resident Surgical Officer to the Birmingham General Hospital, *vice* J. T. J. Morrison, M.B., F.R.C.S., resigned.

GAULT, Arthur H., L.R.C.P.Lond., M.R.C.S., appointed House-Surgeon to the Ashton-under-Lyne District Infirmary.

GELSTON, John Seymour, L.R.C.S.I., L.M. and L.K.Q.C.P.I., etc., appointed Medical Officer to the first district of the Thingoe Union, *vice* A. F. Stevens, M.R.C.S., L.R.C.P., resigned.

KEIR, W. I., F.R.C.S., L.R.C.P., re-appointed Medical Officer of Health to the Melksham Urban Sanitary Authority, Wiltshire.

MACDONALD, John, M.B., C.M.Ed., appointed House-Surgeon and Apothecary to the Northern Infirmary, Inverness, *vice* J. W. Black, M.B., C.M.Ed., resigned.

MENZIES, William Francis, M.B., C.M.Ed., appointed Assistant Medical Officer to the Lancashire County Asylum at Rainhill.

PRANKERD, Dr., appointed Assistant House-Surgeon to the Royal South Hants Infirmary, *vice* T. Pagden, M.R.C.S., resigned.

SHAW, Harold, B.A., M.B., M.C.Cantab., appointed Assistant Medical Officer to the Gloucester County Asylum, *vice* Harding H. Tomkins, M.R.C.S., L.R.C.P., resigned.

SOUTHERN, John Acton, M.R.C.S., L.R.C.P., L.S.A., appointed House-Surgeon to the Derbyshire General Infirmary, *vice* E. C. Green, M.R.C.S., L.R.C.P., resigned.

SWAN, Walter, L.R.C.S.I., L.A.H.D., and L.M.Dub., appointed Medical Officer to the Monaghan Union, *vice* Wm. Woods, L.K.Q.C.P.I., deceased.

SYMES, E. West, M.D., M.R.C.S., appointed Surgeon to the Waterhouse's Charities and Blue Coat School, Halifax, *vice* Sol. Smith, M.R.C.S., etc., resigned.

WINTER, E. Thompson, L.R.C.P., L.R.C.S., appointed Medical Officer to the Children's Hospital and Dispensary, Manchester, *vice* Wilton Mills, M.R.C.S., resigned.

SANITARY REGISTRATION.—The first meeting of the conference of the representatives of various sanitary and other bodies, convened for the consideration and discussion of the subject of sanitary registration, was held recently at 5, Argyll Place, Regent Street, when Sir Joseph Fayrer was appointed President of the Conference. The first resolution, proposed by Mr. Rutherford, seconded by Mr. T. Holmes, and carried, recognised the necessity which exists for the sanitary registration of buildings in the interests of the public health. Sir Vincent H. Kennett-Barrington proposed "That it is desirable that the law should forbid any building being used for public or semi-public purposes unless and until the arrangements for the water supply, drainage, and ventilation of such building have been certified as satisfactory by some qualified person." This resolution was passed, as was also a motion, moved by Mr. Mark Judge and seconded by Sir H. E. Roscoe, "That the provision of a public sanitary register for the voluntary registration of private houses would be instrumental in promoting sanitary improvements." At a meeting of the Sanitary Assurance Association a lecture on this subject was given by Sir V. H. Kennett-Barrington.

THE QUEEN'S JUBILEE HOSPITAL.—The following is the list of appointments to the "Queen's Jubilee Hospital," Gloucester Terrace, Queen's Gate, S.W.: J. L. W. Thudichum, M.D., F.R.C.P.Lond., etc., Physician to the Nose and Ear Departments; T. Frederick Pearse, M.D., M.R.C.S., etc., Physician to the Skin Department; Kenneth W. Millican, B.A.Cantab., M.R.C.S., etc., Surgeon to the Throat Department; R. Fitzroy Benham, M.R.C.S., Surgeon to the Rectal and Orthopædic Departments; Basil Woodd Walker, M.D., M.R.C.S., Surgeon to the Ophthalmic Department; Septimus Sunderland, M.D., M.R.C.S., Registrar and Anæsthetist.

DEATH FROM HYDROPHOBIA.—A girl, aged 12, died from hydrophobia in Macclesfield Infirmary a few days ago. She was bitten on the wrist by a dog in December last. The wound was treated in the usual way. The child enjoyed her ordinary health till three days before her death, when she complained of feeling giddy.

THE Earl of Powis has been re-elected President of the Shrewsbury Provident Dispensary.

LAUDANUM POISONING. — An army pensioner, of intemperate habits, died recently from the effect of an overdose of laudanum taken to induce sleep. It was stated by Dr. Forsythe, who was called in to see the deceased, that the man had taken in two doses 6 drachms of laudanum. Dr. Forsythe's assistant, by whom the laudanum was supplied, was censured for disobeying his employer's orders in supplying so large a quantity of laudanum to the deceased.

SOCIETY OF APOTHECARIES OF LONDON.—The results of the examination in arts, held at the Hall of the Society on March 3rd and 4th last, have recently been published. There were 204 candidates, and from the Pass List it appears that 2 were placed in the first class, 44 in the second class, and 116 were certified as having passed in some of the subjects, but not in all. The number of candidates was larger than on any former occasion, though the examination is held four times annually.

LONDON CABMEN AND LONDON HOSPITALS.—Sir Edmund Henderson, K.C.B., presided last week at a meeting of members of the London Cab Trade, held for the purpose of directing attention to the cab-trade collection in aid of the Hospital Saturday Fund. The amount realised by the first collection of 1885 was £169; last year it amounted to £141.

A CENTENARIAN.—Mrs. Alice Ann Bosworth, widow of an agricultural labourer, mother of ten children, has just died at Worcester in, it is said, her 103rd year. She had been in receipt of parish relief for twenty years, and lived in one of the most unhealthy parts of the city. Her sight was perfect until within the last three months, and she was a little deaf, but in other respects retained her faculties to the last.

ST. ANDREWS AMBULANCE ASSOCIATION.—Thirty-eight members of the Leith Police Ambulance Class have gained certificates at an examination conducted under the auspices of the St. Andrews Ambulance Association. At the close of the distribution, Dr. Garland was presented with a handsome pair of candelabra, in recognition of his services as lecturer.

JUBILEE HOSPITAL ENDOWMENT.—The Queen's Jubilee is to be commemorated at Dover by the building of a new hospital, at a cost of £5,000. A large portion of the money has already been subscribed.

STRAY DOGS.—According to an official police return the number of stray dogs taken by the police during the month of March to the Dogs' Home was 1,246. Twelve were killed in the street as mad or ferocious; two were said to be infected with rabies. Sixty-five persons, including two constables, were bitten by dogs during the month.

MR. W. STANGER, F.R.C.S., and Mr. J. W. WALKER, M.R.C.S., L.R.C.P.Lond., have been elected honorary surgeons to the Clayton Hospital, Wakefield, in the place of Mr. Fowler, who has resigned on account of ill-health.

THE King of the Belgians, accompanied by Sir Edmund Currie, paid a visit to the London Hospital, Whitechapel, on Tuesday, April 5th, and inspected many of the wards, when he expressed himself highly pleased with the excellent arrangements.

DR. WARNER will give his course of six lectures for the Froebel Society, on "Our Children: How to Study Them," at the Physical Training College, Hampstead; at 13, York Place; and at 10, Norland Place, Uxbridge Road.

MISS E. PECHEY, M.D., and Miss C. ELLABY, M.D., have been appointed first and second physicians respectively of the Pestanji Hormasji Kama Hospital for Women and Children, Bombay.

SUCCESSFUL VACCINATION.—Mr. J. H. Hughes, L.R.C.P.Lond. and M.R.C.S.Eng., of Ombersley, has recently received a Government grant (for the sixth time) for the efficient state of public vaccination in the Ombersley district of the Droitwich Union.

MR. W. K. BURTON, sanitary engineer to the London Sanitary Protection Association, has been appointed by the Japanese Government Professor of Sanitary Engineering to the Imperial Institute, Tokio.

THE quarantine on arrivals from ports on the Danube and the shores of the Black Sea between Sulina and Bourgas has been replaced by a system of medical inspection.

TYPHOID FEVER AT GUADALOUPE.—Typhoid fever has broken out at Guadaloupe. It is supposed to have been brought by ships from Panama.

MEDICAL MAGISTRATES.—Dr. R. L. Bowles, of Folkestone, Mr. H. J. Roberts, M.R.C.S., of Pen-y-groes, and Mr. Robert Spence, M.B. Craigkennochy Burntisland, have been placed on the Commission of the Peace for Kent, Carnarvonshire, and Fifeshire respectively.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which should be forwarded in stamps with the announcement.

BIRTHS.

WEST.—On April 7th, at 113, King Henry's Road, N.W., the wife of J. Arthur West, M.R.C.S., L.R.C.P., of a son.

MARRIAGES.

FULLER—BLACK.—On April 12th, at St. Marylebone Church, Henry Roxburgh Fuller, M.D.Cantab., only son of the late Henry William Fuller, M.D., of 13, Manchester Square, to Julia Louisa, second daughter of the late Patrick Black, M.D., of 11, Queen Anne Street, W.

WHITE—CHALMER.—April 13th, at Christchurch, Fulwood, Sheffield, by the Rev. A. G. Tweedie, M.A., John Sinclair White, M.D., F.R.C.S., to Evelyn, only daughter of Frederick Chalmer.

DEATH.

EGAN.—April 3rd, at Whitehaven, Dr. John Johnstone Egan, late Surgeon in the Peninsular and Oriental Steam Navigation Company's Service, son of the Reverend J. J. Egan, Incumbent of Denylane, Diocese of Kilmore, co. Cavan, aged 31 years.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—MEDICAL SOCIETY OF LONDON. Mr. C. B. Lockwood will read a paper on a Mode of Restraining Hæmorrhage during Operations upon the Tongue. Mr. H. H. Clutton: A Case of Catheter and Calculus Removed by Lithotrity. Dr. Angel Money: Renal Sarcoma in Infancy; is Surgery Justifiable?

TUESDAY.—ROYAL STATISTICAL SOCIETY, LONDON, 7.45 P.M. The sixth ordinary meeting of the present session will be held at the Royal School of Mines, 28, Jermyn Street, S.W., when the following paper will be read: Class Mortality Statistics, by N. A. Humphreys, Esq.

PATHOLOGICAL SOCIETY OF LONDON, 8.30 P.M. Messrs. Bowlby, Lockwood, W. Adams, Morgan, and Shattock: Specimens Illustrative of Congenital Dislocation of the Hip. Mr. Lunn: Disease of the Humerus. Mr. Shattock: Fibrous Metaplasia of Bone. Dr. A. H. Robinson: Osteitis Deformans. Mr. Hutchinson: Destructive Arthritis of Knee, without Suppuration. Mr. Hutchinson, junr.: Sarcoma (?) of Knee. Dr. Pitt: Carcinoma of Spine and Liver. Dr. Coupland and Dr. Pasteur: Diffuse Sarcoma of Spinal Pia Mater (two cases). Dr. Maguire: Interstitial Aneurysm of the Interauricular Septum. Card Specimens.—Mr. Fenwick: Tumour of the Bladder. Dr. Wilcocks: Congenital Malformation of the Heart. Mr. Shattock: Tuberculous Disease of the Skin.

WEDNESDAY.—ROYAL METEOROLOGICAL SOCIETY, 7 P.M. Mr. Charles Harding: The Storm and Low Barometer of December 8th and 9th, 1886. Mr. G. Chatterton, M.A., M.Inst.C.E.: Report of the Wind Force Committee. Mr. W. H. Dines, B.A.: A New Form of Velocity Anemometer. Mr. G. M. Whipple, B.Sc.: Description of Two Maximum Pressure Registering Anemometers.

THURSDAY.—THE PARKES MUSEUM OF HYGIENE, 5 P.M. Mr. Alfred Fryer, On Dust and Ashes: How to deal with them. Mr. Charles Hawksley, M.Inst. C.E., in the chair.

HARVEIAN SOCIETY OF LONDON, 8.30 P.M. Mr. F. Treves: The Treatment of Wounds. Dr. W. B. Hadden: Demonstration on Pathological Changes in the Brain and Spinal Cord.

FRIDAY.—CLINICAL SOCIETY OF LONDON, 8.30 P.M. The following papers will be read.—Mr. Bilton Pollard: Three Cases Illustrating the Difficulties in Establishing Natural Respiration after Tracheotomy and their Treatment by Tracheal Catheterisation. Mr. Meredith: A Case of Large Omental Lipoma, successfully Treated by Abdominal Section. Mr. Godlee: Some Cases of Abdominal Cyst following Injury. Mr. B. Pitts: Abdominal Exploration for Chronic Intestinal Obstruction: Relief of Symptoms by Artificial Anus: Subsequent Removal of a Growth Involving Splenic Flexure of Colon: Recovery.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

QUERIES.

ENGLISH HEALTH-RESORT FOR RHEUMATOID ARTHRITIS.

F. W. would be glad to know the best place to send a lady suffering from rheumatoid arthritis; she has been at Buxton, Droitwich, and Northwich without receiving much benefit. Any establishment in this country where there was even a remote chance of improving her health she would visit, but it is feared that she could not be induced to go abroad.

DUTIES OF GUARDIANS OF THE POOR.

D. H. E., who has been recently elected a member of a board of guardians, asks to be informed of any work bearing on their duties, etc.

SIR JAMES PAGET ON VENESECTION.

M.B. wishes to know the title of a treatise on blood-letting, written by Sir James Paget some years ago, and where he is likely to obtain it.

*** Sir James Paget informs us that he has never written a treatise on blood-letting, or said anything about it in public, unless it were at a meeting of the British Medical Association in Norwich. The address delivered by Sir James Paget at the opening of the Section of Surgery, at the meeting at Norwich in 1874, contains some remarks on the value of blood-letting. It was published in the JOURNAL of August 15th, 1874, p. 221. (The number is out of print.)

ANSWERS.

CHINA.—We do not believe that the Chinese have engaged any English surgeons for the army and navy which they are organising; but, after their experience in their late fighting with the French, it is to be hoped that they may soon see their way to make provision for their sick and wounded in time of war. Doubtless an application by letter to the Chinese Embassy, 49, Portland Place, would receive due attention.

PILOCEREUS SENILIS.

NEMO writes: Like "An Inferior Person," I have appealed to my classical friends; "πίλος-cereus-senilis" is the only ray of light, and there are objections to the compounding of the words; still, old hats are made to shine by the application of wax. On the other hand, it is quite in keeping with the generous character of the late Dr. Moxon to claim no more for his writings than their polish or pungency. "I don't suppose I give the men better bread and meat than you do, but I put a little mustard on the sandwich." He was as proud of the condiment as his friends are of the subject matter. I shall welcome any more probable solution.

SENECTUS writes: In reply to your correspondent who signs himself "An Inferior Person," it appears to me that "Pilocereus senilis," Dr. Moxon's *nom de plume*, is meant to signify "old grey hairs." He was a funny man, as witness his reference to the motto of Guy's Hospital, "dare quam accipere," as applied to its stock mixtures. The shafts of his satire were justly aimed at a good deal of the rubbish of the materia medica; and it would appear from your biographical notice of this remarkable man, his faith in drugs was very small. A great many of our most thoughtful M.D.'s Lond. are also very sceptical of ancient physic, and are groping about and searching for "a more excellent way." Men of such a genius as Dr. Moxon would have rejoiced at the dawn of a brighter day in the general practice of medicine.

MR. J. MANLEY (West Bromwich) writes: Pilocereus means literally "hairy cactus"; *cereus* is a genus of cactaceæ; *pilo-cereus* is a genus somewhat covered with long hairs, which are in many species white, or whitish grey, hence the specific name *senilis*.

DR. EDWARD F. WILLOUGHBY writes: "An Inferior Person" should have consulted, not lexicons, but a dictionary of botany. He would have found that the *nom de plume* chosen by Dr. Moxon is the botanical name of the "old man cactus.' *Cereus*, the Latin for a wax candle, is the generic designation of those cactuses having more or less cylindrical stems, that is, taper shaped, some being quadrangular, some hexagonal, and some again, as *c. flagelliformis*, with grooves so numerous and shallow, that they are simply fluted. The spherical species have long since been separated into the new genera of *echino-cactus* and *melo-cactus* and the *c. senilis*, so called from being surmounted by a head of long drooping white hair, is now made into a genus by itself of *pilo-cereus*, or hairy cereus. In the cactus house at Kew he may see some very fine specimens.

TRAINING OF MONTHLY NURSES.

H. B.—Monthly nurses are trained at many lying-in hospitals. The best known schools in London are the British Lying-in Hospital, Endell Street, W.C., the General Lying-in Hospital, York Road, Lambeth, S.E., and Queen Charlotte's Lying-in Hospital, Marylebone Road, N.W. For terms and further particulars our correspondent had better apply to the matron of one of these institutions.

MASSAGE.

W.—Graham's book *On Massage* (W. Wood, New York, 1884) contains the information required.

ENGLISH PRACTITIONERS IN FRANCE.

X. Y. Z., who makes inquiries with regard to the examination which a qualified English medical man must undergo to obtain the diploma of *Officier de Santé* in France, and as to the method by which a "dispensation" to practise among English people may be obtained, should make application to the "Secrétaire de l'Académie de Médecine," Paris, as a new law is in preparation concerning foreigners practising medicine in France.

TREATMENT OF CORNS.

THE application recommended by Dr. M. F. Bush is a solution of two drachms of salicylic acid in six drachms of collodium. The salicylic acid is dissolved in the collodium by agitation. The fluid should be applied with a camel-hair brush.

INSTITUTIONS FOR PROVIDING NURSES FOR THE SICK POOR.

BETA asks whether any institution exists for the voluntary provision of nursing to the sick poor at their own homes.

*** In London there is the Metropolitan and National Nursing Institution for Providing Trained Nurses for the Sick-Poor. The central home and office is at 28, Bloomsbury Square, W.C.; the superintendent, Miss E. M. Mansell, kindly informs us that there are seven branch homes within the metropolitan area, at Holloway, Hampstead, Paddington, Kensington, Westminster, Clapham (including Battersea), and Walworth. District nursing has also been started in connection with the association in the following country districts: Portsmouth, Hertford, Hereford, Banbury, Bishop Auckland, and Windsor. Nurses trained by the association are working independently of it at Liverpool, Gloucester and Peterborough.

NOTES, LETTERS, ETC.

ARE ANGLO-INDIANS GLUTTONS?

M. BRADLEY (Madras) writes: I have just come across the JOURNAL of January 22nd, in which you quote a paragraph under this heading from the *Indian Mirror*. As I have spent a year travelling in India in all three presidencies—north, south, east, and west—in the hills and the plains, and have stayed with all classes of Anglo-Indians, from lieutenant-governors and generals to missionaries and planters, I am clearly entitled to claim some knowledge of the facts so strangely misrepresented by the *Indian Mirror*. In the hills, and at large places such as Calcutta, where there are many business men, the meals are three, as at home—breakfast at 9, lunch at 2, dinner at 8, with the addition of tea and toast before one's morning ride at 6 or 7. In the plains the *chota hazree* probably consists of eggs and fruit as well, but then the real breakfast isn't till 11.30 or 12, and tiffin is knocked off the programme altogether. What Anglo-Indian ever touches supper? This meal, like the "four meat meals a day in England," can only exist in the *Mirror's* imagination. When one gets up regularly at 5 or 6, one is hardly likely to sit up long enough after an 8 o'clock dinner to run in a supper. As for the assertion that Anglo-Indians take little exercise, I can only say that all the men, and the majority of the women, I've met, manage to ride or play tennis (probably both) daily, (and how many of them would do this at home?), while dancing is much more vigorous during at least three months at the fairly large stations than it is in England.

Being only a "spin," I can't tell what drinks men go in for at their clubs, but at their own houses and at dinner-parties, I have been surprised at the small amount of wine drunk, so many men sticking to mild whiskey pegs.

G. L. W. (Madras) writes: I cannot avoid writing a line in refutation of the calumny contained in the paragraph under the above heading, at page 169 of the JOURNAL of January 22nd, 1887. I see the paragraph is copied from a native paper, the *Indian Mirror*, which is in itself sufficient to stamp it with untruth, as natives, no matter how high in the social scale (and even though newspaper editors), know surprisingly little about the private and domestic life of the Anglo-Indian, and what little they do know is gathered from the native butler, whose object is always to magnify his master's importance and standing to outsiders. This he thinks he can further by stating that his master indulges in about twice the number of meals in the day that is really the case.

The extract speaks of *chota hazree*, *barra hazree*, tiffin, dinner, and supper as the usual meals of the Anglo-Indian, and, in addition, numerous intermediate drinks and light refreshments. The statement is quite false, so far as I have been able to judge from over ten years' experience in various parts of Southern India. Such a meal as "supper" is unknown, except, of course, at balls, or after theatricals, or such-like entertainments. Meat is eaten as a rule only twice a day; namely, at *barra hazree* (that is, mid-day breakfast, probably after four or five hours' work in the open air), or at tiffin, and at 8 o'clock dinner.

The Anglo-Indian's regular hours for meals depend upon the nature of his appointment and work. The man who has to get through a good deal of out-door work must do it as much as possible early in the morning, on account of the heat, starting at 6 o'clock or half past. He takes a light and hurried meal (called *chota hazree*—"little breakfast") of tea and toast, with perhaps an egg, before starting, does his four or five hours' hard work in the open air, and then returns, pretty well done up, to his cold bath and *barra hazree* ("big breakfast") at 12, at which he is, if in good health, ready and able to consume whatever is put before him, and small blame to him for that same. The next "square meal" is the usual 8 o'clock dinner, not counting a cup of tea at 4.30 P.M., taken before going out to racquets, tennis, etc.

Others, whose work is chiefly in office, and whose office hours are 11 till 5, must adopt a different plan. They breakfast at 9.30 or 10, and have a very light tiffin (that is, lunch) sent to their offices at 2 o'clock.

The *Indian Mirror*, from which you quote, seems to me, in its crass ignorance, to have massed together the different meals of the out-door Anglo-Indian and the office Anglo-Indian, and given the whole as an example of what a single average man gets through daily.

As a matter of fact, few men earn their meals better than the average hard-working, and hard-playing (in the sense of exercise) Anglo-Indian.

THE EPIDEMIC OF DIARRHŒA.

DR. C. R. ILLINGWORTH (Clayton-le-Moors) writes: During the last few weeks I have treated about a score of these cases. One or two only were so severe as to produce cramps and a tendency to collapse. I treated all with carbolic acid, ammonia, and small doses of either morphine or chloral and belladonna. In the very large majority eight or ten doses were sufficient to effect a cure. My reasons for using ammonia, chloral and belladonna, and carbolic acid, in place of acid remedies in choleraic diarrhœa, were fully described and criticised in the JOURNAL for September 20th, 1884, *et seq.* In cases of diarrhœa without vomiting, five-minim doses of the solution of morphine (*B.P.*) were given, with fifteen minims of spirits of ammonia and one or one and a half minims of pure carbolic acid, every two or three hours. When there was vomiting as a prominent symptom, with excessive purging, cramps, and collapse, ten-grain doses of chloral were given, with ten minims of the tincture of belladonna, instead of morphine, in an effervescing mixture of bicarbonate of potash and citric acid, with the ammonia and carbolic acid. In one or two cases, after the vomiting and purging ceased, the patients complained of frequent calls to defecation of small quantities of foul-smelling material, especially after taking nourishment. On injecting into the rectum a few ounces of warm carbolised water, of the strength of half a drachm to half a pint, this distressing symptom was immediately relieved, the dejecta became natural, and the patients made rapid recoveries. In one case a half-grain suppository of cocaine, after the injection, was of great service in relieving the tenesmus.

The cause of the epidemic I believe to have been the late cold, damp, and changeable weather, and indiscretions with regard to clothing.

A Method of applying Cucaine in Toothache.

Dr. Scudamore Powell writes: On several occasions I have found that the application of a solution of cucaine, 4 per cent., to a carious tooth has given almost instantaneous relief from the most severe suffering. The greatest benefit of all has followed the introduction of a tabloid of cucaine, one-sixth of a grain, covered with a little cotton-wool, into the cavity of a tooth, or alongside the gum. The dry drug is preferable, as then a concentrated and certain quantity is applied directly to the painful spot; in a few seconds a numbness is felt, and simultaneously the pain vanishes. The tabloids are minute discs, and are made by Messrs. Burroughs and Wellcome.

Permanent Fehling's Solution.

Dr. J. M. McCulloch.—Perhaps the directions given at page 809 of the Journal of April 9th would be plainer if written in prescription form, thus: Sol. A.: ℞ Cupri sulph (cryst.), grs. 181; aquæ ad., ℥vi. Sol. B.: ℞ Rochelle salt, grs. 728; caustic soda, grs. 400; aquæ ad., ℥ vi. When Fehling's solution is required mix equal volumes of Sols. A. and B. The directions concerning the specific gravity of the soda solution were given to bring the formula in accord with one given by Dr. Pavy, in which a solution of soda of the specific gravity corresponding with 100 grains of sodic hydrate to the fluid ounce is directed to be used.

The Physical Education of Girls.

Dr. J. Fielden Howard (Sandycroft, Shaw) writes: In the main I am in accord with Dr. Badden's views upon the physical training of girls; but, in his sweeping condemnation of schools in general, I think if he had not a word in praise of an institution (the Ladies College, Cheltenham), with which he cannot but be well acquainted, at least he might have meted out a measure of justice. Had he seen, as I a few days ago saw, the large body of girls trooping out of the large hall after morning prayers, their healthy, happy appearance, the anæmia he speaks of conspicuous only by its absence, I think he would have been disposed to somewhat qualify his remarks. I have three girls now attending the College, one of them for the last four years; their health during the whole time has been excellent, and their physical development satisfactory. During this time they have also had the experience of two boarding-houses, both large and commodious, and in each case there has been a large tennis-court attached, of which the girls have constantly availed themselves, as well as frequent long walks into the country; these exercises, together with the prescribed gymnastic lessons, dancing, swimming, etc., I think give the College council a just claim to be thought not to have entirely overlooked the development of the body in their anxiety for the girls' mental progress.

Pianists' Cramp.

Richard Neale, M.D.Lond., writes: As Mr. Haward points out in the Journal of March 26th, page 672, cases coming under the definition of the above appear to be rather numerous. During the last year or eighteen months several such cases have fallen under my observation, and in each case very rapid improvement has followed the application of the percuteur, which has seemed to me to yield far quicker and more satisfactory results than massage could possibly have done. In each case I have not advised discontinuance of piano playing, although the time devoted to practice has been curtailed.

Dislocation of the Shoulder in the Horse.

Mr. Henry Horton (Bromyard) writes: Mr. Noble Smith's case brings to mind a similar one which occurred to me in South Australia in 1869. It was on the occasion of a "kangaroo hunt" in honour of the then Governor, Sir James Fergusson, by whose side I was riding when the accident occurred, through my horse putting his left fore-foot into an unseen wombat hole. I had no chloroform, and we were too far from either camp or town to get any. The only movement the horse made was to pull his foot out of the hole, and, most fortunately, at that moment our huntsman and several others, whom His Excellency and myself had outridden, came up. Besides being our huntsman he was an old trooper, so I made him chief assistant, and he with three others took charge of the limb and simply kept up extension, whilst I made the horse do his own part in the reduction by means of the bit. In a very few minutes the result was, as Mr. Smith so graphically puts it, both seen and heard, His Excellency exclaiming that he had never seen such a thing done before, and trying to persuade me to return to camp; but instead of doing so I remounted, and walked the horse quietly into a tank of water which was close by, and took him round it several times. I finished a good day's hunting, taking home six tails of my own killing. The next day I did my work with him in my buggy, and he never had a bad symptom. The next year I sold him to a lawyer, who rode him seventy miles the next day, gave him one day's rest, with precious little to eat, and then rode him the seventy miles back.

Errata.—In the description of Fig. 4 illustrating Dr. Priestley's second Lumleian lecture, published in the Journal of April 9th, "showing *by a line* cells escaping from the ruptured *capsules*" should be "showing *hyaline* cells escaping from the ruptured *capsule*."—Mr. Sidney Barwise was incorrectly described in the Journal of April 9th as "Late Resident Surgical Officer, General Hospital, Birmingham."

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. A. H. Gault, Ashton-under-Lyne; Mr. C. E. Abbott, Braintree; Mr. C. B. Lockwood, London; Dr. F. P. Atkinson, Surbiton; Mr. T. Nixon, Lincoln; Mr. M. H. Judge, London; The Honorary Secretary of Mercer's Hospital, Dublin; Mr. H. B. Blackburn, London; Dr. G. H. Savage, London; Mr. E. A. White, Wolverhampton; Dr. J. W. Moore, Dublin; Dr. H. Dalton, Harrogate; Mr. J. S. Gelston, Ixworth; Dr. J. S. Hamilton, Hilkooshu, Oudh; Mr. W. Stanger, Wakefield; Mr. R. Bayley, Kingston-on-Thames; Mr. A. E. Grant, Edinburgh; Mr. W. F. Menzies, Rainhill; Mr. C. H. Harris, Whitehaven; Dr. Holden, Preston; Mr. D. Duke, St. Leonards-on-Sea; Dr. J. Keser, London; Mr. G. P. Field, London; Dr. E. W. Symes, Halifax; Mr. A. White, Brecon; Mr. S. Snell, Sheffield; Surgeon-Major Fishbourne, Lewisham; Mr. S. Bourne, Birmingham; Surgeon-Major J. G. Rogers, Cairo; Mr. H. R. Fuller, London; Mr. E. Owen, London; Surgeon-General Maclean, Southampton; Brigade-Surgeon Gore, Cairo; Mr. J. Hull, jun., Glasgow; Mr. T. L. Jordon, Sutton Bonington; Senectutus; Skinner and Co., London; Surgeon-Major Riordan, Cairo; Mr. W. A. G. Laing, Barnstaple; Mr. E. C. Greenwood, London; Dr. Warner, London; Dr. H. Cunningham, Dumfries; Mr. V. Jackson, Wolverhampton; Dr. Ewart, London; Mr. L. Knaggs, Huddersfield; Mr. J. Holmes, Radcliffe; Mr. M. F. Bush, Bristol; Dr. J. A. West, London; Mr. J. Topping, London; Dr. H. Lewis, Folkestone; Dr. J. Ackman, Guernsey; Dr. Willoughby, London; Dr. G. Dabbs, Shanklin; Dr. J. H. Scott, Camberley; The Woodhouse and Rowson Electric Supply Company, London; Dr. J. Kirkpatrick, Edinburgh; Dr. J. M. Gaston, Atalanta; Dr. D. A. Fraser, Totnes; Mr. F. D. Hamilton, London; Mr. Booth Clarkson, Liverpool; Mr. J. H. Neale, Leicester; Dr. F. A. A. Smith, Cheltenham; Dr. Thin, London; Our Vienna Correspondent; Dr. C. F. Knight, Dublin; Dr. F. Fox, Strathpeffer Spa, N.B.; Sir J. Paget, Bart, London; Surgeon-Major Cuffe, Dum-dum, Calcutta; Dr. J. F. Caiger, London; Dr. J. M. McCulloch, Dumfries; Dr. R. B. Nicholson, London; Mr. H. J. Nicholson, London; Mr. S. Murphy, London; Dr. Carline, Leicester; Mr. R. Spence, Burntisland; Mr. J. Hogan, Netley; Mr. A. M. Kavanagh, Egypt; Mr. J. Singer, Trieste; Mr. F. Whitwell, Shrewsbury; Mr. J. Manley, West Bromwich; Mr. H. Horton, Bromyard; Dr. Vintras, London; Dr. P. J. Freyer, Mooradabad, India; Dr. C. J. Francis, London; Dr. J. Grieco, Foggia; The Secretary of the Devonshire Hospital, Buxton; The Charity Record, London; Mr. Jai Gopal, Lahore; Dr. Glover, London; Mr. W. Marriott, London; Mr. J. W. F. Rogers, London; Dr. S. Powell, London; Dr. H. Lewis, Folkestone; Mr. C. F. Smyth, London; Mr. H. A. Thomson, Edinburgh; Mr. J. Maitland, London; Dr. Ward Cousins, Southsea; Dr. Imlach, Liverpool; Mr. W. Taberner, Wigan; Mr. L. Humphry, Cambridge; Mr. F. J. Peall, St. Leonards-on-Sea; Mr. M. Thomson, Boxmoor; Dr. S. D. Wells, Plymouth; Mr. T. N. Thomas, London; Mr. Harris, Whitehaven; Dr. W. F. Haslam, Birmingham; Dr. A. Downes, Cheltenham; Mr. D. W. Orr, Lindley; Surgeon-Major Finlay, Aldershot; Mr. S. P. Shield, Cork; Mr. T. D. Cook, Torquay; Dr. B. B. Joll, Liverpool; Dr. C. E. Glascott, Manchester; Mr. A. W. Nankivell, Chatham; Dr. M. Handfield-Jones, London; Dr. Robert Barnes, London; Mr. R. Clement Lucas, London; Mr. A. E. Barrett, London; Mr. M. E. Farmer, Dublin; Dr. R. J. Heatley, Sunderland; Mr. E. H. Davis, West Hartlepool; Dr. Gubb, London; Dr. E. O. Daly, Hull; Mr. J. Cantlie, London; Dr. T. T. Troosewich, St. Petersburgh; Dr. R. P. Harris, Philadelphia; Surgeon-Major R. G. Thomsett, Gibraltar; Dr. De Watteville, London; Dr. M. G. Evans, Cardiff; Mr. J. J. Egan, Beltarbet; Mr. H. Burton, London; Mr. B. D. Taplin, Radcliffe-on-Trent; The Secretary of the Jacob Testimonial Fund, Dublin; Mr. T. P. Hunt, London; Mr. R. W. Murray, Pendlebury; Messrs. Burgoyne and Co., London; The Secretary of the Sanitary Assurance Association, London; Dr. Tatham, Salford; The Secretary of the Queen's Jubilee Hospital, London; Mr. G. A. G. Simpson, London; Miss Allen, Nottingham; Messrs. Calvert and Co., Manchester; Mr. C. M. Jones, Troedyrhiw; Dr. C. R. Illingworth, Accrington; Dr. Coates, Streatham; Mr. N. A. Humphreys, London; Dr. F. J. Savery, London; Surgeon E. Harold Fenn, London; Mr. R. T. Grubb, Harlow; Dr. P. Boulton, London; Dr. G. Henty, London, etc.

BOOKS, etc., RECEIVED.

A Text Book of Pharmacology, Therapeutics, and Materia Medica. By T. Lauder Brunton, M.D., D.Sc., F.R.S. Adapted to the *United States Pharmacopœia* by F. H. Williams, M.D. Third Edition. London and New York: Macmillan and Co. 1887.

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REMARKS
ON
TEN CONSECUTIVE CASES OF OPERATIONS UPON THE BRAIN AND CRANIAL CAVITY TO ILLUSTRATE THE DETAILS AND SAFETY OF THE METHOD EMPLOYED.

(WITH A TABLE.)[1]

By VICTOR HORSLEY, B.S., F.R.S.,
Assistant-Surgeon to University College Hospital; Surgeon to the National Hospital for Epilepsy and Paralysis, Queen Square.

In the JOURNAL for October 9th, 1886, is published a paper by myself on what I believed to be the best method of treating the brain surgically, a method which, though contravening many of the accepted canons of surgery at the present time, I had previously derived by experiments on the lower animals not only to be the safest, but also to afford the best results. The further experience gained from operations upon man, as might be expected, has added little to the knowledge gained by experiment. However, in the former case, one or two points naturally assume a more important position in considering the justifiability of operating, and as I am anxious that they should receive the attention and criticism of those practising in the same direction, I shall now proceed to discuss them in brief detail.

As regards the preparation of the patient, both generally and locally, there is nothing further to add; but before leaving preliminaries, it is worth while noting that the main factor in each case at the present time, which acts most powerfully in suggesting the advisability of surgical treatment, is the utter hopelessness of any other drugs, etc., proving of any value. This is, of course, the early stage in general adoption of every new departure in medical science, but it is obviously needful for us to formulate as early as possible the circumstances conditioning the symptoms of those maladies of the central nervous system which are amenable to surgical treatment. This need lies at the door of imperfect diagnosis.

Diagnosis of disease of the central nervous system means an intimate acquaintance with its physiology and pathology, and this we may hope to see widely generalised in spite of iniquitous opposition to scientific experiment and foolish ignorance, which, so to speak, boasts that it "does not believe in localisation." For the full advantage to be gained from operative procedure it is obvious that the disease must be attacked in an early stage. Nothing illustrates this fact more clearly than the very valuable paper published by Dr. Hale White in the last volume of the *Guy's Hospital Reports*, on the morbid anatomy of certain cerebral tumours. In this paper, Dr. Hale White gives some details from the *post-mortem* room concerning 100 cases of intra-cranial tumour, in which he demonstrates with facility that at about the period when a patient dies from such a cause, surgical interference in the majority of cases would be as powerless as medicine.

When, however, the nature of the malady and its seat are completely diagnosed, as in nine of the ten cases in the table appended to this note, the question assumes an entirely different aspect, as will, no doubt, be conceded on the perusal of the facts there given, from which it will be seen that, with one exception, No. 10, every patient was considerably benefited. After all, however, the proposition that what is wanted in these cases is earlier treatment scarcely needs proving, and so we may pass on to the real object of this note.

Anæsthesia.—The first practical point to be briefly dwelt upon is the question of anæsthesia. The method I proposed before, namely, the previous administration of morphine followed by that of chloroform, I see no reason to alter; but, like all kinds of anæsthesia, it has certain special risks to which it seems necessary to draw attention. In the first place, the remarkable proclivity of children to the effect of morphine must be properly discounted. Dr. Wilson, the senior resident medical officer to the National Hospital for Paralysis and Epilepsy, found that while one-twentieth of a grain was amply sufficient in Case 8, the value of the drug in contracting the cerebral arterioles remained unimpeached. With respect to the administration of chloroform, the one additional fact here to be noted is the extremely important one that it is very easy to give too much in a brief space of time. Thanks to the great care of Drs. Wilson and Stedman, who have assisted me in this respect, I have seen no accident; but I have been very deeply impressed with the startling rapidity with which a patient who has roused up in the middle of the operation is sent off again in a moment with only a few whiffs of the drug. It is perfectly comprehensible, therefore, that an anæsthetist, however careful, might be induced to prolong the administration beyond the point of just sending the patient off again, as, indeed, he would naturally do under ordinary circumstances. Such prolongation, under the present circumstances, is evidently exceedingly dangerous. In the absence of accurate experimental observation it would be foolish to hazard an explanation of this fact, and I do not intend, therefore, to attempt one, but I should like to remark that I am nearly sure this state of sensitiveness to the action of the anæsthetic is more marked when the dura mater is opened.

Formation of the Scalp Flap.—In insisting before that the old crucial incision should be entirely abandoned in favour of a large flap, stress was laid upon the fact that it must be so outlined as to preserve in its attachment either the superficial temporal, or occipital arteries uninjured. This can be easily done without disfigurement or hindrance to drainage, and at the same time it perfectly admits of the exposure of any portion of the cranium. As regards the reflection of the flap, it has always been the custom to reflect the periosteum as a separate layer. Now this method has a very obvious disadvantage in considerable and unavoidable laceration of the very thin membrane. This may be prevented by lifting it *en masse*, in continuity with the rest of the flap. It peels off perfectly, and there is no interference with the nutrition of the bone.

The Bone.—Sawing of the bone is most rapidly, and therefore best, accomplished by first taking out an inch disc with a trephine, to learn its thickness, and then by cutting out a piece of the size required with a circular saw, mounted on Bonwill's surgical engine,[2] the separation being completed with very powerful bone forceps. Following Dr. McEwen's method in cases where it has been possible to preserve the dura mater, I have replaced fragments of the bone between the same and the skin flap; but although the vitality of the fragments has invariably been perfectly preserved, I have not so far observed much ossification of the cicatrix. This, however, I take to be of little practical importance, since the cavity becomes roofed over with the tough fibrous membrane I have before described, which well preserves the parts beneath from injury. In cases where it has been necessary to remove a large area of bone, the patient has worn a perforated celluloid cap, which, though light, is nevertheless very strong.

The Dura Mater.—Portions of this membrane which are adherent to tumours are usually very considerably altered. If the mischief has but lately begun, the dura mater will be found simply highly vascular. In very advanced cases it may be yellowish, and in some instances, on separating it from the growth beneath, it is found to be of a dirty reddish colour. In all cases where it is adherent, of course the membrane must be freely excised.

The Brain.—Almost the only addition now to be made to what I have said before on the subject of the treatment of the brain is to advise that plenty be removed, especially in the case of new growths. From the experience gained from Case 4, it is clear that even the most malignant tumours may be successfully attacked, and life thus prolonged and ameliorated, but it also shows plainly that the malignant growths must be excised very freely from among the white fibres. In the instance referred to, the recurrence was almost entirely confined to the latter part of the brain. The details of this case, however, which are specially interesting, will be published elsewhere, this note being only intended to illustrate the most important facts of the operative procedure.

Drainage.—In the first few cases operated upon, I employed a drainage-tube in the usual fashion for the first twenty-four hours, and then left it out. I now sew the wound all round closely except for one inch at the most dependent part, where any tension of wound-discharge can relieve itself by escape between the edges. I am more than ever convinced that the object to be attained is immediate union of the flap, and that the arachnoidal, like the peritoneal, cavity may be trusted to absorb excess of fluid.

Mode of Dressing.—As before, I employ the original form of strict Listerism, and wider experience prompts the suggestion for further stringency in attention to details. I have experimentally tested the method of irrigation, to see whether the carbolic spray could be easily dispensed with, and the results of the inquiry have been to show that the spray still affords the best method of continuously douching the wound with disinfectants. It, besides, offers no inconvenience, so far as I can see. After the first four or five days, when the wound is healed, it seems preferable to scatter powdered boracic acid

[1] Very kindly compiled for me by Dr. Thomas Wilson, Senior Resident Medical Officer to the National Hospital for Paralysis and Epilepsy.

[2] A powerful form of which Messrs. Mayer and Meltzer have made for me, after the plan of the original engine, presented by the inventor to St. Bartholomew's Hospital.

TABLE OF FIRST TEN CASES, ARRANGED CHRONOLOGICALLY.

No.	Initials, Sex, and Age.	Object of Operation.	Diagnosis.	State before Operation.		Operation.	Mode of Dressing Wound.	Mode of Healing.	State after Operation.			Physician seen with.	Result.
				Mental.	Paralysis.				General.	Mental.	Paralysis.		
1	J. B. M. 22	Removal of scar in brain from old depressed fracture of skull, giving rise to fits beginning in the right leg; 2,870 fits during first 13 days of stay in hospital (twice in *status epilepticus*)	Scar involving hinder end of superior frontal sulcus	Dull	Incomplete of right arm and leg	May 25th, 1886. Trephining at seat of adherent scar in skull, and removal of scar extending into brain by free incision	Strict Listerism with spray 5 per cent. carbolic gauze. Drainage-tube left out on second day	Immediate union. Highest temperature 100°	Improved	Improved	As before	Dr. Ferrier	No fits since.
2	T. W. M. 20	Removal of irritative lesion in thumb-area causing epilepsy and spasms of thumb-type; 1 fit or more a week; spasms constantly	Lesion in anterior border of motor centre for thumb. (?) Tumour	Fair	Incomplete of left upper limb	June 22nd, 1886. Trephining at seat of lesion; exposure of localised tubercular tumour and removal by free incision	Strict Listerism with spray 5 per cent. carbolic gauze for 4 days; then boracic acid and eucalyptus gauze. Drainage-tube left out on second day	Immediate union, but afterwards a superficial portion of skin at edge of flap (which was turned upwards) sloughed. Highest temperature 100.8°	As before	As before	,,	Dr. Hughlings Jackson	No fits for 3 months afterwards; since then 8 fits, all confined to the arm and of shoulder-type, in September, October, and November, 1886; none since.
3	W. J. M. 24	Removal of irritative lesion in the motor cortex, causing severe epileptiform seizures in batches every 3 weeks or less	Old punctured fracture of skull involving cortex	Dull; headache frequent	Slight of right upper limb and face	July 13th, 1886. Trephining at seat of minute scar and removal of small piece of inner table of skull depressed in a traumatic cyst, with the brain surrounding this for thickness of 5 to 8 mm.	Strict Listerism with spray. Drainage-tube left out on second day	Immediate union. Highest temperature 101.8°	Improved	Improved	Improved somewhat	Dr. Buzzard	No fits since operation save three slight attacks of *petit mal*.
4	J. H. M. 38	Removal of irritative and destructive lesion in brain, which caused complete left hemiplegia, coma, and epileptiform seizures beginning in the left shoulder	Tumour of the cortex involving the upper part of the arm-centre in the right hemisphere	Semi-comatose for 10 days before operation	Complete of left arm and leg	September 23rd, 1886. Trephining over the diagnosed seat of tumour and removal of glioma, the portion removed weighing 4½ ounces	Strict Listerism with spray and carbolic gauze. Drainage-tube left out on second day	Immediate union for most part; small portion of wound was re-opened on the eighth day, remained open for 30 days, a large quantity of clear serous fluid draining away for that time. Highest temperature 101° on the normal side (right), 102° on the paralysed side (left)	Much improved	Return of full consciousness, mental state remaining perfect for 3 months afterwards	Much improvement gradually till patient could walk with very slight help 2½ months after operation	Dr. Ferrier	No fits after operation; patient gradually improving for 3 months, after which tumour began to give symptoms of recurrence, and patient died on March 18th, 1887, six months after operation.
5	O. S. H. M. 10	Removal of irritative lesion causing epileptiform seizures beginning at left angle of mouth; 3 to 6 fits every day	Lesion in motor cortex; ? small hæmorrhagic cyst	Moral imbecile	Incomplete of face, tongue, and articulation	October 19th, 1886. Trephining over "facial centre," and removal of cortex composing that centre, as determined by faradism at the time	Strict Listerism with spray 5 per cent. carbolic gauze. Drainage-tube removed on second day	Immediate union. Highest temperature 99.6°	Improved	Improved	As before	,,	Twitchings at left angle of mouth second night after operation, fits third night; afterwards about half as frequent as before; still later has had interval of 8 nights without fits. General improvement.
6	G. W. M. 37	Removal of irritative lesion caused by blow on head 14 to 15 years ago; first fit 3 years later	Cicatricial lesion in and behind centre for movement of hallux, that is, upper end of fissure of Rolando. [Beevor and Horsley.]	Very dull; memory very much impaired	Paresis of right arm and leg, especially of hallux. Paresis is of sensation as well as motion	November 8th, 1886. Trephining over diagnosed seat of lesion. Bone normal. On incision of dura large cystic cicatrix removed from cortex. Excision of lesion incomplete owing to collapse of patient	Strict Listerism with spray and carbolic gauze. Drainage-tube left out first day after operation	Immediate union. Highest temperature 100°	Much improved	Much improved	*Motor:* improved in upper limb; as before in lower. *Sensory:* much improved	Dr. Savill	Four fits day after operation, 2 on sixth day, and a slight attack about once a week; no loss of consciousness.
7	J. W. M. 37	Relief of severe localised and intractable headache of 3 years' standing, which incapacitated the patient from work	—	Good	None	November 12th, 1886. Trephining at seat of pain. Removal of piece of parietal bone, inner table of which had been perforated and was being eroded by a Pacchionian body	Strict Listerism with spray. No drainage-tube	Immediate union. Highest temperature 99°	As before	As before	None	Dr. Hughlings Jackson	Relief of pain after operation; no return since.

TABLE OF FIRST TEN CASES, ARRANGED CHRONOLOGICALLY—*continued.*

No.	Initials, Sex, and Age.	Object of Operation.	Diagnosis.	State before Operation.		Operation.	Mode of Dressing Wound.	Mode of Healing.	State after Operation.			Physician seen with.	Result.
				Mental.	Paralysis.				General.	Mental.	Paralysis.		
8	F. W. M. 4	Exploration and removal of lesion causing 3 to 14 fits every day	Lesion beneath motor cortex; probably old hæmorrhagic cyst	Semi-comatose most of time	Almost complete of right arm and leg	November 29th, 1886. Trephining over left "motor area;" exploration of brain by incision.	Strict Listerism with spray. No drainage-tube; small portion of incision left free	Immediate union. Highest temperature 99.4°	As before	?	As before	Dr. Bastian	No fit for a month; then six slight ones; then no more.
9	W. T. M. 37	Removal of irritative and destructive lesion causing gradually increasing right hemiplegia, and fits beginning in the right forefinger; no fit for three months before operation	Tumour in motor cortex involving right "hand-centre"	Good; headache constant	Complete of right hand and forearm, incomplete in leg; slight defect of speech	December 7th, 1886. Trephining over seat of lesion, and removal of tumour weighing 4½ ounces.	Strict Listerism with spray. One inch of incision left approximated but without suture for drainage	Immediate union except at one small piece of incision left for drainage. Highest temperature 100°	Improved	As before	As before in arm and leg; a little more defect of speech	Dr. Ferrier	No headache since; no fit; no further increase in the paralysis.
10	J. B. M. 18	Removal of progressive destructive lesion causing headache, vomiting, optic neuritis, increasing weakness of all limbs, especially left arm and leg, and epileptoid attacks with turning of head and eyes to right	Tumour involving right lobe of cerebellum chiefly	Good	Incomplete of all four limbs, especially the left arm and leg; sphincters affected	December 17th, 1886. Trephining over right lobe of cerebellum, and removal of tubercular tumour weighing 7 drachms	Strict Listerism with spray	—	—	—	—	Dr. Bastian	Died 19 hours after completion of operation, having only partially recovered consciousness for a short time. Patient had been a year in bed. Operation as *dernier ressort*. *Post mortem:* generalised chronic tubercle in viscera.

along the dry line of incision, and to fix by collodion a little cotton-wool over all. At any rate, there is clearly no reason why the original dressing should remain on the head after the wound is sealed and dry.

After-Treatment of Patient.—The only symptom of inconvenience that the patients treated so far have suffered has been thirst. Possibly this is in the main due to the morphine. As an additional though minor trouble, the liquid diet of the first three days makes the tongue very furred and unpleasant. To remove this, the mouth should be thoroughly brushed several times a day with strong chlorate of potash solution. The patient should be put on solid food as soon as he asks for it. If the case be a comparatively trifling one, he may be allowed to get up at the end of a week. Ten days, however, is a very good average for the stay in bed, and in severe cases a fortnight should be insisted upon. Recovery of power may be accelerated by the use of the faradic current from the vertex to the weakened muscles (Ferrier).

Many other questions offer themselves for discussion—for example, the question of further operation in case of recurrence, the curative effect of the operation on epilepsy, etc.; but the facts at our disposal are too few to make such discussion either practicable or profitable.

In conclusion, I think the details of the cases contained in the accompanying table show that the operation of exposing and removing considerable portions of the brain is not to be ranked among the "dangerous" procedures of surgery.

DONATIONS AND BEQUESTS.—King's College Hospital has received £1,000 stock anonymously (per Messrs. Haggard, Hale, and Pixley), and £100 from the Duke of Bedford.—Mr. William Middlemore, of Edgbaston, bequeathed £250 to the General Hospital, £250 to the Queen's Hospital, £100 to the Hospital for Women, £100 to the Eye Hospital, £100 to the Hospital for Sick Children, £100 to the Sanatorium, and £100 to the General Dispensary, all at Birmingham.—Mrs. Susannah Beloe, of Gravesend, bequeathed £250 each to the National Hospital for the Paralysed and Epileptic, the Gravesend Hospital, the Hospital for Consumption and Diseases of the Chest, and the Cancer Hospital.—Miss E. K. Brumby has given £105 to the Richmond Hospital, Surrey.—Mr. George Stubbs, of the Ferns, has given £100 to the Macclesfield Infirmary.—Mr. Francis Dunsford, of Tiverton, bequeathed £100 to the local infirmary.

ABSTRACTS OF LECTURES
ON
MALARIAL FEVERS.

BY W. NORTH,
Research Scholar of the Grocers' Company.

LECTURE I.—DISTRIBUTION AND GENERAL CONDITIONS OF PREVALENCE: HISTORY IN THE PROVINCE OF ROME.

THE wide distribution of malarial fevers and their disastrous effects upon the population of countries in which they prevail, and the obstacle they constitute to all material progress, is not generally realised, whereas it is a subject which should attract the attention of governments, inasmuch as these diseases materially increase the cost of administration. We as a nation have had a vast experience of them, and the literature of the subject is enormous, but, withal, little or nothing has been done towards understanding their etiology, or the precise conditions necessary for their existence or production. If we examine the malarial chart of the world, we cannot fail to be struck by the gradation of the disease from the equator to the poles, and by the characteristics of the countries where it prevails. They are, briefly, countries where Nature has her own way, and swamps, jungle, and virgin forests abound. The map suggests a relation of the disease to temperature and water. If we compare the malarial chart of Europe with a physical map of the Continent, the relation of the disease to low land, abundant water, and hot, moist climate, is very evident. Make the same comparison between a physical map of Italy and the map of Senator Torelli, showing the local distribution of the malaria, and the relation of the disease to water, temperature, and altitude of the land becomes a certainty. A study of the local distribution and variation of intensity of malarial fevers in the province of Rome shows us that local conditions have a most important bearing on the subject, and are, therefore, worthy of minute and careful examination, and the general conclusions drawn from the consideration of large areas are still found to apply, and we find the disease to be generally most severe on low-lying ground, in valleys, and in marshy districts.

An examination of the distribution of the population in the province of Rome shows us the usual order of things is reversed, and that whereas in most civilised countries the population is densest in the plain and least dense in the mountains, in the province of Rome exactly the reverse is the case, and we find the mountain population stands to that of the plains in the ratio of 68 to 28 persons per square kilomètre. This starling exception to a well-recognised rule leads us to enquire whether political causes have led to the abandonment of the plain, and the malaria simply stepped in and taken possession, or has the malaria itself been the cause of this abandonment? and, in either case, where did the causes begin to operate?

This is an historical question of the very greatest interest, and also of the very greatest importance to the subject, as tending to show what are the conditions necessary for the development and spread of malarial fevers. There is, however, one very great difficulty in the inquiry, and that is that malaria develops so slowly that, unlike the black death or the sweating sickness, it does not attract the attention of the historian, and thus we are driven to argue its presence or absence, and its intensity, from the history of individual localities.

The one great fact that we have as a starting-point is that in even the later days of the Roman Empire, places now absolutely uninhabitable were not only inhabited but held in high esteem by the Romans as health resorts, so much so that the whole coast line of the province was covered with their villas and country houses, of which we can see the ruins to-day; and we know from the writings of Pliny and others that these villas were maintained in a state of luxury and of magnificence quite incompatible with the presence of such an enemy to health as malaria. There is some evidence, however, that the Pontine district was not all that could be desired, even in those times; and Seneca advises a friend to avoid the neighbourhood of Ardea as not being very healthy. The invasions of the Goths swept away these villas and the high cultivation which surrounded them; the gardens and sacred groves were destroyed, and the population driven to the hills and secure places. Rome itself had sunk almost to insignificance, and the destruction done by the northern barbarians was never repaired, and the Campagna continued the battle-ground of Saracens, Lombards, rival Popes and barons, rendering a return to the ancient civilisation almost hopeless. In the seventh and eighth centuries we hear of fever, not isolated, but widespread, and of serious attempts by various Popes to recolonise and cultivate the desolate country. The so-called Domuscultæ were established, with the double object of military defence and the reclamation of the land, on the site of places which flourished under the Empire—but they do not appear to have been successful, or at most only partially so; and though some of them exist at the present day, for example, the Isola Farnese, the site of the ancient Etruscan city of Veii, they are only aggregations of hovels, and so unhealthy that the population desert them in the summer and autumn.

Thus we see that the Campagna was abandoned from causes purely political, and Nature was allowed her own way in a country where the unceasing toil of man is required to keep her under control. There can be no doubt but that the reckless destruction of trees, which has gone on steadily ever since it was begun by the Goths, has played a most important part in altering the local conditions and local climate of the country; and in comparatively recent times the destruction of timber in the mountains has caused the streams which rise in them to become uncontrollable and destructive, converting large areas of the lowland into bog and swamp, and rendering cultivation difficult and unprofitable.

Our inquiry, therefore, leads us to the conclusion that, from political causes, the local conditions of the Campagna have been most profoundly altered, and that, *pari passû*, malaria has arisen and increased in intensity.

A minute examination of the relation of local conditions to the disease will form the subject of the next lecture.

Bequests and Donations.—The Oldham Infirmary, the Southport Infirmary, and the Southport Convalescent Hospital and Seabathing Infirmary have each received £2,700 under the will of Mr. George Bedford.—Mr. Alfred Bishop, of Severn Villa, Highbury New Park, manufacturing chemist, bequeathed £500 to the London Hospital, £100 to the London Dispensary, Spitalfields, and £100 to the Poplar Hospital.—Mr. W. Tattersall, J.P., of Blackburn, has given £250 as a "Jubilee donation" to the Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties at Lancaster.—Mr. J. S. Morgan has given £100 to the Royal Hospital for Children and Women.—The Royal Free Hospital has received 50 guineas, the proceeds of a "Jubilee smoking concert" by the employés of the Railway Clearing House.

ON THE TREATMENT OF CONGENITAL DISPLACEMENT—THE SO-CALLED CONGENITAL DISLOCATION—OF THE HIP-JOINT BY LONG-CONTINUED RECUMBENCY AND EXTENSION.

By WILLIAM ADAMS, F.R.C.S.E.,
Surgeon to the Great Northern Hospital, and to the National Hospital for the Paralysed and Epileptic; Consulting Surgeon to the National Orthopædic Hospital; etc.

In a paper which I read last year in the Surgical Section of the Association at Cardiff, "On the so-called Congenital Dislocation of the Hip-Joint," published in the Journal of November 7th, 1885, my observations were confined to the pathological and clinical history of this affection. This paper was accompanied with a statistical table of sixty cases which had occurred in my own practice during twenty-five years. I now propose to offer a few remarks on the treatment best calculated to diminish the deformities and other consequences of this malformation. The chief points in the pathological and clinical history which appear to me to be established are:

1. That in all specimens of this so-called congenital dislocation ot the hip, the head of the femur, although displaced upwards, has been found to be still within the capsular ligament, so that no true dislocation exists.

2. That in every dissection the acetabulum has been found to be deficient so far as regards the osseous rim and cotyloid ligament, which essentially form this deep cup-like cavity. In these cases the acetabulum is represented only by a flattened triangular depression, the apex of the triangle corresponding to a point that would naturally be a little above the centre of the acetabulum, and the base corresponding to the border of the obturator foramen. This is evidently that portion of the floor of the acetabulum formed by the ischium naturally uncovered by articular cartilage, and in which fatty tissue is lodged. The floor of the acetabulum, or what would correspond to it after the fusion of the bones which naturally enter into the composition of the acetabulum, namely, the ilium, ischium, and os pubis, is well-formed, and in this respect there is no evidence of arrest of development; but so far as regards the osseous rim of the acetabulum and the cotyloid ligament, the defective condition observed can only be regarded as a congenital malformation.

3. That the head of the femur is always diminished in size, and somewhat flattened and irregular in outline, but covered with a thin layer of healthy articular cartilage. The round ligament is sometimes present and elongated, but in many cases it is absent. The neck of the femur is nearly horizontal in direction, and curved or twisted backwards in adaptation to the altered position of the head of the bone, in adult specimens. The great trochanter also becomes diminished in size and altered in form.

4. That the capsular ligament becomes elongated, representing an elongated pear-shaped cavity, and greatly increased in thickness and density. Professor Bennett described this in his dissection of a case in a girl, aged 6; and Dupuytren in the dissection which he made in the year 1828—the subject being a man, aged 74—observes: "The fibrous capsule of the joint, which was in form exactly like a purse, was attached to the upper and lower borders of the original acetabulum, and was in place of an osseous cavity on the side it covered; its length was sufficient to allow the ascent of the head of the femur to the depression I have just described; the space over which it extended amounted to about three inches. This capsule was very thick, and almost as dense as cartilage."[1] The thickened and dense capsular ligament evidently compensates to a certain extent for the absence of the acetabulum, and restrains the head of the femur within certain limits.

5. That in consequence of the absence of the acetabulum, the head of the femur gradually ascends on to the dorsum ilii under the influence of the weight of the body after the walking period. It is doubtful whether any displacement exists at the period of birth, though the conditions for such displacement undoubtedly exist. When only one hip-joint is affected, no inequality in the length of the thighs can be detected previous to the walking period, and for some little time after

[1] *On the Injuries and Diseases of Bones*, being selections from the collected edition of the Clinical Lectures of Baron Dupuytren. Translated and edited by F. le Gros Clark for the Sydenham Society, London, 1857, p. 178.

this; when the lameness first attracts attention, it is difficult to prove shortening; but subsequently the inequality in the length of the legs gradually becomes more apparent, and the ascent of the head of the femur is proved by the obliteration of the ilio-femoral triangle, and the test of Nélaton's line. There is no evidence that the head of the femur is ever displaced by muscular action.

6. That the gluteal muscles, being thrown out of action from the absence of the natural ball-and-socket articulation and alteration in their natural direction, gradually pass into a state of fatty degeneration. Dupuytren described this, and Professor Bennett also described it in his dissection.

7. The consecutive deformities, involving the pelvis and the spine, which occur in these cases, if allowed to pursue their course without any treatment being adopted, are severe and important, more especially when occurring in females. In cases of displacement at both hip-joints we know the pelvis gradually assumes the horizontal direction, with the lumbar vertebræ projecting anteriorly, and the sacrum depressed betwen the iliac bones, and quite horizontal in direction. The pelvic bones also become altered in shape. When the displacement occurs only at one hip-joint, obliquity of the pelvis and alteration in shape of the pelvic bones, as well as lateral curvature of the spine in a severe form, are certain to result. The boot worn on the shortened leg has to be gradually raised until the completion of growth; and in one case in my list—Miss M., a tall young lady—the boot had to be raised four inches and a half, and a steel support for the spinal curvature had to be worn.

8. The theory of this affection being a traumatic dislocation, produced by the accoucheur by manipulative or instrumental interference in cases of difficult labour, is negatived by the pathological condition found on dissection, and by the collected series of sixty cases which have occurred in my own practice, and which I published in my previous paper. The labour, whether natural or otherwise, is noted in forty-five cases, in twenty-three of which it is said to have been easy and natural. In two of these cases the child was born before the accoucheur arrived. Breech-presentation is stated to have occurred only in seven cases. Prolonged labour occurred in twenty-two cases, but in only seven of these either manipulation or instrumental assistance was employed.

TREATMENT.—In reference to the indications for treatment, it must be borne in mind that the consecutive deformities above described are simply the result of a mechanical cause—namely, the weight of the body, when thrown upon the affected limb or limbs, elongating the capsular ligament, and forcing the head of the femur gradually higher on the pelvic bones, passing more or less directly upwards and backwards in different cases, and so disturbing the natural equilibrium of the body.

It is necessary to be borne in mind that the shortened limb can be elongated without pain by gentle extension, and the great trochanter will descend one or two inches, according to the age of the patient and other conditions; but, as soon as the extension is removed, the shortening returns, and the top of the great trochanter rises to the level of a horizontal line drawn from the anterior superior spinous process, or above this line towards the crest of the ilium. This mobility of the head of the femur necessarily results from the absence of the acetabulum and the elongated condition of the capsular ligament.

This is the special characteristic of the congenital displacement, and naturally suggested to the earlier observers of this affection the treatment by recumbency and continued extension. Dupuytren bears testimony to having seen benefit result from this treatment in the practice of MM. Lafond and Duval. He observes: "I at first thought that no benefit would be derived in these cases from the employment of continued traction on the lower extremities for reasons already stated, but the experiments of MM. Lafond and Duval tend to throw some doubts on the correctness of the conclusion. These distinguished practitioners tested the influence of extension in their orthopædic institution, on a child aged 8 or 9, who was the subject of double congenital dislocation of the hip, and after the uninterrupted employment of this treatment for some weeks I satisfied myself that the limbs had resumed their natural length and direction; but I was not a little astonished to find that, after extension had been persisted in for three or four months continuously, the greater part of the beneficial results remained for several weeks undiminished. It would be idle, it is true, to generalise on this single case; but as an isolated example of the utility of extension it is interesting, and it may be the forerunner of more important results" (*Op. cit.*, p. 184).

This treatment, however, does not appear to have found much favour with the profession; indeed, the whole subject seems to have attracted less attention, and to have been studied less than it deserves, since Dupuytren so accurately described this affection.

Many years ago I tried absolute recumbency with extension, for a period of three months, in the case of a young gentleman, aged 8½ years, in whom congenital displacement existed only on the left side. At the end of this time I found the shortening return quickly after the extension was removed, and the head of the femur moved up and down with as much facility as at the beginning. The parents were unwilling to allow the child to be subjected to further restraint, and the treatment was abandoned. This child was kept in bed, or on the sofa, and extension by weights used, as in the treatment of hip-joint disease. Since then I have continued to adopt the plan of partial recumbency, that is, for half the day, combined with gymnastic exercises in the horizontal position, by the improved exercising plane, and limiting walking and sitting to half an hour at any one time.

By these means the consecutive deformities have, I believe, been diminished, but it has been reserved for Dr. Buckminster Brown, of Boston, U.S.A., to carry out the treatment by recumbency and extension more thoroughly, with greater attention to details, and for a longer period than has hitherto been done, and his efforts have been rewarded by the most marked success.

In a work on the subject which Dr. Brown recently published,[3] the improvement gained in one case—a girl, aged 4, with congenital displacement of both hips—has been shown by photographs taken two years and a quarter after the commencement of treatment, which had been continued strictly for thirteen months, that is, from December 30th, 1882, to January 14th, 1884. Dr. Brown observes (*Op. cit.*, p. 23):

"It is worthy of remark that the patient, with slight exceptions, remained in excellent health throughout the long confinement, was always in good spirits, retaining her flesh and a healthy colour in her cheeks."

"May 25th, 1885. The child's walk is normal, and she enjoys walking; she steps with natural firmness and vigour. Like other children, she takes especial pleasure in running."

It would therefore appear that in this case there is every probability of the advantages gained being permanently retained through life.

With regard to the method of making the extension, Dr. Brown confines the child to a bed, that is, outside the bed, partially dressed, in the daytime, during the whole treatment, with extension by weights and pulleys fixed at the required angles to posts at the head and foot of the bed. In the case related direct extension only was at first made, and in two months the tendency of the head of the femur to slip upwards was diminished. He then altered the plan to one in which the thighs were in a position of flexion, abduction, and eversion, whilst extension was being made, imitating the method of Bigelow in the reduction of an ordinary dislocation; but Dr. Brown observes, "this position was painful, and could be borne but two or three hours in the course of the day." Now, as we know that no true dislocation exists, and the head of the femur never leaves the capsular ligament, this position is evidently unnecessary.

I have always found direct extension, lightly but continuously applied, quite sufficient to bring the head of the femur into a natural or nearly natural position, so that the ilio-femoral triangle is restored, and I therefore only employ it.

Instead of keeping the child confined to a bed, and in the house, I have recently employed a new extension-couch, made for me by Mr. Ernst. The child is placed on a movable plane, covered by a mattress, and the straps for extension and counter-extension are attached to the plane, the extension being made by a check-pulley instead of the weight and pulley. On this plane the child can be lifted from the couch, and carried about the house, or taken into the open air on a spinal carriage, whilst the extension is being maintained. This plane is now being used in two cases, and appears to answer its purpose very well.

With regard to operative treatment, such as the division of the tendons of all the muscles inserted into and about the great trochanter—the glutei and external rotators—as practised by Guérin and other surgeons, I am opposed to any such interference, as the head of the femur is never displaced by muscular action, nor is it ever retained in the displaced position by muscular contraction, and the mobility of the joint is always free.

In one direction, however, that of abduction, the motion is always limited, sometimes to such an extent that I have thought division of the adductor longus tendon would be useful, especially in cases of double displacement in females. It has also occurred to me that by the use of a subcutaneous ligature it would be possible to contract and more or less perfectly obliterate the upper portion of the cavity of the

[3] *Double Congenital Displacement of the Hip: Description of a Case, with Treatment, resulting in Cure.* By Buckminster Brown, M.D., Boston. Cripples, Upham, and Co., publishers.

capsular ligament after the head of the femur has been for some time retained in the lower portion of this cavity. The effect of this would be to prevent the ascent of the head of the femur when the extension is removed, but I have not as yet performed this operation.

Dr. Brown, quoting from the *Medical News*, for October, 1884, states that excision of the hip-joint has been performed for the so-called congenital dislocation by Drs. Hensner, of Bremen; Margary, of Turin; E. Rose, and C. Reyher; but upon what principle, or with what object such an operation could be performed, I am at a loss to understand.

There can be no doubt that during the period of childhood and active growth, much may be done by long continued recumbency and extension to diminish the conspicuous deformity, as well as other consequences certain to result if no treatment be adopted; and according to the statement in Dr. Brown's case, the great improvement gained will probably remain through life.

CLINICAL REMARKS ON THE TREATMENT OF ANGULAR CURVATURE OF THE SPINE.[1]

By RICHARD DAVY, M.B., F.R.S.E.,
Surgeon in Charge of the Orthopædic Department, Westminster Hospital.

Last year we had under observation four typical cases, in all their misery, of angular curvature of the spine. My purpose to-day is to briefly relate each of these cases, and conclude with some general remarks on their treatment.

Case I.—T. B., aged 4, Peckham; admitted into Percy Ward on February 23rd, 1886; discharged on April 8th, 1886. The general appearance of this boy is well shown in the diagram. The upper seven



of his dorsal vertebræ were involved; he could not remain long in his self-assumed attitude; he was restless and peevish; moped away in a corner and lay down, though in reality he was a good-tempered fellow. He had a fall when about one year old, and the disease and deformity had steadily progressed. There was no abscess. In 1885, I applied a jacket for him, which had to be removed on February 24th, 1886, by reason of usage. His general health had been looked after; he had had deep-water baths; and on April 8th, 1886, I placed him on his stomach in the hammock and set him up stiff in plaster, working in shoulder-bridges of plaster for the support of a circular air-pillow. His mother was pleased to see her boy playing about the ward, and his own spirits have increased wonderfully; he is now an inmate of a children's home.

Case II.—J. B., aged 9, school-boy, Leicester, was admitted into Mark Ward under my care for angular curvature in the lower dorsal and lumbar region on January 4th, 1886. When three years old he fell out of a perambulator; and shortly afterwards he lost power in his lower limbs, and the deformity began. Sensation was perfect; there was no loss of control of the urine or fæces. My dresser, Mr. Godwin, made an accurate sketch of the boy, which has been lithographed, and is annexed.



On getting up he was compelled to seize his ankles with his hands, and then walked in lithotomy position, being unable to bear his weight in any other way; and even this form of progression was undertaken with much preliminary balancing and trepidation. The boy was well fed and well nursed, and had his jacket set on in the hammock in February, 1886. From that time he gained strength and vivacity; he was daily exercised, and learnt to balance himself with his hands on his knee-joints. As his weakness seemed to depend upon laxity of the knee-joints, I set up both legs in a light columnar support of plaster, and so gave extra power for the use of his legs in walking. Within a few days he learnt his new balance, and we all had the pleasure of seeing this boy first creep round the bed or a table on his fortified legs, and eventually walk out of the ward with the aid of a stick. I have heard that, since his dismissal on May 27th, 1886, he continues to make good progress, and that with the aid of crutches he can get about comfortably.

Case III. *Fractured Spine; Acute Angular Displacement; Fractured Sternum; Paralysis of Extremities; Death.*—E. K., aged 64, was admitted into Henry Hoare Ward, on Friday, February 12th, 1886, at 4 P.M., much collapsed, and with his head lopping on his chest. He had fallen 14 feet, at Marlborough Buildings, Queen Victoria Street, and was picked up insensible. He was carefully placed in bed and wrapped around with warm blankets. He could sluggishly move both arms, but neither of his legs very much; sensation was impaired over both arms, and absent in both legs. He was drowsy, and in answer to questions repeatedly drawled out "I can't move." He incontinently passed fæces, but not urine. He had a left inguinal hernia. His urine was drawn off once with a full-sized catheter, and he was given a little milk and brandy, warm tins of water at the sides of his body, and a screen around his corner bed. He remained conscious to the last, and died on Saturday morning, February 13th, 1886, at 2 A.M. (eleven hours after the accident). From his friends I gleaned that he had been a healthy man, but in 1880 he fell 40 feet, breaking his ribs; since then he has had asthmatic attacks every winter.

The *post-mortem* examination was made by Dr. Hebb, and I have to acknowledge the following abstract from his register:

February 16th, 1886. Body well nourished; rigidity present; superficial grazes over calvarium; the brain and membranes healthy; lungs emphysematous; much œdema. There is marked induration at the base of the right lung, due to fibrous thickening of the peri-bronchial connective tissue. This thickening spreads inwards and upwards, like the branches or root of a tree. No pneumonia, nor a trace of softening or breaking down. There are some old fractures of

[1] Delivered at Westminster Hospital.

the ribs on this side, with pleuritic adhesions. Left lung and pleura healthy. By aid of the microscope, the indurated lung shows fibrous tissue, enclosing numerous spheroidal foci of lymphoid cells. The general appearance is remindful of sarcoma; heart and pericardium healthy; liver and kidneys congested. There is a left omental oblique hernia.

At the conclusion of the *post-mortem* examination, I carefully macerated the cervical vertebræ, sternum, and left clavicle, mounted them, and have brought the specimen from our museum for your inspection. The left clavicle was completely smashed at its sternal end, which suggests that he fell on his left hand or arm. The sternum is broken about three-quarters of an inch below the junction of the manubrium and mucro; one jagged line of fracture on the front aspect, comminuted and depressed on the thoracic side. The ensiform cartilage is extremely well marked; bifid for an inch, and the right horn again is bifid for one-eighth of an inch. The cervical vertebræ are well developed above, but the fifth, sixth, and seventh cervical and first dorsal are bulged at their discs, chipped and splashed, with irregular, bossed nodules of dense bony projections. The anterior body of the sixth cervical vertebra only measures a quarter of an inch, whereas the fifth and seventh measure fully half an inch each. The sixth cervical vertebra is separated from the fifth cervical by a smashing up of the intervertebral tissues, and its laminæ and the arches of the fifth cervical are fractured irregularly; the tips of the spinous processes of the fourth, fifth, and sixth cervical vertebræ are also broken. On examining the cord, the lower part of the cervical enlargement is much flattened, and is extremely soft; on incision, the grey matter is found to be the seat of marked extravasation, with much bruising of texture. The cord was put away for hardening in chromic acid. The white matter of the cord seemed to be intact.

Case iv.—In Percy Ward at present (January 1887) there is a girl, aged 10, a typical case of angular lateral curvature of the lumbar spine, with double hip-joint disease of four years' duration, who has been readmitted for application of a jacket. The ilio-femoral joints were both ankylosed, and her right leg was so much adducted and flexed as to brush the left knee and thigh, and render walking or standing on both feet impossible. On June 26th, 1886, I performed posterior sub-trochanteric osteotomy of her right femur, and placed her leg in a straight position. On August 24th, 1886, her thigh having well united, I put this patient up in a plaster jacket; and she left the hospital on August 30th, 1886, improved in health, able to walk better, and without knee-brushing.

General Remarks.—Three of these cases show what an excellent plan of treatment the plaster jacket is in young cases of spinal curvature; and the more I use plaster in hospital practice, the better I like it; because the treatment is vested absolutely in the hands of the practical surgeon, independent of the vexatious delays of the instrument maker. I can also maintain that the use of hammock suspension for these plaster-settings is the best plan yet introduced for such applications. In Case 3 (fractured spine) the fracture of the sternum was undoubtedly caused by direct jam of the symphysis menti on the sternum; the fractured fifth cervical vertebra permitted this exaggeration, and the non-fracture of the symphysis of the lower jaw shows what a strong bone this must be. The peculiar slopings on the bodies of the spinal vertebræ may be old, but I find that similar results may be obtained by forcible *post-mortem* flexions of the spine, as well as by direct intense pressure on the cancellous vertebral bodies. If the changes I have shown you be old, then we may assume that the sloping discs gave point to the intense cervical flexion and rupture. In Case 4, we have a rare association of double hip-joint disease and lumbar curvature. This hip-joint disease was *bonâ fide*, with osseous ankylosis, not the distortion caused by a psoas abscess. I am especially pleased at the result of subcutaneous osteotomy in this case, and I will, in conclusion, say a few words on this operation. The instruments required are a heavy box-wood mallet, a cold chisel, and a thin scalpel. The position of the patient, I have always taught, should be on the back, and the femur to be operated on held up by an assistant at right angles to the table. The subcutaneous position of the back of the trochanteric portion of the femur can be easily made out, and a small cut made with the knife, down to the bone, and only just admitting the chisel. No important parts are divided; and the shaft here slopes off rapidly, giving an advantageous attack to the chisel. The weight of the patient's body gives a most firm counter-stroke to the point of the chisel, and the longest possible leverage is given to the surgeon over a solid fulcrum for snapping the femur. By the dependent position ensured, a valvular opening is secured on bringing the femur down to the straight; occlusion of the wound also is guaranteed, and the weight of the limb presses on the collodion pad. A large area of bone (pelvic and trochanteric) is left firm, on which the lower fragment rests, either for the play of a false joint, or for bony ankylosis. The girl made an excellent recovery. I have performed the same operation thirteen times in this theatre, and without any failure. Spinal cases are by no means purely subjects for instrument makers, but they do call for the early diagnosis, as well as the best and most sustained energies, of the skilled surgeon.

PSOAS ABSCESS: WHEN AND HOW TO EVACUATE IT.

By EDMUND OWEN, M.B., F.R.C.S.,

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In the surgery of childhood there is probably no branch of practice which has derived such beneficial influence from the principles of antiseptic surgery as the treatment of psoas abscess.

So far as my experience serves, twenty years or so ago, most cases of psoas abscess went wrong under active treatment, and surgeons were shy of interfering with them; dealing with them in a half-hearted and apprehensive way, they dreaded the almost inevitable hectic fever and gradual and fatal exhaustion.

When using the words "antiseptic surgery," I do not mean to imply that everything in the way of improvement is due to the spray and gauze. I refer to no narrow ritual, but to the grand principles of modern surgery, whether practised by a Lister, Savory, Tait, or Gamgee. For now that the spray has, in every sense of the word, cooled down, and the atmosphere of surgical practice and criticism is less obscured by clouds of carbolic vapour, one is able to take a much wider and more liberal view of the entire question. One is, moreover, now much less inclined to take fright or offence at the principles of the memorable Address in Surgery which was delivered at the Cork Meeting of this Association, one great feature of which was the claim that every careful surgeon is an antiseptic surgeon.

Twenty years ago, if the surgeon could do so, he preferred leaving a psoas abscess alone; but if the collection of matter were bulging to such an extent as to cause a reddening and thinning of the skin, if, in short, Nature were forcing his hand, he would perhaps thrust into the abscess a cannula and trocar, or partially evacuate it by a valvular opening.

It was at about this period that Mr. Holmes wrote, in his well-known work on the *Surgical Diseases of Children*, that his experience led him to dissuade the opening of abscesses which were associated with spinal disease; that however effected, and with whatever precautions, it generally did more harm than good (Second edition, page 543). And Alexander Shaw, in his essay on "Diseases of the Spine," also spoke about "hesitation and delay," and held out the somewhat vain hope that the surgeon might possibly succeed in dispersing the collection by resolution (*System of Surgery*, 1870, vol. iv, p. 128). And by various other authors the important subject of the active treatment of psoas abscesses was dealt with in diffidence, or quietly shelved.

The chief reason or excuse for adopting the Fabian policy was that possibly the abscess might remain quiescent for all time, or that it might happily disappear altogether. Thus, in 1849, in his classical *Treatise on Diseases of the Bones*, Stanley wrote:—

"The knowledge of the fact that even in a small proportion of cases a psoas abscess has been observed to undergo no change prejudicial to the part, or to the health of the individual, furnishes a ground for not interfering with the abscess; but another and still better reason for abstaining from such interference is that the disappearance of the abscess may take place by the absorption of its contents." He goes on to say that the opinion has been expressed on good authority that this natural cure of a psoas abscess never occurs, but that, nevertheless, he is sure of the fact, and that he is thus brought irresistibly to the conclusion that a psoas abscess should not be opened until it is about to burst.

One of the points on which I would specially ask for an expression of opinion by modern surgeons is whether psoas abscess does often undergo this spontaneous cure. In my own experience the happy contingency has been so rare that I do not consider it as within the range of practical therapeutics. In many years of out-patient practice at a general and at a children's hospital, I have met with only one such case. My invariable experience—with that one exception—is that when in connection with a stiffened spine, an ovoid or fusiform tumour can be

detected ascending in the depths of the iliac fossa, it is only a question of time as to when its purulent contents reach the surface. For their removal aspiration is of no real value. The tubular needle is quickly choked, and flakes of fibrin, shreds of ruined intervertebral discs, and fragmentary sequestra of the vertebræ can never be removed by it. The abscess quickly fills again, and within a few days of making the attempt sero-purulent fluid leaks through the puncture, and unless thorough evacuation be at once performed, the abscess runs great risks of becoming septic. Irresolute attack of any other kind gives an equally unsatisfactory result. All this being admitted, there is no alternative for the practical surgeon but freely to open and drain the abscess.

The second point which I would suggest for discussion is, when should this thorough evacuation be resorted to? My contention is that the abscess should be attacked as soon as treatment has brought the patient into the best possible condition for the ordeal. There should be no useless temporising. Why delay operating until the skin has become thin and red? For during this time the pus may be hollowing out for itself a wandering chasm which extends from the diaphragm above to Scarpa's triangle below, and may be insinuating itself beneath the iliac fascia or amongst the planes of the abdominal muscles. Surely, the smaller the abscess the less serious the inevitable operation, and the more amenable the cavity to successful treatment.

The method of evacuating psoas abscess, which I have adopted in a large number of cases, and which I recommend with confidence, is by a free anterior as well as posterior opening and by then washing and draining the cavity right through. The first opening I make close above the outer end of Poupart's ligament, using the scalpel until about an inch of the length of the fibres of the aponeurosis of the external oblique has been exposed. I then scratch through the fleshy attachment of the internal oblique and transversalis, and, keeping well below the level of the peritoneum, thrust the director into the swelling. Pus escapes, and the opening is enlarged by the dressing forceps and the finger. A stiff probe is then passed through the abscess cavity and made to project beneath the skin on the outer side of the erector spinæ. With this as a guide, a counter-opening is made in the loin. The large cavity is then flushed perfectly clean with a warm antiseptic solution, and a drainage-tube of the size of a penholder is laid through the chasm for a few days, being afterwards replaced by a silk thread. The parts are liberally covered with bulky pads of wood-wool and finely picked oakum in gauze bags; these are kept in position by a towel arranged as a binder, which, for the sake of compression, is tightly drawn and fixed with safety pins. Next day the cavity is again washed out, under chloroform, if necessary, the wounds being dressed as before. After this, the less that it is interfered with the better; if the temperature do not rise, and the discharge do not soak through, the dressings may be left for a three or four days, or longer. From the first day the discharge becomes thin and watery; suppuration in the ordinary sense of the word is at an end, and the cavity steadily contracts into a narrow passage.

If the abscess be so small that the surgeon does not feel inclined to attack it from the front, he may readily work down on to it above the iliac crest, on the outer side of the erector spinæ. The scalpel is needed only for the skin incision, the rest of the operation being performed with equal ease and safety by the use of a steel director and the ring dressing forceps—at any rate in children.

Of the evacuation of unilateral psoas abscess, after the manner recorded, I have had a large number of examples; and it so happens that we have lately had under treatment in the ward, at the same time, three cases of double psoas abscess, each of which is deserving of special record.

The first is that of a girl, aged 6, who was admitted last March; she was pale and thin, and had been losing power in her lower limbs for about a year. A large psoas abscess reached from below each crural arch to the carious lumbar vertebræ. Mr. Lewis, the house-surgeon, evacuated the left abscess only, fearing lest the simultaneous attack of the two large abscesses should cause serious shock. The child did not do well, and the temperature rose. After an interval of a week or two, the other side was washed out and drained, and immediately the temperature dropped towards normal, and has not been materially raised since. The child is now at the Convalescent Home of the Children's Hospital, greatly improved in every way.

Another girl, aged 6, had a right psoas abscess evacuated in May last; her temperature remained at normal for about two months, when it began to ascend two or three degrees at night, and the child complained of much pain. Examination showed that the left side was occupied by an abscess, which had filled quickly. This I opened, front and back, thoroughly flushing the cavity with warm sublimate solution (1 in 1,000); it was noticed that some of the injection returned by the opening on the other side. I much regret to say that this poor child died within four hours of the operation, death being preceded by three attacks of vomiting, and by collapse; she had, moreover, several loose motions, and the urine which was passed just before death was bloody. Of course, the vomiting might have been due to the chloroform; but, when this feature is considered in conjunction with the persistent and fatal collapse, the loose motions, and the hæmaturia, the circumstantial evidence in favour of her having been brought under the toxic effect of the sublimate salt is strong indeed. At any rate, for the future, I shall discard the mercuric solution of the strength of 1 in 1,000 for washing a large cavity in a child, and shall revert to warm iodine-water, decolourised by carbolic acid, a solution of which I have great reason to speak highly. (Salivation would not be expected in the case of sudden mercurial poisoning.)

The third case is that of Rebecca L., aged 5¼, who, twelve months previously, had been treated at another hospital for spinal caries. On admission to Great Ormond Street, she had a large psoas abscess on each side, which had been noticed for eight months or so. On July 12th, 1886, the surface of the body having been cleansed, each abscess was opened, front and back, and drained. Since then she has been steadily improving in every way and is getting fatter. As is shown by the chart, her temperature has remained steadily against the normal line; it has never reached 100° F.

Conclusions.—It is unpractical to look forward to the spontaneous absorption of a psoas abscess; sooner or later it must be evacuated by Nature or art. In this matter art has the advantage, as by her aid the cavity can be at once emptied, cleansed and drained. The earlier the abscess is opened the better; for delay may entail the extravasation of pus, and the formation of a needlessly large and intractable cavity. The abscess should be opened and irrigated from the front and drained through a counter-opening in the loin. Washings and drainage should be thorough; for a small abscess the single opening at the back may suffice.

Warm iodine-water (decolourised) is the most suitable fluid for irrigation; the sublimate solution (1 in 1,000) is dangerous, at any rate in a large or double psoas abscess in childhood. The most convenient dressings are bulky pads of wood-wool and gauze bags of finely picked oakum; they should be fixed under a towel tightly pinned as a binder. Pus may rapidly collect on the opposite side of the spine, after a single abscess on the one side has been evacuated; therefore, if the temperature rise and remain high after the evacuation of a unilateral abscess, the formation of a second abscess should be watched for, and it should be opened as soon as it is detected; thus convalescence may be at once established.

Bilateral abscesses should be attacked simultaneously; they are likely to be in intercommunication, and the area of suppuration cannot be kept aseptic unless both sides are washed and drained.

THE TREATMENT OF MALIGNANT STRICTURE OF THE ŒSOPHAGUS BY TUBAGE OR PERMANENT CATHETERISM.

By CHARTERS J. SYMONDS, M.S., F.R.C.S.,
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1. *Epithelioma of Œsophagus: Treatment by Permanent Catheterism or Tubage: Death from Extension to Pleura and Lung.*—S. S., aged 43, came to my out-patients, at Guy's in April, 1885, suffering from dysphagia of two months' standing. She was between five and six months pregnant, and had got the impression that she had a "pregnancy tumour" in her neck, which would disappear at her confinement. A large bougie was arrested eleven inches from the teeth; a smaller one was passed with ease. For three months the occasional passage of a bougie relieved the dysphagia, though, on two occasions, she was unable to swallow even fluids for thirty-six and twenty-six hours respectively, the last being five days before admission.

July 6th. She came into the hospital very much emaciated, and able to swallow a little fluid only. She was eight months pregnant, and had had dysphagia for three months. A bougie was passed without difficulty, and the swallowing was improved.

July 9th. A short funnel-shaped tube was inserted; this gave rise to no trouble. On the 14th, it was removed, cleaned, and reintroduced, the stricture having become somewhat dilated. Through this tube (No. 10) she took beef-tea thickened with arrowroot, eggs and milk, and thin custard. She was up every day.

July 21st. She gave birth to a well-nourished female child, apparently at full time.

August 10th. The tube was removed. It had not been changed for twenty-seven days, during the whole of which time she swallowed fluids, arrowroot, eggs, custards and similar things freely. When removed the tube was found to be blocked, so that the fluids must have passed by the side, a circumstance indicating dilatation. The tube was now left out, as she was able to take bread and butter, bread and milk, and fish. On August 12th she was discharged.

August 24th. She returned, looking thin and exhausted. For the first week she swallowed fairly well, then the difficulty increased to complete inability on the 22nd. She was fed by a long tube; and, on August 27th, a No. 16 short tube was passed. It was a tight fit, but caused no discomfort. She spat up some blood-stained mucus, and, three hours after the insertion of the tube, had a rigor, with severe headache and an uncomfortable feeling in the neck. The temperature was not recorded at this time, but the next morning it stood at 103°; and, in the afternoon of the 28th, being still high, 102.6°, I removed the tube, fearing cellulitis. On the 29th the temperature was normal, and she was swallowing freely.

From August 29th to September 12th she managed to swallow without a tube, but suffered a good deal from cough, and from pain in the right side.

September 16th. A No. 12 short tube was inserted.

September 20th. Went out wearing the tube, but returned with the tube blocked on the 28th. She had been eating cake, and a currant was found in the tube; the tube had been in twelve days. She was sent home without the tube, and continued to swallow fluids and bread and butter, rice and cake, till October 15th, when she had pleurisy, with increased difficulty in swallowing.

October 20th. She was again admitted; and on 22nd a short tube, No. 10, was inserted. The introduction was followed by a rigor, during which the temperature reached 103.8°; but as she had no pain, and the pulse was good, the tube was allowed to remain, and the next day she was better.

November 4th. Up to this date she got on very well, but a symptom indicating pulmonary complication now appeared, namely, cough on swallowing. The tube was removed on the 6th, and she swallowed a little better, but the dyspnœa increased so much, and the cough became so continuous, that I was obliged to pass a long feeding-tube on November 10th. The sputa were foul at this time, and the pulmonary symptoms were increasing. From this date to her death, on December 14th, she wore a long tube through the mouth, by which all food was administered, except on one or two occasions, when she was able to swallow for a short interval without cough. The tube caused her much distress, due, as will be found later, to ulceration of the mucous membrane over the cricoid cartilage.

After death, the epithelioma was found to begin at a point four inches from the cricoid, and to extend downwards for three inches, ending at a point three inches from the cardiac orifice. There was a good deal of solid growth, rendering the wall thick. In the centre, the growth was ulcerated, and had infiltrated the wall of the bronchus, into the cavity of which it was bulging. A vertical ulcer, exposing the cartilage, existed in the mucous membrane over the back of the cricoid, and had been produced by the long tube worn through the mouth. There was an extensive right empyema.

Summary.—In reviewing this case, I must say that, when the pulmonary distress became severe, I recommended gastrostomy, to prevent the food irritating the lung; but this the patient declined until it was too late to afford relief. The obstruction had existed in all ten months, during eight of which she was under treatment—for two months by bougies, and for the remaining time by œsophageal catheters. After permanent catheterism was adopted, she lived in comfort so long as she attended to the treatment, until the swallowing of fluids produced coughing. This occurred first on November 4th, forty days before her death, and 117 from the first introduction of the short tube. The longest period the tube remained in the œsophagus without removal was twenty-seven days. For three periods of fourteen, nineteen, and twenty-one days respectively, the patient was able to swallow without a tube; the closure gradually becoming complete, however, in each instance.

2. *Epithelioma of the Upper End of the Œsophagus: Treatment by Tubage: Permanent Dilatation effected: Death from Exhaustion and Prevertebral Suppuration.*—T. W., 51, attended my out-patient room at Guy's Hospital, on November 16th, 1885, having been sent up by Mr. Bedford. The man had had dysphagia for three months for solids, and for six weeks had been restricted to fluids. When first seen he was pale and emaciated, and had not swallowed anything for twenty-four hours, and for the previous two or three days had taken very little.

A No. 10 conical bougie was passed, and he was directed to come up next day.

November 17th. He had not swallowed anything since the passage of the bougie. After the conical bougie had been again passed, a No. 12 short œsophageal tube was inserted. The stricture was seven inches from the teeth, a distance which would place it just below the cricoid. The man immediately swallowed a pint of milk, without any effort, and was sent home. It was noted that the bougie was foul when withdrawn, and that a little blood was expectorated. His weight was 8 st. 1 lb.

November 19th. He looked much better, was able to take eggs, milk, and other fluids, without the slightest difficulty. He had a little uneasiness on swallowing saliva, which he referred to the cricoid and the base of the tongue. The tube was removed, cleaned and reinserted. The epiglottis was examined with the finger and found healthy, so that the inconvenience was attributed to the high position of the growth.

November 23rd. He came to out-patients; he was swallowing well, and said that he did not feel the tube at all.

November 25th. The tube became blocked, but freed itself again.

November 30th. He came to out-patients; he was unable to swallow, the tube having been blocked since the 28th, more or less. In order to clear the tube, he had swallowed forcibly, driving the tube through the stricture, so that the silk was quite taut. It was found impossible to remove the tube, the silk breaking in the attempt. I therefore passed a large bougie into the stomach, pushing the tube before it. The bougie entered with the greatest ease, nor was the tube felt. This bougie was several sizes larger than that formerly passed, and indicated a considerable dilatation of the stricture, which was further proved by my being able to insert a No. 16 short tube without difficulty. Through this the man swallowed freely, and though the tube had an unusually thick wall, he experienced no inconvenience therefrom.

December 1st. He weighed 8 st. ½lb.

December 8th. The tube was removed and cleaned, having been in eight days, and was again returned. On the 9th this man was shown at the Hunterian Society.

December 14th. He swallowed well; the tube was removed, cleaned, and returned. He could swallow freely without the tube. He looked well, and was free from cough. He said he was able to get about, and felt great increase of strength, though unable to work.

December 21st. He had not been seen for a week, but had had no trouble.

December 24th. The tube was partly obstructed. It was removed, and he felt relieved at once of the uneasiness of which he complained. The tube could not be returned, so the man was allowed to return home without it. He had worn a tube continuously for thirty-seven days, without inconvenience, for the further history will show that the irritation and cough of the last few days were due chiefly to the extension of the growth.

December 25th. He swallowed freely; had less cough, and had slept well.

December 28th. A conical bougie was passed, but a tube could not be inserted.

December 31st. He was able to swallow stewed tripe and onions, stewed calves' feet. Weight 8 st. 4 lbs. His voice was gruff, without cough; the gruffness came on to-day, and he attributed it to cold.

January 4th-18th (1886). He continued to swallow freely, but the hoarseness remained. The larynx was examined, and though the cords were well seen, no change was observed that could account for the alteration of the voice.

January 25th. Came again, looking very ill. He had a bad cough, and expectorated a good deal of bad-smelling, purulent material. Swallowing (especially fluids) produced cough.

February 1st. He was very weak and thin, but being anxious to remain at home, and having a cheerful disposition, he would not enter the hospital, and made out that he was swallowing better than he really was.

February 4th. I saw him at his own house. He was then cold and almost pulseless. He had with difficulty got home on the 1st, and had rapidly emaciated since. He was anxious to have a tube passed. But the attempt proved too much for his remaining strength, for shortly afterwards he died.

At the *post-mortem*, the epithelioma was found extending from the level of the centre of the cricoid downwards for three inches, reaching to a point nearly opposite the bifurcation of the trachea. The growth was much ulcerated and the trachea infiltrated, its mucous membrane

showing three nodules. The ulceration extended outwards into the cervical tissues, where suppuration existed in front of the vertebra. There was no evidence that the tube had caused ulceration, though its upper end must have rested against or just below the cricoid. The tube pushed down nine weeks before death was found in the duodenum. It showed no evidence of digestion, and the mucous membrane was uninjured.

Summary of case:

Duration before treatment	... ...	3 months
,, after ,,	...	nearly 3 ,,
Total ...	... ...	... 6 months

Of the 3 months of treatment,

He lived with tube in	...	... 5½ weeks
,, after tube removed		... 6 ,,
Total ...	... ...	... 11½ weeks

It may be said: 1. The use of the tube kept him alive and well while it was retained. 2. It produced so much permanent dilatation that after its removal he was able to swallow solids to within a few days of his death.

3. *Rapid Epithelioma of the Œsophagus: Treatment by Tubage: Death from Extension to the Trachea.*—C. J., aged 51, grocer. He had been twenty-one years in the army. This man was admitted under me into Guy's Hospital, on July 6th, 1885. Five months previously he retched violently while at breakfast, and was unable to take any food. From this time he began to fail, lost appetite, and suffered from thirst. Two months later—that is, three months before admission—dysphagia began for solids, and for seven weeks he had been restricted to fluids.

July 6th. On admission, the man was emaciated and weak, but had continued to attend to his work. He presented all the usual signs of œsophageal obstruction, which was found nine and a half inches from the teeth. On the previous day I had passed a bougie, after which he swallowed more easily.

July 8th. A small-sized bougie passed with difficulty, though he was taking meat and vegetables. On the 9th I failed to pass a bougie, but succeeded on the 10th.

July 11th. He was sent out, since he was able with care to take solids. The improvement seemed due, in part at least, to the use of bougies, for when first seen he only swallowed fluids with difficulty.

July 28th. He was readmitted, with almost complete inability to swallow, and a bad cough. This latter symptom first showed itself on July 20th, and was produced by any attempt to swallow. I immediately passed a No. 10 short tube through the stricture. It was tightly grasped, and gave rise to some retching and straining. Before its introduction he took some milk, which was at once rejected with cough. Afterwards he drank half a pint without taking the vessel from his lips, and said "it was the greatest treat he had had for two months." He was put on milk, beer, beef-tea and eggs. This patient already had signs of extension to the lung, and a speedy termination was to be expected.

July 31st. He swallowed freely, but was disturbed by cough and expectoration, and by pain in the left side, about the position of the nipple. A No. 12 tube was tied in.

August 4th. The pain below and outside the nipple had increased, and there was tenderness, with a fremitus and a double pleuritic rub. He now had cough on swallowing.

August 5th. The tube was removed, and found narrowed by mucus. He was relieved, and at once expectorated foul purulent sputa. He took milk easily for a day; but, as cough was still produced by the passage of fluid, a long feeding-tube was introduced. This was successful for a few days, but had to be removed later, because of the pain. It was introduced during the day, and removed at night. The man's condition rapidly grew worse; the cough was incessant; signs of gangrene of the left lung came on; and he died on August 31st. The long tube was used up to the time of death, but caused him a good deal of trouble, due, as will be seen from the account of the necropsy, to ulceration of the mucous membrane over the cricoid.

At the inspection, the epithelioma was found occupying the central portion of the gullet; it involved the whole circumference, and perforated into the trachea at four points. There was gangrene of the lower part of the upper lobe of the left lung, a few enlarged glands, but no secondary deposits elsewhere. There was a little food in the bronchi. There was a vertical ulcer in the mucous membrane covering the back of the cricoid cartilage, caused by the presence of the long tube. It was of exactly the same character as that in S. S., but not so deep.

Case iv. *Stricture of Lower End of Œsophagus: Relief by Tubage.*—G., aged 43. This man was sent on to me by Dr. Pye-Smith, under whose care he had been in Stephen Ward for œsophageal stricture. The patient is now (August, 1886) under my care in Guy's Hospital. The obstruction is thirteen inches from the teeth, so it must be close to the stomach. When first seen as an out-patient, a bougie passed easily, and he was instructed as to food. Then he had pleurisy of the left side, and was very ill at home for some time. In July I took him in, and, after many attempts, succeeded in passing a conical bougie, and later a short tube. The relief afforded was most marked; for, while before he expectorated twenty to thirty ounces of saliva and mucus, he now ejected scarcely any. He was unable, before its introduction, to rest on his back, as a troublesome cough supervened, but now could do so for most of the night. The tube was left in three days, during which time he was fed on fluids only. After its removal, he took bread and butter, chicken, tripe, etc., with greater ease; and a bougie could be passed easily. The patient suffers chiefly from dyspnœa, due probably to extension of the growth to the left lung. The whole of the left chest is dull, and on several occasions blood only has been withdrawn on aspiration. Once an ounce of clear serum was removed. I propose to insert a tube from time to time, to keep the stricture dilated, and enable the man to take solids; and, when this is no longer possible, to retain the short tube permanently, until other conditions may demand the use of the long feeding-tube.

It has already been shown by Krishaber, Durham, and Croft, that tubes can be safely worn for long periods, both through the nose and the mouth, with the effect of prolonging life in cases of malignant stricture of the œsophagus.

Krishaber's [1] cases lived 305, 167, 126, and 46 days respectively; Croft's [2] wore tubes for 149 and 108 days respectively, and the case quoted by Mr. Durham [3] had already worn a tube four months.

The tubes used by the surgeons above mentioned were passed through the nose or the mouth, and the food was poured down the tube. The material was the ordinary gum-elastic or black caoutchouc. Dr. Krishaber stated that after a time soft rubber tubes could be passed. This plan has independently been carried out by Mr. Berry, who, in a paper in the *St. Bartholomew's Hospital Reports*, records cases and describes the method he adopted. Of all materials for long tubes, there can be no doubt that the least irritating in every way is rubber, and I can confirm the statement that ordinary drainage-tube is quite sufficient to maintain dilatation. These long tubes were used, as will have been seen, in two of the cases here recorded, when the swallowing of fluids produced coughing, and, for a time, they answered well, but an evil attending their use, to which attention has not yet been directed, deserves remark. In both cases the patients were at first relieved, and easily fed, but soon the tube caused great irritation and cough, and had to be removed frequently. After death a vertical ulcer was found in the mucous membrane over the cricoid, in both cases, and on the floor of one the cartilage was exposed. The tubes were worn through the mouth, as recommended by Durham and Croft, neither of whom seem to have encountered this effect. As both these patients were troubled much with cough on account of severe lung implication, it is probable that to the frequent and spasmodic movements of the larynx the ulceration was due. Such a result might not have happened had the tube been passed through the nose, as it is kept further back in the pharynx. Again, had a soft rubber tube been introduced, still greater relief might have been afforded.

Short Tube.—In one other case the long tube gave rise to great pain and irritation, partly due to its own presence, and partly to the necessity of constantly ejecting the saliva. It was in connection with this case, fully recorded in the *Transactions of the Clinical Society*, vol. xviii, that the short tube was suggested to me. In the paper referred to, the tube is illustrated *in situ*. The object of this modification of Krishaber's tube is to permit the patient to swallow and enjoy the taste of his food, while it at the same time substitutes a piece of silk for a tube in the mouth. Four cases illustrating its use are here recorded, and I propose to state the range of its usefulness, and to record the difficulties and accidents attending its employment. I am also most anxious to learn how far the tube has been found useful by others.

I can confirm Mr. Durham's statement that, with care and proper instruments, there is little danger in passing bougies, no accident having occurred in the eight cases I have had under prolonged treatment.

[1] *Transactions of the International Medical Congress*, 1881.
[2] *St. Thomas's Hospital Reports*, vol. xii, 1882.
[3] *Lancet*, November 19th, 1881.

The short tube, about six inches in length, is passed through the stricture till the funnel rests upon its upper face. It is passed on the end of a conical bougie, or by a special introducer of copper wire, which anyone can make. The advantage of the wire is, that the tube can be directed down the posterior wall of the gullet, the trachea being avoided; but it should always be made quite supple first, and tried on a bougie, as a tortuous passage may thus be easily and safely traversed. The silk is looped over the ear, and held by a piece of strapping. The patient swallows down to the funnel, through which the fluids pass to the stomach. The best form of tube is that made on a silk web, and it is essential that the thickness of the wall does not increase in proportion with the increase in size of the lumen, but remains nearly the same for all sizes. This gives a wider channel, and secures softness and pliability, the funnel moulding itself to the shape of the œsophagus, and it is quite stout enough to produce and maintain dilatation of the stricture. These tubes, with the proper silk attached, are well made by Messrs. Down Bros., of St. Thomas's Street, S.E.

The Effect of the Tube.—As Krishaber pointed out, dilatation of a malignant stricture can easily be effected. This is so rapid that, in a week, tubes two to three sizes larger can often be passed. Indeed, it is so rapid that it is always wise to remove and clean the tube once in ten days, for fear it should slip beyond the stricture—an accident that once occurred to me. The first advantage attending this dilatation is that the tube may be removed from time to time, and the patient allowed to take solid food for short intervals. This variation in diet is a great source of comfort as well as of nourishment. It may be urged that this dilatation leads to a more rapid formation of the growth, to which it may be replied that the comfort is cheaply bought.

Its Applicability.—In the case brought before the Clinical Society, the disease was seated in the middle third of the gullet; and it was thought by many that such a tube could not be worn when the disease was high up. I am able to record here the case of T. W., in whom the ulcer extended downwards from the centre of the cricoid, so that the funnel must have rested against the cartilage, and yet it gave him no inconvenience. In another case, G., the disease was at the lower end, and here the tube had been worn with great relief and without discomfort, though two to three inches must have been in the stomach. The five cases now recorded are sufficient to illustrate the value of the tube in stricture in all parts of the œsophagus.

This short tube has a limited range of usefulness, for in most cases there comes a time when the lung is involved and the swallowing of fluids produces cough. The funnel being no higher than the stricture, and fluid passing by its side, nearly the same irritation arises as if there was no tube in at all. That this is due to fluid passing by the side of the tube is suggested by the relief afforded on passing a larger one, and by the temporary relief which follows its withdrawal. When this period of the case is reached, we can only relieve by substituting a long tube, preferably of rubber, or by performing gastrostomy, and it can be shown, I think, that Krishaber's long tube will answer well, and since the patient has but a short time to live, it would seem better to continue the use of tubes. My own experience of the long tube is, I admit, unfavourable, and I believe one of my patients, S. S., would have been more comfortable with an opening into the stomach. I proposed this to her, but she declined until it was too late. The ulceration which occurred in these two cases will, I hope, be avoided in future by adopting the nasal route and using rubber tubes.

Two of the cases here recorded lived twenty-seven and forty days respectively from the time that swallowing fluids first produced coughing, while the original case wore a short tube of large calibre to the time of his death, though his cough was severe and the expectoration abundant. While referring to duration of life, I may mention that we are able to make a prognosis partly upon the duration before complete dysphagia arises, but chiefly upon the character of the breath and the result of examination. A foul breath or foul eructation, and an unpleasant odour communicated to the bougie, are evidences of rapid growth. The case of C. J. is a good example of this form, while that of S. S. is of the slower variety.

Disadvantages of the Short Tube.—As above stated, its applicability is limited, but the comfort and relief afforded when once witnessed are sufficient to justify its use, even for a short time. When expectoration is abundant, the sputa may block the tube, and it will require more frequent removal. The tube may pass beyond the stricture, and we may be unable to withdraw it. In one case, that of T. W., this was due to his attempting to clear the tube by forcible swallowing. It passed beyond the stricture, and on attempting to withdraw it I broke the silk. I at once sent the tube into the stomach by a large bougie, and inserted another. The tube never gave any trouble, and was found at his death, sixty-five days later, in the duodenum, there being no evidence of any injurious effect whatever. This tube was a thick one. The softer ones will probably pass; this happened, in an instance related to me, on the sixteenth day. This accident will be avoided by removing the tube every ten days at least, to clean and if necessary insert a larger, and by directing the patient not to swallow forcibly. Beyond these two disadvantages I do not know any others specially connected with the short tube. That no ulceration attends the presence of the funnel has been proved now in four cases.

Rigor.—In the case of S. S., a rigor followed the introduction of a tube on two occasions, the temperature rising to 103° and 103.8°. The fever subsided in two days on the first occasion, the tube having been removed after twelve hours. The tube was allowed to remain in the œsophagus after the second rigor without any evil result. This complication closely resembles that occasionally attending catheterism of the urethra.

In reviewing the treatment of this form of stricture I would suggest the following plan:

1. So long as solids can be swallowed, let the patency be maintained by the passage of bougies, for neither by tubage nor through the opening formed by gastrostomy can solid food be introduced. Well-stewed tripe, rabbit, and pigs' and calves' feet are swallowed readily.

2. When solids can no longer be taken, a short tube should be introduced. This, when considerable dilatation has been effected, may be removed altogether from time to time, and the patient allowed to take solids. This form can be worn till the case terminates, unless pulmonary symptoms supervene, especially cough on swallowing.

3. When the passage of fluids can no longer be borne, then they must be withdrawn altogether from the gullet. This can be accomplished in two ways: (*a*) by the use of Krishaber's long tube; (*b*) by gastrostomy.

The duration of life after this stage has been reached will in no case be long, and it becomes a question of giving the patient the greatest amount of comfort. The experience of others as well as my own shows that long tubes may be worn till the termination of a case; and, as I believe, the ulceration will be avoided by using rubber tubes, and passing them by the nose. To this method I give my adhesion, rather than to gastrostomy. Those who have seen many cases know the difficulty that often arises from escape of the gastric juice, and that not a few have been fed into the peritoneum, while the operation, if done when the patient is in a depressed condition, is very likely to be unsuccessful, either from want of union or exhaustion. Other means are sufficient in the earlier stages.

The most recent advocate for gastrostomy, Dr. Gross[1], seems to believe that only those cases of malignant disease in which there is no ulceration are suitable for permanent catheterism. To this I may reply that my most successful case, T. W., had certainly ulceration when first seen; and this condition existed in all the others at a time when catheterism was giving complete relief.

Again, while I think greater caution must be exercised in dealing with disease at the lower end of the tube, it by no means follows that it is impossible, as Dr. Gross suggests, to enter the stomach. The case of G. shows this. I have had great difficulty in traversing the stricture in two cases; but I believe, with suitable instruments, and a period of complete rest, with the use of sedatives and rectal enemata, most of the strictures will be overcome; and once a tube has been passed and retained, there will be no further difficulty.

RIGHT UPPER CANINE TOOTH REMOVED FROM THE LEFT ORBIT OF A CHILD.

By JOHN WARD COUSINS, M.D.Lond., F.R.C.S.,
Senior Surgeon to the Royal Portsmouth Hospital, and the Portsmouth and South Hants Eye and Ear Infirmary.

A WELL-NOURISHED child, aged 2 years, came under my care in May, 1886, with a hard tumour, about the size of a filbert, firmly fixed just within the left orbit. The tumour could be pressed inwards under the eyeball, and downwards to the edge of the orbital plate. It was deeply embedded, and required to be carefully dissected out and detached from its connections. The crown of the tooth was enclosed in a sac, and the fang was attached to the orbital plate by fibro-cartilage. On examination the teeth were found normal in position, complete in number, and well formed; and the jaws were also large and fully developed for a child of 2 years.

[1] *Amer. Journal Med. Science*, July, 1884.

Mr. T. J. Tracey, and Mr. W. H. Kirton, Surgeon-Dentist to the Royal Portsmouth Hospital, kindly examined the tooth, and sent me the following report: "The tooth is a well-formed right upper canine belonging to the temporary set, and it is a well-developed canine for a child of 2 years of age."

REMARKS.—Irregularity in the number of teeth may occur in either the first or second dentition, and supernumerary teeth may spring up in any part of the dental arch. In shape these teeth are generally irregular and conical, and they bear no special resemblance to any kind of normal teeth; sometimes, however, they present a definite outline and accurately resemble one of the recognised forms. Instances of supernumerary incisors, canines, and bicuspids have been recorded, but examples of ill-shaped teeth, without possessing the characters of any special form, are of frequent occurrence in dental practice. As regards the time of eruption, supernumerary teeth are always irregular. They are generally matured long before the appearance of the permanent set, but their exact relation to the normal teeth is not well defined; they may be freaks of development in connection with either the temporary or permanent teeth. A normal permanent and a supernumerary tooth sometimes seem to hold the same relation to each other as the teeth of the first and second dentition. In my case there was no irregularity of the teeth, but the age of the patient, and also the special characters of the tooth, clearly indicate its relation to the deciduous set.

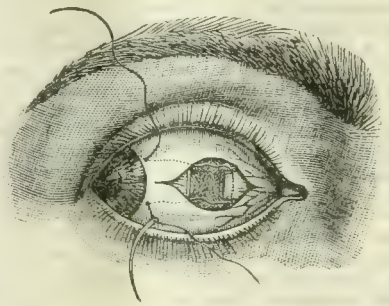
Cases of misplaced teeth, in strange situations, have often been recorded. These irregularities, however, are not associated with any special shape of jaw, or deficiency of size in the dental arch. The teeth are generally found to occupy an inverted position on the bone to which they are attached. They have been erupted in the hard palate and in the nares, but I have been unable to find an instance on record of a tooth appearing in the orbit. The occurrence of a right upper canine in the left orbit is certainly a singular feature in my case, and this crossed displacement must have taken place at a very early stage of embryonic life. The canine papillæ appear in the primitive dental groove about the eighth week; and soon after the rudimentary pulp of the milk teeth are in rapid formation within their follicles on the edge of the jaw. At this period, a supernumerary follicle and its contents could be very readily displaced from the lip of the primitive groove, as the surrounding tissues are soft, and the rudimentary orbit and the gums are in close proximity. A supernumerary tooth-sac must always be especially liable to dislocation; and when once it gets out of the groove it may be pushed in any direction during the formation of the surrounding structures.

ON A SIMPLE METHOD OF OPERATION FOR DIVERGENT SQUINT.

By RICHARD WILLIAMS, M.R.C.S.,
Surgeon to the Liverpool Eye and Ear Infirmary, and Ophthalmic and Aural Surgeon to the Royal Albert Edward Infirmary, Wigan.

READJUSTMENT or advancement of the insertion of the internal rectus is now a recognised surgical proceeding. It is therefore important that the operation should be not only effectual, but easy of performance, and as simple as possible. Since its introduction by J. Guérin, it has undergone various modifications at the hands of Von Graefe, the late Mr. Critchett, and others. It still remains, however, a very tedious proceeding, necessitating the use of an anæsthetic, during the administration of which the patient not infrequently vomits, and matters are thus greatly complicated. The introduction of cucaine, while to some extent lessening these inconveniences, can hardly be said, in operations of this kind, involving the deeper structures, to enable us, in the majority of cases at least, to dispense with the use of an anæsthetic. Any modification therefore of this operation which secures this desideratum will be of advantage both to the operator and the patient. Of late I have adopted the following plan in all cases of external squint coming under my care, and unless the patient has been excessively nervous, I have not found it necessary to use an anæsthetic, while the time occupied in the operation has been greatly shortened.

An incision is made in the conjunctiva and subconjunctival tissue over the tendon of the internal rectus, extending from near the margin of the cornea for about half an inch towards the inner canthus. The edges of this incision being separated, the strabismus hook is inserted under the tendon in the usual way, and then confided to an assistant. A curved needle armed with a suitable silk thread is then inserted in the conjunctiva near the margin of the cornea (as shown in the figure), and carried between the sclerotic and the conjunctiva, towards the muscle behind the hook. It is then passed through the tendon from edge to edge at right angles to the course of its fibres, and brought out at the opposite side of the conjunctival wound. The edge of the conjunctiva at this side of the incision is now raised with a pair of forceps, the needle is insinuated between it and the sclerotic, and brought out near the margin of the cornea at a point corresponding to the point of entrance. A glance at the accompanying figure will indicate the course the ligature has taken, and it will be seen that the tendon and conjunctiva are included in a single loop. At this juncture the external rectus may be divided or not, according to the requirements of each individual case. This point having been disposed of, the tendon of the internal rectus is divided at a safe distance from the ligature, and the hook is removed, the parts then presenting the appearance shown in the figure. By now tying the two ends of the loop together, the margin of the cornea is brought into apposition with the cut end of the tendon, and the eye is brought into a position of more or less internal squint. Finally, the edges of the conjunctival incision are brought together by means of a fine suture.



The advantages claimed for this operation are: (1) that it is much shorter and simpler than the usual method; (2) that by passing the ligature in the manner described, a very firm hold is obtained both of the tendon and the conjunctiva, which is sometimes apt to tear; (3) that no anæsthetic is generally required. The objection which naturally suggests itself is that there is a certain amount of tendency to puckering of the end of the tendon where the loop is tied. I think, however, this objection is more theoretical than real; at any rate, I have not found that it jeopardised the success of the operation in any of my cases. Moreover, it can to a large extent be avoided by placing the points of entrance and exit of the ligature at a considerable distance from each other.

The following two cases, while interesting in themselves on account of the condition of the refraction, are examples of cure by means of this operation.

CASE I.—W. G., aged 17, consulted me at the Eye and Ear Infirmary on October 4th, 1886. He had a well-marked external squint of the left eye, the duration of which could not well be ascertained. There was H = 2 D in each eye, and vision was normal in the squinting eye as well as in the other. No cause could be assigned for the squint. He became an in-patient, and was operated on on November 29th. Cucaine was employed to produce local anæsthesia only. A month after the patient was shown at the meeting of the Liverpool Medical Institution. By this time he had completely recovered the power of conjugate action, and the eye appeared quite normal, with the exception of a slight injection in the region of the inner canthus.

CASE II.—Miss R., aged 17, consulted me first in September of last year, but the operation was deferred owing to the patient being at school. She had an external squint of the right eye of many years' standing. On examination with the keratoscope, she was found to have H = 4 D in one meridian, and = 6 D in the other. Vision, with correcting glasses, was barely $\frac{2}{20}$. The fundus was normal. In the left eye she had M = 2 D; V with this glass being $\frac{6}{6}$. With the help of my colleague, Mr. C. G. Lee, I operated on December 21st, 1886. The patient was so excessively nervous that we were compelled to give her ether. With this exception, the operation was performed in the usual way.

December 29th. The ligature was removed. There was a slight internal squint, with a tendency to homonymous diplopia, increased on looking outwards. A week later she was ordered glasses; and on January 24th, 1887, she left for school, the diplopia having quite disappeared, and the eyes being quite parallel.

GLANDERS IN RUSSIA.—A laboratory and a *clinique* for the study of glanders have been added to the Veterinary Institute of Dorpat. *id*

OBSERVATIONS ON THE ETIOLOGY OF ECZEMA.

By FORTESCUE FOX, M.D.Lond.,
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The etiological distinction of skin-diseases as constitutional and local is perhaps the only classification expressive of a constant natural division. To both classes of causes the reaction of the skin is variable, depending on its present constitution or bias. This in its turn is determined by heredity, by past deviations from health ("cellular memory"), by functional habit, by nutrition and innervation. If the bias of the skin be on the side of health, much of external or internal morbid cause may be fruitless of disease; if on the contrary side, the smallest impression may excite it.[1] The bias depending upon period of life is mainly functional (action being perverted, diminished or excessive). That which, irrespective of period of life, manifests itself as an hereditary or acquired tendency is, on the other hand, a bias mainly structural.

To illustrate these propositions the following cases are selected from a large number treated at Strathpeffer; they fall naturally into four or five clinical groups.

Group I includes the eczema of youth, with a skin highly sensitive, of much functional activity.

Group II.—These cases, usually men of declining vitality, present an eczema often at first extensive and moist, but afterwards dry and tending to become localised in the lower extremities. The eruption is often recurrent, but not, it is believed, due to diathetic causes. The skin is found thin, dry, papery, and inclined to scale, the dryness being proportional to the duration of the disease and the senility of the tissues.

Case I.—A man, aged 79, complained of "dry eczema" of the legs. The eruption first appeared at the age of 66, and now for four or five years he has had a dry and scurfy condition of the skin from ankles to knees, and to a less degree over the back. The warm sulphur baths proved very soothing and mollifying; and on the patient's leaving, the skin was much less scaly and more supple.

Group III. *Relapsing Moist Eczema in Middle-aged Women.*—This large group of cases usually shows no relation to the gouty or other known diathesis. The eruption appears, usually, in a person of full habit, wherever heat, moisture, and friction coexist. It is at first moist and hot, extending over a large area, and varying greatly from time to time. Indulgence at table or mental irritation aggravate the symptoms. This form of eczema does not, in the writer's experience, attack the hands or feet. Under appropriate treatment it recedes and becomes drier, but readily breaks out again unless the original causes be avoided. These patients are frequent at the Spa, where the warm sulphur water is especially grateful.

Case II.—A married lady, aged 40, has suffered from eczema since her last confinement. It is moist and irritating, and affects the trunk and flexors. No gouty tendency can be traced, but the patient is stout and inclined to a stimulating diet. The latter was regulated, 12 ounces of the "strong well" were given twice daily, and sulphur baths thrice a week. Under this treatment the general health was much improved and the irritation subdued.

We here pass the confines of local causation as a dominant influence. The purely local eczemas of the first group furnish its most typical examples; in the second group the cause may be considered localised in the skin itself; whilst, in the group last considered, admitting the dominance of local causes, we must allow a considerable amount of general predisposition. Pursuing the clinical investigation of eczema, we enter at this point a region where, it is contended, the constitutional element becomes the dominant etiological factor.

Group IV. *Localised Dry Eczema in Middle-aged Women.*—The hand is the most usual seat of eruption, which early passes through a brief moist stage to become a dry, chronic, and often intractable fissured eczema. In ten out of eighteen cases the presence of gout in the immediate family was ascertained. In most or all of the remainder a determining diathesis may probably have been present.

Case III.—A spare person, aged 45, unmarried, has had eczema of the hand for one year, at first moist, afterwards dry. The patient's mother was—and two brothers are—gouty. On one occasion during her stay at Strathpeffer this patient partook of salmon, and presented herself the next day with renewed moist eczema as at the first. She left the Spa quite free from eruption.

Case IV.—A lady, aged 65, thin and spare, has suffered from eczema for many years—in the face, and especially the hands. There is gout in some uncles and one brother; a sister has eczema. At the conclusion of the sulphur-water course the eczema had left the head, and was nearly gone from the hands. The following year this patient, now decidedly weaker in general health, remained two months without improvement, several exacerbations of subacute eczema taking place. One of them began like a common "cold." Harsh bronchial cough then set in, with distress of breathing. Presently the throat and interior of the mouth became red, hot, dry, and sore, and this again was followed by characteristic eczema around the mouth. Meanwhile the distress of breathing abated.

Case V.—A single lady, aged 60, has suffered long from ill-health, and, with her near relatives, is "very rheumatic." The skin has been the seat of eruptions many times, the last being a "severe attack of shingles." Eczema of the face has been present many years. It is scaly in parts, and in others moist and even pustular, and much aggravated by heat. After two months it is noted to be "scarcely perceptible."

Group V. *Eczema in Men, tending to become Localised and Dry, and nearly always associated with Gout.*—In comparing this group with the preceding an important distinction in the local effect may be looked for, founded upon a corresponding difference in the constitutional cause. Let us admit for the moment that a variety of chronic eczema is due to acquired or hereditary gout. Then, may we not expect in males, the subjects of gout, a cutaneous manifestation somewhat different to that seen in patients, whether male or female, who, without actual gout, inherit the effects of it? In these last, eczema may be the only sign of the diathesis. It traces its pedigree to an antiquity more or less remote. In the former class, on the other hand, it is the direct offspring of a present disease, with the other symptoms of which it waxes and wanes, or even alternates, replacing an inward by an outward manifestation.

Case VI.—A gentleman, aged 40, states that he has had eczema for five or six years; previously he had gout. He says: "The eczema and gout alternate." A daughter, aged 5, passes large crystals of uric acid. The patient is stout and plethoric. There has been extensive eczema of the trunk, with moisture, but the hands alone are now affected, being very dry and covered with scales.

Case VII.—A man of about 50 has suffered from gout two years since. His father and grandfather were always gouty. Two months since the eczema appeared moist in character and rapidly spreading. At present it affects in particular the neighbourhood of the small joints of the hands and feet (especially around the fingers), with a scattering on the face. It consists of papules, on a livid swollen skin, some suppurating and some semi-vesicular. Twenty of the sulphur-baths were taken, and on leaving the Spa only a few obscure papules and pigmented stains remained.

To revert to the principle of classification with which we set out: Group I is the local eczema of youth; Group II is the eczema of the senile skin, mainly local; Group III is the local eczema of moist heat, in predisposed subjects; Groups IV and V—separable, as above indicated, by the particular effects of sex—include together, in the writer's belief, constitutional eczema of the gouty species, and own the same laws and observe the same procedure as other gouty manifestations. Of 27 cases (9 male, 18 female) which have been grouped as constitutional or diathetic, 18 presented a definite history of gout, and of the apparent exceptions 8 were female. Among the 9 males, gout was recorded in 8, and the ninth was a tall, spare man of 60, passing large quantities of "red sand." Speaking generally, one may say that localised dry eczema in adults is gouty, and that it is localised and dry in proportion to the remoteness of its descent. Alternation of eczema with dyspepsia or asthma was noticed in several cases, all—with one exception—showing a marked history of gout. The development of the eruption in Case IV was strongly suggestive of eczema of the mucous membranes, which the analogy of exanthemata would support. When a diathesis is determined to the surface, why should not these membranes share in the eruption? Here may lie the mystery of many dyspepsias.

[1] While in some cases the skin is as sensitive as a daguerrotype plate and breaks into an eczematous eruption under the slight stimulus of light, in others it will bear severe irritation before showing the least reaction.—Hebra.

THERAPEUTIC MEMORANDA.

EFFECTS OF CUCAINE.

The perusal of Mr. Steer Bowker's note, in the Journal of March 26th, on the toxicological symptoms following the application of cucaine for the extirpation of the eyeball, induces me to lay before your readers two exceptional cases which I have watched with much interest. Mr. R. C., aged 69, consulted my father nine years ago on

account of neuralgia of the right facial nerve; the pain sometimes attacked the superficial branches, sometimes those supplying the gums and mucous membrane of the cheek and lip; it speedily became of the epileptiform or convulsive type, and defied all remedies. My father sent him to Mr. John Marshall in 1884, with a view to division of the nerve-trunk, but this was not thought advisable, and he was treated for gout (gout being both hereditary and acquired). Little benefit followed. Drs. Broadbent and Gowers at different times also saw Mr. C.; cannabis indica, belladonna, quinia, arsenic, iodides, bromides, etc., all failed in turn. At last we tried cucaine in a 5 per cent. solution to the gums and mucous membrane, with menthol and olive oil in equal parts to the skin of the cheek and outer angle of the jaw, with the most successful results. Gradually we had to increase the strength of the cucaine to 25 per cent., and this invariably affords almost immediate ease; the attacks are becoming less and less frequent and severe; great care is taken that none of the solution is swallowed.

Mr. W. H. W., aged 45, suffering from neuralgia of the lower end of the gullet, strongly neurotic, consulted my father eighteen months ago on account of severe pain three inches above the stomach, induced on taking certain articles of diet both solid and liquid. The pain is so great that eating and drinking are dreaded; it radiates from the original site over both sides of the thorax. Ordinary remedies failing, half-grain doses of cucaine in a tablespoonful of water were given a quarter of an hour before meals. The first dose afforded complete relief, but was followed by great excitement; the patient felt compelled to laugh and shout, told funny stories, and behaved in the most absurd manner in the billiard-room of his club, although feeling perfectly sober; this continued for three hours; he then went to the chemist's, and asked if a mistake had been made in compounding his medicine. There had been no error, so he took a second dose with a like result, and persevered for three days. Finding that the pain was completely under control, he then gave it up on account of its causing dyspepsia. Since taking it, however, the neuralgic pain has never been so bad, and he can eat and drink things now which formerly he dared not venture on, and the thoracic pain has never returned.

Harrogate. JAMES A. MYRTLE, M.D., C.M.

THE following notes on three cases in which cucaine was recently used in this hospital may prove interesting:—

1. *Extirpation of Small Wens.*—About 25 minims of a 4 per cent. solution were administered hypodermically in the forehead. The patient scarcely felt the operation, and no untoward symptoms followed.

2. *Circumcision.*—After administering hypodermically 25 minims of a solution of the same strength as above, and sprinkling about 15 more on the part, the operation was proceeded with, without any pain to the patient. After a minute or two he became pallid and cold, with a slightly intermittent pulse. About three hours subsequently he vomited, and expressed himself as feeling "very bad during the day." Next morning, he had quite recovered. In this case, there was remarkably little bleeding on removal of the foreskin.

3. *Circumcision.*—Twenty-five minims of a 4 per cent. solution were used hypodermically without any lessening of sensation, the patient feeling the slightest prick of a needle. Much condensation of the tissues of the foreskin, from old inflammatory action, seemingly prevented the action of the drug.

DENHAM F. FRANKLIN, Surgeon M.S.

Station Hospital, Shorncliffe.

ANTIFEBRIN.

THE following notes show the advantage of antifebrin over other antipyretics:—

CASE I.—J. B., aged 3; meningitis, with a temperature ranging from 102° to 105.4° F. Three-grain doses were at first tried in the forenoon. The temperature fell from 105° to 101.4° during the first two days, but on the third evening 104.4° was registered. Five grains were then given every three hours, and the temperature fell to 99.4° after two doses, and remained thereabouts. When two doses were omitted the temperature rose again.

CASE II.—A. V., aged 2; broncho-pneumonia, with temperature from 103° to 105° F. At first three-grain doses were given every three hours, and for four days this kept the temperature below 100°. On the fifth day the temperature rose repeatedly above 102°, so five grains were given every three hours, and the temperature fell to 99.4°, and remained at that point.

CASE III.—M. L., aged 25; pyelo-nephritis. Fifteen-grain doses were used. The temperature fell to 99° within one hour and a half, and remained there for ten or twelve hours. I had the temperature taken every three hours, and whenever 101° was registered, fifteen grains were given. Quinine in ten-grain doses was tried under the same conditions. The temperature fell about 2.4°, but rose to 104°, and sometimes 104.8° within six or seven hours.

REMARKS.—Antifebrin seems much more powerful than quinine, kairin, or antipyrin. It equals antipyrin in the duration of its effects, and in this respect surpasses quinine or kairin. It is only excelled in the quickness of its action by the external application of cold. Its effects are evident within an hour, and they last from ten to twelve hours when a full dose has been administered. When administered for a long time, the dose must be increased. It produces profuse sweating and redness of the cheeks; it diminishes the pulse-rate, and distinctly increases arterial tension. I found no depressing effects follow its administration even when full doses were given. Antipyretics belong to two great classes, namely, those which diminish tissue metabolism; and, secondly, those which increase the loss of heat. From the sweating it produces and the rise in arterial tension, one might conclude that antifebrin belongs to the second class as well as the first one. This might explain the quickness of its action, as antipyretics of the second class act more speedily than those which diminish tissue metabolism. J. K. MURRAY, M.B.

Kendal.

A NOTE regarding the employment of this derivative of aniline in hyperpyrexia may be of interest. As a reducer of temperature I have found it far superior to antipyrin, kairin, thallin, or quinine. It is absolutely safe, and although in one case cyanosis followed its administration, that condition was unaccompanied by any other untoward symptom. The brain does not become confused under its influence, and the action of the heart is not weakened. The following cases illustrate its power:—

1. Congestive cephalalgia in a woman, with much throbbing and vomiting; temperature 106.3 F., pulse 128. Fifteen grains were given every four hours; two hours after the fifth dose the temperature was 97.5 and the pulse 94. She was slightly cyanosed, but this speedily passed away when the interval between the doses was increased to twelve hours. She was five days under treatment, and at the end of that time felt quite well.

2. Local encephalitis, etc. In this case quinine was at first employed; it lowered the temperature, but the cerebral disturbance it produced more than counterbalanced its good effects. The temperature ranged from 100 to 103.5. Fifteen grains were given night and morning until the temperature remained subnormal for six days; then every night till convalescence was established.

3. Phthisis pulmonalis in a woman, with almost constant cough and profuse night sweats; temperature 105°, pulse 108. Fifteen grains were given every twelve hours. The perspiration increased during the first two days she was under treatment; then it quickly diminished, and by the fifth day it entirely ceased. The temperature and pulse became subnormal, and remain so, although she is only taking one dose every twenty-four hours.

I have also used it in a case of enteric fever in a child with the best results. HUGH CUNNINGHAM, M.D. Brux.

Dumfries.

CLINICAL MEMORANDA.

TRANSIENT HEMIPLEGIA.

IT may be interesting to your readers to hear of the following case:—

A.L., aged 72, whom I have been attending during the last six months for a mild form of senile imbecility, found on awaking about 3 P.M. on April 1st that he had lost all power over and sensation in his left arm. About an hour afterwards convulsive twitchings occurred, and I was sent for. When I arrived I found the patient unconscious, and suffering from complete hemiplegia of the left side; he had increased knee-jerk and *tache cérébrale*, both well marked, on the paralysed side. Saliva occasionally found its way into the windpipe, and there were muscular twitchings on both sides, more especially the right. At 11 the same night I found all the muscular twitchings had ceased, consciousness had partly returned, and the patient had tried to speak but failed to articulate.

On the following day the patient was in the same condition; he had passed water and fæces under him. On April 3rd movement in the

legs and fingers were restored; the tongue was protruded in the middle line, and power of speech had returned. On the 4th the hemiplegia completely disappeared. The pulse was feeble and compressible, but the arteries and heart-sounds were normal throughout. There was no pyrexia. The urine was crowded with lithates, otherwise it was normal. There is nothing in the present or previous condition of the patient, with the exception of the mental state, which has been somewhat exaggerated since the hemiplegia, to throw light upon the cause of the paralysis. There is no evidence of cerebral tumour, and no history of previous fits.

London. E. CLIMSON GREENWOOD.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

ROYAL INFIRMARY, EDINBURGH.

CASE OF PACHYMENINGITIS INTERNA WITH HÆMORRHAGE, AND TEMPORARY RELIEF BY TREPHINING.

(Under the care of Professor GRAINGER STEWART, M.D.)

CONSIDERING the interest which at present attaches to the applications of surgery to intra-cranial disease, it seems desirable that every case in which such methods are tried should be recorded, whether the result be favourable or not. The example here given shows striking benefit of a temporary kind, with prolongation of life for some days beyond what would otherwise probably have occurred. It is also of interest as an example of a rare condition, as certainly internal pachymeningitis must be held to be.

J. B., aged 44, a coalheaver, was admitted on February 22nd, 1887, complaining of headache, weakness in the limbs, and difficulty of walking. He stated that he had always been temperate, and had enjoyed good health till the 1st of January of the present year, when he fell upon the back of his head, cutting it against the edge of a form. For a minute or two he lost consciousness, but soon got up, and felt quite well, though somewhat dazed. He remained well and doing his work for a fortnight, when pain in the forehead gradually set in. A fortnight later—that is, about the beginning of February—giddiness was added to the pain. A week later these symptoms had become so severe as to unfit him for work; and by the time that he was thus incapacitated he noticed that his legs had become feeble, his walk very unsteady, and he tended to stagger. On admission, the patient's expression was somewhat anxious. When sitting or lying in bed there was no peculiarity, but on attempting to walk he staggered. The head showed no mark of injury. The nervous system alone was affected. The patient complained of frontal headache and of giddiness, the latter much more marked when he sat up or attempted to walk. Sensibility of the skin was everywhere normal in all respects. When the muscular sense was tested by weights, his answers were often incorrect; but this was probably due simply to stupidity. He did not complain of his sight, and there was no scotoma; the movements of the eyelids and eyeballs were natural. The right pupil was slightly larger than the left; both reacted normally. On ophthalmoscopic examination, optic neuritis was distinct in both eyes. The other special senses were natural. Thus, in respect of sensory functions, the only points were headache, giddiness, and optic neuritis.

As to the motor functions, the organic and skin reflexes were normal; the patellar tendon reflex was distinct on the right side, but no other deep reflex could be elicited. There was no loss of power of any individual muscle or group of muscles; his grasp was firm; he stood and walked with a little assistance, but if he attempted to stand or to walk without help he staggered occasionally; he failed to walk along a straight line, or to stand upon one foot. He showed no mental peculiarity beyond a degree of stupidity which might have been natural to him, or might have been the result of disease. The case was discussed along with the clinical class on the 24th, and a diagnosis of probable slight injury of the cerebellum by direct violence, and of the frontal lobes by *contrecoup*, was established. On that day, for the first time, he vomited; this recurred on the following day.

On the 26th his condition was distinctly less satisfactory, his gait being more unsteady, the tendency to vomiting and torpor more pronounced, and his stupidity increased. The sensibility, as tested by pricking with a needle, was diminished over the right side of the body; the right patellar reflex was still present; the jaw-jerk was well marked; tapping over the triceps and biceps of the arm induced movement on the right side, not on the left. The temperature was subnormal, 97° to 97.8° F.

The patient was restless and had bad nights, but remained in about the same condition throughout the 27th. On February 28th he was much worse, the torpor threatening to pass into coma; pricking of the right side of the body and face remained unheeded; the right arm and leg were distinctly paralysed, and aphasia was well marked, the patient being evidently unable to speak even when so roused as to desire to do so. He continued to vomit, and he passed urine and fæces in bed. As Professor Grainger Stewart had been out of town during February 27th and the forenoon of February 28th, the house-physician, Dr. Gulland, asked Professor Stewart to see the patient in the evening. As it was clear that the lesion affecting the anterior part of the brain had become aggravated so as to produce aphasia and right-sided hemiplegia, he decided to ask Professor Annandale to see the case with a view to operative interference by trephining. After consultation on the morning of March 1st, as the symptoms had become during the night even more pronounced, it was decided to trephine without delay. The point selected was that corresponding to the posterior part of the third left frontal convolution. Chloroform having been administered, a curved incision, three inches long, was made along the lower edge of the part to be trephined. A trephine, with diameter of one inch, was applied, and a circular piece of bone removed. The dura mater, being partially adherent to the bone, was torn at one point in elevating the circle, and through this opening there immediately welled out with a pulsatile movement a quantity of serous fluid, at first brownish-red, afterwards dark red in colour. The opening in the dura mater was enlarged, and about six ounces of this fluid escaped. On inserting the finger, it was found that the fluid lay between the dura mater and the arachnoid, in a space extending backwards about three inches, and forwards two inches, and it at once became clear that the pressure of a hæmorrhage had led to the increase of the symptoms. We concluded that this hæmorrhage was the result of a pachymeningitic process, and recognised that while the immediate danger had probably been obviated, the ultimate prospects of the patient were less favourable than they might have been had an abscess within the hemisphere been the cause.

On recovering from the chloroform the patient showed marked improvement in respect of intelligence, sensibility to touch, and motor power, and he soon began to speak sensibly and to express the great relief he had experienced from the operation. The exaggeration of reflexes which had appeared on the right side had now passed off.

During March 2nd the improvement continued, the temperature was still subnormal. The discharge continued copious, and the convolutions were much nearer the surface than they had been immediately after the operation.

On March 3rd, about fifty hours after the operation, there was a slight rise of temperature, and the patient's condition was somewhat less satisfactory; there was a recurrence of headache, a slight rigor, and some nausea and vomiting, but the wound was reported to be quite aseptic. It was, however, clear that, although so great advantage had been gained by relieving the convolutions from pressure, inflammatory action was going on, and there was no reason to hope for improvement from further surgical interference.

During March 4th the temperature continued to rise, at one time reaching 102.6°; there was a recurrence of chilliness and vomiting; the pulse was often at 100, and sometimes 120, the temperature and pulse rising and falling together. The respiration was regular. The patient also became torpid, his speech was again impaired, his right arm and leg were powerless. Towards evening twitching of the left arm and leg set in, the expiration became puffing, and the breathing noisy.

On March 5th the temperature on the two sides of the body was found different, at first the right or paralysed side was lower, afterwards higher. The coma was deeper, the right side completely paralysed as to motion, and pricking of that side of the body elicited little either in the way of wincing or of reflex movement. Severe convulsions occurred at intervals, mostly clonic in character, and affecting the right side sometimes exclusively and always chiefly. Towards evening the paralysis of motion and sensation involved the left side also.

On March 6th the same condition persisted; nineteen convulsive fits occurred in the course of six hours, the patient often screaming loudly during the attacks. The condition gradually became worse; during the last hours of life the convulsions had for the most part disappeared; the patient lay comatose, breathing stertorously, and with much puffing of the cheeks, especially the right. The skin and con-

junctival reflexes were abolished, the deep reflexes were masked by clonus in the right arm, were exaggerated in the left arm, and were completely absent in both legs. Respiration became peculiar; the tracing taken with Marey's polygraph showed 26 full respirations, 19 shallow, 20 full, 18 shallow, with sudden alternation. The urine was drawn off; it was dark in colour, very acid, and contained a considerable amount of albumen, but no peptone, bile, or sugar. There was an occasional jerk of the muscles of the fingers or of the pectorals. The character of the breathing changed suddenly, expiration becoming much longer and sighing in character, and the patient died shortly after 11 P.M. Just before death the temperature in the left axilla was 98.8° F., and in the right axilla 102 4° F., the pulse 150, and the respirations 50 per minute. After death the temperature rose in both axillæ, but more in the left than the right.

Report of Post-mortem Examination, by Dr. BRUCE, Pathologist to the Royal Infirmary.—On removing the calvarium the dura was found slightly adherent in front of the trephine wound. Through the wound in the dura projected a highly vascularised mass, partly consisting of brain-tissue. On the left side, over the frontal and parietal regions the brain was depressed to a considerable extent, and the dura mater over this region was markedly flaccid and wrinkled; on the opposite side, over the tip of the frontal and over the occipital lobe, a dark blue discoloration shone through the dura. On reflecting the dura, on the right side its under surface was generally blood-stained, with a little thin, dark-coloured clot at the areas mentioned, which was covered by a thin, smooth continuous membrane. There was a little free bloody fluid in the arachnoid sac, and part of the membranes over the occipital lobes was adherent to the dura, leaving a rough vascularised surface when separated. On the left side the under surface of the dura was generally of a bright red colour, from vascularisation and blood-staining, and on it also lay numerous thin dark clots like those on the right side. This surface was slightly adherent to a toughish membrane, buff-coloured and blood-stained, which overlay the whole hemisphere. Under this, and slightly adherent to it, was a second thinner and more easily lacerable membrane, closely applied to the arachnoid, but not adherent to it. On the surface of the brain itself, below the arachnoid on both sides, was evidence of acute leptomeningitis. There was greenish-yellow exudation along the Sylvian fissures, especially on the right side, and on this side also the exudation extended along the sulci over the frontal lobe. There was general congestion of the vessels of the pia, especially on the left side, and several patches of purulent lymph under the arachnoid along the margin of the great longitudinal fissure. The hernia of cerebral substance was situated near the posterior end of the second and third frontal convolutions, and around this the above-noted congestion was more marked. Passing into the interior of the centrum ovale from the under surface of the hernial mass was a cone of red softening, whose apex extended to the anterior horn of the lateral ventricle. In the lateral ventricles was a slight excess of bloody serum. There was some congestion of the grey cortex of the cerebellum, and slight œdema of the white matter, but no hæmorrhage. Posteriorly both amygdalæ were united by slight meningeal thickening in the middle line, similar thickening uniting them laterally to the sides of the medulla. There was *post-mortem* clot in both upper and lower petrosal, both lateral and both cavernous sinuses, and in the superior longitudinal sinus.

REMARKS BY PROFESSOR GRAINGER STEWART.—The existence of intracranial disease in this case was rendered certain by the history, the headache, the giddiness, the unsteadiness of gait, and the optic neuritis; and I do not know of any circumstance that would enable one to amend the diagnosis made at first, which included on the one hand cerebellar disease, and on the other lesion of the anterior lobes of the brain. The sudden development of pressure-symptoms, involving the motor and speech areas of the left side, might have been due either to disease within the brain-substance, or pressure on the brain from without. Certainly operative interference was justified, and, had the lesion proved to be within the cerebrum, perhaps the life would have been permanently saved. As it was, the relief was only temporary; whenever the welling out of the sero-sanguineous fluid occurred, the nature of the process and the prospects of the patient became apparent. The extremely favourable condition presented during the day after the operation led one almost to hope that, with the removal of the fluid, inflammation was to subside; but any such hope was soon extinguished as the irritative symptoms set in. If one met with such a case again, surgical help ought certainly to be asked, and the very strictest antiseptic precautions adopted. In the present instance, there was no reason to believe that any septic infection took place. The leptomeningitis followed upon the inflammation of the dura mater. It is difficult to be certain as to the cause of the fungating condition; it certainly did not result from direct injury during the operation. It may have been connected with hæmorrhage which had occurred early, or with the altered pressure-conditions which succeeded the operation.

ST. MARY'S HOSPITAL.

CLINICAL NOTES OF VARIOUS CASES.

[Under the care of Mr. PAGE.]

CASE I. *Late Manifestation of Congenital Syphilis.*—A single woman, aged 22, admitted in October as the subject of supposed destructive lupus of the nose and upper lip, presented the typical appearances of this disease, every characteristic being well marked. The septum and alæ nasi were already much eroded, and the destructive process seemed to be extending in the lip as well as in the nose. The history, however, at once raised a suspicion that we had to do not with an ordinary lupus, but with an ulceration due to congenital syphilis, and closely imitating, as syphilis does sometimes imitate, the less curable disease. The Christmas before her admission itching began on the bridge and tip of the nose, and a small nodule appeared, which broke in March, and thence continued to ulcerate, spread, and destroy. She had never had anything of the kind in childhood, and lupus does not begin *de novo* at 22. Her sunken nose and general aspect suggested inherited syphilis, and when the swollen lip had been raised so as to look at the teeth, the central upper incisors were seen to be typically Hutchinsonian. Further, her corneæ were not quite clear, and she gave a history of four years previously having had bad eyes (interstitial keratitis), and about the same time she became deaf, as she is now almost totally deaf, in both ears. Nothing definite could be made out in the fundus of the eyes because of the corneal cloudiness. She was the youngest and only living member of a family of eight, the seven others having all died young. The diagnosis of inherited syphilis thus seemed tolerably certain, and it was strengthened by the fact that healing rapidly took place under iodide of potassium and dusting the ulcer with finely powdered iodoform. One element of doubt remained, but careful inquiry failed to elicit any evidence of acquired syphilis at any period of her life. The case, therefore, we think, was an example of those somewhat rare manifestations of inherited syphilis which appear unusually late, having a destructive tendency, such as belongs to "tertiary" phenomena, and to which Fournier has recently directed attention in his *Syphilis Héréditaire Tardive*. Prone as they are to imitate the appearance of simpler cutaneous maladies, they are likely to escape recognition, and, under a faulty diagnosis, the treatment essential for their cure.

CASE II. *Gangrenous Umbilical Hernia: Recovery with Artificial Anus.*—M. W., aged 52, a woman with an enormous abdomen, had been the subject of an irreducible umbilical rupture for ten years, and during the last six had frequently suffered from attacks of pain, vomiting, and purging. These attacks she used herself to overcome with castor oil, but this means had failed in the early morning of December 15th, when she was suddenly seized with most violent umbilical pain and vomiting, following a day of constipation. On admission to hospital on the afternoon of that day the hernia was the size of a large cocoa-nut, exquisitely tender, tympanitic, and very hard from its great drum-like distension, and through the thin and tightly-stretched skin the contents were seen here and there of a suspiciously bluish colour. The vomiting had ceased, and, bar the pain, she presented no symptoms of strangulation, and was in herself cheerful and well. Operation would have been resorted to at once, but for her assurance that she had often been as bad before, and had seen the swelling as dark in colour. Warmth was therefore applied, and a turpentine enema administered, but no improvement followed. The hernia became darker in colour, and the skin itself was becoming green, although in herself the woman showed no signs of illness. The next day, therefore, the sac was laid open, and was found to contain transverse colon, immensely distended with gas, surrounded everywhere with gangrenous stinking fat, and itself gangrenous for some six inches. There was no marked constriction at the neck of the sac, and the gangrenous condition had probably been induced by the mutual pressure on each other of the different parts of the enormously distended sacculated gut. It was out of the question to return the bowel into the abdomen, and it was deemed hopeless to resect the gangrenous portion, so extensive was it, and so nearly approaching gangrene seemed the parts adjoining. Fat and sac, where gangrenous, were therefore removed, gas was evacuated by trocar and cannula, the parts were thoroughly dusted with iodoform, and poulticing was ordered with the intention of making an artificial anus as soon as the abdominal cavity had been shut off by the formation of adhesions. For the next two days the patient was somewhat weakly, but there was no real collapse. On the third day she

began to improve, and on the fourth the gangrenous bowel was cut away. The parts quickly cleaned, and very shortly she was having a natural daily action of the bowels through the new opening. When she left the hospital in February she was in herself well, and there was no difficulty in keeping the artificial anus closed with a pad, and free from smell. Looking to the very common end of strangulated umbilical herniæ, even when not gangrenous, the result in this case was most satisfactory. Resection and reunion of the gut was obviously impossible at the time of the operation, for it would have involved removal of nearly the whole transverse colon, a very different thing from the like procedure on the small bowel. Nor would it then have been wise to have established an artificial anus, for nothing could have obviated fæcal contamination of the peritoneal cavity unless the patient could have been kept in the prone position. Her size, however, prevented this, and it was clearly the best plan to wait for the formation of adhesions to shut off the abdominal cavity before cutting away the gangrenous bowel. She was averse from any subsequent operation for restoration of the canal. Had this patient been seen sufficiently early it seems not improbable that the condition might have been relieved and the gangrene prevented by puncture of the intestine and evacuation of the gas within.

Case III. *Treatment of the Urethra after removal of the whole Penis.*—T., aged 57, the subject of phimosis, and of syphilis many years ago, had had for the last twelve weeks a rapidly enlarging sore and growth on the penis, which on his admission involved the organ almost down to the root, and was obviously an epithelioma (since confirmed microscopically). He had been under the care of a legally qualified practitioner for two months, but it was not until two days before, when the ulcerated mass had attained this vast size, and the glands in the left groin were enlarged and ulcerating, that the man had been advised to come to the hospital. The penis was at once removed, and the scrotum having been divided through the raphé, the corpus spongiosum—rendered rigid on a staff—was dissected free from the rest of the penis, and so brought down behind the scrotum, where, ample in length, it was sutured to the skin. Reunion of the scrotum completed the operation, a drainage-tube being passed through it from above downwards, in the site, that is, of the now displaced urethra. At the same time glands were scraped away from the groin, but no dissection was made, as they seemed to dip deeply around the vessels. It was hoped that some of the enlargement might be due to inflammation alone, and this happily turned out to be the case, for much of the swelling subsided, and when, fourteen days afterwards, a solitary protruding gland had been scraped out, the wound forthwith began to heal. The scrotal wound had healed immediately, and the man had no difficulty whatever either in retaining his water, or in passing it in a sitting posture. There is no better method than this of dealing with the urethra when, the whole penis having been amputated, the urethral orifice must of necessity be sunk and lost within the scrotum. Impressed with its value twenty years ago in a case under Professor Humphry in Addenbrooke's Hospital, I have practised it with advantage in other instances during the past few years.

Mr. Sharpe, Mr. Davis, and Mr. Bird were the dressers of these cases.

LIVERPOOL ROYAL INFIRMARY.

MALIGNANT TUMOUR OF LEG—RECURRING—REAMPUTATED WITH IMMUNITY SO FAR AFTER SEVEN YEARS.

[Under the care of Mr. Rushton Parker.]

Mrs. M. H., aged 38, came under notice in June, 1879, on account of a large tumour of the right leg, six months in duration, with a history of pain in this limb for three years. She was much emaciated and suffered great pain from the tumour, which greatly distended the calf and adjacent parts of her leg.

Amputation at the knee above the femoral condyles was performed on June 10th, 1879, a slice of the patella being left, with circular incision of the skin. Her appetite returned the next day, and she made a simple recovery during the next five weeks.

The tumour was obviously malignant, and on section presented a gelatinous appearance, being attached to the periosteum of the tibia and to the sheath of the soleus muscle. Microscopically the tissue showed irregular oval and round cells, with many others of a stellate and long fusiform shape, connected by several branches with a loose fibrous network that enclosed a mucous juice, constituting what is known as a myxosarcoma.

Nine months later she complained of a painful swelling like an abscess, about the size of a walnut, on the bone at the end of her stump, distending and reddening the skin. Aspiration of this withdrew only a few drops of blood and fragments of gelatinous tissue, which, under the microscope, showed the structure of the primary growth.

Reamputation about the middle of the thigh was done on March 30th, 1880, by unequal oval flaps, the longer in front; after which a very satisfactory recovery was accomplished without the slightest disturbance of her health, with no formation of pus, and with only two or three dressings of the stump, which was supported by a couple of close-fitting splints of sheet zinc, and firmly enveloped in coarse cotton dusters of open texture, imbued with terebene and olive oil. The drain was a large wisp of horse-hair. She has been stout and in the best health ever since, and attended an exhibition of patients at the Liverpool meeting of the British Medical Association in 1883. On February 3rd, 1887, I visited her and found her perfectly well.

Remarks.—This case differs from all others that I have attended or seen, before or since, in the immunity, during this long period of seven years, from the recurrence that so frequently disappoints our efforts. Although the first amputation was done in the hope of evading recurrence by way of the large calf muscles, I should not again operate quite so low down in a similar case, but I had no hesitation, in the second operation, in amputating through a femur affected by mere contact at its lower end with malignant disease, the germs of which had been probably conveyed by way of fragments of the gastrocnemius muscle that may have been unintentionally left behind. Even in tumours primarily arising in the lower end of the femur I have several times performed, and frequently witnessed, amputation through that bone without subsequent recurrence in the stump, though the disease has always reappeared elsewhere. Such experience justifies surgeons in hesitating before performing or recommending amputation at the hip-joint in place of the far safer procedure lower down, when the latter can be fairly substituted. At the same time prudential motives lead one not to mince matters when dealing with disease below the knee or elbow, but to amputate well above these joints. In planning the operation it is well to bear in mind the mechanism of recurrence in its various phases, and the paths by which the germs of secondary tumours are probably conveyed to the localities where they arise: (1) by continuity of tissue in the part or limb; (2) by way of the lymphatics to neighbouring glands; (3) by the blood stream to the lungs or other viscera. In such cases as the present operative measures are chiefly of use against (1), and perhaps against (2), which, though unusual, is not unknown; while against (3) it is a mere matter of chance and haphazard whether operation, however early, be in time to anticipate it. The single recurrence of the disease demonstrates its malignancy to all who did not see the tumour or its microscopic preparations, while the subsequent immunity of the patient shows that even that had only a local character.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, April 19th, 1887.

R. Douglas Powell, M.D., F.R.C.P., Vice-President, in the Chair.

Congenital Dislocation of Hip.—Mr. Anthony Bowlby showed a specimen of congenital dislocation of the hip observed in a girl aged 13, who died in St. Bartholomew's Hospital from a new growth in the stomach. She was the first child of the family. The labour was easy and natural, no interference being necessary. Nothing was noticed amiss till she began to walk; lameness was but slight until about the age of 3 years. She had met with no accidents, and had never suffered from symptoms pointing to hip-disease. The head of the right femur was displaced into the dorsum ilii. In the position of the normal acetabulum was a triangular depression, which, although it evidently represents the acetabulum, was far too small to have accommodated the head of the bone at any time. The floor of the depression was covered in its upper part by cartilage, and the edges were scarcely raised above the level of the surrounding bone. The upper portion of the acetabulum, that formed by the ilium or the iliac segment, was deficient, and the cavity was formed by the junction of the pubic and sciatic portions. The head of the bone lay in a depression on the dorsum ilii, immediately above the deformed acetabulum, and was in this situation surrounded by a fibrous capsule. The ligamentum teres was undeveloped. He thought it probable that this condition of the acetabulum was a more frequent cause of congenital dislocation of the hip than was generally allowed, and that there were no good reasons for believing that such displacement was the result of injury during parturition. — Mr. Lockwood showed two specimens of deformity of the hip-joint observed

in the fœtus. 1. A microcephalic fœtus with well-marked lateral curvature of the spine. The child was born with a breech presentation. The cerebrum, cerebellum, and spinal cord were all excessively small. The fingers were crumpled into the palm, the feet were in the position of talipes varus, and the legs were crossed. The hip-joint had no sini, and was merely a shallow hollow; the head of the femur was not displaced. Mr. Lockwood thought that since the brain and spinal cord were so decidedly abnormal, and since the organs of volition were affected and not the viscera, there must be some association between the two sets of conditions. The various specimens exhibited illustrating the development of the hip showed that the margin of the acetabulum was formed in cartilage before the second month of intra-uterine life; in the specimen he showed, this process seemed to have failed. 2. In the second fœtus the legs tended to remain flexed on the abdomen. The presentation was a breech. There was ectropium of the abdomen, with protrusion of the liver and intestine. The brain and spinal cord were well developed. The hands were flexed upon the arm to a right angle; there was no thumb on the right side, and only a rudimentary thumb on the left. The head of the right radius was dislocated upon the front of the humerus. The margins of both acetabula were deficient, and the heads of the femurs were displaced upon the dorsum of the ilium. Mr. Lockwood thought that in this case the absence of the margin of the acetabulum had predisposed to the dislocation, and that the muscles had, during intra-uterine life, drawn the head of the femur upwards. These cases were compared with ordinary examples of congenital dislocation of the hip, and it was argued that the cases which went by that name were seldom, or perhaps never, traumatic, but were due to developmental defects. Physiological movement during intra-uterine life was an essential element in the development of joints, and in these cases no movement could take place at the hip.—Mr. W. Adams exhibited two dried specimens from the Museum of the College of Surgeons which belonged, in Professor Stewart's opinion and in his own, to the class of congenital displacements of the hip. Mr. Bowlby's case was of special importance, because it was accompanied by a trustworthy history, which was absent in all the other specimens in London, with one exception, which was that shown by Mr. Morgan; this specimen had been shown to the Westminster Medical Society by the late Mr. Edwin Canton (*London Medical Gazette*, N. S., 1848, vol. vi, p. 559) as an example of "congenital dislocation of both hip-joints." As the specimens exhibited proved, the head of the femur in these cases was displaced in various directions, directly upwards, upwards and forwards, upwards and backwards towards the sciatic notch, or on the centre of the dorsum ilii. All the specimens agreed in showing no trace of disease; but, on the other hand, the innominate bone was evidently congenitally deformed. The acetabulum was represented only by a flattened triangular depression, the base of which was formed by the border of the obturator foramen; while the apex corresponded to a point a little above that which should represent the centre of the acetabulum if that cavity were present. The upper half of the prominent border of the acetabulum, which should naturally be formed by the ilium, was entirely absent; so that there was nothing to prevent the head of the femur passing upwards on to the dorsum ilii when the weight of the body was thrown on the limb. In all these specimens the lower part of the innominate bone was narrowed and elongated; the ischial tuberosity was everted, and its ramus twisted; the head of the femur was smaller than natural, generally flattened behind and below, but covered with healthy articular cartilage; the round ligament was occasionally present, being greatly elongated; the head of the femur remained within the capsule-ligament, which was not only elongated, but thickened. The collection of specimens would help to dispel several errors; for it would be seen that the condition was really a consecutive displacement of the femur resulting from a congenital deficiency of the acetabulum, rather than a true dislocation. Two practical results were the outcome of these views. In the first place, the accoucheur must be freed from all possible blame in producing the displacement or so-called dislocation; and, secondly, the practice of dividing the tendons of the glutæi and rotator muscles must be condemned as an irrational and useless procedure.—Mr. John H. Morgan exhibited a specimen from the Charing Cross Hospital Museum, which was of historical as well as pathological interest, as being the first specimen illustrating the condition of parts found in congenital dislocation of the hip. It was exhibited to the Westminster Medical Society in March, 1848, by Mr. Canton. The patient was a female, aged 32, who was affected in both hips. She died fourteen days after giving birth to a living child at full term. Examination of one hip only was permitted. The body and upper limbs were well formed, whilst the lower extremities were somewhat atrophied. The head and neck of the femur were found on the dorsum ilii, the former having passed beneath the small external rotators, whilst a large bursa existed between the latter and the capsular ligament which immediately covered the former like a hood. This ligament preserved its natural connections, but was considerably elongated, thickened, and strongly fortified with supplemental bands at its upper part. The head of the bone was coated by a bluish film of cartilage, which was continued over a superficial impression, marking the site of the pit for the ligamentum teres, which was not present. The portion of the dorsum ilii played upon by the femur was smoother than natural. The acetabulum was triangular in form, the base directed outwards; the heighth was one inch, the breadth half an inch; the cavity was nearly filled with fat. Mr. Morgan remarked that although specimens exhibited that evening placed it beyond doubt that in some cases an erroneous development of the acetabulum occurred, and the head of the femur was thus forced to make for itself a socket upon the dorsum ilii, he believed that there were other cases in which inflammation of the synovial membrane occurring at or soon after birth, rupture of the ligamentum teres took place, and the femur was pushed out of the acetabulum, and drawn up on to the ilium. The appearances in the specimen which he exhibited were quite compatible with this view. He had had an opportunity of seeing this condition in a case under Dr. Barlow at the Hospital for Sick Children in Great Ormond Street, where the femur became dislocated in the course of rheumatic fever; and, on cutting down upon it, the head of the femur was found thus displaced, covered by the stretched but unaltered capsule, and forming for itself a new cavity, in which it rotated. The acetabulum was filled to a level with its margin by granulation tissue. In two cases which had lately come under his observation, presenting all the clinical features of congenital dislocation, he had detected the marks of small abscesses which very possibly had resulted from some such course of events.—Mr. Shattock showed a specimen which he said was practically identical with Mr. Bowlby's. He had dissected several specimens of the condition which Volkmann had called genu recurvatum, in which during intra-uterine life the knee was over-extended on the body; in such a condition either the hamstrings must rupture or the hip become subluxated; this had been the position in both of Mr. Lockwood's specimens. That fact was suggestive, and made it probable that in reality we were dealing with an intra-uterine malposition.—Mr. D'Arcy Power showed a specimen of double dislocation added by Mr. Stanley in 1834 to the Museum of St. Bartholomew's Hospital.—Mr. Howard Marsh thought that these deformities were very occasionally produced at delivery; he had seen one case where the child was born with a breech-presentation, and where the medical attendant assumed that he had produced the condition, as he had used strong traction, and had felt something give way. He thought such an occurrence very exceptional, but its occasional occurrence ought to be borne in mind. The cases were not very uncommon, he had seen eighty altogether, and the condition varied slightly in different cases, As a rule the joint appeared to be rudimentary, so far as could be ascertained by external examination. Moreover there were undoubted cases of hereditary transmission of the defect, as had been stated by Dupuytren. He had seen one case in which a mother and child both had congenital dislocation of the hip on both sides. Lastly, it largely predominated in female children, and the deformity was commonly double, facts which seemed only explicable on the theory that the cases were due to congenital fault.—Dr. Barlow referred to a case reported to the Society by Mr. A. E. Barker. The child had come under treatment for abscess in connection with the hip-joint, of pyæmic nature. The acetabulum was rudimentary, and filled with solid connective tissue; the abscess communicated with the hip-joint; there was some cartilage on the head of the femur, and no evidence of ulceration. Mr. Barker thought the case an example of congenital dislocation, but a Committee of the Society thought that the condition was produced by the arthritis. Arthritis ran a different course in infants than in older children, the processes of repair being so active as to obliterate signs of inflammation, and to produce a condition resembling congenital deformity. The same remark applied with even greater strength to intra-uterine inflammations. In dislocations occurring during early life, in the course of acute fevers also, the evidences of inflammation were ultimately slight.—Mr. Barwell thought that most of the cases were due to congenital disease, and that there was a certain class of cases benefited by division of muscles.—Mr. Edmund Owen commented on the predominance of the dislocation in female children and in children born by breech-presentation. He objected to the term dislocation, as he considered it to be due to imperfect development, and was inclined to accept Mr. Shattock's explanation.—Mr. Bowlby, in reply, said that in the acute

arthritis of infancy the hip-joint might be disorganised in such a manner as to produce a condition somewhat resembling congenital dislocation, but to be sharply distinguished from it.

Disease of the Humerus.—A specimen of an obscure form of disease affecting the humerus of a man, aged 86, was shown by Mr. J. R. LUNN. Three months before his death it was noticed that the right arm was becoming curved outwards and was tender; no other bones were affected. There was no history of syphilis, gout, or rheumatism. The bone, when examined after death, was curved obtusely about the middle; the thickening was greatest where the bone was most curved, the bone regaining its normal dimensions at the ends. The bone was softened, the medullary canal at the curvature narrowed, and the cancellous tissue at this point tough and compact. The shaft above was rarified, and the cancellous tissue within the tuberosity and neck deficient, the enlarged portion of the medullary canal being filled with fat. Mr. Shattock found that the curved portion of the bone showed, on microscopical section, well-formed osseous tuberculæ, including a vascular connective tissue; in parts, large osteoclasts lay against the trabeculæ, and there was abundant evidence that these had been altered in direction. In most of the spaces ossification was in active progress, and in places "brushes" of stiff osteogenic fibres spread into the new bone as "perforating fibres." New bone was also in process of formation in a dense, fibrous, connective tissue in the deeper layer of the periosteum. Mr. Lunn, after commenting on the difficulty of diagnosis, and the improbability that it could be classed with osteitis deformans, owing to the fact that only one bone was implicated, expressed the opinion, founded on the microscopical appearance, that the case was an example of osteo-malacia affecting a single bone.

Fibrous Metaplasia of Bone.—Mr. SHATTOCK showed microscopical specimens from two cases of admitted osteo-malacia, recorded by Howship and Solly. There was extreme rarefaction of the shaft; this was not due to osteitis, for there was no evidence of osteo-plastic periostitis, nor of small-celled infiltration. The contents of the enlarged canals was simply fatty tissue and effused blood; direct conversion of osseous into fibrous tissue, and of that again into fat, could be traced, so that with Sir James Paget the process might be described as a fatty degeneration of bone; but the term degeneration was objectionable, and that suggested by Virchow—metaplasia—was better. He referred incidentally to a possible source of fallacy in bone-decalcification in old specimens in museums owing to the spirit becoming markedly acid.—Dr. BERNAYS had found that this acidity was due to sarcolactic acid, no doubt derived from muscular tissue.

Case of Osteitis Deformans.—Dr. A. H. ROBINSON showed the calvaria and one of the clavicles from a case of osteitis deformans. A large sarcomatous tumour connected with the left lobe of the cerebellum, removed from the same case, was also shown. The patient was a clerk, aged 52. He had never been intemperate, nor had he suffered from rheumatism or syphilis. There was no history of cancer in his family; his twin-brother died an imbecile. He was father of a family of ten children, his wife having had no miscarriages. Two of the children died of scarlatinal dropsy, at eight years of age, and were said to have very large heads, resembling in form their father's. One of the patient's brothers died at the same age, and suffered similarly, his limbs being much distorted. The patient's symptoms dated back ten years, beginning with pain in the back and weakness in the lower limbs. His left tibia was the first bone observed to be enlarged, and the head afterwards began to enlarge rapidly. The right femur and humerus then became thickened to almost double their normal diameter; for some months prior to his death, which occurred quite suddenly, he was bedridden. At the necropsy the left side of the heart was hypertrophied, and the right dilated, the organ weighing fourteen ounces. There was no valvular lesion. The lateral ventricles were distended with serous fluid. To the left lobe of the cerebellum a large round-celled sarcoma was found adherent, probably springing from the membranes. There were no growths elsewhere in the body. The section of the skull showed hypertrophy chiefly on the right side and in the occipital region, with complete obliteration of the sutures, and disappearance of the diploe. A portion of the outer table was removed at the vertex, and showed a condition of rarefaction beneath. The thickening of the clavicle was confined to the inner two-thirds of the bone.—Mr. D'ARCY POWER thought Mr. Lunn's case was an example of osteo-malacia.—Mr. MACNAMARA said that in osteitis deformans, in one stage of the disease there was a remarkable softening of the bone, but it afterwards became extremely hard. In osteo-malacia the softening was progressive. The cases classed as osteo-malacia required subdivision. The osteo-malacia of pregnancy was a distinct type of disease; in other cases the lesions closely resembled sarcoma. Long continued chronic changes in the osteo-blasts, the bone-forming elements, resulted in the production of fibrous tissue. It was necessary to recognise that osteo-malacia included a series of cases in which softening of bone was the prominent event, but in which the softening might be due to various causes.—Mr. LUNN, in reply, said that there must be a stage of softening.

Card Specimens.—Mr. LOCKWOOD: Specimens Illustrating Development of the Hip.—Mr. ADAMS: Drawings of Congenital Dislocation of Hip.—Mr. MORGAN: Congenital Dislocation of Hip.—Mr. SHATTOCK: Congenital Dislocation of Hip.—Mr. G. H. FENWICK: Tumour of Bladder.—Dr. WILLCOCKS: Congenital Malformation of the Heart.—Mr. SHATTOCK: Tubercular Disease of the Skin.—Dr. DAKIN: Atrophied Kidney and Dilated Ureter, from a Female Child, aged 2.—Dr. COLCOTT FOX: Infantile Scurvy.

MEDICAL SOCIETY OF LONDON.

MONDAY, APRIL 18TH, 1887.

J. HUGHLINGS JACKSON, M.D., F.R.S., President, in the Chair.

On a Mode of Restraining Hæmorrhage during Operations upon the Tongue.—Mr. C. B. LOCKWOOD read a paper on this subject, in which he said that the depth of tissues at the place where the vessel lay upon the side of the pharynx was so small that there could be no difficulty in compressing it. He then described forceps which had been devised for this purpose; one blade passed by the side of the tongue into the pharynx, whilst the other was bent to fit the contour of the lower jaw, and meet the other near the tip of the greater cornu of the hyoid bone. Mr. Lockwood described cases in which the instrument had been used with good results by himself and by Mr. Willett.—Mr. BOWREMAN JESSETT thought that where the disease was limited to the tongue, the artery could be picked up and tied before division.—Mr. SHEILD thought the idea was ingenious, and merited a trial. He asked Mr. Lockwood if the instrument would be applicable to wounds of the tongue far back accompanied by serious hæmorrhage.—Mr. BOYCE BARROW said great importance was attached to the removal of the glands, which was generally done as a preliminary step to ligature of the lingual artery.—Mr. WALTER PYE did not think that the instrument allowed of sufficient pressure being applied.—Mr. LOCKWOOD, in reply, said that the instrument would not be applicable in certain cases of extensive disease, but he maintained that the operation ought not to be delayed until the disease was so far advanced.

A Case of Catheter and Calculus removed by Lithotrity.—Mr. H. H. CLUTTON read the case of a man, aged 29, who was sent to him with a history of ruptured urethra. This had been treated by means of a catheter, which was tied in for three weeks. After leaving the hospital he began to pass calculi. On admission into St. Thomas's Hospital he was found to have a fistula at the peno-scrotal angle, a stricture of the urethra, and a calculus in the urethra, with a second in the bladder. The stricture was dilated, and a lithotrite introduced. During the manipulation small pieces of a gum elastic catheter came away with the lithotrite, and eventually the fragments of a catheter thirteen inches in length were removed. The bladder-symptoms at once disappeared. A small fragment was left in the urethra in a pouch behind the stricture, but the patient would not allow a second operation. It seems that the catheter had slipped up the urethra while he was in the County Hospital, leaving the bone part at the orifice.—Mr. E. H. FENWICK alluded to several similar cases which had come under his cognisance.—Mr. W. PYE remarked on the rapid action of the urine on the catheter, and said that pure rubber would not have been thus affected.

Renal Sarcoma in Infancy.—Dr. ANGEL MONEY made a communication on the subject of renal sarcoma in infancy, and specially discussed the question whether surgery was justifiable. He related four cases that he had observed at the Hospital for Sick Children. Hæmaturia was not observed in any. All the cases were females, and the ages ranged between 18 months and 34 months. The other kidney was unaffected in each case. One tumour probably began in tissues not strictly renal. One was evidently of supra-renal origin, and this had enlargement of the external genitals, in which an enormous growth of hair had taken place during the last nine months of the life of a female child, aged 21 months at death. All the tumours were large and abutted against the diaphragm. There were secondary deposits in three cases, and in the fourth the meso-colon was infiltrated as well as the retro-peritoneal glands. The course of the case was always longer the older the child. A study of recorded cases in which nephrectomy had been performed seemed to show that life was not prolonged even in the successful cases, and the statistics proved the danger that attended the operation. Doubtless if the tumour was detected when small, a chance for surgery existed, but as a rule the

tumour was not discovered till it had reached a great size, and secondary growths were almost inevitable; so that in his work on the *Treatment of Disease in Children* he summed up the present situation by saying that removal of the tumour was useless.—Mr. MARMADUKE SHEILD did not think that operation would be practicable unless the disease was detected very early.—Mr. BERNARD PITTS thought that in cases where the course was not too rapid an operation might advantageously be resorted to.—Mr. BOWREMAN JESSETT said that the difficulty lay in the early diagnosis.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, APRIL 1ST, 1887.

F. H. ALDERSON, President, M.D., in the Chair.

CLINICAL EVENING.

Malignant Polypus of the Nose.—Dr. SCANES SPICER related the case of a woman under his care suffering from malignant polypus of the nose.—Mr. BRUCE CLARKE said that he had lately been watching a similar case to that described by Dr. Spicer. The polypus was removed with forceps; ultimately the patient died, and at the *post-mortem* examination an abscess at the base of the brain was found.—Dr. THUDICHUM made some remarks.

Transplanted Mole.—Mr. KEETLEY showed a case in which he had transplanted a mole from the face to the arm.

Multiple Lipomata.—Dr. COLCOTT FOX exhibited a case of fatty tumours with linear atrophy. The tumours were symmetrical, those in the middle line being bi-lobar.—Dr. THUDICHUM made some remarks, and Dr. FOX replied.

Xanthelasma Palpebrarum.—Mr. JONATHAN HUTCHINSON, jun., brought forward a case of xanthelasma palpebrarum in a man aged 60.

Adenoma of External Ear.—Mr. BLAND SUTTON showed a case of adenoma of the external ear, upon which he had operated successfully. The patient made an excellent recovery, and recovered his hearing, which he had in great measure lost.

Rhinolith.—Mr WEISS exhibited a rhinolith, which he had lately removed from a young girl.—Mr. BLAND SUTTON said such concretions usually formed around a foreign body.

Fracture of Patella.—Dr. ALDERSON showed a specimen of transverse fracture of the patella, which occurred twenty-three years before. The fragments had been brought into close approximation by pads, fixed above and below the fracture, by a strip of adhesive plaster, and a figure-of-8 bandage; subsequently the limb was put up in gum and chalk. The patient died recently of apoplexy, and Mr. Dunn reported that in the patella the band of union generally was one of dense ligamentous tissue, but in the centre there was a bridge of osseous tissue which was continuous with that of either fragment.—Mr. KEETLEY suggested that the joint might have become the seat of changes due to chronic rheumatoid arthritis.—Dr. ALDERSON replied that he had known the patient up to the time of his death, and no complaint had been made of symptoms pointing to that disease.

Electrolysis in Stricture of the Urethra.—Dr. W. G. STEAVENSON and Mr. BRUCE CLARKE gave a demonstration upon the living subject of the treatment of stricture of the urethra by electrolysis.

Specimens.—Mr. H. PERCY DUNN showed the following card specimens: 1, Epitheliomatous Growth of the Back of the Pharynx; 2, the Rectum of a Child Six Months after Operation for Imperforate Anus; 3, Scirrhus of the Breast, showing several hæmorrhagic Cysts.—Brigade-Surgeon W. CURRAN showed several drawings, and some slugs and fragments of bullets, illustrative of the behaviour of lead in the presence of bone.

PATHOLOGICAL SOCIETY OF MANCHESTER.

WEDNESDAY, APRIL 13TH, 1887.

A. W. STOCKS, M.R.C.S., Vice-President, in the Chair.

Malignant Endocarditis and Nephritis.—Dr. H. ASHBY showed the heart and kidneys of a girl, aged 13, who had suffered for several years with chronic mitral disease and rheumatism, acute or verrucous endocarditis supervening. A few weeks before her death she had an attack of subacute rheumatism; a diastolic basic *bruit* was heard in addition to the systolic, and the urine was loaded with albumen. At the *post-mortem* examination numerous irregular nodules of fibrin were found on the mitral valve and on the posterior wall of the left auricle, and also along the line of contact of the aortic valves. The kidneys were large and pale; microscopically they showed swollen and fatty epithelium, and the tubes were choked with blood and fibrinous casts. The glomeruli appeared swollen, but otherwise unchanged. Many of the capillary vessels were choked with emboli consisting of micrococci. The spleen and liver were enlarged.

Cystic Disease of the Kidney.—Dr. H. ASHBY showed for Dr. MACALISTER the kidneys of a man, aged 34, who had suffered for upwards of three years from epistaxis, hæmaturia, headache, and attacks of dyspnœa. Uræmic convulsions supervened before death. At the *post-mortem* examination hypertrophy of the heart and recent pericarditis were found. The kidneys consisted of masses of cysts numbering many hundreds, and varying in size from a pin's head to a marble; their contents were fluid or gelatinous, consisting of altered blood.

Intra-thoracic Tumour.—Dr. HUTTON exhibited a sarcoma, involving all the thoracic organs, of a boy, aged 8. There had been no symptoms or loss of health until within four or five months of his death, and urgent symptoms existed only for about eight weeks.

The Oldham Poisoning Case.—Dr. T. HARRIS showed the œsophagus of the victim, which presented a corroded, charred patch, with absolutely black edges; the patch was circular in shape, an inch in diameter, and involved the mucous and submucous tissues. There could be no doubt as to the case being one of poisoning by some corrosive fluid, probably sulphuric acid.

Polypoid Growth of the Vulva.—Dr. BROOKE showed a drawing and sections of a molluscoid tumour of the vulva, involving the clitoris and its folds, both labia majora, and the lower part of the front wall of the vagina. The patient, aged 29, had suffered badly from syphilis for the last eight years. The tumour proved to be of myxo-fibromatous nature.

Specimens.—Mr. SOUTHAM and Dr. DRESCHFELD also showed preparations and sections.

BRITISH GUIANA BRANCH.

Dr. WILLIAMS, Acting Surgeon-General, in the Chair.

Hospital Mortality in George Town.—A paper on the Mortality of the Public Hospital, George Town, for the year 1886, was read by the SECRETARY. He pointed out that the percentage on all cases treated to a termination was 9.8, but, deducting those that died within forty-eight hours of admission, the rate was only 8.8. There were eighty-seven causes of death, the principal being phthisis with 25 per cent. of the whole mortality, and Bright's disease with a similar percentage. There was only one case of yellow fever for the year, the last of a slight outbreak that occurred at the end of 1885. There were very few cases of malarial fever.

Bright's Disease.—Dr. HILL read a paper on Bright's disease, and showed, from the *post-mortem* examinations made, the frequency with which it was found. Out of 418 necropsies made in the hospital in 1886, in no fewer than 383 cases was disease of the kidneys found. He drew attention to the more important clinical features of the disease, and concluded by referring the cause to malarial fever.

Malaria.—Dr. FERGUSON read a paper on malaria, in which he pointed out how unsatisfactory, in many respects, the germ theory of malaria was, and how much better all the phenomena could be accounted for by the "chill-theory." He drew special attention to the occurrence of intermittent fever in dry, rocky places where no vegetation grew.

BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.

E. NOBLE EDWARDS, M.R.C.S., President, in the Chair.

Dislocations of Upper Extremity.—Dr. UHTHOFF mentioned a case of dislocation of the humerus, illustrating the value of Dr. Neil Macleod's method of reduction, as described in the JOURNAL of January, 1886; also a case of partial dislocation of the orbicular ligament of the radius, and the method of reducing it advised by Mr. Jonathan Hutchinson, jun., in the same volume of the JOURNAL.

Antifebrin.—Dr. UHTHOFF also mentioned a case in which the use of a small dose of antifebrin had been followed by a rapid reduction of temperature accompanied by somewhat alarming symptoms.

Phosphaturia.—Dr. SHADWELL read a paper on Phosphate of Lime in the Urine, associated with Pain of a Peculiar Character. He believed the affection to be hitherto undescribed. Attacks only occurred in warm weather, and bodily fatigue was an essential condition. A large quantity of phosphate of lime was passed, and about a minute afterwards pain began. It was rhythmical in character and occurrence. It lasted about a minute, and recurred every three or four minutes, each time with increasing severity, until there was an uncontrollable desire to relax all the sphincters. Then, as the urine formed, it gradually washed out the bladder and urethra, and all the symptoms passed off in twenty or thirty minutes. The urine was acid, and the deposit consisted almost entirely of amorphous

phosphate of lime. Treatment with acids, especially fresh lemon-juice, was effectual.—Mr. EDWARDS remarked that young people frequently passed phosphates with acid urine, and without pain.—Mr. HODSON asked if the patients ever passed phosphates without pain.

Migraine.—Dr. WHITTLE read a paper on Migraine, based on his own personal experience. He maintained that migraine was not a "neurosis," but that the headache was neuralgic, arising from reflex irritation of some remote disturbance, in this instance probably some functional hepatic derangement of cyclical character. It was contended that, the liver being a one-sided organ, any reflex irritation arising from it would be more or less irregularly manifested, thus explaining the unilateral headache. The chief impression was made on the abdominal sympathetic, and conducted thence to all other parts in relationship to the deranged centre, thus affecting the vascular system, from the heart to the smallest vessels, and the digestive and excretory organs, the cerebral nervous system being only secondarily affected.—Mr. EDWARDS thought the attacks often came on quite independently of any stomach disturbance, the latter arising after the commencement of the illness. He had found citrate of caffeine, in 5-grain doses, combined with bromide of potassium, of great value in checking the pain.—Mr. W. TURNER thought the attacks were produced by anæmia of the brain, as exemplified by the condition of the sight or the nervous system.—Mr. CRESSWELL BAKER pointed out that some cases arose from irritation of branches of the fifth nerve in the nose or elsewhere.—After some remarks from Dr. SHADWELL, Dr. WHITTLE replied.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, MARCH 4TH, 1887.

H. R. HATHERLEY, M.R.C.S., President, in the Chair.

Diphtheria.—Mr. BOOBYER read a paper on Diphtheria, which was followed by a discussion, in which the PRESIDENT, Dr. RANSOM, Dr. BROOKHOUSE, Dr. MUTCH, Mr. WILLS, and Dr. WHITELEGGE took part.

Bergeon's Treatment of Phthisis.—Mr. BURNIE showed Bergeon's apparatus for the treatment of phthisis by gaseous enemata.

Tricuspid Regurgitation.—Dr. HANDFORD showed a case of tricuspid regurgitation.

Fatty Tumour of Thigh.—Mr. ANDERSON showed a fatty tumour, weighing 8 lbs., removed from the thigh of a woman.

Urethritis in Children.—Dr. MUTCH read notes of three cases of acute urethritis in children.

Diabetes with Ataxy.—Mr. T. D. PRYCE showed a case of diabetes associated with ataxic symptoms in a man, aged 66. He drew attention to the not uncommon association of these conditions, and suggested that, in some cases, the ataxic symptoms might be due to peripheral neuritis, caused by the circulation of the diabetic poison in the blood. The almost toothless condition of the patient was also remarked upon.

Myxœdema.—Mr. T. D. PRYCE showed a case of myxœdema in a woman, aged 59. Her history was one of excessive child-bearing and of very considerable mental worry. The urine contained a trace of albumen, and the amount of urea excreted was diminished. The thyroid gland was diminished in size.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, MARCH 30TH, 1887.

LLOYD OWEN, F.R.C.S.I., President, in the Chair.

Carcinoma of Male Breast.—Mr. BARLING showed a patient, aged 47, who nearly five years before noticed a burning and smarting pain at the left nipple, and on handling the part found a hard swelling; this slowly increased, and eighteen months ago became ulcerated. There were enlarged glands in the axilla, and a scraping from the ulcer showed that it was a squamous-celled carcinoma.

Syphilitic Stenosis of Trachea.—Dr. SUCKLING showed a woman, aged 50, who had contracted syphilis twenty years previously; five years later the hard palate became perforated. For the last nine years she had suffered from difficulty in breathing, which was noisy and stridulous. On several occasions the dyspnœa had been extreme, and almost necessitated tracheotomy. There was no laryngeal stenosis or other disorder, the cords moving freely. On inspiration the glottis was rhomboidal in shape, being extremely dilated; nothing abnormal could be seen in the trachea. There were no signs of mediastinal tumour, no dysphagia, or other pressure symptoms.

Aortic Aneurysm.—Dr. SUCKLING showed a case of aneurysm of the transverse and descending aorta in a man, aged 63.

Multiple Exostoses.—Dr. W. RICHARDS showed a case of multiple exostoses.

Excision of Goitre.—Mr. CHAVASSE showed a woman, aged 29, from whom he had successfully removed the right lobe of the thyroid, and read a paper on the subject.

SOUTH-EASTERN BRANCH.

WEDNESDAY, MARCH 30TH, 1887.

DR. ROSS in the Chair.

Recurrent Small-Pox.—The CHAIRMAN read notes of a case in which two attacks of small-pox occurred in the same patient at a short interval. Auto-infection was the most probable cause.

Rational Antiseptic Measures in Midwifery.—Dr. WALTER GRIFFITH read a paper, in which he said that antiseptic measures were principally needed for the prevention of puerperal fever, which in all cases had an external source. Danger arose during lying-in from causes inherent to the patient herself or from external causes such as defective drainage, infected water-supply, or contagion conveyed by the medical attendant or the nurse. The sources of infection were cases of pyæmia, septicæmia, and erysipelas, the examination of recently dead bodies, and the dissection of bodies imperfectly preserved; scarlet fever was not a source. No vaginal examination should be made unless the hands were absolutely aseptic, and a vaginal antiseptic douche should be used twice daily during the first week. Corrosive sublimate 1 in 2,000 to 1 in 4,000 was the best antiseptic when used with the necessary precautions.

Fœcal Tumour.—Dr. RANKING related four cases of fæcal tumour in which recovery took place. In one, the patient was a lady somewhat advanced in life who had a tumour in each hypochondrium, which, before she came under his care, had been diagnosed as malignant. Under treatment, consisting mainly of enemata, she was cured in two months.

ACADEMY OF MEDICINE IN IRELAND.

SURGICAL SECTION.

FRIDAY, MARCH 18TH, 1887.

SIR WILLIAM STOKES, President, in the Chair.

Secondary Suture of Ulnar and Median Nerves.—Mr. J. H. SCOTT read a paper on nerve-suture. A man, aged 21, sustained an injury to the palmar surface of his right fore-arm, about one and a half inches above the wrist-joint, by putting his hand through a plate of thick glass. The accident occurred four months prior to admission into the Adelaide Hospital. There was distinct evidence, from the condition of the hand, that the ulnar and median nerves had been completely divided, without any attempt at regeneration. On April 16th, 1886, eighteen weeks after the injury, the ulnar nerve was sutured, three catgut ligatures being introduced to bring the freshly-cut surfaces together. Five days after the operation sensation had markedly improved. The median nerve was sutured on August 31st, 1886, almost ten months after the injury. Three weeks after the operation the patient could distinguish the touch of a pin's point anywhere in the area of distribution of the median nerve. Mr. Scott said there was every hope that the hand would be perfectly restored to usefulness.—Sir WILLIAM STOKES recalled a similar operation by Mr. Wheelhouse, of Leeds. Mr. Scott's case was a further illustration of the great importance of nerve-suture.—Dr. TOBIN observed that in gunshot wounds the rule was to amputate when the chief nerve was injured, but if the nerve could be united and sensation preserved there would be no necessity for such an extreme measure. At Suakim he had a case in which half an inch of the ulnar nerve was blown away by a gunshot. He performed excision of the elbow-joint, and having united the ends of the nerve, sensation returned, and the case turned out a success.—Mr. W. THORNLEY STOKER, Mr. F. T. HEUSTON, and Dr. FOY took part in the discussion, and Dr. SCOTT replied.

Excision of the Knee-joint.—Mr. W. THORNLEY STOKER read a paper on some elements of success in excision of the knee-joint. He considered that the results of excision of the knee had been too favourably stated, and that many instances, recorded in their early history as cured, had later on shown a return of disease. Three things were to be regarded as of superlative importance in the prospect of success in excision of the knee: (1) complete removal of all diseased structures; (2) relative permanence of dressings; (3) thorough fixation of parts. He laid great weight on the careful removal of diseased synovial membrane, condemned the use of Esmarch's bandage, and advocated the use of dry dressings. For fixation, Mr. Stoker recommended the use of Heron Watson's splint as modified by Mr. Thomson, and opposed the use of plaster-of-Paris. He described the method of "dowelling" which he had de-

vised as a means of securing the bones, a full description of which was published in the JOURNAL for April 2nd, 1887. Mr. Stoker stated that he and his colleagues had had the method in use for more than a year, and had found it most satisfactory.—Sir WILLIAM STOKES said the plan of fixation of the bones devised by Mr. Thornley Stoker should be welcomed by every operating surgeon as superior to any other method of bone-suture.—Mr. FRANKS agreed with Mr. Stoker in most points, but was not prepared to say that the dowels were better than the wire sutures.—Mr. CROLY objected to the plaster-of-Paris splint, as causing congestion if put on very tightly, while if too loose it was of no use.—Mr. LENTAIGNE said that in many cases a limb which was quite straight when the patient left the hospital, subsequently became bent. He always insisted on the patient wearing a strong support for six or eight months after the operation.—Dr. KENNEDY found that when Esmarch's bandage was used it was necessary to open the dressing on the second day, and sometimes on the day following the operation, owing to the oozing.—Mr. THOMSON testified from practical experience to the perfect simplicity of Mr. Stoker's method, as well as to the perfect accuracy with which it kept the bones in apposition and at rest. With regard to the general result in such cases, he felt proud of the results of excision in Dublin. In forty excisions of the knee by his colleagues and himself in the Richmond Hospital, he could not recall one which was followed by death.—Mr. STOKER, in reply, said that no doubt bending of the limb occurred in many cases, and a support, as suggested, was desirable.

REVIEWS AND NOTICES.

BERICHT ÜBER DIE ALLEGEMEINE DEUTSCHE AUSTELLUNG AUF DEM GEBIETE DER HYGIENE UND RETTUNGSWESEN. BERLIN, 1882-3. Herausgegeben von Dr. PAUL BOERNER. Breslau: Schottländer. 1885.

REPORT ON THE GERMAN EXHIBITION IN HYGIENE AND THE SAVING OF LIFE, HELD AT BERLIN IN THE YEAR 1882-3. Edited by (the late) Dr. P. BOERNER. In 3 vols., containing 1800 pages and 400 illustrations.

[CONCLUDING NOTICE.]

A SAD interest attaches to this third volume from the death of Dr. Boerner, whose portrait forms the frontispiece, and whose life, by his friend and successor in the editorship, Herr Albrecht, the opening chapter. The son of a justice in one of the higher courts, he was born in 1829, and, intended by his father for the legal profession, he entered the University of Berlin in 1851. Here, however, the influence of Helmholtz turned his thoughts to science, while Virchow and Bardeleben confirmed him in his choice of a medical career. He graduated in 1854, and passed the Staats Examen in 1856 with distinction. He then settled in practice at Landsberg, but in 1863 determined to remove to the more congenial intellectual society of Berlin. The movement in the direction of sanitary reform in Germany had recently begun, and Boerner threw into it all the strength of his nature and the weight of his pen. The war of 1870-1, in which he served as a staff surgeon-major in the Landwehr, called him away for a time, but at its close he returned decorated with the Iron Cross, and resumed his literary labours with renewed energy and success. Besides numerous contributions to medical and other journals, he wrote a graphic account of his experiences of the war, translated Wilson's *Hygiene*, and founded in 1875 and the following years the *Deutsche Medicinische Wochenschrift*, *Jahrbuch der Practischen Medicin*, *Reichsmedicinal Kalendar*, and the *Deutsche Wochenschrift für Gesundheitswesens*. For thirteen years he was one of Varrentrapp's most active and valued fellow-labourers, and his last works were the *Hygienische Führer durch Berlin* and the present Report in connection with the Exhibition, of which he was, as his biographer says, the very soul. But he was far from being a specialist; history, philosophy, and politics in turn engaged his pen. He was convinced that the science of public health must sooner or later make its influence felt in politics and legislation, in literature, and in art. While seeking to popularise the study by reproducing in plain language the results of scientific research, he was a foe to all dillettanteism and superficial treatment of such subjects, maintaining that all action must rest on the conclusions of exact science. While the aim of the latest of his weeklies was to educate the intelligent public in the true principles of personal and public health, that of his earliest was to provide a journal at once thoroughly scientific and practical, not devoted to the interests of any class of specialists, nor consisting of bare reports of cases, but meeting the needs of the general practitioner who was desirous of keeping up with the medicine of the day.

Boerner combined in an unusual degree the speculative and the practical genius; the grasp of wide generalisation and of minute detail. Never was a man more regardless of his own interests, or more resolutely bent on improving the condition of his fellow men, a more determined advocate of all that is true and good, or a more unsparing opponent of the false, the shallow, and the mean. He consequently made many enemies, but many more friends. Statesmen, legislators, and administrators turned to him for counsel, and honours of all kinds were heaped upon him. To his extraordinary powers of organisation the success of the Exhibition was mainly due, but it was not given to him to see the completion of the great scheme for the more permanent realisation of its aims. Last August, in the midst of his labours, he succumbed after a few weeks' illness, and Berlin and Germany lost in him, too soon after his friend and fellow-worker Varrentrapp, one of her noblest sons.

This volume covers a wide field, comprising the questions of water-supply, drainage, heating, ventilation and lighting, the hygiene of manufacturing and mining industries, the protection of life by sea and land, and prevention of fires, with short chapters on mortuaries and on statistics, and a report on the Hungarian section of the Exhibition.

In introducing the subject of water-supply, Herr Albrecht, while admitting the greater purity of spring waters, points out their proneness to fail in hot seasons, when the need of towns is greatest, whereas rivers furnish a more constant and certain supply. He rightly condemns the proposal of a double service, not only on the ground of unnecessary outlay, but of the danger inseparable from the domestic use of water admittedly unsuited for drinking purposes. The sources and methods of filtration of the supplies of a number of German towns which were represented at the Exhibition are fully described, as well as the several forms of hydrants, filters, and water-meters. The pulsometers exhibited by Neuhaus, of Berlin, and Korting Brothers, of Hanover, attracted much attention, from the novelty and simplicity of their construction, and as providing at a small expenditure of fuel by the condensation of steam in two communicating chambers, without any mechanism beyond india-rubber valves, for raising large quantities of water to a moderate height. That of Neuhaus, which was used for the artificial cascade in the gardens, raised 6,000 litres (1,320 gallons) of water per minute. They are specially recommended for pumping sewage or waste waters containing coarse solid matters.

The next section treats of all measures for maintaining the purity of the soil, including paving materials, street cleansing, drainage, sewerage, and sewage disposal, and here for the last time Herr Albrecht had the assistance of his friend Dr. Boerner. Liernur's system is fully examined and condemned, the form of closet which it necessitates being described as "repulsive and on sanitary grounds inadmissible." Every system, it is urged, has its sanitary, technical, and financial aspects, and on these considerations, supported by the authority of Pettenkofer, Soyka, Flügge, and Hobrecht, he decides in favour of water-closets and water carriage in sewers, with filtration through the soil, as the ultimate means of disposal of the sewage of large towns. The advantages presented by Hobrecht's "radial system" of sewerage over single huge outfall sewers are justly insisted on. The sewerage works of the principal German towns, as well as the conservancy systems still in vogue in others, are described, and some statistics are given of the irrigation works at Berlin.

In the treatment of electric and gas lighting, Herr Albrecht was assisted by Messrs. Siemens and Halske, and the relative advantages of the glow and arc lights are fully discussed. Heating and ventilation, separately and in combination, were entrusted to Professor Hartmann of the Technical High School at Berlin. The general use of closed stoves in Germany has led to the production of a great variety of these, as well as of central heating apparatus on the hot air, water, and steam systems under high and low pressure. Among the numerous firms represented in this department the Kaiserslaütern Foundry Co., Messrs. Rietschel and Henneberg and Bechem and Port seem to take the lead, and the combined heating and ventilation of the Strasburg University and of the high schools at Aachen and Dresden executed by them, are described and figured.

The Kaiserslaütern Co. exhibited a thermo-telegraph, designed by Professor Recknagel, which indicates by bells of different tones whenever the temperature of a room rises above or sinks below any previously determined limits. The most noteworthy exhibit in the department of artificial ventilation alone was certainly the aerophor of Messrs. Treutler and Schwartz, consisting essentially, like others, of fans or Archimedean screws working in cylinders, and fitted, if desired, with water jets or sprays, but of more than ordinary power,

and capable of being arranged for impulsion or extraction of air. They are recommended in duplicate for ships and engine rooms.

Industrial hygiene, by Dr. Villaret, of the Prussian War Office, occupies nearly half the volume. He avails himself freely of the reports of factory inspectors in each branch of industry. Ventilation and lighting of workshops naturally receive considerable attention. The injurious effects on the health of operatives of the various kinds of dust are exhaustively discussed, and a number of fans and other contrivances for its removal are described. Among cotton mills, those of Messrs. May and Co. and the Brothers Spindler appear to be models, the cubic space allowed being far in excess of what is usually deemed sufficient either in Germany or England, and the arrangements for ventilation and the prevention of accidents and of fire being admirable. In regard to lead poisoning, it is remarkable how little success has been attained even by Messrs. Leyendecker, whose precautions far exceed in stringency and completeness those of any white lead works with which we are acquainted. The greatest difficulty is experienced from the careless habits of the workpeople themselves, even where they are paid for what might be deemed the luxury of warm baths, etc. Aniline poisoning, acute and chronic, is described, and much light is thrown on the nature and origin of dust explosions in mills. The unique construction of the dynamite factory, where every man works alone in a hut surrounded by walls twenty-five feet high and three thick, with underground passages communicating with the adjoining compartments into which he may retire in anticipation of danger would be well imitated in all such works. The most powerful of all explosives, hellhoffite, composed of a nitro derivative dissolved when required for use in nitric acid, requiring a match for its explosion, and in cartridges which the acid destroys if retained in them for any length of time, presents in these days of dynamitards such obvious advantages over other preparations, that it might well supersede them in all blasting operations. The gases evolved, too, are non-poisonous, consisting mainly of oxygen. Unfortunately, the patent has been secured by the Russian Government. To the chapter on mining industries is appended an account of the Knappschaftvereins, which combine the functions of trades unions, friendly societies, co-operative stores, etc., and contribute to the erection and maintenance of schools, churches, etc. ; and also of the dwellings for the miners at Saarbruck and elsewhere, which are purchasable by the men on easy terms.

A short report on railways and locomotives, breaks, and points, with a discussion of Pintsch's and other systems of lighting, by H. Bartels, is followed by a longer one on the means for preventing loss of life at sea by the editor, Herr Albrecht, who describes the arrangements on board the Hamburg American liner *Rugia*, and on two ironclads built at Stettin for the Chinese Government, with special reference to ventilation and the saving of life in the event of shipwreck.

Lighthouses, lifeboats, and diving apparatus are next passed in review. With regard to lifeboats, it appears that the Germans have generally discarded heavy wooden vessels with deep keels, as used here, in favour of a lighter pattern constructed of corrugated or ribbed sheet iron, attaching more importance to portability and stability than to the power of self-emptying or self-righting in the event of being capsised. These boats are easily carried on cars to any part of the coast ; their nearly flat bottoms are better suited to the low, sandy shores of the Baltic, where a keel would cause them to upset if stranded. They have air-tight bulkheads fore and aft and on either beam. When sailing the part of a keel is fulfilled by a somewhat pear-shaped sheet of iron lowered through a median well, which also serves to carry off the water when it rises above the seats or water-line of the boat. In very rough weather or in the event of the rudder becoming useless, stability and control are obtained by means of a conical bag attached at its open end by a strong rope to the stern, and guided by a cord from its further extremity, by which, if no longer needed, its direction can be reversed, when it collapses and may be hauled in. The rudder, too, in a high sea, when it otherwise would be frequently out of the water, can be prolonged downwards by a movable sheet of iron.

These new boats have given universal satisfaction to their crews, and the idea is well worthy of consideration elsewhere. Another form of lifeboat was exhibited by the builder, O. Kirchhoff, of Stralsund, which was adapted by an ingenious mechanism to progression either in water or on rough or smooth ice, conditions often indispensable for the rescue of fishermen on the Baltic coast. It is a fact worth mentioning here that the German Atlantic steamers are provided with cork jackets, of the best make, enough for every one of the crew and passengers.

Fireproof roofs and incombustible clothing, and appliances of all kinds for the extinction of fires are reviewed by C. Strehl, chief of the Berlin Fire Brigade, the organisation of which he describes, as also those of Breslau and other towns. He does not think much of the "Extincteur," but points out that the German patents protect only the special apparatus or capsules, and that the chemicals, which can be obtained at a much lower price, may be used by anyone. He, however, highly commends a fire-engine exhibited by the Berlin Anhalt Machine Company, Limited, which works a jet of condensed carbonic acid, followed, when the supply is exhausted, by steam and water, as the most perfect yet conceived.

Herr Albrecht contributes an account of the Paris Morgue, in order to compare with it the Mortuary at Berlin, of which he gives a full description, with plans, sections, and elevation. In the former, a solution of calcium-chloride is used, running in pipes and open gutters, to obtain the desired low temperature in the dead-house ; in the latter, an ice-machine, working with compressed ammonia, is employed, the cold water being carried through refrigerators in each cell, and serving afterwards to feed the boilers, and in summer for irrigating the glass roof. The building is replete with every convenience for medico-legal investigations, court-rooms, *post-mortem* rooms, and laboratories, offices, apartments for the resident staff, chapel, etc. There are thirteen cells open to public inspection for unidentified bodies, and thirty-nine for others, with rooms where the clothes of such as have been buried without recognition are retained, with a view to future identification.

The statistical publications of the municipality of Berlin are analysed by Dr. Boeckh, and the rich collection of reports, etc., on vital, nosological, and other statistics of the Empire generally, by Dr. Petersen.

Dr. Rózsahegyi, of Klausenburg, reports on the Hungarian department, which, however, could not be expected to approach the German in wealth or intrinsic value. But we must make an exception in favour of the collection by Professor J. von Fodor, of Buda-Pesth, of apparatus for research and demonstrations in ventilation, the physics and chemistry of air, earth, and water in relation to ground-air, sewage-disposal, etc. ; and a pyrometric series of fusible alloys for estimation of temperature up to 415° C. (966° F.), as well as graphic charts on various hygienic questions. Professor von Fodor is one of the most distinguished pupils of Pettenkofer, and, like his fellow student, Dr. Soyka, now of Prague, is an energetic apostle of hygiene in his own country.

PRACTICAL MEDICINE AND MEDICAL DIAGNOSIS. By BYROM BRAMWELL, M.D., Lecturer on the Principles and Practice of Medicine, School of Medicine, Edinburgh ; and Assistant-Physician to the Royal Infirmary. Pp. 146. Edinburgh : Young J. Pentland. 1887.

THIS book consists of the introductory portions of a course of lectures on Practical Medicine and Medical Diagnosis, which the author for some years has given in the Extra-Academical School of Medicine, Edinburgh. It is presumably the first instalment of what, when finished, will constitute an extensive and complete work on the science and art of medicine. The present volume is mainly limited to the consideration of three important questions, namely: 1. Methods of diagnosis ; 2. Case-taking and Case-recording ; and 3. The temperature of the body in health and disease. At first sight it might appear that each of these subjects had already been treated by preceding authors in a sufficiently exhaustive manner. The topics discussed are, however, of the highest importance, involving as they do some of the fundamental principles of the art of healing, and such are capable of being handled in various ways, and examined from different points of view. But however worthy of commendation any new production on such practical questions may be, its real merits will greatly depend upon the circumstances which are associated with it. Accordingly, the methods adopted and the opinions expressed by one who, like Dr. BRAMWELL, has been well known for many years to be a scientific pathologist, a sagacious physician, and a successful teacher, cannot fail to receive a respectful and cordial greeting from the members of the medical profession. A perusal of the present work will not disappoint its readers ; they will find in it a rich harvest matured by years of faithful and conscientious toil on the part of one of the most earnest labourers in our profession.

As the work under consideration is essentially of an educational character, another reason might be adduced to explain the demand for the periodical production of this class of medical literature. To keep these special branches abreast with the time is no easy task, and demands constant vigilance and toil. Medicine in general, perhaps more than any other science, makes almost daily gigantic strides, and is undergoing rapid development. Its disciples throughout the world are

busily adding to its stores of knowledge, and new facts are discovered in such numbers as to keep its doctrines in an almost constant state of revolution ; hence a treatise on the subject, however applicable for the moment, demands constant correction and extension to keep it on a level with advancing knowledge.

We shall not attempt to review this book in the ordinary sense of the word. In the brief space at our disposal the interest of our readers will be best served by simply stating the nature of its contents, with the addition of any comments which suggest themselves.

Chapter I is introductory, and deals with the various methods of Diagnosis. The necessity of following a complete and systematic plan is insisted upon, and the means of effecting this are indicated.

Chapter II is devoted to Case-taking and Case-recording. The author here also impresses upon his readers the importance of following a well-considered system in the investigation of a medical case, and the method by which this is best to be performed is discussed in detail. Dr. Bramwell very properly endeavours to inculcate the habit of case taking and recording upon both student and practitioner. He points out that the mere act of so doing promotes completeness and accuracy of observation, greatly adds to the interest of practice, and encourages original research. For a student it is undoubtedly the best method of acquiring a knowledge of disease, and, if he would only believe it, is far preferable to the present system of cram and closet-study of systematic literature. With Dr. Bramwell, we believe that a case carefully reported at the bedside will do more to fix the facts of any given disease on the mind of a student than double the time expended in attempting to acquire them by memory at home. The author's method of case-taking is given in detail, each heading being accompanied by useful explanatory comments, founded on observation, experience, and thoughtful reflection.

Chapter III consists of a brief but sufficiently complete summary of what is known concerning the temperature of the body in health and disease. This is demonstrated in a clear and interesting manner, and copiously illustrated by charts and diagrams. This chapter is the longest in the book, but space compels us to confine ourselves to the statement that all the essential facts concerning medical thermometry necessary for the ordinary requirements of the student and practitioner will be found therein.

The work concludes with appendices, in which divers topics of more or less interest are discussed. Among them is the much-vexed question of the out-patient hospital department; the respective interests of the patient, the student, and the teacher ; the methods of conducting it; the difficulties, advantages, and disadvantages associated with it ; and the field offered by it for clinical instruction and original observation. On all these points Dr. Bramwell has much to say which is well worthy of consideration, and with most of which we cordially agree. He describes his method of utilising out-patients for clinical instruction. We entirely concur with him in maintaining that this department is suitable for senior rather than junior students—that here the finishing touches are to be applied, rather than the elements acquired. We think he is also right in asserting that it is an error to suppose that this form of hospital duty demands inferior skill, and may with safety be relinquished to subordinates. On the contrary, it in reality requires the highest amount of medical acumen and knowledge, both as a physician and teacher. In the wards, disease is generally gross and readily appreciable, and there is time and leisure for examination and reflection. In out patient practice, ailments are more varied and obscure, applicants for relief are more numerous, and a rapid decision has to be arrived at. To instruct successfully, and maintain the interest of the pupil, the teacher in the out-patient room must possess extensive knowledge, rapid power of observation, readiness of demonstration, and a capacity for lucid and attractive exposition far in excess of that demanded to effect the same ends in the wards. Much also depends on local circumstances. In Edinburgh these are comparatively favourable ; the audience is large, the patients few in number and select in quality. In London almost exactly the opposite conditions prevail, since the teachers there are, as compared with their more favoured rivals in the North, heavily handicapped in their efforts at useful work. Each, however, must make the best of their opportunities, and endeavour to promote that friendly and healthy competition which must always be beneficial to the interests of medical progress.

In concluding this imperfect notice of Dr. Bramwell's book, we again recommend its perusal to our readers, who will find therein the matured observations and reflections of an experienced and thoughtful physician and teacher.

DR. HOLSTI, Privatdocent, has been named Professor Extraordinarius of Medicine at the Helsingfors University.

DIE PATHOLOGIE UND THERAPIE DER GELENKE-ENTZÜNDUNGEN. Von Professor Dr. MAX SCHÜLLER, in Berlin. Wien und Leipzig: Urban und Schwarzenburg. 1887.

THIS book is a somewhat enlarged edition of the author's article on inflammations of the joints in Eulenberg's *Real-Encyclopædia*. In it the author groups the inflammatory affections of joints according to their chief clinical symptoms. After a very short sketch of the general pathological anatomy of inflammatory affections of joints, Dr. SCHÜLLER discusses their classification. He separates the metastatic suppurative inflammations from ordinary suppurative inflammation ; he divides the rheumatic affections into acute rheumatism, chronic mono-articular rheumatism, and chronic polyarticular rheumatism ; he classes as senile inflammations of joints those in which, while there is fibrous change in the cartilage, there is no new formation, but rather atrophic processes ; he gives a very clear description of the inflammatory affections occurring in secondary, tertiary, and hereditary syphilis ; and he looks on the neuropathic affections as closely allied to arthritis deformans. Then follows a chapter on the frequency of occurrence of these diseases under various conditions, such as age, sex, employment, climate, etc. In the chapters on treatment, as indeed in the rest of the book, there is very little that is new or that is better stated than in many other works. Dr. Schüller appears to be very fond of carbolic acid fomentations for all acute inflammations. The carbolic acid is of the strength of 2 to 3 per cent. (in children, 1 to 1½ per cent.) watery solution, and the skin must not be wetted more than twice daily, as ulcers are otherwise apt to form. He makes the somewhat surprising statement that he has never seen any good results in any of these affections from the use of the actual cautery, nor does he advocate the use of blisters or iodine. The only application to the joint, besides the carbolic acid, which he thinks of any real use, is the unguentum hydrargyri in certain non-tubercular thickenings of the capsule. Special stress is laid on the use of local douches and baths of various kinds, especially in certain chronic inflammations after injuries, chronic rheumatic affections, arthritis deformans, etc. Massage has only given him good results in chronic rheumatic affections and in arthritis deformans, where there is marked thickening of the capsule. He advocates injections into the joints in some cases, using chiefly one to three Pravaz syringefuls of a 2 to 3 per cent. watery solution of carbolic acid injected once daily. This treatment is, in his opinion, quite harmless, and often gives brilliant results in contractions, the result of inflammatory shrinking of the capsule ; but he doubts if this or any other kind of injection is of more than temporary benefit in tubercular affections. The value of free lateral incisions in cases of white swelling and other affections of joints is admitted, but Dr. Schüller thinks that it should in many cases be combined with removal of the capsule of the joint. His experience corresponds with that of most antiseptic surgeons that excision and and amputation are now but rarely required.

We have indicated the chief points of interest in this book. Unfortunately the writing is involved and prolix, and there is a good deal of unnecessary repetition ; but it contains useful information and several valuable hints may be obtained from its perusal.

BEFORE TRIAL: WHAT SHOULD BE DONE by CLIENT, SOLICITOR, AND COUNSEL. By RICHARD HARRIS, Barrister-at-Law. London : Waterlow Bros. and Layton.

THIS work—written "not for lawyers only, but for all ranks and conditions of men who may have occasion to employ them"—is, like the author's well-known *Hints on Advocacy*, discursive but readable. It does not strike the reader as containing much that is new ; on the contrary, it seems that the greater part of its contents are but what one knows already ; but there is no harm in being reminded of such knowledge as Mr. Harris recalls to us in it. The greater part of the work will not, probably, be appreciated as widely as the *Hints on Advocacy* have been, because one feels that the author is more at home when dealing with questions of advocacy than with the more prosaic if not unimportant matters which should be attended to before a case comes into court. If the necessity of proper attention to these is impressed on all concerned in litigation, the utility of the book will have been established ; but the subject is not one to attract general attention or to bid successfully for popularity.

Bound up with this work, but not apparently much connected with the rest of it, is a chapter which has a special interest for members of the medical profession. It is notorious that medical and legal opinion on questions of insanity do not agree. Mr. Harris, in his chapter on the defence of insanity, boldly attacks the legal definition of insanity, which excuses a man from criminal responsibility, and attempts to show that the opinions given by the judges to the House of Lords

in what is known as McNaghten's case are erroneous. He points out, rightly enough, that those opinions have no binding legal effect, for they were not given after argument as a judgment upon the facts of a particular case, but were merely answers given to certain questions put by the House of Lords, who wished to be informed as to the law applicable in cases where the defence of insanity is set up. But though these opinions are not technically a judgment, they practically have the effect of one, for judges, in deciding a case, naturally follow the collective opinion which was then given, and which is admitted to sum up correctly the result of previous decisions. The law has always held that a man who is insane is not criminally responsible for his conduct. But the question to be decided in each case is: What constitutes insanity? Neither by law, nor by medical science, nor in any other way that human skill can devise, has it been possible hitherto to draw up an exact definition. No two cases are exactly similar. Some persons are absolutely devoid of mental power; others are perfectly sane on most subjects, though perhaps liable to be or to become insane on some one or more; others, again, are merely eccentric, different from the ordinary run of humanity without being fit to be put under control in an asylum. The judges in McNaghten's case gave their opinion that the law is that every man is presumed to be sane until the contrary be proved, "and that to establish a defence on the ground of insanity it must be clearly proved that at the time of committing the act the party accused was labouring under such a defect of reason from disease of the mind as not to know the nature and quality of the act he was doing, or, if he did know it, that he did not know that he was doing what was wrong." Mr. Harris and many eminent medical authorities quarrel with this, as unduly diminishing the cases in which insanity should be a defence. It is said that there are cases in which a man knows perfectly well that he is doing what is wrong, and yet is impelled by an uncontrollable impulse to do it. There are, however, many cases in which the knowledge that punishment will follow does prevent the wrong act being done, and where consequently the impulse, though strong, can be and is controlled. Where it is really uncontrollable, we do not think there would usually be much difficulty in finding that the accused had such a defect of reason, as to prevent his appreciating the nature and quality of the act he was doing. The judicial question may not be perfectly worded—it is difficult to frame any set of words which shall not be open to criticism—but it is preferable to that suggested by Mr. Harris, "Was the prisoner sane or insane when the act was committed?" That seems to us to be throwing the whole matter before a jury to be decided according to their unaided views of what is right, or possibly according to their sympathies. In determining the question of criminal responsibility some rule must be laid down more definite than that conveyed by using such a very vague, and elastic word as "insanity." Medical experts who object to the judicial rule as bearing too hardly on persons whose responsibility is in question have often done harm to the cause they advocate, by injudicious zeal. Scientific witnesses are often suspected as partisans, and their conduct in the witness-box sometimes justifies the suspicion. Though we cannot share his views as to the legal question to be put in these cases, we agree with Mr. Harris that much may be done in the preparation of a defence where insanity is to be set up. Facts must be ascertained, and, if possible, proved, from which insanity may be inferred. Hereditary disease, previous illness of the prisoner, eccentricities in conduct before the time of the commission of the crime, matters such as these may be all important; yet very often no proper inquiry is made about them till the prisoner is actually in the dock. Medical experts who know little or nothing about the facts, and whose opportunities of examining his actual mental condition have been but slight, are called on to give an opinion as to his sanity, when they have had no proper means of forming one. Under such circumstances no wonder if a defence fails, and possibly a man who is but partially responsible for his acts may be convicted. Such convictions we believe now rarely, if ever, occur; if Mr. Harris's suggestions as to the proper preparation of a defence are adopted, the chance of their happening will be infinitely diminished. Though we do not agree with the legal test which he suggests, his criticisms on recorded decisions are instructive, and we recommend a perusal of the chapter on the defence of insanity to all, be they lawyers or be they medical men, who are interested in the question.

STUDIEN ÜBER STOFFWECHSEL IM THIERKÖRPER. Von Professsor Dr. J. SEEGEN, in Wien. Berlin: A. Hirschwald. 1887.

THESE studies on the tissue changes in the animal economy consist of a collection of papers by the author, thirty-one in number, that have appeared during the last twenty-five years; the first one, for example, "Physiologisch-chemische Untersuchungen über den Einfluss des Karlsbader Mineralwassers auf einige Factoren des Stoffwechsels," was published in the *Wiener Mediz. Wochenschrift, Jahrg.*, 1860; while the last, "Beitrag zur Kenntniss der Umwandlung der Kohlehydrate im Magen und Darmkanal," only made its appearance last year in Pflüger's *Archiv*.

The earlier papers (3-9) consist chiefly of investigations upon the nitrogen excretion as the result of albumen decomposition in the body, and methods for its estimation; the tenth is an investigation into the tissue-changes during starvation; while the majority of the remaining papers are upon sugar: how to recognise and determine it when present in urine; the conversion of glycogen into sugar by the salivary and pancreatic ferments; the nature of the hepatic sugar, its method of construction, and its possible origin in peptone; sugar in the blood, its source and significance; and the possible formation of sugar in the liver out of fat. The papers, indeed, fall into two chief groups, the first dealing with the question as to whether all the nitrogen of the albumins decomposed in the animal organism is eliminated in the urine and fæces; and the second being concerned with the question of the sugar formation in the economy, and particularly with the part played by the liver.

Many of the more recent papers have received notice at different times in the pages of the JOURNAL, and more especially in our Annual Reports on Medical Chemistry for the last two years.

SEEGEN, as is well known, contends that the sugar formed in the liver does not arise wholly from the glycogen present there, but that it finds its chief, if not its real, source in the peptones; and he concludes from his researches that the liver-cells, when retained in a living condition by the action of blood rendered arterial by a current of air, are capable of forming more or less sugar from peptones. This formation of sugar he considers to be a vital function of the animal body, having its main seat in the liver—constituting, in fact, one of the liver's chief physiological functions—one, too, that is directly independent of the food, as it is not interrupted by a prolonged fast, although increased by a diet rich in carbo-hydrates. Sugar he always finds present in the blood, that leaving the liver, however, containing nearly twice as much as that entering it. His experiments, also, would tend to prove that albumin in the form of peptone is its source, and that as it is not eliminated as sugar its decomposition must be rapidly effected in the circulation. The formation of sugar would thus appear to constitute one of the most important functions of the tissue-changes in the body, albumins and fats forming the chief sources of supply.

In spite of different statements to the contrary, Seegen still maintains that the reducing substances in the blood are almost exclusively formed of dextrose, but that to obtain an accordance between the results of fermentation and those of polarisation and reduction, the fermentation must be allowed to go on for several weeks, owing to the excessive slowness with which blood-sugar ferments. The variations in the amounts of glycogen and sugar in the liver, he further affirms, are independent of each other.

Professor Seegen's papers are well worthy of a careful perusal, and, indeed, are deserving of the highest praise; for, differ from him as we may, we cannot fail to recognise the master's hand in these able and laborious researches, extending, as they do, over a quarter of a century, of which this book forms the modest record.

THE CROONIAN LECTURES, 1886. ON SOME POINTS IN THE PATHOLOGY OF RHEUMATISM, GOUT, AND DIABETES. By Professor P. W. LATHAM, M.D., F.R.C.P. Deighton, Bell, and Co.

THESE Lectures were given at the Royal College of Physicians in March and April of last year. As we referred to them pretty fully in an article that appeared in the JOURNAL shortly after their delivery (April 24th), it is unnecessary for us now to do more than merely congratulate the author on their appearance in book form; for, as we have previously stated, their perusal will repay every thoughtful practitioner of medicine. Dr. LATHAM, the reader will find, is very fond of chemical formulæ; and he has certainly made good use of them in explaining, or rather attempting to explain, some of the changes occurring in the organism. He seems to regard the body simply in the light of a complex laboratory; but, while we must confess that some of his deductions appear to us far-fetched and highly hypothetical, yet we must acknowledge that many of them are very ingenious and suggestive, and as such we accord them every praise; we believe Dr. Latham is on the right track, and in his future labours in the same direction we wish him a full measure of success.

SMALL-POX IN CABUL.—Small-pox is reported to have broken out in the city of Cabul; the mortality among children is very great.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

STEELE'S CHLORIDE OF LIME.

MESSRS. J. C. STEELE AND CO., of Glasgow, have prepared a patent waterproof and air-tight packet of chloride of lime, which is convenient for disinfecting purposes. It keeps well even in a damp place, and until opened is quite free from odour.

EDWARDS'S DESICCATED SOUP.

WE have received a sample of Edwards's desiccated soup, prepared by Messrs. Frederick King and Co., Limited, of Belfast, and Bishopsgate Avenue, London. Each pound should make six quarts of good soup, containing the equivalent of seven pounds of beef and six pounds of potatoes and other vegetables. It is portable, and will be found a great convenience to travellers and others to whom economy of space is essential.

BENGER'S PEPTONISED CHICKEN JELLY.

MESSRS. MOTTERSHEAD AND CO., of Manchester, have recently brought out a new preparation, under the title of "Benger's peptonised chicken jelly." It is of good flavour, keeps well in any climate, and will be acceptable to invalids. Being prepared by the pancreatic method, on the same lines and in a similar manner to Benger's well-known peptonised beef jelly, it is readily absorbed by the stomach, and gives little or no work for the digestive organs to do.

A NEW AND IMPROVED CLAMP FOR HÆMORRHOIDS.

MR. R. FITZROY BENHAM (Park Street, Grosvenor Square) writes: As your correspondent, Mr. C. J. Smith, has sought to criticise my original invention for the above, I trust that, in justice to myself, you will permit me to offer a few remarks in reply thereto.

Prior to my invention I came to the conclusion that the cause of all of the very many ingenious clamps which had been constructed failing to effect sufficient parallel crushing power was the application of the force after the scissor fashion, notwithstanding that measures were adopted in many to ensure theoretically, but certainly not practically, that the jaws of the individual clamp should so approximate. I accordingly resolved to construct one to grasp the pile to be operated upon in the opposite direction, and on this principle effectual clamps could be made after various designs; but I felt that, in order to obtain a clamp of the simplest and yet most powerful description, it would be advisable to construct it in the shape of pincers, with the handles about four times the length of the other end, with the addition of a screw to be attached to the extremities of them (see the *Lancet*, vol. ii, 1880, pp. 1 and 158; also vol. i, 1882, p. 602). Now I maintain that your correspondent has grasped my idea of abandoning the scissor fashion, but has produced a clamp which I do not hesitate to characterise—having now had very large practical experience in the crushing operation of piles—as being most unreliable; and if he will kindly screw his clamp tightly together with a small mass, say, of brown paper, between the outer edges of the jaws, he will find that they will spring from the parallel direction, which I have not only again and again found to be the case, but which fact also is well known to every intelligent mechanic: hence the now almost obsolete pattern of the hammer-spanner used. But he has figured in his sketch the lip at the extremities of the jaws and V-shaped piece particularly mentioned by me in the *Lancet*, vol. i, 1882, p. 602. I also certainly do not agree with Mr. Smith that my clamp is unwieldy, and has fairly yielded to another; and I have yet to learn that his now almost obsolete, screw-hammer pattern has anything like the crushing power as compared with my clamp, apart from the most important fact that "the jaws do not approximate under pressure in a parallel direction." I confess that my clamp is somewhat heavy; but, considering that only one person is required to perform the operation with my clamp (a fact which was pointed out to me by my friend Mr. Masters), and he is not required to carry such an instrument in his waistcoat pocket, it is no drawback to it, provided its performance is effectual, which I have not the slightest hesitation in asserting to be the case.

DRUMINE.

DR. JOHN REID (Melbourne) sends in the following additional note on drumine: Drumine and its chloride are not volatile, but char by heat. Oxidising agents at ordinary temperatures do not seem to affect them; strong nitric acid dissolves, so does H_2SO_4, without charring. $HgCl_2$ 2KI is not a delicate test in precipitation. KI strong solution causes ppte, and K Cy in neutral sollution, which is dissolved in acid solution; salicylic acid causes crystalline ppte, the salicylate being somewhat insoluble in water. Messrs. Burroughs, Wellcome, and Co., are now acting under Dr. Reid's directions, and are the only manufacturers in whose preparations of drumine confidence can, he writes, be placed. Messrs. Burroughs and Wellcome inform us that they are willing to place samples at the disposal of experimenters; their address is Snow Hill Buildings, Holborn Viaduct.

A CHEAP MEDICINE-CHEST.

WE have received from Mr. Lawrence, chemist (of Oban) a specimen of a cheap medicine-chest, which secured the first prize offered by the *Chemist and Druggist*. It is a neat and portable box, fitted with a dozen well-stoppered bottles, and is sold at a moderate price, which varies according to the drugs chosen.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 23rd, 1887.

THE COLLEGE OF SURGEONS AND THE PROFESSION.

THE struggle between the Council of the College of Surgeons and its constituents—the great bulk of the profession—which the unyielding and high-handed course adopted by the Council has rendered inevitable, has now commenced by the public announcement on the part of the Council that it has adopted the report of its "Committee on Charters and By-laws," and is about to take the necessary steps immediately for obtaining a new charter from the Privy Council. This means, in effect, that the Council of the College has rejected every substantial reform which has been asked for by its constituents, except the Fellows' privilege of voting by proxy papers—and even this small concession has only been wrung from it by an agitation protracted over many years. All the more important demands of the profession, as formulated in meetings of the Fellows and Members, called by the President and Council to discuss College affairs in the College, have been met by a blank refusal. The tenure of the great office of President is in a most unsatisfactory condition, and leads to a state of things whereby the government of the College is far too much in lay hands; yet the Council will do nothing to amend it. The mode of election of the President has become so much a matter of routine as to deprive it of all dignity and all honour, yet the Council steadily refuses even to consider any method whereby the election can be made more of a reality. The College is entering into most important relations with the College of Physicians, and is, in connection with that body, pursuing a course towards the Apothecaries' Society leading directly to a perpetuation of the "double portal" to medical diplomas, which a very large proportion (we believe a great majority) of the profession wished to see closed. Yet the Council steadily refuses to consult its constituents on these or any other matters of great public moment, excepting such illusory and empty consultation as takes place after the matter has been settled, and at meetings in which the Council preserves an unbroken silence. The College has come (or will come immediately) into the possession of very large wealth; yet its constituents are to have no voice in the distribution of those funds, which may all be wasted on objects with which the great body of the profession has no concern whatever, for anything that anyone outside the Council Chamber can do. We call the bulk of the profession "the constituents" of the Council advisedly, since it is by their funds that the College has been constituted and built up, and it is on their numbers, influence, and

public services that it depends for its position and emoluments. But in the technical sense in which the word "constituency" is used to signify a voting body, we need hardly say that the Council (or at least those members who dictate its course) will not hear of extending any voting privilege, still less any representative functions, to the general body of Members; and has treated with contempt the petition which has been signed by about half the whole body of Members, backed as it is by the support of a large proportion of the Fellows. The question is therefore a very simple one: shall the College of Surgeons be allowed to remain, as at present, a close corporation of consulting surgeons, in which the general profession has no voice, and in which its interests are entirely unrepresented; a body respectable, no doubt, from the great names which have been, and to some extent are, still connected with it; efficient, no doubt, for examination purposes, and claiming with reason a due share of public gratitude for the great national museum of human and comparative anatomy; but so utterly useless to the profession, that no professional subject of vital interest is ever brought before it; and so utterly without influence in medical politics, that an ex-President (Mr. Erichsen) said the other day, in a speech defending the present state of things, that the College left such matters to the British Medical Association? The action of the Council, if unopposed, will stereotype this state of things for at any rate a good number of years; for although we believe it is a state which cannot last permanently, yet if a new charter is obtained from which all these reforms are omitted, the experience of the movement for allowing the Fellows to vote by balloting papers shows how long it will take to replace the present by a more progressive Council. It behoves everyone, therefore, who is interested in College affairs to bestir himself. The two Associations of Fellows and Members will no doubt apply for leave to address the Privy Council against the proposed new charter—not, of course, because they have any objection to the trifling reforms which it will introduce, but because they believe that other and greater reforms are necessary, which will be shelved for an indefinite period if a new charter is now granted without including them. We need not say that, in our opinion, the most important of these reforms is that which would admit the Members to a share in the management of the College; and the Members have shown such admirable moderation, and such respect for the vested rights of the Fellows, that we cannot but feel confident that they will carry their point before any impartial tribunal. But it is essential to lose no time, and any of our readers who sympathise with the movement for enlarging the influence and usefulness of the College should at once communicate with the secretaries of one or the other Association, and put his name and influence at their service. The medical press also appears unanimous on the question, and will lend its powerful aid. It will be strange indeed if the mistake made in the reign of George IV. of handing over this great institution to a small privileged class should be repeated or sanctioned in the fiftieth year of Queen Victoria, when all other class privileges are so rapidly disappearing.

LEGAL ASPECTS OF INSANITY.

An address recently delivered by Mr. Clark Bell before the Medico-Legal Society of New York, as President of the Society, calls for some notice from us.

The address is by a lawyer who has shown a constant nd increasing interest in all questions connecting law and lunacy, and in his expressions we may expect to see reflected the feeling of American medico-legal thought.

The address is long and methodical, having the virtues and the vices of legal writing. Authorities are quoted to almost a fatiguing extent; but we suppose, before advancing anything new, it is as well to sum up the acquired experience of those who are recognised as leaders. The subject is divided as follows: 1. What is insanity? 2. The care of the insane; and this second division is further subdivided into the questions whether the insane should be treated in hospitals or asylums; whether mechanical restraint should be used; and, next, what should be done with quiet, incurable patients. The last part of the address is devoted to the consideration of Insanity and Crime.

With such a large field to explore, it is not surprising that the treatment is unequal and incomplete; but it all points in one direction, which is to the more accurate comprehension of insanity, and, as a consequence, to a more reasonable mode of dealing with it. As Mr. Clark Bell says, "Insanity is a fruit of what we call civilisation;" and, as such, it varies with the stage of the civilisation, as well as with the race, the country, and the food.

This evil fruit of civilisation is but the correlative of development. The unstable is in many ways the formative, and without this, true progress would cease. We should only weary our readers if we discussed once more the definitions of insanity, and we agree with the writer that, in any case, the lawyers and the doctors must differ. The lawyers ever want a sign, that is, a definition, and no sign or definition can be given them. Nature is indefinite, whether in health or disease.

Mr. Clark Bell concludes his first division by a wise piece of advice, which he at once refrains from acting upon. He says: "One should be admonished of the unwisdom of attempting definitions. I will give what I should answer, if called upon as a witness to give my own opinion as to insanity and responsibility as follows: 'Insanity cannot be exactly defined medically, from lack of present knowledge of its pathology. Legally considered, it may be regarded as a disease of the brain or nervous system, which prevents the exercise of volition.' The test of responsibility under the law for a criminal act, when the defence of insanity is interposed, should be clear knowledge of its nature, consequences, and penalty, not volition unimpaired by disease of the brain or nervous system."

So, then, the lawyer tells us that all insanity has a definite pathology which we have not advanced far enough to detect. We are not prepared to use the term "pathology" for the causes of individual peculiarities of temper and taste, and we constantly meet with insane people who are the natural result of their origin, education, and surroundings; and, though obnoxious to society, they have no special pathology. As long as medical men are expected to find the cause of all perverted function in demonstrable tissue changes no real progress will be made.

The legal part of the definition is as good as any definition of the indefinite can be; it is the standard to which, for practical purposes, the appeal must be made.

Our own feeling is that there are only two courses open: either to have some means of having the prisoner supposed to be insane placed under observation by independent skilled experts, whose report of sanity or insanity should be decisive, no arbitrary questions of comprehending the nature and quality of acts or the power of self-control being in-

troduced; the person being insane, all action should be stayed. This plan has serious drawbacks, but it is not so objectionable as the alternative, which is, that each person should be tried, as at present (whether the suggestion of insanity has been made or not), fuller power, however, being given of calling experts at trials and opportunity being given them of stating fully their theory of the insanity. At present an expert witness hardly ever leaves the witness-box without feeling that what he has said may be easily misunderstood. So far, the Americans are not ahead of us.

The more practical part of the address "On the Care of the Insane" touches chiefly on the real necessity for asylums for some cases, and yet on the folly of aggregating all persons of unsound mind in great buildings at immense cost, while many might be made happier if boarded out among peasants and others. We have frequently referred to the evils of the great asylums; they are deadening to medical spirit and dementing to the insane mind. America has land enough to enable it to try, on the grandest scale, industrial colonies for the insane.

Mr. Clark Bell praises Gheel perhaps a little too much. That colony, as a landmark of what has been done, is of great historical interest, but it is not, to our mind, a crowning result of the experiment. In Scotland and in Germany similar colonies are found to work well, though the asylum-building mania has seized even the frugal Scot.

The subject of mechanical restraint is so fully discussed that we are impressed by the fact that there must be many advocates of this in America. We are rarely as good as our principles, and, therefore, it is very important that the principle in asylums should be "non-restraint." Recently an American crib-bedstead was exhibited at one of the meetings of the Medico-Psychological Association in London, and was examined with much interest. Such things were once used in England but are now discarded, not, perhaps, on the ground which Mr. Clark Bell and some others take, that the enforced recumbent attitude produces or increases congestion of the brain, or else we might return to rotatory chairs or centrifugal wheels.

Under Section V we find this:—"The brutality of attendants is proverbial;" and in their defence we would say the untruthfulness of insane patients is also proverbial. We believe that lunacy and its treatment are behind other branches of medicine because individual treatment cannot be followed in asylums and hospitals as at present officered. More medical attendants, more assistants, and a higher class of nurses have developed medicine and surgery to what they are, and the same method applied to insanity will have a similar result. The restraint at present complained of is the restraint of overwork. "Multa non multum" has to be the superintendent's motto; and, with his many duties and his many patients, he cannot advance science.

But we have said enough to show that Mr. Clark Bell, as representative of the Medico-Legal Society of New York, understands the wants of the day, and is quite prepared to admit that much has been learnt from England, and that, in practical matters, there is still much for all parties to learn.

THE REGISTRAR-GENERAL'S ANNUAL SUMMARY.

THE Registrar-General's annual summary, dealing with the vital statistics of London and twenty-seven of the largest provincial towns of England and Wales, reads the most eloquent lesson of encouragement to all engaged or interested in sanitary progress. That the mean death-rate of the more than nine millions of persons living last year in these twenty-eight large towns did not exceed 20.9 per 1,000 and that this rate was 1.5 below the mean rate in these towns in the ten preceding years afford conclusive evidence that the sanitary work of recent years has not been in vain.

England probably contains the largest proportion of the densest urban population of any country in the world, and yet the death-rate of its urban population is far lower than that of any other urban population of which mortality statistics are available. The Registrar-General's summary has a table of death-rates in 1886 in twenty-four of the largest European cities, with an aggregate population of rather more than ten millions, and it appears that the mean death-rate in these Continental cities last year was no less than 27.2 per 1,000, or 6.3 above the mean rate in the twenty-eight English towns. Thus, whether compared with our own town death-rates in recent years, or with the Continental town rates in 1886, the mortality of the urban population of England last year may be readily accepted as proof of markedly improved sanitary condition.

When we look at the individual towns which make up the aggregate of our largest urban population, we still find a wide range of death-rates, pointing to undoubted differences of sanitary condition, which may well awake the deepest interest of the dwellers in the several towns. After due correction for differences of sex and age proportions in the populations of these towns, we are told that the lowest death-rates in 1886 were 17.6 in Brighton, 18.9 in Derby, 19.5 in Hull, and 20.0 in Bristol, while the rates ranged upwards in the other towns to 26.1 in Liverpool, 27.8 in Blackburn, 29.4 in Manchester, and 31.4 in Preston.

It is especially noteworthy that six of the seven Lancashire towns stand actually at the bottom of the list of corrected death-rates in these twenty-eight towns. Leaving Brighton out of the question, as having abnormal characteristics of population which destroy the value of its comparison with manufacturing towns, the explanation of the wide range between the death-rates of Derby, Hull, Bristol, and Sunderland on the one hand, and Liverpool, Blackburn, Manchester, and Preston on the other, cannot in the present day be involved in much doubt. The difference may safely be attributed to difference of sanitary condition in the broad sense of that term. The high death-rates in the Lancashire towns are not of recent date. Dr. Farr began to write of them fifty years ago, and they have declined remarkably since then. The decline in the death-rates of other towns has, however, been still greater, so that the excess of mortality in the Lancashire towns is fully as conspicuous as it used to be. In a certain sense this wide range in the death-rates of our large towns causes encouragement to the labourer in the field of sanitary reform. It not only forbids the enunciation of the "rest and be thankful" doctrine, but it holds out the certain hope that a further marked decline in our urban mortality may be confidently looked for.

There is one point in connection with the Registrar-General's mortality statistics which should constantly be borne in mind. It is now nearly six years since the last census supplied trustworthy population data for our large towns, and the official estimates are based upon the hypothesis that the rate of increase of population in such towns since 1881 has been the same rate as that which prevailed between 1871 and 1881. It needs very little consideration to arrive at the conclusion that this hypothesis, which in former decennia has yielded in a considerable proportion of cases far from satisfactory results, is very unlikely to yield more trustworthy results in a decennium in which the

effect of the long-continued commercial depression upon the growth of towns is so difficult to estimate. The marked decline in the marriage-rates and birth-rates in recent years are known factors of disturbance of considerable importance; while the varying effect of local and general depression upon urban migration is an unknown quantity. The Registrar-General has sought to test the approximate accuracy of his estimates of town populations by annual returns of inhabited houses, but the influence of depression upon the density of population per house seems to throw doubt upon the value of this test, and so the hypothetical and uncorrected estimates are not surrendered. Bearing in mind the increasing importance of trustworthy mortality statistics, the time has surely come when a quinquennial census for large towns is imperatively demanded in the interest of public health and its improvement. Doubtful estimates of population are too apt to detract from the due influence which high death-rates should exert upon urban authorities and ratepayers.

The continued low death-rate in London is one of the most interesting features in the annual summary just issued. The death-rate in Registration London, which was equal to 24.4 per 1,000 in the ten years 1861-70, declined to 22.5 in 1871-80, and during the first six years of the current decennium the rate further fell to 20.5. The rate in 1885 was 19.8, far lower than the rate recorded in any previous year since the commencement of civil registration in 1837. In 1886 the rate was almost as low, 19.9. London, with its huge population of more than four millions, including probably as large a proportion of the poorest working classes as any other town in England, stands seventh in the list of corrected death-rates for 1886. Notwithstanding the drawbacks of its disjointed system of sanitary organisation, and its exclusion from the operation of the Public Health Acts of 1872 and 1875, London has shown in recent years its full share of the general improvement in public health. The range of death-rates in different parts of London is still, however, nearly as wide as ever. Mortality has declined in all the worst parts, but it has also declined in the healthier parts. A table in the annual summary shows that, while the death-rate (after due distribution of deaths in institutions) did not exceed 18.0 in the west and north groups of districts, it was 19 in the south, 23 in the east, and 26 in the central groups of districts. It is true that these rates are not corrected for differences of age and sex proportions in the populations; but this correction would probably rather widen the range between the rates. With regard to the high death-rate still prevailing in the central districts of London, it appears from the table of death-rates in the sanitary districts, published in the JOURNAL of April 16th, that the death-rate in 1886 was equal to 25.6 in St. Giles and 27.8 in Holborn.

The fact that the latest trustworthy information we have of the population of London is nearly six years old places a similar difficulty in the way of estimating even approximately the present population of London, as has been referred to in connection with the twenty-eight towns. The difficulty as regards the population of the various sanitary districts of the metropolis is perhaps even greater than in the case of the large towns. For instance, the population of the central districts of London declined considerably between 1871 and 1881, while in some of the more suburban districts the population in those ten years almost doubled. It is quite probable that the rate of increase of population in the whole of London since 1881 may not very materially have differed from the rate that prevailed during the last intercensal period, but to assume either that the central districts are continuing to decline, or the individual suburban districts to increase at the same rate that prevailed in a period that terminated six years ago, is to adopt a most doubtful hypothesis. A quinquennial census in the metropolitan sanitary districts is fully as necessary for the construction of trustworthy mortality statistics as it is in the large provincial towns. In the meantime, however, there is no sufficient ground for doubting the reality of the high death-rates that are still recorded in central London, especially in Holborn and St. Giles sanitary districts. If we turn to the record of infant mortality as a test of condition, we find that the proportion of deaths of infants under one year to 1,000 births, which averaged 159 in London last year, was equal to 174 in the central districts, and was 199 in St. Martin-in-the-Fields, 210 in Holborn, and 219 in Strand sanitary districts. The population difficulty, it should be stated, does not affect these rates of infant mortality.

It is evident that the London death-rate is still susceptible of further reduction, for we have long left behind the days when such high death-rates as still linger in Central London can be regarded as inevitable. The combined efforts of earnest sanitary authorities and of the various associations for the improvement of the dwellings of the poor can as undoubtedly bring down the death-rate of Central and East London to 20 per 1,000, as the rate in the rest of London has already been brought down below 19 per 1,000. More, perhaps, is to be expected from the action of the improved dwellings associations than from that of the sanitary authorities, who are responsible for the rates. As proof of what is being effected by these various associations, Mr. Noel A. Humphreys, in his paper on Class Mortality, read before the Royal Statistical Society, on Tuesday evening last, pointed out that "in the Peabody Buildings, situated in various parts of London, and now containing a population of more than 20,000 persons belonging to the artisan and labouring classes, the death-rate of infants under one year of age during the five years 1882-86, averaged 144 per 1,000 of the registered births, and was 7 per 1,000 below the mean rate in the general London population during the same five years." In the face of this and other similar facts, it is impossible to doubt that the present large excess of mortality among the working classes, which there is too much tendency to regard as inevitable, is distinctly within the control of effective and single-minded sanitation. There is, indeed, much encouragement in the thought that it is quite impossible at present to estimate a limit to the possible further reduction of the death-rate in English urban populations, striking as has been the reduction in recent years.

RELATIVE RANK.

IN our last issue we published without note or comment the letter of Sir Ralph Thompson, Permanent Under-Secretary of State for War, to the Chairman of the Parliamentary Bills Committee of the British Medical Association. This letter gave the proposed alteration of the articles in the Warrant as to rank of departmental officers. It is with great regret we have to express our conviction that the proposed alteration is not adequate. It is no doubt a concession to the representations of the Committee; but it is very doubtful whether it will be accepted by the medical officers of the army after all that has occurred. The War Office was at pains to discredit "relative rank," and to assert, in effect, that it was a mere "term" having no meaning; and this in the face of a fact patent to anyone who has in his possession an Army List of older date than the Warrant which has

caused this commotion. There, immediately above the name of the Director-General of the Medical Department, the following notice is printed in italics: "The second date opposite an officer's name is that of his relative rank;" and yet the term "had no meaning." It does not appear in the "proposed alteration," yet in point of fact the "alteration" is in effect "relative rank" restored; the thing the deputation that waited on Mr. Secretary Stanhope assured that gentleman could never now meet the justice of the case, inasmuch as it had been repudiated and discredited by the highest authority. The proposed alteration leaves the medical department of the army in a position distinctly inferior to that of the commissariat and pay departments, a class of officers, who, as the deputation was at pains to show, are not exposed to a tenth part of the risks that army medical officers have to face in war, more especially in the wars against half-civilised nations in which this country is almost always engaged. It is to us a matter of keen regret that Mr. Stanhope has not seen his way to put an end to this agitation at once and for ever by an act at once just and expedient, doing what sooner or later must be none, namely, giving with a good grace honorary rank to the medical department, and so placing it on a footing of equality with the two other "non-combatant" departments, whose claim to a superior rank will not bear investigation for a moment. We trust Mr. Stanhope's last word has not been spoken, that the "alteration" is in reality only "proposed." The present aspect of the case will be considered at a meeting of the Parliamentary Bills Committee early next week, when the representations of leading members of the service on the whole subject of relative and honorary rank will be considered, and further proceedings taken.

The reply given to a question in the House of Commons by the Under-Secretary of State for India on the rank of medical officers of Her Majesty's Indian Army, appears to show that the India Office, since the Royal Warrant was issued, considers that these officers have no rank at all. This is the only possible meaning of the answer given.

When a Royal Warrant is issued in England conferring any advantage of pay, as in the case of Brigade-Surgeons, the India Office is quick to declare that such warrants have no effect in India, unless adopted and promulgated by the Government there. It appears, however, that when a blow is struck by a warrant, issued at home, at the status and position of army medical officers, it is to be immediately acted upon in India, and deemed binding without the formality of official recognition and promulgation by authority there.

It would, in our opinion, be most dangerous to the future of the great Medical Service of India to allow judgment to go against it by default. It was retired medical officers of the army of India, who were the first to see the real meaning of the insidious abolition of relative rank, and the action of the India Office in the matter has more than justified their fears. In the JOURNAL of April 9th we published a letter from a number of retired medical officers of both services, men of standing and experience, who, in expressing their thanks to the Parliamentary Bills Committee of the British Medical Association for the prompt and vigorous action taken on behalf of the medical departments of the British and Indian armies, say: "Knowing from personal experience the importance to medical officers, both in camp and in garrison, of distinctive and officially recognised rank (by whatever term it is designated), we desire to express our opinion that, both socially and officially, they will be injuriously affected by the abolition of 'relative rank.'" How far this temperate expression of opinion by a body of retired officers, who have now no personal interest in the matter, will influence the Secretary for India, we do not know. But we do know that it is the duty as well as the manifest interest of the great medical corporations throughout the kingdom to be up and doing in aid of the efforts of the British Medical Association and its Parliamentary Committee. It will be nothing short of a lasting disgrace to them if they sit still, and, without remonstrance, allow their brethren in India to be quietly relegated to the position of camp-followers, not much better than that of the "leeches" who served at Cressy and Agincourt.

As regards the Medical Service of India, we request our readers to note the time selected for this enlightened measure—the close of the nineteenth century! We ask them to observe, further, that hardly a number of this JOURNAL issues from the press without carrying with it to the whole profession evidence of the great work the medical officers of India are doing, not for their own countrymen only, great as that is—but also for the two hundred millions of our native fellow-subjects, among whom they are spreading a knowledge of the healing art in its latest and most advanced developments. The duty of the teachers in our schools and universities is plain enough. They are morally bound to do all they can to protect the interests of the young men who look to them for guidance. It is their business to let the authorities know plainly, that if it shall be their pleasure—knowingly or ignorantly, as the case may be—to heap contempt on a body of cultivated men, whose services are indispensable to a well-governed State, they will ere long have to content themselves with the residuum to be found in all professions, and that when the inevitable "break down" follows, they cannot in justice join in the cry of execration sure to arise against the men of their own deliberate choice. Students of medicine, of a class fit to be entrusted with the costly lives of soldiers at home or abroad, "in camp or garrison," are wise enough to know that "men do not live by bread alone," and when they come to see that the bread offered in India has to be eaten with bitter herbs, they will look elsewhere for a more honourable career than it is the present pleasure of the India Office to offer.

SIR Spencer Wells, Bart., and Mr. Ernest Hart returned this week to London from Orotava, Teneriffe, where they have been spending the Easter holidays.

WE regret to announce the death, at the age of 78, of Mr. Chatto, well known as the Librarian to the Royal College of Surgeons, an appointment which he has held since 1853.

DR. DONKIN, Physician to the Westminster Hospital, has been appointed Dean of the Medical School, in the place of Dr. F. de Havilland Hall.

WE understand that the Association of Fellows of the Royal College of Surgeons intend shortly to summon a meeting to discuss the course of action to be adopted in view of the decision of the Council of the College to apply for a new charter. The Association of Members intends to send in the petition which it has prepared to the Privy Council without delay.

THERE appears to be no foundation for the statement which has been made that the Crown Prince of Germany was attacked by cancer of the tongue; he is suffering from chronic catarrh.

CREMATION SOCIETY.

A MEETING of the Executive Council of the Cremation Society will be held at the residence of Sir Henry Thompson, 35, Wimpole Street, W., at 3 P.M., on Saturday, April 23rd. The model of the Society's crematory, which has been prepared for the Royal Yorkshire Jubilee Exhibition at Saltaire, will be shown.

PSYCHOLOGICAL MEDICINE IN ST. PETERSBURG.

According to the *Vestnik Klinitcheskoi i Sudebnoi Psikhiatrii*, vol. ii, 1887, p. 286, a new building, in which it is intended to hold *cliniques* of diseases of the mind and nervous system in connection with the Military Medical Academy was commenced in the autumn of 1886, and will be opened in about three years. It will contain 100 beds for mental and 40 for nervous cases. The Ministry of War granted 500,000 roubles (about £50,000) for the works.

A NEW HOSPITAL FOR MONTREAL.

SIR GEORGE STEPHEN, President of the Canadian Pacific Railway, and Sir Donald Smith, one of the directors, have offered to contribute a million dollars for an unsectarian hospital for the city poor in Montreal. The new institution is to be called the Royal Victoria Hospital, and is to be erected on the slope of Mount Royal. The above sum will be placed in the hands of the Governor-General as soon as the site has been arranged and the conditions have been accepted by the corporation.

ST. JOHN AMBULANCE IN WALES.

A WELSH branch of the St. John Ambulance Association has been formed at Dowlais, and has been largely attended by colliers, ironworkers, and other artisans. During the winter months, Dr. J. H. Owen, assistant surgeon, Dowlais Iron Company, gave a series of lectures on ambulance work, in Welsh, to a large class; he was assisted in the practical part by Mr. John Mason, M.B. The successful candidates underwent an examination in the vernacular by Dr. Evan Jones, Aberdare, on April 9th, and received their certificates in the presence of a large assembly.

DEATH OF DR. ALFRED MEADOWS.

IN another column we publish an obituary notice of Dr. Alfred Meadows, whose sudden death on Tuesday last has been a source of deep regret to a large circle of friends. The interment will take place at Colnbrook this day (Saturday, April 23rd). A service will be held at All Saints' Church, Margaret Street, at 11 A.M., and a special train will leave Paddington at 2.30 P.M. for Colnbrook.

THE VESTED INTERESTS OF THE BUTTERINE TRADE.

THE Butterine and Oleomargarine Bills, it will be seen from another column, have been referred to a Select Committee. This has been done in order to give the retail sellers of butterine, who form an important body of tradesmen in the cotton-districts, an opportunity for giving evidence against the placing of any restriction on their business. Some idea of the importance of the butterine trade may be gathered from the fact that the total quantity of that substance imported into the United Kingdom last year was valued at more than £3,030,000. The imports for the first three months of the present year represent a value over £1,000,000.

THE MORTALITY ON RAILWAYS IN THE UNITED KINGDOM.

THE returns of accidents and casualties reported to the Board of Trade by the several railway companies in the United Kingdom during the year 1886 show the total number of persons killed and injured in the course of public traffic during 1886, to have been 938 killed and 3,539 injured, as compared with the list of 1885, which gave 957 killed and 3,467 wounded. The number of passengers killed and injured from accidents to trains, rolling stock and permanent way, was 8 killed and 615 injured, as against 6 killed and 436 injured in the previous year. A large number of accidents occurred, as usual, from causes such as falling between the carriages and the platforms, getting into or out of carriages, and the like.

FEVER IN LONDON.

THE last returns of fever in London, issued by the Metropolitan Asylums Board's officers to the committees of the several asylums, show that fever continues to show a slow decrease. A month ago there were 510 cases of all kinds of fever under the Board's officers, while on Saturday last there were 431, made up of 148 cases of scarlet fever in the Eastern Asylum, with 22 cases of enteric fever, and one of other disease; 114 cases of scarlet fever in the Western Asylum, and one other disease; and, in the South-Eastern Asylum, 114 cases of scarlet fever, 2 of typhus, 27 of enteric, and 2 of other diseases. There are 375 beds in reserve in these asylums, and, taken with the reserves in the disestablished asylums, the managers have accommodation available for 693 cases, in addition to those under treatment.

THE JUBILEE OF THE UNIVERSITY OF LONDON.

A SPECIAL meeting of Convocation of the University of London was held on Tuesday last to consider the best means of celebrating the Jubilee of the University, which was founded in 1837. Dr. Quain, in an eloquent speech bristling with facts which proved the important work which the University has done, moved that the most appropriate way of commemorating at once the Jubilee of the University and its coincidence with the Jubilee of the Queen would be to erect a statue of Her Majesty in the Hall of the University. This motion was seconded by Sir A. K. Rollit, M.P., and carried unanimously.

THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET.

THE following courses of lectures will be delivered during the summer session at the Hospital for Sick Children, Great Ormond Street—Dr. Cheadle: The Artificial Feeding and Food Disorders of Infants and Young Children, on May 3rd, 6th, 10th, 13th, and 17th, at 3.30. Dr. Barlow: Clinical Lectures, on May 5th, 19th, June 2nd, 16th, 30th, and July 14th, 28th, at 10 A.M. Mr. John H. Morgan: Congenital Abnormalities in Children, May 4th, 11th, 18th, and 25th, at 3.30 P.M. Dr. Lee: A course of lectures to students commencing the study of children's diseases, beginning May 2nd, at 10 A.M. Dr. Abercrombie: Hemiplegia in Children, on June 1st, at 3.30 P.M., and The Clinical History, Pathology, and Treatment of Diphtheria and its Sequelæ, on June 8th and 15th. Mr. Arbuthnot Lane: On the Pathology, Causation, and Treatment of the Deformities which Develop during Young Life, on June 3rd, 10th, and 17th, and On the Surgery of the Chest in Children, on June 24th, at 3.30 P.M.

THE ADDITIONS TO THE CABINET.

IT is announced that the Lord Privy Seal, Earl Cadogan, and the President of the Local Government Board, Mr. Ritchie, are to be admitted to the Cabinet. These additions will increase the number of Cabinet Ministers to 17—rather too large a number, it might be thought, for really efficient work. In the construction of Cabinets of late years, more regard has been had to men than to the positions which they occupy in the Government, and though we have never ceased to urge that the Presidency of the Local Government Board ought to carry with it, as a matter of course, a seat in the Cabinet, just as if its holder were a Secretary of State, yet it has happened that all Conservative Presidents have had to remain outside, at all events at starting. Mr. Sclater-Booth never got into the Cabinet at all; but to both Mr. Balfour and Mr. Ritchie, after a period of probation, the door of the charmed chamber has been opened. We wish we could think that Mr. Ritchie's initiation betokens a desire on the part of the Cabinet to make a start with the measures of domestic legislation that have so long been promised and are now so dismally overdue. Mr. Ritchie has shown that he has the courage of his opinions, and he is known to be anxious to make his Local

Government Bill as useful and workable as possible. But we shall be agreeably surprised if he succeeds in impressing his colleagues with the importance of what Mr. Gladstone, in a historic address, described as "this thoroughly unexciting, but as thoroughly vital, subject," so long as the affairs of Ireland monopolise the thoughts and energies of Parliament and the Government.

THE DANGERS OF THE STREETS.

THE police at Birkenhead appear to take a more comprehensive view of their duties than they do in other places, notably in London. Last week the magistrate was called upon to settle a point which is certainly not devoid of interest for the inhabitants of towns; namely, as to the way in which workmen are at liberty to carry their tools through the street when walking on the footpath. In this particular case a coalheaver was summoned for carrying a spade with the blade projecting over his shoulder. The case was dismissed as the magistrate was not satisfied that the public had really been exposed to risk of injury. It is quite possible that in this instance the prosecution was not well advised, but the question merits attention. The careless way in which workmen carry pointed, cutting or other dangerous tools along public thoroughfares is by no means rarely the cause of accidental wounds. A carpenter who carries a saw, projecting out of the bag slung over his back, has been the involuntary cause of a serious scalp wound to a passer-by, and injuries resulting from collision with planks, iron bars, and so forth, are of extremely common occurrence. Not long since, a workman in Paris took with him on the tramcar a keg of sulphuric acid, which he managed to break, inflicting terrible injuries on himself, his fellow-passengers, and the horses. A man has no more right to carry a tool to the common danger, than he has to twirl his stick or umbrella round at the risk of abrading or removing an eye or upper lip.

CONVALESCENT HOMES.

THE following communication on behalf of the convalescent work of the Charity Organisation Society has been addressed to the public press:

"We desire, as medical men daily engaged in work among the sick poor, to ask your readers most earnestly to help the convalescent work of the Charity Organisation Society with their contributions. In numerous instances, we have found it of the greatest assistance to poor patients. The help has been quickly provided on a plan which, we understand, is alike satisfactory to the homes and to the patients; and in many cases other help has been given (for example, an allowance to the family during the absence of the wage-earner), and advantage taken of every opportunity of enabling those in distress to recover their health and means of livelihood. Last year, 2,207 patients were sent to the convalescent homes, or boarded out, through the agency of the Society. This year the numbers are already increasing. We understand that a sum of one thousand pounds would probably enable the Society to carry on the work effectually, and, what is very important, to make early arrangements for accommodation at homes by purchasing beds for the summer months. At least seventy more beds for those months are required. This document bears the signatures of the following medical men: Dr. Ord, St. Thomas's Hospital; Dr. Steele, Superintendent of Guy's Hospital; Dr. Broadbent, St. Mary's Hospital; Dr. E. Symes Thompson, Hospital for Consumption, Brompton; Dr. Stephen Mackenzie, Physician to the London Hospital; Mr. A. Pearce Gould, London Temperance Hospital; Mr. F. M. Corner, Medical Officer of Health, Poplar; Mr. A. G. Bateman, M.B."

We heartily concur in this representation, and trust that it may have the desired effect.

OUTBREAK OF SMALL-POX.

THE ambulance committee of the Metropolitan Asylums Board, under the guidance of Mr. Scovell, is engaged in tracing the causes of an outbreak of small-pox at Plumstead, which has suddenly caused several cases to be admitted to the Board's hospital-ships. The people last smitten are all connected with one family, and there seems to be no doubt that the disease, in this case, was imported from Egypt. A man who had come from Port Said lately came under the care of the Asylums Board's officers, suffering from the disease, and was taken to the hospital-ships. It was hoped that the speedy removal of the patient and his complete isolation had prevented the disease from spreading. But there is reason to fear that one other case must have intervened, for the contagion attacked a young man who could not have been in contact with the first Plumstead case. The second case was privately treated, and it is stated that though four medical practitioners knew of the illness, no one in the house was vaccinated. The result was, the disease spread to other persons besides those in the household. Two persons died, and seven were, on Saturday, on board the ships at Long Reach. The vessels, fortunately, being in commission, and not disestablished, as was proposed some time since, in order to save, at the most, about the tenth part of a penny in the pound for a year on the London rating, the ambulance committee was able to have the patients completely isolated, and thus danger to the metropolis was materially lessened. There is one other case of this disease under the care of the Board, and this is in the Eastern Asylum. There is reason to believe that one of the greatest of the late epidemics was lighted up by a sailor, who travelled from the East of London to the Dreadnought Hospital at Greenwich, where it was found he had small-pox; and with this experience the managers of the Asylums Board hospitals and their officers are watching for other indications of the mischief which may arise from this importation of disease.

ANTHRAX ON A CHESHIRE FARM.

SOME doubts having been raised as to whether the cattle disease prevalent on certain farms in Cheshire was anthrax, Dr. Hime took up his residence for some days at a farm, and has established beyond the least doubt that all the animals which died there during his residence suffered from anthrax, and he as positively denies the fact—and, indeed, the possibility—of the co-existence of "occult swine fever" and of anthrax, which we believe has been officially suggested. In some cases very few bacilli were found, and, in Dr. Hime's opinion, some of the animals were recovering from anthrax, and died of exhaustion and want of maternal nurture. The nature of the disease has been established by Dr. Hime not only by characteristic microscopic appearance, but by the other necessary means. It is satisfactory to find that a medical officer of health is not only well able, but willing to undertake such a task.

PRIVATE BILL LEGISLATION.

MR. CRAIG SELLAR has taken under his especial care a branch of Parliamentary work which is most irksome to those members who are compelled to perform it, but which the House in its collective capacity appears peculiarly reluctant to grapple with. No one would, we suppose, be prepared to argue that our present system of private Bill legislation works either with facility, or certainty, or economy. A Committee on a private Bill has neither the time nor the patience to investigate and master the often complicated details of local requirements; and, as a consequence, the oracular utterances of "skilled witnesses" and the eloquence of counsel have a wholly disproportionate weight in influencing decisions as to whether particular Bills are to proceed or not. A Bill to reform and cheapen the process of private Bill legislation was one of the promises of the Queen's Speech; and though nobody can feel the smallest hope that any measure of the kind can be effectively discussed while the Parliamentary outlook is so clouded as at present, yet it comforted Mr. Sellar to be told on April 18th that the Government had not forgotten their promise. Indeed, the First Lord of the Treasury undertook to air the Government proposals in the House of Lords, in order to give an opportunity for the free ventilation of the question. Mr. Smith did not, it is true, announce what was the principle of the Government Bill. But it appears that the Cabinet regard it "as of the first value and great importance;" and if it is referred to the Select Committee, which Mr. Smith promised Mr. Sellar for his own Bill, some useful

work will have been done in preparation for the halcyon period when the House has leisure for domestic legislation. Mr. Sellar's Bill has more than respectable credentials. It is backed by Mr. John Morley and Sir Lyon Playfair, as well as by Mr. Howorth and the Hon. Arthur Elliot. The essence of the measure is the transference of the consideration of all private Bills from Select Committees of the Houses of Parliament to three Parliamentary Commissioners to be appointed by Her Majesty. Each Commissioner is to have all the powers, jurisdiction, and authority now possessed by Select Committees for the purpose of hearing the case for and against any private Bill, and for dealing with its preamble and contents. He is to make a report to both Houses of Parliament showing how he has dealt with the Bill, and what his reasons are. Provision is also made —and this is very important—for the holding of inquiries on the spot.

HOSPITAL VENTILATION.

In an interesting paper on the above subject, read by Dr. C. Theodore Williams at a meeting of the Hospital Association held at Brompton Hospital on Wednesday, April 20th, attention was first directed to the varying impurity of the hospital atmosphere, and the results of analyses, showing that with an insufficient cubic space came first an increase in carbonic acid (carbon dioxide), varying in the best-ventilated wards from 0.6 to 0.8 per 1,000, but in badly-ventilated ones rising to 1 and 2 per 1,000. Together with the increase in carbonic acid came an increase in organic matter, and to this was to be attributed the "closeness" so often observable when the amount of carbonic acid reached 0.7 per 1,000. Reference was made to the experiments of various observers who had proved the existence of specific organisms in the atmosphere of wards. With regard to ventilation, Dr. Williams said one of the best forms of inlet for fresh air in summer was the "Tobin" tube, rising to four or five feet in the ward, delivering air towards the ceiling and away from the patients. In winter, however, it was advisable to heat the current or to mingle warm air with it. At the newly-erected Insel Spital outside the town of Berne, there was an arrangement of flues and valves by which the supply of hot and cold air could be regulated. A better method was to bring the air over coils of hot-water pipes. At Brompton Hospital the air was admitted through gratings, and half passed between the hot-water coils and half up a vertical tube, the streams mingling over the coil; extraction of air was performed through towers containing coils of steam-pipes. Dr. Williams alluded to the system in use at various other hospitals in this country and abroad, and summed up as follows: (1) That to maintain the proper standard of purity in a hospital atmosphere in this climate, some form of artificial ventilation, combined with warming the air, is necessary; (2) that no system which does not provide for a change of air at least three times an hour, beyond the extraction by fire-places, should be adopted; (3) that if extraction by heat is used, it is of the utmost importance that the temperature of the extracting shaft should be maintained as thoroughly in summer as in winter; (4) that the water-closets and slop-sinks of a hospital should be ventilated separately from the wards and corridors.

NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR.

The festival dinner in aid of the funds of the Royal National Hospital for Consumption and Diseases of the Chest, Ventnor, was held at the Hôtel Métropole, on Tuesday last. The Duke of Cambridge presided, and was supported by Admiral Sir Henry Keppel, Sir Algernon Borthwick, General C. Elmhirst, Sir Richard Webster, Q.C., Sir George Elliot, Mr. Herbert C. Saunders, Q.C., Dr. Sinclair Coghill, Dr. Quain, Director-General Sir Thomas Crawford, and other distinguished guests. In proposing prosperity to the institution, His Royal Highness observed that no hospital called more powerfully for public support than the one in honour of which they were assembled that evening, which was established for the purpose of mitigating one of the saddest and most painful diseases to which man was prone. Beyond the scope of the Consumption Hospital at Brompton, which undoubtedly effected an enormous amount of good, there was a most important sphere of usefulness which could only be filled by a hospital situated in a more salubrious atmosphere than that of London. Undoubtedly the Ventnor institution most excellently fulfilled the requirements in that direction. Since its establishment in 1869, 7,384 patients had been treated within its walls. Beginning with twelve, it now possessed 118 beds, every one of which was isolated in a special room, there being eight of such rooms in each of the detached buildings, or blocks, into which the hospital was divided. In August, Princess Beatrice would inaugurate a new pavilion containing twenty beds, an increase which would raise the annual expenditure from £9,000 to upwards of £11,000. Its income from interest on investments and annual subscriptions amounted to only £3,155, and he therefore most earnestly called upon those present generously, and to the full extent of their power, to contribute to the support of a greatly-needed and admirably-managed hospital. The Treasurer, Mr. Coleman, stated that, although a considerable amount had been left by the late Mr. John Jones—which had enabled the board to add another wing to the hospital—only part of the legacy was available for investments to add to its income. The permanent income of the charity was much less than the expenditure, and the board of management had, therefore, to look to the public for donations and subscriptions each year to make up the deficiency. In returning thanks for the board of management, Mr. Herbert C. Saunders, Q.C., read several letters from grateful patients, who had enjoyed the benefits of the hospital, and had been in a great measure restored to health and able to resume their duties. Dr. Sinclair Coghill, in returning thanks for the medical staff, mentioned how cordially the board of management and medical staff worked together for the interest of the charity, and stated that the French Government had sent over commissioners to inspect the hospitals for consumption in England, and that they had adopted the Ventnor Hospital for their model. The Secretary announced donations and subscriptions to the amount of £2,400.

THE POST OFFICE AND SANITARY AUTHORITIES.

Whatever objections may be felt to the reporting to a sanitary official of cases of infectious disease occurring in private households, there can surely be none to the reporting of cases attended by public officers at the national expense. In the year 1883 we gave publicity to a correspondence which had taken place between the Post Office and Dr. Dudfield, the Health Officer of Kensington, on the subject of the co-operation of the medical officers of the Post Office in securing the isolation of cases of infectious illness occurring in the families of postal workpeople. We regret to find that but little result has followed the appeal then made by the Kensington Vestry to the Postmaster-General "to issue an instruction to the medical officers of his department to give notice to the sanitary authority of the existence of dangerous infectious disease in the persons or families of post office servants." For example, in Dr. Dudfield's last report, three cases of infectious disease are reported as having occurred in the families of as many letter carriers, who were, in consequence, relieved from duty for many weeks. The Post Office authorities were necessarily acquainted with the facts, but no information was given to the sanitary authority until it could no longer be withheld, inasmuch as the Post Office medical officers would not allow the postman to return to duty until the Kensington Health Department had disinfected the sick rooms and their contents. It ought not to be difficult for the authorities of Government departments employing large numbers of hands to keep the local sanitary authorities informed of matters which it is clearly for the general interest that they should know, and at once. We trust that the publication of Dr. Dudfield's protest may serve to secure the promulgation by the Postmaster-General of some definite and satisfactory instructions to his staff on this most important subject.

DISGUISED FORMULÆ.

An American professor recently discussed in a clinical lecture the advisability of letting patients know what medicines they were taking. Obviously this must depend, to a very great extent, upon the patient; no small amount of tact and discretion is required in order to distinguish between those who would and those who would not be benefited by an explanation of the means to be employed. In dealing with a man of intelligence and education, there is always a temptation to endeavour to enlist his confidence by affording him an insight into the nature and scope of the measures to be employed. But few medical men, probably, have escaped the disappointment of seeing their very reasons made use of to discredit their skill and impugn their ability. As a matter of fact, practitioners of mature age and experience of life seldom commit themselves to anything of the kind, or if, to gratify a patient's whim, they appear to yield to the temptation, their explanations are advisedly ambiguous. There is always a possibility that the patient may glean some information from the prescription. The official *Pharmacopœia* recognises the necessity of concealing the nature of certain preparations. Opium may be ordered under several different denominations without giving rise to the slightest suspicion of its presence. Mercury, another drug in reference to which prejudice is general, has not been equally protected. "Hydrargyrum" is nearly as well known as the magic word "aqua." It is suggested that calomel might be written "panchymagogus quercetanus," but the expression, though etymologically interesting, might prove as much of an enigma to the chemist as to the patient. The employment of the names of individuals is an effective if unscientific way of disguising the real nature of the substance ordered, where this is deemed desirable. Dover's or James's powder would checkmate the most curious and best informed of laymen, and with a small amount of archæological research it would be easy to baffle the most persevering querist. The tendency, however, is to discard these vestiges of a cruder system, and to leave to the patient the responsibility of following the directions which have been given him. As the art of medicine advances, the practitioner learns to adopt simple and practical methods of treatment which shall acquire for him the confidence formerly obtained only by mystery of demeanour and speech.

VENTILATION OF SHIPPING.

The ventilation of ships of war and of merchant vessels has hitherto presented almost insuperable difficulties, from the fact that considerations of speed, stability, draught, carrying power, and strength must necessarily be of paramount importance. In the P. and O., Cunard, and other "liners," indeed, the ventilation of the deck cabins leaves little or nothing to be desired, but such an arrangement is obviously out of the question in an ironclad, while the berths of second-rate passenger vessels and merchant ships are for the most part simply unfit for human occupation. All methods as yet proposed for the ventilation of the 'tween decks, if they do not, like those of Perkins and of Thiers, depend on the rolling movement of the hull, at least require progression as an essential condition of their efficiency, and are totally inactive when most wanted, as when moored in a tropical port. Fans enclosed in shafts have, it is true, been tried with some degree of success, but the space they occupy and the amount of mechanism which their multiplication would necessitate preclude their application to each cabin or compartment. A novel method, which may be seen at work at Messrs. Green and Sterkman's offices, 91, Queen Victoria Street, E.C., seems to offer a complete solution of the problem. Its principle consists in the conveyance of compressed air from a central compressor, by common iron gas-pipes, to the several chambers, where it is discharged through nozzles in specially-constructed tubes or channels communicative with the open air. The secondary current set up in these is more than twenty times as great as that proceeding from the nozzles themselves. These channels may be arranged to act as impulsion or exhaustion tubes, so that the air of the compartment can, if desired, be entirely changed in five or ten minutes. On board steamers and in factories the compressor may be worked by the engines employed for other purposes at the same time.

A CASE OF HERMAPHRODITISM UNRECOGNISED FOR SIXTY-NINE YEARS.

Last year, a man aged 69 died after the reduction of a "labial" hernia in the Charité Hospital, Paris. At the necropsy it was found that "this individual, a woman for sixty-nine years, was a man." He had always believed himself to be a woman, and had dressed and lived as such. There was, however, a history of masculine sexual propensities, and he liked to do heavy manual work, which his powerful, muscular frame enabled him to perform. He was often morose and suspicious. He was never married. Messrs. Pozzi and Grattery describe his case in the *Progrès Médical*, of April 16th. There was hair on the chin and lips, indeed the patient shaved regularly, but none on the cheek, chest, extremities, or along the line between the umbilicus and pubes. There were labia, which did not go so far back as in the female. The right labium majus contained the right testicle and a hernial sac. The labia minora formed the prepuce and the frænum of the glans penis, which was large, bifid below and provided with a corona; the corpus cavernosum was single, and attached to the deep perineal fascia, and not to the pubic arch. The groove which ran along the under surface of the bifid glans was continued along the vestibule to the orifice of the meatus urinarius; the groove bore crypts like those which are found in the male urethra. There was a vulvar pouch one inch and a half deep, the perineal raphe was not quite four-fifths of an inch long. Below the bladder, a fleshy mass received the vasa deferentia in a hollow on its surface. This mass, the uterus masculinus, was hollowed by the vulvar pouch below. The vasa ran through the uterine walls, and beyond it were dilated and irregular for some distance. The left vas joined the undescended left testicle, and was pervious. The right did not reach its testicle, but ended as an impervious cord in the wall of the hernial sac in the labium. The left kidney was atrophied, and contained a calculus. This case was an instance of transverse hermaphroditism, the outer parts being of female, the inner of male type. The presence of labia and of a vulvar orifice naturally gave rise to the belief that the subject was a woman.

STRANGULATION OF THE PENIS IN THE HEAD OF A HAMMER.

In the Polish bi-weekly *Wiadomosis Lekarskie* (*Medical News*), No. viii, 1887, p. 243, Dr. Drobner, of Lvov, reports the curious case of a strong and healthy lad of 19, who came to the hospital with his penis tightly fixed in the head of a hammer. The iron weighed 1½ kilogrammes, and the hole measured 3 centimètres in diameter by 4 centimètres in length. The patient had inserted the organ (no doubt with a view to masturbation) about twenty-six hours before, and had since made many fruitless attempts to withdraw it; for the whole of that time he had been unable to pass water. The end of the penis was greatly swollen, its diameter being thrice that of the hole through which it had been pushed. It was only after making thirty deep incisions into the tumefied portion that the imprisoned organ could be liberated. Three weeks elapsed before the parts were restored to their natural condition.

HOMŒOPATHS IN ST. PETERSBURG.

The following incident has caused great excitement and dissatisfaction among Russian homœopaths. A member of the fraternity, a M. Lev Brazol, editor of the *Homeopatitchesky Vestnik*, recently delivered before an audience partly edified and partly scandalised an egregiously absurd discourse on the homœopathic law of similitude. After this performance, the lecturer sent the money taken at the door, amounting to about £42, to the Medical Students' Benevolent Fund. The committee of the Fund, through their president, Professor V. A. Marnassein, politely but firmly declined the money, on the ground that it was the fruit of an impudent and ignorant attack upon

medical science and its professors. It is almost needless to add that the students of the Military Medical Academy have expressed their full and cordial approval of the action of their committee. In consequence of this, M. Brazol and a number of believers in homœopathy, chiefly retired generals and old ladies, pour out the vials of their wrath and spite against orthodox medicine in the daily press of St. Petersburg. Amidst this storm in a teacup the committee maintains an attitude of dignified indifference.

ASPHYXIA FROM SEWER-GAS.

A STRIKING instance of the toxic effects of undiluted sewer-gas was furnished last week in Paris, where the *concierge* of a house in the Rue de Temple and his wife, together with their son, narrowly escaped death. In consequence of their non-appearance one morning, their room was broken into by the neighbours, when all three persons were found insensible in their beds. The son was the first to recover consciousness, and the two others ultimately rallied, but remained seriously ill. A search was instituted, which resulted in the discovery of a fissure in the soil-pipe, which passed down behind the wall of their room, the gas from which had, in all probability, given rise to these severe symptoms. A persistent bad odour had been remarked for some time previously, but as this is rather the rule than the exception in houses in Paris other than those inhabited by the very well-to-do, no particular attention had been paid to it. This case shows very clearly the danger incurred by allowing a soil-pipe to pass down within a building—a fact which, notwithstanding its simplicity, does not as yet seem to have dawned upon foreign architects, who, whatever their theoretical knowledge may be, so largely ignore the elementary principles of hygiene in their plans for dwelling-houses,

TRANSVERSE SEPTA IN THE CERVIX UTERI.

M. BUDIN has recently published in the *Progrès Médical* an original article on Incomplete Transverse Septa in the Cervix Uteri. In 1875 he discovered a diaphragm of this kind in a patient at the Maternité, Paris, during labour. She had already borne one child. M. Budin found the cervix completely effaced. On passing the finger over the fœtal head, the edge of the septum could be plainly detected. The septum was well marked on the right side, and existed in front and behind, but appeared to be absent on the left side. Labour was normal. In 1879 Professor Depaul induced premature labour in a primipara aged 30, with a deformed pelvis. M. Budin detected, when the os was well dilated, a septum equally marked in all directions; it had a wide orifice, and appeared to be attached to the walls of the cervix below the os internum. Labour was long, but the waters pushed the septum well downwards, so that it did not appear to be the cause of the prolonged process of parturition. When the patient was convalescent the septum could be detected, but it was less marked than before. Müller detected a similar septum below the os internum in a single girl aged 20, subject to retroversion and menorrhagia. Breisky, in his notes, recorded a case of cervical septum in a woman aged 40, also subject to menorrhagia. Bidder detected a septum in a primipara aged 26, during labour, as in Budin's cases; here, again, the septum was most developed on the right side. The pains were feeble, and the septum certainly obstructed labour. Its edge was incised, and the margin of the os externum was also incised; the os was then dilated, and a male child delivered with the aid of forceps. The septum seems to have disappeared after labour. Perhaps, Budin suggests, the left side of the septum had been destroyed in his case during the first labour. From notes supplied to him by the head midwife at the Maternité, there appear to have been seen in 1884 and 1886, in Professor Tarnier's wards, two cases of uterine septa. The first occurred in an instrumental labour, the termination of the patient's seventh pregnancy. The septum seemed to lie at the level of the os internum; it was very rigid, its orifice was minute, and its tissue contracted simultaneously with the uterine contractions. In the second case, a primipara, a septum with a very narrow orifice was detected nearly an inch above the os internum. The shoulder presented, and tore the septum. Turning was performed, and the child was delivered alive. The torn septum could be detected afterwards. The true relation of the menorrhagia in some of the above cases of cervical septum is doubtful.

SCOTLAND.

DR. G. SIMS WOODHEAD, who, as Pathologist to the Royal Infirmary, has made his name favourably known as a student of bacteriology, has been appointed Superintendent of the new Research Laboratory established by the Royal College of Physicians of Edinburgh.

EAR-HOSPITAL, GLASGOW.

THE annual meeting of the directors of the Ear Hospital, Glasgow, was held last week. The report stated that during the past year 4,137 cases were treated, and since the existence of the Society (fifteen years) 26,277 cases have been treated at the hospital. There has been an increase of subscriptions during the past year, but, owing to the increase of work, the treasurer's report showed a deficiency of about £36.

HEALTH OF GLASGOW.

DURING the fortnight ending April 9th, 508 deaths were registered, as compared with 591 the preceding fortnight, representing a death-rate of 25.2 per 1,000 in place of 29.4. The deaths from zymotic disease still formed a large proportion of the whole number, but were counterbalanced by a diminution in several unclassified diseases. The death-rate in the first week of the fortnight was 25.3, and in the second week 25.1.

A SHOPKEEPER'S MISTAKE.

IN the Glasgow Small-debt Court damages of £12, the full amount sued for, were awarded an engineer against a small shopkeeper, whose daughter had sold him a bottle of caustic soda solution in mistake for "brown robin." The man's mouth and throat were seriously injured, but fortunately for himself he had not actually swallowed the liquid.

GLASGOW MEDICAL SOCIETIES.

AT the meeting of the Clinical and Pathological Society on April 18th, a case of locomotor ataxy, and a patient on whom ligature of the carotid artery was performed for pulsating exophthalmos, were shown by Dr. John Carlyle, of Greenock, and Mr. H. E. Clark. Mr. Clark also showed a biliary calculus removed by operation from the small gut in a case of intestinal obstruction. Dr. Perry showed a specimen of primary carcinoma of the liver. Dr. Newman exhibited the petrous portion of the temporal bone from a patient who had suffered from suppuration in both ears, and who died with cerebral symptoms. The *post-mortem* examination, however, revealed no inflammatory lesion of the brain or its membranes. At a meeting of the Medico-Chirurgical Society on April 15th, Dr. J. C. Renton showed a case of excision of the os calcis, a case of club-foot in which a wedge was removed from the tarsus, and a vesical calculus removed by supra-pubic operation. Dr. Macintyre read a paper on Tumours of the Pharynx and Larynx, and showed various forms of batteries and cauteries.

GLASGOW HOSPITAL FOR SKIN-DISEASES.

THE number of new cases admitted to this institution last year was 1,264, making a total of 31,097 since its foundation. Nearly 100 of the more serious cases had been transferred to the cutaneous wards of the Western Infirmary, towards which a grant is made from the funds. The importance of the hospital as a clinical school is yearly increasing, the number of students in attendance last summer being sixty-eight, as against fifty-four during the previous summer. A pleasing feature of the financial statement is the large amount sub-

scribed by patients, sufficient to cover 30 per cent. of the total outlay in connection with the maintenance of the hospital.

EDINBURGH UNIVERSITY PUBLIC HEALTH DEPARTMENT.

THE annual dinner of the members of the Edinburgh University Public Health Department recently took place at the Waterloo Hotel, when the chair was taken by Surgeon J. Stevenson, M.B., F.R.C.S.E., Army Medical Staff. Among those present were Drs. Blair, Hughes, Grant, Dewar, Wise, and Lennox, and, as guests, Dr. Hunter Stewart and Messrs. Little and Palmer. After the usual loyal and patriotic toasts, the following were drunk with enthusiasm: "The Public Health," coupled with "Success to the University of Edinburgh;" "The Hygienic Societies of Great Britain;" and "The Ladies" (Sir Douglas Maclagan). "The Memory of the late Dr. Parkes" was also duly honoured.

IRELAND.

DR. CARDIFF, it is expected, will be returned as the new coroner for South Wexford.

OLDCASTLE UNION.

Dr. BRADLEY has been appointed *locum tenens* for Dr. Adrien during that gentleman's leave of absence, but without remuneration.

WICKLOW DISPENSARY DISTRICT.

THE Board of Guardians of the Rathdrum Union recently increased the salary of the medical officer of this district by £20 a year, on the unanimous recommendation of the Dispensary Committee. The district is the largest in the union, and there are four dispensary days each week. Last week, however, a resolution was adopted rescinding the increase as illegal, as it appears the board, about two years ago, fixed the salary at £100 a year, and £10 as medical officer of health. At the same meeting the salary of Dr. Barnes, medical officer of the union, was increased from £100 to £120.

SIR PATRICK DUN'S HOSPITAL.

A MEETING of the governors and friends of this hospital was held last week; the President of the College of Physicians occupied the chair. Owing to the non-payment of rent and other causes, the funds of the hospital, of which the President and Fellows of the College of Physicians are trustees, under the will of Sir Patrick Dun, have seriously suffered. Under these circumstances the Governors will be compelled materially to diminish the number of beds in the hospital unless the public comes to its support. Dr. Banks proposed: "That Sir Patrick Dun's Hospital deserves well the support of the public for its services, past and present, to the suffering poor of Dublin and other parts of Ireland." He referred to the admirable manner in which the institution had discharged its functions, both as a hospital and as a clinical school, and he quoted a remark of the late Sir Dominic Corrigan, who, in reply to an observation that a hospital filled with sick was a melancholy sight, said that a hospital with all appliances for the cure of the sick, with its doors closed for want of funds, was a still more deplorable spectacle. The Provost of Trinity College supported the resolution, which was unanimously adopted. During the last year, 1,395 patients were treated in the hospital or in the maternity wards, and 9,080 dispensary patients were prescribed for. A bazaar in aid of the hospital was opened in the King and Queen's College of Physicians by Her Excellency the Marchioness of Londonderry, on Wednesday last.

PROPOSED AMALGAMATION OF DUBLIN MEDICAL SCHOOLS.

THE proposal made by several of the Professors of the School of the Royal College of Surgeons in Ireland to the Directors of the Carmichael College of Medicine, that the two schools should be amalgamated, has been rejected by the Council of the College of Surgeons. Eighteen members were present at the meeting of Council last week at which the matter was discussed, and there was a majority of four against the resolution, although a majority of the most active and efficient members of the Council and of its Medical School are in favour of the amalgamation. The Directors of the Carmichael College profess that they never sought an amalgamation with the School of the College of Surgeons, and that they would certainly not gain anything by such amalgamation. Their lecturing and teaching staff, they say, is composed of highly competent men, who work together most harmoniously, and who discharge their duties with conscientious thoroughness and praiseworthy zeal. The result, they aver, is that their School is flourishing and is increasing every year. It is an open secret in Dublin that the condition of the School of the Royal College of Surgeons is not so satisfactory. Perhaps something may be said about this matter at the next annual meeting of the Fellows.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

WE are informed that Mr. Kendal Franks, of the Adelaide Hospital, Dr. Heuston, of the same hospital and of the Carmichael College of Medicine, and Mr. Conolly Norman, resident medical superintendent of the Richmond District Lunatic Asylum, are candidates for a seat on the Council of this College. There will also be a contest at the forthcoming annual election for the Vice-Presidency of the College between Mr. Henry Gray Croly and Dr. Henry FitzGibbon, both surgeons to the City of Dublin Hospital. The President of the College, Sir William Stokes, gives a dinner on Saturday, April 23rd, in the College, "in celebration of the Queen's Jubilee," at which His Excellency the Lord Lieutenant will be present. Dr. Anthony H. Corley succeeds Sir William Stokes as President.

THE DUBLIN HOSPITALS COMMISSION.

THE *Freeman's Journal* states that it is enabled to give the following as the principal recommendations which the Commission have agreed to. The report has been presented to the Lord-Lieutenant, but has not yet been published:

"In the first place, it is recommended that a Central Board of Control be appointed, to consist of the Roman Catholic Archbishop of Dublin; the Protestant Archbishop of Dublin; the Moderator of the General Assembly; three members of the Dublin Corporation; the Chairman of the Hospital Sunday Fund; two representatives of the College of Physicians, to be selected by the Council; one representative of the College of Surgeons; one representative of Trinity College; one representative from the Royal University; and two members to be nominated by the Crown. All the different funds derived from sources other than donations, bequests, or private subscriptions would be made one common fund, and vested in the Central Board, who would make annual grants to each of the Dublin hospitals. The amount of the grants to be based on the amount of work accomplished during the year; the total number of beds occupied; the total number of patients treated; the total number of students receiving instruction; the total number of nurses (trained and probationary); the general efficiency of the institution; the energy of the directors, as evidenced by the amount of money collected in the shape of subscriptions, donations, and bequests. In order to obtain a grant the institution must not be sectarian either as regards patients or students. It is not recommended that any of the hospitals should be closed or amalgamated; but it is expected, should the recommendations of the Commission be carried out, that a general weeding-out process will ensue, and that the less useful institutions will disappear, leaving a large amount of revenue for such hospitals as perform the greatest amount of service to the public. In estimating the amount of work done, special consideration will be given to 'established charities,' such as annual grants given by employers for the treatment of their employés. We may add that the Commissioners highly approve of the manner in which the Corporation have made their grants to the Dublin hospitals."

ROUMANIAN MEDICAL CONGRESS.—The second general meeting of Roumanian medical practitioners will take place at Jassy on May 21st.

PRESENTATION OF A PORTRAIT OF THE LATE DR. CHADWICK TO THE ASSOCIATION.

At a numerously attended Council meeting held on Wednesday, April 14th, in the new Council Room of the Association at 429, Strand, Sir Walter Foster, M.P., in the chair. The chairman called upon

Mr. Wheelhouse who said: Gentlemen, I have to mention a matter which arises out of the minutes. On the last occasion when the Council had under consideration the best means of obtaining some memorial of the late Dr. Chadwick, you were all good enough kindly to leave the matter entirely in my hands. The first thing I did on reaching home was to put myself in communication with Dr. Chadwick's family, to make an endeavour, if I could, to ascertain from them what form of memorial they would prefer to any other as being a record of him and of his services for the British Medical Association. My object was, and I say at once my intention was, to have presented to this Council, myself, an enlarged photograph, or something of that kind which would have served to keep the memory of Dr. Chadwick before us, and to remind us of one who, in all times of difficulty and of trouble, whether when matters of heated conflict were about us, or even when we were cool, was always ready to aid us with the best advice that he could, and who always came as a tower of strength when he did speak, which was not, as everybody in this room is aware, very often, unless he thought very keenly upon any given subject. I soon ascertained from Dr. Chadwick's family that they would rather, for some reason, that I did not take any personal steps in the matter, and, although they told me that they had one or two very good photographs which, if enlarged, would represent their father very well, still they would rather that I took no steps for the moment, and I presently learned that that was because they all felt that, having an admirable portrait of him themselves, they would like, provided the consent of each member of the family could be obtained, to present that portrait to the British Medical Association through the Council, on condition that we would allow it to hang upon the walls of the Council Chamber. I therefore held my hand, and it was only about a month ago that I received a formal intimation from Dr. Charles Chadwick, of Leeds, that the family had so determined, and the consequence is that I am requested by the family to ask you to accept, on behalf of the Association, the portrait which you see placed upon the wall, and which I think you will all recognise as being a most admirable representation of Dr. Chadwick. It is painted by a man of great eminence, and I speak advisedly when I say that, because I know a great many portraits that he has painted of men of all classes, public characters and others—by Mr. Sydney Hodges—and it is a portrait of Dr. Chadwick not as we all knew him at the last moment of his life, but ten years ago, when he was in full health, and when, as we know, he was in full activity, full power, mental and bodily, and in full vigour and work for this Association. I am sure those gentlemen who are present at this table will know that the British Medical Association never had a truer or more earnest friend, and never had a friend on whose judgment they could better rely for soundness and clearness than the late Dr. Chadwick. As one of his colleagues I could say a great deal more even than that. His gentleness, his urbanity, his kindness of heart ever induced him not only to seek the truest, the justest, and the most perfect solution of any question, but always inclined him to a state of kindliness and thought for others rather than for himself, and I feel quite confident that those who have watched his conduct in the Council Chamber here will know that that was one of his chief characteristics here also. He was courteous to the last degree to everyone with whom he came in contact, and if it were his ill-fortune to be compelled to differ from anyone, I believe that thought for that other person was always present in Dr. Chadwick's mind before any feeling of his own personality ever came into question at all. Gentlemen, we lost in Dr. Chadwick a friend such as the Association has never had very many of, because, although most of us feel that our work for the Association is work for the profession, Dr. Chadwick felt more than that. His work for the Association was a work purely of love, and it was carried on as only works of love are carried on. I make this presentation on behalf, therefore, of his family, and with great confidence, because when the family said to me, "Now, do you think the picture will be really valued in the Association?" I took upon myself to say that I knew it would be regarded as a gift of high price and of great value, and that the Council would be only too charmed if they could have anything hanging upon their walls which would remind them constantly of their old friend. I, therefore, have to ask you to accept, on behalf of the Association, that portrait, and to ask also that the Council will be kind enough to allow it to remain as a permanency in this Chamber.

Mr. Vincent Jackson: Mr. President, after what has fallen from Mr. Wheelhouse, my duty will be a merely formal one. Before I read the resolution which has been placed in my hands, I may say I endorse all the remarks which Mr. Wheelhouse made. That likeness is almost a life-like one; and, whenever we look upon it, we shall be reminded of the manly vigour of the late Dr. Chadwick of Leeds, and of the strong common sense of those remarks, brimful of wisdom, which he always uttered in his place at this Council. It is my duty to move:

"That, on behalf of the Association, the best thanks of the Council be given to the family of the late Dr. Chadwick for their beautiful and intrinsically valuable gift. The portrait, which is regarded by the Council as an admirable likeness, while adorning the walls of the Council Chamber, will also keep ever before it the memory of one of its most beloved members, and will serve to remind it of the gentleness, the urbanity, and the substantial wisdom of a colleague upon whose sound judgment it had learned, especially in times of perplexity or difficulty, to place great confidence and reliance."

I beg to move that resolution.

Dr. Holman: It is with more than usual feelings—I can hardly say of gratification—that I venture to second the proposition made by Mr. Vincent Jackson. It has been my great privilege to know Dr. Chadwick not only in our work in the Association, but also in his intimate home-life, and a more perfect man in his way it is very difficult indeed to find, whether as a professional man or in his home-life. Of those gentlemen who were present at the meeting at Leeds, who can ever forget the grand courage of that man? He read his address racing against time to catch his train, in order to go to the death-bed of a dying daughter. Who can forget the way in which he came back to us, doing his very best in order that the pleasure and profit of that meeting at Leeds should not be marred by any private domestic distress of his own? There never in the history of this Association was a grander instance of a more complete self-abnegation. That was the man! I know what a pleasure it has been to the members of his family to present us with this portrait. I cordially endorse every word that has been said by my friend Mr. Wheelhouse, who knew him so well for so many years, and the resolution which has been moved by Mr. Vincent Jackson has my most cordial and hearty concurrence.

Dr. de Bartolomé: It is perhaps unnecessary that I should add a single word to what has fallen from Mr. Wheelhouse, but I think I should be failing in my duty if I did not confirm every word that Mr. Wheelhouse has uttered. I do not know whether I am not perhaps the oldest friend that Dr. Chadwick had. I had the pleasure of sitting upon the same benches with him at Edinburgh University for four years, and from that date to this I have never had any occasion to alter the high opinion which I then formed of Dr. Chadwick in every respect. More than this it is unnecessary for me to say. I beg to concur in every word that has been uttered not in Dr. Chadwick's praise, but in doing justice to Dr. Chadwick's character.

The resolution was unanimously agreed to.

THE HUTTON FUND.

Dr. W. Howship Dickinson desires it to be known that the help of the benevolent is solicited on behalf of the family of Dr. Hutton, late of 26, Lowndes Street, who died on March 27th. Dr. Hutton's course, though one of industry, self-denial, and probity, was not rewarded by pecuniary success. Some of his excellent qualities were such as do not tend to worldly prosperity, and even in some respects militate against it. He began life with a small patrimony, but this was sacrificed in the interest of a near relation without any fault on Dr. Hutton's part, excepting that he was too trustful and too unselfish. Upon this part of the sad story it is not needful to dwell. Dr. Hutton's practice, once considerable, of late years diminished until the daily earnings scarcely provided the daily needs, though these were made matters of the most rigid economy. When the end came, there was found to be nothing, or rather less than this. There is a son who holds a commission in the army, which it is trusted he may not have to give up. He is thus provided for, but his pay does not suffice to maintain his relations. The widow and two unmarried daughters are left with no means of support. The widow, who is advanced in years, and is the subject of a painful disease, has a double claim on the profession, since she is the daughter of the late Dr. Seymour, once well known as physician to St. George's Hospital.

It is hoped that some who have been more successful than Dr. Hutton, will give out of their abundance towards a fund which is being raised for the purpose of saving these ladies

from absolute want. How it can best be used will depend on the amount; it shall be guarded carefully, and employed judiciously. Some of the leaders of the profession, as well as some of Dr. Hutton's attached friends, have already subscribed liberally. It is hoped that this appeal to a wider circle may be also responded to. The gentlemen whose names follow have agreed to form a committee for the collection and management of the fund: L. Cumberbatch, M.D.; W. H. Dickinson, M.D.; Sir Joseph Fayrer, K.C.S.I.; Geo. Faudell Phillips, Esq.; G. D. Pollock, Esq.; R. Stewart, Esq.; W. Wadham, M.D.

Dr. Cumberbatch, 25, Cadogan Place, Belgrave Square, S.W., as Treasurer, will be glad to receive and acknowledge subscriptions. Cheques should be made payable to him. Dr. W. Howship Dickinson is the Secretary to the Committee.

The following sums have already been subscribed:

List of Subscriptions.

	£	s.	d.		£	s.	d.
Sir Prescott Hewett	52	10	0	Geo. D. Pollock, Esq.	10	0	0
Sir W. Jenner	21	0	0	G. B. Brodie, M.D.	10	0	0
Sir Andrew Clark	21	0	0	J. H. Mudie, Esq.	10	0	0
Sir William Gull	10	0	0	Mrs. Hugh Kennard	10	0	0
Sir Joseph Fayrer	5	0	0	J. H. Levy, Esq.	10	0	0
Lady Fayrer	5	0	0	W. O. Priestley, M.D.	5	5	0
Sir Benjamin Phillips	5	5	0	W. Wadham, M.D.	5	5	0
Geo. Faudell Phillips, Esq.	50	0	0	H. Lee, Esq.	5	0	0
S. H. Phillips, Esq.	5	5	0	F. Bagshawe, M.D.	3	3	0
Baroness H. de Worms	10	0	0	J. W. Ogle, M.D.	3	3	0
General Seymour	50	0	0	Charles Hawkins, Esq.	2	2	0
R. Stewart, Esq.	31	10	0	T. Holmes, Esq.	2	2	0
James Wyllie, Esq.	21	0	0	J. Rouse, Esq.	2	2	0
J. D. Allcroft, Esq.	20	0	0	J. Mould, Esq.	2	2	0
L. Cumberbatch, M.D.	20	0	0	J. Cavafy, M.D.	1	1	0
Mrs. Cæsar Hawkins	10	10	0	T. P. Pick, Esq.	1	1	0
W. H. Dickinson, M.D.	10	10	0	Clinton Dent, Esq.	1	1	0
Miss Dickinson	5	0	0				

Total Subscriptions .. .. £436 17s.

INTERNATIONAL MEDICAL CONGRESS.

We have received from the Committee of Arrangements, of which Dr. A. Y. P. Garnett is the Chairman, and Mr. C. H. A. Kleinschmidt, Secretary, the following memorandum of the rates of transport and hotel rates in Washington, for the information of persons desirous of attending the ninth annual meeting of the Congress.

Rates of Transport.

Red Star Line, $100; Antwerp to New York and return.
Inman Line, $100; Liverpool to New York and return.
Hamburg Line, $90; Hamburg to New York and return.
Royal Netherlands, $80; Amsterdam to New York and return.
North German Lloyd, $187.50; Bremen to New York and return.

Same rates are allowed for the families of members.

Cunard Line 10 per cent. reduction for members of the Congress only.

Hotel Rates in Washington.

Arlington Hotel from $3.00 to $3.50 per day.
Riggs House from $3.00 to $3.50 per day.
Willard's Hotel from $3.00 to $3.50 per day.
Metropolitan Hotel $3.00 per day.
National Hotel $3.00 per day.

Other hotels conducted on the European style will furnish rooms at $1.00 to $2.00 a day. Good lodging-houses will also furnish rooms from $1.00 to $1.50 a day.

Proper accommodation has been secured for the meeting places of the Congress and its sections.

The arrangements for transport within the limits of the United States have not yet been determined upon, but will, with particulars of the plan of entertainments and other notices, be made known at a later date.

RESEARCH AT THE COLLEGE DE FRANCE.

The following statement, which is authoritative, will be of interest and value in relation to the desired application of the Erasmus Wilson Bequest of the Royal College of Surgeons, and of the recent action of the Royal of Physicians of Edinburgh, in establishing a new Laboratory of Research in that city.

The Collége de France, founded by Francis I in 1530, has preserved its original character ever since; its aim is now, as formerly, to give free instruction to all. No formalities are needed to obtain admission; anyone may attend the lectures. The instruction is comprehensive in its range, and of the highest order, both as regards the subjects taught and the excellence of the teaching. The end kept in view throughout is not to popularise but to advance science. There is, therefore, no danger in allowing free admission; the instruction is of a kind not adapted to the many, but only to the few. The following instances will exemplify this statement. M. Berthelot, the present Minister of Public Instruction, is professor of organic chemistry at the Collége de France. The subject of his lectures this year is *La Synthèse et les Carbures d'Hydrogène*. These lectures would be altogether beyond the intellectual reach of a beginner, as a thorough knowledge of organic chemistry is required in order to follow them. M. Berthelot will merely touch upon the subject of olefiant gas, benzine, etc., and his lecture will treat almost solely of those carburetted hydrogen compounds which are the least known. M. Maspero, professor of philology and Egyptian archæology, does not teach his audience how to decipher hieroglyphics, but proceeds at once to the study of the different texts inscribed on the pyramids, and their bearing upon the ancient religion of Egypt. His lectures are consequently only suited to persons already familiar with the different Egyptian dynasties, who wish to study the ancient religion of Egypt. Every science is represented at the Collége de France, provided that it admits of further investigation. When a science has reached a point at which it becomes stationary and allows of no further researches, the chair is suppressed at the death of the professor who taught it. In 1830, for example, Troja, professor of descriptive anatomy, died. By that time no further progress in this science was possible. The chair was, therefore, suppressed at the death of the professor. In 1874 it was revived under the name of general anatomy, and M. Ranvier was appointed professor. Of the forty chairs at the Collége de France seven are devoted to collateral medical sciences, namely, physics, inorganic chemistry, organic chemistry, natural history of organised beings, comparative embryology, general anatomy, and medicine. The last-mentioned chair, together with those of Hebrew and Greek, was among the first which were established at the Collége de France on its foundation. The professorship of medicine was held by practical physicians and surgeons till the time of Magendie, who made the chair one of physiology. Magendie was succeeded by Claude Bernard, who at his death was succeeded by Brown-Séquard, the present incumbent.

The chair of Cuvier (*Histoire Naturelle des Etres Organisés*) was at his death divided into two, dealing respectively with organised and inorganic matter. These chairs were occupied by Flourens and St. Clair de Ville, the former being afterwards succeeded by M. Marey.

The professors at the Collége de France are obliged to give forty lectures in the year. This number is, however, too great, when the nature of the instruction is taken into account. It is impossible for a professor every year to occupy forty hours in describing discoveries made by himself; hence, after a few years, they find themselves driven either to present old matter in a new dress or criticise some newly published work upon the subject which they have to treat.

When a professor dies or retires, his colleagues hold a meeting to decide whether the chair is to be kept up or not. If its continued existence be agreed to, a vacancy is declared, and at the end of a month the professors re-assemble, and select two among the candidates who have presented themselves. One of these is placed first, and the other second on the list, which is forwarded to the Minister, who refers it to the Académie des Sciences in the case of a scientific professor, or to one of the other Academies, according to the nature of the chair which has to be filled. The Académie des Sciences returns the names in whatever order it pleases, but the candidate preferred by the professors themselves is generally chosen. The Minister then makes the formal appointment.

Every professor has a laboratory for scientific researches in connection with his chair. The staff of the laboratory consists of a director with one or two assistants (*répétiteurs*), whose duty it is to aid in whatever researches are made in the laboratory. The same spirit which grants free scientific instruction to all is shown with regard to the laboratories. Free admission to them is accorded to all persons desirous and capable of making scientific researches. No previous examination is required, nor is it necessary to possess a degree or diploma of any kind. The permission of the professor is all that is needed. This can be obtained without difficulty if the director of the laboratory considers the applicant sufficiently advanced to make such researches. Should he need further instruction, he is placed for a certain time under the direction of one of the *répétiteurs*. As a general rule, those who work in the laboratories make their researches in the way which they think best. The director and his assistants only interfere when their advice or help is required in carrying out certain investigations.

This system is totally different from that which prevails in Germany, where the director of the laboratory has the entire control of the scientific researches, and only the manual part is performed by the student. Each of these systems has its advantages, but the plan adopted at the Collége de France gives greater encouragement to original work.

No diploma is given to laboratory students at the Collége de France; only a certificate stating the time which the holder has spent in the laboratory. A man is judged solely by the amount and value of work which he has done there.

ADDRESS AND TESTIMONIAL TO DR. KENNEDY.

At a meeting in Dublin, over which Sir Charles Cameron presided, it was resolved to present Dr. B. Burke Kennedy, Resident-Surgeon of Mercer's Hospital, with an address expressive of sympathy with him in the ordeal through which he was so unjustly made to pass, and also to open a "Defence Fund" to pay the heavy legal expenses to which he was put.

A charge of manslaughter was brought against Dr. Kennedy for removing a delirious patient from an ordinary to a special ward. After the evidence for the prosecution had been heard, the jury stopped the case, and returned a verdict of acquittal, with the following rider: "We consider that, according to the evidence, Dr. Kennedy should not have been subjected to the hardship of a prosecution."

Members of the profession are requested to forward subscriptions to the Honorary Treasurer, Dr. McVeagh, 1, Rutland Square East, Dublin. The report of the Corporation Commission of Inquiry, together with an abstract of the trial and verdict in the Law Courts, will be forwarded on application to the Honorary Secretaries, George H. Kidd, M.D., F.R.C.S.I., Arthur H. Benson, M.D., F.R.C.S.I., Robert Wade, F.R.C.S.I., F. Alcock Nixon, F.R.C.S.I.

THE ROYAL STATISTICAL SOCIETY.

Dr. T. Graham Balfour, F.R.S., a Vice-President, took the chair at the sixth ordinary meeting of the present session at the Royal School of Mines, in Jermyn Street, on Tuesday, April 19th, when a paper was read by Mr. N. A. Humphreys on "Class Mortality Statistics."

The first part of the paper was devoted to the description and discussion of such existing mortality statistics (more especially life tables), as threw light upon the varying rates of mortality in various social classes. A comparison was drawn between deductions from Dr. Farr's National Life Tables, based upon the general mortality of all classes, Dr. Farr's Healthy District Life Tables, based upon mortality of all classes in the healthiest districts, Ansell's Upper Class Tables, and Hodgson's Clergy Experience Tables. The mean duration of life of persons by Dr. Farr's English Life Table (No. 3) was 41 years; but by a more recent table, based upon the general mortality, it had increased to 44 years; and by the Healthy District Table the mean duration was 49 years. Ansell's Table of the Upper Classes gave a mean duration of 53 years. A detailed examination of these and other life tables showed that child mortality was the controlling element of the mean duration of life of a population. A table in the paper showed that the annual death-rate among children under 5 years of age was 66 per 1,000 by Dr. Farr's Life Table (No. 3), 61 by Mr. Humphreys's more recent General English Table, 39 by Dr. Farr's Healthy District Table, and only 28 by Ansell's Upper Class Table. The range of death-rates at the next age-period shown in the table, 5 to 20 years, was almost as great as it was under 5 years. The greater vitality of the middle and upper classes was well but not as strongly marked at each of the three subsequent age-periods. This strong contrast between the general and upper class rates pointed to still stronger contrasts between the upper and working class rates, were such a comparison possible. Unfortunately, no working-class life-tables existed. Reference was made to the Registrar-General's Statistics of Occupational Mortality, prepared successively by Dr. Farr and Dr. Ogle. These statistics dealt only with adult males engaged in different occupations, but they threw some light upon the subject under discussion—class mortality. Dr. Ogle's most recent statistics of occupational mortality showed that, after due allowance for age-differences, if the mortality of all males aged 25 to 65 years were taken as 1,000, the relative mortality of males engaged in different occupations ranged from 556 for "clergyman, priest, minister," 599 for "gardener, nurseryman," 631 for "farmer, grazier," and 701 for "labourer in agricultural counties" to 1,839 for "miner" (Cornwall), 1,879 for "costermonger, hawker, street-seller." 2,090 for "general labourer" (London), and 2,205 for "inn, hotel servant." These differences were evidently due far more to occupational influences and risks than to the mere influence of class; and the comparatively small difference between the mortality of clergymen and gardeners and agricultural labourers was especially noteworthy. These statistics, however, important and interesting as they were, did not throw any light upon the general mortality of the various classes, including men, women, and children; and, for reasons before mentioned, statistics of class mortality among children were especially important.

The latter half of the paper was devoted to the initial examination of the class mortality statistics relating to the population of the city of Dublin in the three years 1883-85, issued by Dr. Grimshaw, Registrar-General of Ireland. These statistics, notwithstanding certain defects which might reasonably be expected in an experiment of this nature, formed an undoubtedly valuable contribution to our knowledge of the subject of class mortality. The variations of age-distribution in Dr. Grimshaw's different classes were very remarkable. For instance, 1,000 of his professional and independent class contained only 75 children under 5 years of age, whereas the same number of the artisan class contained 121 children of these ages. On the other hand, the proportion per 1,000 of persons aged upwards of 60 years was 158 in the professional and independent, and only 63 in the artisan classes. Given identical rates of mortality in each of Dr. Grimshaw's classes at each age-period, the difference of age-distribution alone would cause the death-rate at all ages to range from 19.5 in the middle class, to 25.2 in the professional class. Corrected for difference of age-distribution, and taking 1,000 to represent the mortality that would occur in each class at English life-table rates, the mortality in Dublin in the three years 1883-85, in Dr. Grimshaw's four classes, was equal to 632 in the professional and independent class, 1,093 in the artisan class, 1,333 in the middle class, and 1,659 in the general service class, which included workhouse inmates.

The effect of class influence in each of the age-periods was most striking. Thus the mean annual mortality under 5 years of age was just five times as great in the general service class as in the professional and independent class. At the next age-period, 5 to 20 years, the difference of mortality between these two classes was very nearly as great, and in each of the three age-periods of adult life the rates of mortality were more than twice as high in the general service class as in the professional and independent class.

The varying incidence of zymotic mortality was fully as marked as that of mortality from all causes at different age-periods. For instance, measles mortality was nearly ten times as fatal in the general service class as in the professional and independent class; whooping-cough more than four times as fatal; diarrhœa nearly three times as fatal; scarlet fever more than twice as fatal; and typhus nearly five times as fatal. The mortality from lung diseases was more than three times, from convulsions nearly thirteen times, and from violence more than five times as great in the general service class as in the professional and independent class. Mr. Humphreys closed his paper with an appeal to medical officers of health and others for further investigation in the direction of Dr. Grimshaw's statistics, and urged a stronger faith in the possibility of controlling the present wide range between the death-rates of the upper and working classes. The near approach of the death-rates among the clergy and agricultural labourers suggested that it was not mere poverty and hardship that killed, unless accompanied by dirty homes, impure air, and above all by intemperance, which almost inevitably prevailed among badly-housed populations. The marked reduction of working class mortality, especially among infants, in the Peabody Buildings, showed that the mortality of the working classes was within the control of effective sanitation. With a further extension of this branch of sanitary reform, it was at present impossible to estimate the possible amount of further reduction that might reasonably be expected in the already markedly reduced English death-rate.

In the discussion which followed, the under-mentioned took part—Mr. A. H. Bailey, F.I.A., Mr. Robert Lawson, LL.D., Mr. F. G. P. Neison, F.I.A., Mr. Rowland Hamilton, Dr. J. Edmunds, Mr. H. M. Paul, Rev. I. Doxsey, Mr. S. Bourne, and the Chairman.

ASSOCIATION INTELLIGENCE.

ABSTRACT OF PROCEEDINGS OF COUNCIL.

At a numerously attended meeting of the Council, held in the Council Room of the new offices, 429, Strand, W.C., on Wednesday, April 13th, 1887, Sir B. Walter Foster, M.D., M.P., President of the Council, in the chair, it was

Resolved: That the financial statement for the year ending December 31st, 1886, as certified by the auditors as correct, be approved and published in the Journal, in accordance with By-law 26.

The remainder of the proceedings of the Council will appear in next week's Journal.

BRITISH MEDICAL ASSOCIATION,

FINANCIAL STATEMENT FOR THE YEAR ENDING DECEMBER 31st, 1886.

Balance Sheet.

Dr.] Liabilities.	£ s. d.	£ s. d.
To Subscriptions paid in advance		555 19 10
,, Advertisements ditto		372 0 10
,, Publishing ditto		15 8 0
,, Wood Fund		25 0 0
,, Contributors		547 2 9
,, Reporting		16 16 0
,, Engraving		29 4 6
,, Printing Journal		262 8 7
,, Paper for Journal		538 13 0
,, Miscellaneous Printing		20 13 8
,, Committees		1 11 6
,, Stationery		33 15 3
,, Copying, and Assistance		1 7 9
,, Repairs		4 12 4
,, Legal Charges, etc.		207 9 3
,, Premises Committee		200 0 0
,, Rent, Taxes, and Insurance		46 5 0
,, Special Prize given by Dr. Ward Cousins		20 0 0
,, Plant and Type		34 7 3
Total Liabilities		2,932 15 6
,, Plant Depreciation and Renewal Fund, as at 31st December, 1885	800 0 0	
Added for 1886	200 0 0	
	1,000 0 0	
Less New Plant purchased this year	129 2 9	
		870 17 3
		3,803 12 9
,, Surplus Account, viz. :—		
Balance on 1st January, 1886	24,712 9 6	
Profit on Sale of Consols	203 0 3	
Profit brought from Revenue Account	3,989 7 4	
Total of excess of Assets over Liabilities		28,904 17 1
		£32,708 9 10

Cr.] Assets.	£ s. d.	£ s. d.
By Subscriptions—Amount due		1,132 10 8
,, Advertisements—Amount due		3,052 7 11
,, Sundry Sales—Amount due		179 16 10
,, Due from Hastings Memorial Fund		8 15 0
,, Lease of 161a, Strand, Amount due from Purchaser		500 0 0
,, Scientific Grants Committee		91 5 0
,, Lease of New Premises, 429 Strand, at cost		4,500 0 0
,, Fixtures, 429, Strand		464 17 7
,, Sale of Old Furniture—Amount due from Purchaser		27 10 0
,, Plant and Type at cost		1,284 14 6
,, Postage of Journal—amount due		4 17 5
,, Interest due on Investments		267 2 6
Investments, viz. :—		
£2,000 L. & N. W. Railway 4 per cent. Debenture Stock at cost	2,231 7 0	
£1,780 Midland Railway 4 per cent. Debenture Stock at cost	2,013 1 6	
£1,767 G. W. Railway 4 per cent. Debenture Stock at cost	1,991 6 3	
£1,845 L. & S. W. Railway 4 per cent. Debenture Stock at cost	2,143 13 6	
£1,743 N. E. Railway 4 per cent. Debenture Stock at cost	2,016 18 7	
£1,623 G. N. Railway 4 per cent. Debenture Stock at cost	1,868 9 0	
£2,000 Lancashire and Yorkshire 4 per cent. Debenture Stock at cost	2,309 9 6	
£2,000 Newcastle Corporation 3½ per cent. Debenture Stock at cost	1,992 10 0	
£338 18 8 Bank Stock at cost	1,000 0 0	
		17,566 15 4
At London and Westminster Bank on Deposit Account	2,000 0 0	
At London and Westminster Bank on Current Account	1,627 17 1	
		3,627 17 1
		£32,708 9 10

Revenue or Profit and Loss Account, for year ending 31st December, 1886.

	1885. £ s. d.	1886. £ s. d.
Editorial Expenses	3,098 5 5	3,229 0 11
Expenses of Printing Journal	9,307 16 6	10,009 5 10
Office Expenses	1,723 17 9	1,850 8 0
Office Salaries and Wages	1,650 1 0	1,515 3 0
Miscellaneous Association Expenses	2,102 10 0	2,127 11 11
Plant Depreciation Fund	150 0 0	200 0 0
Premises Redemption Fund	150 0 0	
Furniture and Fittings (written off)	33 0 0	28 15 9
	18,215 10 8	18,960 5 5
Subscription Losses from death	551 13 11	477 8 8
Discounts and Allowances	1,632 18 8	1,958 1 5
	20,400 3 3	21,395 15 6
Profit for year carried to Balance Sheet	3,313 0 9	3,989 7 4
	£23,713 4 0	£25,385 2 10

	1885. £ s. d.	1886. £ s. d.
Subscriptions	11,812 16 3	12,267 18 5
Advertisements	9,525 12 9	10,670 14 10
Sundry Sales of Journal	1,038 7 3	1,153 4 11
Collective Investigation Record Sales and amount of Grant unexpended	98 10 2	64 6 0
Sundries—Reading and Binding Covers	51 19 1	48 16 0
Reprints	107 7 6	112 2 1
Interest on Investments	643 2 9	651 7 8
Scientific Grants unused and returned	160 0 0	74 0 8
Sale of Waste	13 2 6	
Discount on Printing, Paper, etc.	262 5 9	300 14 2
Balance on Redemption Fund, 161a, Strand		41 18 1
	£23,713 4 0	£25,385 2 10

Stewart Fund.

£579 invested in 4 per cent. Caledonian Railway Debenture Stock, in the name of the British Medical Association.

1886.		£ s. d.
Jan. 1.	To Balance brought down	78 6 4
Dec. 31.	,, Interest one year £579	22 7 9
		£100 14 1
1886.		£ s. d.
Aug. 18.	By payment to Dr. Cory	52 10 0
Dec. 31.	By Balance carried down	48 4 1
		£100 14 1

Middlemore Fund.

£500 invested in 4 per cent. North British Railway Debenture Stock, in the name of the British Medical Association.

1886.		£ s. d.
Jan. 1.	To Balance brought down	68 7 8
Dec. 31.	,, Interest one year on £500	19 6 8
		£87 14 4
1886.		£ s. d.
Aug. 11.	By payment to Mr. W. A. Frost	26 5 0
,, 26.	By payment to Mr. G. Berry	26 5 0
Dec. 31.	By Balance carried down	35 4 4
		£87 14 4

Hastings Fund.

£477 invested in 4 per cent. London and North Western Railway Debenture Stock, in the name of the British Medical Association.

1886.		£ s. d.
Dec. 31.	To Cash. One year's Interest on £477	18 10 6
	,, Balance carried down	57 17 10
		£76 8 4
1886.		£ s. d.
Jan. 1.	By Balance	76 8 4
		£76 8 4

We have examined the foregoing Accounts with the Books and Vouchers of the Association, and find the same to be correct.

April 7th, 1886. PRICE, WATERHOUSE & Co.,
44, Gresham Street, London, E.C.

NOTICE OF QUARTERLY MEETINGS FOR 1887. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Meetings of the Council will be held on July 13th and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, June 23rd and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary*.

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE, and on the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE, are now closed.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, and HABITS OF INTEMPERANCE, a full Report on OLD AGE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 429, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

SOUTH-WESTERN BRANCH.—Preliminary Notice.—The annual meeting of the Branch will be held at the Athenæum, Plymouth, on Wednesday, May 18th, 1887, under the presidency of Paul Swain, Esq. Members who propose to read papers, or to bring forward communications or motions, are requested to intimate the same to the Honorary Secretary without delay.—P. MAURY DEAS, Honorary Secretary.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The spring meeting will be held at the Freemasons' Hall, Queen Street, Neath, on Thursday, April 28th. Members wishing to read papers or to make communications are requested to send to one of the Secretaries before April 13th. Further particulars in circulars. ALFRED SHEEN, M.D., Cardiff, and D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of the above district will be held at the Hospital, Gravesend, on Friday, April 29th, at 4 P.M., C. J. W. Pinching, Esq., in the chair. The dinner will take place at the New Falcon Hotel at 6.30 P.M., charge 6s. 6d., exclusive of wine. Gentlemen who intend to dine are particularly requested to signify their intention to the Chairman, C. J. W. Pinching, Esq., 76, New Road, Gravesend, not later than April 27th. All members of the South-Eastern Branch are entitled to attend this meeting, and to introduce friends. Papers to be read:—1. Dr. Firth: On Pyæmia. 2. R. J. Bryden, Esq.: Two Complicated Cases in Midwifery Practice. 3. Dr. Goodhart: The behaviour of Fluid in the Pleura, and the Treatment of Empyema.—A. W. NANKIVELL, Honorary Secretary of District.

METROPOLITAN COUNTIES BRANCH: NORTHERN DISTRICT.—The next meeting of this district will be held at the Deaconesses' Institution and Training Hospital, Tottenham, on April 28th, at 8 P.M., when the President of the Branch, Dr. Bristowe, will deliver a clinical address. Dr. Ogier Ward will also read a paper on the Treatment of Diphtheria. A discussion may follow. All medical men are invited.—GEORGE HENTY, M.D., Honorary Secretary.

OXFORD AND DISTRICT BRANCH.—The next ordinary meeting will be held on Wednesday, April 27th, at 8 P.M., at the Radcliffe Infirmary. Members who wish to read a paper or show cases are requested to notify their intention to one of the Honorary Secretaries on or before April 19th. Members wishing to dine after the meeting (6.30) must send in their names on or before Tuesday, April 26th.—Dr. DARBISHIRE, 60, High Street, Oxford; W. L. MORGAN, Esq., 42, Broad Street, Oxford.

SOUTHERN BRANCH: ISLE OF WIGHT DISTRICT.—The annual meeting of this Branch will be held at Sandown Bay Hotel, on Thursday, April 28th, at 4 P.M., David Lloyd, Esq., President, in the chair. Agenda: 1. A report of the proceedings of the district during the past year, by W. E. Green, Esq.; 2. An address by the President-elect, J. M. Williamson, M.D.; 3. Election of Officers and Statement of Accounts; 4. Next place of Meeting; 5. Removal of Lipoma of Neck, by Surgeon R. W. Barnes; 6. A case of Peri-hepatic Suppuration Cured by Free Drainage, etc., by T. A. Buck, M.B.; 7. Short Notes on an unusual Fracture of the Os Calcis, by W. E. Green, Esq. Gentlemen who are desirous of introducing patients, exhibiting pathological specimens, or making communications, are requested to signify their intention at once to the Honorary Secretary. Dinner at 6 P.M., charge 6s., exclusive of wine. Members to send in names before April 26th.—W. E. GREEN, Honorary Secretary.

BATH AND BRISTOL BRANCH.—The fifth ordinary meeting of the session will be held at the Museum and Library, Bristol, on Wednesday evening, April 27th, at half-past seven o'clock precisely, C. Gain, Esq., President. The following communications are expected: 1. The Bath Waters and Arsenious Acid, by Pagan Lowe; 2. A Case of Hypertrophic Paralysis, the patient to be exhibited, by C. A. Wigan, M.D.; 3. Stricture of the Urethra, with Cases treated by Lister's Bougies, by W. J. Penny; 4. The Treatment of Incomplete Abortion, by A. E. Aust Lawrence, M.D.: 5. A Case of Superfœtation, with Specimen, by J. A. Barton, M.B.; 6. A Case of Myxœdema, the patient to be exhibited, by J. H. Wathen; 7. Cases illustrating the Antipyretic and Antiseptic Treatment of Phthisis, by W. H. Spencer, M.D.—E. MARKHAM SKERRITT and R. J. H. SCOTT, Honorary Secretaries.

YORKSHIRE BRANCH.—The spring meeting will be held at the Queen Hotel, Harrogate, on Wednesday, April 27th, at 3 P.M., when the following papers will be read. 1. Mr. McGill: Suprapubic Cystotomy in cases of Enlarged Prostate. 2. Dr. A. Orlando Jones: On Sulphur (withdrawn). 3. Mr. H. B. Hewetson: Diagnosis and Treatment of Vertigo; (*a*) arising from defects in the eye, (*b*) from the ear. 4. Mr. J. F. Horne: A Case of Hydrophobia. 5. Dr. Braithwaite: Two Cases of Vaginal Extirpation of the Uterus for Cancer. 6. Mr. A. W. M. Robson: A series of Cases illustrating the Radical Cure of Hernia. 7. Dr. W. R. Thomas: On a Case of Paralysis of Both Arms, brought on by severe Exertion. 8. Dr. E. H. Jacob: Syphilitic Disease of the Pharynx. 9. Dr. J. W. Eastwood: A Case of Melancholia with peculiar Delusions. 10. Mr. W. H. Jalland: A Case of Poisoning by Chloride of Zinc, with absolute Destruction of the Stomach. At no meeting but the annual will dinner be ordered by the Secretary of the Branch; but the Manager of the Queen Hotel, Harrogate, will provide dinner for those members who wish to dine on receiving notice from them.—ARTHUR JACKSON, Secretary.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.

A CONJOINT meeting of the members of the above Districts was held at the Grand Hotel, Brighton, on Wednesday, March 30th, 1887, Dr. Ross in the chair.

Next Meeting.—It was decided to hold the next meeting at East Grinstead in May.

State Honours to Medical Men.—The Honorary Secretary read a letter he had received from Mr. Cureton, Honorary Secretary of the Shropshire and Mid-Wales Branch, asking that the feeling of the meeting should be ascertained as to State honours to medical men, and suggesting that a memorial should be sent to the Prime Minister, as had lately been done by the Shropshire Branch. It was thought that the subject should be brought before the Branch or Branch Council, as District meetings could hardly take any action.

Representative on Council of Association.—Mr. G. F. HODGSON, of Brighton, was nominated to represent Sussex on the Association Council.

BRITISH GUIANA BRANCH.

A VERY successful meeting of this Branch was held at the Public Hospital, George Town, on Thursday, March 24th. Nineteen members were present.

Dr. WILLIAMS, the Acting Surgeon-General, took the chair, and after the usual formal business, Dr. WALLBRIDGE moved the following resolution, which was carried unanimously:

"That this being the first public meeting of the medical profession since Dr. Grieve's departure from the colony, the meeting desires to record its deep sympathy with Dr. Grieve in regard to the unfortunate accident which befell him whilst in the active discharge of his duties, and also the earnest hope that he will soon be restored to health, and enabled to resume his important position as head of the medical service and head of the medical profession in British Guiana; and further, that the Secretary be requested to forward a copy of this resolution to Dr. Grieve."

A letter from the Editor of the JOURNAL was read, asking for a summary of the proceedings. It was decided to publish, for the use of the members, the transactions of the Branch.

The following gentlemen were elected members of the Branch: Drs. Ozanne, Fernandes, Bezbarva, Wilts, Winter (Army Medical) Pentland, and D'Aguiai.

It was decided to hold the next meeting early in July.

SOUTH MIDLAND BRANCH.

A COMMITTEE meeting of the above Branch was held at Northampton on March 31st.

New Members.—Five gentlemen were proposed and elected new members of the Branch; namely, Mr. Audland and Mr. Thompson (Northampton), Mr. De'Ath (Buckingham), Mr. Kingcombe (Towcester), and Mr. Macgillicuddy (West Haddon).

Travelling Expenses of Representatives on Council.—The SECRETARY

announced that he had received forty-two distinct replies to the ninety-four circulars he had sent out to the members of the Branch. A considerable majority of the replies were in favour of the travelling expenses being paid partly by the parent Association and partly by the Branches; the latter, when within 100 miles of London, to pay their own expenses; the parent Association to pay the difference in cost beyond that limit in the case of the more distant Branches. Much discussion ensued, and ultimately it was resolved, on the motion of Dr. BUZZARD, seconded by Mr. BULL, that the Secretary be directed to send up all the replies received to the General Secretary.

Communications from other Branches and Societies.—Circulars were received from the Metropolitan Counties Branch concerning the action of the Royal Colleges of Physicians and Surgeons towards the Apothecaries' Society; from the Association of General Practitioners; from the Manchester Medico-Ethical Association (with resolutions) on the subject of Coroners' Inquests; and from the Parliamentary Bills Committee concerning the claims of Brigade-Surgeons in India. The Secretary was requested to acknowledge receipt of the same, no resolutions being passed.

Election of Officers.—The Committee of Management (the name of Mr. Bull being put in the place of that of Mr. Spurgin) and all the other officers were re-elected.

Election of President.—Mr. Spurgin (Northampton) was elected President for the current year, and Mr. H. Veasey (Aspley Guise) President for next year.

Places of Meeting.—It was resolved that the next annual meeting be held at the Northampton Infirmary in the month of June, and the next autumnal meeting at Daventry in the month of October. It was further resolved that the annual meeting next year should be held at Bletchley.

Vote of Thanks.—On the motion of Mr. TERRY, a vote of thanks was accorded to the President for his conduct in the chair.

SPECIAL CORRESPONDENCE.

A WINTER TRIP TO "THE FORTUNATE ISLANDS."

I.

The Theory of Winter Holidays.—Reminiscences.—Recollections of Madeira.—Life on Board Ship.—The First Sight of Land.

Mr. ERNEST HART writes to us from Madeira, under date of March 19th (in a letter of which the delivery has been delayed):—

There are few Englishmen who would not willingly free themselves from the fetters of an arbitrary fashion and seek summer climates and sunny gardens in December, if the curious conventions of custom did not bind them by professional duties to the fogs, frosts, and east winds of winter, and bid them seek their holidays in autumn, when English landscape is most lovely, and even towns are tolerable. Perhaps, one day, when grouse, partridges, and foxes are less exclusively the idols, tyrants, and favourite victims of the sportsman, and when "the season" is less arbitrarily governed by traditions which have long failed to be reasonable, winter holidays will cease to be difficult and exceptional, and we shall learn, all of us, to wander in the winter, and to stay at home in the summer and autumn, when our own country is incomparable. Happy now are those whom imperious reasons of health or a capacity and opportunity for defying conventions drive or entice to the South during the snows of an English December, or pending the easterly gales which make March a terror and a scourge to the invalid in Great Britain. Excusing myself on both grounds, I am now steaming to Orotava.

In former years I have tested the climatic characters and enjoyed the peculiar pleasures of sea-journeys in the Mediterranean in the winter season, and have basked with a never-ceasing and long-remembered sense of enjoyment among the sunny hills of Mentone, the orange-gardens of Cannes, the olive-groves of Corfu, the hills of Posilippo, the bay of Baiæ, the shores of Sorrento, the flowery gardens and peerless galleries of queenly Florence. I have, while fleeing from the severities of the winter or early spring of England, enjoyed the carnival at Nice; lost myself in the marvels of Pompeii and the secular glories of Rome; dreamed on the Acropolis; slept beneath the shadow of the Sphinx; camped beneath the Pyramids; scrambled into the Serapeion; tramped through Memphis; and explored the wadys of the Lybian Desert under the guidance of Schweinfurth. Such holidays live in the memory while life lasts. The pictures of scenes which are among the most beautiful and sublime in Nature and the most noted in history remain engraved on the tablets of the mind; only to write the names or to speak the words evokes now and ever afterwards recollections which are an abiding joy. Each visit is an education; each holiday fills a treasure-house of historic and artistic impressions, which remain a possession for ever. These holidays are only possible and can only be really enjoyed in winter. I have rarely allowed myself more than six weeks', or at most two months', leave of absence; this time I can permit myself only a month. But in a few weeks how much can now be seen and enjoyed, without hurry or discomfort, and without effort or anxiety! A month on the Riviera may mean a visit to Cannes, or Nice, Mentone, Bordighera, Alassio, Hyères, Genoa, Spezia, Florence, or all of them. Six weeks' holiday will unfold to you the oriental splendour of Egypt and Constantinople, and, if you please, bring you home coasting the Greek islands, through Corfu, and with a glimpse of Naples. Six years ago I had but a fortnight to spend at Easter in holiday-making, and we spent it in a visit to Madeira, exploring the island, and returning to London on the fourteenth day, to which date I was restricted by an important engagement. What a holiday it was! I am reminded of it now, because our first port will be Madeira; and as all the delights of that brief fortnight rise before my mind I feel that I shall be sorely tempted to renew them, to stay at least for some days in Madeira. I remember well the astonishment which friends at home felt whom I met again on the pre-arranged fourteenth day after quitting them (without notice of our intermediate holiday), that it should have been possible to spend meantime a whole week of that dreary spring amidst bananas and sugar-canes, among masses of roses and camellias blooming in the open air, plucking orange-blossom, and passing from valley to peak in an everchanging flora as we ascended the volcanic hills or descended to the vales beneath. At the foot was a paradise of sweet-scented flowers and blossoming trees; a little higher the geranium and the fuchsia flourishing as road-side hedges; still higher the lime, oak, and til-tree; and presently heather and mossland; and then again we descended to the regions of the semitropical plantations, but always in a mild and gentle air and among landscapes and with sea-views of surpassing picturesqueness and beauty. Invalids confined to the comparatively limited amphitheatre of Funchal—where the streets are steep, the air mild, moist, and somewhat enervating—rarely enjoy, and therefore seldom report, the striking beauties and the more robust pleasures of a journey across and around the Island. It is not much larger than the Isle of Wight, but its lofty volcanic hills, wooded to the very peaks and clothed with a wealth of flowers from the base to near the summit, are rich in rare surprises. They are accessible by steep and narrow paths, which can only be traversed on the little surefooted horses imported from Spain, on foot, or in hammocks; these paths climb sometimes almost perpendicularly along the edges of precipitous rock overhanging the sea; and it needs at first the reiterated assurances of the guides and a confidence, quickly acquired, in the sagacity and surety of the clever little barbs to feel at ease. They tread the overhanging precipices and pace along the rocky steps cut in the climbing tracks along the rocky edge shelving over the sea with an unerring step which soon removes all apprehension. And so for days you travel through scenes of wild and sometimes terrifying grandeur, along narrow necks of rock overlooking gloomy *corrals* of two and three thousand feet in depth; along the edges of *levadas* which collect the mountain streamlets into fertilising aqueducts to irrigate the parched vales below; through forest, across heath, and into smiling vales, with views of infinite variety, beneath a sky mostly blue and illuminated by golden sunlight, and looking across a sea which, even in the winter, has the characters of the azure Mediterranean.

These are the recollections of Madeira which rose freshly in the memory as my wife and I stepped on board the good ship *Niger* in which the African Steamship Company bore us from the gloomy sky, the cold cutting winds, and frozen snow which on that twelfth day of March made Liverpool deeply dismal, and doubled the pleasures of anticipation of the sunshine and soft airs of the semi-tropical islands of the Atlantic. Not that Madeira is always free from rain; its rainfall in March is sometimes considerable, but from October till May you can always count upon an equable temperature, and weather at least as fine as a favourable June in England, and scenery which is among the most varied and attractive in the world. The hotels, too, are excellent, and the Santa Clara, at Funchal, is a delightful house, excellently managed, and where the manager has achieved the enviable reputation of being the friend, guide, and watchful helper of every invalid, and the ever-obliging host and adviser of the tourist. It is certain, then, that we must find time, if possible, to stay awhile at Madeira, for how many friends did we find and make among the hospitable residents in that island? And chief among them the well-known Dr. Grabham, whose accomplishments as a botanist and meteorologist rival his experience as a physician and his ready kindness as a friend.

But only a short stay, for this time we are bound for a more dis-

tant part; our destination is the Canary Islands, and chiefly Orotava. What a vista of pleasant anticipation the name opens! It has a tropical, wild, and far-off sound. The Canary Islands are the "Fortunate Islands" of the Greeks, the Gardens of the Hesperides, the Atlantides of Plato, the Elysian Fields of Homer, "where," he says, "the sharpness of winter is not felt, where the air is always pure, and freshened by the ocean breezes"; the Gezayrah Khaledat, or Happy Islands, of the Spanish Moors. These were supposed to be the "end of the world," the land of the evening, according to Hesiod; "the land of the setting sun, where the sun sinks into the sea, where night brought forth the Hesperides, who guard the golden apples." These golden apples, now the famous Canary oranges, are objects of daily commerce, and the end of the world is only four or six days from the English shore, according to the route you choose. We are on the way to it, and we have chosen the six-day steamer because to me, and fortunately to both of us, there are no holidays so dear, no peace so perfect, no journeys so enjoyable, no rest so redolent of health as our holidays at sea.

That is an article of the holiday-maker's creed which I hold firmly, and which I think very worthy of medical acceptance. There are, of course, those who are afflicted with stomachs so weak and nerves so irritable that the mere suffering of sickness mars the merry movement of the sea, and belies with moaning weariness the buoyant bounding of the ship as it breasts the waves, and speeds across the Atlantic. Some pay a passing tribute to Neptune of temporary trouble, and soon emerge to the full enjoyment of the pleasures of the deck. Where else than on an ocean-ship can you enjoy the sense of never-ceasing progress with continuous rest; idling and contemplating in peace and pleasure amid a scene of majestic motion, with all the freedom of isolation and the liberty which belongs to solitude, a spectator and not an actor, with no part to play; free from the fetters of the fidgetty drama of city life, and at liberty—nay called upon—only to be and not to do? No abstract philosophic determination can work so complete and restful a change in the mental attitude as is wrought by mere force of physical surroundings in a sea-voyage. The ship is an island, and you are cast away on it. The instruments of progress with which we fortify our civilisation and torture ourselves—the post, the telephone, the telegraph—are no more. With the first movement of the keel they have been annihilated. Society, with its triumphs, its plagues, its aspirations, its weary wickedness, its self-sacrifice, and its labours is cut adrift; responsibilities are no more; you are powerless to affect others. On board ship your life is subjective; you are a unit, self-contained, and not called upon to receive or to radiate. These mental conditions, of which everyone is dimly sensible, are most favourable to the physical conditions. The pure, aseptic air, the equal temperature, the abundant ozone, the salt sniff of the waves, the unobstructed radiant sunshine, the laughing and dimpled surface of wave chasing wave, present from day to day elements of health and happiness which make a holiday at sea, to those who are mentally and physically capable of enjoying it, the most recreative and blessed period of repose. This we are now enjoying once more. For four days we have traversed the Atlantic under the happiest auspices; on the first day the shade temperature of the air at nine in the morning was 45° F., and 43° at ten at night; next day it rose to 52°, and since it has stood at 60° to 62°. We have had our usual fortune of fine days and lovely nights; once or twice a shower, chiefly at night; some hours of cloudy, grey sky, enough to enhance by comparison the rays of sunlight growing continually more bright; a little rolling, sufficient to keep us lively; but a voyage of unmixed pleasure—with a happy ship's crew and a captain whose main pleasure was the harmonious happiness of his passengers. And now Madeira is in sight, and I must finish this letter.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Statical Electricity in Hysteria.—Beri-beri.—Prevention of Accidents from Electrical Machinery.

In the *Progrès Médical* of February 19th, 1887, M. Blanc-Fontenelle publishes several observations on the effects of statical electricity in certain manifestations of hysteria, particularly anæsthesia, contractures, and muscular weakness. A Voss machine was used, and the patients were placed in groups of three or four upon the insulated stool. The duration of each application was from fifteen to forty minutes. In several of the patients affected with total or partial anæsthesia this rapidly restored the parts to their normal sensibility. In some the application was followed by a slow and gradual return to normal sensibility after several sittings, while in others it had no effect whatever. Complete removal of hemi-anæsthesia was obtained in all cases in which this symptom was plainly marked; and the patients who complained of weakness, in many instances, gained a certain amount of strength. In none of these cases, however, was the effect lasting. The application produced no effect on the hypnogenic and lethargogenic regions in any of the patients examined; these regions were as active after electrisation as in the normal state. This was not the case as regards the spasmogenic regions, which were greatly affected by the application; they generally disappeared entirely, but unfortunately this effect was of very short duration, varying from a few hours to eighteen days, at the end of which they recovered their activity, if a fresh application was not made. Statical electrisation weakened the "diathesis of contracture," and sometimes caused it to disappear entirely. In some of the patients it was impossible to produce contracture, whatever means were employed, after five or ten minutes' electrisation, while in others contracture would always be produced, but in such cases it almost immediately disappeared. In this way spontaneous contractures, following convulsive attacks, were cured in several cases, but no result could be produced in chronic contracture. Contracture induced during hypnotic sleep likewise disappeared under the influence of statical electrisation. It was found impossible to electrify the patients when under the influence of hypnotism; whilst in that condition electrisation invariably threw them into convulsions. The effect of the application under such circumstances was so great that suggestion itself was powerless. The general state of the patients was much improved after electrisation; the convulsive attacks became less frequent, the appetite returned, digestion became easier, and the patient's spirits improved.

Dr. Villette has been making investigations on the subject of beri-beri. The following are his conclusions: 1. The disease is most common among prisoners or in persons under similar conditions. 2. It is contagious and endemo-epidemic. Its origin is obscure, but probably depends on insufficiency or faultiness of nourishment. 3. There are three forms of beri-beri; the paralytic or atrophic, the hydropic, called also hydræmic or œdematous, and the mixed form. 4. These forms are dependent on an acute myelitis, which reacts on the motor nerves, causing paralysis and atrophy, or on the ganglionic system, causing œdema through vaso-motor paralysis; it sometimes acts on both these systems, producing thereby the mixed form. Beri-beri is thus a distinct affection in which every form of treatment has hitherto failed. Prevention alone is of any avail. As soon as the disease declares itself, the patient should be isolated, under good hygienic conditions.

At a recent meeting of the Paris Biological Society, M. d'Arsonval communicated the result of an inquiry into the causes of the danger of accident to the workmen employed in the manipulation of dynamo-electric machines. According to him the danger in such cases arises solely from the self-induction resulting from the construction of the machine, and not from the tension or intensity of the current. In machines in which the current is continuous, there is danger only at the moment when the current is interrupted, as an extra current is then produced, and it is to this that the accidents must be attributed. M. d'Arsonval has devised a simple arrangement by means of which any accident from this source may be effectually prevented. It consists of a stopcock of glass, or stoneware filled with mercury, the latter being placed in the circuit. On turning the key the column of mercury is gradually divided, thus avoiding too sharp an interruption of the current. In machines with alternating currents the danger is much greater, and M. d'Arsonval confesses his inability to devise a means of effectually preventing it. He asserts, however, that in nearly every case in which an animal was struck down by a current from one of these machines, he was able to restore animation by means of artificial respiration, and he recommends this mode of treatment in all cases of such accidents occurring in man.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

Epidemic of Measles.—The Foundling Hospital.—The New Infirmary.—The Infectious Diseases Hospitals at the South-End.

For some considerable time past serious outbreaks of measles have been reported from places near Liverpool. Garston has especially suffered, so much so that some of the public elementary schools have had to be closed. The disease has also shown itself in the suburbs; and, during the last few weeks, the number of cases in the city has been steadily increasing. For the week ending March 19th the death-rate of Liverpool was 26.5 per 1,000, with 20 deaths from measles, or 13 above the average. For the following week the rate of mortality was 28.6, with 33 deaths from measles, or 25 above the average. And for the week ending April 9th the death-rate was 28.5, with 38 deaths

from measles, or 29 above the average. This last is the largest number of deaths from measles that has been reported in the Corporation books for the past forty years. During March 788 cases of measles were reported, of which 107 died; and since the commencement of this month, or, from April 1st to 15th, 472 cases have been reported, of which 70 have died. The disease is of a peculiarly severe type; and an unusually large proportion of cases have occurred in adults. There is no hospital accommodation here for measles; and, probably, the only effectual method of dealing with the epidemic would be to close the schools.

The new Foundling Hospital has had its first annual meeting. The institution has been at work for nine months. Very wisely the promoters of the charity have commenced in a modest way in a house in Upper Parliament Street, with accommodation for twenty infants only. The hospital is conducted on the same principles as those that guide the governors of the London Foundling Hospital, and it is confidently expected that the movement will meet with general support.

Work in connection with the rebuilding of the Royal Infirmary has been commenced, and is being actively carried on. The Lock Hospital, which is situated opposite University College, has been closed, and is undergoing alterations with a view to the reception of medical cases whilst the old Infirmary building is being demolished. Sheds for surgical cases are also being erected, and the arrangements for properly carrying on the work of the hospital during the alterations will be very complete.

The new hospital for infectious diseases at the south end of the city will be immediately commenced. Dr. Hope, the Assistant Medical Officer of Health, and Professor of Hygiene in University College, has been appointed Visiting-Physician to the City Small-pox Hospital.

CORRESPONDENCE.

THE CONJOINT SCHEME FOR IRELAND.

SIR,—The JOURNAL of April 16th contains a reply to my letter of April 2nd; the signature is not that of the "Fellow;" the hand may be that of an Esau, but the voice is the voice of Jacob still. The letter is a long one, but multitude of words will not always conceal the weakness of a cause. In paragraph 2 the writer asks, Why are so few of the Hall examiners—for it is with the vilified examiners we have here to do—content with the mystic letters L.A.H. after their names? I ask, Why are so many medical men in England at this moment anxious to place the letters M.D. after their names? Did the College, some few years since, induce a number of medical practitioners to take out the College licence, under the promise that these practitioners could add the mystic letters M.D. to their other qualifications? If so, the College misinterpreted their own Act or charter; and where was then their superior knowledge and boasted wisdom? In the same paragraph we see an opportune specimen of College statistics. One of the examiners only is said to be a Licentiate of the R.C.S.I., and two to be Members of the R.C.S.E. Turning to the Register of the Medical Council for 1886, I find that four are Licentiates of the R C S.I., one of these being also a Fellow; and that three are Members of the R.C.S.E. "Eleven of the fifteen directors hold Scotch or English qualifications; those given by the universities north of the Tweed being special favourites." In a former letter general practitioners were insulted, now Scotch and English qualifications are sneered at. Paragraph 3 states that the first half of the examinations for the licence of the Hall is not now recognised by the College, and that it was through an oversight in the wording of one of the regulations that it had been formerly recognised. This may be clever logic. It was recognised for years up to the middle or end of last February; and possibly ceased then to be recognised, as I have been informed on unquestionable authority, by a special resolution of the College. "Equally erroneous is the extraordinary statement that apothecaries were informed that they might become Licentiates of the College, and continue to keep open shop for the sale of medicines." My answer is that the statement was correct, and can be proved to be so.

In my former letter I stated that the number of Hall Licentiates residing in Ireland is about three times larger than that set down in the "statement." This is designated a "reckless assertion." A member of the Hall, not long ago, carefully investigated this subject. The result of his researches was that there were then about a thousand Hall Licentiates resident in Ireland. I have shown that the College statistics are "reckless" and unreliable. The assertion that the legal opinion of so eminent a lawyer as Sir Joseph Napier "is ridiculous" carries its own refutation. I did also state in my previous letter that the arguments of the College to nullify the force of Irish and Imperial Acts of Parliament, which recognise the medical status of the Irish Apothecary are "simply absurd." The arguments are two: That "prior to 1754, there were neither apothecaries nor surgeons properly so-called in Ireland." That "prior to 1851 the number of properly qualified practitioners in Ireland was extremely few." The Act of 1791 was passed at the prayer of "the Master, Wardens, and Commonalty of the Corporation of Apothecaries, and other Apothecaries of the City of Dublin." The implication is that these apothecaries were general practitioners, and that they prayed for an Act which would reduce them and their successors to pharmacists. The second argument also implies that the Irish apothecary prior to 1851 was a medical practitioner, only not "properly qualified." The intention of the College is to prove that the apothecary is a pharmacist only; therefore the arguments are absurd for the purpose, and offensive to apothecaries and other medical practitioners not Licentiates of the College.

An Irish conjoint scheme, including the three corporations alone, was agreed to in 1872-74, with "the full consent of the College of Physicians," but failed in consequence of monetary disagreements between the Colleges. I have read the concluding portions of the reply. Some have been answered in my previous letter; respect for the body with which I am connected precludes any further notice. In closing the correspondence on my part, I have to express my regret at having been obliged to use the word "College" apparently in its collective sense. I am, however, enabled to hope that the unprovoked animosity and unfairness with which the Hall has been assailed have been the work of a few over-zealous members of the College Council. The matter is now in the hands of the General Medical Council; and when the future position of the Hall is defined, its governing body will, I trust, be enabled faithfully to discharge whatever obligations may be imposed on them.—I am, etc., M.D.

Dublin, April 18th, 1887.

PAYMENT OF TRAVELLING EXPENSES OF BRANCH REPRESENTATIVES ON THE COUNCIL OF THE ASSOCIATION.

SIR,—The proposal for the payment of the travelling expenses of Branch representatives on the Council is far too important to be considered in the light of "estimated cost," in which it is represented by Mr. Dix in the JOURNAL of April 16th.

On more than one occasion it has come before the Council of the South-Eastern Branch, and met with a decided negative. A leading and hard-working member of the hierarchy of the Association remarked on one occasion that "the South-Eastern Branch is always sound in its opinions;" and we owe this praise in no small measure to the way in which our Branch representatives have performed their duties. Always ready to spend and to be spent in our service, our experience shows the question of payment to be entirely unnecessary. Of the general question of paid representation, to which this measure, if adopted, would lead, all history writes a condemnation. The French and American Houses of Representatives, and the compact body of Irish (whose social position classes them necessarily as paid representatives), who make night hideous in our own House of Commons warn us of the folly of committing ourselves to any step which might lead to this.

As medical men generally we are considered unbusiness-like. Surely it would be fulfilling our repute in this respect if we endorsed a system of payment for that which we can get done by better men without payment. The attendance of distant members involves, in the case of successful and working members of our profession, a far greater sacrifice than that of the travelling expenses. It is eminently undesirable that our representation should fall into the hands of others than those whose success, and with it the capabilities of affording the outlay, has given proof of skill in managing their own affairs, and presumptive proof that they will best manage ours. In the event of local conditions rendering it necessary that a Branch should be represented by a member unable to bear the travelling expense, it were better for this to be borne by the Branch itself than to make a general rule which, in the opinion of many, would degrade the position of all our representatives.

In every Branch there are some members able and willing to act as representatives and cheerfully bear all the sacrifices of time and money involved in so doing. No statistics of attendance quite fairly represent the capability of attendance, as, let the occasion arise when the particular Branch, honoured by breach of attendance, is warmly interested and the man will come with it. If he has not hitherto attended, it only shows how strong is the faith in the care of other representatives to work for the common good and look after the interests of the absent. As to the representatives, if they are of

the class which I believe they ought to be and are, each one would say to this proposal, "Timeo Danaos et dona ferentes."—I am, etc.,

JOHN H. GALTON, M.D.Lond.

Sylvan Road, Upper Norwood, S.E., April 18th.

A SUGGESTED ADDITION TO THE SCIENTIFIC VOCABULARY.

SIR,—The absence of a word in our language which shall run on all-fours beside the words Will and Intellect has been lately adverted to in the journal *Mind* (January, p. 49, note). This is a want which concerns medical men (alienists, in particular) equally with psychologists. The word I propose to fill the gap is Psychique (formed on the analogy of Physique), already provided with a correlative adjective in "psychical," which marks, pretty accurately, its range. The use of these words is calculated to introduce more order into the symptomatology of those physical diseases in which the mind is affected—for example, Hysteria and Epilepsy; while I trust it may initiate a reform in the nomenclature of the Mental Diseases. "Intellectual Insanity" and "Moral Insanity" are not congruent conceptions, although the affections indicated by them are in a certain way parallel. Intellectual Insanity is Insanity of the Intellect. The other Insanity should, similarly, designate a factor of the mind—the Psychique, as I propose—and should be called Psychical Insanity. This would be a much better representative of the German *Gemüthwahnsinn* than our clumsy Moral Insanity. It is bad policy to use up our attributives in naming, when we shall want them subsequently in describing, disease. And this, especially when they do not illuminate, but confuse matters.

Intellect, Psychique, Will, I propose to call "Prime Factors" of Mind. The phrase is suggestive of synthetic unity rather than of analytical separateness—such suggestion, I think, being eminently desirable in psychological nomenclature.—I am, etc.,

GEORGE PAYNE BEST, B.A., M.B.Cantab.

DISINFECTANTS AND THEIR USES.

SIR,—In your annotation of my address to the "Public Sanitary Inspectors," in the JOURNAL of April 9th, there are two references which may mislead if not explained. The microbes which spread small-pox will in ordinary instances lose their vitality in the air in much shorter distance than "100 yards" when they have been detached from feverish patients. It is only when they are dormant, or in a condition in which the active agency of life is suspended, that they may be wafted some distance and retain their vitality.

As to carbolic acid, I did, and do, recommend it as destroying the living growing germs; but I stated that in dilute solutions it had no destructive effect upon the dormant spores, that something more than carbolic acid is necessary to effect this object and that the over-advertised nostrums wh ch are being pushed by manufacturers are not able to put an entire stop to infective agencies; nay, they are assisting to preserve the dormant seeds from decay, so that in such cases, when trusting to such, we are trusting to broken reeds.

The impudence of some manufacturers is very mischievous. Since I gave that address I have been threatened with legal proceedings by some for presuming to offer such advice, because (say they) it is calculated "to injure their trade." Manufacturers who take such a course are utterly unworthy of support at the hands of medical men. I have advised those who menaced me with legal proceedings to apply for an injunction to stop certain experiments which are being made, because the result may bring discredit upon their published statements and damage a trade which at present is assisting to preserve the germs of disease in a dormant state, instead of destroying them for ever. At the same time, I am ready to acknowledge the great assistance we receive from manufacturers such as Calvert, who honestly assist to promote good works and destroy infection, without bluster.—I am, etc.,

ALFRED CARPENTER.

Duppas House, Croydon, April 18th, 1887.

J. WEYER AND REG. SCOT.

SIR,—In his notice of the life of Weyer by Professor Carl Binz, your reviewer says, "Whether Scot was acquainted with Weyer's writings we cannot say." He was; he quotes him and his book by name, and, as I have shown in my recent reprint of Scot, he copies him not infrequently. At the same time it should be stated that, while he borrows, he borrows mainly a varied list of illustrative charms and the like. Hence, and from circumstances set forth in my introduction, I am led to believe that Scot was not a mere follower of Weyer, but an independent though slightly later writer. While also Weyer may have had, and had, "a clear appreciation of the physiological"—or rather psychological—"and medical side of the case," I would add that Scot had as clear a knowledge on these points, besides that his grasp of the question of witchraft and his confutation of it were, in the words of my friend Professor W. T. Gairdner, more thorough-going. He was, in fact, a man of greater mental calibre, though the independence and right reasoning of both, when prejudice was so excited and so universal, are to be reverenced and wondered at.—I am, etc.,

BR. NICHOLSON, M.D.

South Norwood.

ANOTHER UNFOUNDED CHARGE AGAINST A MEDICAL MAN.

SIR,—In the JOURNAL of March 5th you called attention to an instance of those vexatious charges to which medical men are exposed. In this case (Lennard *v.* Lennard, Brown, and Allatt) an attempt was made to prove adultery against, and to obtain damages from, a medical co-respondent. This attempt broke down completely, and Mr. Brown was absolutely exonerated both by the summing-up of the judge and by the verdict of the jury. The judge, in dismissing Mr. Brown from the suit and ordering the petitioner to pay his costs, said that the case as against Mr. Brown was a most unfounded one, and ought never to have been brought. Mr. Brown has been unable to obtain any portion of his costs, amounting to £160 18s. 11d., the petitioner being without means.

We think the case is one in which other practitioners may be fairly asked to assist Mr. Brown in bearing the expenses which have thus been forced upon him. In resisting the attempt to obtain money from him, he was fighting the battle of the profession as much as his own, and we trust you will render your valuable assistance in bringing this aspect of the case before the profession. Dr. Murray, of Meadowside, Upper Richmond Road, Putney, will be glad to receive subscriptions towards a fund for the purpose.

ROBERT BARNES,
SYDNEY JONES,
W. H. BROADBENT.

April, 1887.

MORTALITY AFTER PRIMARY LAPAROTOMY IN EXTRA-UTERINE PREGNANCY.

SIR,—Dr. Robert P. Harris in the JOURNAL of February 19th asked me for statistics, and these I refused to give him in a letter addressed to you on March 12th. In that letter I gave my reasons for so refusing. Now he says that I am endeavouring to keep a secret from my professional brethren which I have no more right to keep from them than Peter Chamberlen had to hide his forceps. This insinuation is absolutely baseless; for, if Dr. Harris will take the trouble to look through your columns from the year 1874 till now, he will find a number of papers which contain all that I have to tell about the methods of operation. The only thing that is not yet supplied is the complete statistical information which Dr. Harris is anxious to anticipate me in the publication of. Such anticipation I will not permit.—I am, etc.,

LAWSON TAIT.

7, The Crescent, Birmingham, April 16th, 1887.

THE ASSOCIATION OF GENERAL PRACTITIONERS.

SIR,—I hope the above powerful advocate of the rights of the masses will favour us here in Ireland with a meeting next August, on the occasion of the British Medical Association gathering in Dublin. Irish provincials need stirring up, and a little Saxon backbone will do them no harm.—Yours truly,

THOMAS LAFFAN.

Cashel, April 16th, 1887.

PILOCEREUS SENILIS.

SIR,—The *nom de plume* of my late friend, Dr. Walter Moxon, appears to have excited so much curiosity that it may be of interest to your readers to know how and when it was assumed. Its botanical origin has, however, already been correctly traced by Mr. Manley and Dr. Willoughby.

At a time when I was desirous of reviving the somewhat drooping energies of the *Guy's Hospital Gazette*, conducted then as now by students, we spent a day together in the Botanical Gardens at Kew. I had pressed him to write something for the *Gazette*, and, when we entered the cactus house, the comic element of his nature was immediately struck by the wise and antiquated appearance of the hoary-headed cactus *Pilocereus Senilis*. The name was particularly noted, and afterwards became the cloak for his philosophical reflections.

Two other incidents of that visit occur to me, and were somewhat typical of the man. His boyish nature and muscular activity found

vent in a challenge for a foot-race, which we ran off on a gravel foot-path; and his mental side was not satisfied till we had settled on a test for memory—which of us would longest remember the name of the gigantic leafless flower, *Rafflesia Arnoldii*.—Yours faithfully,

R. CLEMENT LUCAS.

FITCH'S DOME-TROCAR.

SIR,—In the JOURNAL of March 5th, Dr. Norman Kerr inquires "Whether it would not be an advantage to have an aperture in the puncturing point of the dome-trocar, so that the operator would at once see fluid escaping when that is reached."

I reply that the dome closing the distal end of the inner tube has generally a perforation in its apex, so that, instantly, as the cutting point enters a cavity containing fluid, some of the fluid escapes through the perforation, showing that the dome may now be pushed forwards, disclosing the large fenestra in the inner tube, and giving free exit to the contents of the cavity. This aperture is clearly depicted in the illustration of the dome-trocar-catheter in the JOURNAL of February 5th, p. 266.

I would add that, for injecting a cavity, an inner tube may be used, with the dome end perforated with numerous small holes, so that the injection shall issue through them in the form of spray. There should not be, however, any aperture in the trocar for transfusion, where, after the instrument is filled from the furnishing vein, the dome acts as an impervious valve at the distal end of the trocar, keeping it filled till after its insertion into the receiving vein, when it is projected, and the communication between the veins established and the entrance of air absolutely prevented.

These and other details were omitted in my paper, in order to bring the reading of it within the time usually allowed by the Association.

In regard to priority of claim for the invention, I beg to state that, in 1871, I had the outer tube made pointed and cutting, and protected it by pushing the blunt inner tube forwards. This first step in the improvement of the trocar is noticed in Sir Spencer Wells's book on *Diseases of the Ovaries*, 1872, p. 336, and in his book on *Abdominal Tumours*, 1885, p. 77, and is the instrument he now uses. In 1874 I made the distal end of the inner tube solid, or covered over by a dome, so as to obviate its sharp edge; and this completion of the mechanism of the dome-trocar, with its adaptation to the smallest trocars for aspiration, was the subject of a paper read by me before the Medical Society of the County of New York, February 9th, 1875, and published in the *New York Medical Journal*, April, 1875.

Further descriptions of the several forms of this instrument and their applications may be found in the *New York Medical Journal* of April, 1875, and November, 1877; in Dr. Roberts's book on *Paracentesis of the Pericardium*, Philadelphia, 1880; and in the *New York Medical Journal and Obstetrical Review*, February, 1882.

—I am, etc.,

SIMON FITCH, M.D.

Halifax, Nova Scotia, March 19th, 1887.

SCOTCH AND IRISH LICENTIATES.

MR. JAMES GILROY forwards the following extract from a letter which he has received from "a much respected official" of the Faculty of Physicians and Surgeons of Glasgow:—

[*Copy.*]

The question which you put to me I take to be this: "Was the Licentiate of the Faculty, as such, entitled to apply and administer as well as to compound and dispense medicines within the territorial limits in Scotland, over which its jurisdiction extended?" To that question I have no hesitation in saying Yes. It is one indeed which was never raised in Scotland, for the reason that no one ever saw cause to dispute the right. The following facts and considerations bear on the points:

1. The ordinary title of the Surgeon-Member and Licentiate was Chirurgeon-Apothecary, latterly modernised into Surgeon-Apothecary.

2. His examination embraced not only questions in surgery and the compounding of drugs, but extended over the field of common medical ailments. The thesis which he wrote was as often, perhaps, on a medical as on a surgical subject.

3. He was the general practitioner of the West of Scotland, his practice including the ordinary run of cases, whether surgical or medical. The physicians were the consultants, and they also attended the medical cases of the well-to-do. This state of matters continued up to the second or third decade of the present century, when the Doctor of Medicine, who had formerly been a pure physician, began to practise as a general practitioner.

4. The right of the Surgeon-Apothecary to practise as a general practitioner was never challenged in the Faculty itself. Had there been any valid ground for doing so, the strong presumption is that it would have been done, as the physicians and the surgeons in the Faculty were extremely jealous in respect of their respective privileges, and were not seldom at war on this account.

5. During the last century, and the first forty years of the present century, the Faculty was involved in a series of lawsuits, first with University Graduates and latterly with the University of Glasgow, in reference to alleged rights of University Graduates in Medicine to practise surgery within the bounds of the jurisdiction of the Faculty. The legal decisions were uniformly in favour of the Faculty, and it is inconceivable that had there been any ground for recriminatory suits that these would not have been raised.

6. In the beginning of the present century the Faculty granted a certificate for druggists in pharmacy, or "pharmacians" as they were called. The latter, however, began under the cover of this certificate to administer as well as dispense medicines, when some of the Surgeon-Apothecaries entered a complaint that their rights were being interfered with, and the granting of the "pharmacians'" licence stopped.

7. Anyone turning over the old records of the Faculty would find that many of the allusions would be meaningless, on the assumption that the Faculty believed that the Surgeon-Apothecary was not allowed to apply medicines in medical cases. The old official Table of Fees bears witness to the fact that he was the general practitioner of the day in the West of Scotland.

8. Under the Scotch Poor-law Act it is not necessary that the medical officer appointed hold what is called a "double qualification." The framers of that Act, acquainted as they were with the condition and mode of evolution of medical practice in Scotland, knew that such a provision was not necessary, the "surgeon," equally with the medical graduate, being a general practitioner.

Other considerations occur to me pointing in the same directions, but I have not time to state them. You will note that I have not looked at the question from the legal, but from the historical, point of view. I am not a lawyer, but I have carefully gone through the whole records of the Faculty of what has actually been the practice.

These observations, Mr. Gilroy points out, confirm what he said "regarding the law, as far as the history of and present significance of the licence granted by the Faculty" are concerned.

INDIA AND THE COLONIES.

INDIA.

LAHORE MEDICAL SCHOOL.—The report of the Lahore Medical School for 1885-6 alludes to the fact that it is no longer restricted to educate its pupils only for the degree of Licentiate in Medicine. Within the past year the school has been raised to the dignity of a college, and it is now in a position to prepare students for the degrees of M.B. and M.D., while additional professors have been appointed. There was a marked improvement in the attendance of the students during the year; there were 91 in the English and 152 in the Hindustan class. Thirteen native and twelve European midwives were instructed by Dr. Elizabeth Beilby, who also taught a nursing class of nineteen ladies and six nurses.

THE SANITATION OF CALCUTTA.—The Calcutta Health Society is doing good work in drawing public attention to the insanitary conditions which prevail in that city. In a little publication issued by the Society it is pointed out that, during the last six years, cholera alone has claimed 24,000 victims in the city and its suburbs, and that this result is directly traceable to the filthy condition of certain plague-spots, to defects in the drainage system, to the want of proper control over the milk-supply, and to the deficiency of the water-supply. Attention is drawn to the enormous infant-mortality, which is mainly due to the ignorant and superstitious practices of the native lying-in room. A meeting was lately held under the auspices of the Society, when the Lieutenant-Governor, who presided, urged the Municipality to spare no pains to remove the causes which rendered Calcutta the home of cholera and a standing menace to the health of the world.

HEALTH OF INDIAN GAOLS.—The health of prisoners in Indian gaols shows marked improvement. In 1885 the daily number of admissions to hospital was 1,014, and the daily sick-rate was 36 per mille, while in the years 1877-81 the admissions were 1,189, and the daily sick-rate 44.9 per mille. The lowest death-rate registered in 1884 was 29.11 per mille, but the average in the years 1877-81 was no less than 63.01. In 1885 the deaths again rose to 33.54, which was lower than that of any previous year before 1883. It is very clear from the returns that the number of deaths in the gaols depends a great deal upon the health of the people outside the gaols. An outbreak of cholera, notwithstanding that all the necessary precautions are taken, will soon be brought into the gaols by some prisoner already affected by the disease outside, and as cholera spreads in the gaols, the annual death-rate at once rises. Thus it appears that in 1884 cholera accounted for only 1.43 of the death-rate, but in 1885 this had risen to 3.44. The same may be said with regard to the outbreak of malarial fevers in the neighbourhood of the gaols, where many of those admitted are suffering from enfeebled constitutions.

SALE OF POISONS.—A Bill has been laid before the Legislative Council for the North-West Provinces for the regulation and control of the sale of poisons. The necessity for such a measure is shown by the statistics of 1885, from which it is seen that in the twelve months to which the report relates the number of reported cases of the administration of poison to human beings rose from a normal average of 24 to 54, and the number of convictions dropped from a normal average of 40 per cent. of the cases reported to 31 per cent. Another class of offences particularly numerous under the present lax system is that of administering poison to cattle with the view of stealing the skins. The number of cases during 1885 amounted to 482.

NAVAL AND MILITARY MEDICAL SERVICES.

THE INJUSTICE OF RELATIVE RANK: OPINION OF LORD DALHOUSIE, LATE GOVERNOR-GENERAL OF INDIA.

LORD DALHOUSIE, when holding the appointment of Governor-General of India, gave expression in a minute upon the Medical Service, appended to the Report of the Parliamentary Committee, to the following forcible observations, which have a particular significance at the present time:

"There are several particulars in which the medical service as a body lies under great disadvantages, and which they regard—justly, in my opinion—as grievances, which ought to be removed. I refer to the inequality which now prevails between the position of the medical officer and that of his brother officers in respect of pension,[1] honour, and rank. I respectfully submit that such inequalities are founded on no sound grounds of justice, expediency, or policy; no valid reason ever has been, or can be, alleged for maintaining them. Their effect is to depress the spirit of the medical officers, to depreciate a profession and class of service which ought to be held in the utmost respect, and supported equally from motives of prudence and gratitude.

"But the most galling, the most unmeaning and purposeless regulations, by which a sense of inferiority is imposed upon medical officers, is by the refusal to them of *substantive* rank. The surgeon and assistant-surgeon rank invariably with captain, lieutenant; but the rank is only *nominal*: whenever medical officers and others are brought together on public duty, the former have no rank at all, and the oldest surgeon on the list must, in such case, range himself below the youngest ensign last posted to a corps.

"It is impossible to conceive how such a system as this can have been maintained so long, on the strength of no better argument than that it has been, and therefore ought to be! It is impossible to imagine what serious justification can be offered for a system which, in respect to external position, postpones service to inexperience, cunning to ignorance, age to youth; a system which gives a subaltern who is hardly free from his drill precedence over his elder; a system which treats a member of a learned profession, a man of ability, skill, and experience, as inferior in position to a cornet of cavalry just entering on his study of the pass and audit regulations; a system, in fine, which thrusts down grey-headed veterans below beardless boys."

THE following telegram has been received during the past week from the Medical Staff at Allahabad: "Medical Staff of India believe honorary rank absolutely necessary for equality with other departments. Relative rank now worthless."

HONORARY RANK FOR MEDICAL OFFICERS.

"MEDICAL STAFF, BENGAL," writes: The question of rank for officers of the Medical Staff, which is now engaging the attention of the profession at home, is a matter which deeply affects the interests of the department. In 1885, when honorary rank was conferred upon the Commissariat and Transport Staff, and Ordnance Store Department, it was generally felt that the position of the officers of the Army Medical Staff was becoming very anomalous; but when, by the new Royal Warrant, issued in January last, the semblance of rank which we possessed was swept away, the blow was felt as very severe, and one that vitally affected the welfare and status of the officers of the department.

To show the unfairness with which the Medical Staff has been treated, it may be noted that the officers of the departments which have been granted honorary rank are considered so purely unmilitary and so little liable to the risks of war, that, according to the Royal Warrant, those of them engaged on duties with an army in the field, although eligible for medals, are excluded from receiving clasps unless "actually exposed to fire under circumstances which may have rendered such exposure a duty," whereas medical officers, all of whom with an army in the field are, in virtue of the same Royal Warrant, entitled to clasps, have been deprived of even the appearance of rank which they formerly possessed, and are relegated to what the authorities are pleased to stlye "relative precedence."

Such treatment is not only calculated to make the department discontented, but is sufficient to create disgust with the military service. It is well known that position in the army is decided and made evident by recognised military titles; what, therefore, must be the feelings of those who find themselves suddenly deprived of all rank, and given instead an indefinite form of precedence, which may mean anything or nothing according as it may be interpreted, and can convey no idea of rank either to soldier or civilian? If medical officers are to have any rank at all, they must be placed on an equality with the other departments, and given honorary rank. The time is past for relative rank or relative precedence.

The duties of officers of the Medical Staff are more military than ever; on entering the service they receive military training; they command not only the warrant officers, non-commissioned officers, and men of their own corps, but also all men of other corps attached for duty; all patients in hospital, and all connected with the Hospital Establishment. Their duties are entirely with troops, and the wearing of uniform is now compulsory at all stations, both at home and abroad.

It seems almost incredible that the other departments of the army, whose duties are wholly confined to office work and supply, who rarely come in contact with soldiers, and who never see a shot fired in anger, should be given well-defined military rank, whilst it is denied to officers of the Medical Staff, who share not only all the dangers of war, but also, in addition, all the risks of pestilence and disease, as the lists of dead sufficiently testify.

This inequality should not exist. What advantage is it to a medical officer to have relative rank on leaving the service, or to receive a step in promotion in such rank? To whom outside the service is such rank known, or who understands the meaning of such a title as Brigade-Surgeon? The sooner all these anomalies cease the better for the service. If we are to be denied the honorary rank given to the other departments, let us be pure civilians, without any uniform or badges of any description; our position would then be defined, and we could know how to act accordingly. The question of rank or no rank is one that in the interests of the service demands an immediate settlement to allay the prevailing and increasing discontent.

[1] This has been rectified.

CHANGES OF STATION.

THE following changes of station among the officers of the Medical Staff of the Army have been officially notified as having taken place during the past month:—

		From	To
Deputy Surgeon-General	J. B. C. Reade	Bengal	London.
,, ,,	W. Cattell	Nova Scotia	Cork.
,, ,,	J. Tulloch, M.D.	Devonport	Woolwich.
Brigade-Surgeon	J. Inkson, M.D.	Bengal	Aldershot.
,,	J. Paxton, M.D.	Bombay	Colchester.
Surgeon-Major	J. R. Murray, M.D.	Gosport	Portsmouth.
,,	C. S. Close	Bombay	Gravesend.
,,	J. F. Fannin	Madras	Dundalk.
,,	W. Taylor, M.D.	Bombay	Staff of C. in C., E. Indies.
,,	J. O Reilly, M.B.	Bengal	Netley.
,,	W. F. Samuels	Bombay	Birr.
,,	G. Corry	Egypt	York.
,,	J. A. Clery, M.B.	Egypt	Woolwich.
Surgeon	A. C. J. R. Lundy, M.B.	Salford	York.
,,	T. M. Corker, M.D.	Cork	Kilkenny.
,,	O. Todd, M.B.	Colchester	Harwich.
,,	M. W. Kerin	Madras	Netley.
,,	J. G. W. Crofts	Bengal	York.
,,	A. J Struthers, M.B.	Woolwich	Edinburgh.
,,	S. C. B. Robinson	Bengal	Pembroke Dock.
,,	R. P. Hetherington	Egypt	Netley.
,,	S. N. Cardozo	Egypt	Aldershot.
,,	H. T. Baylor	Madras	Buttevant.
,,	A. A. Sutton	Egypt	Jersey.
,,	H. N. Kenny, M.B.	Egypt	Netley.
,,	D. Hennessy, M.D.	Limerick	New Ross.
,,	D. M. Saunders, M.D.	Aldershot	Salford.
,,	R. N. Buist, M.B.	Liverpool	Newcastle-on-T.
,,	W. Dowman	Aldershot	Bengal.

The gentlemen who were appointed on February 5th last, have been stationed as follows:—

Surgeon	F. J. Morgan	Aldershot.
,,	W. H. Horrocks, M.B.	,,
,,	C. H. Hale	,,
,,	H. C. Thurston	,,
,,	B. H. Scott	,,
,,	W. C. Poole, M.B.	,,
,,	O. R. A. Julian	,,
,,	G. Raymond, M.B.	,,
,,	E. A. Burnside	,,
,,	T. M'Culloch, M.B.	,,
,,	A. B. Hinde	,,
,,	A. Y. Reily, M.B.	,,
,,	J. W. Cockerill	,,
,,	J. Ritchie, M.B.	,,
,,	H. St. G. S. Hore	,,
,,	S. Macdonald, M.B.	,,
,,	E. Corcoran	,,
,,	A. O. C. Watson, M.B.	,,
,,	E. W. Gray, M.B.	,,
,,	D. Stiell, M.B.	,,
,,	L. E. A. Salmon	,,
,,	G. A. Wade, M.B.	,,
,,	J. Minniece, M.D.	,,
,,	R. H. Penton	,,
,,	M. P. C. Holt	,,
,,	W. L. Gray, M.B.	,,
,,	E. G. Browne	,,
,,	J. C. Morgan	,,
,,	H. I. Pocock	,,
,,	G. Hilliard, M.B.	,,
,,	C. R. Elliott, M.D.	,,
,,	C. A. Young	,,
,,	J. W. Bullen, M.D.	,,
,,	J. C. Weir, M.B.	,,
,,	B. J. Inniss	,,
,,	R. C. Thacker	,,
,,	W. N. Murphy, M.D.	,,
,,	S. F. Clark, M.B.	,,
,,	E. M. Hassard	,,
Quartermaster	T. Warrington	Gibraltar.

A QUESTION OF COSTUME.

IN reply to "Surgeon-Major," we may say that we believe the *conversazione* to be given to the Association, at the annual meeting in Dublin, would be a very suitable occasion for medical officers of the volunteer forces to appear in uniform.

THE NAVY.

Inspector-General Dugald M'Ewan, M.D., has been placed on the retired list. Dr. M'Ewan's promotion to be Inspector-General, with the particulars of his commissions and war services, were so recently given in the columns of the Journal that it seems unnecessary now to repeat them.

Fleet-Surgeon Gerald A. Yeo died at Alverstoke, Hampshire, on March 27th. His commissions bore date: Surgeon, March 2nd, 1842; Staff-Surgeon, February 21st, 1850; and Fleet-Surgeon, February 26th, 1867; he retired April 1st, 1870. He was in receipt of the Greenwich Hospital Pension.

Staff-Surgeon R. G. Bird has been promoted to be Fleet-Surgeon. He entered the service as Surgeon, June 28th, 1886, and became Staff-Surgeon, March 16th, 1878. During the Egyptian war in 1882 he was Staff-Surgeon of the *Carysfort* (medal and Egyptian bronze star), and also during the operations near Suakin in 1884 (clasp).

The following appointments have been made at the Admiralty: J. H. Halpin to be Surgeon and Agent at Wicklow; William Hunter, to be Surgeon and Agent at Rothesay; Thomas Nunan, Surgeon, to the *Wasp*; James Smith, M.D., to be Surgeon and Agent at Tullapool.

THE MEDICAL STAFF.

Surgeon-Major A. N. Hojel, Bombay Establishment, is promoted to be Brigade-Surgeon, *vice* H. J. Blanc, retired. Brigade-Surgeon Hojel entered as Assistant-Surgeon July 27th, 1859. During the disturbances in Persia in 1856-71, he was present at the dethronement of two revolutionary sultans of Muscat; at the bombardment, landing, and capture of Bahrim Fort; and at the capture and destruction of Arab war vessels and piratical craft (mentioned in despatches).

Deputy Surgeon-General R. A. Chapple, Surgeon J. B. W. Buchanan, and Surgeon R. E. Foott, M.D., have been brought on the strength of the British troops in the Bombay command from March 9th, the date of their arrival in Bombay.

Brigade-Surgeon W. O'Halloran is granted retired pay with the honorary rank of Deputy Surgeon-General; his previous commissions are dated: Assistant-Surgeon, February 18th, 1856; Surgeon, March 8th, 1871; Surgeon-Major, March 1st, 1873; and Brigade-Surgeon, January 30th, 1882. He was present at the capture of Canton in December, 1857 (medal with clasp), and in the operations in the Malay Peninsula in 1876 (medal with clasp).

Brigade-Surgeon W. Cherry has also gone on retired pay with a step of honorary rank. He entered the service as Assistant-Surgeon, January 19th, 1860; became Surgeon, March 1st, 1873; Surgeon-Major, April 1st, 1875; and Brigade-Surgeon, April 3rd, 1886. He has no war record.

Surgeon-Major D. C. G. Bourns, who went on half-pay in April of last year, has been reappointed to the full pay establishment, *vice* F. H. Welch, who has been promoted to Brigade-Surgeon.

Surgeon S. H. Lindeman, serving in Bengal, has leave of absence for six months on medical certificate; and Surgeon T. R. Morse, serving in the Madras command, has leave to Australia for six months, also on medical certificate.

Surgeon C. Quarry, on arrival from England, is directed to do duty at the Station Hospital, Secunderabad, Madras Command.

Surgeon A. Asbury, on arrival from England, is ordered to do general duty, Eastern District, Madras, and to report himself to the Deputy Surgeon-General, H.M.'s Forces, Madras, for orders.

Surgeon H. J. McLaughlin, M.B., doing duty, Station Hospital, Bangalore, is directed to do general duty, Eastern District, Madras.

Surgeon F. W. H. D. Harris, doing duty Station Hospital, Madras, is directed to do duty, Station Hospital, Bangalore.

Deputy Surgeon-General T. Tarrant, M.D., serving in the Madras command, is appointed to officiate as Surgeon-General in the Bangalore Division and Ceded and Belgaum Districts, with temporary rank.

Brigade-Surgeon F. Ferguson, M.D., Medical Staff, is appointed to officiate on the Administrative Medical Staff of the Madras Army, with the temporary rank of Deputy Surgeon-General, *vice* Dr. Tarrant, during the absence on leave out of India of Surgeon-General J. Irvine, M.D.

THE INDIAN MEDICAL SERVICE.

Brigade-Surgeon C. J. F. McDowall, Bombay Establishment, has retired from the service, on a pension of £700 per annum payable in England. He joined the service as Assistant-Surgeon August 4th, 1856, and became Brigade-Surgeon September 15th, 1882. He served in the Eastern campaign in 1855-56 with the Turkish Contingent (5th Class of the Medjidie, and Turkish medal); with the Persian Expeditionary Force in 1857, when he was present at the capture of Mohumrah (medal with clasp); in the Indian Mutiny campaign in 1857-59 in the Southern Mahratta country (medal); and in the Abyssinian war in 1867-68, including the storming of Magdala (medal).

The following appointments on the Bombay Establishment have been made from the date of the retirement of Brigade-Surgeon H. J. Blanc, M.D.:—Surgeon-Major A. N. Hojel, to be Physician to the European General Hospital, *vice* Brigade-Surgeon Blanc. Surgeon-Major G. Waters, to be Second Physician, Jamsetjee Jejeebhoy Hospital, *vice* Surgeon-Major Hojel. Surgeon R. Manser, to be Third Physician and Registrar, Jamsetjee Jejeebhoy Hospital, *vice* Surgeon-Major Waters. Surgeon R. J. Baker, M.B., to be Resident Surgeon, European General Hospital, *vice* Surgeon Manser. These officers held the appointments substantively *pro tem.* from the date of the expiry of the furlough granted to Brigade-Surgeon Blanc up to the date of his retirement. The following appointments are also made consequent on the appointment of Surgeon Major A. N. Hojel:—Surgeon-Major G. Waters, to be Professor of Physiology in the Grant Medical College. Surgeon R. Manser, to be Professor of Pathology, *vice* Surgeon-Major Waters. Surgeon R. J. Baker, M.B., to be Professor of Materia Medica, *vice* Surgeon Manser. These appointments were held from the date of expiry of the furlough granted to Brigade-Surgeon Blanc to the date of his retirement.

Brigade-Surgeon G. S. Sutherland, M.D., Bengal Establishment, Examiner of Medical and Fund Accounts, Bengal, has leave of absence for 275 days on medical certificate.

Surgeons N. P. Sinha, C. Mactaggart, L. J. Pisani, B. K. Basu, J. F. Evans, W. R. Edwards, A. C. Deare, G. J. H. Bell, W. H. B. Robinson, and A. W. Dawson, M.B., all of the Bengal Establishment, have passed the examination in Hindustani by the lower standard.

Surgeon-Major W. S. Fox, of the Madras Establishment, is promoted to be Brigade-Surgeon from January 4th; he entered the service as Assistant-Surgeon March 31st, 1865, but has no war record.

Surgeon A. Silcock, Bengal Establishment, is appointed to the permanent medical charge of the 1st Sikh Infantry, *vice* Surgeon-Major A. P. Holmes, deceased.

Surgeon H. Fooks, Bengal Establishment, is appointed to the officiating medical charge of the 3rd Sikh Infantry, *vice* Surgeon A. Silcock.

Surgeon W. Owen, M.B., Bengal Establishment, is appointed Civil Surgeon of Maldah, but will continue to act as Civil Surgeon of Pubna.

Surgeon-Major J. F. Fitzpatrick, M.D., Madras Establishment, is appointed to act as Superintendent of the Central Gaol at Coimbatore during the absence of Lieutenant-Colonel Pickance on leave.

Brigade-Surgeon J. Keess, of the Madras Establishment, who retired from the service on January 4th last, was at the same time granted a large Medical Fund annuity.

Surgeon John Jackson, M.D., late of the Bengal Establishment, died at Brighton on March 31st, at the age of 82.

Surgeon R. Macrae, M.B., Bengal Establishment, officiating Civil Surgeon of Nuddea, is appointed Civil Surgeon of Mymensingh, but will continue to act in his present appointment.

The appointment of Surgeon-Major H. Boyd, 45th Sikhs, to the medical charge of the Rawul Pindee Lock Hospital is confirmed.

Surgeon G. W. P. Dennys, Bengal Establishment, is appointed Civil Surgeon of Jullunder.

Surgeon M. Gaisford, Bengal Establishment, Superintendent Rangoon Gaol, whose services have been placed at the disposal of the Government of the North-West Provinces and Oude, is appointed a Deputy Sanitary Commissioner, and is posted to the third circle.

Surgeon S. J. Thomson, Bengal Establishment, Deputy Sanitary Commissioner of the third circle, on being relieved by Surgeon M. Gaisford, is posted to the second circle.

The Queen has approved the admission of the following gentlemen as Surgeons: *Bengal.*—Robert Joseph Macnamara, M.D., Herbert Wilson Pilgrim, George Brooke French, Francis Wyville Thomson, Edwin Harold Brown, Charles Norman Bensley, Selby Herriot Henderson, David Wilson Scotland, Charles Robert Mortimer Green, James Henderson Sellick, Edward Christian Hare, Frank Cecil Clarkson, John Gregory Jordan, John Digby Marsh Swinburne, Herbert Mackinlay Morris, Allan Rupert Postance Russell, James Morwood, M.D., Edmund Alexander William Hall. *Madras.*—Gilbert Capel Hall, Richard Henderson Castor, Frederick George Maidment, Marie Joseph Toby Joinville Blancard, Ignatius Purcell Doyle. *Bombay.*—Blenman Buhot Grayfoot, Thomas Edward Dyson.

The following officers, whose admission to the Indian Medical Service (Bengal) was notified in the *London Gazette* of August 20th, 1886, should have been placed in the order here shown: W. G. Thorold, P. Hehir, L. J. Pisani, B. K. Basu, N. P. Sinha, W. R. Edwards, C. Mactaggart, J. F. Evans, G. J. H. Bell, J. T. Daly, H. Fooks, E. Hudson, A. C. Deare, A. W. Dawson, W. H. B. Robinson, H. A. Sheppard.

The undermentioned gentlemen, all of the Bengal Establishment, have obtained leave of absence for the periods specified: Surgeon-Major G. Massy, for 91 days on medical certificate; Surgeon-Major T. F. Mullen, M.D., for one year on medical certificate; Surgeon J. Lewtas, Queen's Own Corps of Guides, for one year and 186 days on private affairs.

HOSPITAL AND DISPENSARY MANAGEMENT.

Workshop Collections for Hospitals.

Mr. S. Stretton writes: The workpeople of our town are showing a strong desire to establish "Saturday collections" in aid of our infirmary. It is thought that information from other towns adopting a similar course might contribute largely to the general success of the movement, and I am invited to obtain every possible detail. I feel the duty a difficult one, and I must appeal generally to those gentlemen who have knowledge of hospitals where such a system is giving satisfactory results. I shall consider all information I receive on this subject as a personal favour, and the good likely to accrue to our institution will afford extra satisfaction to those who may thus assist in the establishment of good weekly collections from the class who chiefly benefit by hospital admissions and treatment.

*** We have referred this letter to Dr. R. Rentoul (78, Hartington Road, Liverpool), who writes: I do not know of any pamphlet or rules to guide one in the matter of hospital collections by the working classes. In this city many workshops fix a box in the shop, and ask the people to drop into it on their pay-days. In many towns Hospital Sunday and Saturday are not kept as separate accounts. In Birmingham, the working men contribute say £20 at one store. They give £15 of this to the hospital, and with the other £5 buy so many tickets from the hospital secretary, so that they may command treatment as their right and due. Mr. Smedley (Secretary Hospital Saturday Fund), 25, Waterloo Street, Birmingham, will supply particulars. The Rev. W. Banister, St. James's Mount, Liverpool, is honorary secretary to the hospital fund here.

A pamphlet written by the late Dr. Gamgee, on *Our Medical Charities and the Working Classes*, and published by Cornish Brothers, 37, New Street, Birmingham, contains some hints. *Hospital Management*, by H. C. Burdett, may give a help. So may *Notes taken on a Cruise in the Baltic*, by F. C. Carr-Gomm, Chairman London Hospital. Also a pamphlet by R. Trewer, Secretary Hospital Saturday Fund, London, price 2d.; to be had from him. If your correspondent will take a look at my Prize Essay in the December (1886) number of the *Philanthropist* (123, Fulham Road, S.W.), he will get some points. Let me refer him also to H. Fry's *Royal Guide to the London Charities*, 1886, Chatto and Windus, 1s. 6d.; and to Howe's *Classified Directory of the Metropolitan Charities*, 1886; Longman, Green and Co., 1s. The Hospitals Association, Norfolk House, Norfolk Street, London, W.C., may be able to help.

A verdict of £20 damages for personal injuries sustained by a bicyclist has been recovered from a defendant who is an inmate of Dartford Asylum.

MEDICO-LEGAL AND MEDICO-ETHICAL.

CAN A L.S.A. CALL HIMSELF "SURGEON?"

L.S.A. AND L.M.—This question has been submitted to Mr. James R. Upton, Solicitor to the Association, who writes; I have referred upon the construction of Section 40 of the Medical Act, 1858, to the case of Ellis *v.* Kelly (30 *L.J.C.M.*, p. 37), referred to by your correspondent. I do not, however, find that it decided "that if a man is registered he can call himself what he pleases," but that, on the contrary, Lord Bramwell there lays down that a registered Member of the College of Surgeons, or of the Apothecaries' Society, wilfully and falsely calling himself a Doctor of Medicine, would be liable to the penalty imposed by the section. I doubt, however, whether the use of a self-conferred title of "Surgeon" by a L.S.A. would, if he were prosecuted, result in his being convicted and made liable to the penalty. I would point out that Section 6 of the Medical Act, 1886, does not come into force until June 1st, 1887.

LANGMORE DEFENCE FUND.

A DETAILED statement of the object of this Fund was given in the JOURNAL of April 16th, at page 852. Many subscriptions have been forwarded in response to that appeal; but a sum of £122 is still required to pay simply the legal expenses incurred by Dr. J. Wreford Langmore, for his defence in the recent trial, although he obtained the verdict of the jury, with full costs.

Subscriptions should be sent to Mr. George Eastes, M.B., 69, Connaught Street, Hyde Park Square, London, W., one of the Honorary Secretaries to the Metropolitan Counties Branch of the British Medical Association.

Amount of Subscriptions already announced .. £84 16s 6d.

SECOND LIST OF SUBSCRIBERS.

	£	s.	d.		£	s.	d.
Mr. Marcus Beck	1	1	0	Mr. J. Breward Neal	0	10	6
Dr. W. H. Broadbent ..	2	2	0	Mr. W. B. Owen	1	2	0
Dr. Walter J. Bryant ..	1	1	0	Mr. Herbert Page	1	1	0
"H. V. C."	1	1	0	Mr. F. N. Pedley	1	1	0
Mr. F. Canton	0	10	6	Dr. G. V. Poore	1	1	0
Surgeon-General W. R. Cornish	1	1	0	Mr. Henry Power	1	1	0
				Mr. Walter Rigden	0	10	6
"W. D."	0	10	6	Mr. Thomas Smith	3	3	0
"A Friend"	5	5	0	Dr. C. Taylor	1	1	0
Mr. G. P. Field	2	2	0	Sir Henry Thompson	2	2	0
Mr. Henry Gaselee	1	1	0	Mr. A. S. Underwood	1	1	0
Dr. J. Hughlings Jackson ..	2	2	0	Mr. R. H. Woodhouse	1	1	0
Mr. Malcolm Morris ..	1	1	0				

PUBLIC VACCINATORS AND PRIVATE VACCINATION.

J. J. I. asks if a public vaccinator living in his district can legally vaccinate any person, or child of a person, who applies to him as his private medical attendant, not charging the guardians for the operation, but the applicant?

*** Certainly a public vaccinator is not prohibited from private vaccination practice, but all persons living in his district have the right to claim from him that he shall vaccinate their children at the cost of the guardians, and for this purpose they must attend at the specified times and places; there is no reason, however, why other people living in the district should not ask him to undertake this duty as a private medical practitioner, themselves paying his fee.

ADVERTISING "CANCER-CURER."

F.A.A.S.—In cases where persons holding medical qualifications insert unprofessional advertisements in the public newspapers, the best plan is, in the first instance, to state the facts of the case to the corporations which granted the licence or licences to the offender. If our correspondent will transmit the advertisements to the Registrars of the Colleges, it is not improbable that some action may be taken.

MIDWIFERY ENGAGEMENTS.

DR. A. E. BARRETT writes: In your concluding remark on this subject I think you have touched on the most important point. Your advice to practitioners "to have a clear understanding as to payment at the time they accept their retainer" is what I refer to. In legal matters a retainer is synonymous with a retaining fee, and it has long appeared to me to be only right and proper that we should take a retaining fee when we accept the responsibility of attending a case which we are expected to hold ourselves in readiness to attend at any moment. If by some blunder of the patient's messenger, or from any other reason, we are not on the spot at the particular moment, no matter what inconvenience or loss we may have been put to, our claim for remuneration is questionable.

My plan is to charge a retainer equal to payment for one visit at the time of entering the name, the balance to be paid when the confinement is over; and I find that people in moderate circumstances rather like the plan; and having, as it were, paid an instalment, they are not likely to go elsewhere when the critical time arrives; or if they do, I have the satisfaction of knowing that my time has not been taken up for nothing. I have only adopted this plan in doubtful cases, but is there any reason why a retainer should not be the rule?

SUPERANNUATION OF OFFICERS OF COUNTY ASYLUMS.

A CORRESPONDENT draws attention to the following statement in a leading article on the new Lunacy Bill, at the top of page 736, in the JOURNAL of April 2nd:—"The County Asylum Medical Service also is improved by the enactment that when any officer's service has been in more than one county asylum, his service in all such asylums shall count towards pension or superannuation allowance."

From this statement, which is rather misleading, it may be inferred that asylum service can be transferred from one county to another, and such service in these counties shall count towards pension. But such is not the case, for Section 53 of the said Lunacy Bill says: "When any officer is transferred from one county asylum to another county asylum *in the same county*, his service in all such asylums shall be counted for the purpose of computing his pension, superannuation allowance, or gratuity for length of service, as if all such asylums had constituted only one asylum."

If the words "*in the same county*" had been omitted, then the Asylum Medical Service would have been improved by such enactment as stated.

*** The words "in the same county" should have been added to the sentence published in the JOURNAL, as our correspondent says. But it is distinctly an improvement of the Asylum Medical Service by the Bill that it makes that to be compulsory on the part of the justices which is now optional only; and although the justices have in one instance acted in the same sense, it does not at all follow that, under the present law, justices would do the same thing on future occasions. A wide extension of the principle is very desirable.

SCALE OF PAYMENT IN CLUB PRACTICE.

FAIRPLAY writes: The letter in this week's JOURNAL brings to the front once more a grievance that as yet has not received the attention it merits, and is not likely to, unless there is more union between the members of our profession and some who understand its requirements at the head. It appears to me the profession has neither head nor body, and is without plan or union, liable to be kicked about by any body of people.

One who had been fifty years secretary to a club wrote the other day that each member averaged eight attendances per annum, at the rate of 4s. per annum. His idea was that it should never be less than 5s. to 10s. per member per annum. I have seen a great deal of cheap practice, and find it always makes men careless, half-hearted, and produces a dislike to the profession. Thus the public gain nothing.

A friend of mine in the Midlands had a practice entirely composed of clubs; I took charge of it for a while, and found one could not do one's duty. If a case of any difficulty turned up it had to take its chance, as putting in two visits a day was almost impracticable, and the work was too poorly paid to permit one to drive. These people buy, nevertheless, all sorts of rubbish, and give a surgeon barely half what he would get for parish work.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Monday, April 18th.

The late Dog Regulations.—The Earl of MILLTOWN asked why the Commissioners of Police had withdrawn the order which was in force last year requiring dogs in the streets of the metropolis to be either led or muzzled; and whether it was considered that there was less danger of hydrophobia now than when the order was in force.—Viscount CRANBROOK explained that the powers of the police to issue regulations with a view to the extinction of rabies had been transferred to the Privy Council, which body had authorised the local authorities throughout the country to make the same kind of regulations as were enforced last year by the police in the metropolis. In London the Metropolitan Board of Works was the local authority, and it now possessed full power to make any regulations that might be deemed necessary for diminishing the danger of the spread of rabies. He was happy to say that there was very good reason to suppose that the disease was much less prevalent now than last year. Since January 1st there had only been two cases of rabies in dogs.—The Earl of MILLTOWN said that the Commissioners of Police still retained the power under statute to order that dogs should be muzzled in the metropolitan area. If there should be one single death from hydrophobia in London now that the order to which his question referred had been withdrawn, a very serious responsibility indeed would rest upon the Commissioners of Police.

HOUSE OF COMMONS.—Thursday, April 14th.

Army Medical Officers.—Mr. E. STANHOPE, in reply to a question from Dr. TANNER as to how and in what way the classification of army medical officers would regulate their status on board ship or for choice of quarters, said that medical officers would be exactly in the same position in respect to all the matters mentioned by the hon. member as they had hitherto been.

Non-compliance with the Vaccination Acts.—In answer to Mr. CHANNING, Mr. RITCHIE said: I have no information with regard to the case of James Bamford, imprisoned for non-compliance with the Vaccination Acts. I have forwarded to the guardians a copy of the Evesham letter, which sets forth the Board's views on the subject of repeated prosecution, but I cannot undertake to intervene in any individual case, nor am I prepared to propose legislation which would take away from the guardians, who have the advantage of knowing fully the local circumstances, their freedom of action in the matter.

Monday, April 18th.

Private Bill Legislation.—Mr. W. H. SMITH informed Mr. SELLAR that the Government were entirely in sympathy with the object of his Bill to improve and cheapen private Bill legislation, and would consent to its being referred to a Select Committee. They intended to introduce a Bill of the same character into the House of Lords.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

POOR LAW MEDICAL OFFICERS' ASSOCIATION.

A MEETING of the Council of the Poor Law Medical Officers' Association, to which workhouse medical officers were invited, was held at the rooms of the Association, 3, Bolt Court, Fleet Street, on April 14th. Before the business of the evening was entered upon, a feeling of regret was unanimously expressed at the continued absence from the chair of Dr. Joseph Rogers, owing to severe illness.

Clause 14, Subsections 5 and 6 of the Lunacy Acts Amendment Bill were discussed, and the opinion of the meeting was that the alterations suggested by the Parliamentary Bills Committee of the British Medical Association fully met the requirements of the case, and the Secretary was requested to write to the Chairman of that Committee to tender the co-operation of the Association in whatever manner might be deemed advisable, with a view to having the obnoxious clause amended in the Commons. It was also suggested that in Clause 19, line 4, of the Bill, referring to the payment of fees by the guardians under order of the justices, the word "shall" be substituted for "may." The opinion of the Secretary of the Lunacy Commissioners as to the great value of certifying pauper lunatics by the workhouse medical officer (*vide* Dr. Hill's letter in the JOURNAL of April 2nd) was considered important in reference to the amendments.

THE PURIFICATION OF THE UPPER THAMES.

AN inquiry was held by Mr. Arnold Taylor, an inspector of the Local Government Board, on Wednesday, April 13th, with reference to an application by the Richmond urban and rural sanitary authorities, for a provisional order to form their districts into a united district for sewerage purposes, under Section 279 of the Public Health Act. The parishes affected include those of Richmond, Mortlake, Barnes, Kew, and Petersham. It is proposed that the new board shall have powers similar to those which were exercised for some years by the now defunct Lower Thames Valley Main Sewerage Board. A sewerage scheme, devised by Mr. Melliss, C.E., at a cost of about £100,000, has been accepted by the urban and rural authorities and received the sanction of the Local Government Board. The formation of the new board will probably be sanctioned.

UNSATISFACTORY LYMPH SUPPLY.

VACCINE writes: A short time ago I wrote to the National Vaccine Establishment for some vaccine, and in return I received a tube apparently well filled, but when I came to use it, not a drop of lymph could be got out of it, for the very good reason that there was no lymph in it. I returned the tube to the National Vaccine Establishment, stating that I had failed to obtain any lymph from it, and requesting that another tube might be sent me. Another tube was sent me, but it has failed to produce any effect upon the baby vaccinated. The authorities at the National Vaccine Establishment assured me that they had got plenty of lymph out of the tube returned. It would be interesting to know by what means they managed to abstract lymph from the empty tube. I have had lymph from the National Vaccine Establishment for years, and I can truly say that in very few instances have I found it satisfactory. It either proves inert, or else produces some poor, abortive vesicles.

*** We would recommend our correspondent to ask for points when he proposes to use the lymph immediately after its receipt. These would probably give better results than tubes. As to whether the particular tube referred to was empty or charged we cannot, of course, express an opinion, but we would observe that it is quite possible to be misled by the appearance of the tube.

HEALTH OF ENGLISH TOWNS.

IN the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons, 5,806 births and 3,696 deaths were registered during the week ending Saturday, April 16th. The annual rate of mortality, which had been 23.4 and 21.6 per 1,000 in the two preceding weeks, further declined during the week under notice to 20.5. The rates in the several towns, ranged in order from the lowest, were as follow:—Brighton, 10.6; Halifax, 14.5; Cardiff, 17.0; Derby, 17.8; Sunderland, 18.1; Birmingham, 18.3; Salford, 18.6; Bolton, 19.0; London, 19.3; Bradford, 19.5; Hull, 19.9; Birkenhead, 20.3; Wolverhampton, 20.7; Leeds, 20.9; Norwich, 21.4; Leicester, 21.5; Nottingham, 21.9; Bristol, 22.4; Sheffield, 22.9; Newcastle-upon-Tyne, 22.9; Plymouth, 23.0; Preston, 23.5; Portsmouth, 24.2; Liverpool, 25.3; Oldham, 25.3; Blackburn, 26.4; Manchester, 31.7; and the highest rate during the week, 35.3 in Huddersfield. In the twenty-seven provincial towns the death-rate averaged 22.2 per 1,000, and exceeded by 2.9 the rate recorded in London, which, as before stated, did not exceed 19.3 per 1,000. The 3,696 deaths registered in the twenty-eight towns during the week under notice included 266 which were referred to measles, 115 to whooping-cough, 45 to scarlet fever, 32 to diphtheria, 26 to diarrhœa, 24 to fever (principally enteric), and 2 to small-pox; in all, 510 deaths resulted from these principal zymotic diseases, against numbers steadily increasing from 342 to 502 in the eleven preceding weeks. The zymotic death-rate was equal to 2.9 per 1,000. In London the zymotic rate was 2.2, and was as much as 1.2 per 1,000 below the mean rate in the twenty-seven provincial towns, among which the zymotic rate ranged from 0.5 and 0.6 in Birkenhead and Derby, to 6.6 in Hull, 6.7 in Norwich, 6.8 in Sunderland, 6.9 in Manchester, and 8.7 in Huddersfield. The fatal cases of measles, which had increased from 77 to 250 in the nine preceding weeks, further rose during the week under notice to 266, and caused the highest death-rates in Sheffield, Liverpool, Hull, Manchester, Sunderland, Norwich, and Huddersfield. The deaths referred to whooping-cough, which had been 97, 105, and 117 in the three previous weeks, were 115 last week, and were proportionally most numerous in Oldham, Plymouth, and Blackburn. The 45 fatal cases of scarlet fever showed a slight further increase upon the numbers returned in recent weeks, and caused the highest rate in Bristol. The deaths referred to diphtheria, which had been 32 and 24 in the two preceding weeks, rose again during the week under notice to 32, and included 21 in London, 2 in Liverpool, and 2 in Bristol. The 26 fatal cases of diarrhœa showed a decline from recent weekly numbers. The deaths referred to different forms of fever, which had been 25 and 34 in the two previous weeks, declined to 24 last week. Of the 2 fatal cases of small-pox recorded during the week under notice in the twenty-eight towns, 1 occurred in London and 1 in Blackburn. Seven small-pox patients were under treatment in the Metropolitan Asylum Hospitals on Saturday, April 16th, but no new cases were admitted to these hospitals during the week under notice. The death-rate from diseases of the respiratory organs in London during last week was equal to 4.5 per 1,000, and was considerably below the average. The causes of 76, or 2.1 per cent. of the 3,696 deaths registered during the week under notice in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, April 16th, 881 births and 593 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,299,000 persons. The annual rate of mortality, which had declined in the four preceding weeks from 26.2 to 22.9 per 1,000, rose again during the week under notice to 23.7. Among these Scotch towns, the rate was equal to 13.0 in Perth, 15.8 in Leith, 18.3 in Edinburgh, 19.4 in Dundee, 22.2 in Paisley, 24.7 in Greenock, 27.3 in Glasgow, and 33.7 in Aberdeen. The 593 deaths registered during the week under notice in these Scotch towns included 91 which were referred to the principal zymotic diseases, against 127, 111, and 91 in the three preceding weeks; of these 36 resulted from whooping-cough, 28 from measles, 10 from scarlet fever, 7 from diarrhœa, 6 from "fever," 4 from diphtheria, and not one from small-pox. These 91 deaths were equal to an annual rate of 2.6 per 1,000, which was slightly below the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic death-rates in the Scotch towns during the week under notice were recorded in Edinburgh, Glasgow, Greenock, and Aberdeen. The fatal cases of whooping-cough, which had been 31 and 33 in the two previous weeks, further rose last week to 36, and included 15 in Glasgow, 9 in Edinburgh, 6 in Aberdeen, and 3 in Dundee. The deaths referred to measles, which had declined in the three preceding weeks from 55 to 34, further declined during the week under notice to 28, of which 14 occurred in Aberdeen, 10 in Glasgow, and 3 in Greenock. The 10 fatal cases of scarlet fever were within one of the number recorded last week, and included 4 in Edinburgh, 3 in Glasgow, and 2 in Dundee. The 7 deaths from diarrhœa showed a marked decline from recent weekly numbers. The fatal cases of fever, which had increased from 3 to 8 in the three preceding weeks, declined last week to 6, of which 2 were returned in Glasgow. The 4 deaths referred to diphtheria corresponded with the number in the preceding weeks, and included 3 in Glasgow. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 5.3 per 1,000, against 4.5 in London. The causes of 55, or 9.3 per cent., of the 593 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

IN the week ending Saturday, April 9th, 446 deaths were registered in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 26.8 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 20.7; Belfast, 24.2; Cork, 22.7; Drogheda, 12.7; Dublin, 29.2; Dundalk, 26.2; Galway, 20.2; Kilkenny, 76.1; Limerick, 32.4; Lisburn, 19.3; Londonderry, 17.8; Lurgan, 25.7; Newry, 28.1; Sligo, 9.6; Waterford, 23.2; Wexford, 38.5. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.7 per 1,000, the rates varying from 0.0 in eleven of the districts, to 4.4 in Dundalk; the 6 deaths from all causes registered in that district comprising 1 from diarrhœa. Among the 104 deaths from all causes registered in Belfast are 1 from typhus, 4 from whooping-cough, 2 from diphtheria, 1 from enteric fever, and 3 from diarrhœa. One of the 18 deaths registered in Kilkenny was caused by typhus; and the 9 deaths in Wexford comprise 1 from simple continued fever. In the Dublin Registration District, the births registered during the week amounted to 181, and the deaths to 203. The deaths represent an annual rate of mortality of 30.0 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 29.2 per 1,000. Twenty deaths from zymotic diseases were registered, being 8 below the average for the corresponding week of the last ten years, and 1 under the number for the week ending April 2nd; they comprise 5 from measles, 2 from scarlet fever (scarlatina), 1 from typhus, 1 from whooping-cough, 1 from cerebro-spinal fever, 1 from enteric fever, 3 from diarrhœa, 2 from dysentery, 1 from erysipelas, etc. Fifty-nine deaths from diseases of the respiratory system were registered, being equal to the number for the preceding week, and 7 over the average for the corresponding week of the last ten years; they comprise 41 from bronchitis, and 11 from pneumonia, or inflammation of the lungs. The deaths of 11 children under 5 years of age (including 8 infants under 1 year old) were ascribed to convulsions. Two deaths were caused by epilepsy, 17 by other diseases of the brain and nervous system (exclusive of convulsions), and 13 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 26 deaths, mesenteric disease 5, and cancer 4. Two accidental deaths were registered. In 25 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

In the week ending Saturday, April 16th, 482 deaths occurred in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 28.9 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 25.8; Belfast, 27.9; Cork, 24.7; Drog-

heda, 21.1; Dublin, 33.1; Dundalk, 30.6; Galway, 20.2; Kilkenny, 12.7; Limerick, 21.6; Lisburn, 33.8; Londonderry, 25.0; Lurgan, 25.7; Newry, 21.1; Sligo, 33.7; Waterford, 32.4; Wexford, 21.4. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.1 per 1,000, the rates varying from 0.0 in ten of the districts to 5.1 in Lurgan; the 5 deaths from all causes registered in that district comprising 1 from diarrhœa. Among the 120 deaths from all causes registered in Belfast are 1 from typhus, 4 from whooping-cough, 2 from simple continued fever, and 2 from diarrhœa; and the 38 deaths in Cork comprised 1 from typhus. In the Dublin Registration District, the births registered during the week amounted to 175; and the deaths to 231. The deaths represent an annual rate of mortality of 34.1 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 33.1 per 1,000. Twenty-six deaths from zymotic diseases were registered, being 6 over the number for the preceding week, but 1 under the average for the corresponding week of the last ten years; they comprise 7 from measles (5 of which were in No. 4 South City—Grand Canal Street—District), 4 from scarlet fever (scarlatina), 2 from typhus, 4 (all in No. 1 North City West—Langrishe Place—District) from whooping-cough, 2 from simple continued and ill-defined fever, 2 from enteric fever, 1 from diarrhœa, etc. Deaths from diseases of the respiratory system, which in each of the two weeks preceding had amounted to 59, fell last week to 45, or 3 under the average for the corresponding week of the last ten years; the 45 deaths comprise 28 from bronchitis, 5 from pneumonia or inflammation of the lungs, and 4 from croup. The deaths of 22 children under 5 years of age (including 16 infants under 1 year old) were ascribed to convulsions. Two deaths were caused by epilepsy, 17 by other diseases of the brain and nervous system (exclusive of convulsions), and 9 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 31 deaths, mesenteric disease 5, and cancer 4. Eight accidental deaths and one case of suicide were registered. In 37 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending April 16th, that the annual death-rate recently averaged 28.9 per 1,000 in the three principal Indian cities; it was 28.3 in Calcutta, 22.7 in Bombay, and 35.2 in Madras. Cholera caused 49 deaths in Calcutta, measles 23 in Bombay, and diarrhœal diseases 47 in Madras; while the mortality from "fever" was excessive in each of these cities. According to the most recently received weekly returns, the annual death-rate averaged 28.2 per 1,000 persons estimated to be living in twenty-one of the largest European cities, and exceeded by 7.3 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 34.6, and showed a slight decline from the rate recorded in the preceding week; the 615 deaths included 16 from typhus and typhoid fever, and 14 from diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 21.9 per 1,000, and ranged from 16.3 in Christiania to 24.9 in Stockholm; diphtheria and croup caused 9 deaths in Stockholm, 6 in Copenhagen, and 3 in Christiania; 9 fatal cases of whooping-cough occurred in Copenhagen, and 5 of measles in Stockholm. In Paris the death-rate was equal to 28.7 per 1,000 (against 31.5 and 29.2 in the two preceding weeks), and exceeded by as much as 9.4 the rate for the corresponding week in London; the deaths included 15 from small-pox, 44 from typhoid fever, 66 from measles, and 38 from diphtheria and croup. The 181 deaths in Brussels, of which 7 resulted from measles, and 2 from diphtheria, gave a rate of 20.9. No returns from Geneva have been received since the beginning of the current year. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 23.5 per 1,000, the several rates being 22.1 in the Hague, 23.2 in Amsterdam, and 23.7 in Rotterdam; measles caused 9, and diphtheria and croup 12 deaths in Amsterdam, while a fatal case of typhoid fever and of measles were recorded in the Hague. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 26.4 per 1,000, and ranged from 18.2 and 21.1 in Dresden and Berlin, to 35.0 and 36.6 in Buda-Pesth and Prague. Small-pox caused 11 deaths in Buda-Pesth, 7 in Prague, 2 in Trieste, and 2 in Vienna; diphtheria showed the greatest fatality in Berlin and Hamburg; and 8 deaths were referred to typhoid fever in Hamburg. The death-rate in three of the principal Italian cities averaged 36.9 per 1,000, and ranged from 30.5 in Venice to 38.7 in Turin; small-pox caused 12 deaths in Rome and 2 in Turin; measles 7 deaths in Rome, 8 in Turin, and 3 in Venice; and typhoid fever 4 in Rome. In Cairo the death-rate was 36.6, and in Alexandria 39.7; typhoid fever caused 14 deaths in Cairo and 6 in Alexandria; whooping-cough 11 deaths in Cairo, and typhoid fever 6 in Alexandria. In four of the largest American cities the recorded death-rate averaged 28.7 per 1,000, and ranged from 18.8 in Baltimore to 25.4 in New York and in Philadelphia. Diphtheria caused 34 deaths in New York and 16 in Brooklyn; measles 17 in New York and 15 in Philadelphia; while 4 fatal cases of small-pox were recorded in New York, and 10 of typhoid fever in Philadelphia.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

ST. PANCRAS.—Dr. John F. W. Sykes entered upon his duties in this district during the second quarter of 1885, and was therefore at a disadvantage in compiling a report for that year. He has the satisfaction, however, of recording the lowest death-rate in the annals of St. Pancras—19.5 per 1,000; but in order to bring it below those recorded for 1883 and 1884, the deaths of lunatics dying in extra-metropolitan asylums (information supplied for the first time in 1885) have had to be deducted. For the tables of comparative statistics, Dr. Sykes is naturally indebted to the labours of his predecessor, and he has wisely drawn up the report on the same lines as former volumes of the series. The deaths from zymotic diseases were below the average, measles being the only disease which showed an excess of deaths. Dr. Sykes shows the relative mortality of each disease in the various sub-registration districts, with a view of obtaining an accurate guide to the conditions influencing the health of the inhabitants. A total of 339 cases of small-pox were removed from the parish into the hospitals of the Asylums Board during the year, and 63 deaths were registered from this disease.

ST. LUKE'S, MIDDLESEX.—*Comparison of Mortality Rates of Metropolitan Districts.*—It has been the custom for many years to show the favourable position which St. Luke's occupied in relation to the death-rate of London; but, with the knowledge that a large number of parishioners die outside the sanitary area, and that the actual death-rate for 1885 was 22.7 per 1,000, Dr. Yarrow thinks there can be no longer reason for congratulation on this matter. He thinks also—and in this we quite agree with him—that it is useless to compare the mortality rates of metropolitan districts until all authorities agree to use the information obtainable from the Registrar-General's Office, and to distribute the deaths which properly belong to them, but which take place outside their respective districts, according to the method initiated and pursued in the columns of the JOURNAL. Dr. Yarrow is able to report a marked improvement in infantile mortality during 1885. The deaths registered from zymotic diseases in the parish were not numerous—1 from small-pox, 11 from scarlet fever and malignant sore-throat, 43 from measles, and 35 from whooping-cough. An extract from the Registrar-General's returns gives the total deaths belonging to St. Luke's, and those from the principal zymotic diseases, which were as follows: small-pox, 9; measles, 44; scarlet fever, 12; diphtheria, 11; whooping-cough, 38; fevers, 8; and diarrhœa, 42. The cases of small-pox were considerably fewer in 1885 than in the previous year, while measles and scarlatina were much more prevalent. Dr. Yarrow thinks it further worth recording that in 1865 the number of cases of fever appearing on the poor-law officers' books amounted to 766, against 7 for 1885. The vaccination returns show the cases not reached to have been only 5.2 per cent. of the children registered and belonging to the parish—a result which is highly satisfactory.

FRIERN BARNET.—No very serious epidemic was reported by Mr. Stott for 1885, though cases of all the principal zymotic diseases appeared during the year. Measles and whooping-cough were most prevalent, but no deaths were caused by these diseases. One case of small-pox occurred, and this was speedily removed to the Highgate Hospital. No other case resulted, nor was there any other outbreak, although the disease was so prevalent in London. The works for a new system of sewerage were commenced late in the year. A considerable portion of the report is devoted to the question of dealing with the sewage, a subject to which Mr. Stott seems to have given much attention. The deaths recorded for the year were 66, 20 being those of infants under one year. Nine persons died from phthisis, but 7 of these were known to be in the last stage of consumption before they came to reside in the district. The death-rate for 1885 was 13.1 per 1,000, against 12.5 for 1884. There was, however, a decrease in the deaths from zymotic diseases, the rate being a little over 1 per 1,000, against 2 per 1,000 in the previous year.

HUDDERSFIELD.—*Prevalence of Scarlet Fever: Mortality from Consumption.*—A large portion of Dr. Spottiswoode Cameron's report for 1885 is devoted to an account of the outbreak of scarlet fever during that year. Every possible precaution was taken to limit its spread, but the inadequacy of the hospital accommodation considerably discounted the efforts of the health-officer. At one time during the epidemic he confesses he was in some danger of damaging the patients already in by overcrowding. The number of deaths from this disease was eleven, against a previous average of thirteen. Throughout the whole of the investigations the question of possible infection through the milk-supply was kept in view, but there was no reason to suspect such a cause for the outbreak. Three cases of small-pox were reported as having occurred in the borough. Dr. Cameron directs special attention to the mortality from consumption. For a disease which varies so much in its duration in the individual attacked, the rate of mortality has been wonderfully uniform, varying only from 2.9 per 1,000 in 1879 to 2.06 in 1884. The death-rate from consumption is, if decreasing at all, doing so at a much less rapid rate than that from other diseases. The rate from all causes is shown to be slightly above that of 1884; but, on analysing the causes of this increase, Dr. Cameron states that it was mainly due to diseases of the respiratory organs, and not sufficient to detract from the generally favourable returns. The causes influencing the growth of consumption are touched upon in this report, and we shall await with interest the fulfilment of Dr. Cameron's promise to deal more fully with the subject in a future report.

MEDICAL MAGISTRATE.—Mr. E.I. England Phillips, L.R.C.P.Ed., etc., of Southend, has been placed on the Commission of the Peace for the county of Essex.

OBITUARY.

ALFRED MEADOWS, M.D.Lond., F.R.C.P., Physician-Accoucheur to St. Mary's Hospital.

The news of the sudden death of this well-known obstetrician on Tuesday morning, April 19th, caused a great sensation amongst members of the profession in London. Dr. Meadows was born in 1832, so that he died at the relatively early age of 55. He was a native of Ipswich, and he commenced the study of his profession as apprentice to Mr. Elliston in that town. He studied at King's College after matriculating at the University of London in 1853. In 1856 he became a Member of the College of Surgeons, and a Licentiate in Midwifery of the same College. In 1857 he became Bachelor, and in 1858 Doctor, of Medicine, of the University of London.

He was destined to hold a large number of appointments, and achieved a degree of celebrity as an obstetrician which earned for him a long list of honorary memberships of foreign societies. He commenced practice in 1858, when he was appointed Physician-Accoucheur to the St. George's and St. James's Dispensary. In 1860 he became Assistant-Physician for the Diseases of Women and Children at King's College Hospital, in 1865 Physician to the Hospital for Women. In company with Drs. Edis, Squarey, Mr. Christopher Heath, and other members of the staff, he severed his connection with that institution in 1874. He was also Physician-Accoucheur to the General Lying-in Hospital. His most important appointment was that of Physician-Accoucheur to St. Mary's Hospital, and Lecturer on Midwifery and the Diseases of Women and Children to that hospital, in succession to Dr. Tyler Smith, which appointments he held from 1871 till his death.

Dr. Meadows at one period was an active Fellow of the Obstetrical Society, holding several of the various appointments on the Council. He was very assiduous in the performance of his duties as secretary, to the great satisfaction of Dr. Barnes, who was at that time (1865-7) president. Dr. Meadows edited the *Catalogue and Report of Obstetrical and other Instruments*, exhibited at the *conversazione* of the Obstetrical Society of London, held by permission at the Royal College of Physicians on March 28th, 1886. In conjunction with Dr. Braxton Hicks he played the most active part in arranging the exhibition of instruments.

In December, 1884, when the British Gynæcological Society was founded, he was unanimously elected first President. He held the chair during 1885, and was succeeded in 1886 by Mr. Lawson Tait. Dr. Meadows was President of the Section of Obstetric Medicine at the annual meeting of the Association held at Brighton last year. The sectional meetings were highly successful, and the distinguished American obstetricians and gynæcologists in particular were much impressed by the manner in which he discharged his presidential duties, and were much gratified by his courtesy and hospitality.

Dr. Meadows was the author of a *Manual of Midwifery* well-known to a generation of students and teachers, and compiled *The Prescriber's Pharmacopœia*, a useful work which went through many editions. He took a share in Dr. Tanner's well-known text-book on the *Diseases of Children*. One of his most useful literary undertakings was the translation of Bernutz and Goupil's *Clinical Memoirs on the Diseases of Women*, for the New Sydenham Society. The accomplishment of this task made available for a large section of the profession who cannot read French with facility one of the most valuable contemporary works on inflammatory and other diseases of the pelvic peritoneum and connective tissue in the female. Dr. Meadows was actively engaged in professional work last week, and was present at the last meeting of the Gynæcological Society on Wednesday, April 13th. On that occasion he exhibited a specimen of fibroid tumour of the uterus, which he had successfully removed.

The deceased was a commander of the Order of Wasa, Sweden, and a Justice of the Peace for Buckinghamshire. He contributed a paper on Nursing to a volume of essays edited by Mr. Orby Shipley, which made some noise in its day; and he was for some years Provost of the Guild of St. Luke's, a confraternity of medical men. Getting early into lucrative practice, he was able to afford the luxury of a country house, Poyle Manor, near Colnbrook, where he hospitably entertained his friends, and especially his brother Masons—for he was an active Freemason, and took a leading part in founding the University of London Lodge. He had also actively promoted the foundation of the Mont Dore at Bournemouth, and was chairman of the original company which built that handsome establishment, which proved a white elephant to its owners.

Actively engaged in practice, and with his leisure time fully occupied in various pursuits, Dr. Meadows's health had for some time been failing. On Sunday evening, April 17th, after attending All Saints, Margaret Street, he was seized with abdominal pain, which became so acute that Sir Edward Sieveking was summoned early on Monday morning. His strength rapidly gave way under the strain of the agony of the colic, and his heart, which had shown signs of weakness before, failed to respond to treatment. Sir W. Jenner saw him late on Monday, with Sir E. Sieveking, and he died at 6.30 on Tuesday morning. Dr. Meadows leaves a widow and one daughter.

A meeting of the staff and students was held in the Library on Wednesday, April 20th, at 3 P.M. (Sir Edward Sieveking in the chair), to record the profound regret felt by all connected with St. Mary's Hospital at the sudden death of Dr. Alfred Meadows. Dr. Broadbent, Mr. Edmund Owen, Mr. Page, Mr. Field, Dr. Lees, Mr. Malcolm Morris, Dr. Phillips, Mr. Pye, Dr. Maguire, Dr. M. Handfield-Jones, Dr. Cockey, Dr. Hubbard, Mr. Luff, Dr. Pearce, Mr. J. J. Clarke, Mr. Michelli, Secretary to the Hospital, and others were present.

The Dean read letters of regret (at being unable to be present) from Dr. Cheadle, Dr. Alder Wright, F.R.S., and Mr. Critchett. Sir Edward Sieveking, in a speech in which he mentioned the good work that had been done by Dr. Meadows and the irreparable loss sustained by his death, then called on Mr. Edmund Owen to move the first resolution; this was seconded by Dr. Montagu Handfield-Jones, and carried unanimously:

"That the staff and students of St. Mary's Hospital have received with poignant regret and sorrow the intelligence of the death of their beloved friend Dr. Meadows; that young and old who have had the advantage of intercourse with him, have learnt to admire his excellent qualities of head and heart; and that the staff and students of St. Mary's Hospital request Mrs. Meadows and Miss Meadows to accept the assurance of their profound sympathy in the irreparable loss they have sustained."

The next resolution was moved by Dr. Cockey, seconded by Mr. G. Murray:

"That a deputation of six students be appointed to attend the funeral of Dr. Meadows, and that a suitable wreath of white flowers be provided for them to take to the grave as a symbol of their love and affection."

Resolution 3 was moved by Mr. A. P. Luff, seconded by Mr. H. C. Barr:

"That a copy of the previous resolutions be forwarded to Mrs. Meadows by the Chairman and the Dean, with a short account of the present meeting."

THOMAS SMITH, M.D., M.R.C.S.Eng.

We regret to have to chronicle the death of Dr. Thomas Smith, who for forty years practised his profession at Cheltenham, where he acquired the confidence and respect of a large circle of patients and friends. He was the son of Mr. T. Smith, surgeon, of Exeter, and was educated at the Ackworth School for Quakers (to which denomination he belonged). Having completed his scholastic career, he was articled to Dr. Peregrine, honorary medical officer to the Ventnor Consumption Hospital. Dr. Smith, prior to taking up his residence in Cheltenham, practised in Leeds, where he held the appointment of senior physician to the Leeds Dispensary. Dr. Smith at one time filled the post of physician to the Cheltenham General Hospital and Dispensary, and for many years conducted a successful practice in that town. He had been ailing for about four years before his death, which occurred in his 75th year. He was the author of a volume on *Acute Hydrocephalus*. Dr. Smith was one of the earliest members of the British Medical Association.

JOHN JACKSON, M.D.Cantab.

Dr. John Jackson, who died at Brighton on March 31st, was in his eighty-second year. He was born at North Preston, Lincolnshire, and educated at Cambridge, and subsequently in the Westminster Medical School. Soon after obtaining his degree Dr. Jackson entered the Honourable East India Medical Service, and for some thirty years held important appointments in the Bengal Presidency. His admirable work, both at the General Hospital and in the Native Hospital, Calcutta, was highly appreciated by those best able to form an opinion on the subject. He held for many years the leading place in the profession in Bengal.

It is a matter of history that the commencement of our rule in India was largely due to the services of a member of the medical profession, but few understand the influence for good which men like Dr. Jackson have exercised on the minds of the natives of that country. A learned man and a thorough gentleman in every sense of the term, full of generosity and kindness, he was able to inspire many

natives with respect and admiration for one of the ruling class, who otherwise could never have known them except in courts of law or in an official capacity. In this respect Dr. Jackson's influence for good was very great, for no Englishman was ever more sincerely loved or held in higher esteem by the natives of Calcutta. It was not, however, among the natives and Eurasians alone that the worth of Dr. Jackson was felt; his own countrymen were under a no less great obligation to him, and they fully appreciated his rare abilities and loving nature; always ready to spend and be spent, he laboured with wonderful energy for their good in one of the most trying climates in the world. Dr. Jackson was of far too sensitive a nature to sound his own praise, or to thrust his own merits on the notice of the Government or the public, and so he remained unhonoured by titles or other marks of distinction; he was content to do his duty, and to leave behind him deeds and memories which must be a source of constant pleasure to those who knew him. The amount of suffering he relieved and the good deeds he did can only be calculated by the days and hours of his long life. With confidence it can be said of such a man after death, "he rests from his labours, and his works do follow him."

MEDICAL NEWS.

UNIVERSITY OF GLASGOW.—Degrees of M.B. and C.M. Pass-List, April, 1887.

First Professional Examination.—J. Adam, J. Anderson, J. W. Boyd, R. Brownridge, M. Bryson, W. Butler, J. A. Cameron, J. Cordiner, M.A.; A. B. Craig, R. Davis, J. H. Dickson, A. Donald, E. A. Eckersley, J. Fisher, L. Fraser, J. Gilchrist, M. Gillies, W. Groome, T. A. Haig, J. Hunter, F. W. E. Hutchison, J. H. Jones, C. F. Laing, A. H. Lucas, R. F. Macarthur, M.A.; R. M'Lay, J. A. Macpherson, J. Munro, R. A. Paton, A. A. Pratt, A. Prentice, J. S. Wallace, J. R. Wortabet, J. J. T. Young.

Second Professional Examination.—J. Abbott, W. Auld, T. K. Bell, J. Cook, R. C. Cowan, R. G. Dick, J. Donald, H. W. Gentles, G. Gordon, R. T. Halliday, T. H. Jackson, C. A. Lewis, H. E. H. Lewis, J. Livingstone, R. B. Lothian, C. B. Lucas, D. M'Callum, J. M'Fadyen, A. N. M'Gregor, D. M'Intosh, R. D. Mackintosh, D. M'Nicol, T. M. Martin, G. Mathieson, A. W. Miller, A. C. Morrison, J. M. M. Muir, L. R. Oswald, W. A. Parker, O. T. Pinck, D. Revie, R. Steel, P. Stewart, J. Stewart, J. Strang, J. Taylor, R. Weir, M. Whyte, W. E. Williams, W. M. Wilson.

Third Professional Examination.—R. Banks, G. A. Bannatyne, T. L. Blackburn, A. Blair, M. H. Bland, R. M. Buchanan, J. Charles, A. Copland, H. O. Cowen, W. Gemmell, J. P. Gillespie, A. H. Jago, J. S. M'Conville, M.A.; J. M'Glashan, J. Melville, T. K. Monro, M.A.; C. R. Niven, F. L. Norris, W. R. Paton, R. L. Pinkerton, M.A.; J. S. Rankin, W. Robb, J. Sandilands, M.A.; J. Wallace, J. P. Wilson, R. J. Wylie, J. Young.

The following have also passed in Pathology.

M. A. Boyle, T. Cameron, A. Campbell, D. Curle, A. Gunn, C. H. Hallett, W. C. Hamilton, E. O. Harrison, T. W. Hay, A. Innes, T. W. Jenkins, M.A.; H. Kirkland, T. Laird, E. Lang, J. M'Kendrick, H. R. Sloan, C. M. Wildridge.

ABERDEEN UNIVERSITY.—The ceremony of "capping" the successful graduates in Medicine and Surgery was held in Mareschall College, Aberdeen, last Friday. Ten gentlemen received the degree of M.D., and 34 the degree of M.B., C.M.

L. D. Alexander, M.B., C.M., Kilcreggan, Greenock; J. Carbery, M.B., C.M., Matale, Ceylon; W. S. Cheyne, M.B., C.M., Aberdeen; M. Dickson, M.B., C.M., Liverpool; R. H. Fallan, M.B., C.M., Clifton; T. Fiddes, M.B., C.M., Urmston, Manchester; J. Gerard, M.A., M.B., C.M., Aberdeen; D. Hardie, M.B., C.M., Brisbane, Queensland; P. Letters, M.B., C.M., Dundee; E. B. Smith, M.B., C.M., Twickenham.

The degrees of M.B. and C.M. were conferred upon

W. Alexander, M.A., Fyvie; A. T. G. Beveridge, M.A., Aberdeen; J. H. Brooks, London; A. T. Brown, Banchory; J. Bryce, Aberdeen; J. S. Butter, Letham, Forfar; J. Crevie, Newburgh, Aberdeen; W. C. Crowe, Aberdeen; J. J. Y. Dalgarno, M.A., Aberdeen; D. M. Davidson, Mauritius; C. E. Duff, Turriff; J. W. Fraser, Arbroath; T. H. Fyfe, Aberdeen; G. Henry, M.A., Aberdeen; J. E. Holden, Bolton, Lancashire; G. A. Kelman, Fearn, Rossshire; G. B. D. Macdonald, Aberdeen; L. S. Manning, Christchurch, New Zealand; J. Melvin, Aberdeen; J. C. Myles, Aberdeen; P. J. S. Nicoll, Aberdeen; J. Pearson, Sheffield; J. Pirie, M.A., Elgin; R. Rannie, Glenbucket; J. Shand, Keith; R. Smith, Aberdeen; C. H. J. Souter, Emmaville, New South Wales; J. Souter, M.A., Aberdeen; T. H. Thomson, Stonehaven; C. T. D. Urquhart, Aberdeen; F. W. Walker, Darlington; J. Webster, Aberdeen; C. F. White, Chippenham, Wilts; G. N. Wilson.

Of the above-named candidates, D. M. Davidson received his degrees in Medicine and Surgery with highest academical honours. J. S. Butter, J. Shand, and T. H. Thomson received their degrees in Medicine and Surgery with honourable distinction. At the same time, G. W. E. Ker was certified to have passed all the examinations, and that he should receive his degrees in Medicine and Surgery with "honourable distinction," but did not graduate.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received Certificates entitling them to practise as Licentiates of the Society, on April 14th, 1887.

Bishop, Charles Rosser, M.R.C.S., 20, Craven Hill, Hyde Park, W.
Dickinson, John Clough Hardman, 117, Bow Road, E.
Hinnell, Joseph Squier, 62, Garland Street, Bury St. Edmunds.
Johnston, Charles Saint, 9, Easy Row, Birmingham.
Roe, Henry Havilland, M.R.C.S., 10, Woburn Place, Russell Square, W.C.
Tonks, Henry, M.R.C.S., Packwood Grange, Knowle, Warwickshire.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM BORO' ASYLUM.—Resident Clinical Assistant. Board and residence. Applications to E. B. Whitcomb, Esq., Medical Superintendent.

BRISTOL ROYAL INFIRMARY.—Assistant Resident Medical Officer. Salary, £80 per annum, with board, etc. Applications by May 3rd to the Secretary.

CARMARTHEN INFIRMARY.—House-Surgeon. Salary, £100 per annum, with board, etc. Applications by May 12th to Mr. H. Howells, 11, Morley Street, Carmarthen.

CASTLEREA UNION.—Medical Officer for Union Workhouse. Salary, £110 per annum. Applications to Mr. M'Flanagan, Clerk of the Union. Election on April 30th.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road.—House-Surgeon; rooms, gas, and firing. Applications by May 5th to the Secretary.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road.—Assistant-Surgeon. Applications by May 5th to the Secretary.

CHELSEA, BROMPTON, AND BELGRAVE DISPENSARY.—Surgeon. Applications by April 28th to A. Hepburn, Esq.

CHELTENHAM GENERAL HOSPITAL.—Assistant House-Surgeon. Salary, £40 per annum, with board, etc. Applications by May 3rd to the Honorary Treasurer.

CHESTER GENERAL INFIRMARY.—Visiting Surgeon. Salary, £80 per annum, with board, etc. Applications by April 29th to the Chairman of the Board.

COUNTY ASYLUM, near Dorchester.—Assistant Medical Officer. Salary, £120 per annum, with board, etc. Applications by May 10th to the Medical Superintendent.

DENTAL HOSPITAL OF LONDON, Leicester Square, W.C.—Assistant Dental Surgeon. Applications by June 1st to the Secretary.

EVELINA HOSPITAL FOR CHILDREN, Southwark Bridge Road, S.E.—House-Surgeon. Salary, £70 per annum. Applications by April 25th to the Committee of Management.

GLOUCESTER GENERAL INFIRMARY AND EYE INSTITUTION.—House-Surgeon. Salary, £100 per annum, with board, etc. Applications by May 18th to the Secretary.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—House-Physician. Applications by May 3rd to the Secretary.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—Two Clinical Assistants. Applications by April 23rd to the Secretary.

GUY'S HOSPITAL.—Two Assistant Physicians. Applications before April 27th to the Treasurer.

HORTON INFIRMARY, Banbury.—House-Surgeon and Dispenser. Salary, £60 per annum, with board, etc. Applications by April 26th to C. H. Davids, Esq., 27, Marlborough Road, Banbury.

INFIRMARY FOR CONSUMPTION, Margaret Street, Cavendish Square, W.—Honorary Visiting Surgeon. Applications to the Secretary.

KIDDERMINSTER INFIRMARY.—House-Surgeon. Salary, £140 per annum. Applications by April 25th to the Secretary.

LIVERPOOL INFECTIOUS DISEASES HOSPITAL.—Resident Medical Officer. Salary, £85 per annum, with board, etc. Applications by April 26th to the Town Clerk, Municipal Offices, Liverpool.

LIVERPOOL INFIRMARY FOR CHILDREN.—House-Surgeon. Salary, £85 per annum, with board, etc. Applications by April 30th to the Honorary Secretary.

LONDON TEMPERANCE HOSPITAL, Hampstead Road, N.W.—Junior House-Surgeon. Applications by April 23rd to the Secretary.

QUEEN'S HOSPITAL, Birmingham.—Obstetric and Ophthalmic House-Surgeon. Applications by April 23rd to the Secretary.

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY, Wigan.—Junior House-Surgeon. Salary, £80 per annum. Applications by April 26th to the Secretary.

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Brighton. House-Surgeon. Salary, £80 per annum, with board, etc. Applications by May 4th to the Chairman of the Medical Committee.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Examiners in Anatomy. Applications by April 27th to the Secretary.

ROYAL LONDON OPHTHALMIC HOSPITAL.—Clinical Assistant. Applications by April 28th to the Secretary.

UNIVERSITY OF CAMBRIDGE.—John Lucas Walker Studentship in Pathology.—Annual value £250, for three years. Applications by May 31st to Professor Roy, Trinity College, Cambridge.

WHITECHAPEL UNION INFIRMARY.—Assistant Resident Medical Officer. Salary, £150 per annum, with furnished apartments, etc. Applications by April 23rd to W. Vallance, Esq.

MEDICAL APPOINTMENTS.

ANDERSON, W. A., M.B., C.M.Edin., appointed Assistant Medical Officer to the Kent County Lunatic Asylum, vice W. F. Menzies, M.B., C.M.Edin., resigned.

BURGESS, Gregor, M.B., appointed District Medical Officer to the Easingwold Union, *vice* Jabez P. Brooks, M.R.C.S., L.S.A., resigned.

CORKHILL, J. C. C. M.B., M.R.C.S., appointed Junior Resident Physician to the Smedley Hydropathic Establishment, *vice* G. Tennant, M.B., C.M., resigned.

HORROCKS, WILLIAM, M.B.Lond., F.R.C.S.Eng., appointed House-Surgeon to the Bradford Infirmary and Dispensary, *vice* J. A. Kemp, M.R.C.S.Eng., L.R.C.P., resigned.

JESSOP, Walter H., M.B., F.R.C.S., appointed Surgeon to the Central London Ophthalmic Hospital, *vice* W. Charnley, M.D., resigned.

MARTIN, Sidney, M.D.Lond., B.Sc., M.R.C.P., appointed Pathologist to the City of London Hospital for Diseases of the Chest, Victoria Park, E.

MASON, F. J. G., M.R.C.S., appointed House-Surgeon to the Cheltenham General Hospital, *vice* A. R. Jolliffe, M.R.C.S., L.S.A., resigned.

MICKLE, W. J., appointed Lecturer on Psychological Medicine at the Middlesex Hospital Medical School, *vice* H. Case, resigned.

MURRAY, John, M.B., B.Ch.Dub., M.R.C.S., appointed Senior House-Surgeon to the London Temperance Hospital, *vice* G. Charles Wilkin, M.R.C.S., L.S.A., resigned.

O'CONOR, John, M.B., B.Ch., B.A., appointed Assistant House-Surgeon to the Royal Portsmouth, Portsea, and Gosport Hospital.

PARTRIDGE, Thomas, M.K.Q.C.P.I., and M.R.C.S.Eng., reappointed Medical Officer of Health to the Stroud Rural Sanitary Districts.

PRANKERD, Herbert P., M.B.C.M.Edin., appointed Assistant House-Surgeon to the Royal South Hants Infirmary, *vice* T. Padgen, M.R.C.S., resigned.

ROGERS, Claude, L.D.S., M.R.C.S.Eng., appointed Dental Surgeon to the Dental Hospital of London, *vice* Arthur S. Underwood, L.D.S., M.R.C.S.Eng., resigned.

THOMPSON, J. Tatham, M.B., C.M.Edin., appointed Ophthalmic Surgeon to the Glamorgan and Monmouth Infirmary and Dispensary.

WELDON, W. J., L.K.Q.C.P.I., appointed Medical Officer to the Gorey Union, *vice* George Weldon, L.K.Q.C.P.I., deceased.

WOODHEAD, German Sims, M.D., F.R.C.P.Ed., F.R.S.Ed., appointed Superintendent of the New Laboratory, Royal College of Physicians, Edinburgh.

AT the last annual meeting of the Preston Medico-Ethical Society, the following officers were elected. *President:* Dr. Moore; *Vice-President:* Dr. J. Lonie; *Treasurer:* Dr. Walmesley; *Committee:* Drs. Smith, Garner, Green, Rayner, Trimble, and Rigby; *Honorary Secretaries:* Mr. John Holden and Mr. J. Byrne. A resolution was passed, expressing the desire that an independent inquiry should be made into the sanitary condition of the town by the Local Government Board, especially in regard to its high mortality.

BEQUESTS.—Sir Joseph Whitworth, of Manchester and Stancliffe Hall, Derbyshire, bequeathed 200 shares, value £5,000, in "Sir Joseph Whitworth and Co., Limited," to Owens College.—Miss Hargreaves, of Mellor, near Blackburn, bequeathed £1,000, less duty, to the Blackburn and East Lancashire Infirmary.—Dr. Edwyn Andrew, of Shrewsbury, bequeathed £500 to the Shropshire Eye, Ear, and Throat Hospital.

TESTIMONIAL TO MR. E. H. DENISON.—A testimonial is being raised in acknowledgment of the services of Mr. E. H. Denison on the occasion of his retirement from the post of librarian to St. Thomas's Hospital, which he has held for a period of twenty-five years. The subscription list already includes about 300 names, and will remain open until May 16th. Contributions to the fund will be received by the treasurers, Mr. William Anderson and Mr. George Henry Makins.

SUCCESSFUL VACCINATION.—Dr. W. H. Wright, public vaccinator for the North District of the Derby Union, has received the Government grant of £57 4s. for successful vaccination. A short time ago, Dr. Wright was successful in obtaining the Government grant for the Normanton, Ormaston, and Littleover Districts of the Shardlow Union.

RABIES IN DEER.—Rabies is reported to have broken out among the deer in Richmond Park. About a hundred animals have in consequence been killed. The infected herd has been isolated, and the order to admit no dogs within the park unless led will be enforced.

DEACONESSES' INSTITUTION AND HOSPITAL.—The Princess of Wales has consented to open the Samuel Morley wing of the Deaconesses' Institution and Hospital at Tottenham on Saturday, May 28th.

A WELSH CENTENARIAN.—A widow, named Mary Davies, has just died at Llanyerwys, at the age of 104 years. She is said to have been able to read her Welsh Bible to the last. This is the eleventh centenarian that has died in Wales during the past three years.

THE LONDON SCHOOL OF MEDICINE FOR WOMEN.—The Mercers' Company has voted £210 towards the expense of the alterations recently made in the premises of the London School of Medicine for Women. The Clothworkers' Company has again granted £20 for the same purpose, making a total of £190 contributed by it to this institution.

HYGIENE IN PRAGUE.—A hygienic institute is about to be established in Prague, under the direction of Professor Soyka. A body of sanitary inspectors is also being organised in that city.

ROYAL COLLEGE OF PHYSICIANS, EDINBURGH.—*Passed Membership Examination:* 1. J. W. Ballantyne, M.B.Edin.; 2. A. W. Rinder, L.R.C.P. *Passed Licence Examination:* 1. J. F. Bridgwood, M.R.C.S. Eng.; 2. R. W. F. Tucker, M.R.C.S.Eng.; 3. D. A. Waite, M.R.C.S. Eng.; 4. W. H. F. Farmer, M.R.C.S.Eng. *Passed Public Health Certificate Examination:* 1. W. Kiddle, M.B.Dub.; 2. E. Robinson, M.R.C.S.Eng.

DANGERS OF FOOTBALL.—A man lately died from the effects of a kick in the stomach during a football match at Macclesfield, which was played for the benefit of another man who had had his leg broken in a previous match.

HONOURS TO MEDICAL MEN IN GERMANY.—Dr. Lotzbeck, of Munich, has received the Order of the Red Eagle (2nd Class); Dr. Reche, of Rosel, has received the Order of the Red Eagle (4th Class); and Dr. Leuthold, of Berlin, has been named Commander of the Order of Henry the Lion (of Brunswick).

IT is reported that the Solicitor-General will take charge of the Lunacy Bill in the House of Commons, the second reading of which will be moved on Monday next.

DR. W. J. MICKLE has been elected a Vice-President of the Section of Psychological Medicine and Nervous Diseases at the International Medical Congress, to be held in September at Washington, U.S.A.

THE medical staff of the Austro-Hungarian Army in time of peace will, according to a decree just published, be composed as follows: Four physicians for the general staff; 24 first-class physicians, 30 second-class, and 96 third-class; 384 surgeons-major of the first-class, 192 of the second-class, and 242 assistant-surgeons.

GUY'S HOSPITAL.—The Michael Harris Prize in Anatomy of £10 has been awarded to Mr. Frederick Hall, of Sydney, New South Wales, and the Beaney Prize in Pathology of 30 guineas has been awarded to Mr. Theodore Fisher, of Greenwich.

PRESENTATION.—Dr. J. W. Lane, on the occasion of leaving Bishop's Castle, has been presented by many friends with a handsome massive marble and bronze timepiece with suitable inscription.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—MEDICAL SOCIETY OF LONDON. The following cases will be shown:—Mr. Bruce Clarke: A Peculiar Congenital Papilloma of the Thigh. Mr. William Rose: A Case of Severe Injury to the Wrist-Joint requiring Suture of Nerves and Tendons. Mr. F. B. Jessett: (1) A Case of Plastic Operation on the Nose. (2) A Case of Removal of a Large Cystic Growth from the Neck implicating the Sub-Maxillary Gland. Mr. Bernard Pitts: A Case of Congenital Curvature of the Spine. Mr. Marmaduke Sheild: Case of Tumour of the Neck greatly reduced in Size by Arsenic.

TUESDAY.—ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M. Dr. Warner and Dr. Fletcher Beach: A Case of Chronic Meningitis, probably Syphilitic, and causing Progressive Dementia. Dr. Poore: An Analysis of 93 Cases of Writers' Cramp and Impaired Writing Power, making, with 75 Cases previously reported, a total of 168 Cases. Dr. Haig: The Relation of a certain Form of Headache to the Excretion of Uric Acid.

WEDNESDAY.—BRITISH GYNÆCOLOGICAL SOCIETY, 8.30 P.M. Specimens will be shown by Dr. Edis, Dr. Fancourt Barnes, Dr. G. Granville Bantock, Mr. Lawson Tait, and others. Council at 8 P.M.

HUNTERIAN SOCIETY, 8 P.M. Dr. A. T. Davies: Cases of Myxœdema. Dr. Dundas Grant: A Case of Carcinoma of the Œsophagus perforating the Trachea. Dr. Port: (1) Two Cases of Pseudo-hypertrophic Paralysis. 2. On Antipyrin.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which should be forwarded in stamps with the announcement.

BIRTHS.

GOOD.—On April 15th, 1887, at St. Neots, Hunts, the wife of F. T. Good, M.R.C.S.Eng., of a daughter.

MARTIN.—On April 13th, at the Limes, Walkden, the wife of William Young Martin, M.D.Univ.Durh., and F.R.C.S., of a son.

MARRIAGES.

MYDDELTON-GAVEY—CATT.—On April 14th, at the Parish Church, Lindfield, by the Rev. F. Willett, M.A., assisted by the Rev. R. Wyatt, vicar of Hayward's Heath, Edward Herbert Myddelton-Gavey, M.R.C.S.Eng., of Ipswich, to Frances Caroline Catt, daughter of the late Charles Catt, of Summer Hill, Lindfield, Sussex.

OWEN—HALL.—On April 13th, Rayley Owen, of 14, Devonshire Terrace, Hyde Park, son of William B. Owen, of 61, Cleveland Square, to Elisabeth, eldest daughter of the late Walter Hall, of 12, Holland Park, W.

DEATH.

VACHER.—On April 15th, at 31 Shrewsbury Road, Birkenhead, Isabella wife of Francis Vacher.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY.....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's —1 30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY.....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

Charing Cross.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

Guy's.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

King's College.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

London.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

Middlesex.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9. Skin, Tu., 4; Dental, daily, 9.

St. Bartholomew's.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

St. George's.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

St. Mary's.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

St. Thomas's.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

University College.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

Westminster.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30: Ear, M., 9; Skin, Th., 1; Dental, W. S., 9.15.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

Communications respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the Journal, etc., should be addressed to the Manager, at the Office, 429 Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the Journal be addressed to the Editor at the office of the Journal, and not to his private house.

Authors desiring reprints of their articles published in the British Medical Journal, are requested to communicate beforehand with the Manager, 429 Strand, W.C.

Correspondents who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

Correspondents not answered, are requested to look to the Notices to Correspondents of the following week.

Public Health Department.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

Manuscripts forwarded to the Office of this Journal cannot under any circumstances be returned.

QUERIES.

Hypodermic Solutions of Morphine.

G.F.W. asks to be referred to the number of the Journal in which appeared an article on the Advantages as to Efficacy, Keeping Qualities, etc., of the Different Preparations of Morphine for Hypodermic Injection.

M.D. Durham.

"Dublin" would be obliged for any information as to how to prepare for the M.D. (Durham) examination for a practitioner of fifteen years' standing. What are good books to read on the various subjects?

Foreign and Colonial Nursing Appointments.

S.G. would be glad to know if there is any agency or other recognised way in which qualified gentlewomen can obtain hospital appointments on the Continent or in the Colonies.

Northern Climate Suitable for Phthisis.

Paterfamilias is anxious to be informed what parts of England, other than the South, would suit a case of incipient delicacy of chest, where a dry and not too harsh climate is indicated. Are the North Midlands or North ever chosen for these cases?

A Fictitious M.P.

Veritas writes: If a practitioner who is not a member of any university, but who holds diplomas L.R.C.P. and L.S.A. persists in signing himself M.D., not only in private but also in documents for publication, can any steps be taken to restrain him in the practice of the imposture, or is he free to spread the falsehood unchecked?

*** If his College were communicated with, the authorities of the College would no doubt take steps in the matter.

ANSWERS.

X.Y.Z., who asks on what subjects an L.R.C.S.Ed., who has passed the first and second examinations for the M.D., Q.U.Irel., should be examined for the L.S.A. London, should apply to Dr. Peregrine, Secretary to the Court of Examiners, Apothecaries' Hall.

Inquirens wishes to know whether a Licentiate of the College of Physicians of Ireland, or of the Apothecaries' Hall of London or Dublin, can style himself "Surgeon?"

*** Licentiates of these bodies possess a customary though not a strict right to the title of Surgeon.

Homes for Dipsomaniacs.

Dr. J. Wilson Paton, Rockferry.—A list of homes (licensed and unlicensed) for the intemperate of both sexes appears in our advertising columns.

English Health-resort for Rheumatoid Arthritis.

S. J. recommends Woodhall Spa, Lincolnshire.

M.B. writes: If "F. W." will communicate with me at 4, the Quadrant, Buxton, he will get all the information required.

Case of Swallowing Artificial Teeth, with Rapid Expulsion by the Rectum.

Dr. William Galletly writes: Would you kindly allow me to state in reply to a letter in the Journal of March 26th, in which the wisdom of the treatment adopted in the above case as reported in a previous issue (March 12th) is impugned, that a fig diet was ordered, hoping thereby to favour a bulky residue, so as to encase the denture, if possible, and facilitate the passage of the foreign body as easily and as quickly as was consistent with safety.

NOTES, LETTERS, ETC.

We received on April 12th the manuscript of a paper on Hydrocephalus, for publication in the Journal. It was in print, and was to appear this week, when we observed the publication anticipated by its appearance in another medical journal. The circumstances are such as to make it apparent that the manuscript was simultaneously forwarded to both medical papers. No notice was given to us that the manuscript had been forwarded elsewhere. We have, of course, cancelled the proof, at some inconvenience.

We wish it to be distinctly understood by everyone—as it is, we believe, generally understood—that when a manuscript is forwarded to the British Medical Journal it is implied that a similar manuscript has not been sent elsewhere, unless special notice of the fact be given; and we shall regard any breach of this well-understood rule as a breach of faith.

A Member B.M.A.—The subject-matter of the communications has no medical interest.

Rabies and Tetanus.

Mr. Victor Horsley will be extremely obliged to any Member who can send him a piece (two or three inches) of fresh spinal cord, from any case of human rabies or traumatic tetanus. The piece of spinal cord (removed as speedily as possible after death) is best packed in a small box full of powdered boracic acid, and sent by letter post. Please address—"Immediate, Mr. Victor Horsley, the Brown Institution, Wandsworth Road, S.W."

The Toilet of Disfiguring Sores on the Face.

Mr. H. B. Blackburn writes: Having lately seen a case of unhealed lupus of the face, of some years' standing, in the person of an intelligent mechanic, who had been trying many things to hide the disfigurement, and at last succeeded in a wonderful manner, I am induced to describe his toilet of the sore. I was so much pleased with the complete disguise that I think it worth while to publish so useful a plan for the hiding of unsightly sores.

The patient produced a small mirror from his pocket, then, having cut a small piece of the white silk lining of an old hat (sarcenet) to the size and shape of the sore, he applied it, pressing it equally on with a camel-hair brush; next he applied with the brush a little oxide of zinc, tinted with carmine, to bring it to the

colour of the surrounding skin. He said this dressing would remain with the same appearance all day, whereas he had found that all other materials he had before tried began to curl up at the edges after a time.

I may add that had I been in his company and ignorant of his condition, I should, at the completion of his toilet, never have suspected that there was anything on his face beyond the disfigurement produced by an old healed lupus, whereas there was a red, raw, and nodular sore of the size of a florin on the nose and cheek.

ERRATUM.

In the report of the Leeds and West Riding Medico-Chirurgical Society, which appeared in the JOURNAL of April 16th, Dr. Churton is said to have described "cases of double and of fœtid empyema, in which the pus came from dilated bronchi." It should have been "cases of double and of fœtid empyema; and *cases of apparent empyema* in which the pus," etc.

EARLY PATERNITY.

M.D. writes: A case has recently come under my notice of sufficient physiological and medico-legal interest to deserve notice. A young woman was sent to me for examination, and it was evident she was pregnant. She confessed it, and was brought face to face with her paramour; they both confessed that the woman had led him astray, and allowed him to have intercourse at least a dozen times. The present age of the father is 13 years and 3 or 4 months, and as quickening had taken place at the time of my examination of the woman, the lad could have scarcely attained the full age of 13 at the time the intercourse took place. The boy, I may say, is well developed as regards the generative organs, but is this not an unusually early age for the development of the procreative functions?

*** Instances of precocious puberty are of by no means rare occurrence, but, so far as we are aware, procreative capabilities have never been proved hitherto at so early an age as in the present case. The earliest recorded case up till now has been a case where a boy, aged 14, succeeded in impregnating a girl of the same age.

STIFFNESS OF THE GREAT TOE IN MALE ADOLESCENTS.

MR. H. B. BLACKBURN writes: Mr. Lucy describes cases common enough. Nothing can be added to what he attributes as the cause, which is undoubtedly backward pressure, from the toe not being allowed to slide forward sufficiently, from shortness of the boot or shallowness of the toe thereof. His treatment, also, is the only one suggested by surgery or common sense, namely, rest until the acute inflammation of the joints has subsided, and properly-made boots afterwards.

Such things as corns, bunions, and the above painful and deforming conditions, should be unknown, depending as they do on easily preventable causes. Ready-made boots should never be worn—by the young, at all events. No adult who has gone to the trouble and slight additional expense of having a last made for his boots will regret it. The last may be altered from time to time by slight additions of leather, and eventually a perfectly-fitting boot may be obtained. The last should be made by obtaining perfect measurements and perfect shape of the foot. He who is being measured should stand on one foot to get its shape and size, as in walking; the bootmaker should trace the shape with a pencil on a paper on which the patient stands.

There is likely to be permanent upward inflexibility, or, anatomically speaking, want of extensibility, with deformity from osseous thickening in these cases. Indeed, with no very long continuation of the cause, such an event may be expected.

I cannot say I have much faith in the external application of iodine, though in all cases of this kind it is sure to be used. The whole treatment is rest for the time and change of boots permanently.

POST-GRADUATE COURSE DURING THE ANNUAL MEETING.

A. B. C. writes to suggest, in view of the meetings of the British Medical Association at Dublin in August, that a post-graduate course of lectures should be delivered at the Rotunda Hospital daily, and extending over a fortnight, or thereabouts. The hour of lecture might be so arranged as not to interfere with the sectional meetings.

THE PHYSICAL EDUCATION OF GIRLS.

DR. RAYNER W. BATTEN writes: There are two points in Dr. Fielden Howard's letter which call for notice. In the first place he very gently blames me for not "meting out a measure of justice" to one particular institution. If he will refer to my paper he will see that I expressly stated that I would "not even allude to some very honourable exceptions;" had it been my purpose I could have named some high schools in which the physical training is nearly all that can be desired; but it would clearly have been most unjust on my part to have done so.

In the second place, writing of girls of the same college, he says, "the anæmia he [Dr. B.] speaks of is conspicuous only by its absence;" it would have been somewhat strange had it been otherwise, seeing that the anæmia of which I spoke was the anæmia of women, and not of girls. I should no more expect to find the marked signs of anæmia amongst such girls than I should the neuroses and uterine affections to which I also alluded. My argument was that the anæmia and unsatisfactory condition of health of so many women might have been prevented; that it was due largely to a faulty up-bringing; and that amongst the causes which had produced it the absence or insufficiency of wise physical training in girlhood was one of the most important.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Sawdon, Hull; Mr. E. Brady, Cork; Dr. Moorhead, Carrington: The Honorary Secretary of the Bath and Bristol Branch, Clifton; Dr. J. H. Galton, London; Mr. L. Jefferies, Cliftonville; Dr. R. H. Mathews, Sheffield; Dr. C. F. Moore, Dublin; Mr. T. B. Goss, Bath; Mr. A. R. Wright, Manchester; Dr. A. H. Hilliard, Aylesbury; Mr. C. H. Wells, London; Mr. J. B. James, London; Dr. R. W. Batten, Gloucester; The Secretary of the Royal College of Physicians, Edinburgh; The Secretary of the International Medical Congress, Washington; Miss M. Keighley, London; Mr. H. T. Heath, Mansfield; Sister Gertrude, Surbiton; Mr. W. H. Spurgin, Maryport; Mr. J. W. Barnes, London; Mr. H. Dixon, London; Dr. W. Murrell, London; Mr. E. S. Henson, Keyworth; The Income Tax Repayment Agency, London; Messrs. Schieffelin and Co., London; Mr. N. Humphreys, London; Dr. J. H. Parkinson, Sacramento, California; Messrs. Lynch and Co. London Mr. S. Morris, Chorley; Dr. Abercrombie, London; Mr. J. Gilroy, Birmingham; Dr. F. A. Davy, Poonumablee, Madras; Mr. T. J. Verrall, Brighton; Dr. W. H. Dickinson, London; Mr. M. W. Kerin, Netley; Dr. Maxwell, London; An Interested One; Mr. T. D. Cook, Torquay; Mr. E. D. Rowland, George Town, British Guiana; Mr. A. H. Benson, Dublin; Mr. Lawson Tait, Birmingham; Mr. R. Clement Lucas, London; Mr. A. M. S. Turner, Gloucester; Dr. C. T. Williams, London; Professor Annandale, Edinburgh; Mr. S. S. Rodery, Droitwich; The Secretary of the West London Medico-Chirurgical Society, London; Mr. R. T. Grubb, Harlow; Dr. Railton, Manchester; Mr. G. F. Webb, Dawlish; Mr. A. S. Jeffries, Clevedon; Dr. Mickle, London; Brigade-Surgeon R. Waters, Allahabad, India; Dr. R. Prichard, Cardiff; Dr. F. Fox, Strathpeffer Spa; Dr. Partridge, Stroud; Dr. T. Laffan, Cashel; Dr. D. V. O'Connell, Neemuch, India; Dr. Churton, Leeds; Mr. F. W. Bell, London; Quid Rides; Brigade-Surgeon Hamilton, Dil Kooshu, Oudh; Dr. A. Hall, London; Dr. Simon Fitch, Halifax, Nova Scotia; Dr. J. H. Warren, Boston, United States America; Dr. J. K. Murray, Kendal; Mr. J. T. Gilchrist, Greenock; Dr. Uhthoff, Brighton; Dr. E. S. McKie, Wiesbaden; Dr. Styrap, Shrewsbury; Dr. Heatley, Sunderland; Mr. E. Turner, Stourbridge; Mr. H. J. Collins, London; Surgeon-General MacKinnon, London; Surgeon-Major R. H. Quill, Woolwich; Dr. McKendrick, Glasgow; Mr. G. Carter, Ilkley; Mr. E. Garraway, Faversham; Dr. Von Idelson, Berne; Mr. W. Bunn, London; Mr. A. G. Lawrence, Chepstow; Dr. B. Smith, London; Dr. Moorhead, Carrington; Messrs. Burroughs, Wellcome and Co., London; Mr. R. J. Hutton, London; Mr. Snowdon, Newcastle-on-Tyne; Dr. Mouncey, Earleston; Mr. G. B. Browne, London; The Honorary Secretary of the Nottingham Medical Society; Dr. J. A. Nealon, Runcorn; Dr. Hack Tuke, London; Surgeon-Major Gallway, Brighton; Messrs. Burgoyne, Burbidges, and Co., London; Dr. W. F. Haslam, Birmingham; Dr. J. A. Myrtle, Harrogate; Reverend J. Kirkman, London; Dr. J. W. Paton, Rockferry; Mr. Page, London; Dr. C. Bell, Edinburgh; Mr. H. P. Prankerd, Southampton; A Subscriber; Mr. T. O. Smith, Kinnetty; Mr. E. Davies, Vochriw; Mr. C. T. Kingzett, London; Mr. F. G. Turner, London; Mr. G. Holford, Bolton; The Woodhouse and Rawson Electric Supply Company, London; Messrs. Wenham and Waters, Croydon; Dr. R. Rentoul, Liverpool; Dr. Tatham, Salford; Dr. G. P. Best, Cheltenham; Mr. J. Brown, London; Dr. R. Barnes, London; Dr. G. S. Woodhead, Edinburgh; Mr. E. Hamley, London; Dr. W. H. Wright, New Normanton; Mr. J. B. Smith, London; Dr. Johnstone, Dover; Mr. W. A. Lane, London; Dr. Wilks, London; Mr. L. W. Marshall, Nottingham; Mr. G. P. Field, London; Dr. R. Drury, Birmingham; Dr. Hime, Bradford; Mr. J. Lewis, Birmingham; Mr. T. Mowat, Strathaven; Messrs. R. A. Knight and Co., London; Mr. Shirley Murphy, London; Dr. A. Colles, Wellington; Our Glasgow Correspondent; Our Manchester Correspondent; Mr. N. W. Scatliff, Margate; Dr. J. G. Brereton, Newport; Mr. A. Jackson, Sheffield; Mr. H. J. Davis, Brighton; Dr. R. E. Rouse, Brighton; Mr. T. B. Brierley, Tattenhall; Mr. A. S. B. Miller, Cambridge; Mr. W. T. Brookes, Oxford; Mr. Perry Marsh, Bristol; Mr. Holloway, London; Dr. Gustav Fischer, Jena; Dr. C. R. Illingworth, Accrington; Dr. Strachan, Sunderland; Surgeon Beevor, London, etc.

BOOKS, ETC., RECEIVED.

The Treatment of Spina Bifida by a New Method. By J. Morton, M.D., L.R.C.S.Ed London: J. and A. Churchill. 1887.

The International Journal of the Medical Sciences for April, 1887. London: Cassell and Co. 1887.

The Practice of Pharmacy, etc. By Joseph P. Remington, Ph.G. Illustrated. Philadelphia, U.S.A.: J. P. Lippincott and Co. London: Burroughs, Wellcome and Co. 1887.

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THE HUNTERIAN ORATION
ON
THE ETIOLOGY OF PUERPERAL FEVER.

Delivered at the Annual Meeting of the Hunterian Society.

By ALFRED LEWIS GALABIN, M.D. CANTAB., F.R.C.P. LOND.,
Obstetric Physician and Lecturer on Midwifery to Guy's Hospital.

I NEED hardly remind you that the genius of Hunter was not limited to the field of surgery and general pathology, but that he devoted some of his attention also to subjects connected with obstetrics. Thus his name is immortalised in the description of the several parts of the decidua of the gravid uterus, and especially in that term decidua serotina, whose late Latinity is apt to perplex students having minds imbued with classical models of a purer age. No one can comprehend this nomenclature without mastering the Hunterian theory of decidual formation.

In undertaking, therefore, to address you, I venture, as an obstetrician, to select an obstetrical subject, and to direct your attention to some of the problems connected with Puerperal Fevers. I do so the more readily, because many of these problems are yet unsolved, and their solution demands especially three things in which Hunter was pre-eminent—painstaking clinical observation, scientific experiment, and sound reasoning. While I cannot hope to bring before you novel facts, I shall be repaid if I can obtain the aid of some members of the Hunterian Society in investigating these questions by Hunterian methods.

Modern discoveries as to the connection of microscopic organisms with disease, which have thrown such a flood of light on the nature of spreading inflammations, of several infectious diseases, and on some diseases not hitherto considered infectious, have not failed considerably to modify opinions as to the nature of puerperal fever.

No other rational theory has, indeed, ever been proposed to account for the existence of an infectious or contagious disease, which may spread indefinitely from one individual to another, but is limited by time in the individual, except the theory that it is dependent upon parasitic organisms. A merely chemical ferment may indeed suffice, although present in very minute quantity, to kill an individual. A second may even be inoculated from the first, and suffer in minor degree, as when the hand is wounded in dissecting an animal dead from snake-bite. But all experiment shows that such a chemical ferment, if free from organisms, is incapable of causing a disease spreading from one animal to another progressively.

The Darwinian theory of pangenesis, indeed, asserts that the cells of the body give off germs of a minuteness far beyond the reach of any present or any future microscope; and that it is owing to the presence of such germs, derived not only from the parent, but from further ancestors, in the ovum and the spermatozoa, that the progeny grows to resemble its parents, and even reproduces traits of its long-past ancestors. However incredible such a theory may appear at first sight, it will hardly be possible, in any easier and simpler way, to account for the extraordinary powers of ovum and spermatozoon. If we accept such a theory, we may suppose that cells having, for some reason unknown, taken on a morbid action, may throw off germs which reproduce such morbid action not only in other cells of the same animal, but in those of another animal, if in any way they get access to its tissues. We can hardly dispute the existence of some such spermatic influence of one cell over another in malignant growths—as, for instance, when we find that the glands of the rectum or the uterus are reproduced in a secondary deposit in the liver or the lung.

It is conceivable, then, that an infectious disease might exist, dependent on such a spermatic influence of cells through their own germs, and not on any parasitic organisms. But, on this theory, it appears impossible to imagine any explanation, either for the tendency of the animal to recover from the disease after a certain time, or for the immunity, more or less complete, which is generally conferred by one attack against future attacks of the same disease. The disease ought to be ever spreading into a wider circle and increasing, as is the case in the advance of cancer.

On the parasitic theory of infectious disease, on the other hand, it is possible to account for both of these facts. In artificial cultivations of microbes it is not an uncommon experience that the organism may cease to multiply and die after a certain time—not merely when it has exhausted the pabulum upon which it feeds, but also, apparently, from the effect of some chemical substance which itself produces. Some similar chemical substance may be produced by the growth and multiplication of pathogenic organisms within the body, either by their own power or by some reaction which they set up in the cells of the body.

The immunity conferred by one attack against future attacks of the same disease is not quite so easy to explain. It is well known that three modes of accounting for it have been suggested.

1. That the pathogenic organism exhausts some material in the body necessary for its subsistence; and that this material is never reproduced, or reproduced only after an interval of years. If this were so, then the material in question must be different for each zymotic disease, since an attack, for instance, of whooping-cough does not protect from measles. Men and animals must certainly be singularly unfortunate if they have in their bodies so many substances capable of nourishing zymogenic organisms, but entirely useless to themselves, as they must be if the body is able to go on for years without appreciable loss, and without ever reproducing the substance in question. This explanation is, moreover, directly disproved. An animal which has suffered from anthrax is thenceforth proof against inoculation by anthrax bacilli, which produce the disease with much certainty in unprotected animals of the species which are subject to it; but as soon as the animal is dead the anthrax bacilli will thrive luxuriantly in its tissues, as they will in most organic substances. There is, therefore, no want of pabulum, but the resistance to the growth of the organism depends upon the vitality of the tissues.

2. The second explanation is that the disease is terminated by the production by the pathogenic organism in the body of some chemical substance inimical to its own future growth; and that this substance remains in the body for years, or for life, and prevents any future attack of the same disease, or modifies that attack by hindering the development of the microbes. This explanation is approved by Klein, amongst others, as being probably the correct one. But it seems almost as improbable that this series of substances—one for each zymotic disease from which the animal has suffered—should be retained in the body for an indefinite time, and never excreted nor destroyed, as that there should exist at first in every animal a pabulum specially suitable to each zymotic disease to which it is liable, which is never reproduced when once consumed. The theory appears to me, moreover, to be refuted by the same fact that as soon as the animal is dead the anthrax bacilli will grow in the tissues of an animal protected from anthrax by a previous attack. Is it conceivable that a protecting substance once produced should remain for years intact in the animal's body, and yet disappear immediately upon death, and before decomposition has occurred?

3. The third explanation ascribes the acquired immunity to an altered vital action in the cells or other tissues of the body transmitted by inheritance, more or less completely, to all generations of future cells which succeed the first. If Pasteur's theory be correct as to the mode in which his inoculations for hydrophobia confer an immunity against that disease, we must conclude that this altered vital action can be brought about not only by the multiplication of microbes within the body, but by the repeated introduction by inoculation of some chemical substance produced by the microbes. There is little doubt that the tissues of the body have more or less power of resisting the growth of all organisms within them. An organism is innocuous as regards which the power is complete; that organism is pathogenic as regards which it is incomplete or absent. It may be regarded as essential to the existence of an animal that it should have the power of resisting the entrance into, or multiplication within it, of those organisms to which it is constantly or most frequently exposed; and therefore as certain that such a power would be developed to adapt the animal to its environment. The mode of resistance may be that some chemical substance inimical to the multiplication of the organisms is either produced continuously by the tissues, so as to be constantly present in the body, or else is produced only by the reaction between the cells and the microbe which is assailing them.

May it not be essential to the continuance of the species, not only that this resisting quality in the tissues should exist, but that it should increase in the presence of pathogenic organisms which put it to the test? The mode of increase might be the preferential survival by natural selection of those nuclei in the body which are best adapted to destroy the assailing organisms rather than be destroyed by them. The hypothesis of such a faculty of increase of the resisting power of the tissues of the body in the presence of assailing organisms has the recommendation that it explains by one cause three facts which call for explanation. First, it accounts for the fact that, after a certain time, if the animal attacked by infectious disease does not die, the

tissues of the body gain sufficient power to destroy the organisms and put an end to the disease. I think that the explanation is even a better one than that of supposing that the microbes produce some chemical substance by an inherent quality of their own, and that this substance accumulates in the body until it is sufficient in quantity to prevent their further development. For, take the case of syphilis; if the accumulation of this hypothetical substance is so slow that the disease still exists after months or years, it is difficult to suppose that it would not be continuously excreted or destroyed, and fail ever to accumulate at all to the required total amount. On the other hand, we can conceive that a struggle for existence may be prolonged even for years and yet end in the victory of the tissues of the body over the assailing organisms. Secondly, all future cells of the body, the progeny of those which acquired the improved resisting power, may be expected to inherit this property to some extent, but probably not to the full degree. The further removed are the generations of cells the weaker would be the inheritance. Thus we have an explanation of the fact that an immunity, more or less complete, is generally conferred against future attacks of the same disease, but that this immunity is apt to become impaired in the course of time. Thirdly, the improved resisting power in the tissues is likely to be transmitted, to some extent, from the animal which suffered from the disease to its descendants; and, if many animals in the same lineal descent suffer from the disease, such improved resisting power is likely to become a permanent acquirement in the race. Several well-known facts are capable of explanation on this ground. A zymotic disease introduced to countries where it does not generally prevail usually has a high mortality. Diseases such as measles and whooping-cough, which are constantly present, and from which almost everyone suffers, have a very small mortality. The very same diseases introduced into an island whose population has been free from them for generations become very fatal.

I think that considerations such as these, together with the facts which have been proved as to the dependence of certain diseases upon parasitic organisms, are sufficient to induce many to consider that, if not absolutely demonstrated, it is probable in the highest degree that every contagious or infectious disease is due to the multiplication in the body, or upon some surface, of a pathogenic organism. But whether or not this be admitted as regards all infectious disease, few will deny that it is true of the infectious forms of puerperal fever. Organisms have been found in abundance in the peritoneal exudations, in diphtheritic patches on the genital tract, in the pus of parametric abscesses, and that of metastatic abscesses in different parts, in the lymphatics, and in thrombi within the vessels. In necrotic patches in the walls of veins associated with thrombosis, the spread of microbes has been found coterminous with the necrosis. Microbes have also been found in emboli in distant organs, in the Malpighian tufts of the kidney, in the fluids of the pleura, the pericardium, and the ventricles of the brain, and on the valves of the heart in endocarditis. Both fresh fluids from the peritoneum, or elsewhere, and cultivations of microbes derived from such fluid, have proved fatal to animals when injected into the cellular tissue or peritoneum. Some, indeed, of the animals experimented on have proved able to resist the virus, but animals in the puerperal state have appeared to be more susceptible. In some cases, although comparatively rarely, microbes have been visible in the blood during life; artificial cultivations of microbes have been obtained from the blood, and these have proved fatal to animals in the same way as those derived from the peritoneal exudation.

Both evidence as to the occurrence of organisms in puerperal fever and the importance assigned to it have rapidly increased within the last few years. So recently as 1875, in the discussion on puerperal fever at the Obstetrical Society of London, although the relation of bacteria to the disease was one of the points specially put down for consideration by Sir Spencer Wells, who introduced the debate, only one speaker touched at all considerably on this subject, and he was of opinion that the bacteria are quite innocuous, and rather beneficial in their action than otherwise.

This modern evidence has tended to bring towards unity the various opinions which have been held as to the nature of puerperal fever. The chief of this opinions have been (1) that it is a specific zymotic disease to which puerperal women alone are liable; (2) that it consists primarily in an inflammation of some one or more of the organs or tissues connected with the process of parturition, and that the fever and general symptoms are secondary to and the consequence of these local inflammations; (3) that it is due to absorption from organic matter in a state of decomposition, and is identical with surgical septicæmia and pyæmia; (4) that the name includes affections of different causation, some of which originate from decomposing organic matter, and some from other morbid poisons. Of these, it is scarcely necessary now to consider any except the last two; for it is clear that the infectious form of puerperal fever cannot be merely dependent upon a local inflammation. And I know of no authority of the present day, except Dr. Fordyce Barker, of New York, who still maintains the view that puerperal fever is a specific zymotic disease.

The application to puerperal fever of the germ theory of disease has introduced a new classification—more essential than the old classification into autogenetic and heterogenetic forms of disease.

There are three possible sources of poison in the body of the puerperal woman:

1. The poison may be produced within the body itself. For the resulting condition the term "endogenetic toxæmia," proposed by Dr. Barnes, may be adopted. Even in the normal puerperal woman the excessive liability to septic disturbances and zymotic diseases which exists is doubtless due to the presence in the blood of an excess of waste products. If the excretory organs (especially the kidneys and liver) are acting inefficiently, a greater proportion of such waste products is apt to be retained in the blood. An unusual excess of waste products may also arise in another way. It is known that the bodies of over-driven cattle decompose very rapidly. Again, the flesh of the coursed hare is noted among epicures for its tenderness. It may be inferred that excessive muscular exertion produces such a condition of the tissues that the microbes of the ordinary decomposition develop in them more rapidly than usual after death. Probably, therefore, they may be less protected than usual from other septic germs even during life. We may see here one of the reasons why, after a very severe labour, women are specially prone to septic disturbance. I know of no evidence to prove that endogenetic toxæmia can by itself produce a febrile disease. At any rate, it cannot be clinically distinguished as a separate variety, and is to be regarded rather as a condition predisposing to puerperal fevers proper.

2. A chemical poison—the so-called sepsin—may be produced by the action of the bacteria of decomposition on organic matters in the genital canal, and may be absorbed into the system. Experiments made on animals by injection of such fluid into their tissue after sterilisation show that the effect is proportional to the amount of the fluid injected; that a comparatively considerable amount, such as a cubic centimètre in the case of a small animal, is requisite to cause death, and that, if it does not die, the animal soon recovers if no more poison is introduced. The condition so produced is called septic intoxication or sapræmia. Septic intoxication may play an important part in many cases of puerperal fever, in which, so long as some decomposing material is retained within the uterus, there may be a continuous entry of poison. But it is hardly ever possible clinically to decide that any case belongs purely to this variety; only, if the symptoms subside very rapidly and completely after the removal of the decomposing matter, it may be presumed probable that the case has been one of septic intoxication only.

3. Parasitic organisms may gain access to the body, and multiply in the tissues, the blood, or the lymphatics, or in all of them. This constitutes septic infection, or septicæmia proper, and is the variety of puerperal fever upon which almost the whole interest is concentrated; for it is hardly ever possible to be certain that a given case is not of this nature; and without doubt this class comprises the great majority of cases which occur, including many, if not all, of apparently local affections, such as pelvic cellulitis, and phlegmasia dolens, which have not generally been included under the title of puerperal fever.

It is evident that, by the definition I have given of the third class, zymotic diseases are included, although this is not generally understood to be implied by the term septicæmia. The class may, therefore, be divided into two subdivisions, septicæmia, and zymotic diseases.

Even before the germ theory of disease had been worked out in reference to puerperal fever, most German authorities had adopted the view that puerperal fever is identical with surgical septicæmia, and due to no other cause. This was largely due to the labour of Semelweiss, who showed that dissecting-room poison conveyed by the hands of students is a fertile source of puerperal fever, and that the danger may be averted to a great extent if the hands are carefully washed with antiseptics. American authorities mostly adopt the same view. Many British authors, on the other hand, have long held that certain zymotic diseases, especially erysipelas, scarlatina, and typhus fever, may produce a disease indistinguishable from puerperal fever due to septic poison.

This is now the most doubtful point connected with the disease. I propose especially to consider what evidence on the subject may be obtained, both from observations and experiments in reference to pathogenic organisms, and from clinical experience. The simplifica-

tion attained by the theory that puerperal fever is identical with surgical septicæmia is not so great as may at first sight appear. It does not reduce puerperal fever to a single disease, but leaves it still a group of diseases.

I will first consider the evidence which has been obtained about septicæmia by experiments on animals. It has been shown that the common organisms which produce putrefaction in organic matter (mainly the bacterium termo and a common bacillus) are not capable of multiplying in living tissues, although they produce the sepsin which may be the cause of septic intoxication. They are aerobic, that is to say, they require the presence of oxygen for their growth, while most, at least, of the pathogenic organisms are anaerobic, and multiply and flourish without oxygen. If, therefore, septic infection is produced, this is due not to the organisms chiefly concerned in putrefaction, but to others, the germs of which chance to be conveyed to the genital canal, and which are capable of multiplying in organic fluids, as are also the organisms of several known zymotic diseases. Each species of these must produce a disease which is essentially different.

An acquaintance with the subject which I confess with sorrow to be very limited enables me to enumerate nine diseases in animals, to be included under the term of septic infection.

1. *Davaine's Septicæmia in Rabbits.*—Davaine injected into the subcutaneous tissue of rabbits a small quantity of putrid ox blood; this produced rapidly fatal septicæmia, and the infection was transmitted through twenty-five animals in succession. For the last effective transmission of the putrid infective material, only a trillionth part of a drop of blood was used.[1] The blood contained actively moving bacteria in great numbers. Most diverse fluids were found effective for the first infection. Coze and Feltz[2] had previously produced a similar septicæmia in rabbits by injecting blood from a puerperal patient, and also continued the transmission by gradually diminishing quantities of blood. They observed in the blood not only bacteria, but micrococci in chains, and long moving rods, and probably, therefore, were dealing with a mixed infection. Davaine's septicæmia cannot always be produced. Koch failed to obtain it. It must, therefore, depend upon organisms not always present in the air. These experiments attracted great attention, because they were supposed at first to show a gradual increase in the virulence of the infection during its transmission from one animal to another. Later experiments, especially those of Gaffky and Dowdeswell, appear to have shown that this was a fallacy, due to the absence of sufficient control experiments, and that the extreme of virulence is already attained in the second, or at the most the third, generation. A greater quantity of the blood of the first animal is required because it dies from the combined effect of the first injection of putrid fluid, and before the bacteria have multiplied to such an extent in the blood that some of them are contained even in a very minute fraction of a drop.

2. *Koch's Septicæmia of Rabbits.*[3]—By injecting into rabbits an infusion of putrid meat, and also water from a rivulet, Koch produced a rapidly fatal septicæmia, which could be transmitted through a series of animals like the last form. Everywhere the blood contained bacteria about 14 μ[4] in length and 6 μ in breadth. The disease is fatal to mice and birds, but guinea-pigs, dogs, and rats resist it. It thus differs from Davaine's septicæmia, which is easily transmissible to guinea-pigs, but not to birds.

3. By injecting a putrid infusion of meat into rabbits, Koch[5] on two occasions obtained a form of septicæmia transmissible like the last, but dependent on large oval micrococci, whose greatest diameter was .8 to 1.0 μ.

4. *Koch's Pyæmia of Rabbits.*[6]—A piece of mouse's skin was macerated two days in distilled water, and a syringeful of the fluid injected into the back of a rabbit. Metastatic deposits were produced in the lungs and liver, and the disease was inoculable through the blood. The organism was a micrococcus, spherical, .5 μ in diameter.

5. *Koch's Septicæmia in Mice.*[7]—This was obtained by injecting putrid fluids. It was transmitted through as many as seventeen animals in succession. The blood was full of very minute bacilli. They are only .8 to 1.0 μ long, that is about one-tenth of the average size of bacillus anthracis or the tubercle bacillus. From their minute size they could only be seen after careful staining and illuminations by a condenser of very large angular aperture.

6. *Koch's Progressive Necrosis in Mice.*[8]—The organism is a micrococcus, spherical, .5 μ in diameter, occurring chiefly in chains and zoogloea. This occurred first in association with No. 5, and could only be separated from it by transmission of the infection to field-mice, which possess an immunity from that septicæmia.

7. *Klein's Pyæmia of Mice.*[9]—This was obtained from an accidental contamination of a culture in pork-broth. The organism is a micrococcus, larger than that seen in No. 4, but forming smaller clusters.

8. *Koch's Spreading Abscess in Rabbits.*[10]—This was produced by injection of putrid blood. The micrococci are spherical, and very minute, only .15 μ in diameter.

9. *Koch's Erysipelas in Rabbits.*—This was produced by inoculation with mouse's dung softened in distilled water. Local inflammation like erysipelas was produced. The blood was not infective, but material from the site of inflammation was not tested. The organism was a bacillus, about half the length (10 μ) and a quarter or a half of the thickness (.3μ) of bacillus-anthracis. The disease, therefore, although producing a similar local effect, is not the same as ordinary erysipelas, the organism of which is a micrococcus.

To these may be added two forms of septicæmia in which a special organism has been observed in the human subject.

10. In several cases of human septicæmia, Klein found in the blood-vessels of the swollen lymphatic glands large numbers of minute bacilli, slightly thicker than those of Koch's septicæmia of mice, their length about 1 to 2.5 μ.

11. A number of persons were poisoned by eating ham at Welbeck in 1880. In the fatal cases, bacilli were found in the vessels of the kidney. In experiments on animals, the disease proved to be transmissible, and the same bacilli were found in the blood and exudations. The bacilli are from 3 to 9 μ long, their thickness about 1.3 μ

After a very small research, therefore, eleven distinct diseases can be enumerated, and probably many more exist. In five of these the organism is a micrococcus, in two a bacterium, in four a bacillus. Experiments cannot, of course, be made upon the human subject, and it is therefore not known to how many of these man is liable. But it may be inferred that in him also there are at least several distinct forms of disease, each having a special microbe, included in the term septicæmia. A similar inference may be drawn from the knowledge, imperfect as it is, which has been obtained as yet about the microbes which occur in puerperal fever.

So long ago as 1878 Pasteur found in the blood of puerperal patients who died from a rapid form of septicæmia a microbe, which has the form of a vibrio. This could sometimes be obtained by a culture from the blood, even though it could not be seen in the blood itself. Further researches, both by Pasteur himself and others, have shown that the organisms most generally present are micrococci, and these are always found, even if bacteria and bacilli are present also. They form a main part especially of the peritoneal exudation, and of any diphtheritic patches formed in the genital canal.

The micrococci are found most frequently in chains and chaplets, especially when propagated in cultures. They thus differ from the micrococci commonly found in ordinary abscesses, which are usually arranged in pairs. The chain-like arrangement, however, affords no distinctive character, for it is a very common mode of growth of different species of micrococci. Micrococci similar to those seen in puerperal fever are found in small-pox, erysipelas, diphtheria, pneumonia, scarlatina, as well as in some of the forms of septicæmia in animals already described. Although it has been contended that some of these diseases, as, for instance, scarlatina and diphtheria, may be transformed one into the other, yet there can be no doubt about the absolute clinical distinctness of small-pox, and thus it is proved that micrococci morphologically similar may be of different species, and have absolutely distinct qualities.

Although micrococci are the most usual organisms found in puerperal fever, yet in secondary abscesses, especially if offensive, bacteria and bacilli may be found. Doléris professes to be able to classify the forms of puerperal fever according to the organisms found, in such a way as to be in agreement with the clinical symptoms. He makes the following classification of puerperal fever:

1. Rapid, acute septicæmia, which kills without any notable local lesions. In this form he finds the chief microbe to be a moving bacillus, which in rare cases appears early, both in the lymphatics and the blood. In the cases observed, micrococci also were always found in the lymphatics.

2. In a less rapid form of the disease, there is a tendency to suppuration the lymphatics and the peritoneum being chiefly affected.

[1] *Med. Jahrb.*, vol. clxvi. Koch on *Traumatic Infective Diseases*, New Sydenham Society's Translation, p. 10.
[2] Virchow und Hirsch, *Jahresbericht für* 1866, i, p. 195.
[3] Koch, *Mittheil. Aus. d. k. Gesundh.*, 1881.
[4] μ = a micromillimètre, or .001 millimètre.
[5] Koch, *Traumatic Infective Diseases*, p. 58.
[6] *Op. cit.*, p. 47.
Op. cit., p. 33.
[8] *Op. cit.*, p. 40.
[9] Klein, *Micro-organisms and Disease*, p
[10] *Op. cit.*, p. 44.

A micrococcus growing readily into chaplets is the chief microbe found abundantly in the lymphatics. The same septic bacillus as that seen in the last form is found also in the lymphatics, and appears in the blood only shortly before death. This septic bacillus appears to correspond with the microbe observed by Pasteur in rapid forms of puerperal septicæmia.

3. In forms characterised by thrombosis and phlebitis, and tending to pyæmia, micrococci were found in the blood. These were in small quantity, and could frequently only be obtained in certain parts of the body, not everywhere throughout the vascular system.

4. In slow forms of disease associated with phlegmon, or tendency to metastatic abscesses, and accompanied by great anæmia, micrococci were also found in the blood. In cases where the hæmatic lesions existed alone, cultures from the blood showed only double points and zoogloea. When it was accompanied by phlebitis and infarctus, the almost constant form in cultures was that of double points in enormous quantities. Chaplets appeared late, or not at all. When there was also lymphatic lesion with development into abscesses, cultures of the blood gave rise almost constantly to long chaplets, similar to those found in the lymphatics.

It is to be observed that during life, as a rule at any rate, the microbes can be seen in the blood only in very small quantities. It appears that the movement of the blood hinders their development. When, however, some corpuscles become agglutinated and form an embolus in a small vessel, the microbes multiply rapidly in and around the embolus. Very shortly after death, in some acute septicæmic cases, Doléris found the blood swarming with bacilli, which, after such a short interval, he considered could not be the result of the multiplication of the ordinary bacilli of decomposition.

By other authors forms of disease have been recorded somewhat differing from those described by Doléris in reference to the appearance and distribution of the microbes. Thus Lomer[11] relates the case of a woman, aged 37, in whom symptoms of peritonitis commenced twenty-four hours after delivery. Phlegmonous swellings were formed in various parts. She died five days after delivery. Shortly before, some blood was drawn with antiseptic precautions, and was found to be crowded with chain-like micrococci, each chain being composed of from two to twelve members. To every blood-corpuscle two or three chains were present. On *post mortem* examination, performed only one hour after death, the same micrococci were traced in the peritoneal cavity pus, in the liver and kidneys, and in lymph from the phlegmonous swellings; a variety of bacteria were also found. This case is very unusual from the large number of organisms seen in the blood during life. It also proves that, in a rapid form of disease, the microbes in the blood may be micrococci and not bacteria.

The following case, related by Fränkel,[12] is of interest, because it shows, first, a mixed form of disease, and, secondly, an apparent relation to erysipelas. A puerpera died with embolism, suppurative parametritis, and pleuritis. The pleural exudation was found to be an almost pure cultivation of fine bacilli. Some of the micrococci usually seen in suppurations were also present. In the spleen was found a special form of micrococcus, very minute, chiefly occurring in pairs. Cultivations of these cocci, injected subcutaneously into mice, caused death. In rabbits there was no reaction to subcutaneous injection, but injections into the pleura caused pleuritis and pericarditis, the exudation containing the same micrococci. An injection of this exudation into the ear of another animal caused a local inflammation resembling phlegmonous erysipelas. A similar erysipeletous inflammation was produced at the site of the wound where a pure cultivation of the micrococci was injected into the jugular vein of another rabbit.

The following interesting experiment by Pasteur[13] seems to show the passage of a microbe through the blood of the mother to that of the fœtus. From the blood of a rather sickly new-born child, whose mother was suffering from supposed puerperal fever, he cultivated a microbe having the form of a vibrio. From the mother's blood no cultivation could be obtained, and at her death no lesion of the genital organs was found. She had, however, an old hepatic abscess, and in pus taken from this he discovered the same vibrio.

The following observation, communicated by Pasteur to the Academy, June 10th, 1879,[14] is also of interest in reference to the question whether it is possible for a zymotic disease in the puerperal state to simulate puerperal septicæmia derived from decomposing organic matter. A woman died at Nancy, under the care of M. Feltz, having all the classical symptoms of puerperal fever. Two days before death, M. Feltz discovered the presence in the blood of bacilli; these were cultivated according to Pasteur's method, and the cultivations, inoculated in animals, killed them by infection. Feltz thought that he had discovered in these bacilli the special septicæmic poison of puerperal fever, and showed them to Pasteur. Pasteur recognised in them the bacilli of anthrax. To test the matter, animals were inoculated with the bacilli and with cultivations derived from anthrax. All died with the same lesions, and the aspect of the blood was identical. It was then discovered that the woman had lived during her pregnancy close to a stable, whence she might have acquired anthrax, although it was not known that the disease had been present in it.

Examination of the lochia has not thrown much light upon the nature of the microbe concerned in puerperal fever. As might be expected from the vicinity of an external surface, the lochial discharge is never absolutely aseptic. Even normal lochial discharge has been found to produce poisonous effects when injected into animals, these effects increasing, the later the date after parturition.[15] The organisms which may be found even in the case of women suffering from no morbid symptoms are of the most various kinds, including bacilli, bacteria, and micrococci, varying in size and form as much as the several species which have been shown to be concerned in different forms of septicæmia in animals. As a rule, however, when the women are free from febrile symptoms, only a very few organisms are found, or it may be impossible to see any, especially if antiseptic injections have been used, and the fluid is obtained high in the vagina. When febrile disturbance is present, the microbes are generally present in abundance. It is thus clear that examination of the lochia does not solve the question how many species of puerperal septicæmia there may be, or whether the microbes causing them are those whose germs are generally present in the air, or must be derived from some special source of contagion.

Experiments on animals have been equally inconclusive. Cultivations from the blood or pus of patients suffering from puerperal fever have frequently caused death when inoculated upon animals, and the blood of the animal has sometimes shown micrococci, generally taking the form of chaplets; but in many cases also the animals have been able to resist the infection, especially when not in the puerperal state.

On the whole, the observations on the organisms present in puerperal fever confirm the view that there are at least several pathogenic organisms capable of producing different forms of the disease. It is obvious that the micrococcus growing in the form of chaplets need not have been of the same species in all cases, since a similar form is observed in such various diseases as small-pox, diphtheria, scarlatina, erysipelas, and pneumonia. There are also apparently harmless micrococci, such as those which have been found even on the surfaces of wounds running an apparently aseptic course under Listerian dressings.

It is probable that much more may yet be discovered as to difference of species of the microbes in puerperal fever by cultivation and experiments on animals. The various forms of the disease—some marked mainly by rapid septicæmia, some by peritonitis, some by thrombosis and phlebitis, some by slow pyæmia—may depend upon the mode in which the microbes find entry, but may also depend on a difference in their species or their virulence.

If the observations be confirmed, showing that the organism concerned may sometimes be a bacillus, the point may prove to be of some practical significance. For, while micrococci, bacteria, and bacilli themselves are killed by boiling water, and by some antiseptics in general use, the spores of bacilli—of some known species, at any rate—have been found to resist boiling for fifteen minutes, and solutions of carbolic acid 1 in 10, and even corrosive sublimate 1 in 100.[16] Possibly this may afford some explanation of recorded cases in which practitioners, after a series of cases of puerperal fever, have given up practice for weeks, and used antiseptics with diligence, and yet have found the disease recur on resuming midwifery practice.

In the absence of any positive method of distinguishing between micrococci of similar morphological appearance, the question whether zymotic diseases, such as erysipelas, scarlatina, and diphtheria, can give rise to a disease indistinguishable from puerperal septicæmia, must rest at present upon clinical evidence. In reference to this, I desire to call attention to some evidence which appears in the Report on Puerperal Pyrexia, issued by the Collective Investigation Committee, especially as this and other similar reports, owing to their having been published only in the *Collective Investigation Record* and

[11] *Amer. Journ. of Obstet.*, xvii, p. 676.
[12] *Deutsch. Med. Wochenschrift*, No. 14, 1884.
[13] Pasteur, *Comptes Rendus*, 1880.
[14] Ardenne, *Les Microbes, les Miasmes, et les Septicémies*, p. 287.
[15] Kehrer, *Beitr. z. vergleich. Geburtsk.*, No. 6, 1875.
[16] Klein, *Micro-organisms and Disease*, p. 190.

not in the BRITISH MEDICAL JOURNAL, have probably been seen by very few persons. It has been objected to collective investigation that, for deciding an obscure question, no advantage can be gained from an indiscriminate collection of reports from observers, on many of whom no reliance can be placed for scientific observation. It is found, however, that, although some reports are of little value, many are evidently the work of careful observers.

In reference to puerperal fever, the evidence of general practitioners is the best available. Physicians in charge of lying-in hospitals may, indeed, throw much light on one aspect of the subject. But the great mortality of lying-in hospitals up to the date of the most modern improvements in antiseptic precautions proves that in them the risk of puerperal infection is of such a special kind that no inference can be drawn from their experience as to the etiology of sporadic cases occurring in private practice. Again, obstetric physicians, who see cases in consultation, can only form a judgment as to their causation, unless some obvious local cause exists, through the report of the practitioner in charge.

In the case of those zymotic diseases, such as erysipelas and diphtheria, the organisms of which can be easily cultivated in organic fluids at ordinary temperatures, there is every probability in the supposition that the organisms frequently multiply in nature, apart from the human body. It is confirmed by the fact that it is precisely these diseases which often appear to arise spontaneously, in the presence of insanitary conditions, and without its being possible to trace the infection to any previous case of the disease. If it be correct, then such organisms are likely to become the source of traumatic infectious diseases in the same way as any one of the various microbes, the result of whose action is included in the term septicæmia.

The zymotic disease which has most generally been considered as a possible source of puerperal fever is erysipelas. Erysipelas appears to occupy an intermediate position between zymotic diseases and those diseases which are included in the term septicæmia. It is generally considered a zymotic disease, and it corresponds to one in the fact that it may be caught by anyone not suffering from a wound, in the ordinary sense of the term. No doubt some slight abrasion of surface may be necessary for the entrance of infection. On the other hand, it differs from most zymotic diseases in the fact that one attack does not confer a protection against future attacks.

Recorded instances in which a series of cases of puerperal fever have arisen in the practice of a medical man while he was attending a patient suffering from erysipelas, generally of the phlegmonous form, are so numerous that it is needless to quote any. When a lying-in ward has existed in a general hospital, erysipelas has often prevailed in the surgical wards, and puerperal fever at the same time in the lying-in ward. A case of erysipelas, accidentally introduced into a lying-in hospital, previously in perfect sanitary condition, has sometimes been followed by a series of cases of puerperal fever, as in an instance at the Rotunda Hospital, recorded by Dr. Atthill.[17]

Even by the German authorities and their disciples, who maintain that all puerperal fever is identical with surgical septicæmia, it is scarcely denied that erysipelas has a very close relation with puerperal fever. To be consistent in denying that a zymotic disease can assume a form in the puerperal woman indistinguishable from septicæmia, they are obliged to separate phlegmonous erysipelas from superficial erysipelas, and to regard the former as merely a septic inflammation. But clinically it is impossible to draw an absolute line between superficial and phlegmonous erysipelas; and experience points rather to the existence of a virus varying in intensity, than to that of two or more distinct viruses. The following case, related by Doléris,[18] may serve as an illustration.

A man, aged 40, suffered from a facial erysipelas which underwent a normal development, phlyctenæ being formed on the affected skin. Cultures of fluid from these showed micrococci in chaplets similar to those seen in puerperal fever. After the subsiding of the erysipelas a series of abscesses associated with distended lymphatics were formed in the substance of the derma over the affected surface during a period of about three weeks. The pus contained micrococci in abundance. Culture of the blood drawn during the acute stage of the erysipelas proved negative. Blood drawn at the time when the patient was suffering from sympathetic fever in consequence of the suppuration gave a cultivation of micrococci, mostly in pairs, like those commonly seen in suppuration.

Moreover, erysipelas does not seem to be exactly identical with septic inflammation, although it is apt to give rise to it, for its microbe has been traced with greater certainty than that of any other ordinary infectious disease, and appears to be very definite in its effects. Fehleisen[19] found micrococci in the lymphatics of erysipelatous human skin. These he cultivated artificially for fourteen generations, during a period of two months. He then, by inoculation in the ear of rabbits, produced an erysipelatous rash which spread to the head and neck, but led to no general septicæmia. He also produced the disease again in man, by inoculating certain tumours with the cultures. Science here gained the unusual benefit of experiments on the human subject, from the fact that the operator expected, and attained, a beneficial influence upon the tumours.

A strong point in favour of a close relation between puerperal fever and erysipelas is the fact that when the mother has suffered from puerperal fever, showing its ordinary symptoms, the child has sometimes died with erysipelatous inflammation starting from the umbilicus, often leading to suppuration, and micrococci in chaplets have been found in the affected part. In one instance, in Italy, a man had connection with his wife, who afterwards died of puerperal fever. The husband also died with phlegmonous erysipelas of the penis, extending to the abdomen.

The question is a more difficult one, whether scarlatina poison can give rise to a disease resembling ordinary puerperal septicæmia, and not showing the ordinary symptoms of the disease. In favour of the affirmative, the evidence of Dr. Braxton Hicks,[20] who, out of sixty-eight cases of puerperal pyrexia seen in consultation, found twenty cases of actual scarlatina, and seventeen others in which there might have been infection from that disease, either through the medium of the accoucheur or in other ways, has justly been regarded as of much weight.

Scarlatina may undoubtedly sometimes, like erysipelas, take the form of a traumatic infective disease. In proof of this I may refer to an account by Mr. Howse in the *Guy's Hospital Reports*, vol. xxiv, of an outbreak of scarlatina in Guy's Hospital, in which patients having wounds specially suffered, and the rash often commenced in the neighbourhood of the wound.

Scarlatina in the puerperal woman has three peculiarities. 1. The puerperal woman has a special susceptibility to the disease, while in pregnancy there appears to be unusual immunity. Olshausen[21] found 134 recorded cases within a week after delivery, as against only seven throughout the whole of pregnancy. 2. While the mortality of the disease is much greater than usual—generally from 20 to 50 per cent.—this mortality is not due to the throat-affection, which is almost always slight. 3. It is not unfrequently accompanied by local lesions of the pelvis and peritoneum. This is denied by some authors, but appears in the reports of the Collective Investigation Committee. In 354 cases of puerperal pyrexia there were thirteen of undoubted scarlatina. In all but two of these thirteen cases some symptom of local inflammation of pelvis or peritoneum was noted, and in all the fatal cases the abdomen became distended. In four of the thirteen cases the lochial discharge was scanty, and in five it was offensive. Thus undoubted scarlatina in the puerperal woman shows diminution of some of its own special symptoms, greater fatality, and the addition often of some of the symptoms usually present in puerperal septicæmia.

Again, cases are not uncommon of puerperal pyrexia in which a general scarlet rash occurs with little or no sore-throat, often with no desquamation, and as to which it is very difficult to say whether they should be classed as scarlatina or not. Thus Guéniot, who regards such rashes as symptoms of septicæmia, recognises the resemblance by calling them puerperal scarlatinoid. The following, related by Aulas[22] as an example of this, strongly suggests true scarlatina. A woman, aged 21, two days after delivery had a scarlet rash on the trunk and inner part of the thighs, with pyrexia. Next day it had extended to the whole body except the face. The urine was albuminous. There was slight sore-throat, and a little redness of fauces was visible. There were no abdominal symptoms throughout. The rash began to fade after eight days, and was not followed by desquamation. There was still slight albuminuria when the patient left the hospital.

There is one point which appears to tell somewhat in favour of the view that such an eruption should be interpreted as indicating a slight attack of scarlatina. This is that, while both in puerperal women and in surgical septicæmia the other forms of rash which are likely to occur—namely, limited erythematous blotches, a vesicular or papular rash running on to form pustules, or a petechial rash—are of very grave import, this is not so with the scarlatinoid rash in puer-

[17] *Medical Press and Circular*, April, 1877.
[18] *Op. cit.*, p. 249.
[19] *Die Aetiologie des Erysipels*, Berlin, 1883.
[20] *Obstet. Trans.*, vol. xii.
[21] *Obstetrical Journal*, vol. iv
[22] *Des Eruptions Septicémiques*. Paris, 1878.

peral women. Guéniot even regards it as being rather a favourable sign than otherwise in a case of puerperal pyrexia.

In the 354 cases reported in the *Collective Investigation Records*, besides the thirteen of undoubted scarlatina, there were six, not including a case in which a rash followed pneumonia commencing before delivery, in which there was a general scarlet rash. This rash was generally of short duration, and not followed by desquamation in the patients who recovered. In all six cases there were marked local symptoms in pelvis or peritoneum. There was slight sore-throat, with congestion of fauces, in four of the six cases. Two of the patients died—a mortality of 33.3 per cent.

If these cases be regarded as scarlatina, it is not impossible to suppose that there might be a still further modification of the disease, in which the rash might be entirely suppressed, and pelvic and peritoneal symptoms similar to those which occur in ordinary puerperal septicæmia form the main feature of the complaint. Among patients who showed the other forms of rash which I have enumerated, combined with the ordinary lesions of puerperal fever, not including cases of mere sudamina or miliary eruption, the mortality was much higher. Sixteen such cases were reported, and the mortality was thirteen, or 81.2 per cent.

There is one point in which the *Collective Investigation Records* appear to me to afford evidence of some importance in favour of the view that the contagion of erysipelas and scarlatina may produce a form of puerperal pyrexia not having distinctive signs of the original disease, namely, the relative mortality of the several classes. The records were divided into a number of sections, according to probable causation, as far as this could be judged from the report, by myself in conjunction partly with Dr. Herringham, partly with Dr. O. A. Browne. In making the classification, we had no idea in our minds with regard to the mortality. The result is that in the following classes the mortality is decidedly above the average: (1) cases ascribed to infection from puerperal fever itself, mortality 70.8 per cent.; (2) cases occurring after exposure to the infection of erysipelas, mortality 70.5 per cent.; (3) cases occurring after exposure to infection of scarlatina, mortality 62.5 per cent.; (4) cases in which the pyrexia commenced before delivery, and thus indicated that the disease arose from special poison absorbed, and not from any decomposition or other morbid process occurring after delivery, mortality 33.4 per cent. Among the cases not classed as probably due to any special infection, a division corresponding to the old class of autogenetic cases, including, also, the rather numerous cases in which no cause could be assigned, the mortality was only 37.7 per cent. The probability would be very strongly against such a large excess of mortality appearing merely by chance in every one of the four classes above mentioned. The reasonable inference is that in each of them the infecting poison was of unusual virulence.

It is rather singular that, in actual cases of scarlatina and erysipelas, the mortality was less—37.5 per cent. for erysipelas, 30.7 per cent. for scarlatina. It would seem that the excessive danger as compared with average cases of puerperal fever only exists when the stress of the poison falls upon the pelvic organs and peritoneum, and the usual symptoms of the zymotic disease are not manifested.

The strongest evidence which has been adduced tending to show that zymotic diseases cannot be the source of puerperal fever is that of Matthews Duncan,[23] who collected statistics proving that the epidemic prevalence of either erysipelas or scarlatina in any place was not accompanied by any increase of the deaths ascribed to puerperal fever. This is at any rate satisfactory as a proof that zymotic contagion is not often conveyed by the accoucheur. It does not appear to me to prove that it may not be conveyed in some instances, especially when it is remembered that, in time of epidemic, accoucheurs would be likely to use extra precautions. There is no doubt that puerperal women are very liable to take scarlatina; and the evidence would be more conclusive if it were proved that while there was a marked increase of puerperal scarlatina when scarlatina was prevalent in any locality, there was none of puerperal fever in its ordinary form.

Other authorities, on the contrary, have reported unusual prevalence of puerperal fever as coincident with epidemics of erysipelas. A series of such instances, occurring in America, in small villages, has been collected by Minor.[24]

The old division of puerperal fever into the autogenetic and heterogenetic class must clearly be regarded as a less radical and scientific division when it is remembered that in every case of true traumatic infective disease the microbes or their germs must come from without. Yet it may still be to a certain extent a useful practical division, since it is as yet impossible clinically to recognise each disease according to the microbe which produces it. The autogenetic class then includes those cases in which the microbes are only those whose germs are generally present in the air, and in which the essential part of the causation consists in a nidus being provided for them to multiply in, in the shape of some bruised or damaged tissues, or in some solids or secretions too long retained in the genital canal. Yet even so the line of distinction is not clear between the two classes. For there may be every gradation in the sanitary surroundings of a patient, as regards the quantity and quality of the germs present, from a pure mountain height to a bedroom where sewer-gas is laid on abundantly to the room itself or its vicinity. We cannot as yet define what the germs are which are generally or constantly present.

This consideration leads us to a question which is of great importance as regards the causation of puerperal fever, namely, whether it it is possible for a morbid virus to become intensified. The experimental proofs by which such an intensification was not long ago supposed to have been established are stated all to have broken down. These were the case of Davaine's septicæmia in rabbits, already described; the supposed conversion by Buckner of the hay-bacillus into the anthrax bacillus; the poisonous properties said to be acquired by a bacillus subtilis when growing in jequirity infusion; similar properties said by Grawitz to be assumed by an aspergillus, when grown on neutral and alkaline material at about body temperature.[25]

There is no doubt, however, that a virus may be attenuated, and this fact affords a strong presumption that it may also be intensified. Indisputable examples of attenuation are found in vaccinia, and in Pasteur's attenuated virus of anthrax. Although experimental proof is yet wanting, clinical experience is strongly in favour of the view that virus may become intensified. Thus the fatality of infectious diseases varies in different epidemics, and in different stages of the same epidemic. The special dangers of hospitals in general, and lying-in wards in particular, are less easily explained by supposing that rare microbes find their way thither than by the view that common microbes find a congenial soil of organic matter and acquire there unusual vigour. If the popular view be correct that a common cold is infectious, the only explanation of this quality is that a common micrococcus is first able to multiply in the morbid secretion, and then to acquire thereby the faculty of establishing itself even in normal secretion, and so setting up inflammation of the mucous membrane of another person.

It appears probable that a similar modification may take place in the micro-organisms of pneumonia. The disease is commonly produced by cold as an exciting cause, and not by infection from another person. It is associated with a microbe which can be easily cultivated, and is probably, therefore, capable of multiplying in nature outside the body. But there is evidence that the disease sometimes assumes an infectious form, and spreads like a zymotic disease.

Even as regards Davaine's septicæmia in rabbits, though a progressive intensification of the virus by transmission through a succession of animals has been disproved, there does appear to be some intensification at the outset. The bacillus in question cannot be of extreme rarity, since, on several occasions at any rate, it has been developed in putrid blood during hot weather. But apart from these experiments it is not known to have caused infective traumatic disease. On the other hand, when once it has been transmitted from one rabbit to another, so that a pure cultivation of it in the living blood is obtained, touching an abrasion with a very minute fraction of a drop of this blood is sufficient to produce certain death in another rabbit.

In the case especially of septic organisms, which commonly multiply outside the living body, and only exceptionally in its tissues, it might be expected *a priori* that increased power of growing in the living tissues, that is to say, an increase of pathogenic virus, would be developed. For if the view which I have contended for be correct, that it is an increase in the resisting power of the blood and tissues which terminates a disease dependent upon pathogenic organisms, and protects against its recurrence, it may expected that, on the side of the microbes also, when they are introduced into novel surroundings in the living body, there may be an improvement by natural selection in their power of maintaining the struggle for existence against the tissues. It will be still more likely that this has occurred if the microbes gain the victory, and the patient dies.

One of the problems in puerperal fever is the following. Micrococci, similar to those seen in puerperal fever, normally or commonly reach the vagina, and do no harm, if there is no undue retention of organic matter. On the other hand, in some forms at any rate of puerperal fever, the organisms are so virulent that the accoucheur is

[23] *Edinburgh Medical Journal*, March, 1876.
[24] *American Journal of Medical Sciences*, 1875.
[25] See Klein's *Micro-organisms and Disease*, p. 152, *et. seq.*

apt to carry fatal infection to other women who have had perfectly normal labours, notwithstanding careful ablution, and even considerable use of disinfectants. Must these virulent organisms have been originally derived from some special source, such as a transformed erysipelas, or a micrococcus which dwells in sewers, or may they be the organisms whose germs are commonly present in the air, but possessed of acquired virulence?

The contagious virulence of puerperal fever, in some cases, probably exceeds that of any other disease commonly met with. Practitioners are now so well aware of the danger that a wide spread of infection is rare, though sometimes we still meet with two or three deaths among patients attended by one practitioner, within a few days, before he had become aware that he was likely to be a source of danger. It is necessary to go back nearly fifty years for instances like the following. In the town of Sunderland, within one year, there were forty-three cases of puerperal fever. Of this number, forty occurred in the practice of one medical man and his assistant.[26] A midwife delivered a woman who shortly died with symptoms of puerperal fever. Within one month, the same midwife delivered thirty other women, of whom sixteen caught the disease, and all died.[27] I know of no such propagation of surgical septicæmia in the private practice of a surgeon, although something similar has occurred when wounded men have been crowded in an insanitary hospital.

It has generally been held that the so-called autogenetic form of the disease is little, if at all, contagious. The following case, which I have met with, appears to me to indicate the probability that organisms commonly present may acquire an increased infective virulence. A woman miscarried about the third month, and a portion of the ovum was retained. This decomposed, and produced an offensive discharge from the uterus. Pyrexia and general peritonitis were developed, and the patient died in a few days with symptoms resembling those of ordinary puerperal septicæmia. Notwithstanding free use of carbolic acid, this case appeared to be the starting-point of a series of cases of puerperal septicæmia in women attended within the next few days by the practitioner in charge, and his assistant who had also seen the patient. Two of these proved fatal, and both the practitioner and his assistant had to give up midwifery practice for some time.

The point which chiefly comes out in the *Collective Investigation Record* as to the danger of contagion is, that it is from fatal cases that danger is most to be feared. Out of the 356 cases, there were nineteen in which there was a probable conveyance of contagion. In eight, this was to other puerperal women; in nine, to the infant. All but one of the nineteen cases which were the source of contagion proved fatal. In only two of them was there a probable autogenetic source for the original disease.

In conclusion, I have to say that the Collective Investigation Committee still hope for more evidence, and will be grateful to any who may furnish it.[28] I may indicate two points of special interest: 1. In what forms of the disease is contagion most to be feared? 2. Can, not only erysipelas and scarlatina, but other zymotic diseases—typhoid fever, diphtheria, small-pox, pneumonia—give rise to a disease in the puerperal woman closely resembling septicæmia? Of special interest would be an instance, if any such occur, in which an apparent puerperal septicæmia is itself traced to the contagion of a zymotic disease, and reproduces the original zymotic disease again by contagion to the infant, or to some other person.

THE TREATMENT OF TUBAL FŒTATION BY GALVANO-PUNCTURE.

By PERCY BOULTON, M.D., M.R.C.P.Lond.,
Physician to the Samaritan Free Hospital.

The treatment of ectopic gestation by means of electrolysis is one of the most important questions of the day, and anything bearing on the subject is of interest to obstetricians and gynæcologists.

Although Bachetti, of Pisa, published a successful case in 1857, which, as far as I know, is the first on record, it is only lately that in this country our attention has been seriously directed to this plan of treatment.

It is true that in 1865 Dr. Braxton Hicks used the faradic current in a case published in the *Transactions of the Obstetrical Society*, but there was no puncture by needles. One rheophore was placed in the vagina, and the other on the abdomen. The operation failed, and it is as yet an open question whether in the early stages this treatment will succeed, unless a strong current of eighteen or twenty zinc carbon-cells is applied every day for half an hour at a time, for four or five days. There are reasons to believe that any shock that would kill a fœtus of say four or five months, would endanger the life of the mother. Its nervous organisation being undeveloped, it is more tenacious of life; and as Dr. Steavenson has said, in an article published in the *St. Bartholomew's Hospital Reports* for 1883, vol. xix, "A powerful electric shock causes the death of an adult by its stimulation of the inhibitory fibres of the pneumogastric, but a fœtus has no inhibitory apparatus. At two to three months, at any rate, the nervous apparatus is not fully differentiated, and it is probable that a shock would affect the mother rather than the embryo."

It is our American brethren who have come to the front in this matter of electrolysis. Without directing attention to all their published cases, which, beginning with Allen's, of Philadelphia, in 1862 (published 1872, in *American Journal of Obstetrics*), are now well on to forty in number, I would say that the papers on this subject in the *American Journal of Obstetrics*, by Dr. Gaillard Thomas and Dr. Garrigues, seem to point to the formulation of the rule that before the fourth month of gestation treatment by electrolysis should be adopted, while after that date laparotomy is to be preferred. Dr. Thomas, remarking on twenty-one cases of extra-uterine pregnancy, said that if the condition be diagnosed before the end of the fourth month of gestation, he would destroy the vitality of the child by electricity in preference to all other methods which have been proposed. Dr. Garrigues, of New York, reported nine successful cases in the *Transactions of the American Gynæcological Society*, 1883. In this country, Dr. Aveling had a successful case, and Dr. Petch reported one at the last meeting of the British Medical Association at Brighton, in which he says that the fœtal tissues were actually dissolved, after being directly submitted to a strong current. The patient recovered, and there was no verification of the diagnosis. There are many questions arising out of this method of treatment which cannot yet be answered with any degree of certainty, and I shall cite a case which was recently under my care at the Samaritan Free Hospital, rather because it illustrates some of these than for any other reason. Given a case of supposed tubal pregnancy under five months (the diagnosis generally being more or less obscure), how can we destroy the fœtus without injury to the mother? If an electric shock that would kill the fœtus would endanger the life of the mother, we need only consider daily faradisation and galvano-puncture. Galvano-puncture would seem to be by far the more certain, and backed by the writings of Thomas, Garrigues, Lusk, and Emmett, I adopted this in my case, which I regret to say ended fatally.

In a case published in the *St. Bartholomew's Hospital Reports* for 1883, the fœtal heart was heard a considerable time after this treatment had been carried out. Eventually the fœtus died, and the mother also; on *post-mortem* examination the fœtus was found to have been considerably damaged by the electricity, though it continued to live the day after the operation. It seems clear that the pregnancy was too far advanced to be suitable for galvano-puncture, and that in all cases where the fœtal heart can be heard, laparotomy is certainly the proper treatment.

In the following case, under eight weeks pregnant, I employed galvano-puncture. M. S., aged 24, married, came under my care at "Dorset House," on July 10th, 1886. She had been confined of her first child a year previously, and stated that she had miscarried a month before coming into hospital, and had been losing blood ever since. She had some abdominal pain at the time, and passed clots and membrane, but saw nothing else. She still complained of irregular pains. She had only missed one period before the so-called miscarriage, but considered herself about two months pregnant when it took place, as a second period was then due. Her last proper "period" was early in April. In May she saw nothing. In June she thinks she miscarried, and has been losing more or less ever since. The uterus was found to be to the left of the mesial line of the pelvis, the os rather patulous and soft, the uterine cavity three inches long. To the right of the uterus, and at least one inch separated from it, was a circumscribed, globular, somewhat elastic tumour, as big as a goose's egg. It was tender, not to say painful on pressure, and was well-defined and movable. The temperature taken in the vagina was subnormal. The breasts showed evidences of recent pregnancy. They were enlarged, and there was a marked areola, and some moisture could be expressed from the nipples. There could be no doubt that the patient had been recently pregnant, and but for the tumour and the continued pain and loss, I should have considered that she had aborted.

What, however, was the tumour? If inflammatory, it would scarcely have been so defined and movable, it would have been more tender on

[26] Armstrong, *Facts and Observations Relative to Puerperal Fever*. London. 1814.
[27] Robertson, *London Medical Gazette*, January, 1840.
[28] Forms of return can be obtained from Dr. Isambard Owen, Secretary to the Collective Investigation Committee.

pressure, and, in spite of the hæmorrhage, the temperature would most probably have been above normal. After watching the case for a week, during which time the tumour had distinctly increased in size, I concluded it was a tubal pregnancy, and I asked my colleague, Mr. Thornton, to give me his opinion. He agreed with me so entirely that the only question was whether it should be treated by electrolysis or by abdominal section. It appeared a typical case for the former, and we decided that I should adopt it.

Several of my colleagues saw the case, and were interested in it; and on August 2nd I operated. Dr. W. S. Griffith administered the anæsthetic. Dr. W. E. Steavenson, Electrician to St. Bartholomew's Hospital, kindly gave me his valuable advice and assistance with the battery, and Dr. Day and Dr. Prickett were present. The vagina having been thoroughly douched, I passed three curved needles by the vagina into the tumour. The needles were new, prepared specially for the operation. Except an inch and a half for insertion into the tumour, they were insulated by a thick coating of shellac; moreover, to protect the vagina, they were wrapped round with a strip of lint. The ends of the needles projecting beyond the vulva were connected with the positive pole of a 30-cell (Stöhrer) constant-current battery, all the cells being in use. Dr. Steavenson then applied a flat sponge electrode connected with the negative pole on the left thigh of the patient, moving it gently about for the space of six minutes. The needles were a little difficult to extract, owing to roughening of the points and deposit on and about them during the process. The patient was put back to bed.

It would be tedious to narrate all the notes from this point to the day of death, so I will abbreviate them. For the first four and a half days the patient had no bad symptom. On the evening of August 6th the temperature was 99° and pulse 96. She had a restless night, and complained of pain in the right iliac fossa on the morning of August 7th. The temperature was 101° F., pulse 120, and on examination there was some inflammatory fixing of the tumour, with swelling and great tenderness. I ordered a quarter of a grain of morphine by the rectum, a salicylic mixture, a poultice over the abdomen, and a hot water douche. At 2 P.M. the temperature was 104° F., and I ordered an ice-cap. At 8 P.M. the temperature was 105° F. The ice-cap did not fit sufficiently tightly, and was changed for another. The next morning, at 10 A.M., the temperature was 102° F., and at 8 P.M. 101.4° F. Until the day she died, it never rose again over 101° F. On August 13th the ice-cap was discontinued.

The general treatment consisted of one drachm of Warburg's tincture three times a day, opium or morphine by the rectum as required, ice and iced champagne by the mouth, and four ounces of enemata of beef-tea and brandy, or milk and brandy, every three or four hours. On August 15th she was much better; she had had five hours' natural sleep, and had taken and enjoyed some boiled bread and milk by the mouth, also a little beef-tea and brandy. The pulse was 108, the temperature in the vagina 100° F. On August 16th she was about the same; but on August 17th she had had a restless night, she had been sick, and the bowels were relaxed. On August 18th she was better, and in much the same condition as on August 15th; but on August 19th she was not so well again. This day I had to leave London for the Continent, and I transferred the case to a colleague during my absence. On my return I heard that the patient had remained much as I left her during August 20th and 21st, and died on August 22nd, the *ante-mortem* temperature running up to 105° F. The husband objected to a *post-mortem* examination, but leave was obtained to remove the tumour, and this was done, but the specimen was accidentally destroyed by a nurse before it was examined. Altogether, a more disappointing termination to an interesting case could not be imagined.

From examination by the vagina before I left London, it was clear that the tumour was much reduced in size, and the pelvic thickening had nearly disappeared, and I should fancy that suppuration had occurred, with rupture into the peritoneum.

A fœtus of eight or ten weeks would not weigh one ounce; and, if we consider the caustic effect of the electricity and the tremendous destruction caused by it in the five months' fœtus at St. Bartholomew's, I should not have been surprised to find that in my case complete disintegration had occurred, and that what was removed for examination was only a collapsed tubal cyst. The case has taught me that galvano-puncture is by no means free from danger, while it is not suitable for cases advanced beyond the fourth month. In a future case I should prefer to use the faradic current daily for several days, as first applied by Dr. Braxton Hicks; and, this failing, to resort to abdominal section further on. Personally, I certainly should not again employ galvano-puncture until we know more about the exact dose that is advisable.

A METHOD OF TREATING SOME CASES OF SCANTY MENSTRUATION AND OF AMENORRHŒA.

By JAMES BRAITHWAITE, M.D.Lond.,

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Putting aside cases of deficient or absent menstruation from constitutional causes and from some ovarian affections, many cases of amenorrhœa, or of very scanty menstruation, remain, in which the fault appears to lie with the uterus alone. Some of these cases are attended with the most distressing symptoms, and when the system generally and the ovaries are healthy, relief is urgently required. This is usually sought by the administration of emmenagogues and other well-known remedies, but usually with very little success. It will, I think, be admitted by all who have frequently to treat these cases that the means at our disposal for doing so are very inefficient. A really good emmenagogue has not yet been discovered. The announcement that permanganate of potash is a reliable one was welcomed by the profession. Cases have been published showing very frequent, if not almost uniform, success from its administration. This has not been my experience, and I have given it in not less than forty suitable cases. Any benefit from its use was very seldom met with.

Many years ago, reflecting upon the hæmorrhage caused by intra-uterine polypi, I introduced into the uterus, when I wished to bring on menstruation or to increase its amount, small foreign bodies, which were left in its cavity. At the same time other means of treatment were not neglected, such as the use of hot baths, the administration of iron, aloetic aperients, and alteration in the diet and habits of patients, when luxury and indolence appeared to be at the root of the matter, as they sometimes are. The most convenient foreign body is a piece of hempen ligature, doubled several times, knotted, and impregnated with pitch. These were easily passed up to the fundus without any preliminary dilatation, and left there. Some success resulted from their use; but the uterus generally expelled them before they had done their work, and I therefore abandoned them for a Greenhalgh's rubber stem. This is very efficient, and I have, by means of it, been able to do everything needful in a considerable number of cases. The stem, carefully washed in carbolized water, should be introduced and left in position a week before menstruation is due, or supposed to be due. Usually a hæmorrhage will result within a few days; but the stem should remain *in situ*, whether it comes on or not.

Case I.—As an instance of the occasional rapidity of this mechanical treatment of amenorrhœa, I can give no better illustration than one I had in December last (1885). A young woman, aged 17, came as an out-patient to the Leeds Infirmary on account of amenorrhœa of four months' duration. She was pale, but not chlorotic, and attributed the amenorrhœa to a chill. No complaint was made of her sight; but on her second visit, in a week, she had to be led into the room, as she was going blind. This loss of sight was already very serious, but it only dated back four days. The disease was ascertained to be optic neuritis, caused by lead-poisoning from the use of dry colouring materials in the manufacture of porcelain. It seemed, however, not improbable that the amenorrhœa, resulting, as it appeared to have done, from suppression by cold, might be a factor in the case, and that relief by a copious hæmorrhage from the uterus would be of use. Accordingly, after slight dilatation, I introduced a Greenhalgh, with the result of bringing on within forty-eight hours a very free sanguineous discharge. Remedies for lead-poisoning were at the same time administered. The neuritis, however, was most acute, and ended in permanent blindness. This deplorable result does not impair the case as an illustration of what can be done by this mechanical treatment in suitable cases. The stem was withdrawn by the girl's mother before the next period was due; but menstruation has recurred regularly up to the present time.

Case II.—Mrs. M., aged 30, married two years, but childless, was of healthy parentage. She appeared to be, although rather pallid, a strong and vigorous woman, fond of out-of-door exercise, and stated that she could walk some miles without fatigue. During 1883, without any assignable reason, her periods became more scanty, and the colour of the discharge paler. Although her complexion was pallid, she was not anæmic or chlorotic. She next began to have headaches at and preceding the periods, and these soon became exceedingly severe, and more or less continuous between the monthly periods. I

tried bromides in vain, and permanganate of potash had no effect on the amount of the discharge. Her descriptions of the severity and nature of her head-symptoms were very vivid, and led me to think that if no relief were procured, epilepsy would ensue. A very curious symptom also occurred, which impressed me much, namely, that her hair, which was short, dark, and curly, became within a few months quite grey. Although her appearance was not that of a person suffering from fulness of blood, I felt that the case was very urgent, and accordingly subjected her to the stem treatment, with the result that the next period was copious and prolonged. Her head was completely relieved; and at the present, two years afterwards, she is in good health.

I could give numerous instances of the success of this mode of treatment, but I have also met with some failures. Still it is the best and most certain means there is of bringing on absent menstruation, or of increasing the flow where it is present but deficient in amount. Any kind of stem may be used. I have found Wynn Williams's very efficient, and it has the great advantage of not being easily expelled from the uterus, which sometimes occurs with Greenhalgh's rubber stem. I have also used Chambers's stem with advantage, but it is liable to "prick," and I prefer the other two. I have also had made what may be called an artificial polypus, to remain entirely *in utero*.

The treatment of amenorrhœa by means of stems is briefly referred to both by Dr. Barnes and by Dr. Edis in their excellent works on *Diseases of Women*, but the allusion is contained in two or three lines only. There is also a reference to it in a paper by Dr. Routh, in the fifteenth volume of the *Transactions of the Obstetrical Society of London*, but the case given is one of amenorrhœa from obstruction, and requiring the use of the hysterotome. Treatment of amenorrhœa by dilatation of the cervix has been used in America by Dr. Carstens, of the Detroit Medical Society; and as before the use of a Greenhalgh's or Williams's stem it is generally or often necessary to dilate slightly, this dilatation may to some extent assist in producing the result. For several years I thought this mechanical treatment was original, as the well known galvanic stem acts in a different way altogether, and is considered especially suitable for cases of infantile or undeveloped uterus. I am satisfied, however, that the possibility of treating successfully cases of amenorrhœa and scanty menstruation in the way described is almost unknown to the majority of the profession.

LACERATION OF THE CERVIX UTERI, AND ITS RELATION TO MALIGNANT DISEASE.[1]

By W. D. SPANTON, F.R.C.S.Ed.,
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The importance of this condition has been made more manifest since recent observations have shown that it may be the precursor, if not actually the cause, of a large number of uterine ailments. Dr. Thomas enumerates no less than twelve of these as resulting from laceration of the cervix, and among them he places epithelioma. Other authors state the same thing, while some go so far as to declare that a large proportion of the cases of cancer we meet with in that region result from a damaged cervix.

Whether this be accepted as a broad rule or not, the case I am about to mention is an illustration that cancer is sometimes the outcome of a torn cervix; and the frequency of such sequence can be estimated only by long and careful observation of a large number of cases.

The usual effects of a laceration or fissure of the cervix are sufficiently well known, and are most commonly seen in the persistent subinvolution of the uterus, which leads to retroflexion with its attendant discomforts, and to functional menstrual disturbance. In a case which came under my care not long ago, persistent and alarming menorrhagia occurred to such an extent as to place the patient's life in imminent danger. The patient was a married woman, about 36 years of age, whom I saw in consultation with Dr. Partington, in June last. She was then, and had been for six months, suffering from severe but not constant hæmorrhage, passing large coagula with great pain. She had four children, the last one having been born ten years before.

The uterus was large and retroflexed, the cervix deeply lacerated posteriorly, and the anterior lip large, indurated and everted. Various forms of treatment were adopted, including a pessary, but without any benefit, and I then advised Emmet's operation for the cure of the laceration and the removal of the hypertrophied anterior lip. This was done on June 21st, and from that time rapid progress took place. The silver wire sutures were all removed by the tenth day; good union took place, and the same pessary which before had been useless, was quite effectual in maintaining the proper position of the uterus. Shortly afterwards all hæmorrhage ceased, and the patient is now menstruating regularly, and is perfectly well and active. This instance serves to show how impossible it is to cure the patient suffering from the effects of this condition until the cause of it has been remedied. The signs indeed which we commonly recognise in cases such as this are after all but the results of an anterior condition—the laceration—which must be remedied before any success can be attained in the treatment.

A more important question arises when we come to consider whether and how far the injury I have referred to conduces to the formation of cancer in that region.

A married woman, aged 39, came as an out-patient of the North Staffordshire Infirmary in May last. She was suffering from great uterine discomfort rather than pain, bearing down, and the usual train of symptoms associated with endocervicitis. There was no uterine displacement, no enlargement, but only a deep single fissure through the uterine cervix, both labia being ectropic. There was no indication whatever of anything in the shape of malignant disease.

After finding ordinary treatment of no avail, I advised the performance of Emmet's operation to be performed, and for that purpose the patient was admitted into the Infirmary in July, 1886. After a few days' rest in bed I made an examination, and found a condition resembling that figured in Thomas's work, a deep fissure dividing the posterior lip into two unequal parts, one being slightly more thickened than the other, and having the appearance usually found accompanying erosion of the entrance to the cervical canal. There was some glairy leucorrhœal discharge, with sense of weight and general pelvic discomfort on moving about. For various reasons the operation was postponed until about five weeks afterwards; and when I came to examine the parts for that purpose, I was astonished to find a large mass occupying one half of the cervix, which was clearly malignant in character. So instead of doing, as I had proposed, trachelorraphy, I was compelled to remove this cancerous mass with the *écraseur*. The patient soon recovered from the effects of the operation, but, I am sorry to add, is now confined to bed at home with rapidly progressing epithelioma.

We have, therefore, in this instance a clear illustration of the possibility of cancerous growth supervening on simple hyperplasia of a damaged cervix, and, once begun, running a rapid malignant course; and this is the point to which I wish to draw attention. I am quite sure it is one which deserves careful consideration, and should lead us to remedy as speedily as possible every case of laceration or fissure of the cervix which gives rise to symptoms which do not at once yield to the ordinary local remedies.

I have now operated in many of these cases, and have never yet had occasion to regret having done so, nor have I seen, so far, any ill results from the operation itself.

[1] Read before the Staffordshire Branch.

CUCAINE IN LABOUR AND GYNÆCOLOGICAL CASES

By GEORGE H. ROQUÉ DABBS, M.D., Shanklin.

As long ago as February, 1885, I wrote a short note to the Journal, stating that I had used cucaine (a 12 per cent. solution) as a local anodyne to the os and cervix in primiparous cases, and that the application was, so far as I then could say, with my limited experience of its use, worth a trial at other hands. Since that date I have steadily gone on using it, and to simplify my present observations I will tabulate them thus:

1. I obtained equally good results from a 6 per cent. solution as from a 12 per cent. solution (of the hydro-chlorate), but in dry labours I now always use a 4 per cent. solution of the alkaloid itself in castor-oil. Into the thin, parchment-like os I put a cucaine-saturated plug of cotton-wool, which I renew (or rather replace with a fresh plug) about every half-hour, until fair dilatation has taken place.

2. In cases in which the labour progresses so slowly that some assistance is needed, and yet the cucaine need not as yet be deposed in favour of chloroform, the form in which I have found ergot of most benefit has been as a hypodermic combination of sclerotic acid, gr. ½, and bimeconate of morphine, gr. ⅓. By means of Burroughs's tabloids I have been thus able to secure a certain degree more of uterine action, and with the bimeconate of morphine combined with the sclerotic acid and the internal application of the cucaine, have now seen many cases of almost absolutely painless dilatation of the os.

3. But of all uses for cucaine in connection with first labours, I have obtained the most gratifying results from the application of a

12 per cent. solution to the vulva and inside of the vagina during the slow progress of a case of marked perineal rigidity. I do not of course mean that the case is hastened much, but I do mean that the pain is lessened to an extraordinary degree.

4. My observations lead me to conclude that it is chiefly in primiparous (slow) labours that cucaine is of use (notably in breech cases), or in any case possibly in which the os dilates slowly and the perineal rigidity is well marked.

5. In cases in which the os has to be dilated by tents, I have soaked and partly enlarged the tents in a hot oleaginous solution of the alkaloid before introducing them, with, as I think, considerable success; and in cases of tender and irritable vaginæ in which, for any reason, the speculum has to be used (gynæcological cases), I have adopted the practice with great advantage of previously painting the vaginal walls with the solution of cucaine in castor-oil before alluded to.

I am quite conscious that all the foregoing may be a "twice-told tale" to many of your readers but as anything that tends to mitigate the patient's pain and the practitioner's weariness is important, I have ventured to give you the above summary of three years' observations, none of them claiming to be more than suggestive, but all I hope fairly accurate.

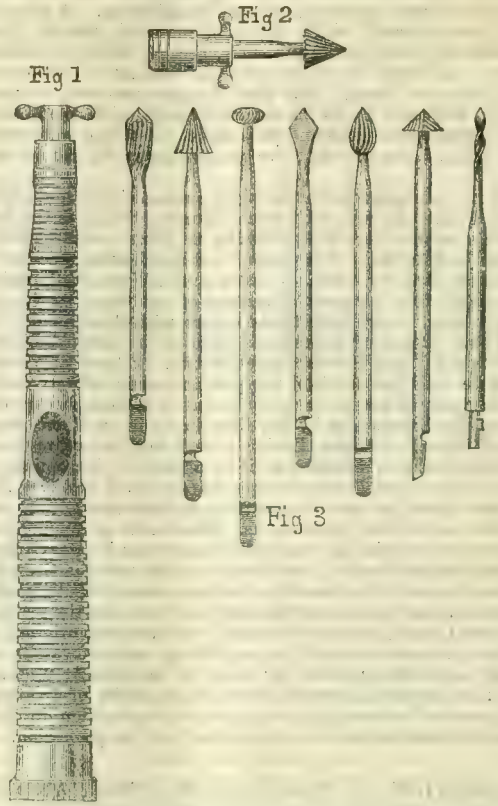
ON AURAL EXOSTOSIS.

By GEORGE P. FIELD, M.R.C.S.,
Aural Surgeon to St. Mary's Hospital.

THE following cases of operation for the removal of aural exostoses, given in the order of their occurrence, are in continuation of the series published by me in the JOURNAL for February 20th and 27th, 1886, pp. 338 and 385.

It is still not uncommonly stated that, except in urgent instances, this operation should never be attempted, and for the assigned reasons that its risks are very great, and the benefit likely to be derived from it but small. Now, in publishing this second series of cases—which, be it noted, are not selected, and may therefore be regarded as representative—I wish again to emphasise the fact that, whereas the risks of the operation, when carefully performed, are practically *nil*, the benefit to be derived therefrom is lasting, and to many people of the utmost importance. That, moreover, the operation, by providing a vent for pent-up pus, may give relief from serious and ever-present danger to life, is another fact which I have, with good cause, insisted upon in the past. It was but a few months ago that I had occasion to strongly recommend a gentleman to permit the removal from one of his ears of a large exostosis. Behind it there was an accumulation of pus, for which there was no external outlet save a small aperture, the closure of which might at any time jeopardise his life. This gentleman's medical man, however, decided—on what grounds he did not demonstrate—that the risks of an operation would be too great, and accordingly nothing was done for the ear. If this patient's ear escapes becoming completely blocked, and he has no further trouble with it, it may even be maintained that an operation could never have been desirable; for there are some persons who seem to be quite content that, if not they, certainly their neighbours, should go through life providentially afflicted with a large amount of preventable deafness, and exposed at all times to a remediable chance of meningitis or cerebral abscess. The condition of the gentleman just referred to reminded me very much of that of Mr. F. G., of Ipswich (Case XIII in the series I published a year ago), when, contrary to my advice, he put off operation until a more convenient season, thus compassing his own death. The great and lasting benefit that an operation may confer is well shown by my first case, Dr. G. M., who since 1877 has never for a day lost his hearing, though before then he was stone-deaf from exostosis in both ears, and consequently debarred from society and the active exercise of his profession.

As I have already pointed out, the presence of exostoses is no certain evidence that operation for their removal is desirable. Multiple exostoses not infrequently leave, by mutual interference of growth, a passage in the meatus quite adequate for the conveyance of sound, and need not therefore be interfered with; and, again, the very deep situation of a growth in the meatus may render any attempt to remove it hazardous. With these limitations it may confidently be maintained that in all cases where the presence of a hard aural exostosis is a source of inconvenience or danger to a patient, its extirpation should be effected; and to this end the safest and most satisfactory means is undoubtedly the employment of the drill. It remains for me to add that in operating I now use for the protection of the middle ear, instead of a guard to go behind the exostosis, what I regard as an important improvement upon this, namely, a small cross bar at the end of the



drill-holder (as made for me by Mr. Hawksley, see fig. 1). This prevents the insertion of the drill into the meatus to a depth greater than its exposed length (Fig. 2), and all risk of a slip of the instrument is thus obviated. Fig. 3 represents the drills of various lengths.

CASE XVII.—D. McC., a boy, aged 6½, was sent to me by Mr. F. W. B. Jones, of Ross, on February 8th, 1886. I found the right meatus occupied by an exostosis, seated on the anterior wall, the origin of which was doubtless attributable to abscess during an attack of measles in March and April, 1882, and remittent otorrhœa. After operating with the drill on May 3rd, 1886, I followed my usual course of treatment in such cases, under which the discharge gradually ceased, and hearing was much improved.

CASE XVIII.—H. G., a clerk, aged 31, came to me at St. Mary's Hospital, April, 1886, complaining of increasing deafness of the right ear. Fifteen years previously he had experienced whistling noises in the ear, and, after somewhat more than a twelvemonth, during which there was discharge from each meatus, he had noticed that his hearing was becoming impaired. He was treated awhile for the discharge and deafness, but, he says, without success. On admission at St. Mary's, the patient stated that there had been numerous abscesses in his right ear, which had always been worse than his left; also, that he had first noticed obstruction in the right ear eight months previously, when pieces of bone-like fragments of honeycomb used to come from it. I found the right external auditory meatus to be blocked by an exostosis of soft cancellous tissue. Operating on May 12th, 1886, after administration of an anæsthetic, I broke away the growth bit by bit. The subsequent treatment, which was followed by restoration of hearing, consisted in the careful maintenance of cleanliness of the meatus, and the local use of stimulant antiseptic lotions.

CASE XIX.—F. W. B., a gentleman, aged 20, who came to me October 18th, 1886, first noticed a discharge from the right meatus about 1872. For this he can assign no origin, save possibly a scald in childhood. Nothing was done for the ear, beyond the application of a blister or two behind it, until May 1st, 1879, when a polypus was detected. The removal of this was deferred in consequence of an attack of scarlet fever on May 5th, but was subsequently effected. At Easter, 1886, there was slight bleeding from the right ear for two

or three days. As the patient's deafness—due, as I discovered, to an exostosis—continued to increase, he was brought to me by Mr. Chaldecott, of Dorking, with whose assistance, on September 21st, I operated with the dental engine. The systematic cleansing of the meatus and the repeated application of a solution of carbolic acid constituted the main after-treatment, and the patient is now steadily regaining his hearing.

Case xx.—H. C., a gentleman aged 61, was sent to me by Dr. Lawrence, of Chepstow. Three or four years previous to his first visit to me, in 1886, he had twice suffered from deafness of the right ear, consequent, apparently, on abscess caused by the ingress of water into the meatus. After a slight discharge for a fortnight, the deafness had on both occasions entirely ceased. In August, 1886, subsequent to bathing every other day or so during four weeks at Whitby, deafness came on in the left ear, lasting a month. The patient, who, when he came to me, was very deaf in both ears, and suffered from considerable pain in the right side of the head, presented an exostosis on the posterior wall of each external meatus. On October 20th, 1886, I drilled through both by means of the dental engine. No pain or injury to the general health ensued, and hearing was restored some five weeks from that date to the left ear, and a few days later to the right. On January 6th, 1887, he wrote as follows: "I am very happy to be able to tell you that I am as nearly as possible cured of my deafness. When I come to town I will certainly give you a call, that you may see how successful your operation has been."

Case xxi.—Emma H., a hospital patient, came to me November 3rd, 1886, with an exostosis of the left ear, the size of a large pea, and completely closing the external auditory meatus, to the anterior wall of which it was attached by a small pedicle. The development of the growth had begun with shooting pains in the ear two years previously, and deafness had gradually increased, until it had now become almost absolute. In this case the use of strong forceps sufficed for the ready removal of the whole of the exostosis.

Case xxii.—K. W., aged 34, formerly a nurse, was admitted into the Manvers Ward, St. Mary's Hospital, November 10th, 1886, on account of an ill-defined swelling below the left ear, corresponding in position with the parotid gland, together with typical facial paralysis. The patient, though unhealthy-looking, was fairly well nourished. Her family history was on the whole good, but she had lost her mother from softening of the brain, and a brother had occasional attacks of paralysis. Except for sick headache, at one time her general condition may be said to have been quite satisfactory. Ophthalmic examination showed white streaks upon the retina; by urinary tests, however, no albuminuria could be detected.

Five years previous to admission into hospital, she began to suffer pain behind the left ear; and three years later she noticed in that situation a hard, somewhat tender swelling. This slowly increased in size; and occasionally there was a slight viscid and rather offensive discharge from the ear. The facial paralysis commenced soon after the swelling became apparent. The pain behind the ear, for which opiated fomentations have been used, was described as of a stabbing character, and as running in a line from the ear to the throat.

By November 20th, the patient's face had become much swollen, and she had endured several attacks of megrim with vomiting. She was seen by me on the 25th, when I discovered in the left meatus, attached by a broad base to its posterior wall, and all but completely occluding its cavity, a large exostosis, which on percussion with a probe gave a clear ringing sound, as though it were composed of hard bone. The application of forceps proved the growth to be of loose construction, so that numerous small pieces of it, together with some granulation-tissue, were easily removed, and a passage through the meatus was secured. The following week the passage was enlarged with the dental drill sufficiently to allow of a free discharge of pus, the pain in the head being thereby much relieved.

Case xxiii.—The following case is one of a class in which immediate removal of an exostosis is not to be advised. E. L., a girl of 14, came to me at St. Mary's Hospital, October 24th, 1886. She had from babyhood suffered from otorrhœa. On November 12th, after removal, under chloroform, of a polypus in the right meatus, I found on its upper wall, and quite close to the drumhead, a large bony outgrowth. As the meatus is not yet (and may never be) occluded, the position of the growth certainly for the present contra-indicates operative interference.

Case xxiv.—Major R. B., sent by Dr. Smith, of Newport, to consult me, November 23rd, 1886, gives the following history of his case. After three years' service with his regiment in Burmah, he contracted endemic fever, and was invalided home in 1867. On recovery, he discovered himself to be persistently deaf in the left ear, insomuch that a watch held to it was scarcely audible. He remarked his deafness most in a noise, and particularly in that caused by driving, railway travelling, or the conversation, as at a dinner-party, of several persons together. Near the close of 1884, he learnt from his local medical attendant that he had an unnatural growth in each ear; as, however, his deafness was not worse than usual, he attached no weight to this piece of information. In September, 1886, however, after a day's shooting, he experienced complete deafness in the right ear; this left him as suddenly as it had come on, but only to return six weeks later. By the advice of his medical man, whom he now again consulted, he saw me on November 23rd. Finding him to be the subject of double exostosis, I recommended operation by drilling. This I performed on December 6th. The patient did well, keeping his bed for only a short time, and suffering but slightly. He returned home on December 18th, twelve days after the operation, able to resume his usual occupations. The hearing of the right ear is now completely restored; that of the left, which was regained in fair measure for a few days, we may hope to be permanently restored, as in other cases, on the removal of the granulations blocking the meatus. He says he "now hears as well as he did twenty years ago."

Case xxv.—Mr. E. L. P., aged 27, was sent by Dr. Thursfield to consult me, December 7th, 1886. He first noticed a growth in his left ear about July, 1881, but thinks he must have been deaf for some time before then. By the advice of his medical attendant he visited an aurist, who diagnosed an exostosis, and by syringing dislodged from behind it a piece of wax about as large as a good-sized pea. Being recommended not to undergo an operation unless increase in the bulk of the tumour became perceptible, the patient, though often very deaf, troubled himself no further respecting his condition until near the end of November, 1886. He then, while washing, began to suffer from persistent pain in his ear. Dr. Thursfield, whom he consulted shortly afterwards, suggested he should see me without delay. On December 9th the drilling of the tumour was successfully effected, the operation lasting forty minutes. The patient made an excellent recovery, and on January 3rd, 1887, he felt perfectly well; all discharge had ceased, and a watch was audible at 12 inches from the ear.

THORACIC ANEURYSM.

By C. W. SUCKLING, M.D.Lond., M.R.C.P.,
Physician to the Queen's Hospital, Birmingham.

During the past two years, I have had under my care at the Workhouse Infirmary and at the Queen's Hospital altogether twenty cases of thoracic aneurysm. A brief summary of the chief symptoms met with in these cases may be of interest.

Of the twenty cases, three were women, seventeen men; none of the patients were under 30 years of age.

Between	30	and	40	years there were	8 cases
,,	40	,,	50	,, ,,	4 ,,
,,	50	,,	60	,, ,,	6 ,,
	Over		60	,, ,,	2 ,,

All of them had led very laborious lives; seven of the men had been porters, and had been accustomed to carry heavy weights. A history of syphilis was obtained in four cases only, and dated back several years in each. There was a history of syphilis in one of the women; in the other two, heavy work seemed to have been the cause. In only three cases could a history of sudden onset of symptoms be obtained. In one man, pain in the chest came on immediately after being crushed at a political meeting. In another, pain was felt after lifting a sack of flour. In the third case, pain in the chest supervened immediately after ligature of the external iliac artery for femoral aneurysm.

Of all the symptoms, pain was the most constantly present. Pain was complained of in eighteen of the twenty cases. When present, it was always felt behind the upper portion of the sternum, occasionally down both arms, more frequently down the left alone. The pain varied much in intensity, and was always relieved by rest and by iodide of potassium. Dyspnœa was a prominent symptom in eight of the cases, in some occasional, in others constant, but with exacerbations. Stridor on inspiration and expiration was marked in five cases; this is, of course, a symptom that should at once lead to a careful examination of the chest for aneurysm, yet it is frequently put down to asthma or bronchitis. Inequality in the radial pulses, dysphagia, hoarseness, brassy cough, and inequality in the pupils were frequently present. Sphygmographic tracings were taken in most of the cases, and one of the few purposes for which the sphygmograph is useful is the localisation of thoracic aneurysm. In a case of innominate aneurysm, in which dyspnœa was an urgent

symptom, there were well marked respiratory undulations in the pulse tracing of the right radial artery.

The destructive pneumonia which follows pressure on the bronchus was observed in six of the twenty cases. This destructive pneumonia may be mistaken for malignant disease of the lung, or for ordinary phthisis.

In one necropsy an aneurysm, involving the extra-pericardiac portion of the ascending aorta, had compressed the right bronchus, and had led to consolidation of the upper lobe of the right lung. During life the patient, a woman, had suffered from hæmoptysis, slight stridor and exhaustion, with marked œdema of the head, neck, and upper extremities. There was dulness over the manubrium, and the usual signs of consolidation of a considerable portion of the right lung. There was no pulsation to be seen or felt, and no pain had ever been experienced; in addition, there was no fever during the time she was under observation. The balance of evidence was thought to be in favour of malignant growth, but at the necropsy an enormous aneurysm, with very thick walls, was found. It is well to remember that aneurysm is far more common than malignant growth in the mediastinum or of the lung. I have met with two cases of primary sarcoma of the lung during the time in which I have met with twenty cases of thoracic aneurysm.

This pneumonia is a very important pressure-symptom; it may affect either the upper or lower lobe of the lung, and helps to localise a thoracic aneurysm, as in the following case. A man with an aneurysm of the femoral artery was operated on by Mr. Bennett May, the external iliac vessel being tied. He complained immediately after of pain in his chest, and a few months later presented signs of phthisis at the left apex. The consolidation of the left lung advanced; but, unlike what is usually seen in ordinary phthisis, the right lung was healthy, while the left was extensively consolidated. The aneurysm was supposed to be situated in the descending portion of the arch of the aorta, and to be growing forwards and compressing the left bronchus, and this was found to be its exact position at the *post-mortem* examination.

In malignant disease the profound exhaustion which rapidly supervenes is very characteristic; in addition, there is little if any fever, while in the consolidation resulting from pressure on the bronchus an irregular pyrexia is almost invariably present. In one case malignant disease of the upper lobe of the left lung was diagnosed; a day or two later a systolic *bruit* was heard in the interscapular region close to the spine. This threw a little doubt upon the diagnosis. Was the *bruit* due to pressure on the aorta by the growth; or was there an aneurysm compressing the left bronchus and leading to a consolidation of the left upper lobe? The absence of fever and the very marked exhaustion supported the diagnosis of malignant growth which was found to be present at the *post-mortem* examination. In four cases aortic regurgitation was present in addition to the aneurysm, probably being brought about by the same cause. In one case a double *bruit* was present at the base of the heart, with capillary pulsation; but it was found after death that the aortic valves were perfectly competent, so that a diseased aorta alone can produce these conditions. In this case, also, the heart was not enlarged, only being displaced; it seems that aneurysm, unless complicated with insufficiency of the aortic valves, does not lead to cardiac hypertrophy. A systolic *bruit* was heard in thirteen of the cases, in three no murmur at all. In two cases embolic phenomena were present, in both a left hemiplegia. In one case there was, in addition, embolism of the central artery of the retina on the same side, leaving well-marked atrophy of the disc. Nineteen of the twenty cases were aneurysms of the arch of the aorta outside the pericardium; one was innominate.

I have met with one case of acute aneurysmal dilatation of the intra-pericardial portion of the aorta causing death by perforation and hæmorrhage into the pericardium. This was in a case of ulcerative endocarditis. The aneurysm was not diagnosed during life. In five cases the diagnosis could be made by inspection and palpation of the chest wall, there being evident bulging and pulsation; in fifteen there was neither of these symptoms. In nineteen of the twenty cases there was dulness on percussion over the manubrium or at the side of this portion of the sternum, attention being directed to this region by the patients' complaint of pain there. This region of the chest is often overlooked. It is a good rule to percuss the sternum in every case of chest-pain in men.

There is no such thing as mediastinal dulness in the healthy state, the note of the sternum in health being resonant, although there is no lung behind the first portion of it. Dulness over the manubrium sterni is pathological, and means in the majority of cases mediastinal tumour, aneurysm being by far the commonest form. Tufnell's plan of treatment, together with the administration of iodide of potassium, gave great relief in twelve cases. In two cases under this treatment the dulness almost disappeared, the pressure symptoms completely so, and the diagnosis of aneurysm could not have been made without a knowledge of the previous condition. The iodide was given in large doses, commencing with ten grains, and increasing to a dose of a drachm or more, according to the tolerance and effects. In two or three cases the iodide seemed to do harm, the pulse becoming very quick. Aconite in these cases suited better. Electrolysis was performed in one case with temporary relief.

ANTIPYRIN IN SUNSTROKE.

By Surgeon G. A. HARRIS, M.R.C.S.E., L.R.C.P.Lond., B.M.S.,
Civil Surgeon, Simla.

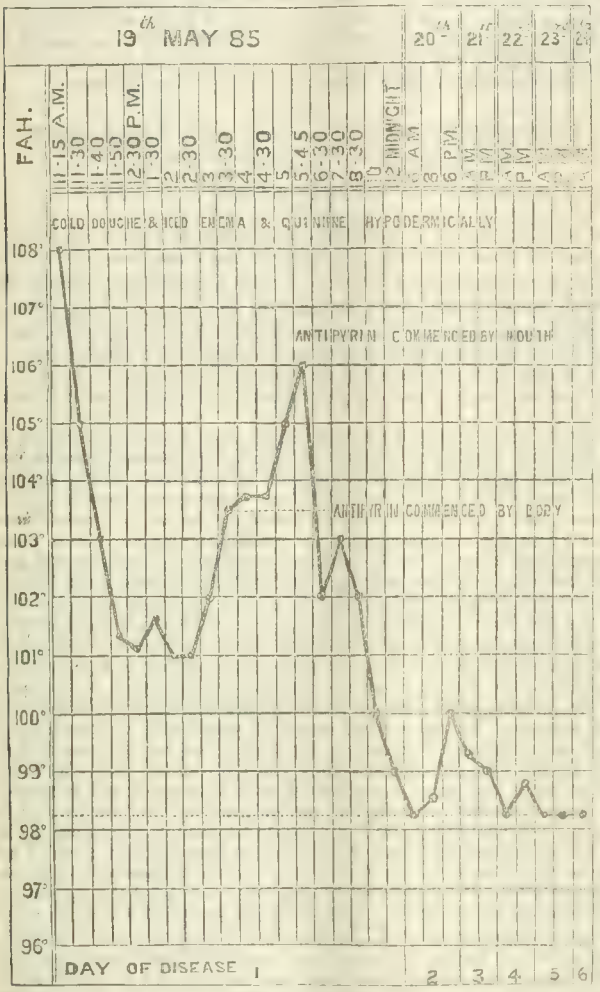
The following notes of a case of the hyperpyrexial form of insolation, which came under my observation at the Calcutta General Hospital, and which was in part treated with antipyrin, is of some interest. I believe it was one of the first, if not the first, case of insolation in which antipyrin was used to reduce the high temperature; at least, I have not seen any record of a previous case, though I know subsequent observations in the United States of America were recorded in which antipyrin was used successfully to combat the hyperpyrexia of sunstroke. I regret that my own subsequent experience did not confirm the hopes raised by the successful issue of the present case; but I think this was in part due to the doses being too small.

W. S., an American seaman, aged 40, was brought to the General Hospital, Calcutta, very shortly after 11 A.M., on May 19th, 1885. When admitted he was perfectly unconscious, and the only history obtainable was that he had been seen early that day visiting several ships lying in port, and was known to have been drinking freely on several of these ships. Shortly before he was brought to the hospital, he had been found lying insensible on the Strand Road, which runs parallel with the River Hooghly.

On admission the temperature was 108° F., at 11.15 A.M., in the mouth and rectum. The patient was perfectly unconscious, with laboured and stertorous breathing; his face was markedly cyanotic; the skin of the whole surface was harsh, dry, and burning hot; the eyes were red and suffused, and both pupils contracted to a pin's point; there was a sweetish, sickly odour about the breath; the pulse was full and bounding; he was constantly throwing his arms about and groaning. There were a few superficial wounds on the scalp, filled with mud and gravel, and probably caused by falling on the ground when he first became insensible. Shortly after admission he vomited some undigested food and bilious-looking fluid, which smelt strongly of alcohol.

The patient's clothes being removed, he was at once well douched with cold water, given a large enema of iced water, then put into a cold bath, and 10 grains of the neutral sulphate of quinine injected into his arm. Whilst in the bath his bowels acted freely. He was kept in the bath about ten minutes, ice being applied to the shaven head, and, before he was taken out, a drop of croton-oil was put on the back of his tongue. After the cold douche and the enema, the temperature fell to 105°, and in the bath and after removal it kept on falling until 2.30 P.M., by which time it had fallen to 101°. The cold bath had not been repeated, but a large sheet which was kept constantly wet with cold water was wrapped round him, and evaporation encouraged by constant fanning. Ice had been constantly applied to the head, but he had in no way regained consciousness. Small quantities of Brand's essence were put between his lips, but very little was swallowed. The convulsive twitching of the arms and legs was incessant, and there was the profoundest insensibility. The conjunctivæ and corneæ could be freely touched, and shouting into his ears produced no response. The pulse was 128, and of a running character; the breathing continued stertorous. On any attempt being made to flex or extend the limbs they showed marked muscular rigidity with resistance. At 3.30 P.M. the temperature was 103.5°, and was apparently rising, notwithstanding the constant application of cold to the surface, so I determined to give antipyrin a trial, and 20 grains were dissolved in water and injected subcutaneously, and at 5 P.M. I repeated this measure. In spite of this, the temperature continued to rise, and at 5.45 P.M. was 106° in the rectum. At 6.10 P.M. the temperature was still 106° in the rectum, and 30 grains of antipyrin were given by the mouth, and by 6.30 P.M.—that is, in twenty minutes—the temperature had fallen from 106° to 102°. At 7.10 P.M. the 30-grain dose of antipyrin was repeated by the mouth; at 8.10 P.M. 15 grains were given by the mouth, and repeated at 9 P.M. and at 11 P.M. Subsequent to these big doses, the temperature did not

rise above 103°, and by 10 P.M. it had fallen to 100°, and at midnight was 99°, and on the morning of May 20th was normal. Altogether, between 3.30 P.M. and 11 P.M., the patient had taken in all 145 grains of antipyrin (or nearly 2½ drachms). After the first big dose by the mouth, about 6.45 P.M., he seemed very decidedly better, answering to his name, and asking for milk, and by 8 P.M. he was able to talk sensibly and quietly, and the twitchings above mentioned had entirely stopped. The pupils were normal and responded, and the pulse was 120, soft and compressible. He had been sleeping off and on, but it was deemed advisable to give him a draught of bromide of potassium and chloral, 20 grains of each. The accompanying chart shows graphically the temperature curve. The subsequent history



was one of uninterrupted convalescence; strength and appetite gradually returned; the temperature showed no disposition to rise above 100°, and no nervous sequelæ remained. On June 7th he was discharged well.

REMARKS.—I was almost constantly with the patient, and have no doubt in my own mind that the two doses of antipyrin of 30 grains each, given at 6.10 P.M. and 7.10 P.M., added to the two doses of 20 grains each given subcutaneously some hours previously, had a very decided effect in lowering the temperature, and thereby obviating the tendency to death, and that the subsequent doses of antipyrin above detailed materially aided in subduing and checking the hyperpyrexial tendency.

If I had a similar case to treat again, I would not hesitate to give 40 grains or even 1 drachm of antipyrin in one dose, guarding it, if necessary, with alcohol and minute doses of atropine to lessen the depression which such a large single dose might produce; and, thus guarded, I would repeat the dose as often as I considered necessary. Although there may be very considerable doubt amongst the profession as to continuously employing powerful antipyretics, as antipyrin, kairin, resorcin, salicylic acid, etc., in reducing the temperature of pneumonia, enteric fever, tuberculosis, etc., seeing that the mere pyrexia in these diseases is of itself rarely fatal, and we are as yet but on the outskirts of the inquiry as to whether the mere reduction of the temperature in these and other pyrexial diseases always cuts short the disease and lessens the tendency to complications, still there can be little, if any, doubt that hyperpyrexia[1] *must* be cut short speedily to ensure recovery. Whether the means adopted to attain this very necessary end be the application of cold externally (by which I include the giving of enemata also) or the giving of drugs internally, the object is the same, and I think we are bound to leave nothing untried.

I have no experience of the newest candidate amongst antipyretic drugs, phenyl acetanilide or "antifebrin," but, according to Drs. Kahn and Hepp, assistants in Dr. Kussmal's Clinic in Strasburg, its action is four times more powerful than antipyrin—that is, 5 grains of acetanilide (or antifebrin) are equal to 20 grains of antipyrin in time of appearance, duration, and magnitude of their antipyretic action. Antifebrin also is said to cause less depression, and to be safer than antipyrin. I should think that antifebrin well merits a trial in all cases of hyperpyrexia, and especially in the hyperpyrexial form of insolation which is unfortunately so frequently seen amongst soldiers and sailors in our large garrison towns and Indian seaports.

I cannot explain why the temperature continued to rise in my case, notwithstanding cold douching and wet packing; nor can I explain why the antipyrin should have acted better by the mouth than subcutaneously.

ABSTRACTS OF LECTURES
ON
MALARIAL FEVERS.

By W. NORTH, B.A., F.C.S.,
Research Scholar of the Grocers' Company.

LECTURE II.—LOCAL CONDITIONS AFFECTING THEIR DISTRIBUTION AS STUDIED IN THE PROVINCE OF ROME.

IN the previous lecture the general relation of malaria to latitude, altitude, water, and climate, have been shown to hold good for a continent, for an individual country, and for a province of that country; it remains to show how far these relations hold for much smaller areas. This involves consideration in detail of localities, and with regard to each the following points demand especial attention:

1. Local conformation of the soil. 2. Constitution of the soil. 3. Water. 4. Altitude. 5. Cultivation. 6. Population. 7. Meteorology. 8. Drinking water.

Local Conformation of the Soil.—The peculiar nature of the Roman Campagna, and the fact that it is by no means a plain, in the generally accepted sense of the word, may be illustrated by the following examples.

The neighbourhood of the Isola Farnese is exceedingly broken up by streams running in valleys with almost precipitous walls, often fifty mètres and more in height, of more undulating country, but still very broken; the neighbourhood of Tre Fontane to the south of Rome affords a good example; here there are valleys whose bottoms are not more than 12 to 16 mètres, and whose sides may rise to 50 and even 60 mètres above sea-level. The streams which flow through these valleys are, for reasons to be considered later, liable to frequent flood, and deposit an enormous amount of mud and silt.

Of true plain, the valley of the Tiber, the Pontine region, and the low land on the coast-line, may be cited as the best examples.

Constitution of the Soil and Water.—It has been shown repeatedly that geology has little to do with malaria, except in so far as it affects the physical nature of the soil. The fact that the greater part of the Roman Campagna is volcanic is of material importance to the subject, inasmuch as it has a great influence on the distribution of the water. Underlying the surface-soil there is frequently an almost impervious layer of littoid tufa, full of saucer-like depressions, which hold water and render the soil with which they are filled and hidden wet and boggy. In some cases these depressions are crater-like and of large size, having once been, to all appearance, volcanic lakes. These larger depressions are found chiefly round the base of the extinct volcanoes of Albano and Bracciano; the best example, perhaps, is that of the Val d'Ariccia, below Albano, which is nearly a mile across, exceedingly

[1] By this I mean any temperature above 105.5° or 106°.

fertile, and very unhealthy. After heavy rain the whole valley becomes a bog, there being apparently no adequate means of escape for the water. This valley is known to have been a lake, and to have been drained in order that the alluvium, which almost filled it, might be cultivated. The volcanic soil holds water like a sponge, and only when it is saturated does the water issue from the hill-sides as springs, and then chiefly because it has met a layer of hard tufa, which stops its downward course. Good examples of this are to be seen near Tre Fontane. Some idea of the water-holding capacity of this volcanic soil may be gathered from the following facts:

In 1876 the water in the torrents in the district of Velletri began to show an increase about October 20th; the total amount of water which had fallen over the drainage-area since the first rains of September was equal to a depth of 25 centimètres, and represented a total of 34 millions of cubic mètres of water.

In 1877 the flow did not begin till even later, namely, in the first fortnight of November, after a rainfall of 17 centimètres, or a total volume of 23 millions of cubic mètres of water. The Travertine area below Tivoli is very interesting as an example of an exceedingly malarious district, covered to a varying depth with a calcareous stone, excellent for building purposes, and on the top of which the soil is often so thin as to render cultivation impossible.

Altitude.—The general fact that malaria diminishes and finally disappears as we ascend is undisputed. The remarkable fact about it is that a very small elevation above a malarious soil affords very efficient protection to the inhabitants. The practice in such countries of building the houses on poles, on the tops of tombs, and similar places is evidence of this; but it would also appear that there is an undoubted difference, as far as the risk of acquiring the disease is concerned, between a house at the bottom of one of the valleys already described and one built on the top of the hills which bound them—a difference in altitude often not more than 30 mètres. The neighbourhood of the Basilica of San Paolo fuori le Mura, to the south of Rome, affords a very curious example of this.

Cultivation.—The ancient cultivation and the present state of the Roman Campagna have been already discussed. The relation of malaria to trees is of great interest, though but little understood. The case of Cisterna will serve as an illustration. In 1714 it was proposed to cut down a large area of *macchia* which lay between the town of Cisterna and the Pontine Marshes. Lancisi, the Papal sanitary adviser at the time, resisted it successfully, on the ground that these trees opposed a barrier or filter to the malarial emanations from the Pontine region; this idea constituting what is known as the "*prejudizio palustre.*" Cisterna at the time was very unhealthy, and had a rapidly-diminishing population. About a hundred years later these woods were cut, and since that time the health of the place has improved, and the population almost trebled.

The attempts made at Tre Fontane to improve the locality by planting eucalypti hardly admit of discussion. The plantations are too small and too young to enable any decided opinion to be formed; still there is considerable evidence that good has been done. We may state generally that the effect of plantations, well kept and of suitable trees, is to drain the soil and distribute the water; while the *macchia* before mentioned near Cisterna, consisting of stunted brushwood, undrained and boggy, was rather a means of collecting stagnant water near the town, and its removal exposed the soil to the light and air, and so without artificial drainage what was practically a bog was got rid of.

Population.—The condition of the moving population of the Roman Campagna is a very serious question; they are ill-fed, ill-clothed, and worse housed, and generally are placed in circumstances which render successful resistance to the violence of the climate almost an impossibility. Density of population undoubtedly drives away malaria, and we need go no further than Rome itself for a conclusive example. Since the entry of the Italians in 1870 the city has extended enormously, and parts which at that time were something more than unhealthy are now built over, and fast becoming the fashionable quarter. The areas within the walls, particularly on the south, near the Porta San Sebastiano, which are unbuilt on, have a very evil reputation.

Drinking Water.—Is the malarial infection capable of being caused by water? This is a question which is naturally of the very first importance. The evidence, such as it is, would seem to point to an emphatic negative as the answer. The healthiest parts of the city of Rome are supplied by water admittedly the best in the world, and which rises—to take the Acqua di Trevi or Acqua Vergine as an example—on unenclosed land, in springs which bubble up and cover the surface in a locality so unhealthy that to pass several nights there in August might involve risk to life, and certainly to health. There seems to be but little doubt that a supply of good drinking-water is of importance in malarious localities, but it has yet to be shown that, in exchanging pond and ditch water for that of springs, the inhabitants of these places cease to take a poison into their bodies. The evidence points rather to the fact that by so doing they raise their general health, and so become less liable to the disease—at all events, proof that the malarial infection can be conveyed by water is wanting, though very largely credited by the natives of countries where the disease prevails.

Meteorology will be considered in the next lecture in connection with the circumstances under which the disease is acquired.

We may conclude from the facts above quoted, and numberless similar ones which might be quoted did space permit, that the malarial infection is neither wind nor water-borne, that it is extraordinarily local, and dependent upon local conditions for its intensity to an extent not readily believed, and that the local conditions which appear to favour its development are precisely those which affect local climate.

COINCIDENT VACCINATION AND SMALL-POX.

By BRINSLEY NICHOLSON, M.D.Edin.,
Deputy Inspector-General.

Your notice of M. P. Pourquier's inoculation of vaccine of different degrees of attenuation brought to my mind three cases of the character above-named seen by me. I now narrate them because they furnish succinct and direct evidence of the value of vaccination at once comprehensible by the ordinary unlearned and non-medical man, who looks upon statistical evidence as tedious and confusing, and before whom such evidence can be so manipulated as to more than bewilder him, and apparently prove the very opposite of what it really asserts.

In the fourth year of my studentship I took, as was required of me by the Edinburgh University, six months' dispensary practice, and there then happened to be an epidemic of small-pox, chiefly showing itself among the Irish in the Old Town. Almost coincidently—indeed I was called to the third while still visiting the first—I visited three cases where the circumstances were exceedingly alike. Three young labouring men, each of good make and constitution, had been attacked; each had not long been married; and each had a newly-born babe, of ages varying from four days to a fortnight, in a cradle on the floor of the one room of their respective "closes," in which each with his family lived. On each of my second visits I vaccinated the infant, but what I had feared came to pass—each child was attacked with small-pox. In one the vaccine distinctly showed that it had taken on the morning of the attack, and both affections progressed normally and together. In the second case as I would call it, the attack of small-pox coming on relatively a day earlier, the vaccine looked likely to take, but no more, and here the small-pox ran its course, and then the hitherto stationary vaccine took up the running and pursued it normally. In the third case, where nothing—at least nothing to an anxious and careful student's eye—could be predicted as to the taking or not of the vaccine when the small-pox fever showed itself, I can only at this distance of time remember that the respective courses ran differently from the other two, though both completed their courses.

These noteworthy facts, however—those for which I narrate these cases—occurred in all: 1. In all, the small-pox ran its modified course as after vaccination, and this though the latent small-pox must have been in the system prior to the vaccination, and though this vaccination had only in two cases commenced to run its visible course, and in a third case had not even done this. 2. As by modified course I mean that there was no exacerbation on the eighth day, but that the disease practically declined on that day, and that there was no formation of pus, there was, therefore, no symptom of danger nor cause of anxiety throughout. 3. Except the vaccine scars, not a single scar was left on the bodies of these infants, nor even on their faces. I know that such cases are not unique, for I instantly sought for and found notices of similar ones, but I narrate them thus simply for the reasons mentioned, saying no more, because I feel that any further words will only weaken, in the minds of others, facts which were and are to me of irresistible force.

Per contra, however, I would add that when in Tien-tsin, during and after the war, the estimate of all the medical officers there was that at least one-fourth of the males showed evidence of small-pox, and in by far the greater number of instances evidence of deep, universal and close pitting over the face. For myself, the strongest impression on my mind was the unsolved question—What a mortality there must have been to leave this one-fourth residuum.

SURGICAL MEMORANDA.

EPIDIDYMITIS ENDING IN ABSCESS.

SUPPURATION as a sequel to any of the ordinary forms of orchitis seems to me to be sufficiently rare to render its occurrence worth noting. The following case happened in my practice a short time ago.

The patient, aged 60, was a man enfeebled by alcohol and social misfortunes. For many years past he had suffered from at least two urethral strictures, the result of old gonorrhœas. Once or twice a year he was in the habit of coming to me for the purpose of having these strictures dilated.

Some few months ago he came as usual, and after several sittings I managed to pass a No. 8 soft catheter through the anterior stricture. There was, however, another contraction further back, probably near the membranous urethra, through which I could only pass a No. 4, and that with difficulty. After trying for about a quarter of an hour to introduce a larger instrument without success, I desisted, and the patient walked to his home about a mile away. No bleeding and only very slight pain occurred.

Two days after this I was called to see the patient at his own house, and found him suffering from all the symptoms of acute epididymitis. This I treated by rest, support, poultices, and opium for about ten days, but without any abatement of the local symptoms. At this time the skin of the scrotum was red and œdematous, and the left testicle considerably swollen and painful, with obscure fluctuation at its upper and back part. Into the centre of this I made an incision, letting out about two drachms of fœtid pus. This under the microscope revealed no spermatozoa, but abundance of putrefactive organisms. In about a week from this time the patient was well, and the only signs of the late mischief remaining were the scar and some thickening of the epididymis beneath it.

The instruments I had used were new ones, and between my catheterisation and the onset of orchitis there had been no urethral discharge.

F. H. WEEKES, F.R.C.S.ENG.

York.

A PECULIAR CASE OF SUICIDAL CUT-THROAT.

BOMBARDIER G. H., belonging to a mountain battery that formed part of the Ruby Mine Expedition, was admitted a patient at Sagadonng Camp, at the foot of the Shan Hills, on December 3rd, 1886, suffering from remittent fever of a malignant type. His temperature went to 106° F., with slight delirium. Early on the morning of Sunday, December 5th, I was called to the hospital-tent, shared by deceased, an apothecary, and three other sick men. I found deceased lying with his face downwards, his head and shoulders projecting beyond the end of a "dandie," on which he had been accommodated. His right hand firmly grasped a razor, with blade upturned, held under his throat, the elbow supported on the edge of the dandie. His throat was cut by one clean wound, exactly corresponding in shape to the razor-blade. It had completely severed the blood-vessels of both sides, the thyroid cartilage, and the œsophagus, exposing the muscles covering the anterior surface of the spinal column.

REMARKS.—Evidently the man had dropped the weight of his head and neck (possibly body also) on the upturned blade—a method fortunately not often employed, and ghastly in the certainty of its being fatal. Although naturally depressed from the disease he was suffering from, he had shown no previous suicidal tendency. Nothing unusual was noticed during the night by the other occupants of the tent.

H. HATHAWAY, Surgeon, Medical Staff.

Mogoke, Upper Burmah, January 27th.

TRAUMATIC LYMPHATIC ŒDEMA.

I VENTURE to think that glycerine of belladonna is not made as much use of as it might be in cases of lymphatic œdema or inflammation. I append this case as one of peculiar severity. The patient was sent up to me from the country originally to have his arm amputated, as nothing could be done for him. It occurred to me that the condition here reported was one of obstruction of the entire lymphatic system of the forearm, and I adopted the well-known application.

My patient was a man, about 30 years of age, who had the bones of his right forearm broken at about the middle, with great contusion of the soft tissues. The fracture was not compound, though there were wounds of the integuments. The arm, after the accident, was put up in splints, and so kept for five weeks, before being sent to me. The patient thought that the swelling began at about the date of the injury; and, though many remedies were employed, it continued to increase. When I first saw him there was a curious solid œdematous swelling affecting the forearm, mostly dorsally, from about two and a half inches from the condyles to the back of the hand, and extending obliquely round the wrist to the palmar surface; it was extremely painful. It exactly resembled elephantiasis. Glycerine of belladonna was freely applied to its surface, and the limb swathed in wool. In about two days there was most marked improvement, the surface being more supple and the swelling less; and in three weeks' time the lymphatic œdema had nearly disappeared, and when I last saw him (recently) entirely.

I have lately seen a case of fracture of the humerus high up where this lymphatic œdema was most marked, and which yielded in the same way to the same agent.

EDWARD BELLAMY, F.R.C.S.,
Surgeon to Charing Cross Hospital.

CLINICAL MEMORANDA.

CASE OF RUPTURE OF THE HEART.

THE following case may be of interest on account of the extensive internal injuries coexisting with little external damage. The body of a Hindu beggar, aged about 50, named Ramjoy Chang, was sent for *post-mortem* examination to Mymensingh civil station, on the evening of January 25th, 1887. He was said to have been run over during the day. The necropsy was performed at 11 next morning. The body was fairly well-nourished; rigor mortis had almost passed off. A little dark fluid blood was oozing from the mouth and nose, but no wounds or bruises were visible externally.

The meningeal vessels were congested; the brain and its membranes were healthy. On opening the chest, the sternum was seen to be completely fractured across, just below its junction with the fifth costal cartilages; the broken ends were separated by about an eighth of an inch. In the cellular tissue of the anterior mediastinum were a few small circumscribed effusions of blood from small ruptured vessels.

Both lungs were congested and were adherent to the pleuræ at the sides and back by old adhesions. The larynx and trachea were healthy and empty. A small goître was present.

The pericardium was healthy, not ruptured, and contained an ounce and a half of dark fluid blood. The heart was lying loose in the pericardium, being completely torn away from the great vessels. The aorta was torn quite across, three-quarters of an inch above its origin, the edges of the rupture being quite regular and even. The left auricle was torn away from the pulmonary veins, leaving a gap in its outer side two inches long by half an inch broad; the right auricle was similarly torn away from both venæ cavæ, its whole outer side being torn away. The pulmonary artery had been torn from the right ventricle, just beyond the pulmonary valve. The left ventricle was contracted and empty; the right empty and flabby. The aorta was healthy, except for the tear; there was no atheroma.

The abdominal walls were healthy. The peritoneum was healthy, but contained about a pint of dark fluid blood. The omentum was full of small clots of effused blood. The stomach was healthy, and contained one ounce of water. Both small and large intestines were healthy; the former were empty, the latter contained grey fæces. The liver was healthy.

The spleen was enlarged to one-and-a-half times its normal size, and was ruptured in two places. Both kidneys were healthy, except that the left contained in its cortical substance a cyst the size of a large pea. The bladder contained ten ounces of healthy urine.

Mymensingh. D. G. CRAWFORD, M.B., Surgeon, I.M.S.

ULNAR NEURALGIA.

I SHOULD like to draw the attention of your readers to an affection of the ulnar nerve exactly analogous to sciatica which I have not seen any reference to in text-books or the medical journals, though it is quite possible it may have been described without my coming across it. I can recall to mind four cases, and singularly enough all in females. The symptoms consist of pain of varying degrees of intensity along the ulnar side of the forearm, and passing down to the little and ring fingers. The pain is often most severe at night, preventing sleep, and there is also a feeling of loss of power in the fingers, and numbness and tingling. The ulnar nerve where it comes round the internal condyle is always very tender to pressure, and gives rise when pressed to similar sensations to those experienced when the pain is at its worst. In all my cases but one there was a marked history of rheumatic pains in the joints; one patient said she had never suffered from rheumatism of any kind. In none was there any anæmia or other indications of general failure of health. The pain was often severest after a day's washing, or other occupation requiring the hands to be kept in water. When no actually severe pain was present there was a

dull aching along the course of the nerve, and when the arm was kept in a flexed position in bed there was a great tendency for the part to go "to sleep."

This affection resembles sciatica in all its features, and merits, from its well-marked characters and frequency, a separate name quite as much as the latter. The treatment I have adopted is to apply a blister round the arm above the elbow, and to administer alkalies, and in all the cases speedy relief was obtained, though there was a tendency to recurrence.

JAMES MCNAUGHT, M.D., M.R.C.S.
Newchurch in Rossendale.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

LONDON HOSPITAL.

CASE OF SIMPLE FRACTURE OF THE SKULL WITH A PUFFY TUMOUR.

(Under the Care of Mr. FREDERICK TREVES.)

A FACTORY girl, aged 15, was admitted on March 18th, 1885, in a state of insensibility. Shortly before admission she had fallen down a flight of stairs headlong. She was unconscious when picked up. When first seen she was lying in bed restless and groaning, and in a condition of complete insensibility. The pulse was 60, soft and compressible. The temperature was subnormal, and her extremities were cold. The pupils were contracted, were equal and responded to light. Both eyes were kept rigidly turned to the right. Although the patient tossed about a great deal, she was disposed to lie chiefly on her right side. There was no evidence of paralysis; the contents of the bladder and rectum were retained. The head was carefully examined, but it presented no wound nor contusion, nor any evidences of fracture. There was free bleeding from the right ear. The patient vomited once, just after admission; there was no blood in the vomit. The symptom was not repeated. The head was shaved and an ice-bag applied. On the second day the bleeding from the ear was less; the pulse was 64. Neither on this day nor at any subsequent time was any sugar found in the urine. On the third day a light-coloured, turbid fluid was flowing from the ear. The temperature, which had risen to 100° F. on the evening of the first day, was now 101°. On the fifth day the discharge from the ear was thick, and of a dirty-brown colour. It had the appearance of pus suspended in water.

The following was the condition on the seventh day. The patient had remained quite insensible since admission. She was exceedingly restless. For the first few days she had moaned almost incessantly; she then became noisy, and disturbed the ward by her frequent screaming. She was evidently hypersensitive. She resented the least touch and noise. If spoken to she moaned and tossed about. If touched she screamed and struggled. The eyes were kept closed. The pupils were of normal size and equal. After the first day the eyes were no longer directed to the right. The urine was removed by catheter. One action of the bowels had been obtained on the fifth day by means of croton oil. The temperature kept between 101° and 102°. Neither rigors nor convulsions had been noticed. The patient was fed with difficulty. Her tongue was dry and brownish, and she was evidently losing strength.

There was now over the right temporal region a well circumscribed puffy tumour that presented indistinct fluctuation. I cut down to the skull through this swelling by means of a V-shaped incision. The tumour was caused by a collection of purulent-looking fluid between the pericranium and the bone. When the skull was exposed, a fine linear fracture without depression was seen to run vertically down the squamous bone. Close to the zygoma this fracture led to a loose piece of bone the size of the finger-nail, and composed of the whole thickness of the squama. The removal of the fragment left a hole in the skull. There was a small laceration of the dura mater, a little brain-matter escaped, and the operation opened up a collection of the same purulent-looking fluid between the dura mater and the bone. This fluid was composed apparently of pus, cerebro-spinal fluid, and a little disintegrated brain-matter. It was identical with that escaping from the ear. Pressure upon the collection caused an increased discharge from the meatus. It was found that the bony meatus was fractured, and a probe introduced through the fracture came up within the skull. The parts were well washed with weak carbolic lotion, and a small drainage-tube was passed in at the meatus and brought out through the hole in the skull. The operation was performed under the spray, and the wound was dressed with gauze in the usual way.

During the eighth and ninth days, the patient's condition remained unchanged. She was still insensible, restless, and noisy. Her temperature kept between 101° and 102°. There was a copious discharge from the wound. On the tenth day she became much quieter, and appeared to recognise her brother. Her temperature stood at 100°. The antiseptic dressings were replaced by wood-wool pads soaked with eucalyptus. Part of the temporal muscle had sloughed. The discharge was still free.

The patient now improved daily. The drain was removed on the eleventh day (four days after the operation). By the fifteenth day she was perfectly sensible, and answered questions intelligently. Between the eleventh and the eighteenth days the temperature ran between 99° and 100°. It reached normal on the nineteenth day.

Within three weeks of the operation the patient was up and about. The wound had filled up by granulations. It still discharged a little, and matter still escaped by the meatus. A rent was discovered in the membrana tympani, and the patient was deaf in that ear. She had had no headache, and her recovery was without complication of any kind.

Five weeks after the operation she was discharged. The wound had now healed, and under the scar the pulsation of the brain could be felt. There was no discharge from the ear.

The patient presented herself for examination six months after the accident. The scar had become very firm, and beneath it no pulse could be detected. She was still a little deaf in the right ear, but apart from that was in excellent health.

REMARKS BY MR. TREVES.—As no precise data could be obtained of the circumstances of the patient's fall, no explanation can be offered of the peculiar fracture. It was limited to the temporal bone. It would appear that the fracture that extended through the bony roof of the meatus was associated with rents both in the meninges and in the lining membrane of the auditory canal. I do not think that any blood came from the middle ear and escaped through the gap in the membrana tympani. It is evident that the circumstances of the lesion differed from those that attend an ordinary fracture of the base of the skull. So far as the anatomical base was concerned, the fracture would seem to have been limited to the roof of the meatus. Although the fracture would have to be classified as simple, it was practically compound by reason of the gap in the upper wall of the auditory canal. The tumour was conspicuous and well circumscribed. It was puffy, but did not fluctuate. I have hesitated to speak of it as an example of "Pott's puffy tumour." This tumour is regarded by some as chimerical, as a phantom visible only to Mr. Percival Pott. This is the only approach to the puffy swelling I have seen among the numerous cases of head-injury that are to be met with at the London Hospital. Mr. Christopher Heath, speaking of this tumour, writes: "It is said to indicate a collection of matter beneath the skull, but it is seldom if ever seen." From Pott's account, as furnished in his *Chirurgical Works*, this tumour was very common, and he provides many detailed accounts of it. "The inflammation of the dura mater," he writes, "and the formation of matter between it and the skull, in consequence of contusion, is generally indicated and preceded by one sign which I have hardly ever known to fail; I mean a puffy, circumscribed, indolent tumour of the scalp and a spontaneous separation of the pericranium from the skull under such tumour." In all instances the tumour did not form until some days after the accident, and it was met with in cases of simple contusion of the skull as well as in cases of fracture. The two varieties of the puffy tumour may be represented by the following examples from the *Chirurgical Works*. With the second example the present case would appear to be in accord.

1. A poor fellow, crossing Tower Hill, got, before he was aware of it, into a mob that was endeavouring to rescue a sailor from a press-gang. The man was knocked down, was found senseless, and was brought to St. Bartholomew's Hospital, where he was immediately let blood and put to bed. In an hour or two he was so far recovered as to be able to give the preceding account. Next day he appeared to be perfectly well, nor did any mark of violence appear on his head, except one small bruise. He was again bled, and left the hospital on the third day. On the twelfth day he returned very ill. He was feverish, unable to sleep, and very uneasy in his head. On the fourteenth day a puffy tumour appeared; there were rigors and increased fever. The man became delirious. The puffy tumour was incised, and a brown sanies escaped. On the seventeenth day the patient died. The necropsy showed separation of the pericranium under the puffy tumour, pus between the dura mater and the bone, but no fracture.

2. A young man playing at cudgels in Moorfields received a stroke on the forehead. It did not seem to himself or the spectators to have been a severe one; but, as it produced blood, it was deemed by the laws of the game a broken head, and he was obliged to yield to his antagonist. No trouble followed until the ninth day, when a swelling appeared on the forehead. By the twelfth day the swelling had increased, and, feeling much out of order, he came to the hospital. The puffy tumour was incised; a brown ichor escaped from under the pericranium, and a fracture came into view. The trephine was applied twice along the fracture-line. The dura mater was discoloured, and beginning to have matter on its surface. A high fever followed, that was met by repeated bleedings. After a long illness the man made a good recovery.

Putting aside the puffy tumour, it is evident that, in the treatment of intra-cranial suppuration, Pott was far in advance of his own times. His practice was in advance of that of the present time. The most ardent practitioner of "cerebral surgery" has, so far as intra-cranial effusions are concerned, not yet reached the point attained by Percival Pott.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 26TH, 1887.

GEORGE D. POLLOCK, Esq., F.R.C.S., President, in the Chair.

A Case of Chronic Meningitis, probably Syphilitic, and Causing Progressive Dementia. By FRANCIS WARNER, M.D., F.R.C.P., and FLETCHER BEACH, M.B., M.R.C.P.—The case was that of a boy, aged 7, who came under the observation of Dr. Warner in January, 1879. While an infant he suffered from snuffles, thrush, and sores about the nates. He never had fits. As he grew up he became a strong boy, and went to school, where he did his lessons fairly. He continued bright and well until about eight or nine months before he was first seen. The first thing noticed was a certain difficulty in his movements, the boy at the same time complaining of headaches, and crying for slight causes. The symptoms when first seen were then related, and the progress of the case was given. He was under observation until September, 1880, when he was admitted into Darenth Asylum, under the care of Dr. Fletcher Beach. There he remained until his death in January, 1882. At the necropsy, twenty-seven hours after death, the dura mater was found adherent to, but easily separable from, a subjacent false membrane, which had evidently been formed for some time. It was attached here and there to the upper surface of the pia mater by thin membrane, and could be traced for a considerable distance along the floor of the skull. The family history showed that the maternal grandmother was epileptic, that the mother was liable to spectral illusions, and that the father had had syphilis. This interesting case, which had been watched carefully for three years, was clearly one of acquired imbecility, due to chronic meningitis, probably syphilitic in its origin, and was representative of many others, where owing to the influence of heredity, indicated here by the history on the maternal side, the child was born with an unstable brain easily disturbed by any cause. Syphilis was not a common exciting cause of imbecility, but according to Heubner, hereditary predisposition to nervous diseases appeared to exert an influence in determining the syphilitic poison towards the nervous system. The paper concluded with references of the connection between syphilis and idiocy and imbecility. Photographs of the brain and of the membranes were exhibited.—Dr. ANGEL MONEY imagined such cases to be far from common, but had had one which was probably similar under his care. The child died, aged 20 months, and he had not had time to show the loss of mental faculties. A thick membrane was found between the dura mater and the pia mater, which seemed at one time to have been infiltrated with blood. The pathological condition, he thought, might be called a peri-encephalitis, as being probably similar to what were known as peri-hepatitis and peri-splenitis. There was no specific endarteritis in Dr. Warner's case; but in the case of a child, where he had seen it, it led to small hard patches in the cerebral substance.—Dr. WARNER had watched some other cases of specific disease which had run a similar course. In one there was gradual loss of mental function for three years, and then a stationary condition; in his brother there was infantile hemiplegia and subsequent athetosis. He had found treatment with mercury and potassium iodide practically useless.—Dr. FLETCHER BEACH had noticed three similar cases out of 1,600 at Darenth.

An Analysis of 93 Cases of Writers' Cramp and Impaired Writing Power, making, with 75 Cases previously reported, a Total of 168 Cases. By G. V. POORE, M.D.—This paper was in continuation of one published in the sixty-first volume of the Society's *Transactions*. The cases reported were given in the form of tables, as an appendix to the paper. They were arranged in three groups—namely, (1) paralytic, 13 cases (10 cerebral); (2) degenerative, 14 cases; (3) neuro-muscular, 66 cases. The cases in groups 1 and 2 were nearly all referable to well-understood pathological conditions which affected the brain or spinal cord. The author was of opinion that a not uncommon cause of impaired writing power was to be found in lesions causing slight degrees of paresis of a hemiplegic type, and that the evidence of a slight, long-antecedent, and possibly forgotten hemiplegia might have almost disappeared, except in the execution of an act such as writing, which required both delicacy and steadiness. Slight degrees of sclerosis affecting the different columns of the spinal cord might in like manner be scarcely noticeable, except in the effect which they produced on the act of writing. Of the total 168 cases of impaired writing power, about one-fourth were referred to slight central changes in the brain or cord. The remaining 117 cases (66 in the present paper and 51 in the previous paper) could not with any sufficient reason be referred to central change. They formed a group which the author called the neuro-muscular group. The objective symptoms of this group (in addition to the impaired writing power), were: 1, nerve-tenderness; 2, change in the faradic irritability of some of the muscles; 3, tremors. These symptoms might occur singly or combined. Nerve-tenderness occurred in 50 out of the 93 cases, and in most of these it was the median nerve which was tender. Change in muscular irritability occurred 61 times in the 93 cases. The change was generally a depression, and it occurred chiefly in those muscles which, in the act of writing, were subjected to prolonged contraction, such as the interossei, etc. Tremor occurred in more than half the cases. Many cases were complicated by slight rheumatic conditions of some of the joints. The pathological significance of altered muscular irritability and nerve-tenderness was discussed, and it was shown that these conditions occurred under such varied circumstances that alone they had little value in determining the nature of the pathological change or its seat. Both, however, might be induced by excessive muscular exertion; and the author continued to regard the depressed electric irritability as symptomatic of muscular fatigue, and was inclined to regard the nerve-tenderness as also connected with over-exertion. In the treatment of cases of impaired writing power, the first step clearly was diagnosis. For cases of the neuro-muscular group, blistering and other forms of counter-irritation, applied to the tender nerve-trunks, had proved of marked value. Good results had also been obtained from massage and other methods of improving the nutrition of the affected limb.—Dr. BISS was struck with the close connection of the general physical state of the patient with these special nervous conditions. He had found that in a man under his care, who was very nervous and suffered from over-anxiety as well as over-writing, a partial cure could only be effected after six weeks, and he considered the length of the time due to his general nervous fatigue.—Dr. A. MONEY was especially interested in that set of cases which Dr. Poore had classed as paralytic. Many of these, he thought, were probably the last remaining results of infantile hemiplegia. There was a tendency to confuse this with infantile paraplegia, and many cases were brought to children's hospitals with a limp which could be shown by careful examination to have some signs of the central lesion of hemiplegia left, occasionally in the hand. Some cases, on the other hand, might be called local hysterical or functional contraction. The motor cortex might be compared to a coachman who controlled his horses, the spinal centres, by the fibres or reins of the crossed pyramidal tract; and in fatigue the cortex allowed the horses to run riot. In a state of exhaustion, both ends of a nervous chain suffered—that is, both the central and the peripheral ends. It was a more subtle change than the Wallerian degeneration, which went both upwards and downwards from the point of section of a nerve.—Mr. GODLEE had noticed that slight rheumatic joint-pains were mentioned in some cases. He had seen two cases lately in which there were amazingly loud clicks to be heard on motion in the wrists and shoulders of women. He asked Dr. Poore what relation he had found between rheumatism and writers' cramp?—Dr. POORE apologised for the number of figures which were to be found in his paper. As to the mental condition of his patients, he had found that true writers' cramp generally was accompanied with great energy—very hard writing and over-strain; and, further, occasionally induced a condition of despair, when the subject might give up all chance of recovery, or might show some passion with the recalcitrant hand. He agreed with Dr. Money that a true central hemiplegia was often mistaken for spinal disease in

babies. He hoped some time to carry his investigations far enough to show where and why the loss of function was which caused most cases of writers' cramp. Accepting Dr. Money's simile, he remarked that it was accurate enough, and co-ordination might be broken up either by the coachman getting drunk, or the reins breaking, or one of the horses casting a shoe. At present he must refrain from dogmatising on the true causes. There could be no doubt there was peripheral evidence of mischief, but it was possible enough the mischief might not be always or altogether peripheral. The cases of joint-disease that he had mentioned he took to be chiefly gouty. The loud clicks in joints were functional.—The PRESIDENT inquired if he had found that rest was sufficient to cure the disease, and narrated the case of an eminent over-worked and over-anxious solicitor who had been completely relieved without any other treatment than rest. He had also himself noticed what he thought was comparable to writers' cramp—namely, spasms in the muscles of his legs, chiefly the recti and vasti—after a long day's walk in the Highlands. As to the click in the joint, he had had occasion to treat it in the hip-joint of a stout young lady with a good deal of temper, and found that it disappeared on serious recommendation of a leather splint.—Dr. OGIER WARD had seen fatigue produce complete failure of the muscles of the leg without spasm.—Dr. A. E. GARROD suggested that pressure on one arm might produce symptoms like those of writers' cramp.—Dr. POORE remarked that he rarely got cases to treat until treatment by rest had been tried for some time and had failed, but he had no doubt of its great use as the first part of treatment; and he related a few instances of rapid cure and some anomalous cases which were not true writers' cramp, but sprains, or pressure by sleeve-links on the median nerve.

CLINICAL SOCIETY OF LONDON.

FRIDAY, APRIL 22ND, 1887.

W. H. BROADBENT, M.D., F.R.C.P., President, in the Chair.

Difficulties in Establishing Natural Respiration after Tracheotomy.—Mr. BILTON POLLARD referred to three cases illustrating these difficulties, and drew attention to their treatment by tracheal catheterism. He said that the difficulty in getting rid of the tube after tracheotomy was by no means uncommon, and in two of the cases related it persisted after most determined and persevering attempts had been made for more than a year and a half by the usual methods; two of the cases had been for a long time under the care of Mr. Godlee, and had passed into Mr. Pollard's hands when he succeeded Mr. Godlee at the North Eastern Hospital for Children. The first case was a boy, aged 2½, on whom tracheotomy had been performed for laryngitis. For eight months frequent attempts were made to dispense with the tube. Mr. Godlee then catheterised the larynx without benefit. Five and a half months later Mr. Godlee passed a piece of india-rubber tubing through the larynx from the mouth to the tracheotomy wound, and left it in position for forty-eight hours without any improvement in laryngeal respiration. The operation was repeated four months later without success. A year and seven months after the tracheotomy, Mr. Pollard passed a tracheal catheter from the mouth, through the glottis, and into the trachea, beyond the tracheotomy opening. It was retained for thirty-one hours, and, after its removal, the patient continued to breathe through his mouth. The tracheotomy wound was firmly healed in a fortnight, and the child had been perfectly well for the six months that had passed since the operation. In the second case (a boy, aged 6) the windpipe had been opened for laryngitis. Three months after the operation, all attempts to get rid of the tube having failed, Mr. Pollard passed the tracheal catheter, and in doing so dislodged a piece of granulative tissue, which was coughed up. Pneumonia followed in this case, but the patient was nevertheless cured, and was discharged a fortnight after the operation. He had remained perfectly well for the three months that had passed since the operation. In the third case (a boy, aged 4), the operation had been performed for impaction of a foreign body in the right bronchus. For seven months attempts were made to get rid of the tube. Mr Godlee then removed granulative tissue from the trachea, and catheterised the larynx. The latter procedure was frequently repeated during the next three and a half months. Two years and three months after the tracheotomy, Mr. Pollard found the vocal cords adherent; he separated them, and, after dilating the glottis with Lister's sounds, passed the tracheal catheter; it was kept in position for thirty-eight hours. It was not until three weeks after this operation that the patient breathed through his mouth alone. The boy's voice returned, but after four weeks laryngeal respiration was so difficult, owing to the vocal cords having grown together again, that the trachea had to be reopened. The only difference between the plan Mr. Pollard followed and that Mr. Godlee adopted was that, by keeping the tube in the trachea whilst the tracheotomy wound was allowed to close, the patients were left, on its removal, without the opportunity of making use of the passage which, from constant employment, had become for them the natural one. In the first and second cases, the chief cause of obstruction was laryngeal spasm, but in the second there was also a growth of granulative tissue. In the third case, there was a genuine stricture of the larynx, and the tracheal catheter served as a means of continuous dilatation; the result in this case showed that the dilatation should have been employed for a longer period. In two of the cases the tracheotomy incision had divided the cricoid cartilage, and Mr. Pollard suggested that this method of operating might be a cause of the difficulty of re-establishing laryngeal respiration in those cases.—Mr. MARSH thought the paper was interesting as bringing forward a class of cases by no means too fully considered. The trachea was a mucous passage as liable to injury from want of care in instrumentation as the urethra. Many tracheotomy-tubes were too long, and described the arc of too large a circle. At most *post-mortem* examinations where tracheotomy had been performed, the tube was found to have caused ulceration. He deprecated the use of the bivalve form of tube, the only advantage of which lay in its introduction; once that had been achieved, it was positively injurious. The cannula should be loosely attached to the tube in order to allow for the movement of the chest.—Mr. GOLDING BIRD alluded to two cases under his care, in which the granulation tissue in large masses had formed and prevented the passage of air by the larynx. He proposed to leave a drainage-tube *in situ* for forty-eight hours, after which he hoped to be able to dispense with the use of the tracheotomy-tubes. He was unable to offer any explanation of the fact that granulations grew exuberantly in some cases and not in others. In many cases the obstacle to the passage of air arose from disuse of the laryngeal muscles, requiring some stimulus to set them going again.—Mr. BARKER said that there were two categories of cases, some in which mechanical obstruction existed, and others in which it was absent. The treatment, of course, would vary according to the nature. He thought that the removal of the tube was often postponed too long.—Mr. POLLARD did not think that the element of time had the importance which had been attributed to it.

Large Omental Lipoma successfully removed by Abdominal Section.—Mr. MEREDITH read notes of this case. The patient, a woman aged 62, was admitted under his care at the Samaritan Free Hospital in January, 1886, suffering from an abdominal tumour of over four years' standing. About eighteen months before this she had been an inmate of another special hospital in London, where the abdomen had been opened in the belief that the tumour was ovarian, but had been reclosed on the discovery of the fatty nature of the growth. The patient returned home after recovering from this exploratory operation, but remained more or less constantly bed-ridden on account of the weight and size of the tumour, which steadily continued to increase. On her admission to the Samaritan Hospital, the abdomen, measuring forty-six inches in girth, contained an elastic but evidently solid tumour, which filled the entire cavity and overhung the pubes and groins without invading the pelvis. The growth, viewed in the light of the former operation, was diagnosed as a lipoma of the omentum, on the grounds of its comparative mobility and the absence of any intestinal resonance in front of the mass. The tumour was removed on February 6th, 1886, by enucleation *en masse* from its omental capsule. No serious difficulty was encountered, and the abdomen was closed without drainage. The growth weighed 15½ lbs.; it was solid throughout, consisting of dense lobules of fat, with a scanty amount of fibro-cellular tissue. The patient recovered well, and left the hospital on the twenty-fourth day after operation. She was seen in good health four months later, having gained flesh and strength. Examination revealed no evidence of further growth.

Abdominal Exploration for Chronic Intestinal Obstruction: Relief of Symptoms by Formation of an Artificial Anus and subsequent Removal of Growth involving the Splenic Flexure of the Colon.—Mr. BERNARD PITTS described this case. The patient, Mrs. D., came under observation in St. Thomas's Hospital, on August 21st, 1886. She was aged 37, and had enjoyed good health till October, 1885, when the first obstructive attack took place. For the six weeks prior to her admission, she had had no satisfactory evacuation of the bowels, even after repeated enemata. She was a thin, pale woman, with distended abdomen, with coils to be seen and felt, much peristaltic movement, and occasional vomiting; one large coil especially marked was seen running across the abdomen from above downwards towards the left groin. On examination under an anæsthetic, no tumour could be felt, and the rectum was normal. On September 21st, the vomiting became continuous and offensive, and the patient was very exhausted;

the vomiting was checked by morphine, but no action of the bowels could be obtained. In consultation with Mr. Edmunds, it was decided to explore the abdomen in the middle line, and this was done on September 24th, when the transverse colon was greatly distended and displaced downwards, and the descending colon was completely empty. The end of the transverse colon was attached to a small separate incision in the upper part of the left semilunaris, but the bowel was not opened till several days had elapsed, and the central wound had healed. The patient was in a very depressed state for the week following the opening of the colon. A very large quantity of fæces continuously passed, and she was apparently poisoned by the gases generated during the evacuation. Her breath had a strong fæcal odour; she was for days very drowsy, not recognising her husband; fractious, and suspicious of those around her. After getting rid of the very large fæcal collection she rapidly improved, and was able to get up on November 5th; her weight was then 7 stone 4 lbs., the weight before operation having been 6 stone 10 lbs. By introducing the finger into the colotomy opening, a movable mass about the size of a small orange could be felt under the ribs, evidently a malignant stricture at the splenic flexure. It was therefore decided to attempt the removal of the affected bowel. After careful preliminary treatment this secondary operation was performed on November 22nd. An oblique incision was made on the left side below the ribs, about two inches above the colotomy opening, and by hauling on the collapsed descending colon, the affected portion of bowel was drawn out of the wound and about four and a-half inches excised; several small glands, and some adherent omentum were also taken away. The two ends of the bowel were carefully united by silk sutures, throughout their posterior and lateral aspects. The muscular coat of this united part of bowel was then attached by numerous sutures to the abdominal opening, and the everted mucous membrane carefully stitched to the skin. The patient was then left in the condition of possessing a second colotomy opening, the first opening having contracted to the size of the little finger. The patient made a rapid recovery, the temperature remained normal, and on the tenth day she was able to get up. She left for home on January 2nd, wearing a vulcanite tube, with the hope that fæces might pass into the lower bowel, and the natural passage be restored. Mrs. D. was now, five months after the removal of the growth, in perfect health, and able to do ordinary household work. Her weight was 9 stone, or a gain of more than 2 stone since the relief of the obstruction; the bowels were open regularly every morning by the second colotomy opening, but there was complete control for the rest of the day. The specimen, a typical columnar epithelioma of the bowel, was shown and described. Mr Pitts, in remarking on the case, gave his reasons for making the abdominal exploration, and quoted two other cases of stricture of the large bowel, in which he had made a preliminary abdominal exploration before opening the bowel at a selected position. By the exploration it was possible to gain definite information as to the cause and extent of the mischief, and this was of immense advantage when any further radical measure was contemplated. When no stricture was found in the rectum, he regarded a chance colotomy as an unsurgical procedure. In each of these cases the selected portion of the bowel had been attached to a separate opening in the abdominal wall for three reasons: 1, it allowed the exploration incision to heal by first intention, and as the second opening was exactly the size wanted, and as the bowel was stretched all round, there was no wound near the bowel-opening to heal; 2, the bowel was not displaced from its natural position by being drawn up to the central wound; 3, and most important, it was of great advantage after examination to have the opening near the seat of mischief, so that an after-exploration with the finger might determine the character of the stricture and its relations. At the primary exploration, when the bowels were greatly distended, it was well to be content with a very limited examination, and on no account to attempt any removal of growth, until all obstructive trouble had been relieved, and the bowel had been thoroughly washed out. Mr. Pitts then gave his reasons for not restoring the complete continuity of the bowel at the time of the colotomy, and discussed the chances of successful after-restoration of the natural passage. The paper concluded with some remarks on the prognosis, and on the poisoning by absorption of gases, that occurred during the evacuation of large fæcal collections.—Mr. MORRANT BAKER said he could only congratulate Mr. Pitts on his treatment and the success of his case. He had had a somewhat similar case of obstruction under his own care where the same poisoning took place by the decomposition of the accumulated fæces on the colon being opened. In this case, the passage *per vias naturales* was re-established in two or three days, and the artificial anus which he had formed was successfully closed.—Mr. BARKER said he had an almost identical case in a gentleman 60 years of age. He cut down on the transverse colon, and found it permeated with hard new growth. Under these circumstances, he cut down on the cæcum and sutured it to the integument; he then withdrew about four pints of fluid fæces by means of a large aspirating needle. The manœuvre had to be repeated, and an incision was substituted on the third day. The case did well.—Mr. PITTS, in reply, acknowledged the value of Mr. Barker's suggestion as to withdrawing the fæces in the way described. He would prefer to make an opening fairly near to the growth, especially if subsequent measures were contemplated.

Living Specimens.—Dr. DE HAVILLAND HALL exhibited a case of Pendulous Tumour (Congenital) from the Uvula.—Mr. HORSLEY showed cases illustrating Brain-Surgery.

MEDICAL SOCIETY OF LONDON.

MONDAY, APRIL 25TH, 1887.

J. HUGHLINGS JACKSON, M.D., F.R.S., President, in the Chair.

CLINICAL EVENING.

Case of Blood-Cyst of the Tongue.—Mr. BRUCE CLARKE showed a young woman who had a blood-tumour the size of a filbert-nut on the margin of the tongue, of two years' growth. He proposed to excise it together with some of the surrounding tissue, if necessary.—Mr. DAVIES-COLLEY asked what circumstances had guided Mr. Bruce Clarke in deciding that the tumour was not a nævus. He suggested that the simplest plan would be to ligature it.—Mr. BOWREMAN JESSETT spoke favourably of Paquelin's cautery as a means of removing the tumour.—Mr. JOHN MORGAN said he would be in favour of some radical measure of removal.—Mr. BRUCE CLARKE, in reply, said that either galvano-cautery or electrolysis would probably remove the growth satisfactorily.

Case of Severe Wound of Wrist.—Mr. WILLIAM ROSE showed a butcher who had accidentally got his hand in a sausage-machine, inflicting a severe wound on the front of the wrist. All the tendons at the front of the wrist, as well as the arteries and nerves, were severed; the wrist-joint was opened, and the hand hung only by the extensor tendons and the integument at the back of the wrist. Instead of completing the removal of the hand, he pulled out the ends of the tendons, which had retracted within their sheaths, and sutured them to their distal ends. The same course was followed with the median and ulnar nerves, great care being taken to secure accurate junction of each to each. The blood circulated freely through the posterior interosseous artery, and it was found necessary to ligature the distal as well as the proximal ends of the ulnar and radial arteries. The man made a very rapid recovery, and regained free movement of the wrist. Sensation in the fingers was still imperfect. Mr. Rose proposed to break down adhesions at some future occasion.—Mr. MARMADUKE SHEILD had seen a very similar case. He thought massage might be of service in restoring movement to the fingers.—Mr. BRUCE CLARKE deprecated forcible movements under chloroform, preferring massage and electricity.—Dr. ANGEL MONEY made some remarks, and Mr. WILLIAM ROSE, in reply, said the continuous current had been tried, but not systematically. The man had returned to his work. He was in a better state two months ago than he was at present, and this fact seemed to indicate the necessity for further interference.

Case of Large Nævus.—Mr. BOWREMAN JESSETT showed a lad, aged 19, who had had a large nævoid growth behind the ear, starting from a small congenital formation. He dissected out the whole of the tumour, beginning at the lower edge, with a good result.—Mr. WILLIAM ROSE thought the treatment adopted was far more scientific than any subcutaneous injections.—Mr. DAVIES-COLLEY thought excision was the best treatment in many cases, the only objection being the hæmorrhage which was apt to occur. He suggested passing two harelip pins crosswise beneath the base of the tumour, and then winding a common drainage-tube round under the free points. In this way the blood-supply could be controlled.—Mr. BERNARD PITTS agreed that electrolysis was a slow progress, and he preferred excision whenever the patients could be kept in view. Electrolysis, however, though slow was sure, and did not involve any risk of hæmorrhage.

Case of Tumour of the Lower Jaw.—Mr. MARMADUKE SHEILD showed a man with an exostosis or fibrous tumour of the lower jaw, and asked for suggestions as to the mode of removal.—Mr. DAVIES COLLEY said it might be an ossified fibrous epulis. He thought the alveolar process, from which it grew, ought to be removed.

PRESENTATION.—A presentation of a life-size oil-painting and a purse of gold, value £120, was made to Mr. Thomas Bell Keetley, J.P., M.R.C.S., etc., on April 9th, by his fellow townsmen and patients, in recognition of his long and arduous public and professional services in and around Grimsby.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 13TH, 1887.

Surgeon-General JOHN MURRAY, M.D., Vice-President, in the Chair.

Mould-Fungi as Causes of Diphtheria.—Dr. MICHAEL W. TAYLOR read a paper embodying all the evidence which he had collected from many years' experience of outbreaks of diphtheria, in support of views which he had formerly expressed in the JOURNAL of July, 1881. His view was that some common mould-fungi, growing under certain conditions, might originate or transmit diphtheria. The first set of cases comprised three children in one house, who took diphtheria within a few days of each other; they had not been exposed to infection, nor could the disease be traced to any external conditions, except the state of the bedroom they slept in. The walls, in consequence of leakage, had become sodden with wet on July 12th; on July 22nd a fungus appeared on the wet plaster; on August 1st the first case of diphtheria appeared, rapidly followed by two others, in the children who occupied the room. At that time the surface of the wall was covered with aspergillus mould, besides which there was a surprising development of a pileate fungus, a coprinus, growing on the wet plaster. In a second case, in which a child died in three days from diphtheria, there was a great development of penicillum moulds in the apartment. In another case, a young man had diphtheria severely, four days after having been engaged in cleaning out a loft in which a number of pigeons were kept, which was full of mould growing on the exuviæ and *débris* and rotten woodwork. In a fourth case, four children in the same family were attacked, the only insanitary condition present having been a quantity of fleeces of sheeps'-wool, which had been stored for two years within the house, in an adjoining room. Again, there had been three outbreaks of diphtheria in a farm-house, one case in 1879, four cases in 1880, two cases in 1881. Here also wool had been stored within the house, and it was kept in a room which had been successively used by these children as a sleeping apartment. Dr. Taylor regarded the evidence as pointing strongly to the storage of wool, and to the mould spores and dust proceeding from it, as being the exciting causes of these successive outbreaks of diphtheria. He then discussed the probability of common moulds being connected in some way as agents in originating the diphtheritic growths. It was shown by the researches of Oertel, Nasiloff, Eberth, and others, that diphtheria was a true mycosis, and that we were warranted in believing that it depended on the implantation of fungoid material endued with virulent power. Evidence was sought from the analogy of other fungoid parasitic affections which infected man and animals; it was shown that many of these fungal productions were but conversions of elementary states of penicillum and oïdium. As maintained by Zopf, there might be a pleomorphism amid pathogenic micro-organisms, and there might be stages of intermediate forms resulting from the nature of the nutrient media. Common moulds were capable of artificial growth in the bodies of animals; the spores of aspergillus glaucus had been made to germinate in the eyes of rabbits, and there was a ready-made experiment in the madura foot-disease, which arose from inoculation with the spores of a mucor, growing in the hot season in India. The innocent bacteria and aspergillus might, by special cultivation, become pathogenic, according to Grawitz and Fepinger. The experiments in this direction by Nägeli and Büchner were referred to, and also Lichteim's experimental inquiry on Pathogenous Mould-Fungi. Dr. Taylor regarded the primary elements of zymotic disease as dependent not on individual forms of germs, but as an affair of soil, and inferred that common moulds, both by spores and byssoid mycelium, might originate diphtheria by growing on noxious media.—In the discussion which followed, Drs. MURRAY, THORNE, SMART, BURNS, and Messrs. PAGET and SHIRLEY MURPHY took part.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, APRIL 21ST, 1887.

EDMUND OWEN, M.B., F.R.C.S., President, in the Chair.

Treatment of Wounds.—Mr. TREVES read a paper on the treatment of wounds. Dealing first with wounds of the lower extremities, he dwelt on the greater mortality attending these injuries, and the reasons assigned for healing taking place more slowly and imperfectly. In his opinion bad ventilation was one cause; the atmosphere under the bed-clothes was close and stuffy, if not positively fœtid; the limb might be wrapped up in cotton wool, but ought to be freely exposed to the air. Again, in wounds about the toes and feet, the large sheaths of the tendons were opened; no care was taken to close them, and they became practically open tubes, in which pus accumulated. In removal of the toes, healing was often prevented by sloughing of the flaps; this was due to the operator neglecting to respect the integrity of the artery which supplied blood to the flap. In cases of fractured patella no treatment was better than the use of Malgaigne's hooks, provided these were scientifically applied; the author described his method of applying them Mr. Treves protested against the use of plaster in putting up compound fractures of the lower limb; his plan was always to fix these fractures by the use of straps and buckles, to expose the limb freely to the air, and to keep the wound constantly powdered with iodoform until a firm scab formed. While dealing with wounds of joints, the author remarked on the great value of irrigation, and gave notes of a case where amputation of the lower limb for desperate disease of the knee-joint had been avoided by keeping a stream of water flowing through the joint for a month. In discussing the dressing of operation-wounds, the relative merits of iodoform, corrosive sublimate solution, etc., were discussed, but preference was given to dry sponge, dusted over with iodoform. Great stress was laid on the different drainage of abscess cavities and wounds; for large abscesses, as in suppurating hydatids of the liver and psoas abscess, the tubes ordinarily used were quite inadequate.—The PRESIDENT called attention to the fact that though operations about the feet were not so successful as might be wished, yet Syme's amputation was an exception to the rule. He quite agreed that the absence of antiseptics in surgery had interfered with the success of Malgaigne's hooks, when these were first introduced. In treating abscess of the knee-joint, nothing gave such good results as free drainage; after this method had been adopted good movement of the joint was retained. The use of corrosive sublimate injections was to be condemned; but iodine solutions acted admirably.—After some remarks by Drs. CLEVELAND, MAGUIRE, WALTER PEARCE, LEWERS, and Mr. LUFF, Mr. TREVES replied.

Pathological Drawings.—Dr. W. B. HADDEN showed a collection of drawings illustrating pathological changes in the brain and spinal cord.

SOUTH INDIAN BRANCH.

NOVEMBER 5TH, 1886.

THE VICE-PRESIDENT in the Chair.

Sarcoma of Lower Jaw.—A specimen of sarcoma of the lower jaw was exhibited for Surgeon J. SMYTHE, M.D. The patient, a male Hindoo, aged 35, stated that the tumour had been growing for four years. The growth, which was the size of a child's head, and weighed 44 ounces, was removed, together with part of the jaw. The wound did well, but the patient died of pneumonia attributed to exposure to cold.—Surgeon NAILER reported that the tumour was a central sarcoma.

DECEMBER 5TH.

THE VICE-PRESIDENT in the Chair.

Fibro-Cystic Bronchocele.—A paper by Surgeon J. SMYTHE, M.D., on a case of fibro-cystic bronchocele was read. The patient was a woman, aged 30; the cysts were evacuated through a cannula, and a solution of perchloride of iron, made by adding two drachms of the tincture to an ounce of water, was injected. Considerable local inflammation resulted, and there was some constitutional disturbance, the temperature running up to 103.4° F. A small cyst which appeared to develop after the operation was injected at a later date, and the final result was very satisfactory, the circumference of the neck being reduced from 18⅝ inches to 13¼ inches.—Mr. BRANFOOT expressed the opinion that free incision and drainage was the best way of treating cystic bronchocele if not very vascular.—Mr. DRAKE-BROCKMAN thought that the fever which followed the operation might have been partly due to the strong injection used.

Preputial Calculi.—Mr. NAILER showed three large calculi, the size of average carpal bones, removed from beneath the prepuce in a case of phimosis. Symptoms had existed for four years.—Surgeon-Major MCNALLY reported that the calculi weighed 169.48 grains, and were mainly composed of calcium phosphate.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, APRIL 15TH, 1887.

ALFRED HILL, M.D., President, in the Chair.

Sore Throat from Coal-Gas.—Dr. CORFIELD read a paper on Outbreaks of Sore Throat, caused by Slight Escapes of Coal-Gas. He pointed out that attention had been almost entirely directed to cases of poisoning by asphyxia produced by escapes of coal-gas into dwel-

ling rooms; this had been shown to be due to the carbonic oxide contained in the coal-gas. He referred to the recent investigations of Professors W. T. Sedgwick and W. Ripley Nichols, of the Massachussetts Institute of Technology, as to the relative poisonous effects of coal and water gas; these investigators concluded that carbonic oxide was probably the only component of illuminating gas whose poisonous qualities were of practical importance to the public health. Michel Lévy, in his *Treatise of Hygiene*, suggested that some of the effects produced on persons working in atmospheres charged with the products of combustion of coal-gas might be due to unconsumed substances, such as bi-sulphide of carbon, but Dr. Corfield had been unable to find any account of definite illness produced by continuous slight escapes of coal-gas from defective burners or joints in pipes. During the past few years his attention had been gradually arrested by cases of illness, and more especially of relaxed and even ulcerated sore throats, occurring in persons sleeping in rooms in which there were defective gas burners or pipes, but living in houses as perfect as modern sanitary science could make them. The persons attacked became quite well on the defects in the gas burners or pipes being remedied, and no other cases occurred. Dr. Corfield himself had personally suffered from a slight escape of gas from a defective pipe in his own bedroom. He also pointed out that coal-gas might get into houses through the basement floor, and even up through the walls, especially behind panelling, from defective mains in the streets. He believed that the effective agents in producing the irritation in the throat were the bi-sulphide of carbon, and other sulphur compounds contained in the gas. To hospital throats and sewer-air throats must now be added coal-gas throats.

In the discussion which followed, Mr. WYNTER BLYTH, Mr. ROGERS FIELD, Dr. SYKES, Mr. BUTTERFIELD, and Mr. SHIRLEY MURPHY took part.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, APRIL 14TH, 1887.

W. A. GARRARD, M.R.C.S., in the Chair.

Malignant Tumour of Œsophagus.—Dr. J. D. WYNNE showed an œsophagus which was involved in a scirrhous mass for about six inches downwards from just above the root of the lung. The patient, aged 79, had suffered for about a year from occasional dysphagia, which became worse during the last three weeks of life, so that eventually all food was rejected.

Pemphigus Neonatorum.—Mr. JEFFREYS related a case occurring in a child 5 days old. It was not specific; there were bullæ on the face, chest, back, abdomen, arms, and legs; they were confluent, and some were three inches in diameter. The case was treated successfully with opiates and arsenic, the body being washed occasionally with warm water and anointed with purified vaseline.—Remarks were made by Mr. JACKSON, Dr. DYSON, Dr. S. ROBERTS, and Dr. KEELING.

Sarcomatous Tumour of Anterior Lip of Uterus complicating Labour.—Mr. JEFFREYS also related this case. The patient was in her second pregnancy. After the birth of the child, the tumour descended to the vulva, and was found to be a rounded mass about two inches in diameter, attached to the uterus by a thin pedicle. It was removed by transfixing the pedicle, applying a silk ligature, and cutting it off with a pair of scissors. Satisfactory recovery resulted. Dr. Galabin had kindly examined the tumour, and called it a fibro-sarcoma of the cervix uteri. The time elapsed was too brief at present to discuss the question of recurrence.

Paralysis of Arms.—Dr. W. R. THOMAS related a case of paralysis of both arms from severe exertion.

Homonymous Hemianopia.—Mr. SNELL introduced a patient with right homonymous hemianopia.

REVIEWS AND NOTICES.

PATHOLOGIE UND THERAPIE DER HAUTKRANKHEITEN. Von Dr. MORIZ KAPOSI. Dritte, umgearbeitete, und vermehrte Auflage.

PATHOLOGY AND TREATMENT OF DISEASES OF THE SKIN. By Dr. MORIZ KAPOSI. Third, revised, and enlarged edition. Vienna and Leipzig: Urban and Schwarzenberg. 1887.

DURING the three years that have elapsed since the appearance of the former edition of Professor KAPOSI's *Lectures on Diseases of the Skin*, few departments of medicine have witnessed greater or more productive activity than that of dermatology. The publication of the present edition of the work is therefore a matter of some importance. The Vienna School not only maintains its reputation for original investigation in diseases of the skin, but Kaposi scrupulously avails himself of his unrivalled opportunities of proving the accuracy of the statements that are made in various parts of the world regarding new methods of treatment. The fruits of this rich and ripe experience are embodied in this new edition, and are given in concise and authoritative language, which commends itself to the practitioner as well as to the specialist.

With an industry which does him infinite credit, Kaposi has not only incorporated in this work the latest advances in pathology and treatment, but he has brought up the sections on the Anatomy and Physiology of the Skin to the level of the latest advances in our knowledge of these subjects.

Recent years have witnessed some investigations regarding the nerves of sensation of the skin, and we note an account of Goldscheider's researches. That author has shown that the points in the skin which are sensitive to pressure differ from those which are sensitive to temperature, and that, further, the points in which the sensations of heat and cold are felt are not identical.

In the section on Therapeutics, we observe that amongst the new remedies mention is made of Liebreich's lanoline, a cholesterine fat, which occurs regularly in horny substances, such as sheep's wool, horses' hoofs, feathers, and epidermis. This substance, which for practical purposes is usually mixed with 5 per cent. to 10 per cent. of glycerine or fat, is quickly taken up by the skin. It is worth noting that when mention is made of the oleates the author states that he has no personal experience with regard to them.

For some years R. Schroeter has obtained by distilling fossil fishes a substance first called icthyol, and latterly icthyo-sulphate of soda, which has been highly recommended by Unna for certain diseases of the skin. It is an oily, yellow-brown fluid, with a disagreeable odour. It mixes well with fat and water, and contains up to 10 per cent. of sulphur in combination. Kaposi states that it possesses no advantages over other less ill-smelling remedies.

The author states that Hebra's classification of skin-diseases still represents most conveniently the present position of our knowledge. He finds that Auspitz's system separates diseases which ought to be classified together, for reasons that are often highly hypothetical, and associates diseases that are essentially different. For the same reason he rejects the attempt of Schwimmer to build up a system on the ground of the neuropathic nature of many skin diseases, considering that only very few affections of the skin are really to be traced to such a cause.

The influence of local asphyxia, caused by paralysis of the vaso-constrictors, is recognised as producing localised areas of a red or blue-red colour, and as combining with lowered and sometimes heightened temperature a feeling of numbness, formication, or, on the contrary, burning and pain, with dryness, or secretion of drops of cold sweat. Conditions of this kind lead to œdema, and, as a consequence, to formation of mucous tissue and connective tissue (myxœdema, pachydermia), inflammation, muscular weakness, and even gangrene (symmetrical gangrene of Raynaud), whilst in other cases special forms of atrophy of the skin and subcutaneous tissues and of the nails take place.

O. Simon described a multiple cachectic gangrene of the skin in children. Kaposi says that he has seen such localised gangrene repeatedly take place in children in eczematous patches. He has observed them in adults on the shoulders, abdomen, thorax, and in inflamed parts when the general health was low. He has also seen them occur in universal psoriasis, universal lichen ruber, and pityriasis. He looks upon this form of gangrene as a consequence of local thrombosis of the capillaries. The influence of the nervous system in producing essentially neurotic dermatitis acts by leading to hyperæmia and its consequences. As examples of this condition, he cites "glossy skin," herpes, neuritic pemphigus, and certain kinds of excoriation, ulcers, and necrosis, and a form of outgrowing and of degeneration of the nail due to this cause.

Whilst fully recognising the influence of the specific coccus in erysipelas, as described by Koch and Fehling (inoculation with this cultivated coccus having produced typical erysipelas), Kaposi, nevertheless, expresses himself on the subject with some reserve. He states, as a matter of clinical experience, that every accumulation of matter in the skin or subcutan tissue may lead to erysipelas as long as it is confined, and that the erysipelas retrogrades as soon as the abcesses are opened.

In Vienna Kaposi has found lichen ruber twice as common amongst men as amongst women. In sixty-six cases he has seen only four of pure lichen ruber acuminatus; all the others were either pure lichen

ruber planus or a mixture of the forms. He rightly calls attention to the fact that morbid anatomy and histology have as yet thrown no light upon the serious disturbances of nutrition which cause this disease. Amongst the peculiar forms which it assumes, he calls attention to the rare one in which the eruption takes place in the form of rows of minute swellings, somewhat resembling a hypertrophi cicatrix or a burn. He calls this a "coral-necklace form" of lichen ruber.

We find that the remarkable disease first described by Hebra, and called by him "impetigo herpetiformis," has now been observed in the Vienna *Clinique* in thirteen cases; twelve of them were in women who were mostly in the last months of pregnancy; the remaining case was that of a young sickly man of 20, in whom the disease began in the scroto-inguinal folds. Another case in a young man has been described by Pataky. Of the twelve women, ten died, and only one thoroughly recovered. In one, it occurred in two pregnancies, after which she recovered. It occurred again in a third, and she died. Kaposi repudiates the attempt to include this disease in the group of different affections described by Duhring under the title of dermatitis herpetiformis. The eruption develops in the groins and navel, the breasts, axillæ, and finally on other parts of the body, in the form of spots on a red basis, rapidly going on to the formation of thickly-set, small pustules. Within one or two days this pustule has burst, but others form and extend on the circumference. Under the crusts which form, the skin is red, smooth, infiltrated, but never ulcerated. In some cases a similar eruption took place on the tongue, palate, and pharynx. The appearance of groups of minute pustules on an inflamed basis, with a tendency to a peripheral extension during weeks, or, at the longest, months, with fever, and an almost invariably fatal termination, are the characteristic features of the disease.

The relations of pemphigus to the nervous system are not well-defined, and the causes of the disease are obscure. Kaposi gives an instance in which the disease was hereditary. A man, twenty-two years of age, had from his childhood suffered from this complaint. His mother, sister, his mother's brother, and some of the children of the latter, had been affected with the malady.

Frequently pemphigus is associated with hysterical conditions connected with anomalies of the female sexual functions. In some women the disease appears regularly with every pregnancy (herpes gestationis, Bulkley). When the disease has been found associated with the functions of the nerves and nerve-centres, Kaposi believes that it is a matter of coincidence. Together with Weiss he examined carefully the spinal cord in nine cases of fatal pemphigus, and in only one of them was any anatomical change found. In this case there was diffused sclerosis, but the case was complicated with cancer of the liver and tongue, and the man had been kept in a water-bath for a year on account of his pemphigus.

Kaposi traces in detail pigmentation of the skin to the escape of red blood corpuscles from the vessels of the papillæ and the upper layer of the cutis, the hæmoglobin being changed into hæmatin. The blood corpuscles, after they have left the vessels, are acted on by the lymph cells and connective tissue cells which take up the hæmoglobin. The pigment that results is carried by the lymph cells into the rete mucosum. In the sub-epidermic zone of the papillæ and in the upper layer of the corium, round, clavate, and multipolar cells are found singly or arranged in a network around the blood-vessels.

The pigmentation of the skin in Addison's disease receives more attention than in the previous edition, and the opinion of Nothnagel is quoted with approval, that in Addison's disease the pigmentation as well as the other symptoms are due to organic or functional disturbances of the abdominal plexuses and ganglia. The pigment itself, as in other cases, is derived from the blood-vessels, and it is assumed that the vascular changes are due to reflex action analogous to the chloasma of pregnant women which is produced by reflex action from the nerves of the sexual organs.

As an illustration of the completeness of the work it is worthy of mention that a succinct but clear account is given of karyokinesis, with illustrative engravings.

As a cause of alopecia areata, Kaposi gives the hypothesis of trophoneurosis, but only on the ground that we have not yet discovered in the skin alteration sufficient to account for the disease. The affection occurs, he remarks, in perfectly healthy persons. He has never seen it caused by arsenic, although Weiss states that the internal use of this mineral may lead to the disease. As regards the treatment of the affection, after enumerating a variety of remedies recommended by various authorities, he truly remarks that time does more than any of them.

Striæ atrophicæ are explained as being due to the distension of the skin with hæmorrhage from rupture of the blood-vessels. The spots and rounded or linear swellings disappear after some weeks, and leave behind a macula or stria atrophica. A special disposition to this condition of local hæmorrhage exists in certain persons. A case described by Pelizzari as erythema urticatum atrophicans belongs to this category. Kaposi's statement as to the cause of xanthoma is that, considering the relatively large number of cases in which jaundice usually accompanies, and sometimes even precedes it, the connection cannot be considered accidental; and it seems to him that the same cause which leads to an affection of the skin causes a nodular formation in the liver on which the jaundice depends.

In the section on Rhinoscleroma we find a coloured drawing, showing the bacilli that were obtained in a pure cultivation from the fresh juice of the affected tissue at a temperature of 36° C. to 38° C. for twenty-four hours on agar-agar, the organisms being stained in methyl violet. These bacilli, he states, are neither morphologically nor by cultivation to be distinguished from Friedländer's pneumonic coccus, nor from the micro-organisms found by Klamann and Thost in ozæna and simple catarrhal affections of the nose.

The lecture on Lupus contains a complete account of the numerous investigations that have in recent times been made regarding the etiology and pathology of the disease. This chapter is a valuable one, as it gives in a short space a complete account of what has been done by the various observers who have investigated the relations of lupus to the bacilli of tubercle. On clinical grounds, however, Kaposi still holds to the distinction that can be maintained between scrofulosis, tuberculosis of the skin, and lupus.

The lecture on Leprosy contains excellent coloured engravings, showing the bacilli, with references to the latest works on the subject.

THE SURGEON'S POCKET-BOOK. AN ESSAY ON THE BEST TREATMENT OF WOUNDED IN WAR, ESPECIALLY ADAPTED FOR THE PUBLIC MEDICAL SERVICES. By Surgeon-Major J. H. PORTER, late Assistant-Professor of Military Surgery, Army Medical School, Netley. Third Edition. Revised and Edited by Brigade-Surgeon C. H. Y. GODWIN, Medical Staff, Assistant-Professor of Military Surgery, Army Medical School, Netley; late Medical Officer of the Royal Arsenal, Woolwich. London: Charles Griffin and Co. 1887.

THIS is a surgical manual of a very compendious and useful character, well suited to form part of the field service equipment of the army surgeon; dealing chiefly with the practical treatment of the wounded in war, but also supplying, in a well-judged and very condensed form, memoranda on many important subjects to which the army medical officer, on active service, might wish to refer. This excellent little work first appeared in 1875. Professors Billroth of Vienna, Baron von Langenbeck of Berlin, and Socin of Basle, adjudged it worthy of one of the prizes offered by the Empress of Germany for the best essays on the "Practical Treatment of the Wounded in War." Shortly after the second edition was issued in 1879, the gifted and much lamented author, Surgeon-Major J. H. Porter, died of pneumonia, while on active service, at Cabul, on January 7th, 1880. The third edition has been prepared, revised, and to a great degree rewritten, by Brigade-Surgeon C. H. Y. GODWIN, the present Assistant-Professor of Military Surgery at Netley. This has been done in a most praiseworthy manner. Whilst the identity of the original author, and that of his work, has been scrupulously preserved, much information of importance has been added; the results of recent war experiences have been utilised; and the different subjects brought well up to date. The work opens with general remarks on the Organisation of Army Transport; the construction of different varieties of ambulance vehicles; and the best means of extemporising stretchers, hospital cots, splints, and other surgical appliances. The tyro is instructed as to the varied uses to which different parts of a soldier's dress and accoutrements may, on an emergency, be applied in relation to the removal of sick or wounded men. Many such *impromptu* expedients are rendered clearly intelligible by suitable illustrations. The whole system of surgical assistance on the field of battle is well described. The equipment for regiments and batteries of artillery is noted. The regulation supply of Bearer Companies for Brigades, Divisions, and Army Corps is given. The position of "collecting" and "dressing" stations, of field hospitals, of stationary hospitals, of advanced depôts of medical stores, and of general hospitals at the base is indicated; and rules are laid down as to how wounded men should be dealt with at each surgical position, and before they are sent back from the fighting line to the field hospitals, when possibly suffering from hæmorrhage, shock, pain, etc. The chapter on the General

Treatment of Gunshot Wounds has been re-written. It is very well done, and quite up to date, in all particulars. The Notes on Antiseptics, and their use, are such as to meet the approval of the most eager advocate of Listerism. Considerable preference is shown for mercuric chloride. The very important fact is stated, as the result of experience gained during the last Turko-Russian war, that, "after an interval of fourteen days, gunshot injuries may be made aseptic." One of the most important parts of the work under notice is that which has reference to the manner in which a wounded man should be treated, in the first line of assistance, and also in the field hospitals. In former days, the young army surgeon used to be instructed and enjoined to do as much for the wounded man as possible immediately after the receipt of a wound; and this with regard to a complete examination of the wound, removal of bullets or of foreign bodies, dressing, bandaging, and even amputation, if necessary. Now all this is changed—as we think very wisely. "The fate of the soldier," says Nussbaum, "is in the hands of the surgeon who first attends him." Keeping this opinion in view, Dr. Godwin has done well to insist most strongly on the value of the experience gained by Carl Reyher, Bergmann, and Cammerer, during the last Russo-Turkish campaign—all of which points to the importance of the first aid to the wounded being very simple indeed, and almost limited to the application of antiseptic coverings to the wound, and the careful placing of the patient and the part wounded, on the litter. All handling and "fingering" of wounds at the first are strongly to be deprecated, and also the extraction of rifle bullets, fragments of clothing, and the like. Had the rules which are laid down (at pages 51, 52, and 57 of this little handbook) been strictly followed in former days, we have no doubt whatever that many a man would now be alive whose fate was sealed by an indiscriminate and too early examination of his wound, and by well-intentioned but ill-judged interference with Nature's principles and purposes. The very convenient little book before us is full of well-compiled information on a great variety of subjects connected with military surgery. Want of space prevents our even enumerating these. Especial care has evidently been devoted to the following subjects: The exploration of gunshot wounds; the most approved modes of extracting bullets; the constitutional and sanitary treatment of wounds; amputations; bloodless operations; excision of joints; hæmorrhage, primary and secondary; ligature of arteries; tetanus; and all forms of traumatic infective disease. We are glad to see that allusion is made to modern experience regarding Laparotomy, and the adoption of this operation, in military practice, for the extraction in suitable cases of foreign bodies from the abdominal cavity, or for the treatment of wounded intestines. The very important subject of the proper treatment of Gunshot Fractures of the Femur at the lower, middle, or upper third, and the conditions under which a conservative line of treatment seems justifiable, is minutely dealt with; and the opinions of the highest authorities are adduced, such as Guthrie, Stromeyer, Esmarch, Pirogoff, G. H. B. Macleod, Hamilton (of the United States Army), Sir Thomas Longmore, and Erichsen.

Following the more special surgical topics, we find rules laid down regarding the construction of cooking places, field ovens, and camp latrines. There are also some useful hygienic memoranda, having reference to water-supply, extemporary filters, ready modes of purifying water, rough qualitative tests, war rations, dietary scales, army regulations as to space and ventilation, etc.

There are four Appendices; the first having reference to certain useful therapeutic formulæ; the second regarding the different antiseptics in use in army practice, and where they may readily be found in the different field-cases. The third is a translation of the latest Regulations issued to the Medical Department of the German Army, regarding the preparation of antiseptic dressings and bandages, and the methods of using them in the field. The fourth furnishes an interesting table, showing the supply of rations allowed, during 1884-85, for each boat proceeding up the Nile, calculated for twelve men in a boat, and sufficient to last one hundred days.

On the whole, we have no hesitation in saying that this little manual is a most useful and creditable work, compiled with much care and good judgment. It certainly meets an important army want. It cannot fail to be of value to surgeons of Her Majesty's Navy; to those in medical charge of vessels of the English or American mercantile marine service; and, indeed, to all practitioners who want a very handy little book of sound surgical reference.

A CENTENARIAN.—The death of Mrs. Charlotte Williams, widow of a potter, at Bristol, at the age of 103, has been registered at the Parish of St. Mary Redcliffe, by a daughter of the deceased, aged 65, the youngest of a family of nine.

NOTE SUR LA NÉCESSITÉ DE RATTACHER À UNE ADMINISTRATION CENTRALE DE LA SANTÉ PUBLIQUE LES DIFFÉRENTS SERVICES D'HYGIÈNE. Par M. le Dr. PERRIN. Paris. 1886.

A REPRINT from the Proceedings of the Société de Médecine of a discussion which took place in October last, at which a resolution already adopted by several international congresses of hygiene was unanimously approved, namely, "That, following the example of the majority of foreign countries, the civil sanitary administration should in France be entrusted to an autonomous administrative body, competent and responsible, not only in the case of the central authority, but also in that of the departments and great towns." The enforcement of such sanitary laws as already existed in France was, Dr. PERRIN urged, impossible, owing to the division of responsibility in questions affecting the public health among the several Departments of Commerce and Industry, of Agriculture, and of the Interior; the Consultative Committee of Public Hygiene, though composed of men of the highest ability, having absolutely no initiative and but limited functions. We fear that he paid us an undeserved compliment, since a like division of authority between the Home Office, Board of Trade, and the Local Government Board exists here, and we have no Board of Health whatever.

In the course of the discussion, M. Dubrisay stated that though the law fixed 10 per cent. as the maximum of lead permissible in tin vessels intended for preserved foods, and 16 per cent. in those used for measuring liquids, it was admittedly a dead letter, an alloy containing 40 per cent. being openly sold under the name of *la claire* for cups, spoons, forks, American saucepans, etc., and even 60, 70, or 80 per cent. of lead being often employed. Indeed, the so-called tin sucking-bottles for infants, much used in Brittany and Normandy, were composed of 80 per cent. of lead and 20 of antimony, containing no tin at all, and a similar alloy was largely employed for other purposes. There was no authority to compel the local boards to use their powers, even in the most flagrant instances, of which he gave some examples of the spread of enteric fever by polluted sources of drinking-water. It is, however, satisfactory to hear that the matter of a revision of the public health laws and administration is under the consideration of a Parliamentary Committee, including among its members several eminent medical men.

UEBER NEURITIS OPTICA, UND DEREN ZUSAMMENHANG MIT GEHIRN-AFFECTIONEN, von Prof. R. DEUTSCHMANN. Jena: Gustav Fischer. 1887.

THIS little monograph contains much that is of interest both from a medical and an ophthalmological standpoint. Although it has long been known that a cerebral tumour will cause optic neuritis, there is great difference of opinion as to the nature of the connection between the two affections, and how numerous are the theories that have been advanced to explain it will be seen by a reference to the discussion which took place at the Ophthalmological Society on the subject (*Transactions of the Ophthalmological Society*, vol. i, p. 112).

DEUTSCHMANN is altogether opposed to the view that distension of the nerve-sheaths can cause optic neuritis by pressure, and founds his objections chiefly on the following facts: (1) that considerable distension of the sheath can exist without neuritis; (2) that microscopic examination of specimens shows that, in the cases of so-called "choked disc," there are always inflammatory changes, and not merely œdema from venous obstruction, nor is there any evidence of obstruction, except in the advanced stage from inflammatory products, in the papilla itself in front of the sclerotic ring; (3) if in animals (rabbits) the inter-sheath space is distended almost to bursting, œdematous changes occur in the optic papilla; but these are transitory, are not accompanied by inflammatory changes, and the pressure necessary is beyond all comparison greater than can occur in the living subject; (4) when the distension is less, very slight and very transitory changes take place in the retinal vessels.

The author adopts the view advanced by Leber at the International Medical Congress, held in London in 1881, that effusion into the inter-sheath space sets up optic neuritis, owing to the irritating nature of the fluid. Injecting fluid containing a minute quantity of staphylococci into the sheath, Deutschmann set up a severe papillitis; the same fluid injected into the cerebral subarachnoid space caused rapid death; but inoculation of this with tubercle caused papillitis. The amount of fluid introduced was insufficient to cause any increase in the intra-cranial pressure; when, on the contrary, the latter was increased by the introduction of fluid, with strict antiseptic precautions, no optic neuritis was set up.

We have only space to indicate the main lines upon which the

author has argued his case; but we would advise all who are interested in the subject to study the original, which, besides containing much new matter, chiefly of an experimental nature, forms a valuable summary of current theories.

OUTLINES OF QUANTITATIVE ANALYSIS. By A. HUMBOLDT SEXTON, Professor of Chemistry in the College of Science and Arts, Glasgow. 1887. Charles Griffin and Co., Exeter Street, Strand.

THIS addition to our chemical text-books is well adapted for use in the laboratory and for students whose work is superintended by a competent teacher. It is not sufficiently exhaustive to be a competent guide in the absence of skilled assistance; but, as far as they go, the directions are both simple and clear.

In most laboratories, certain analytical methods are generally preferred to others, which, though in themselves excellent, are perhaps not practicable, or are less convenient, or are rejected on account of some personal prejudice against them in the mind of the teacher or director of studies; and this must be more and more common as the choice of methods for determining the various constituents of chemical compounds becomes larger and more varied. Such considerations as these diminish somewhat the value of works on quantitative analysis of limited scope, when it is proposed to give them a world-wide circulation.

Mr. SEXTON'S book, however, will be welcome to many teachers of practical chemistry, for the processes he describes are usually well chosen, the principle which underlies each method is always clearly explained, and the directions for carrying out the analysis are sufficiently lucid.

OBSERVATIONS ON THE SPINAL CORD IN THE INSANE: BEING A THESIS FOR THE DEGREE OF M.D. By R. S. STEWART, Assistant Medical Officer to the Glamorganshire Asylum.

THIS very interesting thesis deserves notice not only by asylum physicians, but by all those pathologists who are making special study of the nervous system. Dr. STEWART gives a limited selection of cases which have been under his observation, and from these he infers some interesting relationships, which inferences, if in some cases rather hastily drawn, yet deserve more than passing notice.

It has seemed to us lately that the question of secondary degenerations of the nervous centres stands a good chance of being overdone; it appears as if it were to share the same fate of popularity with each new and partially true pathological fact; from humours to bacilli, from localisation to secondary degeneration, it is always the same; the human mind, especially the pathological mind, cannot hold fairly the balance when two ideas—an old and a new one—come in opposition.

Dr. Stewart, then, has to our mind done good in pointing out and carefully describing cases which show that there is frequently degeneration not only in the brain of the insane, but in their cords also; and that this is not necessarily a primary degeneration in the brain and a secondary one in the cord. He thinks that the same nervous instability which exists in the one part of the cerebro-spinal axis may be present in the other; he goes further, and shows that the degeneration may show itself not in the strands of connecting fibres alone, such as would be found in secondary degeneration, but that the disease may attack the nervous cells in both parts, and may affect those parts of the cord which are chiefly attacked by primary decay; and, again, the disease is not so isolated and defined as if it were secondary. We cannot say that Dr. Stewart has proved all his points, and there appear to be several things which he has not fully mastered.

The thesis, only containing eighty pages, requires to be read for itself. It consists of reports of cases with short macroscopic and more full microscopic descriptions, and with most there are diagrams of the changes found in the spinal cords. In the case-reports we are struck by the rather frequent mention of bed-sores; this, of course, cannot be avoided in all cases, and may, in fact, be a strong point in supporting Dr. Stewart's contention of cord-lesion, yet there is a strong feeling in English asylums that bed-sores ought very rarely to occur.

The cases described consist of five of general paralysis, six of dementia, and this group includes one of ataxy, four cases of melancholia, two of imbecility with epilepsy, and one of imbecility without epilepsy. These cases are, of course, only intended to show that, under many varying conditions and with very different mental symptoms, cord-changes may occur. We would go further, and say that the most highly developed and most unstable of tissues will suffer when the whole body suffers. Other observers will doubtless carefully work up the peripheral nerve-wasting existing in various chronic diseases. We may expect this soon, as the rage at present is to find peripheral nerve-changes as of frequent occurrence.

Dr. Stewart gives a concise epitome of the results of his investigation, giving in detail the changes found in the various parts of the cord in its various areas, and in its different structures. The whole work is painstaking, and much above the thesis level.

ON ANTISEPTIC SURGERY, AND ITS APPLICATION IN MILITARY HOSPITALS AND IN THE FIELD. By Surgeon-Major JOHN MARTIN, Army Medical Staff. London: J. and A. Churchill. 1886.

IN this little book the author discusses shortly the history and principles of antiseptic surgery, and then deals at greater length with the application of antiseptic surgery in stationary military hospitals and on the battle field. He lays great stress on the preservation of the original blood-clot in an uninjured condition; and recommends that, wherever it is possible, the wounds should not have any elaborate dressings applied at the time, but that a little carbolic oiled lint should be applied and the patient sent to the rear. The author seems to lay too much stress on the value of the blood-clot as an antiseptic, and to deprecate too much the necessity for washing out the wound. He does not admit that a bullet-wound is ever an antiseptic wound, as air enters with it; and he thinks that the aseptic course followed by these wounds is due to the antiseptic action of the uninjured blood-clot. He divides the cases into two groups: *a*, those in which the bearers apply an oiled lint dressing, and send the patients to the rear, where the dressing is revised; and *b*, those which are brought to the notice of the surgeon in the field. The latter cases are also divided into two groups: 1. Those which require attention at the field hospitals; and 2, those which the surgeon dresses permanently, and which do not require immediate revision. As the antiseptic to be used by the surgeon, the author prefers corrosive sublimate, which may be carried in small bulk and highly concentrated in the form of a solution in glycerine.

Although we cannot quite agree with all the author's views and propositions, we would recommend this little book to those who are interested in the application of antiseptic surgery in war.

GRUNDRISS DER BACTERIENKUNDE. By CARL FRAENKEL. August Hirschwald. Berlin. 1887.

FOR some time past the bacteriological courses which have been given every month in the Hygienic Institute in Berlin, under Dr. Koch's supervision, have been entrusted to Dr. Fraenkel's care, and this book is, in the main, a reproduction of the instruction which he has given. As the proofs have been submitted to Dr. Koch, the book is stamped with his authority, and will be most useful as a hand-book for those who attend these courses, or, indeed, for anyone who wishes to work up the subject. It has no pretensions to completeness, but at the same time even those who are already acquainted with bacteriology will find in it much useful and interesting reading. The book begins with a general description of bacteria, their position in nature, their forms, and chief vital properties. Then follows a description of the methods of investigation, and afterwards a description of a number of the commonest pathogenic and non-pathogenic bacteria. The methods of investigating air, earth, and water finish the course.

NOTES ON BOOKS.

Some Phases of Cerebral Syphilis. By JULIUS ALTHAUS, M.D. Pp. 55. (London: Longmans and Co. 1887.)—This pamphlet contains an address delivered before the New York Academy of Medicine, and the phases of cerebral syphilis with which it deals are two, namely, coma and hemiplegia. Of the first of these the author remarks that it is not even mentioned in the text-books, and that Fournier and Buzzard are almost the only authors who have alluded to it. Dr. Althaus has seen eight cases of syphilitic coma, all in men between 25 and 42 years of age; two were fatal. Useful hints are given on the differential diagnosis of the various forms of coma. With regard to hemiplegia, the author does not agree with Fournier that there is no single pathognomonic sign of the syphilitic form. Dr. Althaus is of opinion that excessive exaggeration of the deep reflexes or tendon-phenomena on the paralysed side is pathognomonic of syphilis. The address is able and instructive, and is decidedly worth reading. It is a pity, however, that the term "venereal" should be used—as it is in more places than one—when "syphilitic" is evidently meant. We notice also that the strength of mercurial or blue oint-

ment is given as one in three, instead of nearly one in two, which is the proportion contained in the *B.P.* preparation.

The Diagnosis and Treatment of Syphilis. By Tom Robinson, M.D. Pp. 138. (London: J. and A. Churchill. 1886.)—This is in some respects a remarkable book, of which perhaps the best idea may be given by quoting a few passages from its own pages. In the first place, the author says (p. 3): "I shall abolish the term hard chancre;" and on the next page: "I shall also abolish the words secondary and tertiary syphilis." This seems rather a sweeping announcement, but Dr. Robinson has a reason for it. Thus we read further on: "I saw recently a Welshman with a typical initial sore, general adenitis, and a mucous patch on his tongue; and I have seen a distinct roseola added to this formidable array. It is for this reason that I am unwilling to accept the divisions of syphilis as *(sic)* are usually taught." In some places Dr. Robinson's meaning is not quite so clear as it might be in a book written, as the author says it is, for students. For instance, we find on p. 16 that "the true gonorrhœal virus may nestle down behind the corona glandis and pass through its course without influencing the urethra;" and again (p. 6): "He had eight punched-out ulcers with pus on their faces; some of the ulcers had infected surfaces upon which they laid" (!) Then, as regards treatment: "My first motto is 'begin early,' don't wait for the development of symptoms, but the instant you apprehend the presence of syphilis order your patient to take" mercury. It only remains to notice the striking and original phraseology employed by Dr. Robinson; for example, we read of "the drama of syphilis," "this long syphilitic tragedy," "a bloated sebaceous gland," "long trailing foreskins," "a finger like the belly on a pipette," "big-bellied frontal bones," etc. On the whole we cannot strongly recommend the work as—to quote the preface—"a trustworthy, practical, and concise treatise on syphilis."

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

SPLINT FOR DEFORMITY OF GREAT TOE.

We have received from Messrs. Kronhe and Sesemann a specimen of a little apparatus to correct the malposition of the great toe, and for the prevention and relief of enlarged joint. It is not uncommonly found as the result of ill-fitting boots that the great toe has been forced upon or under the second toe, and a bunion is the result. The object of this invention, which consists of a lever spring, is to restore



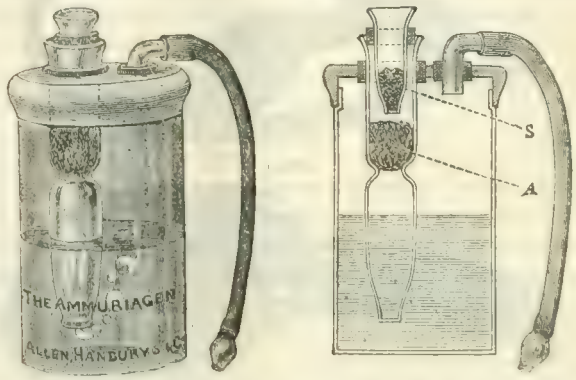
the toe to its normal position, and thereby prevent this occurrence, or if a bunion be already formed, it serves to protect it from the pressure of the boot. The lever, which is made of metal, from three-eighths of an inch to half an inch wide, is covered with leather, and is made of different lengths to suit the size of the foot. The apparatus, as will be seen from the illustration, reaches from the middle of the great toe to the end of the arch of the foot. The fulcrum is kept in position by a well-padded rectangular plate, jointed to the lever. Attached to one end is a short, soft leather band, to be passed round the great toe, and to be fastened by a small hook to the plate. At the other end of the lever, in order to permit traction, a longer band is fixed at a right angle, with or without an inserted piece of elastic webbing. The shape of the lever, from the end of the toe to the fulcrum, is semi-circular, so as to avoid pressure upon the joint



of the great toe. It may, therefore, be worn in properly-fitting, broad-toed boots. Slight traction should be made at first, in order to stretch the contracted tendon. This traction is to be gradually increased until the great toe has been brought, with as little discomfort as possible, to its normal condition.

THE AMMURIAGEN.

The Ammuriagen is the name applied by Messrs. Allen and Hanbury to a simple form of chloride of ammonium inhaler illustrated below.



The inhaler consists of a glass jar, fitted with a cap, to which are attached the charge tubes and the inhaling tube. The charge tubes are two: one, larger in diameter than the other, having a contraction which forms a holder for the acid plug and the smaller one contained within it which holds the sponge for the ammonia. When required for use the jar is half filled with cold water; the pumice plug is saturated with hydrochloric acid, and inserted in its place in the large tube; the sponge is charged with solution of ammonia, and inserted in its holder within the large tube and above the acid plug. The inhaler is then ready for use, and inhalation is carried on by drawing the vapour through the water by gentle inspiration into the mouth. The mouth-piece is so shaped that it can be used either for oral or for nasal inhalation.

The apparatus is easily taken to pieces for cleaning purposes, and is compact and portable; it is suitable for the administration of cold inhalations of volatile substances, the chloride of ammonium vapour acting as a vehicle for most of these.

DEBACKER'S UTERINE BAND WITH PAD.

This instrument, made by M. Collin, of Paris, is intended to hold the uterus in place, and to support the abdominal walls. It is composed of a pad shaped somewhat like the hand, and is made to press across the abdomen above the pubes; it is held in place by two springs similar to those used in hernia trusses.

CHAPOTEAUT'S MORRHUOL.

Morrhuol may be described as the active principle of cod-liver oil. Its mode of preparation is described in *L'Union Pharmaceutique* of November, 1885. The oil is first treated with an aqueous solution of carbonate of sodium to remove the fatty acids, and is then agitated with alcohol. The alcoholic solution so obtained yields on distillation morrhuol, a substance which has an acrid, bitter taste, and a powerful odour. It crystallises at ordinary temperatures, and has been found to contain phosphorus, iodine, and bromine. The brown oil yields from 4½ to 6 per cent., whilst the pale oil gives a somewhat

smaller percentage. It is estimated that it represents twenty-five times its weight of the crude drug. It is best given in the form of capsules, each of which contains the equivalent of over a teaspoonful of the oil. The dose of the capsules is for an adult from six to ten a day immediately after meals. They have been tried in the various hospitals in Paris, and have been found useful in cases of phthisis and other wasting diseases. We have had some trials made of them here in London, and the results have been satisfactory. Patients take them readily, and in most cases gain weight speedily. They are prepared by M. P. Chapoteaut, Pharmacien, 8, Rue Vivienne, Paris.

ATKINSON'S IMPROVED TRUSS.

An improved truss, patented by Mr. B. F. Atkinson, of 7, Mill Street, Hanover Square (late of 3, Hemmings Row, Charing Cross), has been sent us, which differs in some important features from the instrument in ordinary use. The pad is connected to the spring that encircles the body by a universal joint, which permits it to be moved in any required direction. When the desired position has been determined, a lever, acted upon by a screw, grasps the ball of the universal joint, and renders the pad immovable.

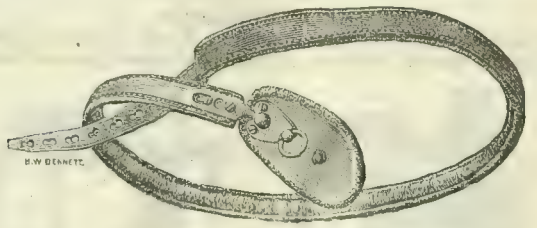


Fig. 1

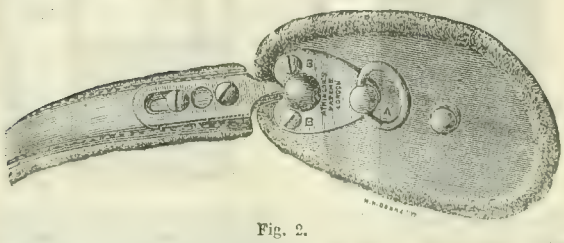


Fig. 2.

When an alteration in the position of the pad is required, the binding screw A, Fig. 2, is released, the pad adjusted, and the screw again tightened. An important feature which, it is thought, will be recognised by surgeons as one of practical utility, is the peculiar form of the face of the pad, which allows pressure to be given by a comparatively flat surface, or a more or less obtuse one. The truss is also made to press over the internal abdominal ring, and slightly in advance, though without making pressure, upon the spermatic cord. The advantages of this truss are very marked.

THE PNEUMATIKON.[1]

Mr. Brindley James writes: The exceptional relapse into severely trying weather we are now experiencing renders the question of lung affections one of foremost importance in daily practice; and the accessibility of a simple and ready appliance, alike prophylactic and palliative, must at such a period prove a very acceptable boon to practitioners and patients alike. No little ingenuity has before now been expended on the construction of the respirator, the utility of which under such circumstances has been unanimously acknowledged for years; that known as Jefferies' variety being probably the most efficient yet devised. The pneumatikon, based on the same, presents the further utility of being not only a respirator, but also in addition an inhalator, purifying the air inhaled, destroying the noxious bacteria evolved in pulmonary disease, by dint of an antiseptic medium, and thus combining the advantages of Jefferies' respirator with that of Yeo's auro-nasal inhaler. No very complicated apparatus has been needed to effect this long-looked for desideratum. A piece of lint, saturated with an antiseptic solution is placed between two gold gauze-wire parietes, and thus enables the patient, while enjoying the comfort attending the use of the ordinary respirator, to inhale air purified by passing through the medium of such antiseptic as his medical adviser may prefer. My own specific I may quote here, *exempli gratiâ*: ℞ Tincturæ iodi ætherealis acidi carbolici aā ʒij; thym. olei ʒi; sp. vini rectificati ad ʒi; guttæ xx nocte manoque inhalandæ.

The great relief experienced by my numerous patients through the use of this simple, but (as I have found it) efficacious appliance of my own devising, warrants me in warmly commending it to the favourable notice of my professional brethren; all of whom I feel confident will find their experience coincident with mine as to the benefits, both temporary and permanent, which their patients will enjoy through the adoption of its use.

[1] Made by Down Brothers, St. Thomas's Street, Borough.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

Subscriptions to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, APRIL 30th, 1887.

THE MEDICAL DRAMA: ACT THE SECOND.

Comparatively few words need be said by us on the subject of the issue to be decided by the General Medical Council at its meeting next week in respect to the application by the Apothecaries' Society for the legal appointment of surgical examiners, to enable them to comply with the provisions of the Medical Amendment Act of 1886. The General Medical Council, by an overwhelming majority, at its last meeting, deputed its President to remonstrate on its behalf with the Colleges of Physicians and Surgeons of London, who had refused to admit the Apothecaries' Society to the Conjoint Qualifying Board of London, and to express the opinion of the Council that the Apothecaries' Society ought to be so admitted. It was a forlorn hope that these bodies, which had shown so little deference to the general opinion of the profession on the subject, and had acted, in the case of one of them at least—the College of Surgeons—in defiance of an express resolution of its Fellows and Members assembled in general meeting, would show any more regard to the official decision of the General Medical Council. The Council has no power to enforce its decisions, and it has to endure the affront, and digest it as well as it may. The Apothecaries' Society now applies in due course for the appointment of surgical examiners. The Council, undoubtedly fulfilling in that respect the wishes of the profession, and acting in accordance with the principle which we were the first to enunciate, but which has long since gained universal sanction, expressed the opinion that every qualifying examination should include all the necessary subjects of medical study. In accordance with that view, the Apothecaries' Society has, since 1874, appointed surgical examiners, and has held a complete examination in all the ordinary subjects of medical study. It is now required that these examiners be appointed under legal sanction, and the Society applies to the Council to make such appointment, as provided by the Act of 1886. Unless surgical examiners be legally appointed, the Society must cease to exist.

We can only, at this juncture, reiterate and emphasise the statement which we have before made, that, in the existing state of the law, the Apothecaries' Society is the only body which effectually stands between the profession and the public and the prescribing chemists, who are only waiting such an opportunity as the decease of the Apothecaries' Society would afford to flood every town and every district with a horde of chemists and druggists, acting as medical advisers to the people, without education and without qualification. In order that there may be no mistake about the facts which have so studiously been kept out of sight, or so recklessly ignored by many leading persons who have influenced, thus far, the course of events, it will be well to quote

the 20th Section of the Apothecaries' Act of 1815, which confers the power to which allusion is made. It is as follows :

"And be it further enacted that if any person (except such as are then actually practising as such) shall after the 1st day of August, 1815, act or practise as an Apothecary in any part of England or Wales without having obtained such certificates as aforesaid, every person so offending shall, for every such offence, forfeit and pay the sum of twenty pounds, and if any person (except such as are then acting as such, and excepting persons who have actually served an apprenticeship as aforesaid) shall, after the 1st day of August, 1815, act as an assistant to any Apothecary, to compound and dispense medicines without having obtained such certificate as aforesaid, every person so offending shall for every such offence forfeit and pay the sum of five pounds."

This section is not actually repealed by the Medical Act of 1886, but if the Society were to cease to be a licensing body, it would be deprived of any motive for exercising the powers conferred by that Section. These prosecutions entail considerable cost on the Society, and the expenses are paid out of the surplus profits in respect of the fees for examinations after paying the costs of conducting the examinations. As the fund, therefore, out of which these prosecutions are paid would disappear if the Society ceased to be an examining body, so would the means of paying the costs of prosecutions.

It is beyond legal question that the Society cannot be compelled under this section to prosecute, but that it is only a power conferred on it which it is at liberty to exercise or not. In effect, therefore, except in so far as the Society may feel bound, as far as it can, to protect the rights of existing Licentiates, it may be correctly stated that, if the Society ceased to be a qualifying body, its function as a prosecuting body would cease too.

In order to appreciate the power and importance of the Apothecaries' Act of 1815 as the bulwark of the profession and the public against quacks and quackery, and to estimate the loss which would accrue and the immediate danger which would arise from the extinction of its charter and statutory privileges, it will be well for those interested to turn to the pages of the JOURNAL of October 30th, 1886, page 839, and to read again the highly important letter which we then published from Mr. C. J. C. Pridham, the solicitor to the Medical Defence and Medical Alliance Associations. Mr. Pridham is a perfectly disinterested witness, for, on the one hand, he is not in any way connected with the Apothecaries' Society or any other corporation, and he is not a medical man, but he has been engaged as a lawyer in carrying out such powers as the law affords for preventing the disastrous action of prescribing chemists and medical quacks. Having acted in this matter on behalf of two societies of general practitioners, no man is more thoroughly or more practically acquainted with all the facts of the case, and these are Mr. Pridham's words :—

"The penal laws protecting practitioners and their patients are not now so strong that they can afford to be weakened by the destruction of their most powerful and effectual weapon, while the laxity and indolence (save as regards the Apothecaries' Society), with which they have been administered by the bodies to whom they have been entrusted, and the want of interest and just appreciation of them displayed by medical men as a class, have contributed to a result which, in view of the possible extinction of the Apothecaries, it would be no figure of speech to describe as appalling. Of course the possibility exists of getting an amended penal clause which will retrieve the loss of the Society's charter and statute, but the probability is so remote (to those who know the continuous and praiseworthy efforts which have been made by Mr. R. H. S. Carpenter and others for that purpose, and which have failed) that it may be safely put out of consideration in the remarks which I venture to address to you."

Some hundreds of prosecutions have been successfully carried out under the powers of the Apothecaries' Act, and the instance quoted by Mr. Pridham of long, tedious, and costly litigation, in which these powers were successfully upheld, suffice to show with what energy and ingenuity, and what large control of funds, quacks, prescribing chemists, and their friends have contested those powers of repression. From this it may be judged with what eagerness they would avail themselves throughout the country of the opening which would be afforded if the Apothecaries' Society were, by any failure on the part of the General Medical Council to protect the interests of the profession, to be so weakened as to cease to be a living force in the protection of medical interests.

We see with no small regret that Dr. Struthers has put upon the paper a motion hostile to the application of the Apothecaries' Society. There is, of course, at once a palpable inconsistency and a cruel injustice involved in the proposition. The General Medical Council has plainly told the Colleges of Surgeons and Physicians that it was their duty to admit the Apothecaries' Society to the Conjoint Board of Examination; the Colleges have replied by declining to fulfil that duty. Who, then, is to suffer from this neglect and recalcitrancy? The Colleges who are in fault, or the Apothecaries' Society, the public, and the profession, who are helpless and without fault in the matter? Dr. Struthers's answer is, apparently, that the three latter are to be made the whipping boys, that the Colleges are to ride off triumphantly, and that all other interests are to suffer from their default. Surely in this there is neither reason, nor justice, nor public policy. If, as we think, as the profession thinks, and as the Medical Council thinks, it is the duty of the Colleges to incorporate the Apothecaries' Society as one of the examining bodies for the licence of general practice in England, means may yet be found to bring about that desirable result, and that object must be held in view in future proceedings, of which it is needless here to enter into details. Even if the reasons which we have above set forth did not make it of the highest urgency that the efficiency of the Apothecaries' Society should be preserved so long as it is the sole repository of the special powers we have described, there would be a grievous injustice in making this Society suffer for the sins of others. To say to the Apothecaries' Society "The Colleges of Surgeons and Physicians have acted wrongly; they have sacrificed large interests to minor considerations; they have treated you with great injustice, and we shall now refuse to do our part in remedying that injustice," is a course which we do not well understand, as one that even so ingenious and able an advocate as Dr. Struthers can easily recommend to a body such as the General Medical Council. Of course, those who think that the conjoint examinations of the two London Colleges are likely to be of a higher standard than would be required for the practitioners of the poor may see with equanimity all such persons driven to Scotland for their minor licences. This would be a grievous hardship and injury to English schools and English students and practitioners. It would be a libel on any corporation to suppose that it aims at the extinction of the Apothecaries' Society with a view to the benefit of any other corporation in other divisions of the kingdom.

The great facts which the General Medical Council has to consider are—that this Society has done everything in its power to comply with the law; that it is ready to continue to give a complete examination, and to submit its examination to the requisite inspection and supervision of the General Medical Council, that it has done nothing to forfeit the rights and privileges heretofore enjoyed by it, and in principle continued and conferred on it, by the Medical Act of 1886; and further and above all, that it is the repository of powers of vast importance to the welfare of the population, and to the just rights and privileges of the medical profession. To assent in any way to the annihilation of these powers, or to such treatment of a body which has in its day and in its degree rendered perhaps greater services to medical education and examination than any other, would be to inflict a grievous injustice, and to strike a serious blow at the welfare of the profession, of which the far-reaching consequences cannot be now even adequately estimated. The extent to which prescribing chemists would systematically pursue unqualified practice cannot be judged by the mere number of prosecutions; for it is of course apparent that the success of prosecutions effectively carried through to conviction, after protracted struggles, and the power of the Apothecaries' Act, have been shown chiefly and most importantly in the resulting prevention of the spread of such practices.

But for the success of the cases of the Society *v.* Nottingham, the Society *v.* Wiggins, the Society *v.* Hamilton, the Society *v.* Pearson, and the Society *v.* Aspinall, and but for the decision of Mr. Justice Field in 1876 in the trial of Nottingham, we should now have unqualified practice carried on, and medical visiting habitually practised, by chemists in every other street, and in every town and village of the country. The measure of the value of this active enforcement of the Society's powers is to be found in the relatively small amount of unqualified practice rather than in the number of prosecutions. But once that power is removed, the whole horde of prescribing quacks would once more over-run the country. The matter for decision by the General Medical Council is, therefore, a very momentous one, but the nature of the decision which should be arrived at seems to us to be so clear that it should need but little discussion, and claims one only and evident issue.

HONORARY RANK.

THE more the present unsatisfactory position of the Medical Service of the army is considered, the more it becomes apparent that two courses—and two only—are open for the settlement of the question. One is to make the service a purely civil one, not only in name but in reality; the other is to maintain its present military organisation, and to give to its officers honorary rank, without which it is becoming daily more evident that military organisation will not work. So long as the regimental system lasted, relative rank was a workable system; and, if far from perfection, it sufficed, the amount of friction being at least bearable. Now that this system is abolished, and another has been substituted for the plan adopted at the end of the great Napoleonic war, namely, scattering the British army in regiments and parts of regiments at home and in the colonies, the old regimental medical organisation has become an anachronism at once costly and unworkable. It is useless, therefore, to discuss its revival here, and even were this possible, relative rank, having been reduced to a mere classification, is out of court altogether. The War Office is therefore shut up, as we have said, to one of two courses. A large number of army medical officers would be glad to serve simply as civilians, if they were satisfied such a system would work, not only for their own honour and comfort, but for the well-being of the sick and wounded committed to their charge.

The first objection to the purely civil system is one that would arise in the Treasury—it would be nearly twice as costly. It is quite certain that if the Medical Staff of the army are to cease to be officers, they must have compensation in the shape of better pay. Young medical men are attracted into the service under the impression that, holding commissions in Her Majesty's army, they have an honourable position in that army: as civilians only attached to the army, this attraction, call it sentimental if you please, would be taken away, and a money one must take its place. This consideration alone would be fatal to it. But this is not all. Take away the military organisation of the department, and the authorities can have no possible right to ask civilians to go under fire or expose themselves to the thousand risks which military surgeons daily run, without a thought, in time of war.

Again, this scheme would need a reorganisation of the Army Hospital Corps. Experience has proved that unless the Medical Staff of the army have the command of this body of men, for whose work they are responsible, the machine will not work. Convert them into civilians, pure and simple, and they cannot exercise the command proved to be indispensable; the resource is the introduction of a military command element, and the result, friction, inefficiency, and confusion, to the detriment of the sick and wounded. If army surgeons with the advantages of these commissions, and such other privileges and consideration as their relative rank gave them, have found the discharge of their duty to be always difficult, and often almost impossible, what in all the hurly-burly and tumult of battle-fields would be the position of a body of helpless gentlemen in plain clothes? Any one who has the most superficial knowledge of the duties the Medical Staff of an army have daily to perform must know that a civil system cannot possibly work.

Turning to the other alternative, namely, honorary rank, we say, after much consideration, it is the only possible one the War Office, by its own action, has left. The difficulties army medical officers had to face even when relative rank was believed by themselves and the army generally to be something real were very great; now that by a War Office Warrant it is declared in the face of the whole army to be a mere classification, we sincerely believe its restoration, even if that is contemplated, which we greatly doubt, would in time of war leave the Medical Staff of the army in a condition as helpless as that of the civilians we have just described. We have before us as we write the evidence of a medical officer of years and experience, a war-bred man, and this, in a few words, is his testimony: "Sick and wounded men are no doubt a great encumbrance to an army; in a certain sense it would be an immense advantage to a commander if, after a battle, he could leave the latter to die where they fall, or with the former take Napoleon's short and ready method of dealing with them, as this blood-stained man did with his own on his retreat from St. Jean d'Acre—send them to sleep where they cease from troubling. Unfortunately for this summary method of getting rid of sick and wounded, their doctors, and other impedimenta, the public conscience is a little sensitive on the treatment of sick and wounded soldiers, and even great commanders, when they think the 'doctors are

'wanting in initiative,' are not above joining in, if not raising, a cry of execration if a complaint is made that a field hospital has not all the means of the Royal Victoria Hospital, Netley, for their solace and comfort. The result of my experience is this: if army medical officers are to be, as they are now, held responsible for the various military duties now demanded of them, they must be given military rank, call it honorary if you please, but such as can be seen and known, and respected by all with whom they have to do; without this, life on service is a grievous thing; it is nothing but an incessant struggle for the rights which even relative rank is supposed to give, a struggle not only for their own rights, but the rights of those committed to their charge. Army warrants are not very intelligible to those not immediately concerned with the rights they confer, and others can always affect ignorance of them when it suits either their purpose or their temper. This it is, above everything else, which makes it absolutely necessary, in the interests of the sick and wounded officers and men, that those who are responsible for their right treatment, comfort, and safety, should, once and for all, be placed in a position that admits of 'no mistake.'"

CANALISATION AND CATHETERISATION OF THE FALLOPIAN TUBE.

DISEASES of the Fallopian tubes were but recently looked upon as pathological luxuries "of little clinical importance." Within the last few years it has been shown that inflammation and obstruction of the tube is a disease by no means infrequent, and that papilloma of the same structure, though very rare, may occur as a distinct affection with marked symptoms. Hence, certain observers are once more turning their attention to an old question—the canalisation and catheterisation of the tube.

In the thirtieth volume of the *Archiv für Gynäkologie*, part i, (January, 1887), Dr. Gönner, of Basle, describes two cases of high interest. In removing some diseased endometrium by means of a curette from a young woman who had aborted three months previously, he found that the curette could be made to pass till it touched the fundus uteri and could then be turned to the left and pushed onwards, without the employment of the least force, until eight inches of its shank had passed above the os externum. The instrument was removed and once more passed in the same direction without difficulty. No bad results followed and the patient was in good health; six weeks later involution of the uterus was found to be complete. Dr. Gönner about the same time examined another young patient a month after delivery. The forefinger could be passed for an inch into the uterus in order to guide the sound, which touched the fundus at a distance of four inches from the os externum. On careful and gentle manipulation, the sound could be passed to the right for seven inches beyond the os. The point could be felt entering into a cavity. Another physician, without having heard the results of Dr. Gönner's exploration, passed the sound as far in the same direction on the following day. The left tube could not be sounded. The curette was introduced and a piece of retained placenta was removed; that instrument could not be passed into either tube. On the tenth day after the removal of the placental relics, the patient was suddenly seized with pain in the right side of the hypogastrium when attempting to sit up in bed. The temperature rose to 103.8° F., the pulse was weak, the hands cold, the abdomen very swollen and tender. There was resistance in the hypogastrium to the right, and dulness nearly up to the umbilicus. The area of dulness became distinctly circumscribed two days later, it then extended much higher on the right than on the left side. The patient recovered slowly and left the hospital two months later. Professor Bischoff believed that tubo-uterine gestation existed, since it appeared that a part of the placenta lay in the dilated uterine end of the tube. Dr. Gönner admits the possibility that in one or both of his cases the uterine walls may have been perforated, but, he adds, the careful guiding of the instrument from the fundus and thence laterally without any force seemed rather to indicate that it really entered the Fallopian tube.

Dr. Tyler Smith, in 1849, advocated catheterisation of the tube for the cure of sterility, and Frankenhäuser, later on, recommended the same for the removal of morbid contents. In 1872, Bischoff passed a sound six inches and a half beyond the os externum in a patient with cystic tumour of the ovary. The patient died a few days after ovariotomy. Dextroversion and flexion of the uterus were discovered at the necropsy. The highest point of the uterus was the part whence the left tube arose; a sound could readily be passed into that tube. Dr. Matthews Duncan, who insists on the physiological canalisation of the tube for the transmission of the fecundated ovum, describes in the appendix to his *Clinical Lectures* a very similar case. He passed the sound far beyond the right side of the uterine cavity before ovariotomy. The patient died, and the right tube was observed lying in the route which the sound had taken, and its uterine extremity was patent and wide enough to transmit a common surgical probe. The same obstetrician declares in his *Practical Treatise on Perimetritis and Parametritis* that, in one of his cases of "encysted serous perimetritis," he could easily pass the sound through the left Fallopian tube into the peritoneal cavity.

Some interesting discussions on the transmission of morbid material from without through the Fallopian tube into the peritoneal cavity are to be found in the last two volumes of the *Transactions of the Obstetrical Society of London*. Dr. Gönner's cases tend to prove, what has already been suggested, that the tubes are unusually patulous after parturition. Hence, perhaps, the frequency of tubal disease and pelvic peritonitis after abortion and mismanaged labour at term, especially when the patient is infected with gonorrhœa. The second case is, we trust, a wholesome warning against any systematic attempts to sound the tubes, especially in the out-patient room. In the present state of our knowledge, catheterisation of the tube is to be regarded rather as an accident to be recognised whenever it occurs in the course of an exploration of the female pelvis than a practice to be advocated as a therapeutic agent or as a surgical operation.

Nor must the subject be dismissed without a consideration of the views of those who like Bandl believe little in catheterisation of the tubes. Several authorities have failed to pass any kind of sound into the normal tube, even during courses of special systematic experiments on adult subjects in the *post-mortem* room. With regard to the alleged patulous condition of the tubes after childbirth, it has been proved that the uterine walls are very soft and readily perforated at that period, especially close to the orifices of the tubes. In one instance there was extra-uterine gestation, and the perforation of the uterine walls close to one tube was proved at the necropsy. These last two facts are important in relation to Dr. Gönner's second case. Perforation of the uterine walls by the sound may certainly cause no ill effects. The evidence is, on the whole, in favour of perforation of the uterus being more frequent than catheterisation of the tube. The

latter can probably only occur when the sound is passed during some physiological process of canalisation, such as Dr. Matthews Duncan suggests. Both accidents, for they should, we believe, be ever held as such, teach us to be chary about using the sound. It is not to be wondered that many authorities prefer to rely on careful bimanual palpation.

THE Prince and Princess of Wales will open the new buildings of the London Hospital at five o'clock on Saturday, May 21st.

WEDNESDAY, May 11th (2 P.M.), is "Presentation" day at the University of London.

DR. CHARLES MERCIER has been appointed to give a course of lectures on Neurology and Alienism, at the Westminster Hospital Medical School.

LORD MOUNT-TEMPLE has given notice that he will, at an early date, call the attention of the House of Lords to the regulations for the prevention of hydrophobia, and present a Bill on the subject.

THE sixth annual International Hygienic and Demographic Congress, under the patronage of the Crown Prince Rudolph, will be held in Vienna from September 26th to October 2nd. In connection with the Congress a Hygienic Exhibition will be held.

DR. LLOYD ROBERTS, of Manchester, has been elected a Vice-President of the Obstetric Section, and Dr. Batty Tuke, of Edinburgh, has been nominated one of the Vice-Presidents of the Psychological Section, at the forthcoming International Medical Congress at Washington.

THE Lunacy Bill, the second reading of which has been postponed till Monday, has been blocked by the Irish Members, and there is thought to be little hope that progress can be made with it at present, although its main provisions meet with general assent on both sides of the House.

AN extraordinary meeting of the Council of the Royal College of Surgeons will be held on Thursday, May 5th, to receive the report on the question of the utilisation of the vacant space behind the Examination Hall of the two Colleges, and further to receive the report of the Committee of Delegates on the question of granting degrees in medicine and surgery by the two Colleges.

THE President and Council of the Medical Society of London have issued cards for a *conversazione*, to be given in the rooms of the Society, 11, Chandos Street, Cavendish Square, on Monday, May 2nd. An oration, "The Treatment of Intra-peritoneal Injuries," will be given by Sir William Mac Cormac at 8.30, and this will be followed by the President's reception at 9.15.

ARRANGEMENTS have been made between the Council of the Neurological Society and the Editorial Committee and publishers of *Brain*, in virtue of which that journal will be in future the organ of the Society; papers read before it will be published in *Brain* either in full or in abstract. The journal will continue in every other respect to have the same characteristics as it has possessed for so many years under the able editorial direction of Dr. De Watteville, who, under the new arrangement, has been appointed Editor by the Council of the Neurological Society. Messrs. Macmillan will continue to be the publishers of *Brain*.

MERTHYR TYDVIL HOSPITAL.

THE foundation-stone of the new building of the Merthyr Tydvil General Hospital will be laid on June 21st, and the Marquis of Bute has been invited to perform the ceremony. Local employers of labour and the colliers intend to support the maintenance fund; sufficient money for the erection of the building has already been promised.

CANTOR LECTURES.

THE concluding course of Cantor lectures at the Society of Arts will be on "Chemistry of Substances taking part in Putrefaction and Antisepsis," by Mr. J. M. Thomson, on May 2nd, 9th, 16th, and 23rd. These lectures are intended to give a general account of the changes occurring during putrefaction, and will deal especially with the properties of the substances resulting from these changes. Special attention will also be paid to the chemistry of the common substances employed as antiseptics.

THE ANATOMICAL SOCIETY.

THE first meeting of the Anatomical Society, the formation of which was recently announced, will be held in the rooms of the Medical Society, Chandos Street, Cavendish Square, on Friday, May 6th, at 5 P.M. The chair will be taken by Professor Humphry, F.R.S., of Cambridge, and all persons interested in the movement are invited to attend this, the foundation meeting of the new Society.

LATENT PLEURISY.

AT a recent meeting of the Société Médicale des Hôpitaux, M. Delore presented a patient who had suffered from purulent pleurisy for three years without much inconvenience. M. Delore gave a short summary of the case, and sketched the principal characteristics of latent purulent pleurisy. The general symptoms were determined by the degree to which pus was absorbed; when the thick shell formed by the false membranes prevented absorption no constitutional symptoms were produced.

FRACTURES OF THE FIBULA.

IN connection with a recent incident, noticed at page 741 of the JOURNAL for April 2nd, a small correction should be made. It is there stated that "it is the usual custom that a simple fracture of the fibula should be taken in [that is, to Guy's Hospital] for a plaster-of-Paris splint to be put on, and that the patient should be discharged with crutches next day, when the plaster has set." We are informed that most cases of simple fracture of the fibula are kept in much longer, and that they are only sent out so soon when the accident-wards are very full. This is proved by reference to the records of last year, which the Surgical Registrar has recently furnished. Sixty-four cases of simple fracture of the fibula were admitted, and of these only eleven were sent out within twenty-four hours.

THE NIGHTINGALE TRAINING SCHOOL.

THE annual meeting of the Council of the Nightingale Fund was held on Monday last. The chair was taken by the Right Honourable Sir Harry Verney, Bart. Mr. Henry Bonham Carter having read the annual report on the School, from which it appeared that since its foundation 520 certified nurses had left it in order to take service in various hospitals, Sir William Bowman gave an interesting address to the pupil-nurses on the profession of nursing and the high character it now enjoyed. Sir Harry Verney then referred in feeling terms to the impending retirement of the Matron, Mrs. Wardroper, who had superintended the school since it was founded twenty-seven years ago. Mr. Rathbone, M.P., after reading a resolution which had been passed by the Council expressing their own and Miss Nightingale's deep sense of the inestimable services which the Matron had rendered to the school, as well as to the nursing profession generally, reviewed the work of the school, and referred to the great reforms which had taken place in hospital nursing and administration since it was established as being largely due to its influence. The meeting was subsequently addressed by the Treasurer, by Dr. Bristowe, and by Mr. Croft, who responded in appropriate terms on behalf of Mrs. Wardroper.

SANITARY DEMONSTRATIONS TO MEDICAL MEN.

SOME general knowledge of the modern systems of sewerage and drainage, and of the numerous novel sanitary domestic appliances, is very useful to medical men, who are often called upon to form a general opinion on the sanitary condition of a house in which cases of illness have occurred having symptoms suggesting infection by the "filth diseases." There is a representative collection of such appliances at the Parkes Museum of Hygiene (Margaret Street, Regent Street), but, without some preliminary knowledge or a competent guide, it is rather unintelligible to the ordinary visitor. To supply this want, the Council of the Museum has arranged to hold three demonstrations during May, which will be open to all members of the medical profession on presentation of their cards. The first will be given by Professor W. H. Corfield on Monday, May 9th; the second by Mr. Rogers Field, M.Inst. C.E., on Monday, May 16th; and the third by Mr. Percival Gordon Smith, F.R.I.B.A., on Monday, May 23rd. Each demonstration will commence at 5 P.M., and the objects and advantages of the various appliances exhibited will be fully explained.

A NEW BRANCH OF THE BRITISH MEDICAL ASSOCIATION IN CEYLON.

AT the last meeting of the Council of the British Medical Association, communications were received from Dr. Henry Keegel, assistant Colonial surgeon at Colombo, Ceylon, announcing that a meeting of the members of the medical profession resident at Colombo had been held, at which steps were taken towards the formation of a Branch of the Association in that island. Dr. Keegel states that there is reason to believe that all the resident qualified medical practitioners in the island will, on the formation of the Branch, seek election to membership. The Council gladly recognised this new addition to our Colonial Branches, and the necessary formal steps were taken towards the due formation of the Branch under suitable by-laws. The continued extension of the Association throughout the British Colonies is a subject of great congratulation, and we feel sure that this last acquisition to our body will be most cordially welcome. We trust that the Branch will appoint representatives to attend the annual meetings of the Association, and take part in its scientific proceedings, where they will assuredly have a most friendly reception; and we hope that their scientific activity will be duly recorded in the pages of the JOURNAL.

INTERNATIONAL COURTESIES.

THE *Western Daily Mercury* is publishing a series of very interesting letters on the Canary Islands, from Mr. Isaac Latimer. In one of these letters, which appeared on April 23rd, he writes: "The Medico-Chirurgical Society of Teneriffe, with the 'courtly Spanish grace' of their nation, sent a deputation to Orotava on the 11th, to present their diploma of Honorary Fellow to Sir Spencer Wells and Mr. Ernest Hart. The presentation was made the occasion of a little ceremony in the drawing-room of the hotel; Sir Spencer expressing the pleasure he felt at this mark of the friendly feeling of his brethren in the Canary Islands, and the additional gratification which it gave him to be associated with so old a friend as Mr. Ernest Hart, who had been a pupil and had taken the first prize in the first course of lectures delivered by Sir Spencer himself in London nearly thirty years ago. Mr. Hart responded in a similar spirit, expressing the hope that the profession in England would soon become better acquainted with the quality of the very fine winter climate of Orotava, and of the comfortable arrangements both for invalids and healthy visitors made at the sanatorium. Sir Spencer Wells had spent part of the forenoon in a very useful manner, having, in the presence of several Spanish medical men from different parts of the island, removed a very large tumour from a young lady who had been brought to Orotava, and who, I am glad to hear, was 'going on remarkably well before he sailed from Santa Cruz, after what he tells me has been a very enjoyable holiday, and a very good preparation for the hard work of the London season."

THE MEDICAL PROFESSION AND THE POLICE.

THE censure of a professional brother by the coroner at a recent inquest for not giving sufficiently full information to the police naturally raises the question as to what the duty of a medical man is in regard to informing the police in cases where he is unable or unwilling to give a certificate of death. In the first place, every medical man who is unwilling to give a certificate in the case of a person whom he had attended or seen during life should communicate with the coroner, stating all he knows about the death and his reasons for not signing the certificate. If he has no cause to suspect foul play his duty ends there; he is not called upon to go to the police about it; and, further, he would be quite justified in refusing to volunteer information to them under such circumstances, but could refer them to the coroner. If, however, there should be any ground for a suspicion of foul play, it would most clearly be his duty, having laid the facts before the coroner, to place himself also in communication with the police, and aid their inquiries with all the information at his command. To withhold information from the police in a case of murder might be the means of preventing the detection of the perpetrator, and would be certain to render his capture more difficult. A medical man by so acting would, not intentionally perhaps, but still in fact, be trying to shield the criminal. Even if, in a case where there was no ground for suspicion, a medical man had already given information to the police, he ought to supply them with all reasonable details bearing on the death. A medical man is only justified in refusing to give information to the police when he is quite clear that there are no grounds for suspecting foul play, and when he has not first offered them any information.

MR. GOSCHEN ON HOSPITALS.

THE Chancellor of the Exchequer, who presided at the festival dinner of University College Hospital on April 27th, made a speech in proposing the toast of the evening, more interesting and suggestive than such after-dinner utterances usually are. Referring to his Budget speech, he said that as it was his sad fate to speak of an inelastic revenue on a very recent occasion, so now he had again to speak of an inelastic revenue and a very automatic and growing expenditure. The decline in income having been largely due to a falling off in the amount of legacies, he was led to make some remarks on the curious regularity with which legacies were generally left in routine to particular charities, so that the receipts from this source were, as a rule, maintained at about the same yearly amount. This curious law and its exceptional infraction at the present time were, he suggested, interesting points for psychological investigation. The hospital had one interesting source of revenue which distinguished it from others, namely, a special fund called the People's Contributions Fund. It consisted of the subscriptions of working men and small tradesmen living in the district in which the hospital was situated. Governors were chosen representing these working men, who dispensed among their fellows letters of admission to the hospital, and so developed a new system of self-help. The expenditure of a hospital tended to grow because the improved methods of medical science were more costly than the old; but the results were better, and patients were more rapidly relieved, and thus a greater number was treated every year. The Committee, moreover, found itself compelled to make arrangements for rebuilding the hospital, and for this purpose a capital sum of £50,000 would be required. Subscriptions amounting to £1,885 were subsequently announced. Dr. Russell Reynolds proposed the toast of the Hospital and Medical Committees, and Captain Douglas Galton, C.B., and Dr. G. V. Poore responded.

IMPORTANT TO MEDICAL STUDENTS.

AT a meeting of the Committee of Management of the Examining Board in England by the Royal Colleges of Physicians and Surgeons, on April 25th, it was resolved: "That, to enable students who commenced their professional education before October 1st, 1884, to pass

a qualifying examination for the purposes of registration, students who shall have completed four years of medical study to the satisfaction of the Committee of Management, and who shall have passed such first and second examinations as that Committee shall approve, may be admitted to the final examination of the Examining Board in England, which is a 'Qualifying Examination' for the purposes of registration under the new Act." Students desirous of taking advantage of this resolution of the Committee of Management must make application in writing to the Secretary of the Examining Board in England, giving full particulars of any examinations passed by them at the two Colleges or elsewhere.

VIENNA CONGRESS OF HYGIENE AND DEMOGRAPHY.

THE sixth International Congress of Hygiene and Demography is announced to take place at Vienna from September 26th to October 2nd next. The object of the Congress is to arouse public interest in favour of the progress of hygiene and demography, and to offer to experts and specialists an opportunity for the exchange of individual opinions favourable to the progress of these sciences, and to prepare by conference and public discussion the elucidation of questions relative to hygiene, demography, and public health. There will be two general meetings: the first at the opening and the second at the closing of the Congress, for business purposes. Papers may be presented in German, French, English, or Italian, and will be printed in the language in which they are sent in. Persons opening the discussion are not to occupy more than fifteen minutes, speeches to be limited to ten minutes. At the first public meeting Professor Brouardel will deliver an address on the Propagation of Typhoid Fever; Professor Pettenkofer, on the Teaching of Hygiene in the Faculties of Medicine, and in the Higher Technical Schools. At the closing meeting, Professor Corradi will deliver an address on Longevity from the point of view of History, Anthropology, and Hygiene, and Professor Inama-Sternegg, on the Most Important Changes which have occurred in the Population of Europe during the last Thousand Years. A detailed programme has been prepared of subjects to be discussed in the sections of Hygiene and Demography. The Congress is under the patronage of the Crown Prince Rudolph, and the honorary presidency of the Ministers of the Interior and of Instruction in Austria. The meetings will be held at the University. The President of the Organisation Committee is Professor Schneider, and the General Secretaries Dr. Ernest Ludwig and Professor Gruber, of the University of Vienna.

RESEARCH SCHOLARSHIPS OF THE BRITISH MEDICAL ASSOCIATION.

AT the last meeting of the Council, Dr. Sidney Martin, Fellow of University College, London, was appointed one of the Research Scholars of the British Medical Association. Dr. Martin has already been the recipient of several grants from the Association, which have enabled him to prosecute researches of considerable importance on the action of papaine and on the gluten and the proteids of flour. Short reports of his investigations have appeared in these columns from time to time; among the most interesting of his results have been the discovery of a series of vegetable albumoses related to the animal albumoses and to peptone, and the observations that the ferment papaine is clearly associated with an albumose, and that the active principle of jequirity, which is of ferment-nature, is also closely associated with an albumose. It is pretty well established that the animal albumoses and peptone have a toxic action, lowering blood-pressure, causing death in a comatose condition, and preventing the coagulation of the blood after death. Dr. Martin proposes to test the toxic action of the vegetable albumoses, and to ascertain whether it is associated with a body of the nature of a ferment. Dr. Martin also proposes to continue his researches on the etiology and pathology of the diseases of the stomach, commenced last autumn. Mr. Watson Cheyne was at the same meeting re-appointed a Research Scholar; he will continue his researches on the relation of bacteria to disease, with special reference to (1) the best antiseptics and their behaviour in connection with wounds, and (2) the diagnostic value of Lustgarten's bacillus of syphilis.

REGISTRATION AND COMPULSORY EXAMINATION OF ARCHITECTS, ENGINEERS, AND SURVEYORS.

A PROPOSED Bill for the above purpose, of which the draft has been sent to us, has for its avowed objects the creation for the public advantage of a competent body of architects and engineers, and the production and annual publication of a register giving name, address, and various qualifications of each person duly licensed to practise in architecture and engineering, and thus to enable the public to distinguish qualified from unqualified men. The draft also aims at the improvement of the status of the architectural and engineering professions by raising the standard of educational proficiency. In a circular which has been issued, giving the above reasons for the proposed measure, it is noted that medical men have shown how faulty water-supply, drainage, and construction are the causes of disease; hence it is of great importance to the public that architects should be qualified in sanitary science. Numerous legislative precedents are quoted in favour of the Bill, and amongst these precedents are the Medical Acts, the Dentists' Act, 1878, the Pharmacy Act, 1868, and the Veterinary Surgeons' Act, 1881.

HEALTH IN THEATRES.

THE *Sanitary Record*, endorsing some recent observations which were made on the subject of public health in theatres, calls attention to the discussion upon Mr. Percy Fitzgerald's paper: "On Scenic Illusion and Stage Appliances," at a recent meeting of the Society of Arts, which drew forth some very interesting remarks by Mr. Lascelles Scott on the sanitary conditions of certain of our provincial theatres. According to the evidence of this gentleman, who has evidently acquired a large experience as to the course of procedure to be observed in investigations of this nature, three out of every four playhouses in the provinces may be considered unsatisfactory so far as the accommodation for the actors behind the scenes is concerned. He mentioned the case of a theatre in one of the northern counties where, whenever a certain company proposed coming to fulfil their engagement, a special messenger was invariably sent on beforehand with a good supply of perfumery and disinfectants. Mr. Scott also gave his audience good reasons for believing that several cases were known to him where the health and comfort of the actors had been seriously interfered with through mismanagement in this direction. We may take this opportunity, not only of endorsing Mr. Scott's remarks, but also of drawing attention to the fact that even several of our metropolitan theatres are far behind the times in their sanitary arrangements, the accommodation for the public being often well-nigh as abominable as it is for the actors. But until the Board of Works sees its way to altering certain of the regulations, or some drastic changes are made in the conditions upon which a theatrical licence depends, we can hardly expect to find, for the present at least, any improvements introduced in the construction and fittings of all those arrangements where the public wants may be considered and decently supplied.

CARBOLIC ACID INHALATIONS IN WHOOPING-COUGH.

IN the *Deutsche Med. Wochenschrift*, No. 21, 1886, Dr. R. Pick, of Koblentz, published several cases which seem to show that the inhalation of concentrated carbolic acid solutions has a powerful curative action in whooping-cough. Dr. Kniaziolucki, of St. Zofia's Hospital in Lvov, in Galicia (*Wiadomosis Lekarskie*, No. 3, 1886, p. 82), accordingly tried the same method in a severe case of his own occurring in a weak, emaciated, febrile girl, aged 9. The affection had lasted for about four weeks, and the paroxysms occurred about twenty-eight times a day. The inhalations of carbolic acid, either pure or diluted with an equal amount of distilled water, were repeated hourly, the administration being continued for ten minutes on each occasion. The number of paroxysms during the subsequent days fell to 20, 19, 12,

12, 6 respectively, and from the sixth day of the treatment the patient had not a single attack. The temperature became normal on the third day. After ten days' stay in the hospital the girl was discharged quite well. No poisonous symptoms were observed either in this case or in those related by Dr. Pick. Equally satisfactory results were obtained by Dr. W. Jakobski, of Odessa (*Wiadomosis Lekarskie*, No. 9, 1887, p. 280), who used a 50 per cent. solution of the acid, the inhalations being carried out for ten minutes every two hours. In one of his cases the daily number of paroxysms fell rapidly from thirty-two to six. Dr. Jakobski differs from Pick and Kniaziolucki only as regard the details of the method. They principally employ a mask resembling that used for giving chloroform; this is placed over the patient's nose and mouth. Dr. Jakobski, on the other hand, finding that this apparatus frightened children and led them to resist the application, devised an instrument like a toy, consisting of a pasteboard tube with gold paper gummed over it, and fitted with a handle. Within the tube are two thread nets, and between them a layer of Bruns's cotton-wool, which is moistened with the carbolic solution. Jakobski found that with this there was no difficulty in getting the little patients to take the inhalations.

THE ROYAL COLLEGE OF PHYSICIANS.

At the meeting of the College of Physicians, Sir Henry Pitman, in order to testify in some practical manner the deep interest he felt in its concerns, made the College an almost invaluable present. The minutes of the proceedings of the College, extending back to its earliest days, have been recorded and preserved in a series of volumes of annals which now number thirty-three. For many years one volume of the annals, relating to a period of about ten years towards the close of the last century, has been missing. Sir Henry Pitman, by indefatigable search amongst the letters and papers in the College, has supplied its place by a record compiled from these of every transaction during that period, and has thus placed the College still more deeply in his debt—a debt which, as the President remarked in reference to his long services, the College cannot repay either by thanks or gifts.

SCOTLAND.

At the annual meeting of patrons and subscribers of the Glasgow Ear Hospital, held on April 13th, Dr. James Erskine, formerly assistant surgeon to the hospital, was elected a member of the Board of Directors of that institution.

ABERDEEN UNIVERSITY.

The summer session in the classes of the Medical Faculty, Marischall College, Aberdeen, were opened on Monday, April 25th. There was a large attendance of students. Dr. Cash, successor to the late Professor Dyce Davidson in the chair of Materia Medica, met his class for the first time, and received a most hearty greeting.

EDINBURGH UNIVERSITY UNION.

Mr. Gladstone, who it may be remembered was twice Lord Rector of Edinburgh University, has sent to the Assistant-Treasurer of the Edinburgh University Union the sum of £10, with a note to the following effect: "In token of good wishes, Mr. Gladstone sends herewith a small donation to the Edinburgh University Union."

GLASGOW UNIVERSITY.

The Senatus of Glasgow University has resolved to confer the honorary degree of Doctor of Laws (LL.D.) on John Hughlings Jackson, M.D., F.R.S., London.

REPRESENTATION OF GENERAL COUNCIL OF EDINBURGH UNIVERSITY.

The death of the late Dr. Rutherford Haldane having created a vacancy in the University Court of Edinburgh University, he having acted as Assessor for the General Council there, a meeting of the Council was held last week, at which two candidates were proposed for the vacancy. Mr. Edmund Baxter, W.S., proposed, and Professor Calderwood seconded, the nomination of Sir Alexander Christison, M.D., Bart.; while Mr. R. Vary Campbell, Advocate, proposed, and Dr. Joseph Bell seconded, the nomination of Patrick Heron Watson, M.D., LL.D., Surgeon to the Queen in Scotland. A show of hands was taken, and was in favour of Sir Alexander Christison; a poll was demanded by Dr. Watson's supporters, and, as a result of this, voting papers have been sent to all the members of Council. The voting papers must all be received by Mr. Gilbert, Registrar, Edinburgh University, by May 10th. The supporters of the two candidates have sent letters urging their respective claims on the members of Council, those in favour of Sir Alexander Christison placing great reliance on the merit of his work in India. The Association of General Council, which numbers nearly 1,200 members, has issued a circular in favour of Dr. P. Heron Watson, in which they say: "The chief object of this Association has been to increase the influence and interest of the General Council and the public in the government of the University, and at this critical juncture, when a Bill affecting the Scottish Universities is impending, it is a matter of the greatest importance that the Representative of the Council should be one who in the past has done everything in his power to promote the views of this Association, and is not put forward by the *Senatus*, a body already fully represented in the Court. Dr. Watson is thoroughly acquainted with the working of University affairs, and his experience in the Medical Council and as a teacher of surgery is calculated to make his presence in the chief governing body of the University peculiarly valuable." This letter is signed by Dr. John Duncan and Mr. Thomas McKie, Honorary Secretaries. The leading daily paper had an article strongly in favour of Dr. Watson, and published a letter pointing out that the chief support of his opponent is from professors and others connected with the governing powers of the University, and that these are already sufficiently represented in the University Court.

GLASGOW EYE INFIRMARY.

Reviewing the whole of the correspondence which has appeared in our columns since the publication of a communication from our Glasgow correspondent on March 19th on the subject of the changes then made in the staff, it appears to us that the charges which were insinuated rather than directly made against Dr. Fergus have been shown to be entirely without foundation, but have not been withdrawn with the directness and frank expression of regret which are proper under such circumstances. Our correspondent was evidently writing in good faith, but was misled, and under those circumstances we think it right to express our sincere regret that such insinuations were made through our columns, and our conviction that they were contrary to the fact, and entirely without foundation. Such frank and complete withdrawal, and such cordial expression of regret, are, we think, due alike to ourselves and Dr. Fergus, who throughout this matter appears to have maintained the most correct attitude, and one in accordance with the high and honourable position which he has so long held in the estimation of his profession and his fellow citizens.

IRELAND.

BELFAST MAIN DRAINAGE SCHEME.

A meeting of ratepayers in opposition to this measure was held at Belfast on March 25th. Resolutions were passed objecting to the Bill on the grounds that the proposed high level sewer would not empty itself efficiently, that the proposed scheme would not sufficiently purify the river Lagan, that the wants of that portion of the town on the County Down side of the river had been overlooked, and that the discharge of sewage matter would injure some of the property on the shores of Belfast Lough. Mr. Cobain, M.P., was one of the chief

speakers, and amongst those on the platform were Pro essor Everett and Alderman Dr. Graham.

ULSTER MEDICAL SOCIETY.

THE last meeting of this Society, held on April 20th, was devoted to the exhibition of patients, instruments, drawings, microscopical preparations, etc. Amongst the exhibitors were the President (Dr. Whitla), Professor Dill, Professor Sinclair, Mr. Fagan, Dr. Harkin, Dr. Aickin, Dr. Walton Browne, Dr. Esler, Dr. Burden, Dr. McCaw, Dr. O'Neill, and Dr. Calwell. The cases shown included one of elephantiasis and one of cirsoid aneurysm. In the course of the evening Dr. Harkin moved and Dr. Wales seconded a vote expressing the deep regret of the Society at the untimely death of the late secretary, Dr. James Barron.

PROPOSED INSTITUTION OF ART, SCIENCE, AND TECHNOLOGY AT BELFAST.

ON March 30th a meeting was held in the Town Hall, Belfast, under the presidency of the Mayor, to consider the propriety of establishing an institution of the above character as an appropriate manner o celebrating the Royal Jubilee. Resolutions in favour of the object of the meeting were proposed and carried. Belfast has at present a Technical School, a Working Men's Institute, and a School of Art, but the feeling of the meeting seemed to be that there was still a need for a central institution in which adequate provision should be made for the teaching of all branches of technical education.

ACADEMY OF MEDICINE IN IRELAND.

A SPECIAL general meeting of the Academy was held on Tuesday, April 26th, first, to consider the advisability of applying for Her Majesty's permission to prefix the word "Royal" to the present title of the Academy; and secondly, to consider whether an Address should be presented to Her Majesty on the occasion of her Jubilee. There was a very large attendance, and resolutions embodying the propositions contained in both suggestions were adopted by the meeting.

HOSPITAL AND WORKHOUSE MORTALITY AT DUBLIN.

SIR CHARLES CAMERON has addressed to the Town Council of Dublin an exceedingly valuable and interesting report upon the death-rate of that city, and upon the causes which tend to raise it above the average of other large towns. He finds that the most serious factor in this result is the poverty of a large proportion of the population. Among the city poor everywhere, there is an excessive mortality; and, as the poorer classes are more numerous relatively to the richer sections of society in Dublin than in the great English towns, the death-rate of Dublin is somewhat higher. Another cause of the high death-rate of Dublin appears to be the crowding into it from the country of worn-out and decayed persons, who end their days in the eleemosynary institutions of the city. About one-sixth of the population of Ireland resides in the towns, and it is evident that the immigration of old and sick people must affect towns injuriously. It is a striking fact that the City of Dublin, with only one-twentieth of the population of Ireland, contains about two-fifths of all the hospital beds in the country. In ten years, out of 421,357 patients treated in all the hospitals of Ireland, no fewer than 197,306, or nearly one-half, were admitted into the hospitals of the City of Dublin and its suburbs. There is one hospital bed to 181 inhabitants of Dublin—city and county—while the proportion in all Ireland is one bed to 790 inhabitants. In the general hospitals of London, with its 4½ millions of inhabitants, only 40,000 patients are annually treated. Another unpleasant fact, grimly suggestive of the poverty of the people, is that, while 15 per cent. of the deaths in the English towns take place in the workhouses and charitable institutions, 30 per cent. of the deaths n Dublin occur in those institutions. Although the population of the two Dublin workhouses numbers only about 6,000 out of the 350,000 inhabitants of the city, no fewer than 15 per cent. of the 10,000 deaths which are annually registered in Dublin occur in the workhouses.

THE ROYAL UNIVERSITY OF IRELAND.

THE fifth annual report of this University was laid on the table of the House of Commons on Tuesday last. It states that the total number of persons who presented themselves at the various academical examinations of the University during the year 1886 was 2,933, being an increase of 43 on the year 1885. In the year 1884 nine of the women students were admitted to the degree of Bachelor of Arts, three with honours. In 1885 nine women were admitted to the degree, four having obtained honours. Last year the degree was again conferred upon nine women, four taking honours. Last year also one lady was admitted to the degree of Master of Arts in the department of Mental and Moral Science and Political Economy. At the B.A. degree examination last year Miss Mary Story obtained a first-class exhibition. At the Matriculation examination held last year, 78 presented themselves, being an increase of 10 on the number for 1885; 71 passed, 27 with honours. Referring to the scholarships established by the bequest of the late Dr. H. Hutchinson Stewart, the report states that during the present year of 1887 none of these scholarships can be awarded owing to the failure of the revenue out of which their amounts were payable, which are chiefly derived from rent in landed property. The utmost the Senate can hope is to be able to pay the amounts that will fall due to those who won scholarships in former years. One of these scholarships is awarded for proficiency in the study of mental diseases, another for proficiency in the subjects at present prescribed for the second examination in Medicine in the University, and the third is to be given to the candidate obtaining the highest aggregate of marks in an honour examination in English and in modern literature at the first University Examination in one year and the second University Examination in Arts in the next year. The report directs attention to the absence of proper fittings and equipment for the laboratories, and to the want of an endowment fund for the maintenance of the University buildings. It is again pointed out to the Government that the buildings are public property, and ought therefore to be maintained out of the public exchequer; and that the allocation of the funds under the University Endowment Act leaves no portion available for the maintaining of the structure. Indeed, a fair review of the circumstances for which the University is intended to provide would show that its endowment is too small; and that the efficiency of its operations would be greatly increased if it had larger funds at its command.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

AT the meeting on Thursday, April 28th, the following were admitted Members of the College:—Duncan Burgess, M.B.Camb.; James Calvert, M.D.Lond.; Thomas Johnstone, M.D.Edin.; and Thomas Frederick Pearse, M.D.Brussels.

Licences were granted to 94 gentlemen who had passed the required examinations.

The following Members were elected to the Fellowship:—George Oliver, M.D.Lond.; Robert Cory, M.D.Camb.; Henry Radcliffe Crocker, M.D.Lond.; Frank Buzzard, M.D.Lond.; Robert Saundby, M.D.Edin.; Charles James Cullingworth, M.D.Durham; William Julius Mickle, M.D.Toronto; George Allan Heron, M.D.Glasgow; James Anderson, M.D.Aberdeen.

Communications were received from the students of the Westminster, Charing Cross, and London Hospitals in support of the proposed granting of a degree in Medicine by the two Colleges in combination.

The quarterly report of the Finance Committee was read and adopted.

PRESENTATION.—Mr. Fitzmaurice, L.R.C.P., of Dunning, was recently presented with a handsome polished oak, cylinder writing-table and writing-chair in morocco (Mrs. Fitzmaurice being the recipient of a Russian leather dressing-case) as a token of esteem on the occasion of his leaving Dunning.

THE DUBLIN HOSPITALS COMMISSION REPORT.

We published last week some of the principal recommendations made by the Commissioners in their report, which was only made public on Friday, April 22nd. The Commission was appointed in June, 1885, and held its last meeting in March, 1886; so that, although sixty-five witnesses were examined, the report has been more than a year in course of publication. We have not space to give any adequate abstract of the evidence or of the report itself, but may from time to time comment on certain points in both which may seem to merit notice.

One of the main questions the Commission had to inquire into was that of the Parliamentary grant of £15,850 now made annually to the Dublin Hospitals, and its distribution among them. The future of this grant depends upon the decision which may be arrived at in consequence of the recommendation of the Commission. The House of Industry Hospitals (the Richmond, Whitworth, and Hardwicke) receive the largest share of this grant—namely, £7,600. The surgeons of these hospitals may claim the credit of having, by their persistent and well-founded complaints as to the condition of the Richmond Hospital, induced Earl Spencer to appoint the Commission. The Commissioners recommend that the said hospital be closed and appropriated for the purposes of the North Dublin Union Workhouse, which is overcrowded. The Parliamentary grant to the Meath Hospital (£600), for the support of fever beds; and that to the Cork Street Fever Hospital (£2,500), the Commissioners consider, cannot be defended, since legislation has imposed upon local bodies the responsibility of preventing the spread of infectious disease, and of providing hospital accommodation for such cases. As to the Westmoreland Lock Hospital, which gets £2,600, the Commissioners think it is in the highest degree improbable that Parliament will again consent to place it in the singular position of being the only hospital of its kind which is supported by moneys charged on a vote included in the estimates for civil services. Having reviewed the circumstances of each institution, the Commissioners discuss the hospital question as a whole. They lay stress on the fact that Dublin has too many hospitals, there being no fewer than ten general and nine special institutions of the kind in the city. The hospitals themselves, they assert, are also over-officered, and the mode of appointment to many of them—namely, by purchase—they emphatically condemn.

Touching the income of the hospitals, it is pointed out that, deducting the amount of the Parliamentary grant, the total income of the general hospitals is reduced to about £40,000, of which, including the Corporation grant, scarcely £15,000 a year is derived from permanent sources.

If this income were likely to continue, and were expended upon the maintenance of two or three large institutions, it would be possible to support between 700 and 800 beds which, according to the evidence, would clearly be inadequate. But distributed as the income is at present, it would be rash to assume that this number could be maintained. They therefore state that, under these circumstances it is clear to them that unless the income of the general hospitals in Dublin derived from sources other than the Parliamentary grants, is capable of very considerable expansion, the withdrawal of the latter would be attended with most disastrous consequences. The educational utility of these hospitals is, the Commissioners say, the only ground which can for one moment be admitted as a reason for the continuance of a Parliamentary grant. The argument for this view is so well and strongly put by the Commissioners, that we give it in their own words:

"If the propriety of the State giving assistance to hospitals in the interest of medical education were being considered by us as an abstract question, we should be disposed to express ourselves in favour of such aid being given, on the ground that it is all important to the State as representing the community at large, that the standard of medical knowledge should be raised to the highest possible pitch. And if it were objected to us that the State did not assist the lawyer, or the engineer, or the architect, in acquiring instruction in their professions, we would reply that, in the case of the lawyer most certainly the State did, by establishing and maintaining courts of justice, supply him with the means of acquiring a practical knowledge of his profession. To the student of law the courts of justice play the same part *qud* education, which the hospital does to the student of medicine. It would be possible to acquire a perfect theoretical knowledge of the sciences of law and medicine without such material aids; but if the lawyer has not sat in court and listened to the manner in which cases are handled by the leaders of his profession, his knowledge will not of itself enable him to conduct his case successfully, and so, too, the young surgeon may have acquired from books a perfect knowledge of the anatomy of the human body, but without having walked a hospital his theoretical knowledge will not enable him to perform a successful operation."

The Commissioners therefore recommend that State aid should be continued, and that the annual grants should be commuted for a capital sum to be invested in the names of trustees. The constitution of the Central Board, which it is proposed should have the distribution of the fund contributed by Parliament, was given in last week's Journal, and the Commissioners state that it would be in the highest degree important that the moneys which are now distributed by the Corporation and the Committee of the Sunday Hospital Fund should be allocated upon the same principle as those which they propose for the guidance of the Central Board. If this were possible, a considerable fund would be created, which of itself would go far towards maintaining in each of, say, four large general hospitals, the minimum number of beds—one hundred—required by one of their conditions to entitle a hospital to any share in the distribution of the Parliamentary fund; while the fact that assistance from this general fund was confined to certain institutions would, they think, probably influence the public in their selection of the hospitals to which they were willing to contribute. Thus the smaller institutions which would be unable to comply with the requisite conditions would, in the struggle for existence, die natural deaths.

The Commissioners then proceed to formulate the conditions which should be fulfilled by a hospital in order to entitle it to any share in the distribution of the Parliamentary fund. These are briefly as follows:—

a. The hospital should contain not fewer than eighty beds, and after five years' receipt of the grant the beds should not be fewer than one hundred in daily occupation throughout the year.

b. The hospital should be open for clinical instruction, and not fewer than fifty paying students should be on the books each year.

c. The hospital should be open to persons of all creeds, without distinction, and clergymen of all denominations should be admitted to see patients requiring their ministrations at any hour of the day or night.

d. The staff of the hospital should be appointed without distinction of creed or place of education, or reference to the candidate being connected with any particular university, or medical corporation, or hospital, or the payment of any sum of money, and promotion from the junior to the senior appointments should be recognised as far as may be deemed compatible with the interest of the institution. No member of the staff should hold a similar appointment in any other hospital.

e. Every appointment as junior resident surgeon or physician should be filled up by examination.

f. The hospital shall employ as nurses only such persons as have gone through duly recognised probationary training.

The considerations which are to determine the amount to be given to any one of the hospitals entitled to a share in the distribution of the fund were stated by us last week.

Finally, the Commissioners state that, should the conditions they lay down be accepted, they cannot doubt that the result will be to promote the amalgamation of hospitals, to improve the character of the clinical instruction given in them, to increase the benefit of these institutions to the sick poor, and to diminish the general hospital expenditure in the city.

PROVISION AGAINST SICKNESS, ACCIDENTS, ETC.

The quarterly meeting of the Executive and General Committee of the Medical Sickness, Annuity, and Life-Assurance Society was held on Wednesday, April 13th, at 38, Wimpole Street, Cavendish Square, W. There were present—Dr. de Havilland Hall (in the chair), Mr. J. Brindley James, Dr. A. Rabagliati (Bradford), Mr. Major Greenwood, jun., Mr. Frederick Wallace, Mr. E. Bartlett, Mr. W. Thomas (Birmingham), Dr. J. W. Hunt, Dr. R. Lord, Dr. F. S. Palmer (East Sheen), Mr. W. J. Stephens (Brighton), Dr. J. Pickett, and Mr. E. Noble Smith (Honorary Treasurer). The President (Mr. Ernest Hart) was absent owing to his being abroad, and Mr. S. W. Sibley (Honorary Treasurer) wrote regretting that an important engagement would prevent his attending.

The report for the quarter stated the Society had been very successful during the period, the last three months being probably the most prosperous hitherto experienced. During this time thirty new proposals had been received, and there had not been a single lapse by non-payment.

The amount expended for sickness-pay had been £387 12s., against £475 4s. in the preceding quarter, while the income for this branch

of the Society's work had been £1,211, against £1,122. The number of members sick had been 32, and the periods claimed for 123 weeks 4 days. The claims had been on account of illnesses of a very varied description and duration, four members having been in receipt of sickness-pay during the entire quarter, while, on the other hand, ten claims were each for one week only, and ten others for periods of less than three weeks. Seven claims (over 20 per cent. of the total) were on account of the effects of accidents, seven for colds or affections of the lungs and air-passages, four from affections of the liver, and five from rheumatism. The average sickness-rate was stated to be below that allowed for in the tables, and the reserve savings in this fund alone were about £7,000. Several letters acknowledging the usefulness of the Society had been received, one member just recovered from severe spinal injury owing to an accident writing as follows: "I must say how much I appreciate the regularity of the weekly payments. If medical men did but know the comfort to feel that a *locum tenens* is paid for, and the aid that feeling is to recovery, the number of policies issued would be as many thousands as they are now hundreds."

The annuity branch had received an addition owing to the new rule enabling members, by a comparatively small extra payment, to have the larger proportion of their premiums paid to their representatives in case of death before the age of 65—123 members having converted their contracts to this system. The life-assurance fund also showed an increase, while more than half the 10 per cent. of premium set aside for management had been saved, the net cost paid for the whole executive work of the Society being at the extremely low rate of 3¾ per cent. of its premium income—economy without parallel in the history of insurance.

At this time—the close of the third financial year of its existence—the total worth of the Society was stated to be £16,007 12s. 8d., of which £5,324 3s. 5d. had been accumulated in the first year, £4,904 5s. 10d. in the second year, and £5,779 3s. 5d. in the third year, closing on March 31st.

Full particulars as to the Society, with rates, tables, and forms for proposal and medical examination, will be at once forwarded (post free) to registered medical practitioners or licentiates of dental surgery on application to the Secretary, Mr. C. J. Radley, 26, Wynne Road, Brixton, London, S.W.

NOTES FROM THE SIXTEENTH CONGRESS OF THE GERMAN SURGICAL SOCIETY, AT BERLIN, APRIL 13th-16th, 1887.

I.

Effect of Artificial Respiration on the Circulation.—Professor KRASKE (Freiburg) spoke of artificial respiration and artificial motion of the heart. He related a case in which tracheotomy was performed for diphtheria on a boy, aged 5 years, after the respiration and cardiac movements had ceased; about ten minutes after the last breath, artificial respiration was commenced, and seemed at first to be successful, as the lips and cheeks reddened and the enlarged pupils contracted. But finally the attempt had to be abandoned as useless; the artificial respiration by the Sylvester method produced, it was thought, a certain movement of the blood in the dead body. Professor Kraske had made some experiments on this point. Having introduced a coloured liquid into the jugular vein of dogs, he found that it was possible to drive it on through the blood-vessels by artificial respiration alone. Similar experiments on human bodies were also successful. These observations are of a certain importance in connection with the treatment of the apparently dead, and may prove useful to the operator, especially in cases of chloroform syncope, when it is a matter of urgency, not only to free the blood in the lungs from chloroform by aeration, but also to impel the aerated blood towards the heart in the hope of rousing that organ to renewed activity. By a suitable modification of the method, as described by the speaker, it would seem to be possible to act on the heart itself in a more direct manner. In the discussion some similar cases were mentioned. One speaker dwelt on the advantage in chloroform-poisoning of putting the head in a dependent position, the action of the chloroform being greater the higher the head is held.—Dr. LANGENBUCH (Berlin) believed that in desperate cases it was allowable to keep up the movements of the heart by direct introduction of the (aseptic) hand into the opened pericardium. Most of those present, however, thought this a risky method of treatment, though Dr. Langenbuch maintained that, with efficient asepsis, the proceeding would not be dangerous to life.

Etiology of "Erysipeloid."—Dr. ROSENBACH (Göttingen) said that he had succeeded in cultivating a micro-organism in a pure state from cases of "erysipeloid" disease; he had satisfied himself that it was neither a bacillus nor a coccus. It occurred in closely-woven threads of very different length, some straight, others spiral, or irregularly wound. The branched appearance presented by the threads was an optical delusion. The micro-organism was most nearly allied to *Cladothrix* (Cohn), but it was not *Cl. dixotoma*. Persons engaged in trades which led them to handle putrefying animal substances, as, for instance, cooks, butchers, tanners, fish and game sellers, and cheese-dealers, were most liable to infection. Commonly the disease appeared on the hands. He had made some experiments by inoculation on himself; the disease was not at all dangerous.

Repeated Gastrotomy and Laparotomy.—Dr. STELZNER (Dresden) showed a variety of objects removed from the stomach and bowels of a man who had swallowed them in order to be transferred from the prison to the infirmary. He had repeated this folly several times, the operations, laparotomy or gastrotomy, being always successful.

Attempted Removal of Needle from the Heart.—Dr. STELZNER also related a case in which an attempt was made to remove a needle from the right ventricle of the heart. A student of the Polytechnic School had endeavoured to kill himself by driving a needle into his heart. Though the needle entered the heart, the attempt failed. The needle could be distinctly felt. The pericardium was opened, but the needle was not found; a second operation was undertaken, and the operator was successful in seizing the needle, but failed to extract it, so that it slipped completely into the heart, where it could be felt. The operation having been abandoned at this stage, the patient made a good recovery.

THE JUBILEE OF THE LONDON UNIVERSITY.

IN moving a resolution at the meeting of Convocation of the University of London, on April 19th, summoned to consider the best method of celebrating the jubilee of the University of London, Dr. QUAIN gave some statistics and recorded some historical facts of considerable interest. He said: I have undertaken a pleasing duty, inasmuch as I was one of the early graduates of the University, having passed in the first medical examination, and having witnessed the early difficulties that had assailed the University; I have participated in its progresses, and I feel fortunate in being now able also to take part in its successful jubilee. No doubt in the earliest days of the existence of the University the feelings of the older universities and corporations were excited against a new university founded on principles which threatened to interfere with their own customs and associations. These feelings, which were sources of difficulty and embarrassment in the early days of our institution, had happily long since subsided, and those older institutions were now willing to recognise the elevated position our University had attained. An objection had been raised that it was premature to celebrate the jubilee of the University. But the age of an institution may be measured rather by the progress it had made than by the years of its existence. If we apply this test to our University, we may feel fully justified in holding our present celebration. During the first decade of the existence of the University, the number of persons who matriculated was 763, and during the same period 522 obtained degrees of various kinds. During the last decade the numbers reached 8,469 matriculated and 2,375 graduated. Summing up the results of the proceedings of the University during those fifty years, we find that the total number of persons who presented themselves for examination was 58,962, and that altogether 18,832 persons matriculated, and 6,489 obtained degrees, making a grand total of 25,321 graduates and undergraduates.

Independently of these statistical results which record our successful progress, we must recognise the important influence exerted upon the other universities and colleges and various educational institutions of the country. The University has been so fortunate as to take its place in the van of literary and scientific progress, as, for instance, has been well illustrated in the foundation of degrees in science, literature, and other subjects, more especially in the science of medicine.

We also see evidence of the great progress of our University in the position held by its graduates. As statesmen, as lawyers, as men of science, their rank is everywhere conspicuous. We recognise the names of our graduates amongst the members of various Cabinets. We find on the record of distinguished lawyers a Lord Chancellor, a Master of the Rolls, Lords Justices, and other Judges. In the medical profession we recognise most distinguished members. Our graduates hold rank as Presidents of the great Medical Corporations, the highest appointments at Court, and in hospitals and public institutions. The

names of our graduates are also conspicuous amongst men of science, and not a few are distinguished ministers of religion—we can even reckon amongst them the name of a bishop! Under these circumstances I do not feel called upon to apologise for the proposal to celebrate the jubilee of an institution, the brief but brilliantly successful career of which may be looked back upon with honest pride.

Various methods have been suggested for celebrating this jubilee. One has been a record of its history, with brief references to the lives of those who have been prominent amongst us during the last fifty years. Others have suggested a banquet and the usual orations, of which little would be remembered save, perhaps, the indigestion that it caused. But let us remember that, contemporaneous with this celebration, happily, is the jubilee of the Queen, one of whose first acts was to grant us a Charter, reserving to herself the office of Visitor. Her Majesty honoured the opening of the building in which we are assembled by her presence, and has lately conferred on us the high privilege of free access to the throne. How, then, can we better celebrate our jubilee than by placing within our halls a statue or like memorial of our most gracious Queen?

The history of our University has been co-incident with a reign of unexampled brilliancy, during which intellectual activity has been at its highest point of development, and during which mind has reigned more supremely over matter than at any previous period of human history. Nothing could, therefore, be more appropriate than a mode of commemoration which would link together these two ideas—the most illustrious reign in English history of a great Sovereign, alike conspicuous for domestic virtues and the highest and noblest political principles; and the contemporary successful career of an important University, which that Sovereign was graciously pleased to found.

Dr. Quain concluded by moving the resolution, which was adopted unanimously.

INTERCOLONIAL MEDICAL CONGRESS, ADELAIDE, 1887.

At a general meeting of subscribers to the Congress Fund, held at the Adelaide Hospital on December 11th, 1886, Dr. Verco was elected President. An executive committee of twenty members was appointed, with power to add to their number, who were empowered to carry out all arrangements for the conduct of the Congress. The Committee has since been engaged in carrying out its work, in which it has been encouraged by the ready promises of support from many correspondents in the different colonies. Notwithstanding the great distances to be traversed by the majority of intending visitors, it is hoped that the federal nature of the gathering, and the opportunities it affords for the discussion of subjects common to the interests of practitioners throughout Australasia, will combine to secure a large and representative attendance. The governors of seven colonies have, it is stated, approved the project, and authorised the Committee to place the Congress under their patronage, while evidence has already been afforded of the goodwill and active co-operation of the medical associations in the matter. The business of the Congress will be carried on in sections based on the following subjects: Anatomy and Physiology, Pathology and Morbid Anatomy, Medicine, Surgery, Gynæcological Medicine and Surgery, Diseases of Children, Mental Diseases, Ophthalmology, Laryngology and Otology, Dermatology, Materia Medica, Therapeutics and Pharmacology, Hygiene, State Medicine. The meetings will be held in the buildings of the Adelaide University, and will extend from Tuesday, August 30th, to Friday, September 2nd, inclusive. An evening reception of members and guests will be held on Monday, August 29th, at the University. Excursions will be made to objects of interest in the neighbourhood of Adelaide, and there will be several gatherings of a social nature, under the direction of the Reception Committee, which is completing arrangements for reduced rail and steamboat fares, and for the entertainment of visitors. A payment of one guinea will constitute membership, and will entitle each member to a copy of any *Transactions* which may be published. The following is a list of the officers. *President:* J. C. Verco, Esq., M.D.Lond., F.R.C.S. *Vice-Presidents:* J. Bancroft, Esq., M.D., etc., President of the Medical Society of Queensland: The Hon. John Mildred Creed, M.D., M.L.C., President of the New South Wales Branch of the British Medical Association; T. W. E. Dawson, Esq., M.R.C.S., etc., President of the Auckland Medical Association, N.Z.; T. M. Hocken, Esq., M.R.C.S., etc., President of the Medical Association of New Zealand; Alex. Johnston, Esq., M.D., etc., President of the Wellington Medical Association, N.Z.; Cosby W. Morgan, Esq., M.D., etc., President of the Newcastle Medical Society, N.S.W.; Samuel A. Patrick, Esq., M.D., etc., President of the Canterbury Medical Society, N.Z.; Sir Alfred Roberts, M.R.C.S., etc., President of the Medical Section of the Royal Society, Sydney; J. Davies Thomas, Esq., M.D., etc., President-Elect of the South Australian Branch of the British Medical Association; John Williams, Esq., M.D., etc., President of the Victorian Medical Society; J. Eardley Willmott, Esq., M.D., etc., President of the Victorian Branch of the British Medical Association. *Chairman of the Reception Committee:* E. C. Stirling, Esq., M.D., F.R.C.S., M.P. *Secretary of Reception Committee:* Melville R. H. Jay, Esq., M.R.C.S., etc. *Treasurer:* W. T. Hayward, Esq., M.R.C.S., etc. *Secretary:* B. Poulton, Esq., M.D., M.R.C.S.

The last day for receiving notice of contributions is June 30th, by which date an abstract of each paper must be handed in to the Secretary.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1887.

ELECTION OF MEMBERS.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Meetings of the Council will be held on July 13th and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, June 23rd and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

Francis Fowke, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

Inquiries are being pursued on the following subjects

Diphtheria, The Etiology of Phthisis,

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on Old Age, and on the Connection of Disease with Habits of Intemperance, are now closed.

Reports are in preparation upon the Inquiries made into Acute Rheumatism, Diphtheria, and Habits of Intemperance, a full Report on Old Age, and a Supplementary Report on Puerperal Pyrexia. All the above will be published in the Journal as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the Geographical Inquiry are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 429, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

South-Western Branch.—Preliminary Notice.—The annual meeting of the Branch will be held at the Athenæum, Plymouth, on Wednesday, May 18th, 1887, under the presidency of Paul Swain, Esq. Members who propose to read papers, or to bring forward communications or motions, are requested to intimate the same to the Honorary Secretary without delay.—P. Maury Deas, Honorary Secretary.

Southampton District: Southern Branch.—The next meeting of this District will be held at the residence of Dr. Lake, 18, East Park Terrace, on Tuesday, May 3rd, at 8 P.M. Business: Election of officers; Examination of accounts. A paper will be read by Brigade-Surgeon Godwin, M.S., Assistant Professor of Surgery, Army Medical School: Notes of Surgical Cases.—Theoph. W. Trend, M.D., Honorary Local Secretary.

Dorset and West Hants Branch.—The next meeting will be held at Blandford on Wednesday, May 4th, 1887. The Business Meeting will be held at the Crown Hotel at 3.45 P.M. Agenda: Secretaries' accounts for 1886. Election of Branch Council; seven members. The following members of the Branch have been proposed and seconded: George Henry Batterbury, M.D., Wimborne; Christopher Childs, M.B., Weymouth; Alfred John Henry Crespi, Wimborne; Decimus Curme, Child Okeford; James Davison, M.D., Southborne; William Frazer, M.D., Bournemouth; William Ernest Good, Dorchester; Frederick William G. Griffin, M.B., Weymouth; Robert Godolphin Long, Stalbridge; Peter William Macdonald, M.B., Dorset County Asylum; Philip William G. Nunn, Bournemouth; William Rendall, Maiden Newton; William Vicary Snow, M.D., Bournemouth. Election

of a Representative of the Branch on the Council of the Association. Election of New Members of the Branch. Candidates: Aubrey Blakeston, Wareham; William Clibborn, M.D., Bridport; Arthur Nathaniel Davis, Dorset County Asylum; John Francis Dixon, Westbourne; Edwin Hyla Greves, M.D., Bournemouth; Walter Benger Kendall, Dorchester; David James Lawson, M.B., Portland. Place and date of the summer meeting. Communication respecting the payment of travelling expenses of Branch representatives to the four quarterly meetings of the Council of the Association in London. Address by the President. Communications: Dr. Snow: On the Use of Oxygen in Medicine. Surgeon-Major Cotter, M.D.: Case. Mr. Lawton: Specimen: Horny Growth removed from Lower Lip. 2nd Case. Mr. Lawton: Specimen: Melanotic Papillomata. Dr. McLean: The Epidemic of Typhoid in Portland during the months of September, October, and November, 1886, with remarks by Dr. Childs. Mr. Parkinson: An Epidemic of Infectious Pneumonia. Mr. W. E. Good: Case of Compound Comminuted Fracture of Humerus. Patient to be shown; specimen. Mr. W. E. Good: Specimen: Epithelioma of Tongue. Mr. W. E. Good: Specimen: Strumous Abscess in Testicle. Dr. Griffin: Instrument-case for Watch-pocket. Dr. Griffin: Old Illustrated Work on Anatomy. Published at Venice 1627. Mr. J. R. Philpots: Case of Enchondroma; patient to be shown. Discussion: On Hypertrophy of the Prostate. Dinner at 6 P.M.; charge, 6s. each, without wine. Members intending to be present are requested to communicate with Dr. E. M. Spooner, Blandford, on or before Monday, May 2nd.—WILLIAM VAWDREY LUSH, M.D., Weymouth, C. H. WATTS PARKINSON, Wimborne, Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH: SOUTH LONDON DISTRICT.—A meeting of members of the Branch residing on the south side of the Thames will be held by permission of the Treasurer of St. Thomas's Hospital, at the committee-room of the Hospital (Westminster Road entrance) on Thursday, May 5th, at 5 P.M., to re-organise the District Society, and to appoint a Secretary thereof. Dr. T. Acland and Mr. Ballance will together give a demonstration of Bacteriological Specimens. Dr. J. S. Bristowe, F.R.S., President of the Branch, will preside. All visitors will be welcome.—W. CHAPMAN GRIGG, M.D., and GEORGE EASTES, M.B., Honorary Secretaries to the Metropolitan Counties Branch.

METROPOLITAN COUNTIES BRANCH: WEST LONDON DISTRICT.—A meeting will be held at the Harbury School Rooms, Ladbroke Road, Notting Hill (Kensington Park Road entrance), near Notting Hill Gate Station, on Friday next, May 6th, at 5.30 P.M., to reorganise the District Society, and to appoint a Secretary thereof. Mr. C. B. Keetley will read a paper On the Management and Treatment of Umbilical and Ventral Hernia. Dr. J. S. Bristowe, F.R.S., President of the Branch, will preside. All visitors will be welcome.—W. CHAPMAN GRIGG, M.D., and GEORGE EASTES, M.B., Honorary Secretaries to the Metropolitan Counties Branch.

EAST SURREY DISTRICT: SOUTH-EASTERN BRANCH.—A meeting of this district will be held at the Greyhound Hotel, Croydon, on Thursday, May 12th, at 4 P.M. T. A. Richardson, Esq., of Croydon, in the chair. Dinner at 6 P.M.; charge 7s., exclusive of wine. Papers, etc., have been promised by Mr. H. Power (On Squint), Dr. Horrocks, Mr. Howard Marsh (On the Association of Suppuration with Malignant Disease), Dr. Duncan, Mr. Richardson, and Mr. A. Matthey (Pathological specimens, etc.). Members desirous of exhibiting or reading notes of cases are invited to communicate at once with the Honorary Secretary, P. T. DUNCAN, M.D., Croydon.

SOUTH-INDIAN BRANCH.

THE annual meeting was held at the Central Museum, Madras, on January 25th, 1887, the PRESIDENT in the chair.

The minutes of the previous meeting were read and confirmed.

Financial Statement.—The Honorary Treasurer then submitted a statement of the accounts of the Branch for the past year, showing a balance in favour of the Branch of Rs. 1224-2-3. Proposed by Mr. SIBTHORPE and seconded by Mr. HACKETT that Mr. Fox and Mr. Drake-Brockman be asked to audit the accounts for the past year. Carried unanimously.

Alteration in By-Laws.—The following alterations of the by-laws proposed by the Committee were then put to the meeting, and carried unanimously:—1. To alter By-Law VI by inserting after Rs. 15 per annum, "or such other sum as may be fixed at the annual general meeting of the Branch in January of each year." 2. To alter By-Law VII so that it shall read as follows: "The subscription to the Branch, exclusive of the subscription to the Parent Association, shall be for the present Rs. 8 per annum, which may be paid quarterly in advance."

Subscription for Current Year.—It was then proposed by Mr. BRANFOOT, seconded by Mr. HACKETT, and carried unanimously, that the subscription under By-Law VI be Rs. 17-8-0 for the present year.

Investment.—Proposed by Mr. SIBTHORPE, and seconded by Mr. DRAKE-BROCKMAN, and carried unanimously, that the Honorary Treasurer be authorised to invest Rs. 1,000 in Government paper in the joint names of the President and Treasurer.

The following members were then elected as office-bearers for the year. *President:* Surgeon-General Bidie, M.B., C.I.E. *Vice-President:* Surgeon-Major E. F. Drake-Brockman, F.R.C.S. *Committee:* Brigade-Surgeon Sibthorpe, F.K.Q.C.P.; Brigade-Surgeon Hunt, Surgeon-Major Mackinnon, Surgeon Major Branfoot, M.B.; Surgeon Dymott, M.B. *Provisional Members:* Surgeon-Major Hackett, Mr. H. Leslie Ansted. *Honorary Treasurer:* Surgeon-Major C. J. McNally, M.D. *Honorary Secretary:* Surgeon-Major H. Allison, M.D.

The President then delivered an address, which will be published shortly.

PROCEEDINGS OF COUNCIL.

AT a meeting of the Council, held in the Council Room of the New Offices, 429, Strand, W.C., on Wednesday, April 13th, 1887, Present,—

Sir B. WALTER FOSTER, M.D., M.P., President of the Council, in the chair,

Mr. C. Macnamara, Treasurer, London
Dr. G. B. Barron, Southport
Dr. M. Martin de Bartolomé, Sheffield
Dr. T. Bridgwater, Harrow-on-the-Hill
Dr. A. Carpenter, Croydon
Surgeon-General W. R. Cornish, London
Dr. J. W. Ward Cousins, Portsmouth
Dr. G. W. Crowe, Worcester
Dr. A. Davidson, Liverpool
Dr. J. L. H. Down, London
Dr. C. E. Glascott, Manchester
Dr. Bruce Goff, Bothwell
Dr. W. C. Grigg, London
Dr. James Hardie, Manchester
Dr. Holman, Reigate
Mr. T. Vincent Jackson, Wolverhampton
Mr. T. R. Jessop, Leeds
Mr. H. R. Ker, Halesowen
Dr. W. G. V. Lush, Weymouth
Mr. F. Mason, Bath
Dr. F. Needham, Gloucester
Dr. C. Parsons, Dover
Dr. R. Saundby, Birmingham
Dr. A. Sheen, Cardiff
Mr. S. W. Sibley, London
Dr. E. M. Skerritt, Clifton
Dr. W. Strange, Worcester
Mr. T. Sympson, Lincoln
Mr. J. Taylor, Chester
Dr. T. W. Trend, Southampton
Mr. F. Wallace, London
Dr. E. Waters, Chester
Mr. C. G. Wheelhouse, Leeds
Dr. A. Winkfield, Oxford

The minutes of the last meeting having been printed and circulated, and no objection having been made to them, were signed as correct.

Mr. WHEELHOUSE presented the portrait of the late Dr. Chadwick, which had been given by the family.

Resolved: That on behalf of the Association the best thanks of the Council be given to the family of the late Dr. Chadwick for their beautiful and intrinsically valuable gift of the portrait, which is regarded by the Council as an admirable likeness, and which while adorning the walls of the Council Chamber will also keep ever before his colleagues the memory of one of their most beloved members, and will serve to remind them of the gentleness, the urbanity, and the substantial wisdom of one upon whose sound judgment the Council had learned, especially in times of perplexity or difficulty, to place great confidence and reliance.

The proposed alteration of by-laws of the South Indian Branch of the British Medical Association, proposed by the Committee and passed unanimously at the annual meeting held at Madras on January 28th, 1887, were then considered.

I. To alter By-law No. VI, by inserting after "Rs. 15 per mensem," the following words: "or such other sum as shall be fixed at the annual general meeting of the Branch in January of each year."

II. To alter By-law VII, so that it shall read as follows: "The subscription to the Branch, exclusive of the annual subscription to the parent Association, shall be for the present Rs. 8 per annum, which may be paid quarterly in advance."

With reference to No. I, it was then proposed, seconded, and carried unanimously that the subscription for the present year be fixed at Rs. 17 annas 8. H. ALLISON, M.D., Hon. Secretary.

Resolved: That the proposed alteration in the by-laws of the South Indian Branch be received and approved by the Council.

Read letter from Mr. Keegel, Colombo.

10, Mackenzie Place, Colombo, Ceylon, March 4th, 1887.

To the General Secretary of the British Medical Association.

DEAR SIR,—1. In terms of a resolution adopted at a meeting of the members of the medical profession resident at Colombo, held at the Colonial Medical Library here, on the 26th ultimo, I have the honour to forward the annexed proceedings for the information of the Council of the British Medical Association, and to request the favour of the early approval of the Council for the formation of a Branch of the Association in this island.

2. I have also to state that subscriptions due for the current year by gentlemen who are already members of the British Medical Association, who are resident in Ceylon, will be collected and forwarded to you at once.

3. I request you will be good enough to favour me with fifty voting papers for the election of members.

4. I annex to the proceedings a list of the members of the British Medical Association resident in Ceylon, and I have every reason to believe that all the resident qualified medical practitioners in this island will, on the formation of the Branch, seek election to membership.

5. I also annex an enclosure on certain microscopic specimens of the *anchylostoma duodenale*, as exhibited by Dr. Macdonald at the close of the preliminary meeting.—I am, dear Sir, yours faithfully,

HENRY KEEGEL, L.R.C.P.Ed.,
Assistant Colonial Surgeon and Honorary Secretary.

Resolved: That the Council will gladly recognise the addition of a Branch in Ceylon, upon receiving from the members of the proposed Branch a copy of the proposed by-laws and constitution for approval, and a report of the formal meeting of members proposing to form such Branch.

Resolved: That 156 of the 158 candidates whose names appear on the circular convening the meeting be and they are hereby elected members of the British Medical Association.

Resolved: That the minutes of the Journal and Finance Committee of to-day's date be approved, and the recommendations contained therein carried into effect.

The minutes of the Journal and Finance Committee contain the report upon the examination of the quarterly accounts, amounting to £7,597 7s. 6d.; the Auditors' quarterly report, and a further vote of £1,500 to complete alterations and furnishing of new offices, and the financial statement for 1886.

Resolved: That the financial statement for the year ending December 31st, 1886, as certified by the auditors as correct, be received, approved, and published in the JOURNAL, in accordance with By-law 33 (see p. 902).

Resolved: That the minutes of the Premises Committee of February 1st and 18th last, and the 12th instant, be approved, and the recommendations contained therein carried into effect.

The minutes of the Premises Committee contain the particulars of estimates for furnishing new offices, and other details, with report upon the completion of the alterations by Dr. Alfred Carpenter, and a request for a further grant of money.

Resolved: That the minutes of the Jubilee Committee of March 22nd last be approved, and the recommendations contained therein carried into effect, with the exception of the proposal for a Jubilee dinner.

The minutes of the Jubilee Celebration Committee contain proposed address to Her Most Gracious Majesty the Queen upon the completion of her Jubilee Year, and a suggestion that it be celebrated by a dinner.

Resolved: That the President of the Council, the Treasurer, and Dr. Holman be appointed as Sub-committee to draw up the annual report.

Resolved: That the minutes of the Parliamentary Bills Committee be received and approved.

Report of meeting of Parliamentary Bills Committee see page 519.

Resolved: That the minutes of the Habitual Drunkards Committee be received and approved.

The minutes of the Habitual Drunkards Committee contain proposals for amending the Habitual Drunkards Act.

Resolved: That the minutes of the Scientific Bills Committee of the 12th instant be received and approved, and the recommendation contained therein carried into effect.

The minutes of the Scientific Grants Committee contain the recommendation of the appointment of Dr. Sidney Martin to the vacant scientific scholarship, he proposes to carry on researches on the vegetable albumoses, especially with relation to their alleged toxic action.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIFTH ANNUAL MEETING.

THE fifty-fifth Annual Meeting of the British Medical Association will be held at Dublin, on August 2nd, 3rd, 4th, and 5th, 1887.

President: Withers Moore, M.D., F.R.C.P., Senior Physician to the Sussex County Hospital, Brighton.

President-elect: John T. Banks, M.D., D.Sc.(Hon.), F.K.Q.C.P.I., Regius Professor of Physic in the University of Dublin.

President of the Council: Sir B. Walter Foster, M.D., F.R.C.P., Professor of Medicine in Queen's College, and Physician to the General Hospital, Birmingham.

Treasurer: C. Macnamara, F.R.C.S., Surgeon to the Westminster Hospital, London.

An Address in Medicine will be delivered by W. T. Gairdner, M.D., F.R.C.P.Ed., Professor of Medicine in the University of Glasgow.

An Address in Surgery will be delivered by Edward Hamilton, M.D., Fellow and Professor of Surgery in the Royal College of Surgeons in Ireland.

An Address in Public Medicine will be given by the Reverend S. Haughton, M.D., F.R.S., D.C.L., Senior Fellow, Trinity College, Dublin.

The scientific business of the meeting will be conducted in eight Sections and two Subsections, as follows, namely:

MEDICINE.—*President*, William Moore, M.D. *Vice-Presidents*, H. C. Bastian, M.D., F.R.S.; J. Magee Finny, M.D. *Honorary Secretaries*, T. Gilbart Smith, M.D., 68, Harley Street, Cavendish Square, London, W.; C. J. Nixon, M.D., 2, Merrion Square, Dublin.

SURGERY.—*President*, Sir George H. Porter, M.D. *Vice-Presidents*, Alexander Ogston, M.D.; John Fagan, F.R.C.S.I. *Honorary Secretaries*, W. Thomson, M.D., 34, Harcourt Street, Dublin; R. J. Godlee, F.R.C.S.Eng., 81, Wimpole Street, London, W.; C. B. Ball, M.D., 16, Lower Fitzwilliam Street, Dublin.

OBSTETRIC MEDICINE.—*President*, A. V. Macan, M.B. *Vice-Presidents*, T. More Madden, M.D.; A. L. Galabin, M.D. *Honorary Secretaries*, Wm. J. Smyly, M.D., 56, Fitzwilliam Square, Dublin; Wm. Duncan, M.D., 6, Harley Street, Cavendish Square, London, W.

PUBLIC MEDICINE.—*President*, Sir Thomas Crawford, M.D., K.C.B. *Vice-Presidents*, John S. Taylor, M.D.; R. Thorne Thorne, M.D. *Honorary Secretaries*, John Wm. Moore, M.D., 40, Fitzwilliam Square West, Dublin; John F. W. Tatham, M.D., Town Hall, Salford.

PSYCHOLOGY.—*President*, J. R. Gasquet, M.B. *Vice-Presidents*, Frederick Needham, M.D.; Oscar T. Woods, M.D. *Honorary Secretaries*, Conolly Norman, F.R.C.S.I., Richmond District Lunatic Asylum, Dublin; T. Lyle, M.D., Rubery Hill Asylum, Bromsgrove, Worcestershire.

PATHOLOGY.—*President*, Samuel Gordon, M.D. *Vice-Presidents*, A. W. Foot, M.D.; David J. Hamilton, M.D. *Honorary Secretaries*, Theodore D. Acland, M.D., 7, Brook Street, Grosvenor Square, London, W.; Henry T. Bewley, M.B., Willow Park, Booterstown, Co. Dublin.

THERAPEUTICS AND PHARMACOLOGY.—*President*, Wm. Whitla, M.D. *Vice-President*, Matthew Charteris, M.D.; D. J. Leech, M.D. *Honorary Secretaries*, Chas. Y. Pearson, M.D., 42, King Street, Cork; Michael McHugh, M.B., 25, Harcourt Street, Dublin.

OPHTHALMOLOGY.—*President*, H. R. Swanzy, M.B. *Vice-Presidents*, D. Argyll Robertson, M.D.; Priestley Smith, M.R.C.S.Eng. *Honorary Secretaries*, A. H. Benson, M.B., 42, Fitzwilliam Square, Dublin. A. W. Sandford, M.D., 13, St. Patrick's Place, Cork.

SUBSECTIONS.

OTOLOGY.—*Chairman*, E. Woakes, M.D. *Vice-Chairman*, J. B. Story, M.B. *Honorary Secretary*, D. D. Redmond, L.R.C.S.I., 14, Harcourt Street, Dublin.

LARYNGOLOGY AND RHINOLOGY.—*Chairman*, W. H. MacNeill Whistler, M.D. *Vice-Chairman*, Kendal Franks, M.D. *Honorary Secretary*, R. A. Hayes, M.D., 56, Merrion Square South, Dublin.

Local Honorary Secretary.—George F. Duffey, M.D., 30, Fitzwilliam Place, Dublin.

TUESDAY, AUGUST 2ND, 1887.

9.30 A.M.—Meeting of Council.
10 A.M.—Service at the Roman Catholic Cathedral.
11.30 A.M.—First General Meeting. Report of Council. Reports of Committees; and other business.
4 P.M.—Choral Service at St. Patrick's Cathedral.
8.30 P.M.—Adjourned General Meeting from 11.30 A.M. President's Address.

WEDNESDAY, AUGUST 3RD, 1887.

9.30 A.M.—Meeting of Council.
10.30 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Second General Meeting. Address in Medicine.
9 P.M.—Soirée given by the President of the Association and by the Dublin Branch.

THURSDAY, AUGUST 4TH, 1887.

9.30 A.M.—Meeting of Council.
10.30 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Third General Meeting. Address in Surgery.
7 P.M.—Public Dinner.

FRIDAY, AUGUST 5TH, 1887.

10 A.M. to 1.30 P.M.—Sectional Meetings.
3 P.M.—Concluding General Meeting. Address in Public Medicine.
4 to 6 P.M.—Garden Party.

SATURDAY, AUGUST 6TH, 1887.

Excursions.

ANNUAL MUSEUM.

THE Annual Museum will be held on August 2nd, 3rd, 4th, and 5th.

The Museum will be arranged in the four following Sections, and intending exhibitors are requested to communicate with the Secretary of the Section or Sections in which they propose to exhibit.

SECTION A.—Food and Drugs. (Honorary Secretary, F. J. B. Quinlan, M.D. Univ. Dub., 29, Lower Fitzwilliam Street, Dublin.)

SECTION B.—Recent Books, Instruments, and Appliances—Medical, Surgical, and Electrical. (Honorary Secretary, John Lentaigne, F.R.C.S.I., 29, Westland Row, Dublin.)

SECTION C.—Anatomical and Pathological Specimens and Drawings, Microscopes and Microscopical Preparations. (Honorary Secretary, Alex. B. McKee, M.B. Univ. Dub., Royal College of Surgeons, Dublin.)

SECTION D.—Hygienic and Sanitary Appliances. (Honorary Secretary, H. C. Tweedy, M.D. Univ. Dub., 2, Gardiner's Row, Dublin.)

Particulars should be supplied to the Secretaries of the objects proposed to be exhibited and the amount of space required. No showcases will be allowed.

As it is intended to print a catalogue, with appendix of advertisements, it is requested that inquiries be addressed to the Secretaries as early as possible.

Chairman of Museum Committee—Wm. Thornley Stoker, F.R.C.S.I., 16, Harcourt Street, Dublin. Vice-Chairman—D. J. Cunningham, M.D., 69, Harcourt Street, Dublin.

FRANCIS FOWKE, *General Secretary.*

SPECIAL CORRESPONDENCE.

A WINTER TRIP TO "THE FORTUNATE ISLANDS."

II.

The landing at Madeira.—Ascent to the Mount.—Tobogganing.—Climate of Madeira.—The History of Tenneriffe: its Classic Story: its Geographical Advantages.—The Guanches.—Plato's "Atlantis."

MR. ERNEST HART writes under date of March 23rd:

We have a few hours to spare while the ship is discharging cargo at Madeira. We utilise them by a hurried visit to the island. The landing at Madeira is not always free from unpleasing excitement. The harbour is ill-protected; a new breakwater is promised; meanwhile, the ship cannot approach the shore; the tossings of the little boat, which lies bumping below the ship-ladder, and the nervous jump which they necessitate, are trying to weak nerves, especially to those of ladies, who have an awkward habit of holding on to the ship's rope just when they should let it go, after stepping into the boat. However, we are favoured this time with a moderate roll only, and are safely landed through the surf by experienced boatmen, after the approved Madeira fashion—approaching obliquely to the edge of the surf, and suddenly beaching the boat at a suitable moment stern forwards, when stalwart watchers, knee-deep in the surf, seize and drag it to the shore, and hitch it on to a beam; a yoke of oxen, well-trained to the manœuvre, drag it quickly up the shelving ground, and we jump over the side on to *terra firma*. A *carro*, a characteristically-decorated double sledge on runners, gaily tinted, curtained, and cushioned, awaits us; it is drawn by a pair of fine oxen up the steep and slippery street, characteristic of an island in which there is no wheeled conveyance (as there would be no use for it), and we enter the well-appointed hotel. Welcome are the pleasant terraces, the cool saloons, the gardens glowing through all the winter with roses, geraniums, and all our summer flowers; and the air laden with flower-perfumes. The ripe loquats (Japanese medlars), silver bananas, and freshly picked oranges at table remind us that we are in midsummer latitudes. Without losing time, we mount our horses, and clatter in a noisy and joyful cavalcade up the steep streets, and climb the precipitous road leading to the convent on the mount. The descent is to be effected after a unique fashion. It is *coza de Madeira*—special to the island. Two of the ladies prefer to make the ascent in hammocks, as having the character of a more purely local luxury. The hammock-bearers are picturesque looking fellows, with dusky skin and gleaming black eyes, dressed in white linen with gaily-coloured scarves. We climb and canter as fast as our hardy and sure-footed little steeds will carry us, up through the narrow streets of white-washed and flat-roofed houses, past terraces and vineyards; overlooking the *quintas* and villas of the wealthier inhabitants, past plots of sugar-cane and banana, towering laurels and climbing roses, looking down craggy ravines and across volcanic mountain peaks which please the eye and tempt the imagination. We reach the convent church on the mount, after climbing nearly 1,800 feet, and enjoy the distant view of mountains, gorges, and gardens, and below, surrounding all, the sea. Funchal nestles sheltered in its humid hollow. Then we all prepare to descend by the Madeira fashion of tobogganing. The horses have been sent away, and now we all seat ourselves in cars, shaped like huge red-cushioned, cane arm-chairs mounted sleighwise on hard wood runners; three of us in a sleigh. Behind each car are two bare-footed men, holding each a cord attached to the hinder end of each runner; another at the side holds a rope attached to the front end. We are all seated, a party of fifteen. We set off at racing pace down the steep paved roads, the inclination of which is about 45°. The gentlemen fold their arms with resolute and anxious composure; the ladies set their teeth, determined not to shriek. The cars come rushing down the narrow streets, paved with smooth, slippery stones; the men guiding them with marvellous dexterity, now hanging on the cars, now planting one foot on the ground, and sliding along full speed with the impulse of the weight of the car down the descent; then striking out with the foot to steer it; now hanging back and guiding the car, as it runs full tilt towards a wall, over which it threatens to dash into the sea, directing it by a sharp, dexterous tug round the corner; changing at every minute their attitude and their pressure, but rushing always at railway speed down slopes, round angles and zig-zags, to avoid rough obstacles, or to leave untouched passers-by, men and animals, who, at the sight of the descending *carros*, range themselves under doorways or flat against the walls, to escape the avalanche of cars and men. A false step, a broken rope, or an error in direction might mean broken bones. But we are assured that accidents very rarely happen. So down we go with all the excitement of accompanying laughter, the cries of the guides, the shouts of children and mule-drivers, who wilfully seem to brave impending destruction as we come thundering down towards them, and, at the last moment, gleefully flatten themselves against the wall. The wooden runners char and smoke with the friction of our rushing speed; but "they never take fire." All ends well; tea awaits us. Mr. Cardwell has executed our small commissions for birds, basket-work, chairs, and embroideries, for which Madeira is celebrated, with the same unfailing kindness and exactitude as ever, and after a short chat with Dr. Grabham we are off to the ship in darkness, and, alas, in rain. For, unfortunately, Madeira pays for its mild, moist, and soothing climate so dear to many invalids by a somewhat heavy rainfall and frequent showers. Madeira is once more regaining its fair share of popularity, due to its mild, equable temperature, its summer garb during our English winter months, and the peculiar softness of its somewhat humid air, and its small diurnal variation of temperature. Dr. Grabham tells us that the season has been a full one and the patients are doing well, but he agrees that the drier air and lesser rainfall of the Canaries offer a most valuable alternative to Madeira for the numerous cases which require sunshine, warmth, dry air, sunny skies, and equable temperature during winter, and to which humidity or confinement within a narrow area and frequent rains are neither acceptable nor advantageous; so that he warmly approves our visit to the Canary Islands, and recommends a visit to Las Palmas at Grand Canary, as well as to Orotava at Teneriffe. This also falls within our programme, and we are glad to be fortified by so good an authority. We leave, promising ourselves a short stay on our way home if it be possible. But how seldom are such plans fulfilled; for the exigencies of travel more than occupy all the spare time allotted, and the days are all too short to study and to enjoy the fresh scenes of interest which every day unfold to the sympathetic sojourner in strange countries; so that the promise is made not without misgiving and due reserve.

To-morrow we are to reach Teneriffe early in the day, and if all goes well in atmospheric conditions, we should see the far-famed Peak towering into the sky about sixty miles before we reach the island. Meantime let us read up some of the many authorities who have elucidated the geography, the antiquities, the history, the meteorology, and the geological conditions of this historic island and of the Atlantic archipelago of which it is the chief ornament. There is an ample choice: Homer, Hesiod, Herodotus and Plutarch rank first in the list; then come the contributions of the Mauritanian royal geographer Juba, and his copyist Pliny, whose accounts of the natural history of the Fortunate Islands are still true to the life; then the Spanish historians, of whose work our honest countryman the worthy Captain Glas made such excellent use in his highly entertaining and rare *History of the Discovery and Conquest of the Canary Islands* (published 1764), of which we have been sent a copy. Next in order and first in point of completeness, as well of scientific as of artistic detail, is the monumental work of Berthelot (the resident French Consul) and Webb, an English amateur and man of science, who lavished large resources on the description and pictorial reproduction of the natural features of the island; then there are the entertaining scientific records by Piazzi Smith of his ascent of the Peak for astronomical observation, and the journeyings and adventures connected therewith. The careful and somewhat prolix treatise on *Les Antiquités Canariennes*, by M. Berthelot, contains some good illustrations of the pelasgic stone remains, the flint hammer-heads, bone fish-hooks, corn-mills, pintaderas, and other relics of the Guanche aborigines; the excellent pamphlet of Belcastel on the Medical Climatology of Orotava; the carefully-written chapter of Marcet on the Climatology of the Peak; the lively volumes by Pigot-Ogier on the Fortunate Islands, translated by F. Locock into English in 1871; an excellent contribution to the study of the climate of the Canary Islands, by Dr. Biermann, which has just appeared (January, 1887) in the *Meteorologische Zeitschrift*, and one or two more or less slight English pamphlets recently compiled. Out of all this mass of material, it would be easy, after journeying through the islands, to compile what is now much needed, a reasonably accurate and compendious hand-book. Meantime let us note a few preliminary facts as to the island on which we are about to land. They are most neatly put together by Pigot-Ogier, a French *feuilletoniste* of much vivacity, doubled by the savant, Berthelot, to whose valuable manuscripts and collections, made during a long series of years, he had free access, and of which he evidently made large use.

And since in Orotava we are to visit the veritable and undoubted Gardens of the Hesperides, the cradle of the ancient race of the

Atlantides, the seat of the vanished and submerged Republic of Plato, let us reanimate our classic recollections of the traditions which lie about the earlier history of this volcanic marvel of the Atlantic. Its cataclysms, historic and geologic, have but added to its strange mysterious interest, leaving all its charms untouched, and now no longer out of reach. Homer says that "Jupiter will send Menelaus to those Elysian fields which are at the end of the world, where the sharpness of the winter is not felt, where the air is always pure, and freshened by the ocean breezes." (Let me say in reviewing this page that the picture is literally exact, and at this moment felicitously descriptive). Herodotus, speaking of Teneriffe, (*Latiné* Nivaria) and its Peak says, "The world ends there, where the sea is no longer navigable, in that place where are the Gardens of the Hesperides, where Atlas supports the sky on a mountain conical as a cylinder." Juba, King of Mauritania, whom Pliny follows, sent, in the time of the Emperor Augustus, an expedition to the Fortunate Islands, of the products of which he gives a good account. These Gardens of the Hesperides, or Vesperides, were "the land of the setting sun, the land of the evening, where the sun sinks into the sea; where night brought forth the Hesperides, who guard the golden apples." The Elysian fields, the Fortunate Islands, the Gardens of the Hesperides with the golden apples (oranges) guarded by the dragon-tree, whose secular bark—aged, according to Humboldt, from 10,000 to 12,000 years—still wept tears of red blood when pierced by its own sharp-pointed leaves: these are the authentic titles of Orotava and these its ancient records.

As we approach we recognise that, with its sister island, it enjoys peculiar privileges of position and of climate. Thus far the most equable climate known to us has been that of Madeira, at once mild in winter and moderate in summer, but subject to the reproach of too much humidity, and suffering from the disadvantage of the too restricted amphitheatre within which Funchal lies, and the absence of level ground for exercise. Nevertheless, Madeira is (and here I heartily agree with M. Belcastel) far superior in equability of climate to Nice, which sleeps and wakes in icy breezes, and smiles only in the sunshine of the day, to Rome, which suffers from frequent frosts and heavy rains, or to Palermo, from which "all the fires of spring can with difficulty efface the traces of its humidity or atone for its sudden changes." "It is not in Italy that we can successfully seek for an ideal climate. It is not in Europe, mobile in its climate as in the genius of its people. It is not even in the territory of the Mediterranean, the battle-field of the north winds and of the west winds, where we have to suffer in turn from the burning air of Africa, and from the piercing blasts of the glacial zone." That describes with the picturesque force of a French enthusiast the comparison which naturally occurs to the mind of an impartial seeker after climate, who, after analysing the delights and discomforts of a winter in the Riviera, takes refuge in the Atlantic isles of Madeira, or as we learn still and far better ot Teneriffe and the Canaries; for Teneriffe is situated just four degrees south of Madeira. More to the north, in the Azores, we find winds and damp; more to the south, in the Cape Verde Islands, tropical heat. Placed in the middle of the Gulf Stream, in the lines of the trade-winds, this Canarian archipelago has no winter. From its southerly position it knows no cold; while—rare privilege—in summer refreshed by the gentle and continuous cool breath of the north-east (trade) winds, it is never parched. These are its credentials, presented to us on excellent authority as we approach the island Further, we read of its romantic modern history. Sinking out of sight during all the long intervals between the periods of classic fable and mediæval geographical exploration, it was rediscovered in 1402 by the Norman septuagenarian adventurer Béthancourt. His mild and romantic conquest of the Guanches abounds with human interest, just as the subsequent slow subjugation and cruel extermination by the Spaniards add another bloody page to the dark records of Spanish conquest and merciless persecution. The records of the Guanches are chiefly preserved in Spanish manuscripts, and are therefore not too favourable. They found there, as all concur in recording, in the fifteenth century, a native and primitive race with noble instincts and habits, virtuous, highly organised, well governed, and innocent. They were ruled by princes and nobles, but the claim to nobility was vindicated from generation to generation, and the son of the noble only acquired the right to sit in his father's place by affording indisputable evidence of courage, honour, chastity, and charity. They were monogamous, and in cases of incontinence the man, as being the stronger vessel, was the more severely punished for having misled the woman. Clad in goat-skins, neatly stitched by the aid of bone-needles, with thread drawn from the fine tendons of the goat, they fed chiefly on *gofio*, the crushed and roasted grain of barley, which they mixed with water or with milk—still the chief food of the islanders; their flocks were of sheep and goats, and these also they used for meat, which they roasted in small earth ovens. Only outcasts and criminals were butchers; they lived apart. The Guanches had a horror of taking life. and when the Spaniards came to the islands, they were astonished to find the birds so tame that they came trustingly to be fed from the hand. They fished with bone fish-hooks; but they swam with such strength and agility that a favourite amusement was to take fish by swimming after them and striking them with sticks. Their religion was a pure theism, worshipping the God of heaven and earth; they had no idols; and their principal form of worship was by pouring libations of fresh goats'-milk on the earth, within the sacred enclosures of stones corresponding to the dolmens and menhirs of Brittany and Cornwall; their attitude of prayer was kneeling with the hands raised to the sky. They believed in future punishments and rewards. The virtues which were cardinal were courage, truth, respect to women, and unalterable fidelity to their pledged word. Nothing astonished them so much as to find that their invaders, in the hour of defeat, suspected them (the Guanches) of possible treachery, though the Spaniards themselves did not hesitate to break their spoken word or to profit by perfidy. They suffered for their good qualities. Alternately cajoled, trapped, "converted," pillaged, massacred, they were, after a contest of nearly one hundred years, hunted down and slaughtered by those with whom they had often fought successfully with their simple weapons of stones, slings, and staves—those whom they had at first received as benefactors and teachers, but by whom they were, in the end, ruthlessly exterminated. They brought the virtues, the weapons, and the traditions of a stone age down to the fifteenth century. Meantime, they lived happily, and solved for themselves many of the social problems of government, distribution of property and wealth, reward of merit, and cultivation of happiness and goodness which are still awaiting tremendous solutions in our society. There was a priesthood without civic power except that of gathering from the superfluities of the rich wherewithal to meet the needs of the poor; land was redistributed at the death of the head of the family, and the need of possession was thus prevented. There were vestal virgins who practised care of the poor and sick and good works, and who were themselves the charge of the community. Favourite amusements were dancing and feats of strength, of which the Spanish records tell remarkable examples. Wrestling and single-stick still survive in the Canaries the indolent traditions of Spanish life. A lively fancy may see in these "Atlantides" the realisation of the Platonic dream, the perfect life, the ideal government; the one wise as they were certainly a happy and innocent people. I cannot detail here the contending geological theories which favour or oppose the fancy. The archipelago appears to be made up of upheaved peaks of serial volcanic ridges perhaps stretching from the Atlas range on the proximate African continent and breaking off abruptly at Cape Blanco (called by Ptolemy Canaria Extrema). The Guanches themselves are apparently of Berber origin. But let us turn to our Plato, and "cleave to the summer side of doubt." Berbers or Atlantides, mere sages or virtuous savages, inhabiting islands which Nature made fortunate and poets Elysian, they bring into our time a strain of primitive romance to which we perhaps do well to cling; for, on the whole, and especially on these summer seas, and in this our holiday-time, it is surely well to live with imagination or with faith, to "spy the summer through the winter-bird," to "hear the lark within the songless egg," and even "to find the fountain where *they* wail mirage."

And now Santa Cruz is in sight, but the Peak is wrapped in cloud, and does not disclose itself even as we steam into the harbour.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Diastasized Wines.—New Portable Microscope.—Causes of Hæmoptysis.—Rumination in the Human Subject.

The *Gazette des Hôpitaux* publishes the following note by Dr. Delmis on diastasized wines. It is generally admitted in the present day that vegetable diastase considerably aids digestion and the assimilation of farinaceous substances. Dr. Coutaret first indicated a practical method of extracting diastase from barley. MM. Gruber and Musculus demonstrated the identity of vegetable diastase with that in the salivary secretion of the superior animals, and proved that the ferments of this diastase acted in a like manner on glycogen and on starch. In Dr. Durand's diastasized wine the tonic substances (cinchonine and manganese), though present only in very small quantity, produce, it is alleged, a most remarkable effect. Dr. Delmis

describes the case of a woman who had suffered from dyspepsia for fifteen years. Obstinate constipation was the principal symptom. The use of the diastasized wine was followed by a sensible improvement in her condition, and the constipation entirely disappeared. The same treatment has been successful in many cases of dyspepsia, gastralgia, persistent vomiting, anæmia, and prolonged convalescence. The ordinary dose is a wineglassful after meals.

A new portable microscope, manufactured by M. Dumaige, has the double advantage of being easily reduced to a convenient size, while possessing perfect stability, together with all the improvements that are now applied to laboratory microscopes. M. Dumaige's microscope, when set up for use, has the appearance and size of an ordinary inclining instrument, and may be divided into two parts, the first part comprising the pillar and the tube, the second the stage and the foot. The pillar is fixed to the stage by means of a special screw with four threads; by a quarter turn of this screw the stage may be fixed to the pillar. The stage is so arranged that it can be slipped down so as to rest between the branches of the foot, thus enabling the whole instrument to be reduced to a very small volume.

The *Paris Médical* of January 22nd, 1887, publishes extracts from a work by M. Dejean, in which the author states that hæmoptysis is not always a symptom of incipient pulmonary phthisis, as is generally supposed, but may be due to dilatation of the bronchi from a varicose condition of the capillaries, or miliary aneurysms of the bronchial mucous membrane. Laënnec, who first described this affection, observed cases of hæmoptysis in which the necropsy revealed several bronchial dilatations, without any sign of the presence of tubercles. Barth, Gombault, Balzer, and other authors have often seen hæmoptysis in patients affected with bronchial dilatations, and attributed the bleeding to capillary aneurysms in the walls of the dilated bronchi. An important feature of this form of hæmoptysis is that the blood which is brought up is rarely frothy, as it is in the case of tubercular disease. The differential diagnosis between bronchial and other kinds of hæmoptysis may be established in difficult cases by the presence or absence of bacilli, as has been proved by Dr. Cochez.

The *Journal de Médecine de Paris* publishes a communication made by M. Le Juge de Segrais to the Société Médicale de l'Elysée concerning rumination in the human subject. The author records a case, observed by M. Axel Johannesen, of a peasant, aged 27, who was subject to frequent epistaxis. He chewed his food imperfectly, and it returned to his mouth automatically from five to fifteen minutes after meals; he then masticated it a second time, the proceeding being attended with a pleasurable sensation. Rumination lasted from fifteen to forty minutes. After a slight meal, or when the man was angry, these phenomena did not appear. Recently the patient suffered from dyspepsia, with tenderness in the epigastric region. The stomach was washed out and the indigestion was relieved, but the rumination continued. The case observed by M. Le Juge de Segrais himself differed from the one above described in that there was no second mastication. The patient, a child, aged 11, had contracted the habit of causing food to return into the mouth, in order to renew the pleasure of any thing the taste of which he liked. In order to effect this, he first recalled the taste of whatever he had most enjoyed in his meal, then held his breath, and, by contraction of the abdominal muscles, brought the particular thing which he wished to taste again up into the mouth; he occasionally did this a second time. On examination, the stomach was found to be slightly dilated, but made no rumbling sound; the child was pale, and rather anæmic. His parents had tried every means of curing the habit. When a young child he lived in the country, and milk was his principal article of diet; the stomach became overloaded, and regurgitation ensued. The child became accustomed to these regurgitations, which finally caused a pleasurable sensation, and the habit of rumination was thus established. M. Le Juge de Segrais proposes to submit the patient to a course of hydrotherapy, to wash the stomach out with Faucher's apparatus, and to apply the actual cautery to the epigastric region.

CORRESPONDENCE.

THE COLLEGES, THE APOTHECARIES' SOCIETY AND THE PROFESSION.

SIR,—The letter of "Audi Alteram Partem," in the JOURNAL of April 2nd, which purports to be written with some authority, has no foundation in fact so far as the relations of the Society and the Colleges respectively are concerned. The Society has been consistent throughout in seeking for combination; the Colleges have been persistent throughout in withdrawing from or declining it altogether. It was the Colleges which, without any notice to the Society, abandoned the conjoint scheme, when perfectly complete and ready for approval by the Council.

It was the Colleges who, in 1884, formed their conjoint scheme, and brought it before the Council without the slightest previous intimation to the Society.

To judge from the letter under discussion, it would be thought that after the Colleges had completed their scheme a long interval had elapsed before the Society applied to be let into it. As a matter of fact, the Society waited but little over a year; and why did it wait? Because fresh medical legislation was pending, and till the outcome of that was known, it was impossible for the Society to take any action. It then applied, not from the motive or in the spirit which the letter imputes to it, but in the spirit of professing readiness to meet the Colleges in any reasonable way to insure combination. The writer says that our representative's motion at the last session of the Council shows that the Society had little expectation of being admitted to the Conjoint Board. How could it be otherwise in the face of the peremptory refusal by the Royal Colleges to admit it? From what quarter does the writer get his information that the Society makes no secret of its willingness to be left out of the combination? Can he produce one document or official statement in proof of his proposition?

When the Act of 1886 was passing through Committee in the House of Commons, Sir Lyon Playfair, speaking to a deputation of the Licentiates of the Society, said that he would force combination if he could; and with those words sounding in their ears, the authorities of the Society have honestly and faithfully laboured to effect a combination; and before they thought of approaching any other of the licensing bodies in England, they held out their hand to the Royal Colleges, and gave them the first and most favourable opportunity for combination, now so hopelessly lost by the action of those two great bodies, and of them alone.—I am, etc.,

JAMES R. UPTON, Clerk to the Apothecaries' Society.

14, Austin Friars, London, E.C., April 25th, 1887.

THE LUNACY BILL, 1887.

SIR,—The new clause inserted on February 22nd last into the Lunacy Bill of the present year, at the instance of Lord Monkswell, to the effect that "when any officer was transferred from one county asylum to another, his service in all such asylums shall count for the purpose of computing the pension or superannuation allowance" is good so far as it goes. But, Sir, there are officers who have served a sufficient number of years to earn a pension whose service has not been confined alone to county asylums—who have transferred their services from one of the county asylums to one of the borough or metropolitan district asylums, or *vice versâ*. These gentlemen will naturally be of opinion that, in fairness, the operation of the clause in question ought to be extended to them.

It will not, I venture to say, be contended that the work in the borough or district asylums is less anxious, onerous, and responsible than it is in the county asylums; and, moreover, probably one effect of the exclusion of the officers serving in them from this pension clause would be to deter the best men at present serving in the county asylums from offering themselves for such appointments in future.—I am, etc.,

JAMES ADAM, M.D.

Malling Place, Kent, April 23rd.

OPTIC NEURITIS IN THE PROGNOSIS OF TUMOURS OF THE BRAIN.

SIR,—Mr. Horsley, in his interesting communication published in the JOURNAL of April 23rd, gives three cases of tumour of the brain, on which he operated. In two of these it appears that there was not optic neuritis, and in these two recovery ensued. In the third, a case of cerebellar tumour, there was optic neuritis, and this patient died. To these may be added Dr. Hughes Bennett's and Mr. Godlee's case, in which optic neuritis was present, and a case of cerebellar tumour, with neuritis, recently operated on by Mr. Bennett May; both of these were unsuccessful. Thus, out of five cases, the two which had no optic neuritis recovered, while the three which had neuritis died.

It may be that this coincidence is accidental, for recoveries take place in some cases of head injury and cerebral abscess in which neuritis has occurred; but still, its presence must be taken to indicate some complication which is probably harmful, and makes it important that, if possible, tumours of the brain should be recognised before the onset of optic neuritis, and, therefore, without its diagnostic aid.—We are, etc.,

WALTER EDMUNDS.
London, April 26th. J. B. LAWFORD.

CHILD-BIRTH AFTER OVARIOTOMY.

SIR,—Sir Spencer Wells, in his work on *Abdominal Tumours*, has referred to many of his patients who have borne children after ovariotomy—some twins and one triplet; but I doubt if he or any other surgeon has a record of any patient who, after removal of one ovary, has borne *seven* children. I therefore think it of some interest to make known that I have just attended with her seventh child—five girls and two boys—a woman upon whom Sir Spencer Wells performed ovariotomy in the Samaritan Hospital on October 6th, 1875, who had borne five children before the operation. I had tapped this patient in June, 1874. She became pregnant after the tapping, and was confined in July, 1875, with a fine, full-formed child, the ovarian tumour being then almost as large as the gravid uterus, though it did not interfere with the natural course of the labour. It increased rapidly after the birth of the child. I was present at the operation on October 6th, 1875, and attended her in another confinement on October 5th, 1876—one day short of the year.—I am, etc.,

Kibworth, April 23rd, 1887. THOMAS MACAULAY.

EARLY TRACHEOTOMY IN DIPHTHERIA.

SIR,—I should feel obliged by the insertion of a few lines on the subject of Mr. Watson Cheyne's article "On Early Tracheotomy in Diphtheria," or rather upon the prefatory observations of that article.

In the first place, we are told as follows: "Unfortunately, up to the present time diphtheria has been reckoned as a disease which ought to be placed under the care of a physician rather than of a surgeon, and consequently the surgeon is not, as a rule, called in till the period which I believe to be the suitable time for performing tracheotomy has already passed." As to this extraordinary statement I desire to remark that, with few exceptions, every medical man in general practice possesses degrees or diplomas in both surgery and medicine, and thus combines in himself physician and surgeon.

But, secondly, passing on to the etiology of diphtheria, we are told that the disease "is, from its commencement, a surgical disease," that it is "without doubt due to a micro-organism, and, from Loeffler's researches, most probably to a bacillus;" and further on it is said, "apparently according to Loeffler's researches, the virus of the disease (the bacilli) does not penetrate into the circulation," &c. These statements, at once bold and guarded, are the cause of my writing.

Diphtheria is here said to be "without doubt due to a micro-organism." I venture to say that in the present state of our knowledge of diphtheria this last conclusion is premature. Even if a particular micro-organism were discovered to be always associated with diphtheria, and to be capable of giving rise to a fatal disease, more or less remotely resembling diphtheria, in animals, it would not necessarily follow that such an organism must constitute the sole etiological factor in the causation of diphtheria. Other elements in the causation might be equally important—for example, climatic, constitutional, or otherwise. But no such micro-organism has been found in diphtheria. Certain bacilli are described by Loeffler under the heading "Kleb's bacilli" (see abstract by Mr. W. Hime in *Microparasites in Disease*, New Sydenham Society, 1886, p. 457, the volume edited by Mr. Watson Cheyne himself); but Loeffler acknowledges that it is "impossible to say" whether they are to be looked upon as the "specific cause" of diphtheria or not. They were not found in all typical cases, they were sometimes found in the alveoli of the lungs and in the liver, and they have been found in the saliva of a healthy child. As there were presumably no signs of changes due to them in the pulmonary alveoli and the liver, Loeffler "is of opinion that their presence there was due to *post-mortem* changes." On the other hand, these bacilli, when inoculated into some animals, have "the same effect as the diphtheritic virus," namely, they produced a false membrane, and also internal hæmorrhages; on other animals they had no effect. After six pages are devoted to the account of these bacilli, an important communication occurs in a foot-note: "The second part of Loeffler's paper is taken up with the description of diphtheria in pigeons and calves, in which other forms of bacilli are present, which are in all probability the cause of the disease."

The micrococci are dismissed early from consideration, although they, too, have once had their champions. It is noteworthy that in some animals the bacilli did not kill by the development of toxic ptomaines, but simply by the mechanical effect of the false membranes.

Such is the case at present. No particular micro-organism can be shown to be established as yet in any causal relation with diphtheria in man. But if such were discovered, and if, after successive cultivations, it could reproduce the original disease, even this would not suffice to establish it as the sole cause, as already remarked. For, take tuberculosis. In this disease, a micro-organism (Koch's bacillus) is always present. This is so universally agreed upon that the axiom has arisen, "without the bacillus no tuberculosis." Further, after any number of pure cultures in nutrient media, these bacilli can be shown to have the power to produce tuberculosis (in animals), so that apparently there is no room for any doubt that the bacillus tuberculosis is the cause of tuberculosis. And yet when these undoubted facts derived from bacteriological science are brought to the test of clinical observation, they are found wanting to explain the phenomena of phthisis, the most frequent example of tuberculosis. Dr. Douglas Powell, in his recent new edition of his work *On Consumption*, etc., considers it not as yet proven that Koch's bacillus is the sole cause of phthisis. And Biedert (*Berliner Klin. Wochenschr.*, 1886, p. 715) ably sums up the objections to the bacteriological view, and ends by stating that in his firm opinion a previous or current chronic pneumonia is an essential element in the etiology of all cases of pulmonary tuberculosis, thus going back to the views of Niemeyer on the subject, *plus* the bacillus. In fact, the medical world is at present divided into two opposing camps, namely, for and against the bacillus.

How much more then should we hesitate before accepting the statement that "without doubt the disease is due to a micro-organism?" This is bold. "Most probably to a bacillus." This is guarded. But to speak thus—"apparently, according to Loeffler's researches, the virus of the disease (the bacilli) does not penetrate," etc.—is to be bold and guarded at the same time. The virus and "the" bacilli are associated (the bacilli being put in brackets), and the whole question is begged.

It is no part of my intention to discuss the practical part of Mr. Watson Cheyne's article, which I leave to those more experienced in diphtheria than myself. In one localized epidemic in an isolated village which I observed some years ago, I was wholly unable to account for either the origin or the spread of the disease by contagion, although I have no doubt that diphtheria is contagious.—I am, etc.,

E. J. EDWARDES, M.D., M.R.C.P.,
Assistant Physician to the N. W. London Hospital.

STANDARD OF HEALTH IN CANDIDATES FOR THE PUBLIC SERVICES.

SIR,—I was very glad to observe your valuable suggestion that the parents and guardians of youths wishing to enter upon a military career should be informed at the earliest possible period as to their (the youths') physical fitness for it. Your remarks had reference to eyesight, but the principle would apply to any kind of physical examination for a public service. Two years ago I was consulted by a widow lady about her son's tendency to stutter. Would it, she asked, be a disqualification for the Indian Civil Service, for which he wished to prepare? I told her—the tendency being very slight, of nervous origin, and, with proper treatment, conquerable—that I thought not; but, to make sure, I advised her to consult the authorities who would examine the candidate; and I wrote a preliminary note, explaining the case, and soliciting the favour of an examination. I received a reply to the effect that no opinion could be given then on a point which would hereafter come before the examiner officially. Surely, if this be the law, it requires alteration. Of course, in a case of stammering, which might become confirmed or otherwise, according to management, a decided opinion could not be given; still, words of encouragement or the reverse might be spoken, and thus the parent would have something definite by which to be guided.—I am, etc.,

Brondesbury, April 11th, 1887. CHAS. R. FRANCIS, M.B.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF OXFORD.

EXAMINATIONS IN MEDICINE AND SURGERY.

NOTICE has been given by the Regius Professor of Medicine that the Final M.B. Examination to be held in Trinity Term next, will, by Statute, and under the Medical Act, 1886, be an examination qualifying successful candidates, first, for the degrees of Bachelor in Medicine and of Bachelor in Surgery, and secondly, for the registering of a

complete qualification in Medicine, in Surgery, and in Midwifery. The Final Examination for the degrees of Bachelor of Medicine and Bachelor of Surgery will begin on Tuesday, May 31st, and that for the degree of Master in Surgery will be held during the same week; the First Examination for the degree of M.B. will begin on Monday, June 27th.

The Secretary of the Boards of Faculties has given notice that names of candidates for the Second or Final Examination for the Degree of Bachelor of Medicine must be given in to him not later than Saturday, May 14th, and that names of candidates for the First Examination for the same degree must be given in to him not later than Saturday, June 11th. Attendance will be given in the office of the Boards of Faculties, Clarendon Buildings, from 1.30 to 2.30 P.M., on Friday and Saturday, May 13th and 14th, and on Friday and Saturday, June 10th and 11th, for the purpose of receiving names. Names must be sent by letter, so as to reach the Secretary either on those days or previously. Letters should be addressed to the Secretary to the Boards of Faculties, Clarendon Buildings, Oxford.

All candidates, in giving in their names, are required by the Statute to pay the fees for admission, and to produce the required certificates.

The required certificates are as follows:

1. For the First Examination, a certificate that the candidate has satisfied the Examiners in the School of Natural Science in the Preliminary Examination in (*a*) Mechanics and Physics, (*b*) Chemistry, (*c*) Animal Morphology and Botany; or, as an alternative for the Preliminary Examination in Chemistry, that he has satisfied the Examiners in the Pass School, in subject (3) of Group C, namely, the Elements of Chemistry.

2. For the Second Examination, except in the case of candidates who offer Materia Medica and Pharmacy only, a certificate that the candidate has passed the First Examination.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, April 21st.

Saving of Life at Sea.—Baron H. DE WORMS, in reply to Mr. H. VINCENT, said that the Select Committee on Saving Life at Sea would be nominated immediately.

Friday, April 22nd.

Metropolitan Open Spaces Bill.—This Bill was read a third time.

Butterine.—Baron H. DE WORMS informed Mr. MACLURE that the Select Committee on the Butter Substitutes Bill and Oleomargarine Bill would be nominated forthwith, and, if they agreed that evidence ought to be taken, the Board of Trade would offer no objection.

Monday, April 25th.

Adulteration of Beer.—The CHANCELLOR OF THE EXCHEQUER, in answer to Mr. OCTAVIUS MORGAN, said that 316 publicans and beersellers had been convicted of selling adulterated beer in the Metropolitan Police District during the year ending March 31st, 1887. The total amount of penalties was £7,667, which sum went to miscellaneous revenue.

Treatment of Hydrophobia.—Mr. MATTHEWS, in answer to Mr. MACLAREN, said the report of the Committee appointed to inquire into M. Pasteur's treatment had not yet been received, but it was not proposed to use any influence to prevent public servants being subjected to his treatment. There was no intention at present to ask the Committee to extend their inquiry to the Buisson vapour bath system, or to appoint another Committee to inquire into that system.

Distress in the Metropolis.—Mr. RITCHIE informed Mr. FLOWER that returns on this subject were being submitted to close examination in the Registrar-General's Department, a process which necessarily occupied some time.

Fog Experiments.—Mr. PLUNKET, in reply to Dr. FARQUHARSON'S inquiry as to the result of Dr. Percy's experiments on the exclusion of fog from the atmosphere of the House, said Dr. Percy had prepared an apparatus for making experiments when the opportunity occurred.

NOTICE OF MOTION.

MR. SAMUEL SMITH has given notice of the following motion on going into Committee of Supply:—To call attention to the great injury done to the natives of India by the traffic in strong drink, and to the rapid extension given to it by the Government of the country for the sake of revenue; and to move, That this House views with alarm the spread of drunkenness in India, and considers it due in part to the facilities for obtaining strong drink unwisely granted for revenue purposes, and calls upon the Government of India to diminish such facilities, in conformity with the wishes of the native population.

NAVAL AND MILITARY MEDICAL SERVICES.

ABOLITION OF RELATIVE RANK AND ITS CONSEQUENCES.

MEDICAL STAFF writes: I trust that the reply given by Sir J. Gorst on April 5th on the question of the allowances of the Medical Staff in India has not escaped the notice of the Parliamentary Bills Committee. Notwithstanding the assurances of the Government that abolition of relative rank meant nothing, and that the position of the medical officers was in no way affected thereby, we can now see how the Warrant is really interpreted by Government officials, and the medical officer is for the first time clearly and officially defined as having no rank.

Sir J. Gorst states that the rank of officers of the Medical Staff in India is that of surgeon, and that they receive the allowances of their rank. It is assumed that the title of surgeon is a rank, and comparison is then made between the allowances of surgeons, subalterns, and captains. The fact that a surgeon ranks with a captain is deliberately set aside, presumably because allowances do not come under Paragraph 125 A of the Royal Warrant, which provides only for "precedence, pensions for wounds, pensions to widows, and compassionate allowance to children."

It is well that we at last know how the Government intend to interpret the new Warrant, but they must learn that medical officers will not accept a title of surgeon as an army rank, and the reply of Sir J. Gorst will materially strengthen the hands of those who are so ably fighting the battle for justice to the Medical Staff. Until this justice be accorded, it is to be hoped that the advice given by the BRITISH MEDICAL JOURNAL will be followed, and that not a man will come forward for service in the Medical Staff of the Army.

A CAMP-FOLLOWER writes: I am writing this letter from a garrison town in the United Kingdom from whose medical colleges some of the leading men in the public medical services have come. Here, and at all home-stations, the newly amended Warrant is utterly condemned, and it will never be accepted, even with the flourish of the Director-General's name in Mr. Stanhope's letter. Quoting the D.G.'s name is a shallow artifice, and is understood just for what it is worth.

The Secretary of State will have to reckon, not with the D.G., but with the British Medical Association, the teachers in the schools, and, lastly, with the thousand officers of the Medical Staff, who refuse to be content with a lower position than the other departments of the army.

Lord Dalhousie's able minutes, and Surgeon-Major Rogers's pamphlet, should be read by the Secretary of State. No amount of plausible answers about "privileges," "precedence," etc., will do; we must either have rank or be mere civilians; let Mr. Stanhope decide. Meantime, everyone is disgusted, and anxious to be able to leave this unfortunate department, where everything seems insecure, and where we have incessantly to battle for our rights. It is not for the good of the service that such a feeling of disgust and despondency should be daily on the increase. England copies many things from foreign armies, let her imitate them by granting military rank to medical officers; it is the least that might be done for the army surgeons, who, on so many brilliant occasions, have perished on the battlefield or at their posts in the hospitals.

The Secretary of State, by issuing amended proposals, has confessed that the original Warrant was wrong; let him now rectify the matter finally by saying "You shall have the rank you have so richly deserved on many battlefields, and you shall not, while in England's service, be a "camp-follower."

L. T. N. writes: Every day you are adding to the deep debt of gratitude which the Army Medical Department owe to your valuable exertions on their behalf. Will you endeavour to enlist the sympathy and support of all surgeons belonging to the militia and volunteer forces in the great struggle we must make for our legitimate rights, namely, the concession of honorary rank to army medical officers; it will concern them equally with ourselves, when the great citizen army of the future becomes part and parcel of the present regular forces?

"WE DID NOT EVEN CRAVE BREAD, YET YOU GAVE US A STONE."

"SI RECTE POSSIS, SI NON, QUOCUNQUE MODO REM" writes: The prompt and energetic action you have taken with regard to the recent "Jubilee retro-version of legislation," so seriously affecting the medical officers of the army, evokes for you their deep and heartfelt gratitude. The term "dismay" which you apply to the feeling aroused on receipt of the intelligence of their "effacement," well represents their abject and hopeless condition. "Dismay" to think that traditionary vested rights, repeatedly confirmed by Royal Warrant, should be swept away by a mere postscript to an ordinary War Office Gazette. "Dismay" on ascertaining that this *coup d'état* had been contemplated and discussed in certain coteries. "Dismay" at the conviction that this attack, so mysteriously set in motion, was a tentative prelude to the perpetration of further indignities and curtailing of rights, pecuniary and otherwise. "Dismay" on becoming aware of the instantaneous change of front on the part of those whom they had tended in sickness and succoured when wounded, in the matters of social amenities, and the unwritten etiquette of military intercourse. "Dismay" at finding their utility as public servants minimised, their personal convenience set aside, their pecuniary welfare endangered, their social standing vitiated. In fine, they find themselves soldiers cut off from civil rights; citizens under military law deprived of their military rights; and professional advisers whose opinions as experts are condemned, disregarded, and set aside as it suits the caprice of those for whose special benefit they were elaborated.

This experience is that of one who has served with every military arm during the third of a century in barracks, camp, and field, has gone into action with his regiment, and mingled in the bloody fray of a sortie in the advanced trench, who has been patted on the shoulder by a Marshal of France, while addressed as "*Mon brave garçon.*"

Those who have seen service know the whereabouts of the "honorary major" and schoolmaster when fighting is going on; he is at the depôt. Where is the pay-master and honorary major? On board ship or at the port of disembarka-

tion. Where is the commissariat officer? In a commodious tent, miles in rear of the army.

The schoolmaster, the pay clerks, and the contract officer are estimable and worthy men no doubt, and deserve well of their country, but I would ask is their exceptional and anomalous devotion to serve as a counterpoise to our degradation?

SANITARY REPORT OF BRITISH TROOPS IN THE MADRAS COMMAND FOR 1886: BY SURGEON-GENERAL IRVINE, M.D.

The annual strength of British troops in the Command, of non-commissioned officers and men, was 10,414; total admissions into hospital, 12,165; the total deaths, 97; invalided to England, 251; of these, 12.77 per 1,000 were for change of climate, and 11.33 for discharge from the service. These results give the following ratios per 1,000 of strength: for deaths 9.31, invaliding 24.10. The average number constantly sick was 686; the average sick-time for each soldier was 25.62, and the average duration of each case of sickness was 22.04 days. The health of the troops for the year was considered fairly satisfactory, although slightly less so than in the previous year. The febrile group of diseases gave 1,649 admissions, with 27 deaths, and 2 invalided; 6 admissions were due to small-pox, 2 to chicken-pox, and 3 to measles. The eruptive fevers gave no deaths. Enteric fever gave 73 cases and 23 deaths. The station of Secunderabad gave the largest number of admissions—29. Paroxysmal fevers gave 50 admissions, and 2 deaths from remittent fever. Cholera gave, for the whole Command, 6 cases and 2 deaths. The disease was epidemic at Secunderabad, where 4 of the cases occurred. The small number of cases during an epidemic visitation speaks well for the care of the troops and the sanitary condition of their surroundings. It is a remarkable fact that this great station, so notorious for dysentery and its sequel, liver-abscess, has never suffered much from cholera. Tubercular disease gave 70 cases—a ratio of 7.59 per 1,000. It is probable that the victims carried the seeds of this disease with them to India; still, it is clear that climate exercises no small influence on its development, for the Western Districts contributed only 2 admissions—a ratio of 1.78 per 1,000—against 8.34 in Bangalore, and 7.30 in Secunderabad. Sunstroke gave 14 admissions, with 4 deaths, 2 in, 2 out of hospital. Diseases of the circulatory system gave 100 admissions and 7 deaths. Diseases of the respiratory system gave 345 admissions, with 4 deaths, 3 due to pneumonia, and 1 to pulmonary extravasation. The total admissions and deaths from diseases of the digestive system were 2,424 and 19 respectively. Dysentery caused 567 admissions and 4 deaths; diarrhœa, 430 admissions; hepatitis, including abscess of the liver, 307 admissions and 12 deaths. Venereal diseases gave 1,646 admissions. We observe that so striking was the increase in this class of affections from the closing of lock hospitals that Government was constrained to re-open them in many districts. Fortunately for the British soldier in India, the reign of "fad" has not yet been established in that country. Delirium tremens gave 29 admissions, 6 from alcoholic poisoning, and 1 death; 7 men were accidentally drowned, 5 committed suicide. The month of May gave the largest number of admissions into hospital, 1,185; February the smallest, 862.

In this report there is the usual discrepancy as to the cause of enteric fever. We are glad, however, to see that there is a recognition of a cause so much insisted on by Professor Maclean, namely, that, however fairly good the barrack-supply of water may be, the soldiers often contract the disease in the native bazaars, where they indulge in "native drinks, chiefly bad water into which an effervescing powder is placed."

We have read with peculiar pleasure the detailed description of the hospital lately built at Rangoon. On this occasion there seems to have been entire accord between the engineer and the sanitary authorities, and the result has been a building admirably adapted for the climate and the treatment of disease, reflecting great credit on all concerned. There is one very noticeable thing in this hospital: every ward has a "designation board," giving its superficial area, its cubic contents, and its accommodation; so that if overcrowding is allowed, it is a sin against light and knowledge.

We rise from the perusal of this report with a strong impression on our mind that, in the face of so much serious disease, the small mortality reflects great credit on the medical staff of the Command.

THE PROSPECTS OF A MEDICAL OFFICER UNDER THE HOME DEPARTMENT.

One of the Sufferers writes: I cannot recommend too much faith to be placed in Government appointments, regulations, or promises, especially in the prison department, as you may judge by the following personal experience.

After nearly fifteen years' service in the Royal Navy, to which I feel the greatest pleasure in adverting, and in which I received the highest commendations from my superiors, and some medals for active service, on my return from a voyage round the world, and recovering from the effects of shipwreck, I asked for and obtained charge of a convict hospital and two prison establishments, with one assistant; and to my astonishment a salary of £250, part payment to include my half-pay from the Navy, and the remainder from the Home Office, while my predecessor I found had received £400. On remonstrance, I was informed that other arrangements were in progress which would improve my salary, when I would receive an allowance equal to my salary on full pay, with the compensation for allowances on ship-board.

Great alterations were made in what was termed the executive, by conferring the offices on the military instead of civilians, elevating their position nominally by giving them the title of Governors of Prisons instead of gaolers, and conferring on them salaries four or five times at least the amount formerly given to civilians, none being of too high a position to refuse these appointments, while the medical officers, on whom the whole responsibility lies for maintaining the health of the prisoners, the ventilation of the prisons, the diet, clothing and labour, as well as the regulation of punishment inflicted by the governors, are rather looked down upon by these officials, backed by the Directors of Prisons, who support them in many cases against the medical officers, no doubt on account of the inferior remuneration received as salary, their pay being from £400 to £800 per annum, while the extreme pay of the medical officer never exceeds £350, without either promotion, or, as in my case, on retirement after thirty-four years service, of pension, or any acknowledgment of services rendered, beyond an expression of regret on my leaving, on account of age (70) and a hope that I will enjoy my retirement, which might have been possible if they had given me a pension or gratuity to retire on after a salary only calculated to keep up the respectability of the office.

A SURGEON-MAJOR'S CARD.

S. J.—If the surgeon-major's rank were attained while serving in the Army Medical Staff, the style of visiting card usually adopted after retirement is "Surgeon-Major A. B., Medical Staff, retired." If the rank were attained in the Volunteer Medical Service, the usual designation is "Surgeon-Major A. B., late Volunteer, etc.," the volunteer regiment to which the surgeon-major was attached being named, if the rank were got while attached to a regiment, or "Volunteer Medical Staff," if it were obtained while unattached.

MEDICAL INSTRUCTION FOR VOLUNTEER MEDICAL OFFICERS.

Dr. W. P. Mears (Surgeon, Tynemouth Artillery Volunteers) writes: I regret to be obliged to alter a statement made in a note of mine in reference to the training of volunteer medical officers which appeared in the Journal of March 12th, p. 598, and—as I judge from letters received—proved of interest to some of your subscribers.

I have just been informed from the office of the Director-General that the permission granted me last November to join the School of Instruction at the Medical Staff-Corps Depôt at Aldershot, under the usual regulations as to allowances, etc., has been rescinded, and that such permission will not in future be granted to regimental surgeons, but only to surgeons of the Volunteer Medical Staff. I regret the matter the more because it seems to me that one of the difficulties most strongly deprecated by the promoters of the Volunteer Medical Staff-Corps is now arising, by the drawing of a most invidious distinction between the officers of that corps (and indeed all other commissioned officers) and the surgeons carried on the Regimental Lists.

N. writes: In reference to the recent refusal of permission to regimental surgeons to pass through the medical staff course at Aldershot under the usual regulations as to allowances, etc., may I briefly point out the following facts, namely:

1. That regimental surgeons are the only commissioned officers of volunteers who are not required to become "proficient" (acting-surgeons and chaplains are not commissioned).
2. That they have no officially recognised position in their corps, nor have they any official duties to discharge.
3. That their rank—always somewhat indefinite—has been rendered more than doubtful by the recent warrant.
4. That they alone of all other volunteer commissioned officers are prevented from acquainting themselves under practicable conditions at Aldershot or elsewhere with the duties they may at any time be called on to perform.
5. That—as in four instances in my knowledge—they are apparently not infrequently superseded in the charge of outlying stations, etc., by practitioners quite unconnected with the services in any way.

THE NAVY.

Deputy Inspector-General John Fisher has been promoted to the rank of Inspector-General of Hospitals and Fleets; his previous commissions are dated: Surgeon, March 9th, 1854; Staff-Surgeon, March 12th, 1863; Fleet-Surgeon, April 3rd, 1876, and Deputy Surgeon-General, May 30th, 1882. Inspector-General Fisher was Assistant-Surgeon of the *St. George* during the Russian war in the Baltic in 1854, and of the *Basilisk* in 1855 (medal).

E. D. Maddick, Esq., has been appointed Honorary Surgeon to the London Brigade of the Royal Naval Artillery Volunteers.

Fleet-Surgeon E. V. de Méric has been placed on the retired list. He was appointed Surgeon November 16th, 1866; Staff-Surgeon, March 16th, 1878; and Fleet-Surgeon on January 20th last. He was Staff-Surgeon of the *Iris* during the operations at and near Suakin in 1884-85 (medal).

Fleet-Surgeon H. F. Norbury, C.B., has been promoted to be Deputy-Inspector General of Hospitals and Fleets. He entered the service as Surgeon June 16th, 1860; became Staff-Surgeon December 16th, 1872; and Fleet-Surgeon, July 3rd, 1879. He served on the coast of Syria in 1861, during the massacres in Mount Lebanon and the occupation of the country by the French army; as Staff-Surgeon of the *Active*, was landed in medical charge of her Naval Brigade during the Kaffir war in 1877-78 (mentioned in despatches and strongly recommended for promotion); served in the Transkei as Senior Medical Officer of six different columns of troops, was present in numerous skirmishes, in the action at the Quorra River, and at the battle of Quintana; was in medical charge of the Naval Brigade of the *Active* during the Zulu war in 1879; was Principal Medical Officer of Colonel Pearson's Column, being present at the battle of Inyezane, 22nd January, 1879, and of the garrison of Ekowe (several times mentioned in despatches); afterwards joined General Crealock's Column as Principal Medical Officer of the entire Naval Brigade, and advanced to Port Durnford (twice mentioned in despatches, promoted, medal with three clasps); C.B., November 27th, 1879; Sir G. Blane's gold medal, 1879.

Fleet-Surgeon H. S. Lander has been appointed to the *Impregnable*, and Surgeon A. T. Rimell, has been appointed to the *Rattlesnake*.

The Greenwich Hospital pension of £50 a year for fleet and staff-surgeons, vacant by the death of Dr. Gerald Yeo, has been awarded to Fleet-Surgeon W. G. A. Ayre.

The following appointments have also been made at the Admiralty:—Michael Fitzgerald, Staff-Surgeon, to the *Triumph*, additional for Esquimalt sick quarters; O. P. Browne, Staff-Surgeon, to the *Caroline*; C. D. D. E. Chamberlain, Surgeon, to the *Rattler*.

THE MEDICAL STAFF.

Surgeons Henry Charlesworth, J. C. Dorman, M.B., G. H. Le Mottée, M.B., W. L. Chester, M.B., and E. A. Mapleton, M.B., have been promoted to be Surgeons-Major.

Deputy Surgeon-General W. Collis, serving in Bengal, is transferred from the Peshawur District to the administrative medical charge of the Meerut Division, *vice* Deputy Surgeon-General R. Wolseley, deceased.

Surgeon-General T. G. Balfour, M.D., F.R.S., retired pay, has been appointed Honorary Physician to the Queen, *vice* Surgeon-General W. Rutherford, M.D., C.B., deceased.

Surgeon E. Davis, who is serving in Bengal, has received leave of absence for six months on medical certificate.

Surgeon H. W. M. Kendall, serving in Bengal, is appointed to the civil medical charge of Chunar, in addition.

Surgeon-General J. Irvine, M.D., Surgeon-General to Her Majesty's Forces, Madras, has leave of absence for 182 days on medical certificate.

Surgeon-Major H. C. Guinness, serving in the Bombay command, has leave of absence to Poorundhur till June 12th on private affairs.

THE INDIAN MEDICAL SERVICE.

Surgeon J. H. T. Walsh, Bengal Establishment, is appointed to the officiating medical charge of the 1st Bengal Cavalry, *vice* Surgeon-Major J. E. C. Ferris, on furlough.

Surgeon J. T. Daly, Bengal Establishment, is appointed to the officiating medical charge of the 40th Native Infantry, *vice* Surgeon-Major W. E. B. Moynan, M.D., on field service in Burmah.

Surgeon W. G. Thorold, Bengal Establishment, is appointed to the officiating medical charge of the 2nd Battalion 2nd Goorkhas, *vice* Surgeon-Major C. Bomford, M.D., in temporary civil employment.

Surgeon L. J. Pisani, Bengal Establishment, is appointed to the officiating medical charge of the 4th Sikh Infantry, *vice* Surgeon-Major G. McB. Davis, M.D., on furlough.

Surgeon-Major G. Massy, Bengal Establishment, on return from furlough, has reported his arrival at Bombay.

Surgeon G. W. P. Dennys, Bengal Establishment, on return from duty with the Government of India, is appointed Civil Surgeon of Jullunder.

Surgeon E. S. Brander, Bengal Establishment, is appointed to perform the civil medical duties of Peshawur, in addition to his own, *vice* Surgeon G. F. Nicholson, M.D., who has proceeded on furlough.

Surgeon-Major H. M. G. Archdall, Madras Establishment, Civil Surgeon of Bellary, is appointed Civil Surgeon of Rajahmundry.

Surgeon-Major W. O'Hara, Madras Establishment, Acting Inspector of Vaccination and Deputy Sanitary Commissioner, is appointed Civil Surgeon of Bellary, but is to continue to act as Inspector of Vaccination during the absence of Surgeon D. F. Dymott, M.B., on other duty.

Surgeon M. H. Smith, Madras Establishment, is directed to act as Second Surgeon, General Hospital, Madras, and as Professor of Pharmacy and Materia Medica, Medical College, during the absence of Surgeon J. Maitland, M.B., on leave.

Surgeon P. J. Damania, Bombay Establishment, in medical charge of the 22nd Native Infantry, is ordered to officiate in medical charge of the 8th Native Infantry, during the absence of Surgeon-Major J. S. Wilkins, on field service in Burmah.

Surgeon E. W. Young, Bombay Establishment, Staff-Surgeon at Poona, has returned to duty from furlough.

The death is announced of Surgeon P. H. W. Poon, of the Madras Establishment, Acting Civil Surgeon and District Sanitary Officer, Cocanada.

THE VOLUNTEERS.

The undermentioned gentlemen have resigned their appointments in the corps specified:—Surgeon and Honorary Surgeon-Major T. C. Beatty, jun., 2nd Durham (Seaham) Artillery—commission dated March 14th, 1860; Surgeon J. J. Gawith, 1st London (City of London Rifle Volunteer Brigade)—commission dated September 26th, 1885; Surgeon J. R. Kemp, 22nd Middlesex (Central London Rangers)—commission dated January 19th, 1884; Surgeon and Honorary Surgeon-Major E. H. Roe, 4th Lancashire (commission dated November 23rd, 1871), with permission to retain his rank and uniform; Surgeon and Honorary Surgeon-Major P. Brown, 5th Durham (commission dated June, 1865), with permission to retain his rank and uniform.

The undermentioned gentlemen have been appointed Acting Surgeons to the Corps specified:—D. L. Anderson, 1st Banff Artillery; J. A. Rigg, 2nd Oxford; Charles Tweedy, 1st Volunteer Battalion of the Princess of Wales's Own Yorkshire Regiment (formerly the 1st North Riding of York).

Mr. George Hollies is appointed Acting-Surgeon to the 2nd Shropshire Rifles.

Acting-Surgeon C. N. Lee, M.B., of the 1st Newcastle and Durham, has resigned his appointment, which dates from January 9th, 1886.

Acting-Surgeon W. M. Roocroft, of the 4th Lancashire, is promoted to be Surgeon in the same corps, which he joined August 2nd, 1884.

Mr. L. G. Dillon, M.D., is appointed Acting-Surgeon to the 2nd Durham (Seaham) Artillery.

Acting-Surgeon H. F. Stokes is appointed Surgeon to the 1st London (City of London Rifle Volunteer Brigade).

Mr. John Anderson, M.B., is appointed Acting-Surgeon to the 1st Linlithgowshire.

The formation of a Volunteer Bearer Company at Maidstone, in connection with the Medical Staff Corps, has been approved by the Duke of Cambridge.

Surgeon Frederick Taylor, of the Oxford Yeomanry Cavalry, has resigned his commission, which dates from April 21st, 1865; he is granted the honorary rank of Surgeon-Major, and is permitted to retain his rank and uniform.

The undermentioned gentlemen have been appointed Acting-Surgeons to the corps specified: J. L. Waters, M.B., 1st Caithness Artillery; Theodore Fennell, 3rd Cheshire Rifles; W. B. Moir, M.D., 6th Lanarkshire Rifles.

Surgeon T. F. Morrish, of the 8th Lancashire Rifles, has resigned his commission, which was dated September 28th, 1872.

Acting-Surgeon T. Philip, M.D., of the 1st Renfrewshire, is promoted to be Surgeon in the same corps.

Acting-Surgeon E. S. Angove, of the 1st Volunteer Battalion of the Duke of Cornwall's Light Infantry (late the 1st Cornwall), has resigned his appointment, which he entered November 26th, 1884.

Mr. J. A. Watson has been appointed Surgeon to the London Division of the Volunteer Medical Staff Corps.

Dr. Aronsohn, who is the author of several important physiological papers, has been appointed assistant to Professor Jacobson, of Berlin.

Presentation.—After the delivery of certificates to the successful members of the Chorley centre of the St. John Ambulance Association, which took place recently, Mr. Septimus Farmer, M.R.C.S., was presented with a handsome timepiece of novel design, including compass, thermometer, barometer, and two time-indicators, in grateful recognition of his services as instructor.

MEDICO-LEGAL AND MEDICO-ETHICAL.

BONE-SETTERS AGAIN.

We have before now had to call attention to the way in which some county court judges seem inclined to value the services of unqualified persons as highly as those of regular practitioners. In the case of Spurgin against Nicholson we were glad recently to point out that Mr. Spurgin's professional reputation had been successfully vindicated; and that the evidence of the bone-setter, which at first prevailed, was conclusively shown to be worthless. One would expect that the judge who tried that case would, after its result, look on the evidence of this individual, at any rate, with suspicion; but a report which we get from the *West Cumberland Times* of April 16th shows that he is still flourishing. The action was brought by Mr. Keever, as executor of Dr. Denham, to recover the sum of £1 1s. for professional attendance on a Mr. Thomlinson. The defendant alleged that Dr. Denham's attendance on him had been useless. He called Mr. Wilson, the bone-setter, to prove that he, and not Dr. Denham, had cured his injury, which Mr. Wilson alleged to have been a dislocation of the shoulder. As Dr. Denham was dead, this evidence, of course, could not be contradicted. The judge seems to have arrived at a compromise; for he did not altogether disallow the claim, but reduced the amount to 5s.—a munificent remuneration for three visits. Executors are always at a disadvantage in substantiating their claims, and this case does not absolutely prove that the services of a qualified medical practitioner were held to be valueless. It looks, however, very much as if the judge had again relied on the evidence of an unqualified person, given on a question, not of fact, but of professional skill. If this is so, we can only regret the view taken by this particular tribunal, and advise all members of the profession who are unfortunate enough to be within its jurisdiction to consider whether it may not be better to lose a few small fees rather than to sue for them with such unsatisfactory results. If the amount in question is such as to give a right of appeal, this consideration would not apply.

LANGMORE DEFENCE FUND.

The last two numbers of the British Medical Journal have contained an account of this Fund, together with lists of subscribers. A sum of about £103 is still required to reimburse Dr. J. Wreford Langmore the costs to which he has been most unjustly put for his defence in the action Hughes *v.* Langmore.

Subscriptions should be sent to Mr. George Eastes, M.B., 69, Connaught Street, Hyde Park Square, W., one of the Honorary Secretaries to the Metropolitan Counties Branch of the British Medical Association.

Amount of Subscriptions already announced .. £118 8s 6d.

Third List of Subscribers.

	£	s.	d.		£	s.	d.
Dr. W. H. Allchin	1	1	0	Mr. Henry Morris	2	2	0
Mr. J. Bisshopp	1	1	0	Dr. Owen Pritchard	1	1	0
Dr. G. F. Blandford	1	1	0	Sir Edwin Saunders	2	2	0
Mr. J. F. Churchill	1	1	0	Dr. T. Harrington Tuke ..	1	1	0
Dr. G. C. Dale	1	1	0	Mr. M. J. Verdon	1	1	0
Dr. Wilson Fox	3	3	0	Dr. H. W. Webster	0	10	6
Dr. S. O. Habershon ..	2	2	0				

PATIENTS' PREFERENCES.

R. P. writes:—A. (a young practitioner) was called to an acquaintance's house, where he was asked to attend a child with pneumonia. This he refused to do, because he knew B. was the regular medical adviser. B. was sent for and attended. Subsequently A. was told that if any illness should happen again, he would be asked to attend. "They like B. as an accoucheur, being an elderly man, but have no faith in him for general diseases of children," etc. Would A. be justified in attending if again requested to do so?

*** The right of a patient to change his medical adviser being unquestionable, there can, in our opinion, be no doubt that, under the circumstances described, and assuming that all the incidents are disclosed, A. would be justified in accepting charge of any new case of illness in the family in question; strictly speaking, indeed, he would have been justified in attending the case of pneumonia alluded to. At the same time, we consider that, in declining to do so, he acted in the true spirit of medico-ethical scrupulousness, and will have no reason to regret it.

"ADVICE AND MEDICINE, 6D."

M.D.—In reference to Dr. Croke's unprofessional card-circular, intimating that his charges are, for "Advice and medicine, 6d.; visit and medicine, 1s.; and one week's attendance and medicine at home, 2s. 6d., payable in advance," we would simply reiterate the advice which has been repeatedly given in the Journal to the effect that, inasmuch as those who adopt such courses are alike recalcitrant to professional remonstrance and journalistic condemnation, the only remaining mode of checking such proceedings will be to address a memorial to the authorities of the College of Physicians, of which the offending practitioner is a member, and solicit their attention to the case, enclosing one of the card-circulars, and any like publication. If the appeal be supported by the signatures of a few resident practitioners, there may be some hope of a satisfactory result.

DEATH AFTER A DRAUGHT OF CHLORAL HYDRATE AND BROMIDE OF POTASSIUM.

MR. J. ELLIS EDWARDS has directed our attention to the report of an inquest held at Carmarthen, on March 25th, on the body of a police-constable, aged 47, a patient of Mr. Edwards's, who had died very suddenly after a dose of chloral hydrate and bromide of potassium. Mr. Edwards had some cause for complaint in not having been given an opportunity of attending the *post-mortem* examination, either personally or through some friend, and the coroner ought to be aware, though he does not seem to be, that as a matter of courtesy it is usual for him in ordering the *post-mortem* examination to intimate that Dr. ——— is concerned in the case, and should be told of the date of the examination. Mr. Edwards's protest, therefore, was a very good way of making public an undoubted grievance, but we think he takes an unnecessarily gloomy view of the situation when he speaks of being placed in the position of a prisoner at the inquest. It is much to be regretted that no analysis was made of the contents of the stomach, or of the remaining contents of the bottle, for the case as it stands is valueless for medico-legal purposes. Hydrate of chloral has caused death more suddenly than in this instance, but only when given in doses very much in excess of what the deceased was presumed to have taken (30 grains each of bromide of potassium and hydrate of chloral); very possibly the addition of the bromide helped in causing the death, but until we have more evidence we shall continue to regard the above doses as perfectly safe. We ought to add that Mr. Edwards had told the man to take only half the draught.

SCOTCH AND IRISH LICENTIATES.

SIR,—In my letter in the JOURNAL of April 2nd I am made to speak of *liberal* definitions; the word I use is *literal*—liberal is quite outside my intention, so it is either a misprint or a *lapsus pennæ*. I think anyone reading Glenn at the page I first referred to, and referring to Greenwood's work on *Medical Law*, confirmatory of Glenn's exposition of the law, cannot but see that Mr. Upton's contentions are simply extra as far as law (as explained by the two authorities quoted) is concerned on the point in question. I have nothing to add or to subtract from what I have said, but, with your leave, and following Mr. Upton's example, I have referred to dictionaries. I beg to call his and your attention to the Latin word "pharmaceutica," as defined in Mayne's *Medical Vocabulary*. This is noteworthy (although his definition is quite beside the question of law) because a L.R.C.S.E. and a L.F.P.S.G. is the possessor of a full and unlimited licence in *Chirurgiam et Pharmaceuticam*. Mayne defines the latter as the art or system of administering medicines. I simply ask Mr. Upton if that is not the art of an apothecary? I maintain it is. An apothecary in law is one who dispenses and applies his remedies, and, as stated, and I might add proved, in my previous two letters, that is a right of privilege belonging to both L.R.C.S.E. and F.P.S.G. Greenwood, at page 38, says a Licentiate of either of them can charge and recover under both branches—surgery and pharmacy—and it has been held by English county court judges that this is so. Mr. Upton claims for the L.S.A. a difference, in that he is licensed in medicine; but we all know perfectly well that this is as an apothecary, that is, it is a limited right. A L.S.A. is not a physician, and, as I have already said, the Scotch Licentiate has had the apothecaries' right for centuries. Mr. Upton refers to the title L.S.A. That is outside the question *in toto*. Nobody is claiming the right to use it as regards the individual letters.

Now suppose Mr. Upton's exposition were correct, which I respectfully submit it is not, the right of a L.R.C.P.Lond. to the title of Surgeon rests on no sure foundation; and yet his right to it rests on the specific wording of the Charter of the R.C.P.L. Again, the F.P.S. or the R.C.S.Edin. might, similarly to the Society of Apothecaries, proceed against any L.S.A. or M.R.C.S. going north, and practising within their ancient limits of jurisdiction. Will Mr. Upton admit this? If he adheres to his original position he must do so. Observe I say they might, as he contends the Society of Apothecaries might, prosecute a man with a diploma in pharmacy because he has not one in medicine, implying that they have the right. If the one is true, the other follows.

Finally, I have ascertained officially from one of the Corporations named, that in Scotland the double right is, and has always been, unquestionable as belonging to its diploma. An apothecary in Scotland is an apothecary in England. Glenn is correct, Mr. Upton says, and he confirms the statement.—I am, etc.,

JAMES GILROY.

*** Mr. Upton states with reference to this communication: I entirely adhere to what I have already expressed in my previous letters, and have not the slightest doubt as to my opinion being correct.

J.—Assuming "J.'s" statement to be in all respects accurate, it is evident that B. took an unjustifiable advantage of the information confidentially communicated to him.

INQUIRIES (Birmingham).—We think "Inquiries" was right to wait until he had made up his mind that the case was one of syphilis before beginning specific treatment.

PHENYL-HYDRACINE AS A TEST FOR SUGAR IN THE URINE.—Two pinches of hydrochlorate of phenyl-hydracine and four pinches of acetate of soda, are placed in a test-tube, which is afterwards half filled with water and slightly heated. An equal volume of the urine to be tested is then added to the contents of the tube, and the whole placed in a *bain-marie* for twenty minutes, after which it is cooled in cold water. If there be a considerable quantity of sugar in the urine a yellow crystalline precipitate is thrown down; if the liquid is only slightly turbid the precipitate should be allowed to stand for a few hours, and the crystals should then be examined with the microscope. Von Jaksch has found this test useful in three cases of poisoning by carbonic oxide.

AN outbreak of yellow fever is reported to have occurred on board the barque *City of Ottawa*, from Mobile Bay, during her passage to England. The captain and three of the crew are said to have died, and other members of the crew are affected.

INDIA AND THE COLONIES.

INDIA.

THE HEALTH OF CALCUTTA FOR THE FOURTH QUARTER OF 1886. By Dr. SIMPSON, Health-Officer.—We have more than once had occasion to invite the attention of the profession, and sanitarians in particular, to the admirable reports presented by Dr. Simpson to the Chairman of the Corporation of Calcutta. The one before us is full of interesting and instructive matter on the subject of cholera in the city which Dr. Macpherson designated as the "home" of that disease. Once more the health-officer brings out the intimate connection between cholera and dirt. The health-officers of Calcutta, long before Dr. Simpson's time, have endeavoured, "line upon line, precept upon precept," to drive this lessen into the minds of the corporation of the town of Calcutta, and with it the necessity of a pure water-supply for the crowded *bustees* of the native quarters of the city, in substitution for the scarcely diluted sewage they now consume. The number of deaths from cholera during the quarter amounted to 942, against 383, the decennial mean; "in short," says Dr. Simpson, "we must go back to the year 1868, a time prior to the introduction of the water-supply, before we find a corresponding quarter with a greater number of deaths." Inquiry brought out the fact that in almost all cases the disease occurred in groups, for the most part in *bustees*, where the conditions prevail which have so often been described, and which are here once more insisted on. Tracing the facts connected with the prevalence of cholera, it is noted that a large grouping took place round tanks, and in localities where there was great scarcity of water. Thus in Raja Bagan, with twelve tanks, with no drainage and no pure water-supply, there was an outbreak in which over fifty persons were attacked; in Colvin's *bustee*, under the same conditions, ten persons were affected, in another twelve; the water of the tanks in all these *bustees* was very foul. Then the health-officer goes on to say, "the same remark might be made of nearly every tank in Calcutta, and especially of those in the native quarter of the town. Human ordure is seen on the edge of the water, and often adjacent to utensils for cooking purposes and storing water. The people in these instances simply bathe in, cook with, and drink their own filth, and they might as well in many instances drink and bathe in the water issuing from a sewer." No wonder Dr. Simpson dwells on the hopelessness of extinguishing cholera in and about these *bustees* until a supply of pure water is obtained for the inhabitants. It will be said there is nothing new in all this; it is a story often told, but as often forgotten; not only are the quarters of the city in this condition scourged by cholera, it brings in its train a great deal of sickness, more particularly of a dysenteric character. Like sanitary authorities elsewhere, the health-officer of Calcutta complains of want of power to enforce sanitation—"there can be no enforcement where there are no regulations." "Each person," he goes on to say, "builds according to his own ideas and standard, and the result is a state of irregularity, overcrowding, and unhealthiness, highly favourable to epidemic and other diseases." It is evident from this and other reports from the same quarter, that the sanitary authorities of Calcutta have a tremendous task before them to cleanse this Augean stable, and to rescue the inhabitants that suffer in such numbers from cholera and other clearly preventable diseases; we wish Dr. Simpson success, and are in hearty sympathy with him in all his difficulties.

REMITTENT ANTHRAX.—A report, dated 1887, by Veterinary Surgeon R. W. BURKE, A.V.D., on an epidemic which had prevailed among the horses in Meerut towards the end of last year has been issued. The disease sometimes began with a shivering fit, and the temperature rapidly rose, reaching in many cases 105° to 106° F.; there were marked morning remissions, and the temperature might even come down to normal, with complete cessation of all febrile symptoms. After an apparent improvement, acute symptoms generally appeared again, either due to a fresh attack or some complications. Swellings sometimes appeared under the arms or in the throat, abdomen, etc. Paraplegia, muscular tremors, and other nervous symptoms also occurred. The course of the disease is not so rapid as in some forms of anthrax; the animals revive after an attack, and a few days afterwards a relapse occurs, leaving them so weak that they ultimately succumb to exhaustion. The *post-mortem* appearances are dark, viscid blood, subserous ecchymoses, congestion of the lungs, with some consolidation, enlargement of the spleen, dropsical swellings under the arms, in front of the sternum, along the course of the trachea, etc. Bacilli are constantly present in the blood; they are generally small, and stain readily with the ordinary aniline dyes. Rabbits inoculated with the blood die in a couple of days, and the

bacilli there present longer rods and chains. The author terms the disease remittent anthrax, and looks on these bacilli as anthrax bacillus. This may be so, but he brings forward no proof in support of this view; the form of the bacilli seems to differ from the ordinary anthrax bacillus, and no attempt seems to have been made to ascertain by cultivation the identity of the organisms. All that can be said is that this is probably a bacillar disease, but whether due to the bacillus anthracis or to some new form has yet to be determined.

THE RAVAGES OF WILD ANIMALS.—The number of persons killed by wild animals and venomous snakes in the ten divisions of Bengal during the official year 1885-6 was 11,823, the highest number in the last five years. As is usual, nine-tenths of the deaths were caused by snakes. Buffaloes, oxen, horses, and ponies to the number of 12,223 were killed by wild animals; but of these only 311 died from snake-bites. In this number is not included the large number of deaths of sheep, goats, pigs, and donkeys. Five hundred and forty-eight persons (probably nearly all children) were killed by jackals, 221 by crocodiles or alligators, 84 by pigs (either wild or domestic), 22 by elephants (whether wild or domestic it is not stated). Only 18 deaths are attributed to mad dogs, but this is supposed to be much understated. The total amount paid for the destruction of wild animals and venomous snakes was 29,884·4 rupees, against 42,374·11 rupees paid in the preceding year.

THE Government analyst, after examining the water in thirty-three tanks situated in different wards in the northern part of Calcutta, has characterised it as either "very impure," "impure," or "unfit for use of any kind."

THE Princess of Wales, acting on a suggestion made by the Countess of Dufferin, has presented a cheque of £20, out of the funds of Her Royal Highness's Branch of the National Aid Society, to be expended in light literature for the patients in the military hospitals of Rangoon, Thayetmyo, and Mandalay. This amount has been expended under the direction of Sir T. Crawford, the Director-General of the Army Medical Department.

THE death is announced of Dr. Shand, Superintendent of Chinawan Gaol, who is supposed to have contracted typhus fever from one of the prisoners whom he attended. Dr. Shand was a comparatively young man, having entered the India Medical Service about six years ago. An Indian contemporary, in notifying the fact, observes that by his death Government has lost a most energetic and able officer—a man of great intelligence and indomitable perseverance. Whatever he undertook to do, he did with all his might; and he did it well. He has died, as truly as man can die, in the execution of his duty.

IT has been decided to amalgamate the offices of Inspector-General of Gaols and Sanitary Commissioner in Madras on a consolidated salary of Rs.1,500 per month, also the offices of Deputy-Inspector of Gaols and Deputy Sanitary Commissioner on a salary of Rs.1,000 per month.

A NEW BOMBAY HOSPITAL.—The committee of the Parsee Lying-in Hospital has opened a lying-in hospital in Bombay. Surgeon-Major Parakh has consented to act as honorary consulting physician. Drs. Temuljee B. Nariman, Cowasjee Hormusjee, Cowasjee Pestonjee, Dinshaw B. Master, and Jehangeer Cursetjee will act as honorary surgeons of the hospital.

AT the Darbhanga Raj Female Medical Hospital, which was opened in September last under the charge of Miss Ramsbottom, there have been twenty-six admissions since December 4th, and 1,267 women and children have been treated as out-patients.

THE BOMBAY INSTITUTION FOR DEAF-MUTES.—There are in the Bombay Presidency alone some 16,000 deaf and dumb persons, and throughout India no fewer than 200,000 persons thus afflicted. This institution has thus a large field in which to prosecute the useful work which it has recently taken up.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—At the quarterly meeting of the Directors, applications for grants were read from sixty-three widows, six orphans, and three orphans on the Copeland Fund, and a sum of £1,364 was voted to be distributed among them at the next Court. The expenses of the quarter were £58 6s. 6d. Dr. Birket, Dr. de Havilland Hall, Mr. Langton, Mr. Morris, Dr. J. M. Bright, and Dr. H. M. Duncan were selected to fill the vacancies in the Court caused by the retirement of the six senior Directors. Mr. Fuller, acting Treasurer, was nominated as a trustee of the funded property, in place of Sir George Burrows, resigned. The annual general meeting will be held on Wednesday, May 18th, at 5 P.M.

MR. H. R. BARRAUD, 263, Oxford Street, has forwarded to us an excellent cabinet photograph of the late Dr. Meadows, of the existence of which some of his friends and old pupils will be glad to hear.

HOSPITAL AND DISPENSARY MANAGEMENT.

LANCASHIRE COUNTY LUNATIC ASYLUMS, PRESTWICH.

ON January 1st, 1886, this immense institution contained 957 male and 1,138 female patients; of these, more than 250 were epileptics, and 150 general paralytics. The number of admissions during the year 1885 was 859, which was much below the total received in 1884, namely, 1,414, but was still considerably above the average of previous years. In order to meet the demand for accommodation, it was necessary to transfer to other asylums about 150 chronic cases who were without friends. The Commissioners observe, in their Report, that "the number of cases fit for workhouse-care seems to be large." The recoveries amounted to 39.2 per cent. of the admissions; this is about the average rate since the asylum was opened. In the superintendent's opinion, the proportion of recoveries as compared with the admissions is likely to diminish rather than increase. He writes: "I think there can be no doubt that this is, in some degree, due to the fact that in Lancashire, as in other crowded communities, the liability of the inhabitants to incurable forms of insanity is much more marked than in less densely populated districts; no less than 29 per cent. of the male admissions last year having been afflicted with general paralysis, a fatal form of brain-disease comparatively unknown in Ireland and in the majority of our agricultural districts. Another cause of the low recovery-rate is that, in Lancashire, where ample accommodation for the insane has been provided, a larger proportion of the chronically afflicted are placed in asylums, and fewer remain at large. Superannuated and paralytic old people, as well as persons suffering from slight and transient forms of mental derangement, are now sent to asylums, such as in former days would never have been removed from their homes. In 1861, there was found within the county of Lancashire one insane person for every 717 of the general population. In the period of 25 years, the estimated proportion of the insane rose from 1 in 717 to 1 in 594, a difference of more than 17 per cent. These figures do not prove that there is a larger amount of insanity existing at the present day, but that the extent of its existence is more clearly known, and a larger proportion of it finds its way into asylums. Another efficient cause of the decrease in the recovery-rate is due to the fact that this asylum only receives a certain proportion of the recent, and consequently curable, insanity of the district; the other, and no inconsiderable part, is treated elsewhere. In all the principal unions of the Salford Hundred, there is attached to the workhouses special accommodation for the insane to the extent, in some instances, of 350 or 400 beds. This accommodation, originally intended to provide for the care and custody of the aged, the incurable, the idiot, and the imbecile, has of late years been made to serve other purposes. All types of insanity are collected within these lunatic wards, and the workhouse now competes with the asylum for the treatment of much of the recent insanity of the district. As the majority of persons when first attacked with mental disease are taken to the workhouse, the authorities are able to retain what cases they please, and, in some unions, send patients to the asylum only when they happen to require room, or when patients become too expensive or too troublesome to manage. From two of the largest unions in the Salford Hundred, we have scarcely received from the workhouses a single curable patient during the past year."

It is open to serious question whether patients thus detained in the workhouse, instead of being sent at once to the asylum, are given the best possible chance of recovery; it is no answer to plead that the workhouse lunatic wards send out a large number of recoveries, for the reply is obvious, that the number would probably have been larger had the patients been placed under the more skilled asylum treatment. To retain curable cases in the workhouse, and use the asylum as a mere refuse-heap, seems to us an undoubted reversal of the proper order of things, against which we strongly protest.

At Prestwich, there are but five assistant medical officers. In an institution of this size in the United States, we should probably find nearer fifteen than five assistant medical officers and clinical assistants. We venture to suggest to the Committee that the appointment of some clinical assistants could not fail to be of great advantage in many ways; they could at least take charge of the case-books, to which it would seem almost impossible for the present staff to devote much time.

BELVIDERE FEVER HOSPITAL, GLASGOW.

THE Corporation Fever Hospital at Glasgow has recently been completed according to the original plans by the erection of a building for the administrative department, including proper accommodation for the

medical officers and the matron, and dormitories and sitting-rooms for eighty-two nurses. The hospital grounds are thirty-three acres in extent, containing large gardens and pleasure-grounds. In 1862 the Corporation obtained a certain amount of authority to undertake sanitary work, and to deal with infectious disease—authority which was extended a few years later. In the grounds of Belvidere there are two hospitals, totally distinct from each other—one for the treatment of small-pox, and the other for fever patients. The former consists of five pavilions, or ten wards, capable of accommodating 150 adult patients, besides the medical officer's house, nurses' quarters, kitchen and stores, washing-house, stables, morgue, and other offices. The total cost of this portion of the premises has been £30,235. The Fever Hospital was begun in 1870, the first pavilion erected being wholly composed of wood. In 1879, contracts for four brick pavilions were entered into, and from that time till now pavilion after pavilion has been added, the wooden ones being removed to give place to the more commodious and substantial brick buildings, until there are now thirteen permanent pavilions, or twenty-six wards, capable of accommodating 390 adult patients. The cost of the Fever Hospital has been £76,167. The air-space provided for each patient is 2,000 cubic feet. The official inspection of the recently finished part of the building took place on March 3rd, when the Lord Provost of the city, accompanied by members of the Corporation, representatives of public bodies, Professor Gairdner, and Drs. McVail, Glaister, and Neilson, was shown round the building. After the ceremony of inspection, the Lord Provost addressed the company. Referring to the improvement in the health of the city owing to the labours of the Corporation, he stated that in the ten years ending in 1885 there was, compared with the preceding five years, a reduction in the death-rate of fully 1,900 per annum; that is, a total of 19,000 lives saved to the city in these ten years. The reduction still went on, because, whereas in 1885 the death-rate was 25.9 per 1,000, in 1886 it was only 25, no correction being made for increase in population. The death-rate had been reduced from 30.4 in 1875 to 25 in 1886. In 1864 and 1865, typhus fever had a total of 2,700 victims, but from 1881 to 1885 only 32 per annum. The last great outbreak of small-pox was in 1874, when 221 died; last year the deaths were only 5. In 1874, 1,719 died of scarlet fever; last year, only 334. The last great outbreak of measles was in 1871, when 889 died; last year the mortality was 383. In 1872, the deaths from whooping-cough were 1,056; last year, 608.

GLASGOW SOUTHERN HOSPITAL.

Considerable discussion has arisen over the proposed additional infirmary for Glasgow. Dr. Russell, the medical officer of health, in a letter to the *Glasgow Herald*, puts the argument from statistics for additional hospital accommodation very strongly. He points out that the population of Glasgow proper was, in 1881, 511,415. To this he adds the population of the "urban aggregations" round the city, "a vast concourse of people, which is in vital union with Glasgow, and must be remembered in providing for the wants of Glasgow." This gives an addition of 173,057, or, with Glasgow proper, a total of 684,472 in 1881. In 1883, the Registrar-General estimated that this total had grown to 712,636. By similar calculations in the case of Edinburgh, a total of 236,018 is obtained. Dr. Russell takes no account of municipal fever-beds which are rate-supported, and finds for Glasgow a total number of hospital-beds of 1,284, or 1 to every 533 of the population in 1881; while, in Edinburgh, there is a total of 824 beds, or 1 to every 286. He points out that the contrast in 1887, were the populations known, would be still more to the disadvantage of Glasgow. In Edinburgh, in 1886, 36 per cent. of cases came from outside the city, and in Glasgow 23 per cent. of the cases at the Royal Infirmary, and 21 per cent. at the Western, came from outside. In Glasgow proper, 25 per cent. of the population live in single apartments, in Edinburgh 17 per cent.; in Glasgow, 8¼ per cent. live in houses of five rooms and upwards, in Edinburgh 27 per cent. Dr. Russell remarks on the fact that, outside Glasgow and suburbs, there are 300,000 persons in Lanarkshire, at least half of whom are supported by the wages of labour of the most dangerous and unwholesome description, to whom Glasgow is the nearest refuge. He believes that, if the 225,185 persons who live on the south side of Glasgow get a hospital of their own, "their liberality will be quickened by the possession of it, so that the existing hospitals will not be one shilling the poorer."

DEVONSHIRE HOSPITAL, BUXTON.

During the year 1885, 2,449 cases were treated at this hospital, of whom only 354 were without some form of rheumatic complication. Rheumatism itself accounted for 1,324 cases, rheumatoid arthritis for 450, lumbago for 90, and sciatica for 183 cases. Of the 2,449 in-patients, 2,325 were discharged as improved, and only 48 as no better; while 23 were discharged at their own request, 17 left for various reasons, the comparatively large number of 8 died during their stay in the hospital, and 28 remained on the books at the end of the year. The number of out-patients admitted during the year was 248, or 12 fewer than the number admitted during the preceding year. Of the 248 out-patients, 218 were discharged as improved, only 4 as no better, 19 left without report, 1 at own request, and 6 remained on the books at the end of the year. During the last 13 years, a form, printed on a postal card, has been given to every in-patient on leaving the hospital, to be filled up and returned six weeks after discharge. During the 13 years, 18,456 of these cards have been received, and 13,279 are reported as improved, 5,102 as no better, and 75 as having died. During 1886, 2,034 of these postal cards have been received; and 1,443 are reported as improved, 584 as no better, and 7 as having died. The explanations given as to the high cost per patient do not seem quite satisfactory. The charges for medicine and medical and surgical appliances ought in a hospital of this kind to be much smaller than in an institution which treats all sorts of sickness and accidents. Apparently all that most of the patients of the Devonshire Hospital require is a free use of the thermal mineral water, and plenty to eat.

STIRLING DISTRICT LUNATIC ASYLUM, LARBERT.

The report before us covers the year ending May 14th, 1886. The population of this asylum continues to increase slowly, the total number of patients at the end of the year being 392, as compared with 373 at the commencement; since, however, the institution is planned to accommodate 430 patients, there is no present danger of overcrowding. The proportion of recoveries was good, namely, 47 per cent. of the admissions, the average during the seventeen years since the opening of the asylum having been 43.5 per cent. The number of deaths was 27, being at the rate of 7 per cent. of the average population; it does not appear how many *post-mortem* examinations were made. Six of the 27 deaths are attributed, somewhat vaguely, to "general decay and nervous exhaustion." Neither restraint nor seclusion appears to have been made use of; the number of escapes was rather large, namely, 14 in less than twelve months.

The water-supply is still so scanty, in spite of all attempts to increase it, as to necessitate the bathing of several patients in the same water, an arrangement which, as the Visiting Commissioner in Lunacy remarks, "is beyond question an undesirable thing." We feel sure that so able a superintendent as Dr. MacLaren will make every effort to remedy, if possible, this deficiency.

Nearly one-half of Dr. MacLaren's report, which although very lengthy (it extends over forty-three pages) contains an interesting and suggestive recital of the more important events in the history and development of the asylum in the decade during which he has occupied the position of medical superintendent. We can scarcely summarise the results better than in Dr. MacLaren's own words:—"Whereas the percentage of recoveries on admissions for the first six years was 37 per cent., the percentage for the last ten years was 54 per cent.; while the numbers have doubled, accidents have diminished by two-thirds; the period of service of our attendants is year by year becoming longer; marked tranquillity and content has become the prevailing condition in our wards; and the general health-condition of the asylum has steadily risen, and is now at a very high standard."

The remainder of the report consists of brief but valuable sketches of the various cases admitted during the year. It is quite refreshing to find an asylum report which is something more than a mere *rechauffé* of the statistical tables which follow, but Dr. MacLaren's training at Morningside doubtless made it impossible for him to be satisfied with the ordinary stereotyped form. We could not help wondering, on coming to the following passage in his report, whether the superintendent possessed the full share of that caution usually attributed to our "brother Scots." "The shortest residence of all—nineteen days—occurred in the case of a man who, finding that a dark page in his history which he had succeeded in covering for half a lifetime was at last to be laid bare, made a half-hearted effort at self-destruction. Realising, I suppose, that he had only aggravated matters by his imprudent act, he soon came to take a more rational view of things, and asked to be allowed to go home. So unmistakable was the change that I had no misgiving in acceding thus early to his request." Few English superintendents, we think, would have discharged within three weeks of admission a patient who had made an attempt at suicide; but it is probable that we have a tendency to err on the side of over-caution.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

SALARIES OF MEDICAL OFFICERS OF HEALTH.

SEVERAL cases, especially in the Eastern Counties, have recently come to our notice, in which rural sanitary authorities have, on reappointing their medical officers of health, greatly reduced the salaries—sometimes to the extent of a third. We are glad to have observed at the same time that the Local Government Board has frequently, and sometimes successfully, protested against such proposals. In some cases the previous salary has been considered excessive by the sanitary authority; in others it has been urged that, as the district has reached a fair state of wholesomeness, the labours of the health-officer will in future be less arduous; whilst in others, again, the salary has suddenly been discovered to be more liberal than those given in adjoining districts. Of course no general standard of remuneration can be fixed, and each case must to a great extent be dealt with on its merits; but it is by no means clear that the sanitary authority has in all cases held in view the primary importance of making it worth the while of the best qualified local practitioner to take the post of medical officer of health, and give adequate attention to the proper discharge of its duties. A health-officer ought not to be concerned solely with outbreaks of infectious disease. A district, however healthy, has some resemblance to a machine, inasmuch as it is always liable to get out of order, and a health-officer should be prepared to advise his authority on all questions affecting the public health throughout his district; but, if his services are not properly remunerated, the systematic inspections which would enable him to give proper advice will, not improbably, be only partially carried out. Again, it is small encouragement for a health-officer who is endeavouring to improve the condition of his district to feel that, when he has achieved a fair state of wholesomeness, his salary may be curtailed, and that he may then lose the appointment altogether if he is not prepared to accept the reduction. As for local comparisons, it is but scant fairness to a zealous officer, at a time when additional duties in the supervision of dairies, cowsheds, bakehouses, etc., devolve upon him, to reduce his salary because inadequate remuneration is given in an adjoining district. It is to be hoped that, when the long-deferred reform of local government is effected, some better arrangements will be made for the discharge of the duties of health-officers.

MEDICAL OFFICERS OF HEALTH AND LOCAL BOARD MEETINGS.

A CORRESPONDENT asks "whether he has not a definite right, as medical officer of health, to attend the meetings of his local board when any point touching the public health is being raised." It is unquestionably the duty of a medical officer of health to afford his authority such assistance and explanations (verbal if need be) as the authority may require; and to do so it is usual for him to attend the authority's meetings. Such attendances are as a rule valued—at all events where proper relations exist between the authority and their officer; but if the authority decline to hear the health-officer, or to allow him to attend their meetings, we fear they are quite within their powers. A medical officer of health is, however, always at liberty to embody his remarks in a report to the authority, although we quite recognise the fact that an authority who will not give their officer a hearing is not likely to give much greater attention to his written remarks.

DRAINAGE OF MANCHESTER.

THE Rivers Committee of the Manchester Town Council has prepared a report on an extensive system of main drains, which will carry the sewage of the entire city to Davihulme, where it will be dealt with by precipitation works on the principle of those now in successful operation at Leeds. The effluent water will pass into the River Irwell, which stream, by the means to be adopted, will be relieved of much of its impurity. The maximum expenditure to be incurred, to cover works, land, easements, and all other contingencies, is set down at £500,000.

LYMPH SUPPLY.

JNO. W. HAYWARD (Public Vaccinator) writes: My experience does not accord with that of your correspondent, "Vaccine," as, being desirous of changing my stock at the commencement of the quarter, I wrote to the National Vaccine Establishment for a supply of calf lymph, which was forwarded to me on four points on April 1st. From two of these I vaccinated an infant on the 4th, the result being four very fine and typically healthy vesicles. On the 11th, I used the other two points with an equally satisfactory result. I have on several occasions procured lymph in tubes from the Institution, and have generally found the result successful.

MIDWIFERY FEES UNDER THE POOR-LAW (SCOTLAND) ACT.

ANON. writes:—A. B. was called upon to attend a pauper in her confinement. The patient was delivered with the aid of instruments. The pauper resides four miles distant from A. B.'s residence, in the parish to which he is medical officer—under the Poor-law (Scotland) Act)—but is chargeable to another parish. Is the medical man legally entitled to a fee? If so, what would be considered fair under the circumstances?

*** Our correspondent should have given us additional particulars, more especially as to the difficulties he encountered and the time occupied, as, in such a case, the Board of Supervision, which generally acts with liberality to medical men, would have acted justly and fairly. He could not, however, do wrong in making an application for £2, but we should not advise his applying for a larger amount.

REGULATIONS OF VANS, TENTS, ETC., USED AS HUMAN HABITATIONS.

M. O. H. writes:—Can you or any of your correspondents inform me (1) whether any by-laws have yet been made under 48 and 49 Vic., ch. 72, sec. 9, in regard to tents, vans, etc., used for human habitation, and where a copy of such by-laws might be obtained? (2) What reasonable standard of cubic space might be adopted (*a*) for tents, (*b*) for fairly well ventilated vans?

*** 1. We are not aware that any such by-laws have yet been made, nor has the Local Government Board issued any models on the subject for the guidance of local authorities. We believe, however, that the Central Board has caused special inquiry to be made through their medical department as to the best way of dealing with the question, and our correspondent might apply directly to the department on the subject. 2. As regards "cubic space," if "M. O. H." contemplates its regulation by by-laws, we doubt his correctness. "Overcrowding" is to be dealt with under the first part of the section he quotes, as if it were a "nuisance within the meaning of section 91 of the Public Health Act, 1875," whereas the by-laws that may be made under the second part of the section relate to the promotion of cleanliness and the habitable condition of tents, vans, etc., to the prevention of the spread of infectious disease, and generally to "the prevention of nuisances in connection with the same." Still the legal question may be open to some doubt. The question of "reasonableness" is so very much one of opinion, and is so influenced by circumstances, that we hesitate to suggest a standard with any belief that it could be generally adopted, especially as regards tents. But it may be useful to note that on canal boats the regulations require that any after-cabin used as a dwelling shall contain not less than 180 cubic feet, and any fore-cabin not less than 80 cubic feet; and they also require for every person above the age of 12 years a minimum space of 60 cubic feet, and for each child under 12 years, of 40 cubic feet. These figures are, however, exceptionally low. It has always seemed to us that the section referred to by "M. O. H." is very incomplete.

HEALTH OF ENGLISH TOWNS.

DURING the week ending Saturday, April 23rd, 6,428 births and 3,825 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons. The annual rate of mortality, which had been 20.5 and 20.9 per 1,000 in the two preceding weeks, further rose during the week under notice to 21.6. The rates in the several towns, ranged in order from the lowest, were as follow:—Birkenhead, 14.9; Leicester, 15.7; Nottingham, 15.8; Brighton, 16.3; Wolverhampton, 18.7; London, 18.9; Derby, 20.0; Portsmouth, 20.1; Bradford, 20.2; Newcastle-upon-Tyne, 20.6; Bristol, 21.0; Hull, 22.3; Plymouth, 22.3; Leeds, 22.7; Sheffield, 22.8; Bolton, 22.8; Birmingham, 23.4; Huddersfield, 23.8; Preston, 24.0; Blackburn, 24.1; Norwich, 24.7; Salford, 24.8; Oldham, 26.4; Sunderland, 26.6; Halifax, 27.7; Cardiff, 27.9; Liverpool, 28.7; and the highest rate during the week, 30.4 in Manchester. The death-rate in the twenty-seven provincial towns averaged 23.8 per 1,000, and exceeded by 4.9 the rate recorded in London, which, as before stated, did not exceed 18.9 per 1,000. The 3,825 deaths registered in the twenty-eight towns during the week under notice included 558 which were referred to the principal zymotic diseases, against numbers increasing steadily from 342 to 510 in the ten preceding weeks; of these, 291 resulted from measles, 134 from whooping-cough, 47 from scarlet fever, 40 from diarrhœa, 24 from "fever" (principally enteric), 21 from diphtheria, and 1 from small-pox. These 558 deaths were equal to an annual rate of 3.1 per 1,000. The zymotic death-rate in London during the week under notice did not exceed 2.4 per 1,000, while it averaged 3.8 in the twenty-seven provincial towns, and ranged from 0.4 in Portsmouth, and 0.6 in Wolverhampton, to 6.2 in Norwich and in Salford, 6.7 in Liverpool, and 7.6 in Manchester. The deaths referred to measles, which had increased from 77 to 266 in the ten preceding weeks, further rose during the week under notice to 291, and were proportionally most numerous in Sunderland, Sheffield, Newcastle-upon-Tyne, Norwich, Huddersfield, Liverpool, Salford, and Manchester. The fatal cases of whooping-cough, which had been 117 and 115 in the two preceding weeks, rose again last week to 134, and caused the highest death-rates in Norwich, Birmingham, and Nottingham. The 40 deaths from diarrhœal diseases showed an increase upon recent weekly numbers. The fatal cases of fever, which had been 34 and 24 in the two preceding weeks, were again 24 during the week under notice. The 47 deaths referred to scarlet fever showed a slight further increase upon the number in the three preceding weeks, and were proportionally most numerous in Blackburn. The fatal cases of diphtheria, which had been 24 and 32 in the two preceding weeks, declined last week to 21, and included 14 in London, 3 in Liverpool, and 2 in Derby. One death from small-pox was recorded in London, but no fatal case of this disease was registered during the week under notice in any of the twenty-seven provincial towns. Two small-pox patients were admitted into the Metropolitan Asylum hospitals during the week under notice, and 7 small-pox patients were

under treatment in these hospitals on Saturday, April 23rd. The death-rate from diseases of the respiratory organs in London during last week was equal to 4.1 per 1,000, and was considerably below the average. The causes of 92, or 2.4 per cent. of the 3,825 deaths registered in the twenty-eight towns during the week under notice were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

In the eight principal Scotch towns having an estimated population of 1,299,000 persons, 890 births and 550 deaths were registered during the week ending Saturday, April 23rd. The annual rate of mortality, which had been 22.9 and 23.7 per 1,000 in the two preceding weeks, declined again to 22.0 during the week under notice, but slightly exceeded the mean rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 11.5 in Leith, 12.3 in Greenock, 19.9 in Edinburgh, 20.7 in Dundee, 21.0 in Perth, 22.6 in Aberdeen, 25.3 in Glasgow, and 29.9 in Paisley. The 550 deaths registered during the week in these Scotch towns included 36 which were referred to whooping-cough, 30 to measles, 10 to diarrhœa, 9 to scarlet fever, 8 to "fever," 2 to diphtheria, and not one to small-pox; in all, 95 deaths resulted from these principal zymotic diseases, against 102 and 91 in the two preceding weeks. These 95 deaths were equal to an annual rate of 3.8 per 1,000, which exceeded by 0.7 the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic death-rates in the Scotch towns during the week under notice were recorded in Glasgow, Dundee, and Aberdeen. The deaths referred to measles, which had declined from 55 to 28 in the four preceding weeks, rose again to 30 during the week under notice, of which 18 occurred in Aberdeen (against 34, 21, and 14 in the three previous weeks), and 11 in Glasgow. The fatal cases of whooping-cough, which had risen in the five preceding weeks from 25 to 36, were again 36 during the week under notice, and included 14 in Glasgow, 6 in Edinburgh, 5 in Dundee, and 5 in Aberdeen. The 10 deaths from diarrhœa differed but slightly from the average; 4 occurred in Glasgow and 3 in Aberdeen. The 9 fatal cases of scarlet fever showed a further slight decline from recent weekly numbers, and included 4 in Dundee, 3 in Edinburgh, and 2 in Glasgow. The deaths referred to different forms of fever, which had been 8 and 6 in the two preceding weeks, rose again during the week under notice to 8, of which 3 occurred in Glasgow, and 2 in Dundee. Of the 2 fatal cases of diphtheria, 1 occurred in Glasgow and 1 in Aberdeen. The death-rate from diseases of the respiratory organs in these Scotch towns during the week was equal to 5.2 per 1,000, against 4.1 in London. The causes of 57, or 10.3 per cent., of the 550 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending Saturday, April 23rd, 455 deaths occurred in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 27.3 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 10.3; Belfast, 30.7; Cork, 14.3; Drogheda, 21.1; Dublin, 31.0; Dundalk, 17.5; Galway, 23.5; Kilkenny, 71.9; Limerick, 24.3; Lisburn, 14.5; Londonderry, 16.0; Lurgan, 25.7; Newry, 7.0; Sligo, 9.6; Waterford, 27.8; Wexford, 21.4. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 1.9 per 1,000, the rates varying from 0.0 in twelve of the districts, to 4.6 in Waterford; the 12 deaths from all causes registered in that district comprising 2 from diarrhœa. Among the 132 deaths from all causes registered in Belfast were 1 from scarlatina, 1 from typhus, 4 from whooping-cough, 2 from diphtheria, 1 from enteric fever, and 1 from diarrhœa; and the 22 deaths in Cork comprise 1 from typhus. In the Dublin Registration District, the births registered during the week amounted to 213, and the deaths to 212. The deaths represent an annual rate of mortality of 31.3 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 31.0 per 1,000. Twenty deaths from zymotic diseases were registered, being 9 below the average for the corresponding week of the last ten years, and 6 under the number for the week ending April 16th; they comprise 6 from measles, 2 from scarlet fever (scarlatina), 2 from whooping cough, 2 from diphtheria, 4 from enteric fever, 3 from diarrhœa, etc. Fifty-one deaths from diseases of the respiratory system were registered, being 1 over the average for the corresponding week of the last ten years, and 6 over the number for the week ending April 16th; they comprise 29 from bronchitis, and 15 from pneumonia, or inflammation of the lungs. The deaths of 17 children under 5 years of age (including 13 infants under 1 year old) were ascribed to convulsions. Three deaths were caused by apoplexy, 2 by epilepsy, 10 by other diseases of the brain and nervous system (exclusive of convulsions), and 16 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 25 deaths, mesenteric disease 2, and cancer 6. Two accidental deaths were registered. In 39 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending Saturday, April 23rd, that the annual death-rate recently averaged 28.1 per 1,000 in the three principal Indian cities; it was 22.7 in Bombay, 25.1 in Calcutta, and 35.2 in Madras. Cholera caused 36 deaths in Calcutta and 2 in Madras; 5 deaths were referred to small-pox, and 27 to measles, in Bombay; while "fever" was fatally prevalent in each of these Indian cities. According to the most recently received weekly returns, the annual death-rate averaged 28.6 per 1,000 persons estimated to be living in twenty-two of the largest European cities, and exceeded by as much as 7.0 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 33.6, and showed a slight further decline from the rates in recent weeks; the 597 deaths included 24 from typhus and typhoid fever, 6 from small-pox, and 14 from scarlet fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 24.0 per 1,000, and ranged from 21.3 in Christiania to 26.6 in Copenhagen; diphtheria caused 10 deaths in Christiania and 8 in Copenhagen, and 7 deaths resulted from scarlet fever in Stockholm. In Paris the death-rate was equal to 29.4 per 1,000 (against 29.2 and 28.7 in the two preceding weeks), and exceeded by as much as 10.5 the rate for the corresponding week in London; the deaths included 15 from small-pox, 56 from measles, 36 from typhoid fever, and 33 from diphtheria and croup. The 189 deaths in Brussels, of which 6 resulted from measles and 3 from whooping-cough, gave a rate of 21.8. No returns from Geneva have been received since the beginning of the current year. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 25.1 per 1,000, the several rates being 19.2 in the Hague, 22.3 in Rotterdam, and 27.9 in Amsterdam; 9 deaths were referred to measles and 4 to whooping-cough in Amsterdam. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 27.2 per 1,000, and ranged from 21.5 and 22.2 in Dresden and Berlin, to 30.9 in Vienna, 34.9 in Prague, and 35.0 in Buda-Pesth. Small-pox caused 3 deaths in Vienna, 3 in Trieste, 5 in Prague, and 8 in Buda-Pesth; 6 deaths were referred to typhoid fever in Hamburg; 10 to measles in Munich, and 9 in Vienna; while diphtheria and croup were fatally prevalent in most of these cities. The death-rate in three of the largest Italian cities averaged 33.9 per 1,000, and ranged from 29.4 in Venice to 37.1 in Rome; small-pox caused 9 deaths in Rome and 2 in Venice; measles 19 deaths in Rome and 4 in Turin; and 4 deaths were referred to typhoid fever in Turin. In Cairo the death-rate was 36.1 per 1,000, and in Alexandria 37.7 diarrhœal diseases caused 95 deaths in Cairo and 23 in Alexandria; and 3 fatal cases of small-pox were recorded in Cairo. In four of the largest American cities the recorded death-rate averaged 23.9 per 1,000, and ranged from 15.9 in Baltimore to 27.8 in New York. Diphtheria caused 40 deaths in New York and 17 in Brooklyn; 9 fatal cases of typhoid fever and 13 of measles occurred in Philadelphia; and 2 deaths were referred to small-pox in New York.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Gloucestershire Combined.—Dr. Bond had a favourable report to make for this district during 1885. There was no appreciable change in the general death-rate, which stood at 15.9 per 1,000, compared with 16.0 per 1,000 in 1884. The zymotic death-rate, 1.5 per 1,000, though not quite so low as in 1881, was considerably below the average of the eleven preceding years. Small-pox (for some years absent from the death-list) caused 7 deaths in 1885. Its effects were all limited to one special division, that of Chepstow. There was a notable decrease in the mortality from the scarlatinoid group of diseases, from fevers, diarrhœal affections, and the septicæmic class of diseases. Dr. Bond gives some interesting particulars as to various outbreaks, especially of typhoid fever and diphtheria. In a remarkable outbreak of the latter disease at Hatherley, near Gloucester, which carried off four children and their mother, no evidence either of appreciable dampness or of any other insanitary condition of special import could be obtained. Perhaps the most satisfactory feature of the year's returns is the remarkably low mortality from the various forms of continued fever. Dr. Bond reports a further reduction of over 60 per cent., and again discusses the prevalence of typhoid fever among the men employed at the Severn Tunnel works. The chief existing cause that could be discovered was exposure to wet when working. In the absence of hospital accommodation in the combined district, except that in Cirencester, no efficient isolation of cases of infectious diseases was practicable. Temporary hospitals had to be provided for the small-pox patients in Chepstow. Dr. Bond indulges in a lengthy diatribe on the injustice under which rural districts now suffer in being constantly liable to infection by towns which are situated in their midst, the authorities of which often, as in the case he cites of Chepstow, persistently refuse to co-operate with their rural neighbours in organising a hospital for their common use. The central authority should be invested with power to enforce a combination of sanitary districts for this purpose.

Isle of Wight Rural. *Connection of Diphtheria and Scarlatina: Infectious Diseases in Health-Resorts.*—An epidemic of diphtheria in this district during the year 1885 revealed a most serious state of sanitary neglect. In almost every case cited by Dr. Groves in his annual report, insanitary conditions were the rule, and in one outbreak he describes these as appalling. The dwellings were bad, there were heaps of refuse or slaughter-house offal, foul closets or drains near the houses; or there was serious overcrowding, or bad water. At Northwood and Whitwell, on clay soil, the mortality was great. In the former, the disease was not spread by communication, but the sanitary conditions were bad, and the air polluted by refuse from the town. At Whitwell, there was communication at a period when watchfulness was suspended; this period being followed by an outburst of the disease. Dr. Groves points to the connection between diphtheria and scarlatina, epidemics of the latter being accompanied and followed, as in the foregoing instances, by cases of the former disease, especially in damp, confined places. Enteric fever caused four deaths, two of the cases being imported. Measles prevailed in the East Medene in the autumn. There were about thirty cases in Brading, and about forty in the neighbourhood of Shanklin and Sandown. Dr. Groves faces the question of the causes which tend to the prevalence of catching disorders in health-resorts. He considers that rural sanitary authorities, in whose districts many health-resorts are situated, do not possess powers adequate for the protection of the public health, unless they have urban powers. Considering 1885 alone, Dr. Groves gives evidence of the introduction into his district of both scarlatina and enteric fever, and, in two cases at least, the latter disease was con-

tracted by visitors in the Isle of Wight Rural District, and imported into Worcestershire. Dr. Groves calls attention to the prevalence of diseases of a degenerative type, as insanity and scrofula, among the natives of the island. The members of some of the old families have also, by heredity, a tendency to cancer, which is one of the diseases the causes of which must be sought probably in the habits and conditions of life of generations back, and in intermarriage among kinsfolk. The birth-rate of 1885 was lower than in any previous year since 1848, and was as much as 5.3 per 1,000 below the very low average of England and Wales. The death-rate was also below the average, and, deducting the deaths of persons not belonging to the district, was equal to 13.6 per 1,000.

SHEFFIELD.—*Infant Mortality: Outbreak of Small-pox.*—Dr. Sinclair White has presented a most able report at the conclusion of his first year of office—1885—the statistics of which will be specially valuable as a basis of future operations. Although no report has been published for several years, it is satisfactory to find there has been no retrogression. After making allowance for the many factors outside the pale of sanitary reform, Dr. White considers there is clear evidence that the many improvements in the town are bearing fruit in the form of a lower death-rate and a higher degree of health and efficiency in the living. Zymotic diseases caused 836 deaths. There was a decrease in the mortality from scarlet fever and diarrhœa, but measles showed an increase over the returns for 1884. No fewer than 666 of the zymotic deaths occurred in children under five years of age. Dr. White comments at some length on the discouraging record of infantile mortality, and points out the desirability of more care in the rearing and feeding of children. The large number of deaths in young children from measles and whooping-cough points to an unsatisfactory measure of vitality among them. Although these diseases were so prevalent and fatal, yet little effort was made by the public to curtail its spread. Small-pox appeared in May, and for a short time the outbreak assumed alarming proportions. The majority of cases were of persons who either had never been vaccinated or who had undergone the operation many years before. The very few cases that occurred in vaccinated children or re-vaccinated adults were of the mildest type. There were several cases of typhus fever, with four deaths; but the disease did not spread beyond the houses originally attacked. The disinfecting apparatus is not sufficient for the requirements of the town, although it did good service during the year.

SUNDERLAND.—*Epidemic of Measles.*—The year 1885 will be long memorable in the health annals of Sunderland for a virulent epidemic of measles. Dr. Harris states that rarely in these days is a town visited so severely with this disease, and there is no previous record in the history of the borough of an epidemic causing such a sacrifice of juvenile life. The subject is specially dealt with in Dr. Harris's report for that year, as there was naturally a great interest taken by the public in the matter. Of 1,316 known cases, 384 deaths occurred. The average number of deaths in the ten years preceding was 46 per annum, with an alternate high and low mortality up to the end of 1883. In 1884, no deaths from measles were recorded till the end of the year, when 9 occurred. The zymotic mortality was considerably above the average, though small-pox, diphtheria, and measles were the only diseases which showed an excess. Typhus fever gave cause for some anxiety; great distress prevailed, the people were ill-clothed and ill-fed, and nearly all the conditions which conduce to this disease were present. The cases were quickly reported and the patients removed to the hospital; but the want of a suitable place for isolation was much felt. The deaths from diarrhœa were fully 50 per cent. less than in the preceding year. Dr. Harris directs special attention to the effect of age-distribution on mortality. He has drawn up several important tables, comparing the death-rates of Sunderland and those of England and the "healthy districts." The rate of mortality among children under five is shown to be far in excess of that of either of these standards; but between the ages of fifteen and forty-five there is greater healthiness in Sunderland. The population is distributed in a manner distinctly favourable to a low death-rate, and if the age-distributions were the same as in England and Wales the mortality would be much higher. The death-rate for 1885 was 23.7 per 1,000, and, less the measles, it was 20.6 per 1,000.

OLDHAM.—In his first annual report, for the year 1885, Dr. James Niven has confined himself almost entirely to statistics, and reserves his comments for future report. A considerable number of typhoid cases occurred during the winter, and, though the results of the investigations are not recorded, yet, in most instances, a serious defect of drainage seems to have been found. Oldham stands below the average number of deaths from zymotic diseases; but, along with Preston, it had the highest death-rate from whooping-cough. Bronchitis, phthisis, and pneumonia head the death-list, though a distinct decline is evident in bronchitis since 1875. Dr. Niven draws attention to the biennial visits of measles in Oldham. The deaths increase by a bound every second year, except in 1885, when they fell to 54 from 193 in 1884. The death-rate from all causes for the whole borough was 22.0 per 1,000, varying in the sub-districts from 15.5 to 31.2 per 1,000.

OBITUARY.

JOHN CHATTO, M.R.C.S., L.S.A., Librarian to the Royal College of Surgeons.

MR. JOHN CHATTO, so well known to all who have studied during the past thirty years in the Library of the College of Surgeons, was born in London in 1809. His father, Mr. John Chatto, was the son of Alexander Chatto, Esq., of Mainhouse, N.B, members of whose family have married with the Rutherfords and other old North of England and Border families. He began life as apprentice to the celebrated Joseph Swan, who then practised at Lincoln. Mr. Swan, it may be observed, never took another pupil. On the completion of his apprenticeship, Mr. Chatto entered as a student at St. Bartholomew's Hospital, where he pursued his studies with exemplary diligence, taking the old double qualifications in 1832. He set up in practice first in Judd Street, and afterwards in Great Coram Street, but he possessed neither the tastes nor the qualities which make practice a congenial pursuit and a means of acquiring a competence. He gradually took to literature, and became a valuable contributor to the *British and Foreign Medical and Chirurgical Review*, when that magazine was conducted by Dr. James Johnson and Dr. John Forbes. He troubled little about medical politics, excepting on one occasion, when he wrote some spirited letters to the *Lancet* on that perennial subject of dispute, the Council of the College. Later in life he was a constant contributor to the *Medical Times*.

Mr. Chatto, when living in Bloomsbury, was a constant visitor to the College Library, and afforded valuable assistance to Mr. T. M. Stone, who was then acting as Librarian. Mr. Chatto was, in consequence, officially employed in the compilation of a catalogue. In 1853 he was formally appointed Librarian. Comparatively late in life he married a French widow lady, Madame Josephine Chanoin, to whom he was deeply attached, but she died in a very few years, leaving no children. Her loss was acutely felt by her husband, and his naturally melancholic temperament was henceforward intensified. When he became a widower, he gave up his official residence, and lived with his sister at Notting Hill. After a few days' illness, for which he was attended by Dr. Berkart, he died of bronchopneumonia on April 19th. He had nearly completed his seventy-eighth year. Mr. Chatto was buried on Saturday, April 23rd, at Kensal Green Cemetery, by the side of his wife's remains. Amongst those who were present were his cousin, Dr. J. Griffith, Dr. Walker, Mr. Trimmer, and Mr. Searle.

For thirty-four years he performed the duties of the appointment which was so congenial to him in a conscientious and unostentatious manner. He would sit, as a rule, quietly at work in the little apartment specially provided for him, but when consulted would spare no pains in seeking out not only any specified book which might be sought, but also the sources of any literary subject which a visitor to the Library desired to investigate. The authors of many well-known medical works are much indebted to Mr. Chatto for valuable assistance. Any practical form of expressing thanks he looked upon as superfluous.

Mr. Chatto was an accomplished French and German scholar, and one of his favourite occupations was the compilation of a medical dictionary of reference to works in the principal European languages. Unfortunately this dictionary was never published, and it is not known whether the thousands of pages which he filled during its preparation are still in existence. He was more recently engaged in a new catalogue of the Library of the College.

John Chatto looked after his books as a shepherd looks after his sheep. The one unpardonable offence was, in his mind, the temporary abstraction of a volume by any officer of the College for use in another part of the building, without previous notification. Such prejudices are golden qualities in a librarian, above all when he guards, as in this instance, a collection of volumes which must not be lent out. Physically, he was a good type of the man of weak health who manages to live long. He suffered in 1876 from a very severe

attack of facial erysipelas, from which, however, he rallied. He was frequently dyspeptic, and was very sensitive to cold winds and damp weather. Yet with very rare intermissions he was constantly at his post from 1853 till a few days before his death. Mentally, he was a man who was seldom genial, but ever congenial. His manner was always rough, even with his friends, yet he was ever sympathising, whether he volunteered to hunt up references in order to assist a learned scientist, or to show picture-books to a child in order to afford it amusement. In fact, he was a blunt, thoroughly honest man of decided character. John Chatto will be missed and regretted by many. Amongst the officers and servants of the College he was universally respected.

JOHN KIRKMAN.

THE death of Dr. Kirkman, at the venerable age of 93, occurred at his residence at Brighton on April 3rd. He was for forty-five years superintendent of the Melton Asylum, but it is in connection with the introduction of the non-restraint system in the treatment of pauper lunatics that his name will be best remembered. Before this system was recognised or understood in the metropolitan area, it was in successful working at Melton. The first great asylum to adopt this plan was that of Hanwell, and the priority of Dr. Kirkman was frankly acknowledged at the time by Dr. Conolly. The deceased gentleman was popular with all classes in the country, owing to his genial manners, his high intellectual attainments, and the great personal interest which he took in his patients. Dr. Kirkman was twice married, his first wife being the daughter of Mr. Chevalier, the well-known surgeon. He leaves three sons and a daughter; one son being Dr. W. P. Kirkman, retired Superintendent of the Maidstone Asylum.

Dr. Kirkman resigned his position of Superintendent of the Suffolk County Asylum eleven years ago, and retired on a salary of £600 a year. He was president of the Association of Medical Officers of Asylums and Hospitals for the Insane, and President of the East Anglian Branch of the British Medical Association. He was the author of many papers on the management of lunatic asylums. His efforts in initiating the non-restraint system have been considered a great honour to the county of Suffolk, where all the magistrates, a whole generation of whom he had survived, nobly supported him.

C. J. BRACEY, M.B.Lond., F.R.C.S.

WE regret to record the death of Mr. Bracey at the early age of 48. To his numerous medical friends in Birmingham, and in even greater measure to his patients, his death will cause an irreparable loss. His academic distinction culminating in the Gold Medal for Surgery at the final M.B. examination, and the reputation he won for skill and ability as house-surgeon to the General Hospital, presaged him a career of usefulness and success. Unhappily for himself and the public his health was so continuously bad, owing to migraine, that he was compelled to resign one after the other his appointments at the Children's and Women's Hospitals. For the same reason he had to give up the Professorship of Anatomy at Queen's College, where his success as a lecturer was only equalled by his popularity among the students. The loss to the public was, however, the gain of his private patients, and to few is it given to win in such a measure, as did Mr. Bracey, the love and confidence of those among and for whom he worked. To many his place can never be filled, and by all he will be remembered as a trusted counsellor, and a most upright, high-minded man.

WRIGHT ALLEN, M.R.C.S.Eng., L.S.A.

THE death of an octogenarian member of the profession, Mr. Wright Allen, occurred on April 8th, at Nottingham. The deceased gentleman was born on February 9th, 1804, and, having obtained the diploma of the College of Surgeons and the licence of the Apothecaries' Society of London, he commenced practice at Arnold, a populous village in the vicinity of Nottingham. For forty-eight years Mr. Allen was here actively engaged in the onerous duties of his profession. He had a large midwifery practice. He filled the post of medical officer to the Arnold Board of Health, and for many years the appointment of certifying surgeon under the Factory Act. The repeated bronchial attacks to which he at length became subject compelled him to resign his appointment, and to retire to Nottingham, where he resided until his death. Mr. Allen, who was a good type of the hard-working country medical practitioner, has left many sorrowing friends, who showed their last mark of respect for his memory by attending in large numbers at his funeral, which took place on April 12th, in the village with which he had been so long associated.

WILLIAM MURRAY, M.D.

WE have to record the sudden death of Dr. Murray, of Burley-in-Wharfedale, which took place a few days ago. Dr. Murray, who was a native of Paisley, had practised for the last twenty-four years in Burley, where he was the only medical man, and where he had won the esteem of all with whom he came in contact. Dr. Murray was but 49 years of age, and though his health had been such as to give anxiety to his family, he discharged the duties of his profession up to within a few hours of his death. Dr. Murray filled the office of Medical Officer of Health to the Burley Local Board.

MEDICAL NEWS.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received Certificates entitling them to practise as Licentiates of the Society, on April 21st, 1887.

Hensley, Arthur Egerton, Parkham Rectory, Bideford.
Harris-Liston, Llewellyn, Cambridge House, St. John's, S.E.

On the same day 11 others were admitted to examination, of whom 3 passed in Surgery and 7 passed as Assistants.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At the April sittings of the Examiners, held in Glasgow, the following candidates passed the respective examinations for the triple qualification:

First Examination.—M. M. Campbell, S. Hishmeh, S. A. Kapadia, D. R. Johnston, T. M'Millan, J. A. C. Park, D. M. Paton, D. Porteous, H. Solkan, R. D. Thomas.

Second Examination.—E. Barber, W. Bell, A. F. Crinan, W. A. Frizell, M. D. Gray, H. Heyworth, J. A. Hamilton, H. L. Homer, D. R. Johnston, S. A. Kapadia, E. S. Leyburne, G. C. C. Mackinnon, J. M. Ormond, G. Watson, L. Watson.

Final Examination.—A. A. Adie, Glasgow; J. Brodie, Edinburgh; C. S. Bowker, Appleby Magna; G. A. Clark, Southsea; W. F. Cooper, Birmingham; G. W. Davis, Glasgow; E. A Huntley, St. Albans; S. A. Kapadia, London; A. J. M'Lean, St. Helen's; A. F. C. Marquis, Glasgow; V. A. Rutherford, Newcastle-on-Tyne; H. Smith, Glasgow; W. A. G. Williams, Carmarthen.

UNIVERSITY OF ST. ANDREWS.—The following gentlemen, having passed the required examinations, had the degree of Doctor of Medicine conferred upon them on April 20th, 1887:

C. H. Greaves, M.R.C.S.Eng., L.S.A.Lond., Stafford; J. Hackney, M.R.C.S.Eng., L.S.A.Lond., Hythe; D. Havard, L.R.C.P.Lond., M.R.C.S.Eng., L.S.A.Lond., Newport, Pembroke; S. C. Hirst, M.R.C.S.Eng., L.S.A.Lond., Bradford, Yorkshire; J. B. Jackson, M.R.C.P.Ed., L.F.P.S.G., L.S.A.Lond, Birmingham; J. F. Le Page, L.R.C.P.Ed., L.F.P.S.G., Salford; A. Lyall, L.R.C.P.Ed., L.R.C.S.Ed., Leven; H. G. MacBain, L.R.C.P.Ed., L.S.C.S.Ed., North Berwick; J. Mitchell, M.R.C.P.Ed., M.R.C.S.Eng., L.S.A.Lond., New Wortley; V. Stone, L.R.C.P.Ed., F.R.C.S.Ed., Montrose.

At the same time the following gentleman had the degrees of Bachelor of Medicine and Master in Surgery conferred upon him, after examination:

J. Fayrer, M.A., Edinburgh.

MEDICAL VACANCIES.

The following vacancies are announced.

BRISTOL ROYAL INFIRMARY.—Assistant Resident Medical Officer. Salary, £80 per annum, with board, etc. Applications by May 3rd to the Secretary.

CANCER HOSPITAL, Brompton.—Assistant House-Surgeon. Salary, £35 per annum, with board and residence. Applications by May 10th to the Secretary.

CARMARTHEN INFIRMARY.—House-Surgeon. Salary, £100 per annum, with board, etc. Applications by May 12th to Mr. H. Howells, 11, Morley Street, Carmarthen.

CASTLEREA UNION.—Medical Officer for Union Workhouse. Salary, £110 per annum. Applications to Mr. M'Flanagan, Clerk of the Union. Election on April 30th.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road.—House-Surgeon; rooms, gas, and firing. Applications by May 5th to the Secretary.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road.—Assistant-Surgeon. Applications by May 5th to the Secretary.

CHELTENHAM GENERAL HOSPITAL.—Assistant House-Surgeon. Salary, £40 per annum, with board, etc. Applications by May 3rd to the Honorary Treasurer.

CITY OF LONDON LUNATIC ASYLUM, Stone, near Dartford.—Medical Superintendent. Salary, £500 per annum. Applications by May 17th to the Committee of Visitors, Guildhall, E.C.

COUNTY ASYLUM, near Dorchester.—Assistant Medical Officer. Salary, £120 per annum, with board, etc. Applications by May 10th to the Medical Superintendent.

DENTAL HOSPITAL OF LONDON, Leicester Square, W.C. —Assistant Dental Surgeon. Applications by June 1st to the Secretary.

GLOUCESTER GENERAL INFIRMARY AND EYE INSTITUTION.—House-Surgeon. Salary, £100 per annum, with board, etc. Applications by May 18th to the Secretary.

GREAT NORTHERN CENTRAL HOSPITAL, Caledonian Road, N.—House-Physician. Applications by May 3rd to the Secretary.

INFIRMARY FOR CONSUMPTION, Margaret Street, Cavendish Square, W.—Honorary Visiting Surgeon. Applications to the Secretary.

LIVERPOOL INFIRMARY FOR CHILDREN.—House-Surgeon. Salary, £85 per annum, with board, etc. Applications by April 30th to the Honorary Secretary.

MASON SCIENCE COLLEGE, Birmingham.—Professor of Physiology. Applications by June 30th to G. H. Morley, Esq.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street, W.—Assistant Dental Surgeon. Applications by May 20th to the Secretary.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, Queen Square, Bloomsbury, W.C.—Senior House-Physician. Salary, £100 per annum, with board, etc. Applications by May 7th to the Secretary.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, Queen Square, Bloomsbury, W.C.—Junior House-Physician. Salary, £50 per annum, with board, etc. Applications by May 7th to the Secretary.

ROYAL ALBERT HOSPITAL, Devonport.—Assistant House-Surgeon. Applications by May 10th to the Chairman of the Managing Committee.

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Brighton.—House-Surgeon. Salary, £80 per annum, with board, etc. Applications by May 4th to the Chairman of the Medical Committee.

STAFFORD COUNTY ASYLUM.—Resident Medical Officer and Superintendent. Salary, £500 per annum, with unfurnished apartments, and £200 in lieu of board. Applications by May 7th to the Chairman of the Committee of Visitors.

SUSSEX COUNTY HOSPITAL, Brighton.—Assistant-Surgeon. Applications by May 18th to the Secretary.

SUSSEX COUNTY HOSPITAL, Brighton.—Assistant House-Surgeon. Applications by May 18th to the Secretary.

TYRONE COUNTY INFIRMARY.—House-Surgeon. Particulars on application to Dr. Thompson, Omagh, Co. Tyrone.

UNIVERSITY OF CAMBRIDGE.—John Lucas Walker Studentship in Pathology.—Annual value £250, for three years. Applications by May 31st to Professor Roy, Trinity College, Cambridge.

MEDICAL APPOINTMENTS.

ARMSON, Frank Greasley, M.R.C.S., L.S.A., appointed Medical Officer and Public Vaccinator for the Yoxall District of Lichfield Union, *vice* George Chapman, M.R.C.S., L.S.A., resigned.

BARTLETT, Hedley, appointed Casualty House-Surgeon to the Middlesex Hospital.

BAUMGARTNER, Henry S., M.B., M.S., M.R.C.S., L.S.A., appointed Acting-Surgeon to the Newcastle and Sunderland Artillery Volunteers.

BISHOP, William, L.R.C.P., M.R.C.S., L.S.A., appointed Medical Officer to the 5th District of the Bridge Union, Canterbury, *vice* Edward Long, M.R.C.S., L.S.A., resigned.

CAREY, Basil de Beaufort, B.A.Cantab., M.R.C.S., appointed Resident Clinical Assistant to the Hospital for Consumption, Brompton, *vice* G. Stevenson, resigned.

CARTER, D'Arcy B., M.R.C.S., L.R.C.P., appointed Surgeon to the Shipley and Eccleshill District of the Great Northern Railway.

ELLIS, William H., M.R.C.S., L.S.A., appointed Surgeon to the Shipley and Eccleshill District of the Great Northern Railway.

FORBES-RUSSELL, A., L.R.C.P., M.R.C.S., appointed Medical Officer to the Scarborough Friendly Societies' Medical Association, *vice* George Daunt, L.R.C.P., L.R.C.S., resigned.

FOX, George Martin, L.R.C.P.Lond., M.R.C.S.Eng., L.S.A.Lond., appointed Resident Medical Assistant to the General Hospital, Birmingham.

GIDLEY, G. G., M.R.C.S., L.R.C.P., L.S.A., appointed Junior House-Surgeon to the London Temperance Hospital, *vice* John Murray, B.A., M.B., B.Ch., M.R.C.S., resigned.

MARTIN, Sidney, M.D.Lond., appointed Pathologist to the City of London Hospital for Diseases of the Chest.

MUIR, David C., M.B., C.M., appointed Medical Officer to the Parishes of Mid and South Yell, Fetlar and North Yell, *vice* E. R. Hanson, L.R.C.P.Ed., L.R.C.S.Ed., resigned.

OLDHAM, M. W., M.R.C.S., L.R.C.P., L.S.A., appointed Obstetric and Ophthalmic House-Surgeon to the Queen's Hospital, Birmingham, *vice* F. W. Emery, M.R.C.S., L.R.C.P., resigned.

SUTTON, Thomas S., M.R.C.S., L.S.A., appointed Medical Officer to the 2nd District of the Bridge Union, Canterbury, *vice* Henry Hamilton, M.R.C.S., L.S.A., resigned.

VERNON, Humphrey W., M.B., C.M., appointed Assistant House-Surgeon to the Cumberland Infirmary, *vice* T. Moore Hodgson, M.B., C.M., resigned.

WREFORD, John, M.R.C.S., L.R.C.P., appointed Resident Clinical Assistant to the Birmingham Borough Asylum, *vice* Harold Shaw, M.B., resigned.

EXAMINERS AT THE UNIVERSITY OF LONDON.—At the last meeting of the Senate of the University of London, the examiners for the ensuing year were appointed. The following are the names of the examiners in the subjects required for the examinations in the Medical Faculty:—Medicine: Dr. W. Cayley and Dr. F. T. Roberts. Surgery: Mr. Morrant Baker and Professor Christopher Heath. Obstetric Medicine: Dr. John Williams and Dr. Champneys. Forensic Medicine: Dr. Stevenson and Dr. G. V. Poore. Materia Medica and Pharmaceutical Chemistry: Dr. Brunton and Dr. Bruce. Physiology: Professors Schäfer and G. F. Yeo. Anatomy: Professors Cunningham and Curnow. Comparative Anatomy and Zoology: Professor Ray Lankester and Mr. Adam Sedgwick. Botany and Vegetable Physiology: Professors Bayley Balfour and Bower. Chemistry: Professor Reynolds and Dr. W. A. Tilden. Experimental Philosophy: Mr. Glazebrook and Professor Reinold. Mathematics and Natural Philosophy: Professors Greenhill and Hill.

DR. EDGAR M. CROOKSHANK, Demonstrator of Physiology in King's College, has made arrangements for giving a course of instruction in Pathological Micro-biology in London. This class will be held in the Physiological Laboratory at King's College, on Mondays, Wednesdays, Thursdays, and Saturdays, commencing on May 16th. The object of the class is to impart a practical knowledge of the more important species of micro-organisms, and to give instruction in the methods of cultivation, as well as the special histological methods employed for detecting bacteria in the tissues. The work each day will be preceded by a short lecture, illustrated with diagrams and typical microscopical preparations. The fee for the course is four guineas. The advantage of such a practical course of Bacteriology to medical officers of health, officers on leave from India, and practitioners who feel that a knowledge of the recent advances in pathology is necessary, will, we believe, be widely felt, and many will be glad to avail themselves of the opportunity here offered.

THE LONDON HOSPITAL MEDICAL COLLEGE.—The Hospital Scholarship, of the value of £20, for proficiency and zeal in clinical medicine has been awarded to Mr. C. R. Killick, and an honorary certificate to Mr. Benjamin Walker; the Hospital Scholarship, of the value of £20, for proficiency and zeal in clinical surgery has been awarded to Mr. Evelyn Oliver Ashe, and honorary certificates to Mr. Owen Meredith Jones, and Mr. Benjamin Walker; and the Duckworth-Nelson prize in practical medicine and surgery, value £10, has been awarded to Mr. Benjamin Walker, and an honorary certificate to Mr. Owen Meredith Jones.

THE FOOD SUPPLY OF PARIS.—The report relating to the sale and consumption of food in Paris shows the estimated annual consumption a head of the population to have been 169 lbs. of meat, 9 lbs. of *triperie* (which includes calves'-head, tongue, kidneys, etc.), 26 lbs. of fish, 25 lbs. of poultry, 8 lbs. of oysters, 17 lbs. of butter, 5 lbs. of cheese, and 15 dozen of eggs. In addition to the usual meat supply, the report contains a record of the sale during the year of 4,000 lbs. of horse-, mule-, and donkey-flesh, sold at the average wholesale rate of 3d. a pound.

PRESENTATION.—A pleasing presentation was made to Dr. H. W. Laing, of Kirkcaldy, on his leaving the district, by a large number of patients and friends in token of the esteem in which he was held. Dr. Laing received a cheque for 100 guineas and a library table and chair.

THE MIDDLESEX HOSPITAL MEDICAL SCHOOL.—The Broderip Scholarship, of the value of £30 per annum, tenable for two years, has been awarded to Mr. W. H. Vickery, and that of £20 per annum, tenable for two years, to Mr. E. E. Lewis.

A CENTENARIAN.—Ann Virgin, aged 100 years, was buried at Membury on Good Friday. The mourners included a brother 92 years of age (in good health) and descendants of the fourth and fifth generations.

ATTENTION is called by the Treasurer of Guy's Hospital to the fact that the conditional munificent offer of Mr. J. S. Morgan of £10,000 in aid of the special fund of that hospital expires on May 1st. The amount collected up to date towards the £100,000 is nearly £58,000.

KING'S COLLEGE.—The Warneford Scholarship of £25 per annum for two years has been awarded to Mr. T. Boswell Beach, the Senior Scholarship to Mr. R. James Carter, and the Second Year Scholarship to Mr. L. Vernon Cargill.

A BILL prohibiting the taking in of more passengers than can be provided for on the street cars of New York is before the Legislature at Albany. A similar enactment to put down the overcrowding in our metropolitan railway carriages is urgently needed, and would meet with general approval.

PRESENTATION.—Mr. J. Fletcher Little, L.R.C.P. on the occasion of his leaving Ben Rhydding, has been presented by his numerous friends with an elegant casket, and a handsome illuminated address expressive of the esteem in which he is held, and of regret at his removal.

MEDICAL MAGISTRATE.—Mr. R. Vandeleur Kelly, F.R.C.S.E., of Newtown, Moate, has been appointed to the Commission of the Peace for the county of Westmeath.

SUPERANNUATION.—Mr. Thomas Gray, M.R.C.S.Eng., late medical officer to the Poplar Union Workhouse and Infirmary, has obtained a superannuation allowance of £67 per annum.

SUCCESSFUL VACCINATION.—Mr. John Clare, Public Vaccinator for the Hanley and Shelton District, has received, for the second time, the grant from the Local Government Board for efficient vaccination.

STUDY OF HYGIENE AT VIENNA.—The *Wien. Med. Wochenschrift* calls for the establishment of an Institute of Hygiene in connection with the Medical Faculty of the University of Vienna.

DR. GRANT BEY, of Cairo, has been appointed an honorary member of the Associazione dei Benemeriti Italiana, and has been awarded its gold medal in recognition of the distinguished services which he has rendered to the cause of humanity.

PHARMACOLOGY IN MOSCOW.—According to the *Vratch*, No. xii, 1887, p. 294, a pharmacological *clinique* will soon be opened in the Moscow University. This will be the first institution of its kind in Russia.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—MEDICAL SOCIETY OF LONDON, 8.30 P.M. Sir William Mac Cormac will deliver the Annual Oration, after which the President will hold a reception, and a *conversazione* will follow. The string band of the Royal Artillery will be in attendance.

ODONTOLOGICAL SOCIETY, 8 P.M. Casual communications by Mr. F. Henri Weiss, on the Destruction of a Permanent Tooth-pulp by an Alveolar Abscess attached to a Deciduous Molar. Dr. St. George Elliott will show a new Hot-air Motor; Mr. E. Lloyd Williams will exhibit a Hot-air Syringe; and a communication will be read from Mr. Humphreys. Papers by Mr. W. Hern, M.R.C.S., etc., on Cucaine as a Local Anæsthetic in Dental Surgery; and Dr. George Cunningham, B.A., on the Physiologica Action of Cucaine.

TUESDAY.—PATHOLOGICAL SOCIETY OF LONDON, 8.30 P.M. Report of Morbid Growths Committee on Dr. Edmunds's specimen of Horny Papilloma of Hand. Mr. Hutchinson: Destructive Arthritis of Knee-joint without Suppuration. Mr. T. Smith: Senile Arthritis. Mr. Hutchinson, jun.: Sarcoma (?) of Knee. Dr. Pitt: Carcinoma of Spine and Liver. Dr. Coupland and Dr. Pasteur: Diffuse Sarcoma of Spinal Pia Mater (two cases). Dr. Maguire: Interstitial Aneurysm of Inter-auricular Septum. Mr. R. W. Parker: Cases of Sarcoma in Children. Mr. Lawson Tait: Tubal Pregnancy. Dr. Payne: Multiple Neuro-fibromata in Connection with Molluscum Fibrosum. Mr. Leopold Hudson: Tumour of Prostate. Card Specimens—Mr. Fenwick: Urinary Tuberculosis with Multiple Calculi. Dr. Barlow; Renal Sarcoma in a Child. Mr. Page (for Mr. Raven): Sarcoma of Dorsal Vertebræ. Mr. Shattock: Tubercular Arthritis (six cases).

WEDNESDAY.—OBSTETRICAL SOCIETY OF LONDON, 8 P.M. Specimens will be shown by Mr. Doran, Dr. John Phillips, Mr. Barton, Mr. Lawson Tait, and others. Papers—Dr. Matthews Duncan: Hæmorrhagic Parametritis. Dr. Lewers: On the Frequency of Pathological Conditions of the Fallopian Tubes, as Determined by Observations in the *Post-mortem* Room of the London Hospital.

THURSDAY.—HARVEIAN SOCIETY OF LONDON, 8.30 P.M. Mr. Hugh Owen Thomas: The Physical Signs of Disease and Recovery of the Hip-joint, with a Demonstration of the Mechanical Fixation of the Joint. Dr. Stephen Mackenzie: Some Cases of Hysteria. Mr. A. Q. Silcock: A Fatal Case of Hysteria.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM, 8.30 P.M. Living and Card Specimens at 8 P.M. Messrs. Critchett and Juler: (1) Guttate Appearance of Fundus; (2) Peculiar Pigmentary Degeneration of Choroid. Mr. Ernest Clarke: Improved Artificial Eyes. Papers—Mr. W. Lang: (1) A Fatal Case of Meningitis after Excision of a Suppurating Globe; (2) On the Insertion of Glass Globes into Tenon's Capsule after Excision of the Eyeball. Mr. Nettleship; (1) Three Cases of Night-blindness, with Peculiar Retinal Changes; (2) Two Cases of Quinine Amblyopia. Dr. Brailey: Recurrent Choroido-Retinitis in Region of Macula, probably an Early Stage of "Central Guttate Choroiditis." Mr. Mackinlay; Complete Self-Enucleation of Eyeball.

FRIDAY.—ANATOMICAL SOCIETY, 5 P.M. Foundation Meeting, Professor Humphry, F.R.S., in the chair. (At the Rooms of the Medical Society, Chandos Street).

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which should be forwarded in stamps with the announcement.

BIRTHS.

FAIRBANK.—On April 26th, 1877, at Moulsey House, Windsor, the wife of William Fairbank, M.R.C.S.Eng., of a daughter.

THORESBY-JONES.—April 19th, at Marylands Road, W., the wife of J. Thoresby-Jones, M.R.C.S., L.R.C.P., of a son.

MARRIAGES.

BRODIE-PETTIGREW.—At 17, Queen's Crescent, on April 19th, by the Rev. John Isdale, assisted by the Rev. James Douglas, M.A., John Ewan Brodie, M.D., to Mary Stuart, daughter of Matthew Pettigrew.

DEATH.

HARRIES.—On April 26th, at Belmont, Shrewsbury, Susanna, wife of John D. Harries, M.R.C.S., Surgeon to the Salop Infirmary.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

ANSWERS.

M.D.DURHAM.—If "Dublin" will write to Dr. T. Tinley, Whitby, he will be glad to give him all particulars.

ENGLISH HEALTH-RESORT FOR RHEUMATOID ARTHRITIS.

DR. A. W. SCATLIFF recommends Margate. The dry and bracing nature of the air, impregnated with ozone, iodine, bromine, etc., seems specially suited to such cases, and proved to be so to a young lady suffering from rheumatoid arthritis, ordered there by Dr. Garrod last year, and who experienced much benefit.

NOTES, LETTERS, ETC.

WE wish it to be distinctly understood that when a manuscript is forwarded to the BRITISH MEDICAL JOURNAL, it is implied that a similar manuscript has not been sent elsewhere, unless special notice of the fact be given; we shall regard any infringement of this rule as a breach of faith.

POST-GRADUATE COURSE DURING THE ANNUAL MEETING.

DR. JOHN O'NEILL SISK (Fermoy, Co. Cork) writes:—Having seen the letter of "A. B. C." in the JOURNAL for April 23rd, on a "Post-Graduate Course during the Annual Meeting of the British Medical Association in Dublin in August next," proposed to be delivered at the Rotunda Hospital, Dublin, I presume, on the Diseases of Women, etc., I, as a provincial practitioner, am sure the lectures would be popular and well attended, and as a member of the Association I should be glad to attend and subscribe to such.

REGISTRATION OF FOREIGN DEGREES.

MR. F. TAYLOR SIMSON (Westminster Hospital) writes with reference to the registration of American degrees in Great Britain:—It seems to me that the Medical Council should take the views, not of a few, but of the whole of the registered British practitioners before deciding this important matter.

My own opinion is that no foreign or colonial degrees should ever be registered here. It would indeed be a retrograde movement to do so. The profession is so overcrowded that one can with difficulty exist as it is. It is the worst protected profession. What will it be if we are beset by our friends from over the water? It seems wrong to me that any of our licensing bodies should be allowed to admit them to modified examinations. I consider they should be required to show proficiency in all the subjects of the medical curriculum. It is no uncommon thing to see an immense door-plate with M.D., etc., after the owner's name, and, on looking the gentleman out in a directory, to find that he only possesses a minor British qualification, for which, no doubt, he was admitted to a very modified examination.

LEPROSY IN SPAIN.

DR. WM. JELLY writes: In the JOURNAL of March 26th (p. 685), there is an annotation headed "Leprosy on the Continent," stating that "leprosy, according to an official circular in the *Madrid Gazette*, is prevalent in the provinces of Valencia, Alicante, Almeria," etc. I beg to state that in the latter part of 1878 I passed several weeks among the lepers in a large district in the two first-named provinces, comprising three heads of departments, namely, Pigo, Parcent, and Pedreguer, and eleven or twelve small towns and villages. I visited and examined scores of lepers in every stage of the disease, and hundreds who were "*sospechosos*." I had every courtesy and help given me by the then Governor-General of the province of Alicante in the form of orders to deputy governors, alcaldes, and to every medico I might come across; also to the civil guards to help me in any way I needed, etc. When I returned to Madrid in the middle of January, 1879, I found the papers full of my visit to the leprous nursery-ground, making it out to be a rare discovery, and calling on Government to take immediate steps for isolation, etc. I also reported to our then Ambassador in Madrid (Sir J. Walsham) the sad state of the people there. Seeing that the lepers are the vine-raisin cultivators, harvesters, and packers, they have all the handling of the fruit. The raisins are by far the finest grown in the Peninsula, equal to the famous "sultanas;" they are all packed in boxes *without stalk*, and are the raisins from which our best Christmas puddings are made.

The limits of the disease are from Denia in the north to Jabea in the south, and to the orange groves on the west. When I came on to the "orange zone" I

could not find a single leper; all limited to the vine-raisin and stunted olive and carob-growing belt.

My object in writing this is to prove that the Spanish Government was fully aware of this flourishing leper-field. I have documents and statistics by me as far back as 1845, which I obtained from the parish priests and the Government medical men of the several places visited.

ELECTION EXPENSES FUND OF B. W. RICHARDSON, M.D., F.R.S.

Treasurer's Account to April 22nd, 1887.

[DR.	£ s. d.	CR.]	£ s. d.
252 Receipts as per counterfoil receipt-book	155 2 1	Printing	68 12 6
		Postage	52 15 1
		Advertisements	32 19 6
		Gratuity to Porteress.. ..	0 15 0
	155 2 1		155 2 1

Audited and found correct.

(Signed) T. H. ALDERSON, M.D., Hon. Treasurer.
ROBERT J. BANNING, M.D. } Hon. Secretaries.
CHARLES WELLS, M.D. }

Quebec Institute, Baker Street, W.

P.S.—The expenditure would have been somewhat larger had not Dr. Richardson defrayed some preliminary expenses, and Dr. Danford Thomas kindly given £10 worth of stamps in addition to subscriptions.

JACOB TESTIMONIAL.

THE Honorary Treasurers and Secretaries beg to thankfully acknowledge the following additional subscriptions:—

	£ s. d.		£ s. d.
Amount already acknowledged	509 10 3	Neary, B. J., Howth ..	1 1 0
Coppinger, C., Dublin ..	1 1 0	Cutler, P. A., Waterford .	0 5 0
Gaffney, T., Keadue	0 10 0	Sewill, H., London (additional subscription) ..	2 2 0
Hamilton, J. T., Dublin ..	1 0 0		

Cheques to be made payable to the Honorary Treasurers—Professor Edward Hamilton, 120, Stephen's Green, W., Dublin, or Dr. Thomas Purcell, 71, Harcourt Street, Dublin; or to the Honorary Secretaries—Professor E. D. Mapother, 6, Merrion Square, N., Dublin; Dr. J. H. Chapman, 122, Pembroke Road, Dublin; or Mr. G. F. Blake, Royal College of Surgeons, Dublin.

INCOME TAX.

THE Income Tax Repayment Agency, of 16, Artesian Road, W., points out that now is the time for claiming relief and repayment of Income Tax in all cases where the profits for the past year have not amounted to the sum upon which tax was paid for the year ending April 5th. This claim can be made whether an appeal was made against the assessment or not, and if successful has the additional advantage that it fixes at the same time the assessment for next year necessarily at a lower figure than this year. From the numerous letters received the agency is more than ever convinced that medical men are scandalously over-assessed. In all cases where exemption is not claimed by reason of the income being under £150, an appeal should be made to the Special Commissioners instead of to the District Commissioners. It ensures, at the same time, greater secrecy and better justice. Should this privilege be refused by the surveyor, the fact might be notified to the agency, the Assistant-Solicitor to the Inland Revenue upholding the interpretation of the clause in the Act. The time for claiming being very limited, notice should at once be given to the surveyor, and accounts made out to prove the claim.

A CONSULTING-ROOM THIEF.

MR. ROBERT JAMES HUTTON writes: I, like your correspondent Dr. Longhurst, have lately been the victim of a consulting-room thief, and should imagine, by the description, the same man, although he gave a different name. He called about six weeks ago, about four in the afternoon, and asked for me, and while the servant went to ask how long it would be before I came home, walked in and told her he would await my return; however, my wife, knowing I was uncertain, went to tell him so, and found him coming out of my consulting-room; he told her he could not wait longer, and would call again after six o'clock, which, it is needless to say, he did not. In the short time he was there he managed to pick the lock of my writing-table drawer and abstract seven sovereigns, which I had placed there just before going out, thinking it would be safe until my return, when I found the drawer unlocked. The police have a description of him, and my servant, who let him in, states that she could identify him anywhere; also, a professional neighbour, upon whom he called immediately before, and who fortunately returned just as he was being shown in, and with whom he entered into particulars of having a child suffering from incipient hip-disease, and that he called to make arrangements with him to see the child next morning, which appointment, of course, was not kept.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Wile, Philadelphia; Dr. Crockatt, West Ferry; Dr. De Watteville, London; Mr. H. B. Carter, London; Dr. H. Cullimore, London; Dr. Styrap, Shrewsbury; Mr. T. Hill, Ledbury; Mr. L. M. Cantell, Nottingham; Mr. S. Barwise, Birmingham; the Editor of the *Stock Keeper*, London; Mr. F. N. Hume, London; Mr. S. Snell, Sheffield; Mr. M. Brierley, Tattenhall; Mr. W. Whitelaw, Kirkintillock; Sir T. Spencer Wells, London; Dr. F. A. A. Smith, Cheltenham; Dr. B. Poulton, Adelaide; the Secretary of the Board of Health, New South Wales; the Editor of the *Journal of Hydrotherapeutics*, London; Mr. J. D. Griffith, London; the Secretary of the University of St. Andrews, Mr. H. J. Roberts, Pen-y-groes; Dr. Casper, Berlin; Mr. Wagstaffe, Sevenoaks; Mr. J. Vesey Fitzgerald, Birmingham; Mr. H. J. Collins, London; Mr. W. Lynd, London; Mr. S. Kent Jones, Great Grimsby; Dr. A. Mantle, Stanley; Dr. Thin, London; Dr. Maxwell, Woolwich; Mr. J. S. Cameron, Huddersfield; Mr. T. Gallimon, Tattenhall; Dr. B. Strachan, Sunderland; Dr. Campbell, Carlisle; Mr. R. Barwell, London; Dr. W. M. Watson, Montrose; Dr. J. H. Ross, Brighton; Dr. W. F. Simpson, Calcutta; Mr. W. G. Bower, London; Mr. G. M. Fox, Bilston; Dr. Fletcher Beach, Darenth; Dr. J. F. Little, London; Rev. Dr. F. E. Clarke, Boyle; Mr. E. Bellamy, London; Mr. L. H. Villanueva, London; Dr. B. Nicholson, London; Mr. H. S. Barrington, Newcastle-on-Tyne; Mr. A. Cooper, London; the Editor of the *Liverpool Journal of Commerce*; Mr. Jai Gopal, Punjab; Mr. S. A. Blackwood, London; Dr. Brand, Driffield; Mr. A. M. McAldowie, Stoke-on-Trent; Dr. R. Barnes, London; Mr. J. Tomes, Caterham; Dr. Spanton, Hanley; Dr. Lloyd Roberts, Manchester; Dr. F. G. Arnison, Yoxall; Mr. F. Home Moore, Leicester; Dr. Robb, Glasgow; Mr. C. O. Elkerton, London; Mr. G. F. Edwards, Manchester; Mr. J. E. Williams, Aberystwith; Mr. L. Francis, Northampton; Dr. H. Ashby, Manchester; Dr. Rentoul, Liverpool; Dr. Routh, London; Mr. J. Dixon, Dorking; Dr. R. J. Benning, Bushey; Dr. Mears, Newcastle-on-Tyne; Dr. Batty Tuke, Edinburgh; Mr. J. W. Hayward, Whitstable; Sir James Sawyer, Birmingham; Sir H. W. Acland, Oxford; Dr. J. Adams, Malling Place; Mr. G. F. Aldous, Dover; Mr. H. J. Puckle, London; Dr. Murrell, London; Mr. R. W. Burke, Jubbulpore, India; Surgeon-Major J. G. Rogers, London; Mr. W. Robinson, Stanhope; Mr. W. Weiss, London; Mr. W. Edmunds, London; Mr. J. B. Lawford, London; Mr. S. Bennett, London; Mr. O. Bowen, Liverpool; Mr. J. G. Macaskie, Bamburgh; Dr. W. Sykes, Mexborough; Mr. R. M. Simon, Birmingham; Dr. E. M. Crookshank, London; Mr. T. Tinley, Whitby; Dr. W. V. Lush, Weymouth; Mr. R. J. Heatley, Sunderland; Dr. A. Napier, Crosshill, Glasgow; Dr. A. Robertson, Glasgow; Mr. Shirley Murphy, London; Miss M. Keightley, London; Dr. Tatham, Salford; "Medicus," London; Mr. J. M. Walker, Birmingham; Dr. T. W. Trend, Southampton; Dr. H. B. Donkin, London; Mr. D'Arcy Carter, Shipley; Mr. J. T. Jones, London; Mr. H. Smith, London; Mr. R. Wade Savage, London; Dr. H. C. Major, Bradford; Mr. C. Jackson, London; the Secretary of the Society of Arts, London; Mr. W. Murray, Burley-in-Wharfedale; Dr. Dreschfeld, Manchester; Dr. Kirkpatrick, Edinburgh; Dr. G. Mackey, Edinburgh; Dr. P. Horrocks, London; Mr. L. B. Cowin, London; Mr. H. Bartlett, London; the Secretary of the Royal Academy of Arts, London; the Honorary Secretary of the Jacob Testimonial Fund, Dublin; the President of the Medical Society, London; Dr. J. O'N. Sisk, Fermoy, co. Cork; Dr. J. E. Blackman, Portsmouth; the Secretary of the Harveian Society, London; Dr. H. H. Murphy, East Twickenham; Dr. Barnes, Hartismere; Messrs. Street and Co., London; Sir William Mac Cormac, London; Mr. C. E. Scott, Twickenham; Mr. Blackett, London; Mr. W. G. Bunn, London; Dr. W. A. Jamieson, Edinburgh; Mr. C. Donkin, Preston; Mr. C. F. Bulmore, Helston; Mr. R. J. Heath, Sunderland; Mr. A. Milman, London; Dr. Turpin, Midleton; Mr. A. Devonald, Carmarthen; Mr. J. Hutchinson, London; Mr. M. W. Oldham, Southam, Rugby; Dr. James, Porthcawl, Brigend; "X.Y.," Lerwick; Dr. Masterman, Stourport; Mr. G. E. Williamson, Newcastle-on-Tyne; Mr. G. S. Murray, London; Mr. C. Palgrave, London; Mr. A. Jackson, Sheffield; Dr. P. T. Duncan, Croydon.

BOOKS, ETC., RECEIVED.

Year Book of the Scientific and Learned Societies of Great Britain and Ireland. Fourth Annual Issue. London: Charles Griffin and Co. 1887.

Photography of Bacteria. By E. M. Crookshank, M.B. Illustrated. London H. K. Lewis. 1887.

The Dissector's Guide. By D. J. Cunningham. Part III: Head and Neck. Edinburgh: Maclachlan and Stewart. London: Simpkin, Marshall and Co. 1887.

Dr. Phillips: A Maida Vale Idyll. By Frank Danby. Second Edition. London Vizetelly and Co. 1887.

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THE ANNUAL ORATION,

ON

ABDOMINAL SECTION FOR THE TREATMENT OF INTRA-PERITONEAL INJURY.

Delivered before the Medical Society of London, May 2nd, 1887.

By SIR WILLIAM MAC CORMAC, F.R.C.S.,
Surgeon to, and Lecturer on Surgery at, St. Thomas's Hospital.

Mr. President and Gentlemen,—The reason, I apprehend, why modern surgery occupies so foremost a position is because of its success in curing disease and in dealing with maladies hitherto regarded as beyond the reach of art.

Particular operative procedures are now distinguished by their boldness, completeness, and success. This greater success is based on sounder knowledge of the causes of disease and the principles of its treatment.

It cannot be gainsaid that great changes have taken place, that much is attempted now, and much successfully accomplished, which twenty years ago was never even dreamed of. All must admit the vastly enlarged powers which surgeons have recently acquired for the successful practice of their art, and this new development of their resources is based on a wider and more intimate scientific knowledge and experiment. "Medicine indeed," as Helmholtz says, "has become young again, and endowed with fresh and greatly enhanced powers of doing good by dipping in the youth-springs of the natural sciences."

History will, I believe, declare that nothing has done so much to further the progress of modern surgery as the work of a man still living and active amongst us. He has laid down principles which, however they may be criticised, have revolutionised the art of surgery in every country in the world where the art of scientific surgery is known.

It may well be said that many circumstances contribute to our modern success, but I am fully convinced of the efficacy of antiseptic measures. Whatever difference of opinion may exist as to the most effective manner of applying them, it must be admitted that the success attained by adopting the principles of treatment recommended by Professor Lister has been something quite unparalleled, and should be gratefully acknowledged.

Another important feature in the modern practice of medicine is the greater frequency with which the physician invites the surgeon to aid him in treating cases previously regarded as purely medical. Medicine in a sense has become more surgical, and surgery has penetrated the organism more deeply and has invaded territory previously reserved to internal medicine. The physician perhaps lays greater stress than the surgeon on the means of investigating the hidden causes of disease. He is apt to be more familiar with the stethoscope, microscope, thermometer, and the tests supplied by electricity, but these are also subservient to the progress of surgery, and the surgeon must employ all the aids at his disposal in his search after the truth.

Medicine and surgery derive vitality from roots which nourish the same parent stem: resting, as surgery does, on the same scientific experience, it must in many things be correlative and equal with medicine, each helping the other. As Bacon truly urges when speaking of a wider field of human knowledge, natural phenomena cannot be studied alone. To be understood they must be considered in their relation to all nature.

Our anxiety as to the progress of the wound itself is now well-nigh altogether at an end, and to this we mainly owe the great possibilities of modern surgery—the possibility, for example, of safely performing many kinds of exploratory operations on the head, the chest, and abdomen. There are conditions of disease in which no certain knowledge can be attained by any other method of diagnosis. In many instances we cannot decide whether a serious operation is necessary by any means short of an incision into the affected parts. We lay open the abdominal cavity to ascertain the character of a tumour or to explore the nature of an injury, and only then may it be possible to decide on the propriety of removal of the diseased part, or the adoption of some other line of treatment.

Gentlemen, the subject of abdominal surgery is so wide that it may be said to possess a literature of its own. The conditions of the kidneys, intestine, stomach, uterus, and spleen, which indicate surgical intervention have been very fully considered, and lately the diseased states of the pancreas and liver. There is one class of cases, however, which has received less consideration than the rest, at any rate in the light of our newer knowledge and experience; and that is the treatment of penetrating abdominal wounds and visceral injury. My attention has been directed to the subject by the recent occurrence in my own practice of two cases of intra-peritoneal rupture of the bladder produced by external violence. In both of these the abdominal cavity was laid freely open, the rent in the bladder closed by suture, and the peritoneal cavity effectively purified. In each instance the patient completely recovered, and two men, the subjects of a heretofore fatal injury, were restored to perfect health. Another case of the same kind has been since successfully operated upon in a precisely similar manner by Mr. Walsham at St. Bartholomew's Hospital.

My colleague, Mr. Croft, has courteously placed at my disposal the record of a case which, if not in itself completely successful, points out how success is to be realised. It is so interesting that I shall quote a brief account of it.

G. W., aged 34, labourer, was admitted into St. Thomas's Hospital on Sunday, March 6th, at 2 o'clock. Seventeen hours previously he had received an injury to the abdomen in a public-house row. He stated that he had been jumped upon. He had no medical advice before reaching the hospital. During the night he was in great pain, and was sick two or three times. On admission the patient's temperature was 103°, and he was thought to have peritonitis. Mr. Croft was sent for. He decided at once to explore the abdomen by median laparotomy. The operation was performed eighteen and a half hours after the accident. Three lesions were discovered. The ileum had been ruptured transversely, to the extent of two-thirds of its circumference, at the junction of the lower and middle thirds; the lower surface of the mesentery in the same neighbourhood presented a laceration about an inch and a half in diameter; and the omentum, above the level of the umbilicus, had a considerable rent in it. There was fæcal extravasation, and septic peritonitis had spread into the iliac, umbilical, and hypogastric regions. Enterorraphy was debated, but was postponed, under the circumstances, in favour of artificial anus. The peritoneum was very carefully irrigated and rendered aseptic with a warm solution of boracic acid from 15 to 20 per cent. in strength. The edges of the ruptured intestine were closely attached to the parietal wound, and the rest of the incision was closed in the usual manner. The operation lasted an hour and a half, and the man was kept during this time under the influ-

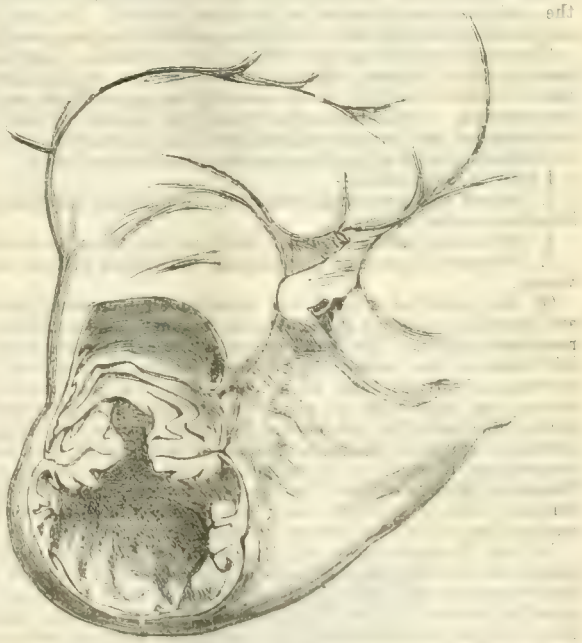


Fig. 1.—Small intestine sutured after Lembert's method. The patient survived the operation thirteen hours. The wound is soundly closed and quite water-tight. A window has been cut in the bowel-wall to show the complete inversion of the adjacent serous surfaces produced by this manner of suturing.—*St. Thomas's Hospital Museum.*

ence of ether. He became much exhausted; the pulse was very feeble, and the hands and feet cold. He recovered satisfactorily. The symptoms of peritonitis disappeared, but a sharp attack of bronchitis ensued. This yielded to treatment, but he did not gain strength or flesh, owing partly to the irrepressible escape of intestinal contents at the artificial anus, and partly to the local irritation established in the abdominal wall by the contact of the intestinal secretion.

At the end of four weeks Mr. Croft proceeded to close the artificial anus. The patient was prepared for the operation, which was performed on April 4th, by substituting rectal feeding for alimentation by the mouth, and by local irrigation of the intestine and all parts immediately concerned. The bowel was then separated from its parietal attachments, the injured portion resected, and the cut surfaces carefully united by twenty-six sutures of fine silk; twenty of these were in one row, after Lembert's manner of suturing. The operation lasted two hours and a quarter, and the patient was taking ether all the time, with the exception of a quarter of an hour, when his circulation became so feeble that the anæsthetic was discontinued, and a brandy enema was administered. He died on April 5th, thirteen hours after the operation. The lungs were found very congested and airless. The suturing had been perfect (Fig. 1) and the peritoneum was entirely free of any recent exudation or inflammatory products. The figure shows the appearance of the sutured portion. Had the natural force of the man been a little greater, he might have made a good recovery.

Mr. Mackellar, in a case of gunshot injury of the sigmoid flexure, recently opened the abdominal cavity, but found it impracticable to apply Lembert's suture to the intestinal perforations caused by the bullet. The patient was in a state of impending collapse at the time of the operation, and died twelve hours afterwards.

Again, Mr. Croft nearly achieved success in a case of rupture of the spleen. The patient, a young man, had been run over by a cab; no effective assistance was rendered to him, and when brought to the hospital twelve hours afterwards, the abdominal cavity was full of blood. Laparotomy was performed, the ruptured spleen removed, and the peritoneal cavity cleared of blood and purified. But the patient never rallied from the state of collapse, and died the same evening.

Cases such as these are somewhat closely connected. They suggest many points of interest, and invite consideration to the large question of abdominal injury, more especially in regard to its treatment by operation. I would urge the propriety of a more frequent resort to abdominal section and exploration of the abdominal cavity and contents in cases of injury than has been heretofore adopted.

I propose to consider:—

1. Incised and punctured wounds of the abdomen implicating the intestine or other viscera.
2. Abdominal gunshot wounds, chiefly as they affect the intestine.
3. Traumatic rupture of the intestine and viscera without external wound.

Of late years the subject has attracted an increasing attention, and American surgeons in an especial manner have achieved some remarkable results. The foundation of a rational treatment was first laid down in that country by St. Croix, of the University of Pennsylvania, as early as 1805, when he performed a number of experiments upon dogs, with the view of ascertaining the best method of sewing up a wound of the bowel. Benjamin Travers, in 1812, published his treatise on the mode of repair of intestinal injuries, and the preparations illustrating his experiments are, by the courtesy of our Treasurer, upon the table. Early in the present century the French surgeons, Jobert, Lembert, Gely, and Amussat, experimented with various forms of intestinal suture on the lower animals.

In 1843, Professor Gross, of Philadelphia, published the results of a lengthened investigation to determine the progress of repair of intestinal wounds in dogs, and the best method of their treatment; and recently Professor Parkes of Chicago, Senn of Milwaukee, Dennis of New York, and several others, have published most valuable reports on the subject, more especially in regard to gunshot injury. (*Vide* Table II.)[1]

Stab Wounds of the Abdomen.

These may be either simple penetrating wounds without injury to any of the contained viscera, or accompanied by visceral injury. Simple penetrating wounds of the abdominal cavity, either by sharp or blunt weapons or by gunshot, are very rarely inflicted; there are upon record many apparent exceptions to this statement, but some of them may be explained by the circumstance that the weapon or projectile has evaded the abdominal cavity which it apparently enters, or, when traversing the cavity, has produced an injury susceptible of repair.

[1] The tables will be published with the concluding portion of the Oration.

A sword-thrust may traverse the abdomen, and the bowel, subsequently prolapsed through the wound, be found uninjured. During the American war, an Apache Indian prisoner, attempting to escape, was transfixed by a bayonet and pinned with it to the ground. The weapon entered the left hypochondrium, passed directly backwards, and made its exit about two inches from the vertebral column. No bad symptom followed, and the wounds had healed on the fourth day. An instance is recorded where an iron-headed arrow (Fig. 2) entered three inches to the right of the fifth lumbar



Fig. 2.—Kiowa arrow. The shaft has been divided in order to withdraw the barbed and feathered extremities from a man's body. The arrow, twenty-six inches in length, entered three inches to the right of the fifth lumbar vertebra and emerged two inches to the right of the ensiform cartilage. Circumscribed peritonitis ensued, but the patient recovered without other ill consequences. (One-fourth natural size.)

spine, and emerged two inches to the right of the ensiform cartilage. Circumscribed peritonitis ensued, but the patient recovered without other ill consequences.

Hennen records the recovery of a soldier shot through the abdomen with a ramrod at Badajos in 1812. During the American war, in 1863, a ramrod entered the left groin of Private Manypenny, and emerged through the left lumbar region. The surgeon records his diagnosis as "a ramrod driven plumb through the guts." There was no serious peritonitis, and the man returned to duty two months later.

Beck quotes seven cases of penetration of the abdomen by bullets, without any apparent visceral injury, occurring in soldiers of General Werder's corps, during the war of 1870-71. Five of these recovered. In one of the fatal cases the bullet entered anteriorly, and was found lying against the vertebral column; the viscera were not wounded. In the other fatal case several coils of uninjured intestine protruded through a large wound caused by a mitrailleuse bullet. In the five cases which recovered there were secondary lesions, such as fæcal fistula, so that they can scarcely be considered conclusive.

Extraordinary instances of a similar kind are also reported by Paré, Wiseman, and many others. But such cases are very rare; the viscera seldom wholly escape. Larrey, in his long career, only observed one instance in which a ball penetrated the abdominal cavity without producing immediately serious results, and in this case the intestine was afterwards found to have been contused.

Penetrating Wounds with Visceral Injury.

As I can only deal with a limited part of so comprehensive a subject, I shall chiefly refer to wounds of the small intestine, since, of all the complications of penetrating wounds of the abdomen, injury of the small intestine is the most frequent and most fatal. Mr. Abernethy used to shake his head and say Nature would have nothing to do with these cases, but left them to their fate.

"In one short and general prognostic," says John Bell, "we announce them to be fatal." Fortunately this is not absolutely true, but, despite the exceptions, we may take it that such injuries are very rarely recovered from.

In time of war very few sword or bayonet wounds of the bowel are met with; these injuries occur for the most part in brawls where the knife or dagger is used. The intestine very rarely protrudes, and hence, probably, suture of the wounded bowel has been but seldom attempted; and although the result must depend to some extent on the empty or collapsed condition of the bowel at the time of injury, unless the puncture be very small there is no likelihood of recovery without suture. When extravasation occurs, peritonitis almost necessarily follows, although in a few instances a fortunate agglutination of adjacent coils may prevent it from spreading, and recovery ensue.

Diagnosis.—The diagnosis of wound of the bowel is of primary importance, as upon the speedy determination of this point and prompt consequent action must altogether depend the success of our treatment. When the injured intestine is prolapsed through the wound, or the contents of the tube escape externally, the diagnosis is clear, but these occurrences are the exception, and, in the early stage, the presence of a wound of the intestine must be often mere matter for conjecture. Tympanites, discharge of blood *per anum*, are valuable symptoms when present, but neither may appear directly after the injury. If the blood passed from the bowel be abundant, and shows itself soon

after the injury, it is a very valuable symptom. Emphysema, when it occurs in the wound-neighbourhood, is said to be pathognomonic. Shock and pain vary so much in degree as to afford no useful guidance. The amount of shock is very variable, and cannot be relied upon in any degree as diagnostic. It is often described as very trifling; at other times it may be severe. The amount of pain also offers no true criterion. The surgeon who sees the case immediately after the injury must often be in doubt as to whether the intestine is injured or not, and as to the extent of the internal damage.

Treatment.—Probing these wounds has been very universally condemned as useless for diagnostic purposes, and harmful to the sufferer, by possibly disturbing the parts and giving rise to fæcal effusion. But this view can scarcely meet with the same consideration now in the light of modern methods of treatment. If precautions be taken to exclude septic influences, the thorough examination of the wound by the probe may determine its direction and extent, and if this fail to clearly establish the fact or otherwise of penetration, the wound should be enlarged and explored to its termination either in the parietes or more deeply. The important point to speedily determine is, whether the wound penetrates the abdominal cavity, and this is perhaps the most effective manner of ascertaining it. After a short interval the occurrence of peritonitis will determine our diagnosis; tympanitic distension of the abdomen, agonising pain, ceaseless vomiting, tendency to collapse, thready pulse, and clammy surface make their appearance, and a fatal issue soon follows. When the diagnosis has been established in this way the services of the surgeon are no longer called for.

Should the abdominal cavity be penetrated, the question arises as to whether the intestine has been wounded or hæmorrhage has taken place. In that event the better treatment will be at once to make a median incision in the manner recommended for any other form of abdominal section, and not to trust to enlargement of the existing wound. Of course where the bowel protrudes and no extravasation has taken place in the interior, it will be sufficient to suture the opening in the prolapsed portion, excise after ligature any damaged portion of omentum, and return the parts, if necessary enlarging the external wound for the purpose. Although the abdominal cavity has been traversed both by a bullet and sword without opening the intestine, which is presumably thrust aside, this condition of things is not to be relied upon to guide our treatment. The do-nothing system, Guthrie justly declared, is generally followed by death. In wounds of any magnitude of the small intestine an unequivocal recovery, either with or without an artificial anus, can scarcely be said to exist.

Benjamin Bell, *System of Surgery*, 1783, long ago recommended suture of the bowel, although apparently he never practised it. He also advised the sutures to be cut short and the bowel returned to the abdominal cavity.

At the beginning of the century, however, John Bell stigmatised sutures as utterly useless and detrimental. When the intestine is wounded, he says, we must not pretend to search for it with the absurd intention of sewing it up, nor expect to fasten it to the external wound, but trust to adhesions forming. If the wounded intestine be protruding it were madness to let it go back into the abdomen. "I have ventured to say," he continues, "that if there be in all surgery a work of supererogation it is this operation of sewing up a wounded gut. It is a dangerous and puerile conceit." Indeed, he characterises Benjamin Bell's observations on the subject of abdominal injury as "unparalleled in all the books of surgery from the invention of printing down to the present day."

Enterorraphy is at the present time admittedly the best method of treatment for all punctured and incised wounds attended by protrusion, unless the parts are so damaged that an artificial anus seems preferable. In cases of stabs and gunshot wounds, unattended by protrusion, the common practice heretofore has been to arrest the peristaltic movements with opium, and enjoin absolute rest, in the hope that adhesions may form to avert extravasation. Experience proves that in the vast majority of instances such hopes are illusory, ninety-nine times in a hundred extravasation occurs, hyper-acute peritonitis follows, and, after much suffering, death generally takes place within forty-eight hours.

Another proceeding commonly recommended is the formation of an artificial anus by attaching the margins of the wound in the gut to the skin, but where it is possible to avoid it this course is in the highest degree undesirable, and certainly unnecessary in those cases where the injury does not extend more than half-way around the calibre of the tube, or where the convexity of the bowel is wounded, and probably in all cases where the mesenteric attachment is intact; and the same may be said where the bowel is ruptured by external violence. This practice gives the surgeon a false sense of security; he thinks if his sutures give way the patient may still recover, but the evidence is very strong that the risk of fæcal extravasation is less when the wound in the bowel is completely closed, and the gut at once returned to the abdominal cavity. A different practice properly obtains in hernial or other forms of strangulation where the bowel is gangrenous. An artificial anus should then be established in preference to immediate resection of the sphacelated portion of the bowel, with suture of the divided ends. In such cases the bowel is in an unhealthy condition. We do not exactly know the limits of the gangrenous action, nor of the zone of inflammatory infiltration beyond it, and therefore cannot precisely determine what amount of damaged bowel it is necessary to remove.

In cases of injury, however, we shall have but half accomplished our work if we form an artificial anus rather than at once attempt to restore the continuity of the intestine. Should the patient recover, a further operation will be required to close the fæcal fistula, and this procedure is often one of great difficulty and serious risk. Besides, should the original damage be in the upper portion of the small intestine, there is a considerable probability of the individual being either starved, or so weakened by the escape of nutriment that he becomes unfit to be submitted successfully to any operation whatever.

Should all wounds of the bowel be sutured? The older authorities—Dionis, Heister, Sabatier, Sharp, Boyer, and others—advised against it when the wound was under a quarter of an inch in length, the diameter of a goose-quill or penknife.

Benjamin Bell tells us emphatically that the opening, however small, should be securely closed, the suture in itself being harmless compared with the possibility of extravasation.

Gross settled this question in the affirmative by his experiments on dogs undertaken in 1843, for he found that even an opening two lines or one-sixth of an inch long, which was always blocked to some extent by intrusion of the mucous membrane, nevertheless permitted fæcal matter to escape, and we know the smallest quantity is sufficient to excite a fatal inflammation.

Methods of Intestinal Suture.

There are three conditions required to ensure successful suture of the intestine:

1. Two adequately broad and sufficiently wide surfaces of peritoneum must be brought into contact.
2. The mucous membrane must be excluded, for when the needle passes through the whole thickness of the gut, peritonitis generally ensues from leakage taking place along the line of the thread.
3. Rapidity of execution is of extreme importance, and that form of suture is the best which can be effectively applied in the shortest time.

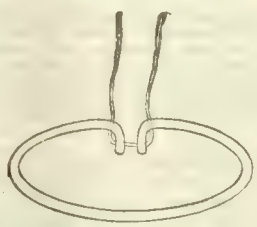


Fig. 3.—Jobert's suture. In this method the mucous membrane is included in the loop.



Fig. 4.—Diagram of the relations of the intestinal coats and sutures.—Jobert.

In the earlier attempts to deal by operation with a wounded bowel, the surgeon generally connected the gut by one or two sutures to the external wound. This very imperfect method was approved by

Scarpa, Richter, John Bell, Larrey, Lawrence, and other famous surgeons.

Rambdohr, in 1730, is said to have been the first to suture successfully a complete division of the intestine. Heister afterwards secured the preparation, and found the bowel quite united. The patient had died of pleurisy a year after the operation.

Reybard, in 1827, sought a more exact apposition of the internal and external openings.

Ledran employed a looped suture. Bertrandi's stitch was practised by Chopart, Desault, and Béclard.

The four masters in the 13th century introduced a cylinder into the lumen of the intestine; and Duverger, in 1745, records a case of successful suture after this manner.

Denans, in 1838, combined inversion of the serous surfaces with the ancient plan of supporting the tube from within by a hollow cylinder of pewter or silver.

Jobert, in 1822, proposed a new method of treating wounds involving the entire circumference of the bowel. It consists in invaginating the upper into the lower end of the divided gut, and securing it there by suture after inverting the margins of the lower end, always a difficult matter to accomplish. (Figs. 3 and 4.) The ends of the sutures are brought out through the abdominal wound and withdrawn by traction on the fourth or fifth day. Professor Madelung has recently revived and modified Jobert's suture. (Fig. 5.)

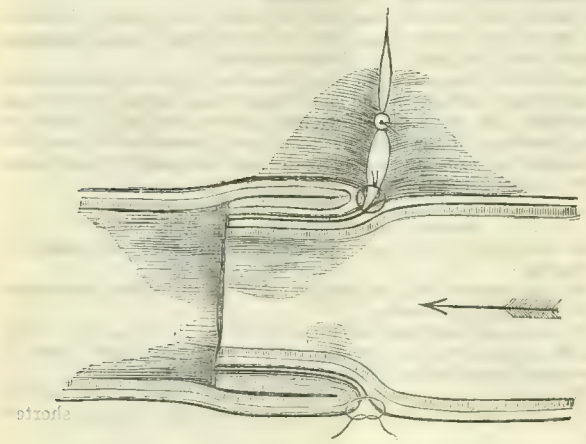


Fig. 5.—Jobert's method of suture as modified by Madelung. In place of passing the sutures, as advised by Jobert, through the whole thickness of the invaginated intestine, which would include three layers of gut, Madelung sutures the serous layers together around the line at which the invagination begins. The invaginated portion will thus be directed valve-like whichever way the intestinal current passes, and the danger consequent upon mistaking the upper for the lower end of the bowel is avoided.

In 1826, Lembert introduced a method of bringing the two adjacent serous surfaces into contact, avoiding penetration of the mucous coat. It is the preferable one to employ in all wounds of the bowel; sufficient inversion may be thus easily accomplished without causing obstruction of the lumen of the tube; when the wound is small or incised, the needle may be introduced a line and a half or two lines from the margin, and then brought out at the edge of the serous coat, the same being done on the opposite side. (Figs. 6 and 7.) This will suffice in clean cut wounds; but, where the edges are bruised, it is best to exclude them by entering the needle about three or three and a half lines from the margin, and carrying the suture through the bowel a line distant or more from the edge. The number of stitches must be sufficient to bring the parts everywhere into accurate contact, and care taken not to tie the sutures too tightly, as it may lead to gangrene and consequent failure to procure union. Experimentally, this has been found to be the most frequent cause of non-union. The ends of the sutures are cut short, and the intestine returned to the abdominal cavity. When the surfaces are drawn together sufficiently to bring them fairly into contact, the subsequent swelling will hold the parts firmly until the rapidly-formed adhesive material securely glues them together. When the omentum is much injured, it is probably best to excise the damaged parts after applying ligatures.

The abdominal cavity must be perfectly cleansed of all blood and foreign matter. Irrigation with a 3 per cent. solution of boric acid, at a temperature of 100°, made with water previously boiled, is the best and gentlest method. The external wound is closed, as after ovariotomy. If the operation be done shortly after the accident, drainage may be dispensed with. If some time have elapsed, or if peritoneal inflammation be present, it will be best to drain. The presence of a drainage-tube in the wound certainly enhances the risk run by the patient, and it is best therefore to dispense with it in all cases where it appears safe to do so.

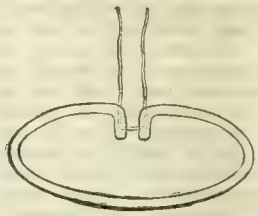


Fig. 6.—Lembert's suture, in which the mucous membrane is excluded.

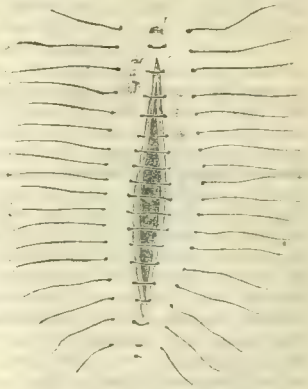


Fig. 7.—Manner of passing the sutures—Lembert's method.

Dr. Roberts, of Louisville, reports a case which shows how much may be done under unfavourable circumstances. It is, I believe, the first successful case of the kind in America, and well illustrates the practice we should adopt.

In August, 1883, a fat man of 54, received a knife-wound, three inches long, in the left side of the abdomen; the bowel protruded, and was ascertained to be wounded in two places, the openings being the size of a lead pencil, and two slits, each an inch long, were found in the mesentery. The patient had lost much blood, and the medical man who was first called in merely returned the intestine, and sutured the external wound. When Dr. Roberts saw the patient some hours later he reopened the wound, tied some still bleeding vessels in the mesentery, sutured the wounds in the gut, washed out the abdominal cavity with hot carbolic solution, and inserted a drainage-tube at the lower angle of the wound, which was then closed by deep sutures. The man made a rapid recovery.

A considerable number of successful cases of suture of the intestine when protruded through the abdominal wound are recorded in the tables.

Gunshot Wounds.

Gunshot wounds of the intestine are injuries of the most fatal description. They are of frequent occurrence in time of war, and far from being rare in civil practice, especially in America, where everyone carries a revolver, and often uses it on small provocation.

About one-tenth of those slain in battle perish from abdominal injury, but only 3 to 4 per cent. of those who come under treatment are wounded in the abdomen. These wounds are almost invariably concealed, the gut being seldom protruded. Wounds of the duodenum are comparatively rare, and usually associated with other severe injury. The jejunum is more frequently wounded, but the ileum is the most frequent seat of gunshot injury; damage to other parts is often present, or a multiple wound of the intestine itself. Alexander relates a case occurring in the Crimea where the intestine was wounded in sixteen places by the same bullet. If this were common, operative surgery would prove of little avail; but it is rare that more than two convolutions are perforated, or that the intestine is wounded in more than four places. In a few instances the bullet may perforate and lodge in the bowel; this is proved by it being voided at stool shortly after, and this happens most frequently in wounds of the large intestine. When discharged *per anum* at an early period, the bullet has presumably penetrated the gut; when the missile is passed at a late period, it probably gained admission to the tube from some adjacent part by secondary ulceration or abscess.

Symptoms and Diagnosis.

In gunshot injuries the first question to ascertain is if the bullet have penetrated the abdominal cavity. The external wound should be carefully probed, or it may be enlarged sufficiently to explore its whole length as it passes through the abdominal wall. This adds little to the gravity of the patient's condition, and will positively determine whether the wound is a penetrating one.

These injuries are attended with considerable hæmorrhage, great and prolonged shock, lowered temperature, feeble rapid pulse, restlessness, severe pain, great anxiety, rectal tenesmus, and there is always extravasation of fæces into the peritoneal cavity, although it is very rare for any sign of them to appear externally.

The absence of fæcal matter in the parietal wound is no proof that the intestine is not perforated. In none of Professor Parkes's numerous experiments on dogs did any fæcal matter emerge through the external wound, although in many instances large quantities were found in the peritoneal sac; and Gross, as I have already mentioned, found that fæcal extravasation into the peritoneal cavity occurred in every instance. The mucous membrane never blocked the perforation produced by the smallest bullet so as to prevent it, a strong point in favour of active interference.

Air in the abdominal cavity causing tympanites, emphysema around the wound, a larger escape of blood than the injury to the parietes will account for, are among the symptoms which help to indicate intestinal injury.

The occurrence of bloody stools is usually a late symptom, and without practical importance in reference to operation. When they appear at an early period they signify intestinal damage. The amount of shock is partly dependent on idiosyncrasy, but prolonged initial shock indicates either general visceral involvement or a great loss of blood; later on the symptoms are those of hyper-acute peritonitis.

Shock accompanies all penetrating gunshot wounds to a greater or less extent. When it becomes more and more severe, with increasing exhaustion, jactitation, feeble pulse and respiration, we may conclude internal hæmorrhage is taking place. This is the most frequent cause of death after gunshot wound of the abdomen, and we usually find the cavity filled with blood quite out of proportion to the size of the vessels injured. Even in the case of small vessels there is but little tendency to spontaneous arrest of hæmorrhage, because of the laxity of the tissues and the absence of atmospheric influence in producing coagulation. As soon as air is freely admitted by abdominal section, the bleeding from the lesser arteries is speedily arrested. When a large vessel is injured the bleeding is always excessive, and a fatal result almost directly follows.

In Parkes's experiments no shock was observed apart from symptoms attributable to loss of blood, and whenever severe prostration occurred there was always extensive hæmorrhage to account for it; the transit of the bullet did not even alter the character of the pulse or respiration. If hæmorrhage, then, be so frequent a cause of symptoms usually attributed to shock, this condition, unless extreme, indicates laparotomy as the only means whereby the bleeding can be arrested, and life either saved or prolonged. On the battlefield there is so much haste, confusion, dirt, and calls innumerable for the surgeon's aid, that immediate laparotomy can be very rarely feasible. Cases apparently suitable should be rapidly and gently transported to the nearest field-hospital, where an operation may possibly have a chance of success. We must recollect, however, that a rifle bullet inflicts a much more terrible injury than a revolver ball, the effects of which we commonly witness in civil practice.

After the military period which closed with Waterloo, the problem of enterorraphy for wounded intestine remained unsolved. Guthrie regarded the proper management of gunshot wound of the intestine undetermined, and one to be settled by his successors. J. Thomson thought such cases should be left as much as possible to Nature. Astley Cooper and Syme considered interference hopeless. But during the next quarter of a century the methods of suture were greatly improved, and during the military operations of the French in Algiers, occasion was found to practise intestinal suture. Baudens published two cases, one of which was completely successful, the other, in which eight inches of intestine were cut away, died on the third day. Larrey, in a case of complete division of the ileum, attached the divided ends to the external wound; the patient recovered.

Pirogoff, during the war in the Caucasus in 1849, was greatly impressed with the importance of this question, and regrets that he only once sutured the intestine for gunshot injury. The patient was reported as doing well on the fourth day, but his ultimate fate has not been recorded. All the others thus wounded he gave up as lost for want of time, and on account of the large numbers awaiting his help. In the Crimean war Legouest advised the proceeding, but it was not acted upon. In the American war the intestine was sutured by Bentley, Hudson, Gill, and Kinloch.

On the other hand, Dr. Hamilton, *Treatise on Military Surgery*, 1865, speaking of gunshot wounds of the intestine, says: "Be assured the patient will have a better chance of life if we leave him entirely alone. It is surprising," he says, "that many good surgeons should think otherwise."

Treatment of Gunshot Perforation of the Intestine.

The experiments on dogs prove how futile it is to expect immunity from either intestinal perforation or extravasation of fæces after a bullet has traversed the abdomen; and the same is true in man; the bowel is nearly always perforated, fæces are extravasated, and very frequently there is some other serious injury as well.

It will be more reasonable, then, to submit the patient to the less serious risk incurred by abdominal section than to leave him in deadly peril from the consequences of a wounded intestine or a bleeding vessel, on the mere assumption that they may possibly have escaped injury. Some degree of doubt must always exist, on account of the necessary obscurity of the symptoms, except in the rare event of prolapse of the injured gut, fæcal extravasation appearing externally, or very free hæmorrhage from the wound. But although there may be uncertainty as to the extent of the lesion, it is surely better to solve the doubt by an exploratory abdominal section which may afford the only possible means of rescue.

If we await the outbreak of peritonitis, the patient's chances of recovery after operation will be greatly diminished. Operation is practically useless after twenty-four hours have elapsed, or when general peritonitis and great collapse have set in. A slight amount of peritonitis, however, by no means contra-indicates operation.

If we are satisfied that laparotomy is the proper proceeding, and decide to explore the abdomen, the operation should be undertaken as soon as possible after the infliction of the injury, and performed with every antiseptic precaution. When it has been delayed, the condition of shock is so much aggravated by the necessarily prolonged operation, that it may be impossible to complete the thorough disinfection of the cavity.

The median incision must be sufficiently extensive to allow all parts of the abdomen to be explored. It should be large enough to admit the operator's hand, and none but his should ever be allowed to enter the peritoneal cavity. The mere enlargement of an existing wound is inadequate for the purpose of thorough exploration. The bullet wound in the abdominal wall should be explored when necessary for purposes of diagnosis, otherwise it ought simply to be disinfected and included under the general dressing. Abdominal section enables us to determine the extent of the injury and the treatment which should be adopted. The entire cavity and its contents can be thoroughly examined. An injury is less liable to be overlooked, and the suture of the bowel is more readily accomplished.

The operation is incomplete unless the entire intestinal tract be examined as well as the stomach and other viscera, which of course entails considerable manipulation. The intestines must be withdrawn, carefully examined, and protected as far as possible by warm cloths. The best way is to seek the cæcum first, and then trace the small intestine upwards for its entire length; in this way we shall be least likely to fail to find the injury. All bleeding points must be secured and the clots swept away.

When several openings exist close together, it is better to resect the portion of intestine involved. In some instances, when the bowel wall is seriously compromised at one or more distant points, multiple resections have been made. Ingenious clamps, such as Rydygier's, Treves's, and others, have been suggested, but the fingers are probably the best form of instrument to prevent the escape of the intestinal contents after division of the tube.

The mesentery must be detached from the portion of the gut to be resected. When a large portion requires removal, a triangular piece of mesentery may have to be excised, taking care to secure separately every bleeding point. The mucous coat becomes much everted (Fig. 8), sometimes seriously interfering with the introduction



Fig. 8.—Illustrates the appearance of the resected bowel, with its edges much everted, previous to the introduction of the sutures. In the margins of the separated portion of mesentery four points of suture have been introduced after the vessels were secured by ligature.

of the sutures and the accurate approximation of the surfaces of the bowel. It should not be excised, as it gives support, and supplies blood to the edges of the gut. In all the experiments where it was cut off by scissors the sutures gave way (Parkes). Care must be taken to insert the sutures at the mesenteric border sufficiently deep to ensure complete inversion of the intestine, and to bring the serous surfaces fairly into contact. There is a triangular interval (Figs. 9, 10, and 11), filled with connective tissue and blood-

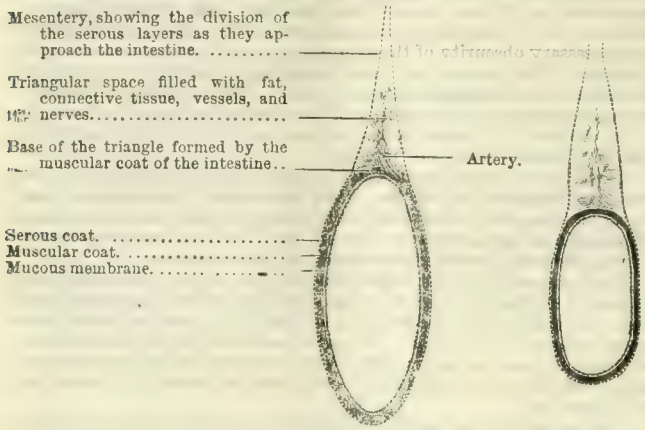


Fig. 9.—Semi-diagrammatic section of the jejunum (natural size.) The muscular layer through which the sutures are passed is comparatively thick.

Fig. 10.—Section of ileum, from the same subject (natural size).

The figures illustrate the comparative thickness of the wall of these two portions of the intestine, and show how thin the muscular layer is in the ileum.

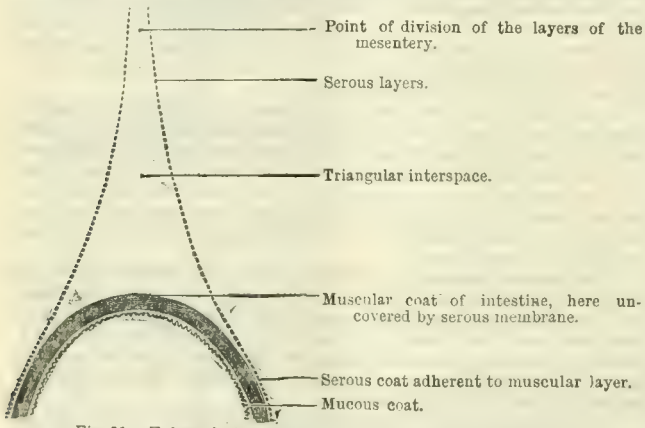


Fig. 11.—Enlarged view of the inter-serous space, diagrammatic.

vessels between the layers of the peritoneal coat as it leaves the bowel to form the mesentery. At this place the needle must be passed deeply enough to include the muscular coat as well as the serous, otherwise extravasation will result.[1]

Three sutures should be first introduced at the mesenteric border, in the manner insisted upon by Parkes. A suture had then better be placed at the convexity of the bowel, then one half-way down on each side, the others following in order in the quadrantal intervals between. In cases of complete resection of the bowel, it is best to include a considerable width of serous membrane. Each suture should be introduced not less than a third of an inch from the divided margins, brought out just free of the edge on one side, then re-introduced close to the opposite edge, and made to include about the same width of tissue. It should include only the serous and muscular layers. It is more difficult to pass the sutures in succession, one after the other all the way round; the mucous membrane is in the way, and the sutures are apt to be uneven. Fine silk is the best material to employ, and a moderately-curved needle. Czerny's double row is very tedious to apply, and, as it gives no better results than the single row including a sufficient width of tissue, it had better be abandoned, on account of the loss of time it entails, or, if used at all, it can only be necessary along the mesenteric border. The condition of the solid viscera must be examined, and any injury found in them dealt with according to circumstances. This will, however, prove a very fatal complication.

(To be concluded.)

[1] Note upon the surgical anatomy of the small intestine with reference to the operation of resection and suture:—

1. Owing to the divergence of the two layers of the mesentery as they approach the bowel, a portion of the circumference of the jejunum and ileum is destitute of a serous investment. The separation of the laminæ of the mesentery begins at a distance of about two-thirds or three-fourths of an inch from the intestine, and leaves a triangular space, the base of which, averaging about five-sixteenths of an inch in width, is formed by the uncovered muscular tunic. This interspace, extending along the whole of the mesenteric attachment, is occupied by fat in variable quantity, by the vessels and nerves of the gut, and by delicate fibres of connective tissue. Unless this disposition of the peritoneum be taken into account, it is obvious that a suture applied in the manner of Lembert might fail to bring into contact the true wall of the intestine at the mesenteric attachment, and a leakage from the interior of the tube might take place into the inter-serous triangle and peritoneal cavity.

2. The disposition of the arteries within the triangle is worthy of notice. The last row of anastomotic loops, from which arise the direct branches of supply, is placed much nearer to the intestinal wall in the lower than in the upper portion of the bowel, and, towards the termination of the ileum, commonly lies within a third of an inch of the canal. From these loops are given off at moderately regular intervals straight vessels, which do not intercommunicate, but pass at once to the muscular floor of the triangle, either to pierce it on each side near the lateral angles of the interspace, or to run for a short distance between the serous and muscular tunics before entering the latter. As each of these vessels has a fairly well-defined territory, it appears undesirable to interfere with the loops from which they spring, and it is hence safer to divide the mesentery as close as possible to the portion of bowel to be resected, the cut edges of the redundant fold left after suture of the intestine being united by fine catgut stitches.

3. It is important to remember that the thickness of the muscular coat of the small intestine varies within rather wide limits in different subjects, and in all cases diminishes, together with the calibre of the tube, from the upper towards the lower extremity of the canal. The amount of the diminution is very considerable. Thus, in the jejunum, about two feet from its commencement, the depth of the tissue ranges from one-seventieth to one-fortieth of an inch, while at the lower part of the ileum, about two feet from the ileo-cæcal valve, the thickness is reduced to about one-half or even one-third of this admeasurement. The difficulty and danger of enterorraphy will hence be greater the more remote the portion of intestine under operation is from the stomach.

4. The submucous tissue has a considerable degree of toughness, and is usually thick enough to bear a fine suture applied after Lembert's manner without implicating the surface of the mucous membrane. An inner row of stitches used in this manner would, in some cases, give increased security of union at the mesenteric border, and prevent channels of communication being opened between the peritoneal cavity and the lumen of the gut.

AN ADDRESS
ON
MEDICAL AND SANITARY WORK IN SOUTHERN INDIA.

Delivered at the Annual Meeting of the South Indian Branch.

By GEORGE BIDIE, M.B., C.I.E., Surgeon-General,
President of the Branch; Sanitary Commissioner with the Government of Madras.

On taking this chair for the first time I have to thank the members of the Branch for the honour which they have bestowed on me in electing me as their President. For a good many years I have been placed in positions that have prevented me from engaging in the executive duties of our common profession; but, although during that period my knowledge has been rather on the peace-list, I have not lost my interest in professional subjects, but have tried to keep myself acquainted with the numerous advances and discoveries in medical science.

Although this, the South Indian Branch of the Parent Society, is still in its infancy, it has, during the period of its existence, manifested considerable vigour, and I trust that during the year which has just begun it will be even more active and prosperous, extending the sphere of its action by the addition of new members resident in up-country stations, and making itself a name by contributing something new to our knowledge of disease and its relief, as also to vital statistics and ethnology.

Members.—At the close of 1885 there were sixty-nine members on the roll; and during the year that has just closed ten new members were enlisted, while six resigned, and one, Surgeon J. Heath, Medical Staff, was killed in Burmah while performing his duty with singular devotion and intrepidity. On January 1st, 1887, there were seventy-two members on the roll; but, as that number is less than half the strength of our department, I think some special effort should be made to secure recruits. The good that may be effected by a Society of this kind depends very largely on the extent of its membership. As the numbers multiply so do the observant eyes and busy brains at work, and thus by an increase of contributions the meetings are ren-

dered at once more interesting and more instructive. It would be well, too, to let up-country members understand that any novelty, however trifling it may appear to them, will be acceptable, for amid common clay we shall certainly now and again pick up some gems of truth worthy of being treasured, and thus the Society will be fulfilling what I consider to be its chief value in the East. We are, so to speak, the missionaries of medical science in this foreign land, and, while spreading existing knowledge, it is our duty to strive to add to the common stock. This latter obligation is not always realised; and I shall be glad to see the Association try to awaken our fellow-practitioners to a due sense of it, so that they shall not only be workers but also observers.

Sketch of Medical Work in Southern India during the Year.—And now it may be interesting and well for us just to glance at the medical work which is being carried on by us and our fellow-workers in Southern India. In the upper ranks we are divided into two sections—the one devoted to general medical and surgical work, and the other to pure sanitation; but the majority of the actual executive workers—namely, the district medical officers—combine both functions. No one who has not been engaged in mofussil work, or has not visited up-country stations of late years, can form any idea of the vast medical machinery now at work in the provinces, or of the number and importance of the duties of the district medical officer. From very small beginnings our charitable hospitals and dispensaries have increased till they number over three hundred, and form a network of humane institutions holding forth the light of European medicine amid surrounding darkness, and affording relief to the sick poor from the Mahanadi to Cape Comorin. In the several collectorates the district medical officer has also extensive administrative duties, and the successful working of the minor dispensaries in the district depends largely on his attention, tact, and zeal. He is required to visit them at intervals, to direct, advise, and encourage. As a matter of fact, these institutions are very well looked after on the whole, and doing a great amount of good. During my present tour I saw one hospital in charge of a hospital assistant which would vie with any institution in Madras in respect of equipment, general tidiness, cleanliness, and popularity. In addition to his medical duties, the district medical officer has also to look after the registration of births and deaths, to have an eye on vaccination, and to supervise sanitation. In some districts the number of subordinate hospitals is very small; but in one they numbered thirty-seven in 1885, and generally speaking they range from eight to over twenty, and are on the increase. I need not say much about the large and useful hospitals at the Presidency, as they are more in public view, and therefore better known, whereas, as I have said, few understand the amount and value of the work being carried on so quietly by our mofussil brethren.

One very satisfactory feature of our charitable hospitals is that they are mainly supported by the people; and thus in the matter of medical relief, as well as in other directions, self-help and independence are being inculcated by our municipal and local board organisation. The liberality on the part of the native community towards hospitals is only what was to be expected amongst a people who are so profuse in their charity, and so mindful of all connected with them by ties of blood, or simply in want, as to render the debasing machinery of the European poor-laws quite unnecessary. I regret to say, however, that in some cases these charitable institutions are abused by people resorting to them who could well afford to pay for medical attendance. I confess I regard this with some anxiety, as anything tending to lower the native idea as to the sanctity of charity and as to its scope cannot fail to be mischievous, as a first step towards pauperism. This is a question which will require cautious consideration at no distant date, as the taxpayer is evidently in some cases coming to regard the hospital for which he pays as a sort of provident institution, to the benefits of which he has a full title in return for his payments. Unfortunately, this attitude with regard to charitable hospitals is not confined to the mofussil where Cimmerian clouds are supposed to obfuscate the human intellect, but is also particularly rampant in the Presidency, the centre of light and learning, and amongst people who ought to be ashamed to claim relief at institutions maintained for the special benefit of the very poor.

The statistics of the sick treated in our civil hospital in 1886 are not yet available, but in 1885 the total of in- and out-patients amounted to 1,894,936. Of that number, 532,721 were children, 413,259 women, and 948,956 males. The number of cases requiring surgical operations was 59,858, of which 4,365 were major and 55,493 minor. The mean cost of every case treated in the mofussil hospitals was R. 0-5-3, a very modest charge. In one municipal hospital, which I lately inspected, a fee of 2 annas is levied from every in- and of 8 annas from every out-patient. This impost has not interfered with the popularity of the hospital, and is an experiment which I shall watch with great interest.

Sanitary Work.—In sanitation we have had a fairly active year, and some important advances have been made. One of the most notable of these has been the bringing of all Government and aided schools within the range of sanitary inspection. When I tell you that high class schools were conducted without anything in the shape of latrine accommodation, you will see that we had to start at the very lowest step of the ladder, and you can imagine how other sanitary measures were neglected. I consider it of the first importance that the lighting and general sanitation of schools should be carried out on the most approved principles, not only with a view to the immediate physical welfare of the students, but also as educational measures, so that they may know and be trained to what is right. In many cases, too, the hours of study have been too prolonged, and the means of recreation, in the shape of playgrounds, etc., absolutely wanting. In fact, everything has given way to the rage for acquiring, as rapidly as possible, sufficient knowledge to pass certain academical examinations. With the ordinary teacher apparently the dominant idea is, here is a boy, come let us cram him, and crammed he is often with a truly Herodian effect.

Efforts were also made in the past year to impress on Government and local authorities the necessity for private house sanitation keeping par with public reform. The careful scavenging of streets and lanes, the provision of public latrines, and the introduction of a pure water-supply, are no doubt measures of the greatest value; but if the individual dwelling is overcrowded, badly ventilated, undrained, and dirty, the public improvements are simply neutralised. Overcrowding, both of houses and their inmates, is a patent evil in all our towns, and until some active means are taken to relieve and avert it, all our sanitary measures will be comparatively nugatory. In no place is the undue pressure of population greater than in the town of Madras, as in some places the numbers range from 128,400 to 198,700 per square mile. When the population is so thick as this on the ground, it becomes utterly impossible to carry out the necessary conservancy measures, and slums of this kind are plague-spots in our towns, as they invite and foster epidemic disease. One of the first duties of the sanitarian at the present day is to find out where these localities exist, and then to get local bodies to take steps, as they have the power, to deal with the evil. A useful measure was instituted in directing the attention of local authorities to the necessity for greater care in the inspection of cattle and sheep prior to being slaughtered, and for the inspection of food in the markets, rules having been provided for the guidance of inspectors. At present the good intentions of many municipalities in the direction of introducing much-needed improvements are, so to speak, blasted in the bud, owing to the fact that there is no sanitary engineer to advise and direct. As a rule, these local bodies will never, if possible, invoke the aid of the department of Public Works, as they have an impression, right or wrong, that the officials have little or no knowledge of drainage, water-supply, or such like projects, and that any work executed by them is extravagantly costly. It need hardly be said that, at the present day, sanitary engineering is as much a special branch of the profession as is mining or railway engineering; and that, when special works are undertaken by men who have neither the requisite knowledge nor training, the project will probably be badly executed and at quite an unnecessary cost. The presence of a skilled sanitary engineer would, therefore, give a great impetus to sanitary improvements; and, by adding a fraction to the present imposts on local bodies, the salary of the much-needed official would be provided for. Gentlemen, while dwelling thus in detail on sanitary matters, you must not suppose that I overlook the progress that has been going on in medical and surgical work. But, as you are aware, the carrying out of sanitary projects is chiefly in the hands of non-professional people, who want to be constantly reminded of their obligations, and pressed to carry on the necessary reforms. It is very necessary, therefore, that we should from time to time take stock of what has been done, and look into what is before us.

And now, gentlemen, I fear I have trespassed too much on your time and patience; and must, therefore, conclude with wishing this Branch of the Association much prosperity during the current year.

A NEW play called "After," by Mr. Scott Battams, resident medical officer at the East London Hospital for Children, Shadwell, author of "Sister Grace," will be produced at a *matinée* at the Vaudeville Theatre, on Tuesday, May 10th.

PRESENTATION.—Dr. James Adams was presented on Saturday last, by the past and present members of his class on surgical nursing at the Royal Infirmary, Glasgow, with a handsome inkstand, bearing a suitable inscription.

AN ADDRESS

ON THE

NOMENCLATURE OF SKIN-DISEASES; WITH ESPECIAL REFERENCE TO HYBRID, SYPHILITIC, AND MEDICINAL ERUPTIONS.

Delivered before the Medical Society of Middlesex Hospital.

By ROBERT LIVEING, M.D., F.R.C.P.,
Physician to the Department of Skin Diseases, Middlesex Hospital.

Dermatologists have always found an interesting occupation in the classification of skin-diseases, and it must be admitted that tracing out their relationships is a somewhat fascinating study; but, except as an exercise which each may follow for himself, it is of very little practical use. The nomenclature of skin-diseases on the other hand, though less interesting is of far greater importance. The free interchange of medical literature at the present day renders a uniform nomenclature in the highest degree desirable. A very close approximation to uniformity has already been attained in England, France, Germany and America, and this is rapidly extending to other countries. This result has been gradually brought about, not by any sudden change, but by a steady exclusion of those names that are useless or obsolete, and the retention of those only that indicate definite diseases. Most of these names have become familiar by long use, but have now assigned to them a more exact and scientific meaning than formerly.

A good example of this dying-out of names is supplied by the word "porrigo," which is fast becoming obsolete. The name is used by Celsus for diseases of the scalp, and early in the present century Bateman thus defines it: "The porrigo is a contagious disease, principally characterised by an eruption of the pustules denominated favi and achores, unaccompanied by fever. The several appearances which the disorder assumes are reducible to five or six specific forms," namely, "Porrigo larvalis" (infantile eczema capitis); "P. furfurans" (steatorrhœa cap.); "P. lupinosa" (favus); "P. scutulata" (tinea tons.); "P. decalvans" (area); "P. favosa" (impetigo). It is interesting, and in this case satisfactory, to look back and see what progress we have made in half a century. Porrigo, then, is a good example of a name which has just died out. Eczema on the other hand, is an illustration of an old word retained, but used in a far more exact though also more comprehensive sense than formerly. Not long ago this disease, as it passed through its different stages (hyperæmic, papular, vesicular and squamous), was called successively erythema, lichen, eczema and pityriasis; and even at the present time most writers speak of the early stage of eczema as erythematous. One, and I would add perhaps the most important advance in scientific dermatology is the recognition of the fact that most skin-diseases are not mere eruptions, but definite diseases, of which the eruption is only one though perhaps the chief feature. It appears to us at the present time very confusing to speak of erythema passing into eczema, and then into a scaly stage called psoriasis or pityriasis. As long however, as the names meant only eruptions of various kinds there was nothing absolutely wrong in the practice; but now that the words erythema, lichen, eczema and psoriasis are used to indicate definite diseases, it becomes grossly erroneous to apply them to different stages of one and the same disease.

In addition to the exclusion of superfluous names and the more accurate application of others, a further change has been made by the introduction of a small number of new names; some of these merely replace old ones, as for example, xanthelasma by general consent replaces vitiligoidea; in other cases old but suitable names have been substituted for inconvenient ones, as lepra for elephantiasis Græcorum; and lastly, a very few newly discovered diseases have required new names. We have got rid, then, of most of our superfluous words, but I think that one or two more might advantageously be dropped. The names I refer to are pityriasis and ecthyma. With regard to pityriasis, which is much the more important of the two, we have (1) pityriasis simplex, (2) pityriasis rubra, (3) pityriasis versicolor, (4) pityriasis maculata et circinata. Here then, are four diseases, all named pityriasis, which implies that they are in some way related, and yet they have not the slightest relation to each other whatever. It would indeed be difficult to find four other skin-diseases that have less in common. I have always denied the existence of any definite disease that can properly be called pityriasis simplex. A simple exfoliation of cuticle, which sometimes occurs from defective nutrition, and much more commonly as the sequel to various eruptions, is not worthy of a distinct name; pityriasis simplex of the scalp is either exfoliation of cuticle or dry steatorrhœa. For these reasons then, the name pityriasis simplex may well be dropped. The name dermatitis exfoliativa has already nearly replaced the older name pityriasis rubra. Pityriasis versicolor is not a very appropriate name for a disease that is not remarkably scaly; and as it belongs to the parasitic group, it might well be called tinea versicolor, as was suggested by the late Dr. Tilbury Fox. Lastly, pityriasis maculata et circinata (of Bazin) is an inconveniently long name. The disease runs a rapid and definite course, is attended with slight febrile disturbance, and is uninfluenced by treatment. These characters induced Dr. Behrend (of Berlin) to suggest the name roseola furfuracea herpetiformis, but as this name is too long, I would suggest roseola circinata as more appropriate. If then these changes already partly carried out be continued, we shall get rid of the name pityriasis altogether, which as at present applied, links together four diseases which have no relation to each other whatever.

The name ecthyma is not of much importance. I know of no one definite disease that can well be called ecthyma. The word may still be used as an adjective—ecthymatous, to indicate a peculiar form of discrete pustule with a raised and pointed scab, which is not uncommonly met with amongst the badly fed poor in such diseases as scabies, phthiriasis and impetigo. Lastly, I would point out that single names, *ceteris paribus*, are preferable to double ones. I admit that the latter cannot be entirely avoided, but in this respect we are slowly moving in the right direction. As an example of my meaning, I may say that the names lepra, zona and area are preferable to their synonyms elephantiasis Græcorum, herpes zoster and alopecia areata; indeed everything which tends to simplify names is an advantage.

On the chief points, then, in our nomenclature all are pretty well agreed; but I pass now to more debatable ground. There are certain skin-diseases with regard to which the profession has not yet universally adopted a uniform nomenclature. These diseases consist of three groups: (1) mixed or hybrid skin-diseases (or diseases so-called); (2) syphilitic skin-diseases; (3) medicinal eruptions.

Coincident skin-diseases are very rare; by this I mean that it is very unusual to see two definite diseases of the skin occurring at the same time in one and the same person. I know of no better established fact in dermatology than this. There is an exception to the rule in the case of some contagious diseases. It is obvious that the presence of eczema or lupus, for example, cannot possibly diminish the liability to scabies or ringworm, and may even increase the liability to erysipelas. Although I have stated the case somewhat strongly, I do not of course mean that two skin-diseases never occur at the same time; everyone occasionally meets with them, but when this is the case—and I wish to lay much stress on this fact—the two eruptions are generally quite distinct, and the difficulty of diagnosis is scarcely increased.

I. I now pass to the most interesting and important part of my subject—mixed or hybrid skin-diseases; and I would remark in passing that mixed eruptions are not of necessity the same thing as hybrid skin-diseases. Mixed skin-diseases, as I use the term, are those in which two or perhaps three different diseases are so far mixed that their eruptions are more or less blended and modified. I think it is very doubtful whether any real blending of disease ever takes place; in other words, it is doubtful whether there is anything that can be called a hybrid or cross between two diseases; as to this, however, there is a difference of opinion. The local irritation caused by one disease, such as varicella and vaccinia, will sometimes set up another skin-disease, such as urticaria and impetigo, but this is not what is meant by the blending of two diseases. It would not be necessary to dwell on this point, were it not that it appears to have led (I say appears, because I do not know it as a fact) a very distinguished writer and observer, Mr. J. Hutchinson, to introduce a system of nomenclature which I think is especially calculated to mislead and puzzle beginners. He connects the names of two skin-diseases by means of a hyphen, so as to form a compound name, thus: lupus-psoriasis. He has published an excellent drawing of this disease in plate 19 of the New Sydenham Society's Atlas, and he gives us two synonyms—"psoriasis-lupoides" and "multiple patches of superficial lupus." The name "psoriasis-lupoides" rather increases our difficulty, but "multiple patches of superficial lupus" makes all plain as to the real nature of the disease; but one cannot help asking, why call it any-

thing else? Anyone carefully reading the account of this disease will agree with Mr. Hutchinson that the case is one of scaly "multiple patches of superficial lupus," and I would venture to add, of nothing more. If I read his meaning aright, it is that the case is one of lupus with some distinct characters of psoriasis about it; but I do not think that explanation will apply to all the examples he gives us of his method of nomenclature.

I will take another example of the same kind. In the first volume of his excellent *Lectures on Clinical Surgery* (vol. i, page 207) he describes a case of "lichen-psoriasis," which, he says, is "an excellent example of the disease known as lichen ruber or lichen planus." In this case he points out that some patches are very like psoriasis; this is so common in lichen ruber that I should have said it was the rule rather than the exception, and certainly not enough to justify the change of name to lichen-psoriasis.

I will quote another example, with a view of showing that the same nomenclature is used also in a rather different sense. The second lecture in the volume above quoted is devoted to varicella-prurigo, and the facts recorded are most interesting; I am only about to criticise the name. Mr. Hutchinson says: "I think, therefore, that I am safe in stating that these cases do begin as *bonâ fide* varicella," and further on he says, "Great irritation is produced, and the child becomes fretful and thin. The eruption may last for months, and the spots then resemble ecthyma, on the one hand, or yet more frequently the disease known as lichen urticatus." Now, varicella is a fever which is quite as definite in its nature and course as small-pox or measles, and it is quite impossible that it can last as varicella for more than a short and well-defined period, but it is sometimes followed by just such eruptions as Mr. Hutchinson describes; these eruptions are, however, a sequel to the varicella. I have seen a spot of psoriasis develop round each varicella vesicle and nowhere else, so that each little spot of psoriasis had a small pit in its centre; this would, I presume, be called varicella-psoriasis. All these are, however, examples of one disease excited by and following another, though it may be difficult to say exactly where one ends and the other begins. It is in this respect that the name varicella-prurigo is not quite on all fours with lichen-psoriasis and lupus-psoriasis. In his lectures will be found many other instances of this kind of nomenclature; for example, we have acne-prurigo, lupus-psoriasis scrofulosus, and rupia-psoriasis. Again, in the JOURNAL of July 24th, 1886, he gives a description of a case of "eczema-erysipelas." From simply reading the accounts without seeing the patient (the temperature is not given) it might be difficult to make an exact diagnosis of the case, but the difficulty cannot be removed by calling it eczema-erysipelas. Of course erysipelas may be caught by a person suffering from eczema; a raw surface would much favour it. We not very infrequently find patients in the medical wards with lupus contract erysipelas, but it would be quite absurd to change its name in consequence to lupus-erysipelas. I do not know that this name has ever been used, but it is only a small step further than eczema-erysipelas.

There are from time to time anomalous cases of skin-disease cropping up of which the diagnosis is very difficult; it is, however, better to reserve our judgment as to the nature of the case rather than adopt a mixed name, which in no respect removes the real difficulty.

I remember a rather severe outbreak of rötheln occurring some twenty years ago in a large country town with which I was well acquainted. At that time and place little was known of rötheln, and the "new disease" was supposed to be a hybrid between measles and scarlatina, and was called "scarlatina-measles." A little experience proved its real nature. It is, I am persuaded, mainly the imperfection in our diagnosis which begets a belief in hybrid disease.

On two occasions I have been able to watch, at the Middlesex Hospital, the effect of syphilis contracted by a patient of mine, who was attending at the time for psoriasis. In both cases the syphilis was treated in the usual way, but was followed by eruptions that ran a course quite independently of the psoriasis, which also retained its character unchanged throughout. I must admit that on the first occasion the result was to me unexpected. If hybrid diseases exist at all, one would have expected to meet with them in connection with syphilis. I do not say positively that they do not exist, but I do say that it is extremely difficult to prove that they do. Can anyone point with certainty to this or that disease, and say that it is clearly and without doubt a hybrid? I cannot place the opposite view before you in better or more forcible words than those of Sir James Paget. In his Bradshawe lecture, delivered at the College of Surgeons in 1882, he says:—

"I. An exact likeness is never transmitted by inheritance; neither an exact likeness of either parent, nor an exact composite of both. This is evident enough in features, size, weight, and all that we can observe in external things. If we could be exactly endoscopic, we should observe equal variation within; the same want of exact likeness in liver and lung, and I venture to say in blood and lymph and plasma, and whatever goes to make up the whole person, healthy or diseased. The inheritance of likeness in disease or liability to disease is, indeed, clear evidence of the transmission of likeness in the very minutest part of structure and composition. But the likeness is never perfect; it may in different persons deviate this way or that; it may vary towards disease, or back again towards the healthy type; but it is never perfect, and in successive generations its degree of unlikeness may in some persons increase to a great width of difference.

"2. The certainty and probable extent of this variation must seem the greater if we consider the mingling of diatheses and of all dispositions and liabilities to diseases in transmission from and through both parents. Consider the difficulty of maintaining a "breed" in any of the varieties of the species domesticated or cultivated by us—in horses or dogs, in pigeons, or in seedling plants; the care that both parents should be of the same blood, or the same race, and that their produce should be raised in all due conditions; and then consider how numerous and wide, in spite of all this care, are the deflections from the type. With these facts before us we cannot imagine that diseased conditions should often be transmitted singly and unchanged; it is, surely, not likely that disease should be transmitted with more fixed conformity to type than normal compositions are. *Hybrids and mongrels must be even more common among diseases than among species and varieties.*" [The italics are my own.]

I readily admit Sir James Paget's facts, but not his conclusion. I should rather have said that, taking into consideration all these facts, it is very remarkable that we do not meet with hybrid diseases, but that they come up, as a gardener would say, true. Irregularly developed diseases, no doubt often exist, but there is very little evidence that the irregularity is produced by crossing. I would suggest as some explanation of this, the following considerations, the first of which is the most important: (1) That diseases are not natural, and do not follow the laws of natural development. (2) That diseases, as a rule, do not exist in us at the time of birth; in other words, they are not inherited at all in the same sense that we inherit our eyes and nose, the forms of our faces, the likeness to our ancestors, so that the two cases are not on all fours. (3) If diseases followed the laws of hybridisation, they must by this time. by constant crossing, have been all completely and thoroughly mixed, and be incapable, one would think, of further modification in this way.

II. I pass now to the nomenclature of syphilitic diseases. It has long been the custom to apply to syphilitic eruptions the name of those ordinary diseases of the skin which they most nearly resemble, preceded by the word "syphilitic;" thus we have syphilitic psoriasis, syphilitic lupus, and even syphilitic varicella. These names have not been generally used to indicate any mixture of two diseases, but simply as a convenient form of nomenclature. Syphilitic psoriasis would of course mean not a hybrid disease but a syphilitic eruption resembling psoriasis. It is admitted that the nomenclature is convenient, but it is nevertheless erroneous, and it is especially confusing to beginners. Take for example, one common misnomer, syphilitic lupus; what can be more puzzling to a student who has read an account of the pathology of lupus than to hear his teacher speak of "syphilitic lupus." There are, of course, instances where it is very difficult to say immediately whether an ulceration is lupus or syphilis, for in certain stages, when the chief character in each is simply negative, simply a destruction of tissue, there must be a similarity of appearance; but a correct diagnosis can always be made by watching the case; and under no circumstances can we avoid the difficulty os a diagnosis by calling the ulceration syphilitic lupus. The name ir not always used in this very objectionable way; but in whatevet sense it is used, the nomenclature is essentially bad. We cannocorrectly say syphilitic pemphigus, or syphilitic lupus, because pemphigus and lupus are not really present; if we do, we may as well go a step further, and speak of syphilitic epithelioma and syphilitic varicella.

It is not very difficult to describe syphilitic eruptions without using the names of ordinary skin-diseases. Thus we can speak of macular, papular, vesicular, squamous, pustular, and ulcerating syphilodermata, besides gummata and nodes, and many other well-known terms in common use; and, when we consider how very polymorphic the syphilitic eruptions are, we see that this has certain advantages over the older form of nomenclature. It always appears awkward, for example, to speak of a patient as suffering from syphilitic psoriasis in one part of the body and syphilitic lupus in another; whereas we can easily speak of a squamous and ulcerating syphiloderm. Lastly, I would say that the old nomenclature has been dropped by most of the best

writers of the present time, as, for example, by Dr. Duhring and the late Dr. Hilton Fagge, and partially by the late Dr. Tilbury Fox. I must, however, except Mr. Hutchinson's article on Syphilis in Heath's excellent *Surgical Dictionary*, where he speaks of "syphilitic psoriasis or lichen."

III. Cutaneous eruptions are occasionally produced by both the external and internal use of drugs, and the nomenclature often applied to these eruptions is similar to that of syphilitic eruptions, and is open to the same objections. I will take iodide of potassium as an illustration of my meaning. In some people this drug will produce an eruption of pimples, and in others an eruption of blebs. Dr. Van Harlington says that this latter eruption was first described by O'Reilly, of New York, and soon after by Bumstead. It has been also noticed in this country by several accurate observers, especially by Mr. Hutchinson, who has given us an excellent drawing of the eruption in plate 32 of the New Sydenham Society's Atlas. Bumstead calls the eruption pemphigus, and Hutchinson calls it hydroa. It is not to be supposed that either of these writers believes the eruption to be really pemphigus in the one case or hydroa in the other, but simply that it resembled the eruptions of those diseases, which could not possibly be produced by drugs. It would be almost as easy to produce scarlatina or small-pox. Blebs from iodides are what the eruption consists of, and what we had better call it.

I will briefly sum up that part of my paper which deals with disputed matter, and restate the points for which I contend in five brief propositions.

1. When two skin-diseases coexist, they are generally quite distinct, and should be called by their well-recognised names.

2. That diseases are not natural, and do not follow the laws of natural development.

3. That it is very doubtful whether hybrid or crossed diseases exist at all, and that certainly there is no sufficient justification for a hybrid nomenclature.

4. That syphilitic skin-diseases differ from ordinary skin-diseases in their etiology, pathology, and treatment; and that this difference should be fully recognised in our nomenclature.

5. That medicinal rashes are not diseases of the skin, but simply eruptions, and should be so named.

ILLUSTRATIONS OF EXCEPTIONAL SYMPTOMS AND EXAMPLES OF RARE FORMS OF DISEASE.

By JONATHAN HUTCHINSON, F.R.C.S., F.R.S., LL.D.,
Emeritus Professor of Surgery at the London Hospital, Vice-President of the Royal College of Surgeons.

[*Continued from page 568.*]

XVI.—Psoriasis of the Nails: True Psoriasis of Nails Contrasted with Chronic Onychitis attended by Fibrous Thickening.

I may contrast two remarkable cases of chronic disease of the nails which came under my observation on the same day. In the first, I think there cannot be the slightest doubt as to the disease being what may be correctly called "psoriasis of the nails." The patient was a surgeon, and could therefore give a clear account of his whole history. When a student at King's College, eighteen years before I saw him, he was treated by Dr. Duffin for common psoriasis, which affected the tips of his elbows and the fronts of his knees. This got well for a time, but often relapsed. It was never a very severe case, and, with the exception of still affecting his temples and the adjacent part of the scalp, the skin-eruption finally left him about six years before his visit to me. His finger-nails began to suffer a few years after the first appearance of psoriasis on the skin. He had taken arsenic repeatedly, and with benefit; but a remarkable feature of his case was that the psoriasis, both of the skin and of the nails, had often undergone spontaneous cure. His nails had, he said, been repeatedly quite well, and that without any special treatment. He had been a liberal beer-drinker, but had taken much exercise, and had, on the whole, had excellent health. His mother had suffered from psoriasis on her elbows, knees, and other parts during a great portion of her life.

Having thus shown that the disease with which we have to do is clearly an appanage of common psoriasis, I will now describe the peculiarities presented by the nails. It was exactly like that in the case of a Mr. D., in whom also psoriasis of the skin is still present. It was an inflammation of the nail-bed in the first instance, and always showed itself first at the edge of the nail, either at its side or at its extremity, never at the root. There was no thickening of the nail; it simply became loose, dry, and opaque. A probe could be pushed under the affected nails for a considerable distance. In Mr. D.'s case, great complaint was made of the brittleness of the nails, which used to break when he was using his fingers. The subject of my present case did not make much complaint about this. Quite recently he had observed, however, that the finger-tips were numb, so that in picking up things he could not feel well. It occurred to me that this might be due to arsenic; but he did not think that it was, as he had not taken much.

His toe-nails were affected like those of his fingers. He told me that the disease always returned in the same nails, and asserted positively that they were often quite well for months together. It was the nails of the thumb, index, and middle fingers which were attacked, those of the two ulnar fingers wholly escaping. The case which I would contrast with this is that of Mrs. H.. in whom the condition of chronic inflammation of the nail itself, as distinct from that of the nail-bed, is presented. In her, the nails are rough and fibrous over their entire surfaces, and are much thickened, the thickening being greatest in the middle. They are not in the least loosened, and the whole of their free edge is broken away. It is a condition not infrequently seen, and of which I have several good drawings. Mrs. H.'s account of its beginning is that her finger-ends used to look a little puffy, and felt hot and irritable; then the nail began at its root to roughen, and gradually the condition extended from the root to the tip. The forefinger was the one first affected, and on both hands the ring-finger had remained exempt. The little finger was free on the right hand, but affected on the left, and it had suffered last; the thumb on each hand was affected subsequently to the index and the middle. I may here remark, as a point of some interest for future observation, that it will appear that the ring-finger is usually the one last to suffer, and that next to it comes the little finger; the index and the middle are usually those first attacked. In Mrs. H., the nail of one great toe was reported to have recently taken on the disease. It was difficult in this instance to assign any special cause. Our patient was a widow, aged 36, florid, and of robust health, and of a beautifully transparent skin. She had a troublesome pruriginous eczema of the labia and mons of a few months' duration; but, excepting this, she had never at any time had any trace of skin-disease. Her nails had been in perfect condition until six months before I saw her. She had several times had slight attacks of true gout. She could take arsenic, but could not take either iron or quinine, as they always made the head "feel light," and, if persevered with, caused excruciating headache. Although we find the disease in association with eczema of the genitals, it must be clearly understood that there was no eczema round the nails; the disease began in the nail-roots, and was confined to their substance.

XVII.—Chronic Inflammatory Disease of many Finger-nails, beginning in Early Childhood, and continuing for Ten Years: History of Syphilis in the Father, but no Signs whatever of it in the Child.

A very healthy little girl was sent to me by a valued friend, the question being whether a certain disease of the finger-nails from which she suffered was or was not syphilitic? The father of the child had suffered from syphilis several years before his marriage. It had been a complete attack, but he had been well treated, and, during the whole of his married life, he had appeared to be in perfect health. He had been married thirteen years, and his little girl was ten years old when she was brought to me. She was not the oldest, there being a boy, two years older, who ailed nothing. Neither of the children had, so far as I could learn, had any suspicious symptoms in infancy, but both were said to have suffered from "crusta lactea." The child herself had excellent features and perfect teeth. Thus it would seem that the history of syphilis in the father was the only suspicious fact. The disease of her nails had been noticed in early infancy, possibly soon after she was a year old; and it consisted of a sort of chronic inflammation at the root of the nail, which caused the lunula to become fibrous and break up, and had repeatedly led to exfoliation of almost an entire nail. In some cases it did not lead to loosening of the nail, but caused a fibrous opaque condition, with transverse furrows or pits. Although, in some instances, there had been distinct inflammation of the tissues surrounding the nail, with suppuration under the edge, nothing approaching the condition of onychia maligna had been produced. The condition had affected now one finger and now another, and the fingers had lost their nails repeatedly. The new nails had been developed in some instances so perfectly that I could not have told that there had ever been any disease. The toe-nails had always been exempt, and there had never been any skin disease, except the eczema of the scalp in infancy. The finger-nails of the two hands had been affected with tolerable symmetry. It would seem that

the condition had been going on for more than eight years, and it showed no sign of mitigation. I could not see any reason for regarding it as syphilitic; the condition seemed to approach nearest to what I have described as Sycosis of the Nails—a suppurative affection of the nail-bed, met with in delicate children, and often in conjunction with ophthalmia tarsi. But the child had no ophthalmia tarsi, nor did she appear to be delicate or strumous, nor, as regards most of the fingers, was the inflammation attended by suppuration. It is remarkable that, with so many fingers affected, the toes should have wholly escaped. A suspicion arose in my mind that the disease might be cryptogamic, but, on examination, we could find no fungus; and, further, I have never seen true tinea of the nails cause either suppuration or exfoliation.

XVIII.—Symmetrical Slight Disease of Nails in a young Boy; Syphilis possible but very improbable.

The case of Master D. was of much interest with reference to diseases of nails. He was 4½ years old when the nail of each ring-finger became affected. There was no disease of the adjacent skin, and not the slightest soreness. The two nails were exactly alike, and presented a series of little pits in their surfaces over and about the lunula. By these the nail was made quite rugged. There were a few minute white dots in the substance of the nail further on, but for the most part it retained its polish and smoothness. The nails of the other fingers were quite healthy, with possibly a slight exception in those of the little fingers. The symmetry of the affection rendered it almost certain that it was not due to any local cause. There were two points of special interest in the family history. An elder half-sister had been for years the subject of severe common psoriasis, and the father of both had suffered many years ago from syphilis. He had been under my care before his second marriage for a very persistent though but slight form of plantar psoriasis. He was a nervous man, and exceedingly anxious lest his children should inherit a taint. It was this anxiety which made him bring the child to me for his nails, which he confidently believed to be consequent on inheritance of a taint. There was not the slightest evidence corroborative of the supposition. The child appeared to be in perfect health, and had suffered from nothing in infancy. He was the eldest of the second family, and there were one or two younger who had also wholly escaped. I was inclined to think that the condition of the nails was due to an inherited tendency to common psoriasis rather than to specific disease, but it was, it must be admitted, not exactly the condition usually met with in that association.

XIX.—The Nails in True Leprosy.

Mr. D., aged 18, shows very well the kind of disease of nails which occurs in leprosy. All his finger nails, with the exceptions to be mentioned, are broken up and fibrous, much thickened, and lifted by formation of epidermic scales in the nail-bed. No smooth surface whatever is to be seen on any of them. In a few places the inflammation has gone on to pus-secretion and scab. The only nails which have escaped are those of the little and ring-fingers of the left hand. That of the little finger is still smooth, and not at all thickened; that of the ring-finger has not escaped so completely; it is opaque, but not broken up. These two fingers have for ten years or more been involved in paralysis of the ulnar nerve on that side.

XX.—Xanthelasma Palpebrarum on the Lower Lids only: Migraine Attacks, with Temporary Amblyopia.

It is not often that we see xanthelasma on the lower lids only. This occurred in Mrs. C. B., a lady aged 42, whom I saw in November, 1886. She had symmetrically-placed little yellow patches of the chamois-leather kind, and rather bigger than peas, on the lower eyelid of each side, a little under the canthus. She said that the one on the left side had come four or five years ago, and the other much more recently. Mrs. B. had suffered much from neuralgia and various nervous symptoms, which she attributed to inherited gout. She had never had a gout paroxysm, but often flying pains, and in early life rheumatic fever. She had never had bilious sick-headaches, but was accustomed to become dark round the eyelids when out of health. She was stout, of rather dark complexion, vigorous, but not strong. She had often had migraine attacks and obscurity of sight, also pins and needles in her left arm. She had taken great quantities of medicine all her life. When she had the attacks of dim sight the worst, she was taking champagne.

As it is well known that xanthelasma almost invariably begins in the upper eyelid, I have thought the above exception worthy of notice. On both sides the lower lid only was affected.

XXI.—On Linear Scars in the Skin.

I doubt not that many observers have remarked that it is often difficult to find an explanation of linear scars in the skin, I mean those which resemble the scars of pregnancy. It is well known that they are produced by anything which has caused distension and stretching, and that they are often seen after pregnancy, dropsy, obesity, synovial effusion, etc. Sometimes stretching without distension causes them. I once saw them in a very marked form on the knees and ankles of a girl who suffered from cystitis, but who had never been fat, nor had any swelling of joints. The explanation was that she had been accustomed to sit for hours together in a squatting attitude on the chamber-utensil, straining to pass water. To repeat, however, my first assertion, I have often seen them when there was no explanation whatever to be obtained. A gentleman, aged 30, came to me for a chancre, and, in exposing his abdomen, I noticed that, crossing his abdomen on each side obliquely downwards, were a series of cicatricial streaks exactly like those of pregnancy. They were very conspicuous. He said that he had had them all his life, and that he used to be teased about them at school. He said, also, that a twin brother had them in exactly the same condition. This gentleman was stout, and it is possible that, in infancy, he was very fat, but unless this suggestion may be allowed to explain them, there was really nothing to be found. He had never had dropsy, nor any kind of abdominal distension. In these unexplained cases, it is worth keeping in mind that conditions of great local development of fat may have occurred in early childhood. I do not know how early in life these linear scars have been observed.

ON FROST ITCH, OR PRURIGO HYEMALIS.

By J. F. PAYNE, M.D., F.R.C.P.,

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Many persons suffer from itching of the skin in cold weather, especially when the air is keen, dry, and frosty. They begin to scratch when they take off their clothes to go to bed, and some can foretell, by their sensations, a frosty night. Others suffer more from the irritation when they become warm, more particularly from the radiant heat of a fire, but only when the outside temperature is low. In short, change of temperature more than absolute cold is the exciting cause, and dryness of the air is also an important factor.

In most cases these inconveniences are transitory, and not severe enough to cause the sufferer to apply for medical advice; but sometimes the liability to irritation from this cause is so great that it constitutes a very troublesome affection, and may deserve a special name. As such it was first described by Dr. Duhring, of Philadelphia, in the *Philadelphia Medical Times* for 1874, as "Pruritus hyemalis," and independently by Mr. Jonathan Hutchinson, in 1875, as "Winter Prurigo" (*Lectures on Clinical Surgery*, vol. i, part 1, 1878, p. 100; Journal, 1875, ii, 773). Since then the affection seems to have received little attention, and hence the following account of some cases observed in the last two winters may be worth placing on record.

The one characteristic of this affection is intense itching, which lasts more or less through the winter, from November or December till March or April; varying to some extent with the severity of the weather. The only lesion of the skin is one which appears to be secondary to the irritation, namely, small hard papules not passing into vesicles, on the outer aspects of the arms and legs, seldom on the trunk, and accompanied by signs of scratching. This eruption is rather the consequence of the disease than its cause, being set up by the scratching and rubbing to which the itching gives rise. It is essentially the same in most itching affections of the skin where there are not more distinct lesions, and may be called symptomatic prurigo, distinguished from substantive prurigo (Hebra's disease), where the papules appear to be the starting point of the irritation.

The affection is unconnected with any special state of health, and may recur every winter for many years. But in mild winters it may be quite absent; and possibly the mildness of the weather in several winters previous to 1885-6 is the reason why this affection has not been lately much noticed. The following case is one of the best marked.

Case I.—Mr. C., aged 33, a London tradesman in good circumstances, came to me in January, 1886, during cold weather. He complained of the most intense itching, which tormented him both day and night, but especially when he was hot. It was torture to him to be near a fire, and he could not bear hot rooms, so that he

never went out to any evening entertainments. Christmas Day was spent by this poor man not in the society of his family, but alone in his bedroom, scratching himself. The condition was aggravated also after meals; and eating anything indigestible, such as pastry, brought on the irritation at once. At night the itching was sometimes very severe, so as to lead the patient to rub himself when in bed with a hair-glove, but sometimes, on the other hand, he slept pretty well. These symptoms had afflicted him for the past four years, but only in winter, always going away in March. The last winter (1884-5) he had suffered very little, but this was a mild season. He was a tall robust man, and enjoyed very good health, except for indigestion, of which he complained a good deal, and which he attributed to want of exercise. Very likely this had some foundation, as for a man of his physical development his occupations were too sedentary.

The eruption consisted of hard papules, not vesicular, situated chiefly on the outer sides of the thighs and to a less extent on the inner sides, also on both aspects of the forearms, and a little on the upper arms, but none on the trunk or the face. There were also marks of scratching. The papules were sometimes red, sometimes pale; when scratched much, they formed crusts.

Case II.—John W., aged 25, an engine fitter, came to St. Thomas's Hospital February 10th, 1886. He complained of excessive itching in the skin of the body and limbs, which had lasted about eight weeks, so that its commencement would have been towards the middle of December, 1885. The itching was most severe on undressing, but also brought on by heat, especially when he was near a fire. He had been wearing a thick woollen under-vest, and, thinking that might have caused the irritation, had left it off, and substituted a coloured cotton shirt, but found himself worse for the change. The only eruption on his body consisted of papules, distributed chiefly on the outer aspects of the arms, both above and below the elbow, with a few on the inner aspect. There were a few on the back, more on the front of the body, and nothing notable on the legs. There was no trace of scabies, nor of the presence of pediculi. The patient was in good health, and the only circumstance in his habits which seemed important was that he worked in a very hot workshop, heated by steam, and with gas burning, and had to pass from this direct into the open air. On March 3rd he was noted as being much better.

This winter I have also met with some cases.

Case III.—A gentleman, aged 62, came to me on January 7th, 1887. He had suffered from extreme irritation of the skin in the winter for six years more or less, but especially for three winters past. The irritation was always worse in cold weather, but, as usual, brought out by changes of temperature. It was very troublesome at night; not generally increased by the heat of the fire, but worse on coming into a hot room out of the cold. It was also aggravated by eating pastry or other indigestible things. He dressed warmly, but a rough, thick, woollen vest made the irritation worse. In this case there had been no visible eruption till three weeks before I saw the patient, and this was evidently not the cause of the irritation, but, if at all connected with it, rather a consequence. The ordinary pruriginous papules caused by scratching I found only on a few places on the arms, but there was on the trunks and limbs an eruption which I will briefly notice, though its connection with the pruriginous symptoms was doubtful. It consisted of flat, slightly raised patches of angular shape, covered with scarcely perceptible scales. On the back, waist, and abdomen they were about an inch or three-quarters of an inch in diameter; on the arms and legs decidedly smaller. They came out in successive crops, which lasted two or three weeks, being at first of a dull red or pink colour, afterwards darker, and went away leaving a brown macula. When I saw the patient a second time, the patches were almost all in the macular stage, only a few fresh ones appearing. Those on the lower leg were, as is usual in many other affections, much darker, being of a tawny or almost a coffee colour. They did not appear to increase the irritation. I conclude, therefore, that this eruption was either identical with or closely resembled the pityriasis rosea of Gibert, and was independent of the pruriginous condition. The rather excessive pigmentation might be regarded as due to the advanced age of the patient. Many skin affections produce pigmentation in elderly people which do not do so in the young. The patient was dyspeptic, and had what appeared to be, or at least was thought to be, a decidedly gouty history. He improved in a marked degree under treatment, which consisted in giving a mixture containing sulphate of magnesia, with a very small dose of colchicum, and on the local application of glycerine. But in the sudden burst of cold weather which commenced in the first week of February, he suffered a relapse, and was as bad as ever. As this gentleman is a member of our profession, his account of his symptoms may be received with implicit confidence.

Case IV.—Another case this year was that of a young man, aged 20, who came to St. Thomas's Hospital on February 18th, 1887, complaining of irritation of the skin. He had been treated for scabies, but, whether he ever had it or not, was certainly free from that disease when I saw him. His history was that the itching had begun in November, and troubled him to some extent through the whole winter, but had got better in January. Lately, however, since the return of cold weather in the first week of February, he had got so much worse that he was induced to come to the hospital. He stated that he had suffered precisely in the same way the winter before, the itching beginning to trouble him in November and subsiding in the spring. On examination, he showed the usual type of symptomatic prurigo; papules chiefly on the outer sides of the limbs, rather the result of scratching than the cause. On one arm a small impetiginous patch had been produced by scratching, but this was a transitory matter. There were no papules, or scarcely any, on the trunk. Nothing in his health threw any light upon the irritation.

The treatment of this troublesome affection is not very satisfactory. If the patient suffers from dyspepsia and debility, we naturally treat him for these symptoms, but with little effect as regards the itching. The only true indication seems to be to soothe and protect the skin as thoroughly as possible. Warm clothing is, of course, essential; but, since any woollen garments which are at all rough often irritate the skin, some soft, pure woollen must be found. It should be remembered that much of the so-called "merino" clothing is more than half cotton.

Next, some physical protector in the form of an oily or viscid lubricant should be applied to the skin. This, by soaking into the epidermis, makes it a much more perfect non-conductor of heat, and thus the peripheral nerves are shielded against changes of temperature. Glycerine is the favourite substance, and in Case 3 the patient thought nothing else did him any good; but patient No. 2 preferred vaseline. The glycerine may be used pure, or diluted with an equal part of water or camphor-water. Probably free inunction with olive-oil would be better still; but I have not been able to induce patients to give it a fair trial.

At first I used lotions containing lead, carbolic acid, and glycerine, but afterwards came to the conclusion that the last was the only useful part of the prescription. In certain cases, especially when the irritation is worst at night, small doses of chloral hydrate are very useful. In case No. 2 I gave fifteen grains every night for a time, and believe that the benefit attributed to local remedies was chiefly due to this. For obvious reasons, it is a remedy not to be used hastily or continued too long; but the benefit is not confined to the night, as the nerves are permanently soothed.

ABSTRACTS OF LECTURES
ON
MALARIAL FEVERS.

By W. NORTH, B.A., F.C.S.,
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Lecture III.—Recent Researches into their Etiology and Pathology: The Possibility of Prevention in the Individual, and of Improving the Condition of Malarious Countries.

After considering the general and local distribution of malaria, and the conditions under which it exists, the next question which arises is: How far may the symptoms which characterise the disease be regarded as the natural consequence of exposure of the individual to these conditions? Or is it necessary to go further, and seek their origin in some poison whose growth and development is especially fostered by these conditions?

A simple, uncomplicated attack of malarial fever, as is well known, begins with a "cold stage," often accompanied, but not necessarily, with more or less violent rigors; then follows a "hot stage," or condition of fever, which terminates in profuse sweating, the "sweating stage." It is possible to have such a train of symptoms, to recover, and have no return of them if the patient be promptly treated; but in most cases they repeat themselves at varying but exceedingly regular intervals, constituting what is known as quotidian, tertian, quartan ague. Further, it is possible for an individual, after an interval of immunity, varying from days to years, to have a re-

currence of the symptoms, though not, as a rule, with the same period of intermission, and in old cases the regular intermission disappears.

Further, these symptoms may, and often do, reappear under conditions which render it impossible that there should have been a fresh access of poison, and an individual who has once suffered appears to be more or less liable to returns of the disease as long as he lives, and, should he be attacked by any febrile disorder whatsoever, a distinct intermission will generally be found added, as it were, to the ordinary symptoms of his disease, and this intermission will disappear under the treatment usually prescribed for ague, namely, the use of quinine, arsenic, and the like, in addition to any drugs proper to the treatment of the particular disorder from which he is suffering. If antiperiodics be not administered, the intermission will disappear with the disease, and may not manifest itself again until the patient suffers from some other disease.

Again, in a person who has once had ague, an attack may be provoked by a number of widely different circumstances, for example, fright, surgical injury, nervous and physical exhaustion, sudden chill, and the like; and not only will these circumstances bring about an attack, but some of them are equally efficacious in cutting one short which has just begun. In the very grave forms of the disease known as "pernicious," the fever is often continuous and frequently fatal. These cases, in the Roman Campagna at all events, are not very common, and in the author's opinion are rarely if ever "first" attacks; and though a first attack may be severe, there is a very large amount of evidence to show that intermittent fever—except, perhaps, in the case of persons of very feeble constitution—cannot be acquired by a few hours' exposure in a malarious locality, and that there is some sort of connection between the duration of the exposure and the severity of the attack; this varies enormously in different individuals, and though it is exceedingly doubtful whether such a thing as absolute immunity exists, there are undoubtedly such differences in susceptibility as to render it at all events conceivable.

The pathological changes in the organs and tissues which accompany the disease are somewhat obscure. In grave cases there is always a large amount of melanæmia, which manifests itself in the liver, spleen, and kidneys, and especially in the cortical substance of the brain, where the capillaries are found to be loaded with minute black granules. The splenic trouble which is characteristic of most cases would seem to point to some special interference with, or alterations in, the functions of that organ; and it is not surprising, therefore, to find in the blood evidence of profound changes in the red corpuscles and their pigment, and the production of certain amœba-like bodies, which, under the name of plasmodium malariæ, have been described by Drs. Celli and Marchiafana as the cause of the disease, the transmissibility of which they claim to have proved by intravenous injection of the blood of a patient suffering from intermittent fever into an individual who was said never to have had it in his life. It is needless to remark that the experiments are open to very grave objections, so grave as to deprive the result of almost all its significance. Dr. W. Osler has given a very full account of these so-called "hæmatozoa of malaria" in the JOURNAL of March 12th. Here it will suffice to state that all attempts to discover an organism capable of producing the disease in the air, soil, or water of malarious localities have signally failed, although a number of organisms have from time to time been announced as such. Nor have the attempts to cultivate the blood of patients produced any better results. The experiments of Professor Silvestrini on the subcutaneous injection of dew, water, and the water in which soil from exceedingly malarious localities had been washed, are interesting. Sixty-three experiments of this kind yielded absolutely negative results; and, despite the large amount of work which has been done in the search for a pathogenic organism, a confirmation of the existence of the peculiar changes in the blood above referred to represents the progress made, and proof that the disease has its origin in such an organism, or that the bodies discovered in the blood come from without, and are not the outcome of changes in the corpuscles themselves, is still wanting.

There is one other theory as to the cause of the disease which claims serious attention. The so-called "chill theory," according to which the thermotaxic nervous system, in endeavouring to adapt itself to the needs of the body, exposed to the great and violent changes of temperature said to occur in malarious countries, breaks down and becomes disorganised; that is to say, malarial fever is essentially a disease of the nervous system caused by exposure to climatic conditions. Chill is probably a wrong term to use, for the breakdown is more likely to be occasioned by exposure to excessive heat than to excessive cold; and considering that we know practically nothing of what occurs in the body when exposed to a temperature above its own, the theory cannot be summarily rejected. It depends, however, on the supposed existence of these violent changes which have not apparently been made the subject of accurate observation by those who have urged this explanation of the disease. From a large number of experiments made by the author in exceedingly unhealthy sites near Rome in the summer of 1885, it would appear (1) that the daily range of temperature in these places is very great; (2) that the changes are sudden and violent; (3) that the characters of the curves indicating temperature and tension of aqueous vapour present in the atmosphere present most marked differences in localities barely 200 mètres apart horizontally; similarly marked differences are found in the records of instruments placed at different vertical heights above the soil; (4) the connection between these variations of temperature and vapour tension and the malarious character of the localities in which they were observed is such as to lead to the conclusion that if not in themselves the cause of the disease, they must directly affect any organism to which such a power could be attributed, and it would seem fair to conclude that if these climatic conditions could be modified, the pathogenic organism which may be supposed to thrive under them would disappear, and the localities in question become healthy. Either as sufficient cause in themselves, or as controlling the growth of organisms, these phenomena undoubtedly have a most intimate connection with the disease, and it becomes possible for us to understand the real value of the precautions universally deemed advisable in malarious countries—fire, food and clothing, the avoidance of low, damp ground for camps, the building of huts on poles, residence in the top floors of houses and the like. It is difficult to realise from mere figures what these climatic phenomena really mean, but one night spent in the Campagna in August would probably suffice to convince the most sceptical of the necessity of protecting the body against them, and to realise the wretched condition of the greak bulk of those who are most exposed. Ill-fed and worse clothed, they have to resist, all day long, a temperature often 104° F. in the shade, and to sleep in a damp, wretched hovel in an atmosphere saturated with moisture and a temperature which just before dawn may have fallen to 38° or even 36°, to rise in three or four hours to 100° or more. A healthy person exposed for some time in places where these conditions obtain runs grave risk of acquiring an intermittent fever; and one who has already had the disease will readily relapse under them, and may be attacked by one of the very grave forms; in both cases the result may be attributed to access of poison. But the same explanation will hardly hold in cases of relapse from exposure to heat or cold in a non-malarious country, and after years of immunity either the organism, if such there be, has a wonderful power of lying dormant, and of being recalled to activity by exceedingly diverse conditions, or the thermotaxic nervous system, having once been thrown out of gear, readily breaks down again under strain.

The recurrence of attacks would seem to be, as it were, a vice rendered the more easy by practice; consequently the anticipation of them by drugs or other remedies is of great importance in treatment. Chronic cases, in which all regular periodicity has been lost, are notoriously obstinate and difficult, if not almost impossible, of cure; much may, however, be done in all cases by avoiding exposure to the above-mentioned extreme variations of temperature and the maintenance of "tone" in the nervous system.

The question of the cure of a malarious country resolves itself into the removal of the causes of these climatic extremes, and this in turn into perfect control over subsoil water. Drainage and the planting of suitable trees are the well-recognised methods of effecting this, and the care bestowed by the Romans on their woods, and the elaborate system of drainage which they constructed in the hills round Rome, would seem to indicate that they at all events realised the vast importance of these things.

It is very evident from the facts that malarial fevers have a most intimate relation to the soil and to local climate. In the case of the Roman Campagna, it has been possible to some extent to trace the spread and increase of the disease *pari passu* with the depopulation and neglect of the soil; and whether malaria be due to the direct influence of climatic conditions on the individual, or to a pathogenic organism, there can be no reasonable doubt that these peculiar local conditions form an important factor in the problem of its causation; and not only of malaria, but probably of other diseases. The peculiar form of enteritis known as typho-malaria exhibits a similar relationship to the soil, and in England infantile diarrhœa shows a connection hardly less striking.

Our knowledge of the relations of soil and climate to disease is scanty and very general, and a careful study of these local conditions would probably tend to throw great light on much regarding them which is at present obscure or almost inexplicable.

OBSTETRIC MEMORANDA.

EPILEPSY FOLLOWING LABOUR.

On April 2nd of this year, I was called to attend Mrs. R., aged 28, in her first confinement. Labour began at 3.30 A.M., and was concluded naturally at 7.30 A.M. The pains were not excessively strong, and she bore them well. About noon I saw her, and she was then going on well, except that she complained of throbbing pains in the head. At 4 P.M. I was sent for in great haste, but unfortunately was not at home, and it was near 6 before I got to the bedside. To my astonishment, I found her in a strong epileptic seizure. The pulse was weak, the pupils widely dilated. I was informed that, since her first attack at 3.30 P.M., she had had at least twenty or twenty-five seizures, the fits following one another in rapid succession, and being very violent. Fortunately, I had in my midwifery bag a solution of chloral hydrate, and seeing that no time was to be lost if I was to save my patient, I injected 25 grains into the rectum. I waited half a hour till the fits had ceased, and she was in a profound sleep. I returned in two hours and found her still sleeping, having had no return of the fits, but latterly she had had some twitchings of the limbs. I now injected 15 grains of chloral combined with 40 grains of bromide of potassium and left her. On calling next morning I heard that she had had two mild seizures during the night. She took no notice of anything. For many days her memory was quite lost; but she made a good recovery, and had no return of the fits. On inquiry, I elicited the following facts:—

When fifteen she had a fright, and had a strong epileptic seizure. Since that time she had been quite free from a recurrence. She was married a year previous to the occurrence here related, and her husband says that on two or three occasions she had fainted, but soon came round, and generally slept for a short time. These were evidently *petit-mal* seizures. Her grandmother, on the mother's side, suffered from fits; her mother never had fits, but committed suicide; her mother's sister was a confirmed epileptic, but had a large family, none of whom ever had fits.

Sheffield. C. Nelson Gwynne, M.D.

THERAPEUTIC MEMORANDA.

STROPHANTHUS IN HEART-DISEASE.

As the influence and value of strophanthus in heart-disease is at present attracting a good deal of attention, my experience may be of interest. I have administered the drug in twelve cases of heart-disease: nine were functional and three organic, and I have much reason to be pleased with the success of the treatment, and with the amount of relief I gave my patients.

On looking over my notes I find two cases of mitral disease, in one of which there was a loud murmur, both obstructive and regurgitant. The patient was a woman, aged 45, in whom the prominent symptoms were harsh, hacking cough occurring in paroxysms, dyspnœa, and even at times orthopnœa, palpitation, and œdema of feet and legs. The pulse was intermittent, with a regular irregularity, and beating 90 to the minute. Strophanthus was given in half-drop doses at first, and was gradually increased until she was taking 2 minims three times a day. Almost from the first dose taken an alteration in the sufferings of the patient was observed. The heart-sounds were firmer and steadier; the pulse-beats, though still irregular, were not so fast; cough was much less troublesome, and the palpitation was neither so frequent nor so violent. Along with this there was a copious increase in the renal secretion, which soon relieved both the visceral engorgement and the œdema in the feet and legs. In fourteen days she felt so well as to be able to return to her household duties. In the other case of mitral disease the symptoms were much the same, but not nearly so severe. The same dose was given, and the effect was as satisfactory and rapid.

Another case of aortic stenosis in an old lady, aged 60, who had for years been a martyr to chronic cough, palpitation, and the other symptoms attendant upon stenosis of the aortic orifice, received great relief from a one-minim dose of the drug. In this case palpitation was very violent, the pulse was rapid, and there was extensive passive congestion of both lungs. Œdema of the feet and legs was also present in a marked degree. Under the influence of strophanthus the pulse became slower and firmer, the congestion in the lungs lessened day by day, and a copious diuresis soon made an alteration in the œdema. The palpitation was trifling compared to what she previously suffered, and her cough was much relieved.

In the other nine cases in which I administered the drug I could find no trace of a murmur, and the purpose for which the medicine was administered was to allay in some measure the turbulent palpitation of which these people complained. In seven of these cases the palpitation seemed to be dependent upon dyspepsia; remedies were given for that condition. Strophanthus was also used in the hope of its exerting a calming and steadying influence upon the heart, which in all of them it succeeded in doing.

The remaining two were cases of disordered innervation. The pulse was very rapid and irregular, the heart's action turbulent—so much so that at times the sounds could not be differentiated, but seemed all merged in a confused rumble. Both of these patients were much benefited, and though the symptom of which they complained the loudest—namely, palpitation—is not banished, they find that it can be kept within reasonable bounds by a timely dose of strophanthus. All the patients expressed the opinion that the drug had a stimulating effect, which, however, soon wore off. Some of them professed to feel beneficial effects ten minutes after taking their appointed dose. The effect of the medicine was rapid, but did not remain long, and at the end of three or four hours required to be renewed. The system, found, quickly became used to the drug, and to get the amount benefit the dose required to be gradually increased.

In prescribing it I combined it with some bitter infusion, and I never failed to get the physiological action, though Dr. Higham Hill remarks, in the Journal of April 2nd, that it is important not to dilute it except at the time of using. I have never seen sickness or gastric irritation produced, such as we meet with sometimes after digitalis.

The preparation I used was tincture of the strength of 1 in 8, prepared by Messrs. Thos. Christie and Co, London.

J. Hutchison, M.D.,
Physician Anderson's College Dispensary, Glasgow.

CLINICAL MEMORANDA.

BRACHIAL MONOPLEGIA IN ENTERIC FEVER.

Dr. Archer, in describing (Journal, April 2nd) an interesting case of this combination, remarks upon its extreme rarity. In 1879, a girl, aged 13, was under my care in the Leeds Fever Hospital, in whom the left arm became paralysed a few days before death from prolonged enteric fever. A recent blood-clot, of the size of a very small chestnut, was found in the right Rolandic sulcus. No cause—for example, previous blow or local injury—could be assigned for an artery having ruptured there rather than anywhere else. Specific poisons and long pyrexia discover and tend to destroy weak elements of the organism, and thus produce unlooked for "complications." It is, in fact, probably owing to this variability in the original strength or the acquired weakness of different organs and tissues that "no two cases are exactly alike" in any disease. T. Churton, M.D.
Physician Leeds General Infirmary.

WHOOPING-COUGH IN A CAT.

For the past few weeks I have had under my care a little boy suffering from a more than usually severe attack of whooping-cough, and his mother informs me that for quite a fortnight their cat has had five or six distinct fits of coughing daily, similar in every respect to the boy's, which end after the expectoration of frothy mucus. The cat between the attacks is tolerably bright and active, though not so lively as she formerly was, and has considerably fallen away in condition. This is the first instance of a domestic animal becoming affected through, apparently, infection from a human being which I can remember having observed, and it occurred to me that the fact may be of interest to others.

Liverpool. O. Bowen, M.R.C.S.

A woman, named Mary Ann Haynes, has been sentenced to five years' penal servitude for attempting to poison her husband by putting oxalic acid in tea and cocoa prepared for his return. The liquid cocoa was found to contain 16 grains of oxalic acid, and the tea 22 grains.

The Spread of Infection.—A case illustrative of one of the many ways in which infection is spread recently came before Mr. Raffles, the stipendiary magistrate of Liverpool. A man named John Tennant, who held a distress warrant for rent, entered the house of a Mrs. Marley, whose child was ill with measles, and forcibly removed the bedding, although he was informed that it was infected. The defendant was ordered to pay a fine of forty shillings and costs.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

CHARING CROSS HOSPITAL.

CASE OF HYDROPHOBIA.

(Under the care of Dr. BRUCE.)

[Notes by Mr. C. D. FREEMAN, M.R.C.S., L.S.A.]

JOHN M., aged 15, was admitted on January 5th, 1886, at 1.15 P.M. His mother described him as being naturally very excitable, and said he once threatened to commit suicide by jumping out of the window. There was no history of insanity or nervous disease in the family. Three months before admission, a cat, described as "wild," flew at him and inflicted a lacerated wound about an inch long just above the articulation of the trapezium and first metacarpal bone of the left hand. He was taken within a quarter of an hour to the Royal Free Hospital, where, from his description, the wound appears to have been cauterised with fuming nitric acid. The cat also scratched two children, who were still quite well. The antecedents and subsequent fate of the cat were unknown.

The patient continued quite well till January 2nd, when he noticed a pricking pain in the region of the cicatrix, extending up the arm to the side of the neck. It came on about three times a day, and lasted a quarter of an hour.

On the morning of January 4th he noticed an odd sensation when he swallowed, and evinced a great reluctance to eat and drink. When being washed in warm water, the patient "felt his breath taken away."

On admission at 1.15 P.M. on the following day, there was nothing very noteworthy to be observed, except that the boy's expression was somewhat excited and vacant; he was perfectly intelligent; he put his hands to his face to protect it from "draughts which," he said, "took his breath away." Breathing was quiet and not quickened. He fed himself from a spoon, but would not drink from a cup, saying he could not, and struggling when forced. When a cup of water or milk was offered him the breathing became quickened, the head was thrown back, and the neck-muscles became rigid. The noise of water poured from one vessel to another produced no effect. Swallowing was performed suddenly with a gulp. The abdomen was distended and tympanitic. The cicatrix was a little tender. There was no pain in the arm. The pulse was 100 and irregular; there were periods of acceleration occurring several times in a minute, alternately with periods of infrequency, and now and again single pauses. The accelerations appeared to occur along with bodily movement, and also with disturbances of respiration. At 2.15 P.M. a sudden attack of sobbing and sighing came on, without any shedding of tears. The attack lasted less than a minute. There was no laryngeal spasm. The pulse rose to 132. At the same time constant complaint was made of the "wind blowing over him;" frequent frowning or corrugating movements of the eyebrows occurred. The pupils were widely dilated and fixed. The temperature was 99.4° F. The patient was ordered twenty grains of chloral hydrate *per rectum*.

4 30 P.M. The chloral produced no effect. An attempt was made to administer chloroform, but owing to the great resistance offered, and the return of the spasmodic dyspnœa, the idea was abandoned, and half a grain of morphine was injected hypodermically. He was isolated.

7 P.M. The morphine had no soothing effect. He asked for tea, and took about four ounces and a small piece of bread and butter. The tea was taken from feeder in very small quantities, with complaints of difficulty in swallowing. The patient smiled rather vacantly, and talked incessantly but sensibly. The urine was 1018, acid; there was no albumen, but a deposit of phosphates and urates. The chloral was repeated.

11 P.M. The temperature was 100°. The chloral was repeated. He was constantly eating ice and sipping water out of a feeder or spoon. He would lap it out of a saucer, or dip his fingers into it and suck them, but when it was presented in a cup, the spasmodic dyspnœa recurred. The mouth was hot and dry, and the tongue uniformly coated with thickish white fur, but not swollen. He was rather more restless, and began to talk nonsense. He asked again for tea, and took about five ounces with a little bread and butter.

January 6th, 12.45 A.M. The patient had been seized with repeated attacks of spasmodic dyspnœa on attempting to swallow. Excitement was increasing. The expression of countenance, which had been timid and suspicious, was changed to one of anxiety and fear; thirst increased, but he said he was afraid to drink on account of his "breath going," or of his "choking from something in the throat." He made great efforts to expectorate, with no result. He could not be kept in bed without someone standing on either side. The pupils were dilated; there was no dribbling of saliva.

1.30 A.M. The morphine was repeated. The spasms on swallowing were more severe; the patient begged in the most urgent manner for fresh cold water, after rejecting what was offered him. He could not drink out of a cup, but by violent efforts jerked a few drops into his mouth with a spoon or by dipping his tongue or fingers into the saucer as before mentioned. He was allowed to sit in a chair, but kept starting to his feet with the body perfectly rigid and the head thrown back, and throwing off the blankets in which he was wrapped. At 2.45 A.M., he was put back into bed. A nutrient enema consisting of four ounces of beef-tea, the yolk of an egg, and half an ounce of brandy, was given without any resistance, and retained.

3.15 A.M. The pulse continued as before. The cardiac sounds and dulness were normal. With a little difficulty chloroform was administered, and he was kept under its influence for about half an hour, when it was stopped on account of the pulse becoming weaker and the pauses more frequent. In a few minutes he recovered consciousness, and struggled as violently as before, threatening and imploring by turns. He appeared to suffer much from saliva in the throat, thirst, and inability to swallow, any attempt to take fluid being followed by spasmodic dyspnœa which seemed to increase in violence. He cried out constantly that his "breath was going," begged everyone to stand away from him and not to breathe on him, and would then make a frantic effort to get out of bed. He asked for something to drink, but would refuse to take it when brought to him.

4.30 A.M. The spasms had ceased, and the patient had become violently maniacal. Forty grains of chloral hydrate were given *per rectum*. He had to be held in bed. His face was worn and distressed; the eyes wild and staring, and frequently covered with the hands.

At 7.10 A.M. the patient suddenly fell asleep for ten minutes, and again, half an hour afterwards, for ten minutes; but during the intervals he was as violent as before, and attempted to bite those holding him. The temperature was 101.4° F.

7.50 A.M. He was slightly quieter; his voice was hoarse. He passed a small quantity of urine in the bed.

9.30 A.M. He had sipped six ounces of tea, which took him half an hour, without spasm or fear. He had passed a natural motion and urine quite consciously together. He said he felt more comfortable, and allowed himself to be washed. He sat up in bed calmly and contentedly. The face had lost its wild and anxious expression, and altogether he was much quieter. Pulse 100, small, and still irregular. He remained quiet for about two hours, when he began to talk incessantly. A hypodermic injection of morphine gr. ½, atropine gr. $\frac{1}{100}$, was given; and he was quieter for about half an hour after the injection, when he became noisy again, and the dose was repeated. A nutrient enema was given and retained. He was less noisy, but still restless and violent; but at 4.45 P.M. he was dozing. He had taken some tea (six ounces), and had eaten a little bread and butter without difficulty, but slowly. He had periods of maniacal excitement, alternating with quiet intervals. During the latter he lay on his back, breathing very quietly, but irregularly. Temperature 102.4°. At 5.30 P.M. he was quieter, with an inclination to sleep. The temperature was 102.2° at 6.15. Occasionally his arms, hands, and the muscles of the neck and throat became rigid, these spasms increasing both in number and violence. One-fiftieth of a grain of hydriodate of hyoscine was given hypodermically.

10.15 P.M. Patient slept (?) for an hour and a half after the hyoscine, and was quite free from spasms. His breathing afterwards became sighing, gasping, irregular; the pulse was weak and quick; spasms recurred occasionally. He passed urine in bed, and vomited about every ten minutes quantities of coffee-ground material, varying from a drachm to half an ounce. The temperature was 104°.

A hypodermic injection of hydriodate of hyoscine was given at 11.30 P.M., which produced a sedative effect for about a quarter of an hour, after which the spasms recurred. At midnight he was quite unconscious; he looked about him in a vacant manner, but without perception. The vomiting continued; the respirations were 28, and very shallow, and the pulse could not be counted; the pupils were dilated and the conjunctivæ insensitive; the temperature was 106.2° at midnight, and at 12.45 A.M. had risen to 108.2°. The breathing became weaker

and weaker, the pulse imperceptible, the face pale. A slight spasm of the larynx and upper extremities occurred; the arms were tightly folded across the chest; frothy mucus exuded from the mouth, and respiration ceased, whilst the heart continued to act feebly for a few seconds. *Rigor mortis* came on very rapidly. The temperature did not rise after death.

The examination of the body was made, thirty-eight hours after death, by Mr. Stanley Boyd. The body was thin; the abdomen was green all over, and *post-mortem* discolouration was very marked, both on the front and back, the body having been kept for many hours on its face. *Rigor mortis* was slight in the upper, well marked in the lower limbs.

On removing the skull-cap, the convolutions of the brain seemed a little flattened; there was very little fluid in the ventricles. Between the two convolutions of the corpus callosum there were some old adhesions, and in them two hard nodules. The brain weighed 3 lbs. 4 oz., and was rather soft. The two nodules lay close together, and on section were found to consist of calcified tubercular matter; they were, perhaps, meningeal, and had pushed their way into the substance of the convolutions. The fornix was very soft, and had its usual white appearance. The velum interpositum and choroid plexuses were normal. Behind the pineal gland and over the corpora quadrigemina there was a layer of rather dense connective tissue adherent to the surface of the latter, and to the superior vermiform process behind them; it sent slips on each side to the optic thalami, and laterally joined the choroid plexus, going down into the descending cornu. The brain substance around the third ventricle and the iter was very soft, and tore easily. Above the medulla there were a good many fine vessels visible, but probably not more than normally. Puncta cruenta were not in excess; the cerebellum was unduly soft.

On section of the upper part of the cord the central canal was seen as a translucent grey spot about one-eighth of an inch across; and as this patch approached the surface of the floor of the fourth ventricle it widened out. After this there was nothing abnormal to the naked eye in the medulla. In the pons nothing abnormal was noticed, except that the white substance, especially of the middle peduncle of the cerebellum, was very soft. The floor of the fourth ventricle presented nothing abnormal. The spinal cord was normal to the naked eye. The spinal cord and medulla oblongata were preserved for microscopical examination. There was a little blood-stained fluid in each pleura. The left lung was slightly adherent at the apex, rather red on the surface, with a slightly calcareous nodule in a scar beneath the adhesion. The lower lobe, on section, was almost black from congestion; the upper much more congested than usual, being red even at the anterior edge. The lung-substance was softer than usual, but seemed healthy. The right lung presented similar appearances, but no adhesions. The kidneys, on section, contained a good deal more blood than usual. The pharynx and upper aperture of the glottis were stained rather deeply red, as also the lining membrane of the trachea and bronchi, but the latter did not contain an excess of secretion. The mucous membrane of the stomach showed a few small punctiform hæmorrhages, chiefly at the cardiac end, but nothing to account for the hæmatemesis. No noteworthy changes were seen in the viscera. On dissection the radial and musculo-cutaneous nerves were found to be normal and not adherent to the cicatrix of the bite.

Microscopical Examination.—The medulla, brain, and cord, after having been very carefully hardened for several months, were examined by Mr. Stanley Boyd, Dr. Montague Murray, and Dr. Mott. No morbid appearances of a definite kind could be discovered in any part of the central nervous system.

Remarks by Dr. Bruce.—There is little to be added to the very graphic account of this case given by Mr. Freeman, whose attention to the patient was unremitting day and night. As in other cases seen by Dr. Bruce, the diagnosis lay at first between hydrophobia on the one hand, and on the other hand "hysteria," "nervous excitement," or "shamming,"—various expressions frequently applied to the condition of hydrophobic patients at the outset of the symptoms by persons seeing an instance of the disease for the first time. As soon as the nature of the case was clear, the first important step in the treatment was taken—the patient was isolated. Previous to this the symptoms had been aggravated by examination, by the fuss made over his case, and still more by attempts at treatment with chloroform, the patient being thrown into a condition of distressing mental excitement, with frequent laryngeal spasm. With respect to symptoms, the most striking feature in the course of the case was the almost complete disappearance of hydrophobia proper, the horror of drinking, during the greater part of the last twenty-four hours, and the supervention of severe symptoms of mental disturbance. It will have been gathered from the notes that throughout the last day the boy was violently delirious, with occasional quiet intervals of variable length, during which he willingly swallowed fluid and solid food, and allowed himself to be washed without spasm or fear. The spasms that did occur during the last few hours were not confined to the throat, but involved the neck, arms, hands, and legs; and therewith the temperature steadily rose from 102° to 104°, 106°, and finally 108.2°. Vomiting was another prominent symptom towards the end. Of the different methods of treatment attempted, besides isolation and general care, morphine appeared to be, on the whole, the most successful. Chloroform entirely failed. Unquestionably chloral, given by the bowel, very nearly proved fatal, producing as it did alarming cyanosis and coldness. Hydriodate of hyoscine quickly removed the delirium, but was given too late to test its value in controlling respiratory spasm if the drug possess any central action of this kind. The entirely negative results of the careful *post-mortem* examination are very disappointing.

BARNSLEY BECKETT HOSPITAL AND DISPENSARY.

A CASE OF HYDROPHOBIA.[1]

(By J. Fletcher Horne, F.R.C.S.Ed., Honorary Surgeon to the Hospital.)

On October 4th, 1886, A. W., aged 27, wine merchant's drayman, sent for me. I saw him in bed about 10.30 A.M. He seemed unwell; he complained of loss of appetite, alternate heats and chills, a feeling of discomfort about the heart, and shortness of breath; his temperature was slightly raised; I thought I could detect a little roughened breathing at the base of the right lung; his tongue was coated, and he had vomited frequently. I noticed a catch in his breath, and slight twitchings in the muscles of the neck. He told me he had been a little unsteady for the last few months. He showed me a scar on the left hand, and said that on August 21st he took a country journey, and, in passing through a village, a retriever dog set upon his dog and caught it by the collar. W. got out of his cart, caught the retriever by the tail, and swung it over the parapet of a bridge; but not before it had bitten him in the palm of the hand. No caustic was applied to the wound, and he thought no more of it.

About September 28th he found himself stiff about the jaws, and felt unwell. He rubbed the jaw and neck with horse-oils which he had at the stables. I inquired after his dog. He told me he had killed it, because he thought it had gone mad, and his fellow-workmen were afraid of it. The wound on the palm, which had evidently been superficial, was quite healed. He complained of pain, radiating from the scar upwards to the neck and downwards to the fingers. I ordered him an effervescing mixture, and saw him again in the evening. The twitchings had become worse. He was more restless and irritable, but conversed quite rationally. The vomiting ceased in the evening, but during the day he had not been able to retain any food in his stomach, vomiting as soon as it reached its destination.

Any suggestion of liquid to drink, or the appearance of any, caused him to take several short sighs or sobs. He complained of pain about the upper part of the abdomen, rising upwards through the chest to the throat, and producing a sense of constriction. His pulse was quick, and his temperature 100° F. Upon asking him to endeavour to drink a little milk, he said he was unable, and began to sigh, but, on being pressed, took the glass in his hand, and looked at it intently for a moment; then, apparently with great determination, placed the vessel to his mouth, and drank about two fluid ounces in a voracious manner. He was ordered a mixture containing chloral, bromide of potassium, and morphine, to be taken every four hours.

On October 5th, I saw him at 10 A.M. He had passed a restless night, walking up and down, and was very thirsty. I asked him to swallow a little milk; but the moment it touched his lips it brought on spasm and catching in his breath; then followed a loud hiccoughing noise, due evidently to the spasmodic ascent of the diaphragm, which appeared to give intense pain for a minute or two. After seeing this, I abstained from giving him liquids, and administered beef-tea and his medicine by enemata; he was constantly spitting, and complained of the tenacity of the expectoration.

In the evening, at 8.30, I found him restless in the kitchen (with no outer door). I asked him why he was there; he said to avoid the draughts of the door, as the cold air would bring on the spasm. The spasm was frequent, not increased in severity, and he had several in the course of a few minutes brought on by talking. He had sucked several bits of ice during the afternoon, which he said felt grateful, but, on touching his lips, brought on a spasm. I injected a quarter of a grain of curare, and doubled the strength of the chloral

[1] Read before the Yorkshire Branch of the British Medical Association, held at Harrogate, April 27th, 1887.

mixture. As Dr. Mitchell, my assistant, drew off a little water from the tap to rinse the syringe, W. said, "Stop that, don't do that." I noticed it brought on the spasm.

On October 6th, at 3 A.M., Dr. Mitchell called on him, and injected a quarter of a grain of curare. He refused the beef-tea enemata, was restless, had had no sleep, complained of want of air, went out about 7 A.M., and walked in the street with a friend. At 10 A.M. the temperature was 101° F., the tongue cleaner, red at tip and edges, the spasm very much relieved. I found him lying upon his bed with his Bible in his hand. He expressed himself as feeling better, but low spirited, and said he had had a good cry. I injected the curare, and gave him his medicine in the enema of beef-tea. He told me he had drunk a little milk and soda water. As his domestic arrangements were not satisfactory, at my wish he consented to his removal to the Beckett Hospital, which was accomplished at 12.30 P.M. I saw him there about 12.45. He had borne the journey well. I did not again see him in life; for the completion of the history I am indebted to Mr. C. H. Connolly, the house-surgeon, who says:—At 2.30 P.M. he injected half a grain of curare; he noticed twitching of facial muscles. 2.45. 4 ounces of milk were taken well by the mouth. 3.50. He drank soda-water easily. 4. Half a grain of curare injected and then discontinued. 5. He noticed contraction of muscles of neck after 4 ounces of milk with 20 grains of chloral, taken with great difficulty; no respiratory spasm. 6 P.M. He was restless; getting out of bed to look for something under the mattress; tried to turn some objectionable person from the room; objected to someone smoking; was constantly spitting. 7 P.M. He swallowed 5 or 6 ounces of milk with ease, and sent most of it out again, but from no special difficulty in swallowing, no distress at the attempt; the temperature was 102.8° F. At this time he was talking in a somewhat incoherent manner. He was given 5 grains of chloral and 10 of bromide of potassium at 7.30, 8, 8.45, and 9.30. After the last dose he took nearly half a pint of beef-tea. He commenced reading a prayer-book, and was quiet for about an hour; he had quite ceased the constant spitting; the pulse was 144. 10 P.M. 25 grains of chloral and 10 of bromide of potassium. He was now noticed to ramble. 10.30. Repeated the chloral and bromide of potassium. 11. 15 grains of chloral, 10 of bromide; very tiresome; getting up; argued greatly with "Jack"; pulse 104; very violent; attempted to fight his attendant, mistaking him for "Joe"; passed water under him. 11.20 P.M. One third of a grain of morphine injected; slept. 2.30 A.M. Woke up and was excited; drank some milk; a quarter of a grain of morphine given; slept for nearly an hour. When he awoke he was a little restless, his pulse began to fail in strength, he fell into a state of stupor, with Cheyne-Stokes respiration, and at 4 A.M. his breathing stopped, although the heart could be felt faintly fluttering. Artificial respiration and the battery were tried for nearly an hour until the heart stopped.

The house-surgeon referring the friends to me, I gave a certificate of death—hydrophobia. As this took it out of the category of natural deaths, an inquest was held. Evidence was here given that the deceased had told two of his companions that he was thrown out of the cart the same journey that he was bitten. This is not corroborated by any mention to me by the patient of this accident. The jury returned a verdict "That hydrophobia was the primary cause of death, meningitis as a secondary cause, proceeding from the bite of a dog."

Post-mortem Examination of the Head Eight and a Half Hours after Death.—The surface of the brain was turgid with much venous congestion; the arachnoid was generally milky, with slight patches of partially organised recent lymph, causing semi-adhesion between the brain and its membranes in the middle line. On slicing the brain, numerous vascular points were seen. About one drachm and a half of reddish serum was found in the right ventricle.

Examination of Viscera and Spinal Cord Fifty-four Hours after Death—The lungs were congested, probably owing to *post-mortem* changes. The spinal cord appeared a little softened; the other organs were normal.

Dr. Mitchell was kind enough to obtain for me the history of the dog who bit the deceased. Its owner said the dog had not appeared well for a day or two previous to the time the man was bitten; the dog was quieter, ate little, and lost its liveliness. It was thought that it had probably taken poison, and he took little notice of it; but, it not getting better, it was drowned on the Sunday following (August 30th). One circumstance was noticed, namely, the dog went about the room looking dejected, and snapping at imaginary flies. During the last two days of its life, the dog would neither eat nor drink, but was not wild. With regard to W.'s dog, evidence was given at the inquest that for some time after it was bitten it was allowed to run about, then it appeared to be ill and strange, and would neither eat nor drink. It was put into a stable, where it was noticed that froth and saliva hung from its mouth. It snapped at W. several times, and looked very wild, and howled in a peculiar manner. Deceased said it was mad, and, being afraid of it, killed it eight days before his own death.

REMARKS.—Considerable interest was shown in the case by my colleagues, and it is only fair to admit that opinion was divided as to a diagnosis—meningitis or hydrophobia—those who saw the case throughout strongly favouring the latter, whilst those who saw the case during the last few hours of life leaned to meningitis, the *post-mortem* appearances no doubt favouring this view. I should mention that a recent wound was seen over the left eye, but no injury was found on the skull corresponding to this. If this view be correct, the case was one of meningitis, simply due to the fall, nor must it be forgotten that it is clearly possible, but not probable, that the two diseases ran concurrently, the inflammation spreading from the contused bone to the parietal membranes of the brain, and smouldering for six weeks, the man during this time doing his work. On the other hand, reported cases are not wanting to show deaths from hydrophobia, with *post-mortem* appearances of meningitis. Mr. Corley, of Dublin, reported (JOURNAL, May 15th, 1880) a case of hydrophobia in which there was found intense hyperæmia of the brain, with evidences of meningitis.

Surgeon S. T. Rennie, in the *Lancet* of August 25th, 1883, published a case where the *post-mortem* appearances were: Brain much congested, some lymph was deposited along the edge of the longitudinal fissure, arachnoid vessels congested, substance of brain firm; puncta vasculosa marked, showing congestion.

Mr. Gem published, in the *Lancet* of July 18th, 1885, a case of hydrophobia, when the necropsy revealed that the meninges of the brain were slightly congested, but, on tearing away the layers of the arachnoid from the longitudinal sinus, there were patches of recent soft, coagulated lymph. The brain appeared normal throughout.

The "points" of the history of the case were greatly in favour of a diagnosis of hydrophobia, the duration of incubation being six or seven weeks, the usual period, and also the duration of the disease, four days, whilst the symptom of greatest diagnostic force, "the catch in the breath," or respiratory spasm, was so well marked in the case, whilst the subsidence of the symptoms after his admission to hospital is a not uncommon termination of these cases, as has been noticed by Erichsen, who in his *Science and Art of Surgery*, eighth edition, says: "Occasionally the symptoms subside completely before death, the increased sensibility of the surface disappearing, the mental agitation or delusion being removed, the deglutition and respiration being quietly performed; thus Latham relates the case of a man labouring under this disease, who sat up quietly in bed and drank a pint of porter half an hour before he died."

Dr. Burdon Sanderson kindly looked over my notes, and writes thus: "From the symptoms, and particularly the mode of origin, the sensation of tightening in his jaw, and the apparently characteristic spasm after drinking and after hearing the sound of water, I should consider it highly probable that the case was one of hydrophobia. This is confirmed by his antecedent circumstances. On the last day it seemed possible that the symptoms were modified considerably by the large doses of chloral, and perhaps by the curare."

Mr. C. P. Cronch, of St. Bartholomew's, very kindly hardened and made sections of the medulla, one of which, with the notes, I have lately submitted to Mr. Victor Horsley, who says: "I have not the slightest hesitation in pronouncing it to be a well-marked and most interesting case of hydrophobia. The very clear section of the medulla shows the characteristic infiltration with leucocytes in the perivascular lymph-spaces to exist in a high degree, and nothing further could be desired to establish your diagnosis."

BEQUESTS.—Mrs. Carew, of Mytton Hall, near Shrewsbury, bequeathed £1,000 to the Royal Infirmary at Liverpool, £500 to the Convalescent Home for Women at New Brighton, £500 to the Convalescent Home for Men at Rhyl, £500 to the Salop Infirmary at Shrewsbury, £200 to the Eye and Ear Infirmary at Shrewsbury, and £500 to the Gloucester Infirmary.—The Great Northern Central Hospital has received £1,000 under the will of Mr. G. W. P. Bentinck.—Miss Harriet Gurney Fordham, of Melbourn, Cambridgeshire, bequeathed £500 to the Addenbrooke Hospital, Cambridge, £300 to the Hunstanton Convalescent Home, £200 to the Royston Cottage Hospital, and £200 to the Hospital for Children with Hip-Disease at Sevenoaks.—Dr. John Clark, advocate, of Clifton, formerly of Aberdeen, bequeathed £200 to the Royal Infirmary, and £200 to the Hospital for Persons labouring under Incurable Disease, both in that city.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 3RD, 1887.

Sir JAMES PAGET, Bart., F.R.S., F.R.C.S., President, in the Chair.

Report of Morbid Growths Committee.—The report of the Morbid Growths Committee on Dr. Edmunds's specimen of horny papilloma of the hand was read by Mr. SHATTOCK. No positive statement could be made as to the malignant or non-malignant nature of the growth; the clinical history pointed to its being non-malignant.

Destructive Arthritis.—Mr. JONATHAN HUTCHINSON showed a specimen of destructive arthritis of the knee-joint, with an unusual amount of destruction. The patient, a lady, aged 45, had been able to walk up to within two months of amputation, when she was incapacitated by pain. The specimen showed absorption of the whole of the cartilage and extensive destruction of both femur and tibia. There was no secretion in the joint. Mr. Hutchinson thought such extensive destruction, without suppuration, without necrosis or material softening, was most unusual. There was no suspicion of Charcot's disease.—Mr. EVE referred to a case of dry arthritis shown to the Society by Dr. Lediard closely resembling Mr. Hutchinson's case.—In reply to Mr. THOMAS SMITH, Mr. HUTCHINSON said that there had been some inflammation for three or four years, but no acute inflammation until within two months; there was no evidence of tuberculosis.—Mr. MACNAMARA thought there was clear evidence that there might be degenerative changes in joints and bones of the character shown by Mr. Hutchinson in association with lesion of nerve-centres which was not Charcot's disease. There might not be any effusion or marked pain.

Senile Arthritis.—Mr. THOMAS SMITH showed specimens of arthritis in old persons. In the first case the knee became suddenly full of fluid, without marked prodromal symptoms, but accompanied by extensive ecchymosis. The limb was amputated. The cartilage was everywhere thinned, and had disappeared where pressure was greatest. The ligaments were lax, and the synovial fringes enlarged. There was abundant evidence of miliary tubercle in the synovial membrane. The joint contained blood-stained fluid. Several of her relatives had died of tubercular disease. The second case was a plate-layer, aged 70. The wrist had been troublesome for two months before he was admitted into St. Bartholomew's Hospital. When admitted the wrist was swollen and fixed in extreme flexion; there was a profuse discharge of pus, and the lower end of the ulna was necrosed. Amputation was performed, and at first he did well, but died about three weeks later of heart-disease. Examination of the joint showed pulpy degeneration of the synovial membrane. The ligaments had given way, and both the radius and ulna had become detached from their carpal ligaments. The cases were examples of senile struma.—Mr. HUTCHINSON said he had seen a few cases of senile struma, but could give no positive evidence of their tubercular nature.—Mr. GODLEE mentioned the case of arthritis of the wrist in an old man. The swelling was incised, cheesy matter was removed, and the patient left the hospital.—Mr. MACNAMARA had recorded one case of this kind in which there was distinct evidence of tubercle, though the bacillus could not be discovered either in the tissues or the effusion. The patient was about forty-three years old. There was a tubercular history, and there was tuberculosis of the lungs. He mentioned a case of hip-joint disease in the early stage where the fluid contained an enormous quantity of tubercle bacilli, though none were found in the tissue. He thought the evidence that tubercular disease of bone was by no means uncommon—in fact, that strumous disease of bone was really tubercular was now very strong.

Doubtful Syphilitic Tumour of Bone.—A specimen illustrating the difficulty of distinguishing between syphilitic gumma and tumour was shown by Mr. JONATHAN HUTCHINSON. The patient was a middle-aged man. He first noticed a small swelling over the inner condyle of the femur, and he said he had had a chancre some years before. He was first treated in India for syphilitic periostitis, but without permanent benefit. He was in good health when he came under Mr. Hutchinson's care; the swelling was soft, adherent to the bone, and the size of a fist; there was no serious pain. Iodides were again given, and then mercury to full ptyalism, with no benefit. Amputation was then advised. Exploratory incision revealed an opaque white tumour overlying a carious surface of bone, from which it was separated by grumous fluid. It seemed to be, on the whole, advisable to amputate. The microscopical evidence was doubtful, but, on the whole, it was a little in favour of syphilis. The clinical evidence, however, was strongly against this view.—The PRESIDENT said that the doubt which surrounded the case was in itself a matter of interest. He had seen the case during life, and had had no serious doubt that the tumour was a sarcoma.—Mr. D'ARCY POWER said that the case was the counterpart of one he had seen, in which a young man died from the effects of cerebral syphilis. He had a growth of bone closely resembling that shown by Mr. Hutchinson; this was undoubtedly syphilitic.

Primary Carcinoma of Liver.—Dr. G. N. PITT showed a specimen of primary carcinoma of the liver. The patient was a man, aged 48, who had incontinence of urine for two years; the liver was enlarged; paraplegia developed before death. The liver contained a large white growth, and numerous secondary growths were present in other parts of the liver, in the lungs, and in the abdominal viscera. The eighth dorsal vertebra was replaced by new growth. The tumour was carcinomatous. The growth in the liver was probably the primary tumour; there were numerous prostatic calculi, which might account for the incontinence. There was a mass of growth in Douglas's pouch, the remainder of the peritoneum being free; the case, therefore, afforded support to the theory that the secondary growth was due to portions of the new growth falling down into Douglas's pouch.—Mr. GODLEE mentioned a case shown to the Society by Mr. Kesteven, in which a vertebra was replaced by new growth.—Dr. NORMAN MOORE thought the evidence that the secondary growths in Douglas's pouch were set up by falling portions from the upper tumour were very strong.—Mr. LAWSON TAIT questioned this conclusion; he thought that current views as to malignant disease of the peritoneum required revision. The so-called papilloma of the peritoneum was, as a rule, most intensely malignant, yet occasionally it disappeared. Eight years ago he had removed one ovary, and had found the pelvis full of papillomata, which bled profusely when touched; the patient had recently come under treatment for the second time; he had removed the other ovary upon which were some papillomata, but the pelvic peritoneum was quite smooth, and entirely free from papilloma.—Dr. GRIFFITH referred to a similar case recorded by Messrs. Thornton and Doran in the *Transactions of the Obstetrical Society.*

Diffuse Sarcoma of the Spinal Pia Mater.—Dr. PASTEUR (on behalf of himself and Dr. COUPLAND) read a paper on two cases of diffuse sarcoma of the spinal pia mater. Case 1 was that of a girl, aged 22, whose illness began in June, 1885, with headaches and pain in the right shoulder and arm. In September there was severe pain along the spine. On admission to the Middlesex Hospital, on October 7th, 1885, there was impaired memory, paresis of arms and legs, without loss of sensibility, abolition of knee-jerks, and severe pain along the spine and in the occipital region. There was intense double optic neuritis, impairment of vision, and complete paralysis of both external recti, with simple diplopia. The patient died comatose on the second day after admission. The spinal cord was found ensheathed in its whole extent by a softish grey mass of new growth, most developed on the posterior and lateral aspects. It was situated beneath the arachnoid, and was inseparably united to the pia mater. In an upward direction it spread over the pons and medulla, completely investing the sixth pair of cranial nerves, and had extended in the form of isolated nodules to the parietal arachnoid, in several places. Downwards the growth had invested the nerves of the cauda equina with thin translucent sheaths, which at intervals expanded into small tumours. The nervous tissues presented normal naked-eye appearances. Microscopically the growth consisted of closely aggregated small round cells with a small nucleus imbedded in a stroma for the most part obscured by the luxuriance of the cell-growth. The growth invaded the white matter of the cord at several points, mostly along the lines of the normal trabeculæ. The nervous tissue of the cord showed no pathological changes. Case 2.—A girl, aged 4½ years, under the care of Dr. H. C. Bastian. Her symptoms dated from a fall down a flight of steps, two months before admission to University College Hospital. The chief symptoms were strabismus and paresis of the legs and arms, and blindness of sudden onset, fourteen days before admission. There was also severe pain in the back, and marked weakness of the trunk muscles. Sensibility was unaffected. Death took place by asphyxia, seventeen days after admission, without convulsion. The spinal cord was surrounded by a thickish layer of new growth, especially developed on the posterior aspect. The growth reached upwards to the under surface of the cerebellum, which it invested and infiltrated to the depth of about half an inch. The middle lobe of the cerebellum was almost entirely replaced by new growth. Microscopically, the growth presented appearances almost identical with the previous cases; such cases were rare, and seemed to form a group apart from other kinds of growth in the spinal

membranes. Only one other case in which the growth might be presumed to be primary in the spinal pia mater was on record. The notable points in the group of cases were: The extreme diffusion of the new growth, which involved the whole spinal pia mater; the type of tissue, approximating closely to inflammatory tissue, but distinguished by the absence of any tendency to become organised or to undergo retrogressive changes; the limitation of the growth to the spinal pia mater; the age of the patients 4½, 16, and 22 years respectively; the brief duration of the symptoms—about three months in each case; the absence or impairment of knee-jerk and other reflexes in connection with the involvement of nerve-roots; the absence of convulsions; the presence of constipation; the presence of fundus changes in the two cases in which the disease reached the brain; the cause of death in all the cases was interference with respiration—Dr. ORMEROD referred to a somewhat similar case recorded by Dr. Long FOX; and he thought it was interesting to notice that the growth was greatest at the posterior aspects, so that the cases might be confused clinically with locomotor ataxy.—Dr. W. B. HADDEN had seen one case which closely resembled the cases described pathologically, but resembled chronic cerebro-spinal meningitis clinically.

Aneurysm of Inter-auricular Septum.—Dr. MAGUIRE showed a specimen in which the left ventricle was greatly hypertrophied, and the aortic valve was extremely stenosed; there was ulceration below the valves, and there was a small interstitial aneurysm in the inter-auricular septum.

Extra-uterine Pregnancy.—Mr. LAWSON TAIT said that it had been objected to his theory of extra-uterine pregnancy that the rupture of the tube could not be caused by the placenta, because the latter was not differentiated until after the third month, whereas the rupture generally occurred between the tenth and twelfth week. Mr. Tait pointed out that Carpenter had stated that the formation of the placenta commences in the latter part of the second month, and that Godson believed that the immersion of the fœtal tufts in the maternal structures, which was accompanied by increased vascularity, began before the end of the first month, the localisation of the process being evident before the end of the eighth week. Preparation 4,691 in the Pathological Series at the Royal College of Surgeons was an example of the so-called "interstitial" tubal pregnancy; the tube had been greatly dilated by the ovum, and had ruptured. In a case he had examined in 1874, injections of the blood-vessels had shown that the enlarged maternal vessels at the edge of the placental site were clearly the reason of the rupture and the source of the fatal hæmorrhage. Preparations exhibited showed that the site of the placenta became extremely vascular, and, being also infiltrated by soft villi, it offered a feeble resistance to the pressure of the rapidly-growing ovum, unless, like the uterus, it possessed the power of indefinitely increasing the thickness of its walls, a power which the tubes did not possess. In preparation 4,691A, which was the entire ovum from 4,691 found in the abdominal cavity, the fœtus was probably at about the sixth week; the villi were concentrated at one small spot, forming what was practically a placenta. Preparation 4,692, according to the catalogue, showed "a large dilatation of the right Fallopian tube containing a fœtus of about the third month, connected by a well-formed umbilical cord to a placenta lining the walls of the dilatation. The left tube is also dilated to more than half one inch in diameter, and its fimbriæ are effaced, ovary and tube being united." This condition was characteristic of hydrosalpinx, and afforded confirmation of the theory that tubal pregnancy was the result of desquamative salpingitis. The rupture had in this case taken place in the second and more limited zone of tube, which was related to the cavity of the broad ligament; and the ovum did not die at the time of rupture, but went on developing as a broad ligament pregnancy. Preparation 4,697 was another example of broad ligament pregnancy, in which it was clear that the pregnancy was originally tubal, and was one of the minority not causing death at the time of rupture, owing to the rupture being directed into the cavity of the broad ligament, and being, further, one of a minority of the minority, in that the ovum did not die at the time of rupture, but went on developing towards the full time. The catalogue stated that the right Fallopian tube was lost on the surface of the cyst. Reference was also made to a case in which Dr. Heywood Smith had removed from the abdomen during life an extra-uterine pregnancy, which had the form of a pediculated tumour. The sac containing the fœtus and placenta was made up of involuntary muscle-fibre, and resembled in structure the Fallopian tube. The Fallopian tube corresponding to the sac was scarcely represented, except by fimbriæ. The corresponding ovary contained a large corpus luteum; there was no evidence of rupture of the tube, and there was no doubt that the specimen was one of tubal gestation. Dr. Berry Hart had recently made longitudinal frozen sections of a case of tubal pregnancy, which had ruptured into the broad ligament, and, developing there until at least the eighth month, it had pushed the layers of the ligament and of the peritoneum upwards and backwards and towards the centre. Dr. Berry Hart's sections showed why, in operating, the peritoneum was sometimes opened and sometimes not. The growth of the pregnancy could not strip the peritoneum from the anterior wall of the uterus and bladder, though these were pulled well up. But immediately to each side of the uterus the peritoneum was shifted off the transversalis fascia as far up as the umbilicus, leaving a long conical tube of the peritoneal cavity reaching down over the median line of the fœtal mass as far as and corresponding in diameter to the uterus. When this peritoneal tube was central it was opened during the operation; when it was not central it was not opened, so that these operations were sometimes to be ranked as abdominal sections and sometimes not. Sections of the tube in early tubal pregnancy, showing the immersion of the fœtal villi in the tissue of the Fallopian tube and the consequent enlargement of the tubal vessels, were also shown, and the enormous increase of size of the vessels of the abdominal wall in Dr. Berry Hart's drawings was pointed out.

Card Specimens.—Mr. STONHAM: Lithopædion (?).—Mr. R. W. PARKER: Sarcoma of Kidney.—Mr. HARRY FENWICK: Tuberculosis with Renal Calculi.—Mr. GODLEE: 1. Recurrent Alveolar Sarcoma in various bones (and in viscera); tumour of breast removed two years previously. 2. Gangrenous Abscess of Lungs which had been incised.—Mr. SHATTOCK: Tubercular Arthritis.

SOUTH INDIAN BRANCH.

FRIDAY, FEBRUARY 4TH, 1887.

THE VICE-PRESIDENT in the Chair.

Radical Cure of Hernia.—The notes of two cases of operation for radical cure of inguinal hernia by Surgeon J. SMYTHE, M.D., were read. Case I.—A male Hindu with left inguinal hernia of many years standing, strangulated two days. The omentum, being adherent to the sac, was divided between two carbolised silk ligatures. The sac and adherent omentum, together with the testicle, which was degenerated, were removed. The proximal end of the sac was then carefully isolated as high as the internal ring, and a ligature of stout carbolised silk applied and cut short. Drainage-tubes were introduced, and antiseptic precautions were used, but after the wound had healed, except at the point of exit of one drainage-tube, suppuration occurred about the ligatures on the sac and spermatic cord. The ligatures were extruded after about a fortnight's suppuration, and the patient made a good recovery. Eventually there was no impulse at the ring on coughing. Case II.—A similar operation was performed for uncomplicated, reducible right inguinal hernia of ten years' duration; in this case it was only necessary to use one ligature for the neck of the sac, and just over this ligature, long after the wound was healed, a slightly tender swelling could be felt. Dr. Smythe urged that it was unadvisable to suture the pillars of the external ring; their anatomical relations prevented their apposition even in health, and in hernia of long standing their approximation was still more difficult; the tension on the ligatures, when this was done, was so great that the pillars were cut across, and the external ring thus rendered weaker.—Dr. BRANFOOT said that it was his practice in all cases of abdominal section to cut the carbolised silk ligatures short and leave them behind, and he had never seen suppuration ensue.

Distension of Antrum of Highmore.—A case of distension of the antrum of Highmore, with great hypertrophy of its walls, was also contributed by Surgeon J. SMYTHE. The patient was a male Hindu, aged 30; the hypertrophic condition affected the nasal bones and the malar bone of the corresponding side, and as was shown by a drawing, produced great deformity. An operation was performed, the anterior wall of the antrum being taken away, and the deformity thus diminished.—Mr. DRAKE-BROCKMAN thought that the swelling was probably due to a solid fibroid tumour which had undergone degeneration, and had led to a secondary thickening of the bones.—Mr. SIBTHORPE coincided.

Progressive Spinal Meningitis.—Mr. SIBTHORPE described two cases of rapid ascending spinal paralysis occurring in men (aged 50 and 43 respectively) of dissolute habits. In the case in which a necropsy had been made, the membranes of the cord were inflamed and firmly adherent by inflammatory lymph to the vertebræ and the mid-dorsal region. The absence of fever, the great prostration, and the mode of death from paralysis of the intercostals and diaphragm were the most characteristic symptoms in both cases. The first case was fatal in nine, the second in twenty days.—Mr. DRAKE-BROCKMAN said that ascending meningitis of this type, affecting especially the pia mater, was

not infrequently met with in prostitutes and others who had led lives of excess and debauchery. He had seen one case where the disease began in the cerebral meninges and descended, death being due to implication of the phrenic and intercostal nerves.

Vesical Calculi.—Mr. SIBTHORPE read the notes of a case in which small calculi were passed at varying intervals during two years. The patient was a Hindu Tamil, aged 22; one calculus passed while in hospital, was the size of a pea, and consisted of oxalate of calcium coated with phosphate of calcium; there were no symptoms of renal colic.

Atrophy of Penis.—Mr. SIBTHORPE showed drawings of a case of atrophy and retraction of the penis; the patient, a Coolie, aged 25, had had a small abscess in each groin three years earlier; the cicatrices had recently become the seat of serpiginous ulceration, and simultaneously the penis commenced to disappear, so that little more than the prepuce remained visible. The urethra was eight inches long. After fomentation the penis was about three inches long.

Ununited Fracture.—Mr. SIBTHORPE also showed a drawing of a case of ununited fracture of the tibia and hypertrophy of the fibula. The patient, a Hindu woman, aged 46, was able to walk two miles without a stick. The original injury was a compound fracture, with some denudation of the bone; the denuded portion, about half-an-inch long, was sawn off, and the wound dressed antiseptically.

Epithelioma of Penis.—A drawing of a case of epithelioma of the penis and inguinal glands, which had lead to complete destruction of the penis, was also exhibited by Mr. SIBTHORPE.

SOUTH AUSTRALIAN BRANCH (ADELAIDE).

THURSDAY, SEPTEMBER 30TH, 1886.

F. C. VERCO, M.D.Lond., President, in the Chair.

Antiseptic Dressings.—Mr. J. A. G. HAMILTON read a paper in which he discussed the relative merits of various materials used as antiseptic dressings. He recommended especially wood-wool pads and iodoform; the wood-wool he had found so absorbent that wounds remained perfectly dry under its use; it absorbed the products of decomposition, and probably checked their formation; he used the iodoform finely powered with oxide of zinc, boracic acid, or starch. Where there was reason to fear that it would be too stimulating, or would be absorbed in large quantities, trisnitrate of bismuth was substituted. A series of cases were related where wood-wool pads and iodoform had been used. The steam spray was sometimes used in the room, but not, as a rule, directly over the wound; in other cases the wound was continuously irrigated during the operation with sublimate solution (1 in 2,000). Sponges were first treated with dilute hydrochloric acid, then with lime-water, and were finally boiled in a solution of carbolic acid (1 to 40).

Enteric Fever.—The PRESIDENT, commenting on a paper read by Dr. Poulton at the previous meeting (see JOURNAL of January 22nd, p. 160), pointed out that during the years when the cesspools in the city were being opened and abolished, the increase in the number of cases of enteric fever admitted into the hospital was due not to an increase in the number admitted from the city, but to an increase in the number of cases admitted from the country. The cesspools, therefore, were not the cause of the increased admissions for enteric fever.

Living Specimens.—Dr. LENDON: Child with Increasing Hydrocephalus, Cured Spina Bifida, and an Umbilical Hernia.—Dr. GÖRGER: A Case of Resection of Knee, where the bone was removed with a chisel and sharp spoon, resulting in a strong ankylosed joint with only one inch shortening.—Dr. STIRLING: Necrosis of Four Inches of Upper End of Humerus, treated by removal of necrosed bone with the saw, resulting in a useful arm with slight movement at shoulder.

Pathological Specimens.—Cirrhosis of Liver in a Boy, aged 10; there was no history, and death was due to an accident. Heart with Rupture of one Semilunar Valve, and Deep Cæcal Pouch of corresponding Sinus of Valsalva. Abscess of Liver following Dysentery. Atheroma of Aorta.

NORTH OF ENGLAND BRANCH.

THURSDAY, APRIL 21ST, 1887.

WILLIAM GOWANS, M.D., President, in the Chair.

Uranoplasty.—Dr. MURPHY showed a case of uranoplasty, and said that he had found it a great advantage to have the patient's head hung over the end of the table, as the blood then gravitated into the nostrils, instead of finding its way into the trachea.

Floating Kidney.—Dr. DRUMMOND read a paper "On the Symptoms and Diagnosis of Floating Kidney." In the discussion which followed Drs. PHILIPSON, GIBSON, OLIVER, MURPHY, DRUMMOND (of South Shields), and the PRESIDENT took part.

Massage.—Dr. OLIVER read a paper on "Massage and its Accessories as Therapeutic Agents," in which he gave details of four cases which had been treated by seclusion, rest, rubbing, electricity, and over-feeding—all of them with the most satisfactory results. Whilst inclined to regard dry massage as an excellent therapeutic agent, he could not but consider that the removal of the patient from friends and the other adjuncts contributed largely to the success. In all the cases so treated by him, not only had there been a distinct gain in weight, which had been permanent and improved upon, but the disposition of the patient was in every way altered for the better.—Drs. DRUMMOND, MURPHY, and MANTLE made some remarks.

Athrepsia.—Dr. GIBSON read a paper on "Athrepsia," in which he showed that the course of this affection was remarkably uniform. A disease of nutrition, it occurred only in infants of feeble vitality. Its specific nature was shown first in lesions of the mucous membranes of the digestive organs, which had their expression during life in unhealthy buccal secretions, stomatitis, vomiting, and diarrhœa. It speedily affected the blood and the blood-vessels; thromboses and hæmorrhages were the consequences. Finally, the nervous system suffered, and death ensued from convulsions or coma.

Effects of Tobacco on Vision.—Mr. WILLIAMSON read a note "On the Effects of Tobacco Smoking on Vision." He related several cases of optic atrophy in smokers; but, when they were carefully investigated, some other and more potent cause was found, such as a blow on the head, syphilis, or ataxy. In several cases which he believed to be due to the abuse of tobacco, slight optic neuritis, inability to do close work for any length of time, and irritability to light, were present. These symptoms passed off gradually when smoking was given up.

NORTH OF IRELAND BRANCH.

THURSDAY, APRIL 28TH, 1887.

JOHN FAGAN, F.R.C.S.I., President, in the Chair.

Morbid Anatomy of Spinal Cord.—Dr. BURDEN read a paper upon the Morbid Anatomy of the Spinal Cord, and exhibited some microscopical sections of the cord, and a tumour removed from the parotid region.

Icterus Neonatorum.—Dr. BYERS read a paper upon the jaundice of children, and showed the placenta and funis from a case of intra-uterine death of the fœtus, and a new axis-traction forceps.

Successful Ovariotomy.—Dr. ESLER read the notes of a case of successful ovariotomy, and exhibited the patient.

Gunshot-Wounds.—Dr. O'NEILL showed several cases of severe gunshot-injuries, and read the notes bearing upon them; also the notes of a case of litholapaxy.

Vesical Calculi.—Dr. WHITLA exhibited some rare calculi removed from the bladder.

ACADEMY OF MEDICINE IN IRELAND.

OBSTETRICAL SECTION.

FRIDAY, APRIL 1ST, 1887.

A. V. MACAN, M.B., President, in the Chair.

Encephalocele.—Dr. ALFRED SMITH exhibited an encephalocele. The interesting point was the enormous size of the child, which was 21 inches long and 11 lbs. in weight. This was, perhaps, because the brain had ceased to require food, and the additional supply went to the other parts of the body. The child had come to its full term.

Ovarian Cyst.—The PRESIDENT exhibited a multilocular ovarian cyst, which was peculiar in consisting of two very large cysts and one smaller one, which were all connected by a common isthmus, so that at the operation he first thought it was a case of double ovarian tumour.

Malignant Growth of Cervix Uteri.—The PRESIDENT also exhibited a malignant growth, which had been removed from the cervix uteri by Schroeder's operation. The patient was a strong, florid-looking woman, and the only symptom was menorrhagia, which had lasted for eight months. The old method of removal was by putting an ecraseur round the base of the tumour. The modern way was to amputate the cervix of the uterus as high up as possible, with which object the cervix was first incised up to the fornix vaginæ at both sides, and then each lip was amputated as high up as possible by a V-shaped incision, the two edges of which were afterwards brought firmly together by silk sutures. This effectually prevented any hæmorrhage. The woman had a perfectly afebrile convalescence.

Monacular Fœtus.—The PRESIDENT also exhibited a small monocular fœtus from a case where abortion had occurred about the end of the third month of pregnancy.

Treatment of Vesico-vaginal and Vesico-uterine Fistulæ.—Dr. MORE MADDEN read a paper on the treatment of difficult and exceptional cases of vesical fistula consequent on parturition. In nearly every instance of vesico-uterine fistula that had come under his notice, the patients had been delivered instrumentally, and were pluriparæ in whom the uterine walls had been disintegrated by imperfect involution. In the latter cases there were, as a rule, but three courses open to the operator, namely, trachelorraphy in the first instance, followed by a plastic operation on the ruptured vesico-uterine walls; secondly, closure of the os uteri, so as to convert the uterus into an appendix to the bladder; or, thirdly, the same result might be obtained in some cases by turning the cervix into the vesical wound, within the closed walls of which it might be included. In this connection, Dr. More Madden referred to a case in which, after the normal aperture of the uterus was thus closed, the patient subsequently again became pregnant. In destruction from sloughing of the entire vesico-vaginal septum, none of the usual reparative operations were feasible, and in such cases the advisability of closing the vaginal orifice, so as to afford a possible restitution of retentive power, became a question for consideration. Against Simon's operation was the liability to fatal renal disease, which Dr. Emmet held to be an inevitable result of it. In some instances the most extensive vesico-vaginal fistulæ might in time become cured without any operation, by the occurrence of senile atresia of the vagina—a fact of which two cases had come under Dr. More Madden's observation. In some cases, however, there was no resource but to close the vaginal orifice, and the writer succeeded in thus curing a very extensive fistula by a modification of Simon's operation. Whether in this case any renal disease supervened or not there were no data to say.—Dr. ROE said it was the experience of most of them that in all cases of vesico-vaginal fistula delivery had been effected by instruments. He believed that in the majority of cases the fistulæ were the result of sloughing.—Dr. HORNE made some remarks, and the PRESIDENT said, that when they looked back upon the history of vesico-vaginal fistula, it was extremely interesting to find that a disease which at one time was considered almost incurable, could now, except in the worst cases, be cured with absolute certainty, and they should never cease to hope that some day even the severer cases would be brought within the power of the gynæcologist. No person in modern times, with the exception of Marion Sims, had done so much to show them how this disease ought to be treated as the late Professor Simon, of Heidelberg. It was most desirable to draw the attention of young men to the conditions he had laid down as necessary for the cure of these cases. First of all, broad, freshened surfaces were required; secondly, all tension should be taken off the edges; lastly, the edges should be brought accurately together by plenty of stitches. When the uterus itself was fixed, the upper edge of the fistula could often be mobilised by dissecting a portion of the bladder off from the neck of the uterus. In other cases, where the uterus was still movable, if the slightest shred of the urethra were left, the neck of the uterus could be brought down to it. Dr. Roe had opened an interesting question as to the etiology of those cases. When he (the President) was first studying them, he was under the impression that it was in cases of first childbirth that vesico-vaginal fistula occurred most frequently. But he had not found that most of the cases of the disease that came from the country were cases of first birth; on the contrary, the majority of the women had borne children before; and he thought the occurrence of the disease in them was to be explained by the tediousness of their labours. These considerations pointed to the fact that it was not great pressure but prolonged pressure that caused vesico-vaginal fistula. Again, even supposing that the injury might be caused by the forceps, it would, in all probability, be a tear, if not a clean cut. In such a case the loss of tissue would be so slight that cure would be an absolute certainty.—Dr. MADDEN replied.

MEDICAL PRACTITIONERS IN RUSSIA.—According to the *Russian Medical Register*, in 1886 there were in the empire 17,459 male, 550 female medical practitioners, 2,299 veterinary surgeons, and 601 dentists.

FRENCH ACADEMY OF MEDICINE.—M. Bergeron has been elected by forty-six votes out of ninety-one to the post of perpetual secretary of the Académie de Médecine, vacant by the death of M. Beclard.

REVIEWS AND NOTICES.

DU TRAITEMENT ÉLECTRIQUE DES TUMEURS FIBREUSES DE L'UTÉRUS (d'après la Méthode du Dr. Apostoli), Par le Docteur LUCIEN CARLET. Paris: Octave Doin. 1884.

SUR UN NOUVEAU TRAITEMENT DE LA MÉTRITE CHRONIQUE, ET EN PARTICULIER DE L'ENDOMÉTRITE, PAR LA GALVANO-CAUSTIQUE CHIMIQUE INTRA-UTÉRINE. Par le Docteur G. APOSTOLI. Paris: Octave Doin. 1887.

THE first of these books was published about three years ago. It was perhaps partly owing to the manner of publication that it did not meet with the attention it deserved. It appeared as the thesis of Dr. CARLET, the assistant-in-chief at the *clinique* of Dr. APOSTOLI; but it was really a reproduction of the memoir presented to the Academy of Medicine by Dr. Apostoli in July, 1884. Miscellaneous cases to the number of ninety-four were added to illustrate the mode of treatment and to show the results; but as they were arranged, not pathologically, but according to the particular application of the treatment, it was somewhat difficult to form an estimate of its success in certain categories of cases, and some amount of misunderstanding and misrepresentation was the consequence. It was supposed by a few critics that there had been errors of diagnosis, and that the results announced were open to question. This, however, seems really not to be the fact. Some of these objectors seemed unwilling to admit that the hypertrophied uterus was not to be accepted as a fibroma, though the symptoms were even more formidable than in other cases. On the other hand, among the ninety-four first cases, in which the treatment was in a great measure tentative, some which were reported as *"fibrôme interstitiel"* were in the incipient stage of growth, had hardly reached the condition of fully-formed tumours, and were rapidly relieved. These are the cases to which objection has been made as lessening the value of the reports. It is, however, after all, only a verbal quibble, some choosing to speak of such cases as cases of sub-involution, while Dr. Apostoli looks upon them as cases of fibroma or hypertrophy of the uterus in an early state of development.

But call the doubtful cases what we may—and if we analyse the returns they only amount to 22 out of the 94, or 220, if private cases not related at length are included—when judged by the symptoms, they were serious enough to carry the most frightful name, to require the earliest relief, and this, in most cases, soon enough to justify and recommend the treatment.

That there was no error of diagnosis on the part of Dr. Apostoli, that he was quite aware of the different conditions of the uterus which came under his observation, and that he was not misrepresenting cases of inflammatory congestion is evident from the almost concluding sentence of the book, in which he expressed a hope that future experience would enable him to show that an analogous treatment was applicable to chronic metritis. These subsequent observations have led to the recent production of the second book treating distinctly of the disease in question.

Dr. Apostoli, in his first work, adopts the usual classification of fibroid tumours of the uterus, according to their seat, as proposed by Bayle, and recognised by most writers. They are distinguished as subperitoneal, interstitial, and submucous, though it is evident that these divisions are arbitrary, and that the different varieties of tumour often merge into each other. He also speaks of them, according to their structure, as being hard or soft; the connective tissue having the predominance in the hard fibromas, and the excess of muscular tissue and vessels being characteristic of the soft tumour. He gives a hasty glance at the usual modes of treatment of these tumours, both surgically and therapeutically. And, further, he gives a summary of what had been done before his time in the use of electricity. We may say that it is only within the last thirty years that the treatment by electricity has been put to the test. But the principles were not clearly understood, and the methods adopted were altogether inadequate. The results obtained, however, by experimenters in America, Germany, Italy, France, and England were sufficient to show that the subject only required further elucidation, and the mode of using the electrical currents certain modifications, for the treatment to become extensively applicable and useful.

Dr. Apostoli spent some time in the service of his country as an army surgeon. Giving up that position, he took to the study of the surgical employment of electricity at the *clinique* of Dr. A. Tripier. There he had most opportunities of observation. Tripier, in his memoir to the Academy of Science in Paris, on Faradisation in the Treatment of Hypertrophies of the Uterus, opened the way to a great

therapeutical revolution. Apostoli saw the weak points of Tripier's practice. Resolved to overcome the difficulties which hindered his complete success, and stopped the practical application of his principles by the profession, he began in 1882 to carry out his own ideas. He had come to the conclusion that there was too much timidity in action, that the currents employed were too feeble, that their intensity was not regulated and measured, and that the point of application was wrongly chosen. He proceeded with great caution, feeling his way step by step. At length, in 1884, he was able to lay a memoir on the subject of the Treatment of Fibrous Tumours of the Uterus before the Academy of Medicine of Paris. To show what Apostoli's system of treatment is, we cannot do better than reproduce the summary of conclusions drawn up by the reporter of the Academy.

"1. The method consists essentially in the application of a continuous current of electricity, *à l'état constant*, to the uterus, without any interruption during the operation.

"2. The seat of the application by means of a sound of platinum is always intra-uterine, and the whole extent of mucous surface should be acted on.

"3. In the case of the cavity of the uterus being unattainable, a preliminary puncture must be made in the hypertrophied body, followed by negative galvano-caustic action, so as to set up an artificial channel.

"4. The active intra-uterine pole must be positive in all cases of hæmorrhagic fibromas, or when there is the accompaniment of obstinate leucorrhœa; negative in the opposite cases in which the great trouble is dysmenorrhœa. (The local effect of the two poles upon the tissues is very different. The positive pole is coagulating and hardening; the negative pole causes liquefaction of the tissues with which it comes in contact, and often excites some hæmorrhage. This may always be controlled by the positive pole.)

"5. The greatest possible strength of current compatible with the toleration of the patient and the effect desired must be employed.

"6. The application of the current on an average of from five to eight minutes is necessary to produce effective cauterisation.

"7. The number of applications required to insure a reduction of the size of the tumour will vary according to the nature of the disease and the object sought for.

"8. Generally speaking, the treatment will require an operation twice a week, and, if necessary, even during the presence of active hæmorrhage.

"9. To overcome the pain and prevent the eschar caused by high tension currents (from 50 to 300 milliampères) on the skin of the abdomen, an electrode of wet potter's clay was first proposed by Dr. Apostoli, and is used. This increases its surface and diminishes the resistance of the skin.

"10. The operation is virtually a uterine cauterisation, in which the highest possible degree of electro-chemical action is used.

"11. This intra-uterine galvano-caustic procedure brings about a rapid elimination of fibroid tumours, but not their total destruction. Hæmorrhages are arrested, the woman's powers are often restored, and health is assured."

One hundred and seventy-three out of the 253 pages of which the book consists are taken up with the elaborate description of 94 cases, which are divided, according to the treatment adopted, into four classes. The first class comprises 59 cases in which positive galvano-caustic current was the remedy. The second is made up of 21 cases treated by negative galvano-caustic cauterisation. In the third class are 5 cases treated by galvano-punctures, preceded or followed by negative or positive intra-uterine cauterisation. The fourth class includes 9 cases treated by galvano-chemical cauterisation successively positive and negative.

During the three years which have elapsed since the publication of these reports, several hundred cases have come under Dr. Apostoli's treatment. Those at the *clinique* have been open to the critical observation of the profession at large. The private cases have all been verified by the medical attendants who recommended their patients to place themselves in the hands of Dr. Apostoli. We look forward to the publication of the results of these three years of work with more than curiosity. In general terms we must acknowledge that it has been attended with success. But, as Dr. Apostoli says in his most recent work, published only a few weeks ago, much more time and many more observations are needed before coming, on many points, to conclusions complete and decisive. Five years give a short and comparatively imperfect experience on such a subject, though to him, personally, all is so clearly demonstrated that he trusts with entire confidence to the future.

We of course can pronounce no positive opinion, but we may refer trustingly to a letter which will be found in another part of this number of the JOURNAL, from an independent and unprejudiced investigator who has quite lately devoted much time and care to an inquiry into the value of the results obtained by Dr. Apostoli. His report is favourable; nor can we ignore the fact that though by English surgeons the subject has been in a great measure overlooked, the practice has been taken up and pursued satisfactorily by men of position in other countries—such as Reimann, of Kief; Deletang, of Nantes; Hüe, of Rouen; Adolphe Elsassen, of Stuttgard; Martin, of Chicago; Gardner, of Montreal; Engelmann, of St. Louis; and Mundey, of New York. With such testimony to rely upon, we do not see how we can any longer refuse at any rate to make inquiry, if not to test the practice in our own country where fibroid disease is as prevalent, and the failures and mortality from other operative proceedings are almost as much to be regretted as elsewhere.

DISEASES OF THE JOINTS. By HOWARD MARSH, F.R.C.S. London: Cassell and Co. 1886.

THIS is another of the excellent series which is being issued by these enterprising publishers, and which, when completed, will form a valuable encyclopædia, as we have before remarked. But we have observed with reference to some of the series what we may notice of this, that the titles include more than the books contain, for they are all concerned mainly with symptoms, diagnosis, and treatment, and comparatively little with the pathology of the subject. This is generally stated in the preface, but does not sufficiently appear in the title.

Mr. MARSH is known as a clear and forcible writer, and he has had unusually large opportunities of studying the subject he has here chosen. We look, therefore, with interest to see his teaching in certain important matters, besides examining the work as a whole. In reference to the commonest and most important of joint-diseases—that of the hip—nothing but satisfaction can be expressed with his chapters on the subject; and it is especially in treatment that the experienced practitioner will agree with him. Patience and a trust in the curative powers of nature, with such help as perfect rest and the evacuation of sequestra and pus, are preferred to the unseasonable interference which excision involves. Our own experience is fully in accord with Mr. Marsh's on the results obtained by excision, and we think the operation has often been undertaken without sufficient warrant, and in an early stage of the disease it is unjustifiable. The origin of hip-joint disease he attributes generally to pathological changes in the bone rather than in other tissues, and he apparently does not agree with the view expressed by some authors of its being traceable to injury of the ligamentum teres by strain. He omits to draw attention to the necessity of careful attention to the level of the anterior iliac spines in measuring the length of the limbs, and does not give any careful directions to help the student or practitioner in taking such observations. We notice, too, a contradiction in pages 329 and 383 as to the frequency of the occurrence of separation of the head of the femur by necrosis.

The subjects treated in the work are very numerous, and include useful papers on gout, osteo-arthritis, Charcot's disease, scrofulous diseases, "quiet" disease, syphilitic affections, loose bodies, congenital dislocation of the hip, bone-setting, the prejudicial effects of intra-articular pressure, nervous mimicry, ankylosis, tumours, and the diseases of particular joints. The author does not commit himself to any decided opinion as to Charcot's disease, but gives the views held by the different sides very clearly, and leans to those held by Charcot and his followers. The chapters are clearly and forcibly written, as one might expect from the author, and it is not to be wondered at that his references are limited so much to the work of his own colleagues, and his field of observation to his own hospitals. The latter exclusiveness makes the work more valuable in many respects. But we must recognise it as essentially a work on diagnosis and treatment. The pathological portion is credited in great measure to Mr. Bowlby, and though limited, is good and fairly illustrated; but the other engravings are as unsatisfactory as we generally find in English works of the kind. Accuracy need not be sacrificed in artistic productions, and we should be glad to see English art better represented in medical and surgical literature.

AN ABSTRACT OF LECTURES ON LEPRA. By J. L. BIDENKAP, Physician to the Department for Skin-Diseases at the Rigs-Hospital, and Lecturer on Dermatology at the University of Christiania. London: Williams and Norgate.

THE publication of this *Abstract* is opportune. The discovery of the bacillus of leprosy has given renewed impetus to the production of

works on that interesting disease, and few medical men have either the opportunity or leisure to examine all these publications. Dr. BIDENKAP, in his *Abstract*, which does not extend beyond seventy pages, gives a succinct, readable, and comprehensive account of all that is known up to the present time regarding leprosy. The publication is illustrated by several well-executed woodcuts and five coloured plates. Three of these plates are devoted to the appearances which the disease presents on the skin and in the throat; two are devoted to illustrating the bacillus of leprosy in the tissues.

Dr. Bidenkap considers that we are obliged to assume that infection is the most common and probable cause of the spread of the disease, but that there are also instances which can hardly be explained except by heredity. He does not, however, consider that infection and heredity exclude each other.

The author has had large experience in the treatment of leprosy, and what he says is not encouraging. He has found the alleged specifics to be useless.

In 1885 Dr. Unna stated that he had found good effects from ammonium sulph-ichthyolicum. Dr. Bidenkap states that in his hands it perhaps did some good in one case, but it completely failed in several others. He falls back on "rational symptomatic treatment." With local applications he has had the best results from chrysarobine or Goa powder applied to the skin of the affected parts (the tubers or spots). The formula employed by him in the Rigs-Hospital of Christiania is: ℞ Olei olivarum, 20; resinæ colophonii, 20; ceræ flavæ, 40; Liquentur et per horam dimidiam inter perpetuam agitationem in balneo aquæ seponantur. Dein refrigeratis addatur mixtio liquefacta: ℞ Gummi resinæ ammoniaci, 2; balsami terebinthinæ venetae, 2; add. demum, chrysarobini (sive pulveris de Goa), 12 (sive 16). This plaster is thickly spread on lint, and applied to a limited portion of the diseased skin. Generally, in thirty-six to forty-eight hours, the characteristic erythema will appear, and the plaster is removed. In a week or two, the skin having resumed its common appearance, a new application is made on the same place, and this is continued until the leprous symptoms disappear. The disease sometimes cures itself spontaneously.

The official statistical reports from Norway, published in 1882, show the total number of 107 cured lepers in twenty-five years. During the same period 4,891 died of the disease.

NOTES ON BOOKS.

Easy Methods for the Examination of Milk, by Dr. PAUL VIETH, Vice-President of the Society of Analysts, and Analyst to the Aylesbury Dairy Company, is evidently written upon the basis of intimate scientific acquaintance with the subject and great practical knowledge. It describes especially methods of milk-analysis applicable in large dairies without the help of an analyst, yet capable of furnishing accurate results. This is done with great clearness and accuracy, and is exceedingly useful. The author might with advantage add to a future edition a description of means which would enable farmers and small dairies to analyse milk; for by far the largest quantity of milk is probably still sold by men who have no chance of the use of any expensive centrifugal apparatus, nor the time and knowledge necessary for the estimation of total solids or other gravities. It is very satisfactory to find how largely of late years science, capital, and sanitary precautions have been applied to the development and for the advantage of a department of food-supply which had been left in mediæval dirt and darkness. The company to which Dr. Vieth is analyst deserves the credit of having done the pioneer work, and it is satisfactory to see that it still continues to use its great resources for the purpose of advancing knowledge and perfecting the methods by which a safe and pure milk-supply can be secured to great towns.

BEQUESTS AND DONATIONS.—Mr. W. H. Yatman has given £50 to the Charing Cross Hospital.—Mr. James Chapman, of Warminster, bequeathed £250 to the Warminster Cottage Hospital.—Mrs. Elizabeth Salisbury Heywood, of Summerfield, Bowdon, Cheshire, bequeathed £200 to St. Mary's Hospital and Dispensary, Quay Street, Manchester.—The Birmingham General Dispensary has received £100, less duty, under the will of Mr. William Middlemore.

DEATH OF DR. W. T. ILIFF.—At a recent meeting of the Newington Vestry, an intimation was received of the death, on Monday, April 25th, of Dr. W. T. Iliff, the medical officer of the parish. A resolution was unanimously adopted recording the Vestry's appreciation of the deceased gentleman's services during thirty-one years as medical officer, and expressing sympathy with his family.

PHARMACY ACTS AMENDMENT BILL, 1887.

SUBJOINED is a *verbatim* reprint of the Pharmacy Acts Amendment Bill now before the House of Commons. It is intituled "An Act to amend the Pharmacy Act, 1852, and the Pharmacy Act, 1868."

WHEREAS it is expedient to further secure that persons known as chemists and druggists should possess a competent practical knowledge of their business:

Be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

1. *Extension of 15 and 16 Vict., c. 56, and 31 and 32 Vict., c. 121.*—The powers of the Act, passed in the fifteenth and sixteenth years of the reign of Her present Majesty, intituled "An Act for regulating the qualification of Pharmaceutical Chemists," and of the Pharmacy Act, 1868, with respect to examinations required for obtaining certificates of qualification under the said Acts, or either of them, shall be extended so as to provide for the division of the said examinations into preliminary and other parts of the same; also for periods of time and study between any of the said parts; also that persons presenting themselves for a final part of an examination shall have deposited with the registrar under the said Acts certificates of their having duly attended courses of instruction in chemistry, botany, and materia medica, and having for not less than three years in the whole served in the capacity of apprentices or pupils in the open shops of chemists and druggists.

2. *Power of Pharmaceutical Society to Regulate Examinations and Forms of Certificates.*—It shall be lawful for the Pharmaceutical Society of Great Britain from time to time, by by-laws duly confirmed, to regulate the said division of examinations and also the said periods of time and study between any of the said parts, also to allow and provide for and to regulate the reception of certificates issued by other examining bodies in lieu of or so as to satisfy the examiners in lieu of the preliminary part of any examination, also to prescribe the courses of instruction in chemistry, botany, and materia medica, to be duly attended as aforesaid, also forms of certificates to be for any purpose of this Act deposited with the said registrar, and also notices to be given and fees to be paid by persons intending to present themselves for examination, or any part of an examination, or desiring any registration under the said Acts, or either of them; and it shall at all time be lawful for the Council of the said Society, by resolution, on being satisfied by a certificate of a committee of the same Council authorised on that behalf, that any person therein named has acquired, whether in England or Scotland, or elsewhere, competent practical skill and knowledge in and of the business of a chemist and druggist, to waive and dispense with the whole or any part of the said term of three years, or any period of time aforesaid, and any evidence of having attended any such courses of instruction as aforesaid, in relation to the person therein named.

3. *Extent of Act.*—This Act shall not extend to Ireland.

4. *Commencement of Act and Short Title.*—This Act shall come into operation on the first day of January, one thousand eight hundred and eighty-eight, and may be cited for all purposes as the Pharmacy Acts Amendment Act, 1887.

MEETING OF THE INTERNATIONAL MEDICAL CONGRESS AT WASHINGTON IN SEPTEMBER.

WE understand Messrs. Henderson Brothers, managing owners of the Anchor Line of steamships from Glasgow to New York, have decided to offer to members of the medical profession desirous of attending this Congress return tickets to New York for £20, giving the best accommodation at this low rate.

DR. BROOKS has been appointed Lichfield Clinical Lecturer in Medicine, and Mr. Horatio Symonds Lichfield Clinical Lecturer in Surgery, at Oxford University, each for two years.

AT a meeting of the Darlaston sanitary authorities on Tuesday, May 3rd, it was reported that measles had broken out in the town. Up to the present no fewer than thirty-seven deaths are reported to have occurred.

DR. WOLFFHUYEL, Government Councillor and Ordinary Member of the Committee of Hygiene at Berlin, has been named Professor and Director of the Institute of Medical and Hygienic Chemistry at Göttingen.

A SUM of £1,050 has been given to the Great Northern Central Hospital by Mr. R. A. Newbon, of Islington, for endowing a bed in the new hospital in memory of his sister. Of the £45,000 required to complete the building, £10,000 only has yet been subscribed.

A DEATH in the cricket-field occurred last week at Aldeburgh. The deceased, a youth, whilst playing in a match, was struck by the cricket-ball on the side of the nose. Hæmorrhage ensued, which could not be checked, and the deceased bled to death.

MEDICAL MAGISTRATE.—The Lord Chancellor, upon the unanimous recommendation of the Town Council and the Borough Bench of Magistrates, has placed the name of Mr. Vincent Jackson upon the Commission of the Peace for Wolverhampton.

PROFESSOR RAUCHFUSS.—Professor Rauchfuss, Medical Inspector of the charitable institutions founded by the Empress Maria, in Russia, is about to retire from office, and will be replaced by Dr. N Bubnow.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 7th, 1887.

THE APPROACHING SESSION OF THE GENERAL MEDICAL COUNCIL.

THE programme of the business of the meeting of the General Medical Council for Tuesday next, May 10th, commences with the consideration of the important question of the application of the Apothecaries' Society of London to the Council for the appointment of examiners. We have little or nothing to add to what we said on this subject last week; and although Dr. Struthers will probably not be prevented from bringing forward the inconsistent and illogical motion of which he has given notice, it may be assumed that his motion will meet with but little support, and that the Council will not be deterred from doing its obvious duty to the profession and the public. A letter which we have received from an eminent correspondent blessed with a good memory calls attention to the frequent change of attitude and opinion, in this matter, by Dr. Struthers. But for this there are many political precedents, and inconsistency now-a-days is the smallest of political sins. The question, however, is one which really does not depend upon any advocate, however eminent and respected, and Dr. Struthers has great claims to both of these qualifications, but on the evident and bare justice of the case, and the urgent necessities of the profession; the general practitioner—too little represented in the Council, not at all in the Colleges—would suffer, as we demonstrated beyond all dispute, irretrievable loss from the injustice which Dr. Struthers proposes to inflict on the Society which is the bulwark of the privileges of the general practitioner in England, and the main protection of the public against quacks and prescribing chemists. It is all the more necessary that this barrier should be firmly maintained because, as will be seen in another column, the Bill which the Pharmaceutical Society is now promoting, proposes to give to the pharmaceutical chemists in the future a theoretical education in materia medica, which, unless carefully watched, and even when carefully watched, may very easily afford that "little knowledge," which is dangerous and even poisonous to some minds, and which might seem to give some quasi-parliamentary sanction to an assumption of medical knowledge, and tend greatly to increase counter-practice, and prescribing and visiting by chemists. The attention of the General Medical Council will be called to this subject by a communication from the Chairman of the Parliamentary Bills Committee; but it is doubtful how far it can or will interfere. At any rate, we hope that it may be trusted not to increase the existing difficulties of the general practitioners throughout England, and not to commit the outrageous inconsistency and gross injustice which would be involved in refusing to nominate surgical examiners under the provisions of the Act of 1886, as requested.

It is quite evident that the two Colleges are either indifferent on this subject, or do not feel themselves called upon to take any other step in the matter than that which concerns their own interests. They consider it "unnecessary and unadvisable" for themselves to enter into conjunction with the Apothecaries' Society, and that is their last word on the matter. Higher and larger considerations than those of their corporate necessities and advisabilities do not seem to enter into their consideration, and are not referred to. This is the way with privileged corporations. It is, it may be hoped, far otherwise with the General Medical Council. It has a great duty to the whole profession and to the public, and that duty will certainly not be fulfilled unless it forthwith exercises what it ought to consider as a purely ministerial function by nominating the required examiners in the form laid down by the Act.

The case of the Apothecaries' Society of Ireland will follow. It rests upon a far narrower foundation, and is much more open to question, but it will possibly be found that the College of Physicians of Ireland has greatly facilitated the work of the Council by a letter which it addressed to that body on April 26th, and in which it announces that if "the General Medical Council proceed to register Licentiates of the Apothecaries' Hall of Dublin under the Medical Act of 1886, on the basis of a qualifying examination held by the Apothecaries' Hall as a medical corporation in combination with a corporation authorised to grant a diploma in respect of surgery, or on the basis of a qualifying examination held by the Apothecaries' Hall in conjunction with assistant examiners under Section 5 of the said Act, the President and Fellows of the King and Queen's College of Physicians in Ireland will take the steps advised by counsel to restrain the General Medical Council from so registering Licentiates of the Apothecaries' Hall, Dublin." We believe that many members of the Council consider that this would be a very convenient mode of testing and settling the question raised. The legal question involved will then be settled in the course of law, and the General Medical Council would thus far be relieved from an embarrassing question which appears to be full of technical difficulties, and as to which there is a wide conflict of opinion.

Subsequent business of the Council will include the discussion of reports from the Executive Committee in regard to Visitation and Inspection of Examinations; from the Procedure Committee; from the Income and Expenditure and the Curriculum Committees. The Council will also proceed to elect inspectors of examinations in accordance with the resolutions passed by the Council on February 22nd, 1887, and to this the attention of members of the profession desiring such appointments should be at once directed.

MEDICAL INTERESTS CONCERNED IN THE PROPOSED LEGISLATION FOR CHEMISTS.

WE print in another column the Bill which is being promoted in Parliament by the Pharmaceutical Society of Great Britain for the better instruction and training of pharmaceutical chemists. The Bill is a short one, and is much to the point; in its general objects there is much which the medical profession will approve, and by the realisation of which the public will benefit. But, as we shall presently point out, there is some need of amendment and some reason for cau

tion in accepting the Bill in the shape in which it is now put before the House of Commons.

It will be well first to review the present position of pharmaceutical education and examinations, and to explain the operation of the proposed measure, and the good results which it is intended to produce.

The chief object of the formation of the Pharmaceutical Society in 1841 was the promotion of the technical education of chemists and druggists; but, though its work has since been always in that direction, the establishment of a uniform educational system still remains unaccomplished. The Society's expenditure in maintaining courses of instruction in London by lectures and practical laboratory work has amounted to many thousands of pounds; and, in addition, considerable assistance has been rendered to educational organisations in the provinces; but from the absence of any compulsory regulation requiring that persons intending to pursue the calling of a chemist and druggist should go through a suitable course of scientific education and technical training, the opportunities thus provided have not been very generally taken advantage of; and, as regards the provinces, it has been impossible to maintain pharmaceutical schools, because students could not be obtained.

The only approach to a provision for technical training which now exists is the apprenticeship; but, for various reasons, that has proved to be insufficient for insuring the requisite education. This is most conclusively proved by the fact that out of the candidates who present themselves for examination to obtain legal qualification to carry on business, no fewer than 60 per cent. fail to pass, although they must have all been engaged for not less than three years as apprentices or pupils. The subjects of this examination are prescriptions, practical dispensing, pharmacy, materia medica, botany, and chemistry, as defined in the accompanying prospectus. It is specially provided by the Pharmacy Act, 1852, that these examinations shall not include the theory and practice of medicine, and they are conducted under the supervision of an officer appointed by the Privy Council. Hence it is evident that systematic and efficient pharmaceutical education—the chief object of the incorporation of the Pharmaceutical Society—has yet to be provided for, and past experience shows that there is but slender reason for expecting its realisation so long as the mode of attaining it remains a matter of option.

Under this view of the subject the Society's Council has for several years past been engaged in formulating an educational scheme, and has devised by-laws by which it was to have been put in force. Those by-laws have, however, been held by the Privy Council to exceed the present powers of the Society, and consequently it has become necessary to go to Parliament for such an extension of power as will admit of an educational system being established. Should this be accomplished it is believed it would favour the establishment in various parts of the kingdom of schools at which the necessary scientific and technical instruction would be obtainable with facility and at no great expense. The present action of the Council is but a natural and necessary sequence of the policy followed by the Society from the time of its incorporation, and sanctioned from the point of view of the public interest by existing Acts of Parliament. It in no way seeks to establish a monopoly beyond that which naturally appertains to competence for the exercise of a business which so closely affects the public health and safety.

So far good; but when the wording of the Bill is scrutinised certain objections occur which involve questions of great importance, such as the medical profession and the medical corporations would do ill to disregard. All the members of the pharmaceutical trade and profession are by no means so free from unjustifiable pretensions and usurpations as the members of the Council of the Pharmaceutical Society; nor do the opinions or practice of the members of that Council, which we assume to be immaculate in respect to counter-prescribing, medical practice and medical visiting, either govern or even influence a very large proportion of the members. In this respect, indeed, the Council has never attempted, we believe, to exercise, even if it possess, any restraining powers; nor is it likely that it ever will attempt to do so, or that the majority of its members would allow it to do so if it wished. It follows, that any step must be viewed with great suspicion which gives a parliamentary or public sanction to the extension of quasi-medical teaching to a body of men who, without medical training, are in fact inclined only too largely and too frequently to usurp medical functions to the grievous danger and injury of the deluded persons who are already too much disposed to identify every druggist's blue and red bottles as the insignia of "a doctor's shop," and to flock there accordingly for a little cheap and perilous doctoring. If now we examine the clauses of this well-intentioned Bill, we see that it proposes to require certificates of a curriculum including courses of chemistry, botany, and materia medica. Materia medica is a very elastic term; it frequently includes, and may easily be made to include, a large mass of medical and therapeutic principles and details; very useful and essential additions to the anatomical, physiological, pathological, and clinical basis of a medical education, but very useless, and even very dangerous, to a person who has not received that basis of instruction, and who is not intended for the medical profession. In the Pharmacy Act of 1852, to which the Bill is an amendment, it is, as we have said, provided that the examinations of the Pharmaceutical Society shall not include the theory and practice of medicine, and an inspecting physician is appointed by the Privy Council, whose business it is, among other things, to see that this restriction is not infringed. It seems to us obviously necessary that a like restriction be introduced into the provisions as to the curriculum of education in preparation for that examination which this amending Bill proposes to lay down and to make compulsory.

Moreover, the use of the word materia medica in such a connection is likely to be ambiguous, and therefore misleading. We assume that what is meant by the promoters of the Bill is instruction in the physical, chemical, and pharmaceutical characters of the drugs. This is, we believe, more correctly expressed by the word Pharmacognosy; but it would probably be better to use words defining and stating in plain English the character and scope of the instruction to be given.

There is one other point to which attention should be given. Unrestricted and unqualified power is given to the Council of the Pharmaceutical Society to dispense with the whole or any part of the curriculum which the Bill declares to be necessary, and purports to make obligatory. This is a little too sweeping.

Assuming, as is involved in the premisses of the Bill, that such a curriculum is necessary and of public utility, the body which will hereafter regulate the curriculum, conduct the examinations, and receive the fees, should not possess this large power of uncontrolled dispensation. It is obvious that the Privy Council should retain and

exercise the powers, first, of approving the details of the scheme of lectures and of the curriculum; and secondly, of revising the discretion of the Council in exercising its dispensing and annulling powers.

Under all these headings, representations will be made to the Privy Council and to the General Medical Council by the Chairman of the Parliamentary Bills Committee of the British Medical Association, and Mr. Ernest Hart is already in communication with the authorities on the subject, in accordance with the views of that Committee. The General Medical Council, which is a "Council of education and registration," is very shy of going outside its dry official duties; but possibly it may think that the introduction of a Parliamentary Bill for the construction of what may easily be converted into a system of imperfect and quasi-medical education of a class of gentlemen already too much disposed to presume mischievously on their supposed medical knowledge may be fairly held to come within their purview as the guardians of medical education. We commend the subject to their notice and to that of the profession. The Apothecaries' Society has a direct interest and duty in relation to this matter, and it might, we think, add to its usefulness to the profession and the public by assisting us to take measures in this matter "*ne quid medicinæ respublica detrimenti capiat.*"

THE TREATMENT OF INTRA-PERITONEAL INJURIES.

THIS subject is of especial interest, because of the serious nature and disastrous consequences of wounds of the abdominal walls and viscera, and also on account of the immense progress which has recently been made in the surgical treatment of these injuries. No department of surgery has derived more advantage from that systematic cleanliness which is the basis of our modern system of antisepsis. The old belief in the necessarily fatal character of such injuries, and in the utter futility of operative interference, has given place to a well-grounded hopefulness and a spirit of surgical enterprise, scientifically bold without being rash, which have been the means of saving many a life that would formerly have been condemned.

The expectant treatment which our predecessors adopted, for want of better methods, is no longer considered justifiable, and no surgeon worthy of the name would now allow a case of supposed visceral injury to develop unequivocal symptoms of traumatic peritonitis without doing his best beforehand to ascertain and remedy the injuries which may have been inflicted.

To one who, like Sir William Mac Cormac, has had great experience on the battle-field, such a subject must naturally be congenial. One-tenth of the fatal cases on the field are due to some form of abdominal injury. Although the hurry and excitement of war do not offer a favourable opportunity for successful surgical intervention, still the frequent occurrence of wounds of this kind and their extremely fatal nature cannot but excite the interest and attention of those whose lot it is to witness them. The oration delivered by Sir William Mac Cormac at the annual *conversazione* of the Medical Society on the subject of abdominal section for the treatment of intra peritoneal injury, gave him an opportunity of reviewing the progress which has been made, and of summing up the knowledge that has been gained, on this important subject. Most surgeons will probably agree with the orator when he expresses the indebtedness of abdominal surgery to Listerism, and the vast improvement both in methods and results which followed its introduction. Thanks to the confidence which experience of its efficacy has engendered, surgeons are now enabled to deal with these cases with a success that would have seemed incredible to surgeons of pre-Listerian times.

Formerly the practice was to suture the abdominal wound, and hope for the best. If the intestines were wounded, death ensued in a large majority of cases. Now, however, if reasonable grounds exist for suspecting intestinal injury, the surgeon at once cuts down and thoroughly explores the abdominal cavity. If no trace of injury be found, he closes the wound and awaits with confidence the issue of the case. He need not reproach himself for having made a useless incision, the danger of which in itself has been reduced to a minimum. If, on the other hand, an incised, lacerated, or perforated wound of the intestines be discovered, instead of abandoning the case he stops the bleeding, fixes the cut edges in close and perfect apposition, and, after the usual cleaning of the peritoneum, replaces everything in position. Numerous cases are now on record proving the triumphs which modern surgery has already achieved, and the future looks yet more promising. By careful observation, confirmed if necessary by experiment, the surgeon learns the manner of dealing with the most sensitive and most easily inflamed tissue in the body. Each little step, each little improvement helps the movement onwards, until the final result excites the wonder and admiration of those who remember the less daring and less successful practice of a not very remote period.

Since the possibility of successful intervention in cases of abdominal injury has been demonstrated, the great difficulty to be overcome has lain in the diagnosis. The symptoms of visceral injury, apart from hæmorrhage, are in many cases so obscure, and even so conspicuous by their absence, that the surgeon must often find himself in a very embarrassing position. To operate on an uncertain diagnosis is to expose the patient to an unnecessary risk, while to leave him until the diagnosis can be relied upon seriously lessens the chance of recovery. On the whole, Sir William Mac Cormac is of opinion that the former course is less dangerous to the patient than inaction.

Not the least interesting portion of the paper is the history of cases in which tentative operations have been performed for severe injuries involving rupture of one or other of the viscera. Though by no means uniformly successful, they mark the path which is to be followed in treating such cases, and point the way to better results in the future. The great point to bear in mind is the desirability of preserving or, if necessary, restoring, the continuity of the gut. Not only is the patient spared the inconvenience of an artificial anus, but the risks of extravasation are in reality less when the cut edges of the gut are properly sutured than in the alternative proceeding.

The subject of the treatment of wounds of the intestines cannot fail to be of interest to surgeons generally. Even in civil life such cases are frequent enough to render a knowledge of the best methods of treatment indispensable. Moreover, it is in civil life that the surgeon can interfere with the greatest hope of success. The injuries, as a rule, are less extensive, treatment is more readily available, and the conditions under which it is carried out are incomparably more favourable.

THE RANK OF MEDICAL OFFICERS IN THE ARMY.

WE trust the medical officers of the army who have addressed us on the question which has occupied so much of their attention of late will not think us wanting in courtesy or consideration when we repeat that it is impossible to publish even a tenth part of the letters that

reach us from all parts of the world. We have in our leading articles done our best to state their grievances and to point out the needful remedies, and the Parliamentary Bills Committee of the Association has supplemented our efforts by representations that ought to command the serious attention of Mr. Secretary Stanhope. The letters to which we refer dwell much on the twofold duties of the Medical Staff. They insist on the following facts: (1) The Government is careful to protect itself and the health interests of the army by exacting the highest qualifications on the part of candidates for the service. (2) While their army life and constant foreign service debar them from the highest honours in their own profession, the Government withholds the just compensation it is in their power to give by a due recognition of their work, both on the professional and military side of their composite position. (3) As regards their military duties, they contend that much of the military administration of the army depends upon them—the recruiting, the extension of service, and re-engagement of every soldier and non-commissioned officer, all matters which requiring very special knowledge, cannot be carried out without their aid, no sick-leave can be granted to any officer, non-commissioned officer, or soldier without their recommendation and on their responsibility, and no pension for wounds or for ill-health can be granted without their opinion. (4) Again, in matters of discipline, a soldier cannot be tried, nor can any punishment be inflicted upon him, without a medical officer's certificate. (5) The complicated arrangements for the transport of sick and wounded, under the new organisation, all fall on medical officers. These are duties which can only be carried on by men who have received a military training, involving also the command of the Army Hospital Corps, who are trained and fitted for their duties entirely by the Medical Staff of the army. The field duties of medical officers, it is further pointed out, necessitate exposure to the honourable risks of war, not only when fighting is going on, but also when detached in charge of sick and wounded, in our wars with uncivilised races, who do not observe the Geneva Convention. (6) The heavy pressure of the above duties involves great exposure, much consequent sickness, and a heavy mortality. (7) The subordination of a body of officers thus trained, and discharging such important and riskful duties, to others whose duties are purely civil, not exposing them to a tenth part of the risks of war, is dwelt on by our correspondents, one and all, as a grievance that is every day becoming more and more intolerable.

Much may be hoped from the action of the Parliamentary Bills Committee, but that Committee should not be left alone in its efforts. The feeling in the department is evidently widespread and profound, but it should not evaporate in words. In another column, in commenting on one of the many letters which have been addressed to us, a course of action is suggested by which medical officers can thus aid in bringing home to the profession at large their strong feeling on this matter. To do this they must move first in the corporations, next in the Branches of the British Medical Association, and last, but perhaps most important of all, in the medical schools of Great Britain. The method by which this course of action may be practically carried into effect is detailed on page 1019, and we particularly direct the attention of medical officers to the suggestions therein conveyed. The Parliamentary Bills Committee will carry on the fight, but to ensure success it must receive the obvious support of the official bodies and the outspoken declarations of the great body of medical students from whom the Army Medical Service is to be recruited.

THE Crown has appointed Professor Thiselton Dyer, F.R.S., a member of the Senate of the University of London, in place of the late Mr. W. Shaen.

DR. BRAXTON HICKS has accepted the appointment of Physician-Accoucheur and Lecturer on Midwifery and Diseases of Women and Children to St. Mary's Hospital.

WE are glad to hear that Mr. J. S. Morgan has withdrawn the condition attached to his promise of £10,000 in aid of Guy's Hospital, and made it an absolute gift.

A COMMITTEE is now in course of formation among the graduates of the University of London for carrying out the resolution of Convocation to commemorate the Jubilee of the University by erecting a statue of the Queen in the University Buildings.

THERE seems likely to be considerable competition for the vacant Assistant-Surgeoncy to Charing Cross Hospital. We already hear of Mr. W. J. Roeckel, the present Registrar, Mr. Marmaduke Sheild, Mr. Stephen Paget, and Mr. Stonham, as candidates—all good surgeons and good teachers.

THE vigorous efforts which are being made by the authorities have not succeeded in stamping out rabies among the deer in Richmond Park. The veterinary inspector has reported that it has been necessary to have six more animals slaughtered. Of 1,500 deer in the park, over 130 have now been killed, and it is probable that many more will have to be slaughtered before the epidemic is at an end.

A UNIVERSITY FOR TRIESTE.

A MOVEMENT is now on foot in Trieste to obtain a University in which the Italian language shall be used in that city, and the Istrian Provincial Landtag has expressed its approval of the project.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

A QUARTERLY meeting will be held at Bethlem Hospital, St. George's Road, London, on Tuesday, May 17th, at 4 P.M. A meeting of the Council will be held at 2.30 P.M. A discussion will be held on the proposed Lunacy Law Amendment Bill.

GREAT NORTHERN HOSPITAL.

AT a meeting of the Islington Jubilee Committee it was resolved to endeavour t raise by v luntary subscriptions a sum of £20,000, to be devoted to the benefit of the Great Northern Hospital now in course of erection in the north of the parish, upon such conditions as the Committee may determine.

HOSPITAL FOR EPILEPSY, REGENT'S PARK.

THE annual meeting of the Hospital for Epilepsy and Paralysis, Regent's Park, was held on Wednesday afternoon at the Eyre Arms Assembly Rooms. The report congratulated the supporters that the debt had only increased by £60 during the past year. The retiring members of the committee were reappointed.

THE TEETH OF LOUIS QUATORZE.

IN the *Union Médicale* for April 2nd appeared an interesting article by Dr. T. David, entitled "Les Dents de Louis XIV." It is founded on the reports which were drawn up and carefully preserved by that monarch's physicians and dentists. Louis XIV, whose father died of phthisis; who suffered from fistula in his youth; who was addicted to exhausting pleasures; who was perpetually exposed to all kinds of mental annoyance; and who certainly performed a large amount of hard work, happened, nevertheless, to live through the longest authentic reign ever recorded—namely, seventy-two years. His teeth were very unsound, and, before middle age, all those in the upper jaw had been lost or reduced to carious stumps. As the King had a large appetite, and could not masticate his food, he was subject to severe dyspepsia. Throughout the whole of the memorable year 1685, he

suffered from osteitis of the upper jaw, following the extraction of a stump, with suppuration in the antrum and decomposition of the pus. On one occasion the carious alveolus was touched fourteen times in one day with the actual cautery. Dr. David concludes by pointing out that the Great King had, in this illness alone, quite enough to try his patience; and it is not surprising that some persons have suggested that to this dental affection may be attributed the evil state of mind which caused Louis XIV to sign the revocation of the Edict of Nantes in November, 1685.

SMALL-POX IN JAMAICA.

According to the latest advices from Jamaica the epidemic of small-pox which has prevailed on the island since March, 1886, shows but slight signs of abatement. Between March 13th and 27th last, 330 cases occurred, of which 19 were fatal. Of these, 50 cases and 7 deaths occurred in Kingston. Since the commencement of the epidemic there have been altogether 6,182 cases and 590 deaths, of which 1,990 cases and 353 deaths were in Kingston.

ROYAL PATRONAGE OF SCIENTIFIC MEDICINE.

The King of the Belgians honoured the Society of Public Medicine with his presence at its recent session, which was held on the tenth anniversary of its foundation. At this meeting a gold medal was presented to M. Kuborn in recognition of his valuable services. During one of the preliminary meetings the Society agreed to support a request from the Liége Medico-Chirurgical Society to the Legislative Chambers for the institution of an exhaustive inquiry into the condition of prostitution in Belgium.

A PROFESSOR FOUND DEAD ON A TRICYCLE.

A gloom has been thrown over the medical faculty of the University of Freiburg (Baden) by the sudden death of Dr. Hack, Professor of Rhino-laryngology, Dermatology, and Syphilis. As a vehicle was going along a road in the Untermunsterthal, not far from Staufen, the driver saw a tricyclist sitting still on his machine in the middle of the road, and called out to him to get out of the way. The tricyclist not moving, he went up to him, and then saw that his legs and arms were hanging loosely down, and that the occupant of the tricycle was, in fact, the lifeless body of Professor Hack. It seems that the cause of death must have been a sudden failure of the heart's action.

XYLOL IN SMALL-POX.

Otvoes has used xylol in 315 cases of small-pox with excellent results. This substance is recommended by Zuelza as an antiseptic; it coagulates albumen. Otvoes administered it in wine, in doses of two to three grammes a day. The total amount given was sometimes twenty-four grammes. Otvoes gives the following formula for the administration of xylol:—℞ Pure xylol, 3 grammes; menthol water, distilled water, āā 50 grammes; cinnamon syrup, 10 grammes. One spoonful every two hours.

LEARNED M.P.'S.

A correspondent writes to us to point out that "the House of Commons contains a fair number of members of the medical profession. Of these not a few possess university titles. The epithet 'learned' appears to be monopolised by the legal profession. The other courtesy adjective, 'gallant,' in common use, is so loosely employed that it embraces carpet warriors and members of the auxiliary forces, though it does not include members of the medical profession who have worn the Queen's uniform before the enemy. The medical is, I understand, one of the three 'learned' professions. I should like, then, to be informed why the House of Commons does not appear to have grasped the fact that, in reserving the honorary title of 'learned' for the exclusive benefit of its legal members, a slight of omission is being perpetrated upon the medical members of the House."

BRAIN SURGERY.

Mr. Victor Horsley, F.R.S. Professor Superintendent of the Brown Institute, will read a paper on the Operation of Trephining during the Neolithic Period in Europe, and on the Probable Method and Object of its Performance, at the Anthropological Institute of Great Britain and Ireland, 3, Hanover Square, W., on Tuesday next, May 10th, at 8.30. The chair will be taken by Mr. Francis Galton, F.R.S., President of the Institute. Members of the medical profession are invited to attend and take part in the debate which will follow. In order to give sufficient time to the paper and debate, this is the only communication which will be received that evening.

THE LATE M. GOSSELIN.

M. Gosselin, Professor of Clinical Surgery in the Faculty of Medicine of Paris, and Surgeon to the Charité Hospital, died on Saturday last at the age of 69. He was well known as a writer on surgical subjects, his most important work being a collected series of clinical lectures. He had also written on nasal and pharyngeal polypi, on abdominal hernia, and on synovial cysts. He was a Member of the Institute, and a prominent member of scientific society in France.

RABIES AMONG CATTLE.

An inquiry was instituted on Saturday last by the authorities at Rochdale into the alleged outbreak of rabies among cattle and sheep. It was ascertained that several sheep and cattle had been bitten by a black and white fox-terrier, which has since been certified to have been rabid. Three cows (bitten in the nose) soon showed symptoms of hydrophobia; of these two died and the third was killed. Mr. Ingham, the veterinary surgeon by whom the dead bodies of the cattle were examined, has certified that the disease was rabies. The sheep have as yet shown no symptoms of the malady.

PREVENTIVE INOCULATIONS FOR YELLOW FEVER.

At a recent meeting of the Académie des Sciences, MM. Domingos, Freire, Gibier, and Rebourgeon communicated a note upon the microbe of yellow fever and its attenuation. These microbes are micrococci, collected together in long, sinuous rows. They may be developed in cultivations. Yellow fever is transmitted to animals (rabbits, guinea-pigs, birds) by the injection of diseased matter or cultivation fluids. These fluids gradually lose their virulence, and may be converted into benign vaccine. At Rio Janeiro, thousands of persons have been inoculated with these attenuated cultivations.

THE MEDICAL PROFESSION IN ITALY.

There are in Italy 17 medical faculties which have the right to give medical diplomas. The number of diplomas conferred every year is, on the average, about 630. There are 14,467 doctors of surgery, 2,415 doctors of medicine, and 686 surgeons—in all, 17,568 practitioners: of these, 642 are in the army and 115 in the navy. The Faculty of Naples has the largest number of students, namely, 1,356. The number of pharmaceutical chemists is 11,347, although in 3,581 communes no apothecaries are to be found. The midwives number 9,860, each of whom attends on an average 80 cases in the year. There are 2,908 veterinary surgeons.

THE CAUSES OF ECTOPIA.

Dr. Magnussen, in an inaugural dissertation at Berlin, writes on the causes of ectopia of the bladder and intestines, with non-union of the symphysis pubis, describing three cases in Schröder's wards. He agrees with Ahlfeld's opinion that these persistent fissures in the middle line of the body are due to excessive traction of an abnormally distended umbilical vesicle and allantois, which pulls the viscera forwards. This distension is due to a general dropsical tendency in the fœtal membranes and appendages. In all the three cases spina bifida and meningocele, that is to say, dropsical processes in the vertebral region, were present.

GUY'S HOSPITAL.

THE vacancy in the Junior Medical Staff of Guy's Hospital, caused by the death of Dr. Carrington, coming so soon after the death of Dr. Moxon, has naturally caused some curiosity in outside circles as to the steps which the Governors would take to fill the post. In response to the advertisements recently issued, thirteen candidates came forward for two assistant-physicianships, and as the result of a conference between a sub-committee of the Governors and the medical staff, we understand that three gentlemen have been recommended for appointment.

THE PULSE IN MORPHINOMANIA.

AT a recent meeting of the Académie des Sciences, MM. B. Ball, and O. Jennings described certain characteristics of the pulse in morphinomaniacs. The pulse is normal during the period of satisfaction, while the patient is still under the influence of a recent puncture. When he begins to feel renewed craving, the pulse presents a flat elevated surface; this indicates the diminution of cardiac impulse, and explains the sensation of weakness experienced by the patient. The presence of this flat surface is useful in the diagnosis of morphinomania. Treatment should be directed to the stimulation of the heart.

QUACKERY AT RYE.

CREDULITY and imposture have rarely been carried further than in the coarse imposition practised by two persons named Sandy and Carloo, described as "Indian eye-doctors," who were charged at Rye this week with obtaining money under false pretences. These quacks had informed a poor woman, who took her child, aged ten years to them, that each of the child's eyes contained a worm. The child was under treatment for about three weeks, during which time the alleged worms were extracted, at a cost of £2 4s. The child's eyesight naturally did not improve; and Mr. Woodman, in his medical evidence, stated that the substances removed, which had been preserved by the mother, were portions of matter such as could be taken from the conjunctival sac. The two men were committed for trial, and it is sadly significant that one of them had £80 in his possession.

OBSTETRICAL SOCIETY OF LONDON.

AT the meeting of this Society on Wednesday, May 4th, Mr. Lawson Tait exhibited a series of specimens illustrating inflammatory disease of the uterine appendages. Mr. Doran showed a Fallopian tube with an accessory ostium surrounded with fimbriæ. Dr. Phillips showed a fœtal head with meningocele and absence of the posterior arch of the atlas; the malformation had caused dystocia. Dr. Carter showed a fibro-myoma of the ovary weighing ten pounds and three-quarters: it was successfully removed during life. Mr. Butler-Smythe exhibited a new form of speculum; and Dr. Paramore exhibited, for Mr. Haslam, a new variety of midwifery forceps. A paper by Dr. Duncan on "Hæmorrhagic Parametritis" was read, and was followed by an active discussion. The Secretary also read a most valuable contribution, prepared by Dr. Lowers, on "The Frequency of Pathological Conditions of the Fallopian Tubes, as determined by Observations in the *Post-mortem* Room of the London Hospital;" this was followed by a very earnest debate, in which Drs. Galabin, Horrocks, Imlach, Carter, Matthews Duncan, William Duncan, Mr. Tait, and others, took part. The practice, new to this Society, of providing printed abstracts for the Fellows and visitors present proved particularly serviceable on this occasion, as the summary of Dr. Lewers's paper included a valuable series of tables, which greatly aided the audience in following the reading of the paper and the subsequent discussion.

TYPHUS FEVER IN FLINT AND IN CARLISLE.

A SERIOUS outbreak of typhus fever has recently occurred in the little town of Flint, North Wales, and we regret to learn that Mr. T. A. Evans, the medical officer of health, died on April 24th from an attack of the disease which he had contracted in the course of his practice. The outbreak does not appear to have been recognised at first as one of typhus fever, but there seems to be little doubt that at least a dozen cases of the disease, more or less severe, have recently occurred in a particular quarter of the town. On learning the outbreak, the Local Government Board despatched one of their medical inspectors, Mr. Spear, to inquire into the matter, and, in the absence of a health officer, he was able to give the local authority timely and most valuable advice. The authority have, unfortunately, no hospital for infectious cases, and are, therefore, without the most effective means of controlling the spread of the disorder, but cleansing and disinfection of persons and things have been undertaken by the authority. On April 22nd, Mr. W. Brown, the medical officer of health for Carlisle, presented to the Town Council a report respecting a formidable outbreak of typhus fever in Caldewgate. On April 15th, information was received from the Fever Hospital that a case of fever admitted on April 7th from Caldewgate, and two other cases admitted subsequently from the same locality, were cases of typhus. After that six cases of the disease were sent to the Fever Hospital, also from the same locality, and up to the 22nd, nine cases had been removed from four houses. All the cases were isolated at the Fever Hospital, and precise instructions were given for the disinfection of the houses and the destruction of articles of clothing and bedding. The disease is supposed to have been spread at the outset through a "wake." It is hoped that the special efforts of the health officer to stamp out the disease have been successful. No further case has become known.

SPONTANEOUS PURIFICATION OF RIVER WATER.

IT is well known that rivers which in flowing through towns become charged with various organic substances by degrees get rid of these impurities as they flow to a considerable distance. This can only be due to the oxidation of these organic matters, and M. Emich, who has studied the causes of this oxidation, arrives at the following conclusions. If impure water be left undisturbed, and in contact with atmospheric air, it is purified in the same time as it would be by being shaken in contact with the air. Ozone is not perceptibly quicker in action than ordinary air; if impure water be boiled and left in contact only with air deprived of germs by filtration through cotton, the organic matters will remain in it. If the deposit precipitated by water kept in contact with the air be mixed with water previously boiled, organic matter quickly disappears. The process of oxidation consists in the transformation of ammonia and its compounds into nitric acid and nitrogen. These facts show that the spontaneous purification of water containing germs results from the development of organisms which act in the same way as the nitric ferment discovered by Schloesing.

METROPOLITAN WATER-SUPPLY.

A CORRESPONDENT draws our attention to the fact that the Stain Hill Park Estate at Hampton, which immediately adjoins the land used by the Grand Junction Waterworks Company for underground filtration purposes, and is also in close proximity to land similarly used by the Southwark and Vauxhall Water Company, is advertised to be sold as a building-estate, and he points out that if this project be carried into effect, the purity of the water supplied by these companies may be seriously endangered. The land owned by the Grand Junction Company consists mainly of a bed of gravel overlying blue clay, and some years ago, when carrying out works on this land, the Company discovered its capabilities of naturally filtering the water drawn from the Thames, as well as of affording itself much valuable spring water. They thereupon constructed the necessary works for utilising the natural filter-bed, and such works have been in operation since the beginning of 1882. Following this example, the Southwark and Vauxhall Company have procured some adjoining land and put it to a similar use. The value of the new system in supplying clear water during the times that the river is in flood and turbid is highly praised in the reports of the late Sir F. Bolton, and it would

undoubtedly be a misfortune, so long as the Thames remains the chief source of our metropolitan water-supply, if any such means of rendering the water more pure were interfered with. The threatened danger arises from the fact that there is no system of sewerage in operation in the neighbourhood, and if, therefore, the Stain Hill Park Estate be built upon, the houses will of necessity be drained into cesspools, which, however well constructed, will always be liable to pollute the subsoil by leakage or overflow. Such a state of things in the immediate vicinity of the unprotected underground filtration-beds of two large water companies, which supply between them more than a million people, is obviously quite inadmissible; and it is to be hoped that either the Water Companies will themselves purchase the land in question, and thus save it from being built over, or will take such effectual steps as will secure their services from all risk of contamination. We trust that the immediate attention of the Local Government Board and the official water examiner will be given to the matter.

THE ARMY MEDICAL DEPARTMENT REPORTS.

An army-surgeon calls attention to the dissatisfaction which exists in the Medical Staff with regard to the manner in which the Army Medical Department Report is issued and published. Two parts are published annually, forming one volume, but these are only issued to Government officials and to station-hospitals. The official reports which are printed in the first part are the only reports which are issued to the public; indeed the first part can alone be purchased by the public. All voluntary contributions which are contained in the second part, called the Appendix, are thus excluded from publication. This discourages members of the staff from writing reports, and valuable stores of information are thus lost. Foreign army-surgeons in particular are led by this arrangement to form an unfavourable estimate of the scientific spirit of their British colleagues. A distinguished foreign military surgeon recently wrote to inquire if the British army-surgeons ever wrote at all, as he had been unable to find any evidence that such was the case. This is a matter to which we have more than once directed attention in reviewing the volumes. Dr. Farquharson, in the House of Commons, also alluded to the fact that certain copies of those reports were published with, and others without, the appendix. The copies presented to Members of Parliament are identical with those which are alone open to purchase by the public, and are destitute of the appendix. In noticing the last volume, at the commencement of this year, we again reverted to this subject in the following terms: "We are at a loss to conjecture the purpose which the publishing department of the War Office had in view in adopting this arrangement; as the appendix of papers was already in type, the insertion of it in all the copies would have only added a small fraction to the cost, and this might easily have been met by a proportionately increased charge to purchasers, while the discouraging effect such a suppression of their papers was calculated to produce on the medical officers who contributed them was quite obvious. However, as the attention of the Minister for War has been called to the matter in the House of Commons, we have no doubt that these departmental reports will be issued in a manner more just to the medical officers and more conducive to the public interests in future."

THE MEDICAL AND DENTAL REGISTERS.

We have received from the Registrar of the General Medical Council a copy of the *Medical Register* for 1887, which we are informed has, during the past year, been subjected to more thorough revision than in any previous year. This, together with some important improvements and additions, considerably adds to the value of the volume. One very marked improvement is the adoption of initial headings in full-bodied type at the top of each page; by this means reference is greatly facilitated. In order to render the volume as complete as it was possible to make it, no pains have been spared by its careful editor, Mr. Miller, by whom circular letters of inquiry were sent out early in the year to all practitioners, and in November voting-papers in connection with the election of direct representatives. As the result of these inquiries, a very large number of corrections have been introduced. The statistical information is very complete, and in addition to the number of practitioners registered in different divisions of the United Kingdom, the number resident in the three divisions is now given. In the introductory part of the work the new "Medical Act" of 1886 has been printed, together with the older Acts, for the information of the profession, and a table of the qualifications in sanitary science that become registrable under the new Act. From Table E, showing the total number and percentage of persons registered from the beginning of registration, from 1858 up to January 1st, 1887, it is seen that the number registered in England has been 28,659, in Scotland 7,214, in Ireland 7,127, giving a total of 43,000. The number of persons now remaining on the *Register* is, in England 17,112, in Scotland 5,023, in Ireland 4,317. This shows a slight increase in England, and a decrease in Scotland and Ireland. The number added by registration during the year 1886 was for England 787, for Scotland 404, and for Ireland 240, a total of 1,431. England shows the same number as in 1885, while Scotland and Ireland show an increase. The number of persons struck off the *Register* in consequence of death was 606, as against 711 in 1885. The total number of medical practitioners on the *Register* up to December 31st, 1886, was 26,452, an increase of 454 as compared with the foregoing year. The *Dental Register*, also from the General Medical Council Office, gives the number of registered dentists in the United Kingdom as 5,200, as against 5,198. Of this number 932 are Licentiates in Dentistry.

EMIST'S MISTAKE.

It is a very awkward mistake for a chemist, in compounding a prescription, to supply a mixture containing only 60 per cent. of the amount ordered of the active and most important ingredient. This is particularly unfortunate where the medicine in question is an active and rather costly drug, such as quinine. There could be no doubt whatever, therefore, that Mr. d'Eyncourt acted wisely in declining to treat as venial the mistake of a druggist who, in making up a test prescription of the local board inspector, supplied a mixture containing only 14 grains of the sulphate of quinine, when 24 were ordered. To the credit of pharmaceutical chemists, however, be it said that we believe such mistakes are rare. The vigilance on the part of the public analyst in such matters is greatly to be praised, and it is especially called for in poor neighbourhoods; and the more so that the supervision once exercised by some of our medical corporations over the manner in which prescriptions are prepared by chemists and druggists is no longer maintained, and they are now at liberty to supply cheap drugs and bad drugs, and to use inferior preparations and spurious substitutes, as their conscience may allow; or at any rate without any interference of the medical corporations. Great pains are taken to construct a *Pharmacopœia*, but none at all to see that the extracts and infusions supplied are made according to pharmacopœial direction, and from materials such as the Colleges prescribe and approve.

THE MEDICAL STUDENTS' REGISTER.

The official list of medical students registered during the year 1886, issued from the office of the General Medical Council during the past week, contains a great deal of useful supplementary information bearing on the subject of the registration of students, including a list of the Universities and other examining bodies whose examinations fulfil the conditions of the Council as regards preliminary education, together with a list of places at which students are registered as having commenced medical study during the year, and the number of students registered at each. From a table giving a summary of the number of medical students registered during each year in each of the three divisions of the United Kingdom, it is seen that the number of students registered in England was 915, as against 910 in the previous

year; in Scotland 626, as against 639 in 1885; and in Ireland 367, as against 335. The total number of students registered during the year in the three divisions of the United Kingdom was 1,908, against 1,884 in 1885. This number, though an increase of 24 on the previous year, is substantially smaller than the totals of 1879, 1880, 1881, and 1884. Of the places whereat students were registered as having commenced medical study, the University of Edinburgh claims this year, as last, the highest number of students—namely, 280; the University of Glasgow 137, the University of Cambridge 90, St. Bartholomew's Hospital 77, University College Hospital 58. The highest number in Ireland is furnished by the Dublin Ledwich Medical School, 56, and Dublin Carmichael Medical College, 55. In the Indian, Colonial, and Foreign list, McGill University, Montreal, is credited with 11. The above numbers do not indicate the total number of first-year students, as many are registered prior to entering. The regulations of the General Medical Council for the examination and registration of medical students are also given. The volume has been prepared by the Registrar (Mr. W. J. C. Miller), and is marked by completeness and great clearness of detail.

STATISTICS OF TYPHOID FEVER.

In an Amsterdam graduation thesis, by Dr. M. Niemeijer, on the Statistics of Typhoid Fever, out of fifty cases in which complete observations were recorded, prodromata occurred in twenty-five, rigors in sixteen, "cold shivering" in one, pain in the left side in seven, diarrhœa in forty-two, splenic enlargement in forty-eight, rash in forty-seven, ileo-cæcal gurgling in nineteen, and pain in the same region in twenty, bronchial catarrh in forty-three, albuminuria in twelve, in three of which cystitis followed. In sixty-three cases, relapses occurred six times. With regard to complications, out of seventy-three cases, intestinal hæmorrhage occurred in five; peritonitis in three, perforation occurring in two of these. Other complications were: pharyngitis, one; acute follicular sore-throat, one; parotitis, one; epistaxis, three; laryngeal perichondritis, one; pulmonary infiltration, thirteen; pleurisy with effusion, three; thrombus of the crural vein, one; acute nephritis, one, in a somewhat doubtful case; nephrolithiasis, two; herpes labialis, three; cutaneous hæmorrhage, three; periostitis of the tibia, one; joint-affections, three; meningitis, one; neuralgia of the sole, one; profuse perspiration, two; polyuria, one; mental disturbance, four; deafness, five; bleeding from the ear, one. The total number of patients on whom observations were made was one hundred and ninety-four. Of these, twenty, or 10.3 per cent., died, the male mortality being decidedly higher than that occurring amongst female patients—12.5 per cent., as compared with 6 per cent.

MEDICAL SOCIETY OF LONDON.

On Monday evening, May 2nd, the annual *conversazione* of the Society was held at its rooms in Chandos Street. A very large number of Fellows was present. Some admirable modern etchings and mezzotints, together with photographs of landscapes, oil paintings, etc., were distributed about the rooms, and, besides exhibiting a number of specimens of art pottery by Messrs. Martin Brothers, Mr. R. Martin himself worked on the potter's-wheel during the evening. The oration on Abdominal Section for the Treatment of Intra-peritoneal Injury was delivered by Sir William Mac Cormac, and will be found at page 975 in this day's JOURNAL.

PURIFICATION OF DRINKING-WATER IN PANAMA.

At a recent meeting of the Académie de Médecine, M. Ad. Nicolas read a paper on the difficulty of supplying pure water to the working men engaged upon the Panama Canal. The great prevalence of yellow fever and diarrhœa in the Isthmus of Panama renders the water of that country unsafe to drink. The river Obispo, which reaches the worksheds now established at Panama, required purification before it could be used without danger. M. Nicolas decided to submit it to filtration by MM. Chamberland and Maignen's apparatus. A reservoir of galvanised iron, with taps, was constructed to hold 10,000 litres of water. Two batteries of Chamberland's filters, each containing five filters, and placed on the adjoining pipe, supplied 10,000 litres in twenty-four hours at a pressure of five mètres. Five mètres above the filters, and connected with them by a pipe, was placed a cistern, of which the dimensions were in proportion to those of the filters. The water-pipe emptied its contents into this cistern. By means of this apparatus six litres of filtered water are supplied daily to each person.

SCOTLAND.

ROYAL COLLEGE OF PHYSICIANS, EDINBURGH.

Dr. J. Batty Tuke has been elected by the Royal College of Physicians, Edinburgh, its representative on the General Medical Council in place of Dr. D. Rutherford Haldane, deceased.

SUMMER SESSION, EDINBURGH.

The summer session in Edinburgh University and Medical School opened on Tuesday, May 3rd. The classes were well attended; there were no special opening lectures. On the same day the examinations in clinical medicine and clinical surgery, in connection with the final professional examination for graduation, began in the wards of the Royal Infirmary. An increased number of candidates have entered their names for this examination.

ROYAL SOCIETY, EDINBURGH.

At a meeting of the Royal Society, Edinburgh, held on May 2nd, and presided over by Sir Douglas Maclagan, M.D., a paper was read by Professor J. B. Haycraft (now in charge of the physiological department, Edinburgh University), on the Sense of Smell. Assuming the truth of the vibration hypothesis with regard to the senses of sight and hearing, he pointed out that that was an indication that the members of a certain group of subjects behaved in the same way to the sensory organs of sight, as to the olfactory organ, but he admitted at the same time that it was dangerous to proceed beyond the truth of the general fact that it was possible to establish a close relationship between chemical composition and the effects which allied chemical substances had on the organs of sensation. At the same meeting, Professor Crum Brown read a paper on the Physics of Noise, and spoke of some instruments he was constructing in connection with the subject.

ROYAL EDINBURGH HOSPITAL FOR SICK CHILDREN.

During the month of April, 118 cases were treated in the wards of the Sick Children's Hospital, Edinburgh, of whom 64 were inmates at the beginning of the month. There were discharged 43 cured or recovered and 9 relieved. The average number of cases daily was 64. In the out-door department 516 were treated as dispensary cases, of whom 14 were vaccinations. Of 274 new cases, 217 were from the city, 42 from Leith, and 15 from the country. The total number of cases treated during the month was 634.

UNIVERSITY OF ST. ANDREWS.

The movement, lately inaugurated by the Senatus of St. Andrews University, to extend the science and medical teaching of the University is receiving a large amount of support from alumni of the University. Two petitions have been sent to the Secretary of State for Scotland, one from the Senatus and one from graduates of the University, to which no fewer than 800 names were appended. A third petition is now to be sent, and this has already been signed by 200 students out of 216 at present studying at St. Andrews University. Attention is directed to the fact that the University already possesses a number of medical bursaries, some of which are of considerable value, and that to these will soon be added no fewer than thirty new

bursaries (mostly for students of medicine), of the annual value each of from £30 to £35. The latter are the proceeds of a bequest of £30,000 to the University of St. Andrews from the late Sir W. T. Thomson.

GLASGOW UNIVERSITY.

THE winter session of Glasgow University closed on April 29th, with the graduation ceremony, the degrees being conferred by the Chancellor, the Earl of Stair. Among the honorary graduates who received the degree of LL.D., were Mr. James Bonar, of the Civil Service Commission, Mr. Alexander Buchan, of the Scottish Meteorological Society, Mr. A. S. Murray, of the British Museum, Mr. F. S. Underwood, American Consul at Glasgow, and Dr. Hughlings Jackson. Six Bachelors of Medicine received the doctorate, and there were 61 graduates in Arts. In the address with which Principal Caird brought the proceedings to a close, public acknowledgment was made of recent bequests and benefactions to the University. These represent a sum of no less than £30,800, of which £5,800 has been bequeathed to the University for scholarships, bursaries, etc., £5,000 for the completion of the tower,' and £20,000 for the foundation of a lectureship in natural theology. The summer medical session opened on May 2nd.

GLASGOW UNIVERSITY GENERAL COUNCIL.

THE half-yearly meeting of the General Council was held in the Randolph Hall of the University on April 27th, under the presidency of Vice-Chancellor Caird. Dr. Ebenezer Duncan was appointed to the place on the Business Committee vacant by the death of Dr. Eben. Watson. A very lengthy report was presented from the Business Committee. In connection with the proposed extension of University teaching to the people, the report contained the outline of a scheme proposed by the Senate and approved by the University Court, according to which the Senate was authorised to take steps to constitute a Board, consisting of professors, graduates, and others, women also being eligible, for carrying out the necessary arrangements. The report also pointed out the need of new chairs, and lectureships in history, modern languages and literature, political economy, and social science. In science, chairs and lectureships were required in mineralogy, various branches of engineering, the application of science to agriculture and the industrial arts; and, in medicine, on the subjects of pathology and mental disease. Three orders of teachers were suggested—namely, senior professors and junior professors, appointed *ad vitam aut culpam*, and lecturers, appointed for a term of years. Professor Caird pointed out that, if it were adopted, much help might be obtained from the public. The University had been receiving during the last five or six years at the rate of £10,000 a year, irrespective of Lord Gifford's bequest, in benefactions, the greater part of which had gone to found bursaries. The attention of the public might be effectively directed to the fact that what was most needed was new professorships and lectureships. A motion by Dr. McVail, that a representation be sent to the University Court that it is desirable to ascertain, by taking opinion of counsel and otherwise, as they may deem fit, the rights and privileges of the Council in the election of a representative to the General Medical Council, was carried against an amendment of Professor Leishman's.

IRELAND.

HOSPITAL FOR DISEASES OF THE CHEST IN DUBLIN.

THE sum of £6,545 has been subscribed for the erection of the Victoria Hospital for Diseases of the Chest, in commemoration of the Jubilee in Dublin. Sir Edward Guinness heads the list with £5,000.

DEATH FROM HYDROPHOBIA.

A DEATH from hydrophobia has recently occurred in Limerick Workhouse Hospital. The deceased, a child aged 3 years, was bitten last month in the head by a hound. The wound, which was not a serious one, occasioned no anxiety until a few days before death, when unmistakable symptoms of hydrophobia manifested themselves.

NEW BATHS IN BELFAST.

THE Corporation has decided to erect a new set of public baths in Ormean Avenue for the accommodation of the inhabitants of the southern portion of the town.

THOMPSON MEMORIAL HOME FOR INCURABLES, LISBURN.

THE report of the Board of Management of this charity, for the year ending December 31st, 1886, shows the number of patients admitted during the year to have been 24, making a total of 36. There were 7 deaths. The total yearly expenditure on each patient was £43 16s. 8d., or 2s. 4.82d. per day.

THE LATE DR. GEORGE WELDON, OF GOREY.

THIS gentleman died last March from blood-poisoning, contracted from a case of cellulitis in a dispensary patient. He was for thirty years medical officer of Gorey Dispensary, and during that long period not a single complaint of neglect of duty was brought against him. As, unfortunately, he has left a widow and five children without support, a committee has been formed to receive subscriptions, and up to the present time about £50 has been received.

WOUND OF THE HEART.

A MAN named Mulcahy was shot recently in Cork, and died nine hours after removal to the Infirmary. It appears that the bullet passed through the pericardium, the right ventricle of the heart, the left auricle, and again through the pericardium to the front of the spinal column. The interesting point of the case is that the man lived for nine hours after the infliction of such a wound.

THE LEGAL STATUS OF THE APOTHECARIES' HALL.

THE weight of legal opinion seems, we are informed, to be decidedly in favour of the contention of the Apothecaries' Hall of Dublin. That body intends to lay before the General Medical Council opinions written, when the question was previously raised, by Sir Joseph Napier (afterwards Lord Chancellor of Ireland), and Sir Richard Bethell (afterwards Lord Westbury, and Lord Chancellor of England). Both these eminent lawyers held that a Licentiate of the Society of Apothecaries of Dublin could practise medicine, and act as a legally qualified medical practitioner. More legal recent opinions are to the effect that the Act of 1886 fully confirm these earlier opinions.

THE LEDWICH SCHOOL OF MEDICINE.

AT the termination of the winter session, 1886-87, the following gentlemen were awarded prizes for superior answering: Junior Anatomy, Henry Cullinan, 1st; J. C. Ryan, 2nd. Senior Anatomy, D. Shanahan, 1st; J. P. O'Meara, 2nd. Surgery, W. J. Thompson, 1st; D. L. Hamilton, 2nd. Practice of Medicine and Pathology, J. D. Sexton, 1st; Patrick Rowan, 2nd. Physiology, J. R. Steen, 1st; T. B. Wilkinson, 2nd. Midwifery, D. L. Hamilton. Theoretical Chemistry, C. M. O'Brien.

HEALTH OF DUBLIN: QUARTERLY REPORT.

DURING the March quarter, the births registered in the Dublin Registration District amounted to 2,584, and the deaths to 2,723. Deaths from zymotic diseases numbered 212, being 106 under the average for the previous quarter, and 204, or 49 per cent., below the average for the first quarter of the ten years 1877-86. Scarlet fever caused 59 deaths; fever, 55; whooping-cough, 27; and diarrhœa and dysentery, 31. Diseases of the respiratory system caused 715 deaths, and comprised 500 from bronchitis, 113 from pneumonia, and 17 from croup. Two hundred and thirty deaths of children were ascribed to convulsions; while 39 were due to apoplexy, 116 to other diseases of the brain and nervous system, and 197 to diseases of the circulatory system. Phthisis caused 340 deaths; mesenteric disease, 45; and cancer, 63.

HEALTH OF BELFAST.

DR. SAMUEL BROWNE, Medical Superintendent of Health, reports that, during the month of April, 28 cases of zymotic disease had been returned as having occurred among dispensary patients, 13 of these being typhus fever. In the entire district there had been 46 deaths from zymotic disease, of which 21 were from whooping-cough. There were 79 deaths from phthisis, and 128 from diseases of the respiratory organs. The total number of births was 631, and the deaths 490. The average death-rate from all causes was 28.4, from diseases of the lungs 11.9, from zymotic diseases 2.3. The health of the town during April was much the same as during March, the weather continuing trying and changeable. The zymotic rate continues relatively low.

ROYAL COLLEGE OF SURGEONS.

AN extraordinary meeting of the Council was held at the College on Thursday, the 5th instant. The minutes of the Quarterly Council on April 14th were read and confirmed.

The Secretary reported the decease, on April 19th, of Mr. John Chatto, the Librarian, and it was referred to the Library Committee to report to the Council what steps should be taken to fill up the vacancy.

The President reported that Sir James Paget had consented to deliver the first lecture on Cancer and Cancerous Diseases some time during the latter part of the present year.

A report was read from the Court of Examiners of candidates found qualified for the diploma of Member, and it was resolved that a copy of the report be sent to the various medical schools and hospitals. The Council resolved that diplomas of Membership be issued to the several persons whose names are included in the report.

A report from the Committee of Delegates of the Royal College of Physicians of London and of the Royal College of Surgeons of England on the question of the grant by the two Colleges of degrees in medicine and surgery was read and discussed for some time. It was deferred for further discussion till the ordinary Council to be held on Thursday next.

A report from the President, Mr. Savory, the Senior Vice-President, Mr. Jonathan Hutchinson, and Mr. Marshall, on the purposes to which the unoccupied ground on the Embankment belonging to the two Colleges can be applied, was read, and referred to the Committee on Extension of the College Premises to report thereon to the Council.

Sir Spencer Wells, on behalf of the subscribers, offered for the acceptance of the College the picture of the Council in 1884-85 by Mr. H. J. Brooks, which was accepted with thanks.

A letter was read from Mr. Bruce Clarke, Secretary, forwarding two resolutions adopted by the Association of Fellows requesting the Council to convene a general meeting of Fellows and Members to consider and discuss the proposed draft charter to be presented to the Privy Council, and to sanction the issue of copies of the proposed new charter to those Fellows and Members who may apply for them. It was resolved that the Council do not consider it expedient to convene a meeting of Fellows and Members to consider and discuss the proposed charter, the subjects to which it relates having been already submitted to previous meetings of Fellows and Members. It was resolved, however, that the Secretary be instructed to prepare an official abstract of the proposed new charter; and that the same, when completed, be issued to any Fellow or Member applying for it. Notification will be given by advertisement in the medical journals when the abstract is ready.

A letter from Mr. J. Howard Taylor, forwarding a resolution adopted by the students of the London Hospital, in favour of the grant by the two Colleges of the degree of M.D. Westminster, was read, and referred to the delegates of the two Colleges on granting degrees in medicine and surgery.

A letter was read from the Secretary to the Science and Art Department, South Kensington, offering, through the Secretary of State for Foreign Affairs, to furnish to the Austro-Hungarian Government the name of any delegate whom the Council may wish to nominate to attend the International Congress on Hygiene to be held in Vienna in September next, and Sir Spencer Wells was nominated to be the representative of the College at the Congress.

PARLIAMENTARY BILLS COMMITTEE.

Relative Rank. — *Lunacy Acts Amendment Bill.* — *Pharmacy Acts Amendment Bill.*—*Truck Law Amendment Bill.*

A MEETING of the Parliamentary Bills Committee of the British Medical Association was held on Tuesday, April 26th, at the offices of the Association, 429, Strand, when the following members were present:—

Mr. ERNEST HART, in the Chair.

Dr. Alfred Carpenter, Croydon	Dr. Phillips, Reading
Mr. Wickham Barnes, London	Dr. Macmillan, Hull
Dr. J. W. Browne	Dr. Mickle, London
Dr. Walter Dickson, London	Mr. Sibley, London
Dr. Holman, Reigate	Mr. Wallace, London.

The minutes of the last meeting having been printed and circulated amongst the members, were signed as correct.

Read letters of apology for non-attendance from Dr. Henry Barnes, Mr. Balding, Dr. Bruce Goff, Dr. Ogilvie Grant, Dr. A. J. Harrison, Dr. Eyton-Jones, Mr. J. Prankerd, Dr. Charles Orton, Mr. Spanton, Dr. Edward Whittle.

A letter was read from Dr. E. Whittle, of Liverpool, regretting that, owing to illness, he would be unable to continue to represent the Lancashire and Cheshire Branch on the Committee, and suggesting the appointment of a successor.

The CHAIRMAN said he was sure it would be the wish of the Committee to express their sincere regret that Dr. Whittle was unable to continue his attendance on the Committee; and it was decided to forward a letter to Dr. Whittle accordingly, and to request the Branch to nominate another representative.

Relative Rank.—The CHAIRMAN asked Dr. Carpenter, who had been good enough to continue the proceedings in this matter in his absence, to report on the deputation which had waited on Mr. Stanhope, the Secretary of State for War.

Dr. CARPENTER said there was extreme regret at the Chairman's temporary absence, because that made a hiatus in the work which he had begun, and which no one was so well able to carry to a successful issue. The deputation which had waited upon Mr. Secretary Stanhope to insist on the points raised in the previous communication by Mr. Ernest Hart to the War Office, consisted of himself and Mr. Fowke (representing the Parliamentary Bills Committee), Mr. Macnamara, Surgeon-General Maclean, of Netley; Sir Guyer Hunter, M.P. (who introduced the deputation), and several other Members of Parliament. It was not necessary for him to do more than to refer the members of the Committee to the report of the proceedings which had appeared in the JOURNAL (which no doubt they had read), and to say that they were courteously received by Mr. Stanhope, who expressed his desire to remove the mischief that the Warrant had produced; and when they explained to him the very large amount of feeling which had been excited in the profession, both in the army and amongst the civil members of the profession, Mr. Stanhope expressed his astonishment, and said certainly every effort should be made to remedy the evil such as it was. Very soon afterwards the proposed alterations in the Warrant were sent to the Chairman of the Committee, and immediately published in the JOURNAL. He (Dr. Carpenter) thereupon wrote to Sir Ralph Thompson, saying that he felt it did not meet the justice of the case, and that he was afraid it would not be satisfactory to the service, inasmuch as Mr. Stanhope had stated at the interview that the question was one of sentiment, that he had, in trying to deal with the subject, inadvertently destroyed that sentiment, and that he himself had stated that nothing had been taken from the profession, and he (Dr. Carpenter) argued, therefore, nothing could be restored to it by any restoration of the supposed position which medical officers occupied in the army; and that the only proper course to be adopted was to give them honorary rank. To that letter he (Dr. Carpenter) had had a reply stating that it would be fully and carefully considered by Mr. Secretary Stanhope. Dr. Carpenter concluded by saying he had received a number of letters from army medical officers in different parts of the country approving of the course taken by the deputation, and expressing extreme regret at the change which the War Office proposed to make, and stating that in their opinion it would be perfectly unsatisfactory, and not capable of restoring the medical officers to their proper position.

Mr. WICKHAM BARNES read a letter from an army medical officer

dealing with the subject of relative rank; and further letters on the subject, received from eminent officers in the Army Medical Service, were read by the CHAIRMAN approving of the action taken by the Committee in this matter.

The CHAIRMAN said he had received a mass of approving letters and telegrams from the medical officers of Malta, Madras, Lucknow, Rawal Pindi, Poona, Allahabad, and from the medical officers of both services in Rangoon, Burma, also from Dr. Kirkpatrick a letter signed by a number of well-known and influential retired medical officers of the British and Indian armies in Edinburgh, together with a copy of a letter addressed to the Royal Colleges of Physicians and Surgeons, Edinburgh, signed by very distinguished army surgeons, requesting their aid in urging upon the Secretary of State for War the importance of restoring some recognised rank to the medical officers in the public services. These letters were put in circulation for signature before the deputation of the Parliamentary Bills Committee, but it was the opinion of the signatories that the communications should still be forwarded to the Colleges at Edinburgh, with the view of enlisting their assistance. The Chairman, continuing, said the position seemed to be a very anxious one, and one which required very deliberate and careful action on the part of the Committee, because although, no doubt, a very large proportion of army medical officers desired to take this opportunity to secure for themselves honorary rank, such as that which the Pay and Commissariat Departments now had, on the other hand, a few influential persons in the department were opposed to it. They had to consider exactly what honorary rank meant as granted to those departments; and they had to consider exactly what they believed they should properly ask for on their behalf as a civil profession. He (the Chairman) did not think that the concession which Mr. Stanhope had made, although no doubt intended to be so, was adequate to the occasion, and if they would allow him, he would point out in what respect it failed precisely to restore even that which had been taken away. That was the first point, for it professed to restore what had been taken away. The demand for honorary rank was a demand for something more than had been taken away. The representation now made was that Mr. Stanhope, by abolishing the words "relative rank," and by declaring that it had no meaning, had dealt a blow at the status which army medical officers held in military circles, which could not be repaired except by giving distinctive rank of some kind. That representation was one which they must hold very strongly in mind, and one which he thought must guide their future action, as well as the future action of the War Office. And he thought they were bound, on behalf of the Army Medical Department, to ask that something should be done which would define, in a manner that should be plain and apparent to everyone, precisely their relative status in the army, and their rank in respect to boards, ceremonials, social position, mess, precedence, control of the hospital staff, and other things which were not met by privileges of quarters or by allowances. He (the Chairman) thought they were entitled to ask that they should have some sort of a definite and plain indication of the rank of the military medical officer. The contention was—and he thought it was a just one—that the War Office had dealt a blow at the previous state of things in two ways. The first was a very insidious attack. Up to within some months ago, the *Army List* always appeared with a stated relative rank, and the date of attainment of that relative rank opposite to the name of each officer, showing not only his medical designation, but also the date on which he attained the rank or status to which he was relatively entitled in virtue of seniority. That was removed from the *Army List* without any notice to anyone. The *Army List* (an official publication) ceased to have opposite the name of the medical officer a statement of what was his seniority, and his relation to the other military officers of Her Majesty's army. That was before the new Warrant was issued. Then appeared the new Warrant, which was stated—and he had no doubt quite accurately stated—by Mr. Stanhope not to have been precisely aimed at the Medical Service, but to have had some other meaning which it was difficult altogether to understand in respect to relative rank which was given to other military officers. If that were so, the argument was all the stronger for seeing that medical officers should not suffer by a change which was not meant to include them, and which did not arise out of any inconvenience felt by the position which medical officers occupied. The concession made in the proposed alteration of articles in the Warrant as to rank, communicated in the letter of Sir Ralph Thompson, of April 12th, defined the status as to precedence and other advantages which each grade of the Army Medical Service should have; but it did not provide how and where that should appear as to each medical officer, and there was nothing to indicate other than the Warrant what was the grade or relative status of each medical officer, nor what was the date at which he attained that. And he thought that even if the object were only to replace medical officers in the position which they precisely held before, at least it must be considered that they were bound in some way to designate in the *Army List* their relative status (whether they called it relative rank or not), and the date at which each medical officer attained that status, because it was very important in the army to know what was the seniority of the rank; and the Army Medical Warrant was not always at hand. But beyond this they were face to face with the fact that a large proportion of very influential members of the service say: "Henceforth, as relative rank is abolished, it is necessary that some title or designation of rank shall be given, which shall plainly indicate what is the relative status of each medical officer." In the Commissariat and Pay Departments one who had the relative rank of Colonel was called "Colonel." He became to all intents and purposes "Colonel," and he used habitually that title. If honorary rank for medical officers were to mean that one surgeon should be known as "Colonel," and another as "Captain," and another as "Major," dropping their medical designation, there were many eminent men in the service who would object to it, and there were many men who thought that the title of "Surgeon-General" was more proper for a person having the title of Surgeon than that of "General." On that ground he thought that when the matter came before the Colleges and the general profession, they would like to see the army medical officers retain first of all their medical titles, and before any other title that they should take the word "Surgeon." Now, that did not seem to him (the Chairman) to conflict with the claim for an adequate and definite appellation which should carry with it an indication of relative rank attached to the word "Surgeon," and therefore he did not think they should be absolute in the language in which they addressed Mr. Stanhope, but rather leave the system of nomenclature open for adjustment, such as occurred to him at once in that matter. The precedent was quoted of the American and Italian armies. In those countries a Surgeon-General was known as "General." Thus, we read of "General Barnes, Surgeon-General of the American army," and the medical officer's name appeared in every list as "General," or "Colonel," or "Captain." It seemed to him (the Chairman) they might, with some good will on the part of the War Office to settle the question in a manner satisfactory to them, to the service, and to the profession, arrive at some adequate formulæ by which a like result might be attained without losing sight of the distinctive medical titles. For instance, a Surgeon now ranked as Captain; at a later period he ranked as Major; the Brigade-Surgeon ranked as Lieutenant-Colonel and as Colonel, according to his date of seniority; and a Surgeon-General ranked as General or Major-General. It seemed to him that a grade of designations might easily be agreed upon precisely corresponding to that status, and that there was no reason why they should not have Surgeons who ranked as Captains appearing as Surgeon-Captain, and in the same way have Surgeon-Lieutenant-Colonel, Surgeon-General, and Surgeon-Major-General, keeping always his definite medical title. That was only a suggestion which had more than once occurred to him (the Chairman) in thinking over that difficulty, and one to which objections which he could not foresee might be raised; but he could not help thinking that, on the one hand, the War Office would find it necessary, in view of the existing feeling in the medical service to make some concession by which the actual status of each medical officer shall be apparent; and, on the other hand, it would be inconvenient from their point of view, and from the point of view of the professional dignity of the Medical Staff, if any such appellation were made as would leave out of view the definite medical character of the Medical Staff Corps.

Dr. PHILLIPS said he had been in the army for some years, and might be able to throw some light upon the subject. It seemed to him that the subject had been growing up in consequence—first, of the removal of regimental rank, and the consolidation of all medical officers of the army into one department; that, he thought, was one matter which had led up to this; another was, that the Pay and Commissariat Departments were now entirely officered by officers who had formerly been combatant officers, and, therefore, were very jealous of not retaining their rank; and the tendency had been rather to gratify them at the expense of the medical profession. The tendency had been to push the medical officer more and more aside, and to bring forward the Commissariat and Pay Departments, and to look upon the Medical Department as more of a Civil Department. He had spoken to a great many medical men in the army, and the majority of them agreed that the question ought not to be left where it was. It was those in the junior and middle ranks whom the change would most affect. Dr. Phillips concluded by saying that the scheme sketched out by the Chairman practically meant honorary rank, by

which medical officers would still retain their medical designations, whilst it would explain to everyone the rank a medical officer held. It commended itself to his judgment.

Dr. ALFRED CARPENTER said he thought the Chairman had expressed very clearly the points which had to be considered by the Committee, and he had done so in words that explained very generally, properly, and effectually the feelings which he (Dr. Carpenter) knew to be entertained by those who took considerable part in that important movement. He could not help thinking that it would be right for their Committee to endeavour to obtain a positive recognition now of honorary rank in the manner sketched out by the Chairman, and so remove from the shoulders of the younger men in the army the evils to which they at present had to submit. It was with them they had to deal, and just as the whole profession had looked to the British Medical Association for the removal of those sore places which existed in home matters, he had found the younger men, and those who were just rising in position in the army, looked to the Parliamentary Bills Committee to get them justice now, rather than to those who occupied the highest positions in the Colleges or in the army. He thought they should proceed on the basis the Chairman had indicated, and take steps to have it effected.

Dr. PHILLIPS: Army medical officers are precluded by their positions from taking measures themselves.

Dr. DICKSON, R.N., expressed his great satisfaction with what had been stated, and thought they could not do better than proceed on the lines sketched out. By that arrangement substantive rank would be secured. It was important that the army medical officers should not divorce themselves from their profession. It was to their civil connection they owed their greater pecuniary advantages. He (Dr. Dickson) thought it would be important and interesting to obtain particulars of the treatment received by medical officers in the armies of Austria, Germany, and France.

The CHAIRMAN read the following letter which he proposed to send, if approved, to the Secretary of State for War, Mr. Stanhope :—

Parliamentary Bills Committee, British Medical Association,
429, Strand, April 27th, 1887.

SIR,—Your letter of April 12th I have had the honour to place before my colleagues of the Parliamentary Bills Committee of the British Medical Association, the body represented by the deputation that waited on Mr. Secretary Stanhope on March 22nd. In reply, I am to state that we have read the proposed alteration of articles in the Warrant as to rank, with an anxious desire to find in the alteration what would be a final and satisfactory settlement of a grievance, deeply felt not only by the medical department of the army, but by the members of the Association which represents the largest part of the medical profession in Great Britain, Ireland, and the Colonies.

We venture to express a hope that Mr. Secretary Stanhope may be induced, before finally publishing the proposed alteration, to reconsider the question with the following points in view.

We observe that, although in the proposed alteration the term "relative rank" is not used, the medical officers are apparently replaced in the position they held before that term was abolished, on the authoritative declaration that it was a mere "term," without any meaning in the sense of conveying any rank or privilege.

We would, however, point out, that, so far as we understand, the paragraph in the late Warrant abolishing relative rank remains unaltered in its wording, and it would therefore appear to be necessary that, in order to make plain to all branches of the service the effect of the present modification, there should in all future editions of the *Army List* appear some indication of the rank and privileges as conferred by the late alterations, as analogous to that which used to appear in the *Army List* when the date of attaining relative rank was published as well as the date of attaining the particular grade in the department to which the officer belonged. This appears to us to be necessary for the information of officers of other branches of the army, and to avoid misunderstandings and conflicts which might otherwise arise in the absence of such detailed and authorised statement.

It will, however, be in Mr. Secretary Stanhope's recollection that the deputation he so courteously received expressed an opinion that, after having discredited relative rank as a mere name, its restoration could not be expected to satisfy the officers of the department, or the profession to which they belong. The proposed alteration leaves the medical officers of the army in a position of marked inferiority to those of the commissariat and pay departments, a class of officers who, as was much insisted on by the deputation, do not run a tenth part of risks to which medical officers are exposed in peace at all times, and in war particularly; evidence of this fact, which admits of no dispute, was placed before Mr. Stanhope by the deputation

We venture to invite the attention of the Secretary for War to another point of great importance. A Warrant regulating the rank of medical officers of the British army, when published in India, also regulates that of the same class in Her Majesty's Indian army, who render priceless service to that army, and also to the people of India, —services that, by the acknowledgment of some of the foremost statesmen of India, have done much to reconcile the vast population of that country to a Government alien to them in race and religion.

We venture, in conclusion, earnestly and respectfully to press on Mr. Secretary Stanhope serious consideration of the importance of once and for all, on every ground of expediency and justice, settling this question by bestowing adequately expressed honorary rank on the medical officers of the army, by appellations which shall make the respective status of medical officers of all grades distinctly clear to the officers of all other branches of Her Majesty's army; and by so doing to extinguish that discontent and agitation which are obviously hurtful to the public service, and which, in the present state of feeling on this subject in the profession, will certainly deter the best men in our universities and schools from entering what it is in the interest alike of the country and the army to make an honourable service.—I have the honour to be, Sir,

ERNEST HART, Chairman of the
Parliamentary Bills Committee of the British Medical Association.

The above draft letter was approved, and directed to be forwarded to the Secretary of State for War, subject to any minor alterations which leading medical men in the service might suggest.

Lunacy Acts Amendment Bill.—Dr. MICKLE reported that the Bill which was introduced into the House of Lords was considered by that Committee, and a report thereon published in the JOURNAL of March 5th. This Bill, as brought from the Lords to the Commons, contained some alterations to which he would draw their attention. Subsections 9 and 10 of Section 3 had been introduced in place of the clauses existing in the Bill as in the Lords. The present provisions left it optional with the judge, magistrate, or justice to consider whether or not he was satisfied with the evidence appearing by the medical certificates; and, if not, he should make such further inquiries as he thought fit. But, if he thought the evidence sufficient, he might make an order forthwith. This was connected with a different section (an entirely new one), namely, Section 5, pages 8 and 9, where a number of provisions were made for cases in which the magistrate had not seen the alleged lunatic; and in that case the alleged lunatic might, if he had not been previously seen by a judge, magistrate, or justice, demand, at any time within seven days, an interview with the judge, magistrate, or justice. This left room for a good deal of delay; so that he might be certified, and yet his case only decided upon a fortnight later; and though when certified he might be extremely insane, when examined by a magistrate he might have recovered. He thought the suggestion of the Committee that was made on the section for which the above was substituted—namely, that the magistrate should see the alleged lunatic in all cases—would be the most desirable suggestion with regard to this section. It was desirable to make it compulsory for the magistrate to see the alleged lunatic before signing the order for his admission. It was not sufficient for the alleged lunatic to be seen a fortnight afterwards by another justice, etc.

Dr. CARPENTER asked whether it should not be made necessary for the magistrate to see the patient within twenty-four hours.

Dr. MICKLE pointed out that there were two modes of procedure; one was a petition supported by two medical certificates brought before a judge, magistrate, or justice, with whom it was optional whether he saw the patient before he signed the order or not. Then there were the urgency cases, with which he did not suggest interference.

The next important point was in Section 6, subsection 1, page 9, lines 33 and 34, the introduction of the words "or any report or certificate under this Act, or does anything in pursuance of this Act," etc. Dr. Mickle stated that the above covered one of the recommendations made by the Committee for the protection of the medical man.

Dr. CARPENTER thought it left them much in the same position as they were before, as the medical man would have to prove that he had "acted in good faith and with reasonable care."

Dr. MICKLE added except that actions could be stayed on application to the High Court of Justice, or a judge of that Court, if brought against a medical man on the ground that he did not act with good faith or reasonable care. He thought it was satisfactory to have had those words inserted, "any report or certificate," which would cover any report or certificate after the patient was admitted. The point he was doubtful about was whether "or does anything in pur-

enance of this Act" (line 34) covered the reception and detention of a lunatic under the Act.

The CHAIRMAN suggested that the point should be submitted for legal opinion.

This was approved.

Dr. MICKLE called attention to Sections 41, 42, and 43, pages 29 and 30, concerning Chancery lunatics, which were entirely new. Section 41 permitted the Lord Chancellor to supersede inquisition, so far as the same finds that the lunatic is incapable of managing himself, or vary order for commitment of person, if satisfied that although incapable of managing his affairs, the lunatic is capable of managing himself, and not dangerous to himself or others. He (Dr. Mickle) did not think there was any objection to that.

Sections 42 and 43 were referred to and approved.

Attention was next called to Section 55, page 37, which provides that when a medical officer is transferred from one county asylum to another county asylum in the same county, his service in all such asylums shall be counted for the purpose of computing his pension, superannuation, or gratuity for length of service, as if all such asylums had constituted only one asylum. Dr. MICKLE thought the words "in the same county" (line 28) might with advantage be omitted.

Dr. MICKLE pointed out that Section 76, page 44, line 7, had been so modified as to meet a suggestion made by their Committee by which, in the case of a mistake made by the medical man, the penalty no longer remained absolute, but was remitted if he could show that it occurred through inadvertence, and could satisfy the Court that it "arose from mere accident or oversight, and not from wilful or culpable neglect."

The other new points, it was said, were but differences of wording and of no moment.

It was proposed by Mr. SIBLEY, and seconded by Dr. CARPENTER, that Dr. Mickle's report be received and adopted, and that he be thanked for his valuable labours.

The CHAIRMAN suggested that Dr. Mickle should be asked to prepare a full statement of the suggestions of the Committee, adapting those made at the previous meeting to the altered phraseology and provisions of the Bill at present. The Chairman would forward a copy to Sir Walter Foster, asking him to arrange with other medical members of the Committee a conference with Sir E. Clarke on the subject in the House of Commons.

This suggestion was approved of.

Pharmacy Acts Amendment Bill.—Mr. S. SIBLEY called attention to the second clause of this Bill, giving power to the Pharmaceutical Society to regulate examinations. It first of all, he said, provided that the Pharmaceutical Society of Great Britain should have the power of regulating the said division of examinations into various parts. Then it went on to say that they should have dispensing power, and contained the following provision: "And it shall at all times be lawful for the Council of the said Society, by resolution, on being satisfied by a certificate of a committee of the same Council, authorised on that behalf, that any person therein named has acquired, whether in England or Scotland or elsewhere, competent practical skill and knowledge in and of the business of a chemist and druggist, to waive and dispense with the whole or any part of the said term of three years, or any period of time aforesaid, and any evidence of having attended any such courses of instruction as aforesaid in relation to the person therein named." That appeared to give the Pharmaceutical Society the power of dispensing with the regular period of apprenticeship, or of any course of instruction, which would practically give that Society power to admit anybody they chose to examination without having followed their curriculum. It gave them a power which neither the Colleges of Physicians nor Surgeons had, and he thought a much greater power than they ought to have. Would it not be possible to say that they should have that dispensing power under the sanction of the General Medical Council? He had always thought, as probably many present had thought, that the Pharmaceutical Society ought never to have been allowed to be established as an independent body; they should have been grafted on or placed under the Apothecaries' Society. He thought, as the Pharmaceutical Society was asking for increased powers, they might fairly say that if they exercised those increased powers, they must apply to the General Medical Council in each case. That would be a first step towards bringing the Pharmaceutical Society under control, and would go somewhat to remedy the defect which occurred in originally allowing that Society to establish itself as an independent body. He (Mr. Sibley) thought it was an important point, because he considered if irregular practice sprung up in any direction, they might expect it through the pharmaceutical chemists.

The CHAIRMAN said he had had some opportunity of thinking over the matter, and he was strongly of opinion, with Mr. Sibley and Dr. Carpenter, that any such dispensing power was contrary to the public interest, and that it was especially to be deprecated in the case of a body which not only examined, but which accumulated all the functions of educating, examining, making the *Register*, keeping the *Register*, purging the *Register*, and receiving all the emoluments in connection with all those various functions. The only point on which he (the Chairman) had any doubt was whether they could advisedly ask that the controlling power which was required, in the opinion of the Committee, with reference to any such dispensing power, should be placed with the General Medical Council, or whether they should not have to be content with asking that it should rest with that body which at present controlled the Pharmaceutical Society, that is, the Privy Council. He (the Chairman) had very strong reasons to doubt whether the General Medical Council would be in the least degree willing to accept any such connection with the chemists, or to undertake what would be a very difficult, and, as they seemed to think, a dangerous task. It was also to be noted that the courses of instruction include Materia Medica, and that this might easily become a pseudo-medical education, and encourage counter and prescribing practice. The Chairman called attention to the dangers which existed of the extension of counter-practice in view of the perilous position in which the action of the two London Colleges were now placing the Apothecaries' Society.

Dr. CARPENTER and other members of the Committee concurred that this point should have their attention.

It was moved by Mr. SIBLEY and seconded by Dr. CARPENTER: "That the attention of the Privy Council be called to the clause in question, and that they be informed that in the opinion of this Committee such clauses might be detrimental to the public welfare, and that if such remission or any modification of such remission be authorised by Act of Parliament, it should only be made subject to the approval of the Privy Council."

This was carried unanimously.

It was also decided to call the attention of the General Medical Council to the clause in question.

Truck Law Amendment Bill.—Mr. SIBLEY directed attention to Clause 8 of this Bill, by which it was sought to put the power of appointment and dismissal of a medical attendant in the hands of the men, the master having no voice in the matter. The opinion being that under such an arrangement the medical man would have no security in his position, except in the case of dismissal for misconduct. In some districts the medical appointments were made subject to the approval of the master.

Dr. CARPENTER pointed out that it was placing the medical attendant in precisely the same position as a doctor to a club.

A letter was read from a medical officer of considerable experience in a mining district of Scotland, in which he stated that the general feeling in that part of the country was that if the power of appointment of the medical officer was entirely in the hands of the men, he could have no security in his position, as an agitation got up by one or two disaffected men might at any time turn a majority against him (without any proper reason), and thus deprive him of his appointment. The men might change their doctor, for a very trivial reason, as often as they liked, unless there were someone to appeal to as arbiter, such as an honourable master would be. In large works consisting of a number of smaller works, the men might choose to have a separate doctor for each pit, which would be very inconvenient for both masters and men. At present, in his district, the men had in many instances already the selection of the medical man, but subject to the approval of the masters. The best medical men were generally found to be those who had been appointed by the masters. If there was to be any law on the subject of granting more powers to the men, the writer contended that the appointment made by the men should be subject to the approval of the masters.

A letter was also read from Dr. Charles Orton, of Newcastle-under-Lyne, in which he stated that he had seen the whole of the medical men in his district, with the exception of one, with respect to Clause 8, and they all condemned it.

A communication was also read from Dr. W. G. Lowe, Burton-on-Trent, objecting to Clause 18.

The views expressed in these letters were conflicting. It was resolved that the attention of the Branches of the British Medical Association be called to the above clauses, and that they be requested to ascertain the opinion in their respective districts, to furnish the Committee with information on the subject, and to take in each district such action as it might be thought necessary.

Bills for Consideration.—Dr. CARPENTER referred to clauses in the

following Bills:—1. A Bill for the better Prevention of the Fraudulent Sale of Oleomargarine. 2. To amend the Rivers Pollution Prevention Act, 1876. 3. To Regulate the Importation, Manufacture, and Sale of Butter Substitutes. 4. For the Better Sanitation of Houses. 5. To provide for the Sanitary Registration of Buildings.

It was resolved that the above-mentioned Bills should be considered, and a sub-committee, consisting of the following members, was appointed to report on them to the Committee—the Chairman, Dr. Carpenter, Mr. Sibley, Dr. Holman.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1887.

Meetings of the Council will be held on July 13th and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, June 23rd and September 29th, 1887.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE, and on the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE, are now closed.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, and HABITS OF INTEMPERANCE, a full Report on OLD AGE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 429, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

SOUTH-WESTERN BRANCH.—Preliminary Notice.—The annual meeting of the Branch will be held at the Athenæum, Plymouth, on Wednesday, May 18th, 1887, under the presidency of Paul Swain, Esq. Members who propose to read papers, or to bring forward communications or motions, are requested to intimate the same to the Honorary Secretary without delay.—P. MAURY DEAS, Honorary Secretary.

EAST SURREY DISTRICT: SOUTH-EASTERN BRANCH.—A meeting of this district will be held at the Greyhound Hotel, Croydon, on Thursday, May 12th, at 4 P.M. T. A. Richardson, Esq., of Croydon, in the chair. Dinner at 6 P.M.; charge 7s., exclusive of wine. Papers, etc., have been promised by Mr. H. Power (On Squint), Dr. Horrocks, Mr. Howard Marsh (On the Association of Suppuration with Malignant Disease), Dr. Duncan, Mr. Richardson, and Mr. A. Matthey (Pathological specimens, etc.). Members desirous of exhibiting or reading notes of cases are invited to communicate at once with the Honorary Secretary, P. T. DUNCAN, M.D., Croydon.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the Royal Forest Hotel, Chingford, on Thursday, June 2nd, at 6 P.M. The chair will be taken by J. S. Bristowe, M.D., F.R.S., President of the Branch. Business:—Election of Secretary. At 6.15 (sharp) the members and their friends will dine together. Tickets, exclusive of wine, 8s. each. Those intending to be present are requested to communicate as soon as possible with the Honorary Secretary.—J. W. HUNT, M.D., Honorary Secretary, 101, Queen's Road, Dalston.

MIDLAND BRANCH.—The annual meeting will be held at the Derby Infirmary, on Thursday, June 9th, at 2 P.M. Members desirous of reading papers, exhibiting cases, etc., are requested to communicate with me before May 20th.—W. A. CARLINE, M.D., Honorary Secretary, Lincoln.

THE WORCESTERSHIRE AND HEREFORDSHIRE, BATH AND BRISTOL, AND GLOUCESTERSHIRE BRANCHES.—The conjoint meeting of the above Branches will be held under the presidency of Dr. Batten (President of Gloucestershire Branch), on Tuesday, May 17th, at 3.30 P.M., at the Bell Hotel, Gloucester. The dinner will be held at 6 P.M. punctually. Tickets (including wine) 7s.; "morning dress." Preliminary business: The Gloucestershire Branch will proceed to elect Representative on the Council of the British Medical Association, at 3.30 P.M. punctually. Agenda: Mr. Jonathan Hutchinson will deliver an address on Certain Doctrines in General Pathology, as illustrated by Diseases of the Skin.—G. W. CROWE, Honorary Secretary Worcestershire Branch. R. J. H. SCOTT (Bath), E. MARKHAM SKERRITT (Bristol), Honorary Secretaries Bath and Bristol Branch. C. ARTHUR CARDEW, Honorary Secretary for Gloucestershire Branch, and Organising Secretary for Conjoint Meeting, 1, Bayshill Villas, Cheltenham.

STAFFORDSHIRE BRANCH.—The third general meeting of the present session will be held at the Medical Institute and Bell Library, Cleveland Road, Wolverhampton, on Thursday, May 26th. The President, Dr. W. G. Lowe, will take the chair at 3 o'clock in the afternoon.—VINCENT JACKSON, General Secretary, Wolverhampton.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The annual meeting of the above district will be held at Canterbury, on Thursday, May 26th, at 3 P.M.; Mr. Pugin Thornton in the chair. Members proposing to bring forward communications, etc., are requested to intimate the same to the Honorary Secretary, W. J. TYSON, 10, Langhorne Gardens, Folkestone.

EAST YORK AND NORTH LINCOLN BRANCH.—The annual meeting will be held at the Infirmary, Hull, on Wednesday, May 25th, at 1.30 P.M. Gentlemen who intend to make any communication, or to propose any resolution, are requested to inform the Secretary not later than May 15th.—E. P. HARDEY, Honorary Secretary, 80, Spring Bank, Hull.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.

A MEETING of the above District was held at the Hospital, Gravesend, on April 29th; C. J. W. PINCHING, Esq., in the chair.

Next Meeting.—It was decided to hold the next meeting at Dartford at the end of June or beginning of July, and H. L. Bernays, Esq., of Charlton, was appointed chairman for the occasion.

Election of Honorary Secretary.—A. W. Nankivell, F.R.C.S., St. Bartholomew's Hospital, Chatham, was unanimously re-elected Honorary Secretary of the District for the ensuing year.

Papers.—The following communications were read and discussed:—

1. Dr. GOODHART: "The Behaviour of Fluid in the Pleura, and the Treatment of Empyema."
2. Dr. C. FIRTH: "On Pyæmia."
3. R. J. BRYDEN, Esq.: "Two Complicated Cases in Midwifery Practice."

Dinner.—Twenty-four members and visitors dined at the New Falcon Hotel.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.

THE sixth meeting of the session was held at the Hackney Town Hall, on Thursday, March 17th, twenty-one members and two visitors being present. The chair was taken by Dr. HERMAN.

Specimen.—After the usual formal business, Dr. C. R. WALKER showed a specimen of Hydatiform Degeneration of an Ovum.

Discussion.—Dr. JOHN WILLIAMS opened a discussion on the Pathology and Treatment of Puerperal Convulsions, in which several members took part.

Cordial votes of thanks were passed to Dr. Williams for his paper, and to Dr. Herman for presiding.

THE seventh meeting was held at the London Hospital, on Thursday, April 21st; nineteen members and visitors were present. The chair was taken by Mr. C. MACNAMARA.

Cases and Specimens.—The evening was devoted to a demonstration of surgical cases, twenty-three in all, by Mr. RIVINGTON, who also, after the meeting, conducted the members through the wards. In addition, numerous *post-mortem* and microscopical specimens were shown to the meeting.

Hearty votes of thanks to Mr. Rivington and Mr. Macnamara were passed.

YORKSHIRE BRANCH.

THE spring meeting of the Yorkshire Branch was held at the Queen Hotel, Harrogate, on Wednesday, April 27th; the President (Dr. GOYDER) in the chair. About thirty members were present.

Travelling Expenses of Representatives on Council.—It was decided unanimously to re-affirm a previous resolution not to pay the expenses of the Representatives of the Branch on the Council.

Papers.—The following papers were read:

Mr. MCGILL: Suprapubic Cystotomy in cases of Enlarged Prostate.

Mr. H. B. HEWETSON: Diagnosis and Treatment of Vertigo, (1) arising from defects in the Eye, (2) from the Ear.

Mr. HORNE: A case of Hydrophobia.

Dr. BRAITHWAITE: Two cases of Vaginal Extirpation of the Uterus for Cancer.

Mr. A. W. MAYO-ROBSON: A series of cases illustrating the Radical Cure of Hernia.

Dr. W. R. THOMAS: On a case of Paralysis of both Arms, brought on by severe exertion.

Dr. JACOB: Syphilitic Disease of the Pharynx.

Dr. EASTWOOD: A case of Melancholia, with peculiar delusions.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIFTH ANNUAL MEETING.

THE fifty-fifth Annual Meeting of the British Medical Association will be held at Dublin, on August 2nd, 3rd, 4th, and 5th, 1887.

President: Withers Moore, M.D., F.R.C.P., Senior Physician to the Sussex County Hospital, Brighton.

President-elect: John T. Banks, M.D., D.Sc.(Hon.), F.K.Q.C.P.I., Regius Professor of Physic in the University of Dublin.

President of the Council: Sir B. Walter Foster, M.D., F.R.C.P., Professor of Medicine in Queen's College, and Physician to the General Hospital, Birmingham.

Treasurer: C. Macnamara, F.R.C.S., Surgeon to the Westminster Hospital, London.

An Address in Medicine will be delivered by W. T. Gairdner, M.D., F.R.C.P.Ed., Professor of Medicine in the University of Glasgow.

An Address in Surgery will be delivered by Edward Hamilton, M.D., Fellow and Professor of Surgery in the Royal College of Surgeons in Ireland.

An Address in Public Medicine will be given by the Reverend S. Haughton, M.D., F.R.S., D.C.L., Senior Fellow, Trinity College, Dublin.

The scientific business of the meeting will be conducted in eight Sections and two Subsections, as follows, namely:

MEDICINE.—*President*, William Moore, M.D. *Vice-Presidents*, H. C. Bastian, M.D., F.R.S.; J. Magee Finny, M.D. *Honorary Secretaries*, T. Gilbart Smith, M.D., 68, Harley Street, Cavendish Square, London, W.; C. J. Nixon, M.D., 2, Merrion Square, Dublin.

SURGERY.—*President*, Sir George H. Porter, M.D. *Vice-Presidents*, Alexander Ogston, M.D.; John Fagan, F.R.C.S.I. *Honorary Secretaries*, W. Thomson, M.D., 34, Harcourt Street, Dublin; R. J. Godlee, F.R.C.S.Eng., 81, Wimpole Street, London, W.; C. B. Ball, M.D., 16, Lower Fitzwilliam Street, Dublin.

OBSTETRIC MEDICINE.—*President*, A. V. Macan, M.B. *Vice-Presidents*, T. More Madden, M.D.; A. L. Galabin, M.D. *Honorary Secretaries*, Wm. J. Smyly, M.D., 56, Fitzwilliam Square, Dublin; Wm. Duncan, M.D., 6, Harley Street, Cavendish Square, London, W.

PUBLIC MEDICINE.—*President*, Sir Thomas Crawford, M.D., K.C.B. *Vice-Presidents*, John S. Taylor, M.D.; R. Thorne Thorne, M.D. *Honorary Secretaries*, John Wm. Moore, M.D., 40, Fitzwilliam Square West, Dublin; John F. W. Tatham, M.D., Town Hall, Salford.

PSYCHOLOGY.—*President*, J. R. Gasquet, M.B. *Vice-Presidents*, Frederick Needham, M.D.; Oscar T. Woods, M.D. *Honorary Secretaries*, Conolly Norman, F.R.C.S.I.; Richmond District Lunatic Asylum, Dublin; T. Lyle, M.D., Rubery Hill Asylum, Bromsgrove, Worcestershire.

PATHOLOGY.—*President*, Samuel Gordon, M.D. *Vice-Presidents*, A. W. Foot, M.D.; David J. Hamilton, M.D. *Honorary Secretaries*, Theodore D. Acland, M.D., 7, Brook Street, Grosvenor Square, London, W.; Henry T. Bewley, M.B., Willow Park, Booterstown, Co. Dublin.

THERAPEUTICS AND PHARMACOLOGY.—*President*, Wm. Whitla, M.D. *Vice-President*, Matthew Charteris, M.D.; D. J. Leech, M.D. *Honorary Secretaries*, Chas. Y. Pearson, M.D., 42, King Street, Cork; Michael McHugh, M.B., 25, Harcourt Street, Dublin.

OPHTHALMOLOGY.—*President*, H. R. Swanzy, M.B. *Vice-Presidents*, D. Argyll Robertson, Pres.R.C.S.Edin.; Priestley Smith, M.R.C.S.E. *Honorary Secretaries*, A. H. Benson, M.B., 42, Fitzwilliam Square, Dublin. A. W. Sandford, M.D., 13, St. Patrick's Place, Cork.

SUBSECTIONS.

OTOLOGY.—*Chairman*, E. Woakes, M.D. *Vice-Chairman*, J. B. Story, M.B. *Honorary Secretary*, D. D. Redmond, L.R.C.S.I., 14, Harcourt Street, Dublin.

LARYNGOLOGY AND RHINOLOGY.—*Chairman*, W. H. MacNeill Whistler, M.D. *Vice-Chairman*, Kendal Franks, M.D. *Honorary Secretary*, R. A. Hayes, M.D., 56, Merrion Square South, Dublin.

Local Honorary Secretary.—George F. Duffey, M.D., 30, Fitzwilliam Place, Dublin.

TUESDAY, AUGUST 2ND, 1887.

9.30 A.M.—Meeting of Council.
10 A.M.—Service at the Roman Catholic Cathedral.
11.30 A.M.—First General Meeting. Report of Council. Reports of Committees; and other business.
4 P.M.—Choral Service at St. Patrick's Cathedral.
8.30 P.M.—Adjourned General Meeting from 11.30 A.M. President's Address.

WEDNESDAY, AUGUST 3RD, 1887.

9.30 A.M.—Meeting of Council.
10.30 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Second General Meeting. Address in Medicine.
9 P.M.—Soirée given by the President of the Association and by the Dublin Branch.

THURSDAY, AUGUST 4TH, 1887.

9.30 A.M.—Meeting of Council.
10.30 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Third General Meeting. Address in Surgery.
7 P.M.—Public Dinner.

FRIDAY, AUGUST 5TH, 1887.

10 A.M. to 1.30 P.M.—Sectional Meetings.
3 P.M.—Concluding General Meeting. Address in Public Medicine.
4 to 6 P.M.—Garden Party.

SATURDAY, AUGUST 6TH, 1887.

Excursions.

ANNUAL MUSEUM.

THE Annual Museum will be held on August 2nd, 3rd, 4th, and 5th.

The Museum will be arranged in the four following Sections, and intending exhibitors are requested to communicate with the Secretary of the Section or Sections in which they propose to exhibit.

SECTION A.—Food and Drugs. (Honorary Secretary, F. J. B. Quinlan, M.D.Univ.Dub., 29, Lower Fitzwilliam Street, Dublin.)

SECTION B.—Recent Books, Instruments, and Appliances—Medical, Surgical, and Electrical. (Honorary Secretary, John Lentaigne, F.R.C.S.I., 29, Westland Row, Dublin.)

SECTION C.—Anatomical and Pathological Specimens and Drawings, Microscopes and Microscopical Preparations. (Honorary Secretary, Alex. B. McKee, M.B.Univ.Dub., Royal College of Surgeons, Dublin.)

SECTION D.—Hygienic and Sanitary Appliances. (Honorary Secretary, H. C. Tweedy, M.D.Univ.Dub., 2, Gardiner's Row, Dublin.)

Particulars should be supplied to the Secretaries of the objects proposed to be exhibited and the amount of space required. No show-cases will be allowed.

As it is intended to print a catalogue, with appendix of advertisements, it is requested that inquiries be addressed to the Secretaries as early as possible.

Chairman of Museum Committee—Wm. Thornley Stoker, F.R.C.S.I., 16, Harcourt Street, Dublin. Vice-Chairman—D. J. Cunningham, M.D., 69, Harcourt Street, Dublin.

FRANCIS FOWKE, *General Secretary.*

SPECIAL CORRESPONDENCE.

A WINTER TRIP TO "THE FORTUNATE ISLANDS."

III.

Santa Cruz.—Nelson's Mole.—Records of the Conquest.—Laguna: A Summer Resort.—A Spanish Fonda.—Agua Garcia and Agua Mercedes.—The Peak from Humboldt's Point.—His Eulogy of the Valley-Scene.—The Descent into Orotava.

MR. ERNEST HART wrote on March 22nd from Orotava, Teneriffe:

We begin now to test by experience the reality of the pleasing images and anticipations which our readings by the way have led us to form of the attractions of Teneriffe. If one never found happiness in anticipation, one would lose so many occasions of happiness in missing its forward shadows. "*Il faut rire avant d'être heureux de peur de mourir avant d'avoir ri*" is one of the terrible sayings of La Bruyère, more pessimistic than Schopenhauer, but not without its hint how to seize the shadow cast before, lest the eventual realisation should elude our grasp. We have interpreted it in that sense. We have enjoyed the pleasures of anticipation, and must now test the flavour of fruition. We landed at Santa Cruz on March 21st, at early morning. The sky is already of the deepest blue known to a brilliant English June at noon-day; the sea running majestically with long, rolling breakers, deep blue at their base, but showing at the summit transparently pale green as they slowly roll over, breaking into masses of stainless, snowy foam. The little city of Santa Cruz seen from the deck sparkles in the sunlight, the square houses painted white, or yellow, or red, with red-tiled roofs rising tier above tier into the surrounding hills, and showing like a Mediterranean town. Out of it spring the square towers and dome of the church of La Concepcion. Behind the town rise the range of the chain of mountains which extend to Point Anaga, and which we must climb as far as Laguna before we can descend into Orotava on the north side of the island. They lie in purple shade beneath the slanting rays of the sun which is behind them, and are crowned with a heavy mass of fleecy, rounded cloud-forms, which hide their upper cliffs; they have all the mingled shades of purple,

green, yellow, and red, and the ever-changing depths of luminous vapour which form the charm of English summer landscape. We think it of good augury to find here these elements of summer beauty familiar in the temperate zone of the British Isles. An island which combines North African latitude and subtropical sun with the softening cloud-attributes of more northern skies promises richly. There is just time for a water-colour sketch for my wife's portfolio of souvenirs of travel—now become a most valued record of the scenes of happy holidays of many past years—and then the farewells to a band of fellow-travellers bound for the West Coast, whom we leave with pain and in hope of after-meetings when "the Coast" shall have surrendered them for the much longed-for return. A week on board ship means so much intimacy, so many long confidences, so many friendships made and renewed; years in a crowded city often tell you less of the character, hopes, fears, and human nature of town friends than a week of close companionship at sea. I have never left any ship after a week or two's journey without regretful partings and enduring friendly memories. We say farewell to the *Niger*, with its friendly passengers and vigilant captain (Rattray) with more than usual feelings of kindly regret.

The people from Camacho's English Hotel take charge of our baggage, and we experience all the satisfaction of landing at a free port: no duties, no searching of luggage, no vexatious imposts or tyrannical penalties. The Spanish Government has had the singular wisdom to treat the Canaries as free ports; there are none but the most trifling import or export dues, and every facility is given to travellers and to merchants. At Madeira the Portuguese Government adopts exactly the opposite system: the customs are onerous, and the mode of enforcing them tyrannical, arbitrary, and sometimes, I hear, brutal. Hence already the centre of maritime activity is shifting to Grand Canary (Las Palmas), and to Santa Cruz; and to this freedom of the ports is to be attributed the great number of ocean-steamers calling for coals and fresh provisions, which is now rapidly laying the foundation for renewed prosperity in the islands, and greatly facilitates the access of travellers and of "trippers." Note that a trip to Santa Cruz and back by the African or British African steamers from Liverpool costs only £15 for a first-class return ticket, including a dietary which is only too solid and profuse; the average trip by this line occupying eight days going and the like in returning. That is, I suppose, the cheapest sea-holiday on the now extensive list, and I can answer for its being most enjoyable. By the splendid ocean steamers of the Shaw, Savill, and Albion Line of New Zealand steamers or by the equally splendid New Zealand Company steamers, the voyage is accomplished with greater speed, occupying not more than five days, and at somewhat enhanced fares.

But we have now turned our faces landwards. Here we are on Teneriffe. It stretches, we are told—(for we are accosted on landing by a most kindly and intelligent medical colleague, Dr. Dominguez, and by others, who offer us all sorts of help and instruction)—over 60 miles from N.W. to S.W., although only 60 miles across at its widest part, and at its narrowest northern part less than 16 miles. We can see that its shores rise very steeply into volcanic hills; they are rugged and bare, except for the patches of vertical or prismoid Canarian euphorbia. We are willing to believe what we cannot yet see, that the cone of the Peak rises 12,000 feet from the sea-level, the centre of a circular surrounding castellated tier of mountains of which the upper basin is more than 30 miles in circumference. We listen in faith; meantime we tread the Mole and Fort San Cristobal, the scene of Nelson's one naval defeat, and which "affords the reason," as our French mentor has it, why England has the glorious peculiarity of being "the only country in the world where, on a bronze column, they have ventured to erect a one-armed statue." Fort San Cristobal was founded in 1493 by the Spanish Adelantado Don Alfonso de Lugo; it was retaken and burnt by the Guanches and completed as a fortress by Don Juan de Fonseca in 1579; pillaged by Admiral Blake in the time of Cromwell, who took from it the treasure of the Spanish galleons; it resisted during the Spanish war of succession; the British flag in the church tells of its brilliant response to the attack of Nelson. An adventurous middy stole the flag, but the ill-advised young patriot was cashiered, and the flag was restored. It is kept somewhere in a sort of barometer-case near the gallery, but we failed to see it. Now San Cristobal is a useless guard-house; it might be dangerous to the gunners to fire its guns, and it is destined to disappear.

Santa Cruz is a town of no architectural pretensions, but with pretty surroundings, capable of development. It has a population of about 15,000, and is the capital of the island, and is the seat of the consular body, the military powers, and the prefect. It is a frequent resting-place for a few days of tourists and invalids, and the squadrons of the naval powers frequent its waters. It has a couple of fair hotels—Camacho's English Hotel and the International—at both of which there is an English Service. It has one or two churches of which the internal architecture is noteworthy in respect to the carved wood roofs and the highly ornate carved and gilded high altar, usually possessed of silver-plated tabernacle and silver lamps. Otherwise the whitewashed walls and grey stone pillars, plain rounded arches, and wretchedly daubed pictures and frescoes need not long detain the visitor. One or two churches have a small collection of old vestments. The climate of Santa Cruz resembles much that which we shall have to describe at Orotava, but it is decidedly warmer and more relaxing, owing to its southern aspect and its lesser share of the cool and refreshing breezes of the north-east wind, which is the peculiar and daily blessing of the northern side of the island. There is a museum of Guanche antiquities, which we visited, and where, by kind permission of the curator, my wife was enabled to photograph a Guanche mummy, and some other interesting remains and relics of the aborigines. It contains over a hundred skulls and many well-preserved mummies; there is a well-built civil hospital, larger than the town appears to need, and a rather artistic military hospital, built on the block system; a well-appointed club, where parties and balls are given, especially at carnival time; a theatre at which Spanish companies frequently play; and a fine concert-room at which concerts and public balls are given by a Philharmonic Society.

None of these detain us. We are seeking repose and fresh air, open-air life in winter, the warm sea-shore, and the hills, gardens, and mountains which lie beyond the mountain range. A carriage with three little horses harnessed abreast carries us along La Carrotera, a finely engineered road, splendidly macadamised with hard volcanic stone, and as smooth as a billiard table, to Laguna. San Cristobal de la Laguna, St. Christopher of the Lake, is an ancient town, built in 1497 by the conqueror of the island, Alfonso de Lugo, called after him La Ciudad de los Adelantados, the City of the Victorious Captain.[1] Its massive convents and palacios are built in black stone, and are gloomily massive. The palacios of Count Salazar and of the Marquis de Villa Nueva still show the vestiges of their former state. Laguna was once the capital of the island, and it is still the episcopal seat; it once boasted three monasteries, four churches, and five fraternities. It has still a fine old library, containing some 18,000 volumes, where all the old works on the islands may be consulted, and some illuminated MSS. of great merit may be seen. Laguna is destined by Nature to be, and is employed by the inhabitants as, a summer station. The wealthier families of Santa Cruz pass there the summer months from June to November. During the summer months the air is dry and the rainfall very slight. It is exposed to all winds, occupying a plain of about eight miles square, and at a height rising from 2,000 feet at Laguna itself to nearly 3,000 at its highest point towards the village of Esperanza. Of the temperature during the summer months I have some details from Dr. George Perez, of which I will speak later.

Laguna is likely to offer a valuable retreat during the summer heats to visitors requiring a more bracing air, whose health requires them to make a prolonged stay in Teneriffe for one or more years. At present there is only a poor fonda, which cannot be recommended, but I was told that it is likely that after October next a hotel will be opened with European comforts. This will be available, and is desirable also, for visitors and tourists who, even during the winter months, would like to make without exertion the many interesting excursions of which Laguna is the convenient centre. Among these are a visit to the Forest of Las Mercedes, where the laurels, ilices, and various Canarian evergreen trees are to be seen in their highest beauty. This wood is on the way to the picturesque village of Taganana, which is reached after traversing for about five hours on horseback, at a foot pace, forests rich in the rare native ferns and wild flowers. Here may be seen the tree-heath, erica arborea, known to us also on the Mediterranean, but growing here, in the lovely wood of the Agua Garcia, to the astonishing height of fifty feet, and the chief source of the native charcoal; the vignatigo, or laurus persea, of which the boll is weirdly gnarled and rugged. As the tree is cut down for its wood (the Teneriffe mahogany), fresh sprouts rise from the ancient trunk, and its roots may often be seen stretching for yards across the path to grapple neighbouring rocks. Here also are the beautiful and various Canarian holly trees and the Teneriffe laurel growing as a noble forest tree. Among the rarer ferns are the delicate Killarney fern (trichomanes radicans), navalwort—extinct at Killarney, but growing here abundantly—which we

[1] His motto summarises the history of the Spanish conquest: "*Quien lanza sabe tener, Ella le da de comer.*" (To him who can wield the lance, the lance gives food.)

found at the Agua Garcia, the asplenium reniforme, and the woodwardia radicans—varieties in which fern-hunters will revel. From the heights above Taganana a fine view is had of the Atlantic north and south of Teneriffe; Santa Cruz, Laguna, and the Peak are also full in view. Taganana was founded by the Normans, and lately partly settled by the Dutch; for many years they did not intermarry with the other inhabitants of the island; they are fair-skinned, light haired. French and Dutch names are still prevalent, and the women have still a reputation for fairy beauty; if a beautiful woman is noticed at Laguna, it is said, "Ah! she is a Tagananera." Other excursions are to the grand forests of La Speranza, distant four miles along a horse-path; to the village of Tegina by an excellent carriage road, which for the first two miles is quite level, shaded by blue gum trees and tall Italian poplars, and embellished by bushes of geranium and rose, all growing by the way. Thence, by a deep cutting through the mountains (La Cortadura), you reach at once the northern slope of the island, and descend to Tegina, passing through the village of Tegneste, the favourite summer villegiatura of residents at Santa Cruz, and where the French Consul has a country house. The road stops at Tegina, a short distance from the sea. Beyond Tegina are two other sea-side villages, Bajamar and La Punta, which are resorted to as affording good sea-bathing in the summer months.

All this is, however, a later digression, for we are at the moment journeying direct, as is the wont of winter travellers, to Orotava by way of Laguna. Leaving Laguna we enter the plain of Los Rodeos, the broad plains of which, verdant with their growing cereal crops, are now seen at their best, and remind us of the fields of Provence seen in the spring-time. Six miles' drive brings us to the village of Tacoronte, seated on high ground, and looking from precipitous heights on to the deep blue sea. Palms rise at intervals from the slopes of the lower cliff, and stand out sharply against the sky, reminding us pleasingly of our approach to a subtropical fauna. Below us on the right lies the village, with a well-known but scanty museum, and a road to the left, scaling the mountains, leads to the hidden beauties of the forest of the Agua Garcia, to which we subsequently paid a most delightful and long-to-be-remembered visit. Next we reach the village of Sausal, with its dome-shaped church, and here we were rewarded for our long faith and previous disappointment by coming into full view of El Teyde, the far-famed sugar-loaf of the Peak of Teneriffe. It is now free from its frequent cap of clouds, and is glistening white in the sun, towering high as Mont Blanc, not dwarfed like the Alpine giant by neighbouring and rival peaks. Towering into the clouds, an isolated cone, and rising directly 12,000 feet from the sea, the Peak produces the impression, and had long the geographical reputation of being "the highest mountain of the world;" more exact methods of measurement have long since deposed it from that arithmetical eminence, but its effect is still unsurpassed and possibly unrivalled. "The Peak" becomes, after a time, the fascinating centre of attraction at Teneriffe. The scenery is never complete without this grandiose culmination of its views. It follows you everywhere; when it is veiled in cloud the landscape loses half its charm. Its appearance is as much the topic of conversation as "the weather" in England. Its varying aspects—now glistening white in the sun, now capped with fleecy cloud, or frowning in purple shadow, or rising into sunlight above a lower ring of cloud—give infinite variety and charm to this magnificent and towering mountain-spire, which literally pierces the clouds and rises far above them.

Three miles further land us at one of the two fondas—the Fonda Maria. The jovial and buxom Maria receives us with many smiles. "*No habla Ingles*"—she "speaks no English," and we but little Spanish; nevertheless, we manage to make her understand that "*un almuerzo*," the Spanish equivalent of a French *déjeûner*, would be agreeable to our feelings. The room is bare, with white-washed walls, furnished characteristically with the old-fashioned Sheraton chairs, which are found in every cottage in the island; the shutters are closed to exclude the sun; in the corner is a glass chiffonier, with some gaudily-painted Spanish pottery, and an abundant supply of porcelain; the table is covered with oil-cloth, but everything is scrupulously clean. In the corner hangs a guitarra, on which her husband (unfortunately an absentee for the time) is a proficient; outside are a crowd of children brushing the flies off the horses with palm-leaves, as they wait wearily in the midday sun. *La fondera* soon appears, bearing in quick succession, first, cups of *sopa*, the soup made and flavoured with a delicious aromatic herb, the *yerba de huerto* (*mentha hortensis*), a garden mint which is peculiarly delicate and full of flavour; in each cup floats a miniature egg, one of the miniature eggs found in the slaughtered chicken which we shall presently eat. These which with us are wasted, in the Canaries are habitually utilised in soup; with this are served pickled periwinkles and native olives. A Spanish friend who accompanies us put some of the periwinkles into the soup: they are, to my fastidious palate, hard, tasteless, and uninviting, and I declined to follow the example; the olives, too, are far from being worthy of the Spanish soil. This is succeeded by a mignon cutlet of beef with fried potatoes; next a dish of *sesos*, fried calves' brain; then *salmorejo de conejo*, a spiced salmi of rabbit, excellently flavoured with capsicum, and a soupçon of garlic and salt; then *cabrilla frita*, a small dish of a kind of mackerel (*perca cabrilla*), which abounds on these coasts, and is very delicate in flavour. The wines are the red wines of the country (*vino tinto*) which was of poor quality, some moscatel, which was rather better, but far from being first-rate, and some reasonably good sherry. This was followed by two sorts of cheese, one made of goat's milk, the country *queso de calva;* and a dessert of ripe loquats, guavas, bananas, and oranges. Native-grown black coffee is then served. It is common enough to hear Spanish fondas abused. An Englishman who can eat nothing but beefsteaks and mustard, and drink pale ale, will not always find all he wants at the Spanish inn; but here and elsewhere at the Canaries I have found at more than one wayside inn a board spread which, with some cosmopolitan capacities of palate, might well satisfy the exacting, and would put to shame more pretentious European hostelries.

Refreshed and interested by our meal, we pursued our way down steep inclines to Orotava, reaching presently the village of Matanza. Matanza (the Village of Slaughter), our halting place, deserves its name from the ambuscade into which the Guanches drew the Spanish invaders in their first attack on Teneriffe, slaughtering and repulsing them; they subsequently returned with a large army from Gran Canaria, and at Victoria they fought a decisive battle, which, under Don Alfonso de Lugo, gave them a final mastery. The spire of the church stands sharply against the sky, and by the side of it rises a picturesque specimen of the richly-tufted pine of the Canaries, the first which we have seen; in the distance is seen the Peak, and the extreme point of Orotava comes into view. We push across a deep ravine—the Barranco Hondo—which we perforce stop to photograph and admire, and become sensible of the growing richness of the vegetation and increasing beauty of the scene. Presently we reach the lovely village of Santa Ursula, which might be called the Village of Palms, so abundant are they here. They are specimens of the graceful and feathery palm, peculiar to the Canary Islands, and hence named the Phœnix Canariensis; but just now they are sadly mutilated and their beauty spoiled, the topmost leaves being tied together in a stiff spike, and the lower leaves cut. This is in preparation for Palm Sunday, the object being to protect the young leaves from the sun, and to produce the yellow, feathery branches of palm with which on Palm Sunday all the churches are profusely decorated; these palm-leaves being blessed by the priest are carried off by the people, fastened to their balconies, and remain there for some days, in memory of the religious celebration. On the green headland beneath Santa Ursula, jutting out over the sea at the height of a thousand feet above its level, is the pretty little villa of the Marquesa de la Quinta, with its newly-planted avenue of eucalyptus, and lovely views of the surrounding country and of the sea-coast. All this district is thickly planted with chestnut trees, of which the foliage is just beginning to burst. The region of chestnut trees ranges from a height of 2,000 to 4,000 feet; above is the belt of evergreen forest already mentioned, occupying a zone from 4,000 to 6,000 feet above the level; above this are the pine forests now unhappily sadly shorn of their ancient splendours by ruthless felling and long-continued neglect of forestry precautions.

About a mile and a half beyond Santa Ursula we come to the Cuesta de la Villa, the southern descent into the valley. Here we put on the drag firmly, and at a sudden turn of the road we come into full view of the lovely plain of the valley of Orotava, which raised the enthusiasm of the prince of travellers, Humboldt, expressed in a passage in which the inhabitants of the Taoro feel a just and inextinguishable pride, and which it would be inexcusable not to quote, "On descending into this valley we have entered a delightful country, of which travellers of all nations have spoken with enthusiasm. I have seen spots in the torrid zone where Nature is more majestic and richer in the development of organic forms; but, after having seen the Cordilleras of Peru and the beautiful valleys of Mexico, I must confess that I have nowhere come across a scene more attractive, or where the masses of verdure and rocks were more harmoniously distributed." Since the days of Humboldt the trees have been ruthlessly felled, to the great detriment of the landscape.

We stop at this classic spot and look around. Before us lies the whole valley of Orotava. The town of Port Orotava is seated as it were on a peninsula of volcanic soil of black, red, and many-tinted

yellowish hue. It is bathed and wholly surrounded by the Atlantic, which rolls majestically on to the shelving shore and against the fantastic basalt rocks, bursting everywhere into curves of white foam. Three little dome-shaped volcanic cones—the Montañetas—rise from the plain, the nearest us to the height of about a thousand feet; these were once the hotbeds of volcanic energy, and vomited streams of lava and masses of cindery rock which extend from their base to the shores. They are covered with black pumice, and are sparsely clothed with fig-trees, and tall flowering cytisi, and at the lower parts are terraced for the vine. The nearest and hugest of these somewhat ungainly plum-pudding excrescences is said to have been thrown up about five hundred years ago. They are remarkable, and I believe unique in volcanic physiography. Over the valley are sprinkled some white-washed and red-tiled farmhouses, and a few old Spanish *casas de campo*, many of them no longer occupied by the Spanish gentry, for whom they were built two or three centuries ago. The little mole stretches out its feeble arm into the sea, and appears to protect a miniature harbour, which it inadequately shields from the often rough force of the surf. The "Villa" or town of Orotava lies a thousand feet higher, on the brow of the hill beneath us, and about three miles from the sea-coast. The dome of the Church of the Concepcion and the spires of San Juan, as well as the tall square massive buildings of two deserted monasteries—San Augustin and Santo Domingo—break the outline, and, towards the lower part, a tall Canary palm towers loftily into the sky, with a stem rising 110 feet from the ground, crowned by its drooping, bell-shaped plume of feathery branches. This is reported to be the tallest palm in the South of Europe, and was a notable land-mark four centuries ago, when the Spaniards made their conquest. It is in the garden of the Marquesa de Sauzal, and close to it stood till recently the giant dragon-tree, the chief marvel of the arborial world, and considered by Humboldt to have been, at the time of his visit, at least 6,000 years old. It was destroyed about twenty years ago by a gale; there are no vestiges of it, for the precious trunk was accidentally destroyed by fire. The villages of Realejo, Cruz Santa, Perdoma, and, in the far distance by the sea and beyond the confines of the valley of San Juan de la Rambla, are included in the view, perched upon the rugged hills at different heights from the sea. Surmounting and surrounding all, on the land side, is the great amphitheatral slope of mountain heights, La Cumbra, rising like scarped bastions to a height of 8,000 feet. Apparently springing from them, but really rising eight miles within their verge, from the wonderful plain of the Cañadas, supposed to be a gigantic crater of ancient formation—like the Monte Soma of Vesuvius described by Pliny—is the majestic Peak, the ever-present and ubiquitous marvel of the island. It rises over 12,000 feet, towering above the clouds, and is now glistening white in the sun with snows which, however, summer suns will later melt. The valley is richly fertile; the fields are green with wheat-crops; here and there are plantations of the waving sugar-cane; gardens of the banana, with its massive foliage and huge pendant bunches of fruit; terrace upon terrace cut in the rock, and thinly covered with rich volcanic earth, bear abundant crops of the potato; here and there are patches of rough, rock-strewn ground, bristling with the fleshy masses of the prickly pear (opuntia tomentosa), preparing for the cochineal crop—the remnants of what was once an extensive and most remunerative industry, now destroyed by the artificial production of alizavine and aniline; innumerable fig-trees stud the fields and line the highways (figs are sold from the month of May at sixty for a penny); the smooth road on which we are travelling winds down with cleverly-planned gradients into the valley; its course is marked by the fringe of blue gum trees, which have rapidly grown up during the last ten years; fine palms, orange trees, pepper trees, aspens, and cypresses adorn the view. Nevertheless, the landscape is but sparsely and, indeed, insufficiently timbered, and to an eye accustomed to the richly-wooded country scenes of England or of Madeira and some parts of Italy, this deficiency unconsciously detracts from the beauty of the scene. Over all this fairy valley hangs the canopy of azure sky, flecked with masses of floating cloud; into all penetrates the glaring sunlight, making glorious with colour the roughest cliffs, and casting deep shadows over the glens and ravines, which are hollowed into caverns into which the vision cannot plunge, but which have depths of vaporous purple tone such as Turner alone could paint. We have lingered long, so that, although we started from Santa Cruz in the morning, at about 10, it is now about 4 o'clock, and we descend for an hour and a half along a road which becomes continually richer in foliage and flowers and more picturesquely beautiful. The roadside glows with yellow, pink, and damask roses of magnificent size, growing wild in bushes, and forming creepers which line the rocky cuttings; the bougainvillia throws its heavy sprays of purple and pink; the bignonia its pink and golden showers of blossom; the light sky-blue of the plumbago peeps from its creeping branches, flourishing as if in its native home at the Cape; tall geranium bushes of three shades form hedges along the hill-side; the snowy masses of the "schnee-rose" of the Germans, here called the *rosa de mosquete*, are of conspicuous brilliancy; the trees are finer and more numerous. Another hour's drive of ever-to-be-remembered beauty, in an atmosphere redolent with oderiferous scents, beneath a "summer sun," which strangely contrasts with our recollections of the snow, fog, and darkness which we left at Liverpool a week since, and a temperature which is that of a pleasant English June, and we drive into the silent, grass-grown streets of the Puerto de Orotava, and arriving at the iron gateway of a stately villa, pass into the courtyard of what was once the Villa Sitio, the spacious garden mansion of a Cuban millionaire, Don Francisco Garcia. It is now the sanatorium or grand hotel of Orotava, recently opened as such by some patriotic and enterprising residents, under the guiding management of an energetic Englishman. A large and cool tank, almost a miniature lake, through which flows a perpetual stream, occupies the largest part of the courtyard; it is bordered by an open railing, surmounted at frequent intervals by agaves and aloes in vases; the aloes are bursting into stately masses of flower; the cooing of doves and wood pigeons meets the ear: a swan sails gracefully over the water; outside the yellow wall grows a fringe of feathery tamarisks; we pass into a spreading building open everywhere to views of sea and mountain and made up of verandahs and terraced walks stretching out in gardens, rich in palms and tropical foliage, as well as bright coloured flowers of every climate. The cooing of the birds, the splash of fountains, the many-hued colour of the flower beds, the far spreading expanse of blue sea, the towering hills behind us, the blue sky and all-pervading sun overhead, the delicious warmth but exquisite freshness of the air, all tell us that we have reached safely and happily the haven of our rest, and are safely lodged for this promising "winter holiday," in one of the choicest of the gardens of the earth—Puerto Orotava, the very pearl of the Fortunate Isles.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

"Œuvre de la Tuberculose."—Peat as a Surgical Dressing.—Transperitoneal Nephrectomy.—Poisoning from Ether-Drinking.—Calorimetry in Children's Diseases.—Consumption a Contagious Disease. Digestive Disorders in Uræmia.—Vitiligo as a Symptom of Nervous Disease.—Dilatation of the Stomach and Osteomalacia.—General Emphysema in Children.—Diet in Biliary Calculus.

A KIND of Collective Investigation of Tubercle has been initiated, under the title of *Œuvre de la Tuberculose*, by Professor Verneuil, with the co-operation of MM. Bouchard, Brouardel, Charcot, Cornil, and others. Their object is to collect evidence of every kind bearing on the subject. The first fruit of their labours has just appeared as a fasciculus of 350 pages, with the title *Etudes expérimentales et cliniques sur la tuberculose*. The collection begins with a notice of the labours of M. Thaon, of Nice, on the subject of tuberculosis. M. Cornil contributes an article on the phenomena of karyokinesis observed in tuberculosis, which, in his opinion, is determined by irritation, due to the penetration of Koch's bacillus into the cells. M. Gosselin, of Caen, has endeavoured to find a method of attenuating the virus of tuberculosis, while MM. Raymond and Arthaud have tried to render animals refractory to the disease. MM. Landouzy and Martin have attacked the hereditary side of the question. The morbid anatomy and surgical pathology of the subject have been studied by MM. Reclus, Valude, and Verneuil. The different methods of treatment are also dealt with by various writers.

At a recent meeting of the Paris Surgical Society, M. Championnière communicated the result of his experience in the use of peat dressings (*ouate de tourbe*) in surgical operations. In his opinion this dressing is likely to be very useful, being much less expensive than the present antiseptic dressings. M. Championnière does not think it advisable to place the peat in immediate contact with the wound.

At the same meeting, M. Terrier communicated a note on a new method of performing transperitoneal nephrectomy. The abdomen is opened in the middle line, and the intestine pushed aside so as to uncover the peritoneal membrane covering the kidney. A vertical incision is then made in the membrane, the edges of which are held back with clamps. After removal of the tumour, the pedicle and the ureter are tied and brought forward through the peritoneal incision to the abdominal wound, where they are secured. In this manner the peritoneal cavity is closed on all sides. M. Terrier claims that this

operation does not necessitate drainage through the loin, as has generally been supposed.

At a recent meeting of the Académie de Médecine, M. Ory read a note on a case of poisoning from drinking ether. The patient had swallowed 15 grammes of ether in a glass of water. Complete coma, syncope, and suspended respiration ensued; the following day there was vomiting, with bloody stools and jaundice. The patient, after passing through a stage of complete anæmia, finally recovered.

At a recent meeting of the Académie des Sciences, M. P. Langlois communicated the results of his researches upon the calorimetry of sick children. His aim was to determine, by the aid of M. Ch. Richet's calorimeter, whether the high temperature of fever is due to a greater production or a diminished loss of heat. He ascertained that, in chronic diseases in which the temperature is normal or subnormal, the production of heat is diminished, while in pyrexial diseases there is a sensible increase of heat. The thermogenesis and the temperature appear to be in direct correlation in children's diseases.

The France Médicale of April 2nd publishes notes of a paper recently read by Dr. Brochin before the Société de Médecine Pratique, upon several cases in which the transmission of pulmonary tuberculosis by contagion was clearly demonstrated. In one of these, a man contracted the disease from sleeping in the same bed with his wife, who was consumptive. M. Brochin is of opinion that measures for the isolation of tuberculous patients and disinfection and antiseptic precautions should be rigorously adopted in France, as, according to him, they already are in England and Germany.

The *Union Médicale* of March 1st publishes a communication by M. Lancereaux on the digestive disturbances of uræmia. Cutaneous uræmia has been but little studied, though it is known that affections of the skin are of considerable significance in renal uræmia. Uræmic symptoms are more difficult to treat in aged patients than in children, in whom the skin and intestines act easily. Excrementitial matter which is retained acts upon the nervous system in the same way as certain vegetable or mineral poisons, and give rise to cerebro-spinal uræmia. In general, the tongue of a uræmic patient is red at the edges, and covered with pasty material, grey or yellowish in colour. It becomes black and horny in cases where uræmia is accompanied by suppuration in the urinary passages. Gastric uræmia is very common. In chronic neuritis, where gastric uræmia is frequent, vomiting is preceded by loss of appetite, and the patient shows repugnance to certain kinds of food, more especially meat. The vomited matters are liquid, greyish, or pale green in colour, emesis continuing all day long, and sometimes for several days. It disappears spontaneously, or under the influence of a simple enema. At the outset, the vomiting indicates an exaggerated secretion of the stomach consequent on the impairment of the renal functions; later, the gastric mucous membrane is deteriorated by the prolonged irritation caused by the excrementitial matter. Diarrhœa, which is abundant though painless, is a sure symptom of intestinal uræmia. Sleep is induced and headache relieved by it. The evacuations are mucous, fœtid, greyish in colour, and contain a number of whitish grits, like grains of rice; an excessive quantity of urea and carbonate of ammonia is also detected. Later on, the dejecta are tinged with blood, and sometimes become enteric in appearance. Typical lesions are found in the intestinal mucous membrane. M. Lancereaux concludes from his observations that bucco-pharyngeal uræmia is rare, but gastro-intestinal uræmia very common. When vomiting appears at the outset, it should be regarded as a compensatory exaggeration of the secretion, which should not be checked if no other means of secretion remain. The action of the skin and kidneys should be restored. Premature interference may bring on convulsions or coma, consecutive to the suppression of the diarrhœa. When diarrhœa and vomiting appear at an advanced period of the affection, when there are serious lesions in the mucous membrane of the alimentary canal, they should be checked. The hiccough characteristic of cerebro-spinal uræmia is violent and persistent, lasting sometimes for days. This symptom frequently presages a fatal termination.

Dr. Lebrun has recently called attention to the nervous origin of vitiligo in certain cases. This affection may, according to him, sometimes indicate the existence of a central or peripheral lesion, which would have otherwise passed unobserved; and it is, therefore, an important element both in prognosis and in treatment. The skin always denotes the state of the nervous system. If a patient presenting patches of vitiligo be carefully examined, a lesion of the nervous system, either central or peripheral, depending on the spinal cord or on the ganglionic system, will in most cases be detected. It would be desirable to determine whether cutaneous affections of trophoneurotic origin indicate a predisposition to certain nervous affections which appear periodically.

At a recent meeting of the Société Médicale des Hôpitaux, M. Comby reported a case of osteomalacia following dilatation of the stomach. The patient, a shoemaker, aged 66, was one of a family of twenty-two children, and had no hereditary history of disease. He came to the hospital to be treated for dyspepsia, which was characterised by flatulence and constipation. His appetite was good, but he was much emaciated. On examination, the stomach was found to give a flapping sound on palpation an inch below the umbilicus. The other viscera were unaffected, and the urine was normal. The digestive trouble had existed for many years, and the patient showed marks of rickets, with which he had been affected when a child. About ten years before entering the hospital he had suffered from dull pains in the bones, and deformities began to appear. The vertebral column became curved, as did likewise the clavicle and the bones of the forearm. Five years previous to the date of observation the pains had ceased, but the deformities continued to develop. The fingers were covered with nodosities. Like M. Bouchard, M. Comby thinks that the lesions of the bones are due to the excessive formation of lactic and acetic acid in the alimentary canal.

In the *France Médicale* of April 2nd, M. Cadet de Gassicourt describes a case of general emphysema following stridulous laryngitis in a little girl. Roger first called attention in 1883 to general emphysema of non-traumatic origin. In the case described by M. C. de Gassicourt, the emphysema was due to violent attacks of dyspnœa; broncho-pneumonia subsequently declared itself. The patient recovered. In many cases emphysema gives rise to serious complications, and causes suffocation. According to Roger, the prognosis depends principally upon the degree of gravity of the preceding affection of the respiratory organs.

M. Dujardin-Beaumetz recommends that persons suffering from biliary calculus should be enjoined to abstain from all fatty substances and carbo-hydrates which may furnish cholesterine. Peas, in particular, should be forbidden, as they contain a fatty substance similar to cholesterine; the excessive use of meat must be avoided, and eggs should rarely be eaten. A mixed diet composed of meat and green vegetables is the best. All green vegetables may be eaten, and also potatoes. Fruit may be taken if not too sweet; pastry should be forbidden. Meals should be taken frequently, in order to keep the gall-bladder at work. Wine mixed with Vichy water makes a good drink. The bowels should be kept open, and plenty of exercise should be taken.

CORRESPONDENCE.

THE GENERAL MEDICAL COUNCIL AND THE APOTHECARIES.

SIR,—The clear and powerful leading article contained in the JOURNAL of April 30th, under the title "The Medical Drama: Act the Second," must have satisfied every impartial reader that the Medical Council had but one, and that an imperative, duty to perform. It is imperative under the law which requires that every practitioner registered hereafter shall have passed a qualifying examination in Medicine, Surgery, and Midwifery; and as the Apothecaries, both in London and Dublin, are recognised by law beyond any question as medical authorities, empowered to grant registrable qualifications, it is the duty of the General Medical Council simply to see that the means for carrying out the objects of the law are sufficient. If it fail in this duty, the action of the General Medical Council must come under the notice of the Privy Council, and the latter body will point out to the former what its duty has been, and desire it to appoint the necessary examiners. The proposal of Dr. Struthers is to the effect that it would be "contrary to the interests of the public that a Society of Apothecaries, under Section 5 of the Medical Act, 1886, be enabled to grant a diploma qualifying for admission to the medical profession."

In making this proposal, Dr. Struthers asks the Council to place itself above the law, which, he admits in his resolution, proposes to grant this power to the Apothecaries. I trust that the Council will be advised to the effect that it has no such power as Dr. Struthers asks it to exercise, but that it will pass on at once to the appointment of the additional examiners which it is required to make. The proposal to annihilate the Apothecaries in England and Ireland comes with very ill grace from a Scotch professor, who is open to the suspicion of attempting to close the portals of these examinations in order to compel candidates who would have entered them to direct their steps towards those northern portals, always widely open to receive them. The proposal comes from Dr. Struthers

not only ungraciously, but very inconsistently. It was he who specially opposed the original conjoint scheme in which the Society of Apothecaries was included along with the other medical authorities, and it was he who recently induced the General Medical Council to press on the Colleges of Physicians and Surgeons, both in England and in Ireland, the great desirability of incorporating with them the Society of Apothecaries, yet it is he who now—the Colleges having refused to accede to the request of the Council—proposes to annihilate the Apothecaries, who have always acted up to the expressed wishes of the General Medical Council, and have fulfilled their duty in every way which was within their power.

On behalf of my Licentiate colleagues of the Apothecaries, I offer you my grateful thanks for what you have done on our behalf.—I am, etc., L.S.A.

THE MEDICAL DEPARTMENT OF THE PRISON SERVICE.

SIR,—We are always ready enough to grumble at our grievances, and it seems to me but right when they are relieved to make an acknowledgment.

No doubt the treatment which "One of the Sufferers" received at the hands of the prison authorities was most galling and indefensible, but a marked improvement in both the pay and position of the medical department of the Prison Service has taken place within late years. The claims of this department had been given a prominent place in the columns of the JOURNAL, attracting the notice of the administrative authorities, who sensibly and cordially gave them immediate consideration, with the beneficial results which I have stated.—I am, etc., A PRISON SURGEON.

ELECTROLYSIS IN THE TREATMENT OF UTERINE FIBROMA.

SIR,—There seems to be a promise of better things in store for women suffering from uterine tumours and hypertrophies than the chanceful myomotomy or the repugnant excision of the appendages.

An experience of five years has demonstrated that the suggestions of Legros and Onimus in 1868, and of Ciniselli in 1869, on the control of the nutrition of tumours by electro-chemical action, have at length been successfully carried into effect. American surgeons, from 1871 to 1878, tried what could be done with uterine tumours by electrolysis. Their attempts showed that certain effects could be obtained, but the success was not sufficient to establish the practice. Their methods were imperfect. Routh and Althaus, in England, in 1873, arrived at the conclusion that the use of continuous currents tended to provoke a powerful action of absorption, but their results were not considerable. In France, also, the practice of several surgeons showed that electricity was a powerful agent in their hands for acting upon the structures of these tumours and relieving the symptoms attending them. Still, for want of the right method of its application, they were unable to report much curative advantage.

Such was the state of things up to the year 1882, when Dr. Apostoli, of Paris, began his special treatment of these fibroids of the uterus. In 1884 he presented a memoir upon the subject to the Academy of Medicine, giving an account of his method of treatment. This memoir was afterwards expanded into a book, in which he published the details of symptoms, treatment, and results of ninety-three cases. These cases were ample earnest of what has since been achieved. The report to the end of 1886, now in course of preparation, will show to what good purpose this mode of dealing with uterine tumours has been put by its author.

Towards the end of last autumn, Sir Spencer Wells, in conversation, suggested that, as I was living in Paris, it would be worth while to see what Dr. Apostoli was doing. I did not hesitate. Immediately on my return, I hastened to make the acquaintance of Dr. Apostoli. I found I was the first English surgeon who had sought information from him personally. With the utmost frankness he opened all possible sources of enlightenment. He gave an exposition of his views, described his proceedings, put me in relation with a great many of his patients, let me have access to his documents, and offered oral explanation of any obscure points. For more than six months I have regularly attended his *clinique*, spending many hours a day questioning and examining patients, noting what was done, and making myself familiar with his operative peculiarities. I have critically read almost all that Dr. Apostoli has written, and have discussed the subject with other surgeons who were making visits for the same purpose as myself.

I have had introductions to some of his private patients, with opportunities of listening to their histories. I have heard them tell how, at a given time, they were drained, anæmic, exhausted, bent double with pain, unwieldy in bulk, confined to the room and even to the chair. I have seen them cheerful, alert, with the look of health, though often the contour of the body was not much altered. A rapid deposit of subcutaneous abdominal fat takes place after the tumour has begun to shrink, the appetite and sleep have returned, and the nutritive functions have resumed their healthy condition.

I have read the letters of others, comparing their *then* and their *now*, and teeming with contentment and obligation. Among them were some from a celebrated lady artist. She was eminently capable of realising the decline of her powers, and of estimating the value of their restoration. She writes and acts with the fervour of her nature, as a woman conscious of a great escape and thankful for it. We have all missed the pleasure of looking at her productions. She was at one time fibroidal, prostrate, utterly unable to stand at her easel, and her artistic life seemed to be closed. With the treatment her health is now re-established, and she paints as much and as well as ever.

The upshot of all this is that I am perfectly satisfied much good has been done; many women have been gradually, and without suffering, set up in health, who would, under ordinary circumstances, have been condemned to the risks of some cutting operation. The evidence that, by the treatment of Dr. Apostoli, all the symptoms caused by these tumours can be relieved; that the tumours can be reduced in size; that patients can be made to regain their usual health, powers, and enjoyment of life, is so clear, indisputable, and convincing, that in spite of all doubt, prejudice, and insinuation, it must be accepted. Or, since it stands on no better foundation, we may make up our minds to renounce the greater part of gynæcological science, reject the testimony of our senses, nullify ourselves in the fool's paradise of fatuous incredulity, and adopt the negation of a creed in the words of the old saying, "All medical facts are lies."

Seeing what I have seen, and knowing what I know of the galvano-caustic treatment of uterine fibroids and hypertrophies, I should deem myself wanting in philosophic self-denial and Christian charity, if, finding myself face to face with a woman suffering from such disease, I were to menace her with an operation of excision, either of her tumour or appendages. There is an alternative to propose, which is not, like myomotomy, capped with a chance of two to one against success (latest table compiled in Paris, 1886), and which is not mutilating or sterilising like oöphorectomy. Even if the tumour be not eradicated, a woman enduring symptoms calling for operative interference would think herself happy, after a little patience, and no more pain than is the accompaniment of her disease, to find that she had changed for the same condition of ease and freedom she might have with a pregnancy of a few months.

If these notes should excite anything more than curiosity, I am ready to give details of procedure and a number of illustrative cases which have come under my observation.—I am, etc.,

WM. WOODHAM WEBB, M.R.C.P.L.

DEGREES FOR LONDON MEDICAL STUDENTS.

SIR,—Will you allow me refer to a leading article in the JOURNAL of April 16th in reference to the proposed new London degree, in which it is stated that London students are practically debarred from taking degrees, "because, whilst Edinburgh students obtain degrees at the rate of about 85 per cent., London students only obtain degrees in London at about 8 per cent?" It is, I believe, a fact that 8 to 10 per cent. of all registered students leave the profession before the end of their curriculum, and that an equal percentage never qualify at all, or only at a very remote date. It is difficult, therefore, to understand how so high a percentage of graduates as 85 can be reached. A reference to the Edinburgh University *Calendar* shows that the proportion of Edinburgh students who take the M.D. degree varies between 3 and 4 per cent.; and of those who take the M.B. degree, from 8 to 10 per cent. I am informed by one of the University examiners that such is still the proportion. With regard to the Durham University, the percentage of local students who fully graduate is the same as in the case of Edinburgh—namely, between 3 and 4—taking the last seven years as a basis of calculation. Hence, so far as statistics go, and taking as correct the statement of the leading article referred to—namely, that 8 per cent. of students in London obtain degrees—it would appear that the proportion of London students who take degrees is twice as large as that of Edinburgh or of Durham students. At Durham (and similarly at Edinburgh too), the local student encounters much the same difficulties as his fellow in London. He has to pass an Arts examination in at least four advanced subjects over and above those taken in his preliminary; to go through nearly double the curriculum required for the diploma of the London colleges; to delay the date of his graduation as Bachelor in almost every case for six months at least after the termination of his four years

course; to pass much more prolonged and what are considered by the candidates, at any rate, much stiffer professional examinations than for the usual qualifications; and to pay, for full graduation in medicine and surgery, examination fees which by themselves amount to £54. It may be said that a London student is put to extra expense through being required to take out classes during a year or more of residence in the North. It must, however, be remembered that several London schools make a large reduction—some as much as £40—from the full fee in the case of students who have spent a year or more elsewhere, and by so doing render it possible for a student to put in all the attendance that is necessary for a degree without extra expense for classes. If, therefore, the proposed new London University should give its M.D. degree to more than 4 or at the outside 5 per cent. of London students, it would lay itself open to the suspicion of underselling the other Universities, and would run the risk of a corresponding fall in the status of its degrees.—I am, etc.,

W. P. MEARS.

University of Durham College of Medicine, Newcastle-on-Tyne, May 2nd, 1887.

MEDICO-LEGAL AND MEDICO-ETHICAL.

BROWN DEFENCE FUND.

THE following contributions to the above fund have been received:—

	£	s.	d.		£	s.	d.
Thomas Smith, Esq., F.R.C.S.	3	3	0	Dr. Grey Glover	1	1	0
Dr. Broadbent	2	2	0	Dr. Robert Barnes	1	1	0
Lennox Browne, Esq.	1	1	0	J. H. T. Connor, Esq.	0	10	6
Dr. Holman (Reigate)	1	1	0	M. C. Biggs, Esq.	0	10	6
Benj. Duke, Esq.	1	1	0	J. T. Boyd, Esq.	0	10	6
Dr. Frazer	1	1	0	Dr. Neale	0	10	6

G. STANLEY MURRAY.

Meadow Side, 23, Upper Richmond Road, Putney, April 27th, 1887.

CAN A L.S.A. PRACTICE AS A SURGEON?

IOTA asks whether the qualification of L.S.A. enables the holder legally to act as Surgeon to an Oddfellows' Lodge, and whether there is a Society established for the purpose of inquiring into such cases, which would undertake the prosecution.

*** We have referred this letter to Mr. Upton, Clerk to the Apothecaries Society, who writes:

"1. The licence of the Society of Apothecaries does not at present confer any legal qualification to practise as a surgeon in any capacity. It is expected that the licence conferred after June 1st next on those who pass the examination under the new regulations will qualify to practise surgery as well as medicine and midwifery.

2. I am not aware of the existence of the Society referred to by 'Iota.'"

KENNEDY DEFENCE FUND.

THE Honorary Secretaries beg to acknowledge the following contributions to the above fund, which is being raised to defray the legal expenses incurred in refuting a cruel and unjust charge, particulars of which will be found in advertisement in this issue.

The Committee invite the co-operation of all members of the profession in promoting the "Defence Fund," and request that subscriptions be forwarded to the Honorary Treasurer, Dr. M'Veagh, 1, Rutland Square East, Dublin.

	£	s.	d.		£	s.	d.
Sir James Paget	2	2	0	E. Dwyer Gray, Esq., M.P. ..	1	1	0
Sir George Burrows, Bart. ..	2	2	0	Edward Hamilton, M.D., F.R.C.S.I.	1	0	0
Sir Prescott G. Hewett, Bart.	5	5	0	Nathaniel Hobart, M.D. ..	1	1	0
Sir Joseph Lister, Bart. ..	3	3	0	George H. Kidd, M.D., F.R.C.S.I.	2	2	0
Sir George Edward Paget, K.C.B.	2	2	0	Richard J. Kinkead, M.D. ..	1	1	0
Sir Henry Wentworth Acland, K.C.B.	1	1	0	P. B. Kirwan, Esq.	2	2	0
Sir Charles A. Cameron ..	2	2	0	Chas. Frederick Knight, M.D.	2	2	0
The Right Hon. the Lord Mayor	1	1	0	Arthur V. Macan	1	1	0
J. Kellock Barton, M.D., F.R.C.S.I.	1	0	0	John McCarthy, Esq.	1	1	0
J. Hawtrey Benson, M.D., F.R.C.S.I.	1	1	0	Thomas Peter Mason, M.B., F.R.C.S.I.	2	2	0
Lennox Browne, F.R.C.S.Ed.	1	1	0	Robert McDonnell, M.D. ..	1	1	0
William Bruce, M.D.	1	1	0	F. Alcock Nixon, F.R.C.S.I. ..	2	2	0
Thomas A. Cusack, Esq. ..	2	2	0	Alderman John O'Connor, M.P.	1	1	0
Robert H. Davis, J.P. ..	1	1	0	Joseph M. Redmond, F.K.Q.C.P.I.	1	1	0
Joseph D. Fisher, Esq. ..	1	1	0	W. G. Ternan, L.R.C.S.I. ..	1	1	0
Kendal Franks, M.D., F.R.C.S.I.	1	1	0	Patrick Thompson, Esq. ..	5	0	0
				Robert Wade, L.R.C.S.I. ..	1	1	0
				M. A. Ward, M.D., F.R.C.S.I.	2	2	0

M.D. (Hull).—The advertisements in question are newspaper paragraphs purporting to be weekly reports of the Victoria Hospital for Sick Children, Story Street, and of the Hull Royal Infirmary. We cannot agree with our correspondent in considering these reports to be examples of "flagrant advertising," or a "mean advantage taken over the profession at large." We believe that the publication of reports in this form has been the custom in various counties for many years. Nevertheless we can but repeat the opinion which we have expressed on more than one occasion when appealed to on this subject, that such a practice is far more honoured in the breach than in the observance, and, indeed, we are glad to note that in the majority of instances it has been discontinued, chiefly at the express desire of the staff of the various public institutions concerned. The practice has long since been discountenanced and discontinued in all the more important institutions in London and most of the great cities. It does undoubtedly afford a precedent of which many others are prompt to avail themselves under less defensible conditions, and with obviously unprofessional objects. Probably when the attention of the staff of these institutions is called to the subject, they may see fit to take some suitable step in the matter.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Friday, April 29th.

Prevention of Rabies.—Lord MOUNT-TEMPLE, in calling attention to the regulations for the prevention of rabies and hydrophobia and presenting a Bill on the subject, said he considered the present method of muzzling both injurious to the dogs and inefficient for the purpose of preventing the spread of the disease. The principle upon which he had proceeded in framing his Bill was to place a responsibility upon the owner of the dog, who should have presented to him such a statement of the premonitory symptoms of rabies as were set forth in one of the Orders issued by the Agricultural Department of the Council. He recommended that, in addition to the present register of those who paid dog-tax, there should be a register of the dogs themselves, with their numbers to be borne on their collars, each owner receiving, on payment of his tax, a badge with the number on it; and that if a dog was found wandering in the street or on the road without badge or number, that should be held to be *primâ facie* evidence that the dog was ownerless and might be taken up. The Bill did not propose to interfere with the existing regulations, but the register and the responsibility of the dog involved in his proposal might be regarded as an alternative to the muzzle, which to dogs was both irritating and hurtful.—Viscount CRANBROOK did not admit that the proper muzzle was so irritating to dogs as had been stated. In 1885 rabies rose to so great a height in the metropolis that one veterinary surgeon alone had no fewer than seventy-seven cases before him; besides which twenty-eight people died in and close to London from hydrophobia. After the police regulations with regard to muzzling were put in force, the number of cases fell to two, and that, he submitted, was a strong indication that the police rules had done a great deal to mitigate the disease. Rabies being a disease only communicated by saliva, it was a remarkable fact that in certain parts of the country where the people keep fighting dogs the disease was constantly prevalent. Looking abroad, he found that in Berlin rabies and hydrophobia formerly prevailed to a very great extent, and for nine years the whole of the dogs in that city were put in muzzles, and so rigidly was the law carried into effect that during the whole of that period not one human being was attacked by hydrophobia. Nor did he believe himself that the muzzle was injurious to the dog. The outbreak of rabies among the deer in Richmond Park he attributed to their having been bitten by an afflicted dog, the deer communicating the malady by the saliva from one to another. He was sure, from the reports made to him, that the best authorities were strongly of opinion that the disease might be stamped out altogether by a system of muzzling being universally adopted and carried out for a sufficient length of time.—This view was supported by the EARL of KIMBERLEY.—The Bill was read a first time.

HOUSE OF COMMONS.—Thursday, April 28th.

Infant Marriages in India.—Mr. J. G. TALBOT having asked whether Her Majesty's Government were prepared to take such measures as would prevent for the future the enforcement of infant contracts of marriage by English law framed for entirely different conditions of society, Sir J. GORST stated that, as the case was now under appeal, the consideration of the expediency of legislation would, in the opinion of the Secretary of State, be premature.

Tuesday, May 3rd.

Saving Life at Sea.—Baron H. DE WORMS, in reply to Mr. HOARE, said several reports had been received on the use of the line-throwing gun as a means of saving life at sea, one of which referred to experiments at Shoeburyness. These reports would be laid before the Select Committee appointed to inquire into the subject.

The Water at Malta.—Mr. FORWOOD, in reply to Mr. NORTON, said that in December, 1885, occasional testings of the water in the tanks took place. Subsequently, however, to December, 1885, a monthly analysis of the water had been instituted; and, if any tank was found to contain water unfit for drinking it was run off, and the tank thoroughly cleaned out.

NAVAL AND MILITARY MEDICAL SERVICES.

HONORARY RANK FOR ARMY MEDICAL OFFICERS.

M. S. writes: There is not a shadow of a reason why this should not be conferred upon us. I write what I know to be the unanimous feeling of an important division of our staff when I say so. We hope your efforts will not cease until we military surgeons have a recognised status, not inferior to really non-combatant departments in the army.

MEDICAL STAFF writes: The time has gone by for any such alteration of paragraph 125A of the Royal Warrant as reported in the JOURNAL of April 16th to be accepted by the officers of the Medical Staff as a satisfactory solution of the question of their army rank. The proposed alteration leaves this as it was before. There are but two ranks, substantive and honorary, and the medical officer has neither. From the day that the Secretary of State for War declared in the House that relative rank meant nothing, relative rank was doomed. It is now attempted to restore its provisions without giving them even the name. The medical officers of the army will not accept this, and they trust to those who have already so ably advocated their cause to represent their views to the Government. Should representations fail, the pressure exercised by the schools from 1872 to 1878 must once again be brought to bear, and candidates for the Medical Staff must not be forthcoming.

AN ARMY MEDICAL OFFICER writes: The officers of the Medical Staff owe you a deep debt of gratitude for the brilliant defence of their rights and position which you are carrying on in the columns and leading articles of the JOURNAL, and if you only keep "pegging away" your efforts will be crowned by success, and honorary rank will be granted to them. Now that relative rank has been abolished, all our endeavours must point to the attainment of that rank which is held by the other departments of the army, including the inspectors of army schools.

*** It is to be anticipated that great opposition will be made to this claim by the Horse Guards. The Parliamentary Bills Committee and the JOURNAL have won many brilliant victories for the public services in the past, and will endeavour to fight this battle not less effectually; but it is very doubtful whether they can succeed unaided, in view of the formidable opposition by which they are likely to be met. The aid of the medical schools, colleges, and corporations should be invoked. Let every medical officer who has this question at heart at once communicate with leading persons in his own medical corporation and in his own school; especially in the latter, with the deans, house-surgeons, and leading students. Full explanations should be given, and meetings of the students held in every school, at which retired medical officers conversant with the facts should attend, and suitable resolutions should be passed. We shall be glad to hear from medical officers proposing to take this course, with information as to the dates of any such proposed meetings, or copies of any correspondence addressed to the corporations and colleges, and of any proceedings consequent thereon. If desired, we will have the recent leaders on the subject reprinted from the JOURNAL; or a committee formed in each city of retired medical officers, to co-operate with our Parliamentary Bills Committee, might communicate with Mr. Ernest Hart, Chairman of that Committee, who will assist with documents and suggestions.

A MILITARY CORRESPONDENT writes: The Army Medical Staff owe the JOURNAL much for its powerful advocacy. Your leader last week is most able, and is unanswerable. As you are well aware, the Service draws a broad distinction between officers of the army and officers of the departments of the army; for example, see the preamble to the creation of the distinguished service order lately, where it was most marked. The former had substantive rank, the latter only relative rank, real rank being reserved for professional soldiers; now that honorary military rank and titles are granted to departmental officers of the supply branches (pay, commissariat, and stores), relative rank is inferior and scarcely better than none at all. The medical officers share all the dangers and hardships of combatants, *plus* all medical risks, but share the honours and rewards of neither profession, while the officers of supply departments are safe in the rear, or at the depôt or the base. More medical officers in proportion die or are invalided than combatants, as you state truly.

Is the department in charge of the lives and health of the army, the sick and wounded officers and men, the sons and brothers of Britishers, from prince to peasant, to remain inferior to the supply departments? And why? Is not the Medical Staff Corps a military organisation, with military titles and status, from private to sergeant-major and quartermaster, who may be honorary captain or major? This corps is responsible for nursing the sick and wounded, and all the duties of hospitals in the field or at home; but the Medical Staff officers who command this corps (being responsible for all its duties, discipline, interior economy, etc.), and are in charge of the troops and hospitals, and of the sick and wounded, have no army rank whatever.

1. Does the army need the best medical aid available, or will inferior medical assistance suffice?

2. Are the officers of the Army Medical Staff unworthy of military rank? If so, they must be inferior to the non-commissioned officers and men of the Medical Staff Corps who are under their command.

RELATIVE RANK OF VOLUNTEER MEDICAL OFFICERS.

SURGEON ARTILLERY VOLUNTEERS wishes to know what relative rank he holds, and, if it is the same as that of captain in the regular forces, is he entitled to wear spurs on parade?

*** The relative rank of medical officers in the volunteer force is determined by the same rule as that prescribed for the army, except that acting surgeons rank as lieutenants.

A surgeon of artillery volunteers ranks as captain; he is entitled to wear steel spurs when mounted on parade.

INSTRUCTION FOR VOLUNTEER MEDICAL OFFICERS.

SIR,—The refusal by the War Office to accede to the application for pay and allowances made by those regimental surgeons who have passed the School of Instruction at Aldershot is a serious grievance, which (we learn from Dr. W. P. Mears's letter in the JOURNAL of April 30th) has been followed by the indignity of withdrawing the permission to regimental surgeons to attend a course of instruction on any terms. I am sure that this invidious distinction will be viewed most unfavourably by the officers of the Volunteer Medical Staff Corps. The position of regimental surgeons is most unsatisfactory, but the statements of your correspondent, "N.," require amendment and addition.

1. The "proficiency" examination is open to regimental surgeons, and those who qualify for the certificate earn the fifty shillings' grant. Certain commanding officers require their medical officers to become "proficient," or to pay annually the amount of the grant if they retain their commissions or appointments.

2. The duties of medical officers with troops in camp are given in Volunteer Regulations, Sec. xxviii, par. 967, and in the Queen's Regulations, Sec. xiv, par. 68.

3. The training of regimental stretcher-bearers, with special reference to volunteers, is laid down in the Queen's Regulations, Sec. xiv, par. 80—90, and in Volunteer Regulations, Sec. xv, par. 485.

4. In the instructions for the appointments of medical examiners of recruits for the army, precedence is given to volunteer medical officers over other practitioners not in the service. Queen's Regulations, Sec. xix, par. 15.

5. The relative rank of medical officers is defined in Volunteer Regulations, Sec. iv, par. 58; and the honorary rank in Sec. viii, pars. 293, 310, and 313.

6. Regimental surgeons, when on duty in camp at Aldershot, are received most cordially by the Army Medical Staff, and permission is readily obtained from the principal medical officer or the commandant of the Training Depôt to attend parades, and examine medical and surgical equipment.

Lastly: The duties of regimental surgeons are performed at Easter Manœuvres, in barracks at Dover, Portsmouth, Chatham, etc., and in camp at Aldershot and elsewhere. In many corps the regimental stretcher-bearers are well instructed and drilled by the regimental surgeon, and the bearers have passed the examination for the Army Ambulance Certificate and Geneva Cross.

Granting that little encouragement is given to regimental surgeons, there is a wide field of work open to them, and a want of organisation, which well-directed efforts have as yet failed to bring about, due to a lack of enthusiasm.—I am, etc.,

WALTER PEARCE, M.D.,
Acting Surgeon 20th Middlesex (Artists') Royal Volunteers.

DR. J. P. MASSINGHAM (Acting Surgeon 1st Shropshire and Staffordshire Artillery writes: Surgeon Mears, of the Tynemouth Artillery Volunteers, states in the JOURNAL of April 30th, that in future volunteer surgeons will not be allowed to join the School of Instruction at Aldershot, unless they belong to the Medical Staff Corps. Now as the course at Aldershot takes six weeks, and very few volunteer officers can spare that time, it seems probable that the Director-General has been driven to make this order because a medical officer joining the class for a week or so must interfere, more or less, with those who are going through the whole course. Why should not a camp of instruction be formed for volunteer surgeons, of one week's duration? If each officer knew thoroughly *The Manual for the Medical Staff Corps* and *Buckley's Handbook*, before joining, it seems to me that he might learn everything that a volunteer surgeon should know in seven days.

THE NAVY.

THE following appointments have been made at the Admiralty during the past week: G. A. DREAPER, Surgeon, additional, to the *Triton;* H. B. BEATTY, Surgeon, to the *Duncan*, additional; H. E. L. EARLE, Surgeon, to the *Duncan*, additional, for disposal.

Fleet-Surgeon EDWARD NOLLOTH died at Camberwell on April 29th, at the age of 73. His commissions bore date: Surgeon, August 18th, 1835; Staff-Surgeon, January 14th, 1845; and Fleet-Surgeon, January 6th, 1861. He retired April 1st, 1870. He served in the Black Sea during the Crimean war, and had the Crimean and Turkish medals, the Sebastopol clasp, and the 5th class of the Order of the Medjidie.

THE MEDICAL STAFF.

SURGEON-MAJOR W. J. WILSON, M.D., has been promoted to be Brigade-Surgeon *vice* W. Cherry, who has been granted retired pay. Dr. Wilson entered the service as Assistant-Surgeon April 1st, 1861; became Surgeon, March 1st, 1873; and Surgeon-Major, April 1st, 1876. During the recent Afghan war he served with the Southern Afghanistan Field Force, and in the campaign in the Soudan in 1885 he commanded a bearer-company (medal with clasp). He is at present serving at the Mhow Station Hospital, in the Bombay command.

Surgeon-Major J. R. CHOKER is granted retired pay. His commissions are dated: Assistant-Surgeon, April 1st, 1867; Surgeon, March 1st, 1873; and Surgeon-Major, April 1st, 1879. The Army Lists do not credit him with war-service of any kind.

The undermentioned gentlemen serving in the Madras command have been posted as follows: Surgeon-Major D. C. W. HEATHER, doing general duty Hyderabad Subsidiary Force, to be Senior Medical Officer of the Station Hospital, Bellary; Surgeon T. H. CORKERY, doing duty Station Hospital, Secunderabad, to do duty Station Hospital, Kamptee; Surgeon A. ASBURY, general duty Eastern Division, to do duty Station Hospital, Belgaum.

INDIAN MEDICAL SERVICE.

BRIGADE-SURGEON H. J. BLANC, M.D., Bombay Establishment, has retired with the honorary rank of Deputy Surgeon-General. He entered the service as Assistant-Surgeon February 10th, 1859. While serving on special duty in Abyssinia in 1867-68, Dr. Blanc was made prisoner by the Abyssinians; on liberation, he joined the British troops, and was present at the capture of Magdala; he received the thanks of Government and the medal for the campaign.

Surgeons-Major WARWICK JACKSON and ROBERT REID, of the Bengal Establishment, have likewise retired; the former began his army career as Assistant-Surgeon, April 1st, 1868; the latter, March 31st, 1865. Surgeon-Major Jackson served in the Afghan war in 1878-79, and was at the storming of the Peiwar Kotal (medal with clasp), and with the expedition sent against the Mahsood Wuzeerees in 1881. Surgeon-Major Reid has no war record.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

MILK-DIPHTHERIA AT CAMBERLEY AND YORK TOWN.

THE report by Mr. W. H. Power just issued by the Local Government Board on the outbreak, in October last, of diphtheria at York Town and Camberley, in the Farnham rural sanitary district, is one which will be read with interest by all students of preventive medicine who are anxious to unravel the mystery at present surrounding the causation and dissemination of diphtheritic throat-affections. As Mr. Power incidentally remarks, "it is not often that so good an opportunity as the present is afforded the observer who seeks to understand the method of disease-distribution in milk." For several years past diphtheria has prevailed more or less continuously, although in somewhat sporadic fashion, along the valley of the river Blackwater, and the matter has been the subject of more than one official inquiry. But in October last the disease became suddenly epidemic in York Town and Camberley, in the neighbourhood of the Staff and Military Colleges; and before it subsided, towards the end of the month, 57 households had been invaded, and 88 cases of diphtheria, 5 of scarlatina, and 47 of minor throat-illness had occurred, 16 of the attacks proving fatal. Of these 140 attacks, 92 per cent. occurred between the 8th and 18th of the month.

When Mr. Power, some time later, entered upon his investigation, the outbreak was very generally ascribed to the use of milk from a particular dairy, but by some it was referred to defects in the public sewer arrangements, by others to impurity of water-supplies, whilst some few attributed it to emanations from the foul matters dredged out of the Blackwater, and recently deposited on the river-bank near to York Town. There was, however, no community whatever of sewerage arrangements or of water-supplies among the invaded households, and, although Mr. Power admits the danger arising from the tainting of the atmosphere by the foul dredgings of the river, he gives reasons for discarding that as an explanation of the outbreak. But the case is far different as regards the alternative of milk-infection. Of the 176 households in the infected area, 94 took their milk from a particular dairy, whilst 82 took it from other sources. Of the 94 households, 48 were invaded, including 81 persons attacked by diphtheria, and 43 by minor throat-affections, 15 proving fatal. Of the 82 other households, only 9 were invaded, 6 persons being attacked by diphtheria and 10 by minor throat-affections, 1 death ensuing. A glance at these figures is sufficient to throw suspicion on the milk of the particular dairy, whatever may have been the way in which it can have operated; but the evidence is even more striking when it is understood that all the customers (94 households) of the particular dairy are in question, whereas there were some hundreds of houses getting their milk from the same sources as the 82 other households, but in the whole of which scarcely a case of any sort of throat-illness occurred.

Here commences the most important part of Mr. Power's investigation. He points out that it should be no objection that everyone of the consumers of the particular milk did not suffer. We know from experience of milk epidemics generally that every individual partaking of the infected milk need not become attacked. But why that is the case has never been clearly made out. And perhaps we have in the York Town and Camberley experience one potent reason why, namely, that it depends in some way upon difference in quantity of milk consumed by one and another individual. The customers of the particular dairy were found, socially, to be nearly equally divisible into two distinct classes, and it appears that, whilst 84 per cent. of the houses of the better class were invaded, only 22 per cent. of the cottages were attacked; and that, whilst 33 per cent. of the better class of customers were attacked, only 6 per cent. of the other class fell ill. Even a greater disparity is observable when we take the children attacked in the two classes, the ratio then being roughly as 8 to 1. In explanation of this, Mr. Power points out that, among persons of the better class, milk distributed from this dairy had averaged more than five pints a household daily, whereas among cottagers and tradesfolk it had averaged less than one pint daily a household.

Here, then, is an indication that amount of milk had been all-important in inducing attack. As to this, Mr. Power observes that both children and adults of the poorer classes drink far less raw milk than those of the better class, and that the very different use of milk by the two classes—the poorer using, as a rule, only a little milk in hot tea or coffee at breakfast and tea—involved differences in the number of opportunities for infection in one and the other class. He further examines the methods of dealing with the milk in the different households, and notes that among the better class milk is more generally kept from one day to another than in other houses. In connection with this he observes that—given an infective material present originally in the milk as delivered from the farm, and capable of further development or multiplication in the milk if time and opportunity were afforded it—much of the milk consumed in the better-class households could be thought of as having obtained, by the time it came to be swallowed, a superior ability for infecting people than the milk distributed to, and consumed almost at once by, cottagers. He does not, however, pretend to have positively established special operation of such an influence in the present case.

The all-important question then remains—how the milk acquired its infective property; and, unfortunately, Mr. Power has to leave this point unsettled. The dairy farm, it was found, had been exceptionally well managed in every respect, and more than ordinary care had been taken to prevent infection of the milk. Even the water for dairy purposes had invariably been boiled before use, although, as the reporter remarks, "there is not on record any authentic instance of water, however impure, having been the means of conveyance of *diphtheria* to the human subject." There was no sufficient evidence of infection of the milk directly by human agency, and the cows were declared, after veterinary examination, to be free from disease. Mr. Power adds, however, very significantly, whilst reluctantly leaving the main point unsettled, that, "as a matter of fact, at the beginning of November one cow at the farm which had suffered chapped teats still had at the site of a chap a scab or crust, not unlike those which, at a later stage of their malady, had been observed to replace ulcers on the udders of certain Hendon cows."

Here, then, may, or may not, have been the source of the mischief, as in the Hendon outbreak, and it is to be regretted that Mr. Power's special experience and aptitude for thoroughly investigating cases of this nature could not be brought to bear on the present outbreak early enough for him to have tested the suggestion that some affection of the cow was related to the infectiveness of the milk. Recent experiences would seem to show that there is much hope of further important discoveries in this line of investigation.

POOR-LAW MEDICAL OFFICER WITH ONE QUALIFICATION.

COCA.—In answer to our correspondent's query—whether a practitioner holding the diploma of M.R.C.S. is eligible for the appointment of Poor-law medical officer—we give it as our opinion that the single qualification is not sufficient, and that it will be necessary to obtain an additional one, namely, that of Licentiate of the College of Physicians, before any such appointment can be held.

A. B. N.—It does not appear to be necessary that the holder of every Poor-law appointment should possess a certificate of competency in vaccination.

J. M. C.—The general rule is that a double qualification is required, but under special circumstances an exception is occasionally made.

BONE-SETTER'S PATIENTS.

GRAFTON writes: I am a Poor-law medical officer, and lately attended an old woman (receiving out-door relief) who had fallen and fractured the radius. This I set; not satisfied with the treatment, she in a week or so went to a bone-setter, who told her she had dislocated her wrist, and broken one of the bones; he bound it up with strong plaster, and ordered it to be worn in a sling for some weeks. I saw her shortly after on account of a cardiac trouble. Am I justified in applying for the fee of £3?

*** Our correspondent has unfortunately omitted to mention whether it is part of his contract to attend all cases of fracture, etc.; but assuming that it is, we certainly believe that he has a claim, and that the "bone-setter" had not the right to express a contrary opinion, or to put up the limb afresh. Doubtless the limb was very much swollen, and at the end of a week disguised the nature of the injury; that, however, does not invalidate our correspondent's claim for a fee of £3.

HEALTH OF ENGLISH TOWNS.

IN the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons, 5,816 births and 3,647 deaths were registered during the week ending Saturday, April 30th. The annual rate of mortality, which had risen from 20.5 to 21.6 per 1,000 in the three preceding weeks, declined again during the week under notice to 20.6. The rates in the several towns, ranged in order from the lowest, were as follow:—Derby, 10.5; Brighton, 14.6; Leicester, 15.7; Bradford, 16.3; Portsmouth, 16.3; Plymouth, 16.9; London, 18.3; Salford, 18.4 Nottingham, 18.9; Bolton, 19.0; Leeds, 19.1; Hull, 19.6; Sunderland, 19. Birkenhead, 19.8; Birmingham, 21.1; Preston, 21.9; Halifax, 22.4; Newcastle-upon-Tyne, 22.6; Norwich, 24.2; Oldham, 24.5; Wolverhampton, 24.5; Sheffield, 26.4; Liverpool, 27.0; Manchester, 27.5; Bristol, 28.2; Blackburn, 30.8; Huddersfield, 31.3; and the highest rate during the week, 35.4 in Cardiff. In the twenty-seven provincial towns the death-rate averaged 22.5 per 1,000, and exceeded

by 4.1 the rate recorded in London, which, as before stated, did not exceed 18.3 per 1,000. The 3,647 deaths registered in the twenty-eight towns during the week under notice included 261 which were referred to measles, 132 to whooping-cough, 51 to scarlet fever, 43 to diarrhœa, 25 to diphtheria, 15 to "fever" (principally enteric), and 2 to small-pox; in all 529 deaths resulted from these principal zymotic diseases, against 508 and 558 in the two preceding weeks. The zymotic rate was equal to 3.0 per 1,000. In London the zymotic rate was equal to 2.6, while it averaged 3.3 per 1,000 in the twenty-seven provincial towns, among which it ranged from 0.0 and 0.4 in Preston and in Portsmouth, to 6.6 in Sheffield, 6.7 in Norwich, and 7.0 in Oldham. The fatal cases of measles, which had steadily increased in the eleven preceding weeks from 77 to 291, declined during the week under notice to 261, and caused the highest death-rates in Manchester, Sheffield, Sunderland, Liverpool, Salford, Oldham, and Norwich. The deaths referred to whooping-cough, which had risen from 97 to 134 in the five previous weeks, were 132 during the week under notice, and showed the highest proportional fatality in Newcastle-upon-Tyne, Cardiff, and Blackburn. The 51 fatal cases of scarlet fever showed a slight further increase upon the recent weekly numbers, and caused the highest rates in Blackburn, Sheffield, and Oldham. The 43 deaths referred to diarrhœal diseases also showed a further increase upon the numbers recorded in recent weeks. The fatal cases of diphtheria, which had been 32 and 21 in the two preceding weeks, rose again during the week under notice to 25, and included 16 in London, and 5 in Liverpool. The deaths referred to different forms of fever, which had been 22 and 24 in the two previous weeks, declined during the week under notice to 15, of which only 4 occurred in London. Small-pox caused one death in Sheffield and one in Cardiff, but not one in London or in any of the twenty-five large provincial towns. The Metropolitan Asylum hospitals contained 6 small-pox patients on Saturday, April 30th, and no new case of this disease was admitted during the week. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 4.1 per 1,000, and was below the average. The causes of 75, or 2.1 per cent., of the 3,647 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, April 30th, 908 births and 563 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,299,000 persons. The annual rate of mortality, which had been 23.7 and 22.0 per 1,000 in the two preceding weeks, rose again to 22.5 during the week under notice, and exceeded by 1.9 per 1,000 the mean rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 9.7 in Perth, 15.1 in Leith, 20.1 in Edinburgh, 22.1 in Dundee, 22.6 in Greenock, 24.4 in Aberdeen, 24.8 in Glasgow, and 26.5 in Paisley. The 563 deaths registered during the week in these Scotch towns included 89 which were referred to the principal zymotic diseases, against numbers declining from 127 to 95 in the four preceding weeks; of these, 36 resulted from whooping-cough, 27 from measles, 8 from scarlet fever, 8 from diarrhœa, 6 from diphtheria, 4 from "fever," and not one from small-pox These 89 deaths were equal to an annual rate of 3.6 per 1,000, which slightly exceeded the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic death-rates in the Scotch towns during the week under notice were recorded in Dundee, Greenock, and Aberdeen. The fatal cases of whooping-cough, which had been 36 in each of the two preceding weeks, were again 36 during the week under notice, of which 16 occurred in Glasgow, 7 in Edinburgh, and 6 in Dundee. The deaths referred to measles, which had been 28 and 30 in the two previous weeks, declined again during the week under notice to 27, and included 13 in Aberdeen and 12 in Glasgow. The 8 fatal cases of diarrhœa differed but slightly from recent weekly numbers. The deaths from scarlet fever, which had been 11, 10, and 9 in the three preceding weeks, further fell during the week under notice to 8, of which 4 occurred in Edinburgh and 2 in Greenock. The 6 fatal cases of diphtheria exceeded those returned in any recent week, and included 4 in Glasgow. The deaths referred to different forms of fever, which had been 6 and 8 in the two previous weeks, declined during the week under notice to 4, of which 2 occurred in Glasgow. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 4.6 per 1,000, against 4.1 in London. The causes of 70, or 12.4 per cent., of the 563 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending Saturday, April 30th, 412 deaths occurred in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 24.7 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 5.2; Belfast, 19.7; Cork, 27.3; Drogheda, 29.6; Dublin, 30.6; Dundalk, 21.8; Galway, 23.5; Kilkenny, 0.0; Limerick, 31.0; Lisburn, 4.8; Londonderry, 7.1; Lurgan, 20.5; Newry, 52.7; Sligo, 4.8; Waterford, 16.2; Wexford, 12.8. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.1 per 1,000, the rates varying from 0.0 in nine of the districts, to 7.0 in Newry; the 15 deaths from all causes registered in that district comprising 2 from diarrhœa. Among the 85 deaths from all causes registered in Belfast are 1 from measles, 1 from whooping-cough, 2 from enteric fever, and 1 from diarrhœa; 1 of the 42 deaths in Cork was caused by typhus; and the 28 deaths in Limerick comprise 1 from the same disease. In the Dublin Registration District, the births registered during the week amounted to 258 and the deaths to 212. The deaths represent an annual rate of mortality of 31.3 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 30.6 per 1,000. Twenty-seven deaths from zymotic diseases were registered, being 7 in excess of the number for the preceding week, but 3 under the average for the seventeenth week of the last ten years; they comprise 1 from measles, 1 from scarlet fever (scarlatina), 4 from whooping-cough, 2 from diphtheria, 1 from cerebro-spinal fever, 1 from ill-defined fever, 2 from enteric fever, 3 from diarrhœa, etc. The number of deaths from diseases of the respiratory system registered is 41, or 4 below the average for the corresponding week of the last ten years, and 10 under the number for the week ending April 23rd; 22 of the 41 deaths were caused by bronchitis, 3 from croup, and 9 from pneumonia or inflammation of the lungs. The deaths of 22 children under 5 years of age (including 15 infants under 1 year old) were ascribed to convulsions. Three deaths were caused by apoplexy, 2 by epilepsy, 7 by other diseases of the brain and nervous system (exclusive of convulsions), and 13 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 23 deaths, mesenteric disease 4, and cancer 6. Five accidental deaths were registered. In 34 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

OBITUARY.

WILSON FOX, M.D., F.R.C.P., F.R.S.

The sudden and premature death of Dr. Wilson Fox deprives the College of Physicians of one of its most eminent, accomplished, and beloved Fellows, and the English profession of one of its chief ornaments. In Dr. Wilson Fox were united most of the qualities and characteristics which make up the highest type of a teacher and a practising physician, His personal bearing and physical endowments were markedly indicative of refinement, culture, and good-breeding. Tall, spare, and erect, with features finely cut in thoughtful lines, sympathetic in expression and eager of gaze, he produced at the first glance the impression of intellectuality and earnest kindliness which were the key to his character and the secret of his charm. He had attained a distinguished social as well as an eminent professional position. As Physician-in-Ordinary to the Queen, he won the confidence and regard of his Sovereign. In the official *Court Circular* the Queen has expressed her estimate of Dr. Fox in the following gracious words: "The Queen was much grieved to receive yesterday the news of the death, after a few days' illness, of Dr. Wilson Fox, one of Her Majesty's Physicians-in-Ordinary. Dr. W. Fox had formerly been in frequent attendance on the Queen in Scotland, and Her Majesty had a great regard for him. The medical profession loses in him one of its most distinguished members."

By his professional colleagues Dr. Fox was much beloved and esteemed. A certain reserve, sometimes falling into stiffness of manner, did not ill become him; for it expressed naturally the caution of his mind, the fixed resolution to adhere to the highest standards of thought and practice, and the quiet dignity of his character. But at heart he was gentle, sympathetic, affectionate; easily moved to pity and to scorn, although slow to anger. He was deeply interested in advancing the power, influence, and usefulness of the London College of Physicians, of which he was a senior officer, and especially in promoting the extension of the diploma of Doctor of Medicine to its alumni, and the procuring of medical degrees on reasonable terms for English students.

Dr. Wilson Fox was in his fifty-seventh year. Though himself in later years a member of the Church of England, he came of a famous Quaker family, well known in the West of England, and connected with other well known families of the Society of Friends, as for instance the Peases, Jowitts, and Crewdsons; from a member of the last-named family he inherited Fieldfoot, a small estate near Rydal Mount and Lake, to which he was travelling when overtaken by his fatal illness. He was the son of an eminent manufacturer at Wellington, and was educated first at Bruce Castle, Tottenham, and afterwards at University College, London; he took the degree of B.A. in the University of London. Having determined to enter the medical profession, he lived for some time in the house of Mr. Burford Norman, a surgeon residing in Duchess Street, Portland Place, then well known for his skill in ophthalmology; he subsequently entered the medical faculty of University College. Among his fellow-students were Sir Joseph Lister, Sir Henry Thompson, Sir William Roberts, Dr. Russell Reynolds, and Dr. Grailly Hewitt. After a distinguished career as a student, he took the degree of M.B. in 1854, and that of M.D. in the following year. He was House-Physician at University College Hospital, and subsequently held a similar appointment in the Edinburgh Royal Infirmary. He then went abroad, and spent a considerable time in Berlin, Vienna, and other centres of German thought, where he had the advantage of studying under Virchow, Koelliker, and other eminent teachers. On his return he became physician to the North Staffordshire Infirmary, and soon acquired a considerable practice in Newcastle-under-Lyme. Ill-health induced him to resign his appointment, and to return to London, partly in order to place himself under medical care. From this indisposition he completely recovered, and was appointed Assistant-Physician to University College Hospital in 1861, at the same time succeeding Sir William Jenner as Professor of Pathological Anatomy.

In 1866, he was elected a Fellow of the College of Physicians, and, a few years afterwards, a Fellow of the Royal Society. In 1867, he exchanged the chair he held for that of Holme Professor of Clinical Medicine, the duties of which he performed up to the time of his death. In 1870 he was appointed Physician-Extraordinary, and, at

a subsequent date, he became Physician-in-Ordinary to Her Majesty.

Dr. Fox's contributions to scientific medicine were numerous and important. One of his earliest researches was on the development of muscular tissue, published in the *Philosophical Transactions*. Another was concerned with the origin and structure of cystic disease of the ovary. His attention was afterwards given specially to diseases of the stomach and of the lungs, and he wrote on both subjects for the *System of Medicine*, edited by Dr. Russell Reynolds. His articles on diseases of the stomach were afterwards republished in an enlarged form as a separate work. The work, however, for which he was best known was his research into the nature of tubercle; to this he devoted the best energies of his life; for many years, even when he was almost alone among pathologists in this country; he stuck manfully to his thesis that tuberculosis was a peculiar and special process, and that it was not merely ordinary chronic inflammation, as was the popular German opinion, reflected in this country, until Koch's researches were published. Dr. Fox's experimental researches led him to believe that tuberculosis might be produced by the inoculation of indifferent material, and he expressed this opinion in a lecture delivered before the Royal College of Physicians. The publication of Koch's results, while confirming the correctness of his views as to the special characters of the tubercular process, necessitated a remodelling of his views as to the etiology of the disease. It was owing to this cause that the publication of his great work on diseases of the lungs, at which he had worked with extraordinary industry for many years, was postponed. It may be hoped that the enormous mass of materials which he had brought together, and the large collection of drawings which he had prepared to illustrate it, may not be lost to the world.

As a clinical teacher, in which capacity Dr. Wilson Fox will be most vividly remembered by his many pupils, he had certain conspicuous excellences. For twenty years as Holme Professor of Clinical Medicine every student of medicine at University College passed through his hands, and the enthusiasm which he himself threw into his work infected the laziest and most indifferent. His method was characterised by extreme simplicity; every lecture was carefully prepared, the patient had previously been thoroughly examined, and the literature of the subject investigated. In the lecture itself, however, the erudition of the student of books was entirely subordinated to the practical wisdom of the experienced clinical physician. The care of the patient's comfort and the subordination of every other consideration to his welfare were not only characteristic of the lecturer, but conveyed a useful lesson in bedside treatment to the students who thronged the ward. The student was led step by step to follow the process of his teacher's mind, and to appreciate for himself how each link in the chain of evidence was tested by all available methods of clinical research. By the general consent of his pupils, it was in the commoner diseases—phthisis, emphysema, heart-disease, Bright's disease—that Dr. Wilson Fox showed to especial advantage; the simplicity of the language, and the painstaking care with which every symptom and physical sign were discussed, brought them within the comprehension of the youngest hearer, but it was only the more advanced student, who had himself been compelled to treat such cases out of his own resources, who could fully appreciate the high value of the teaching. No detail was too minute if it concerned the comfort or well-being of the patient; no symptom so trivial that it might not be made to throw light on the diagnosis or suggest a line of treatment. A pathologist by early bent, Dr. Fox could afford to teach his pupils to treat symptoms. "The patient wants you to help him to get well, or at least to be as free from discomfort and pain as is possible," he would say. "You must understand the pathology of his disease in order to be successful in your efforts; but clinical medicine is more than pathology, as the greater includes the less." The singular quickness of his own mental processes sometimes made him appear impatient of dulness. Industry, however, in his eyes, compensated for many faults, and to mere ignorance he was ever merciful. Not so, however, when he suspected laziness or shirking, and students guilty of these faults were often made to suffer from the shafts of his sarcastic wit.

As a clinical physician, he was extremely successful, and for many years enjoyed a very large consulting practice, his opinion being especially sought in the treatment of fevers and of the diseases of the lungs. A friend who knew him well from his early years as a student at University College, writes to us that "his most noticeable traits were the exceeding kindness and sympathy which he showed towards his patients, the happy cheerfulness and encouragement which his manner towards the patients imparted to them, and the extreme trouble which he took with every individual case; these qualities inspired remarkable feelings of personal affection towards him, which frequently found expression in word and deed. He was in the best sense of the word a gentleman, and, under all circumstances, put that fact in the first place, and made it his principle of action in every transaction. He had no sympathy with modern habits of Bohemianism in conduct."

Dr. Fox never enjoyed robust health, and on several occasions suffered from attacks of severe illness, by which his life was endangered. Eleven years ago he had a severe attack of pneumonia, complicated by endo- and peri-carditis, which left the cardiac valves in a damaged condition. During the spring of 1886 he had another severe attack of pneumonia, but it quickly passed off, and he returned to both his professorial and professional duties.

After a hard winter's work, he was about to take a brief, much-needed rest, when he was summoned, on April 23rd, to the bedside of a loved brother, seized with pneumonia. He went down to Devonshire, though suffering from lumbago, and was with his brother when he died on the following day. On the same day Dr. and Mrs. Fox travelled northward, to carry out their previously formed intention of resting a few days at Fieldfoot. They stopped at Preston to break the journey, and Dr. Fox then seemed to be suffering only from fatigue and the depression natural under his loss.

He wrote letters from Preston to several friends, and seemed (independently of the lumbago) in his usual health. Early on Thursday morning, April 28th, he became very faint and short of breath, and he was seen by his old college friend, Sir William Roberts, of Manchester, who found him suffering from pneumonia, with extreme prostration. Though there was never any outward and visible sign of the damage inflicted by the old cardiac disease, yet it had a serious effect in aggravating the symptoms at this juncture.

Sir William Jenner visited him on Friday, April 29th, and saw him in consultation with Sir William Roberts. Dr. Arkell, a pupil of Dr. Fox's was with him constantly. He was exceedingly weak, and Sir William Jenner remained with him during Friday night. Pneumonia appeared to be running its ordinary course until Saturday morning, when, shortly after 10 o'clock, great prostration occurred, and suddenly his breathing became much hurried, and he suffered from severe pain in the lower part of the right side. Dr. Russell Reynolds was with him as soon as possible after the prostration set in, and found that the pain was not pleuritic but muscular, and that the chief trouble at that time was cardiac weakness and not pneumonia. On Saturday afternoon there was some slight rally, which was maintained throughout Sunday morning, but during the afternoon of that day the prostration again became extreme. He recognised his own condition most clearly, and for two hours the result hung in the balance, but later in the afternoon he somewhat improved and passed a fair night. On Monday morning, at about 10 o'clock, quite suddenly, the dyspnœa increased, and fine bronchial *râles* could be heard on both sides of the chest. Prostration was extreme, and from this he never rallied, although taking nourishment and stimulant easily and freely until 4 o'clock on Tuesday morning, when, after a few minutes' pallor, but in perfect possession of all his intellectual faculties, he suddenly breathed his last.

It may be interesting to his medical brethren to know that on Sunday, and again on Monday and Tuesday morning early, his sense of dyspnœa was relieved, and he was free from all pain after the subcutaneous injection of ether.

Dr. Wilson Fox, who was twice married, leaves a family of six children, three sons and three daughters, by his first wife. His second wife, the widow of Captain Burgoyne, R.N., the commander of the ill-fated *Captain*, survives him.

JOHN MOORE, M.D.

It is with sincere regret that we announce the death of Dr. John Moore, of Belfast, which took place on April 2nd, at the Strathearn Hydropathic Establishment, Crieff, where he had gone for the benefit of his health. Dr. Moore was one of the earliest graduates of the late Queen's University in Ireland, having taken his M.D. degree in 1851. Four years later he was admitted a Member of the Royal College of Surgeons of England. In early life he served in the army, but finally settled in Belfast. He was elected one of the visiting surgeons to the Belfast Royal Hospital, and was also visiting surgeon to the County Antrim Gaol. He was the founder of the North of Ireland Branch of the British Medical Association, was its first Secretary, and finally its President in the year 1884. In that year he acted as one of the General Secretaries to the British Medical Association at its annual meeting in Belfast.

Dr. Moore was an able surgeon, and was particularly successful as a herniotomist. He was also exceedingly active in all departments of

religious and philanthropic work. He was the means of introducing the St. John Ambulance Association into the north of Ireland, and gave his earnest support to the temperance movement.

About a year ago the loss of his son gave a shock to his system from which he never thoroughly recovered, and for some months his health had been rapidly declining. Much sympathy is felt for his widow and surviving children.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the necessary examination, were, at an extraordinary meeting of the Council on May 5th, admitted members of the College, namely, Messrs.:

Name.	Residence.
Andrews, Frederick William	Broad Oak, Reading.
Arnison, William Drewett, M.B.Durh.	Allendale Town, Northumberland.
Bacot, William Rickward, L.S.A.	Blandford, Dorset.
Baldwin, Harry	37, Cavendish Square, W.
Ballance, John Descarrieres, L.R.C.P.L.	56, Harley Street, W.
Barker, Alleyne Hayward, L.R.C.P.L.	Wantage, Berks.
Barr, Horace Carlos, L.R.C.P.L.	1, Cranmore, Aldershot.
Barrett, Edward Ernest	53, Springfield Road, St. John's Wood.
Barton, Francis Alexander, L.R.C.P.L.	6, Cambridge Terrace, Dover.
Batchelor, Charles, L.R.C.P.L.	10, Garlinge Road, Brondesbury, N.W.
Bishop, Charles Rosser, L.S.A.	20, Craven Hill, Hyde Park, W.
Blurton, John Frederick	45, High Street, Stourbridge.
Bowden, Ernest Edward, L.S.A.	Gorsefield, Patricroft.
Bower, William George, L.R.C.P.L.	The Vineries, Southport, Lancs.
Brackenbury, Henry Britten, L.R.C.P.L.	Woodville, Victoria Road, North Southsea.
Brook, William Frederick, L.S.A.	
Brooke, Charles Edward	Oriel House, Scarborough.
Browne, Robley Henry John	11, Charlton Villas, Old Charlton, Kent.
Burke, Harry Morton, L.R.C.P.L.	6, Seaton Avenue, Mutley, Plymouth.
Burt, Cyril Cecil Barron	76, York Street, Westminster, S.W.
Carter, Robert James, L.S.A.	194, The Grove, Camberwell, S.E.
Caudwell, Eber, L.R.C.P.L.	Spencer Park, New Wandsworth.
Chilcott, Arthur Edward, L.R.C.P.L.	Maiden Newton, Dorset.
Clarke, Arthur Edward, L.K.Q.C.P.I.	Faringdon, Berkshire.
Cockill, William Baron, L.R.C.P.L.	13, Fritteville Gardens, Uxbridge Road, W.
Connolly, Frank Glynn, L.R.C.P.L.	Brisbane, Queensland.
Cox, Alfred Harold Lissant, L.R.C.P.L.	King's College Hospital, W.C.
Coy, William Filmer, M.D.Kingston	51, Torrington Square, W.C.
Dalgliesh, John William, L.R.C.P.L.	31, West Parade, Newcastle-on-Tyne.
Dane, Robert, L.S.A.	86, Finchley Road, South Hampstead, N.W.
Davenport, Cecil John, L.R.C.P.L.	Adelaide, S. Australia.
Davies, Hughes Reid	22, Hill Street, Rutland Gate, S.W.
Ellison, Ernest Henry, L.S.A.	12, Daleview Road, Amhurst Park, Stamford Hill.
Farrar, Reginald Anstruther	17, Dean Yard, Westminster, S.W.
Fox, George Martin	5, Oxford Street, Bilston, Staffs.
Fox, Stephen Charles Gundry, L.R.C.P.L.	Westminster Hospital, S.W.
Gardner, Ernest Frederick, L.R.C.P.L.	11, Lancaster Road, South Norwood Park, S.E.
Garman, Edwin Cornelius, L.R.C.P.L.	The Hollies, Wednesbury.
Giddings, George Thomas	28, St. John's Street, Devizes, Wilts.
*Goodman Roger Neville, L.R.C.P.L.	Brookfield, Cambridge.
Goodwin, Frederick Charles, L.R.C.P.L.	Leith House, Amhurst Park, N.
Gowan, Bowie Campbell, L.S.A.	20, Courtfield Gardens, Cromwell Road, S.W.
*Green, Conrad Theodore, L.R.C.P.L.	Trinity Parsonage, Buxton, Derby.
Greig, Duncan McBean	4, Elsworthy Road, N.W.
Hallilay, Richard Percy, L.S.A.	28, Burley Road, Leeds.
Hamel-Smith, Lionel	32, Sydenham Road, Croydon.
Harris-Liston, Llewellyn, L.S.A.	Cambridge House, Lewisham High Road, S.E.
Harrison, Henry Leeds	14, Great Ormond Street, W.C.
Hensley, Arthur Egerton, L.S.A.	Parkham Rectory, Bideford, Devon.
Hinnell, Joseph Squier, L.S.A.	62, Garland Street, Bury St. Edmunds.
Hosegood, Samuel Price, L.S.A.	Shelbridge Rectory, Witheridge, N. Devon.
Hudson, Henry, L.R.C.P.L.	3A, Bruce Grove Road, Tottenham, N.
Hutton, John, L.R.C.P.L.	57, Anfield Road, Liverpool.
Iddon, Thomas Whittaker	6, Manchester Road, Southport.
*James, Arthur William, L.R.C.P.L.	Dispensary, Stoke Newington, N.
Jaques, John Warren, L.R.C.P.L.	4, Tyndale Place, Islington, N.
Joseph, Arthur Hill	Clifton, Bristol.
Kerans, Felix	48, Beaconsfield Street, Liverpool.
King, Preston, L.S.A.	Barton Place, Bury St. Edmunds.
Labey, Julius, L.R.C.P.L.	24, Harleyford Road, S.E.
Lankester, Francis John, L.R.C.P.L.	High Street, Leicester.
Lawrence, Thomas William Pelham	38, Torrington Square, W.C.
Lumley, Charles Armstrong	89, Wickham Road, Brockley, S.E.
McLean, Wm. Walker Laroche, L.S.A.	Ellerslea, Fulham Park Gardens, S.W.
McLurg, John, M.D., Toronto	Falkirk, P.O., Ontario, Canada.
McVety, Albert Franklin, M.D.Kingston	7, Bernard Street, Russell Square, W.C.
Marston, Henry John, L.R.C.P.L.	81, St. Paul Road, Highbury, N.
Megginson, Mowbray	8, Westbourne Park, Scarboro'.
Metzgar, Charles, L.R.C.P.L.	Guy's Hospital, S.E.
*Miley, Miles, L.R.C.P.L.	21, Belsize Avenue, Hampstead, N.W.
Mould, William Thomas, L.R.C.P.L.	44, Fairholme Road, Kensington.
Naumann, John Charles Francis, L.S.A.	154, Euston Road, N.W.
Osmond, Edward Bartrum, L.R.C.P.L.	33, Cassland Crescent, South Hackney.
Parry, William Thomas, M.D. Toronto	Dunville, Ontario, Canada.
Parsons, Charles Octavius, L.R.C.P.L.	North End, Frome, Somerset.
Paul, Arthur Edmund, L.R.C.P.L.	62, Ladbroke Grove Road, Notting Hill, W.
*Peake, William Pemberton, L.R.C.P.L.	Woodend, Grange Road, Beulah Hill, Norwood, S.E.
Penno, Francis Forbes Lanyon, L.S.A.	Park Hill House, Torquay, Devon.
Pitcairn, John James, L.R.C.P.L.	53, Great Dover Street, S.E.
Pratt, William Sutton, L.S.A.	Weedon, Northamptonshire.
Pullan, Herbert Newman, L.K.Q.C.P.I.	4, Royal Parade, Harrogate.
Pye, Thomas, L.R.C.P.L.	35, Hall Gate, Doncaster.
Rees, John Morgan	Machynlleth.
Roberts, Shirley, L.K.Q.C.P.I.	Ermagh, Morehampton Road, Dublin.
Robson, Robert Barker, M.B.Durh.	3, North Bailey, Durham.
Rutherford, John Victor Walton	Newcastle-on-Tyne.
Sharman, John Schutz William Edward, L.R.C.P.Lond.	3, Oak Villas, Gipsy Road, West Norwood.
Short, James Joseph, L.S.A.	Shortlands, Spencer Park, Wandsworth Common.
Shute, George Sidney, L.R.C.P.L.	Gillingham, Dorset.
Sidebotham, Edward John, M.B.Cantab.	Erlesdene, Bowden, Cheshire.
Skill, James Maurice	33, Gunterstone Road, West Kensington.
Smith, Arthur Henry, L.R.C.P.L.	28, Chorlton Road, Manchester.
Smith, Edmund Symons, L.R.C.P.L.	Winchcombe, Gloucestershire.
Somerset, Edward, L.S.A.	Greenham House, Newbury, Berks.
Stokes, Frederick William, L.K.Q.C.P.I.	Church Road, Moseley, Birmingham.
Stuart, Thomas Edmund, L.R.C.P.L.	Mundon Vicarage, Maldon, Essex.
Swyer, Robert, L.S.A.	224, Brick Lane, Bethnal Green, E.
Thompson, William Henry, M.D., Q.U.I.	51, Bernard Street, Russell Square, W.C.
Todd, Henry Bansall, L.R.C.P.L.	Park Cottage, Streatham Place, S.E.
Travers, Archibald Lindsay, L.R.C.P.L.	16, Holland Road, Kensington.
Turnbull, George Lindsay	8, Furnival's Inn, E.C.
Turner, Ernest Blaker	Lynwood, Francis Road, Leyton.
Tweed, Edward Reginald, L.R.C.P.L.	14, Upper Brook Street, Grosvenor Square, W.
Venis, Walter, L.S.A.	Fountain Court, Temple, E.C.
Vincent, Herbert Edmund, L.R.C.P.L.	Milton Cottage, Sunnybank, South Norwood.
Vinter, Sydney Garratt, L.R.C.P.L.	29, Monmouth Road, Bayswater, W.
Waites, Richard Foulstone, L.R.C.P.L.	83, The Grove, Ealing, W.
Walker, Benjamin, L.S.A.	Eaglescliff, Yarm, Yorkshire.
Wallis, Maurice Edmund Arnold	43, Endwell Road, Brockley, S.E.
Ward, John Alfred, L.S.A.	Shermerdine Castle, Montford Bridge, Salop.
Wedgwood, William Brackenbury, L.S.A.	Fern Bank, Friern Road, East Dulwich, S.E.
Wheeler, James Aitkin	Ipswich, Queensland.
Whiston, Philip Henry, L.R.C.P.L.	The Palace, Rochester.
Wigglesworth, Vincent, L.R.C.P.L.	9, Albert Road, Southport.
Wight, John Cam, M.B.Melb.	7, Tavistock Place, Tavistock Square, W.C.
Williams, William, L.S.A.	91, Kensal Road, W.
Woods, Ninian Wildridge	22, Franconea Road, Clapham Common, S.W.

* Candidates under the Regulations of the Examining Board in England.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At the April period of examination the following candidate was admitted a Licentiate :—

Ernest W. Barnes, L.K.Q.C.P.I., Liverpool.

The following candidate obtained the qualification in Public Health :—

Walter Kiddle, M.B.Dublin, Surgeon, Medical Staff.

The following candidate, having passed the full examination for the Fellowship, was admitted a Fellow on May 2nd :

Thomas Kennedy Dalziel, M.B., C.M.Edin., Regent Terrace, Glasgow.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received Certificates entitling them to practise as Licentiates of the Society, on April 28th, 1887.

Bowden, Ernest Edward, Gorsefield, Patricroft.
King, Preston, Barton Place, Bury St. Edmund's.
Rees, John Morgan, Machynlleth.
Short, James Joseph, Shortlands, Spencer Park, Wandsworth Common.
Somerset, Edward, Newbury, Berks.
Stephens, Richard John, Woodlands, Old Charlton.

MEDICAL VACANCIES.

The following vacancies are announced.

BALTINGLASS UNION.—Medical Officer, Rathvilly Dispensary. Salary, £145 per annum, and fees. £35 yearly will be deducted for rent of dispensary house. Applications to Mr. Wm. Burgess, Honorary Secretary, Tobinstown, Tullow. Election on May 11th.

BLACKBURN AND EAST LANCASHIRE INFIRMARY. — House-Surgeon. Salary, £100 per annum, with board, etc. Applications by May 17th to the Secretary.

CANCER HOSPITAL, Brompton.—Assistant House-Surgeon. Salary, £35 per annum, with board and residence. Applications by May 10th to the Secretary.

CARLOW UNION.—Medical Officer, Ballickmoyler and Newtown Dispensary. Salary, £140 per annum, and fees. Applications to Mr. Robert McMahon, Honorary Secretary, Hollymount, Carlow. Election on May 20th.

CARMARTHEN INFIRMARY.—House-Surgeon. Salary, £100 per annum, with board, etc. Applications by May 12th to Mr. H. Howells, 11, Morley Street, Carmarthen.

CHARING CROSS HOSPITAL.—Medical Registrar. Applications by May 21st to the Secretary.

CHARING CROSS HOSPITAL.—Assistant Surgeon. Applications by May 25th to the Secretary.

CITY OF LONDON LUNATIC ASYLUM, Stone, near Dartford.—Medical Superintendent. Salary, £500 per annum. Applications by May 17th to the Committee of Visitors, Guildhall, E.C.

COUNTY ASYLUM, near Dorchester.—Assistant Medical Officer. Salary £120 per annum, with board, etc. Applications by May 10th to the Medical Superintendent.

DENTAL HOSPITAL OF LONDON, Leicester Square, W.C. —Assistant Dental Surgeon. Applications by June 1st to the Secretary.

GLOUCESTER GENERAL INFIRMARY AND EYE INSTITUTION.—House-Surgeon. Salary, £100 per annum, with board, etc. Applications by May 18th to the Secretary.

INFIRMARY FOR CONSUMPTION, Margaret Street, Cavendish Square, W.—Honorary Visiting Physician. Applications to the Secretary.

LINCOLNSHIRE COUNTY PAUPER LUNATIC ASYLUM.—Medical Superintendent. Salary, £400 per annum. Applications by June 1st to the Committee of Visitors.

LIVERPOOL INFIRMARY FOR CHILDREN. — Assistant House-Surgeon. Applications by May 18th to C. W. Carver, Esq.

MASON SCIENCE COLLEGE, Birmingham.—Professor of Physiology. Applications by June 30th to G. H. Morley, Esq.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street, W.—Assistant Dental Surgeon. Applications by May 20th to the Secretary.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, Queen Square, Bloomsbury, W.C.—Senior House-Physician. Salary, £100 per annum, with board, etc. Applications by May 7th to the Secretary.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, Queen Square, Bloomsbury, W.C.—Junior House-Physician. Salary, £50 per annum, with board, etc. Applications by May 7th to the Secretary.

ROYAL ALBERT HOSPITAL, Devonport.—Assistant House-Surgeon. Applications by May 10th to the Chairman of the Managing Committee.

ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, Ventnor.—Dispenser. Applications to Dr. Mason.

ST. MARY'S HOSPITAL, Paddington, W.—Physician. Applications by May 20th to the Secretary.

ST. THOMAS'S HOSPITAL MEDICAL SCHOOL. — Professor of Systematic Physiology. Applications by May 21st to the Medical Secretary.

STAFFORD COUNTY ASYLUM.—Resident Medical Officer and Superintendent. Salary, £500 per annum, with unfurnished apartments, and £200 in lieu of board. Applications by May 7th to the Chairman of the Committee of Visitors.

STANLEY HOSPITAL, Liverpool.—Senior House-Surgeon. Salary, £80, with board, etc. Applications by May 19th to the Honorary Secretary.

SUSSEX COUNTY HOSPITAL, Brighton.—Assistant-Surgeon. Applications by May 18th to the Secretary.

SUSSEX COUNTY HOSPITAL, Brighton.—Assistant House-Surgeon. Applications by May 18th to the Secretary.

UNIVERSITY OF CAMBRIDGE.—John Lucas Walker Studentship in Pathology.—Annual value £250, for three years. Applications by May 31st to Professor Roy, Trinity College, Cambridge.

WEST SUSSEX, EAST HANTS, AND CHICHESTER GENERAL INFIRMARY AND DISPENSARY.—House-Surgeon. Salary, £100 per annum, with board, etc. Applications by May 27th to the Honorary Secretary.

MEDICAL APPOINTMENTS.

ARTHUR, Walter, M.R.C.S., L.S.A., appointed Assistant Resident Medical Officer to the Whitechapel Union Infirmary, *vice* D. W. Whitfield, M.R.C.S., resigned.

BAILEY, W. H., M.R.C.S.Eng., L.S.A.Lond., appointed Resident Medical Officer to the Royal General Dispensary, *vice* T. Edward Rogers, M.R.C.S., resigned.

BELL, Theodore, B.A., M.B., B.Ch.Dublin, appointed Medical Officer to the Morchard Bishop District of the Crediton Union.

CARPENTER, G. Alfred, M.B.Lond., appointed Resident Medical Officer to the Evelina Hospital for Children, *vice* Albert Martin, M.D.Lond., resigned.

FOX, E. L., M.R.C.S., appointed House-Surgeon to the Liverpool Infirmary for Children, *vice* F. Johnston, M.B., C.M., resigned.

KELLAND, James, M.B., C.M., L.R.C.P. and L.R.C.S.Edin., elected Physician to the Salisbury Infirmary, *vice* F. W. Coates, M.D., resigned.

NEVINS, Arthur E., M.R.C.S., L.R.C.P.Edin., appointed House-Physician to the Middlesex Hospital, *vice* Hedley Bartlett, L.R.C.P., M.R.C.S.

NORTON, H. Harvey, M.R.C.S., appointed House-Surgeon to the Horton Infirmary, Banbury.

PRIMROSE, Alexander, M.B., C.M.Edin., appointed House-Surgeon to the Paddington Green Children's Hospital, *vice* Leonard G. Guthrie, M.A., M.R.C.S., L.S.A., resigned.

ROBERTS, William Lake, M.R.C.S.E., L.M., L.S.A.Lond., appointed Surgeon to the Bradford District of the Great Northern Railway.

SLOMAN, F., M.R.C.S., L.S.A., appointed House-Surgeon to the Kidderminster Infirmary, *vice* A. Lucas Morgan, M.R.C.S., resigned.

TRAVERS, William, M.D., F.R.C.S., etc., late Senior Assistant-Physician, appointed Physician to the Chelsea Hospital for Women.

WALSH, P. C., M.R.C.S.Ed., appointed Medical Officer to the Castlerea Union Workhouse, *vice* M. O'Donohoe, L.R.C.S.I., resigned.

WARWICK, F. J., B.A., M.B.Cantab., appointed Resident Clinical Assistant to the City of London Hospital for Diseases of the Chest.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—PARKES MUSEUM OF HYGIENE (Margaret Street), 5 P.M. Demonstration to Medical Men by Professor W. H. Corfield.

TUESDAY.—ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M. Mr. Arthur E. Barker: A Case of Intussusception of the Upper End of the Rectum due to Obstruction by a New Growth: Excision of the Intussusception: Suture of the Cut Ends of the Bowel: Complete Recovery.—Mr. Stanmore Bishop: Results of an Experimental Inquiry as to the Best Method of Restoring the Canal after Removing Portions of the Small Intestine. Communicated by Sir Spencer Wells.

WEDNESDAY.—BRITISH GYNÆCOLOGICAL SOCIETY, 8.30 P.M. Specimens will be shown by Dr. Granville Bantock, Dr. Fancourt Barnes, Dr. Grigg, and others. Dr. Routh: On the Various Modes of Treatment to be Adopted for the Worst Cases of Uterine Flexions.

EPIDEMIOLOGICAL SOCIETY OF LONDON, 8 P.M. Dr. Arthur Ransome, F.R.S.: Some Evidence respecting Tubercular Infective Areas.—A meeting of the Council will be held at 7.15 to select Office-bearers for nomination to the Society.

ROYAL MICROSCOPICAL SOCIETY, 8 P.M. Dr. Maddox: On the Different Tissues found in the Muscles of a Mummy.

FRIDAY.—CLINICAL SOCIETY OF LONDON, 8 P.M. Mr. Godlee: Some Cases of Abdominal Cyst following Injury.—Dr. Vivian Poore: A Case of Spasmodic Torticollis, probably due to Cerebral Lesion. Mr. Stephen Paget: A Case of Suppuration in a Chronic Gouty Knee-Joint. Mr. Spencer Watson: A Case of Intracapsular Impacted Fracture of the Neck of the Femur (with specimen). Living Specimens.—Mr. Clutton: Case of Osteitis Deformans in a Female, with Lengthening of some of the Bones. Dr. Percy Kidd: Case of Rheumatic Nodules in an Old Woman. Mr. Sidney Jones: (1) Case of Extirpation of Uterus for Fibroid: Recovery (and the Specimen); (2) A Case of Tumour of the Bladder removed by Suprapubic Operation (and the Tumour).

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which should be forwarded in stamps with the announcement.

BIRTHS.

BARLING.—On April 29th, at 85, Edmund Street, Birmingham, the wife of Gilbert Barling, F.R.C.S., of a daughter.

HOBBES.—On April 23rd, at The Limes, Sutton Coldfield, the wife of T. G. Fosbrooke R. Hobbes, L.F.P.S., L.M., L.S.A.Lond., of a son.

SCOTT.—On April 20th, at St. Margaret's, Twickenham, the wife of Charles C. Scott, M.B.Edin., of a daughter.

MARRIAGES.

CHURCHOUSE—KING.—On April 21st, at East Haddon, by the Rev. W. P. Mackesy, Vicar, assisted by the Rev. A. O. James, Vicar of Long Buckby, W. J. Franklin Churchouse, L.R.C.P.Edin., of Long Buckby, to Kate Emma, second daughter of George King, Esq., of East Haddon.

LEAPINGWELL—ORME.—At the Parish Church, Cheadle, Cheshire, on April 20th, Edward Jodrell Leapingwell, M.B., of Butlers Hill, Cheadle, Staffordshire, to Florence Lilian Orme, eldest daughter of Robert Orme, Esq., of Stockport.

DEATH.

RUDDOCK.—May 3rd, at Cayton's, Crown Road, Twickenham, in her 81st year, Ann, widow of W. P. Ruddock, Surgeon, Leeds, and niece of the late Christopher Hardcastle, Esq., Banker, Stainley House, Ripley, Yorkshire.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

We wish it to be distinctly understood that when a manuscript is forwarded to the British Medical Journal, it is implied that a similar manuscript has not been sent elsewhere, unless special notice of the fact be given; we shall regard any infringement of this rule as a breach of faith.

QUERIES.

Treatment of Paralysis Agitans.

A Member writes:—I have a case of paralysis agitans in which one arm only is affected. The patient is a man 64 years of age. If any member can suggest any measure of relief for the continuous shaking, which now scarcely allows my poor old patient fifteen minutes consecutive sleep, I should feel extremely obliged.

Instruction in Massage.

Inquirens asks where a lady, who is unfortunately in somewhat straitened circumstances, could receive instruction as to the method of performing massage, also the terms for such instruction, etc.

A Case of Imperfect Micturition.

A Member would like advice as to treatment in the following case. The patient is a man, aged 45, complaining of frequency of micturition, accompanied by incontinence of urine. At times he feels the desire to micturate, but when he makes the attempt he fails to pass any urine. At other times (even during the day) the urine flows from him involuntarily. The amount of urine in twenty-four hours varies from 120 to 160 ounces. The urine is of a pale straw colour; specific gravity 1004; free from albumen and sugar. The skin presents no abnormal appearance. There is no stricture of the urethra, no prostatitis nor cystitis. There are slight ataxic symptoms. The patient has at times led an intemperate life. There is no history of syphilis. Remedies (such as belladonna, strychnine, iron, gallic acid, opium, ergot, etc.) have failed to give any relief.

ANSWERS.

A Member.—The advertisement of Mr. W. E. Robson, L.R.C.S.I., M.K.Q.C.P.I., should be brought under the notice of the Colleges whose initials he uses; they and they alone can take action in the matter.

Cremation.

Dr. H. Smith writes: Will a member of the Association kindly acquaint me of the nearest crematorium to the metropolis, and tell me the cost of carrying out this sanitary process, as I have instructions to personally conduct in due course "the last act" in this manner for an old lady?

*** The only crematorium is this country is that of the Cremation Society of England, St. John's, Woking. The arrangements for cremating a body at the Society's crematorium are very complete, and are available by the public on the following conditions: (1) an application in writing must be made by the friends or executors of the deceased, unless it has been made by the deceased person himself during life, stating that it was the wish of the deceased to be cremated after death; (2) two certificates from duly qualified men are required relative to the cause of death, one at least of whom must have attended the deceased. These must satisfy the Council of the Society or their representative, and in some rare and doubtful cases a necropsy might be desirable.

A day's notice being given, Messrs. Garstin and Sons, undertakers, 5, Welbeck Street, Cavendish Square, W., will provide a shell and remove the body in a hearse from any house or station within the four-mile radius from Charing Cross to the Society's crematorium. The cremation will then take place without delay. A representative of the family can always be present, and the ashes will be placed at his disposal if desired.

The fee for transit to the crematorium from London charged by Messrs. Garstin (any other undertaker may be employed) is £5 10s. The Society's charges for the use of the crematorium, and all expenses connected with the ceremony, is £6.

A donation of ten guineas made to the Society during life will be received as adequate payment for cremation at death. The necessary forms and any further information may be obtained of W. Eassie, Esq., C.E. (Honorary Secretary), 11, Argyll Street, London, W.

The Potassio-Mercuric Iodide Test for Albumen.

Dr. Brand.—We handed our correspondent's question to Dr. George Johnson, F.R.S., who writes:—The potassio-mercuric iodide solution may most readily be prepared by adding to a solution of perchloride of mercury enough solution of iodide of potassium to just redissolve the precipitated periodide of mercury, and so to form a colourless liquid. This test, with the addition of citric or acetic acid, without which it does not coagulate albumen, renders every specimen of normal urine more or less opalescent, and this it does by precipitating not only mucin, but also some other ingredient of normal urine. It is, therefore, absolutely untrustworthy as a test for a minute quantity of albumen in the urine. Dr. Pavy's pellets of citric acid and ferrocyanide of potassium may be obtained from Mr. W. T. Cooper, pharmaceutical chemist, 66, Oxford Street.

Hypodermic Solutions of Morphine.

H. C. M. writes: Replying to G. F. W., I think that he may possibly have in mind the paper by Dr. Talfourd Jones on Hypodermic Medication. It will be found in the Journal for September 26th, 1885.

Epileptic Hospitals.

Our correspondent will find it difficult to find a place for the case to which he refers. At the Queen Square Hospital the permanent character of the malady would preclude its admission; otherwise the patient could have been admitted to the pay-ward. There is no other institution likely. Care in a private house (for example, a farmer's), without children, would be the best.

NOTES, LETTERS, ETC.

Pink Eye in the Horse.

M.B. would be glad if any of the readers of this Journal could give any information regarding the communicability of "pink eye" in the horse to human beings. He was called to see a girl, aged 13, who had been suffering for about thirty hours from vomiting, diarrhœa, sore throat, and great prostration. He saw her about noon, when she was very restless and delirious, highly anæmic, and prostrate. Temperature, 104.4° F.; respiration 48 per minute; pulse scarcely perceptible at the wrist. The hands were livid and very cold, but the feet were warm and natural; the chest also was livid, but there was no rash; heart and lungs were normal; the glands at the angle of the jaw were swollen; the tonsils and uvula were very red and swollen, and on the latter were several white spots about the size of a pea; no difficulty in breathing. In consequence, however, of the great prostration, it was impossible to make a very careful examination, but he was suspicious that it was a case of diphtheria. The eyes, by the way, were very much congested, and the pupils normal and responded to light. Medicine was prescribed but was not retained, and the patient gradually sank, death ensuing four hours after she was first seen.

The water-supply and drainage threw no light on the case. There was a horse, however, in the stable suffering severely from pink eye; it had also severe throat symptoms, for which it had been blistered. The patient had visited the stable three or four days before being taken ill, and thus a strong suspicion has been excited that the disease originated there. No other members of the family were affected; but this one was delicate and overgrown.

Death after a Draught of Chloral Hydrate and Bromide of Potassium.

Job writes: It may be a matter of comfort to Mr. J. Ellis Edwards to know that recently in the case of a patient of mine, to whom I had given a mixture containing a drachm and a half each of chloral hydrate and bromide of potassium in a bottle divided into four parts, with instructions that a fourth part was to be taken every six hours, the relations, believing that dose after dose had had no effect, administered the whole quantity within six hours, the result being that, after fourteen hours' sleep, the patient awoke a sane man much benefited. His disease was perityphlitis, which I had been treating with opium and belladonna for five days, and in my opinion these drugs produced violent delirium.

Strophanthus.

With reference to strophanthus, Dr. J. Meggatt writes as follows:—I have used it for a long time; first, at the suggestion of Dr. J. Bell, of Edinburgh, a friend of Professor Fraser's. In a case which he saw in consultation here, Miss D., aged 30, I had been using digitalis and convallaria majalis without much benefit. After Dr. Bell's visit I tried the strophanthus, without much or any benefit at all. I then went back to the digitalis, and combined it with potass. acetat. as there was very much œdema of the limbs, and a good deal of ascites along with œdema of the lungs. As soon as that was got rid of, I again tried strophanthus in two-drop doses, and found it acted well in regulating the heart.

The strophanthus will act well where there is any irregularity of the heart, but for any other purpose it will be found to be inferior to digitalis or convallaria majalis. I may mention that Miss D.'s nurse gave a lethal dose to her one day, but after a good vomit no after-effects were left except a little increase of the heart's action, which passed off in a day or so. That would be accounted for by the action of the strophanthus on the muscles of the heart.

I have used it very extensively since where there was any irregularity of the heart, and found it to act like a charm, especially in the case of a minister, who had a want of compensation of the ventricles. It gave him great relief.

Clement Hailes, M.D., C.M. (Clifton), writes: At this time, when Professor Fraser's elaborate experiments with strophanthus are bringing it to the fore in therapeutics, it is interesting to note that Dr. Livingstone, in the account of his 1863 expedition up the Shiré branch of the Zambesi river, mentions that Dr. Kirk, who accompanied the expedition, owing to carrying his tooth-brush in the same pocket with some of the kombi, or arrow-poison used by the Ajawa and Manganja tribes, accidentally experimented on himself, and "though the quantity was small, it immediately showed its power by lowering the pulse, which at the time had been raised by a cold, and next day he was perfectly restored," and remarks that "it is possible that the kombi may turn out a valuable remedy." This case points to its value as a febrifuge.

The Title of Doctor.

Dr. J. A. Campbell, M.D.Glas., F.R.S.Edin., writes: The following quotation from the *Scotsman* of April 22nd of a portion of Principal Cunningham's remarks at the graduation ceremony at St. Andrews are worth attention:

"I congratulate those members of the medical profession—the most humane of all the professions—who have this day attained to the honourable degree of Doctor of Medicine, a degree which will ever afterwards give them a university standing, and place their names on a roll which includes some of the most illustrious physicians and surgeons in the kingdom. I think it is to be regretted that in the medical profession the name of doctor should have become a synonym for physician, and that no sooner has a young medical student received his diploma and begun, perhaps in some obscure village, to bleed and blister, than he is saluted with the venerable name of 'doctor,' or rather the doctor *par excellence*. Why should not the honourable title be reserved, as in other professions, for those who have deserved it?"

I think our Branches should consider this matter of assumption of titles. Could the Medical Act not be brought into force against men who, not possessing the degree of Doctor of Medicine, or other degree of Doctor, yet put Dr. – – on their door-plates? It seems to me a barefaced imposture which should be put a stop to in the interests of the profession. Universities should at least insist on their Bachelor graduates abstaining from such unacademical courses; it would tend to increase the number of their higher graduates, and swell their coffers. University Councils will probably shortly have this matter under consideration.

The Treatment of Gleet.

J. B. writes: Gonorrhœa is easily curable in more or less time, but gleet is the *bête noire* of the average practitioner. I have consulted year-books of treatment for the newest light, but I do not make much of it. Reginald Harrison says: "Very few chronic gleets will be found to resist the daily, or if necessary twice daily, washing out of the urethra with a pint of tepid water containing a little Condy's fluid." I have seen a good many gleets which do resist this

attempt to subdue them. I turn to the latest Druitt (a capital book). and find that gleet, in the majority of cases, is due to a granulating patch in the urethra; an olive-headed sound will as it is withdrawn detect tender patches, a short speculum will show warts or chancre if there are any. But will the sound always detect a tender patch, and what sort of speculum will show most of the urethral canal? I fail, through awkwardness or otherwise, to find out tender patches in the majority of cases. I have a patient who has been coming up to me for months (simple faith!) for a sealing of the meatus every morning, but who can pass a No. 12 bougie with no pain. But granting that I can find the granulating patch, I am told to apply a little solution of argent. nitr. with a special syringe. Now what is the special syringe that will inject any particular portion of the urethra?

Will any of our surgical authorities admit that there are cases of gleet which puzzle them to cure, or will any of them condescend to give a solution of these difficulties, which I know have troubled many of my friends as well as myself? I am sure that a succinct statement of the difficulties attending the treatment of gleet and a full description of the best methods of meeting them would be a great boon to the bulk of the profession.

HORS DE COMBAT asks for suggestions for the treatment of the following case:—My patient, an otherwise strong and healthy man of 35, is the subject of an obstinate gleet, with some unusual concomitant conditions. Two years ago he, being intoxicated, in an endeavour to effect coitus with his wife, found almost insuperable difficulties owing to the very imperfect state of erection. In his own words, he "madly and obstinately persisted" until a miserable emission resulted, and he was thoroughly exhausted. The next morning he discovered the glans tumid, and a yellow discharge from the urethra. His medical adviser ordered rest, cleanliness, and three or four bottles of soda-water daily. There was never any scalding or pain, or chordee or difficulty in micturition, and under the above treatment the discharge quickly diminished, but has never quite disappeared; and the gleet, which is usually thin and colourless, always becomes purulent after an extra glass of wine, and always after coitus. Though I have spoken of his alcoholic indulgence, I should observe that this is rare, and, comparatively speaking, anything but excessive. The tumefied condition of the lips of the meatus, which usually subsides upon gentle digital pressure, is nearly constant, especially is it noticed on waking in the morning. There is undoubted evidence of the entire absence of any vaginal impurity in the wife. Twelve years ago my patient had a "mild attack of syphilis," of which there are now no external signs. His occupation is sedentary.

He has been under my care six months, and I have tried the following: injections of zinc sulphate, zinc sulpho-carbolate and permanganate of potash; iodoform bougies; mild nitrate of silver injection, Plummer's pill, alkaline carbonates, general tonics. There is no stricture and no previous history of urethral affection. I should be glad of suggestions in detail.

A SUGGESTED ADDITION TO THE SCIENTIFIC VOCABULARY.

J. D. writes:—I cannot think that Mr. Best's suggestion to introduce a new French word into the English language is a happy one. The French use *physique* both as an adjective and as a noun, but *psychique* they use only as an adjective. Mr. Best proposes to take this French adjective and naturalise it as an English noun. Surely it is for the French to make *psychique* into a noun, if they think fit, not for us.

SUBCUTANEOUS INJECTION OF CUCAINE.

JOHN J. EYRE, L.K.Q.C.P.I., etc., writes: I had occasion, on April 23rd, to make an incision about an inch and a half long into the muscles of the fleshy part of the forearm of a gentleman, aged 60 years, for the purpose of removing part of a needle, which had got into the muscles.

About ten minutes before making the incision I injected into the tissues of the part 6 drops of a 10 per cent. solution of cucaine, in the hopes of lessening the pain of the operation. The result was very satisfactory, as my patient, who is very sensitive to pain, said he did not feel more pain than a scratch from a pin would cause, although I had to cut into the muscles quite an inch deep, and had to probe about for the needle quite twenty minutes.

NEW POSITION FOR OPHTHALMIC OPERATIONS.

J. ACIANO DA GAMA, L.M. (Chief Surgeon Bombay Eye and Ear Infirmary) writes: Surgeon G. M. Giles writes, in the JOURNAL of December 11th, 1886, page 1158, about a New Position for Ophthalmic Operations, and gives an illustration showing the relative position of the operator and the patient in a cataract operation in the left eye. May I ask Surgeon Giles, through the JOURNAL: 1, What method of operation does he follow in his new position; 2, what instrument is that which he passes over the bridge of the nose into the cornea; 3, is really the position, as shown in the illustration, very convenient to the surgeon; 4, can modern operations be performed in that position without first fixing the globe properly?

I agree with Surgeon Giles when he says that, with the use of cucaine, cataract operations may be performed almost in any position, when only circumstances of the case require it, but I certainly feel constrained to disagree with him when he says that a cataract operation could be performed conveniently in the way shown in the illustration, and when he says that the supine position is by no means a convenient one for eye operations. I should say that this latter ought to be a position of selection.

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BOOKS, ETC., RECEIVED.

Anatomy, Descriptive and Topographical, in 625 Illustrations. By Carl Heitzmann, M.D. English Edition by Louis Heitzmann, M.D. London: Dulau and Co. 1887.

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Post-Mortem Handbook. By Thomas Harris, M.D., M.R.C.P. Illustrated. London: Smith, Elder and Co. 1887.

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CLINICAL LECTURE
ON
SOME OF THE SYMPTOMS OF GRAVES'S DISEASE.[1]

By DAVID DRUMMOND, M.A., M.D.,
Physician and Pathologist to the Newcastle-on-Tyne Infirmary.

GENTLEMEN,—I wish to-day to draw your attention to a few of the features of exophthalmic goitre, and especially to some that have, I believe, received too little notice. I shall introduce three patients for you to examine, and shall refer briefly to the histories of some others, whose cases most of you will recollect.

The first case is that of the young woman, a general servant, who was admitted into No. 12 Ward a few weeks ago. She is complaining of palpitation, shortness of breath, a swelling in the neck, and proptosis or exophthalmos. Her father and mother are living and well; one sister had an attack of hemiplegia at the age of 2 years, and has since been subject to epileptic fits. Our patient has always had a comfortable home, and has been free from mental anxiety or want. In her work she has been much exposed to cold, and has often had wet feet, but has never suffered from rheumatism. In January, 1886, twelve months ago, she was struck by the prominence of her eyes, and about the same time she became affected with shortness of breath on exertion. She grew steadily worse until March, when some improvement was apparent. In April she took typhoid fever, from which she made a very tardy recovery, and her previous symptoms, taking advantage of her weakness, returned in a more exaggerated way, though it was not until October, 1886, that the palpitation forced itself upon her attention; so that, as far as her information is reliable, the order in which the cardinal symptoms of the disease made their appearance was: enlarged thyroid, protrusion of the eyeballs, and palpitation, which, it is important to recollect, is not the most common sequence, for palpitation usually ushers in the symptoms, and this is followed by enlargement of the neck. However, I suspect that the dyspnœa, which she described as one of the earliest symptoms, was cardiac, as it only took place on exertion. Throbbing of the carotids was next noticed, and later the swollen thyroid was seen to have acquired a pulse. The catamenia have been fairly regular, but the discharge scanty, and she asserts that the thyroid distinctly enlarges during the periods.

As you may observe, the patient is somewhat anæmic. She is spare, but by no means emaciated. The eyes are prominent, and from time to time a ring of white sclerotic can be seen surrounding the cornea, giving the face a peculiar startled and staring appearance. But perhaps the most noticeable feature about the case is the dark pigmented areas around the eyes, the muddy duskiness of the face generally, the dark areola about the nipples, the brown axillæ, and the discoloration of the skin of the upper and inner aspects of the thighs. The thyroid is enlarged, and feels soft and elastic, whilst a distinct *bruit* can be heard over it; and, further, it is affected by an expansile pulsation. A soft *bruit* can also be detected by the stethoscope placed over the eyeball, though none can be heard in the neighbourhood of the orbit. The heart is excited, the average number of pulsations per minute being about 110. The visible area of pulsation is increased, though the apex-beat is very slightly depressed. A soft blowing murmur, replacing the first sound, is audible over the base of the heart, and is distinctly conducted up into the carotids. There is no murmur at the apex. The urine is free from albumen and sugar; it varies very much in quantity; for example, on one day 34 ounces were passed, whilst 70 were voided on the following, and 60 on the day after. In addition to the palpitation and other symptoms named, she has complained much of certain subjective sensations, such as tinnitus aurium, a throbbing in the head, vertigo, and a craving for food even after a full meal—an unusual symptom—anorexia being a common feature of Graves's disease. Then she tells us that she is now excessively nervous and easily frightened, whereas prior to the commencement of the illness she was in possession of marked self-control. You will observe that Graefe's sign is absent, or, in other words, when the eyes are depressed, the lids cover accurately the sclerotic margins of the cornea.

Now let us turn to the case of the other female patient before us. She is 47 years of age, married, and has a family. About eighteen months ago, when pregnant, she had a fall, which gave her a great shock and fright; this she regards as the chief cause of her complaint. Very shortly after, palpitation became troublesome, and then the swelling of the thyroid was observed, and, lastly, proptosis appeared. You will observe that the skin of the face is bronzed, especially around the prominent eyes; the anterior folds of the axillæ are considerably discoloured, as also are the areolæ of the mammæ and the internal surfaces of the thighs. She is uncertain when the skin began to darken, but is of the impression that she first noticed the change about the time the palpitation commenced. You can compare her with her sister, who happens to accompany her, and who tells me that the patient's skin is much darker than it used to be. In her case, the symptom to which Graefe called attention is well marked. As she alters the plane of her vision, the lids, either upper or lower, as the case may be, hang fire, as it were, and reveal the sclerotic outside the cornea. The pulse averages 110. She complains much of palpitation, and the excited heart shows an increased area of pulsation. The thyroid is large, and pulsates; the eyes are prominent. Though very much improved, you will notice that she is still extremely nervous, and can with difficulty reply to one's questions.

Our next patient present is a man, aged 36, an overseer in connection with the traffic department of a colliery. He is very intelligent, and has taken an unusual interest in the progress of his case. Two years ago, when in good health, he jumped from a locomotive, and "gave his whole system a shake." This, he imagines, was in some measure responsible for his symptoms, as the bronzing of the skin and palpitation came on soon after, the former distinctly preceding the latter. At first the pigmentation was on the face alone, but it extended rapidly from the cheeks to the neck, and soon after the wrists became affected. From being a calm self-possessed person he grew exceedingly nervous and fidgety, and frequent attacks of violent palpitation distressed him sorely. He now began to complain of debility, and soon made the discovery that he was a completely altered man. The swelling of the thyroid appeared to come on suddenly, for when dressing one morning, some months later than the first appearance of the bronzing, he found that he could not button his collar, and now he observed for the first time a localised swelling in the front of the neck. After this the palpitation became more constant, and soon the protrusion of the eyeballs was detected. When I examined him first I was very much struck with the discoloration of the skin, and though it has certainly faded since then, you can still see the deep brown patches. You will observe the dark areas surrounding the eyes; the mahogany-coloured pigmentation of the cheeks, the well-marked staining all round the neck, which is bordered with areas of skin of apparently natural colour. Again, on the front of the thorax and on the dorsum of the forearms and wrists we find a similar staining. On the wrists, however, the appearances are strongly suggestive of leucoderma, as patches of white skin are surrounded by liver-coloured pigmentation.

The accompanying illustration, taken from a photograph, shows very well the pigmentation on the face and neck, though it scarcely brings out sufficiently the prominence of the eyeballs and the enlargement of the thyroid. The heart, thyroid, and eyes, are all strikingly typical, and Graefe's phenomenon is well shown. In addition to the signs named we cannot fail to be struck with the patient's nervousness—his hands are constantly trembling, and his speech is much interfered with; his forehead is bathed in perspiration, and it is with difficulty that he can stand without leaning against the wall.

I must now remind you of the case of a patient who was admitted into the wards some little time ago for sub acute anterior poliomyelitis and exophthalmic goitre, and to the former of which diseases she succumbed. She was a mantle-maker, aged 50. For many years she was troubled with palpitation, dysmenorrhœa, and general debility. She ceased to menstruate at the age of 43. Six months before her admission to hospital indigestion and vomiting were added to her other troubles, and she became so prostrate that she was obliged to remain in bed for some weeks. About this time a swelling in the region of the thyroid was noticed, and soon afterwards the paraplegia developed. Two or three months later the proptosis was observed.

When admitted, she presented the picture of a nervous, debilitated woman at the climacteric period. Her lower extremities were paralysed and much emaciated, and altogether she was a well-marked example of chronic, or sub-acute, atrophic spinal paralysis of Duchenne, a diagnosis that was verified by subsequent microscopic examination of the cord. The exophthalmos was pronounced; Graefe's symptom was marked; the pupils were somewhat dilated, and responded to

[1] Delivered at the Newcastle-on-Tyne Infirmary.

light. The thyroid was enlarged, but without distinct pulse or thrill, and the *bruit* audible in it was apparently conducted from the carotids. The heart-apex was in its normal position. A loud systolic murmur could be heard at the base between the second costal cartilages, but loudest in the pulmonary area. There was no apex murmur. The average pulse was 104, and the usual palpitation was present. The skin of the face was of a sallow, muddy colour, with well-marked pigmentation around the eyes. The areola of the nipples was very dark; the urine was normal. A few weeks after admission the paralytic lesion became active, and, rapidly ascending the cord, caused death, with implication of the diaphragm.

At the *post-mortem* examination, all present were struck with the thickness of the layer of fat that covered the abdomen and chest, though the body was by no means that of an obese, or even stout, person. It was an inch and a half thick over the abdomen, and half an inch over the thorax; and wherever fat is usually deposited in the body, there was a large accumulation; for example, the omentum, mesentery, pericardium, and heart were literally laden. The thyroid, with a small portion of the trachea, weighed six ounces; the tissue was firm, of a pink colour, and, on section, presented in many places a peculiar colloid appearance. The eyes were by no means so prominent as they had been before death; the orbits were very full of fat;



the heart weighed 8½ ounces; the left ventricle was normal; the right was dilated, and full of soft dark clot, which conveyed to the fingers a strange greasy feel, and, when examined close to the light, was seen to have fatty matter on the surface. There was no valvular impairment. The lungs were œdematous; the liver was small but the substance was normal in appearance; two large gall-stones were found in the bladder, which also contained a quantity of mucus and cholesterin. With the exception of a general softness of consistency and some atheroma of the basal vessels, the brain was normal. The inferior cervical ganglia of the sympathetic were removed for microscopical examination, but to the naked eye they seemed normal. The spinal cord was reserved for examination, and, as I have already stated, showed distinct changes in anterior cornual groups of cells in the lumbar region. The upper dorsal and cervical positions were exceedingly soft; indeed, in the middle and upper dorsal regions, the spinal marrow was reduced to a creamy substance, and quite defied all attempts at hardening. I should mention that distinct bronzing of the skin of the face, axillæ, nipple, and upper part of thighs was remarked at the *post-mortem* examination.

Most of you are already in possession of the facts of the case of Gertrude B., who quite recently died in Durham Ward. She was aged 28, married, and was admitted complaining of palpitation, swelling of the neck, and prominence of the eyeballs. Her grandfather died of apoplexy, but with this exception the family history was devoid of interest. For upwards of five years before admission she suffered from palpitation and nervousness. The swelling of the thyroid was detected very early in the case, and brown discoloration of the face came on at the same time, namely, about five years ago. Three years subsequently she was immersed in the sea for fifteen minutes, owing to the upsetting of a boat, and nearly drowned. After this the palpitation and other nervous symptoms became very troublesome. Six months before she came under observation she married. She now experienced great domestic trouble, was badly used by her husband, who gave her gonorrhœa, and a little later she had a miscarriage. Her symptoms rapidly became aggravated, and she noticed that the skin of the axillæ, thighs, nipples, etc., was much darker than formerly. The exophthalmos also appeared about this time, and the friends were distressed at the change in her temperament, for she had become very irritable. When she was admitted into the infirmary, you will remember, we were much struck with her condition. The goître was pronounced, and the eyeballs stood out prominently, whilst the skin of the face (particularly the lids), neck, axillæ, nipples, flexor aspect of elbows, lower part of abdomen, and upper part of the thighs was considerably bronzed. Graefe's sign was not well marked. The swelling of the thyroid was symmetrical and pulsatile, and over it a loud, humming sound, intensified with each systole, was audible. The carotids pulsated violently. The apex-beat of the heart was normal in position, though there was a decidedly increased area of visible pulsation. A loud, aortic systolic *bruit* was heard, and, at times, the second sound at the base was reduplicated. The pulse ran, as a rule, from 112 to 115 in the minute. The tongue was protruded tremulously, and a nervous tremor of the hand was apparent on exertion. The urine contained sugar. She had little appetite, and frequently was troubled with nausea and vomiting. She was inclined to be morose and irritable, and disliked exceedingly any reference to her condition, so much so that it was with difficulty that her history was taken. Two or three weeks after her admission the nurse complained that the patient was excessively irritable and disagreeable with the other patients, that she refused to do what she was asked, and resented the slightest interference. Two days later she complained of dryness of the throat and great thirst, and the tongue was observed to be very red. She was kept in bed, and the next day delirium set in; she talked constantly, and at times grew very excited. The pulse now went up to 160, and the temperature, which had been normal, rose to 101°. The excitement on the day following was very great, and her mind was filled with delusions; for example, the bed, she thought, was saturated with chloroform, and an attempt was being made to destroy her life in this way; or the students were taking liberties with her, and the nurse sold the patients for immoral purposes, etc. The pupils were widely dilated and did not respond to light. Next day it was impossible to keep her in bed, and she walked about the ward creating a great disturbance. She was now sleepless, and refused food; pulse 180; tongue dry and covered with sordes. Two days later, the excitement continuing, she became cyanosed, was still constantly talking, though in a less coherent and more feeble way; pulse 200; temperature 97°; death occurred six days after the commencement of the mental excitement.

At the *post-mortem* examination, the body seemed to be somewhat emaciated, though, as in the other *post-mortem* examination referred to, a thick layer of fat lined the abdomen and chest. There was brown discoloration of the face, neck, axillæ, abdomen, and thighs. The thyroid was enlarged, and weighed seven and a half ounces, and measured four inches by four and a half. It was firm, and, on section, resembled remarkably the structure of the pancreas. The heart weighed twelve and a half ounces; the left ventricle was slightly hypertrophied, but not dilated; the right was dilated. The tricuspid orifice admitted four fingers. The mitral curtains were just a little thickened towards their free margins. The brain-substance was soft and œdematous. The vessels of the pia were injected. No arterial atheroma. The grey matter, superficial and basal, was of a dark purple colour from engorgement. The orbits contained a large quantity of fat, but no tortuous vessels or œdema could be seen; the optic nerve (right) was decidedly elongated, and measured one inch and a half from the optic foramen to the globe; the muscles of the eyeball were soft, friable, and evidently fatty. Not the slightest trace of Müller's musculus orbitalis was found. The sympathetic ganglia of the neck were removed for examination, and it was observed that the inferior ganglion on the right side was slightly matted with the surrounding parts. The medulla was also reserved for microscopical investigation;

but I regret to say that I neglected to examine the cervical region of the cord.

I shall only trouble you with one more case, the features of which I may state very briefly :

A lady, aged 42, whom I recently saw with Dr. Peart, of North Shields, had goître of five years' standing, and severe palpitation, dating from about the same period. About twelve months ago, the eyes became prominent, and a little later the face was observed to be pigmented. She received a fright, when staying at a hotel in a Yorkshire watering-place, a few months before I saw her, through a gentleman committing suicide in the bed-room adjoining hers, and since then she had been much worse. Soon after this her husband discovered that she was morose and gloomy, and that, without any reason, she neglected to notice him on his return from business. Then she began to refuse food, and took a dislike to all around her. Her irritability increased, and she became excessively suspicious; though weak from want of food, she could not be prevailed upon to remain in bed. When I saw her, she was morose and ignored one's questions ; was complaining of thirst and dryness of the mouth ; the tongue and throat were red ; the urine was saccharine ; the face was pigmented, and the anterior folds of the axillæ and the areolæ of the nipples were dark ; and the heart, thyroid, and eyes strongly suggested Graves's disease. In a day or two the depression gave place to excitement, and delirium set in. The heart went up to 150 in the minute, and seemed, as Dr. Peart remarked, "to run away." Then she became extremely restless, and rapidly sank. No *post-mortem* examination was made.

We have now before us six cases of exophthalmic goître ; but, inasmuch as I recently reviewed the whole subject in some clinical remarks to the class, I shall confine myself to two points illustrated by these cases, and then I propose to call your attention to the pathology of the disease.

You must have been struck with the prominence I have given to the pigmentation of the skin. We have seen that in all the cases there was bronzing, more or less pronounced, and that in one this was associated with leucoderma or vitiligo. In some the appearances were practically those of Addison's disease, only in none were the minute, deeply-coloured patches of pigmentation on the arms, and the staining of the mucous membrane of the mouth, so characteristic of morbus Addisonii, made out. I may add that I have not yet met with this special distribution of pigment in Graves's disease, though I have at present a female out-patient, whom I wished to show you to-day, whose symptoms are highly suggestive. In her case there are all the features of Addison's disease ; great prostration, without material emaciation, vomiting and diarrhœa, pigmentation (arm, mouth, and general), and yet there is palpitation, with a slight tendency to proptosis, and a certain degree of enlargement of the thyroid.

The favourite situation for pigment in Graves's disease would appear to be around the prominent eyeballs, on the face generally, neck, axillæ, areola of nipples, abdomen, and upper and inner aspects of the thighs. The skin is smooth, and at times the patch is defined, or it may fade imperceptibly into the normally coloured skin. Wherever pigment occurs normally, there it is found increased, and the colour would appear to vary from a dirty, pale liver colour to a deep brown. The patches in our male patient are very dark indeed, and it is interesting to note that as the general condition has improved under treatment, so the patches of discoloration have become paler and smaller. In his case, especially on the wrists, we notice smooth, white patches of skin that are surrounded by areas of pigmentation.

To the occurrence of leucoderma in Graves's disease attention has been called by Trousseau, and later by Reynaud in 1875, and from time to time cases have been published in which leucoderma was a noticeable feature ; but from what I have seen of late years of the disorder, I am convinced that sufficient stress has not been laid upon the changes of the skin, and that whereas true leucoderma is comparatively rare in exophthalmic goître, pigmentation allied to Addison's is one of the most constant signs of the disease, and is at least as deserving as Graefe's symptom to be included with so-called cardinal signs. The question arises, Is this pigmentation simply symptomatic of a general disorder, and akin to the discoloration so frequently noticed in cases of cancer, tuberculosis, malaria, in which it is probably in great measure the result of anæmia and irritation from central organs? Or is it to be ascribed directly to the nerve-changes supposed to underlie Graves's disease, just as in the case of Addison's bronzing? This is, of course, a difficult question to answer, and raises some very important points in the pathology of pigment deposit. On the whole, I am disposed to think that in these cases there is a peculiar disposition to the cutaneous deposit of pigment arising out of special and general causes, amongst which may be mentioned perverted nerve-function, misapplied action of the thyroid (to which we vaguely ascribe hæmopoietic functions), great tendency to dilatation of the capillaries of the skin (witness Trousseau's cerebral *tache* or macula), and anæmia.

All experienced in cases of exophthalmic goître are familiar with the peculiar nervous and excitable temperament so often exhibited by the patients, but comparatively few, judging from the paucity of records, appear to have witnessed the more pronounced symptoms of mental disturbance that developed towards the termination of the cases to which I have referred. I am anxious to impress upon you the general features of such disturbance, for it would appear that the occurrence of maniacal symptoms may generally be regarded as an exceedingly unfavourable prognostic indication. In the forty-first volume of *Guy's Hospital Reports* (1882), Dr. Savage describes three cases of Graves's disease in which there was depression followed by violent mania—mania of the destructive and incoherent kind ; and he gives it as his experience that the disease (exophthalmic goître) is more common among the insane than the sane. Again, he states that with the marked symptoms of Graves's disease (where insanity has been present), he has generally met with melancholy of the suspicious type, followed by mania of a very violent kind, and with a tendency to emaciation and death. In this author's work on insanity, published in 1884, we have practically a repetition of these opinions, with the additional statement that he has met with several cases of acute mental disorder with symptoms of exophthalmic goître which have completely recovered, with the loss of both the mental and bodily symptoms. He further reminds us that cases of general paralysis of the insane occur from time to time with one or all of the features of Graves's disease. Quite recently Dr. Collins, of Nottingham, published clinical notes of a case of this disease complicated with melancholia and occasional outbursts of maniacal excitement ; this patient recovered.

I have not observed any reference to the condition of the urine in any of these cases, but you will recollect that, in the case of the two patients who died with mental symptoms, glycosuria was found, though the quantity of sugar was certainly too small to warrant the suggestion that the mental disturbance was in any way connected with the condition known as acetonæmia. In all probability the sugar appeared in the urine as an evidence of a wider range of nervous disturbance than would appear to be common in exophthalmic goître, a compass that may be supposed to include hepatic innervation.

With reference to the mental symptoms of Graves's disease, it is interesting to keep before our minds the observation of Mr. Victor Horsley in the Brown Lectures on Pathology, delivered in 1885, on the thyroid gland, to the effect that imbecility is produced by removal of the gland. Respecting the functions of this body, he reminds us of the opinions of Simon, Liebermeister, and others, who believed that it was a regulator of the cerebral circulation, and that it secreted something necessary to the perfect nutrition of the brain. That the thyroid plays an important part in relation to cerebral function there can be no doubt, and it is possible that the change it undergoes in Graves's disease may be in some measure responsible for the mental state.

In conclusion, permit me to direct your attention for a moment to the pathology of Graves's disease. The opinions advanced by authorities during the past half century have been numerous, but there are a few that command special attention. Stokes ascribed the symptoms to a neurosis of the heart and cervical vessels ; Trousseau, Laycock, and Graefe to an affection of the sympathetic ; Begbie to anæmia and nerve-disorder combined ; Basedow to a dyscrasia allied to chlorosis ; Geigel to cord-lesion (cilio-spinal centre) ; Benedict to disease of the medulla, etc. It seems to me that it is impossible to dissociate the sympathetic from the symptoms of the disease, for the heart-condition, nervousness, sweating, blushing, bronzing, the occasional dependence of the symptoms upon emotional disturbance or fright, all tend to strengthen the connection. The question arises, does a definite organic lesion necessarily underlie the group of symptoms, or may they not arise as the result of a pure neurosis of the sympathetic (functional disorder)? It is true that some pathologists have discovered more or less marked changes in the cervical ganglia, amongst whom I may mention Virchow, Peter, Recklinghausen, Traube, and Geigel. But, on the other hand, in many cases careful investigation has revealed nothing abnormal ; witness the observations of Fournier, Ranvier, Ross, Rebejac, Wilks, Bristowe, Savage, Silcock, and others, a list to which I must add my own, for though I have examined microscopically the ganglia of the two cases referred to, I have not been able to detect any structural changes ; indeed, a comparison instituted between these ganglia and the cervical sympathetic of a man

who was killed by an accident convinced me that the former were absolutely normal in microscopical appearance. I have also examined the medulla and supra-renal capsule of the case in which cerebral symptoms developed, but with negative result. The view to which I am disposed to lean is, that the majority of the cases of Graves's disease are examples of a functional neurosis of the sympathetic and perhaps of the associated centres in the cord and medulla (especially the latter). In proof of the functional, in opposition to the organic, theory may be urged the fact of the occasional sudden origin of the disease, the complete recovery in some cases, the sex most frequently attacked, the rarity of the development of the symptoms during pregnancy, the frequent association with other forms of functional nerve-disorder (insanity, etc.), and so forth. I am disposed to think that a weak but irritable and instable condition of the cells of the ganglia of the sympathetic, due to, or connected with, a similar condition of the cord and medulla vaso-motor centres (cardio-vascular), will account for the palpitation as well as for many other phenomena of the disorder. The thyroidal enlargement is, I believe, a simple hypertrophy in which both the vessels and glandular substance of the organ take part; and I do not think it is straining facts to assume that the hypertrophy is due to this instable and irritable condition of the ganglionic cells, inasmuch as they most probably preside over its nutrition. I remember a case of Graves's disease, in which the thyroid enlarged rapidly in one direction, sending off a bud-like offshoot, about the size of a large filbert, during an attack of tonsilitis. This projection, which was firm and entirely devoid of pulsation, was evidently composed of gland substance and not a simple vascular dilatation; it was interesting to note that during the attack, which only lasted a few days, the eyes stood out much more prominently than before, and receded as the temporary disturbance subsided. The proptosis is more difficult to explain, but I believe it depends chiefly upon these conditions—all of which are responsible for the phenomenon—namely, increase of fat in the orbit, postocular capillary dilatation, and degeneration and relaxation of the recti muscles.

AN ADDRESS

ON THE

STUDY OF HUMAN ANATOMY.

Delivered at the Meeting held for the Formation of an Anatomical Society, May 6th, 1887.

By PROFESSOR HUMPHRY, F.R.S.

Gentlemen,—I fully appreciate the honour you have done me in voting me to the chair on this occasion. The reason for your doing so may be found in the fact that my commencement of the study of anatomy dates from more than half a century ago, during great part of which time I have been a teacher of anatomy; and it is therefore pretty certain that I am the senior anatomical student as well as the senior anatomical teacher here present; and though I have now to a great extent relinquished the study and teaching of anatomy, yet it may be supposed that I still cast lingering looks behind, upon that field in which I for so many years worked happily and earnestly, and I hope not altogether unprofitably.

I appreciate the honour, however, more especially because I feel that this is an important occasion, an epoch it may perhaps be regarded, in the history of anatomy, and an occasion of much importance to the study of medicine generally. We are met together for the purpose of elevating the study of human anatomy, and placing, or endeavouring to place, the science of human anatomy on a level with, and in that proper relation to, the other branches of natural science, which I think it has not for some time held, and which relative decadence is greatly to be attributed to the fact that it has not advanced *pari passu* with them. Since the time of Hunter and Cruikshank and Astley-Cooper and the Bells, human anatomy has lacked its proper interest, and has not held its own with the other quickly progressing branches of natural science. Hence it has come to be regarded as a merely practical subject, and its study to be merely a process of piling fact upon fact without due regard to the purport of the facts and the suggestions to which they should give rise. Far be it from me to disparage the value of anatomy as a practical subject, seeing that in this way it confers the greatest benefits upon humanity, and has, and ever must have, the first and chief claim to our regard. Nor would I disparage the educational benefit resulting from the acquisition of a clear and accurate knowledge of the structure of the body and the mental training derived thereby, which is of so much value to those who are entering upon the pursuit of medicine. But I feel that the study of anatomy should not be regarded from this point alone, but that a wider and higher view should be taken of it. The human body is undoubtedly the highest and most perfect of created works, the last and most perfect outcome of Nature's laboratory, the central one around which all the rest of the animal world is grouped, to which all point, and which all are calculated to elucidate. It is provided with a surpassing mechanism, great results being produced by slight modifications from the forms of other animals, and the resultants being such acuteness of perception, and such variety, nicety, and precision of movement, as to give man the mastery over all others, and enable him to bend all Nature to his purpose. Moreover, its proportions, the outlines of its form, and the power of expression of its several parts, in both sexes and at all periods of life, are such, and present so much beauty and variety, that it has formed subjects for the highest efforts of the greatest artists of all times, from Pheidias and Raphael to Leighton and Millais. Moreover, in it the physical is worked up into that complex and mysterious elaboration and process which enables it to become the organ or agent of the mental and intellectual—the seat of the soul, the abode of Deity. The problems and conceptions—physical, artistic, and psychical—arising out of it, of and associated with this material frame of ours, infinitely surpass, in number and interest, those of all other existing forms.

It may be regarded, therefore, as one of the marvels connected with it, that the study of it should come to be regarded as dull, uninteresting, and profitable only for its direct practical relations with medicine and surgery. Surely it needs only the proper impulses, such as we trust will in part be furnished by the proposed society, to obtain for it a due appreciation and position among the higher and educational sciences. It was this feeling which urged me to contend strongly, and, I am glad to say, successfully, for a place for human anatomy among the natural sciences at Cambridge; and I am convinced that it would be a benefit, vibrating along the whole line of medical education, if at the early stage of that education, the student were accustomed to reflect upon what he sees and reads of in his anatomical course, and to associate thoughts respecting the mechanical and other relations of the structures which he dissects. One of the greatest, perhaps the greatest, defects in medical education, I might say in all education more or less, but in medical education especially, is the heaping upon and oppressing the student's mind with a load of facts which he neither digests nor appropriates, and which he therefore does not retain. His mind is like a sack crammed with grain, which there is little power to fertilise or utilise. Far better would it be to lessen the load, and to substitute the habit and the ability to reflect, and really digest and appropriate the remainder, to give some opportunity for mental elasticity and for that enjoyment of study which results from a real knowledge and appreciation of what is learned. As a general rule, we remember only, at any rate we remember best, that information the bearings of which we have well understood, which has consequently most interested and impressed us, and which we have most enjoyed. To make anatomy better remembered and a better mental training, it must be made more interesting and more attractive and more thought-inspiring; and this is to be done by giving to it its proper scope as a medium of information, and by imparting to its details, which are now too cold and dry and sterile, the warmth and life and thought-budding energy which should belong to them. I have spoken chiefly of human anatomy, because to it these remarks especially apply, and because the human body is the subject of the most serious and arduous study, and the manner in which it is prosecuted is the most important and the most relevant to our purpose. Not that the scope of the proposed society is to be limited to it, but that our greatest opportunities for good will be in relation to it. Anatomy, the anatomy more particularly of the human body, is a very ancient and dignified science, indeed a royal science. It was studied, ages and ages ago, by the people on the banks of the Nile, from whom we have derived so much; and, we were told the other day at Cambridge by my learned successor in the Chair of Anatomy, that the earliest writing upon anatomy of which we have any cognisance was by an Egyptian king who had passed away long before the Exodus took place. It is for us to make it a royal science, in a higher sense, and to give to the human body its proper royalty of position in the animal world, not merely by having regard to the paramount practical importance of its study, but by considering it also in relation to its mechanism or physical physiology, in its relation to embryology, and in its relation to the anatomy of other animals, and also in its relation to the special structural features which may be associated with the

occurrence of certain diseases. The attendance this afternoon shows a general interest in this movement, and argues well for the formation and prosperity of the society, which I trust will prove long-lived and successful. I will occupy your time no longer, for the relation between brevity of life and the length of time, and the value of brevity, in words as well as in action, are becoming daily more manifest in the quickly shifting scenes of this singularly mobile age.

THE ANNUAL ORATION,

ON

ABDOMINAL SECTION FOR THE TREATMENT OF INTRA-PERITONEAL INJURY.

Delivered before the Medical Society of London, May 2nd, 1887.

By SIR WILLIAM MAC CORMAC, F.R.C.S.,
Surgeon to, and Lecturer on Surgery at, St. Thomas's Hospital.

[*Concluded from page 980.*]

Abdominal Injury without External Wound.

Rupture of the Intestine.

Violent contusion of the abdomen may result in rupture of any of its contained viscera, a condition for which laparotomy has been rarely performed.

In these cases an exact diagnosis must always be very difficult, oftentimes quite impossible to arrive at, as the symptoms are obscure and common to several degrees and kind of injury. Serious hesitation must always occur when we are called upon to decide in the presence of each particular case what is the best line of treatment to adopt. One has seen many cases of severe abdominal injury recover, while many very speedily die.

Numerous instances may be cited to illustrate the fact that the most serious injury is sometimes unaccompanied by any definite diagnostic symptoms. In a case which recently appeared at St. Thomas's, the man, apparently, had no serious complaint. He was a labourer, aged 24. On March 26th, 1887, about 8.30 P.M., he was knocked down while in a drunken condition by a tramcar, driving at the rate of four miles an hour, and wedged between the wheel-guard and the ground. He vomited repeatedly after the accident; when seen at the hospital one hour later he could not answer questions coherently, was restive and quarrelsome, the pulse full and quick, respiration hurried; there was no symptom of collapse, no distension or tenderness of the abdomen. After being carefully examined he was able, with some assistance, to put on his clothes, and, on being discharged, was taken to a police-cell. During the night he vomited frequently, and the bowels acted once; he was very noisy, but expressed himself as feeling "all right;" in the morning he complained of pain in the epigastrium, but was able to bail himself out, and walk away from the police-station. One hour later he became much worse, with severe abdominal pain, and died of peritonitis the same evening, twenty-four hours after the accident. At the necropsy a rupture of the lower part of the duodenum, with extravasation of its contents, and a slight rupture of the liver were found.

In 1872 a corpulent man walked a considerable distance to the London Hospital, after falling in a brewery some sixteen feet, and striking his belly in the fall. There were no symptoms throughout his illness referable to abdominal injury. He complained only of pain in the chest, and, being considered fit to attend as an out-patient, was sent home. Soon after he returned to the hospital, and died in about twenty hours. At the *post-mortem* examination a complete circular division of the bowel was found at the junction of the duodenum and jejunum, and a fracture of the sternum.

At the Leeds Infirmary a man, aged 19, was admitted in 1881 in a drunken condition; the wheel of the cart he was driving had passed over his abdomen. There was no evidence of external injury, and the man had been able to remount his cart and drive a couple of miles into the town. There were no symptoms of collapse, and he vomited a few ounces of clear fluid, smelling of beer. On the following morning he said he felt "quite well." There was no abdominal tenderness, nor had any blood passed by the bowel. He was then given some bread and milk, and almost directly after abdominal pain set in, and death occurred from peritonitis twenty-seven hours after admission. On *post-mortem* examination, the jejunum was found completely divided transversely, exactly where it lay upon the vertebral column. It is not stated if extravasation took place.

Such cases, and others might easily be quoted, illustrate the fact that nothing positively indicating a serious intestinal lesion may show itself for some time. Nevertheless the fatality of concealed lesion of the intestine is so great that since the beginning of this century the idea of intervention has occurred to many surgeons. In France, Jobert and Baudens urged interference as soon as the symptoms of peritonitis were declared. Bouilly, in 1883, seems to have been the first to operate on a case of this kind. There have been seven or eight cases altogether which are recorded in the table, including the one already detailed of Mr. Croft, fatal unfortunately in every instance.

Symptoms and Indications for Operation.

The chief indications for operative interference are afforded by the mode of action and severity of the violence. The presence of prolonged and profound shock—the duration of the shock is of greater importance than its intensity—a small and quick pulse, and hurried respiration, while the temperature remains either normal or subnormal, associated with acutely severe, persistent, and localised pain, increased on pressure, indicate the nature of the injury; bloody vomit or stool, rapid tympany, the evidence of percussion, are inconstant signs, and help us but little.

The jejunum and ileum are the portions of intestine most frequently ruptured, and the rent will generally be found just behind the part of the abdomen which has been struck—a fact which can easily be verified by experiment. In about 15 per cent. of the cases, more than one loop of intestine is damaged, and in that case the injury generally occurs in superimposed coils.

It may be affirmed that there is no constant pathognomonic sign of rupture of the intestine. It is difficult at first to distinguish the syncope induced by hæmorrhage from the shock caused by a ruptured intestine. In some cases, as we have seen, there appears to be little or no shock.

In the early period we shall have to arrive at a diagnosis from the nature and violence of the injury, and the general condition of the patient. When peritonitis is declared, an immediate operation is urgently indicated, as collapse comes on very quickly, sometimes very suddenly, and a few hours' delay may negative all prospect of recovery.

Treatment.

Chavasse, from a collection of 150 cases, estimates the mortality of rupture of the intestine without external wound at 96 per cent., a fatality probably below the mark, but at all events one justifying any operative proceedings affording even a moderate prospect of success. Chiefly, no doubt, on account of the obscurity and difficulty attending these cases, abdominal section has been very rarely performed. Absolute rest has hitherto been the chief indication for treatment. But cases do arise in which abdominal section should be practised, and an attempt made to discover and deal with the visceral wound, arrest the bleeding, and clear away the clots and extravasated blood.

We should interfere when we possess a reasonable belief that the intestine is ruptured. We may in some cases properly propose laparotomy as a means of diagnosis, and, indeed when intestinal rupture is suspected the operation should be performed at once to afford a good prospect of success. Exploratory laparotomy has no very serious inconvenience, and should be adopted in those cases where there are reasonable grounds for believing the intestine has been damaged, as in no other way can effective assistance be rendered to the patient. At a later period we have not only the ruptured intestine to deal with, but a septic peritonitis, which produces the most profound depression, and often necessitates an undue curtailment of some essential step in the operation, or occasions the death of the patient before its completion. Extreme collapse, a long interval from the time of the injury, or severe co-existing damage to the spleen, liver, or pancreas, of course contra-indicate operation. The incision should be made in the middle line in all cases, and at the level which will afford readiest access to the seat of the injury. It is desirable to make it long enough to permit the surgeon to reach without difficulty every part of the interior. According to circumstances he may then decide to suture the intestinal wound, resect the injured portion of the bowel, or make an artificial anus. The same objections hold in regard to the latter that obtain in respect of artificial anus after gunshot injury. Where

Tables of Cases in which Laparotomy has been performed for the Relief of Intra-peritoneal Abdominal Injury.

For many of the following cases I am indebted to the courtesy of Dr. Thomas K. Morton, of Philadelphia, and in my search for others have been much aided by Mr. Langley and Mr. Middleton. The record is, I believe, very complete.

Table I.—*Cases of Abdominal Section for Stab Wounds; in some instances the abdomen was explored after enlargement of the existing wound.*

No.	Operator and Reference.	Age.	Time after Injury.	Special Symptoms.	Intra-peritoneal Lesions found.	Treatment of Intra-peritoneal Wounds.	Result.	Remarks and Post-mortem.
1	J. Avery. Med. Age, 1885, iii. 412	Adult	7 hours	Much shock	2 wounds of small intestine, 1 of mesentery	Laparotomy; edges resected, and Glover's suture introduced	Recovered	No visceral injury was found; no shock after operation; rapid recovery.
2	A. E. J. Barker. Lancet, 1886, i. 347	F. 14	1½ hour	Wound by carving knife one inch long close to margin of left ribs; no shock	Some clots; no visceral injury	Abdominal wound enlarged to three inches; viscera drawn out; examination of stomach, colon, and omentum; abdomen carefully sponged	Recovered	
3	Baudens. Annals of Surg, May 1886, p. 392	—	—	— —	2 perforations of intestine	Opening much enlarged	Died	Peritonitis. Post-mortem; another perforation found in cæcum.
4	J. G. Brooks. Med. Herald, 1886, viii. 134	11	A few hours	Great shock; abdomen tense and dull	Great quantity of blood; cut and bleeding mesentery	Laparotomy; vessels ligated	Recovered	
5	J. B. Deaver. (Unpublished)	Adult	—	Much blood in peritoneal cavity; great shock	Wound of spleen	Excision of spleen	Died	Post-mortem; wound of kidney, etc.
6	F. S. Dennis. Med. News, 1886, xlviii. 225—253	22	—	Stabbed with a knife; intestines protruded	2 incised wounds of small intestine—one divided the whole thickness, the other only the serous and muscular coats of the intestine	Abdominal wound enlarged; intestine drawn out and examined for further injury; cavity irrigated with bichloride solution; Czerny-Lembert suture	Recovered	
7	F. S. Dennis. Med. News, 1886, xlviii. 225—253	57	3 hours	Shock moderate; stab wound four inches above and three inches to the left of umbilicus; omentum protruded	No wound of any viscus found	Laparotomy; abdominal contents examined. The whole length of small intestine, also the stomach and colon were carefully examined. The incision was extensive. The viscera which protruded were constantly irrigated with bichloride solution	Recovered	In this case there was a very rapid recovery.
8	F. S. Dennis. Med. News, 1886, xlviii. 225—253	25	Next day.	Had been stabbed in a hernia; hernia reduced; peritonitic symptoms next day	2 large wounds of small intestine	Wound enlarged so as to give easy access to cavity of abdomen; resection of gut, including the two wounds; continued suture of divided ends; fæcal extravasation very large; cavity washed with bichloride solution	Died in a few hours	Post-mortem; no leakage at resected portion; no other wounds.
9	F. S. Dennis. Med. News, 1886, xlviii. 225—253	22	Immediately	Considerable hæmorrhage from external wound just above crest of ilium	5 wounds of small intestine; much fæcal extravasation	Laparotomy; Czerny-Lembert suture; cavity sponged	Died in 40 hours	Post-mortem; wounds in good condition; no other wounds; bloody serum in cavity.
10	Jobert. Günther, Operationslehre	23	—	Protrusion of intestine	2 wounds of intestine	Abdominal wound considerably enlarged; wounds sutured	Died in 38 hours	Post-mortem; another perforation found.
11	Kwiecinski. Pregl. lik. Krakow, 1885, xxiv. 71	20	At once	Great pain; vomiting	3 wounds of small intestine	Laparotomy; suture	Recovered	
12	T. G. Morton. (Unpublished)	30	9 hours	Increasing pain about wound; also emphysema; no shock	Wound of omentum, 1½ inch	Laparotomy; suture of omentum; ligature of bleeding omental artery	Recovered	
13	J. B. Roberts, Philadelphia. Polyclinic, 1886, iii. 93	19	2 hours	Great shock; vomiting; violent pain	2 wounds of small intestine	Lembert's suture	Died in 2 days	Post-mortem; purulent peritonitis; one wound overlooked.
14	J. B. Roberts, Philadelphia. (Unpublished)	40	¾ hour	Violent abdominal pain; prolapse small knuckle intestine; free hæmorrhage	4 wounds of small intestine; 1 of colon; mesentery transfixed	Laparotomy; wounds all closed with Lembert's suture	Recovered	
15	W. O. Roberts, Kentucky. Am. Pract., 1884, xxix. 13	54	A few hours	Considerable hæmorrhage from wound	2 wounds of small intestine; 2 of mesentery	Abdominal wound extensively enlarged; viscera examined; wounds sutured in intestine and mesentery	Recovered	
16	C. Tiling. St. Petersburger Med. Woch. 1848, No. 24	19	Soon	Vomited much blood	Much blood; 1½ inch wound of gut, and also in curvature of stomach; wound of omentum	Laparotomy; Lembert's suture	Recovered	
17	W. S. Tremaine. Med. News, 1886, xlix. 601	18	10 hours	Free bleeding from wound; opium poisoning also	Incised wound 3½ inches long of abdominal wall below umbilicus, dividing the rectus and cutting the deep epigastric artery. Intestines protruding into the wound. No visceral wound. The medical man who first saw the patient introduced a few points of suture in the skin only	Laparotomy in median line; 1½ pint of clotted blood removed; peritoneum stitched and then abdominal wound sewn up and a drainage-tube placed in the wound	Died	Had been given 8 grains of opium before admission, and was fully under the influence till death.
18	Wunderlich. N. Y. Med. Journ., 1887, i. 68	19	6 hours	Shoemaker's knife entered eighth intercostal space two inches to left of mamma, wounding diaphragm and stomach; great thirst; milk passed through the wound	¾ inch wound of gut and of anterior curvature of stomach, and wound of diaphragm	Laparotomy; Lembert's suture; abdominal cavity washed out; patient became much collapsed, and the wound in the diaphragm was left unclosed	Died in 1 hour	Post-mortem; wound in stomach securely closed; some coils of intestine had passed through the diaphragm.

TABLE I *(continued).—Two Cases in which the Abdomen was torn open by Goring.*

No.	Operator and Reference.	Age.	Time after Injury.	Special Symptoms.	Intra-peritoneal Lesions found.	Treatment of Intra-peritoneal Wounds.	Result.	Remarks and Post-mortem.
1	Davids. Günther's Operationslehre, Abtheilung iv. 163	—	—	Gored by an ox	Protrusion of intestine, with two wounds of bowel	Abdominal wound extensively enlarged; gut sutured	Recovered	A hernia subsequently formed in the scar.
2	Gal. Centralblatt f. Chirurgie, 1886, p. 686	45	9 hours	Gored by a cow	Protrusion of intestine	Opening considerably enlarged; abdominal contents carefully examined, cleansed, and returned	Recovered	No rupture of intestine found.

TABLE II.—*Cases of Abdominal Section performed on Account of Gunshot Wound.*

No.	Operator and Reference.	Age.	Time after Injury.	Special Symptoms.	Intra-peritoneal Injuries, &c. found.	Treatment of Intra-peritoneal Injuries.	Result.	Remarks and Post-mortem.
1	Abbe. Med. News, 1886, xlix. 528	53	5½ hours	Slight shock; vomiting; rapid and increasing abdominal pain; tympany	4 wounds of small intestine; 3 of mesentery; wound between bladder and rectum, perforating bladder; much sub-peritoneal extravasation	Laparotomy; a pint of greenish serum containing extravasated fæces; wounds in small intestine sutured by Lembert's method and also the wound in the bladder; abdomen drained	Died in 9 hours	Walked two squares after injury. Post-mortem; purulent peritonitis; ball found in bladder.
2	W. E. Andrews. Journ. Am. Med. As., 1885, p. 177	Adult	16 hours	Vomited much blood; moderate shock; diffused tenderness of abdomen	1 quart of bloody serum	Laparotomy; bloody serum sponged out; organs examined and wound closed	Recovered	Operation lasted 2 hours.
3	T. Annandale. Lancet, 1885, i. 740	15	1 hour	General shock; slight pain in abdomen and pelvis	Considerable hæmorrhage; 5 wounds of small intestine, 2 in colon, 2 in rectum; wound of mesentery	Laparotomy; all closed with Lembert's sutures	Died in 24 hours	Walked 100 yards after injury. Post-mortem; all sutured portions were water-tight except the uppermost wound of the small intestine, where 3 openings were situated close together; wounds firm; no others found.
4	Baudens. Plaies d'Armes à Feu, 1836	—	—	Wound of entrance at umbilicus; exit through quadratus lumborum	2 wounds of intestine, 1 completely destroying portion of intestine	Abdominal wound considerably enlarged; 8 inches resected; Lembert's suture	Died 3rd day	Post-mortem; wound of cæcum found with fæcal extravasation.
5	Baudens. Günther, Operationslehre, Abtheilung iv	—	—	— —	Fæcal extravasation; wound of transverse colon	Abdominal wound enlarged; intestine sutured.	Recovered	
6	Briddon. N. Y. Med. Journ. 1887, xlv. 75	—	12 hours	Vomited large quantity of blood; no urgent symptoms	2 slits in great curvature of stomach	Laparotomy; Lembert's suture	Died	Post-mortem; 4 other wounds, all within 3 inches, previously escaped notice.
7	T. Billroth. Prof. Billroth's Klinik, 1886. (R. von Hacker reporter)	F. 63	32 hours	Collapse; great pallor; small pulse; vomited blood; belly swollen and tender	Bullet entered beneath left nipple through seventh intercostal space; traversed the stomach near greater curvature	Laparotomy; transverse wound 6 inches long from linea alba to sixth rib; ends of seventh and eighth ribs resected; contused margin of stomach; wound excised. 29 Lembert's sutures used to close exit wound. 3 sutures sufficed to close entrance wound. Bullet not discovered. Abdomen cleared of coagula, and drained	Death following evening	Peritonitis and pleuritis: bullet had wounded liver and aorta, and lodged in the right kidney. Vomiting was continuous; gradual loss of strength.
8	Wm. T. Bull. Med. News, 1885, i. 171	22	17 hours	Vomiting; pain; rectal tenesmus; involuntary micturition	Abdomen full of bloody serum, but no fæces; 6 perforating wounds of small intestine; 1 wound of sigmoid flexure	Laparotomy; bullet wound enlarged afterwards; 27 Lembert's sutures to small intestine, 3 to sigmoid flexure. The larger wounds close together had their edges resected, and all wounds were dusted with iodoform; laparotomy wound was closed entirely, but drainage-tube was placed in bullet wound	Recovered	The ball was found lodged in the peritoneum at the edge of sigmoid flexure and protruding into its lumen.
9	Wm. T. Bull. Med. News, 1886, xlix. 601	24	6 hours	Severe abdominal pain; shock; vomiting; diminished liver dulness; fluid in abdominal cavity	Bullet entered behind, and lodged in abdominal wall near umbilicus; 2 wounds of small intestine, and 2 of transverse colon; extravasation into meso-colon	Laparotomy; incision in abdominal wall and bullet removed; escape of bloody serum and gas. Abdominal section in central line, incision 11 inches; 2 pints of bloody serum removed; 2 wounds of jejunum and 2 of transverse colon sutured by Lembert's method; abdomen washed out	Died in 8 hours	Post-mortem; wounds firmly closed, no other wounds found.
10	Wm. T. Bull. Med. News, 1886, xlix. 524	57	12½ hours	Shock; vomiting; scarcely any pain	Large amount of blood; left lobe of liver almost divided	Laparotomy; incision from 1 inch below ensiform cartilage to 3 inches above the pubes; abdomen sponged out. Patient died before the operation could be completed	Died on table	Post-mortem; no other wounds found.

TABLE II.—*Continued.*

No.	Operator and Reference.	Age.	Time after Injury.	Special Symptoms.	Intra-peritoneal Injuries, &c. found.	Treatment of Intra-peritoneal Injuries.	Result.	Remarks and Post-mortem.
11	Wm. T. Bull. Med. News, 1886, xlix. 524	25	2½ hours	Nausea; abdomen appeared normal; only vicinity of wound tender	2 wounds of small intestine; 3 tears of peritoneum; omentum torn	Wound explored by incision 3 inches long. Laparotomy; incision from umbilicus to pubes; abdomen full of bloody serum, which was sponged out; two wounds of small intestines were sutured by nine Lembert's sutures. Iodoform dusted on them. Wound of serous coat of sigmoid flexure was sutured with four Lembert's sutures; vessel bleeding in meso-cæcum was tied; portion of great omentum ligatured and cut off; laparotomy wound sewn up; bullet wound stuffed with iodoform gauze	Recovered	
12	F. S. Dennis. Med. News, 1886, xlviii. 225-253	23	—	Shock	Much blood; wound of liver and its great vessels	Laparotomy; contents of abdomen completely examined, clots of blood carefully removed; abdomen rapidly closed, and pressure applied	Died in 48 hours	Post-mortem: bullet passed through left lobe of liver, injured portal vein, and lodged in right lobe.
13	F. S. Dennis. Med News, 1886, xlviii. 225-253	F. 26	—	Slight shock and pain; pain increased during respiration	Abdomen full of venous blood; 7 wounds of intestine and 1 of mesentery; uncontrollable hæmorrhage from iliac vein; fæcal extravasation	Laparotomy; wounds of intestine sutured; abdomen cleared of blood	Died in 48 hours	Post-mortem: abdominal cavity filled with blood; wounds in intestines all water-tight; iliac vein wounded
14	J. Mc F. Gaston, M.D. Med. and Surg. Rep. June 12, 1886, p. 739	M. 30	4 days	Very prostrate, almost pulseless; extreme shock, which continued for 3 days, treatment being employed to overcome it	No peritoneal wounds found beyond the one made by bullet in anterior abdominal wall; considerable sero-sanguinary effusion undergoing decomposition	Laparotomy in median line; colon punctured with trocar and cannula to allow of escape of gas; small intestine also punctured 6 times; each puncture sewn up by crucial stitch. Abdomen cleansed by sponging. Wound closed; drainage-tube introduced	Death	Post-mortem: no wound of intestines found, nor could the bullet be discovered. Operation performed too late.
15	J. B. Hamilton. Journ. Am. Med. As. 1885, ii. 202	19	2½ hours	Considerable shock	11 wounds of small intestine, 2 of colon; omentum and mesentery wounded; abdomen full of blood	Artery tied; blood removed; Lembert's suture to intestine; wounds ligatured, and the injured portion of the omentum removed	Recovered	Pelvic suppuration; hæmatocele evacuated through rectum on twelfth day.
16	C. A. Jersey. Med. Record, Oct. 16, 1886	44	20 hours	Much shock; pain and tenderness of abdomen	4 wounds of small intestine; 2 perforations of mesentery; abrasion of mesentery	All wounds except the abrasion stitched with Lembert's sutures	Died in 19 hours	Post-mortem: mesenteric wounds sloughing, and bathed with pus.
17	A. R. Kinloch. North Car. Med. Journ. 1882, x. 1	Adult	11 hours	Slight shock; general abdominal pain; pain in sacral region; hole in rectum	Much blood and fæces; 5 perforations of intestine, 2 of mesentery	Laparotomy; edges resected and sutured with Lembert's stitch; drainage	Died in 16 hours	Post-mortem: another wound of the intestine was found.
18	Kocher. Correspond. für Schweitzer Aertze, 1883, No. 23	14	3 hours	Collapse; signs of peritonitis. Pistol bullet perforated near navel; severe abdominal pain; hiccough; vomiting; pallor; collapse; tympanites	Much blood; circular wound, 1½ in. of large curvature and fundus of stomach; anterior surface; no exit wound; bullet not found	2 interrupted sutures, then a continuous suture	Recovered	Abscess followed in track of wound, and somewhat delayed recovery.
19	Jordan Lloyd. BRITISH MEDICAL JOURNAL, 1883, i. 560	F. 19	72 hours	Little shock; no vomiting; later constant vomiting; pain and peritonitis	Much stinking brown fluid; ragged wound of small intestine ¾ in. in diameter	Laparotomy; intestine stitched to wound	Died in 2 hours	Post-mortem: mesentery perforated; contusion of bladder not recognised during life.
20	F. J. Lutz. Weekly Med. Rev. 1886, p. 514	21	—	Right side of abdomen tympanitic; left side dull	7 wounds of small intestine. 4 wounds of mesentery	Laparotomy; Lembert's suture; ligature of a mesenteric artery	Died in 3 days	Post-mortem: purulent peritonitis; intestinal wounds in good condition.
21	A. O. Mackellar. Dec. 25, 1886. (Unpublished.) Noticed, Lancet, 1887, i. 37	22	3[illegible] hours	Collapse; vomiting; pain; no blood appeared in urine till 12 hours after injury	Entrance wound to left, and a little below umbilicus; 2 perforations of sigmoid flexure; contused wound of small intestine	Laparotomy; 2 perforations secured by ligatures	Died in 12 hours	Never recovered from shock of operation. Post-mortem: bullet lodged in posterior wall of bladder; small wound of anterior part of rectum; some fæcal matter and blood-clots in abdominal cavity.
22	T. G. Morton, Philadelphia. (Unpublished.)	36	1½ hour	Some pain; no shock; vomited blood copiously	4 wounds of stomach, 1 of transverse colon; omentum much lacerated	Laparotomy; Lembert's suture to all	Died in 5 hours	Post-mortem: wounds and abdominal cavity all right; large hæmorrhage (1½ pint) into left pleura from cut intercostal artery.
23	C. B. Nancrede. Phila. Acad. of Surg. 1886	—	—	At first little pain or shock, later copious bloody vomiting	Perforation of anterior and posterior wall of stomach; 2 large perforations of duodenum	Laparotomy; Lembert's suture; "cleansing"	Died in 3 days	No post-mortem.
24	Newall, New Brunswick. BRIT. MED. JOURN. Feb. 26, 1882, p. 260	Adult	Next day	Accidentally shot himself with shot-gun in median line	Perforation of intestine by shot; 29 shots passed per anum following day	Laparotomy; gun-wad and pieces of clothing removed from abdominal cavity	Recovered	3 shots made their exit 1½ in. above crest of ilium and 3½ in. from spine.
25	A. V. Parkes. Chicago Med. Journ. and Examiner, 1885, ii. 412	16	22 hours	Abdomen tympanitic; no liver dulness	Great quantity of blood; ½ inch wound; also groove in small intestine	Laparotomy; Lembert's suture to groove and perforation	Died in 15 hours	Post-mortem; few clots; peritonitis; contused wound of rectum and sigmoid flexure.

TABLE II.—(*Continued.*)

No.	Operator and Reference.	Age.	Time after Injury.	Special Symptoms.	Intra-peritoneal Injuries, &c. found.	Treatment of Intra-peritoneal Injuries.	Result.	Remarks and Post-mortem.
26	Pirogoff. Langenbeck's Archiv, xxvii. 278	Adult	—	Wound near umbilicus; protrusion of intestine	4 perforations of small intestine	4 inches resected, also piece of mesentery; 10 Lembert's sutures	?	Progressed favourably for 4 days, then lost sight of.
27	Pozzi. Revue de Chirurgie, 1887, i. 78	13	8 hours	Vomiting; bloody urine	Infiltration of urine; 3 perforations and 3 contused wounds of intestine; wound of bladder	Laparotomy; 29 sutures were employed; partial resection of gut; drainage	Died in 52 hours	Post-mortem; sutures did not yield to injection of water. The symptoms due to the vesical injury were those which chiefly indicated the necessity for operation.
28	A. C. L. Ramsay. Northwestern Lancet, 1885, iv. 377	7	6 hours	Great pain; much vomiting	Much blood; extensive wound of duodenum; contusion of colon	Laparotomy; excision of gut including wound; Lembert's suture	Died in 1 hour	
29	T. G. Richardson. N. O. Med. and Surg. Journ., 1886 xiii. 867	Adult	9 hours	Great shock; vomiting; signs of incipient peritonitis	3 lacerations of intestine, 1 of mesentery	Laparotomy; all the wounds sutured	Died in 14 hours	
30	W. Watkins Seymour. N. Y. Med. Journ., 1886, xliv. 209	16	13 hours	Collapse; vomited; some pain down left sciatic nerve	Acute peritonitis; one quart of bloody fluid in abdomen; 2 wounds in transverse colon, a nick in the duodenum, and 2 wounds of meso-colon	Laparotomy; incision 7 inches; abdomen washed out clean, 2½ inches of colon resected; the ends joined with Lembert's suture; nick in duodenum closed by 3 Lembert's sutures; glass drainage-tube	Died in 18 hours	Post-mortem; no other wound found. No fluid in abdomen; wounds of intestine firmly closed; did not yield to injection of water. Surgeon was of opinion that an earlier operation would have been successful.

it is at all practicable I believe it best to finally close the opening in the intestine, and also the external wound.

CONCLUSION.

For the purposes of this address, I have had to borrow many things from the records of military surgery, and I may therefore allude to the fact that in this branch of our profession the forward movement has been very decided. In this relation we should remember that our military brethren exercise no special vocation, but are an integral part of ourselves. Their surgery is but the application of general surgery under special, and oftentimes most unfavourable, conditions.

It is terrible to think of the sufferings formerly endured by an army in the field. The French troops in the Crimea lost one man in every three. Of 95,615 Frenchmen who lost their lives there, only 10,240 perished at the hands of the enemy, as many more died in hospital from the effects of their wounds, so that the remainder, amounting to 75,000 men or more, were sacrificed to diseases for the most part preventable.

During the American war 97,000 men died from wounds, while just double the number, 184,000, perished from diseases which modern knowledge declares to be mainly preventable. What a sea of blood and tears, what want of prevision and due care for the health of such great numbers of men massed together, do such figures suggest!

During the Franco-German war, the losses on the German side in killed and wounded exceeded, for the first time in military history, those sacrificed by disease; it was, in fact, more than double in amount, for while 17,572 received death at the hands of the enemy, and 10,710 succumbed from the effects of their injuries, the number of those who died from disease was only 12,253.

In all the older campaigns, blood-poisoning caused the most fatal consequences to the wounded. In the American war, the number who died from this cause was enormous; 2,818 cases of pyæmia following gunshot-wound are recorded in the Surgeon-General's report, 2,747 of these died, 70 recovered, and this is probably a low estimate, as the nature of septic poisoning was not so well understood then as it is now.

At Sedan, among the French troops pyæmia was the uniform cause of death after operation, in gunshot fracture, and in many cases of simple flesh wound. Irrespective of the severity of the injury, the part of the body concerned, or the manner of treatment, the disease, once fairly developed, proved equally fatal.

We now possess means of checking this horrible malady, and in the campaign in Egypt in 1882 our surgeons were furnished with the best antiseptic appliance, and the material in their hands was turned to such excellent account that not a single man died from pyæmia, septicæmia, erysipelas, or hospital gangrene—a result altogether unparalleled in the annals of war. The possibility of excluding infective diseases has been thus demonstrated for the first time, and in the next great European campaign, I believe results will be accomplished which may well surpass anything hitherto considered practicable. The military surgeon must principally strive to prevent disease by the establishment of sound hygienic conditions, and from year to year and from campaign to campaign this is more and more perfectly realised. Thus only can he in the fullest possible measure save life and hinder suffering and give that aid to the wounded which it is his paramount duty to afford. Then, in the widest acceptation of the words, we may recall an old description:—

> "Patent certantibus campi;
> Jam corpora procumbunt humi truncata,
> Membra late dispersa sternuntur; manat undique cruor;
> Salus una restat moribundis; vocant hominis amicum;
> Ecce chirurgus."

The science and art of surgery has been almost wholly reconstructed, and the wisdom of the great authorities even at the beginning of the present century possesses for us in some respects mainly an historic interest, but they were masters in their time, and in many ways their teaching is as fresh, as good, and as true at the present moment as it ever was. Yet the last fifteen years have witnessed a complete revolution in the science and practice of surgery.

The difference between the old surgery and the new is not more complete than is the practice ridiculed by Le Sage from that of our modern physicians. Dr. Sangrado, we know, used to bleed freely, for he ordered the surgeon "to take six good porringers of blood, good master ones, and as many more three hours hence; and to-morrow you will repeat the operation." "It is mere vulgar error," he says, "that the blood is of any use in the system; the faster you drain it off the better; and then, your Reverence, I do not despair of putting you on your legs again."

Baron Boyer, one of the most distinguished of French surgeons, said about seventy years ago that surgery had already completely, or almost completely, attained perfection. No statement could be more thoroughly falsified than this one has been by the subsequent progress of scientific surgery. Doubtless we incline to believe our own ways to be best, and that we have as nearly attained perfection as can well be; but there is surely no finality in surgery. It is very true that we have made great advances beyond the knowledge of our predecessors; but our successors, we may feel quite sure, will in their turn surpass us. Decennium follows decennium, and the sum of knowledge constantly increases; new schools arise, each one possessing better methods and more effective appliances for investigation than its predecessors; the number of things possible increases; our diagnosis and treatment rest their foundation on sound pathological knowledge; our prognosis is fortified by trustworthy statistics. But, after all, if we would obtain the real measure of our progress, we must weigh our results, not merely count them.

TABLE III.—*Cases of Abdominal Section for Rupture of the Urinary Bladder.*

No.	Operator and Reference.	Age.	Time of operation after Injury.	Special Symptoms.	Intra-peritoneal Lesions.	Treatment of intra-peritoneal Lesions.	Result.	Remarks and Post-mortem
1	William T. Bull. Ann. of Surgery, 1885, i. 67	46	13 hours	Great shock; bloody urine; dulness half way to umbilicus; catheter went beyond bladder	3¾ in. rent of posterior wall of bladder	7 Lembert sutures	Died in 7 hours	Also had fractured pelvis catheter tied in.
2	J. Duncan. Lancet, 1886, ii, 399	38	22 hours	Shock; desire to urinate, but no power; bloody urine; peritonitis; vomiting	Blood and urine; 2½ in. rupture of posterior bladder wall	Perineal cystotomy failed to discover the rent; subsequently abdominal section was performed; the bladder wound was not sutured; glass drain introduced into bladder	Died in 55 hours	Suppression of urine.
3	Jos. M. Fox. (Unpublished)	38	19 hours	Great pain about bladder, and desire to micturate; bloody urine; great shock	Much blood and urine; 2½ in. triangular rent in anterior wall of bladder	15 Lembert sutures	Died in 42 hours	No abdominal drain; soft catheter in urethra. Post-mortem: bladder wound firm.
4	C. Heath. Med. Chir. Trans., vol. lxii	Adult	40 hours	Tense belly; bloody urine by catheter; injected water felt through abdomen by patient	Rent of bladder	Continuous suture	Died in 6 days	Post-mortem: suture had given way.
5	Hofmokl. Wiener Med. Presse, 1886	Adult	—	Principally those of extra-peritoneal rupture	Intra- and extra-peritoneal rupture of bladder; great infiltration of tissues with blood	Partial suture of the bladder; upper portion left open, and drained	Recovered	It is not clear from the report that the injury was primarily an intra-peritoneal one.
6	William Mac Cormac. Lancet, 1886, ii. 1118	33	19 hours	No shock; 95 oz. of blood-tinged urine withdrawn by catheter. Had walked one mile to the hospital day after injury. Great pain; vesical tenesmus	Median vertical rent of posterior wall of the bladder, 4 inches long	16 Lembert sutures; peritoneum divided at sides to relax bladder walls	Rapid recovery	Catheter passed at intervals of 4 hours; abdominal drainage-tube.
7	William Mac Cormac. Lancet, 1886, ii. 1118	37	27 hours	No shock or symptoms of intra-peritoneal injury; patient directed to attend as out-patient; returned following day. Fluid present in abdomen; vesical tenesmus; signs of incipient peritonitis; nausea	Large amount of bloody fluid in abdomen; 3 in. rent upper portion of bladder wall	12 Lembert sutures inserted in the bladder	Rapid recovery	Urine passed voluntarily from first; no catheterism; no abdominal drainage.
8	A. F. McGill. Lancet, 1886, xxi. 972	54	68 hours	Insensible for time; pain; bloody urine; could not urinate, though had desire; incipient peritonitis	Pint of urine; 4 in. rent of apex and fundus of bladder	9 chromic gut sutures	Died in 17 hours	Post-mortem: bladder wound firm; no fluid in peritoneum.
9	A. W. Mayo Robson. (Unpublished.)	68	3 hours	Frequent desire to micturate with inability to pass water; on passing catheter, 3 ozs. of bloody urine (chiefly blood) drawn off. Fracture of right side of pelvis diagnosed; patient conscious, but pulse feeble	None were found	Membranous urethra opened and tube introduced into the bladder. Laparotomy in median line, but as no urine or rupture into peritoneal cavity was found, the external wound was closed	Died from shock a few hours after wounds.	Fracture of the pelvis was diagnosed by finger passed along the incision in membranous urethra; the muscles and fascia were found infiltrated with urine above the pubes, which had sustained a comminuted fracture; and one of the fragments had penetrated the anterior wall of the bladder.
10	Socin and Keser. Annals of Surgery, Feb. 1887	20	—	Retention of urine; bloody fluid drawn off; hiccough; pain above pubes	Rent in front of bladder, admitted tip of index-finger (extra-peritoneal)	Stitched to abdominal wall; drainage-tube 9 days	Recovered	It is doubtful from the report of this case whether the peritoneal cavity was opened or not.
11	Sonnenburg. Centralblatt für Chirurgie, 1885, p. 838	—	2 days	Peritonitis did not appear for 24 hours; 1000 gr. clear urine drawn off	Rent from vertex to neck along posterior wall of bladder	No sutures; drainage-tube	Died 4th day	Infiltration of urine and intense peritonitis.
12	Charters J. Symonds. (As yet unpublished.)	F. 7	7 hours	Partially insensible; very collapsed; pale; small pulse; great pain in epigastric region, no pain in hypogastric region; vomited blood-streaked contents of stomach; dulness on percussion up to umbilicus; seven hours after the injury complained of pain over bladder; had passed no urine; catheter passed and drew off nearly pure blood in considerable quantity	Y-shaped rent in top of bladder, partly intra- and partly extra-peritoneal; pelvic cavity full of blood and urine	Laparotomy; incision 3 inches long between umbilicus and pubes; about 2 pints of blood and urine sponged out; the rent was sewn up by 12 Lembert's sutures, and abdomen closed	Died in 7 days	Post-mortem: suppurative peritonitis; wound firmly united in all but one small spot, where there was a leakage of urine; no other visceral damage observed; one of the sacro-iliac synchondroses was separated. Two days subsequent to the operation, in consequence of symptoms of peritonitis, the abdominal wound was re-opened with a view of irrigating the abdomen; a considerable quantity of urine escaped, and continued to escape until death. The patient did not pass any urine for 12 hours after the first operation.

TABLE III.—*Continued.*

No.	Operator and Reference.	Age.	Time of operation after Injury.	Special Symptoms.	Intra-peritoneal Lesions.	Treatment of intra-peritoneal Lesions.	Result.	Remarks and Post-mortem
13	T. Pridgin Teale, Leeds.	25	2 hours	Had been kicked in the abdomen and perineum during a quarrel. Pain in hypogastrium; inability to pass urine; abdominal muscles tense; absence of shock; subsequently tympanites and dulness on percussion in both flanks appeared	Intestines found floating in a large quantity of pale straw-coloured fluid. Vertical rent of fundus of the bladder an inch in length.	Perineum opened in median line and drainage-tube inserted into the bladder. Laparotomy; abdomen cleared of urine, etc., and the slit in the bladder closed by fine catgut sutures, so inserted as to bring the peritoneal surfaces into contact without perforating the mucous surface; abdominal wound closed.	Died 19 hours after operation	Considerable secondary hæmorrhage occurred from perineal wound in spite of careful plugging. Post-mortem showed the rent in the bladder to be water-tight, and no peritonitis existed.
14	W. J. Walsham. (Unpublished.)	21	13 hours	Little or no shock	Rent of bladder 1½ in.	9 Lembert sutures	Recovered	Urine passed voluntarily every four hours after first day; no abdominal drainage.
15	Walters, of Pittsburg	22	10 hours	Signs of active peritonitis	Much blood and urine; extensive tear at base of bladder	Removal of extravasated fluid; drainage-tube; no sutures introduced into bladder	Recovered	Catheter in bladder also.
16	A. Willett. St. Barth. Hosp. Rep., 1876, p. 209	48	29 hours	Shock and pain; bloody urine by catheter later; symptoms of peritonitis	3½ in. rent across fundus of bladder	Interrupted sutures	Died in 23 hours	Post-mortem: portion of bladder-wound foun open.

TABLE IV.—*Cases of Abdominal Section performed for Traumatic Rupture or Contusion of the Intestine and other Abdominal Viscera, without any External Wound.*

No.	Operator and Reference.	Age.	Time after Injury.	Special Symptoms.	Intra-peritoneal Lesions found.	Treatment of Intra-peritoneal Wounds.	Result.	Remarks and Post-mortem.
1	Bouilly. Bull. et Mém. Soc. de Chir. 1883, p. 690	29	23 hours	Signs of incipient peritonitis; fæcal vomiting	3-in. rupture of small intestine; also severe bruise of intestine above the rupture	Laparotomy; resection of 5 inches of the small intestine	Died in 10 days	Post-mortem: contused portion had given way after manipulation.
2	Chavasse. Bull. et Mém. Soc. de Chir. 1885, p. 123	23	—	Kicked by horse. Abdomen retracted. Shock from the first, then peritonitis, constipation, and vomiting	Colon badly contused in two places; intestine and meso-colon infiltrated with blood	Laparotomy; no suture required; peritoneal cavity cleansed and drained	Died in 6 days	Pancreas contused.
3	J. Croft. St. Thomas's (unpublished)	34	24 hours	Jumped upon by companions. Shock; peritonitis; no sign of external injury	Extravasation of fæces; rupture of lower part of ileum extending through ¾ of circumference	I. Laparotomy; wound of ileum sutured to abdominal wound; cavity washed out. Operation 1½ hour	—	Recovered from first operation.
						II. Second operation 4 weeks later; bowel detached from abdominal wall; divided margins resected, and united by Lembert's suture. Operation 2½ hours	Died in 26 hours	Post-mortem: lungs collapsed; no peritonitis; no fluid in abdomen; sutured intestine firmly united; did not yield on injection of water.
4	J. Croft. March 4, 1887 (unpublished)	25	13 hours	Run over by cab. Pain; shock; distension; evidence of loss of blood; pallor; fluid in flanks	Ruptured spleen; fractured ribs (8th and 9th)	Laparotomy; 1½ to 2 pints of blood in cavity; spleen excised	Died same evening	Never recovered from shock. Post-mortem: no blood in abdominal cavity; no sign of peritonitis; clots in renal vessels.
5	Demons. Cong. Fr. de Chirurg. 1885	Male Adult	—	Crushed between a cart wheel and the wall	Circular rupture of intestine diagnosed previous to operation	Laparotomy; Lembert's suture; cavity purified	Died	Post-mortem: another wound of intestine found.
6	Fitzgerald. Australian Medical Journ. 1883, p. 264	58	20 hours	All the signs of strangulated hernia. (His truss had been pressed violently against a descended hernia)	Ruptured small intestine	Laparotomy; wound sutured	Died in 8 hours	Author advises abdominal incision to be long enough to afford ready access to all parts of the cavity.
7	T. M. Girdlestone. Australian Medical Journ. 1883	22	4th day	Shock, which was followed by development of peritonitis; vomiting	Almost complete rupture of ileum; lacerations of omentum	Laparotomy; excision and suture of wounded bowel	Died in 1½ hour	
8	Dr. Gregory. St. Louis, 1876 (unpublished)	—	—	— —	Rupture of ileum	Laparotomy; suture	Died in 6 hours	Operation not undertaken till hope was almost gone.
9	A. O. Mackellar. March 21, 1887 (unpublished)	57	29 hours	Struck by shaft of cart. Collapse; pain; pallor; distension; dulness in both flanks	Ruptured spleen; fractured rib	Laparotomy performed after peritonitis; sutured; dark blood in cavity; irrigation; glass drainage-tube	Died 3rd day	Post-mortem: ruptured spleen, extra-peritoneal rupture of kidney, not into hilus, with infiltration of blood around those organs.
10	Edmund Owen. Lancet, 1885, ii	Adult	41 hours	Fell, while drunk, across a board placed edgeways. Shock; peritonitis; tympanites	Rent 1 inch in ileum	Intestine clamped and left outside to form an artifical anus	Died 6 hours after	No post-mortem.
11	E. A. Waggoner. St. Louis Cour. of Med. 1886, xvi. 204	8	27 hours	Walked 400 yards. Great shock; violent peritonitis soon followed	Rupture of intestine 2½ feet above the ileo-cæcal valve; much fæces in abdominal cavity	Laparotomy; wound sutured	Died in 2 hours	

TABLE IV.—*(Continued.)*

o.	Operator and Reference.	Age.	Time after Injury.	Special Symptoms.	Intra-peritoneal Lesions found.	Treatment of Intra-peritoneal Wound.	Result.	Remarks and Post-Mortem
12	Alfred Willett (Unpublished)	32	Soon	While drunk he fell on his back from a van. Acute pain in epigastrium immediately followed; much collapse; bowels acted freely; vomiting constant; abdomen quickly became distended; emphysematous crackling round umbilicus	Peritoneal cavity full of blood; several pints drawn away; rupture of right lobe of the liver extending from the hilus	Laparotomy; abdomen cleared of blood, and wound in abdominal wall subsequently closed	Died 4 days after the injury	Post-mortem: a transverse rent of under-surface of right lobe of liver was found; one large branch of the portal vein was torn; peritonitis was found only around the neighbourhood of the rupture.

TABLE V.—*Edler's Table of Cases of Injury to the Solid Viscera of the Abdomen.*

Langenbeck's *Archiv*, vol. xxxiv.

njury to the Solid Viscera.	Liver and Gall-Bladder.								Spleen.								Pancreas.				Kidneys.								General Totals.			
	Total Number of Cases.	Uncomplicated Cases.	Recoveries.		Deaths.		Mortality per cent.		Total Number of Cases.	Uncomplicated Cases.	Recoveries.		Deaths.		Mortality per cent.		Total Number of Cases.	Recoveries.	Deaths.	Mortality per cent.	Total Number of Cases.	Uncomplicated Cases.	Recoveries.		Deaths.		Mortality per cent.		Total Number of Cases.	Recoveries.	Death.	Mortality per cent.
			Total.	Uncomplicated.	Total.	Uncomplicated.	Total.	Uncomplicated.			Total.	Uncomplicated.	Total.	Uncomplicated.	Total.	Uncomplicated.							Total.	Uncomplicated.	Total.	Uncomplicated.	Total.	Uncomplicated.				
Subcutaneous ruptures....	189	96	27	21	162	75	85.8	78.2	83	62	11	11	72	51	86.7	82.3	3	1	2	66.6	90	55	45	36	45	19	50.0	34.5	365	84	281	77.0
Gunshot wounds.....	289	110	130	67	159	43	55.0	39.1	42	20	7	7	35	13	83.3	65.0	6	1	5	83.3	50	20	28	15	22	5	44.0	25.0	387	166	221	57.0
Incised and punctured wounds	65	32	23	20	42	12	64.6	37.5	35	9	29	6	6	3	17.1	33.3	4	4	—	—	12	7	7	6	5	1	41.6	14.2	116	63	53	45.6
Totals.....	543	238	180	108	363	130	66.8	54.3	160	91	47	24	113	67	70.6	73.8	13	6	7	53.8	152	82	80	57	72	25	47.3	30.4	868	313	555	63.9

ANALYSIS OF CASES OF LAPAROTOMY AND ABDOMINAL EXPLORATION FOR :—

I. *Stab Wounds penetrating the Abdominal Cavity.*

Successful	10
Fatal	8
	18

II. *Gunshot Wounds penetrating the Abdominal Cavity.*

Successful	7
Fatal	22
Doubtful (Pirogoff)	1
	30

III. *Rupture of the Urinary Bladder.*

Successful	6
Fatal	10
	16

IV. *Ruptured and Contused Intestine or other Abdominal Viscus without External Injury.*

Successful	0
Fatal ...	12
	12

Cases where the small intestine was sutured for punctured or incised wounds, with or without enlargement of abdominal opening (*History of the War of the Rebellion*, Günther, and other sources) :—

Successful	42
Fatal	14
	56

Of 4 cases of stab wounds of large intestine recorded in *History of the War of the Rebellion* that were treated by suture, the wound having first been enlarged :—

Successful	3
Died	1
	4

In *History of the War of the Rebellion*, pp. 42, 43, 44, are recorded 11 cases where the stomach was sutured for punctured or incised wounds, with or without enlargement of abdominal opening; of these :—

Successful	10
Fatal	1
	11

Günther (*Operationslehre*) mentions 4 other cases where the coats of the stomach were stitched to the abdominal wall, and recovery obtained in each case.

In 2 cases the abdomen was torn open by goring :—

Successful	2
Fatal	0
	2

Of 3 cases of gunshot wound of liver, where the abdominal wound was enlarged, 2 recovered.

Of 15 cases of partial or complete removal of spleen after injury, all recovered (Otis's *Surgical History of the War of the Rebellion*).

Of 8 cases of wound of intestine occurring during surgical operations, 7 were sutured, with 1 fatal result. The bowel was returned to the abdominal cavity; in one case, where the bowel was returned without suturing, an uninterrupted recovery followed.

HAMAMELIS VIRGINICA.

By JOHN V. SHOEMAKER, A.M., M.D.,
Professor of Dermatology in the Medico-Chirurgical College of Philadelphia, U.S.A.

HAMAMELIS VIRGINICA, commonly known as American witch-hazel, has long been employed in the southern and western portion of the United States as a domestic panacea for all forms of wounds and bruises. Its undoubted hæmostatic and anodyne effects, when used in this manner, led very many physicians to test its value both internally and externally.

Active Ingredients.—H. K. Bowman states that the bark contains upwards of 8 per cent. of tannin. Bartlett, from an analysis of Pond's extract, which is by no means the most certain preparation of hamamelis, reports that it contains a peculiar astringent principle which is thought to be volatile at a low temperature, a diffusive volatile oil, and an oleo-resin like terebene. The precise active ingredients of the bark appear, however, to be still unsettled.

Physiological Action.—Dujardin-Beaumetz believed it owes its utility to an action on the muscular fibres of the veins. Phillips, in considering the subject, adds that Hector Guy reports, after observing the effect of very large doses on frogs and rabbits, that no signs of poisoning were produced; neither is the plant poisonous to man, nor does it show any special physiological action on the vascular system (Thèse de Paris, 1884). Headache, he further adds, and in some cases depression, have, however, been attributed to full doses. Ringer, likewise, in his work on Therapeutics, refers to the latter action of full doses of the tincture. Wood and Marshall, in recent investigations of the root report negative physiological results. Some of the observers just referred to and others have consequently come to the conclusion that the so-called virtues of the preparations of hamamelis depend upon the alcohol they contain, and on the faith of the patient.

The *Provincial Medical Journal* of England, in commenting upon the views and deductions first cited, adds: "This conclusion seems an extraordinary one, when the results obtained with hamamelis by some physicians are taken into consideration, and when, moreover, the styptic properties of certain essential oils—such as turpentine, erigeron canadense, etc.—are borne in mind."

Therapeutic Action.—The published reports of cases in which hamamelis has been administered vary considerably. Some observers claim that it is a potent therapeutic agent, while others assert that it is of little or no value. This wide discrepancy is due in part to differences in the strength and dosage of the preparation employed, and in part to its employment in inappropriate cases. According to my experience, the preparation from which the most certain results can be obtained is the fluid extract prepared as directed in the *United States Pharmacopœia*, by exhausting 100 grammes of the bark in a sufficient quantity of alcohol and water to make 100 cubic centimètres. The dose of the fluid extract should not be less than twenty minims, and may be increased to two teaspoonfuls, or more if necessary, without producing any untoward symptoms. The therapeutic deductions which follow were drawn from clinical research in my own practice and that of many physicians who have used the fluid extract of hamamelis; that its action is depending upon the alcohol in it, I can, from my clinical experience, most decidedly deny, from testing cases at the same time with diluted alcohol and the fluid extract of hamamelis. The styptic properties and other valuable therapeutic actions claimed for hamamelis were not observed upon giving diluted alcohol in the diseases to which I shall refer later in this paper, but were marked and decided upon the employment of the fluid extract of the bark; and, therefore, from my own experience and that of very many other practising physicians, I regard hamamelis as a powerful astringent and hæmostatic; it is also slightly sedative and tonic, stimulating the appetite, and improving digestion. It is a remedy *par excellence* in all forms of gastric hæmorrhage, and in disease due to a relaxed condition of the venous and capillary walls. It is also serviceable in various forms of active hæmorrhage as an adjuvant to any of the cardiac sedatives. It will be found promptly curative in cases of hæmoptysis in which the attacks are prolonged and the hæmorrhages are small in quantity, indicative of a continuous oozing, rather than of an arterial or capillary rupture. In cases characterised by sudden and copious hæmorrhage, attended by a full and frequent pulse, hamamelis will only be effective when combined with full doses of aconite, veratrum viride, or other cardiac depressants. Hamamelis will frequently act like magic in checking menorrhagia after quinine, ergot, gossypium, cimicifuga, and the mineral acids have failed. It will not, however, be of any avail in restraining the bleeding due to polypi or other abnormal growths. It is most effective in anæmic patients, and in subjects of the lymphatic diathesis in whom the sanguinolent flow is probably due to relaxation of the muscular coat of the uterine vessels. It is also potent in checking the bleeding which in some women continues without any assignable cause for several weeks after parturition. Hamamelis is one of the most efficient remedies that I have ever employed in the treatment of epistaxis. As is well known, cases of this affection sometimes persist for several days, even after the administration of ergot, digitalis, matico, iron, and sulphuric acid, and the local application of various astringents. If hamamelis be resorted to, however, I am confident that the bleeding will be either promptly checked or reduced to such an insignificant amount as to remove all apprehension.

It is necessary, however, in order to secure the desired result, to consider the pulse and general condition of the patient. If the pulse is rapid and bounding, and the nervous system in a state of excitement, hamamelis alone will not restrain the flow. It must be combined with veratrum viride, or aconite, and morphine. In such cases I usually order ℞ Tinct. veratri viridi, ♏xii; morphinæ sulphatis, gr. i; ext. hamamelis fl. ℥i; M. Signetur, one teaspoonful every hour.

If the pulse, however, is normal, and the patient free from alarm, the administration of one drachm of the fluid extract of hamamelis every hour for three or four hours will usually be found sufficient. In chronic cases, where the bleeding is minute but persistent, the continuous passage of a solution composed of two ounces of the fluid extract of hamamelis to one pint of water will usually act like a charm. In all cases, however, ice-water should be freely applied to the top of the head and nape of the neck during the continuance of the bleeding. Hamamelis has yielded the most gratifying results in my hands in the treatment of two cases of hæmophilia; I have also employed it with marked benefit in a case of hæmitidrosis in which iron, quinine, nitric acid, and turpentine had failed. I have not had any experience in its employment in hæmatemesis or hæmaturia; but, reasoning from analogy, I believe it will be found serviceable in these affections when the bleeding is of a passive character. Hamamelis is especially valuable in cases of hæmorrhage from the bowels, especially from those of a chronic character occurring in persons of sedentary habits. I have employed it with success in three such cases after the usual remedies had been administered in vain.

Hamamelis is an effective remedy in purpura. I have notes of two cases of this disease in which relapses occurred during the administration of arsenic, quinine, ergot, and oleum terebinthinæ, but which rapidly and permanently recovered when placed upon half teaspoonful doses every four hours of the fluid extract of hamamelis. The therapeutic powers of hamamelis are displayed to striking advantage in the treatment of varicose veins and varicose ulcers. My attention was directed to its value in these troublesome affections by an article written by Dr. J. H. Musser for the *Philadelphia Medical Times* in April, 1883. Prior to that time my treatment of these cases had been troublesome, and not always satisfactory. Dr. Musser's results were so superior to any I had ever heard of, that I decided to resort to hamamelis also. Since then, my treatment of varicose veins has consisted of the application of a firm cotton bandage, and the administration of one drachm of fluid extract of hamamelis four times a day. For varicose ulcers, I direct the ulcerated surface to be touched twice daily with a lotion composed of two drops of nitric acid and four ounces of water. The affected limb is then firmly bandaged, and the patient is directed to take one drachm of fluid extract of hamamelis four times a day. Of seventeen cases treated in this way during the last three years, I lost sight of three, eleven were discharged cured in from three weeks to four months, the remaining three were found to be suffering from tertiary syphilis, and did not show any improvement until placed upon a mercurial course in addition, when they rapidly recovered.

I do not pretend to say that the swollen veins returned to their pristine size in every case. In several cases they remained slightly swollen, but the pain, discomfort, and ulceration disappeared, and the patients were enabled to resume their usual avocations. In one remarkable case, the patient was a woman who had suffered throughout five successive pregnancies with varicose enlargement of the veins of the left leg. When she consulted me she was carrying her sixth child, but did not expect to be delivered for nearly six months. The veins of both legs were tortuous and enormously swollen, and the inner side of the right foot and ankle was an almost continuous mass of ulceration. The pain was so excessive that she had not been able to walk for a week, and had not slept or eaten for

three days. The right side of the vulva was also swollen, purplish, and œdematous.

This was an unpromising case, but as I had been impressed with the value of hamamelis in similar conditions, I assured her that she would obtain speedy relief. I directed her to bathe her limbs in cold water four times a day for ten minutes at a time, and to bandage them firmly immediately after bathing. I also directed her to keep a cold wet compress constantly against the swollen portion of the vulva, and to take one drachm of fluid extract of hamamelis every four hours, and a compound cathartic pill every second night. Improvement began at once. She slept well that night; her appetite and spirits returned. In three days she was able to walk with ease; the ulcers healed by the twelfth day, and within two months all traces of varicosity had disappeared. She was delivered safely at the proper time; and, although she has been pregnant again, and delivered of her seventh child, no symptoms of her former trouble ever reappeared.

Three cases of varicocele in which I exhibited hamamelis improved remarkably, so that all idea of performing an operation for permanent relief was discarded as unnecessary.

Hamamelis will be found very effective in the treatment of painful and bleeding hæmorrhoids. In this class of cases it should be given internally in decided doses, and applied locally in the form of a 20 per cent. cintment or lotion. Laxatives should be administered in addition, in order to keep the bowels freely open until a cure is effected.

Hamamelis is a valuable remedy in the treatment of subacute and chronic diarrhœa. It appears to be especially indicated in cases characterized by frequent painless watery or mucous discharges. Its value is enhanced by the addition of a small quantity of opium and nux vomica as in the following formula: ℞. Tinct. opii deod., ♏ xx; tinct. nucis vomicæ, ʒ ss; ext. hamamelis fl., ʒ i; M. Signetur half a teaspoonful in water every three hours.

Hamamelis is an efficient remedy in the treatment of leucorrhœa and chronic gonorrhœa, if administered internally in doses of from twenty to thirty minims three times daily, and also employed as an injection diluted in the proportion of one part of the fluid extract to twenty parts of water. When diluted in this proportion, as used in the form of the tincture, it will also be found valuable as an external application in hyperidrosis, acne rosacea, seborrhœa, intertrigo, eczema, and some forms of pruritus. The same solution will also be found serviceable as a mouth-wash in mercurial stomatitis, scurvy, and softening of the gums from various causes. It may also be employed with advantage as a local application in naso-pharyngeal catarrh, and as a gargle in chronic pharyngitis, and in all relaxed conditions of the pharyngeal and laryngeal walls. As an application to incised and lacerated wounds I know of nothing better than the following lotion: R. Tinct. opii deod., ʒ ss.; ext. hamamelis fl., ʒ ss; aquæ, ʒ iiiss.

PYREXIA WITHOUT DETECTED PHYSICAL SIGNS.

By CLEMENT DUKES, M.D.Lond., M.R.C.P.Lond.,
Physician to Rugby School and to Rugby Hospital.

In the JOURNAL of December 4th, 1886, there appeared an interesting and instructive paper by Dr. Hale White on "Inexplicable Pyrexia." It may be of interest if I place on record the following case as another example of the condition described; it will also add to the literature of the subject, and may aid in its investigation. At the present time this pyrexia seems to point to some alteration in the nervous centres.

W. B., aged 63, presented himself on August 6th, 1886, as an out-patient at the Rugby Hospital. He complained of great weakness, and staggered as he walked. He looked very ill, and was wasted considerably. I took his temperature, and found it was 102° F.; but, after a very careful examination, I could detect no physical signs. On August 10th I admitted him into the hospital. He still complained of nothing but weakness, but said he had had a slight sunstroke a month ago while haymaking. I examined him again, and on several other occasions, but was never able to find any local physical signs. I need not occupy space by recounting the absence of special signs. He remained in the hospital under daily investigation for six weeks, during which time his temperature varied from 98° to 103.8°. On some days it was normal in the morning and 103.8° at night; on others it was higher in the morning than at night; while at other times it was equal throughout the twenty-four hours (101.5°). Beyond complaining of aching in the calves of his legs, which kept him awake at night, I could never elicit any other symptom. He improved in health with good nursing, but he left the hospital with his high temperature remaining as it was when he entered.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

POPLAR AND STEPNEY SICK ASYLUM.

AN UNUSUAL CAUSE OF EMPHYSEMA.

(Under the care of WM. H. PEARCE, M.R.C.S.E., Assistant Medical Officer.)

WM. P., aged 44, was admitted in a dying state into the Sick Asylum on Monday, October 25th, 1886, at 5 P.M. From the little information that could be gathered from the man himself or his friends, I learned that he had always enjoyed good health, and had followed his usual occupation up to the Saturday previous. He admitted being a "free drinker," and on the Saturday night he had been the "worse for liquor," but, so far as he knew, he was not injured in any way. He did not feel well on the Sunday, and he remained in bed until late in the afternoon, when he dressed, and went out for half an hour; soon after his return he began to swell, and his breathing got bad. He had urgent dyspnœa, his skin and mucous membranes being very blue, and his pulse quick and feeble. His face and neck were much swollen, and on palpation this was found to be due to emphysema of the subcutaneous connective tissue, which on further examination could be traced all over the trunk as low down as the hips, and for some distance down the arms. He denied having sustained any injury. After a careful examination by my colleague, Mr. John Bostock, and myself, no injury to the ribs or respiratory tract could be made out. The chest-wall moved very little on respiration, the breathing being for the most part diaphragmatic.

Percussion elicited a resonant note all over the chest, though at the bases and in the axillæ the note was flatter than that obtained at the anterior and upper part of the lungs; in the former situations there was almost an entire absence of breath-sounds on both sides in the lower half of the chest, but in the former air entered freely. The heart's apex could not be made out, his breathing gradually became worse, and he died somewhat suddenly three hours and a half after admission.

Necropsy Forty Hours after Death.—The body was that of a stoutly-built, well-nourished man, of middle age. On opening the chest there was no fracture or other injury to the chest-wall, but both pleural cavities contained a considerable quantity of fluid, the lower lobes of both lungs being compressed and airless; much recently-effused lymph covered the surfaces of the visceral and parietal pleuræ on both sides. On clearing away this and separating the lower part of the left lung from the pericardium, a collection of undigested food was found outside the œsophagus, occupying the posterior mediastinum, and surrounded by emphysematous connective tissue, which could be traced up the spine to the root of the neck. The food had escaped through a ragged slit-like opening, half an inch long, situated vertically in the œsophageal wall, about an inch and a half from its lower end. Passing downwards in the substance of the wall of the œsophagus was a sinus which connected the opening with a small circumscribed abscess (about the size of a hazel-nut), situated in the wall of the stomach along the lesser curvature, close to the cardiac orifice. This again opened into the cavity of the stomach by a small opening, so that gas or air could pass in freely from the œsophagus or stomach. A small quantity of pus was found in the small abscess in the stomach, but there was no sign of any in the mediastinum. There was no trace of ulcer in the œsophagus, the opening being a mere ragged slit, with black, unhealthy edges, outside which the gullet appeared healthy, but here, no doubt, the mischief must have begun, and an abscess formed, the pus burrowing down, and finally discharging into the stomach, the œsophageal wall giving way either at the same time or later. As to the cause of the abscess, the only thing that suggests itself to my mind is the lodgment of a foreign body, such as a spicula of bone, but there seem to have been no symptoms up to the time when the œsophageal wall gave way, and gas or swallowed air escaped into the mediastinal connective tissue. I did not make out before the necropsy the considerable amount of double pleuritic effusion, believing, as I did, that the emphysema must be due to an injured lung from some obscure fracture, and that the compression was being exercised by internal hæmorrhage.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 10TH, 1887.

GEORGE D. POLLOCK, Esq., F.R.C.S., President, in the Chair.

Case of Intussusception of the Upper End of the Rectum due to Obstruction by a New Growth: Excision of the Intussusception: Suture of the Cut Ends of the Bowel: Complete Recovery. By ARTHUR E. BARKER, F.R.C.S.—The case narrated was that of a married woman, aged 28, who for sixteen months had noticed streaks of blood with her motions, and for eight months had been conscious of a foreign body in her rectum. Two or three months before operation the latter had begun to prolapse at each stool, with copious bleeding. There was much constipation, but there had never been any diarrhœa. On examination of the rectum in June, 1886, a mass of new growth was found, surrounding nearly the whole of the apex of an intussusception of the rectum. The reflexion of the rectal wall could be felt about three inches from the anus, so that the apex of the mass belonged to a spot about six or seven inches from the latter. On June 9th Mr. Barker drew down the intussusception and operated as follows. The left index finger was passed well into the intussusception, and the two layers of bowel were pinched together beyond the growth between the finger and thumb. An ordinary sewing-needle, carrying stout carbolized silk, was then passed through the two layers from the intussuscipient into the lumen of the intussusceptum and returned, including about one-sixth of an inch of bowel-tissue. This loop was tied firmly, and another stitch was similarly introduced about one-sixth of an inch from the first, and tied in the same way. By repeating this the whole bowel was encircled with a row of stitches well above the growth. When this had been done a second row was similarly introduced about half an inch higher up. The whole intussusception was then cut away *en masse* immediately below the lowest row of stitches. Only one small vessel bled, and was tied; the rest of the cut surface was dry. The mass cut away consisted of a nodular mass of adenoid epithelioma, taking up about two inches of the bowel, and with a margin of healthy tissue above it. The patient's recovery was rapid and uninterrupted. A large motion was passed on the sixth day. The patient left hospital about four weeks after operation, feeling quite well. The rarity of intussusception of the rectum was discussed, and some statistics were given. The rarity also of intussusception of the lower bowel produced by cancerous growths was alluded to, the author having only been able to collect eleven such cases. These were briefly described, six of them being either purely rectal or in the sigmoid flexure. Of these six, only four were operated on; the two first by Verneuil, but both with a fatal result. The next excision was performed by Kulenkampff, with an ultimately good result; but a loop of small intestine had been opened in excising the intussusception, and a provisional colotomy had to be done. The case now related was the fourth.

Results of an Experimental Inquiry as to the Best Method of Restoring the Canal after Removing Portions of the Small Intestine. By E. STANMORE BISHOP, F.R.C.S. (Communicated by Sir SPENCER WELLS, Bart.)—The paper discussed the question as to what an ideal suture should be, and referred to all those now in use. The suture devised by the author was described. Specimens of the results obtained by this method were exhibited, and were discussed in the paper. The results of some experiments on animals were detailed which had been carried out in Manchester. Portions of the intestine had been removed, and complete recovery had followed the suture of the cut ends of the intestine in the great majority of cases.—The PRESIDENT congratulated the authors of both papers, and took the opportunity to observe that, owing to the death of their much respected colleague, Dr. Wilson Fox, some other Fellow must be proposed to fill his post of Honorary Librarian, and the Committee had thought it most convenient to send out no notice to the Fellows, but on their next meeting to propose Dr. Gee to fill his place.—Mr. T. HOLMES remarked that he had not been aware that intussusception in the neighbourhood of the rectum was as rare as Mr. Barker had described. He had himself recently had a case of this sort in a baby in which a tumour, such as Mr. Barker had described, produced intussusception and also prolapse of the rectum, which could be easily returned. He had not advised any operation, and a *post-mortem* examination showed that it would have been quite useless, for there were many other abdominal tumours. He had not distinctly gathered from Mr. Barker's paper why he had not removed the tumour without removing the intestine.—Mr. HARRISON CRIPPS agreed that this kind of rectal intussusception was not very rare. He had himself recorded two cases lately. They had originated in a chronic, annular form of malignant tumour, which contracted the rectum and led to intussusception. In one case he had brought down the tumour to the anus, and excised it easily without opening the peritoneum.—Mr. HEATH had seen Mr. Barker's case after the operation, and found the condition of the parts excellent. The case might encourage us to deal more freely with the mucous membrane without fear of contracture of cicatrix.—Mr. BARKER, in replying to Mr. Holmes, remarked that the removal of the growth without the intestine would have been quite impossible because the tumour thoroughly infiltrated the coats of the intestine. The intussusception could not be unravelled, and he considered that in such a case there would be no doubt that the best chances lay in cutting out all the intussusceptum. In such a case as Mr. Heath had alluded to, he should have advised laparotomy and the cutting out of the intussusceptum, and leaving it in the bowel to be passed down the bowel as a motion. He certainly felt that Mr. Bishop's suggestion for suture of the intestine had some points in its favour.—Mr. TREVES congratulated Mr. Barker on his success. He found three classes of cases in which intussusception and cancer were combined. First, those where there was a ring of cancerous deposit and invaginated bowel; secondly, where chronic intussusception passed gradually into an epithelioma; and, thirdly, where a polypus gradually produced an intussception, and became malignant. He related a case under his care in which he had found a polypus becoming malignant at the tip. He performed lumbar colotomy, and was able to remove eleven other polypi. The patient, however, finally died.—Mr. BARKER begged to remark that his own case had remained quite well up to the present time, that is, at least a year after the operation.—Sir SPENCER WELLS was anxious to call attention to some points in Mr. Bishop's method of suture of the intestine which he held of great value. The inversion of the two surfaces of serous peritoneum, and the keeping of them in contact by careful sutures, such as was involved in it, produced a most excellent and stable union. The knots of the sutures fell not into the abdominal cavity, but into the lumen of the bowel, and were of no disadvantage. All leakage was stopped perfectly. It seemed to him, on the whole, an important advance in abdominal surgery, and also furnished a point to answer some wild antivivisection talk, for it was an important practical point attained by the loss of a very few dogs, and those mostly dying under the chloroform in a most harmless fashion.—Mr. CROFT was genuinely anxious to get possession of the best mode of intestinal suture, but at present, so far as he could see, Lembert's method was rather better than Bishop's. Considering the thousands of sutures which had dropped into the abdominal cavity without any bad results, in modern surgery, especially ovariotomy, he did not feel it important to prevent that, though that was an accusation sometimes brought against Lembert's form of the operation. He felt bound to protest against the inference from the results of operations on healthy dogs, to the results in unhealthy men. In such conditions as intussusception, the morbid state latent or obvious made a very great difference in the prognosis and prospects of an abdominal operation. The enterorraphy which he had seen Mr. Makins do by Lembert's method led to admirable recovery; and he considered the difference between this and Mr. Bishop's plan very trifling essentially.—Mr. TREVES had himself experimented on the intestines of dogs by many methods, and had finally fallen back upon Lembert's method as on the whole the best. He thought it was better than Mr. Bishop's in taking less time, or at all events less time whilst the exposure of intestine was continued. He protested against any exact arguments being drawn from dogs and applied to men; for he was himself practically acquainted with the way in which a clumsy stitch of any kind would succeed in uniting a dog's intestine, and any direct inferences that the same would happen in men he counted as practically worthless. In cases of intussusception it was frequently necessary after excision of a piece of intestine to connect the upper part of the intestine which was abnormally large with the lower which was abnormally small, and for that Lembert's operation was more satisfactory than what Mr. Bishop proposed.—Mr. KNOWSLEY THORNTON agreed in thinking Lembert's operation probably more useful, for Mr. Bishop proposed to pass sutures from the inside of the bowel to the outside, and along those he thought septic matter might travel into the peritoneum. The continuity of Mr. Bishop's suture he considered likely to lead to sloughing.—Mr. BARWELL related a case in which he had used Lembert's suture with success.—Mr. BARKER asked what length of suture was found necessary for Mr. Bishop's many continuous sutures.—Mr. BRYANT inquired how he made his last three knots.—Mr. C. E. JENNINGS had found it possible to learn something from his experiments on dogs, even though they had not been successful.—Mr. BISHOP said that he considered any attempts at improving

such difficult operations deserved some attention. As to the objection that his method involved more time than others, he would reply that the exposure of the bowel need not be longer, and that was the really important point. He used to hold the bowel still by a clamp, but had now abandoned that, and merely kept the bowel still between the abdominal walls. As to operations on animals, he quite granted that the results were not exactly the same; but what more accurately similar could be obtained? Certainly dead tissue was less instructive. His operations on dogs had been on healthy tissue, and the operations he contemplated on men were to be on healthy tissue also after the morbid part of the intestine had been excised. The few dogs who had suffered from his treatment had been those he experimented upon before he learnt how much chloroform was requisite and how tight his sutures should be tied.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MAY 4TH, 1887.

JOHN WILLIAMS, M.D., President, in the Chair.

Uterine Appendages.—Mr. LAWSON TAIT showed a series of specimens removed on account of inflammatory disease.

Malformation of the Fallopian Tubes.—Mr. ALBAN DORAN exhibited this specimen, in which there was an accessory ostium surrounded with fimbriæ.

Spinal Meningocele.—Dr. JOHN PHILLIPS showed, for Mr. REGINALD CLARKE, the head of a seven months' fœtus, in which there was dystocia, owing to a meningocele between the axis and occipital bone. The child presented by the breech.

Fibro-myoma of the Ovary.—Dr. CARTER said that this tumour, which weighed 10¾ lbs., had only been noticed for six months. The patient had made a good recovery.

A Pair of Midwifery Forceps was shown by Dr. PARAMORE for Dr. HASLAM, with a lateral hinge in the handle of the upper blade.

A Speculum was exhibited by Mr. BUTLER-SMYTHE, which folded like a tongue depressor.

Hæmorrhagic Parametritis.—Dr. MATTHEWS DUNCAN related three cases of severe bleeding in cases of parametritic abscess. In the first case the bleeding occurred on opening the abscess, and was easily restrained; the woman recovered. The bleeding was probably only a profuse oozing. The second case he did not see; the bleeding was rapidly fatal and flowed through the bladder, the abscess having spontaneously opened into that viscus. In the third case, also fatal, the bleeding occurred in repeated flows through the bladder, along with pus and sloughs. The bleeding arose from gangrene laying largely open the external and internal iliac veins at their junction. This case he regarded as one, not of ordinary parametritic abscess, but of progressive gangrene of cellular tissue. Of this latter disease he had recorded a case in an appendix to his work *On Perimetritis and Parametritis.*—Dr. GRAILY HEWITT referred to the particulars of a case he had published, and which Dr. Matthews Duncan had mentioned in his paper. It was entirely due to physical injury, and was not at all analogous to the cases of Dr. Matthews Duncan.—Dr. WILLIAM DUNCAN had seen two cases in which, after bursting of the abscess, there was oozing of blood for several days from the pyogenic membrane lining the abscess cavity. He thought that it would have been more correct if Dr. Matthews Duncan had given the cases as hæmorrhage into the sac of a parametritic abscess, and deprecated the use of the title "hæmorrhagic parametritis."—Dr. GALABIN had met with a case in which fatal hæmorrhage into a pelvic abscess occurred. The case was originally diagnosed as one of retro-uterine hæmatocele. Suppuration occurred, and discharge through both bladder and rectum. After three months erysipelas occurred about the vulva, and fatal hæmorrhage into the abscess-cavity. Extensive burrowing and sloughing in the pelvic cellular tissue was found at the necropsy.—Mr. LAWSON TAIT had never met with any such cases as those described by Dr. Matthews Duncan, and thought that they ought to be dealt with by abdominal section before such disasters arrived. Mr. Tait thought the title of the paper should have been parametritis ending fatally by hæmorrhage.—Dr. MATTHEWS DUNCAN thought that the title was of no moment, whether hæmorrhagic parametritis or parametritis with hæmorrhage. He knew no reason to regard extravasation of urine as the cause of sloughing, and in a very large number of cases of those abscesses discharging through the bladder he had never met with any evidence of extravasation of urine into the abscess-cavity; it might occur, but he knew no evidence of it.

On the Frequency of Pathological Conditions of the Fallopian Tubes.—Dr. A. H. N. LEWERS read a paper founded on observations made on the pelvic organs in a series of 100 cases in the *post-mortem* room of the London Hospital. Very contradictory opinions had been held as to the absolute frequency with which dilatation of the Fallopian tubes—hydrosalpinx, pyosalpinx, and hæmatosalpinx—occurred among the general population. Recently Dr. Henry Coe, in his paper "Is Disease of the Uterine Appendages as frequent as it has been represented to be?" (*American Journal of Obstetrics*, June, 1886), said "Actual disease of the tubes is far less frequent than is generally believed." Others, on the contrary, were of opinion that these conditions were of frequent occurrence. The question of the absolute frequency of disease of the tubes was one that could only be settled by observations in the dead-house of a general hospital. Cases where the contents of the dilated tubes were not distinctly purulent or were not composed of blood had there been classed as hydrosalpinx. Disease of the Fallopian tubes restricting the expression to pyosalpinx, hæmatosalpinx, and hydrosalpinx, was met with in seventeen cases out of the 100 examined. A detailed description of each specimen was given in the paper, and a table classifying the chief points of interest in these seventeen cases was appended.—Dr. GALABIN thought this communication was of very great value as an addition to the evidence on the subject by Dr. Kingston Fowler. He wished to ask whether the 100 cases recorded were consecutive or selected, as he thought that 17 per cent. was a large proportion of cases of distension of the Fallopian tubes. In 302 necropsies of women above the age of puberty at Guy's Hospital, the pathologists had only found twelve cases of distension of tubes, and two of these were very trivial. This was a proportion of only 4 per cent. There was only one case of pyosalpinx and a doubtful case, the pathologist being uncertain whether two suppurating sacs were tubes or ovaries. The ovaries could not be found. There were fourteen cases of chronic inflammatory disease about the Fallopian tubes, without distension. Of the whole twenty-six cases, it was probable that in seven pelvic inflammation was indirectly the cause of death through the medium of general peritonitis, intestinal obstruction, or in other ways. These included the two cases of pyosalpinx, one of hydrosalpinx, and four of chronic inflammation without distension. Thus in 302 cases there were: of chronic inflammatory disease about the tubes 9 per cent., distension of tubes, 4 per cent.; death indirectly, in about 2 or 3 per cent.—Mr. LAWSON TAIT spoke in eulogy of Dr. Lewers's paper. He found the conclusions drawn from the *post-mortem* room as regards causation, progress, prognosis, and treatment identical with those which he had been preaching for about ten years on the basis of clinical experience. He confessed that it was somewhat a staggering thing to find 17 per cent. of the women who died in the London Hospital suffering from tubal disease, and this did not include those cases which suffered the most, in which there were adhesions between the ovaries and tubes to the surrounding viscera, more particularly the peritoneal layer lining Douglas's pouch, resulting ultimately in complete retroversion of the uterus with its appendages, and forming one of the most dreadful conditions which the gynæcologist had to deal with. When removed it was difficult for an unskilled pathologist to see anything the matter with them. Dr. Lewers had not included such cases, and they must have been numerous. He thought the explanation of the higher percentage at the London Hospital and the small group at Guy's must be due to locality, and that gonorrhœa was more common amongst the poor at the East End than on the south side of the river. At the out-patient department at Birmingham, 10 per cent. of the women who applied for relief suffered from chronic inflammatory disease of the uterine appendages. All these did not require operation. The most staggering conclusion to be derived from Dr. Lewers's paper was the enormous fatality of these diseases. At the London Hospital the death-rate was 24 per cent., while at Guy's it would appear to be 25 per cent. For years Mr. Tait had been arguing in favour of operation in order to relieve suffering, but when the pathologists at the London, Guy's, and Middlesex Hospitals showed a death-rate between 24 and 50 per cent., the cry for relief by operation was one which could not be gainsaid. His own results showed that these cases could be relieved by operation, with a mortality not exceeding 2 or 3 per cent. The question as to the sterility caused by these diseases might be settled by ascertaining the period between the occurrence of death and the birth of the last child. Mr. Tait agreed with Dr. Lewers, that hydrosalpinx seemed to precede pyosalpinx. He must again thank Dr. Lewers for his patient and valuable investigation.—Dr. HORROCKS was surprised at the large percentage of disease of the Fallopian tubes shown in Dr. Lewers's table of cases. He asked if Dr. Lewers could show the specimens. Dr. Horrocks found that in many cases the disease began in the ovary, and glued the fimbriated extremity to itself, which led to pathological changes in the tubes. In some cases the affection spread from the vagina to the uterus and from the latter to the tubes. In all his cases there was peritonitis, but in

nearly every instance it was a chronic and effete process indicated only by old fibrous bands of adhesion.—Mr. ALBAN DORAN noted that it was remarkable to find severe forms of tubal disease so frequent. It must be assumed that milder forms were more common. Catarrh of the tube must involve discharge, which probably escaped through the uterus, so as not to produce symptoms. It was not likely that it escaped through the ostium into the peritoneal cavity, else hydroperitoneum would be more frequent, as he had pointed out in his paper on Papilloma of the Tube. The severe forms of tubal disease with local peritonitis showed how the tubes were a highway from the exterior into the peritoneum. Their frequency among the East-End women suggested that they arose more from extension of neglected leucorrhœa and gonorrhœa than from sounding or syringing. Disease of the tubal mucous membrane was more probably caused by the passage of fluids upwards than by extension of inflammation. Extension might occur, but mucous inflammations were generally localised in the genital as in the respiratory tract.—Dr. IMLACH regarded Dr. Lewers's paper as important, and trusted the investigation would be continued, and that pathologists would scrutinise the ovaries and tubes as carefully as they did other organs. The gonorrhœal origin of these diseases was often assumed. He had examined a large number of women in two lock hospitals, but had not found a single example of pyosalpinx amongst them. The question of etiology was important, and could only be settled by clinical investigation of a large series of gonorrhœal patients.—Dr. MATTHEWS DUNCAN expressed his sense of the great value of Dr. Lewers's paper, but felt the want of further information regarding the cases. He wished for information as to the symptoms, if any, caused by the pathological conditions. It was probable that these pathological conditions were obsolete and evidence only of long-past disease. This view was confirmed by the ages of the patients. Mr. Tait had said that in his practice the average age was 27 to 30, and Dr. Lewers's cases were above 40 on an average, and many quite old. Dr. Matthews Duncan was not astonished at their being evidence of disease in 17 per cent. of the *post-mortem* examinations, for he had long known that evidence of past or present disease in the region of the uterine appendages was a very frequent occurrence.—Dr. WILLIAM DUNCAN thought it most important that out of the seventeen cases reported, fourteen were over 40 years of age, and in only one case were definite symptoms of pelvic mischief given, while almost all died from diseases not attributed to tubal mischief, showing the fallacy of the view that most cases require laparotomy.—Dr. LEWERS, in reply, said that the cases were as nearly as possible consecutive, and that the inquiry lasted thirteen months. There were many cases showing more or less extensive old adhesions not included in his list. He did not think gonorrhœa was more common at the East End than elsewhere in London, and many of the cases at the London Hospital come from the adjoining districts. He thought hydrosalpinx and pyosalpinx were stages of the same disease, and the cases in his table confirmed this to a great extent. If further investigation should establish this view, and that pyosalpinx had a mortality of 40 per cent., we should not be able to resist the conclusion that dilated tubes should be removed. None of the seventeen cases of dilated tubes came from the obstetric wards, though some of the one hundred cases examined came from those wards.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, MAY 5TH, 1887.

J. W. HULKE, F.R.S., President, in the Chair.

THE PRESIDENT announced that Dr. Samelson, of Manchester, had presented a volume of letters of Von Graefe to the Society.

Fatal Meningitis after Excision of a Suppurating Globe.—Mr. LANG read the notes of a case in which meningitis followed the excision of a suppurating globe, causing death within forty-eight hours. On *post-mortem* examination extensive suppurative meningitis was found.

On the Insertion of Artificial Globes into Tenon's Capsule after Excising the Eye.—Mr. LANG read this paper. He had adopted this plan after finding that Dr. Mules's operation for evisceration and an artificial vitreous was unsatisfactory. The operation consisted in inserting a hollow globe of glass, celluloid, or silver into Tenon's capsule, and then closing the capsule by a set of deep sutures, and the conjunctiva by a superficial set, both of silk; the deep ones were not removed. A horse-hair drain placed under the deep sutures and an iced pad to the lids prevented pain and swelling of the lids and conjunctiva. In sixteen cases not one had suppurated; this was probably due to the antiseptic precautions which were taken, namely, to irrigate the conjunctival sac before excising the eye, again after the excision, and this brought Tenon's capsule plainly into view, and finally when the operation was completed. He advocated the operation as it had all the advantages of Dr. Mules's operation without any of its disadvantages.—The PRESIDENT had never met with a fatal case after excision of a suppurating globe. Was extension of the inflammation brought about by the application of a too firm compress? Fluids in the orbit might conceivably in this way be driven back. Would it not be better to treat such a case as an ordinary wound, and leave the orbit quite free from pressure?—Mr. NETTLESHIP remarked that the meningitis might have preceded or accompanied the suppuration of the eyeball, and he therefore asked whether there was any fever before the operation or other indications of a similar significance.—Mr. BRUDENELL CARTER said that Sir Wm. Bowman had thirty years ago condemned the extraction of the capsule of the lens from the eye as a certain cause of cyclitis, etc. In operations on the eye he always soaked his instruments in alcohol, a useful precaution against septic infection, he believed. Following Von Graefe, he never excised an eye in a case of suppuration.—Dr. BRAILEY was of opinion that evisceration was the best method of treatment of suppurating eyeballs. The occurrence of suppuration was, perhaps, not often due to inoculation with germs on instruments, but had more to do with the general condition of the patient. He thought it was more reasonable to suppose that a more beneficial effect and less chance of spread of the suppuration to the meninges would be obtained if the sclerotic were left, than if the capsule of Tenon was the only barrier.—Mr. ADAMS FROST confirmed all Mr. Lang had said in favour of his operation as compared with that of Dr. Mules. His own operation had not been so successful as Mr. Lang's. His plan was to unite the muscles with Tenon's capsule and the conjunctiva over the globe; the hæmorrhage was sometimes very troublesome. He thought that removal of the sclerotic was an additional safeguard.—Dr. MULES had had upwards of one hundred cases of evisceration without any cause for anxiety; the cases were kept in about twelve days. There had been no sympathetic disease, nor had there been any difficulty in cleaning out the interior of the globe.—Mr. JESSOP thought that the capsule of Tenon would get worn away by the foreign body; the sclerotic (as in Dr. Mules's operation) was the only tissue in the body of sufficiently low vascularity to withstand the irritation of a foreign body.—Dr. LITTLE said that he sometimes enucleated and sometimes eviscerated; the latter when he had good reason to believe that the back part of the eye was not involved in the disease. He did not use or advise the employment of an artificial vitreous for fear of irritation resulting.—Mr. F. R. CROSS said that evisceration was a not altogether successful operation, for it was uncertain whether a sinus or fistula might appear after the introduction of the artificial vitreous; secondly, the thin conjunctival membrane between the artificial vitreous and the glass eye would be sorely tried. He concluded that the old operation was the best still, especially if some means could be devised to keep the lower eyelid firmly against the glass eye.—Mr. BRUDENELL CARTER had performed Dr. Mules's operation about twenty-five times. He had seen difficulty arise from the wound not uniting properly. He thought it an excellent and safe operation.—Mr. NETTLESHIP had performed Mr. Frost's operation five times; two had succeeded, but in one of these the globe had become displaced.—Mr. LANG, in reply, said the lens capsule in his first patient was very tough and quite loose, and required no force in its extraction. He did not believe in the absorption of soft tissue by a foreign body. Gaping of the wound was due to the use of too large a globe.

Night-Blindness.—Mr. NETTLESHIP narrated four cases (in two families) of night-blindness of long standing, and apparently at present not increasing, in which a number of very small, scattered, white spots were present at and behind the equator of the fundus, evidently caused by deposit, not by atrophy. In none of them were there any of the appearances of common retinitis pigmentosa, though there was pigment disturbance of a somewhat different kind towards the periphery in some of them. The patients were grown-up girls.

Complete Self-Enucleation of Eyeball.—Mr. MACKINLAY narrated a case in which a woman had wrenched out her left eye with a meat-hook. She was 39 years of age at the time, and had had several children in rapid succession. She was suckling a baby 3 months old, and had been much depressed for three or four days before the occurrence. The optic nerve had been snapped off close to the commissure. She made a rapid recovery, and had since given birth to a child without any unfavourable symptoms. The only case he knew of was one recorded by Mr. McHardy in the last volume of the Society's *Transactions*.

Living Specimens.—Messrs. CRITCHETT and JULER showed two patients; one with a peculiar dotted appearance of the fundus of the right eye, whether in the choroid or the retina they could not say, nor did they know if it was congenital or not;

there was no reason to think of syphilis. In the other eye the vitreous was hazy. The second patient was a young woman, with a rare form of pigmentary change in the retina.—Mr. NETTLESHIP asked as to the length of time that the condition had probably existed in the first case.—Mr. JULER replied that eye was a little myopic, but there was no history of special failure of vision.—Dr. HILL GRIFFITHS referred to the case of a woman with a minute dotted appearance about the macula, and whose sight was defective from abuse of tobacco; her sister had also the same condition of fundus, it was therefore probably a congenital condition.—Mr. JESSOP asked, as to the second case, whether some of the pigment was not in the retina.—Mr. JULER replied that he had no doubt the retina was affected, inasmuch as the pigmentary layer was in places gone.

Mr. ADAMS FROST showed a case of cystic tumour in the orbit, in a woman aged 35. It began two years previously as a prominence of the eye, and six months previously a soft swelling appeared at the upper and inner angle of the orbit, beneath the skin of the upper lid. Puncturing the cyst revealed nothing.

Mr. W. J. COLLINS showed a case of cholesterin in the vitreous in a man aged 66. It was probably a primary change. The right alone was affected. Von Graefe had seen such a condition disappear.

Mr. W. J. COLLINS showed a case of exophthalmos with opacities of the lens; there was marked palpitation, but no goître, though a small one had been present a year previously. Neither Von Graefe's nor Stellwag's signs were present.—Mr. NETTLESHIP noticed there was partial ptosis of the upper lid, the side on which the disease began, the reverse of what was usually seen.—Mr. COLLINS thought this might be due to congestion; it was more marked than he had seen it before.

Instruments, etc.—Mr. BRUDENELL CARTER showed a pair of Franklin's spectacles, for use after cataract extraction. The spectacles were made by cementing two small semicircular plano-convex lenses upon an oval of plane glass. They afforded both near and distant vision, and were not heavier than ordinary spectacles. They were made by Baker, 244, High Holborn.—Mr. ERNEST CLARKE showed a group of artificial eyes.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, APRIL 13TH, 1887.

G. GRANVILLE BANTOCK, M.D., President, in the Chair.

Removal of Uterine Appendages.—The PRESIDENT exhibited an ovary with its accompanying tube, which he had removed from a patient suffering from retroversion of the uterus. No pessary could be borne, because the ovary was fixed by adhesions in Douglas's pouch, and was liable to be pressed upon by the instrument. On removal, it was found to be the seat of chronic inflammation, the tube being apparently healthy. The patient had suffered constant pain, and was quite incapacitated from her domestic duties. The result so far had been most promising, and fully justified the operation.—Dr. EDIS said that when palliative means had been fairly tried, and failed to afford relief, removal of the ovary was the only method of overcoming the difficulty.—Dr. BEDFORD FENWICK had found very good results from mercury in such cases. The plastic adhesions often disappeared under its use to a great extent.—Dr. ROUTH and Dr. HEYWOOD SMITH took part in the discussion.

Missed Abortion.—Dr. SINCLAIR (Manchester) read a paper in which he related three cases of retained ovum recently under his own observation, and one case observed by Mr. Stocks of Salford. The analysis of a large number of reported cases led to the conclusion that retention was due to the persistence of inhibition of uterine action, and not to an inflammatory process.

WEDNESDAY, APRIL 27TH, 1887.

The Late Dr. Meadows.—Before proceeding to the business of the meeting, the President called attention to the great loss which the Society had sustained by the very sudden and unexpected death of its first President. Only a fortnight before, Dr. Meadows had taken part in the work of the evening, apparently in all his usual vigour of mind and body. Dr. Meadows had, by his amiable qualities, endeared himself to all, and his abilities made him an ornament to the Society. The admirable manner in which he discharged the duties of the chair, the courtesy which everyone met with at his hands, and the acumen he displayed in discussion rendered him a member whom the Society could ill-afford to lose.

A resolution of sincere sympathy with the bereaved family was then proposed by the PRESIDENT, seconded by Dr. EDIS and Dr. HEYWOOD SMITH, and carried.

Dr. BARNES rose to propose what he felt sure must be the paramount sense of the meeting, that the Society should adjourn without attempting to enter upon scientific discussion. They could not more fitly mark their respect for their late President, their sense of the loss the Society, for which he had done so much, had sustained, and their sympathy with his family.—Dr. ROUTH seconded the resolution, and the Society adjourned.

SOUTH AUSTRALIAN BRANCH (ADELAIDE).

TUESDAY, OCTOBER 26TH, 1886.

J. C. VERCO, M.D.Lond., President, in the Chair.

Total Vaginal Extirpation of Uterus.—Dr. E. C. STIRLING related a successful case of total extirpation of the uterus by the vagina, for epithelioma, an account of which will be published in a future number.—The PRESIDENT congratulated Dr. Stirling on the success of the operation. What was required now was unimpeachable testimony as to the frequency of recurrence, the date of return, and the estimated prolongation of life.

Multiform Skin-Eruption.—The PRESIDENT related the case of a young man in whom there was a combination of acne, with papular erythema on the head, of erythema nodosum on the legs, a continued fever demonstrated to be of at least thirteen days' duration (and probably much longer), and a somewhat severe bronchial catarrh. As the man had been handling letters brought twenty-five days earlier by a steamer on which an outbreak of variola had occurred, the possibility of the rash being variolous suggested itself, and this was, to some extent, confirmed by the presence of fever and severe backache. This was negatived by the length of the period between exposure and the development of the disease, by the pustule being umbilicated and monolocular, and by the irregular course of the rash.

Renal Calculus.—Mr. L. W. BICKLE related a case in which he was able to determine the nature of the calculus while it was yet in the ureter by observing crystals of oxalate of lime in the urine; the patient was a woman, aged 40; the stone, though it only weighed two grains, took six days to pass from the kidney to the bladder. It was passed spontaneously from the urethra about twelve hours later. Morphine was freely given hypodermically during the time the stone was in the ureter, and Mr. Bickle pointed out that in this method of using the drug the pulse gave an early indication of a sufficient dose having been administered; at first, small, hard, and incompressible, the oncoming of the sedative effect is heralded by a sudden lowering in tension, the pulse becoming soft and full.

Pathological Specimens.—Professor WATSON: 1. Repair in Bones after Fracture; 2. Senile Eccentric Absorption of all the Bones of the Body, whereby they had become translucent.—Dr. VERCO: Pyopneumo-thorax, Secondary to Hydatid of Lung.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, APRIL 13TH, 1887.

LLOYD OWEN, F.R.C.S.I., President, in the Chair.

Talipes Calcaneus.—Mr. EDWARD FREER showed two cases of talipes calcaneus which he had treated by teno-section. The section was made obliquely, and the tendon sutured by kangaroo-tail tendon as suggested by Mr. Walsham. The results in both cases had been highly satisfactory, no signs of relapse having occurred after a lapse of six months from the operation. This was performed with antiseptic precautions, the feet being extended to their utmost, and retained in that position by plaster and an anterior interrupted splint. Mr. Freer pointed out the necessity of ascertaining before operating whether there was sufficient nerve-power in the paralysed limb to prevent a recurrence, and also the advantages of galvanism and massage for some time after.

Ruptured Brachial Plexus.—Mr. MORRISON showed a man, aged 46, who was admitted into the General Hospital under Mr. Bartleet on December 27th, 1886. He had fallen a distance of forty feet, and had sustained fracture of the right upper ribs, right clavicle, and lower jaw, together with rupture of the brachial plexus, and probably laceration of the inner coats of the axillary artery on the same side, with occlusion of the vessel. There was emphysema of the chest-wall, neck, and right upper limb as low as the wrist. For about ten days he remained in a critical condition, with collapse of the right lung, bronchitis, and delirium, but eventually he convalesced and became an out-patient, the upper limb, however, remaining paralysed, both as regards motion and sensation in the area of distribution of the brachial plexus. The limited movements that remained appeared to be imparted by the trapezius. Anæsthesia of the limb was complete, excepting in the parts supplied by the intercosto-humeral, descending branches of the cervical plexus, and possibly also by some filaments

of the circumflex. Pulsation in the axillary artery ceased abruptly below the clavicle. The right pupil had remained persistently smaller than the left, indicating lesion of the sympathetic in the neck. Massage and galvanism were being used to the limb.

Myxœdema.—Dr. SUCKLING showed a woman, aged 40, who presented the appearances of myxœdema in a typical form.

Jacksonian Epilepsy.—Dr. SUCKLING showed a patient who had been successfully treated for Jacksonian epilepsy by trephining.

Sphygmograms.—Dr. SUCKLING also showed a number of sphygmograms.

Abdominal Section.—Mr. JOHN TAYLOR read a paper based on a series of twenty-three consecutive cases of abdominal section.

ISLE OF WIGHT DISTRICT: SOUTHERN BRANCH.

THURSDAY, APRIL 28TH, 1887.

J. NEAL, M.D., in the Chair.

Lipoma of Neck.—Surgeon BARNES read short notes of a case of lipoma of the neck, removed successfully and painlessly under the influence of cucaine.

Peri-hepatic (?) Suppuration.—Mr. BUCK read notes of a case of peri-hepatic (?) suppuration. A sober man, aged 29, was suddenly seized on November 25th with excruciating pain at the epigastrium, which continued more or less for two weeks, with no physical signs; then gradually the liver dulness increased almost to the umbilicus, and gradually extended up the right back to the spine of the scapula. Diarrhœa was present throughout; at first the stools were like yellow pea-soup, soon becoming slate-coloured and horribly offensive. The tongue was furred white. Temperature 100° to 103° F. Jaundice came on, and the patient began to cough up offensive purulent sputa, which continued incessantly day and night for three days; the amount expectorated was nearly a chamber-vessel full every twenty-four hours. The aspirator was used in the ninth intercostal space in the posterior axillary line on the right side. One pint and a half of fœtid pus was withdrawn. A trocar a quarter of an inch in diameter was afterwards inserted at the seat of aspiration, and sixty ounces of foul-smelling pus escaped. A rubber tube was inserted, and the abscess-cavity washed out twice daily with weak iodine-water for a week, when nothing could be injected. When washing out the cavity, gurgling, synchronous with respiration, occurred in the tube, and full distension of the abscess cavity with iodine-water provoked coughing and expectoration of the fluid injected. Diarrhœa ceased and bile appeared in the fæces the day after emptying the abscess, and recovery was practically complete in nine days from that operation.

Fracture of Os Calcis.—Mr. GREEN described a somewhat unusual case of fracture of the os calcis.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, APRIL 20TH, 1887.

JOHN URQUHART, M.D., President, in the Chair.

Two Cases of Tumour of the Pons Varolii.—Dr. MACGREGOR gave details of two cases of tumour of the pons occurring in young children, and exhibited the specimens. The cases were two of a series of similar ones seen by Dr. Macgregor, in which the constant symptom was necrosis of the cornea, along with optic neuritis. In the first case headache, sickness, vomiting, optic neuritis, exaggerated patellar reflex, left exophthalmos; and in the second optic neuritis and slight staggering gait were the other symptoms observed. In neither was there marked motor palsy. On section, the first tumour showed a soft caseous cavity, rather larger than a pea, on the left side of the pons. The second, not being yet thoroughly hardened, had not been opened.

Extreme Astigmatism after Traumatic Cataract.—Dr. MCKENZIE DAVIDSON showed a case of this nature. The patient had sustained an injury to the left eye from a piece of steel about twelve years previously. A large scar was now visible on the lower and inner part of the cornea and sclerotic. The traumatic cataract had been extracted about ten years previously. Vision was not good after the operation, and a year later it grew still worse. When Dr. McKenzie Davidson saw him again a year ago he had capsular opacity. After needling twice, it was found that with +13·D cylinder, axis vertical, V was $= \frac{6}{18}$, and with $\frac{+ 4.5\ D\ sph.}{+ 13\cdot D\ cyl.\ ax.\ vert.}$ he could read J. 1 slowly.

Irrigation of Anterior Chamber.—Dr. MCKENZIE DAVIDSON made some observations upon irrigation of the anterior chamber after extraction of cataract. He used a saturated solution of boracic acid in water heated to about 98° F. as the irrigation fluid, and his results had been most satisfactory

Large Spongy Myoma.—Professor OGSTON exhibited an enormous uterine tumour of the spongy myomatous variety, closely simulating an ovarian cyst, which he had successfully removed from a young married woman.

Large Surgical Kidney.—Professor OGSTON showed a large specimen of surgical kidney, which he had removed a few weeks ago from a middle-aged woman. The patient's health was greatly undermined by the protracted renal disease, and the size of the enlarged organ gave rise to much difficulty in extraction; yet the patient did well, and left the hospital three weeks after the operation.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THURSDAY, APRIL 28TH.

H. N. DAVIES, L.R.C.P., President, in the Chair.

Sporadic Cretinism.—P. RHYS GRIFFITHS, M.B., read a paper, illustrated by photographs, on "Sporadic Cretinism."

Monster Tracheotomy-Tube.—Dr. SHEEN showed a tracheotomy-tube four inches and a half long and three-quarters of an inch in diameter. Particulars of the case have already been published in the JOURNAL of March 19th, 1887, p. 616.

Splints for Fracture of Femur.—Mr. NELSON JONES showed two new splints for the treatment of fracture of the femur.

Sub-glottic Abscess.—W. T. F. DAVIES, M.B., showed the larynx of a woman, aged 63, who had died suddenly after an attack of dyspnœa lasting twenty minutes. A small laryngeal abscess below the vocal cord, and running all round the larynx, with consequent œdema, was found. The aortic valves were calcified, and in the interventricular septum was found a small aneurysm.

ACADEMY OF MEDICINE IN IRELAND.

PATHOLOGICAL SECTION.

FRIDAY, APRIL 15TH, 1887.

WALTER G. SMITH, M.D., President, in the Chair.

DR. E. H. BENNETT read the report of the Committee of Reference upon the lower limbs of a fœtus exhibited by Dr. Macan.—Mr. KNOTT made some remarks, and Dr. BENNETT replied.

Fibroma Corneæ and Melanotic Tumour of the Conjunctiva.—Mr. ARTHUR H. BENSON showed sections of a fibroma of the cornea. The tumour had recurred after excision three months previously. The growth was similar to the former, consisting of corneal tissue slightly modified. It was opaque, elevated above the surface, and non-vascular. The cornea underneath was transparent. He also showed sections of a pigmented tumour of the conjunctiva removed from a boy, aged 11. It had been under his observation for five years, during which time it had enlarged slowly. The deeper structures of the eye were not implicated. Histologically, the growth consisted of much fibrous tissue, with masses of sarcomatous-looking growth, and a quantity of pigment, much of which lay immediately under the epithelium. There was no other case on record that Mr. Benson could find.

Fatty Replacement of the Erector Spinæ in a Pig.—Mr. J. ALFRED SCOTT communicated a case of fatty replacement of the erector spinæ in the pig.—Dr. BENNETT said the name "replacement" was appropriate as distinguishing what had taken place from fatty degeneration. Fifteen years ago he (Dr. Bennett) exhibited to the Pathological Society of Dublin an example of this condition, which had been produced, not by defective nerve organisation, but by the persistent maintenance of a limb in splints for a length of time. Dr. Little had also described an example of this kind of fatty replacement caused by a fracture which had rendered the part of the limb where the fracture took place powerless.

Perforation of the Stomach.—Mr. BOYD communicated a case of perforation of the stomach.—Dr. WILLIAM SMYLY communicated another case of perforating ulcer of the stomach. The patient was a strong, healthy-looking girl, with well-developed muscles, who was suddenly attacked with violent pain in the abdomen, and died a few hours afterwards. The interval from the first attack of pain until her death was about nine or ten hours. On opening the abdomen, he found the space in front of the great omentum full of the contents of the stomach, which had been extravasated through the perforation caused by an ulcer, situated in the anterior surface of the stomach near the lesser curvature. There was no peritonitis; there had not been time for it to occur.—Dr. WALLACE BEATTY adduced another case of perforating ulcer of the stomach in a man about 30. He was suddenly seized with agonising pain in the right hypochondriac region. His belly became swollen, and he vomited a great deal. He got well, but some months later had a return of the same symptoms, and died

in from six to eight hours. A *post-mortem* examination, made by Dr. Bewley, disclosed general peritonitis; but there was no obstruction of the intestine. On examining the duodenum, a perforating ulcer was found. The pylorus was very small and narrowed by thickening, and on opening it they found three ulcers surrounding the upper part of the duodenum and perforating it.—Dr. BEWLEY remarked that there were no appearances of epithelioma. He thought the ulcers were of a simple and non-malignant nature.—The PRESIDENT said these specimens illustrated the uncertainty of clinical diagnosis in such cases. As to the pathology of them, all the theories that had been formed to account for them were still defective. They failed to explain the limitation of the ulcers to particular portions of the intestinal canal. If they were due to thrombi, why did they not occur in other parts of the canal? As to the action of the gastric juice being a factor in their production, he did not know that there was any substantial evidence in favour of it. So far as he knew, small perforating ulcers of the stomach were only found in the upper portion of the duodenum, and not lower down.—Dr. BENNETT said if they could only recognise these ulcers with certainty, he believed many of them could be cured by surgical interference. Even after the rupture had taken place, and the contents of the stomach had been extravasated into the abdomen, there would be no difficulty in surgical interference, provided the diagnosis had been certainly made. Provided there were no adhesions, and that they were sure that the ulcer was in the front of the stomach, he did not see why sutures could not be employed.—Mr. BOYD, in reply, said that when the specimen was recent, varicose vessels were distinctly perceptible near the edge of the ulcer. In cases of fatal perforation, the gastric ulcer was generally on the anterior aspect of the stomach, and there were anatomical reasons why perforations should occur more frequently there than in any other place. At the anterior aspect of the stomach, where there was no support from neighbouring organs and the diaphragm was continually contracting, and the abdominal muscles in continual motion, greater facilities were afforded for a fatal rupture than elsewhere. The President did not seem to think that emboli or thrombi played any very important part in the formation of gastric ulcers. But in his paper he (Mr. Boyd) had alluded to the theory of Virchow on that point. He had performed the operation of tying gastric arteries, and he had found that when a part was cut off from its supply of blood, necrosis took place when the gastric acid came into contact with it.—Dr. BEATTY, in reply, said in his case the stomach was large, but not immensely dilated, although full of blood.

REVIEWS AND NOTICES.

CHARCOT: LEÇONS SUR LES MALADIES DU SYSTÈME NERVEUX; tome iii; avec 86 gravures. Paris: Aux Bureaux du Progrès Médical. 1887.

WHILE the first two volumes of CHARCOT'S classic *Lectures* treat mainly of the organic diseases of the nervous system, the third volume, which has just appeared, is in great measure devoted to the exact study of hysterical paralysis, especially in males. Many of the lectures have already appeared in the *Progrès Médical* and other journals, and some of the subject matter has already been published in the form of theses by the author's pupils or assistants. The publication of the lectures in their present form will, however, be welcomed by all who take an interest in the progress of neuropathology, and especially that part which Charcot has made peculiarly his own.

The excellent introductory address given when Professor Charcot was first appointed to the chair of Nervous Diseases at the Paris Faculty is followed by several lectures on the so-called reflex atrophies which are associated with joint-injuries or rheumatic arthritis. A few lectures are devoted to the consideration of the severe forms of aphasia, where some of those typical cases are given which form the basis of Charcot's well-known classification, which is as philosophical as it is clear and simple, and yet includes all the various forms.

The lectures on this head, as given in the volume before us, though excellent in themselves, give but an incomplete account of Charcot's most valuable researches; and the thesis of Dr. Bernard, and the more recent publication of Dr. Ballet (*Le Langage Interne*), both inspired by Charcot, give a clear exposition of the master's views.

The rest of the volume, excepting one on the juvenile form of muscular atrophy and another on choreic movements, is almost exclusively occupied with an analysis of the symptoms and treatment of hysterical paralysis.

When Professor Charcot commenced the scientific investigation of hysteria as observed in women, it was considered by many that he was treading on dangerous ground, and his earlier publications met with a good deal of adverse criticism and scepticism. Undaunted by these, however, Charcot followed out carefully and systematically the clinical and physiological features of hysteria, and great and important were the results he obtained. In these lectures hysteria, as seen in men, is made the subject of an exhaustive examination, and the close resemblance of the symptoms coming on sometimes after a shock or a traumatic injury to the hysterical paralyses in females is pointed out, such as the paralysis with or without contractions, the anæsthesia of peculiar distribution, and affecting the deeper structures and joints; the loss of muscular sense, the affections of the special senses, and the contraction of the field of vision. A careful examination of these symptoms enables us to distinguish hysteria from organic disease, on the one hand, and from simulation on the other. The study of hysterical paralysis has led the author to consider psychical paralysis and some of the phenomena observed in hypnotism and somnambulism. Charcot's observations on this subject form an exceedingly interesting chapter. They show the close relationship between the hysterical paralysis following a shock or slight accident, and the paralysis produced by a suggestion or an idea as seen in hypnotism. Here, as in all his previous writings, Charcot shows his intimate acquaintance with the older (especially English) literature on the subject.

In an appendix the author gives some further cases of hysteria in man; observations on the muscular sense in relation to voluntary movements; on atrophy in hysteria; and on hysterical aphasia, or rather, hysterical mutism.

These lectures, like the former ones—and, in fact, like all the author's writings—are characterised by clearness of expression and a fascinating style, combined with sound and philosophical reasoning. For us in England, where railway injuries abound, and where we hear so much of mesmerism, these lectures are of special interest.

A BRIEF REVIEW OF THE OPERATIONS OF THE HOME DEPARTMENT (OF JAPAN) IN CONNECTION WITH THE CHOLERA EPIDEMIC OF THE 18TH YEAR OF MEIJI (1885). Yokohama. 8vo. pp. 66, with charts, etc.

THIS is a most interesting report of the measures taken with no small amount of success to check the spread of the last epidemic of cholera, creditable alike to the energy and intelligence of the Government and the people, and written in excellent English, though apparently the work of Japanese officials throughout. Thirteen pages are occupied by a general report by Nagayo Sensai, Director of the Sanitary Bureau; fifty-three by correspondence between the Minister for Home Affairs, Count Yamagata Aritomo, and the local authorities; orders in council, a coloured map showing the distribution of the disease, and statistical charts giving the number of cases and of deaths day by day in each of the provinces invaded are appended.

As in each preceding epidemic, the disease first appeared in the ports of Nagasaki and Yokohama, which were in most constant intercourse with India, Tonkin, and other countries where cholera is endemic, or was epidemic at the time. This was especially evident in 1822 and 1858, when Nagasaki was the only port open to foreign commerce.

Though, thanks to the energetic measures adopted, the epidemic did not extend beyond a limited area, the type of the disease was unusually severe—so much so, indeed, that there was rarely time for the development of asphyxia or of the algid symptoms, death often occurring after one or two attacks of vomiting and purging; and, when the so-called typhoid stage was reached, there were abnormally low temperature, sloughing of the corneæ, and cellular abscesses. Dr. Kitazato Shibasaburo found in every case examined by him bacilli, which, microscopically and in cultures, corresponded to those of Koch, as did Dr. Eldridge and others working independently. The principal measures enforced were rigid inspection of all arrivals, disinfection under medical supervision, and occasional detention for periods not exceeding forty-eight hours of infected shipping, but no such quarantines as are in vogue in the Mediterranean were maintained. Infected persons were sent to hospitals, and suspected individuals isolated for a few days. Once only was a ship, an American man-of-war, in any sense quarantined, and that was with the willing co-operation of her officers. In this case the patients were removed to a hospital, and the rest of the crew kept under observation until the disease had been stamped out. The actual importation of cholera was as usual at Nagasaki, the outbreak at Yokohama being clearly connected with the landing of a cargo of coal from the mines at Takarhima, near Nagasaki, where the disease was prevalent. Prompt isolation of the sufferers and sanitary measures kept it well under. In Yokohama, and everywhere else, sanitary works—as the construction of new sewers and drains,

cleansing of cesspools, relief of overcrowding, etc., were vigorously carried out, owners of property so willingly co-operating, that in very few instances were the authorities under the necessity of taking legal proceedings for default. In fact, while the regulations were worthy of the most enlightened of European governments, the attitude of the people contrasted favourably with that of the peasantry of Italy and Spain.

THE HEALING OF ARTERIES AFTER LIGATURE IN MAN AND ANIMALS. By J. COLLINS WARREN, M.D. New York: William Wood and Co. 1886.

THIS elaborate monograph deals with the history of the subject, with the results of experiments on animals, and with observations on ligature in the human subject and on closure of the fœtal vessels. These investigations establish several interesting points, of which the following three are the chief. The duration of the process till the formation of a complete scar was found to be much longer than is usually supposed, ranging in the case of large vessels from three to six months. The process was found to be a very complicated one; the conditions being unfavourable for a rapid series of inflammatory and reparative changes, provisional structures are formed, which occlude the vessel while the permanent cicatrix is being slowly elaborated. The nature of the cicatrix was also found to differ from the usual descriptions, the muscular cells being a prominent and essential feature of the arterial cicatrix.

Dr. WARREN divides the process of repair into three stages. The first stage includes the changes which occur immediately after the application of the ligature and during the period in which the walls of the vessel are gradually separated from it. In the second stage we have the development of the provisional structures—in other words, of the internal and external callus. In the third there is the formation of the true cicatrix and the gradual absorption of the provisional structures. The cicatrix is composed of three parts—endothelial, muscular, and connective tissue structures. In small cicatrices these tissues are arranged in layers; but in long cicatrices the lumen of the vessel is filled for some distance with a tissue containing vascular spaces, the muscular cells forming circular bands around these spaces. The cicatrix is so disposed in all cases that there shall be a gradual narrowing of the lumen, and, where a large branch is near the cicatrix, it extends upwards on the opposite side, so that there is no abrupt change in the lumen of the vessel. After referring to the various modes of ligaturing vessels, Dr. Warren concludes as follows:—"Provided the ligature be adjusted so as to obstruct permanently the flow of blood through the vessel, it is manifest from the observations which have been described that the destruction of a certain portion of the vessel-walls and a retraction of the ends of the vessel must eventually take place, no matter what the nature of the material may be, or how it be applied."

We cannot do more than refer to one or two of the many points of interest in this work, which ought to be read by all those who wish to make themselves throughly acquainted with the subject.

DONATIONS AND BEQUESTS.—At the forty-second anniversary dinner of the German Hospital at Dalston, donations and subscriptions amounting to £3,409 were announced, including £200 from the Emperor of Germany, £50 from the Emperor of Austria, 100 guineas from the Corporation of the City of London, and £20 from the Duke of Cambridge, the President (Chairman upon the occasion).—Mr. Moses Lea, of Marylands Road, St. Peter's Park, bequeathed £1,000 to the London Hospital, £500 each to the Royal London Ophthalmic Hospital, the Royal Hospital for Incurables, the Earlswood Asylum for Idiots, and the Cancer Hospital; and half the "residue" of his estate to the London Hospital.—Mr. Benjamin Lancaster, of Bournemouth, bequeathed £1,000 to St. George's Hospital, £1,000 to the Cancer Hospital, and £500 each to the Middlesex Hospital, King's College Hospital, the Hospital for Consumption and Diseases of the Chest, and the Royal Hospital for Incurables.—"J. B." has given £100 additional, and Mr. W. Hamilton Yatman £50 additional, to the Charing Cross Hospital.

THE Works and General Purposes Committee of the Metropolitan Board of Works have decided not to recommend the Board to promote a Bill in Parliament for the compulsory purchase of land for a park and recreation-ground for North Paddington on the condition of one-half of the purchase money being provided by public subscription.

ON April 30th, at the distribution of the certificates by Mr. Lovegrove to the successful candidates of the Vyrnwy Ambulance Association, the lecturer was presented with a handsome desk by the class, in recognition of his services.

GENERAL COUNCIL
OF
MEDICAL EDUCATION AND REGISTRATION

SESSION 1887.

THE General Medical Council met on Tuesday last, May 10th, Sir H. W. ACLAND, President, in the chair. Every member of the Council was present.

New Member.—Dr. John Batty Tuke took his seat as representative of the Royal College of Physicians of Edinburgh for five years from May 3rd.

President's Address.—The PRESIDENT then delivered his address. He said: At the close of the last session, the Council did me the honour of desiring that I should retain office until we could with advantage meet to further consider the relation of the Apothecaries' Societies to the Royal Colleges of Physicians and Surgeons in England and Ireland, and the consequences which would arise should they fail respectively to combine for examination purposes. I find myself, therefore, once more called upon by your favour to open another session of the Council. In the discharge of that duty I shall state very shortly the chief business which is before the Council. I shall offer a summary of the proceedings which relate to the action of the Colleges and the Apothecaries respectively, and then, before I retire, shall request you to permit me, as my last act, to join you in recording the sense we all have of the blessings this country has enjoyed during the eventful reign of the Queen and Empress of this united Empire. First, then, and briefly, as to the business, exclusive of the combination question. This is already for the most part set forth in the programme now on the table. Through the activity of your Committees their reports afford ample scope for prolonged attention, but also, through the carefulness of the reports, each subject can be rapidly as well as clearly dealt with. It would be an improper employment of time were I to give any account of the several reports on Procedure, Income and Expenditure, or Practical Education, in the consideration of which I shall be unable to share. The Council will doubtless desire that I shall pass at once to the question of the combination of the three licensing corporations in England and Ireland respectively. First, I would ask that the several communications from the four Colleges and the Society of Apothecaries, which are upon the programme, may be received and entered upon the minutes. I will offer such short commentary upon them as may lay the whole case, as I understand it, clearly before you. I will then report the little that it has been in my power to do in furtherance of the Council's wishes. First, as to the case of England. The letter which was read to you at the last meeting was forwarded to the four Colleges on February 25th. Replies were received from the Royal College of Physicians of London on March 23rd, and from the Royal College of Surgeons of England on April 2nd. No desire was expressed by either of the Colleges for an interview. It was clear from semi-official information which I received, that if an interview were obtained with the College of Surgeons, it would be useless for the object of the Council. I did not therefore further press it. With respect to the College of Physicians the case was different. Having been for nearly forty years a Fellow of that body I was, in my judgment, bound in that capacity to attend the meeting when the subject would be discussed. Accordingly, on March 21st this was done. What passed I am not at liberty to relate. Discussions are held to be *secreta collegii*. But I may just say that it seemed to be a duty to endeavour to disabuse the College of a charge which had been privately made to me, that in the judgment of many Fellows, the Medical Council had gravely outstepped its duties by addressing the College on the subject. As a Fellow I do not hold that opinion; whether it was largely entertained I cannot say. That it was held, by whomsoever held, on an imperfect conception of the position of affairs, cannot reasonably be doubted. Since the time when the Colleges declined to admit the Apothecaries' Society, that body had applied to the Medical Council for examiners under the Medical Act, 1886. The Council, as well as the Colleges, had at various times declared in favour of union between the licensing bodies in England, inclusive of the Apothecaries' Society. If there was any chance still left of union the Council was clearly bound not to appoint the examiners and thus erect the Apothecaries at once, and, *de novo*, into an independent licensing corporation. It was a case in which precipitancy was to be with the utmost care avoided. We were deciding upon a momentous education question of the future. The answer which you have now received must be accounted

as final. A simple question therefore remains. The Apothecaries apply again to you through a new motion (Programme No. 12) for examiners. To this application a reply must now be given. An endeavour will be made to traverse the direct answer by means of a motion by Professor Struthers. This motion makes it my duty to make certain statements for the information of the Council. Very opposite opinions have been pressed upon me since we last met, as for instance: 1, that the Council should certainly refrain from appointing the examiners, and should leave the onus of the decision to the Privy Council; 2, that the Council is bound, both in honour and by the principles of law, to carry out the alleged intention of the Legislature by the Act of 1886, and to appoint examiners; 3, that it will be injurious to the public interest that the Apothecaries should continue to exist as an examining body; 4, that it will be a real advantage to retain them side by side with the two Corporations and the Universities, in order that excessive and unnecessary scientific examinations may not be imposed on every medical student—I have noted that some who used to wish the Apothecaries to be "extinguished," now hold the opposite opinion; 5, that if the Medical Council do not grant the examiners, the Privy Council will certainly not override your decision; and lastly, 6, that the Privy Council will certainly, in the case of your refusal, direct you to appoint examiners, and if you then decline, will appoint them, against your judgment. If this be so, the Privy Council will be acting in the unquestioned exercise of its powers under Clause 19 of the Act of 1886. In what proportion these opinions, and others which have been pressed upon me, weighed with the English Colleges cannot be stated, since they do not assign their reasons for not consenting to form one Corporation Examining Board for England, and in this simple way bring to a close a long and tedious discussion. To you, therefore, or to the Privy Council, is left the decision whether to perpetuate or to extinguish an examining body which for seventy years had rendered the State acknowledged services. I should not have ventured to trouble you with these divergent and hearsay statements but as an introduction to what follows. Since we parted it appeared to me to be a duty to learn, as far as I could, the legal view of our position, subject, of course, to the uncertainty of all opinion not resting on judicial decisions in a court of law. I gather that the Council would probably be advised that they will fail in a statutory duty if they refuse to appoint the examiners. It is true that under the Act of 1886 the Council has power to refuse. "It shall be lawful for the General Council, if they think fit, on the application of (a) corporation, to appoint any number of examiners to assist at the examinations"—Clause 5. But then, by Clause 19, "*if it appears to the Privy Council*" that "occasion has arisen for the General Council to appoint assistant examiners, the Privy Council may notify their opinion to the General Council;" and if the General Council fail to comply with any "directions of the Privy Council relating to such notification, the Privy Council may themselves give effect to such directions." The Medical Council is, therefore, powerless to prevent the appointment of examiners. Its decision must rest not on the question whether the new Examining Board of the Apothecaries would be adequate or inadequate, but on the general question of policy or vested interests in respect to an old corporation. It is clear that the Legislature has carefully guarded these interests by giving a right of final appeal to the Privy Council. By refusing examiners the Medical Council would propose a policy, but that only provisionally. If it grant examiners it becomes the complete guardian of the examinations, because it would both appoint the examiners and send its inspectors. It cannot therefore be alleged that the Apothecaries' examinations will be inadequate if they continue to exist. It may be said they are unnecessary. The Legislature has implied the Apothecaries have rights. If we refuse these, they appeal to the Privy Council. That body will, on the review of the whole case, interpret, as it sees fit, the intentions of Parliament by the Act of 1886. As regards the Apothecaries in Ireland, the case may be more shortly stated. A direct legal issue has been raised by the College of Physicians. You have before you the statement of the College of Physicians of Ireland (March 19th and March 21st), the letter of the College of Surgeons (March 24th), and recently a further letter from the College of Physicians, dated April 26th, and opinions of counsel forwarded by the Apothecaries' Society of Ireland, dated May 5th. From these documents three special conclusions may be drawn: 1st, that it (the College of Physicians) uncompromisingly decides against any combination, alleging that the Apothecaries cannot grant a licence in medicine, and therefore no body can combine with the Apothecaries; 2nd, that it therefore disputes the power of the Medical Council to grant supplemental examiners to the Apothecaries; and 3rd, that the College of Surgeons, in its judgment, proposes to incorporate the Apothecaries with itself for examination purposes without the Physicians, rather than that the Council should give the Apothecaries a permanent and independent position by granting the examiners. It is here necessary to observe that the Council has before it the opinion of the Attorney-General, the Solicitor-General, and Mr. Muir Mackenzie, that, under the Medical Act of 1886, the licensing bodies can combine without the sanction of the Medical Council, and not as heretofore under conditions to be approved by you. By this opinion the Surgeons and Apothecaries of Ireland can combine, if the Apothecaries can combine at all, without your consent or that of the College of Physicians. I cannot conclude this sketch of an important subject without thanking the Irish members of the Council for much assistance in this matter. I need no longer detain the Council. There is much to be considered during this session, and my medical advisers forbid me to share it. Indeed, I feel assured that, in your interest, I should for the last time, and with deep regret, bid you farewell. This I do with an earnest prayer for the steady progress of the scientific, humane, and national work which Parliament has laid upon you. I trust, however, you will allow me before I quit the chair to propose for your consideration a humble address to the Queen. The two surviving members of the original Council may thus join you in discharging a welcome and touching duty to a Sovereign who is full of sympathy for the sufferings we have to prevent and to alleviate, and greatly beloved by all her loyal subjects.

Mr. MARSHALL moved that the address be entered on the minutes. He was sure that he expressed the feelings of all members of the Council when he said that they were proud and gratified at the manner in which Sir Henry Acland had discharged the duties of the presidency for so many years. They extremely regretted that causes connected with his physical strength, and not with any mental deficiency, compelled him to relinquish his post. The address which had just been delivered bore the impress of that clear conception of the position of affairs which was a great test of the adequacy of anyone to fill the office.

Sir WILLIAM GULL seconded the motion. For forty-eight years, he said, he had enjoyed the personal friendship of Sir Henry Acland, and he had never known anyone so devoted to public duty. He had sacrificed everything to it, with great benefit to the profession. No successor in the presidency could ever take a higher ideal than that which was set before him by Sir Henry Acland. There ought to be some honorary position to which he might be chosen, so that he might occasionally be present to assist the Council in its deliberations.

The resolution was carried with acclamation.

Address to the Queen.—Mr. SIMON moved that the following address to the Queen be engrossed for the signature of all the members of the Council.

"To Her Most Gracious Majesty Queen Victoria, Queen of Great Britain and Ireland, Empress of India.

"May it please your Majesty,

"We, the General Medical Council of Education and Registration of Great Britain and Ireland, humbly tender our loyal congratulations to your Most Gracious Majesty on the approaching completion of the fiftieth year of your Majesty's reign.

"Having been appointed by Act of Parliament to take steps for enabling your Majesty's subjects to distinguish between those who are and those who are not qualified by education and character to practise medicine in your dominions, we have had the opportunity of noting the progress which has been made during your Majesty's reign in the science of medicine, especially in its bearings on the health of the nation.

"The progress of education and the improvements in the practice of all branches of medicine, civil and military, have been great during the last fifty years. Towns have been rendered more healthy, rural dwellings have been improved, dangerous occupations supervised, medical officers of health and public analysts appointed, excessive hours of labour regulated, the treatment of the sick poor in our workhouses amended, and asylums for mental diseases carefully organised. In all these improvements medicine and medical education have had a large share. To these subjects the lamented and illustrious Prince Consort gave earnest attention, as evinced by the interest he took both in the erection and administration of model dwellings and hospitals, institutions which have also been the objects of your Majesty's solicitude and sympathy. We desire further to express our sense of the obligation under which the nation lies to all the members of your Royal House, who, treading in the steps of their Royal parents, have constantly shown, by numerous acts, their desire to promote the sound progress, scientific, educational, and practical, of every department of rational medicine.

"For these amongst other reasons bearing on the general welfare,

we have special cause to join our fellow-subjects throughout the Empire in thankfulness to the Almighty for the blessings of your Majesty's reign. We fervently pray for your Majesty's continued peace, well-being, and happiness.

"We have the honour to be your Majesty's dutiful and loyal subjects."

Dr. HERON WATSON seconded the motion.

Sir WILLIAM GULL, in supporting the motion, said that the Queen had a special claim on the profession. Never had there been on the throne of England a Sovereign who had been so faithful and loyal to the medical profession. There had never been in Her Majesty's acts or appointments any suspicion of leaning towards anything like irregular practice. Quackery had never received the least favour from the Queen, who was therefore specially entitled to the respect of the profession.

The resolution was unanimously agreed to.

The Apothecaries' Society, London, and the Apothecaries' Hall, Ireland.—The correspondence which had taken place relating to the Society of Apothecaries of London and the Apothecaries' Hall of Ireland was received, and ordered to be entered on the minutes.

Retirement of the President.—The PRESIDENT: I now wish, in the most affectionate way in which it is possible for a man to do so to express my earnest desire for the progress and well-being of this Council as long as it or England lasts.

Sir Henry Acland then retired from the chair.

Temporary Chairman.—On the motion of Mr. MARSHALL, seconded by Dr. HUMPHRY, Dr. Quain was chosen to fill the chair *pro tem.*

Address to Sir Henry Acland.—A Committee, consisting of Sir William Gull, Dr. Humphry, Sir William Turner, and Mr. Macnamara, was appointed to draw up an address to Sir Henry Acland, expressing the Council's warmest thanks to him for the manner in which he had discharged the duties of President for thirteen years.

Election of New President.—Strangers were directed to withdraw, and the Council proceeded to the election of a new President.

On the readmission of the public, Dr. QUAIN announced that Mr. Marshall had been unanimously elected President.

The PRESIDENT said his first duty was to return his most sincere thanks for the kindness shown him in selecting him to fill such an important position. When he looked back on his predecessors and remembered the admirable services that they had rendered, he felt that a serious responsibility was imposed upon him. He would strive to emulate them, though, of course, he could not surpass them. As he was in the peculiar position under the new Act of being a member of the Council at the same time that he was the President, it might possibly be supposed that he might be in some way or other influenced by his relationship to the particular body which he had the honour to represent, and might therefore be liable to swerve from the line of duty. He was quite sure, however, that that body would feel itself disgraced if he allowed himself on any occasion to have his conduct modified or influenced in the slightest degree by the fact that he represented it. It had been settled by long custom in this country that it was the duty of a president to protect the individual members, and at the same time to maintain the authority of the chair; and it would be his endeavour not only to throw his heart and soul into the work of the Council, but also to regulate its proceedings so that they might be conducted swiftly, smoothly, safely, and agreeably.

Vote of Thanks to Temporary Chairman.—On the motion of Mr. SIMON, seconded by Dr. BANKS, a vote of thanks was passed to Dr. Quain for temporarily occupying the chair.

New Members of Executive Committee.—A ballot was taken for two members of the Executive Committee, one for England and one for Scotland, and Sir William Turner and Mr. Wheelhouse were duly elected.

Chairman of Business Committee.—Mr. Wheelhouse was appointed Chairman of the Business Committee.

Recent Candidates for Army Medical Staff.—Mr. WHEELHOUSE moved that a return of the degrees, diplomas, and licences of the candidates for commissions in the Medical Staff of the army, who in February last presented themselves for examination, showing the numbers that did and did not pass, distinguishing the qualifications, both medical and surgical, under the several licensing bodies, be received and entered on the minutes.

Dr. STRUTHERS seconded the motion.

Dr. MCVAIL contrasted the number that had passed with English qualifications with those who had come from Scotland and Ireland. He would like to get some information regarding the nature of the examinations. It might be that the style was more like that which prevailed in England. Either the Scotch and Irish bodies were acting badly, or there was something peculiar in the nature of the examination.

Sir WILLIAM TURNER regarded the return as a very satisfactory proof that the candidates who were qualified by the various examining boards in the country had a very fair knowledge of their profession. Out of the seventy-three candidates, only three were rejected.

Mr. BRUDENELL CARTER said he had been informed that the Medical Department of the army were so impressed with the high quality of the examinations passed by the majority of the competitors, that they had filled up many more vacancies than they otherwise would have done.

The motion was carried.

Recent Candidates for the Naval Medical Service.—A similar return relating to the navy was also received, and ordered to be entered on the minutes.

Postponement of Operation of Medical Act.—A letter had been received from the Lord President of the Council requesting to know whether the Medical Council considered it advisable to postpone the "appointed day" when, by Sections 2 and 27, the Medical Act is to come into operation from June 1st to June 30th."

Mr. TEALE moved: "That the Council request the Privy Council to postpone the day until June 30th."

Mr. SIMON seconded the motion.

Sir WILLIAM GULL approved of the postponement.

Mr. BRUDENELL CARTER hoped the Council would pass the resolution so that the Apothecaries' Society might not be driven into a corner, for it was hardly possible that the case could be heard by the Privy Council before June 1st.

The motion was unanimously agreed to.

Examiners in Surgery for the Apothecaries' Society.—Mr. BRUDENELL CARTER, in moving "That, in pursuance of the application made to the General Medical Council by the Society of Apothecaries of London, by letter dated April 12th, 1887, for the appointment of Messrs. W. J. Walsham, G. H. Makins, and Andrew Clark to be assistant examiners to the Society, under the provisions of the Medical Act of 1886, the Council hereby appoint Messrs. Walsham, Makins, and Clark to be assistant examiners accordingly," said it would be in the recollection of the Council that at their last meeting in February they had before them an application from the Society of Apothecaries asking for the appointment of assistant examiners for the purpose of enabling the Society to give a completely qualifying examination in medicine, surgery, and midwifery. He had the honour of moving that the application should be acceded to; but, in the opinion of the majority of the Council, it was deemed wiser to defer the full consideration of the matter, in order that a representation might be made on the part of the Council to the Royal College of Physicians and the Royal College of Surgeons, in the hope that the objections entertained by those bodies to a combination with the Society of Apothecaries might be overcome. That representation had been duly made, and as they had heard from their late President, and as most of them knew from the ordinary channels of intelligence, it was not successful. They were, therefore, once more brought face to face with the original question. During the time which had elapsed the Society of Apothecaries had reconsidered, and had in some degree modified, the terms of its application to the Council; so that the letter of the Society now asked for the appointment of three named gentlemen as assistant examiners. Before he concluded the few remarks he had to make, it would be his duty to explain to the Council the ground on which that alteration had been made. For the present he would attempt, however inadequately, to deal with the general principles underlying the question. The privileges with regard to the licensing of medical practitioners which belonged to the Society of Apothecaries dated originally from a charter conferred upon the Society by King James I; but, for the purposes of the present discussion, he would be content to trace them to various Acts of the Imperial Parliament, some of them specially obtained by the Society, and others affecting the Society in common with other medical bodies. The first of the special Acts was that which came into operation in the year 1815, when the College of Physicians having absolutely refused to undertake the supervision and control of the medical education of general practitioners of this country, the work of doing so was committed by the Act to the Society of Apothecaries. It had ever since been carried on by them in what he believed was generally admitted to be an admirable manner. During the seventy years which had elapsed since that time, the rights and privileges of the Society had been confirmed by several other Acts of the Imperial Parliament, and it had conferred its licences upon more than 22,000 medical practitioners, who had been doing their beneficent work not only in this country, but wherever the English tongue was spoken. The Licentiates of the Society at this moment numbered about one-half of the whole medical practitioners of England,

and he would venture to call the attention of the Council to what he believed was the fact, that of the thirteen gentlemen of English birth and of English medical education sitting at the table, seven held the licence of the Society of Apothecaries. The estimation in which the Society was held by Parliament was sufficiently shown by the fact of its having been retained in the Act of 1886 as one of the bodies entitled to send a representative to the General Medical Council, and he was present as living evidence of what the intentions of the Imperial Parliament had been. But the Act of 1886, although fully acknowledging the right of the Society to its position as a licensing body, placed it in this position—that whereas the Act required that no one should be admitted to the *Register* except as the result of an examination in medicine, surgery, and midwifery, the Society, although it had for some time had surgical examiners, and had made surgery an integral and important part of its examinations, had no statutory right to confer surgical qualifications, and would therefore be unable to give its licentiates the right of entrance on the *Medical Register*, unless it could combine with some other licensing body by which its deficiency in respect of surgery could be made good. It could hardly be expected that the Society of Apothecaries would be able to combine with any of the Universities of this country, because the Universities were already complete in themselves; they possessed the power of giving licences in medicine, surgery, and midwifery; they would have nothing to receive from the Society of Apothecaries, and no advantage could possibly accrue to them from a proposed combination. The only bodies with which the Society could combine practically would be the College of Physicians and the College of Surgeons, and, as was well known, a combination of that sort was some years ago on the *tapis*. It was very carefully considered by the Committee, and the terms of the agreement were at one time looked upon as being practically settled. Lately, however, the College of Surgeons and the College of Physicians had refused to carry out the arrangement which they once made, and the result was that the Society of Apothecaries would be unable to admit its Licentiates to the *Register*, were it not for the special provision made by Act of Parliament in such case, that any corporation unable to combine in the manner required by the Act might come to the Medical Council for the appointment of the necessary assistant examiners; and, if the Council failed or refused to appoint those examiners, a right of appeal was given by the Act to the Privy Council. It was in this position that the Society now found itself, and it was under these circumstances that it appealed to the Council to carry out the intentions of the Act of Parliament. When he came to consider the position of the Medical Council in regard to the matter, he found that the Act of Parliament which permitted them to appoint examiners did not, if the words were to be interpreted in their conventional and natural sense, enjoin them to do it. They might do so if they saw fit. They had all heard various interpretations of the phrase "if they see fit," some of which had been referred to by the late President. Some people said it was mere verbal surplusage, which, according to customary interpretations of Acts of Parliament as given by legal decisions, did not contain the very large powers of rendering a succession of Acts of Parliament void and of no effect. Others said that the words conferred absolute discretion upon the Council to do as they thought fit; and some even went so far as to say that the power of appeal to the Privy Council was in reality only a nominal one, because the Privy Council would not seriously entertain the idea of reversing the decision of the ordinary Council. From this view of the Act he ventured entirely to dissent. He held that they had a certain amount of discretion, which, in the words of Mr. Purcell, the Queen's Counsel to whom the case had been submitted on the part of the Irish Hall, they were bound to exercise in a just and reasonable manner, having due regard to the legal rights of the Society. He was advised that the Privy Council had absolute power to review, confirm, or reverse the decision of the Medical Council, whatever it might be, and he was strongly of opinion that the action of the Privy Council would be almost entirely guided in such a matter by the ground upon which the decision of the Council was arrived at. If it should be made to appear to the Privy Council that the refusal to appoint assistant examiners rested on any grave, weighty reasons of public policy, then there was very little doubt that an adverse decision on the part of the Medical Council might be supported by the Privy Council; but, on the other hand, if it should appear that the decision was influenced by sentiment, by corporation rivalries, by corporation jealousies, or by any reasons that would not recommend themselves as sufficient and satisfying to persons of unprejudiced minds, then he thought the Privy Council would reverse the decision. It would, of course, be guided to some extent by a strict interpretation of the letter of the Acts of Parliament relating to the question, but still in some degree by the reasons that were adduced for the decision. He thought it would be a great blow to the dignity and usefulness of the Medical Council, and a great injury to them in carrying out the work with which they were entrusted, if it should be made to appear to the Privy Council that on a question of that character they allowed themselves to be influenced by any consideration but those of the most weighty kind. As a member of the medical profession, he should deeply regret if it were made to appear to the Privy Council—a non-medical body—that it was compelled to exercise over the Medical Council the functions which were exercised by Turkish soldiers in the holy places of Jerusalem, where they were put upon guard in order to prevent the Christians of different denominations cutting each others' throats. He would therefore respectfully invite any members of the Council, if such there were, who were opposed to granting the assistant examiners to formulate the reasons by which their views might be supported, to foreshadow in the speeches which they delivered what they would advance and put before the Privy Council as a valid reason for destroying the privileges of a body which had existed for so many years, and which had done such excellent work. He had not himself heard any such reasons assigned. If he was favoured with them in the course of the debate, he would, of course, have the privilege of considering and replying to them; but, in so far as the controversy had already been conducted, his mind was perfectly clear on the question that if he were not the representative of the Society, he should still vote in favour of granting the application. The only assertion—he would not pay it the compliment of calling it an argument—as to the mischief or evil that might arise from granting these assistant examiners was made up of two statements: first of the true statement that the assistant examiners would enable the Society of Apothecaries to remain in competition with the other licensing bodies, and, as it seemed to him, the absolutely untrue statement, that such competition would be likely to be disadvantageous. He would respectfully ask why and to whom? Not to the public, surely, because the special function of the Medical Council, that for which they were chiefly retained in existence, was to exercise such a supervision over examinations as to see that they were adequate for the protection of the public, and not unduly severe in their claims on the medical students. For the Council to say that the existence of one or more examining bodies would enable the standard of examination to be dangerously lowered was to admit at once their own inability to discharge the functions which the Act imposed upon them. His own feeling was that the action of competition was practically the reverse of that which had been assigned to it. He believed if the Joint Board of the Royal Colleges and the Society of the Apothecaries were both in operation in London, each would be likely to learn something from the other; the Royal Colleges would see what the Society was doing, and the Society would see what the Royal Colleges were doing, and nothing but good was likely to come from such a competition. If there was room for useful work for both those bodies they would survive and do that work, but if there was no room for both, an illustration would be seen of the survival of the fittest; and if the time came for the Society of Apothecaries to be extinguished, that Society would extinguish itself by a process of natural decay, of which at present he failed to see even the very earliest indications. The idea that the Society would be likely to use what had been called "competition downwards" as a weapon in the strife with other licensing bodies seemed to him to be one which no gentleman was justified in gravely putting forward, because it was totally opposed to the whole past history of the Society. There had been no period of the seventy years during which the Society had been one of the chief examiners of medical practitioners in this country when it had ever incurred the reproach of lowering its standard for the sake of attracting candidates for its licences. He regarded the notion of the competing downwards as being somewhat of a bugbear. It first came into vitality and prominence soon after the Act of 1885, when an impression gained ground among London students that the examinations in London were somewhat more severe than elsewhere, and a good many went to other divisions of the kingdom to obtain their licences, influenced partly by the charms of the journey, partly by the opportunity of seeing places they had not previously visited, and partly by the taking nature of the titles they were able to obtain; but in the absence of any authorised standard of any system of inspection, it would be very difficult to establish the fact that a competition downwards existed. He himself had always hoped and believed that examining boards might be trusted to set their faces against anything like incompetence or ignorance. He was proud to be able to quote in defence of his position professional authority of the very highest kind—that of the Royal College of Physicians of London. He was not sure whether the College of Phy-

sicians had ever authoritatively issued any verbal pronouncement upon this point, but its acts had been more eloquent than words. Language did not always express the full convictions of those who used it. It had been cynically said that sometimes it was used for the purpose of concealing thought. Acts, however, might be taken as evidence of unquestionable sincerity, and the College of Physicians had spoken by its acts. So much was the College impressed with the necessity or desirableness of some competition in the metropolis in the matter of licensing general practitioners, with regard to the medical side of their education, that in the year 1861 or 1862 they took to establishing an organisation to set up competition where none before existed; and by its recent decisions the College had shown how thoroughly it adhered to its first resolution. He was too well acquainted with the Royal College of Physicians—with the gentlemen who mainly swayed its councils—to suppose for one moment that they would have established the licentiateship if they had not been completely convinced that competition was good in itself, calculated to promote the advancement of science, and good for the practitioner and for the public. In that view he heartily agreed. Upon that view he asked the Medical Council to set its seal, and not to be frightened by any bugbear of competition; not to be led astray by any sentimental reasonings; not to deprive the public of the benefit of the system of competition which the College of Physicians had made sacrifices to establish, and which even within the last week it had declared it would not abandon. He felt sure they would be acting in defiance of the best professional authority if they were to allow that competition to lapse into a monopoly. Passing on to the question of the three named examiners, he wished to say that, whereas on the former occasion he wished only that examiners might be appointed, on the present occasion he submitted the names of Mr. Walsham, Mr. Makins, and Mr. Andrew Clark. The reason why the Society put the application in that form was that the power given to the Council by the Act was the power to appoint assistant examiners on the application of the corporation. It was therefore doubtful whether the Council would have any power to appoint either more or fewer examiners than were applied for, and it seemed to the Society of Apothecaries, after the best consideration they could give to the Act and to the intentions of its framers, that those intentions would be best satisfied if each examining body had full responsibility for the construction and composition of that examining board, whose proceedings the Council would be called upon to inspect. They felt that if the Council were to select the examiners they would not approach the inspection of their work in the same sort of perfect independence which they would feel if the examiners had been practically selected by the corporation. They felt, too, that the corporation whose examination was brought before the Privy Council ought not to be in a position to say: "Our examination would have been perfectly satisfactory if we could have had the help we asked and wished for." The gentlemen whose names were submitted were appointed as examiners by the Society of Apothecaries at the instigation of the Medical Council in 1884; they were gentlemen of the highest surgical attainments; they were examiners of great practical experience; and the Society put forward their names without any shadow and hesitation as to their fitness for the work which they had been doing and which he trusted they would long be called upon to do. The Society would have full confidence in any selection that the Council might make, but they felt that there were reasons which justified them in bringing forward the names of those who they thought might hold the office. With these few observations he would leave the case in the hands of the Council.

Mr. SIMON seconded the motion. He said it was unnecessary for for him to follow the line of argument pursued by Mr. Carter. There were parts of it with which he ventured entirely to disagree. He did not agree in the view that it was desirable to have competition among examining boards; on the contrary, he thought it a disadvantage and he frankly avowed it, but the Council were in this dilemna, that they must either have the two examining boards in London, or disobey the intentions of the law. It was on that ground that he seconded the motion. He regarded the Act of Parliament under which they were called upon to take this particular step as obligatory unless they had strong and definite reason to the contrary. The case was admirably put by the Irish Queen's Counsel when he said "The grant or refusal of such application is in the discretion of the Council, but it is bound to exercise such discretion in a just and reasonable manner having regard to the legal rights of the Hall." The position of the Council was this: they could refuse, but they could not do so except on some ground which was not before Parliament at the time the Act was passed. If Parliament had meant to extinguish the Society of Apothecaries, it would have extinguished it. The proposal to extinguish the two Apothecaries' Companies was however withdrawn. If Parliament had meant the discretion given to the Council to be such that it would virtually enable them to annihilate the Apothecaries' Companies, it would itself have annihilated them. Such a thing was never dreamed of in Parliament as to give power to such a body as the General Medical Council to extinguish another body with vested rights, against whom no complaint had been levelled. If at the present moment there was before the Privy Council an accusation against the Apothecaries' Company of having unfitly discharged its duties, without a doubt they might then refuse to entertain this application, and very probably the Privy Council would support them. They must be careful not to misunderstand what the position now was. He said this with a sort of anticipatory glance at an amendment that was on the list—that before acceding to the application, they might, if they saw fit, inquire into the examination, but they were supposed to have already inquired into the examination. If there had been anything wrong in the examination of late years, it was their duty to represent that to the Privy Council; but in the absence of any such representation, the examination of the Apothecaries' Company was supposed to be as good as the examination of the University of Cambridge for all purposes of the law. If without a justification of that kind they were to refuse to do what the Company called upon them to do, they would place themselves in an extremely embarrassing position. He had taken pains to consult with others in order to ascertain what the construction of law in matters of this kind was, and there could not be a shadow of a doubt as to what would be the course taken by the Privy Council in such a case. If the Council concluded this session without having complied with the request which the Apothecaries' Company had made, that Company would appeal to the Privy Council, and the Privy Council would, in the terms of the Act, direct the General Medical Council to make the appointments. If, then, the Medical Council refrained from making the appointments, the Privy Council would act instead.

Sir WILLIAM GULL asked Mr. Simon what was meant by the discretion which the Council possessed.

Mr. SIMON said he thought that question was fitly answered by the opinion of Mr. Purcell which was given to the Irish Apothecaries' Company. The Council had a discretion, but not an unlimited one. It was a discretion that must be exercised in a just and reasonable manner having regard to the legal rights of the Company.

Sir WILLIAM GULL asked if the discretion was limited in any way beyond that which arose from the quality and character of the Council.

Mr. SIMON said the limit was one which he believed would be recognised in a minute in a court of law. Such terms as "if they see fit" were constantly occurring in Acts of Parliament, and for them there were established rules of interpretation. He would not pretend to speak as a lawyer, but he was told that there could not be a shadow of a doubt that the Council was not, under the circumstances, entitled to take a course that would practically extinguish the Apothecaries' Company. Could any gentleman sitting at the table suppose that Parliament meant to give them the power of extinguishing that Company? What wrong had the Apothecaries' Company done that it should be at the mercy of the General Medical Council? The Society had a powerful enemy in an extremely influential and enormously respected body, and would Parliament be likely to enact that the College of Physicians should be able to contribute a voice towards extinguishing the Apothecaries' Company? The Council was not established on the Kilkenny cat principle, that some of them should be able to eat up the others. If there were present at the Council any great lawyer to explain to them how courts of law interpreted such words as "may if they see fit," he was confident that he would advise the Council that they had in this case no proper choice except to accede to the request of the Apothecaries' Company. He seconded the motion with regret. There were many members who knew his opinion, and his course in relation to questions of this sort had been consistent. He extremely regretted the necessity of the vote, but he had not the least hesitation as to what was his duty. He seconded the motion.

Mr. TEALE said the motion involved two separate things; one was the granting of assistant examiners, and the other was the appointment of special persons.

Mr. SIMON said the resolution might be divided into two.

Mr. CARTER said he would take it in any way that was considered best. He would therefore suggest that it should read: "That in pursuance of the application made to the General Medical Council by the Society of Apothecaries of London, by letter dated April 12th, 1887, for the appointment of assistant examiners of the Society, under the provisions of the Medical Act of 1886, the Council hereby consent to appoint assistant examiners accordingly."

Sir W. FOSTER said the Act empowered the Council from time to time, if they thought fit, to appoint any number of examiners.

Mr. CARTER said it appeared to him that the words "on the application of the Corporation" governed the number, but that was a question of legal interpretation, on which he could give no opinion.

Mr. TEALE said he regretted that the Council had to come to a vote on this question, but he agreed with Mr. Simon that they really had very little option in the matter; they had not much room for discretion. If Parliament had intended that they should have the power, without reasons which had not hitherto appeared, to put an end to the Apothecaries' Company, it was quite clear that Parliament would have done it itself. With that feeling he did not see how they could avoid coming to the conclusion to grant the request made by Mr. Carter.

Permission was then given to alter the resolution as suggested by Mr. Carter.

On the motion of Sir DYCE DUCKWORTH the debate was adjourned.

Wednesday, May 11th.

The President, Mr. MARSHALL, took the chair at 2 o'clock.

Examiners in Surgery for the Apothecaries' Society.—The adjourned debate on Mr. B. Carter's motion was resumed. A motion by Dr. AQUILLA SMITH, that the Council resolve itself into committee, was seconded by Mr. WHEELHOUSE; after some discussion, in which Sir W. TURNER, Dr. HERON WATSON, Dr. STRUTHERS, and Dr. QUAIN took part, the motion was negatived, only five hands being held up in its favour.

Sir DYCE DUCKWORTH said he had moved the adjournment of the debate because he was desirous to embrace the very earliest opportunity of discharging a duty which devolved upon him, as the representative of one of the Corporations whose action was now in question. At the meeting of the College, at which a negative reply was decided upon, he was asked by the President and Fellows to declare to the Council what the policy was that had led the College to act as it had done. When the courteous letter from the late President was received by the governing body of the College, it was accompanied by no fresh arguments. The whole question had been very fully and maturely considered, both in committee and by the whole College. The first decision was therefore re-affirmed *nemine contradicente*. The College saw that no accession of strength would come to it by union with the Apothecaries' Society; that the examination established by the Conjoint Board would in no way be better or improved by the addition of such examiners as the Apothecaries' Company could send to it from its own body; and that such being the case no possible good could accrue to the public at large from conjunction with that body. The Conjoint Board was doing good work, and it was acknowledged as such by the Apothecaries themselves, and therefore there seemed to be no ground which would warrant the enclosure of that body. It was also thought that if the Apothecaries' Society took part in conducting the examinations of the Conjoint Board, it would have to find its examiners not within its own body, but without, and it could not possibly employ better men to examine than the two Colleges already employed, and if the three bodies were allied the Apothecaries' Company would cease to issue diplomas upon its own account; it would cease, in fact, to be anything else than a trading company in the City. That was a position that did not present itself favourably to a large body of the Fellows of his College. Another point had been lost sight of in this matter, namely, that the College of Physicians in London was in many respects like a university in so far as the power of giving a qualification was concerned. It was not generally known that the College had power to give a complete qualification in medicine, surgery, and midwifery, and at the present moment the College retained that power to the full, for it had not been interfered with by the Act of 1886.

Sir WILLIAM GULL asked if the College of Physicians, without going out of their own body, gave a surgical qualification?

Dr. QUAIN said they did.

Sir DYCE DUCKWORTH said the College had that power, and was careful to guard it during the progress of the Bill in 1886, so that it really was not incumbent on the College to seek an alliance in any quarter. However, for the general benefit, it was thought well that the College of Surgeons should be allied with it. It had been said that the College of Physicians at one time went into alliance with the Apothecaries' Society. That was the case, but it must be remembered, at the same time, that all the universities of England were in that alliance. A very different state of things prevailed now. Mr. Carter had said that, in 1861, the College of Physicians, seeking to do a public benefit, determined to raise medical education in this country, and to establish a system whereby men, after receiving an excellent education, could hold a licence from that College to practise medicine. He thought that none of the Fellows of the College at the present day would be prepared to say that in 1815 the College did not lose a great opportunity of benefiting the public and the profession, but certainly that step was mended. In 1861 the College came to the front, and took its place and did its duty in establishing a new order of Licentiates. No one denied that there was great benefit to the profession, and that the educational standard of general practitioners had been thereby very greatly raised. If that was to be reckoned as a competition within the boundaries of the metropolis, at all events it was a competition very much upwards, and he was quite sure that the establishment of that examination was in no way entered upon as a competition with the examinations held every week in the Apothecaries' Hall. He need say no more as to the idea of rivalry or jealousy, which to those who knew the circumstances of the case was simply ridiculous. Now that he had delivered himself as representative of the corporation, he wished to speak simply as a member, and in doing so he would say that the Apothecaries were no longer wanted in this country. They had done their work well, but there was no longer any need for them. A great deal of the work which the Apothecaries did at one time was now much better done by the trained and examined members of the Pharmaceutical Society of Great Britain. He was quite sure that in these days nobody wanted to be an apothecary. He could speak from the experience of one of the largest schools, and he knew that very few of the pupils were desirous of taking that qualification, but some of them did take it, because the provincial hospitals of the country and the by-laws of various boards of guardians required that whatever diplomas any candidate might possess, amongst those he must produce the licence of the Apothecaries' Society. So it had come to pass that men who were eminently qualified and held the diploma of the College of Surgeons and degrees of the Universities had perforce to obtain the licence of the Apothecaries' Society in order to meet the requirements of the boards of guardians and provincial hospitals. He considered that the Apothecaries' system had been a great drawback to the profession in many ways in England. He was perfectly convinced that it was responsible for a great deal of the degradation of the profession; it had kept up a very low ideal of the general practitioner, who in far too many instances had come to be associated with the position of a shopkeeper. He was quite sure it had been the means of spreading many mischievous ideas among the public and many people who ought to know better. The nonsense of homœopathy in this country was little more than a Nemesis following the Apothecaries. He had listened very attentively to Mr. Carter's eloquent speech, but had found it singularly devoid of argument; in fact, the only argument that he could deduce from the speech was that it was a most excellent thing for the Apothecaries' Society to be re-instated and set on its legs again. He could not gather from the speech any argument whereby the profession or the general public were to be benefited by the proposal. Mr. Carter entirely ignored one of the most important parts of the question—namely, the educational side. It was not for one moment to be doubted that the requirements of the two Royal Colleges were distinctly in excess of the Apothecaries' Society hitherto, and those who looked to the levelling up of the profession in all directions must certainly be concerned to see that the minimum diploma that could be obtained in this division of the kingdom was as good as could be made. They therefore looked askance on the institution of any company, although it must come under the supervision of the Medical Council; they still looked askance at the re-institution and re-instatement of the Apothecaries' Company, even under the *régime* of the Council. Lastly, he would deal with what he should call the threats held over the heads of the Council by Mr. Simon and Mr. Carter—the threats of an appeal to the Privy Council. Was the Medical Council to be muzzled and to be afraid to utter its opinions at a point like the present, and to defer to the opinions of a body of laymen, who, however exalted and eminent they might be, did not at this moment contain a single member of the medical profession, and who, therefore, were not qualified to form an opinion for themselves, unguided by the Medical Council, as to what was best for the highest interests of the profession? It was an anomaly in this country, and he hoped it would soon be corrected, that the Privy Council should be devoid of a single medical member. He hoped that at no distant date medical members would be appointed, and then he thought the Privy Council would be a body of vaster influence and usefulness than at present. But he wanted to know, if the Medical Council, in its wisdom or unwisdom, determined to withhold the granting of examiners, who was to guide

the Privy Council? He could not conceive the Privy Council acting in contravention of a body like the Medical Council, or going against the opinions of those members of the profession who were able to give their views on the point. He could not imagine that the Privy Council would legislate over the head of the Medical Council, if the members did their duty in a straightforward manner. He therefore had great doubts if the opinion of the Council would be over-ridden by the Privy Council under any circumstances whatever. At all events, he was quite certain of this, that it was the duty of the Council to go forward boldly without any fear of the Privy Council or anybody else, and to do what it thought best and right for the profession, and for the highest interests of the public. He should give his vote not only as representing the unanimous opinion of the College of Physicians, but also as representing what he considered to be best for the whole interests of the profession and the public.

Dr. STRUTHERS moved the following amendment:

"With reference to the application made to the Council by the Society of Apothecaries of London, of date February 12th, 1887, received and entered in the minutes of February 18th (p. 127), and to the further application by the Society to the Council, of date April 12th, 1887, that, in the opinion of the Council, it would be contrary to the interest of the public that the Society of Apothecaries should, through Section 5 of the Medical Act, 1886, be enabled to grant a diploma qualifying for admission to the medical profession."

He desired to explain the position which he occupied. At the last meeting of the Council he had moved a resolution in favour of recommending that the Society of Apothecaries should be admitted to the Conjoint Board. He had endeavoured to show that both the Societies had done enough to entitle them to take a subordinate share in the examination (in the department of pharmacy), and that the proposed course was the best way of getting rid of the difficulty which existed—namely, by a process of absorption. The present proposal was a very difficult one—to revivify the Apothecaries' Society in London, and to put it in the position that it had never before occupied, that of being able to give a complete qualification. In opposing that proposal he was guilty of no inconsistency. He regretted that his motion had failed, but he did not desire to censure the Colleges. Indeed, if he had been one of the College of Physicians, he should have sympathised with the views they entertained.

Dr. MCVAIL rose to a point of order, and maintained that it was not competent for the Council to discuss the question whether it was in the interest of the public that persons should be admitted to the medical profession by the Apothecaries' Company, the Act of Parliament having already decided it.

The PRESIDENT ruled that Dr. Struthers was in order.

Dr. STRUTHERS, resuming, said that the first letter of the Apothecaries' Society applied for examiners generally; but in the next letter, now before the Council, the application was for examiners "to conduct on behalf of the Society the surgical portion of the qualifying examination"—showing an entire change of policy. They had now gone back to the original proposal, and the matter was therefore simplified. Under Section 5 of the Act he held that the Council must appoint examiners in medicine and midwifery as well as surgery if it appointed examiners at all. That, however, was not implied in Mr. Carter's motion. There had been a good deal of discussion on the words "if they may think fit" in section 5 of the Act. Notwithstanding what had been said as to the words, they clearly meant that the Council had complete power in the matter, and the question was whether the Council did "think fit" to do what it was asked to do, or whether it would leave the opprobrium or the merit of the action to the Privy Council. His own feeling was that the matter should be left to the Privy Council. Some had thought that his amendment was designed to put an end to the Apothecaries' Society. It had no such object. It would, under the Act, come to an end in some respects in June, unless the Council stretched out a hand and gave it new life. But the Society had other functions to fulfil; it had its joint-stock shares, and would still continue to supply medicines to the profession or to anybody else, and to prosecute quacks. Even if it ceased to do that, it could still confer the distinction of L.S.A. on those who chose to take it. His motion was that, "In the opinion of the Council, it would be contrary to the interest of the public that the Society of Apothecaries should be enabled to grant a diploma qualifying for admission to the medical profession," and he maintained that the honour and the status of the profession and the interests of the public were identical. That the Apothecaries' Society should cease to be a licensing body was no new idea. In the report of the Select Committee of the House of Commons in 1879-80 would be found many opinions expressed that the Society should no longer be a licensing body, and similar opinions were given before the Royal Commission. In the statement sent to the Council by the College of Physicians of Dublin extracts were given from opinions of various persons to the same effect. By the Bill introduced by the Government of the day into Parliament in 1883 a Council was to be appointed, and the College of Physicians was to have three members, the College of Surgeons three, and the Apothecaries' Society one; and it was the same with regard to the Irish Apothecaries' Society. When the Bill went into Committee, on the motion of an Irish peer the Irish Apothecaries disappeared, and Lord Carlingford said he had not made up his mind about the English Apothecaries. Afterwards Lord Salisbury moved in the House of Lords to omit the line "one by the Apothecaries' Society of London," and the Society was accordingly deleted from the Bill. At that time Lord Carlingford was Lord President and Lord Salisbury was in opposition, but they both of them concurred in putting the Apothecaries' Society of London altogether out. That was a very important fact. The Bill died. Then came the Bill of 1884, from which again the Apothecaries' Society was left out. The Apothecaries' Societies were condemned in two successive Bills. Then came the Bill of 1886, and all those who were engaged on that Bill knew very well that the Vice-President, Sir Lyon Playfair, was very anxious to pass what was passable, and to steer clear of all rocks ahead. Sir Lyon got quit of the difficulty by putting it upon the Medical Council. The qualification given by the Apothecaries' Society, supposing it to be started in the way proposed, must be an inferior qualification, and lead to an inferior order of practitioners. He did not wish to hurt anybody's feelings by saying that, but it must be the necessary result. At the last meeting of the Council he was challenged by Mr. Carter when he spoke of the Licentiates of the Apothecaries' Society as apothecaries, and thinking he was wrong he apologised for having used a word which appeared to be offensive. He did not know at the time that he was quite right, but he had looked through the well-known Act of 1815, and he found that it was not called a licence, but simply a certificate to practise as an apothecary, "providing always that no person shall be admitted to any such examination for a certificate to practise as an apothecary;" and in the oath which the examiners took there were the words "as to his fitness or qualification to act as an apothecary or assistant to an apothecary." Again and again they were referred to as apothecaries, and the body itself was entitled, "The Master, Warden, and Assistants of the Art and Mystery of Apothecaries of the City of London." The licence, then, was an inferior qualification, and what kind of students would go for it? Would a student of any common sense go in for the certificate of the Apothecaries if he thought he could pass the double examination of the two Royal Colleges? No doubt it would be the duty of the Council to see that the examination was up to the mark. He did not think that any qualification should be permitted below the diploma of the Royal College of Surgeons. The profession was overstocked, and it was the duty of the Council to elevate and not to lower it, not to make apothecaries out of them, but to raise the members of the profession more and more. If the application by the Apothecaries' Society was granted, the Council would perpetuate the system of supplying drugs. No doubt there were good competitions and bad competitions. The competition of Oxford and Cambridge, and of the Universities of Edinburgh and Aberdeen were good, but the competition of the Apothecaries' Society would not be good. He did not mean that the Royal College of Surgeons would for a moment look upon the Apothecaries as competitors, but the competition would be in the student's mind. One argument that was used a great deal was that the Society had done good work in the past, and in fact he caught himself saying it in his own evidence before the Commissioners. No doubt the Apothecaries' Society put on an examination in medicine in 1815, but where was the merit of that? They were required by the Act to examine; they saw the monopoly, and they got hold of it. It was with regard to that point that the Act used the words "science and practice of medicine." The expression was, "who are hereby authorised and required to examine person and persons applying to them for the purpose of ascertaining the skill and ability of such person or persons in the science and practice of medicine, and of their fitness and qualification to practise as an apothecary." That was the only occasion when the words "science and practice of medicine" occurred, as if they had been popped in by a side-wind. Everywhere else allusion was made to a certificate to practise as an apothecary. If any college or university was offered a monopoly of all the practice in England, Scotland, or Ireland, would it not jump at it? An English apothecary was a thing that was not understood in Scotland or anywhere else in the world. It was a combination of a drug-seller and a practitioner. How did the Apothecaries' Society use their power? As a Scotchman, he said they

used it against the Scotch and against the Irish. The best educated man from Scotland or from Trinity College, Dublin, was an illegal practitioner in England. Had a Stokes or a Christison settled in England and ordered a dose of rhubarb, he would have got a lawyer's letter, and have been mulcted in £20. No English Star Chamber or Romish institution ever used their powers more constantly than the Apothecaries' Society did. It was all very well for some of his younger colleagues from Scotland to smile, but "they jest at scars that never felt a wound." He remembered Dr. Symes and Dr. Christison speaking about it, and saying that there was nothing more dreadful than the Apothecaries' Society of England.

Dr. QUAIN; They were not allowed to cross the border to practise as what?

Dr. STRUTHERS: As apothecaries.

Dr. QUAIN: That was the difference. It did not refer to surgeons or physicians.

Dr. STRUTHERS said that the Apothecaries' Society became a trades union. No wonder it was popular in England, because it gave to Englishmen the monopoly, and kept the enterprising Scotchman or Irishman off the soil. The penalties were disgraceful, as was also the way of recovering them. The person who informed got half and the other half went to the Society. A man at that time could not employ an assistant without his having been examined by five apothecaries. The drug system made the soil in which quackery flourished. An outburst of homœopathy took place in Edinburgh, but it was like the seed that fell on stony ground, and there was not now a pure homœopath in Scotland. But look how homœopathy flourished in England. That was due to the Apothecaries' Society, and he could not help saying that homœopathy, which taught people to rely on nature and not trust so much to drugs, had done more good for the science of medicine than the Apothecaries' Society ever did. There was one thing which Mr. Carter very judiciously did not allude to, but a great deal had been said about it outside—namely, the power of prosecuting quacks. The letter which he was about to quote would perhaps relieve a little the dulness of his speech. It appeared in the BRITISH MEDICAL JOURNAL in November last, for the purpose of showing that Mr. Wheelhouse, Sir W. Forster, and Dr. Glover were not suitable persons to represent the practitioners on the Medical Council, and especially Dr. Glover. A gentleman connected with the Medical Alliance Association wrote of Dr. Glover, "But above all this is my chief objection to him that he is not a *bonâ fide* general practitioner, inasmuch as he does not supply his patients with medicines." With regard to the prosecution of quacks, the report of the Medical Acts Commission said: "We consider it undesirable to attempt to prevent unregistered persons from practising, but at the same time we think that they should be prevented from representing themselves as being registered or assuming titles which would lead the public to believe that they are regular medical men." It was well known that the Act of 1858 went all the length that any Act would ever go in that direction. It was not creditable to any body of men at the present day that they should be admitting another body on the ground of power to prosecute quacks, yet the Apothecaries clung to this little bit of power with great tenacity. They could not prosecute practitioners, they could not prosecute bone-setters; it was only when a man was an irregular apothecary that he could be prosecuted. But the Apothecaries' Society could retain the power of prosecuting quacks, even if they did not continue to be a licensing body. A body must have fallen very low indeed when its friends resorted to such an argument as that as its chief claim to perpetuation. A great deal used to be talked about compensation when anybody was deprived of any particular power, but the Apothecaries' Company lost the chance of getting compensation when the Pharmaceutical Society was established; and really there was no ground for compensation. He was quite sure that there were some things about the constitution of the English Apothecaries' Society which were not understood even in England; and he wished to read a few paragraphs from an undoubted authority with regard to what the real nature of the Society was. The evidence he was about to adduce would not be challenged, for it was given by the Master of the Apothecaries' Society before the Medical Acts Commission, on July 9th, 1881. The money derived from the diplomas was of no use to the Society; they had no interest in it, so that they would not be deprived of any income if they ceased to give diplomas. In his evidence the Master of the Society said: "We touch none of the money that is paid for the examinations." Then he was asked, "To whom do the fees the candidates pay go?" and he said, "They go to a fund that is entirely separate from the Corporation." In answer to the question "Who receives the benefit of that fund?" he said, "That fund is applied towards the expenses, and the examiners receive a certain amount; after that it is funded." He added that £1,000 a year was distributed amongst the twelve examiners, and the Secretary of the Court of Examiners received a salary of £200 a year. The Royal Colleges and universities in the three divisions of the kingdom had grand museums and magnificent libraries, but the Apothecaries' Society had no such things. It was an antiquated body. The Master of the Society was asked, "How are vacancies in the assistants filled up?" He said, "The vacancies of that body are filled up by the Court of Assistants themselves; they elect from the Livery." Then he was asked, "How is admission to the Livery obtained?" and his reply was—"There is a Livery and a Yeomanry, and the admission to the Livery and Yeomanry is either by patrimony or by servitude. They have likewise the power to elect men from the Licentiates." These were old phrases which dated back a century or two ago, to the time when the surgeons were in alliance with the barbers. In addition to its being an antiquated and unsuitably constituted Society for admitting to the medical profession it was a trading company. Trade was quite honest when it was honestly done, but a profession was another thing altogether. The Master in his evidence on this point said—"Previous to the present year the Society allowed certain of their members to trade in drugs and chemicals for the personal benefit of such members, but in the name of the Society. Owing to the excessive competition and other causes the business was discontinued at the end of last year. The Society, however, with the approval of some leading members of the medical profession, are at the present time themselves manufacturing and selling drugs and chemicals, not with the primary view of profit, but with the object of maintaining a standard of purity in such articles, especially for supplying public departments and medical men, and as long as such manufacture and sale is not carried on at an actual loss, they will be prepared to continue it." The Society was then a wholesale trading company, but it was more than that. He had been told in Scotland that it was also a retail company, but he could scarcely believe it. Dr. Struthers created some amusement by narrating his visit to the Apothecaries' Hall, Blackfriars, and exhibiting a tincture and a powder which he had purchased there.

Dr. QUAIN interposed and said he could stand it no longer, his patience was exhausted by hearing Dr. Struthers talk about the Apothecaries' Hall, which had no reference to the question before the Council. The Apothecaries' Society was one body, the Apothecaries' Hall another. It was intolerable that time should be wasted at an expense of 22s. per minute, in hearing an argument which had no bearing whatever on the subject.

Dr. STRUTHERS said that in order to be convinced that they were not simply pharmaceutists, he bought a bottle of eau-de-Cologne, showing that they traded for profit. What he had stated showed that the Apothecaries' Society was not a suitable body to be admitted to the *Medical Register*.

Sir WILLIAM GULL seconded the amendment.

Sir WALTER FOSTER said he thought the Council would agree with him that they were indebted to Dr. Struthers for a very interesting and amusing speech, which he had illustrated in a very practical and ingenious manner. He was glad that Dr. Struthers should introduce something in the shape of bottles, that recalled to their minds the humbler branches of the profession, which were doing good and useful work in the community. He could not, however, congratulate Dr. Struthers on the tone or spirit of his argument. He had endeavoured to appeal to sentiments not of the highest kind, and to revive recollections and grudges against the Apothecaries' Society. He had also appealed to a false pride when he brought forward specimens which he had obtained from the shop. There was nothing disgraceful in shopkeeping. If it were done in an honest spirit it was as good as any other calling in the community, and he had no sympathy with the attempt to raise a false sentiment in the Council on a broad question affecting the general interests of the profession, by means of bottles of tincture of steel and eau-de-Cologne. At present, the leader of the Conservative Party in the House of Commons was a gentleman who had recently been engaged in retail trade, and he was none the less fitted on that account, but perhaps more fitted, for the post he occupied.

Sir WILLIAM GULL: He may be leader of the House of Commons, but he is not President of the College of Physicians.

Sir WALTER FOSTER said that Dr. Struthers had endeavoured to discredit the claim of the Apothecaries' Society by raising a false and sentimental issue. The question really before them was one of the most momentous that had arisen in regard to the profession. They had been looking forward—but it now appeared to be a dream—to the time when, under the new Act, they would be enabled to do away with the almost unlimited competition going on in the country in regard to granting medical qualifications.

They thought that the Act would provide a means by which that object could be accomplished, and it was passed with the intention of bringing about in London and Dublin a condition of things in which there should be a single body establishing a minimum qualification for practice. The notion of the framers of the Bill was to bring such an amount of pressure on the Colleges of Physicians and Surgeons as would induce them to take the Apothecaries' Society into combination with them. A clause was inserted which gave the Council, and, in case of their failing to act, the Privy Council, power to help any body that might be left out, by adverse or impossible conditions being enforced, to obtain the power of granting qualifications. The object was not to do away with any existing corporation; on the other hand, it was to keep the existing corporations in action, and only to strike them out of existence if hereafter it appeared to the Council that they were not doing their duties properly. If they refused to grant to the Apothecaries' Society assistant examiners, what would happen? The Society had the right to appeal to the Privy Council, and the Privy Council, as most persons thought, would undoubtedly, under those circumstances, give them the right to go on, by ordering the appointment of examiners; so that a state of things would be obtained which would have arisen if the Council itself had accepted the responsibility. In this country there was a steadily increasing pressure going on among the poor to obtain medical advice, and there were growing up in the towns, to their great scandal, a large number of so-called "penny dispensaries." Those dispensaries, however, were not officered by Licentiates of the Apothecaries' Society, but by a totally different class, most of them having medical degrees given by bodies beyond the borders of England. Many poor people had no other resource than the chemist's shop, or one of the cheap dispensaries or hospitals. That was all due to the fact that the profession had, during the last few years, entered on a course which was valuable to the profession in some senses, but a little hurtful to the public; it was getting a little above the work it used to do. That kind of thing had now to be met. If they refused to allow the Apothecaries' Society to have examiners, and the Privy Council backed them up in their refusal, what would happen? There would be growing up in the profession another kind of practitioner. The pharmacists of the future were to enter upon a course of study more or less framed in imitation of the medical curriculum. The course of lectures on materia medica would no doubt include a great deal more than the mere knowledge of the physical and chemical properties of drugs; and when a man had acquired that knowledge, it would be difficult for him not to apply it, and endeavour to get legal sanction for the application. It could not be denied that there were hundreds and thousands of cases occurring daily in the metropolis which were prescribed for by chemists over the counter, and that practice must go on unless they found some means of giving to the public medical aid, which would do away with the necessity of going to persons who were not properly qualified. He believed that, in the interests of the public and the profession, it would be a very injurious thing if the Apothecaries' Society ceased to have the power of qualifying for the practice of medicine, because it would force the legislation into the development of what would then be an inferior class of practitioner. If the Apothecaries' Society granted its licence, there need not be that inferior class of practitioner, because if they failed to keep up the standard of professional education, the Council would be able to control them. He threw the whole blame of the present position on the two Colleges that had refused their sanction to the proposal that had been made. He (Sir Walter Foster) had helped to pass the Bill in the House of Commons because he believed that the College of Physicians and the College of Surgeons in London would take a broad view of the matter. Those Colleges had failed in their duty. They might have taken the Apothecaries' Society and assimilated it by an easy process of digestion, so adding to their own strength and dignity as well as to the benefit of the community at large. The Council was now forced into the position of saying whether it was willing that the Apothecaries' Society should have examiners or not. It was their duty to face a responsibility of that kind, and they ought not to try to skulk away from it. He wanted the Council to say that they believed it was to the interest of the public and the profession that the Society should have examiners.

Mr. WHEELHOUSE said he had listened with great interest to the arguments of Dr. Struthers, but there were one or two points on which he had not touched. He did not know what was the state of things in Scotland; but in England he did not know how the poor in isolated localities in England would be able to obtain medicine if the general practitioner were not permitted to supply it. In England there was an absolute necessity for supplying it. That so many were qualified in England by the Apothecaries' Society's licence was a clear proof, not only that the apothecary was a necessity, but that he had been doing a very great work all through the country. As to dispensaries, he looked upon them as the greatest disgrace that ever fell upon the profession. He saw a great deal of them in the town in which he lived. The hours of attendance and the fees charged —2d. or 6d.—were painted in large letters on the windows. Of the managers of those dispensaries he believed there was only one who held a licence of the Apothecaries' Society; the others had put upon the doors or windows "physician," or "surgeon," in order to show that they were something better than apothecaries. He believed that in England the apothecary was now, as he had been in the past, a very valuable member of the profession. There was no one more anxious than he had been that the Apothecaries' Society should be absorbed by the two Colleges. He had all his life looked forward to the time when there would be one portal by which to enter the profession, and if that could be attained he thought they would have arrived at the *summum bonum*. If that could not be accomplished there should be some means by which competition might be kept up to a certain extent, and by which men of all classes might be able to enter the profession. He did not shrink from giving his vote in favour of the Apothecaries having their examiners granted to them, because if he were to do otherwise he thought he should be running away from his duty. At the same time he was sorry that he had to do it, because he had hoped that they would be spared the necessity of having to come to a decision on the subject, but as the duty was cast upon them they ought to do it fearlessly. It was his deliberate opinion that the Apothecaries' Society had been an honourable Society all through its existence. Having himself a licence of that Society, and having been a practitioner of medicine on the strength of it all his life, he felt that he should be turning his back upon the Society that gave him his qualification if he were now to say that it was unfit for the position which it held. The Act of 1886 had guarded them in every way. It said "Give these examiners and then inspect them, and see that they do their duty. If they do not, if the examination falls below the standard at which you think it ought to be, then refer the matter to the Privy Council, and it will be for the Privy Council to take away the examiners." He could not be blinded by the superficial arguments that had been brought forward, and he voted without any hesitation on the grounds he had stated for granting the application that had been made.

Mr. MITCHELL BANKS said that he had listened with interest to the speech of Mr. Carter, but they ought to keep their minds absolutely free from three things, which had been a little forced upon them, and by which dust had been to some extent thrown into their eyes. The first point was that they ought to sympathise with the Society of Apothecaries, because the English Colleges had refused to amalgamate with them. He believed that at the Council there was a very strong hope entertained that the amalgamation would take place, and there was hardly a member who did not regret that it had not been brought about. The Colleges of Physicians and Surgeons, however, had not acted as the Council would like them to act, but the Council ought not to have its judgment warped by the consideration. As to questions of interpretation, his opinion was that when they were told they were free to do a thing they ought to exercise their own common sense upon it to the best of their ability. The suggestion ought not to be made to them that in their discretion they were compelled to do anything. Then there was the question of the threat that had been held out to them that if they refused to grant examiners to the Society of Apothecaries, the Privy Council would step in and give them an ignominious slap in the face. He did not think that the fear of consequences of that kind should weigh with them for a moment. They had a discretion in the matter, and were bound to use it conscientiously. The fear of the Privy Council appeared to have operated upon the minds of many gentlemen, who seemed to say to themselves, "We do not like doing this thing, but we must." Admirable as Mr. Carter's address was, he had not brought forward any valid argument why the Council should accede to the request that had been made to it. The chief argument was that it was necessary to have a low class of practitioners for the poor. That was the third time that he (Mr. Mitchell Banks) had endeavoured to oppose that view, and he did so with all his heart, because he did not believe that a low class of practitioners was required. Then it was said that, if such a class of practitioners did not exist, it was necessary to have dispensaries; but he certainly thought dispensaries properly managed would be far better than a low type of practitioners. But did they need more medical men? Certainly not; for the profession was already more than overstocked. It had been said that the Council could con-

trol the examinations. Theoretically that was true enough, but he had not been teaching students for twenty years without knowing that, whatever examining bodies might put upon paper, the teacher soon found out what those examining bodies were really worth. At present the Apothecaries' Society had the lowest examination, and the lowest class of men went to it. It was said that it would be well to adopt the proposal that had been made, because in that case they would have competition. If it had been proposed to have a high-class degree, he should have understood it; but he did not understand the necessity of a competition downwards. As to the control of the examinations, that could only be carried to a certain point. The truth was that it was a question of vested interests, and the sympathy which Englishmen had in vested interests was, no doubt, very great. He had great respect for them, but they ought not to allow vested interests to override the public good. It had been said that the Apothecaries' Hall was not the Apothecaries' Society. They might as well say that the right arm and the left had no connection. The two bodies were to all intents and purposes the same. The broad question was whether it was a good thing or not that the Society of Apothecaries should be rehabilitated. If any member of the Council thought that the rehabilitation of the Society of Apothecaries would improve the status of medical education, and be creditable to the profession and beneficial to the public, let him vote openly for it; but if, on the other hand, he thought that it would tend to lower the status of the profession and, as a necessary consequence, do harm to the public, it was his duty to refuse the application that had been made.

Dr. LEISHMAN thought that the interpretation of the words "if they think fit," given by Mr. Simon was the correct one, that the Council was expected to do and ought to do what was stated, unless it saw some good reason to the contrary. As to the words "on the application of such corporation," did it apply to a general application for relief under Clause 5, or simply to the application made for examiners? If Mr. Carter had left in the names which had been mentioned in his motion, he (Dr. Leishman) could not have voted for it, but he had wisely left it open to the Council, after deciding the main question as to whether examiners should be appointed, to consider what the number of examiners should be; because, as he interpreted the clause, he thought that the Council had it in its power to appoint any number of examiners it chose. If he was right in that view, a great part of the difficulties which he had first felt disappeared, and he was able to vote for Mr. Carter's motion, and against the amendment of Dr. Struthers. He had not the slightest sympathy with the Apothecaries' Society, and he thought it a great blot in the Act of 1886 that the Society was not summarily dealt with and brought to an end. In interpreting the Act of Parliament under which the Apothecaries' Society had certain legal claims, he ought not to allow any preconceived views of his own to sway him in the decision at which he arrived. For these reasons he gave his adhesion to Mr. Carter's motion, reserving to himself the right to insist that whatever number of examiners might be found necessary should be supplied. If the relief sought were granted to the Apothecaries' Society under Clause 5, the Society would stand in a different relation to the Council from that occupied by any other body. The Council would not only have the duty of instruction to discharge, as in the case of all the other corporations and Universities, but it would have the further responsibility of seeing that every step of the examination was thoroughly up to the mark, and that in future, at all events, those who entered the profession through that portal were thoroughly qualified to practise medicine, surgery, and midwifery.

DR. HAUGHTON said he thought Mr. Carter was wise in separating his motion into two parts, because he had thereby secured Dr. Leishman's vote and his (Dr. Haughton's). He had entered the Council chamber with his mind in the condition of a sheet of white paper, but after hearing Mr. Carter's admirable speech one-third of his mind had been converted by it; the "Nestor" of the Council took possession of another third; and the speech of Dr. Struthers had carried the fortress of the remaining third, so that he was now thoroughly determined to vote for Mr. Carter's motion. Dr. Struthers's speech had produced so strong an impression upon his mind as to make him a complete convert to Mr. Carter's proposal, though probably that was not intended by Dr. Struthers himself.

Mr. SIMON said that his objection to the amendment of Dr. Struthers had been almost anticipated in his remarks on the previous day, in seconding Mr. Carter's motion. Dr. Struthers had taken exception to his interpretation of the words, "If they think fit," but he desired to call his attention to a precedent which he thought was conclusive. Under Clause 14 of the Medical Act it was the duty of the Registrar to keep his Register correct, and it was lawful for him to write a letter to any registered person with regard to his address, and if he did not get an answer he could strike his name from the *Register*. If, however, the person afterwards turned up, it was lawful for the Council to restore his name. In one case a man had turned up in that way and he called upon the Council to restore his name. There was, apparently, no obligation upon them to do so; it was not stated that they "shall," but simply that the name might be restored by direction of the Council, should they think fit. The person in question was believed to be a great rascal, and the Council refused to restore his name. He then applied for a mandamus, and the legal advisers of the Council told them that they had not a leg to stand upon, and the man's name was according restored. The present case was precisely analogous. Dr. Struthers, however, had stated that the interests of the public were against the proposal, but there he was at issue with the Legislature. Parliament had distinctly provided in the Act of 1886 that the thing should be done if the Council thought fit, and those words meant, he contended, if they thought fit on any sufficient reason coming to their knowledge that was not before Parliament at the time the enactment was made. It was not for them to state that a certain body was unfit which Parliament had declared not to be unfit. The speech of Dr. Struthers was, he considered, entirely irrelevant, and he would explain what he meant by an analogy. On the programme of business there was a notice of motion by Dr. Struthers, stating that he would move for the recognition by the Council of the state medicine and public health diploma of the University of Aberdeen. The Council was able to give that recognition if it thought fit; but would it be reasonable in discussing that question to say that it would be a great deal better if the Scotch Universities were to combine? The Council might or might not wish the Scotch Universities to combine, but that had nothing to do with the legal question. In the present case the Council had a legal duty to fulfil towards the Apothecaries' Society. If they did not do it the Privy Council would. If Dr. Struthers's amendment were defeated, as he hoped it would be, he believed that within two years there would be a Conjoint Board in London, which would include the Apothecaries' Society. Sir Dyce Duckworth had spoken of a Nemesis as against the Apothecaries' Society, but he (Mr. Simon) was not sure that was not a Nemesis for the College of Physicians in regard to its proceedings seventy years ago.

Sir DYCE DUCKWORTH said that the Nemesis which he referred to had relation to homœopathy; and as to what was done by the College of Physicians seventy years ago, he considered that it was amply atoned for in the year 1861.

Dr. DUNCAN said he could not accept the law as laid down by Mr. Simon, because he thought it was entirely wrong. When the Act of Parliament used the words "if they think fit," it meant what it said, and did not mean nonsense. It had been stated that the effect of rejecting the amendment of Dr. Struthers would be to bring into action the one-portal system within two years. He considered that that was a ridiculous prophecy. Sir Walter Foster had stated that the one-portal system was the great aim and object of the profession, but he denied it altogether, believing as he did that if the profession were polled, the general feeling would be expressed that the system was the abomination of abominations, and the very worst thing that could happen to the profession.

Sir W. FOSTER said that he did not mean that there should be only one method of entry, but that corporations in places like London, Dublin, and Edinburgh should be united, leaving the Universities outside.

Dr. DUNCAN said he thought that competing bodies were a very great advantage. He had great respect for the Apothecaries' Society, and it was a great pleasure to him to vote as he had done at the previous meeting in favour of the Colleges taking it into association with them, because he thought the plan would save him from doing what was very painful—voting for the amendment of Dr. Struthers, which he hoped would prove to be the extinction of the Society. He had no idea that the Society was an inferior body; he thought it had an honourable history, and might hold up its head side by side even with the College of Physicians. They had been told that, if the Medical Council did not act in the matter, the Privy Council would do so, and give them a slap in the face. He had no such view as that. He did not know what the Privy Council would do, but he thought that the opinion of the majority of the Medical Council in such a matter was far superior to that of the Privy Council. Dr. Struthers, in quoting authorities on the subject, had not referred to certain opinions that had been expressed in the medical journals. He was not revealing a secret when he stated that he had attended meeting after meeting, at which the editors of the

Lancet and the BRITISH MEDICAL JOURNAL were present, combining to extinguish the Society of Apothecaries. What had caused the difference? Those gentlemen were then enthusiastic against the existence of the Apothecaries' Society, but now! They had heard from Mr. Simon a good deal about the intention of the Legislature in passing the Act. That, however, was mere idle talk. The intention of the Legislature was to be gathered from the Bill itself, and not from anything else. He (Dr. Duncan) had gone to the highest authorities accessible in the College of Physicians, with which he was connected, and had learned that it was the intention that the Apothecaries' Society should be extinguished if the Medical Council thought fit. Reference had been made to medical practice over the counter for poor people, which it was said was a very dreadful thing. He (Dr. Duncan) did not think so. It was useless to attempt to put the poor man on a level with the rich. For a cut finger or a trifling sore-throat, and many of the ills for which medical men received their guineas, over-the-counter practice did very well. But what was counter practice? They had already heard that tonics were given without any inquiries at the Apothecaries' Hall of London. He considered that to be over-counter practice. The very body that they were asked to defend was engaged in that practice, and had given Dr. Struthers a good deal of medicine for 3s. 2d. without even asking the symptoms.

Dr. STRUTHERS said he mentioned the particular tonic he required.

Dr. DUNCAN said that Mr. Wheelhouse had remarked that in the wretched dispensaries, which he thought a disgrace to the profession, the persons practising were physicians and surgeons. Those were the very men who were permitted to assume those titles under the regulations of the Medical Council, and surely there could be no objection to giving for a few pence medicine and advice to the poor. For ordinary little ailments, whether of men, women, or children, he thought that the counter-practitioners were very good men, and he had no wish to stop them. The same thing went on in the Apothecaries' Hall and in every shop in London. A lady might go into any shop and say she was faint, and ask for something to take. He had never heard any objection to that kind of practice, and he did not think it was objectionable. He had much more respect for the man who went and paid for his medicine than he had for one who went to a charity dispensary, and got his medicine and advice for nothing. On the discussion at the College of Physicians, a weighty argument was brought forward by Sir William Jenner against the Society of Apothecaries. He pointed out that the Society differed from all other licensing bodies in not being able to provide examiners out of its own body. All other licensing bodies were not only able to appoint examiners from among themselves, but they could go behind the examiners and judge of their examinations; but the Society of Apothecaries possessed no such power. He had great respect for the Society, and he had hoped that a *via media* might be discovered by which it might be combined with the other two Colleges and thus be saved from extinction.

Dr. BRUCE said he considered that Mr. Simon's argument with regard to the words of Clause 14 was unanswerable. He was not now an advocate for the one-portal system, believing that if it were carried out it would lead to a dull uniformity. If it had been the intention of the College of Physicians when the Act was being passed to extinguish the Society of Apothecaries, that view should have been frankly declared in order that the Society might take more decided steps in the matter.

The debate was then adjourned.

Thursday, May 12th.

Sir H. W. Acland.—An address to Sir Henry W. Acland was adopted.

Examiners in Surgery for the Apothecaries' Society.—The debate on Mr. Carter's motion was resumed by Professor HUMPHRY, who spoke in favour of the motion, and was followed by Sir WILLIAM GULL, who argued that the Council had a discretion.—Mr. R. MACNAMARA contended that the Act of 1886 had itself disfranchised the Apothecaries' Society.—Dr. GLOVER found in the attitude of the Colleges at the present moment an additional reason for granting the prayer of the Apothecaries' Society.—Dr. CHAMBERS supported the motion.—Dr. MCVAIL thought there was nothing in the Act to show that Parliament intended to extinguish the Apothecaries' Society.—Dr. KIDD agreed that by appointing examiners the Council made itself responsible for the examinations, and questioned whether this responsibility ought to be accepted.—Dr. HERON WATSON supported the motion, and Dr. A. SMITH spoke in favour of the amendment.—Mr. BRUDENELL CARTER briefly replied to some of the arguments used. The Council then divided, the numbers being: for the amendment, 9, against, 19; majority, 10. One member did not vote; two were absent. The debate was then adjourned.

[A fuller report will appear in our next issue.]

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 14th, 1887.

THE MEETING OF THE GENERAL MEDICAL COUNCIL.

FOR the second time this year, and the third time within six months, the General Medical Council has met in solemn conclave. It is not often that its meetings are as frequent or the subjects discussed as important as they have been during the past few months. Important matters, the settlement of which has been postponed as long as and even longer than was consistent with the best results, have now to be finally adjudicated upon, and the Council is called upon to assume the responsibility incidental to its powers and prerogatives.

One or two important matters had to be attended to before the chief subject was reached. One was to hear the farewell address of the retiring President, Sir Henry Acland, whose courtesy and tact during his many years of office have so often thrown oil upon troubled waters, and enabled the Council to fulfil its duties with some approach to order and usefulness. As this speech appears elsewhere in our columns, it is unnecessary to allude to it further than to say that it offered an admirable summary of the circumstances which have given rise to the present unsatisfactory condition of things. A more pleasing duty, and one which formed an agreeable termination to his official career as President of the Council and to his farewell address, consisted in proposing a humble address to Her Majesty on the occasion of her Jubilee. This naturally gave rise to no discussion, and was agreed to by acclamation.

The first intimation that delicate ground was being approached was given on Mr. Marshall's motion to receive and enter on the minutes various communications in regard to the question of the Conjoint Examining Boards in England and Ireland. Dr. Kidd forthwith took exception to certain statements made by the Apothecaries' Hall of Ireland, which, he maintained, were inaccurate and inconsistent with certain other communications. The moment, however, was inopportune, and the sword had to be returned bloodless to its sheath, seeing that no cognisance could be taken of documents not yet officially received. There was then a little interlude, when the President formally tendered his resignation of his office, and, having taken leave of the Council, left the room. His place having been temporarily taken by Dr. Quain, a formal vote of thanks was voted to him for his services, and a committee was appointed to frame a short address to that effect. Mr. Macnamara wished the address to be illuminated to an extent commensurate with the regret which the retirement of the President had caused; but, from motives which it does not fall within our competence to discuss, it was resolved to dispense with the illumination.

The next step was the election of a President, who, for the first time, was required to be selected from among the members of Council. This was conducted with closed doors. The deliberation was not of long duration, and resulted in the choice of Mr. Marshall, whose experience and ability as Chairman of the Business Committee rendered him peculiarly suited to fill the difficult post of President of an assembly consisting of such a curious agglomeration of rival and often discordant units.

This important detail having been settled to the satisfaction of the Council, some vacancies were filled on the Executive Committee. Mr. Wheelhouse was elected Chairman of the Business Committee, a satisfactory endorsement by the Council of the judicious selection by the profession of its direct representatives. No less than six out of thirty voting-papers were stultified by being improperly filled in.

Mr. Wheelhouse then proposed that the statement of the degrees, diplomas, and licences of the candidates for commissions in the Medical Staff of the army be received and entered in the minutes. Thereupon Dr. McVail rose to call attention to some figures in the table which, though certainly of interest, did not appear to have been noticed before. His remarks practically amounted to an indictment of the mode in which the examinations were carried out, and he suggested that the department should be appealed to to furnish information as to the reason why the holders of London diplomas were so much more successful than the diplomates and degree-holders of other schools. The subject, as we have already observed, merits attention, but the Council was indisposed to risk any criticisms, and negatived the proposal to ask for information on the subject. Several members of Council appeared to be totally unaware of the fact that commissions are awarded according to the number of marks obtained by candidates, and on the whole they did wisely to leave such observations as would be suggested by the statistics to be made by the bodies who might feel themselves aggrieved.

The reading of the letter from the Lord President of the Privy Council in reference to the proposed postponement of the "appointed day" for the Act of 1886 to come into force gave rise to a sharp discussion, but, as might have been foreseen, it was resolved to advise the postponement until June 30th.

After this preliminary business had been disposed of, the representative of the Society of Apothecaries moved his resolution for the appointment of examiners to the Society under the provisions of the Medical Act of 1886. In the original motion the number and names of the proposed examiners were given, but it was decided to take the question of principle first. He dwelt on the excellent service rendered by the Society in the past, and called upon the Council to discharge what he described as a "statutory obligation," any default in which, he felt assured, would be promptly remedied by the Privy Council. To the objection to competition he replied by pointing out that the College of Physicians had begun the competition by creating the class of Licentiates, and now desired a monopoly. Strangely enough the argument was mainly legal.

On Wednesday, the discussion was continued by Sir Dyce Duckworth who, in his double capacity as the representative of the Royal College of Physicians and as a member of the Council, expressed his hearty concurrence in Dr. Struthers's amendment. Dr. Struthers, in a comminatory speech lasting over an hour and a half, reviewed the history of the Apothecaries' Society which, he concluded, was quite unworthy to continue to exist as a licensing body. He sneered at its origin and history, he condemned its policy, and wound up his remarks by characterising it as an institution which was nothing more or less than an ordinary retail drug store.

Sir Walter Foster took up the case on behalf of the Society of Apothecaries. He vigorously defended the claim of the class of general practitioners and the usefulness of the Apothecaries' Society, and, while regretting the fact that it had not been assimilated by the Colleges, expressed a strong opinion as to the justice of the claim advanced on its behalf. Mr. Wheelhouse spoke to the same effect, and was followed by Mr. Mitchell Banks, who was evidently of opinion that it was desirable that the Council should, by refusing to appoint examiners, do its best to procure its extinction. Dr. Leishman and Dr. Haughton announced their intention to vote in favour of the demand made by the Apothecaries' Society, and Mr. Simon drew a vivid picture of the position in which the Council would place itself by refusing to comply with what he considered to be an undoubted obligation, the words "if they think fit" contained in the Act, notwithstanding. The debate was then adjourned until Thursday.

The adjourned discussion was resumed on Thursday by Professor Humphry, who made a very cogent speech in favour of appointing examiners. He urged that the arguments hitherto advanced against the continuance of the Society were illogical and absurd. The only ground which could justify the Council in refusing its sanction would be proof of the inability of the Society to conduct an examination successfully. Even then, however, the objection would be inopportune, since any defect, if existent, ought long since to have been complained of. He asked why the habit of dispensing should have been more conducive to homœopathy than the prescriptions given by physicians? The Apothecaries' Company of Dublin argued that in no Act of Parliament is the system of dispensing medicines, or even keeping open shops, condemned, which he construed to mean a tacit approval of such practices.

While Sir William Gull fulminated against the idea that no discretion was left to the Council in the matter, he indignantly asserted his right and his intention to exercise such discretion, and declared that no Government would dare to go behind the exercise of a discretion which they had undoubtedly conferred on the Council. He declaimed with vigour against the degrading habit of giving drugs for all complaints, from a broken leg upwards, and expressed the hope that in this Jubilee year the medical profession would be set free from the trammels and prejudices of a former age. Dr. Quain ridiculed the doctrine of "physiological physic," and proclaimed his faith in the use of drugs in the treatment of disease. Dr. Glover challenged Sir William Gull's conclusions, and Dr. McVail protested against the imputation that the continuance of the Apothecaries' Society would flood the country with an inferior class of practitioners, the Act having placed on the Council the responsibility of maintaining the standard and efficiency of the examination. He announced that when it came to appointing the examiners, he should insist on their being nominated exclusively by the General Medical Council, so as to make the examination entirely independent of the Society. This new and extended interpretation of the Act opens up a new prospect, and evidently came with all the attraction of novelty to the minds of many of the members.

The oft-repeated expressions of opinion on the part of the Council as to the undesirability of competition could not fail to be contrasted

with the course which it is now proposed to adopt, and this Dr. Kidd did; but the later speakers in the debate did not disguise their anticipation of the result, and Mr. B. Carter's reply was, therefore, somewhat analogous to the triumphal return of the victorious athlete. In a humorous speech, interspersed with anecdotes, he controverted the positions taken up by various speakers, and by argument and sarcasm attacked their conclusions. He claimed that, if the Apothecaries' Society were put out of the field, the Scotch corporations would reap the advantage, and he accounted in this way for Dr. Struthers's energy in the matter. Dr. Struthers's amendment to refer the matter to the Privy Council was then put to the vote, and negatived by 19 to 9; so that the main principle was decided, although the resolution proposed by the representative of the Apothecaries' Society could not be put before the time for adjournment came, owing to a technical difficulty with regard to a resolution standing in the name of Mr. R. Macnamara.

THE FINANCIAL VALUE OF SANITARY SCIENCE.

THE "Financial Value of Sanitary Science" formed the text for an able address given by that veteran worker in sanitary science, Mr. Edwin Chadwick, at the annual meeting of the Association of Public Sanitary Inspectors last week, and no man probably ever had more qualifications for the task, or could speak from such experience and with great authority as this esteemed President of the Association of Public Inspectors. As complementary to the recent Parliamentary Budget, he submitted by way of example for the "health of nations" the financial value of properly qualified sanitary science. First referring to the amounts of money charged upon the community arising from the excessive sickness and mortality which had been proved to be preventable by sound sanitation, he said some approach might be made to estimate the amount of those charges from the ascertained incomes of the life-insurance companies, which perhaps did not comprise more than two-thirds of the population. There were some ninety-three of these companies, comprising almost exclusively middle-class persons, of which companies the annual income was stated to be £23,000,000. There were also the great friendly societies of all sorts, whose aggregate insurance charges, as stated upon the authority of Sir James Paget, were £25,000,000 annually; the two yielded a total of £48,000,000 annually, three times the amount of the poor rates. And if they could ascertain the full number of the uninsured, he expected that the whole would double the total Budget for both the army and the navy, which was stated to be £32,000,000. Thus they had an annual invasion of an enemy, in the form of preventable disease, which every year fought and won a battle against the community, and every year slew in the United Kingdom upwards of 100,000 of the people beyond the present reduced death-rate, all of whom they knew and had proved might have been saved by more efficient sanitation, and at a saving of double the annual cost of the naval and military defences. Of the loss for the killed and wounded—that was to say, for 100,000 deaths of the wage-classes—for every death of an adult there were found to be twenty cases of painful sickness and of disablement and loss of work. The total estimated pecuniary loss for the killed and wounded in civil life might be estimated as exceeding by two-thirds the estimates voted by Parliament for the governmental expenditure of the empire. Even in this metropolis, said Mr. Chadwick, the lowest death-rate place of any capital of the chief States of Europe, or of New York or of any other great city in the United States, we have shown by what had been done by partial application of sanitary defences, ther were upwards of 20,000 killed and wounded annually which efficient sanitary defences might have saved. All this excessive loss of life as well as of money, when examined, would be found to be due to wastefulness in legislation and administration. The only effective preventive would be found to be in the superior economy of tested and corrected sanitary science. In the metropolis the executive functions were generally carried out under inadequate instructions as to the qualifications required, and without securities that those instructions were duly applied for the protection of the public. In their ill-informed or uninformed condition these local bodies, the vestries, were generally positively unaware of the need of the undivided attention required for sanitary service, and they gave such low salaries as often to leave the chief local health-officers under the necessity of making up their income by private practice—that was to say, curative practice—the difference between curative practice and preventive practice in the new science of sanitation not being perceived by them. A revision and consolidation of preventive functions, now scattered over different and weak departments, and systematised under one department and under unity, with an executive board under the supervision of a Minister of Health, would be found on examination to be necessary for the pecuniary relief of the population from the greatest and most grievous of its burdens, as well as for the advancement of its health and strength and the happiness of its existence. It was due to state that with all the shortcomings of defective local administration, the advances made in sanitary improvements during the reign of Her Majesty had been greater than in any country in any of the great States.

In France they had only got a centralisation against the people chiefly for military levies, and they were now only making slow progress with centralisation for the people in their places of work, for the protection of the people in their habitations, and for their protection against tyranny in the productive freedom of service. In France the death-rate was 3 in the 1,000 more than in England, which meant that there was a preventable slaughter there of 112,000 lives more than there was now in England. In Germany the mortality of the army was the lowest in Europe, and there was much to say in the way of example of the economies wrought by it; but under the municipal government the death-rate of the civil population in Germany was very high; it was 6 in the 1,000 higher than in England, which meant a sacrifice of 135,000 more than were now annually sacrificed in this country. In Italy the death-rate was 8 in the 1,000 higher, which implied a sacrifice of 224,000 lives to the wastefulness of ignorance there. In Austria the devastation was still greater even than that; it was no less than 11 in the 1,000 above our death-rate, which occasioned a loss in that empire of upwards of 400,000 more than the present rate in England and Wales. But the death-rate of the army in Russia was three times greater than of the army in Germany; and the death-rate of the civil population, as described by the Registrar-General of France, was still more terrible. To an international arbitration a decisive case could be made out against the extension of such bad government over any population. These were examples of the wastefulness of ignorance and sloth against the economies of well-applied sanitary science. In the United Kingdom the mean duration of life had been advanced during the reign of Her Majesty from thirty to thirty-eight years, leaving a further equivalent advance dependen

on the advance of a more economical sanitary organisation of paid service.

In concluding his able address Mr. Chadwick asked his hearers to accept it as true from one who had seen eighty-six summers that theirs was as good a work as the sun ever shone upon; and that, long before another eighty-six summers should have passed away, it would be recognised as work which deserved the fullest recognition and the most liberal reward, if it were carried out—as he was sure it would be—in the spirit as in the letter, faithfully, vigorously, hopefully, manfully.

THE STANDARD OF VISION FOR THE ARMY.

We recently called attention to an important statement, signed by several of the leading ophthalmic surgeons of London, regarding the unsatisfactory nature of the conditions laid down for testing the vision of candidates for commissions in the army. The facts mentioned in the paper were embodied in the form of a memorial addressed to the authorities at the War Office, and entrusted for conveyance to its destination to the care of Sir Guyer Hunter, M.P., who had previously called attention to the subject of eyesight in the army on several occasions in the House of Commons. The statement alluded to sets forth that the directions given in the military regulations for ascertaining the fitness of a candidate for admission into the army, so far as a standard of vision is concerned, are so loose and indefinite, that no ophthalmic surgeon or oculist can gather from them the necessary information or data for working out a satisfactory reply to a parent or guardian, when he seeks an opinion on the visual fitness of a youth for military employment. The course of a boy's studies, and the judiciousness of incurring a considerable outlay of money in his education, may depend upon a decision as to the quality of his eyesight fitting or unfitting him for embracing a military career, but no safe conclusion on the subject can be arrived at, owing to the want of precision in the description of the standard of visual acuteness which is required by the authorities who rule in such matters. The military regulations order that a candidate shall be "able to read ordinary type, distinguish the principal colours, and perform routine duties without glasses, but for other purposes the use of glasses may be permitted." A very little consideration suffices to show that regulations couched in these terms involve a number of questions which must be solved before they can be practically applied with any satisfactory result. "Ordinary type" varies very greatly in dimensions; what sized type is referred to in the regulations, and at what distance is the candidate to read it? What are the duties understood by "routine duties" which the candidate is to be able to perform without glasses, and what are the "other purposes" for which the use of glasses may be permitted? Without a knowledge of the dimensions of the objects that have to be dealt with under the circumstances named, the distances at which they are placed, and the conditions as to light and other matters which influence vision, how is the quality of sight contemplated in the regulations to be determined either with or without the aid of glasses? We cannot be surprised at the disappointment of ophthalmic surgeons who, when they are required to state how far some ametropic visual defect may incapacitate the subject of it for obtaining a military appointment, only find, on turning to the military rules for assistance, such uncertain visual qualifications laid down for their guidance. A short time ago the rules issued under the sanction of the Government of India for determining the visual fitness of candidates for appointments in the various branches of the Indian service, which had been framed by Sir J. Fayrer, with the assistance of Messrs. C. N. Macnamara and J. Couper, were noticed in our columns. These rules were laid down with sufficient precision to enable an oculist to determine the fitness of a candidate for any particular situation in the Indian service which he might desire to obtain, and there seems to be no sufficient reason why an equally fixed visual standard, and equally plain directions, should not be laid down for appointments in the army. There may be some physical defects, or combinations of defects, only incapacitating for service when they exceed limits which it may be difficult to define in writing, where a special knowledge and experience of the requirements of military service may be necessary for deciding upon the fitness or unfitness of a candidate; although we believe that every disabling defect might be so specified as to enable any intelligent medical practitioner to act upon the information and to apply it in the examination of a candidate; but certainly no such special knowledge or experience is required as regards visual defects. The standard of vision, whatever standard may be resolved upon, which is thought necessary to fit a candidate for military service, and the absence of which is to render a candidate unfit for such service, may be easily expressed in writing with such mathematical accuracy that no mistake regarding its meaning or its practical application could occur to anyone acquainted with the subject of optical examinations. It is not, however, merely for the guidance and advantage of ophthalmic surgeons, it seems to us, that the precise standard of vision which renders a candidate eligible for occupation in the army ought to be made clear. It is necessary for the welfare of the army itself, if the quality of eyesight of the officers in it is really a matter of importance as regards their efficiency, about which we imagine no doubt can exist, and it is also necessary in the interests of justice, so that all candidates for commissions in the army may be treated alike, and, so far as visual qualifications are concerned, on principles that can be universally understood.

We understand that the report of the Commission on Hydrophobia has been prepared, and will shortly be issued.

The workrooms at the College of Surgeons are already being cleared, preparatory to their reconstruction on a larger and improved scale.

Dr. Graily Hewitt has been appointed a Vice-President of the Gynæcological Section of the International Medical Congress, to be held at Washington this autumn.

We understand that the new and commodious physiological laboratories just completed at St. George's Hospital Medical School will be opened on Wednesday, May 18th, at 3 P.M. An address will be delivered on the occasion by Mr. George D. Pollock, consulting surgeon to the hospital.

RABID AND STRAY DOGS.

From an official police-return it is seen that the number of stray dogs taken by the police to the Dogs' Home during the month of April was 1,043; 10 were killed in the streets as mad or ferocious, and 1 was suspected of having died mad. The number certified by veterinary surgeons as rabid was 5. Forty-seven private persons are said to have been bitten during the month by dogs not suspected of being mad. This return shows an increase in the number of rabid dogs, the number of deaths of which were, in March, 1, and in February, 2.

THE ROYAL MEDICAL BENEVOLENT COLLEGE.

At the annual meeting of the Royal Medical Benevolent College, which will be held on May 26th, at 4 P.M., a number of alterations in the by-laws will be proposed. The full text of the modifications will be found in our advertisement columns.

METROPOLITAN COUNTIES BRANCH.

The President and Council of this Branch of the British Medical Association have issued cards for a *conversazione* to be given at the South Kensington Museum on Thursday, May 26th, at 8 P.M.

SEWAGE AT PORTSMOUTH.

The sewage-works which have been carried out at Portsmouth under the direction of Sir Frederick Bramwell, at a cost of nearly £150,000, were formally inaugurated on Monday last in the presence of a representative company, comprising several scientific authorities of national reputation. They are said to mark a new era in the science of sewage.

PASTEURISM IN RUSSIA.

In Russia the belief in M. Pasteur's treatment for hydrophobia remains unshaken. The Kharkov Medical Society has just established a station where the method will be fully carried out. Drs. Motte and Protopopoff, two members of the Society, have been appointed managers of the institution.

PORRO'S OPERATION.

This modern modification of, or addition to, the old operation known as the Cæsarean section, was performed by Sir Spencer Wells in London on Wednesday morning, May 11th, on a patient of Mr. Scattergood's, of Leeds, who was present at the operation. Mother and child were both going on well twenty-four hours after operation. The uterus, both ovaries, and a fibroma weighing 9 lbs., which had rendered delivery *per vias naturales* impossible, were all removed. We hope to publish a full report of the case in a future number.

OWENS COLLEGE, MANCHESTER.

The summer session at Owens College commenced on May 2nd, and, notwithstanding all the festivities in connection with the visit of the Prince of Wales to open the Exhibition, there was practically no loss of time in connection with the medical classes. Owens College sent up an unusually large number of candidates to the examinations of the London Colleges, and a very large proportion of those who presented themselves for examination passed in anatomy and physiology. This is eminently satisfactory, as no test-examinations of any kind are held by Owens College with a view to keep back those candidates who might swell the percentage of rejections.

EUCALYPTUS HONEY.

M. Thomas Caraman, on the strength of his own observations, believes that eucalyptus honey is destined to render great services in cases of laryngeal, bronchial, pulmonary, cardiac and scrofulous affections; in typhoid and marsh fevers; in whooping-cough or infectious neurosis of the expiratory nerves; in influenza, in renal and vaginal affections, and affections of the bladder. Given in milk, or spread upon bread, eucalyptus-honey may be substituted with advantage for cod-liver oil as an alimentary substance.

DEATH OF MR. T. A. EVANS.

The death of Mr. T. A. Evans, the medical officer of health for the borough of Flint, through typhus fever, contracted in the performance of his professional duties, has caused a deep feeling of regret in the town and district in which he practised. At a meeting of the Town Council, on May 5th, the Deputy-Mayor, in making an allusion to his death, observed that he was quite sure the sympathy of the Council and of the whole of the town would be with him when he said that not only had they lost a good officer, but many of them a personal friend. A resolution was passed by the Council recording its sense of the loss which it had sustained by the death of its medical officer, and the expression of its sympathy with the wife and family in their bereavement.

EXPENSIVE ANALYSTS.

The Spanish Government is being urged to establish an Institute of Chemico-Legal Investigations in Cuba, where it seems the system at present in vogue is that, when a chemical analysis is required, a judicial functionary orders it to be carried out by a so-called expert, who is, as a rule, a pharmaceutical chemist. These "experts" are said to charge the Treasury high fees, and to do the work in a very unreliable manner—in some cases from incompetence, and in others from venality. At all events, the amount of the fees in the Section of Pharmacy for these examinations was, for the year ending November, 1886, no less than 89,974 dollars, and it is stated that the amount annually expended by the Public Treasury for this purpose is rapidly increasing, so that it is no wonder, even if economy alone were the motive, that an outcry is being raised in Cuba for a better system. An efficient Institute can, it is thought, be established and maintained to do all the work for about 1,200 dollars.

BEER OR SPIRITS.

From the quarterly report of the National Bureau of Statistics for the United States, it is shown that the expenditure of the United States population on spirits and malt liquors, irrespective of wines, was, in 1886, 700,000,000 dollars, or about 140,000,000 pounds sterling. It is further stated that only one-tenth of the distilled spirits is used for medicine and manufactures, the remaining nine-tenths being taken as beverages. It is pointed out that the aggregate consumption of alcohol, notwithstanding the diminished use of distilled sprits in particular, shows that the activity of the "prohibition" agitation has been accompanied by the collateral condition, or net result, of an immense increase in the national resort to wines and malt liquors. This state of affairs is not without encouraging aspects, but it cannot afford much cheer to those who are looking for the total suppression of the liquor traffic by means of legal compulsion.

TESTIMONIAL TO MR. FURNEAUX JORDAN.

At a meeting held in Birmingham on Thursday afternoon, which was attended by Sir James Sawyer, the Mayor of Wolverhampton, and a large number of the practitioners of Birmingham and the Midlands, a testimonial was presented to Mr. Furneaux Jordan, on the occasion of his retirement from the surgical staff of the Queen's Hospital, Birmingham. The presentation took the shape of two large photographs of Mr. Jordan, one to be hung in the hospital with which he has been identified for thirty years, and the other in the Birmingham Medical Institute; and also a collection of the works of Macaulay, Spencer, Lecky, and a cheque for £217. Councillor Wilders made the presentation, and alluded to Mr. Jordan's high position in the profession as one of the principals of the Birmingham School, and a teacher whose pupils were to be found in every important town in England. Mr. Jordan said he had been impelled to retire by a knowledge that he could not enjoy any kind of health if he remained at his post. He urged his brethren to consider whether it was worth while dying in harness; he did not think it was. Mr. Jordan's name will still be connected with the Hospital staff as consulting surgeon.

PROFESSIONAL INTERESTS.

A case was recently decided in France, the result of which shows how much keener an appreciation law takes of professional interests in France than in our own country. A journal, the *Echo de l'Est*, had thought fit to announce to its readers that Dr. Bernard, of Thiancourt, had just performed a surgical operation, in consequence of which the patient had succumbed. Dr. Bernard immediately brought an action against the journal for libel, inasmuch as it was inferred that the death of the patient was attributable to the operation. The Court of First Instance of Bar-le-Duc, looking at the

matter as one of public interest, authorised the incriminated journal to substantiate the allegation. On appeal, however, the court at Nancy quashed the decision of the other court, and declined to allow the journal to plead, declaring the allegations to be groundless, adding, moreover, that, "inasmuch as they were based on a fact of an essentially private nature, altogether outside public discussion, and quite independent of journalistic criticism," the journal was not warranted in making any such statement, and was condemned to pay 10,000 francs damages to the practitioner whose reputation had been assailed. It is quite refreshing in these degenerate days to see that, in one country at any rate, the reputation of a medical man is recognised as having an appreciable value. The interesting feature of the case, however, lies in the decision of the tribunal that such cases are beyond the competence of a newspaper to criticize, and are, in any event, of an essentially private nature. It would be a great boon if such a sentiment could be imported into this country. A few decisions like this would doubtless have a salutary effect in checking the by no means disinterested curiosity of scandal-mongers, who appear to consider themselves competent and at liberty to comment upon both the malady and the treatment, to the annoyance of the patient and the discomfort, and even damage, of the medical attendant.

THE CONSULTING-ROOM.

Dr. Dubray has recently published some instructive and amusing advice to a beginner in the profession (*Conseils à un Débutant*). The rules about the door-plate, necessary in the provinces, but not considered correct in Paris, concern French practitioners only. Dr. Dubray distinguishes four kinds of consulting-room: the unpretentious, the surgical, the artistic, and the encyclopædic varieties. They are not peculiar to France. In the unpretentious consulting-room the furniture is plain, the book-cases small, and there are just sufficient tables and chairs to allow the patient to sit down and the medical man to write a prescription. The surgical consulting-room presents instruments and appliances scattered about in an apparently artless manner. "Except in the case of a great and celebrated surgeon of admitted renown, an exhibition of this kind is in bad taste," but the exception itself is, we think, barely admissible. Complete abstention from parade of instruments is the best rule. It is not advisable to leave hypodermic syringes about the table, with specula serving as paper-weights. These instruments should not, any more than the herbalist's tape-worms and fœtuses in spirits of wine, be made into advertising agents. Even the gynæcological couch should be kept in a corner, and not placed well in the light, displaying a good supply of steps and elevating mechanisms. Such practices savour too much of the crocodile which hung from the ceiling of the alchemist's laboratory. The term artistic consulting-room, as used by Dr. Dubray, is not quite so innocent in significance as it appears. The objects of art are mostly votive offerings of grateful patients, including not only goblets, clocks, and bronzes, but also photographs, with autographs and expressions of gratitude contributed by patients who are distinguished public characters. Were the writer an Englishman speaking of British practitioners, he would add two other examples of art, one of a highly questionable type, the second unquestionably honourable, ornamental, and legitimate. We refer in the first case to framed and glazed diplomas, honorary certificates of proficiency in anatomy, and similar productions which can hardly be classed amongst either literary or artistic ornaments. The second essentially English type of what we may call personal art includes prize cups and other testimonies of the athletic prowess which distinguished the practitioner in the days of his youth. Dr. Dubray rightly condemns an obtrusive display of patients' presents. In the encyclopædic consulting-room, instead of scientific or artistic neatness the most admired confusion prevails. The tables are strewn with books, pamphlets, and journals, and sheets of manuscript scattered over the ground testify to the literary activity of the practitioner. Dr. Dubray recommends a happy medium. A few artistic adornments, a small library but not too many books, and no instruments out of their cases should be the essential features of a consulting-room after the most important matter—the arrangement of the writing-table and the chairs in such a position that the patient can sit comfortably in a good light during the consultation.

THE STUDY OF ANATOMY.

In all ages the medical practitioner has been expected to have made himself more or less familiar with the normal structure and arrangement of the human body, and to have some idea of the functions of the various organs. When the knowledge on such subjects was small and erroneous, they were studied in common, and the prevailing notions of function were reflected in the anatomical descriptions and nomenclature. The first real progress in medicine dates from the time when anatomy was undertaken in earnest and observation took the place of idle theories. The investigation of function has become a separate and, to some extent, an independent science, and the process of subdivision is still going on. Since the scientific bearing of anatomy can only be properly appreciated by comparisons with other forms of development, the study of the anatomy of animals has been added, though, so far, to a limited and imperfect extent. An acquaintance with human anatomy is obviously at the root of all genuine medical practice, but it has a special and peculiar importance in surgery. The knowledge required by the surgeon refers more to the gross anatomy, it is true, and for that reason some very indifferent anatomists have shown themselves to be bold and successful surgeons. The method of teaching anatomy in our medical schools is almost exclusively arranged to meet surgical requirements, and in very few instances is any attempt made to raise its study above the dead level of a list of facts. Anatomy is really a science, but only on condition of being taught and learnt in a scientific manner and in accordance with scientific methods. The restriction of the study of anatomy to that of man is largely responsible for its present condition of a dry and arid labour, wherein the relative positions and names have to be committed to memory, unrelieved by any intellectual interest and unexplained by analogy. It is principally for the purpose of remedying that state of things that some gentlemen who have the interests of anatomical study at heart have founded an Anatomical Society, which will have for its object the study of human anatomy, together with that of animals so far as it throws light on that of man. This latter restriction is sufficiently elastic to allow of the adhesion of comparative anatomists, while it will at the same time prevent too much discursiveness in the papers. The scope of the Society will also include human embryology and histology. It is a matter for surprise that such a Society has not been founded earlier, and if the Society succeeds in investing the study of anatomy with the normal and proper attributes of the other natural sciences, it will have rendered good service to the subject and to the profession of the future.

A NOVEL DISPUTE.

A curious dispute took place at an inquest at Attenham, near Ipswich, last week, in consequence of the determination of the coroner (Mr. Vulliamy) to exclude reporters. They refused to leave, and had to be removed by force. The jury then refused to proceed with the inquiry in the absence of the representatives of the press, and the inquest was therefore adjourned for a week. The coroner urged that his action was dictated by a desire to withhold certain evidence from the public in the interests of morality; but the jury adhered to their resolution. We do not remember such a point to have arisen before; but it brings the question of the desirability of secret proceedings well to the front. We are, of course, ignorant of the particular circumstances which led the coroner to act as he has done; but, so far as we are enabled to form an opinion, the case would not appear to be of such a nature as to justify so unusual a measure. The deceased, a young girl, is suspected of having made away with herself because she had been seduced and deserted. In such a

case it is practically impossible to keep the details secret, and it would probably have been better to appeal to the representatives of the press to omit or modify any part of the evidence which, in the coroner's opinion, it might have been undesirable to publish. The course of justice has been seriously interfered with, and a very delicate and painful case has been made public in a way and under circumstances which cannot fail to be distressing to many of the parties concerned.

HOSPITAL SCANDAL IN VIENNA.

SOME questions were asked at the sitting of the Austrian Reichsrath, on Saturday last, by a Herr Pernerstorfer, which reflected seriously on the management of the Vienna Allgemeines Krankenhaus, which is the largest hospital in Austria, and one of the largest in Europe, containing, as it does, over 2,000 beds. The charges, though denied in the first instance, are said to have been proved to be substantially correct. The complaints bore principally on the defective commissariat arrangements. This is reported to be at all times unwholesome and scanty, and the patients are alleged to have been kept for days without any food at all. In the whole establishment there is but one bath, and the nurses, of whom 219 are women and 19 men, are accused of having practised systematic extortion on the wretched patients, and to have ill-treated those who were unable or unwilling to pay. The Government promised to make a searching inquiry into the system of management, with the object of remedying whatever might be defective. We sincerely trust that on investigation these serious charges will be disproved, or, at any rate, found to have been grossly exaggerated. The possibility of such charges, however, shows how necessary is a proper supervision of such institutions, more particularly when under Government or municipal control.

SPECIALISM IN EXCELSIS.

YET another society of specialists has been founded in New York, under the title of the Association of Genito-Urinary Surgeons, and it will hold its first annual meeting on May 17th and 18th. It would appear that, like the American Ophthalmological Society and other kindred institutions, the new Society will not hold monthly or other regular meetings throughout the year, but will have an annual session of two or more days' duration. Dr. Edward L. Keyes and Dr. Robert W. Taylor have respectively accepted the office of temporary chairman and temporary secretary, whilst amongst those who have intimated their willingness to share in the work of the Society, we notice the names of Dr. S. W. Gross, Dr. J. H. Brinton, Dr. F. N. Otis, Dr. J. N. Hyde, and many others of equal renown. A goodly number of papers have been promised, and it is evident that at its inaugural meetings, at any rate, there will be no lack of business, but the subject does not appear to us to afford sufficient scope for a separate society, and we hope that no attempt will be made to found a similar society on this side of the water. Further sub-divisions of the subject may be feared—for instance, the separation of the "genito" from the "urinary," and the division of the latter into bladder and urethral sections, until finally we should have a separate society to watch over each of the different named portions of the urethra.

TRANSPLANTATION OF A RABBIT'S EYE INTO THE HUMAN ORBIT.

SOME time ago the medical world was startled by the announcement that Dr. Bradford, of the United States of America, had succeeded in transplanting the entire eye of a rabbit into a human orbit immediately after enucleation, and that the eye had retained its vitality up to the date of publication—about two months. The operation had been performed in four other instances without success. At the time we expressed our conviction that although the possibility of, at any rate, a temporary success had been demonstrated, yet the risk of immediate or ultimate failure was enormous, and that the operation, even if successful, had no practical value. Since then, Dr. May, of New York, has made a very large number of experiments on rabbits, in order to ascertain the most efficient mode of operating. In this he believed that he had succeeded, and in his last six operations on rabbits the transplanted organ maintained its vitality up to ten weeks, after which the observations were discontinued. From these experiments Dr. May had learnt the best kind of eye to select, and the best mode of operating, and considered that he was then in a position to perform it upon the human subject. The patient selected was a young and healthy male, aged 17, and the operation was performed *secundum artem*, without any complications; but the result was a complete failure. Thus, out of six cases, only one can be said to have succeeded at all, and as it is stated that no information can be obtained as to the later result in this case, it seems more than probable that it also has failed. It is to be hoped that this is the last that we shall hear of an operation which, in our opinion, should never have been introduced.

ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS.

AT a meeting of the Committee of this Association, on Saturday, April 23rd, it was decided that a letter should be despatched to the President of the College, requesting him and the Council to convene a general meeting of Fellows and Members to consider and discuss the proposed draft charter about to be presented to the Privy Council. It was further decided that the Council of the College be requested to sanction the issue of copies of the proposed new charter to any Fellow or Member who may apply for them. The Committee further decided that a letter be addressed to the Lord President of the Privy Council, stating that since the receipt of a former letter in reply to a communication addressed by the Association of Fellows to the Privy Council, the Council of the College has publicly announced that it is taking the necessary steps to submit the proposed new charter to the Privy Council. On behalf, therefore, of the Association of Fellows, its Committee requests that the proposed new charter be not approved by the Privy Council until that Association has had an opportunity of expressing its objections to the charter by means of a deputation. It was agreed that the deputation which should represent the Association should consist of the Committee and of any other members of the Association who may be invited by the President. The Association of Members was to be duly acquainted with the fact that the Committee had taken the above steps.

THE TEACHERS' PETITION TO THE COLLEGES.

THE text of this petition is published in the editorial columns of the JOURNAL. We have been informed that the signers, exclusively medical officers and teachers of all the metropolitan schools of medicine excepting that of the Westminster Hospital, desire that the Colleges should obtain the power of granting a degree which need not necessarily take the place of the present conjoint diploma. There are four clauses added to the main petition, and the signers have individually agreed to all, to none, or to some of these clauses, as the case may be. An analysis of the signatures is given in our editorial notice. The wording of the clauses appears somewhat vague to persons outside the circle of medical teachers; but it must be remembered that the signers had already discussed them freely amongst themselves before affixing their signatures. The first clause expresses a desire that the undergraduates, as the candidates for the new degree may, we assume, be called, should reside, at least for a short time, in London. We understand that several arguments in favour of residence have been advanced by the signers. They desire a degree for London students, who alone have no degree open to the average man. They also desire to embody the principle of a teaching University, the teachers and examiners to form the same body. They further seek to disarm Scottish opposition without competing with Scottish Universities. They wish that there should be a residence condition for the London, as for the Edinburgh or Aberdeen, degree. The three remaining clauses represent the opinion of individual signers concerning the ex-

aminations for the future degree. It has been pointed out to us that the words, "Taking the present conjoint examinations of the Colleges as a standard" must be understood as prefixes to each clause. Those who have signed to any one of these clauses probably imply that they think that the examination referred to in that clause should be above the standard. Mr. Treves appears to have devoted great energy to the preparation of the petition, in which task he has been aided by some of the best known advocates of reform in medical education, such as Mr. Timothy Holmes. The teachers of the London schools form a powerful, influential, and most meritorious body, and their opinion cannot fail to be of interest to the profession at large, which at the same time must take certain circumstances into consideration. The roughest analysis of the signatures, such as is given at page 1068, shows that local ideas prevail at the schools and greatly influence the opinion of the senior medical officers and youngest teachers alike. Nor must we forget that those who devote their lives to teaching and live and die as part and parcel of a medical school may have special notions on professional education which those who are experienced in the true requirements of private practice cannot endorse.

THE UNIVERSITY OF LONDON.

WEDNESDAY last was "Presentation Day" at the University of London. Lord Granville, after conferring the degrees and prizes, addressing the large assemblage which had gathered in the theatre, sketched the past history of the University, and referred to the scheme now before the Senate. The principal objects of this scheme, he said, were that, while preserving the Imperial character of the University and maintaining the high standard of its degrees, the University and the teachers might be brought into more intimate and direct relationship. The annual meeting of Convocation was held on the previous day, but the small amount of business got through before the House was counted out had no special medical interest.

GLASGOW UNIVERSITY CLUB, LONDON.

SIXTY-FIVE of the members of this club, with their guests, dined together at the Holborn Restaurant, on Friday, April 29th. Professor Gairdner, of Glasgow, was in the chair. Amongst those who spoke after dinner were: The Marquis of Lothian, K.T.; Lord Watson; Sir F. Sandford, K.C.B.; Lieutenant-General Sir A. Alison, Bart., K.C.B.; Sir T. A. Colt, Bart., M.D.; Messrs. Bryce, M.P., Caldwell, M.P., J. A. Campbell, M.P., Hy. Craik, R. B. Finlay, Q.C., M.P., and Professor McCall Anderson, M.D. During the evening the Chairman read a congratulatory telegram sent to the club by Principal Caird on behalf of himself and the Chancellor and Professors of the University of Glasgow. The club now numbers over 120 members. The Honorary Secretaries are Dr. Heron, 57, Harley Street, W., and Mr. McIlraith, 3, Furnival's Inn, E.C.

SCOTLAND.

INFECTIOUS DISEASES, EDINBURGH.

AT a meeting of the Edinburgh Town Council held on May 10th, the report submitted by the medical officer of health showed that the outbreak of scarlet fever which had inundated the fever hospital had decreased greatly, there now being only 89 cases in the wards. During the month of April 374 cases of infectious diseases had been intimated to the authorities, of which 9 were of typhoid, 9 of diphtheria, 143 of scarlatina, and 213 of measles, and none of typhus or smallpox. At the same meeting, the gift of a piano for the use of the patients of the fever hospital from Messrs. Paterson and Co., George Street, was intimated.

THE ASSESSORSHIP, EDINBURGH UNIVERSITY.

THE result of the poll for the assessorship in Edinburgh University was made public on Wednesday evening. The election was by the General Council of the University; the vacancy was caused by the death of Dr. D. Rutherford Haldane. The candidates were Dr. Patrick Heron Watson and Sir Alexander Christison, Bart. The former received the support of the Association of the General Council; the latter was evidently supported largely by the Senatus Academicus. Voting was by printed forms sent by post; 5,117 voting papers were issued, of which 225 were returned through the Dead Letter Office. Dr. Watson received 1,838 votes, Sir Alexander Christison received 1,245. Dr. Watson thus won by the substantial majority of 593.

POST-GRADUATE COURSE AT ABERDEEN.

A POST-GRADUATE course will be given in Aberdeen during the present month, and be continued weekly up to June 11th. The following is the list of subjects and teachers: Surgery of Brain and Abdomen (Marischal College), Professor Ogston; Diseases of the Ear and Throat (Dispensary), Dr. J. Mackenzie Booth; Bacteriology (Marischal College), Professor Hamilton; General Medical Diseases (Royal Infirmary), Professor Smith-Shand, Dr. Angus Fraser, Dr. Blaikie Smith; Diseases of the Eye (Royal Infirmary), Dr. M'Kenzie Davidson; Genito-Urinary Surgery (Royal Infirmary), Dr. Ogilvie Will; Diseases of the Skin (Royal Infirmary), Dr. Garden.

GLASGOW PHILOSOPHICAL SOCIETY.

AT the ordinary meeting of this Society, held on April 27th, Dr. Ebenezer Duncan, President of the Sanitary and Social Economy Section, read a paper on "The Reform of our Present Methods of Disposal of the Dead, Earth-to-Earth Burial, and Cremation." He pointed out that, while parochial boards and burgh boards were under the stringent regulations of the Burials Act of 1855, they were permitted to make arrangements with private companies not under the Act to bury for them. These companies ignored the laws of sanitary science and considerations of public decency. In some of the cemeteries the dead were buried in pits, the coffins being piled one above another with only a few inches of earth between them, in other cases with none; as a result, very offensive effluvia were given off. He, therefore, thought the Act should be amended to include private companies. Having considered the method of burial in wicker-baskets, or in coffins made of cotton-pulp instead of wood, Dr. Duncan proceeded to speak of cremation, which, from the sanitary point of view, was the only perfect system of disposing of the dead. There were nine crematories in active employment in Europe and four in America. Dr. Duncan exhibited a plan of a crematory, furnished by a Glasgow engineer, the cost of which was estimated at £150 to £160. In conclusion, he advocated the formation of a Scottish Burial Reform Association.

GLASGOW UNIVERSITY COUNCIL ASSOCIATION.

THE annual meeting of this Association was held in Glasgow on April 22nd, under the presidency of Mr. R. W. Cochran-Patrick. The report explained the action of the Association in reference to the Universities Bill. The Committee had prepared clauses to meet the omission, in the Bill of 1885, of a power in the case of each University to affiliate new colleges. They had proposed that the University Court should consist of fifteen members: the Principal, *ex officio*, and four representatives of the Senate; five assessors from the General Council, the Lord Rector, and four representatives, *ex officio*, of public bodies—namely, the Lord Provost, the Chairman of the School Board, the Dean of the Faculty of Procurators, and the President of the Faculty of Physicians and Surgeons; the Court to be the University Executive. The Senate is to have power to initiate changes in all educational matters, as well as to regulate and superintend the discipline of the University. The report states that the number of members on the roll of the Association is slightly in excess of last year, and among the new members are several members of the Senate. The Committee was instructed to watch over the Universities (Scotland) Bill, which had been announced, and to take such measures in connec-

tion with the progress of the Bill through Parliament as seemed to them expedient.

THE HEALTH OF GLASGOW.

Dr. Russell, medical officer of health, reported to the Health Committee that during the fortnight ending April 23rd there were 530 deaths as compared with 508 in the preceding fortnight, representing a death-rate of 26 in place of 25 per 1,000. As compared with the corresponding fortnight of last year, the death-rate was 2 per 1,000 higher, which was wholly due to an excess of zymotic mortality, and essentially to the present epidemic of measles which was moving in successive spurts over the various quarters of the city. Last spring there was not a single death from this disease registered for several weeks. The number of deaths from diseases of the lungs was 193, as compared with 191 ; from diarrhœa 6, in place of 13, of which 4 were of persons below 5 years of age ; from fever 5, in place of 8, all from enteric fever ; from infectious diseases of children 50, in place of 48—namely, 26 from whooping-cough, 19 from measles, and 5 from scarlet fever. There are in the hospitals, Belvidere, 122 cases of scarlet fever, 57 of measles, 48 of enteric fever, 19 of whooping-cough, 5 of erysipelas, and 3 of typhus—in all, 254 cases, as compared with 275 a fortnight ago, and 172 at the corresponding period of last year. The death-rate last week was 25 per 1,000, against 25, 27, 25 respectively for the previous three weeks, and 25, 25, 28, 27 for the corresponding weeks of the past four years.

THE GLASGOW MEDICAL CHARITIES.

The Glasgow Medical Charities Committee, appointed at the public meeting of practitioners, held in the Faculty Hall, on March 30th, met on April 22nd, and having appointed Professor James Morton, M.D., chairman, Dr. Edward McMillan, vice-chairman, and other office-bearers and members of executive, proceeded to consider the initial steps of dealing with the whole subject of abuse of medical charities. Professor Gairdner strongly advised a conference with the Charity Organisation Society, as being in possession of the best possible information regarding the abuse of charitable institutions, and the most successful means of dealing with it. He was of opinion that while the outdoor cases should be seen for the first time, the services of the Society might be obtained for the purposes of investigation. Dr. Erskine spoke of the importance of introducing the lay element, and it was proposed to invite the managers of the various medical charities to confer with the committee and become members of it. Other important points were afterwards considered. The Secretary (Dr. Robb, Carlton Place), who was desired to obtain information from other towns in England and Scotland where reform of charitable medical institutions has been effected or is under consideration, will thankfully acknowledge all such which may be addressed to him.

IRELAND.

HOSPITAL FOR SICK CHILDREN, QUEEN STREET, BELFAST.

The gold medal annually awarded for proficiency in the diseases of infancy and childhood has been gained by Mr. John Campbell, M.A.

ROYAL HOSPITAL, BELFAST: ANNUAL EXAMINATIONS.

At the above examinations Mr. John Campbell, M.A., has been awarded the Coulter Exhibition, and Mr. W. H. Quarry the Malcolm Exhibition. In the latter examination Mr. Robert Wilson has gained a prize.

COUNTY ANTRIM GAOL.

Several candidates are already in the field for the post of medical officer to this institution, left vacant by the death of Dr. John Moore. The duties of the post have been discharged for some time by Dr. J. C. Smyth, who is one of the candidates. It is a Government appointment.

CORK UNION.

One of the guardians has handed in the following notice of motion, which will be considered next week :—"That the resolution of the Board to pay for the maintenance of twenty-five pauper lunatics and also twelve pauper lunatics in the lunatic asylum be rescinded ; and that the Board be entitled to the benefit of the asylum for all the pauper lunatics, similar to all the boards of guardians, none of whom pay for the pauper lunatics."

ZYMOTIC DISEASES IN IRISH PROVINCIAL TOWN DISTRICTS.

In the March quarter the average annual death-rate, represented by the deaths registered, was 28.2 per 1,000. The deaths from zymotic diseases in the sixteen principal urban sanitary districts were equal to an annual rate of 2.0 per 1,000, the rates varying from 0.0 in Armagh to 7.0 in Londonderry. The 232 deaths from all causes registered in the last-named district included 44 from measles, which was very prevalent.

NORTH INFIRMARY, CORK.

During the past year 1,001 patients were treated in the wards, the daily average of beds occupied being 77 ; while in the extern department relief was given to 29,846 cases—a considerable increase as compared with the previous year. The accidents attended to numbered 5,555. The receipts amounted to £1,966 12s. 4d., which includes a sum of £310 19s. 5d. received from pay-patients. The institution is in debt about £800, a result chiefly due to the falling off in the donations.

BELFAST UNION.

The election of medical officers to the No. 1 Dispensary District took place on April 9th. There were eight candidates. After the first poll, four names were struck off, and a poll was taken among the remaining candidates, namely, Dr. Dunn, Dr. Sinclair, Dr. Taylor, and Dr. John Barron. At the final ballot, Dr. Barron had a majority of seven over Dr. Taylor, and was declared duly elected. The successful candidate is the brother of the late officer of this district, whose death we recorded some time ago.

KILLARNEY DISTRICT LUNATIC ASYLUM.

The governors some months since unanimously agreed to allow the resident medical superintendent £50 a year increase, based on a regulation empowering them to do so when the number of patients in the asylum had exceeded the number for which the institution was built. Last week a communication was received from his Excellency the Lord Lieutenant refusing to sanction the increase. The question of adding additional accommodation, at a cost of £1,500, was under discussion, but it was resolved to adjourn the matter until the next visit of the Inspector of Lunatic Asylums.

SIR WILLIAM STOKES'S BANQUET.

Referring to the banquet given by Sir William Stokes, President of the College of Surgeons, in celebration of the Queen's Jubilee, the *Evening Mail* speaks in eulogistic language not only of the good taste and princely hospitality displayed, but also of the graceful and ringing oratory by which he stirred the scholarly assembly. "Sir William Stokes," our contemporary says truly, "has well maintained the traditions of the Stokes family for learning, ability, and eloquence; and the acknowledgment of the fact by the Viceroy in alluding to his illustrious father and distinguished grandfather was singularly happy. Sir William Stokes has personal and hereditary claims on the esteem of his fellow-countrymen. He stands among the foremost men of a profession the services of which, scientific and practical, professional and benevolent, reflect honour on Ireland, and are by Ireland gratefully and universally acknowledged. The College has been a main instrument in making Irish surgery what it is, and at the present day it keeps abreast with the most advanced and actively progressive institutions that cultivate the noble art to which it is devoted. Lord Londonderry could not help being struck with the dignity and status

of the medical profession, and there is little doubt, after what he witnessed, and the expression of his opinion thereon, that the Constitutional Government now in power will no longer ignore Irish doctors, but confer honour where honour is due. In the distribution of State honours, the leaders of the profession rightly object to being placed on a lower level to that of their English brethren, and claim the reward of a baronetcy, or at least a K.C.B. The Queen's Jubilee is the proper occasion to fulfil their expectations."

THE CARMICHAEL PRIZES.

A MEETING of the Fellows of the Royal College of Surgeons in Ireland was held on Monday, May 9th, to receive the report of the adjudicators on the essays for the Carmichael Prize. Eight essays were sent in, and Dr. Robert McDonnell, F.R.S., Dr. P. C. Smyly, and Mr. Chaplin were the members of the Council of the College selected for the arduous task of adjudicating upon them. The examiners awarded the first prize (£200) to Mr. Walter Rivington, Surgeon to the London Hospital, and the second prize (£100) to Mr. Thomas Laffan, Physician to the Cashel Union and Fever Hospital. The same two gentlemen also obtained the first and second prize respectively for their essay on the last occasion the Carmichael prizes were awarded, namely, in 1879.

QUEEN'S COLLEGE, BELFAST: ANNUAL EXAMINATIONS.

AT the general class examinations just concluded, Mr. J. M. Hall was awarded the first prize in anatomy and physiology (third year), Mr. S. A. Powell, B.A. (second year), and Mr. John Jamison (first year). In practical anatomy, Mr. Hall was also first, while Mr. James Fulton and Mr. J. S. McMurray have gained the first place in the second and first years respectively. In medicine, Mr. John Campbell, M.A., was first of the second-year students, and Mr. Robert Wilson and Mr. W. H. Quarry were equal for first place among the first-year students. In surgery, Mr. Campbell and Mr. James Hunter were equal for first place in the senior class, and Mr. Hall was first among the juniors. In materia medica, Mr. Nathaniel Morton was first. In midwifery, the first place was taken by Mr. D. C. Smiley. In practical chemistry, Mr. John Jamison and Mr. E. W. McBride were equal for the first place. In zoology, Mr. G. S. Hart was first prizeman.

THE MEATH HOSPITAL.

THE annual distribution of prizes obtained by the students attending the hospital took place with the usual ceremony on Monday, May 2nd, in the theatre of the institution. Sir George Owens, M.D., was in the chair, and most of the visiting staff of the hospital were present. The surgical prizes were presented to the successful candidates by Sir George H. Porter, and the medical prizes by Dr. J. W. Moore. The following gentlemen obtained prizes: First Medical Prize, Mr. Harry P. Sloggett; Second Medical Prize, Mr. William Bagot. First Senior Surgical Prize, Mr. Thomas Galavan; Second Senior Surgical Prize, Mr. Alfred Bewley. First Junior Surgical Prize, Mr. Oliver L. Robinson; Second Junior Surgical Prize, of equal merit, Mr. George Hepenstal, Mr. Ernest H. Hawthorne. Clinical clerks' certificates were awarded to Mr. Edward C. Brabazon, Mr. St. George Gray. Resident surgical pupils' certificates were awarded to Mr. Ernest Slaughter, Mr. Alexander Ogilvy, Mr. Alfred Austin, and Mr. Ryan.

ROYAL COLLEGE OF PHYSICIANS.

AT the meeting of the Fellows of this College, held on Thursday, May 12th, the following gentlemen were admitted to the Fellowship:—George Oliver, M.D.Lond.; Robert Cory, M.D.Camb.; Henry Radcliffe Crocker, M.D.Lond.; Frank Buszard, M.D.Lond.; Charles James Cullingworth, M.D.Durham; William Julius Mickle, M.D. Toronto; George Allan Heron, M.D.Glasgow; and James Anderson, M.D.Aberdeen.

A communication was received from more than 200 teachers in the medical schools of London advocating the proposed acquisition by the two Colleges jointly of the power to grant degrees in medicine. It was referred to the Committee on that subject.

After some discussion it was resolved to hold a *conversazione* in June next.

ROYAL COLLEGE OF SURGEONS.

AN ordinary meeting of the Council was held at the College on Thursday, May 12th. The minutes of the extraordinary Council held on May 5th were read and confirmed. Mr. James Berry was introduced, and the President handed him the Jacksonian Prize for the past year, together with the instrument declaratory of the award thereof.

The PRESIDENT, on behalf of himself and the Vice-Presidents, submitted to the Council the address of congratulation to the Queen on the completion by Her Majesty of the fiftieth year of her reign, and it was moved and carried unanimously that the address be approved, adopted, and entered on the minutes; likewise that the President and Vice-Presidents be authorised and requested to fix the common seal of the College to it; and that the President be requested to present it in the proper quarter.

Mr. H. W. Allingham was admitted to the Fellowship of the College by examination.

A report was read from the Nomination Committee. Mr. F. Howard Marsh was elected an Examiner in Anatomy for the Membership, and Mr. J. N. C. Davies-Colley an Examiner in Anatomy for the Fellowship.

A letter was read from Mr. Benjamin Bryan, forwarding a memorial signed by 6,727 persons in opposition to the proposal contained in the memorial forwarded by Dr. Wilks relating to the disposal of the Erasmus Wilson Fund. A letter from the same gentleman forwarding another memorial from Bristol and Clifton on the same subject was read. It was resolved that the receipt of the memorials be acknowledged.

The Council resolved not to appoint any separate examiners in Medicine and Midwifery for the ensuing year, seeing that by the Medical Act of 1886 the diploma of the College will cease, after the 1st of June next, to be a qualification registrable by itself alone under the Medical Act of 1858.

The report of the President, Senior Vice-President, and Mr. Marshall, recommending that the Council do agree with the Royal College of Physicians that the vacant ground on the Embankment be occupied by buildings suitable for such scientific purposes as may hereafter be resolved upon, was approved, entered on the minutes, and it was resolved that the College of Physicians be informed to that effect. The resolution was referred to the Land Committee of the two Colleges for further consideration, and to report thereon.

The Council proceeded to the further consideration of the report from the Committee of Delegates of the Royal College of Physicians of London and the Royal College of Surgeons of England on the question of the grant by the two Colleges of degrees in medicine and surgery. The report was approved, adopted, and entered on the minutes, and referred to the Committee of Delegates of the two Colleges to carry out the proposals contained therein. The report involved the adoption of the recommendation of the Council refusing to confer with the Councils of University and King's Colleges with the view to all four Colleges presenting a conjoint application to the Crown for powers to grant degrees in Arts, Science, and Medicine. The report also included the petition and form of charter to be applied for by the two Colleges to give effect to the proposal.

It was resolved that the annual meeting of the Fellows of the College for the election of members of Council be held at the College on Thursday, the 7th day of July, next, at 2 o'clock P.M. precisely; and that the usual notice thereof be published and sent to the Fellows resident in the United Kingdom whose address is known to the Secretary, along with the list of the names of the eligible Fellows and the names of the Fellows by whom they shall have been respectively nominated.

Mr. HEATH moved, and Mr. MACNAMARA seconded, "That an extraordinary meeting of Council be called to consider the disposal of the Erasmus Wilson bequest; the President to appoint the date of such meeting." The motion was carried *nem. con.*

PRESENTATION.—At a meeting of students of the Charing Cross Hospital held on Thursday last in the Board Room, a testimonial was presented to Dr. H. Montague Murray, on the occasion of his marriage and in recognition of his services as Medical Registrar during the last five years. The testimonial was presented by Mr. C. Pye Oliver, and took the form of a clock of the time of Henry II., being copied from the catalogue of the archæological collection of Prince Soltykoff.

NOTES FROM THE SIXTEENTH CONGRESS OF THE GERMAN SURGICAL SOCIETY, AT BERLIN, APRIL 13th-16th, 1887.

II. *The Surgical Treatment of Hæmorrhoids and Fistula in Ano.*—Dr. LANGE (New York) said there was no need to invent a safe and easy method of operation for piles; it was only necessary to improve the present methods in two respects—namely, to lessen the severity of the operative procedures, and to shorten the duration of the treatment. The injection of concentrated carbolic acid into the hæmorrhoidal masses had long been practised by quacks in the Western States of America, and at length legitimate practitioners were induced to make trial of the method. Dr. Lange spoke well of the results obtained thereby. The operation was as simple as possible, and no anæsthetic was required. The rectum should first be thoroughly emptied; then the piles must be brought down; and, after applying iodoform ointment to the mass, a solution of carbolic acid, more or less concentrated according to circumstances, should be slowly injected. Some surgeons used equal parts of glycerine and carbolic acid. In the case of large hæmorrhoids, it was advisable to turn the point of the needle in various directions. Most practitioners allowed the patients to return at once to their business; but Dr. Lange usually insisted on their remaining quiet for some days. After injection, the tumours began to swell somewhat rapidly, and assumed a glass-like appearance. In the case of internal piles, the operation was painless; but, in external hæmorrhoids, sharp pain generally came on suddenly half-an-hour afterwards; this should be relieved by suppositories. The next day the patients were quite well. The operation was repeated at intervals of three or four weeks. Dr. Lange had never observed any ill-effects, except slight sloughing. In America hæmorrhoidal disease was very common not only among men but also among women. This was in consequence of the very abundant diet, for the ladies took hardly any exercise at all, and the men were too preoccupied about business matters to pay attention to the state of their bowels. Among hundreds of persons taken at random, scarcely a dozen would deny having piles if the question were asked, and it would in all cases be safe to ask the patient at once the name of his favourite purgative. In the case of bleeding piles it was advisable to seek for the spots from which the hæmorrhage came and to inject at those places, as the patients then recovered very quickly. Dr. Lange had performed the operation on forty or fifty patients only once, and in only one case had he been obliged to repeat it after two days. As regards fistula in ano, Dr. Lange proposed complete excision followed by suture. He was led to devise this plan by the case of a young lady who had a fistula of such size that incontinence of fæces seemed likely to occur. The method of procedure was very simple. A probe was pushed along the whole length of the fistulous canal; an incision was then made through the muscle down to the callous tissue, and it could then be seen whether sutures could be applied with advantage or not. Dr. Lange had treated thirteen cases in that way, in four of which healing took place by first intention, whilst in three there was slight suppuration. In one case Dr. Lange was not able to apply sutures, and in a few others the operation was only partially successful. Dr. Lange expressed a doubt whether blind external fistula ever occurred except in tubercular subjects.

Effect of Ligature of the Thyroid Artery on Goitre.—Dr. WÖLFLER (Graz) said that in the dog after ligature of the superior thyroid artery no active gangrene ensued, but a process of necrosis was set up whereby the parenchyma of the gland was destroyed, but not the capsule. In the human subject he had first tied the superior thyroid artery in a woman, aged 45, in consequence of a mistaken diagnosis. When first seen she was suffering from serious dyspnœa, and she said that her goitre had existed for years without getting larger or smaller. Dr. Wölfler therefore concluded that it was not malignant, but afterwards it proved to be of carcinomatous nature. Ligature was easily performed; the case went on satisfactorily, and after four weeks the patient was able to leave the hospital. The dyspnœa had ceased, and the circumference of the neck had diminished. A month later, however, the woman came back, suffering from extreme dyspnœa, and died in the hospital. On *post-mortem* examination it was found that the thyroid body had become much shrunken. The arteries were obliterated at the points of ligature, and the branches of distribution were collapsed. There was evidence of necrosis in the gland-substance. The respiratory trouble had been relieved by the shrinking of the goitre, and had come on again when the necrosed tissue had been replaced by new growth. Dr. Wölfler showed a patient whose right superior and inferior thyroid arteries had been tied, after which the dyspnœa which had previously existed ceased. The circumference, diminished but slowly; it was, however, reduced from 44 to 38 centimètres. At first Dr. Wölfler feared that compensatory hypertrophy of the left side might ensue; the contrary, however, took place; not only the isthmus, but also the left half of the thyroid gland, became shrunken. The operation should not be done in cases of malignant goitre, because the collateral circulation might prove insufficient; but ligature of the superior and inferior thyroid arteries might advantageously be substituted for partial excision in cases of simple goitre.

A Method of Partial Excision of the Thyroid without Loss of Blood.—Dr. EUGEN HAHN showed a girl, aged 12, on whom he had, a fortnight previously, operated for goitre. The swelling was equally large on both sides, and extended some way under the sternum. First of all the gland was exposed by an incision in the median line from the episternal notch to the thyroid cartilage, and by two lateral incisions separating the sterno-thyroid and sterno-hyoid muscles. Then both superior thyroid arteries and the thyroideaima were tied with catgut, whilst both inferior thyroid arteries were seized and held with artery-forceps. The arterial supply being thus cut off, the capsule was laid open and portions of the gland of various sizes were taken away with the knife, the scissors, and pincers. There was no parenchymatous hæmorrhage. This method presents the following advantages: As much of the gland can be left as may seem desirable in order to prevent the occurrence of cachexia strumipriva, and to preserve the shape of the neck; the portions of gland-substance can be removed without loss of blood, and the tampon is unnecessary; crushing and laceration of the tissues are thus in great measure avoided, and comparatively few ligatures are required. All this lessens the risk of septic processes being set up. There is no danger of wounding the recurrent nerve, for if it should be by mistake caught up with the forceps, the fact would be at once indicated by alteration in the voice, and pressure could at once be taken off by letting the nerve go. The wound was filled with iodoform gauze, and the artery-forceps were removed twenty-four hours later. No hæmorrhage occurred, and after some days the wound was stitched up.

PROVISION AGAINST SICKNESS, ACCIDENTS AND OLD AGE.

THE report of the progress of the Medical Sickness, Annuity, and Life Assurance, presented at the monthly meeting this week, suggests considerations which will be emphasised by appeals such as some of those which have lately been plentiful, and one of which appears in our columns to-day. The said appeal is on behalf of the family of a physician at one time in possession of an inherited income, and supporting throughout life a highly responsible position. The circumstances are in many ways special, and the liberal response made shows how well the sympathy shown to the survivors was earned during life. Obviously enough, however, even the most favourable conditions during early life and reasonable success in practice during a series of years do not place a medical practitioner above the accidents of ill-health and ill-fortune, and only make it the more incumbent on the better placed, as well as those who are wholly dependent upon their own exertions, to make provision against sickness, accident, ill-health, old age, and premature death. These are contingencies against which none can feel secure, and to meet which everyone should provide. The report of the above Society shows that a considerable number of the profession are becoming alive to their dangers, and the duty of providing against them on their own behalf and that of those dependent upon them. The affairs of the Society have been conducted with unexampled economy, and remarkable efficiency and success. The Society has now been in operation only three years. At the end of the first year it numbered about 400 founding members; it now numbers over 800 members. These, for the most part, make provision by quarterly payment for receipt of a sum of either £2 2s. a week, or £3 3s. or £4 4s. a week, during sickness; for half sick pay during the rest of life in cases of permanent disablement at any age; for an annuity after the age of 65; and for insurance at death. The Society is paying upwards of a hundred pounds monthly to members temporarily incapacitated by accident or illness, and two members are in receipt of permanent sick pay, from severe forms of illness likely to incapacitate them for life. The tables, which were calculated by Mr. Neilson, the well known actuary, have answered well to the test of experience, and in all the classes their payments are within the estimated limit of liability. The reserves of the various funds have accumulated most satisfactorily; so that within the three years the Society has accumulated a fund of about £16,000 invested in securities of the highest class in the names of four trustees. Perhaps the most satisfactory and laudable feature of all in the organisation, which has thus rapidly attained results so stable and successful, is the extreme economy of management, avoiding all outlay for costly offices and premises, dispensing with adver-

tisements, avoiding all payment of commissions, and managed by unpaid medical directors. The original scheme of the founders anticipated a very low scale of administrative expenses, and the actuary, on the representations made and the data afforded, estimated the cost of administration at only 10 per cent. of the premium income. This estimate, however, has been greatly improved upon in practice. From the outset, and when the amount of receipts was small and expenses bore necessarily a larger proportion to receipts, the cost of management was kept down to less than 6 per cent.; this proportion has been gradually reduced, and the last quarter showed an expenditure of only 3¾ per cent. on the premium income. Thus under this head a saving has been effected during the year of over £1,300, which stands as clear profit and a substantial addition to the reserve standing to the credit of the Society. These results are highly gratifying. Not only is the Society widening every month its sphere of usefulness, but each quarter adds to its solid reserves, and gives it a financial stability and importance more than commensurate with the extent of its beneficent operations. No doubt its bounds will widen from month to month and year to year. In proportion as the number of those who avail themselves of its valuable resources is increased, will the recurrence of the lamentable appeals for and during sickness and disablement be decreased. The letters received from members who from time to time claim the benefits to which they are entitled are most interesting and satisfactory. Membership of such a society raises the standard of independence and self-respect, and its membership should by all means be encouraged. Documents and forms of proposal can be obtained on application to Mr. C. J. Radley, 26, Wynne Road, Brixton, London, S.W.

MR. VICTOR HORSLEY ON TEMPERANCE.

Professor Victor Horsley, F.R.S., F.R.C.S., speaking on the subject of Temperance at the annual meeting of the Church of England Temperance Society, said that although he was unable to pose as a Nestor, and review the history of the temperance question from the medical point of view, yet he asked to be allowed for a moment to assume that part, and give a kind of *apologia* for the past position of the medical profession. Medical science, unfortunately, from the very nature of her general knowledge, was necessarily still in the chains of empiricism. It was thus bound, in common humanity, to receive the statements of any one, based upon fair evidence, and to try and test the results which such an one might claim to have obtained from his own experience. It was in this way that the medical profession became enamoured of alcohol as a drug, more especially in the treatment of acute disease and fevers. The example and experience of the late Dr. Todd appeared to have great weight. Unfortunately, to his writings was due the universal employment of alcohol by the medical profession. Things had greatly changed. Physiological science had advanced immensely. They were now gradually freeing themselves from the slavery to which they were before subject, and they knew that the position of alcohol, from the medical point of view, had to be considered in the two opposite conditions of a food and of a drug. The researches of men like Parkes, who headed the movement, had given the medical profession the true scientific value of alcohol, and the value they knew to be very nearly zero. He should substantiate from clinical experiences what he was about to say. With regard to alcohol as food, he reminded his hearers of a certain symposium that was written in the *Contemporary Review* in 1879; in the most brilliant of papers contributed by the medical profession, that by Sir James Paget, their most revered teacher in surgery, reference was made to the popular belief that, as the drinking of alcohol existed as a general custom, it was a good thing. Dr. Parkes, twenty-five years ago, pointed out that, because one thing was a custom, it was no evidence of its truth. Cannibalism was a custom in some parts of the world, and was it therefore good? There was one scientific point ascertained beyond all doubt with regard to alcohol in its first influence upon the human system and animal body, and that was that, in proportion to the dose, it checked the tissue-changes of the body. Alcohol did, in greater or lesser degree, check the activity of these processes. This could be produced with even a small dose; carried to a greater extreme, its effect was not that of a regulator, but it proved an extra blocker of the machinery. It seemed, said the speaker, a kind of chronic suicide that they were always to put the brake on—put the brake on the development of their natural energies. What they wished to do without infringing the laws of nature was to get the greatest amount of energy out of their bodies. Why hinder it? Professor Horsley alluded to the series of experiments on the influence of alcohol upon plant life carried out by Dr. Ridge, of Enfield, who found that one-sixteenth per cent. of a solution of alcohol checked the growth of water-cress, and that a tenth solution killed its seeds. The position of the medical profession with regard to alcohol as a food was becoming more and more defined. Professor Horsley next drew attention to the researches of Dr. Hare as to the use of alcohol as a medicine, and to the fact noticed by him—the large decrease in the use of alcohol at the London hospitals, and the largely increased use of milk and other forms of nutrition. They had a large amount of evidence to show that the medical profession estimated at its full value alcohol as a drug. Referring to the London Temperance Hospital, where, since 1873, the experiment as to whether alcohol was useful had been tried to the uttermost, the evidence was perfectly wonderful to those who, like himself, used alcohol occasionally as a drug. It was true they required even yet more statistics and more figures in the profession, and must wait before receiving the statistics as those upon which they would absolutely rely in the treatment of patients; but the result so far gained was so wonderful and so overwhelmingly contradictory to many preconceived notions, that he had no doubt as to what the verdict would be in the half jubilee of the Temperance Hospital. In this hospital, which had admitted 4,153 persons as in-patients, and 23,000 as out-patients, alcohol had only been administered as a drug in four cases. Dr. Edmunds, the senior physician, writing in 1884, stated that among fifty-three typhoid fever cases there had been five deaths, and at the examination it was found that no administration of alcohol could have possibly saved them. The cases of recovery had done remarkably well, and on the whole there was a mortality of rather less than 1 in 10. This mortality was smaller than the mortality in any other hospital in London at that period, and there had not been given to one of these cases a particle of alcohol either as diet or medicine, and yet a large number ought to have died according to the old view of the treatment of the disease. Figures spoke for themselves, but it seemed to him the use of alcohol as a food and its excessive abuse were dependent upon what must be regarded as possible from the view of the causes which led to its abuse. The abuse of alcohol was produced from three groups of causes: from mental and moral failure of strength; secondly, from the general prevalence of unsanitary conditions; and, lastly, from the unjust and wicked facilities afforded for getting the poison. Their only hope of rapid legislative influence lay in the immediate adoption of, and energetic pushing forward of, that local option to which reference had been made.

THE TEACHERS' PETITION TO THE COLLEGES.

We have mentioned at page 1063 the circumstances which have led to the preparation and presentation of this petition to the Colleges of Physicians and Surgeons. A committee, called by Mr. Treves, recently met at the Middlesex Hospital. It included representatives from every medical school excepting that of the Westminster Hospital, and was composed as follows: Charing Cross, Dr. J. Mitchell Bruce; Guy's, Dr. Frederick Taylor; King's College, Dr. Curnow; London, Mr. Treves (Honorary Secretary); Middlesex, Dr. Coupland; St. Bartholomew's, Dr. Norman Moore; St. George's, Mr. Timothy Holmes (Chairman); St. Mary's, Mr. Malcolm Morris; St. Thomas's, Dr. R. W. Reid; and University College, Mr. Rickman Godlee.

The petition is thus worded:

"To the President of the Royal College of Physicians of London, and the President of the Royal College of Surgeons of England.

"We, the undersigned, earnestly hope that the two Royal Colleges will use their best endeavours to obtain the power of granting a Degree in Medicine. If this power be obtained it will offer to students of the metropolitan schools an advantage already possessed by students of most of the educational centres in this country.

"A. We think that the degree should be granted only to those who have received some portion of their medical education in London.

"B. We think that some addition should be made to the present examinations in Arts.

"C. We think that some addition should be made to the present examinations in Science.

"D. We think that some addition should be made to the present examinations in professional subjects.

The total number of signatures is 214. Of these, 46 sign "A. B C. D," to signify that they agree to all the four sub-clauses or expressions of opinion classified above under the first four letters of the alphabet. On the other hand, 12 affix no letters to their signatures, implying that they are in favour of the main clause of the petition, but do not agree so thoroughly to the four sub-clauses. No less than half this number are on the medical or teaching staff of Guy's Hospital and School, and the 12 include such well-known names as Drs. Pavy and Bristowe, Mr. Thomas Smith, and Mr. Bryant. A large proportion of the signatures from Charing Cross, Middlesex, St. George's, and St.

Thomas's schools bear the four letters. The great majority (18 out of 26) of the signatures from St. Bartholomew's are marked "A.," the petitioners only agreeing to the first sub-clause; and 15 out of the 25 from King's College Hospital, and 7 out of 15 from University College, affix "A." to their names. From St. Mary's, 7 out of 17 affix "A. D.," indicating that the petitioners care less about alterations in Arts and Sciences examinations than about professional examinations and residence in London. Nearly one-third of the signatures from the London Hospital are marked "A. C." An individual analysis of the signatures would be out of place, it would include almost every possible combination of the four letters. Nor need we dwell any further on the different proportions, so to speak, of the totals from different schools, since they mostly depend on permanent or ephemeral local influences not sufficiently instructive to take into account. The signatures were obtained in February, since which date, sad to say, two of the signers, Drs. Meadows and Carrington, have died. Dr. Wilson Fox's name does not appear. The copies of the petition which were received at the two Colleges on Monday were handsomely printed on vellum.

MEDICAL ATTENDANCE ORGANISATION COMMITTEE.

A MEETING of the Committee was held on April 19th to consider the desirability of forming a union between the hospitals and provident dispensaries.

The following memorandum by Mr. ERNEST HART was read:—

"Various proposals have been made and considered to carry out the double object in view of favouring the formation of provident habits among the industrial classes in respect to the provision of medical relief, and of checking the abuse of hospital out-patient departments. They have not hitherto succeeded, or have only partially succeeded, I think, for three reasons:

1. Because such provident dispensaries do not always exist in the districts in which the hospitals are placed.

2. Because no means of intercommunication have yet been arranged between the hospitals and the provident dispensaries; and

3. Because the proposals made to the hospital have either been of too sweeping a character, or have involved a somewhat costly, incomplete, and dilatory action by inquiry officers, acting on behalf of the hospital.

It seems to me that a simple and logical basis for common action has now been afforded by the resolution adopted by this Committee, imposing on the provident dispensaries connected with the Metropolitan Provident Medical Association a wage-limit. It is idle to propose to the hospitals to abolish their out-patient departments. It is illogical to propose to them to restrict their out-patient departments by any process which is not in precise accordance with the simple and obvious principle of wage-limit now accepted. The method of action by a simple limitation of numbers on the part of any hospital is obviously arbitrary, and likely to inflict injustice. The method of action by an inquiry officer is, although good in itself, costly, incomplete, and dilatory. What is needed is a check imposed at the entry, or on application for admission, of a kind which shall be logical, inexpensive, immediate in its action, and having relation to an obviously just principle. I assume that the Metropolitan Provident Medical Association will act upon the resolution that no single person earning more than 30s. a week, or members of a family of which the joint income is more than 45s. a week, shall be admitted to the benefits of the Association. This indicates relatively the limit which the hospitals may be asked to impose on those whom they admit to gratuitous advice. I suggest, therefore, that the hospitals should have laid before them a statement of the organisation of the Metropolitan Provident Medical Association, and of the wage-limit which it imposes; and that they should be asked to lay down and carry out a regulation by which every single person applying for relief, or every member of a family respectively, should be called upon to sign a declaration that he or she is not in receipt of earnings above a certain given limit; in other words, that there should be a printed form of declaration, to be signed by every single person applying as an out-patient, that he or she is not earning more than £1 a week, or by the head of a family or any member of it, that the family is not earning more than 30s. a week. This could be done in every hospital and in every out-patient department without any difficulty or delay; and, as the avowed object of every hospital is to provide relief and yet to check abuse without inflicting hardship, such a method would afford a simple and easy means of carrying out such an object. Any hospital which declined to call upon its out-patients to sign such a declaration would be convicted before the public of carelessness in respect to the distribution of its charity; such a refusal would be considered very unfavourably by a large mass of its contributors and by public opinion, and should ultimately be brought before the Hospital Sunday Fund Committee and other bodies able to exercise influence on hospital administration. On the other hand, the hospitals should be furnished with a list of the provident dispensaries in their neighbourhood, and also of the poor-law infirmaries throughout the metropolis. They cannot impose provident habits on their applicants, but it is obvious that if applicants receiving wages above the limit stated are referred within their own option either to the provident dispensary or to the poor-law infirmaries, no hardship will be inflicted on them. No doubt false declarations will be made in certain cases, but this is a secondary question, which there are obviously many methods of dealing with.

The second branch of the question is the method by which provident dispensaries may be brought into direct communication with the hospital out-patient departments for their mutual advantage. I think this might be effected by a request being made on behalf of the Metropolitan Provident Medical Association that recommendations for the out-patient departments of the hospitals should be lodged with the medical officers of the provident dispensaries; that they should have the privilege of recommending cases of special medical interest or requiring special hospital care, for any reason whatever, to the out-patient departments, and that cases so recommended should be received without inquiry as to means, and dealt with on the basis of cases of urgency. This would be advantageous alike to the dispensary organisation and to the hospital organisation. It would afford to the one the means of specially providing for cases of special difficulty or urgency, and it would feed the hospitals with cases of interest and importance such as are valuable for study and medical instruction.

I believe on this basis arrangements might be made which would appeal very strongly to the public spirit, the good sense, and the right judgment of the honorary medical staff, and to the governors of all the metropolitan hospitals. If such a plan be approved by this Committee, I think each hospital should be dealt with, in the first instance, through its medical staff and by conference and medical deputation to its governors; after preliminary proceedings, a large meeting or conference should be invited of the managers of all the principal metropolitan hospitals, at which this scheme should be publicly submitted, and would be, I hope, publicly approved.

I cannot hope to have solved this difficult question in this brief outline, but I venture to believe that it will be found to furnish a useful basis for discussion."

Mr. TIMOTHY HOLMES proposed the following alterations in the out-patient departments of hospitals:

1. That both the number of out-patients received each day and the hours for seeing them be limited, so that not more patients be received than can be deliberately attended by the stated officers of the hospital (and used for clinical instruction in hospitals having schools attached), and also that the present abuse of keeping patients waiting for a great part of the day be reformed.

2. That out-patients be not received (except in the casualty department) without a recommendation from some medical authority, whether a dispensary or private medical practitioner, so as to ensure that only persons are received whose medical condition fits them for out-patient treatment.

3. That out-patients be received only for consultation, and not for prolonged treatment, unless the latter be recommended both by the medical authority who sends the patient and by the out-patient physician or surgeon of the hospital.

4. That the "casualty department" be strictly limited to accidents and street-emergencies, and that only accidents attend more than once.

At the tenth meeting, on April 26th, the following resolutions were carried after considerable discussion:—

1. That, in the opinion of this Committee, the out-patient department of hospitals should be brought into consultative relation with the provident dispensaries and medical men of their respective neighbourhoods.

2. The Committee suggest that the governing bodies of hospitals should grant priority to all out-patients who bring recommendations from provident dispensaries or medical men.

The eleventh meeting of this Committee was held at 5, Lamb's Conduit Street, on Tuesday, May 10th, Sir T. SPENCER WELLS in the chair. The following resolutions were considered:—

1st Resolution: "That it be an understanding that the resolutions passed on this branch of the subject (namely, relating to the hospitals), are intended as a basis for a conference with hospital authorities previous to the general report being submitted, and not as a final settlement."

This resolution was carried unanimously.

2nd Resolution contained in the first part of a paper by Mr. Ernest Hart: "That, in the opinion of this Committee, hospital authorities should be requested to consider the propriety of requiring all applicants for relief in the out-patient department to sign a declaration that, in the case of single persons, their average wages do not exceed £1 per week, and, in the case of a family, their joint earnings do not exceed 30s. per week."

To this resolution the following amendment was proposed:—

1. That in the interest of hospitals, provident and other dispensaries, and of the poor themselves, it is desirable that an agent, well-trained and thoroughly conversant with the locality, rates of wages, etc., be employed at general hospitals and free dispensaries to fulfil the following duties:—(1) To ascertain whether the patients should receive advice and treatment gratuitously; (2) to make inquiries on the plan now in force at the London Hospital; (3) to refer persons ineligible for free medical treatment to local practitioners, provident dispensaries, or relieving officers.

2. That this proposal be adopted on the understanding that all patients are eligible for first treatment, and also that those cases which are vouched for by the medical men as of special interest be retained at the hospital.

There was considerable discussion on the resolution and amendment, after which the amendment was carried by a large majority.

Mr. T. HOLMES then moved the adoption of the alterations in the out-patient departments of hospitals which he had proposed at the previous meeting.

It was resolved that these resolutions should be considered separately at the next meeting of the committee on Tuesday, May 17th.

THE NEW ANATOMICAL SOCIETY.

A MEETING was held at the rooms of the Medical Society of London on Friday, May 6th—Professor HUMPHRY in the chair—for the purpose of founding an Anatomical Society. A fairly large number of gentlemen were present to support the movement, including Professor Thane, Dr. Hughlings Jackson, Mr. Edmund Owen, etc. The Chairman, in opening the proceedings, delivered an address, which will be found at page 1030.

Letters were read from Professors Young, Struthers, McAlister, Curnow, Cunningham, Le Gros Clark, Turner, and others, expressing approval of the proposed Society.

It was then proposed and carried unanimously: "That an Anatomical Society be founded, and that it be called the Anatomical Society of Great Britain and Ireland."

It was further resolved: "That the scope and object of the Society be the anatomy, embryology, and histology of man and of animals, in so far as they throw light upon the structure of man."

After some discussion as to the best course to be pursued, it was decided to elect a President and Secretary, who should form part of a committee to report to the first meeting upon the constitution of the Society. Professor Humphry was then elected President and Mr. C. B. Lockwood Honorary Secretary, and several gentlemen were elected to constitute the committee.

The first meeting will be held at an early date, and will be duly announced.

HENRY TESTIMONIAL FUND.

SINCE the last acknowledgment on March 26th respecting this fund in the JOURNAL several donations have been received, making the total amount of the fund at the present time £296 14s. The Council of the Metropolitan Counties Branch initiated the fund, feeling that the claims which Dr. Alexander Henry, for many years sub-editor of this JOURNAL, has upon its many contributors and readers are worthy of substantial recognition. Dr. Henry is now unfortunately quite incapacitated by illness. The fund will be shortly closed, and all persons desirous of contributing thereto are requested to send their donations at once to Mr. George Eastes, M.B., 69, Connaught Street, Hyde Park Square, London, W., one of the Honorary Secretaries of the Metropolitan Counties Branch.

	£	s.	d.
Sir H. W. Acland, M.D. ..	3	3	0
Dr. W. Aitken	1	1	0
Mr. Benjamin Barrow	1	1	0
Dr. James V. Bell	1	0	0
Mr. W. Cadge	2	2	0
Dr. William Carter	1	1	0
Dr. C. J. Cullingworth ..	1	1	0
Dr. E. Long Fox	1	1	0
Dr. W. T. Gairdner	1	1	0
Dr. T. W. Grimshaw, Pres., Dublin Branch, B.M.A. ..	1	1	0
Mr. Joseph Hinton	0	10	6
Dr. P. W. Latham	2	2	0
Mr. Frederick Mason	1	1	0
Mr. George May	1	1	0
Dr. W. Withers Moore	2	2	0
Dr. R. C. Shettle	0	10	6
Mr. Waren Tay	1	1	0

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1887.

ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Meetings of the Council will be held on July 13th and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, June 23rd and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary*.

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE, and on the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE, are now closed.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, and HABITS OF INTEMPERANCE, a full Report on OLD AGE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 429, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The annual meeting of the above district will be held at the Kent and Canterbury Hospital, on Thursday, May 26th, at 3 P.M., Mr. Pugin Thornton in the chair. The Chairman will be glad to see members and their friends to luncheon at his residence, St. George's Place, between 1 and 2.30 P.M. The dinner will take place at 5 P.M., at the Royal Fountain Hotel. Gentlemen proposing to dine are particularly requested to inform the Chairman by Tuesday, the 24th, that proper arrangements may be made. Agenda:—Usual business of annual meeting. Mr. Raven will propose the following resolution: "That no speaker in a debate shall occupy more than five minutes, or shall speak more than once without permission of the Chairman." Papers: Mr. Raven: Puerperal Albuminuria. Mr. Garraway: The Dead Failure—Limited. The Chairman: Case of Goitre associated with Placenta Prævia. Dr. Gogarty will show specimens of Thoracic Aneurysm.—W. J. TYSON, Honorary Secretary, 10, Langhorne Gardens, Folkestone.

SOUTH MIDLAND BRANCH.—The annual meeting of this Branch will be held at the General Infirmary, Northampton, on Thursday, June 2nd, at 2.30 P.M. Members wishing to bring forward communications at the meeting will oblige by sending the titles of the same without delay to the Honorary Secretary. The President, H. B. Spurgin, Esq., requests the pleasure of the company of the members to luncheon at his residence, 82, Abington Street, prior to the meeting, at 1 P.M. Gentlemen accepting will kindly write to the President.—CHARLES J. EVANS, Honorary Secretary.

LANCASHIRE AND CHESHIRE BRANCH.—The annual meeting of this Branch will be held at Stockport on or after June 15th. Members wishing to read papers or show cases are requested to communicate at once to the Honorary Secretary, CHARLES E. GLASCOTT, M.D., 23, St. John Street, Manchester.

SOUTH-WESTERN BRANCH.—Preliminary Notice.—The annual meeting of the Branch will be held at the Athenæum, Plymouth, on Wednesday, May 18th, 1887, under the presidency of Paul Swain, Esq. Members who propose to read papers, or to bring forward communications or motions, are requested to intimate the same to the Honorary Secretary without delay.—P. MAURY DEAS, Honorary Secretary.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the Royal Forest Hotel, Chingford, on Thursday, June 2nd, at 6 P.M. The chair will be taken by J. S. Bristowe, M.D., F.R.S., President of the Branch. Business:—Election of Secretary. At 6.15 (sharp) the members and their friends will dine together. Tickets, exclusive of wine, 8s. each. Those intending to be present are requested to communicate as soon as possible with the Honorary Secretary.—J. W. HUNT, M.D., Honorary Secretary, 101, Queen's Road, Dalston.

MIDLAND BRANCH.—The annual meeting will be held at the Derby Infirmary, on Thursday, June 9th, at 2 P.M. Members desirous of reading papers, exhibiting cases, etc., are requested to communicate with me before May 20th.—W. A. CARLINE, M.D., Honorary Secretary, Lincoln.

THE WORCESTERSHIRE AND HEREFORDSHIRE, BATH AND BRISTOL, AND GLOUCESTERSHIRE BRANCHES.—The conjoint meeting of the above Branches will be held under the presidency of Dr. Batten (President of Gloucestershire Branch), on Tuesday, May 17th, at 3.30 P.M., at the Bell Hotel, Gloucester. The dinner will be held at 6 P.M. punctually. Tickets (including wine) 7s.; "morning dress." Preliminary business: The Gloucestershire Branch will proceed to elect Representative on the Council of the British Medical Association, at 3.30 P.M. punctually. Agenda: Mr. Jonathan Hutchinson will deliver an address on Certain Doctrines in General Pathology, as illustrated by Diseases of the Skin.—G. W. CROWE, Honorary Secretary Worcestershire Branch. R. J. H. SCOTT (Bath), E. MARKHAM SKERRITT (Bristol), Honorary Secretaries Bath and Bristol Branch. G. ARTHUR CARDEW, Honorary Secretary for Gloucestershire Branch, and Organising Secretary for Conjoint Meeting, 1, Bayshill Villas, Cheltenham.

STAFFORDSHIRE BRANCH.—The third general meeting of the present session will be held at the Medical Institute and Bell Library, Cleveland Road, Wolverhampton, on Thursday, May 26th. The President, Dr. W. G. Lowe, will take the chair at 3 o'clock in the afternoon.—VINCENT JACKSON, General Secretary, Wolverhampton.

EAST YORK AND NORTH LINCOLN BRANCH.—The annual meeting will be held at the Infirmary, Hull, on Wednesday, May 25th, at 1.30 P.M. Gentlemen who intend to make any communication, or to propose any resolution, are requested to inform the Secretary not later than May 15th.—E. P. HARDEY, Honorary Secretary, 80, Spring Bank, Hull.

BATH AND BRISTOL BRANCH.—The sixth ordinary meeting of the session will be held at the Grand Pump Room Hotel, Bath, on Thursday, May 26th, at 7.30 P.M., C. Gaine, M.R.C.S.Eng., President. The following communications are expected: Dr. W. H. Spencer: Cases illustrating the Antipyretic and Antiseptic Treatment of Phthisis. Mr. R. J. H. Scott: A Successful Case of Gastrostomy. Dr. E. J. Cave: A Case of Hemiplegia and Hemianæsthesia. Mr. Pagan Lowe: Hypermetropic Headaches.—R. J. H. SCOTT and E. MARKHAM SKERRITT, Honorary Secretaries.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.—An ordinary general meeting of the Branch will be held at 198, Union Street, Aberdeen, on Wednesday, May 18th, at 8 P.M., Dr. Urquhart, President, in the chair. Business:—Minutes, etc. Dr. Urquhart (Aberdeen): Case of Artificially-induced Conjunctivitis in a Hysterical Girl. Dr. Michie (Cove): Case of Scleroderma, with exhibition of patient. Dr. Maver (Baxburn): Result of Treatment of Extensive Nævus of Lower Lip, with exhibition of patient. Dr. Mackinder Davidson (Aberdeen): Case of Tobacco-Amblyopia. Dr. Mackenzie Booth (Aberdeen): Case of Otomycosis, with exhibition of patient.—ROBERT JOHN GARDEN and J. MACKENZIE BOOTH, Honorary Secretaries.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

AN ordinary meeting of the Branch was held at 198, Union Street, Aberdeen, on Wednesday, April 20th, at 8 P.M., the President, Dr. URQUHART being in the chair.

Proposed Post-Graduate Course for Aberdeen.—As convener of the committee appointed to consider the question of a post-graduate course for Aberdeen, Dr. EDMOND presented its report, describing other courses of a similar nature elsewhere; the circular issued to members of the Branch, and the favourable reception it had met with. In response, the meeting unanimously resolved to sanction the formation of a post-graduate course, extending over six days of meeting of four or five hours each, and to give the committee full powers to complete the necessary arrangements.

BATH AND BRISTOL BRANCH.

THE fifth ordinary meeting of this Branch was held at the Museum and Library, Bristol, on Wednesday, April 27th; C. GAINE, Esq., President, in the chair. There were also present forty-seven members and two visitors.

New Members.—The following were elected: G. S. Page, L.R.C.P., L.R.C.S., Bristol; W. M. Barclay, L.R.C.P., M.R.C.S., Bristol; A. W. Riddell, L.R.C.P., M.R.C.S., Westbury-on-Trym; Surgeon-Major W. J. Fawcett, M.B., Shirehampton; Surgeon-Major J. R. Rahilly, L.R.C.P., Horfield.

Communications:

1. Mr. PAGAN LOWE read a paper on the Bath Waters and Arsenious Acid.

2. Dr. C. A. WIGAN communicated a case of Pseudo-Hypertrophic Paralysis, and exhibited the patient.—Dr. MARKHAM SKERRITT made some observations on this case.

3. Mr. W. J. PENNY read a paper on Stricture of the Urethra, with Cases treated by Lister's Bougies, which was discussed by Messrs. DAGRE, LOWE, BARCLAY, and GREIG SMITH.

4. Dr. AUST LAWRENCE read a paper on the Treatment of Incomplete Abortion, upon which Mr. EWENS made some remarks.

5. Dr. BARTON communicated a case of Superfœtation, and exhibited the specimen.—Mr. S. H. SWAYNE, Dr. AUST LAWRENCE, and Mr. THETFORD joined in the discussion which followed.

6. Mr. HANCOCKE WATHEN reported a case of Myxœdema, and exhibited the patient.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIFTH ANNUAL MEETING.

THE fifty-fifth Annual Meeting of the British Medical Association will be held at Dublin, on August 2nd, 3rd, 4th, and 5th, 1887.

President: Withers Moore, M.D., F.R.C.P., Senior Physician to the Sussex County Hospital, Brighton.

President-elect: John T. Banks, M.D., D.Sc.(Hon.), F.K.Q.C.P.I., Regius Professor of Physic in the University of Dublin.

President of the Council: Sir B. Walter Foster, M.D., M.P., F.R.C.P., Professor of Medicine in Queen's College, and Physician to the General Hospital, Birmingham.

Treasurer: C. Macnamara, F.R.C.S., Surgeon to the Westminster Hospital, London.

An Address in Medicine will be delivered by W. T. Gairdner, M.D., F.R.C.P.Ed., Professor of Medicine in the University of Glasgow.

An Address in Surgery will be delivered by Edward Hamilton, M.D., Fellow and Professor of Surgery in the Royal College of Surgeons in Ireland.

An Address in Public Medicine will be given by the Rev. S. Haughton, M.D., F.R.S., D.C.L., Senior Fellow, Trinity College, Dublin.

The scientific business of the meeting will be conducted in eight Sections and two Subsections, as follows, namely:

Anatomical Theatre.

A. MEDICINE.—*President*, William Moore, M.D. *Vice-Presidents*, H. C. Bastian, M.D., F.R.S.; J. Magee Finny, M.D. *Honorary Secretaries*, T. Gilbart Smith, F.R.C.S.I., 68, Harley Street, Cavendish Square, London, W.; C. J. Nixon, M.D., 2, Merrion Square, Dublin.

Chemical Theatre.

B. SURGERY.—*President*, Sir George H. Porter, M.D. *Vice-Presidents*, Alexander Ogston, M.D.; John Fagan, F.R.C.S.I. *Honorary Secretaries*, W. Thomson, F.R.C.S.I., 34, Harcourt Street, Dublin; R. J. Godlee, F.R.C.S.Eng., 81, Wimpole Street, London, W.; C. B. Ball, M.D., 16, Lower Fitzwilliam Street, Dublin.

Surgical Theatre.

C. OBSTETRIC MEDICINE.—*President*, A. V. Macan, M.B. *Vice-Presidents*, T. More Madden, M.D.; A. L. Galabin, M.D. *Honorary Secretaries*, Wm. J. Smyly, M.D., 56, Fitzwilliam Square, Dublin; Wm. Duncan, M.D., 6, Harley Street, Cavendish Square, London, W.

Medical Theatre.

D. THERAPEUTICS AND PHARMACOLOGY.—*President*, Wm. Whitla, M.D. *Vice-Presidents*, Matthew Charteris, M.D.; D. J. Leech, M.D. *Honorary Secretaries*, Chas. Y. Pearson, M.D., 42, King Street, Cork; Michael McHugh, M.B., 25, Harcourt Street, Dublin.

Physiological Laboratory.

E. PATHOLOGY.—*President*, Samuel Gordon, M.D. *Vice-Presidents*, A. W. Foot, M.D.; David J. Hamilton, M.D. *Honorary Secretaries*, Theodore D. Acland, M.D., 7, Brook Street, Grosvenor Square, London, W.; Henry T. Bewley, M.B., Willow Park, Booterstown, Co. Dublin.

Divinity Theatre.

F. PUBLIC MEDICINE.—*President*, Sir Thomas Crawford, M.D., K.C.B. *Vice-Presidents*, John S. Taylor, M.D.; R. Thorne Thorne, M.D. *Honorary Secretaries*, John Wm. Moore, M.D., 40, Fitzwilliam Square West, Dublin; John F. W. Tatham, M.D., Town Hall, Salford.

Examination Room.

G. PSYCHOLOGY.—*President*, J. R. Gasquet, M.B. *Vice-Presidents*, Frederick Needham, M.D.; Oscar T. Woods, M.D. *Honorary Secretaries*, Conolly Norman, F.R.C.S.I., Richmond District Lunatic Asylum, Dublin; T. Lyle, M.D., Rubery Hill Asylum, Bromsgrove, Worcestershire.

Physical Theatre.

H. OPHTHALMOLOGY.—*President*, H. R. Swanzy, M.B. *Vice-Presidents*, D. Argyll Robertson, Pres.R.C.S.Edin.; Priestley Smith, M.R.C.S.E. *Honorary Secretaries*, A. H. Benson, M.B., 42, Fitzwilliam Square, Dublin; A. W. Sandford, M.D., 13, St. Patrick's Place, Cork.

SUBSECTIONS.

Engineering Theatre.

I. OTOLOGY.—*Chairman*, E. Woakes, M.D. *Vice-Chairman*, J. B. Story, M.B. *Honorary Secretary*, D. D. Redmond, L.R.C.S.I., 14, Harcourt Street, Dublin.

LARYNGOLOGY AND RHINOLOGY.—*Chairman*, W. H. MacNeill Whistler, M.D. *Vice-Chairman*, Kendal Franks, M.D. *Honorary Secretary*, R. A. Hayes, M.D., 56, Merrion Square South, Dublin.

Local Honorary Secretary.—George F. Duffey, M.D., 30, Fitzwilliam Place, Dublin.

Members desirous of reading papers, or joining in the discussions, are earnestly requested to communicate, without delay, with the Secretaries of the respective Sections.

All the rooms required for the purposes of the meeting will, by the kindness of the Provost and Senior Fellows, be provided in Trinity College. The Sections of Medicine, Surgery, Obstetric Medicine, Therapeutics and Pharmacology, and of Pathology, will be held in the Medical School, and the remaining Sections and Subsections in the Museum Buildings of the University. The President's Address will be delivered in the Dining Hall, and the General Meetings will be held in the Examination Hall, where also the stated Addresses will be delivered.

The front hall over the main entrance to Trinity College will be fitted up as a reception-room, and will be opened at 12 o'clock noon, on Monday, August 1st, and on the following days at 9 o'clock in the forenoon, and will remain open until 6 o'clock in the afternoon of each day, for the issue of tickets to members and for supplying all necessary information.

PROGRAMME OF PROCEEDINGS.

TUESDAY, AUGUST 2ND, 1887.

9.30 A.M.—Meeting of 1886-87 Council. Council Room, Museum Buildings.
10 A.M.—Service at the Pro-Cathedral, Marlborough Street. Sermon by the Rev. Martial Klein, S.G.F.R.U.I.
11.30 A.M.—First General Meeting. Report of Council. Reports of Committees; and other business. Examination Hall.
4 P.M.—Choral Service at St. Patrick's National Cathedral. Sermon by the Most Rev. the Lord Bishop of Meath.
8.30 P.M.—Adjourned General Meeting from 11.30 A.M. President's Address. Dining Hall.

WEDNESDAY, AUGUST 3RD, 1887.

9.30 A.M.—Meeting of 1887-8 Council. Council Room, Museum Buildings.
10.30 A.M. to 2 P.M.—Sectional Meetings. Medical School and Museum Buildings.
3 P.M.—Second General Meeting. Address in Medicine. Examination Hall.
9 P.M.—Soirée given by the President of the Association and by the Dublin Branch. Royal University of Ireland.

THURSDAY, AUGUST 4TH, 1887.

9.30 A.M.—Meeting of Council. Council Room, Museum Buildings.
10.30 A.M. to 2 P.M.—Sectional Meetings. Medical School and Museum Buildings.
3 P.M.—Third General Meeting. Address in Surgery. Examination Hall.
7 P.M.—Public Dinner. Royal University of Ireland.

FRIDAY, AUGUST 5TH, 1887.

10 A.M. to 1.30 P.M.—Sectional Meetings. Medical School and Museum Buildings.
3 P.M.—Concluding General Meeting. Address in Public Medicine. Examination Hall.
4.30 to 6 P.M.—Garden Party.
9 P.M.—*Conversazione* given by Surgeon-General Hassard, C.B., P.M.O Ireland, and the officers of the Medical Staff. Museum of Science and Art.

SATURDAY, AUGUST 6TH, 1887.

Excursions.

ANNUAL MUSEUM.

THE Annual Museum will be held on August 2nd, 3rd, 4th, and 5th, in the Anatomical Department of the Medical School of Trinity College, Dublin.

The Museum will be arranged in the four following Sections, and intending exhibitors are requested to communicate with the Secretary of the Section or Sections in which they propose to exhibit.

SECTION A.—Food and Drugs. (Honorary Secretary, F. J. B. Quinlan, M.D. Univ. Dub., 29, Lower Fitzwilliam Street, Dublin.)

SECTION B.—Recent Books, Instruments, and Appliances—Medical, Surgical, and Electrical. (Honorary Secretary, John Lentaigne, F.R.C.S.I., 29, Westland Row, Dublin.)

SECTION C.—Anatomical and Pathological Specimens and Drawings, Microscopes and Microscopical Preparations. (Honorary Secretary, Alex. B. McKee, M.B. Univ. Dub., Royal College of Surgeons, Dublin.)

SECTION D.—Hygienic and Sanitary Appliances. (Honorary Secretary, H. C. Tweedy, M.D. Univ. Dub., 2, Gardiner's Row, Dublin.)

Particulars should be supplied to the Secretaries of the objects proposed to be exhibited and the amount of space required. No show cases will be allowed.

As it is intended to print a catalogue, with appendix of advertisements, it is requested that inquiries be addressed to the Secretaries as early as possible.

All articles sent to the Museum for exhibition should be addressed to care of Professor Cunningham, Medical School, Trinity College, Lincoln Place, Dublin, and delivered, carriage paid, between the 5th and 26th of July.

Chairman of Museum Committee—Wm. Thornley Stoker, F.R.C.S.I., 16, Harcourt Street, Dublin. Vice-Chairman—D. J. Cunningham, M.D., 69, Harcourt Street, Dublin.

FRANCIS FOWKE, *General Secretary.*

SPECIAL CORRESPONDENCE.

A WINTER TRIP TO "THE FORTUNATE ISLANDS."

IV.

The Sanatorium at Orotava and its Gardens: La Paz.—The Garden of Acclimatisation: its Riches: its Testimony to the Climatic Qualities of Orotava.

WE have spent a week of delightful rest at the hotel and sanatorium of Orotava, drinking our fill of natural beauties in a spot which, after all our varied experiences in Europe, Asia, and Africa, impresses me as one of the loveliest scenes on earth, and in a climate which is nearer perfection than any I have ever approached. To the constant kindness of Dr. Perez, of Orotava, and of his son Dr. George Perez, I owe many opportunities of studying the climatic and medical history of the island, and investigating its natural history. Dr. Perez is a distinguished graduate of Paris, and his son is an M.D. of London, and studied for ten years in England. The works of Marcet and of Jaccoud give little idea of the comforts and resources of Orotava as it is now developed. Marcet wrote in 1883,[1] "I am inclined to believe that Teneriffe will eventually become a favourite station for consumptive invalids.....it will be necessary, however, to put up with Spanish cooking and Spanish attendance." Professor Jaccoud, after a stay of a few days in 1880, wrote that "The climate of Teneriffe (Orotava) is drier and more tonic than that of Madeira, and it is capable of completing and usefully extending the therapeutic applications proper to Madeira in a number of cases. It unites the advantages of mild and equable temperature with those of proximity to the sea and with the advantages of mountain climates;" but according to him, and from his unfortunate experiences of four days' scamper through the island at that time, "the want of any suitable installation," and the want of any suitable guides and the discomforts which he suffered, "judge the question." The want of "a good hotel in the foreground" spoilt for him, as for Dr. Johnson, the charms of the landscape, and annihilated the natural advantages of the place. That is, perhaps, a little too severely gastronomic a judgment, and somewhat too Parisian a point of view, even for a French professor. But the fact is that the want which he felt so acutely has now been filled with supreme success, and the hotel at Orotava is, perhaps, the most beautifully situated, and is certainly one of the most luxurious, well-appointed, and well-managed sanatoria south of Europe. It reminds me somewhat of the Hotel Beausite at Cannes, but has many elements of superiority. Its construction is that of a Cuban villa; its management approximates to that of a London club. It is built in two storeys only, the main reception-saloon facing the sea; two side buildings containing lofty and spacious reading-rooms, smoking-rooms and galleries, and verandah stretching at right angles towards the shore. All the rooms open with French windows to the ground. The terraced roofs, the galleries, and covered verandahs are surrounded by gardens commanding exquisite views of sea and mountain. As I write at seven on this March morning, sitting in the open, raised terrace, in an already delightful air and sun bath, I look across the gardens in front, which run down to the shore. The garden-plots are filled with tall hibiscus-trees, which are resplendent with gorgeous blossoms of different shades throughout the winter; lilies grow high in bushes, with flowering trumpets of pure white, or striped with tiger-yellow and deep crimson; and a mass of lilac blossom peeps out from a lily-bush of which I do not know the name. Masses of roses, geraniums, poppies, stocks, chrysanthemums, heliotrope, campanulæ, enliven the somewhat formal garden-beds. The paths glisten with powdered white pumice dust. Three stately

[1] *Southern and Swiss Health-resorts.* London: Churchill.

acacias rise stiffly from among them; in one corner the Ficus Bengalensis lifts high a massive evergreen head with laurel-like leaves, whence its popular name here, *laurel de la India:* to the right are three small palms, specimens of the Phœnix Canasiensis, and a juniper tree of the Bermudas springs up, looking like a huge Christmas tree; a small row of orange trees border the lower edge of the garden, and through the foliage we look upon the blue waves. Over the trellis of the covered billiard-room, which is open on all sides to the air, and of which even up to midnight the curtains are rarely drawn, climbs a luxuriant, spreading creeper, the Bougainvillia glabra, and the corresponding dining-rooms on the other side of the garden are shaded by a huge bignonia, with golden masses of flower, which are at their best in the months of January and February, but of which scattered bunches still remain. Just in sight from this point of view is a grove of banana trees to the left, and clumps of the brilliant scarlet poinsettia (Euphorbia pulcherrima), which flowers here in fullest beauty at Christmas, and hence is called here the "Flor de Pascua." Christmas, I may mention, is in Spain the "Pascua de Navidad," and Easter the "Pascua de Resurreccion." In the near foreground, on the right of the landscape, rises the rocky headland of La Paz, crowned by the Villa La Paz, belonging to the Marquis of Candia, and now occupied by an English family, who are arranging to spend three years here. It is at a height of 300 feet. A tuft of palms stand out sharply at the extreme front of the garden-terrace; the garden is adorned with a stately avenue of cypresses and myrtle. Below it is a winding path cut in the face of the rock overhanging the sea, along which are passing at this moment a donkey carrying barrels and some peasant figures of men and women balancing casks and earthen jars upon their heads. They are fetching the water from the spring Wartianez a deep rocky source which supplies the hotels with drinking-water of irreproachable purity. The supply is abundant and perennial; in the cool clefts of this rock I found growing abundantly tufts of the maidenhair fern. Wandering along the path, I have come across the mesembryanthemum noctiflorum, the orchil of our worthy trader, Captain Glas, whose tomes so much delight me; the source of the *barilla* of Spanish traders, formerly a chief commercial source of alkali, and a great article of trade; this transformation of the crystalline seaside herb into "a stone" by calcining flames was one of the never ending miracles of the simple faith of the Canarians. Beyond stretches an indented coast, rising precipitously into terraced mountain slopes, and in the distance the Cape of Santa Ursula, and further, the points of Sausal and La Punta stretch out into the sea. Looking backward on to the amphitheatre of the mountainous ranges which shelter Orotava on the land-side from the parching south and south-easterly African winds, we see the rocky heights crowned by the Villa Sitio del Pardo, the lovely residence of Mrs. Charles Smith, the widow of an old and much respected resident. It is flanked by araucarias and a beautiful palm; the lovely terraced gardens are widely known, and supply the subject of some of the remarkable sketches of Miss North, to be seen in the famous gallery of floral pictures with which she has endowed the nation at Kew. The lava-covered territory around it affords nourishment to native flora of the lava grounds, the stiff Euphorbia Canariensis, with its abundant acrid milky juice (which the Guanches were accustomed to throw into shallow seapools, and thus to stupefy the fish, which floated and were easily caught); the Euphorbia dulcis, and a variety of odoriferous rock-plants, and some pretty chrysanthemums. The milky juice of this Euphorbia is used in the island to intensify the action of blisters, and it has been employed by quacks as a drastic purgative and emetic. A short climb on foot or in the *carro*—a sledge like those in use in Madeira, drawn by bullocks—takes us to the famous Jardin de Aclimatacion of Orotava, well known to all botanists throughout Europe. This famous garden is the favourite resort of visitors, and a great addition to the resources of the sanatorium. Twice during our stay here a public concert has been held, with the local music of the Estudiantina and the band of the Philharmonic Society, where the rank, fashion, and beauty of Orotava assembled. It is only doing justice to the extreme courtesy and kindness of the leading Spanish residents if I take this occasion to express my sense of the honour done to us by their unfailing and kind attentions, and especially express our obligations to the Marquis of Candia, Count Salazar, Señor Peña, President of the Philharmonic Society, and others, who did so much to make our prolonged visit as socially agreeable as it was otherwise delightful. I must add some fuller details of the botanical history of the gardens, as I gathered them at various visits from the able and devoted curator, Herr Wilpret, who has spent thirty years in developing them, and has planted and nurtured most of their treasures. It is not too much to say that to his unremitting devotion the gardens owe their success and their fame, and that his attention and kindness to visitors are untiring. I dwell upon the botanical features of the gardens, not only or chiefly from their intrinsic interest, variety, and beauty, but because the truest and most unfailing evidence to the qualities of a climate is afforded by the silent but unerring testimony of these plant-witnesses. Whatever of rigour of wind, variation of temperature, or excess of sun there may be they will show; and the outdoor vegetation is the truest index to the medical climatology of any place.

The famous Garden of Acclimatisation of Orotava is situated at a short distance from the hotel, about a hundred yards above the sea-level. It was founded in 1790 by Charles IV, under the auspices of the Marquis of Nava, but at his death it fell into decay, and was let to a private person who sowed it with barley, wheat and potatoes. It was not until 1858 that some persons of influence obtained from the government a subsidy of 5,000 francs for its restoration. The garden is only two hectares in extent. In 1860 it possessed 250 species of not very rare varieties of plants. Its resources are most inadequate. The honorary director, who does little or nothing so far as I could find out, receives £200 a year; the curator (Herr Wilpret), on whom the whole burden of the work falls, receives only £40 a year. With the small resources at his command he has done wonders, and the garden now contains 3,000 varieties of useful medicinal and ornamental plants belonging to tropical, temperate and subtropical zones. It is a delightful resort for the visitors to the hotel, and for those who come to Orotava to seek health and to study nature. It seems exceedingly desirable that the Spanish government should place at the disposal of this important establishment more important resources. Nothing can give a better idea of the extraordinary mildness and climatic qualities of Orotava, than a brief study of the wide range of the flora, of which examples may here be seen in the finest condition. Among the rarest specimens are the Royal palm (Aureodoxa regia) of Brazil and the Antilles; the Fan palm (Latania Borbonica); the Areca palm (Areca-nut, areca rubra or lutescens); date-palm (Phœnix dactilifera); Phœnix Canariensis, the finest of all; the filament palm or Pritchardea filifera, of California; eight species of the Chamœrops; the Sago palm, or Cycas revoluta; the feather palm, Dion edule. Among the spiral palms are the Pandanus utilis, of Australia; the Pandanus odoratissimus, of Java, with great white flowers. Many fine varieties of ficus, the Ficus elastica, india-rubber tree, flourishing richly; the quaint Ficus imperialis or Artocarpus imperialis, of Para, with its strawberry-flavoured fruit springing from the ground and from the trunk, but which, coming from the Brazils, requires more tropical heat than it gets here to ripen well; the Ficus Benjamini, commonly called here the Indian laurel, which its rich foliage imitates; a delightful shade tree, one of the best testimonies to the qualities of this climate, for it grows to perfection in the gardens of the hotel, but it requires a good soil and mild equal climate, and cannot even be grown out of doors successfully at Cadiz, where its introduction has been attempted. There are dozens of other examples of ficus in these gardens, all of which flourish well. Passing to the Musaceæ, we find exceedingly fine examples of the banana, of which there are eight varieties from America and Africa, among them the Musa speciosa with its grand masses of fruit, and the Musa Sinensis, or Cavendishii, which gives the fruit most abundant in the Canaries; the Musa Paradisiaca, of which the fruits are the largest, and which is held to be the actual fruit with which Eve was tempted, and the Musa Ensete of Abyssinia—the Abyssinian banana, which the French call the Abyssinian cabbage, an ornamental tree, of which the leaves but not the fruit are eaten. It was discovered in Abyssinia during the war against King Theodore, growing on the mountains at a height of 4,000 feet. In all, there are from eighteen to twenty varieties of bananas. The near neighbours of the bananas are the Strelitzia—Augusta, regina, Nicolaiji—remarkable for their beautiful foliage and for their flowers, shaped like a bird's head. The fruit trees of the Antilles and of Central America are represented by the Avocados, alligator pears, or Persea gratissima, of which the interior represents a sort of vegetable butter, and which, eaten with bread, pepper, and salt, is also agreeable and nutritive; it is eaten also cut into salad, or boiled in a vegetable soup; of these there are four varieties in the garden. Of the Guava tree there are eight species—psidium pomiferum, and pyriferum, the pear-shaped and apple-shaped varieties being the most edible. The Guava tree flourishes freely in the island, and its fruit is valued for its astringent properties (containing much tannin), and having a great reputation—somewhat overrated, I think—as a preserve; "Guava jelly" is still esteemed by many a peculiar delicacy; the custard apple in six varieties. The mango tree (mangifera Indica), in these gardens and in Santa Cruz produces abundant and delicious fruit, of which it is probable that, in this new period of rapid steam communication, the London

market may profit by being supplied with, perhaps, the only tropical fruit which is unrivalled by our English hot-houses. Among the medicinal plants are the Liquidambra styraxiflora, which produces the resinous storax; the Helicium anisatum and religiosum, the star-anise of Japan, which flavoured the old anisette of Holland and Bordeaux, and which, till lately, the Dutch settlers at Deshima had the sole right of exporting from Japan; the Laurus Cinnamomum, the false Cinnamon tree (the Cinnamomum Aromaticum of Ceylon does not find here sufficient heat); the Laurus Camphora, the Strychnos nux vomica, the Rhus succedanea, the candle-tree of Japan. Among useful plants we find the Manilla hemp plant, or Musa textilis; the Phormium tenax or New Zealand hemp, the and China grass, Urtica nivea, the bamboo of India and of China, and the indigo plant—indigofera anil. Among ornamental trees and flowers I can mention only the magnolia grandiflora of splendid dimensions; the tulip tree; a considerable collection of the acacias of New Holland and South Africa; a great tree of Hibiscus, forming lofty flowering tiers of most magnificent double and single blossoms; Poinsettia, the Bignonia, the Bougainvillia, the Oleanders; Amaryllides Agapanthus, lilies of gigantic size and rare beauty; flowering aloes; Daturas, laden with grand trumpet-shaped flowers. These are all flourishing in the open air. Not to extend the catalogue further, it will be seen how delightful a study may be made here of some of the rarest and most interesting botanical products, and how rare must be the qualities of the climate which, without tropical heat or winter cold, favours alike the growth of the flora of both.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Treatment of Hæmorrhoids by Dilatation.—Radical Cure of Varicocele.—Aconitine in Neuralgia.—New Beef Extract.—Gastric Complications in Disease of the Urinary Organs.

In the *Gazette des Hôpitaux*, M. Verneuil publishes a note on the treatment of piles by dilatation. According to him, 98 cases out of 100 may be radically cured by this simple process. The duration of the treatment scarcely ever exceeds eight days, during four of which the patient remains in bed, keeping his room during the remaining four. Piles of 6, 8, 10, 12, and 14 years' standing have been completely cured in this manner. Even when the disease is complicated with prolapse of the rectum dilatation should be performed. M. Verneuil has used this method for the last fifteen years without a single failure. He prefers the speculum to the finger as a dilator.

At a recent meeting of the Société de Médecine, M. Wickham read a note on the radical cure of varicocele by Horteloup's operation. This consists, in addition to the partial excision of the scrotum according to the American method, of a resection of a portion of the venous plexus at the back of the spermatic cord, these veins being more often found in a varicose state than any others of the same region. M. Wickham proposes to modify Horteloup's mode of operating in the following manner: A catgut suture is passed through the walls of the scrotum, five or six centimètres above the testicle in front of the posterior venous plexus, so as to enable the surgeon to draw out from the clamp the veins to be excised. The clamp (which is practically a pair of pincers with double pronged blades, resembling in shape the letter V with its ends turned outwards) is now applied. At a short distance from the convex and horizontal portions of the clamp, pins are made to transfix the walls of the scrotum at intervals of about one centimètre; these pins prevent the clamp from slipping, and aid in applying the superficial suture. Resection of the scrotum and veins is now performed either with scissors or by means of thermo-cautery, the line of incision being about half a centimètre from the pins. Twisted sutures are then put in on a level with the pins. An antiseptic dressing is applied, and the clamp is allowed to remain *in situ* for about thirty-six hours, its pressure being relaxed from time to time. A few days later, the superficial sutures are removed.

In the *Gazette des Hôpitaux*, M. Guesdon has published a note on the effects of aconitine in neuralgia. Aconitine diminishes or suspends the functional activity of the nerves of sensation, and, while producing anæsthesia, it gives steadiness to the circulation, diminishes the calibre of the capillaries, and lowers the temperature. The action of the drug is sure and regular, but, owing to the powerful effect which it produces, it should be given in small doses at long intervals. A safe and convenient way of administering the medicine is in the form of pills, made up according to the formula of Dr. Moussette, of Chauny. Each of these contains one-fifth of a milligramme of pure aconitine and quinine. On the first day the patient takes three pills, one in the morning, one at noon, and one at night. If these have no effect, one pill may be added each day until six are given in the twenty-four hours, this dose being maintained until the pain ceases. Should diarrhœa come on, the dose must be reduced.

The *Gazette des Hôpitaux* of March 5th contains an account by M. Richardey of the analeptic qualities of a preparation of beef known as the *tablette Rousseau*. This consists of condensed beef reduced to a powder by a new process; it is unalterable, pleasant to the taste, and easily digested. It is very rich in nitrogenous material and in phosphates, and its assimilation is rendered certain by complete and rapid peptonisation. Each tablet contains twenty grammes of beef-powder, representing eighty grammes of fresh beef. According to the author, this preparation soon makes chlorotic and cachectic patients able to digest other kinds of nourishment easily.

At a recent meeting of the Biological Society M. Pilliet communicated the following note on lesions of the gastric mucous membrane associated with renal and urinary disease. In two patients, one suffering from cancer of the bladder, and the other from stone, both of whom succumbed to urinary cachexia, there were distinct though slight lesions of the mucous membrane. There was marked shortening of the gland-ducts in the stomach, and the villi were injected. The glandular elements had a tendency to remain cubical, and there were also fewer of the granulations which Nussbaum considers as peptic ferments. In the stomach of a patient who died of stricture which had caused extravasation of urine, the lesions were more marked. The glands, which were much shorter, had a more distinct outline, with a tendency to arrange themselves in rows; they appeared to be separated from each other by a network of connective tissue fibres. The membranous cells forming the walls of the gland-ducts were swollen and granular, and the tubes themselves were dilated to double their usual diameter in the lower part. The cells in this part were prismatic, with their nuclei pressed against their base. The villi were raised, thickened, and club-like. In a woman who succumbed to interstitial nephritis, with frequent vomiting, the proliferation of the connective tissue was still more marked. The glands were separated from each other by interstitial tissue filled with round cells. This tissue projected between the glands and invaded the villi, making them appear raised and thickened, so that they looked like the papillæ of the skin with the epidermis stripped off.

CORRESPONDENCE.

A PHILANTHROPIC PROFESSION AND A NIGGARDLY PUBLIC.

SIR,—There are two classes of philanthropists; the one is satisfied to perform its philanthropic work by such means and agencies of its own as it may be able to dispose of; the other prefers carrying on the work of philanthropy vicariously. But small heed is given by the general public and by our governing powers to the immense amount of unrequited and self-sacrificing labour bestowed upon the nation by the Medical Profession, and the ignorance of the general public in this respect is paralleled by their depreciation of our scientific zeal, which leads so many of us, for the benefit of humanity, to devote years of labour to the acquisition of fresh knowledge, and to enter upon fresh fields of inquiry for the investigation of disease and suffering.

There ought, however, to be a limit to the vicarious charity which the general public perform through our agency; and it is with a view to preventing what appears to me an unwarranted abuse of our professional liberality, that I take the liberty of drawing your attention to an undertaking which is especially characteristic of Saint Crispin's method of providing shoes for the poor.

A circular lies before me which, under the authority of a long list of peers, members of parliament, bishops, authors, and others, proposes that a certain number of physicians and surgeons who make a specialty of the treatment of certain diseases, shall attend and give advice at a central establishment during a certain number of hours daily—the object of the association being to "provide advice for patients of very moderate means," who can neither avail themselves of "existing charities, nor can attend, for financial reasons, the consulting-rooms of eminent specialists."

The promoters of this remarkable scheme evidently are not aware of the fact that the eminent specialists they wish to employ, "at a fixed fee of five shillings," are already giving their services to the public without fee or reward at their respective hospitals; that those who have gained the confidence of the public have done so by years of patient and anxious labour; and that, when they have arrived at the

period when guineas flow in, their duty to their families demands, in common justice, that they should gather in their harvest while their health and life are spared.

It appears to my possibly short-sighted vision that, if the peers, bishops, members of parliament, authors, and others were to put their hands into their pockets, and pay the fees for their protégés whom they wish to benefit by the advice of eminent specialists, they would show their estimate of philanthropy in a much more practical manner than by calling upon an already overtaxed and underpaid profession to make further sacrifices.

When the Lord Chancellor, the Solicitor and Attorney General, can be induced to give their legal advice to the poorer members of our profession at a reduced but fixed fee of "five shillings," it may be time for our brethren to consider the propriety of assisting the "Association for the Treatment of Special Diseases."—I am, etc.,

M.D.

THE TREATMENT OF FIBROID TUMOURS OF THE UTERUS BY ELECTROLYSIS.

SIR,—I cordially endorse your remarks in the JOURNAL of May 7th, p. 996, in the review of M. Apostoli's recent work on *The Treatment of Fibroid Tumours of the Uterus by Electrolysis*. You say: "With such testimony to rely upon, we do not see how we can any longer refuse, at any rate, to make inquiry, if not to test the practice in our own country, where fibroid disease is as prevalent, and the failures and mortality from other operative proceedings are almost as much to be regretted as elsewhere." I have been acquainted with this mode of treatment of fibroid tumours of the uterus by electrolysis for several years past, and have had much of the literature on the subject sent to me, from time to time, from France and America.

I have frequently asked members of our profession engaged in the treatment of diseases of women in this country to send me cases to test and verify, if possible, the reported successes received from abroad, but it is very difficult to get English physicians or surgeons to adopt any mode of treatment with which they are not themselves perfectly conversant. Perhaps, for the safety of their patients, this is in many instances a good characteristic.

I have been associated in the treatment of electricity in two cases of fibroid tumour of the uterus, both of which improved; and I have had several cases of dysmenorrhœa, which have been treated with the negative pole of the constant current battery with marked relief.

I do think with you, and with your correspondent Dr. W. W. Webb, that this mode of treatment should receive a fair trial in our own country.—I am, etc.,

W. E. STEAVENSON, M.D. Cantab., M.R.C.P.,
Electrician to St. Bartholomew's Hospital.

SIR,—Any treatment recommended for the cure of uterine fibromata which may obviate the necessity for abdominal section must of a surety receive the most careful consideration of the profession, and especially of those members of it who are constantly treating cases of this nature. It is, therefore, to be hoped that Dr. Webb will publish full details not only of the mode of procedure he mentions, but also of all the cases he has seen so treated. Your readers may care to know that a valuable paper on "The Treatment of Fibroid Tumours of the Uterus by Electrolysis, with a Description of Apostoli's Method," was read by Dr. Martin before the Chicago Medical Society, and is published in the *Journal of the American Medical Association* for April 23rd.—I am, etc.,

WILLIAM DUNCAN.
Harley Street, W.

SEQUEL TO A PORRO'S OPERATION: VAGINAL ENUCLEATION OF FIBRO-MYOMA.

SIR,—At the annual meeting in Cardiff I narrated a case of pregnancy in double uterus in which I performed a modification of Porro's operation (*vide* JOURNAL, October 10th, 1885). There was a single cervix, but a divided corpus uteri, in the right segment of which a large fibro-myoma was developed which fully occupied the pelvis and obstructed labour. By abdominal section the left segment, in which the child was, and a portion of the right horn were removed, but it was impossible to enucleate the fibro-myoma. On April 7th, just two years subsequent to this operation, the uterine tumour had extended to the umbilicus, and was also protruding from the vulva in a sloughing condition. As the os uteri was out of reach, I opened the uterine capsule freely with scissors, and enucleated, *per vaginam*, a fibro-myoma whose collected fragments weighed 4 lbs. 13 oz. The tumour was not polypoid, and its separation from the uterine wall was difficult. Dr. Davies administered ether and assisted me; the operation lasted two hours, but there was little hæmorrhage, and the patient has made a complete recovery.—Yours, etc.,

FRANCIS IMLACH.
Liverpool, May 3rd, 1887.

IRISH HOSPITALS STATISTICS.

SIR,—Sir Charles Cameron is quoted by your Dublin correspondent, in the JOURNAL of April 30th, as having stated that 421,357 patients were alone treated in all the Irish hospitals for some ten years, and that of this total nearly half were treated in the hospitals of Dublin. Allow me to add to that statement that during the same period a million of patients were treated in the Union hospitals of all Ireland. These hospitals are provided with everything that money can procure for the treatment of patients, and they are neither under the necessity of turning out patients prematurely, nor of addressing piteous appeals for alms to the public to save them from impending bankruptcy. At the date at which the memorial was presented by Union hospital physicians to the Royal University, the total number of beds placed at the annual disposal of patients in hospitals other than Union ones in all Ireland was but 16,000, while there was bed-accommodation, and those beds were actually occupied, in Union hospitals for over 100,000.

It must not be forgotten, also, that the nominal bed-accommodation of Dublin is largely in excess of the beds really occupied, while the habit of sending away patients quickly introduces another item which is calculated to mislead. I may add that Union hospital returns are official ones; I am not sure that there is any check on some of the others at all events.—I am, etc.,

THOMAS LAFFAN.
Cashel, May 4th, 1887.

MEDICAL DEFENCE UNION.

SIR,—Will your permit me to reply to various criticisms which have appeared in your columns (and elsewhere) of this institution, that I have now before me an audited copy of the accounts, signed by the eminent firm of Hibberd, Bull, and Co., 17, King's Arms Yard, Coleman Street, E.C.; and that their report is absolutely satisfactory, and confirms the report made to the last annual meeting in everything except one or two trifling details?—I am, etc.,

Birmingham. LAWSON TAIT, President.

RIGHT UPPER CANINE TOOTH REMOVED FROM THE LEFT ORBIT OF A CHILD.

SIR,—The extremely interesting case reported under the above heading by Dr. Ward Cousins in the JOURNAL of April 23rd adds yet another to the many instances already recorded of the unexpected trouble sometimes arising from an unerupted, or abnormally erupted, tooth. Permit me, however, to question the correctness of the conclusions arrived at as to the nature of the tooth in point, which is, I think, conclusively proved by Dr. Ward Cousins himself to be a supernumerary tooth, and not one of the normal series at all.

In the report it is stated that, "on examination, the teeth were found normal in position, complete in number, and well formed." Clearly, then, the tooth found in the orbit could not have been a right upper canine or any other tooth belonging to the normal milk series; and it is further stated "the age of the patient, and also the special characters of the tooth, clearly indicate its relation to the deciduous set." It did not, therefore, belong to the permanent series, and as the milk set was complete without it, there is no option but to decide that the tooth was a supernumerary one belonging to the first dentition. This being so, the question of "crossed displacement" falls to the ground, for there is no evidence that the tooth found in the left orbit ever occupied the right maxilla, and, being a supernumerary tooth, its mere shape would hardly warrant one in definitely fixing the original site of its development.

There is sometimes so great a resemblance between normal and supernumerary teeth that it is difficult to state decidedly into which category a particular specimen should be placed, and this Dr. Ward Cousins has recognised, for he says, "Sometimes they present, however, a definite outline, and accurately resemble one of the recognised forms." The tooth in question should therefore, I think, be described as a supernumerary tooth, resembling a right upper canine.

I may add that the statement contained in the latter part of the notice, that misplaced teeth "are generally found to occupy an inverted position on the bone to which they are attached" is one that will scarcely be endorsed by many practitioners.—I am, etc.,

STORER BENNETT, F.R.C.S.Eng. L.R.C.P.Lond., L.D.S.Eng.,
Honorary Curator of the Museum of the Odontological Society, Dental Surgeon to the Dental Hospital of London and to the Middlesex Hospital.
London.

NAVAL AND MILITARY MEDICAL SERVICES.

We are asked by the Director-General of the Medical Department of the War Office to state that no examinations for commissions in the medical staff of the army will be held during the month of August next.

MIDLAND VOLUNTEER MEDICAL ASSOCIATION.

The second annual meeting and mess of the Association was held at the Great Western Hotel, Birmingham, on April 14th. Among those present were: Surgeon-Major Thompson (1st Volunteer Battalion Royal Warwickshire Regiment, President), Surgeons T. S. Gentles (1st Volunteer Battalion Derbyshire Regiment), H. M. Morgan and W. G. Lowe (1st Volunteer Battalion North Staffordshire Regiment), J. P. Massingham (1st Shropshire and Staffordshire Artillery Volunteers), W. R. Edginton (1st Worcestershire Artillery Volunteers), T. Richards (1st Volunteer Battalion Royal Warwickshire Regiment), F. Underhill (1st Cadet Battalion Royal Warwickshire Regiment), and E. L. Freer (1st Volunteer Battalion Royal Warwickshire Regiment, Honorary Secretary).

The Honorary Secretary read the first annual report, which stated that the Association had been eminently successful in carrying out the objects for which it was formed. The manœuvres at Streetly Wood during the encampment of the 1st Volunteer Battalion Royal Warwickshire Regiment had been most instructive, the commanding officer (Colonel Jervis) and company officers made the movements of the battalion fall in with the requirements of ambulance work as in action, detailed men to fall out at intervals with various supposed wounds, and in every way assisted the medical officers engaged, who, with the men, were afterwards entertained by them. Since last year several additional battalions had taken up ambulance work, and it was hoped that members would induce all medical officers of Midland battalions and batteries to join the Association. After all initial expenses there was a small balance in favour of the Association. An invitation was received from Surgeon Manby, 3rd Volunteer Battalion South Staffordshire Regiment, to hold the second annual field-day at the annual encampment at Oxley Manor in August next, and was unanimously accepted.

Surgeon Manby was elected President for the ensuing year.

Surgeon-Major Thompson addressed the members, and several matters affecting medical officers were discussed, among others the refusal of the War Office authorities to allow pay to those anxious to attend schools of instruction at Aldershot or elsewhere, for the purpose of making themselves proficient; the absence of inducements for filling vacancies in the medical staffs of regiments, owing to there being but one surgeon on the establishments of each battalion, the others only holding acting rank irrespective of length of service; and the much-debated subject of relative rank, respecting which it was decided that the Association should take such steps as might be deemed advisable, in consequence of the anomalous position in which all medical officers are placed thereby.

The routine business of election of committee, etc., was executed, and the members afterwards messed together.

INSTRUCTION TO VOLUNTEER MEDICAL OFFICERS.

A course of lectures to volunteer medical officers is now being given by Dr. Walter Pearce at the headquarters of the Volunteer Medical Staff Corps. At the lecture on Barrack and Camp Hygiene, to be delivered in the Parkes Museum on Wednesday, May 25th, at 7.30 P.M., Dr. Farquharson, M.P., has promised to take the chair.

HONORARY RANK FOR THE ARMY MEDICAL STAFF.

Royal Surgeon writes: In order that the fight for honorary rank may be carried on to a successful issue, it would be highly desirable, as you suggest, that a summary of the whole question should be drawn up in the form of a pamphlet for distribution to leading persons in the medical schools and corporations, Members of Parliament, and others likely to aid us in carrying on this struggle, which promises to be unusually severe and prolonged. I and many others would be glad to aid in defraying the expense of printing, and would assist in distributing the pamphlets. No doubt our opponents calculate that in time this movement will wear itself out; but this idea we junior officers can view with complacency. Time is with us, and we are firmly determined to devote ourselves to persistent active agitation until our present intolerable grievance is removed.

*** Medical officers of the army and retired medical officers desiring to take part in distributing such documents, and willing to assist in the matter in this way, and by communicating to their medical schools, universities, and corporations, are requested to forward their names to the office. It is obvious that to ensure the end in view some energetic and persistent action must be taken.

Chas. R. Francis, M.B., Surgeon-General Indian Medical Service (Retired) writes: Acting upon your excellent suggestion made in the Journal of May 7th, referring to the "relative rank" of medical officers in the army, I have written to the dean of the school attached to my old hospital—the Middlesex—and offered, in the event of the War Minister's action still continuing to be unsatisfactory, to address the students (should a meeting be convened), or to write a letter for circulation amongst them, or both. I have forwarded to the dean all the recent leaders, letters, and proceedings contained in the Journal, and will let you know the result in due course. It is of paramount importance that every honourable inducement should be held out to good medical students to enter the army; but I am sure that the abolition of definite rank will have the effect of deterring them from doing so.

NAVAL SURGEON.

We have ascertained that the courses of instruction at Haslar and at Netley are by no means similar, and that the course of instruction at one of these institutions would not be regarded as a substitute for the course of instruction at the other. Neither is there any precedent for service in the Royal Navy counting as service towards pension or for promotion in the Medical Department of the army or in the Indian Medical Service.

YET ANOTHER MEDICAL SCHOOL.

Army Medical Student writes: I have read with interest and satisfaction your comments upon the condition of the Army Medical Service, and I trust its officers will, as a result, meet with that amount of respect which is their due. Still, if you will allow me to offer a suggestion, I would say that thorough efficiency in that important department of the British army will never be ensured until the army takes the training of its own medical officers into its own hands.

That a London medical student, on the completion of his four years' hospital course, can, even though he call himself an army medical student, know simply nothing of the after-life for which he is certainly doing his best to qualify himself, is surely too plain to need more than the mere mention of the fact; but, I would ask, is it right that this should be so? By the system of training for qualification as an officer in the army, a student can pass direct from school to a military college, where from the very first his naturalisation to the army may be said to commence. It is, however, deemed sufficient that, for an army medical student, the brief fag end of his educational career should be devoted to the practical acquaintance with army discipline and military training which is necessary.

I write to urge the foundation of an Army Medical College, to be presided over by a governing body of army medical officers, with power to conduct their own examinations, fitting them rather for intended army-surgeons than for general medical practitioners. Let the army medical student's career be ruled by that system of living, drilling, and discipline which governs that of the Woolwich cadet; that the student, passing direct from school into the college, may from the very first be educated as an "army man."

BRIGADE-SURGEONS IN INDIA.

The following document sets out a grievance with which we have before expressed our sympathy, and which we consider presses for remedy.

To the Right Honourable the Secretary of State for India, the petition of Brigade-Surgeon ———, Medical Staff, humbly showeth that:

1. When the present warrant, under which officers of the Medical Staff drew consolidated pay in India, was compiled (about twenty-two years ago), the rate of promotion for all ranks was far more rapid than now; medical officers obtained field-rank at about ten years' service, and frequently became deputy surgeons-general before twenty-five years' service, and on this rate of promotion the scale was drawn up.

2. The pay of surgeon-major ranking as lieutenant-colonel after twenty years' full-pay service was laid down at 1,056 rupees.

3. After five years' service this rate was increased to 1,093 rupees, an increment of but 37 rupees; no doubt because it was then calculated that few officers would remain surgeons-major after twenty-five years' service.

4. Beyond this no arrangement for an increase was made, as it was then looked on as improbable that an officer would remain much over twenty-five years in the executive grade.

5. At the present time medical officers do not obtain administrative rank till about thirty years' full-pay service, so that they have to serve from twenty years' service to thirty years' service, with but one small increment of 37 rupees after twenty-five years' service.

6. When the present Indian pay-warrant was granted, the rank of brigade-surgeon was not contemplated, and therefore no provision was made for it in the pay-code.

7. Consequent on the reorganisation of the department, a Royal Warrant was promulgated on December 2nd, 1879, in which was introduced the new rank of brigade-surgeon.

8. The rank of brigade-surgeon is now only obtained after the most rigid selection, a selection unexampled in any other branch of this, or probably of any other army.

9. This selection is founded on (1) physical fitness; (2) reports of superior officers, both military and departmental; and (3) the results of a most severe and exhaustive examination; in addition to which, officers must have a certain proportion of foreign service, eight years being the minimum.

10. Surgeons-major in charge of regiments of the mounted branches formerly drew 90 rupees extra for horse-allowance.

11. Your petitioner being in medical charge of all the European troops of the ——— garrison; namely—regiment British cavalry, one division Royal Artillery, and two battalions of infantry—has all the responsibility that was formerly divided between four surgeons-major, while at the same time he draws 90 rupees *per mensem* less than the officers formerly in medical charge of the cavalry or artillery.

12. The duties of your petitioner as brigade-surgeon are far in excess of those formerly performed by surgeons-major in charge of regiments, and his responsi-

bilities are much greater. Your petitioner is posted to the head-quarters of the division, and holds charge of the station-hospital, in two sections, and performs duties formerly divided among four senior officers. In addition to this, he has to carry on the duties of the deputy surgeon-general in his absence, without pay or allowances, in addition to his other duties.

13. In every part of Her Majesty's dominions, except India, the rank of brigade-surgeon is recognised, and a very substantial addition is made to the pay.

14. In India no recognition whatever is given to the rank beyond being permitted to wear a frock-coat.

15. In the Royal Warrant of December 2nd, 1879, it is laid down that "the foregoing warrant will not be applicable to army medical officers" serving in India, or on the Indian Establishment, and no additional emolument will, under its provisions, accrue to medical officers serving in that country.

16. This provision has never been rescinded, and, as a consequence, your petitioner has been put to the extra expense of new uniform, while, on the other hand, the State strictly adheres to the rule by which he is debarred from receiving extra pay or allowances. In addition, the present strict system of selection has been instituted, so that the conditions of service have been greatly modified since the promulgation of the warrant of 1879.

17. In the Royal Warrant of 1879 it is also laid down that principal medical officers will make the best arrangement the service will admit of, to avoid throwing mere routine duties on senior executive officers.

18. In India this clause is not in operation, and your petitioner is liable to be called on to perform duties of the most routine nature.

19. No distinction is made between your petitioner and surgeons-major who have not been selected, beyond your petitioner being permitted to wear a braided coat at his own expense. Both draw a maximum of 1,093 rupees, though your petitioner performs much more important and arduous duties.

20. Your petitioner would also bring to notice the fact that when on active service he was only granted consolidated pay for charge of a general hospital in the field, at the same rate as a surgeon-major of twenty years' service; and as his pay as brigade-surgeon is 37 rupees *per mensem* more than that of an officer of twenty years' standing, your petitioner was placed in the position of drawing 37 rupees less staff-allowance than his junior.

21. As brigade-surgeon in charge of a large station-hospital, your petitioner has not only an enormous pecuniary responsibility which is strictly enforced in the case of loss of stores, or errors in pay-questions, but also exercises military command over all other medical officers, subordinates, orderlies, patients and native establishment, often amounting to 400 or 500 men in the aggregate, and though every other branch af the army in India, combatant and departmental, receives command, charge, or staff allowance, your petitioner receives nothing extra for this great responsibility.

22. In conclusion, your petitioner prays that he may receive:

First: Recognition of his rank while serving in India;

Second: Exemption from routine duties; and,

Third: A staff-allowance sufficient to mark the importance of his duties and compensate him for his responsibilities, professional, pecuniary, and military; and as in duty bound your petitioner will ever pray.

THE NAVY.

THE following appointments have been made at the Admiralty during the past week:—FLEETWOOD BUCKLE, Fleet-Surgeon, to the *Unicorn;* H. E. MARSH, Staff Surgeon, to the *Thunderer;* A. W. B. BARRETT, Surgeon, to Haslar Hospital JOHN MENARY, Surgeon, to the *Forester*.

THE MEDICAL STAFF.

SURGEON-MAJOR C. S. WILLS, C.B., is promoted to be Brigade-Surgeon, *vice* W. A. Gardiner, who has retired. Brigade-Surgeon Wills entered the service as Assistant-Surgeon, August 7th, 1866; became Surgeon, March 1st, 1873; and Surgeon-Major December 10th, 1875. During the Zulu war in 1879 he was Senior Medical Officer at the base of operations and of the lines of communication between Durban and the Lower Tugela; he was also Sanitary Embarking and Disembarking Medical Officer; he received the medal for the campaign, and was nominated a Commander of the Bath in November, 1879. He is at present stationed at Canterbury.

Surgeon-Major R. P. FERGUSON is also promoted to be Brigade-Surgeon, *vice* W. O'Halloran, retired. His previous commissions are dated: Assistant-Surgeon, March 31st, 1862; Surgeon, March 1st, 1873; and Surgeon-Major, April 28th, 1876. He served in Bhootan in medical charge of the Royal Artillery during the campaign of 1864-65, and was present at the attack and capture of Bala and Buxa Dooars (medal with clasp); in the Afghan war in 1878-79 with the second division Peshawur Valley Field Force (medal); and in the Egyptian war in 1882 (medal and Egyptian bronze star). He is now serving as Senior Medical Officer of the Station Hospital at Belgaum, Madras Presidency.

Surgeon CHARLES WILLIAMSON has been placed upon temporary half-pay on account of ill-health. His commission bears date March 6th, 1880.

Surgeons-Major F. W. L. HODDER and R. V. ASH, who are serving in Bengal, have each received leave of absence for six months on medical certificate.

Deputy Surgeon-General J. LANDALE, M.D., serving in Bengal, is appointed to the administrative medical charge of the Sirhind Division.

INDIAN MEDICAL SERVICE.

BRIGADE-SURGEON HENRY CAYLEY, of the Bengal Establishment, has retired from the service, which he entered January 29th, 1857. He served in the Indian Mutiny campaign in 1857-58 in the Benares, Allahabad, and Goruckpore districts (medal).

Brigade-Surgeon C. J. F. MACDOWALL, of the Bombay Establishment, whose retirement we recently announced, has been granted the honorary rank of Deputy Surgeon-General.

Surgeon Major G. P. MACKENZIE, M.B., Bengal Establishment, medical officer of the 4th Native Infantry, is appointed to officiate as senior medical officer at Port Blair, during the absence of Surgeon-Major W. N. Keefer, on furlough.

Surgeon W. A. SYKES, Bengal Establishment, is placed in civil medical charge of the Ruby Mines District, Burmah, from the date on which he assumed charge from Surgeon Shewan.

Surgeons G. C. HALL and M. J. T. J. BLANCARD, of the Madras Establishment, having arrived from England, are directed to report themselves to the Principal Medical Officer, Burmah Field Force, Mandalay.

Surgeon R. H. CASTOR, Madras Establishment, is appointed to the officiating medical charge of the 3rd Light Infantry.

Surgeon F. G. MAIDMENT, Madras Establishment, on arrival from England, is directed to report himself to the Deputy Surgeon-General, Her Majesty's Forces, Bangalore Division, Belgaum and Ceded Districts, for general duty.

Surgeon I. P. DOYLE, Madras Establishment, on arrival from England, is ordered to report himself to the Deputy Surgeon-General Her Majesty's Forces, Eastern District, for general duty.

Surgeon A. T. L. PATCH, M.B., Madras Establishment, whose services have been placed at the disposal of the Military Department, is directed to report himself to the Principal Medical Officer, Burmah Field Force, Mandalay, for orders.

Surgeons B. B. GRAYFOOT and T. E. DYSON, Bombay Establishment, are appointed, the former to do general duty in the Poona Circle, the latter to do general duty in the Mhow Circle.

Surgeon P. D. PANK, Bengal Establishment, Civil Surgeon, of Bikaneer, is directed to officiate as Agency Surgeon at Ulwur, during the absence on furlough of Surgeon-Major T. Ff. Mullen, M.D.

The services of Surgeon-Major B. FRANKLIN, Bengal Establishment, are replaced at the disposal of the Government of India, in the Home Department.

Surgeon-Major C. W. CALTHROP, M.D., Bengal Establishment, medical officer of the 4th Native Cavalry, is appointed to officiate as Civil Surgeon of Fyzabad during the absence on leave of Surgeon-Major B. O'Brien, M.D.

Surgeon A. G. E. NEWLAND, Bombay Establishment, is appointed to be Civil Surgeon of Pagan, Burmah.

Surgeon G. J. SHAND, M.D., Bengal Establishment, Superintendent of the Chenawan Central Gaol, died at Chenawan on April 1st, aged 32. Dr. Shand entered the service October 1st, 1881.

Deputy Surgeon-General W. WALKER, Bengal Establishment, Inspector-General of Civil Hospitals, North-West Provinces and Oude, is appointed to officiate as Surgeon-General and Sanitary Commissioner with the Government of India during the absence on leave of Surgeon-General Sir B. Simpson, M.D., K.C.I.E., who has privilege leave for two months and twenty-one days.

Brigade-Surgeon W. R. RICE, M.D., Bengal Establishment, is to officiate as Inspector-General of Civil Hospitals, North-West Provinces and Oude, during the deputation of Deputy Surgeon-General Walker.

Surgeon-Major B. FRANKLIN, Bengal Establishment, is appointed to officiate as Civil Surgeon of Jubbulpore, *vice* Brigade-Surgeon Rice.

Surgeon T. E. DYSON, Bombay Establishment, is directed to officiate in medical charge of the 2nd Native Infantry, during the absence of Surgeon G. C. W. Lowdell.

Surgeon B. B. GRAYFOOT, Bombay Establishment, is directed to officiate in medical charge of the 3rd Native Infantry, *vice* Surgeon Quicke, appointed to the officiating medical charge of the 14th Bombay Infantry.

Surgeon W. H. QUICKE, Bombay Establishment, is directed to officiate in medical charge of the 4th Native Infantry, *vice* Surgeon C. J. Sarkies, M.B., who has been ordered on field service, Burmah.

Surgeon C. F. WILLIS, Bombay Establishment, in medical charge of the 9th Native Infantry, is appointed to act as Port Surgeon at Aden, during the absence of Surgeon-Major G. W. R. Hay, M.D.

The undermentioned officers have leave of absence for the periods specified:—Surgeon-Major J. REID, M.B., Bengal Establishment, Principal Medical Storekeeper, for 245 days on medical certificate; Surgeon A. W. MACKENZIE, Bengal Establishment, for five months on urgent private affairs; Surgeon B. N. KOYAJI, Bombay Establishment, in medical charge of the 27th Light Infantry, for 182 days on medical certificate; Surgeon J. E. FERGUSON, Bombay Establishment, for three months on medical certificate; Surgeon-Major W. CENTER, M.B., Bengal Establishment, for one year on private affairs; Surgeon-Major J. E. C. FERRIS, Bengal Establishment, for 270 days on medical certificate; Surgeon-Major H. DE TATHAM, M.D., civil surgeon of Nassick, for one year on medical certificate.

A CORRECTION.—Surgeon-Major J. R. CROKER, referring to a statement in the JOURNAL of May 7th, page 1019, that the Army Lists do not credit him with war service, informs us that he served in the Ashantee war in 1873 and 1874, for which he holds a medal.

THE VOLUNTEERS.

MR. JAMES DRUMMOND, M.D., has been appointed Acting Surgeon to the 3rd Durham Artillery, and Mr. W. L. CHUBB to the 1st Kent Artillery.

Surgeon R. YOUNG, M.D., of the 1st Newcastle-on-Tyne Artillery, has resigned his commission, which bears date June 27th, 1883.

Surgeon and Honorary Surgeon-Major R. DOBBIE, M.D., of the 2nd Ayrshire, has also resigned his commission, which is dated June 29th, 1878; he is permitted to retain his rank and uniform.

Surgeon and Honorary Surgeon-Major D. H. MONCRTON, M.D., from the 2nd Volunteer Battalion of the Prince of Wales's North Staffordshire Regiment (late the 5th Staffordshire) is appointed Surgeon to the Maidstone Division of the Volunteer Medical Staff Corps.

The undermentioned gentlemen have been appointed Acting-Surgeons in the corps specified:—F. W. GIBBON, 1st Newcastle and Durham Engineers; DUNCAN CARMICHAEL, M.B., 3rd Volunteer Battalion of the Gordon Highlanders (late the 3rd Aberdeenshire); J. M. CAMPBELL, M.B., 1st Fifeshire Rifles.

Surgeon E. S. PEARSE, of the 1st Volunteer Battalion of the South Staffordshire Regiment (formerly the 1st Stafford Volunteers), has resigned his commission, but is granted the honorary rank of Surgeon-Major, and permitted to retain his uniform.

The transfer of Surgeon and Honorary Surgeon-Major A. T. NORTON from the 12th Middlesex (Civil Service) Volunteers to the London Division of the Volunteer Medical Staff is to bear date from June 11th, 1885, and not August 22nd, 1885, as previously stated.

The transfer of Surgeon and Honorary Surgeon-Major W. H. PLATT from the Tower Hamlets Rifle Volunteers Brigade to the London Division of the Volunteer Medical Staff is to bear date June 13th, and not June 13th, 1885, as previously stated.

DR. MILLSON has offered to discharge the duties of medical officer of health for the parish of St. Mary, Newington, vacant by the death of Dr. Iliff, gratuitously, *pro tem;* and the vestry, at their last meeting, accepted the offer for six months, after which a permanent appointment is to be made.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

ENGLISH URBAN MORTALITY IN THE FIRST QUARTER OF 1887.

THE vital and mortal statistics of the twenty-eight towns dealt with by the Registrar-General in his weekly returns are summarised in the accompanying table. During the three months ending March last, 75,684 births were registered in the twenty-eight large English towns, equal to an annual rate of 32.9 per 1,000 of their aggregate population, estimated at nine and a quarter millions of persons. In the corresponding period of the three preceding years 1884-5-6, the birth-rate in these towns was 35.4, 35.3, and 34.7 respectively. The birth-rate last quarter in London was equal to 32.8 per 1,000, and almost corresponded with the mean rate in the twenty-seven provincial towns, among which the birth-rate ranged from 26.9 in Halifax, 27.1 in Bradford, and 27.4 in Huddersfield, to 36.9 in Manchester, 37.9 in Newcastle-upon-Tyne, 38.9 in Preston, and 42.3 in Cardiff.

The 50,741 deaths registered in the twenty-eight towns during the first quarter of the current year were equal to an annual rate of 22.0 per 1,000, against 21.1, 22.7, and 24.4 in the corresponding quarters of the three preceding years. In London the rate of mortality did not exceed 20.7 per 1,000, while in the twenty-seven provincial towns it averaged 23.1. The lowest rates in these towns were 16.8 in Brighton, 17.1 in Derby, and 18.2 in Nottingham; they ranged upwards in the other towns to 26.3 in Preston, 26.9 in Huddersfield, 27.6 in Plymouth, and 30.6 in Manchester. During the quarter under notice, 5,373 deaths were referred to the principal zymotic diseases in the twenty-eight towns, equal to an annual rate of 2.33 per 1,000. The lowest zymotic death-rates in these towns were 0.82 and 0.89 in Brighton and Bolton, while they ranged upwards in the other towns to 4.27 in Manchester, 4.49 in Sunderland, and 5.44 in Huddersfield. In London the rate of mortality from the principal zymotic diseases was equal to 1.9 per 1,000, while it averaged 2.7 in the twenty-seven provincial towns. The 5,373 deaths from zymotic diseases included 2,159 which were referred to measles, 1,259 to whooping cough, 683 to scarlet fever, 444 to diarrhœa, 426 to "fever" (including typhus, enteric fever, and ill-defined forms of continued fever), 387 to diphtheria, and 15 to small-pox. The 2,159 deaths from measles registered during the quarter under notice in the twenty-eight towns were equal to an annual rate of 0.94 per 1,000, against 0.34 and 0.66 in the two preceding quarters; this disease was somewhat less prevalent in London than in the aggregate of the twenty-seven provincial towns, among which the rates of mortality from measles were excessive in Bristol, Newcastle-upon-Tyne, Leeds, Liverpool, Manchester, Sunderland, and Huddersfield. The death-rate from whooping-cough was equal to 0.55 per 1,000, against 0.28 in each of the two preceding quarters, but was below the rate in any recent corresponding quarter. While the rate of mortality from this disease did not exceed 0.42 per 1,000 in London, it averaged 0.65 in the twenty-seven provincial towns, and showed the highest proportional fatality in Oldham, Plymouth, and Huddersfield. The death-rate from diarrhœa was only 0.18 per 1,000, and was considerably below the average. The 683 fatal cases of scarlet fever were equal to an annual rate of 0.30 per 1,000, against rates increasing from 0.14 to 0.45 in the three preceding quarters. In London the rate of mortality from scarlet fever was only 0.16 per 1,000, while in the twenty-seven provincial towns it averaged 0.41, and was highest in Liverpool, Manchester, Sheffield, Blackburn, and Bristol. The 426 deaths referred to different forms of "fever" corresponded to an annual rate of 0.18 per 1,000, which showed a marked decline from the increasing rates in recent quarters; while the fever death-rate in London did not exceed 0.14 per 1,000, it averaged 0.23 in the twenty-seven provincial towns, among which the mortality from fever was highest in Liverpool, Bolton, Plymouth, and Preston. The death-rate from diphtheria was equal to 0.17 per 1,000, against 0.20 in the preceding quarter; this disease was somewhat more prevalent in London than in the aggregate of the provincial towns, among which it showed the largest proportional fatality in Oldham, Preston, and Portsmouth. Only 15 deaths were referred to small-pox in the twenty-eight towns during the first three months of this year; of these, 6 occurred in Manchester, 2 in London, 2 in Portsmouth, 2 in Blackburn, 2 in Cardiff, and 1 in Newcastle-upon-Tyne. Only 10 small-pox patients were admitted during the quarter under notice into the Metropolitan Asylum Hospitals, and 1 patient remained under treatment in these hospitals at the end of March last.

The rate of infant mortality in the twenty-eight towns last quarter, measured by the proportion of deaths of infants under one year of age to registered births, was equal to 145 per 1,000, against 144 and 154 in the corresponding periods of the two preceding years. While the rate of infant mortality in London did not exceed 131 per 1,000, it

Public Health Statistics relating to Twenty-eight Large English Towns, for the First Quarter of 1887.

Towns.	Estimated Population middle of 1887.	Births.	Deaths.	Annual Rate per 1,000 Living. Births.	Deaths.	Principal Zymotic Diseases.	Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Fever.	Diarrhœa.	Rate per cent. of Uncertified Deaths.	Deaths of Children under one year of age to 1,000 Births.
28 Towns	9,245,699	75,684	50,741	32.9	22.0	2.3	5,373	15	2,159	683	387	1,259	426	444	2.6	145
27 Provincial Towns	5,028,907	41,210	28,997	32.9	23.1	2.7	3,382	13	1,300	512	191	816	282	268	3.5	156
London	4,216,192	34,474	21,744	32.8	20.7	1.9	1,991	2	859	171	196	443	144	176	1.3	131
Brighton	118,186	814	494	27.6	16.8	0.8	24	—	5	1	6	7	2	3	4.7	140
Portsmouth	137,917	1,245	706	36.2	20.5	1.5	53	2	4	7	20	7	8	5	0.7	120
Norwich	92,848	818	521	35.4	22.5	2.8	65	—	17	9	8	21	5	5	1.2	165
Plymouth	77,127	613	531	31.9	27.6	2.3	45	—	—	6	3	26	8	2	2.1	212
Bristol	223,695	1,680	1,357	30.1	24.3	3.9	216	—	85	56	9	58	1	7	1.6	154
Wolverhampton	80,847	707	473	35.1	23.5	1.6	33	—	17	2	1	6	2	5	2.1	143
Birmingham	441,095	3,519	2,326	32.0	21.2	1.8	202	—	19	11	20	102	18	32	2.8	156
Leicester	143,153	1,158	732	32.5	20.5	2.2	78	—	53	3	5	6	9	2	2.6	161
Nottingham	224,230	1,968	1,017	35.2	18.2	1.3	71	—	2	4	3	29	16	17	1.6	123
Derby	94,006	718	401	30.7	17.1	1.0	24	—	5	—	—	11	5	3	2.2	131
Birkenhead	97,703	786	470	32.3	19.3	1.0	24	—	1	11	3	1	2	6	2.6	135
Liverpool	592,991	4,586	3,843	31.0	26.0	4.0	587	—	272	88	28	113	53	33	5.5	169
Bolton	112,354	919	572	32.8	20.4	0.9	25	—	1	3	2	4	6	9	2.8	126
Manchester	377,529	3,468	2,883	36.9	30.6	4.3	402	6	178	58	22	75	34	29	2.6	169
Salford	218,658	1,789	1,153	32.8	21.2	2.7	147	—	65	42	12	5	18	15	5.6	145
Oldham	134,158	992	817	29.7	24.4	3.5	116	—	33	16	15	39	7	6	6.9	194
Blackburn	116,844	1,067	742	36.7	25.5	3.3	95	2	16	26	—	33	9	9	3.1	167
Preston	102,283	991	670	38.9	26.3	2.5	64	—	3	6	12	18	12	13	2.8	163
Huddersfield	90,034	615	604	27.4	26.9	5.4	122	—	71	5	5	34	1	6	3.1	164
Halifax	79,207	530	454	26.9	23.0	1.3	25	—	9	2	1	8	4	1	5.7	168
Bradford	224,507	1,518	1,172	27.1	21.0	1.7	95	—	11	25	4	43	4	8	2.8	171
Leeds	345,080	2,748	1,980	32.0	23.0	2.9	245	—	137	32	5	39	16	16	1.6	155
Sheffield	316,288	2,598	1,690	33.0	21.4	2.4	193	—	57	66	3	40	20	7	6.4	152
Hull	196,855	1,622	1,044	33.1	21.3	2.7	131	—	70	14	2	38	—	7	5.5	148
Sunderland	129,684	1,155	691	35.7	21.4	4.5	145	—	95	9	1	27	7	6	5.9	131
Newcastle-on-Tyne	157,048	1,484	1,007	37.9	25.7	2.7	104	1	61	8	3	12	11	8	2.5	170
Cardiff	104,580	1,102	647	42.3	24.8	2.9	51	2	13	2	8	14	4	8	2.6	171

averaged 156 in the twenty-seven provincial towns, among which it ranged from 120 in Portsmouth, 123 in Nottingham, and 126 in Bolton, to 171 in Bradford and in Cardiff, 194 in Oldham, and 212 in Plymouth.

The causes of 1,300, or 2.6 per cent., of the 50,741 deaths registered in the twenty-eight towns during last quarter were not certified, either by registered medical practitioners or by coroners. The proportion of uncertified deaths in London did not exceed 1.3 per cent., while it averaged 3.5 in the twenty-seven provincial towns, and ranged from 0.7 in Portsmouth and 1.2 in Norwich, to 5.7 in Halifax, 5.9 in Sunderland, 6.4 in Sheffield, and 6.9 in Oldham.

THE Limehouse Vestry has taken a step in the right direction by resolving to remove the coroners' inquests from public-houses to the Town Hall.

CHOLERA IN SOUTH AMERICA.

TELEGRAPHIC reports state that cholera has broken out afresh at Buenos Ayres, that twelve cases have occurred in Turcuman in the interior, and several in the city of Buenos Ayres itself.

SMALL-POX AND FEVER IN THE METROPOLIS.

THE fortnightly return presented at the meeting of the Asylums Board held on April 23rd showed that during the past month 145 patients had been admitted to the hospitals (a number identical with that for the preceding month), and 7 had died, as against 14 during the previous four weeks. The number discharged during the last month was 189, as against 177 during the preceding four weeks, leaving 373 at present under treatment. This was a decrease of 51 in the number of patients. The small-pox patients had increased 6 during the present month, 10 having been admitted, as against 2 during the preceding month, and 1 having died. There was no death during the previous month, and while 3 had been discharged as recovered during the month under report, 4 had left the hospitals during the preceding four weeks. This leaves 7 at present under treatment.

CHILD MORTALITY AT STOURPORT.

ACCORDING to the report of Dr. Masterman, the medical officer of health for the district of Lower Milton, the infant mortality at Stourport is inordinately high, amounting to over 40 per cent. of the deaths at all ages. Notwithstanding that Stourport is a small town of about 4,000 inhabitants, the death-rate for children is only 7 per cent. lower than that of Preston, a town which is notorious for its terrible sacrifice of infant life. The rate is double that of the adjacent district of Martley, although the death-rate for adults is about the same in both places. Nearly 35 per cent. of the children die before they attain 5 years of age. As Dr. Masterman points out, the same influences which kill so many must maim and permanently weaken a very much greater number, and must seriously affect the health in after-life of children reared under such trying circumstances. The causes are the usual ones, namely, improvident early marriages, improper feeding, want of cleanliness, drunkenness, and above all the employment of young wives and mothers in other than domestic work. It is satisfactory to find that the Local Board has ordered this portion of the report to be printed and circulated in the town, though more energetic measures than these will be required if this terrible waste of human life is to be checked.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

SURBITON.—Speaking generally, the year 1885 was an exceptionally healthy one in this district, both in respect of mortality and sickness. Dr. Coleman reports that there was no especial prevalence of sickness among children, except perhaps whooping-cough in the early part of the year. Scarlatina was almost absent. There were two deaths from diphtheria, but these were sporadic cases, and not traceable to any special cause. The death-rate is given as 9.7 per 1,000, and the zymotic rate as 0.4.

ROTHERHAM.—In commenting on the satisfactory returns which were recorded for 1885, Dr. Junius Hardwicke draws attention to the great diminution in deaths from zymotic diseases compared with 1884. The report is mainly statistical, and gives no account of cases of infectious diseases. The general death-rate of the borough was 18.26 per 1,000, an improvement which Dr. Hardwicke considers is to a certain extent attributable to the mildness of the winter.

MEDICO-LEGAL AND MEDICO-ETHICAL.

LANGMORE DEFENCE FUND.

A SUM of nearly £90 is still required to settle the heavy bill of costs for legal expenses necessarily incurred by Dr. J. Wreford Langmore for his defence in the recent action, and which he now (through the bankruptcy of the plaintiff) has been called upon to pay. It may be remembered that a most unwarrantable action was brought against him in consequence of his having signed a lunacy certificate, in compliance with a magistrate's order. The committee in charge of the fund hope to close it soon, and will, therefore, thank all gentlemen wishing to subscribe to send their donations at once to Mr. George Eastes, M.B., 69, Connaught Street, Hyde Park Square, London, W., one of the Honorary Secretaries of the Metropolitan Counties Branch of the British Medical Association.

Amount previously acknowledged £136 16 0

	£	s.	d.		£	s.	d.
Dr. C. T. Aveling	1	1	0	Mr. H. C. Lawrence	1	1	0
Mr. A. H. W. Ayling	0	10	6	Dr. Isambard Owen	1	1	0
Mr. A. E. Cumberbatch ..	1	1	0	Mr. Rayley Owen	0	10	6
Mr. J. H. Drew	1	1	0	Dr. C. Ransford	1	1	0
A Friend	3	0	0	Dr. C. Royston	1	1	0
A Friend	1	0	0	Mr. T. C. White	1	1	0
A Friend	1	0	0				

DR. B——'S JUBILEE OFFERING TO THE POOR AT C——.

A MORNING'S WORK IN THE SURGERY.

[BY W. H———.]

SUCH is the introduction to a long leading commentary, of the usual fulsome character in such cases, which we read with much regret in copies forwarded to us of the *Essex Telegraph* of March 26th, and repeated *verbatim* on the 29th, thereby but too clearly indicating its true intent It is deeply to be regretted that Dr. B. should have set the example, and so far have forgotten his duty to himself and his moral obligation to the profession as to seek notoriety by such expedients. The writer remarks that, "by the courtesy of Dr. B., he had been permitted to take an arm-chair at his surgery fireside, and to observe for an hour or two the noble work of healing among the poor, which he has undertaken to carry on gratuitously every Thursday, all through this year, in commemoration of Her Majesty's Jubilee."

Such devices are incompatible with the honour and dignity of the profession. However unwittingly Dr. B. may have erred in the matter, we trust that, in dispensing his "Jubilee offering" to the poor, he will at the same time bear in mind his ethical obligations to the profession, and in future carefully eschew such a system of favouring the public proclamation of his "gifts of healing."

BROWN DEFENCE FUND.

	£	s.	d.
Amount already acknowledged	13	11	6
Dr. M. A. Ward, Dublin	1	1	0
R. H. A. Hunter, Esq.	1	1	0
Messrs. Roby and Roby	1	1	0

G. STANLEY MURRAY.

THE CHARGE OF MANSLAUGHTER AGAINST A MEDICAL ASSISTANT.

DR. C. R. ILLINGWORTH writes: You have so generously opened your columns to the various communications I have made in reference to this case, that I trust you will allow me still more conclusively to show how flagrant the miscarriage of justice has been. I will quote the report of a Manchester daily paper of March 23rd, 1886, the day following the adjourned inquest upon the body of the unfortunate woman Darling: "The woman, being ill, went to the surgery of Dr. W. Pitman, Ashton New Road, and saw his assistant, Mr. Irvine, who gave her some medicine, and, after taking several doses, she became unconscious and died. Mr. Irvine said he only put 2 drachms of opium in the medicine; but an analysis showed that it contained 1.729 grains of hydrochlorate of morphine to the fluid ounce, equivalent to about 4 drachms of laudanum to the fluid ounce. A medical man who gave evidence said a dose of 20 minims of laudanum taken every two hours would be dangerous, but in this case the woman must have taken doses containing 240 minims. The jury found that the woman died from poisoning by opium, administered owing to the gross negligence of Mr. Irvine." This also, in substance, was the evidence and finding of the jury at the magisterial investigation, on March 23rd, and at the trial on May 13th and 14th.

Now, shortly after becoming acquainted with the fact that there was less than 40 minims of laudanum in the medicine, according to the Edinburgh analysis published in the JOURNAL in March 19th last, I wrote to Mr. Thompson, the Manchester analyst, telling him of the result of that analysis, and I have received the following reply: "Dear Sir,—I have your letter of the 14th instant, but have not been able till now to reply to it. You assume that I will be surprised to hear that the medicine given to Mrs. Darling contained very little laudanum; but as that is precisely what I stated in court, and what I think I wrote to you, it is needless for me to say that I am not surprised at it." This letter is dated April 17th, 1887. Comment from me is unnecessary, when Mr. Thompson's statement, quoted from his first letter, has already appeared in the JOURNAL of March 19th, and refers to the *dark colour* of the medicine (the italics are mine).

I trust that this statement may elicit some expression of opinion in the JOURNAL.

A MEDICAL BROTHER.

COUNTRY MEMBER.—Annoying as such incidents undoubtedly are, we think they are best met by regarding them as among the unavoidable drawbacks of professional life. While it is only natural that Mrs. D. G. should, under the circumstances of her brother's visit, wish to avail herself of his professional advice, we consider that our correspondent, as the old family medical attendant, has cause to complain of their lack of courtesy in omitting to explain the facts of the case to him.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, May 5th.

Scotch Lunacy Districts.—The Marquis of LOTHIAN presented a Bill restoring to the General Lunacy Board of Scotland powers to alter, enlarge, or restrict in such manner as may be necessary the present Lunacy Districts in Scotland.—The Bill was read a first time.

Monday, May 9th.

Smoke Nuisance Abatement (Metropolis) Bill.—Lord STRATHEDEN and CAMPBELL formally moved the second reading of this Bill.—The Duke of WESTMINSTER, in supporting the second reading, called attention to the fact that the present Smoke Acts were insufficient, owing to the great extension of London which had taken place during the last thirty years. It was, therefore, proposed by the Bill to extend the provisions to the metropolis, as defined by the Metropolis Management Act of 1885 to the area of the police, and to give further powers as to dwelling-houses. Allusion was made to the useful action taken by the Smoke Abatement Committee of 1880; the exhibition of that Committee at South Kensington of smoke-abatement apparatus, and the Smoke Abatement Institute of 1883, which had evoked interest in the public mind, and the movement generally had excited very great attention. Experiments had been made and various apparatus tested, showing in one instance, by the use of smokeless fires, a more equal distribution of heat throughout the building with one smokeless fire, instead of fourteen emitting smoke almost continously. The cost of fuel was only one-seventh, and the labour involved only a hundredth part, calculating the attention alone, and omitting the labour of carrying coals to, and ashes from, fourteen fires instead of one. He concluded by observing that their lordships lived, as a general rule, in pure air, and asked them to give a second reading to the Bill on the ground that it would be conferring a boon on those who were constrained to pass the bulk of their lives in an atmosphere greatly contaminated by smoke.—Lord MOUNT-TEMPLE also supported the Bill, while Earl GRANVILLE suggested whether it would not be better after the second reading to refer it to a Select Committee.—The Marquis of SALISBURY hoped sufficient time would be allowed to elapse before the Committee stage, to enable the metropolitan authorities to take cognisance of the Bill.—The Bill was read a second time.

Tuesday, May 10th.

Cremation.—Lord FORBES moved for a return of the number of cremations that had taken place in England within the last five years, and asked by what authority and under what regulations they were permitted. He said that this question was of importance from a social point of view, because it was necessary that precautions should be insisted upon by which any poison could be detected before a body was cremated.—The Marquis of SALISBURY said the Government would have been willing to give such a return if it had been in their power; it was impossible, however, for them to do so, because as cremation was a matter of individual discretion and not an official proceeding no records were kept, or at least none that were accessible to the Government. He did not know whether the danger referred to by the noble lord was real or not, as he was not well informed on that matter; but he doubted whether the traces of mineral poisons would be absolutely obliterated. Nothing had occurred which called for Parliamentary interference, and as to the information which the noble lord desired, the Home Office was unable to supply it.—The Earl of MILLTOWN pointed out that cremation did not require any official sanction. It was perfectly legal, unless so conducted as to be a nuisance or offensive to public decency.—Lord HERSCHELL said the noble lord would find that this matter had been fully discussed in a debate in the House of Commons in the Session of 1884 or 1885, when it was proposed to legislate.—The motion was withdrawn.

HOUSE OF COMMONS.—Thursday, May 12th.

Relative Rank in the Army Medical Service.—Dr. CLARK asked the Secretary of State for War whether, considering the great dissatisfaction that existed amongst medical students and the medical profession generally at the abolition of relative rank, which dissatisfaction might seriously diminish the number of candidates for the Army Medical Service, he would advise Her Majesty to issue a Warrant conferring honorary rank on all medical officers, and place them at least in as good a position as the officers in the Commissariat, Ordnance, and Pay Departments.—Mr. STANHOPE: I have said many times that the abolition of relative rank has not in any way altered the position or status of medical officers, and I have no reason to suppose that these officers are desirous of being called by titles so dissociated from the duties of their honourable profession as those of colonel, major, and captain. These titles are, however, necessary in the case of other departments, whose officers, unlike those of the Medical Department, do not belong to a recognised profession.

Half-pay of Officers of the Medical Staff.—In reply to Mr. WILLIAM CORBETT, who asked whether officers of the Medical Staff would be put on the same footing as officers of the Royal Engineers, Mr. BRODRICK said that the general rule for all departmental officers was that they did not reckon time on half-pay towards promotion or retirement. Medical officers came under this rule in common with those of all other departments.

Rabies.—In reply to Mr. COGHILL, Mr. STUART-WORTLEY stated that the Commissioner of Police reported no abnormal increase of cases of rabies in April in the Metropolitan Police District. His department had no sufficient information as to the results of the measures taken in Berlin.

OBITUARY.

C. R. THOMPSON, M.R.C.S., of Westerham.

THE neighbourhood of Westerham has sustained a shock and a loss which to the elder generation of inhabitants can never be repaired, by the sudden and untimely death of Mr. C. R. Thompson. The deceased gentleman was a practitioner of no ordinary ability both as a surgeon and as a physician, and in addition to this he was possessed of a strength of character and a sympathetic kindliness of disposition which had for many years gained him the confidence and the affection of all classes of the community. It would, indeed, be difficult to define what a country practitioner ought to be better than describing the position to which Mr. Thompson had attained.

After a course of study at St. Bartholomew's and other hospitals, Mr. Thompson returned to Westerham, his native place, to assist his father, who settled in Westerham in 1825, and is still affectionately remembered as the "Old Doctor." On the retirement of his father in the year 1866, he succeeded to the practice, and since then has given unremitting care to the duties of his position, being daily engaged in alleviating pain and in the endeavour to prolong human life. His activity was not confined to strictly professional duties, for there was no enterprise or undertaking which affected the well-being of Westerham in which he did not take an interest and commonly an active part. Thus he acted as churchwarden during the time of the restoration of the church, when his assistance was most required. He was also chairman of the Waterworks Company and of the Gas Company, which have of late years been started at Westerham.

Mr. Thompson fully deserved the good reputation as a practitioner which he enjoyed among his friends. He worked hard as a student at St. Bartholomew's—as hard as his feeble health at that time of life allowed. But he remained a student all his life: careful, observant, always watchful of his cases, habitually thoughtful, and a clear thinker, he was constantly acquiring knowledge, and he always used it well. There is evidence of this in several papers of the JOURNAL. He had besides considerable manual skill and ingenuity, and invented at least one useful instrument—the paracentesis-trocar, with the cannula having a lateral branch through which fluid can escape along an attached india-rubber tube, while the trocar, only partially withdrawn, keeps the outer part of the main tube still closed.

The confidence which Mr. Thompson inspired was undoubtedly due to the fact that in his professional judgments he was singularly accurate and prompt to find remedy and relief. At the same time, when he was puzzled by symptoms, he was not ashamed to confess his difficulty. Outspoken honesty was, indeed, one of the most marked elements in his character. He always acceded to proposed consultations, and his judgments were almost invariably confirmed. His manner was invariably cheerful, and in any dangerous crisis prompt and decisive. His verdicts also always leaned to the hopeful side, thus saving the patient and his friends from unreasonable fears; when hope existed no longer he honestly stated what he knew to be the truth, and did not deceive the sufferer or his friends with delusive hope. He hoped when there was hope; when there was none he faced the truth. He did his utmost for his patients. Himself always busy and daily in the presence of real trouble, he had perhaps an unsympathising air to the valetudinary persons whom it would have been to

his interest to concilitate. He had indeed a thoroughly English objection to anything that was artificial and savoured of humbug. That any one could have been in real suffering either of mind or body, and thought Mr. Thompson unsympathetic is not possible. When there was danger, his labours were incessant and his constancy unshaken. If his efforts were successful, he prevented thanks with a smile of recognition, and hastened to be off to some similar scene. On one occasion, and doubtless it is one of many occasions, he is known to have travelled 400 miles to see a little girl, who was dangerously ill and had expressed a wish to be attended by his familiar face. This was at great personal inconvenience, without any possible expectation of remuneration, at a time when he knew that any over-exertion might prove fatal to himself. He had had more than one attack of angina pectoris, and fully anticipated that he would lose his life by this disease. When this was the spirit in which he carried on his labours, it is not wonderful that he gained the affection of his patients. They knew that he did his utmost, and more than they could reasonably expect. Therefore it is that his presence was a support to the neighbourhood, and his sudden removal creates more than an ordinary void. Everyone to whom he was known—and he was known to all—feels how large a part he was in their own sense of security and happiness, and how much of what made life to them has with him passed away. The void which the calamity of his death has created may at least teach this lesson—the inestimable value to any society of honesty of character, sympathy of feeling, and devotion to duty.

INDIA AND THE COLONIES.

INDIA.

SANITATION IN THE MADRAS PRESIDENCY.—It is satisfactory to learn that the Madras Presidency has taken the very wise course of appointing a Sanitary Engineer, whom the different Local Boards will have the right to consult regarding proposed sanitary measures. It has been suggested that the new official should be *ex-officio* Vice-President of all the District Boards for medical and sanitary matters, and so put in possession of accurate information regarding each district, and be able to obtain the assistance of local sanitary inspectors. This is a very necessary provision, since this official has not been provided with any staff who could inform him whether his suggestions were carried out or not.

AUSTRALIA.

MELBOURNE UNIVERSITY.—Mr. G. A. Syme, M.B., F.R.C.S., has been appointed Demonstrator of Anatomy, and also Examiner in Anatomy; the latter in place of Professor Halford, resigned. The Council has approved of the admission of ladies to degrees in medicine, and it has been referred to the Faculty of Medicine to formulate a scheme. Ten members voted for the motion, and three against, the dissentients being the Vice-Chancellor, Dr. Cutts, and Mr. Ellery. The Medical Faculty of the University has passed a resolution that female students admitted to the medical schools must fulfil all the conditions of admission now prescribed in the case of male students. This was endorsed by the Council, which requested the Faculty of Medicine to formulate a scheme for separate lectures on subjects in which it is undesirable that the lectures should be attended by the sexes in common, and expressed a wish that the arrangements should be made, if possible, for the present year. Three letters were received from ladies, expressing a desire to enter upon the study of medicine.

THE death is announced of Dr. John Blair, of Melbourne, a former President of the Medical Society at Victoria.

A NEW Consumption Hospital is to be built, for which sites of fifty and thirty acres have been offered, and donations to the extent of £1,600 promised.

IN consequence of a communication on the subject of Federal quarantine made by the South Australian Government, arrangements are in progress for establishing a joint quarantine station on some site to be mutually agreed upon by the colonies. It is proposed to hold a conference of the Presidents of the Central Boards of Health in the colonies for the discussion of the subject.

SOUTH AFRICA.

SMALL-POX IN SOUTH AFRICA.—Small-pox is said to have broken out in the Maclear village location, Cape Town. The medical man who was practising there is said to have left for the gold fields, and the nearest medical practitioner is about seventy miles distant. The magistrate has taken measures for quarantining patients.

JAMAICA.

JUBILEE MEMORIAL.—At a public meeting held last month it was decided to carry out the proposal of the Governor of Jamaica to establish a lying-in hospital in commemoration of the Jubilee of Her Majesty's reign.

HOSPITAL AND DISPENSARY MANAGEMENT.

GLASGOW PUBLIC DISPENSARY.

THE report of this dispensary for last year shows a total of 2,730 cases, of which 545 were diseases of the throat and chest, 1,230 diseases of the skin and ear, 343 diseases of the kidney and urinary organs, and 612 diseases of women and chidren.

THE GREENWICH SEAMEN'S HOSPITAL.

THE 66th annual report of the Seamen's Hospital states that of 2,267 patients treated in the hospital during 1886, 1,452 had been discharged cured and convalescent, 477 had been relieved by treatment and care, 87 only had died, and 194 were in the hospital at the end of the year. There had during the same period been 5,359 out-patients. The financial report was less satisfactory.

NOTTINGHAM SAMARITAN HOSPITAL FOR WOMEN.

AT the annual meeting of this charity, it was reported that the out-patient department was opened on March 9th, 1885, and the in-patient department on January 12th, 1886. There are six free beds in addition to those for which payment is made. During the past year 138 in-patients had been admitted; 73 operations had been performed, mostly of a grave character, including 27 abdominal sections. All the ovariotomies and oöphorectomies, 13 in number, had been successful.

SHADWELL CHILDREN'S HOSPITAL.

A BAZAAR, in aid of the fund for building a new out-patient department for the East London Hospital for Children at Shadwell will be opened on June 2nd at the Westminster Town Hall.

SURGICAL APPLIANCE SOCIETY.

THE fifteenth annual festival of the Provident Surgical Appliance Society for the relief of the Crippled Poor was held on Wednesday, May 4th, at Willis's Rooms, under the presidency of Sir Julian Goldsmid, M.P. The Chairman stated that he had been informed that 10 per cent. of the population required the aid of the Society in one form or another. During last year 4,300 persons were relieved by its means at a cost of £2 200. The Secretary announced subscriptions to the amount of about £900.

VICTORIA HOSPITAL FOR CHILDREN.

AT the twentieth anniversary festival of this charity, presided over by the Duke of Cambridge, it was stated that the number of inmates during the last year had been 561, while the whole number of children that had passed through the wards was 7,972. The out-patients for the same period were 37,566; the total since the foundation of the hospital, 364,164. Four thousand pounds was needed to pay for the recent additions. A list of subscriptions and donations was read amounting to over £1,200.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the necessary examination in Anatomy and Physiology at a meeting of the Board of Examiners, and, when eligible, will be admitted to the pass examination, namely:

A. J. Edge, of St. Bartholomew's Hospital; F. W. Hall, G. F. Beresford, and E. M. Dobinson, of Guy's Hospital; S. G. Toller, G. W. Chapman, and E. E. Ware, of St. Thomas's Hospital; E. C. Osborn, G. W. Simpson, and A. B. Vise, of Westminster Hospital; J. E. Hancock and J. K. Clarke, of Middlesex Hospital; J. H. Badcock, R. Ackland, and S. N. Scott, of Charing Cross Hospital; R. S. Black, of Aberdeen; S. W. Macilwaine, of Belfast; E. G. Trevithick, C. Wyman, and H. J. Cooper, of Cambridge; A. Nicholson, of Glasgow; J. Chectham, of Liverpool; and J. H. Sykes, of Manchester.

Passed in Anatomy only.

G. C. B. Hawes, A. J. H. Murray, F. W. Toms, and W. C. Lattey, of St. George's Hospital; J. C. Cook, F. W. B. South, W. G. Thistle, and J. P. Watkins, of Guy's Hospital; G. A. Campion and W. R. M. Berridge, of St. Thomas's Hospital; H. J. L. Bullen and W. R. Willey, of St. Mary's Hospital; F. A. Nicholas, of Westminster Hospital; W. H. Andrews, of King's College; W. S. Routledge, and P. S. B. Wetherall, of University College; A. L. Chignell, of London Hospital; J. M. Swanson, C. H. Broadhurst, F. H. M. Vander Pant, and B. S. Foulds, of Charing Cross Hospital; J. H. Dawber, L. P. Gibson, and J. W. Williams, of Middlesex Hospital; J. Kearney, of Galway; W. J. Broadhurst, of Newcastle-on-Tyne; H. Heriot-Hill, of Bristol Medical School; E. J. McCardel, of Kingston, Canada; W. B. de Mille, of Halifax; and H. Howells, of King's College and St. Thomas's Hospital.

Passed in Physiology only.

L. W. Westall and A. G. Pierson, of St. Bartholomew's Hospital; J. P. Clowes and E. D. Dunn, of St. Thomas's Hospital; G. C. L. Vintras, of St. Mary's Hospital; F. E. Williams, of Guy's Hospital; J. G. Wilson, of London Hospital; H. B. Falconer, of King's College; R. J. Simons and A. M. Gray, of Bristol; W. Skells, of Cambridge; W. Bott, of Birmingham; T. Gray, of Edinburgh; W. G. Gyton, of Owens College, Manchester; G. W. T. Farish, of Philadelphia; and C. A. S. McQueen, Pennsylvania.

The following gentleman having passed the necessary examinations for the diploma was, at an ordinary meeting of the Council on May 12th, admitted a Member of the College, namely:

R. P. Mitchell, St. Mary's Square, Cardigan.

ROYAL UNIVERSITY OF IRELAND.—Second Examination in Medicine, April, 1887. The Examiners have recommended that the following be adjudged to have passed the examination:

Upper Pass Division.—H. J. Dickey, Queen's College, Belfast; J. N. Donnellan, School of Physic, Trinity College; *E. L. Fleury, London School of Medicine for Women; D. H. Hamilton, Queen's College, Belfast; *R. L. Heard, School of Physic, Trinity College; *T. Jones, Queen's College, Cork; *F. McKee, Queen's College, Belfast; J. Macnamara, Queen's College, Galway; *N. Morton, Queen's College, Belfast; *C. A. Stone, Queen's College, Cork; J. T. Walker, Queen's College, Belfast; *W. A. Wheeler, Queen's College, Belfast; S. H. Withers, Queen's College, Belfast; C. R. Zimmer, Carmichael College and School of Physic, Trinity College.

Those marked with an asterisk are entitled to present themselves for the further Examination for Honours.

Pass.—W. T. Brand, Queen's College, Belfast; S. B. Carlisle, Queen's College, Belfast; L. H. C. E. De la Roche Souvestre, Carmichael College of Medicine; J. E. Dunlop, Queen's College, Belfast; R. H. Elliott, Queen's College, Belfast; A. McC. Erskine, Queen's College, Belfast; J. Fulton, Queen's College, Belfast; T. Gash, Queen's College, Cork; G. A. Hickey, Catholic University School of Medicine; J. M. S. Kenny, Queen's College, Belfast; A. McBride, Catholic University School of Medicine; W. J. McDade, Queen's College, Belfast; A. McFarland, Queen's College, Galway; R. J. Nunn, Queen's College, Belfast; J. O'Brien, Catholic University School of Medicine; J. Scott, Queen's College, Belfast; J. Smyth, Queen's College, Belfast; W. L. Storey, Queen's College, Belfast; C. Turner, Queen's College, Cork; D. Walter, School of Physic, Trinity College; V. L. Watts, Catholic University School of Medicine, and School of Physic, Trinity College; J. Young, Queen's College, Cork.

The Examiners have recommended that the following candidates be adjudged to have passed the undermentioned examinations:

M.B. Degree Examination. Upper Pass Division.—*A. E. J. Birmingham, Catholic University School of Medicine; T. C. Donaldson, Queen's College, Belfast; *J. Entrican, M.A., Queen's College, Belfast; *A. W. Esler, Queen's College, Belfast; *R. J. Ferguson, Queen's College, Belfast; *W. Hackett, Queen's College, Cork; J. M. Macnamara, B.A., Queen's Colleges, Cork and Galway; *W. B. McQuitty, M.A., Univ. Stu., Queen's College, Belfast; W. MacSweeny, Queen's College, Cork; *E. J. McWeeney, B.A., Univ. Stu., Catholic University School of Medicine; *W. W. White, B.A., Queen's College, Cork.

Those marked with an asterisk are allowed to present themselves for the further Examination for Honours.

Pass.—J. Aherne, Queen's College, Cork; J. R. Davison, B.A., Queen's College, Belfast; J. H. Earls, Queen's College, Cork; W. E. St. L. Finny, School of Physic, Trinity College; R. E. Harcourt, Queen's College, Belfast; R. W. Leslie, Queen's College, Belfast; J. A. Macdonald, Queen's College, Belfast; W. K. McRoberts, School of Physic, Trinity College, and Carmichael College; P. F. Mannix, Queen's College, Cork; W. H. Murdoch, Queen's College, Belfast; J. J. Orr, Queen's College, Cork; S. A. Powell, Royal College of Surgeons, Ireland, and Queen's College, Belfast; M. Purcell, Queen's Colleges, Cork and Galway, and Catholic University School of Medicine; W. Stewart, Queen's College, Belfast; W. Usher, Queen's College, Belfast.

Third Examination in Medicine.—St. J. Annesley, Queen's College, Belfast; R. R. Davidson, B.A., Queen's College, Cork; F. E. Gahagan, Carmichael College, Dublin; G. R. Gordon, Queen's College, Belfast; J. Tomb, Queen's College, Belfast.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At a special examination for the Licence in Medicine of this College, held on Wednesday and Thursday, April 27th and 28th, 1887, the undermentioned candidate was successful:

N. C. Sclater.

UNIVERSITY OF DUBLIN.—At the First Summer Commencements in Trinity Term, held in the Examination Hall of Trinity College, on Wednesday, May 4th, 1887, the following licences and degrees in Medicine and Surgery were conferred by the University Caput in the presence of the Senate:

Licentiate in Medicine.—A. R. Darley
Bachelor in Surgery.—A. H. S. Todd.
Bachelors in Medicine.—J. W. Buchanan, R. W. H. Jackson, H. S. Lunn, W. M. O'Connor, P. C. H. Ryan, A. H. S. Todd, J. H. Du B. Whaite.
Doctor in Medicine.—G. T. Revington.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen, having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received Certificates entitling them to practise as Licentiates of the Society, on May 5th, 1887:

Jaques, John Warren, 4, Tyndale Place, Islington.
Pott, Francis Henry, 81, Cornwall Gardens, S.W.
Worrall, Charles Lloyd, Buckfield, Leominster.
Weld, Octavius, London, Canada.
Whicher, Alex. Hastings, Westcombe Park, Blackheath, S.E.
Wooldridge, Arthur Tylee, Winchester, Hants.

On the same day, four others passed the Primary Examination, four the Surgical, and one for Assistant.

The name of "Francis Forbes Lanyon Penno" was inadvertently omitted in the list of candidates who passed their examination on April 28th and received certificates to practise.

MEDICAL VACANCIES.

The following vacancies are announced.

BLACKBURN AND EAST LANCASHIRE INFIRMARY. — House-Surgeon. Salary, £100 per annum, with board, etc. Applications by May 17th to the Secretary.

CARLOW UNION.—Medical Officer, Ballickmoyler and Newtown Dispensary. Salary, £140 per annum, and fees. Applications to Mr. Robert McMahon, Honorary Secretary, Hollymount, Carlow. Election on May 20th.

CHARING CROSS HOSPITAL.—Medical Registrar. Applications by May 21st to the Secretary.

CHARING CROSS HOSPITAL.—Assistant-Surgeon. Applications by May 25th to the Secretary.

CITY OF LONDON LUNATIC ASYLUM, Stone, near Dartford.—Medical Superintendent. Salary, £500 per annum. Applications by May 17th to the Committee of Visitors, Guildhall, E.C.

COOTEHILL UNION.—Medical Officer, Drum Dispensary. Salary, £120 per annum, and fees. Applications to Mr. Thomas Graham, Honorary Secretary. Election on May 23rd.

DENTAL HOSPITAL OF LONDON, Leicester Square, W.C. —Assistant Dental Surgeon. Applications by June 1st to the Secretary.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark Street, S.E.—Registrar and Chloroformist. Salary, £30 per annum. Applications by May 30th to the Committee of Management.

GLOUCESTER GENERAL INFIRMARY AND EYE INSTITUTION.—House-Surgeon. Salary, £100 per annum, with board, etc. Applications by May 18th to the Secretary.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Hampstead, N.W.—Two Clinical Clerks. Applications to the Secretary, 216, Tottenham Court Road, W.C.

INFIRMARY FOR CONSUMPTION, Margaret Street, Cavendish Square, W.—Honorary Visiting Physician. Applications to the Secretary.

LINCOLNSHIRE COUNTY PAUPER LUNATIC ASYLUM.—Medical Superintendent. Salary, £400 per annum. Applications by June 1st to the Committee of Visitors.

LIVERPOOL INFIRMARY FOR CHILDREN. — Assistant House-Surgeon. Applications by May 18th to C. W. Carver, Esq.

LIVERPOOL NORTHERN HOSPITAL.—Assistant House-Surgeon. Salary, £70 per annum, with board, etc. Applications by May 31st to the Chairman of the Committee.

MASON SCIENCE COLLEGE, Birmingham.—Professor of Physiology. Applications by June 30th to G. H. Morley, Esq.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street, W.—Assistant Dental Surgeon. Applications by May 20th to the Secretary.

NEWCASTLE-ON-TYNE INFIRMARY.—House-Physician. Salary, £100 per annum, with board, etc. Applications by May 25th to the Chairman of the House Committee.

ONGAR UNION.—Medical Officer and Public Vaccinator. Salary, £75 per annum, with fees. Applications by May 16th to Charles Smith, Esq.

ROCHDALE INFIRMARY AND DISPENSARY.—Resident Medical Officer. Salary, £80 per annum, with board, etc. Applications by May 14th to the Honorary Secretary.

ROTHERHAM HOSPITAL.—Assistant House-Surgeon. Applications by May 31st to the Secretary.

ST. MARY'S HOSPITAL, Paddington, W.—Physician. Applications by May 20th to the Secretary.

ST. THOMAS'S HOSPITAL MEDICAL SCHOOL. — Professor of Systematic Physiology. Applications by May 21st to the Medical Secretary.

ST. THOMAS'S HOSPITAL.—Librarian. Salary, £150 per annum. Applications by May 28th to the Secretary.

STAINES UNION: Rural Sanitary Authority.—Medical Officer of Health. Salary, £75 per annum. Applications by May 23rd to J. A. Engall, Esq.

STANLEY HOSPITAL, Liverpool.—Senior House-Surgeon. Salary, £80, with board, etc. Applications by May 19th to the Honorary Secretary.

SUSSEX COUNTY HOSPITAL, Brighton.—Assistant-Surgeon. Applications by May 18th to the Secretary.

SUSSEX COUNTY HOSPITAL, Brighton.—Assistant House-Surgeon. Applications by May 18th to the Secretary.

TEIGNMOUTH, DAWLISH, AND NEWTON INFIRMARY AND CONVALESCENT HOME.—House-Surgeon and Dispenser. Salary, £71 per annum, with board, etc. Applications by May 19th to the Secretary.

UNIVERSITY OF CAMBRIDGE.—John Lucas Walker Studentship in Pathology.—Annual value £250, for three years. Applications by May 31st to Professor Roy, Trinity College, Cambridge.

UNIVERSITY COLLEGE.—Holme Professorship of Clinical Medicine. Applications by May 28th to the Secretary.

VICTORIA HOSPITAL FOR CHILDREN, Queen's Road, Chelsea, S.W.—Assistant Surgeon. Applications by May 25th to the Secretary.

WEST LONDON HOSPITAL, Hammersmith Road.—House-Physician. Board, lodging, and attendance. Applications by May 26th to the Secretary.

WEST LONDON HOSPITAL, Hammersmith Road.—House-Surgeon. Board, lodging, and attendance. Applications by May 26th to the Secretary.

WEST SUSSEX, EAST HANTS, AND CHICHESTER GENERAL INFIRMARY AND DISPENSARY.—House-Surgeon. Salary, £100 per annum, with board, etc. Applications by May 27th to the Honorary Secretary.

MEDICAL APPOINTMENTS.

BARNARD, A. J., M.R.C.S., L.S.A., appointed Senior House-Surgeon to the Royal Albert Edward Infirmary and Dispensary, Wigan, *vice* John Buchanan, M.D., C.M.Glas., M.R.C.S.Eng., resigned.

BARLING, A. S., L.R.C.P., M.R.C.S., appointed House-Physician to the Leeds Infirmary.

COPLEY, William Henry, M.R.C.S.Eng., L.R.C.P.Lond., appointed Honorary Surgeon to the North Cambridgeshire Hospital, Wisbech, *vice* William Roy, M.D.Ed., resigned.

COWIE, A. M., M.B., C.M., appointed House-Physician to the Great Northern Central Hospital, *vice* Donald Gunn, M.R.C.S., L.R.C.P., resigned.

DYER, Bernard, B.S., F.C.S., appointed Public Analyst for the city of Truro.

ENSOR, Henry C., M.R.C.S., L.S.A., appointed Surgeon to the Cardiff Eye and Ear Hospital.

FOX, E. L., M.A., M.B.Cantab., M.R.C.S., appointed Senior House-Surgeon to the Liverpool Children's Infirmary, *vice* Francis Johnston, resigned.

GREEN, R. W., M.R.C.S., appointed House-Surgeon to the Leeds General Infirmary.

HALL, Herbert S., L.R.C.P., M.R.C.S.Eng., appointed Junior House-Surgeon to the Royal Albert Edward Infirmary and Dispensary, Wigan, *vice* A. J. Barnard, M.R.C.S.E., L.S.A., resigned.

HALL, Walter, M.B., M.R.C.S., appointed Senior House-Physician to the National Hospital for the Paralysed and Epileptic, *vice* F. Wilson, M.D., resigned.

LYSAGHT, W. C., M.R.C.S., L.R.C.P., appointed Assistant Resident Medical Officer to the Bristol Royal Infirmary, *vice* J. Dacre, M.R.C.S., L.R.C.P., resigned.

METCALFE, James, L.R.C.P., L.R.C.S., L.M.Edin., appointed Resident Medical Officer to the Bradford General Infirmary, *vice* V. J. V. Harle, M.R.C.S., L.S.A., resigned.

NEWBY, C. H., F.R.C.S.Eng., appointed Medical Officer (Out-Patients) to the Royal Portsmouth, Portsea, and Gosport Hospital, *vice* C. C. Claremont, M.D., resigned.

NICHOLSON, C., M.R.C.S., appointed House-Surgeon to the Leeds Infirmary.

SKELLY, William, M.D., B.A., appointed Medical Officer to the Poplar Union, *vice* W. P. Bain, M.D., resigned.

STEWART, W. R. H., F.R.C.S.Ed., appointed Aural Surgeon to the Great Northern Central Hospital, *vice* A. E. Cumberbatch, resigned.

SYMONS, John, M.R.C.S.E., L.S.A.Lond., appointed Surgeon to the West Cornwall Dispensary and Infirmary, *vice* Henry Grenfell, M.R.C.S.E., L.S.A., deceased.

WILLIAMSON, R. T., M.B., B.S.Lond., appointed Junior House-Physician to the National Hospital for Paralysed and Epileptic, *vice* F. O. Stedman, M.R.C.S., L.S.A., resigned.

KING'S COLLEGE HOSPITAL.—On the 10th May Princess Louise opened a bazaar in King's College, Strand, in aid of the funds of the King's College Hospital. A guard of honour of the Army Medical Volunteer Corps, composed of students at the hospital, was on duty. This hospital, which was founded in 1839, relieves annually about 20,000 persons. This year the committee are obliged to spend about £6,000 on structural changes. This expenditure will constitute a heavy charge upon the hospital which has only an income of £2,000.

ROYAL HOSPITAL FOR INCURABLES.—The anniversary dinner of this institution was held on May 10th, the chair being taken by Sir Edward Clarke, Q.C., M.P. It was stated that there were now in the institution nearly 200 inmates, while there were nearly 500 other sufferers, mostly living in cottage homes, receiving an allowance of £20 a year each from this charity. The amount of donations and subscriptions received in connection with this festival showed a total of £4,282, being £500 in excess of that of the previous year. The balance-sheet for the year 1885-6 showed a surplus of £5,201, after a total expenditure of £30,535.

ST. THOMAS'S HOSPITAL MEDICAL SCHOOL.—The William Tite Scholarship of £30 has been awarded to Mr. Henry Burden; the Musgrove Scholarship of £42 per annum, tenable for two years, to Mr. Arthur Francis Stabb; the second tenure of the Peacock Scholarship to Mr. Francis Charles Abbott; the Mead Medal to Mr. W. W. Ord; and the Cheselden Medal and the Treasurer's Gold Medal for general proficiency and good conduct to Mr. Frank Fawssett.

PRESENTATION.—Mr. Henry Bird Vincent, L.S.A., M.R.C.S., who has been giving, under the auspices of the St. John Ambulance Association, a gratuitous course of ambulance lectures at East Dereham, has been presented by his class with a handsome hall clock and a copy of Heath's *Dictionary of Surgery*. From the ladies of the Gressenhall class, he has received a handsome ivory paper knife with silver handle.

CAUCASIAN MEDICAL SOCIETY.—Sir Joseph Lister and Dr. Robert Murray have been elected honorary members of the Caucasian Medical Society. Drs. J. S. Billings and Spencer F. Baird have been elected corresponding members of the same body.

CONVALESCENT HOME FOR WORKING MEN.—The Lord Mayor has forwarded ten guineas in aid of the Morley House Seaside Convalescent Home for Working Men.

CHARLES BAXTER, described as a medical assistant, and Elizabeth Potts, dressmaker, have been sentenced to fifteen years' penal servitude, for producing abortion in a girl named Elizabeth Culling, who died of blood-poisoning following the use of an instrument.

THE French Association for the Advance of Science will hold its seventeenth session in Algeria, at Oran, in 1888, during the Easter holidays.

DR. FEHLING has been named Professor of Obstetrics and Gynæcology at the Faculté de Médecine at Basle.

DR. R. FROMMEL has been appointed Professor of Obstetrics and Gynæcology at the University of Erlangen.

LOSS OF LIFE AT SEA.—There is said to be a strong feeling amongst members of Parliament in favour of extending the scope of the inquiry of the Select Committee on Loss of Life at Sea so as to include collisions and their causes. It is thought probable that the Board of Trade will consent to such an extension.

PROFESSOR HYRTL.—Professor Hyrtl, the eminent anatomist, who formerly occupied a chair in the Vienna University, has just been successfully operated on for cataract by Professor Fuchs.

DR. J. KEATING has been appointed Senior Medical Officer on the staff of the Egyptian Army at Suakin.

BENHAM R. FITZROY, M.R.C.S., etc., has been appointed the English Medical Representative to the American Exhibition.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.—PATHOLOGICAL SOCIETY OF LONDON, 8.30 P.M. Dr. Payne: Multiple Neuro-fibromata in connection with Molluscum Fibrosum. Mr. R. W. Parker: Cases of Sarcoma in Children. Mr. L. Hudson: Sarcoma of Pelvic Fascia. Dr. Handford: Cerebral Hæmorrhage in a Child following Thrombosis of Sinuses. Dr. Charlewood Turner: Fibrous Contraction, with Stenosis of Stomach. Mr. F. W. Clark: Subpleural Lipoma of Diaphragm. Mr. Bland Sutton: A Curious Effect of Rickets on the Skulls of Lions. Mr. S. Paget: Suprapubic Abscess. Mr. Shattock and Mr. Balance: Cultivation-experiments with New Growths and Healthy Living Tissues; and the Parasitic Theory of Cancer. Mr. Battle: Bones from Congenital Syphilis. Card-Specimens:—Mr. Page (for Mr. Raven): Sarcoma of Dorsal Vertebra. Mr. S. Jones: Tumour of Parotid of twenty-five years' growth. Dr. Barlow: Renal Sarcoma. Dr. Pitt: Pleura two years after Drainage for Empyema. Dr. Collier: Pelvic Sarcoma, simulating Hæmatocele during life. Dr. Turner: Bladder, Kidney and Dura Mater from a case of Purpura. Mr. J. Morgan: Cystic Disease of Metatarsal Bone. Mr. Fenwick: (1) Encephaloid Cancer of Apex of Bladder; (2) Acute Tuberculosis of Bladder and Prostate; (3) Purpura Hæmorrhagica of Bladder. Mr. Bull (for Mr. Rouse): Sarcoma of Clavicle. Mr. Mansell-Moullin: (1) Abscess of Brain following Disease of Ear; Trephined; (2) Sacculated Bladder with Calculus fixed behind the Prostate. Mr. Poland: Osteo-myelitis of Scapula, and separation of its Coracoid Epiphysis. Dr. Gulliver: Aortic Aneurysm opening into Superior Cava.

THURSDAY.—HARVEIAN SOCIETY OF LONDON, 8.30 P.M. Clinical Evening.

PARKES MUSEUM OF HYGIENE (Margaret Street), 5 P.M. Major Lamrock Flower: The River Lea.

FRIDAY.—SOCIETY OF MEDICAL OFFICERS OF HEALTH, 7.30 P.M. The President: On an Improved System of Flush-Closets for small House-property. Dr. E. A. Whitelegge: The Powers and Responsibilities of Local Authorities in regard to Rabies. Mr. Shirley F. Murphy: A few Facts concerning the Recent Prevalence of Winter-Diarrhœa in London.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 2s. 6d., which should be forwarded in stamps with the announcement.

BIRTH.

MAIR.—On May 8th, at Sunderland, the wife of Fleet-Surgeon George Mair, of H.M.S. *Durham*, of a son.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, W. S., 9.30; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 8. Eye, M. Th., 2.30; Ear, M., 9; Skin, Th., 1; Dental, W.S., 9.15.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY..10 A.M.; National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY.....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's—1 30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY.....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE wish it to be distinctly understood that when a manuscript is forwarded to the BRITISH MEDICAL JOURNAL, it is implied that a similar manuscript has not been sent elsewhere, unless special notice of the fact be given; we shall regard any infringement of this rule as a breach of faith.

QUERIES.

PRECEDENCE AMONG VOLUNTEER SURGEONS-MAJOR.

M.B. asks: What entitles to precedence among volunteer surgeons-major? As some thousands will be at the Aldershot review in July, it would be interesting to know. And also, who is the oldest volunteer serving, and has been continuously from 1859 (if any)?

HOLIDAY RESORT IN GERMANY.

M.D. would be obliged for information as to any convenient and inexpensive holiday resort in Germany, where pleasant surroundings and opportunities for German conversation could be obtained.

*** We have referred the question to Inspector-General Dr. Macpherson, who writes: I think, from personal knowledge, that either Eisenach, near Cassel, in Central Germany, or Freiberg, in Baden, would meet "M.D.'s" requirements. If he goes to an out-of-the-way place, there would be a difficulty about the German.

ANSWERS.

MALT.—Mr. Alabone's name is not on the *Register* of the General Medical Council. There is no such drug in the *British Pharmacopœia* as "lachnanthes."

W. G. B. would, we think, do well to put the categorical questions which he addresses to the Registrar of his College. We shall be glad to see and publish the answer.

THE APOTHECARIES' SOCIETY AND THE CONJOINT SCHEME.

BRACKENTHWAITE leaves out of consideration that the two Colleges had, on a quite recent date, agreed to union with the Apothecaries' Society, and encouraged it to obtain a special Act for the purpose. Their subsequent refusal was purely an afterthought.

PYRMONT AS A HEALTH-RESORT.

F.E.C.—Pyrmont is a very picturesque little place, with one of the finest avenues of lofty trees in Europe. The waters are very strong chalybeates, with an abundant supply of carbonic acid. The bathing arrangements of every kind are admirable. Pyrmont has also an excellent chloride of sodium spring, with baths, so that the treatment can be varied if necessary. The place has not for a long time been in fashion with the English, and is frequented chiefly by people from the north of Germany. There is comfortable accommodation, although the hotels are not of the same high class as those of such places as Homburg. Society, of course, varies every season. It is in these respects quite a desirable place for those who do not require much excitement.

THE TREATMENT OF GLEET.

MR. F. SWINFORD EDWARDS writes: Replying to "J. B.'s" letter on the above subject in the JOURNAL of May 7th, I would say that, in my experience, injections and medicines by the mouth are usually of but little avail. Speaking generally, gleet depends upon tonic contraction of the urethra, whether congenital or acquired, and this contraction is most often to be found at the meatus, where it is usually congenital. I have several times found a gleet, also both penile and perineal fistulæ, due to a stricture of so-called large calibre, where the patient had been assured he could not be the subject of stricture because, forsooth, a No. 12 English catheter had been passed easily! If the gleet be due to a contracted meatus, this should be incised at once, and dilatation kept up by the daily passage of a full-sized metal instrument, limited to the penile urethra. Where no stricture has been made out after a careful examination of the canal by means of a urethrometer, I have several times known a gleet of long duration cured at one or two sittings by the passage of a metal sound or bougie, varying in size from 24 to 30 (French scale)—equal in size to from 14 to 18 (English)—smeared with this ointment: Pulv. iodoformi 2 drachms; ung. Dresinæ ad ℥i.

To sum up. Gleet, in nine cases out of ten, is due to stricture, though possibly slight, the removal of which generally suffices to cure the gleet. Should it not, I advise the passage of full-sized metal bougies, with the above-mentioned ointment, twice a week. In a considerable experience of these cases I can only recall two failures after the employment of this treatment, and these I succeeded in curing by means of electrolysis in the deep urethra.

As to the case about which your correspondent "Hors de Combat" writes, I cannot help thinking that his patient has something very like a stricture. The tumified condition of the meatal lips points to some obstruction, either about the mucous membrane or surrounding erectile tissue, and I should recommend treatment accordingly.

MR. A. BERNARD writes: In reply to "J. B.," I have found that chronic cases of gleet are eventually cured by systematically dilating the urethra with a large-sized metallic bougie, and, when possible, by daily washing out the passage with water the chill from which has been removed. I also recommend the patient to introduce an iodoform bougie, three inches or so in length, every alternate night. He should be warned against perpetually examining the penis; if he let it alone for a few days, he will reap the benefit of his self-denial. Cold affusion, especially sea-bathing, is decidedly useful. Strict attention to regimen should be enforced, and in many cases Guinness's or London stout may be taken at meal-time with great benefit.

SURGEON W. WATSON PIKE, M.S., writes: I should recommend "J. B." and "Hors de Combat" to paint the under surface of the penis with liquor epispasticus to produce vesication. I have never seen a gleet last more than a fortnight after this treatment was adopted.

DR. CLEMENTS HAILES (Clifton) writes: There are few of us who have had any experience worth mentioning in the treatment of gleet who have not met with some most obstinate cases, and who cannot sympathise with "Hors de Combat" in his difficulty. Great attention is generally paid to the local treatment of gleet; but this is often of no avail, unless combined with suitable constitutional treatment, by which I mean not only careful regulation of diet, avoidance of irritating dishes, malt liquors, acid wines, coffee, etc, and all enervating ex-

cesses, but the correction of any existing dyscrasia, such as syphilis, gout, rheumatism, and struma.

After the failure of injections, passage of bougies, etc., I have found, in cases with even only an indirect gouty history, it yield to a course of iodide of potassium and colchicum, and those with a similar history of struma to cod-liver oil and iodide of iron. "Hors de Combat's" case, from its history, appears to be the result of over-stimulation in a subject constitutionally weakened by syphilis, and might be benefited by iodide of potassium. Sometimes, when other modes of injection fail, a soft rubber catheter, with extra holes smoothly punched in its distal extremity, passed up to the prostatic portion of the urethra, and the injection, carefully thrown up it by means of a ball-syringe with vulcanite nozzle, may be found useful; and after the failure of the numerous substances mentioned by "Hors de Combat," I have known the ext. of pinus Canadensis (Kennedy), diluted with eight parts of water, cure rapidly, one injection a day being enough—in fact, better than two.

One very obstinate case I had last year, after injections and careful constitutional treatment, failed, as well as the dilatation of a slight stricture, yielded in a few days to drachm doses of the liquid extract of damiana. There was a persistent glairy mucous discharge at the meatus every morning, following a gonorrhœa complicated with epididymitis. This discharge had existed for about six months, and contained mucus and a few pus-cells, but no spermatozoa.

Treatment of Paralysis Agitans.

JOHN H. ALEXANDER, M.B. (Dundonald), writes: Subcutaneous injections of morphine and of curare in some cases produce temporary cessation of the tremor; arsenic given subcutaneously is said to be more successful. For a dose, give from six to ten minims of Fowler's solution diluted with two parts of distilled water. Chloral hydrate, calabar, potassium bromide, and silver nitrate—any of these may be given internally. In a case of Reynolds', where the tremor involved the whole right upper extremity, one hour's use, five times repeated, of Pulvermacher's chain removed the tremor; continued treatment restored the power of the arm perfectly in one month.

NOTES, LETTERS, ETC.

A Dry, Warm, and Equable Climate.

MR. W. E. GREEN, Sandown, I. W.—1. The climate of Teneriffe is far superior to that of the Azores as a residence throughout the year, the climate of the Azores being subject to great fluctuations and periods of extreme heat. 2. Teneriffe more than merits the indications mentioned of "a fairly dry, warm, and equable climate," as will be seen from the data afforded in the letters which are now being published in another column on "A Trip to the Fortunate Islands." The cost of living is very moderate, and full particulars can be obtained of Messrs. Sinclair, Hamilton and Co., 17, St. Helen's Place, London, E.C., or by writing to the Grand Hotel, Port Orotava, Teneriffe. 3. Dr. George Perez, of Puerto Orotava, is a M.D. of the University of London, and could give detailed advice as to the selection of a place of residence. Laguna, or Villa Orotava, is most frequented during the summer months, and Puerto Orotava during the autumn and winter. The dryness, equality of temperature, and sunny climate are great charms, and in these respects the Canaries are not to be rivalled, we believe, by any other known health-resort. They are now easy and cheap of access.

Dr. Richardson's Election Fund.

F. H. ALDERSON, M.D. (Honorary Treasurer to the Fund), writes: May I ask you to inform your readers that Dr. Richardson's Election Fund was closed on April 23rd, and the audit published. I have returned a second subscription received since; but this necessitates a note of explanation, and occupies time.

Sanitary Condition of Bermuda.

SURGEON H. J. BARNES, M.S., writes: In the JOURNAL of April 2nd appears a letter signed "A Bermudian," in which doubts are thrown on certain statements of mine on the insanitary condition of Bermuda, embodied in a paper read by me before the Bermuda Branch on February 12th. Those statements I am perfectly prepared to support by facts; but, as I know your space is valuable, I herewith forward a copy of the paper referred to for your perusal.

I pass over the remark about my "limited medical experience," merely observing that my experience of Bermuda alone extends over five years, and that during that time my civilian *confrères* have often done me the honour to call me in consultation. If "A Bermudian" had read his JOURNAL carefully, he would have seen, on page 642 of the same issue in which the summary of my paper appeared, that the meeting at which it was read was the annual general one, and that a vote of thanks was accorded to me for the paper. Nearly every civilian medical practitioner in the islands was present, and the meeting was unanimous in agreeing that the paper should be forwarded to His Excellency the Governor, for the consideration of the Central Board of Health. There was no discussion, as the facts were incontrovertible.

Poisoning by Nutmeg.

DR. JAMES ALEXANDER writes: I had a case the other day of poisoning by nutmeg. A patient ate one nutmeg as a cure for diarrhœa, and all next day he was stupid, giddy, and very drowsy; the symptoms passed off with the use of castor oil and strong coffee. I cannot find any reference to nutmeg poisoning in Taylor or Beck, nor in any work to which I have access, except the appendix to the *Medical Digest*, where I find a case mentioned as having been recorded in the *London Medical Record* for 1885, but I have not the number to refer to. Does not one medium-sized nutmeg seem a small dose to affect an adult, and can any of your readers recall a case of similar poisoning in either adults or children, and what was the treatment adopted?

Unsatisfactory Lymph Supply.

LYMPH writes: Your correspondent, in the JOURNAL of April 23rd, signing himself "Vaccine," is not alone in his experience of the uncertain quality of the lymph supplied by the National Vaccine Establishment. I have used it for upwards of seven years, and on only about two occasions has it produced anything like satisfactory results. Twice it totally failed, once the lymph (?) in one of the two tubes supplied was coagulated, and several times it has been "stringy." The last time I vaccinated, knowing its uncertain action, I armed myself, in addition, with lymph supplied by a friend; the result was striking, the children done from my friend's supply presented well developed, healthy vesicles, while those on whom I had used the National Vaccine Establishment lymph, exhibited little abortive vesicles.

The Hutton Fund.

The Secretary of the Committee requests the insertion of the enclosed list of subscriptions. It is hoped that they may be added to, so as to create a lasting provision for those who have so great claims on the profession as the widow and daughters of Dr. Hutton.

Second List of Subscriptions.

	£	s.	d.
Amount already acknowledged	436	17	0
Medical Benevolent Fund	25	0	0
Mrs. C. La Motte	50	0	0
A Friend	50	0	0
Rev. W. Niven	25	0	0
Dr. Herbert Watney	21	0	0
Baron Von Hügel	21	0	0
A. Sandeman, Esq.	21	0	0
J. H. Hickens, Esq.	20	0	0
Per Fielding Nalder, Esq.	20	0	0
Dr. Eustace Smith	10	10	0
Thomas Smith, Esq.	10	10	0
Bernard G. Brodhurst, Esq.	10	10	0
Dr. Arthur Farre	10	10	0
M. Van Raalte, Esq.	10	10	0
Mrs. Cope	10	0	0
Walter Sandeman, Esq.	10	0	0
George Barnett, Esq.	10	0	0
Mrs. Hutton, Bury, Lancashire	10	0	0
Hon. Mrs. Halford	6	0	0
Miss Matilda Horsley	6	0	0
Hugh Macpherson, Esq.	5	5	0
Dr. Habershon	5	5	0
C. Du Pasquier, Esq.	5	5	0
G. W. Mackenzie, Esq.	5	5	0
Dr. Bowles, Folkestone	5	5	0
H. S. Trower, Esq.	5	5	0
Adolphe Schloesser, Esq.	5	5	0
Edgcombe Venning, Esq.	5	5	0
Sir James Paget	5	5	0
W. S. Steel, Esq.	5	5	0
John Wier, Esq.	5	5	0
Mrs. R. Stewart	5	5	0
H. Gerald Tudor, Esq.	5	5	0
Lady Herbert of Lea	5	5	0
Sir Oscar Clayton	5	0	0
Miss Arnold	5	0	0
Colonel Hume	5	0	0
Mrs. Lloyd	5	0	0
Mrs. Keyser	5	0	0
William Fuller, Esq.	5	0	0
R. F. Crawshay, Esq.	5	0	0
C. F. Gore, Esq.	5	0	0
A. Cox, Esq.	5	0	0
Mrs. C.	5	0	0
Woodhouse Braine, Esq.	3	3	0
Dr. Gibbons	3	3	0
G. A. Macmillan, Esq.	3	3	0
Mrs. Ponsonby	3	0	0
J. J. Merriam, Esq.	2	2	0
Warrington Haward, Esq.	2	2	0
Dr. Barnes	2	2	0
Dr. Blandford	2	2	0
Dr. Gage Brown	2	2	0
Mrs. Goetz	2	2	0
Lady G. Fitzgerald	2	2	0
A. Curling, Esq., Ramsgate	2	2	0
James Teevan, Esq.	2	2	0
General Fitzroy Mundy	2	2	0
Mrs. Sydney Scott	2	2	0
Miss Levy	2	2	0
Bishop of Truro	2	2	0
Mrs. Cameron	2	2	0
Dr. Frank	2	0	0
W. J. Pering, Esq.	1	1	0
Mrs. Slyman	1	1	0
Mrs. J. F. Churchill	1	1	0
Dr. A. C. Key	1	1	0
H. Cripps Lawrence, Esq.	1	1	0
Dr. Sinclair Thomson	1	1	0
Mrs. Owen Jones	1	1	0
Dr. Waggett	1	1	0
Dr. De Havilland Hall	1	1	0
Rev. Frederick Cox	1	1	0
F. H. Stewart, Esq.	1	0	0
K.	0	10	6
E. J., Newcastle-on-Tyne	0	10	0
Total	974	4	6

General Emphysema in Phthisis.

MR. J. D. WINDLE, L.K.Q.C.P.I., writes: On April 29th I was called to see S. B., a young man, aged 20, whose illness commenced three weeks ago with an attack of hæmoptysis. He had previously enjoyed good health, except that he had a little cough from time to time. The father's side of the family are phthisical. On examination, I found well-marked signs of consolidation over the apex of the right lung, and moist sounds on auscultation over the same area.

On the 30th the patient was in much the same condition as on the previous day, but complained of a sharp pain in the right side of the chest. In the evening of May 1st the right side of the neck and the front part of the chest as low as the third rib was much swollen, and distinctly emphysematous. The swelling ended abruptly at the middle line, and extended upwards to the lower jaw. On May 3rd the emphysema had reached the right side of the face, being limited above by the zygomatic arch. The patient died on the 5th.

I should be obliged for any suggestions as to the pathology. May it not be that the two layers of the pleura had formed adhesions, and perforation of a pulmonary cavity had taken place through them.

Cerebral Surgery and Localisation.

DR. WM. CURRAN writes: With reference to the questions of cerebral localisation and the surgery which modern experiments appear to sanction or encourage within the living cranium, will you allow me to reproduce a few cases or memoranda I made some time ago on these points, and to point out that, if these latter are true, or even pertinent to the issues raised by the late Dr. Carrington in the last number of the *Pathological Society's Transactions*, as well as by Mr. Horsley and Dr. Gordon in your own columns, there is little that is either true or new in either or any of them? Though not absolutely averse to experiments of this kind, I am yet of opinion that their outcome is, as regards restoration to health or the prolongation of life, almost *nil*, but it is quite possible that such an early interference as Mr. Horsley suggests may reduce, if it does not entirely remove, the reproach that has hitherto attached to these operative measures, and, meantime, none will be the worse for being reminded of what has been done in the past in this direction. For the rest, I am well content to submit these notes or cases as they came under my own cognisance, and to leave them to speak, so far as they may, for themselves in this connection.

Describing, or rather commenting on, the relationship that exists between life and nervous force, Lange says, *History of Materialism*, vol. i, p. 119, that, "The ancients were acquainted with the import of the spinal marrow, and, thousands of years before Sir Charles Bell, they had distinguished the nerves of sensibility and movement, and Galen cured paralysis of the fingers, to the astonishment of his contemporaries, by acting upon the parts of the spine from which the implicated nerves took their rise." Lange was not, I believe, a medical man, but he was, and is still, I fancy, a shining light among the materialists, and his book has, I think, received the formal blessing of Huxley, Haeckel, and Darwin. He adds further on, vol. iii, p. 117, that "Longet reports two cases in which, quite unequivocally, both frontal lobes of the cerebrum have been seriously

affected and destroyed, and in which not the least disturbance of intelligence was observed" during life.

The following case or occurrence is taken from *The Memoirs of the Royal Society: being a New Abridgment of the Philosophical Transactions*, vol. iv. pp. 106-7, and the account of it runs or reads thus:—"Mr. Kay's father had a cancer, which took its rise from a small bruise on the os Jugale, and, in process of time, spread itself over all the cheek, and, notwithstanding the endeavours of the most eminent surgeons, it ulcerated through his cheek and into the dura mater . . . . ., which putrefied in a few days, and exposed the brain itself to view, several portions of which came away fresh and untainted. And, what was most extraordinary, was that he perfectly retained his senses, and rose every day to dress the ulcer himself, till a considerable quantity of the brain was come away; and, when he was confined to his bed, his speech failed first, and, about four days afterwards, he died, his brain being totally consumed, and nothing remaining in the cranium but a small quantity of black putrid matter. He had neither spasms nor convulsions of any kind or part all the time of his illness," and physiologists tell us that birds can do almost as well without as with the hemispheres of their cerebella.

There is an account at p. 207, vol. iii, of the same publication of a child that was "born alive without any brain" at all; and, commenting on this further on, p. 208, a Dr. Preston mentions that "M. du Verney took away the brain and cerebellum of a pigeon, and stuffed the cranium with flax, notwithstanding which (he says) it lived some time, searched for its aliment, did the ordinary functions of life, and had the use of its senses." He also intimates in the same place that though a "M. Chirac took away the brain from a dog, yet he (the dog) lived for some time after, but when the cerebellum was taken out he died immediately." No wonder, and I had up to this understood with Shakespeare, that when the brains were out it was all up with the owners of them. Not so, however, if we are to believe these stories—stories which read as if they had been taken out of the *Arabian Nights*, or Butler's *Lives of the Saints*; and having given them such authority or authenticity as references, etc., can confer, I leave them as above to take care of themselves.

The Late Mr. Chatto: a Correction.

We have been informed that the name of the lady whom Mr. Chatto married was Madame Chauvin, not Chanoin, as given in our obituary notice, and that he was not interred in the same tomb as his wife. She was buried at Highgate, not at Kensal Green.

COMMUNICATIONS, LETTERS, etc., have been received from:

The Secretary of the Hospitals Association, London; Surgeon-General C. R. Francis, London; Mr. W. C. Blount, London; Mr. J. L. Green, Salisbury; Mr. W. Adams Frost, London; Dr. Percy Boulton, London; Mr. F. T. Le Toll, Woodhouse, near Sheffield; Mr. W. Watson Pike, Curragh; Mr. T. A. Hind, London; Mr. J. Wolff, London; Mr. C. Pegge, Briton Ferry; Deputy Surgeon-General W. E. Don, London; Dr. Lush, Weymouth; Mr. J. Unsworth, Liverpool; Director-General Army Medical Department, London; Dr. J. Mackenzie Booth, Aberdeen; Mr. A. De St. Dalmas, Leicester; Dr. R. Kinkead, Galway; Dr. A. H. Carter, Birmingham; Dr. Dickinson, London; Mr. J. H. Alexander, Kilmarnock; Dr. J. W. Moore, Dublin; A. M. S.; Mr. Bennett May, Birmingham; The Secretary of the Meteorological Society, London; Mr. E. H. Laurie, London; Dr. R. A. Gibbons, London; Dr. Henry Behrend, London; Mrs. Anderson, Edinburgh; Dr. Macpherson, London; Mr. J. M. Cotterell, Edinburgh; Dr. Sheen, Cardiff; Mr. O. G. Vrabic, Bucharest; The Executive Council of the American Exhibition, London; Dr. T. Whipham, London; Mr. T. S. Ellis, Gloucester: Mr. E. D. Harvey, Hamilton, Bermuda; Mr. E. Freer, Birmingham; Surgeon H. J. Barnes, Bermuda; Mr. R. W. Holmes, Dublin; Dr. Styrap, Shrewsbury; The Secretary of the Pharmaceutical Society of Great Britain, London; Dr. Fleury, London; Mr. T. D. Cook, Torquay; Mr. J. D. Windle, Radfield: Mr. A. Bernard, Liverpool; Mr. N. Walker, Dalston; Dr. Gubb, London; The Lady-Superintendent of Jenny Lind's Infirmary, Norwich; Dr. F. P. Atkinson, London; Mr. R. G. Salmond, London; Surgeon-General G. C. Hall, Allahabad, India; Dr. Heron, London; Dr. F. H. Alderson, London; Dr. W. Pearce, London; Brigade-Surgeon F. Ferguson, Bangalore; Sir E. Sieveking, London; Brigade-Surgeon R. Waters, Allahabad; Mr. M. M. Reynard, Bournemouth; Dr. Lawrie, Ayr; Mr. W. H. Copley, Wisbech; The Mayor of Leamington: Dr. W. F. Haslam, Birmingham; Mr. R. W. Murray, Manchester; Mr. H. K. Lewis, London; Mr. A. Edington, Edinburgh; Dr. G. Dods, Edinburgh; Mr. C. B. Lockwood, London; Dr. S. Martin, London; The Secretary of the General Hospital, Birmingham; Professor Victor Horsley, London; Mr. J. Taylor, Buxton; Dr. W. E. Steavenson, London; Mr. R. Fitzroy Benham, London; Our Berlin Correspondent; Dr. C. R. Illingworth, Clayton-le-Moors; Mr. F. S. Edwards, London; Messrs. Lipscombe and Co., London; Dr. W. D. Haslam, London; Mr. J. Mackey, Berwick-on-Tweed; Mr. G. S. Murray, London; Mr. R. J. Brydon, Gravesend; Mr. C. Lovegrove, Llanfyllin; Dr. B. H. Mumby, Portsmouth; Mr. F. Churchill, London; Our Manchester Correspondent; Surgeon-General W. B. Allin, Aldershot; Mr. H. W. Williams, London; Mr. J. Whitehouse, Sunderland; Mr. W. R. H. Stewart, London; Dr. Woodham Webb, Paris; Dr. M. Clark, Rotherham; Dr. C. Hailes, Clifton; Dr. J. Sinclair Coghill, Ventnor; Mr. H. Doughty, Cambridge; The Secretary of the Electro-Dynamic Medical Institute, London; Surgeon Townsend, Cork; Sir James Paget, London; Dr. R. Neale, London; Dr. Tatham, Salford; the Honorary Secretary of the Harveian Society, London; Mr. A. J. Smith, Dublin; Dr. R. H. Williams, Feemy; Dr. J. Wigmore, Bath; Dr. Laffan, Cashel; The Secretary of the Society of Medical Officers of Health, London; Mr. C. N. Lee, Dunfermline: Dr. J. Mackenzie Booth, Aberdeen; Mr. J. Abbey, London; Dr. W. Duncan, London; Mr. A. Jefferson, Liscard, Cheshire; Mr. G. Greene, Ferns, Wexford; Mr. H. White, Corwen; Mr. J. Symons, Penzance; Mr. J. J. de Marshall, Hawkhurst; Mr. W. J. Lee, Stoke, Devonport; Dr. Graily Hewitt, London; Dr. J. Brown, Bacup; Mr. J. T. Hancock, Shrewsbury; Our Liverpool Correspondent; Dr. Bramwell, Perth; Mr. H. St. Clair-Gray, Glasgow, etc.

BOOKS, ETC., RECEIVED.

Congenital Club-Foot: its Nature and Treatment. By R. W. Parker. London: H. K. Lewis. 1887.

Disease in Children. By Angel Money, M.D. London: H. K. Lewis. 1887.

Elements of Pharmacology. By Dr. O. Schmeidelberg. Translated under the Author's supervision by Thomas Dixson, M.B. Edinburgh: Young J. Pentland. 1887.

Principles and Practice of Operative Surgery. By Stephen Smith, A.M., M.D. Illustrated. Edinburgh: Young J. Pentland. 1887.

Die Massage in der Gynäkologie. By Dr. Paul Profanter. Wien. 1887.

Diseases of Women, etc. By Dr. F. Winckel. Authorised translation by J. H. Williamson, M.D. Under the supervision and with an introduction by Theophilus Parvin, M.D. Edinburgh: Young J. Pentland. 1887.

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The Medical Chronicle (May). Manchester.

Giornale Internazionale delle Scienze Mediche (April).

The Therapeutic Gazette (April). Philadelphia, U.S.A.

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Edinburgh Medical Journal (May). Oliver and Boyd.

Glasgow Medical Journal (May).

The Practitioner (May). Macmillan.

The Analyst (May). Baillière, Tindall, and Cox.

Twenty-sixth Annual Report Cincinnati Hospital.

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Annales de Dermatologie et de Syphilographie. Paris.

Archives Générales de Médecine (May). Paris.

Lyon Médical (May).

Courier of Medicine (April). St. Louis, Missouri.

Journal of Nervous and Mental Diseases (April). New York.

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The Obstetric Gazette (April). Cincinnati.

New England Medical Monthly. Bridgeport, U.S.A.

Annales de la Société Médico-Chirurgicale de Liége (April).

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Letters from a Mourning City (Naples, Autumn, 1884). By Axel Munthe. Translated by Maude and White. London: John Murray. 1887.

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Medical Herald (April). Louisville, U.S.A.

Medical Annals (April). Albany, New York.

Medico-Legal Journal (March). New York.

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REMARKS ON HISTORICAL NOTICES OF ŒSYPUM, AND THERAPEUTIC EXPERIENCES WITH PURE ANHYDRIC LANOLIN.

By N. WULFSBERG, M.D. (Christiania).

In the history of materia medica we often find that some new discovery or theory overthrows a whole series of old-established customs for a time, but that further researches prove this proceeding to have been premature, and re-establish on a newer and better basis many of the old experiences.

This has been the case with fats. In olden times a great number had been used medicinally, and very complicated special indications had been laid down for them. When organic chemistry taught us the similarity in the composition of these substances, the old teachings seemed valueless, and we confined ourselves to the use of tallow, lard, wax, spermaceti, blubber, and a small selection of vegetable oils of various consistencies.

It is only in the course of the last few years that Professor O. Liebreich has prepared for wool-fat a brilliant re-entry into the *Pharmacopœia*. I need not here go into the interesting details of his exhaustive research—they are fresh in the memory of us all; but I will give some quotations from ancient medical literature which go to prove that Professor Liebreich is justified in saying that wool-fat, under the name of œsypum or œsypus, has long ago been extensively used in medicine.

We find the first complete account of it in Dioscorides (*Materia Medica*, lib. ii, cap. lxvi), and as the subject is there very thoroughly gone into, a complete translation of the chapter may prove of interest:

"The Greeks give the name of œsypum to the fat of raw wool. It is prepared in the following manner: soft fresh wool, that has not been treated with soap-root,[1] is washed with warm water, and when its impurities have been pressed out and collected in a wide-mouthed vessel, water is poured on, and it is violently beaten with a spoon or stirred with a stick until it foams, so that the dirty foam may be freely collected, on which then sea-water is poured. When the floating fat has settled, and has been collected in another earthen basin, the water in the first vessel is again stirred, the foam is again covered with sea-water, and finally taken out. This proceeding is repeated until all the fat has separated, and no more foam rises. The collected wool-fat is kneaded by hand, and any impurities removed; the water is gradually pressed out, and fresh poured on, the kneading being continued until the taste of a small portion laid on the tongue is only slightly astringent, not sharp, and until its appearance is white and fatty; it is then preserved in an earthen vessel. All this is done in burning sunshine. Some wash the strained fat with cold water, and rub it with the hands, much as women treat their wax-ointment; it thus becomes whiter. Others, again, boil the washed and clean wool with water over a weak fire in a copper vessel, collect the floating fat, and wash it with water in the way above described; after straining they place it with hot water in an earthen vessel in the sun, cover it with a linen cloth until it becomes white and sufficiently consistent. Others pour away the water after two days, and pour on fresh.

"Good wool-fat is slippery, fills abscesses, and softens, especially at the seat and the genitals, when mixed with melilotus and butter; laid on with wool it induces menstruation and parturition, it heals sores at the ears, and also—when mixed with goose-fat—at the genitals; it is an efficacious remedy for inflammation of the corners of the eye, and rash at the same locality; against swollen cheeks and loss of eyelashes.

"It can be burnt in a new pot until it gives off all fattiness and falls to ashes; soot is also collected from it in the way already described, which is advantageously mixed with medicaments for the eye."

This account of Dioscorides requires no further explanation; he describes what he has seen and experienced with the thoroughness and clearness that stamp his writings as truly classical in spite of all linguistic peculiarities.

[1] The saponaceous root of Gypsophila Struthium, L.

Celsus (*De Medicinâ*) whose fifth book treats of drugs, does not mention œsypum in the pharmaco-dynamic part (*De Simplicibus Facultatibus*). On the other hand we meet with it here and there in special therapeutics as an ingredient of various prescriptions. Amongst the remedies for inducing suppuration, comes first the emplastrum tetrapharmacum (ceræ, sebi, picis, resinæ āā) and then the empl. enneapharmacum, to which œsypum together with butter, ox-marrow, wax and grease gives consistency. We further find œsypum as the chief ingredient of an ointment for fissura ani. This ointment contains also a wax prepared with oleum rosæ infusum. Another disease of the same locality necessitates the addition of chalcitis[2] to this ceratum rosaceum cum œsypo.

Galen devotes some remarks to οἴσυπους, but is of opinion that it is in no way superior to the other fats. (Compare Spielmann, *Institutiones Materiæ Medicæ*, Argentorati, 1774, page 138.)

In the *Natural History* of the elder Pliny, œsypum is also described He knows that it is produced by boiling, straining and bleaching in the sun, and mentions as a characteristic quality, that œsypum when rubbed with water, does not become liquid, but white and waxlike. The œsypum taken from Attic sheep is considered the best; but in these remarks—as in so many of Pliny's—we feel that he quotes what he has read in the writings of others, keeping back his own opinion. However, in his therapeutic notes we perceive the acuteness of the natural historian; he takes a pleasure in hinting at the absurdity of certain curative methods. Thus the conjecture dates from him, that in the production of œsypum the dirt collected in the wool may play as important a part as the perspiration of the sheep.

It may be seen from these quotations that wool-fat was a particular product of certain districts, of those, probably, in which soap and soap-root were not used for sheep-washing. During the entire Middle Ages there seems to have been no essential change in this respect. In Germany the preparation was but little known; in France, where we find it in use as late as the last century, Geoffroy [3] mentions that it is not to be obtained of equally good quality from all the provinces. In England, the process of its production is described by Nich. Culpepper [4] almost in the same way as by Dioscorides. The preparation remained longest in use in Spain, where we find it in the *Pharmacopœia* down to the end of last century. In the second edition of the *Pharmacopœia Hispanica* (Madridi, 1798), on page 70, an œsypus purificatus is described as an oily substance, obtained by washing sheep's wool, cleaned by boiling and straining, and made use of as an emollient, and for external application.[5]

In the first eighty years of our century, the remedy was only of interest from a historical point of view. No doubt the progress made in the methods of wool-washing was responsible for this neglect. By the use of potash, soap, and soda, the cleansing process was gradually perfected, but perfected at the cost of the fat, which, changed in quality, was thrown away with the washing water. But since technical chemistry has developed more and more, and since waste substances, instead of being thrown away, are made useful in the most varied branches of manufacture, the wool-washing water has at last been found to be most valuable.

In the year 1880, Dr. Fr. Elsner [6] writes that it has been recognised as a source from which potash can be obtained. When the potash, which is formed partly from the wool-perspiration, partly from the added ley, has been obtained, the water is subjected to treatment for the wool-fat still contained in it. Elsner, who as chemist to the "Leipziger Wollkämmerei" was well acquainted with all the details of the process, states especially that the wool-fat must not be entirely saponified. Already before this F. Hartmann [7] had proved the existence of cholesterin in wool-fat, and Ernst Schulze [8] that of the combination called by him isocholesterin, and the latter had at the same time proved that these substances not only occur in the wool-fat in a free state (as an unsaponifiable portion), but also as a compound ether of fatty acids

[2] A mineral, used as an escharotic, which crystallises in mines from out of the underground water, etc., and which chiefly consists of very impure green vitriol.

[3] *Suite de la Matière Médicale*, Paris, 1756, vol. vi, p. 121.

[4] *Pharmacopœia Londinensis*, or the *London Dispensatory*, London, 1675, p. 264. Compare T. H. Powell, *Pharm. Journal and Trans.*, 1886, November 13th, p. 404.

[5] Compare *Pharmacopœia Batava*, Lipsiæ, 1824, i, p. 231. G. A. Richter, *Ausführliche Arzneimittellehre*, Wien, 1832, vol. i, p. 227. Geiger, *Pharmacopœia Universalis*, Heidelberg, 1835-45, i, 191, ii, 589.

[6] *Pharmaceutische Zeitung*, 25 Jahrg., Berlin, 1880, p. 522. Compare *Jahresbericht der Pharmacognosie*, etc., Goettingen, 1882, p. 114.

[7] *Ueber den Fettschweiss der Schafwolle*, Inaug. Diss., Goettingen, 1868.

[8] *Berichte der Deutschen Chemischen Gesellschaft zu Berlin*, 6 Jahrg., Berlin, 1873, p. 251; compare also Hoppe-Seyler, *Physiologische Chemie*, iv Theil, Berlin, 1881, p. 762, where the author withdraws the doubts previously expressed by him as to the existence of isocholesterin, and declares them to be entirely dispelled by the preparations shown by E. Schulze.

of high molecular weight and of oleic acid. The separation of these cholesterin-fats from the impurities has been made practicable during the last few years, and has been materially assisted by the important researches carried out in the Pharmacological Institute of the Berlin University on the fats of the animal skin, and on the cholesterin-fats as skin-ointment in the physiological meaning of the word.

In the lanolinum purissimum anhydricum (Liebreich) a preparation has been brought into use which is not only as superior to the best Attic œsypum ever seen by Dioscorides, as are our modern candles to the tallow dips of our grandfathers, but which also—by its proved physiological value—presents the best basis for ointments hitherto known.

During the autumn I had occasion to try the purified lanolin, and some ointments prepared with it, on patients. I may say at once that I began my trials with a certain scepticism. I have too often been disappointed by new remedies, even where these have been well recommended, and it so happened that during the last year a number of fats for ointment had passed through my hands. Among the latter had been a specimen of the centrifugated lanolin—the kind first brought in the market—of which, at the time, I formed rather a poor opinion. I was therefore really surprised to find that the very first trials with the purified preparation turned out well. This favourable opinion has been confirmed by further examination. Lanolin is no panacea, nor can it entirely replace the other fats, but in many cases it certainly brings about a quicker and more decided cure than the usual remedies.

I will begin with a simple case, and will describe the application for pruritus and prurigo senilis. The case of pruritus was that of a woman, aged about 80, whom I had repeatedly treated, partly with internal applications (natrium bicarbonicum, kalium bitartaricum, kalium bromatum, radix valerianæ), partly with baths, and finally with inunctions of fats, of which latter only cod-liver oil—disagreeable in various ways—could relieve the irritation. This new attack had followed upon mental anxiety. I now prescribed lanolin. A short time after the first application the itching ceased, quiet sleep set in even the first night, and after a few days the condition had improved so much that the patient was only now and then obliged to apply a small quantity of lanolin. In this case I returned to the use of the less expensive centrifugated lanolin with satisfactory results.

A woman, aged 88, with prurigo senilis, was admitted into my hospital. The skin was covered everywhere with papules and pigment-spots from former eruptions; the patient was thin and worn through itching and sleeplessness, and the general condition was very unsatisfactory. No trace of vermin was found. Scarcely a year passes without my having several similar cases from the poorer classes, and my experience has invariably been that after some time, in consequence of the more generous diet and the careful skin-treatment, they are dismissed as cured. The remedies I was formerly in the habit of using were inunctions with grease, and in the more serious cases cod-liver oil poultices. In this case I at once turned to the lanolinum purissimum anhydricum, of which I had an ointment prepared with 50 per cent. adeps suillus, and ordered it to be applied to a quarter of the body every evening. An improvement set in after a day or two; appetite and sleep returned; after a week the patient had so far recovered that a warm bath could be ordered. After four weeks the patient's condition was normal, the embrocations were discontinued, and she only now and then complained of a slight itching at the neck or the arms, which was promptly put a stop to by the application of lanolin.

In the case of simple abrasions and excoriations I use either an inunction of lanolin or else lay it on with the help of a puff of cotton-wool. It acts as a protective cover, eases the pain, and favours the formation of new epidermis by softening and distending the surrounding skin. Deeper injuries of course require antiseptic treatment, and for these I have not yet made use of lanolin, though it might possibly with advantage take the place of glycerine, castor-oil, and resin in the preparation of antiseptic gauzes.

A lanoliment consisting of anhydric lanolin with 10 per cent. of oxide of zinc was applied instead of the usual zinc ointment. It takes the place of the latter in every respect, and possesses the advantage of sticking to damp surfaces and being easily rubbed into them. Instead of ceratum labiale, the lanoliment oxydi zincici became a great favourite; it makes the lips supple, and has a neutral taste.

Still better results were achieved with a boric acid lanoliment, of which I applied both a 10 per cent. and a 20 per cent. mixture. With the weaker ointment I treated two cases of herpes circinatus. The one case was that of an elderly man who was employed in a cigar-shop, and whose wrists and hands had been for some weeks the seat of a well-developed exanthem. The other case was a woman who, on wearing a red woollen under-jacket, had developed a quantity of irritating but dry circular efflorescences (not pityriasis versicolor) on her shoulders and the upper part of the back. Both cases were cured within a week. The 20 per cent. boric ointment has done specially good service in a case of recurrent eczema, of which I will give a more detailed account.

N. N., a married woman, aged 38, first came to me for treatment in the autumn of 1885. At that time she had been suffering for six weeks from a very violent eczema, which had spread over her face, ears, head, neck, and throat, besides her hands. The places attacked were mostly covered with a purulent crust; the eyelids and outer ears were much swollen; the irritation was unbearable. Under the crust were wet, slightly infiltrated, and sometimes bleeding surfaces; at the edges the exanthem was in some places advancing, and was bordered by a curved row of small pustules. At both the ears the exanthem encroached upon the outer auditory passage, the opening of which was covered with bloody rents and exfoliating pieces of epidermis, and was the seat of the most terrible irritation.

The patient, who before this had been a blooming young woman, was very worn and thin. In consequence of the continued sleeplessness and unceasing itching, she was in a sad state of weakness and nervous irritability. Medical advice had been taken from the beginning, but had as yet been unsuccessful; however, in a short time, by the continued application of goulard-water compresses I was able to give relief, followed after some weeks by complete restoration. During the year that followed, the patient did not suffer in health for a single day until the autumn; when I was called in I found her in bed, where she had been for three days, the eczema was fully developed at all the old places, in the middle a crust was beginning to form; damp spots everywhere, and round all a zone three to four centimètres wide, of tight translucent pustules. The eyelids were swollen, especially the right one, which could not be opened. There was constant irritation. The patient, remembering her former experience, had been applying compresses of goulard-water from the beginning, but had experienced no relief. I at once put a stop to treatment with water in any shape, and myself applied the following lanoliment: ℞ Acidi borici pulverati, 20.0; lanolini purissimi anhydr. (Liebreich), 80.0. M.D. s.

The ointment was applied pretty thickly, and was easily rubbed in, even at the damp spots. A feeling of moderate burning immediately set in, which however was felt as a relief from the former irritation. After a quarter of an hour the irritation had become bearable, and I left the patient. On the sixth day she wrote to me as follows: "Let me thank you for the wonderful ointment, which really has had an extraordinary effect. The itching became less irritating at once, and the swelling has gradually gone down, so that it has now almost disappeared with the pustules."

A week later I saw the patient once more. There was no fresh eruption, the skin was smooth and soft all over; only a slight susceptibility to draughts and to water remained, in consequence of which the ointment was still occasionally applied.

In the case of bedridden female patients, whose long hair is very troublesome to comb, on account of its entanglement, the following pomade has done good service: ℞ Lanolini puriss. anhydr. (Liebreich) 15.00; cetacei; olei amygdalarum āā 5.00; olei bergamiæ gtt. v; olei lavandulæ gtt. xv. M. f. l. a. ungt. D. s.

Tar-remedies can also with advantage be applied as lanoliments, as may be seen by the following example. N. N., a naval cadet, had been attacked whilst on a voyage in the tropics eight or nine months ago, by a dry eczema on his hands and face, the nose especially having a florid appearance. The following ointment was prescribed: ℞ Ung. basilici nigri 5.0; lanolini puriss. anhydr. 45.0 (Liebreich). M. D. s. (The first ingredient is u. basilicum Ph. Germ., with an addition of 12 per cent. of pix liquida, and thus almost identical with the emplastrum tetrapharmacum of Celsus.) In a fortnight the eczema was cured, and has never appeared again. An ergotin-ointment, which I often prescribe in cases of hæmorrhoids, has also been prepared with lanolin, the result being highly satisfactory.

Finally, I have made use of a lanolimentum hydrargyri cinereum, prepared with 10 per cent. of fat, sometimes in the form mentioned, sometimes worked in with twenty times its bulk of anhydric lanolin. The second form of the ointment proved of great value where there were vermin. Only a few inunctions were required to exterminate numerous settlements of pediculi pubis, and the disagreeable skin-irritation that so often ensues upon the exhibition of the ordinary mercurial ointment did not once occur. This ointment was also applied in a case of chronic infiltration round the tendo Achillis, after the

healing of an abscess, and the result was that absorption was complete within eight days.

In a case of leucorrhœa with a highly irritating secretion (where a gonorrhœal infection could not be traced) I applied the stronger mercurial lanoliment, with good result. No suitable cases of syphilis came under my notice during this time.

I have thought it well to describe these therapeutic experiences at length, not in the hope of bringing lanolin into general use—for this my help may well be spared—but because, having at the first re-introduction of wool-fat expressed rather prematurely a contemptuous opinion of it, I think it my duty to state the facts that have caused me to alter my views. I have found pure lanolin to be a valuable remedy that I could now ill spare in my practice.

FURTHER REMARKS
ON
THE RADICAL CURE OF HERNIA BY INJECTION.

INCLUDING A DESCRIPTION OF A MODE OF OPERATING WITHOUT THE USE OF AN ANÆSTHETIC, AND WITHOUT CONFINING THE PATIENT TO HIS BED OR TO THE HOUSE.

By C. B. KEETLEY, F.R.C.S.,
Senior Surgeon to the West London Hospital.

The following paper may be taken as supplementary to one already published in the Journal (1885, vol. ii, page 543), and originally read at the meeting of the British Medical Association at Cardiff.

I have first to say that I found the combination of cannula and syringe somewhat awkward in practice; once or twice the two came apart as I was withdrawing the cannula, allowing an uncertain quantity of the injected fluid to escape, and compelling me to guess vaguely how much more to inject to make up for the loss. For this reason I caused to be made the injection-syringe described in the Journal for July 17th, 1886. This I now show to you, and you see it is a probe, cannula, and syringe all in one instrument, besides having certain other advantages, such as requiring only one hand to fill, empty, and otherwise manipulate it, and being very easily asepticised.

I have further to report three specially interesting cases, all in adults, in one of which I used the injection only, while in another I felt it prudent to refrain from using the injection, and to employ merely the suture, and in a third I adopted an entirely different mode of operating—one which neither required the use of an anæsthetic nor prevented the patient from doing his business. The first and second cases were operated on at nearly the same time, namely, March 16th and April 14th, 1886. The successful case was a young adult man, with a left inguinal hernia of moderate size, coming through a canal also of moderate size. He was admitted into the West London Hospital, and a simple injection of concentrated decoction of oak-bark was thrown into his inguinal canal, no suture being placed in the canal-walls or apertures. A thickening rapidly formed at the site of injection, which felt very much like a crown-piece wrapped up in a piece of lint. This gradually got less, but some months after the operation, he had had no return of either the hernial impulse or hernial swelling. He usually wears a truss by way of precaution, but I shall not fear to let him discard it when next I see him. The other and less fortunate case was that of a very stout gentleman, who came up from Yorkshire to be operated on. I may mention, by the way, that his brother had suffered from hernia, and been cured by injection in America. In ten years of operative experience, I have never had so many minor misfortunes and pieces of what I will call, out of charity to myself, "ill-luck" as I suffered in connection with this patient; they all arose out of a bad commencement. In giving the patient a list of two or three lodging-houses, I included one which, though excellent in itself, was not a good one for our particular purpose. I recollected this immediately; but, expecting to see the patient next day, and having arranged not to operate for a day or two, I thought I should have an opportunity of setting things right. Unfortunately, I did not hear again from my patient till the eve of the date fixed for the operation, and he had in the meantime taken rooms with an exceedingly bad light. A corner window on the ground floor, looking into the bottom of a kind of pit, and the enormous bed in the room, when placed in such light as there was, blocked the way in such a manner as almost to paralyse the nurse and greatly interfere with the assistant. Further, the eventful morning was dark and dull, even for London; and we had to use candle-light. My assistant was more than fully occupied in endeavours to retract the fatty walls of the wound; these were so thick and deep that it was not until I had made an incision three if not four times as long as the usual one that I could get proper access to the inguinal ring and its pillars. When I now proceeded to put in the thick catgut suture with a handled needle, the shank of the latter bent with the effort necessary to bring the eye into view after it had passed through the pillars. There was a good deal of oozing, and the nurse being occupied in holding the candle, while the assistant's hands were monopolised by the retractors, I had to sponge for myself. When the suture was properly inserted, I paused to reflect ere I injected a powerful irritant into the inguinal canal after all the parts had necessarily been subjected to much rough usage.

Had we been engaged on some necessary operation, such as an amputation, to go on and make a thorough finish of it would have been a matter of course; but here was a very different state of things. My main object in doing these operations of injection is to find a really safe and reasonably certain mode of doing the radical cure of hernia. I would therefore infinitely rather fail to do any good than risk doing any harm. Therefore, considering the unusual stoutness of my patient, the large wound it had been necessary to make, the rough usage to which it had been subjected, the unreliableness of the antiseptic precautions which it had been possible to take under the circumstances, and the doubt whether, even under the most favourable conditions, injection would do much good to a hernia coming through such an immense aperture (it would admit four fingers), I determined to refrain from exposing my patient to the risks associated with injection into his canal. Had I had him on the hospital operating-table, in an excellent light and surrounded by plenty of assistance, I should probably have there and then tied the neck of the sac, excised the fundus of it, sutured the ring, and confidently expected a good result. But this course was here at present out of the question, although I had obtained my patient's leave to do as I liked. I therefore merely put a little of the injection on the sutured ring, placed a drainage-tube, sponged and cleansed the wound with $\frac{1}{1000}$ sublimate lotion, and dressed with turf-moss dressing, etc., sublimated in the usual way.

Very glad I was afterwards that I had refrained from putting the injection into the canal, otherwise I should have probably had to deal with an abscess in the abdominal wall between the muscles, for the wound did not heal by first intention, and there was a good deal of suppuration with some sloughing. In addition to this, an attack of pneumonia with rusty sputa, high temperature, etc., developed in a few days, and kept the patient incessantly coughing, besides causing me some anxiety, and compelling me to pay the most rigorous attention to the wound, with a view to preventing septic absorption. I used to dress it three times a day. The pneumonia was partly aggravated by his being kept always on his back with the foot of the bed raised, and disappeared rapidly as soon as I allowed him to sit up a little. The hernia remained up for a fortnight, and then came down in a fit of coughing.

The suture had given way, and I removed it through the wound, which was still unhealed. I then let him sit up in bed, and all signs of the pneumonia quickly vanished, showing that whatever had been its original cause, it had been kept up and increased by the statical effect of the continued supine position with the lower extremities raised, and the head and chest lowered. A good deal of effusion had taken place about the ring, which was diminished in capacity by the thickening, so that I hoped a truss would now keep up the hernia (which would be some advantage gained by the operation). During the few days the patient remained in town, walking about and standing, this hope seemed likely to be fulfilled; but our misfortunes were not at an end. The new truss, which he was now wearing with success, was sent to the maker's, that it might come back with another like it the next day when he had to return to the north. But the makers sent away the truss to some factory out of London, and when he was about to go to the train, they would give him neither the truss nor the duplicate, nor did they have in the shop another truss which was quite effective. When eventually he got the two trusses, he being then in Leeds, neither the new one nor the old one would keep up his hernia. There is really more to be learnt from this case than from the successful ones individually. From it I conclude that, when the patient is very stout, a first-class light, an extra assistant and an extra strong needle are required.

Secondly, I see that, in certain patients, unless it is possible to

take the most complete antiseptic precautions, very troublesome suppuration may occur even after the simple operation in question.

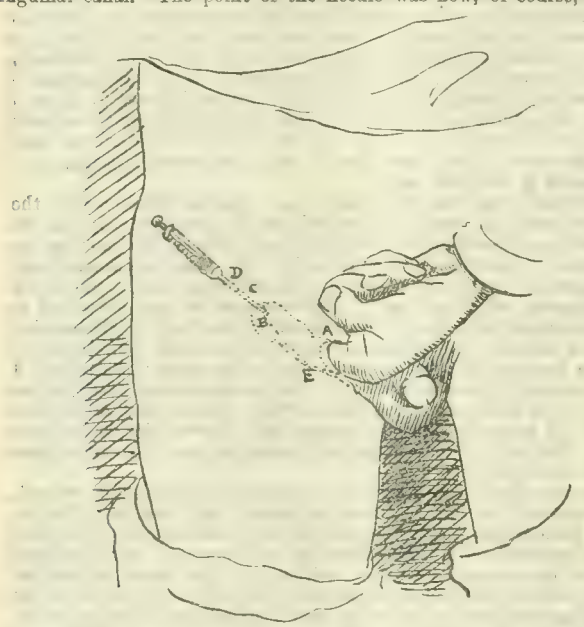
Thirdly, this case furnishes one more instance of the uselessness of the suture without the injection; though it is but fair to say that this was a direct hernia, with no oblique valvular canal such as would be favourable to suturing.

Fourthly, that, as might have been expected, the position usual after all operations for radical cure of hernia is exceedingly bad for patients exposed to the causes of lung-affections.

Having, by my open operations of injection, become sufficiently familiar with the parts, I wished to try subcutaneous injections, and was soon fortunate enough to get for a patient an able and observant surgeon who had himself been already operated on by as good a surgeon as any in these islands, but unsuccessfully, the form of operation having been an attempt to obliterate the canal with a gold wire passed subcutaneously, and left *in situ*. This was a right inguinal hernia with a short canal, but not direct.

My procedure was as follows. First, I requested my patient to get a brand-new morphia injection syringe, with a long, stout needle, and also a small quantity of absolute alcohol in a stoppered bottle. Both these were kept entirely for his own use, the former always remaining in his possession. Every other day, I injected five drops of absolute alcohol into the inguinal canal. The needle was used in the following manner.

Invaginating the scrotum, I passed my left forefinger up the inguinal canal as far as the internal ring, the patient lying supine. With my right hand I now inserted the needle, making it pierce the skin external to the middle of Poupart's ligament, that is, nearer the anterior superior spine of the ilium, and passed the needle-point from without inwards and backwards, till, going through the external oblique aponeurosis, it touched my forefinger-tip lying in the inguinal canal. The point of the needle was now, of course, itself



in the canal, and directed downwards and inwards, in fact, nearly in the axis of the canal. The next step was to take my finger out of the canal, leaving the needle-point in it. My own sight and the patient's own feelings used to assure us that the hernia remained reduced; but, even had it slipped down, it could not have been wounded by the needle lying point downwards and inwards, in the manner I have described. The injection was now made, and the needle withdrawn; a smart burning sensation was felt for half a minute (it was timed accurately by a watch), and then disappeared entirely, as though the alcohol had a secondary anæsthetic action.

What were the results of these injections? Either the second or third injection produced a thickening in the canal about the size of a small Spanish nut; and a few more injections, or, rather, the last of them, produced a swelling as big as a plover's egg, or bigger; it completely blocked up the canal, and was decidedly tender, as well as somewhat painful for a day or two.

Both my patient and myself were now hopeful of success; but, alas! as the swelling subsided, it became probable that it was in the cord, and not in the loose tissues of the canal, because it gradually descended in the canal, till it was all at the external ring; it is needless to say that a swelling there will not cure an oblique hernia.

The patient leaving town, treatment was now discontinued for two months, at the end of which time he returned, stating that his hernia did not come down so readily or so frequently as before; and that he was convinced that we had only to get the injection higher up, namely, to the internal ring, in order to obtain a cure. I was entirely of his opinion. He could only stay in town a very short time on this occasion, so I resolved, with his consent, to inject a more powerful irritant this time. Accordingly, I put in five drops of fresh glycerine of tannic acid; the reaction was tremendous; an immense swelling filled the canal, and descended out of it along the cord towards the scrotum. There was a good deal of pain and fever for a few days, and I kept him in bed; he had been walking about during the preceding treatment; but, again, the injection was too much in the coverings of the cord, so that, as the swelling subsided, the weight of the testicle dragged its remains down towards the external ring. My patient, who is in the army, had now to leave London on duty.

Now, I have no doubt in my own mind that I placed the needle point as high up the canal as the internal ring; and while my finger remained in the canal the cord was guarded effectually enough. But I was obliged to withdraw my finger before injecting, or, as actually happened in the only instance in which I did not, the injection would have gone into the tissues of the invaginated scrotum. During the operation, the tendency to retraction of the cord and testicle was marked, and doubtless the cord, so to speak, impaled itself on the needle as soon as my finger was withdrawn from protecting it. By the cord, I mean its coverings rather than the vas deferens, etc.

It is plain to me that there are two ways in which this simple operation can be perfected: 1. The needle can be provided with a protecting cannula, which should be slipped over its point before the finger leaves the canal. 2. The testicle should be dragged downwards as far as possible while the injection is being given.

There are very serious objections to the latter plan, and the former is the one I shall try at the first opportunity. I am sorry that the necessary departure of my patient prevented its being tried on him. His intelligence, his professional training, and his thorough understanding of his own case greatly increased the value of it.

I hope it will be borne in mind, in considering my paper, that what I am in search of is not an effective radical cure for hernia, but a safe one. I mean one so safe that any surgeon would as readily submit to it as to the opening of an alveolar abscess. Further, what is wanted is not an operation which is only safe in the hands of a very select few men of exceptional skill, knowledge, and experience, but one which can be satisfactorily done by any intelligent and careful surgeon who will take the pains to learn it, and to study the anatomy and pathology of the affection he proposes to treat.

I will take this opportunity of stating that I have this week examined the first patient on whom I operated for the radical cure of hernia by injection. He is a stout, middle-aged gentleman, who used to be greatly troubled by a double inguinal hernia, which came down even as he lay in bed. The result of the operation is in this case perfect. During the two years which have now elapsed, he has neither seen nor felt anything of either rupture; except in the first month of convalescence, he has worn no truss, and there is no impulse. This case was operated on at the Fitzroy Home Hospital, in the presence of Messrs. R. Wharry, S. Benton, and J. Mills.

CLAY-MODELLING OF THE LIVING PROSTATE AS A MEANS OF OBTAINING A PERMANENT RECORD OF PROGRESSIVE DISEASE.[1]

By E. HURRY FENWICK, F.R.C.S.,

Assistant-Surgeon to the London Hospital; Surgeon to St. Peter's Hospital for Urinary Disease.

It is certainly remarkable that whilst our knowledge of the etiology and diagnosis of disease has advanced during the last twenty years by rapid strides, our insight into the functional disturbances and organic diseases of the prostate gland has lagged far behind. Still more remarkable is it that although the gland is within the reach of our finger, yet our macroscopical knowledge of its living condition has not kept pace with the microscopical information we have derived from *post-mortem* investigation of its structure. Our conceptions of the living normal gland are mainly taken from our knowledge of it in its

[1] Read at the Berlin Surgical Congress, April, 1887.

dissected form—a condition greatly different. We have absolutely no true standard of the normal size or shape with which to compare the pathological deviation. It is not, I believe, known that, as regards its rectal surface, the gland is frequently undergoing change of shape. This change may be dependent on a variety of causes, namely, sleep, wakefulness, position of body, and even upon coition. Again, if we consider its pathological state—that is, those conditions which induce us to examine it *per rectum*—we are forced to confess that our diagnosis of its disease frequently requires propping up by other considerations than the mere feel of its surface and surroundings.

Doubtless the cause for this discrepancy is the fact that examination of the prostate is irksome to the practitioner and generally painful to the patient; and when necessity demands its performance, it is only too often perfunctorily or cursorily carried out. Another reason for this deficiency of knowledge is that tactile sensibility and appreciation of size and shape differ greatly in different observers. A tubercular deposit which one surgeon will pronounce to be bean-sized, will be described by another as being equal to a walnut.

The lack of a standard of comparison led me to investigate the prostates of many men in full health, and I was struck with the varieties I encountered. The knowledge I have derived I hope shortly to publish, under the title of *The Normal Prostate, and how its Shape is affected by Sleep, Posture, and Coition.* The object, however, of this paper is to lay before the profession a method which I adopted to record the varieties I have met with in health and disease.

At first I was in the habit of using diagrams to record the various prostates, and this, indeed, is the quickest and the most practical method; but it is inaccurate, for shading does not sufficiently express the elevations and depressions.

I then conceived an instrument for gauging the breadth of the gland. It consisted of a strip of metal, which rotated round a pivot situated on the ball of the right thumb. One end of the strip passed over a dial, and the other end was affixed to and moved with the right index finger. The index being inserted into the rectum, its lateral movements, and therefore the breadth of the prostate, could be marked on the dial. This proved ineffectual to record the antero-posterior diameter, or the varieties of surface-inequalities; so that I finally began to make clay models, and it is this method which is here described.

Figs. 1 and 2 are drawings of models of cases of carcinoma of the prostate, which I have selected out of nine cases of that disease, which came under my immediate notice during last year (1886).

Fig. 1 is from a man, aged 53, who came under my care in private



Fig. 1. Fig. 2.

practice with symptoms of obstruction due to enlarged prostate. I performed colotomy with relief; the entire right lobe is converted into a fungating encephaloid mass; the left lobe is free from disease.

Fig. 2 is from a man, aged 63, who also came under my care with similar symptoms, and on whom I also performed colotomy with relief. The entire left lobe is involved; the right is free. After a few months' time, if the patient lives, another model will be taken to show the growth of the tumour.

The *modus operandi* is as follows: I usually have the bowels well cleared out, and if the patient is very sensitive I inject a couple of drachms of a 20 per cent. solution of cucaine into the rectum. A lump of sculptor's clay roughly fashioned into the shape of a prostate and the back of the bladder, lies under the left hand while the right index finger explores the prostate and a general idea is obtained of its form. The right index is now withdrawn, and both hands roughly model the clay to correspond a little with what has just been felt. The right index is again introduced, and the right lobe is first taken, and little by little its form is thoroughly investigated; the same is done with the left, and the model is now correspondingly altered with both hands. Once again the right index finger is introduced, and is passed over the prostate piece by piece, and the left index is correspondingly passed over the rough model. The "living and the dead clay" are thus compared, and it is curious how well and how accurately the two forefingers work together if the movements be simultaneous. Any mistake, either of elevation or depression, is immediately recognised and altered with ease, a little oil on the surface of the clay model being of great use in making the moulding easier. The model is now put away to dry, after being marked with the name and number of the case in a note-book. If the case is a progressive one, another model can be taken in a month or two. For museum purposes it may be faced with plaster-of-Paris.

I submit this method for criticism, for I believe it to be a very simple and reliable means of estimating the due shape and proportions of the prostate in health and disease, as well as to allow of a permanent record being kept of the macroscopical changes which may ensue in the course of a prostatic complaint.

A CASE OF ŒSOPHAGOTOMY FOR THE REMOVAL FROM THE THORACIC CAVITY OF A HALF-PENNY, WHICH HAD BEEN SWALLOWED THREE YEARS AND A QUARTER PREVIOUSLY: COMPLETE RECOVERY.

By BENNETT MAY, F.R.C.S.,
Surgeon to Queen's Hospital, Birmingham.

EARLY in March, 1885, I was requested by my colleague, Dr. Suckling, to see a child in one of his wards at the Queen's Hospital. The consultation was with the view to an operation for the extraction of a halfpenny which the child was reported to have swallowed some years previously. Dr. Suckling believed that this had never entered the stomach, but that it had become impacted somewhere below the top of the sternum, and had thus been the cause of the very grave symptoms from which the child had ever since suffered. The patient, a boy 7 years of age, had been taken to the out-patient department at the Children's Hospital, to be treated for "asthma" or "consumption," and the following history was given.

At Christmas, 1881, that is, three years and a quarter before, when less than 4 years of age, his mother saw him swallow a half-penny he was playing with, and in his efforts to get it down she noticed that he struggled a great deal. After a short fit of choking he was violently sick, and for a week or more he could not swallow anything, owing to the cough and sickness which all attempts produced. After this period he seems to have so far improved as to be able to swallow a little, but regurgitation of a portion was even then perceptible. No attempt at exploration or extraction was made at this or any other period. Subsequently, when he got very ill, she consulted several medical men, but as she did not always inform them of this incident, treatment was generally directed to the progressive emaciation and chest-symptoms which the child exhibited.

March 20th. At the consultation to-day he looked like a little skeleton, and weighed only 25½ lbs. His manner of swallowing was typical of œsophageal obstruction. By long experience he had become very adroit in his efforts, proceeding in the most cautious manner to gulp down liquids in single mouthfuls, but with terrible avidity. With all his care, however, the larger portion regurgitated after an interval of from one to three or four minutes, and commonly mixed with much frothy and purulent mucus. His voice was hoarse and breathing stridulous. Dr. Suckling found impaired resonance and deficient respiratory sounds all over the right lung, and inferred that the right bronchus was obstructed, but he was not able to establish the existence of any fistulous communication between the two tubes.

On using the œsophageal sound I at once detected an obstruction behind the manubrium sterni. There was no feeling of metallic contact, and nothing to indicate the nature, whether stricture or foreign

body, but we could entertain no doubt it was caused by the halfpenny, and from the large amount of fluid which he regurgitated it appeared that the œsophagus was greatly dilated above it. My first attempts to pass it were fruitless, but at last I managed to slip a No. 3 gum catheter beyond and into the stomach. A large amount of liquid food was poured in through this, and I was very glad to leave it there for a time as a means of feeding the child, and thereby recuperating the vital powers, which had sunk to the lowest ebb—too low, as it appeared, to permit of a severe operation being undertaken. On the following day he pulled the tube out, but his powers of deglutition were then so much improved that for some days afterwards he could swallow liquids quite easily. This preliminary treatment was repeated on two occasions within the next fortnight, when it became impossible to pass the tube any longer.

Operation.—The first stage included the performance of œsophagotomy in the usual way on the left side of the neck. The incision in the œsophagus, which was about an inch and a half in length, was kept as low in the neck as possible, and the subsequent proceedings were facilitated by passing a wire through either edge to serve as a retractor. I then passed my finger down the œsophagus for exploration, and at a spot about an inch below the top of the sternum readily detected an obstruction. This quite corresponded with the edge of a coin as such would be felt obscurely through the œsophageal wall. It seemed to be obliquely in the mediastinum, in front of and to the right of the œsophagus, with the lower edge inclining away from that tube. No metallic contact could be made at any point, so that I presume it was outside the œsophagus, and not simply covered over with a swollen rim of mucous membrane at its upper part. I next very guardedly cut through the covering with a tenotome on to the metal, till this was sufficiently bared to afford a good hold to a strong pair of forceps. The coin was firmly fixed and required a good deal of force for dislodgment. When disturbed a rush of air into the œsophagus occurred, showing that a communication existed between this tube and the trachea or a bronchus, though it appeared as if the coin when *in situ* served to close the opening. The coin was withdrawn first into the œsophagus, and then out through the wound in the neck. It was black and tarnished, but not otherwise altered.

As it appeared imperative to permit no attempt at swallowing for several days, on account of the fistulous communication, I tried to pass a tube from the mouth into the stomach for feeding purposes, but found it impracticable. No sutures were employed either in the œsophagus or outer wound. Alimentation was effected solely by the rectum at the outset; but on the fourth day the temperature had fallen to 96° F., and as he was obviously on the verge of dying from starvation, I let him try to swallow a little milk by the mouth. He managed to suck down 3 or 4 ounces during the day, but of this half regurgitated through the wound in the neck, and, in spite of his care, some got into the air-passage, producing a perilous attack of dyspnœa. After this, he steadily swallowed more and more each day; but the amount regurgitating through the wound seemed to increase rather than lessen, and it consequently made but little progress in healing. On the fourteenth day he managed to swallow a soft rubber catheter, which served as a feeding-tube; this he continued to do twice a day, taking a good meal through it each time. The wound now rapidly began to heal, and was quite sound at the end of six weeks. With the healing of the wound all the chest symptoms gradually disappeared. Up to this time he had only gained one pound in weight.

During the seventh week, he had an alarming attack of obstruction of the bowels, attended with great abdominal distension, tympany, and fulness in the right iliac fossa. I suspected intussusception at first; but soon came to the conclusion that it was due to large accumulation in the intestines. This proved to be the case, for under strict abstinence and the use of enemata it speedily disappeared with copious evacuations. There had been no obvious neglect of the bowels, though they had been persistently torpid; but there is no doubt that his powers of assimilation were greatly reduced, and that he was unable to cope with the large amount of nutriment suddenly thrown into him. After this attack he rapidly gained flesh, and in the next six weeks had made an advance in weight of 11½ lbs.—from 25½ to 37 lbs.

For a long time I was anxious about possible contraction of the œsophagus, and carefully watched him for evidences of its appearance. While in hospital he had two or three attacks of choking, with inability to swallow, each of which I was able to refer to attempts to bolt pieces of bread-crust or other solid food which he had stolen from the other patients' supplies. This induced me to keep him restricted in his diet as long as possible, he being so greedy in his eating. I was never able to pass a bougie with facility; but this seemed more owing to angular bend than contraction, as he could always himself swallow with perfect ease a flexible rubber tube equal to a No. 12 or 13 catheter. He has since remained perfectly well, and has experienced no difficulty in swallowing, with one exception only; on this occasion he had vainly attempted to swallow an entire quarter of an orange, which I fished up from the œsophagus two days afterwards.

Remarks.—I believe this case is quite unique in the length of time intervening between the impaction of the foreign body and its successful extraction, and also in the situation from which it was removed. Monro records a case of impaction of a halfpenny in the œsophagus for three years, fatal by consumption without operation; and numerous cases are recorded of retention of foreign bodies of various kinds in the œsophagus for long periods, which terminated fatally by various accidents; but, as these are detailed in most textbooks of surgery, I need not particularise them. Mr. Durham's table of cases of œsophagotomy for foreign body is probably the most complete list of operations up to the date of its publication (Holmes's *System*, 1870). This list gives a total of twenty-one, four only of which were fatal, and mostly from causes existing before the operation. In most of them the foreign body was cut directly down upon, but in one (Syme's case) a coin had passed below the top of the sternum. This case, too, had the longest interval (two months) intervening between the accident and the successful operation of any in the list.

SUCCESSFUL OPERATION IN A CASE OF ACUTE INTESTINAL OBSTRUCTION.

By G. E. WILLIAMSON, F.R.C.S.,
Assistant-Surgeon to the Newcastle-on-Tyne Infirmary.

On Friday, August 27th, 1886, my friend, Dr. Drummond, asked me to see with him and Dr. Walker a patient suffering from intestinal obstruction, as he thought it was a case for abdominal section. The patient was a groom, about 22 years of age. He did not look so anxious or distressed as I had expected, but this was probably due to the effect of the morphine and belladonna he had been taking. His tongue was very foul, and there was an evil fæcal odour about his breath. The abdomen was tense, somewhat tender, and coils of distended intestine were distinguishable through the abdominal wall. Except for a little dulness in the right iliac region, the abdomen was resonant to percussion. There was no sign nor history of any hernia. It appeared that he had had two attacks of severe pain in the abdomen two or three years previously, but the accounts of these were somewhat vague. His present attack dated from Friday, August 13th. On that day he ate a large dinner of pork in great haste, and then rushed off home. He was suddenly seized with severe pain in the belly and with vomiting. Dr. Walker saw him on the following day, and gave him a dose of castor-oil. The vomiting ceased, but it began again after two days, and on Thursday, August 19th, it was fæcal. Dr. Drummond saw him on Saturday, August 21st. The pulse was small and quick, and the man was almost in a state of collapse. The temperature was not raised, the tongue was dry. A large quantity of fæcal matter was produced, which he had vomited. The abdomen was distended, and tender about the umbilicus and cæcum; no tumour could be found. The rectum was examined, but without result. On Sunday, August 22nd, a large enema of fat mutton broth was given, which passed distinctly into the cæcum. It was retained for two to three hours, and then returned void of fæcal matter. After this the vomiting ceased, the pulse slowed, and the temperature was normal. One-sixth of a grain of morphine was given by the mouth. The vomiting began again, and on the 25th he was put under chloroform, and the abdomen thoroughly examined, but without throwing any further light on the case. The vomiting continued fæcal, and on Friday, the 27th, a fortnight after the onset, we met in consultation, and after again carefully examining the patient under chloroform, we decided upon abdominal section. The urine was drawn off with a catheter, but only a little flowed, although—as is common in these cases—he had complained of difficulty in passing urine for some days previously. An incision was made over the outer margin of the right rectus abdominis, and the edge of the muscle was exposed with very little bleeding. The remaining tissues were slit on a director, and when the slight hæmorrhage ceased the peritoneum was opened. My reason for making a lateral, and not a median, incision was that it seemed probable that the seat of obstruction was in the region of the cæcum. The bleeding could scarcely have been less had the incision been median, as there was not a vessel requiring ligature.

The fingers of the left hand were introduced into the abdomen as the peritoneum was cut, and the coils of distended intestine came under them. It was necessary now to introduce the whole hand, and the wound was enlarged downwards between the slightly separated fingers. The whole hand was then introduced, fitting somewhat tightly into the wound, so plugging it and preventing the escape of gut. The cæcum was first carefully explored, but without result. Next the umbilical region was examined, and here a cord about as thick as an ordinary lead pencil was found, attached at one end to the back of the umbilicus, and at the other running down into the pelvis. My first impression was that there was a band running from the umbilicus into the pelvis, round which the gut had become twisted. I brought it out at the wound, however, before doing anything further, and it was at once seen to be a piece of collapsed intestine. It was replaced and followed up, or rather down, as it turned out afterwards, by drawing the gut between the finger and thumb, a tedious and difficult matter with only one hand; it was followed up to its continuation into ordinary gut, containing gas. I now thought that the obstruction was due to a loop of intestine adhering to the back of the umbilicus, and probably twisted there. I tried to find the upward continuation of the part collapsed, but I was unable to do so. The difficulty in handling the intestine increased considerably. The coils were at first slippery, and slid almost too readily between the fingers, but now the peritoneum was curiously sticky, and it was very difficult to pass the finger and thumb along the gut.

It was, however, clear that the seat of obstruction was found, and it was suggested that a second incision should be made in the linea alba, so as to come more directly upon it. I was loth to make another opening, as I thought I should succeed in carefully detaching the adhesions from the interior. First, a cord about as thick as a crow-quill was felt, brought out at the wound, and cut between two catgut ligatures. The remaining adhesions were carefully separated until the surface seemed to be free. I asked Dr. Drummond to introduce his hand; and it was fortunate he did so, as he discovered another band lower down. It was brought out and cut between ligatures, like the other. The finger could now be swept freely along the back of the abdominal wall without meeting any obstruction. The wound was closed with sutures of silkworm-gut, passing through the whole thickness of the abdominal wall, including the peritoneum. A piece of dry Gamgee tissue was laid on the wound, with a large pad of the same material over it. The abdomen was firmly bandaged, and in addition a broad binder was pinned round. The patient was in good condition at the end of the operation, though he vomited a little fluid fæcal matter just when we were leaving. This was rather discouraging, but we comforted ourselves that it might be only chloroform-vomiting, and it turned out subsequently to be so. During the operation the intestines were freely handled, and everything about which there was a doubt was brought out into daylight and examined. Portions of intestine escaped now and then, but they were easily reduced.

The question of antiseptics in these cases is a difficult one to decide. In this instance I rejected the spray and the carbolised dressings. The skin was sponged over with a very weak solution of perchloride of mercury, and the sponges were wrung through the same fluid. The greatest care was taken to prevent the escape of blood into the peritoneum.

The after-history of the case was short and simple. There was no further vomiting. A dark liquid motion was passed a few hours after the operation, and a second copious motion a few hours later. Twenty-four hours after the operation the temperature was 99°, the pulse 100, respiration 24. The patient was kept under the influence of morphine, and for a few days he was limited to taking a little ice. He then had a little weak beef-tea; and, as he took it well, his diet was gradually improved, until one day, about a week after the operation, he took the matter into his own hands, and ate very freely of chops, cranberry-tart, and cheese. Later on he followed this up with hot cakes and tea. No bad results followed, and afterwards he simply took his ordinary diet. It was six days before his bowels were again moved, when a smooth consistent motion was passed; it was in one piece, and about a foot and a half long. The wound was untouched for a week, when the pad was lifted, the stitches were removed a few at a time, and in a fortnight the wound was healed.

As to the nature of the case, it seems pretty clear that the small intestine had become adherent to the back of the umbilicus in some previous attack of inflammation, and then that the gut had either become twisted or that it had been constricted by a band, and so strangulated. It is now eight months since the operation, and there has been no bulging of the scar, and no intestinal disturbance. He wears a broad pad with a strong belt, and has taken up light work.

OBSCURE CASE OF INTESTINAL OBSTRUCTION (? VOLVULUS): LAPAROTOMY: RECOVERY.

By C. STONHAM, F.R.C.S.Eng.,
Senior Assistant-Surgeon and Pathologist to the Brompton Cancer Hospital.

Elizabeth H., aged 18, a laundress, came under my care on March 17th, 1884, with the following history:—

On the previous Friday morning, March 14th, she had gone to her work as usual, feeling quite well. Between 12 and 1 o'clock she felt slight pains in her abdomen, "like stomach-ache." The pain gradually increased in severity, and during the afternoon became suddenly so acute that she had to leave work and go home to bed. She says the pain was much worse just to the left of the umbilicus, was constant in character, and describes it as feeling as if the intestines were "all tied up in a knot behind the navel." The pain continued to increase in severity until I saw her. The bowels had acted well on the morning of the seizure, and had done so each day previously; there had been no action since, and no flatus had been passed since March 15th, the day following the first appearance of symptoms. At 7 P.M. on March 15th she vomited, and also again the following afternoon. Since the seizure she had not taken any food with the exception of an egg and some tea on March 15th.

State on Admission.—The patient was complaining of intense abdominal pain, more especially felt just above and to the left of the umbilicus; she was writhing in bed, and evidently suffering acutely, but got much relief from a hypodermic injection of morphine, one-third of a grain. There was no noticeable alteration in the shape or fulness of the abdomen. There was general tenderness on pressure, but this amounted to acute pain just above and to the left of the umbilicus. Both recti were tight and contracted, and this was especially noticed to be so with the upper half of the left one. No abdominal tumour could be made out, nor was there any evidence of an external hernia. Vaginal and rectal exploration and examination under chloroform revealed nothing further. The pulse was 110, small, and wiry; the temperature 99° F. Since admission she had been sick, and nothing had passed by the rectum. The tongue was rather over-clean and irritable, and there was a rim of frothy saliva on each side. The conjunctivæ were very slightly bile-stained. Hot fomentations were ordered to be applied to the abdomen, and a grain of opium to be given every four hours, and an enema of a pint of warm oil was administered.

March 18th. She had vomited five times since the previous day. The vomited matter was from the small gut, but was not stercoraceous; there was a constant feeling of nausea. The enema brought away one or two small hard scybalous masses. The abdomen was a good deal distended, more especially above and to the left of the umbilicus. She was under the influence of opium, and so the pain was less. The tongue was dry, brown, and cracked: the patient was nervous and anxious, the pulse was 120, and the temperature 100°.

As nothing further could be elicited by abdominal examination, after consulting with Dr. Sainsbury, it was decided to perform abdominal section.

Operation.—The patient being under the influence of chloroform, the abdomen was opened in the usual way, and the greatly distended transverse colon immediately protruded through the opening. The peritoneum was in a state of acute inflammation, and recent lymph coated the coils of gut, one or two of which were loosely united by it. On tracing up the gut from the rectum I found the sigmoid flexure and descending colon empty, but on arriving at the splenic flexure there was suddenly a large escape of flatus by the anus, and the distended transverse colon collapsed at once. I was not conscious of having undone any twist of the gut, but that was the only explanation I could offer to account for this occurrence. I passed all the intestines through my fingers, but found nothing except quite recent adhesions between one or two coils; these I separated. There was a little turbid fluid in the abdomen. The operation was done under the spray, and when the abdominal wound was closed it was noticed by all present that the abdomen was much smaller. Opium was ordered to be given in grain doses every hour.

March 19th. Since the operation flatus had passed freely, and the bowels acted twice this morning. Vomiting had occurred each time food had been given, but not at other times. The general condition had much improved, although she was still in a weak and prostrate state. The pulse was 120; the temperature 99°. Fairly firm pressure over the abdomen did not cause pain. In the evening the bowels were opened for the third time.

March 20. She had passed a very good night, and was very much improved. The bowels were opened once in the night, the stool was

copious and watery, and of a light-brown colour. There was no further sickness, and the abdominal pain had almost entirely gone. She took nourishment well. The pulse was 104; the temperature 99°.

March 21st. The bowels were well opened twice to-day; the stools were normal. She was very much better in all respects, but still complained of pain in the left hypochondriac region.

March 22nd. The wound was dressed for the first time; it was looking well; the bowels had been open seven times since the previous day. She slept and took food well.

March 24th. The sutures were all removed; the wound was quite healed, except superficially, where there was a shallow raw groove. The patient slept and ate well, and was taking solid food. There was still slight pain as before.

March 26th. The wound had quite healed, and the pain had left her. The bowels were rather freely open, and she had required a little astringent medicine, but is otherwise almost well. From this date she rapidly recovered, and left for the country in April, all abdominal symptoms having disappeared, and the bowels acting regularly.

Towards the end of 1885 I again heard of this patient at University College Hospital, where she had gone on account of constipation, but the usual treatment had soon removed all her symptoms.

REMARKS.—I have thought this case worthy of publication on account of the obscure nature of the cause of the obstruction. At the time of the operation those present, as well as myself, looked upon the case as being one of volvulus at the splenic flexure or thereabouts, and on further consideration of the case I think this offers the best explanation of the symptoms. In favour of this view, I would submit the following facts for consideration: first, the sudden onset of the attack and the early occurrence of severe pain, which gradually increased, so much so that morphine had to be given hypodermically. This pain was felt most at the navel and in the left hypochondriac region, and there was also general tenderness, due to the peritonitis, which I look upon as a secondary condition. Secondly, the vomiting was not at all a marked symptom, and although it consisted later on of the contents of the small gut, it never became stercoraceous. Again, the temperature remained normal throughout, but on the second or third day after the onset of the attack, it rose once to 100°, probably owing to the peritonitis; although I am aware that too much stress must not be laid on this point, since it is well known that acute peritonitis may run its course with a normal or even subnormal temperature. The condition of the gut below and above the splenic flexure, and the result of the operation, seem to me to point very strongly to the fact that there must have been a slight twist at this point.

Mr. Treves, in his excellent work on *Intestinal Obstruction*, points out that in cases of volvulus the distension of the abdomen is a marked symptom; but in this case it did not come on until the third day, and then was not very marked, and was most perceptible at the upper part of the abdomen. At the operation I did not detect any elongation of the meso-colon, as is usually the case in volvulus; nor, according to the patient's account, had there been any previous constipation. In conclusion, it seems to me that a point of great interest in this case is the fact that the twist (as I suppose it to have been) was reduced without any trouble; indeed, one could only judge of its presence by the beneficial effects that were at once produced as the hand passed along the descending and transverse colon. I do not think that the curious assemblage of symptoms and the effects of the treatment in this case bear any other interpretation than the one I here submit.

ADENO-ENCEPHALOID CANCER OF THE BLADDER.

BY J. HEADLEY NEALE, M.B., M.R.C.P.LOND.,
Assistant Physician to the Leicester Infirmary.
(With notes of operation by Mr. C. H. MARRIOTT, F.R.C.S.Eng.)

ON April 1st, 1886, Mr. T., a retired tradesman, consulted me, giving the following history:—He was 63 years of age, married, with one son; had never suffered from gonorrhœa nor syphilis. More than two years ago he noticed that he occasionally passed a drop or two of blood on completing the act of micturition, but for the last eight months he had been a martyr to precipitate urination. Every ten minutes or so he was compelled to micturate, "passing almost pure blood," the act being accompanied by the most intense suffering. The patient had a worn, haggard, and decidedly cachectic look, over and above the pallor of simple mechanical anæmia. I requested him to make water into a glass in my presence. He passed about an ounce of apparently pure blood, the whole act of micturition amounting to the most intense strangury, which nearly bent the patient double. As the fluid was passed, a pale fibrinous clot immediately separated out as a solid mass and settled at the bottom of the glass. The blood was recent, and I suspected (*a*) an encysted calculus, (*b*) a tumour, malignant or non-malignant. A pill containing 3 grains of ergotin had a decided effect in lessening the hæmorrhage.

On April 8th, in company with my colleague, Mr. C. J. Bond, I sounded the patient's bladder, with a negative result so far as stone was concerned, but the following condition was easily made out: occupying the whole of the left side, and encroaching somewhat over the middle line to the right side of the trigone of the bladder, was to be felt a rugged indurated mass, evidently a sessile tumour, springing from the base of the bladder. A fragment that came away in the "eye" of the sound was examined microscopically, and the diagnosis of malignant disease arrived at. Our joint advice to the patient subsequently was that he should submit to an operation that would allow of free drainage of the bladder, and relieve him of the distressing spasm that accompanied each act of micturition.

Accordingly, having first sounded the patient's bladder and confirmed the diagnosis, Mr. Marriott, on May 3rd, performed median perineal section. Digital exploration of the bladder fully bore out the diagnosis, the tumour not only occupying the position indicated, but extending upwards on to the anterior wall, behind the pubes. Mr. Marriott then decided to remove what he could of the growth, using Sir Henry Thompson's recently devised instruments. In all, the masses removed weighed two ounces and a quarter; probably another quarter of an ounce was lost in the *débris* and blood-clots that came away. A rubber drainage-tube (quarter-inch) was passed into the bladder through the perineal opening, and kept in position by tapes. Through this, frequent irrigation with a solution of carbolic acid was ordered.

In a few days the patient became intolerant of the presence of the tube; it was constantly getting blocked with *débris*, and required frequent removal and re-insertion. A glass tube was then substituted, but with no better results.

The urine became alkaline; the tube, as well as the margins of the wound being coated with phosphates. A solution of benzoic acid was then ordered. The perineal wound closed up with remarkable rapidity, and on one occasion, the patient having removed the tube, and twenty-four hours having elapsed before I saw him again, it was with the greatest difficulty that I introduced a No. 10 soft elastic catheter into the bladder. However, he was not to be denied, and in a few days the wound had completely closed. There was a temporary lull, and then the old symptoms gradually returned, in addition to which a somewhat elongated prepuce commenced to slough in a line corresponding to the "corona penis."

[Microscopic section of a portion of the growth (hardened in Müller's fluid), stained with picro-carmine, had the characters of encephaloid cancer. This enabled me at once to give an unfavourable prognosis of the case; but being puzzled by the distinctly adenomatous type of certain portions of the sections examined, I sent a slide to Professor Greenfield, at Edinburgh, giving no particulars of the case, but asking for his independent opinion. He promptly and courteously replied as follows:

"The tumour is usually classed as encephaloid, but is of a form intermediate between malignant adenoma and encephaloid, and is not uncommon both as a primary and secondary growth in various parts."]

The patient next complained of a "hard lump" at the site of the wound; this gradually increased until the whole of the perineal region was occupied by a large conical tumour, the apex of which had a gaping aspect. There was no breach of continuity, simply a stretching of the cicatricial tissue. To the outer side could be clearly seen the pale skin cicatrix; internal to this and pinker in colour, the cicatrised mucous membrane of the floor of the urethra, while beneath the latter a reddish-blue fungating mass protruded. The patient rapidly went from bad to worse, the stench of the fluid passed from the bladder was insufferable; he gradually sank, and died on August 5th.

REMARKS.—This case alone appears to me to put a limit to the range of surgical treatment of vesical tumours. Where a polypoid or pedunculated growth is diagnosed, by all means remove it; but in the case of a sessile tumour closely incorporated with the muscular walls of the bladder, the treatment best suited to the requirements of the case seems to me to be to establish and maintain free drainage and so relieve the strangury, leaving the tumour to take its own course. The instantaneous coagulation of the blood passed by the patient by the urethra may have an important significance when viewed in connection with the subject of metastasis and secondary deposits.

OBSTETRIC MEMORANDA.

MENINGOCELE OBSTRUCTING LABOUR: SPINA BIFIDA.

On April 23rd I was called into the country to attend a woman, aged 31, in her first confinement. On examination I found the diameters of the pelvis to be normal, and the soft parts, for a primipara of her age, remarkably pliant. I diagnosed a vertex presentation, but there was something about the head very puzzling to the touch. Labour progressed rapidly until the occiput was under the pubes, when, although the pains continued strong and frequent, the head refused to alter its position, and the perineum remained quite undistended. There was plenty of room laterally, but it was evident that the antero-posterior diameter of the head was too long to allow extension to take place, and the forehead consequently stayed in the hollow of the sacrum. After waiting until I was quite certain the child could not be born without assistance, I applied the forceps, and delivered by drawing down the occiput, and then making traction directly forwards. On inspection the head had the appearance of being enormously developed posteriorly; the scalp was normal, and the proportions seemed correct, except for the great length between the neck and the occiput. As the child lay on the bed, the under part of the head gave one the idea of the counter of a yacht. On palpation I could distinguish the posterior margins of the parietal bones, the occipital protuberance, and on either side a small, thin, cardboard-like substance, which I suppose were the ununited plates of the occipital bone. Occupying this position was a sessile fluid tumour, as large as a small orange, entirely obliterating the lambdoid suture, and apparently covered by the normal textures of the scalp. It was only on causing the child to cry that any undue lividity was noticed, and then the tumour became very tense. Pulsation was not well marked. I took the following measurements: Circumference of head, 16 inches; from root of nose to summit of tumour, 9 inches; from external auditory meatus to summit of tumour, 6 inches. I could not measure the circumference of the tumour, as the base was too difficult to define. On turning my attention to the spine, I found a cleft in the position of the two lower dorsal and three upper lumbar vertebræ. There was no marked swelling here, except when the child cried or pressure was made on the head. The true skin terminated abruptly at the margin of the cleft by an elevated ridge, in which could be felt the laminæ of the ill-developed bones. The cleft was covered by a thin, red, angry-looking structure which soon began to secrete pus. That a communication existed between the two abnormalities was proved, after death, by pressing on the meningocele and spina bifida, when fluctuation could be detected, and the swellings could be seen alternately enlarging and diminishing. In all other respects the child, a girl, was well-developed. She was very apathetic, did not cry, did not take the breast, was not observed to move her legs, though once I saw her move her arms. She died thirty-six hours after birth. *Post-mortem* examination was refused.

Leicester. ARTHUR LOXTON, L.R.C.P., M.R.C.S.

CLINICAL MEMORANDA.

NOTE ON TEMPORARY ALBUMINURIA IN ENTERIC FEVER.

In this brief note no allusion is intended to the influence of chronic or acute kidney disease upon enteric fever. The albuminuria to which attention is drawn is temporary only, and is unattended by interference with the renal function. It is, nevertheless, a symptom of serious import, and probably indicates a pathological condition of the blood other than uræmia, superadded to the typhoid state.

But little weight is generally attached by authors to the albuminuria of enteric fever. Murchison, however, alludes to the complication, and quotes statistics from German authorities, showing a high mortality in this type of the disease. It is associated with irregularities of temperature; with protraction of the term of fever; and with special nervous symptoms. The irregularity of temperature is often seen, and a reversed chart is sometimes met with, the exacerbation occurring in the morning and the remission in the evening. Protraction of the illness is also common, and the prognosis is unfavourably affected thereby. The nervous phenomena, much rarer, have records of singular uniformity. They are not seen until the apparent termination of the fever, and are ushered in by a condition of threatened collapse—the surface being cold and dusky, the pulse thready and running, and the skin beaded with sweat. After reaction has been established, aphasia is found to exist, without paralysis, and speech is not restored for some days. Trousseau mentions three such cases, and the late Dr. Murchison told me of a similar one. I have seen one myself.

Practically considered, enteric fever, accompanied by albuminuria, demands unusual care. A lengthened illness must be prepared for. Towards the termination of the fever, stimulation should be maintained or increased, to guard against the occurrence of nervous collapse. A point worth noting is that, although albuminuria is present, yet opium is well tolerated in such cases.

Broadstairs. THOMAS F. RAVEN, L.R.C.P., etc.

PHYSIOLOGICAL MEMORANDA.

THE INVERSION OF THE OBJECT ON THE RETINA.

In all scientific investigations, and especially in all physical science, the ultimate appeal is necessarily to experience, that is, to experiment. In regard to the phenomena of vision, it was always taught in my day, and I understand it is maintained in the classes of the present day, that the science of optics demonstrates that the image of all external objects is reflected on the retina in an inverted manner, just as we see them in a camera. Very early in my studies this struck me as incongruous; for it seemed to be a failure in the adaptation of mechanism to requirements. This led me to inquire if direct observation proved that inversion on the retina was truly what occurred.

The usual mode of proving this was, and perhaps is, by taking a fresh bullock's eye, when on removing a circular portion of the sclerotic around the optic nerve, there is seen an inverted picture of all objects within its range. On this the conclusion is drawn that the same objects are impicted on our own eye in the same way. But to examine this experiment more closely: Let B be a bullock's eye so prepared, and at the back of which is seen the inverted representation of various objects, it follows that if we prepare another eye in the same way (C) and place it in front of B, then objects seen through both eyes, the image at the back of B, will be upright, that is, C will invert objects which B will again reverse and show upright. If we continue the series, and place another at D, the image at B will be again reversed, and so on, as shown in the following diagram:

B$_i$, C!, D$_i$, E!, and so on,

in which the image at B is inverted, at C non-inverted, and so on alternately.

By direct experiment it is thus proved and must be admitted that the image at B is inverted, and that it is so is the basis of all argument, but our own eye is at A, and thus corresponds with the whole non-inverted series, as C E, etc.; therefore I argue that the image on our retina is upright. If there is any fallacy in this argument, where is it? Optics, like other physical sciences, is wholly objective, but vision must be studied subjectively.

W. H. O. SANKEY, M.D.Lond.

THERAPEUTIC MEMORANDA.

COFFEE TO DISGUISE THE ODOUR OF IODOFORM.

Valuable as coffee, when freshly ground, has proved in disguising the odour of iodoform, it has the following disadvantages. 1. It is only for a limited period that its effects last; and, 2, it is very difficult to grind the coffee so fine as to prevent the grains irritating a sore part; and especially is this felt if the iodoform be used in the form of an ointment. I have found that by macerating the coffee in hot lard or vaseline, all the deodorising powers are absorbed by and retained in the vehicle employed, and a perfectly smooth, inodorous, and unirritating ointment can be prepared.

RICHARD NEALE, M.D.Lond.

DR. BERGEON'S TREATMENT IN PULMONARY AFFECTIONS.

My experience, so far, of Dr. Bergeon's treatment of consumption and other lung affections, both in private and hospital practice, has been altogether most encouraging—indeed, in some instances, surprising. I believe it is the greatest advance by far that has ever been made in the therapeutics of pulmonary diseases. The great, if not the only, drawbacks to its general adoption and extension are the expense of the materials employed and the time expended in their production. The Eaux Bonnes, or other foreign sulphuretted water, cannot be had under some 15s. per dozen, and Harrogate water at 10s. This, to a great extent, renders the employment of the Bergeon treatment in hospitals prohibitory, and limits it only to the wealthier classes of private patients. To obviate these difficulties, I have been using in

the Royal National Hospital here, instead of natural mineral water, a saturated aqueous solution of washed sulphuretted hydrogen. One and a half to two ounces of this in twelve ounces of ordinary water is much stronger than any of the natural waters, and is perfectly well borne by every patient in whom it has been tried.

I am also making arrangements to have bags similar to those employed for the purpose of storing illuminating gas for railway carriages filled with carbonic acid gas at an aerated water manufactory, which will afford a supply at a fraction of the cost and time employed in its generation from the action of sulphuric acid on bicarbonate of soda, which, under present circumstances, has to be done before each injection. The saturated solution of sulphuretted hydrogen can be obtained from any manufacturing chemist at a few pence a gallon.

Ventnor, I.W. J. G. SINCLAIR COGHILL, M.D., F.R.C.P.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

ADELAIDE HOSPITAL, SOUTH AUSTRALIA.

TOTAL EXTIRPATION OF THE UTERUS BY THE VAGINA FOR CARCINOMA: RECOVERY.[1]

(Under the care of Dr. E. C. STIRLING, Surgeon to the Hospital.)

M. S., aged 37, a healthy-looking woman, was admitted under the care of Dr. Verco, on July 16th, 1886. Her last confinement (the ninth) had occurred seven months earlier, and there had since been a continuous, watery, and sanguineous discharge from the vagina. The cervix uteri was low down, fairly movable; the os admitted the finger-point; the anterior lip was short, both anterior and posterior lips were covered with lobular masses, which broke down easily, and bled considerably; the vaginal walls were smooth and free from any outgrowth or irregularity. The sound passed for four inches and a half; microscopic examination of fragments removed with a sharp spoon confirmed the obvious diagnosis of epithelioma.

As the disease was apparently confined to the cervix and internal surface of the uterus, as the organ was not unduly enlarged, and was fairly movable, Dr. Stirling decided, after consultation, to remove the uterus by the vagina. Accordingly, on September 11th, the vagina and vulva having been cleansed by repeated douching with carbolised lotion, and the pubes shaved, ether was administered, and the patient having been secured in the lithotomy position, the vagina was once more washed out and held widely open by broad, flat spatulæ; a male sound was held in the bladder; the uterus was well drawn down with a vulsellum forceps, and the cervix transfixed with a thick, double, silk ligature well behind the limits of the growth. Anterior and posterior incisions were made, well clear of the disease, through the tissues covering the cervix, and through these incisions the tissues were separated before and behind from the substance of the uterus by means of a scalpel-handle and blunt-pointed scissors curved on the flat, as well as by the fingers. This was done easily on the posterior surface, but in front there was a difficulty, owing to the extreme adherence of the uterus to the bladder. The peritoneum in front and behind was then opened by transverse incisions, and, with a little more separation of the parts by the fingers, the uterus was apparently freed from its attachment, save to the broad ligaments on each side.

Some difficulty was experienced in bringing the uterus down, but, thanks to the long and dexterous fingers of Dr. Gardner, inserted behind the organ so as to tilt it forwards, combined with the assistance of a Barnes's sheathed polypus-hook inserted into the front of the fundus, the body of the uterus was forcibly anteverted and dragged forwards and outwards through the vagina; a second stout, double ligature was passed through the fundus, which gave a sure and excellent control over the organ for the remainder of the operation.

It was then found that in the first incisions encircling the cervix the anterior and posterior incisions on the right had not joined, and that the band of mucous membrane left prevented the uterus being sufficiently drawn down; when this had been divided, the uterus was drawn down far enough to allow the left broad ligament to be transfixed and tied with strong carbolized Chinese silk (which material was used throughout the operation), first in two halves, and then again as a whole, leaving the ends of the ligatures long; the ligaments were then cut through between the ligature and the uterus. In drawing down the right side the uterus broke away under the tension, and left a portion of the diseased structure attached to the broad ligament. Applying a ligature temporarily, Dr. Stirling freed and removed the whole of the uterus, except that fragment of diseased tissue which, as before said, remained attached to the broad ligament. This fragment was then drawn down and the broad ligament transfixed and ligatured as on the left side, well above the diseased part, which was then removed. In this case, however, the ovary was included in the parts removed.

On completion of the section, one of the ligatures placed on the stump slipped, allowing a large vessel—probably the right uterine artery—to bleed profusely. This was speedily secured and tied, but there was still considerable hæmorrhage, which came apparently from a number of small vessels, so far up in the remotest recesses of the large cavity now left that there was the greatest difficulty in arresting it. Forceps after forceps were applied, and at last, after the application of eight, the bleeding seemed to be checked. Much of this difficulty would have been removed if artery-forceps much larger and stronger than those in ordinary use had been available. To lessen further the risks of hæmorrhage, several well carbolized sponges with strings attached were jammed up against the surface whence the bleeding proceeded. The vagina was then washed out with the douche; a T-shaped rubber drainage-tube of large calibre inserted as far up as possible, with the cross-piece lying transversely across the upper part of the cavity, between the tied ends of the broad ligaments; some plugs of carbolized gauze, well powdered with iodoform, and attached by strings, inserted into the vagina, and a large pad of a similar character, supported by a T-bandage, placed over the outside of the vulva, through the orifice of which the handles of the artery-forceps, as well as the drainage-tube and various ligatures, just protruded. No attempt was made to suture the cut edges of the peritoneum. The whole operation lasted a little over two hours, and on its completion the patient was much blanched, with a pulse scarcely perceptible; but on the subcutaneous injection of ether the circulation improved, and she was removed to bed.

The subsequent course of the case was fully recorded in the notes of Dr. Aitken, house-surgeon. Vomiting was at first troublesome, and during the afternoon a hypodermic injection of morphine was given to relieve severe pain in the back. On the following morning, two of the sponges and all the eight artery-clips were removed; the vagina was irrigated with warm solution of thymol, and plugged as before. The temperature was 99.6° F., the pulse 120. In the afternoon the remaining sponges were removed, and the vagina was again irrigated and plugged. On September 13th, the morphine injections were continued at intervals for the relief of pain and sickness. The T-shaped drainage-tube was replaced by a straight drainage-tube on September 17th; the subsequent progress towards recovery was uninterrupted, save by some slight digestive disturbances. The bowels were opened naturally on the seventh day. The highest temperature recorded was at 3 P.M. on September 16th, when it reached 102 6°. On October 9th she returned to the general ward, the discharge having almost ceased, and the vagina being washed out once a day only, and on October 13th she was sent to the Convalescent Hospital at the seaside.

The following is a brief account of the condition of the parts removed: Greatest length of uterus, four inches; breadth at fundus, three inches; thickness of walls, about three-quarters of an inch. Os tumid, ragged, eroded and friable; canal of cervix obliterated. The disease had encroached on the anterior wall for only an inch from the os. There was no evidence externally of the extension of the disease towards the posterior surface, but a section through the organ showed that there was some infiltration of the tissues in that direction also. Internally, the mucous membrane was blood-stained, and apparently affected by the disease throughout the lower two-thirds. Microscopical examination of a section through a piece of the eroded border, showed the structure of epithelioma.

On her return from the Convalescent Home, on November 14th, she had improved very considerably as regards her strength and general health, being, as she said, better than she had been for many months. There was scarcely any discharge. On vaginal examination the central parts of the divided peritoneum were well and firmly healed, but on each side, at points corresponding to the position of the stumps of the broad ligaments, there was a patch of rather dark, exuberant, and not very healthy-looking granulations. To that on the right side was attached a linear brownish-looking mass of what appeared exactly like fæces, but on seizing it with forceps it came away completely and easily, and proved to be a ligature enveloped in

[1] Condensed from a Report read to the South Australian (Adelaide) Branch of the British Medical Association, October 26th, 1886, with a later note.

old blood clot. The patient was sent home, with instructions to return for inspection in a month.

Remarks by Dr. Stirling.—With a very limited experience of this operation, I am doubtful of the value of any observations I may make, and if I venture to offer them it is only to those who, like myself, are seeking information and experience.

In the first place, the operation is one of great difficulty, and should never be undertaken for the first time without repeated practice on the dead body, and careful study of a dissection of the region involved.

The chief dangers, of course, arise from the risk of wounding either the bladder in separating the anterior surface of the uterus from this organ; the ureters, to which one comes perilously near in tying or dividing the broad ligaments; or the rectum and intestines, one or both of which may come awkwardly in the way. The difficulties arise primarily from the fact that one has to steer clear of all these risks whilst working at the bottom of a deep and narrow cavity with the view often obscured by blood. In my case the separation of the uterus from the bladder required especial care, as these organs were more than usually adherent, and I consider myself fortunate in having avoided this material complication. The rectum came well into view, and bulged forwards somewhat, but it never became a source of trouble, being very easily pressed back out of the way. I had no trouble from prolapsing of the intestines, but I notice that this occurrence caused much inconvenience in some of the reported cases.

As to the relative advantages of the two methods of securing the broad ligaments, namely, that of carrying a ligature round them *in situ*, or that which I adopted of anteverting the uterus, and bringing its fundus out by the vagina, I hesitate to speak, but I incline to the latter as giving the best facility for applying the ligature. If, however, the uterus is long and the vagina narrow, it is not at all an easy manœuvre to perform, but the operation is materially facilitated by the use of Barnes's sheathed hook, as described above. So far as my experience on the cadaver goes, the upper edge of the broad ligaments lies at a very variable distance in different subjects. In cases in which this was not great, no considerable difficulty was experienced in hooking a ligature round them, and by this means in bringing them sufficiently within reach to transfix and tie with safety and security; on the other hand, in those cases where the edge is situated far up, it is very difficult not only to pass the ligature, but also to be certain that the whole of it, and nothing more than the whole, is enclosed. Schröder, of Vienna, recommends retroverting the uterus, and so bringing out the fundus through the posterior *cul-de-sac*, but this appears to me more difficult still than the plan of anteversion which I adopted. Another source of obvious trouble that is noticed by most operators, and which I have recently seen exemplified to a considerable degree in a case of Dr. Way's, is the liability of the diseased and softened tissues to break away under even a very moderate strain when pulled upon by the vulsellum or ligature. This of course can scarcely be wholly obviated in some cases where there is extensive disease, but the liability to the accident is lessened by using a broad vulsellum. The main point in the treatment adopted was thorough drainage and the prevention of putrefactive changes, by frequent douching with antiseptic lotions and by the presence of antiseptic tampons. For drainage, the T-shaped rubber drainage-tube made by sewing the end of one piece to the edge of a hole of corresponding size in the middle of another answers very effectually, the tube being large enough to allow of the insertion of the nozzle of the irrigator. Though never very high, the temperature remained a considerable time above the normal, and was thus a constant reminder not to neglect frequent irrigation and dressing.

GUY'S HOSPITAL.

GASTROSTOMY FOR EPITHELIOMA OF ŒSOPHAGUS: IMMEDIATE FEEDING BY PUNCTURE OF THE STOMACH: DEATH AFTER SIX HOURS.

(Under the care of Mr. Golding-Bird.)

[Reported by Mr. T. M'Conkey.]

Esther H., aged 42, married, was admitted on November 23rd, 1886, under Dr. Hale White, and subsequently transferred to the care of Mr. Golding-Bird. The illness dated from August, 1886, when she first began to show symptoms pointing to œsophageal obstruction. The food was swallowed easily, but regurgitated unchanged after varying intervals; besides dyspeptic pains, she localised one constant pain over the sternal region, just above the ensiform cartilage. During the last six weeks, blood had occasionally been observed in the vomit, and the difficulty in retaining any food was much increased. For the last week fluids only had been taken, in very small quantity; attacks of dyspnœa frequently complicated attempts at deglutition. On November 29th, nutrient enemata were resorted to; and on December 5th she was first seen by Mr. Golding-Bird. At 2 A.M. on that morning, on being moved in bed, she fainted; but rallied after the administration of brandy. At 10 A.M., examination with a bougie showed a stricture, eleven inches from the lips, and the fœtid material which the catheter brought up showed, under the microscope, leucocytes, blood, and epithelial *débris*. The patient's voice was weak, but she was able to sit up for the examination. The pulse averaged 100; the temperature was normal. Whilst regarding the attacks of dyspnœa, mentioned above, as a significant proof of the advance of the disease, Mr. Golding-Bird considered that, as both the patient and her husband were anxious that anything that offered a chance of prolonging life should be tried, and as attempts to get the finest catheter into the stomach had failed, gastrostomy with immediate feeding, as a last resource, ought to be performed.

At 2 P.M. on December 5th, the patient being under the influence of chloroform, Mr. Golding-Bird exposed the stomach by a longitudinal incision three inches long, extending down from the cartilages of the ribs along the left semilunar line, outside the rectus abdominis. The stomach was so contracted and drawn up under the shelter of the ribs that it had to be pulled down by firm traction on the omentum. It was at once seized with blunt forceps, and held in the wound whilst a continuous silk suture was inserted to unite it to the incision in the fascial structures of the abdominal walls; the skin was not included. By means of a hypodermic needle and a two-ounce syringe, a small meal of brandy and Valentine's meat-juice was at once administered, with the result that the patient's pulse, which had become very feeble, at once improved. The operation occupied twenty-five minutes. The patient was at once transferred to bed, and hot-water appliances freely used. At 6 15 the same evening, the patient not being so well, Mr. Golding-Bird opened the stomach by incision, and through a cannula administered a meal of brandy with beef-tea, but the patient sank quietly three hours later, that is, six hours after the operation.

Post-mortem Examination.—The stricture was epitheliomatous, five inches long, extending upwards from the cardia, and ulcerated; the stomach was healthy. The aperture from the operation was from two to three inches to the left of the pylorus. There was no space between the stomach and the parietes to which it was attached. The continuous suture had ensured perfect adaptation. There was no blood in the peritoneum, nor evidence of commencing peritonitis. Beyond the liver being fatty, the condition of the other organs calls for no remark.

Remarks by Mr. Golding-Bird.—The operation was undertaken solely as a last resource. The state of the patient was such as to preclude any sanguine hope; yet, as her collapse of the last two days was regarded as mainly due to inanition, it was hoped that by immediate feeding possible restoration might be brought about. The steps of the operation, which presented no difficulties, only require remark in regard to the position of the stomach. It is always, when the stomach is likely to be contracted, difficult, if not impossible, to define its lower boundaries, percussion failing often on account of the immediate proximity of the transverse colon, and in this case no clue as to limits could be obtained beyond that derived from anatomical data; and the *post-mortem* examination further showed that the usual estimate of the position of the large curvature of the stomach is not always correct, it lying much further under and to the left of the left ribs than surgeons imagine. This remark was made by Dr. Wilks, who happened to be present, and certainly three of the writer's cases of gastrostomy, beside the present one, which he has followed to the *post-mortem* table, showed that the gastric fistula was nearer the pylorus than he had expected or intended. The semilunar line, on the left side, appears to be too far to the right in order to open the greater curvature of the stomach, unless at the time of exposing it and drawing it down to the wound in the parietes it is also drawn over to the right, so as to bring the left extremity more into view.

The collapsed condition of the organ in this case, coupled with the puckered and contracted state of the lower infiltrated end of the œsophagus, no doubt tended to give it a more vertical position than usual, and to draw it up further under cover of the ribs. The special point, however, that this case illustrates, and which, indeed, was in view at the time the operation was suggested, is the advantage of employing a pointed cannula as a means of immediately introducing a liquid meal; no regurgitation through the puncture occurred on withdrawing the cannula, and when the stomach was opened in the usual manner with a knife about four hours later, the puncture was only visible as a small hæmorrhagic spot.

The object in attaching the stomach to the muscular—or rather tendinous—parietes only, was both to reduce considerably the length

of the operation, and also to cause, in case of recovery, that the aperture in the stomach should be at the bottom of a fistula leading through the skin and subcutaneous tissue; and thus possibly permit of the more perfect adaptation of a pad, render less likely regurgitation of the food and irritating gastric juice, which has in some cases added much to the patient's subsequent discomfort. There being no secondary deposit of cancer or other explanation of the death, save that of inanition and exhaustion, there is reason to believe that a few days earlier the operation might have given the benefit which it was afterwards too late to accomplish. Dr. Hale White had felt the importance of interference some days before the date on which the operation was performed, and only a misunderstanding caused the delay at last.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 17TH, 1887.

Sir JAMES PAGET, Bart., F.R.S., F.R.C.S., President, in the Chair.

Report of the Morbid Growths Committee.—Mr. CHARTERS SYMONDS read the Report of the Morbid Growths Committee on Mr. Hutchinson's specimen of tumour of the lower end of the femur. The Committee was of opinion that the appearances pointed to syphilitic inflammation rather than new growth.

Molluscum Fibrosum and Multiple Fibro-neuromata.—Dr. J. F. PAYNE showed specimens from a case in which fibro-neuromata coexisted with molluscum fibrosum. The patient, a woman, aged 43, had been under observation for some years as a well-marked case of molluscum fibrosum. The surface of the body was nearly covered with small, soft, fibrous tumours, from the size of a pin's head to that of a hazel-nut, some pendulous, some sessile, some under the skin. They had existed as long as the patient could remember. There was also a tumour, the size of a walnut, in the left axilla, formed on the brachial plexus; it gave rise to much nerve-pain in the arm. It went on increasing in size, while the skin-tumours varied, some new ones being formed, while others wasted and almost disappeared. During the last few months of life there was a marked diminution in their number. The patient died in August, 1886, with symptoms of violent summer diarrhœa. A partial necropsy only was possible, but all the chief organs were found healthy. The left brachial plexus was removed, and on dissection by Mr. Shattock there were found, besides the large tumour, a number of smaller ones, varying in size from a pin's head upwards, on various parts of the plexus, giving the appearance known as plexiform neuroma. These tumours had the usual structure of fibro-neuromata, consisting of nucleated fibrous tissue, in the midst of which the nerve-fibres could be traced. It was not possible to examine other nerves thoroughly, but the right brachial plexus appeared healthy. The skin-tumours, which were seated chiefly in the corium, but some in the subcutaneous tissue, consisted of fibro-nucleated tissue, the larger ones containing broad fibrous bundles with lacunæ. To ascertain the connection of the tumours with the nerves, sections were made by Mr. Shattock, and stained with osmic acid, as well as with other dyes; but though nerve-fibres were seen near the small tumours, none could be traced entering them, and the fibrous masses contained no nervous structures. At the same time, the possibility of the fibrous growths originating in the sheaths of nerves, as in the internal nerve-tumours, could not be disproved. These observations, therefore, only partially confirm those of Recklinghausen, who, in his classical memoir (*Die Multiplen Fibrome der Haut*, 1882), first noticed in two cases the coincidence of fibroma molluscum of the skin with multiple fibrous tumours on the nerves, and explained the former as being neuro-fibroma of the skin.

Sarcoma of Recto-vesical Fascia.—Mr. LEOPOLD HUDSON showed a sarcoma of the recto-vesical fascia. The patient was a man aged 28; there was no family history of tumour. The first symptom, seven months before his death, was pain on defæcation; on rectal examination, a bilobed tumour, feeling like an enormously enlarged prostate, was found. Five weeks after its first appearance cutaneous nodules developed. The tumour grew rapidly, filled the pelvis, and extended upwards into the abdomen, causing lancinating pains and severe vomiting. There was no albuminuria, and the constipation was overcome by purges. He died emaciated. At the necropsy the tumour was found to weigh 7½ lbs., was distinctly encapsuled, and originated apparently from the layer of recto-vesical fascia, which, investing the vesiculæ seminalis, passes across the space between the bladder and the rectum. Microscopical examination proved the growth to be a small spindle- and round-celled sarcoma, which had in part undergone development into a myxomatous tissue, and showed, also, areas of retrogression with mucoid cyst-formation.—Dr. COLLIER exhibited a specimen from a case of sarcoma of the pelvis in a woman; the first symptoms appeared shortly after a fall on the back. A tumour could be felt in the left iliac region, and, as there was pyrexia, it was supposed to be a pelvic abscess. The patient only survived the fall ten weeks. The necropsy revealed a rapidly-growing sarcoma beneath the peritoneum. The growth was very soft.

Cerebral Hæmorrhage in a Boy, following Thrombosis of the Venous Sinuses.—Dr. HANDFORD showed drawings of the brain and preparations of the vessels in a case of cerebral hæmorrhage in a boy, aged 5. The chief symptoms had been headache, constipation, and frequent vomiting. There was no deafness or discharge from the ears. The breathing became stertorous three or four hours before death, which took place ten days after the beginning of the illness. There was no sign of head injury or disease of the ears. The venous sinuses were thrombosed, the superior longitudinal and lateral sinuses containing adherent, decolorised clots. The superficial cerebral veins were also thrombosed and felt like whipcord. There were numerous hæmorrhages on the surface of both hemispheres; two of them—namely, those in the ascending parietal convolution and in the right temporo-sphenoidal lobe—being very extensive and ploughing up the brain substance to a considerable depth. There was ground for supposing that the hæmorrhage occurred only a few hours before death. No cause for the thrombosis could be ascertained, neither could the ruptured vessels be found. The cause of the hæmorrhage was assumed to be the increased vascular tension from the thrombosis of the sinuses, but whether the vessels that gave way were arteries or veins was left an open question, though Dr. Handford inclined to the latter view.—Dr. WILKS had seen five or six cases of thrombosis in anæmic young women. He had put it down to the blood-condition, but thought the subject required working out. The cause of death in all the cases was hæmorrhage.—Dr. COUPLAND mentioned a case of thrombosis of the cerebral sinuses in a case of cancer. Dr. Bright had recorded one typical case.—Dr. W. M. ORD described a case in which, during rheumatic fever, thrombosis first occurred at the root of the neck and extended upwards, producing hemiplegia and death. He thought that possible alteration in the lining membrane of the vessels must not be lost sight of.—Dr. THOMAS BARLOW had examined one case after death in an exhausted child with bronchiectasis. Masses of hæmorrhage were present which were found to have proceeded not from a large vessel but from the coalescence of hæmorrhages from small venules. The hæmorrhages were the direct result of the venous stasis in the large sinuses; this view was held by Sir William Jenner.

Stenosis of Stomach.—Dr. CHARLWOOD TURNER exhibited a specimen of stenosis of the stomach due to general fibroid induration. There were two sites of chronic ulceration, but stenosis did not appear to be due to that.

Sub-pleural Lipoma of Diaphragm.—Mr. CLARKE showed a rounded lobulated fatty tumour found beneath the right diaphragmatic pleura in a woman, aged 65. He mentioned that fat was normally present in small quantities in this situation.

Rickets in Lions.—Mr. BLAND SUTTON observed that the bones of the skull most affected by rickets were those preformed in membrane, and lions born in London suffered from rickets about 1½ or 2 years old; at about that age the cubs died with paraplegia. In the carnivora the tentorium cerebelli was ossified, and in rickets it was enormously thickened. In a cub 2 months old he found, by making a frozen section, that the tentorium pressed on the tenth ventricle, causing extreme enlargement of the third ventricle; the cerebellum was thus pressed down, and protruded through the foramen magnum. The first symptoms were partial paraplegia; the attempt to walk led to a fall, followed by a convulsive fit. The resemblance of these symptoms to those of hydrocephalus described by Mr. Hilton was pointed out.—Dr. HORROCKS inquired why lion-cubs in London suffered from rickets but those in Dublin did not.—The PRESIDENT said that Dr. Haughton had told him that rickets had disappeared since the cubs had been given bones.—Mr. SUTTON said that the authorities of the London gardens had not been equally successful.

Suprapubic Abscess.—Mr. STEPHEN PAGET showed a specimen from a man who suffered from enlarged prostate, chronic cystitis, abscesses in the kidneys, and a suprapubic abscess. Abscess in this situation was rare, and most often occurred in vigorous young men. When suppuration occurred the mortality was high. In none of the cases was there malignant disease, and the abscess was due either to primary phlegmonous disease, or to the spread of inflammation from one of the neighbouring organs.

Cultivation Experiments with Malignant Disease.—Mr. SHATTOCK and Mr. BALLANCE reported a series of cultivation experiments with various malignant growths. The nutrient materials used were serum,

agar, and Koch's peptone gelatine. The results were entirely negative. The experimenters, however, were not prepared to say that the parasitic theory of new growths was disproved; they thought, rather, that the existing methods of cultivation were unsuitable. The theory that the parasite was a protozoon seemed by no means impossible, and its acceptance would explain some of the known peculiarities of malignant disease.—Dr. COUPLAND recalled that the late Professor Grant held that the white corpuscles of the blood were an elementary form of protozoon.—Mr. EVE argued against the parasitic theory, instancing their relation to congenital malformations. He contended that the epithelial cell was the true materies morbi. He had found by transplanting portions of epithelioma of the tongue that acute suppurative panophthalmitis was produced; in epithelioma of the tongue there were, in fact, many micro-organisms.—Mr. ROGER WILLIAMS also combatted the parasitic theory.—Dr. SEMON referred to the alleged antagonism between tubercle and cancer.—Mr. STEPHEN PAGET referred to statistics published by Mr. Roger Williams, tending to show that cancer and tubercle were not antagonistic.—The PRESIDENT said that though cancer and tubercle might be found present in the same body, both were not to be met with in full course together; the spread of the one might be seen to be assisted during the rapid development of the other. Referring to the parasitic theory, he felt that he had in earlier life made a happy guess. Little of the evidence which now existed was then available. In time cancerous growths would have to be very sharply defined from other growths; the difference between malignant and innocent tumours were so definite that eventually they must be absolutely divided. In all probability the presence of a parasite in the former case would be found to be the criterion.—Mr. BALLANCE said the greatest care was taken to avoid any cancer which approached the surface; no other result but suppuration could be expected from inoculation in the anterior chamber with epithelioma of the tongue.

Extensive Disease of Bones in Congenital Syphilis associated with Rickets.—Mr. W. H. BATTLE showed specimens of extensive bony lesions from congenital syphilis and rickets. The child, which was illegitimate, was 3 years and 10 months old. One year before admission the left elbow swelled, and afterwards the right elbow and then the right knee. Progressive emaciation, sleeplessness, and great tenderness were the chief symptoms observed one month before death. There was also considerable fever (101° to 103° F.). The necropsy showed broncho-pneumonia and collapse of the lungs. The epiphysis of the femur was separated from the diaphysis, the periosteum was separated from the shaft for nearly the lower half, and was much thickened and vascular, with slight new formation of bone. The tibia showed a similar necrosis, with separation of the epiphysis. There were similar changes in the bones of the upper extremity, with signs of rickets in the ribs and about the growing ends of the shafts of the tibia. There were marked bossy growths on the skull, which had a natiform aspect.

Card Specimens.—Mr. PAGE, for Mr. RAVEN: Sarcoma of Dorsal Vertebra.—Mr. SYDNEY JONES: 1. Tumour of Parotid, twenty-five years' growth; 2. Papilloma of Bladder removed by Suprapubic Cystotomy; 3. Uterus and Appendages extirpated for Obstruction of Rectum and Bladder.—Dr. BARLOW: Renal Sarcoma.—Dr. PITT: Pleura, two years after Drainage for Empyema.—Dr. COLLIER: Pelvic Sarcoma, simulating Hæmatocele during Life.—Dr. C. TURNER: 1. Bladder, Kidney, and Dura Mater from a case of Purpura; 2. Endocarditis, with Necrosis of Mitral Valve.—Mr. J. H. MORGAN: Cystic Disease of Metatarsal Bone.—Mr. FENWICK: 1. Encephaloid Cancer of Apex of Bladder; 2. Acute Tuberculosis of Bladder and Prostate; 3. Purpura Hæmorrhagica of Bladder.—Mr. BULL, for Mr. ROUSE: Sarcoma of Clavicle.—Mr. MANSELL MOULLIN: 1. Abscess of Brain following Disease of the Ear: trephining; 2. Sacculated Bladder, with Calculus impacted behind the Prostate.—Mr. POLAND: Osteomyelitis of Scapula and separation of Coracoid Process.—Dr. GULLIVER: Aortic Aneurysm opening into Superior Cava.—Mr. TARGETT: Bony Tumour of Buttock.—Dr. HEBB: Quiescent Tubercle (or Disseminated Fibrosis) of Lung.—Dr. HORROCKS: Uterus and Fibroids removed by Abdominal Section (recent specimen).

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 13TH, 1887.

W. H. BROADBENT, M.D., F.R.C.P., President, in the Chair.

Some Cases of Abdominal Cysts following Injury.—Mr. GODLEE related three cases in which abdominal cysts of large size followed the passage of a cart-wheel over the body of the patient. The first was a little girl, aged 4, who sustained a rupture of the left ureter. A large cystic tumour containing urine developed itself, which was first aspirated and then tapped and drained. The kidney was felt projecting into the upper part of the cavity when it was opened. As the patient became liable to frequently recurring attacks of fever, caused by accumulations of urine and pus in the bottom of the wound, it was decided to remove the kidney, which was accordingly done. The operation was a difficult one, but the child made an excellent recovery. The sinus, however, had not completely closed, but still continued to secrete a small amount of pus. The second case was that of a man, aged 23, who was run over by a heavy wagon. A cystic tumour developed itself on the left side, partly under the ribs, partly projecting below them, causing considerable discomfort and vomiting. After periods of improvement and relapse the tumour was aspirated through the seventh intercostal space, and seven ounces of turbid fluid, containing a trace of urea with a considerable amount of albumen, were drawn off. After this the patient gradually recovered. It was pointed out that while the diagnosis of the case was very obscure, it was probably a renal cyst resulting from a laceration of the kidney. The third case was that of a boy, aged 7, who was knocked down by a van, but not run over. A month afterwards a tumour of considerable size, but the dimensions of which apparently varied, was found in the upper part of the abdomen on the left side. During the eleven months after the accident the tumour gradually increased in size, and came to occupy the middle line of the abdomen, pressing the stomach upwards. It was accordingly opened, and the cyst wall was stitched to the abdominal wall. It contained forty-three ounces of turbid whitish-yellow fluid, containing five ounces of urea and a large amount of albumen. The child made an excellent recovery. There appeared to be no data for making a diagnosis in the case.—Mr. GOLDING-BIRD observed that Mr. Godlee had attached a good deal of importance to the presence of as much as 0.5 per cent. of urea in the fluids drawn off, as proof of the fluids being of renal origin. He would call attention to the fact, however, that urea in appreciable quantities might be detected in most of the tissues and fluids of the body. He himself had found as much as 0.2 per cent. in ovariotomy fluid. He related the case of a child, aged 11, who after a fall had a temperature of 104° Fahr., and whose abdomen swelled so that the case was supposed to be one of tubercular peritonitis. The child could eat, but had constant vomiting. A tumour below the liver was opened and drained, and the patient recovered.—Mr. BARKER quoted a case which he had published in the *Lancet* for January 17th, 1885, under the heading of "Cases Illustrating Renal Surgery," of a child who was sent to him with a history of having been run over. There was a swelling on the left side, which was ascribed to ruptured kidney. Aspiration of the tumour was resorted to, and some fluid drawn off which contained a small and varying quantity of urea (0.1 per cent. under highly nitrogenous diet to 0.01 per cent. under feebly nitrogenous diet). During drainage the percentage gradually increased to 2.6. Urea was secreted as soon as the pressure was taken off the kidney. There was probably rupture of the ureter. The kidney was excised, with a successful result. In another case which he had been asked to see by the late Dr. Wilson Fox, also consequent on injury by a van, the wheel of which had passed over the abdomen, six months after the accident forty-five ounces of fluid were drawn away, which contained some sixty grains of urea. The further course of the case, however, showed that it was not a case of renal tumour, and this fact pointed to the necessity for caution in using the presence of urea as an element in the diagnosis of renal tumours.

Case of Spasmodic Torticollis probably caused by Cerebral Lesion.—Dr. G. V. POORE gave particulars of this case. The patient, aged 36, was admitted to University College Hospital on August 5th, 1886, suffering from violent spasmodic torticollis of nearly six months' duration. The head was twisted towards the right shoulder. At first the left sterno-mastoid muscle was mainly at fault, but after division of the sternal attachment of this muscle the spasm was scarcely altered, the rotation of the head being effected by the right splenius. This fact made it probable that the lesion was central. On the left side of the head immediately over the situation of the posterior part of the superior and middle frontal convolutions was a scar, the result of an injury many years previously, which at the time had "half-stunned him." There was an undoubted history of syphilis, and the patient, prior to the onset of the torticollis, had suffered from headache, referred to the neighbourhood of the scar, and from occasional attacks of giddiness. All things considered, it seemed probable that the lesion (meningeal thickening?) would be found on the surface of the brain beneath the scar on the scalp, that is, in the region irritation of which is said to cause deviation of the head to the opposite side. The propriety of trephining was considered, but prior to its performance it was deemed advisable to subject the patient to a thorough course of mercury. This was done, with the result that

the torticollis almost completely disappeared.—Dr. GLOVER wished to add his testimony as to the severity of the spasm. The case showed the virtue of patience in physicians before calling in surgical aid.—Dr. STEPHEN MACKENZIE said Dr. Poore must be familiar with a similar case under the care of Dr. Ringer consequent on disease of the internal capsule. He had a patient under his care for many years after injury to the head in whom no benefit had followed operation. He could see no other explanation of the case than that of central lesion.—The PRESIDENT thought there was doubt of the correctness of the diagnosis as regarded localisation, especially as the spasm was reduced in sleep when the cortex was resting. The case was a very interesting one.—Dr. POORE, in reply, said he was familiar with the cases quoted. He was very reluctant to undertake operation, and every chance was given to time and patience; if drugs had failed, he thought that operation would have been quite legitimate.

Knee joint from the Body of a Man, aged 49, who had suffered for Seventeen Years from Severe Gout.—Mr. STEPHEN PAGET showed this specimen, and related the points of the case. The knee was suddenly attacked by acute inflammation, and a very large abscess occupied the joint and the thigh. It was aspirated, and perfectly healthy pus was let out; later it was opened. Suppuration extended up nearly to the trochanter and down into the calf, and several counter-openings were necessary. Amputation was advised against, on account of the constitution being broken down by disease. For some time he seemed likely to recover, but at last bed-sores formed, and he died about eleven weeks after the invasion of the inflammation. The specimen showed destruction of the cartilages and ligaments, with rarefaction of the ends of the bones: no marked lipping or eburnation. The synovial membrane was infiltrated and partly destroyed by suppuration. Mr. Paget referred to a case published by Dr. Norman Moore, of purulent effusion into the knee-joint in chronic gout; a case of suppuration of the back of the hand and the wrist-joint published by Mr. Rivington; and a case of suppuration of the eyeball published by the late Mr. Critchett. In all these cases the only common cause for the suppuration was chronic gout, of very long duration and of great severity.

Case of Intra-capsular Fracture of the Neck of the Femur, with Specimen.—A gentleman, aged 69, fell from his horse, and on attempting to rise found he could not support himself on his right leg. Mr. SPENCER WATSON found no symptoms of fracture beyond the pain on attempting to move the limb for a fortnight after the accident, and measurements taken several times during the period indicated no shortening. Three weeks after the accident shortening of the right limb, to the extent of an inch and a quarter, was discovered. No splint or extension-apparatus could be borne by the patient, who got up and sat in a chair from the first week, and was on crutches at the end of a month. He died seven months after the injury, and the specimen exhibited showed a fracture through the neck of the femur, intra-capsular and at one time firmly impacted. The neck of the femur was so much wasted that the head of the bone rested on the space between the two trochanters, and was kept in that position by interlocking splinters of the neck.—Mr. W. ADAMS said that intra-capsular fracture usually was easily diagnosed by the free mobility, eversion, and shortening of the limb. In this particular case the shortening was small at the beginning, and subsequently increased. The mobility depended on the kind and direction of fracture. In this case there was more or less a condition of impaction which prevented movement. He quoted the case of a man whose case had been diagnosed as one of intra-capsular fracture of the femur, but who suffered so little inconvenience, being able at first to walk about, that the correctness of the diagnosis was doubted. The man, however, died soon after, and the joint was examined, an impacted intra-capsular fracture being found.—Mr. HEATH said he did not attach much importance to small differences in the length of limbs. He preferred to see whether the patient would raise his limb himself, because, if so, it must be impacted, if there was a fracture at all. If no movement was possible, there was probably an intra-capsular fracture. But the less the limb was moved by surgeon or patient the better. In answer to a remark from Mr. WATSON that Mr. Adams's patient had walked about for four days after the accident, Mr. HEATH said that he probably had an impacted fracture, which then became undone.

Living Specimens.—The following were shown. By Mr. CLUTTON: A Case of Osteitis Deformans in a female, with lengthening of some of the bones.—By Dr. PERCY KIDD: A Case of Rheumatic Nodules in an old woman.—By Dr. DE H. HALL: Adhesion of the Soft Palate to the Posterior Wall of the Pharynx.—By Mr. MANSELL MOULLIN: A Case of Elephantiasis of the Right Leg.

THE post-graduate schools in New York are stated to be in a very flourishing condition, the classes being larger than ever.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MAY 5TH, 1887.

EDMUND OWEN, M.B., F.R.C.S., President, in the Chair.

The Physical Signs of Disease (and Recovery) of the Hip-joint, with a Demonstration of the Mechanical Fixation of the Joint.—Mr. H. O. THOMAS introduced his subject by demonstrating the flexion method of diagnosing hip-disease. He showed his method in the diagnosis of (*a*) advanced disease, (*b*) in the detection of suspected disease, and (*c*) in the discovery of disease in infants. He had already published the first method, but he now dealt for the first time with the flexion method for the detection of merely suspected inflammatory mischief. The proper manipulations so as to avoid overtasking the flexion method, and thus inadvertently simulating a symptom of disease which did not exist, were carefully pointed out by means of appropriate models. Mr. Thomas pointed out the procedure of diagnosing the disease in spite of infantile resistance, the discovery being made by carefully watching the intention of the child with regard to the motion of his limb, and seconding its efforts. He next demonstrated the details of the mechanical treatment associated with his name. He exhibited the modes of fixing and reducing flexion of the hip, fixing and reducing flexion with adduction, and lastly, of fixing and reducing flexion with abduction. Mr. Thomas then gave practical hints occasionally found useful to resort to. The address closed with a description of the diagnosis of recovery from hip-joint inflammation.—The PRESIDENT referred to the modification of Thomas's splint that had been brought forward, and considered that such attempts were, as a rule, failures. In the treatment of hip-joint disease surgeons needed to be more strict with their patients; the latter were allowed to sit up and move about in a manner which marred the success of the treatment. Mr. Thomas's iron nurse was an excellent plan for making locomotion impossible to children who were wearing the splint. In his opinion, stiffness of the joint was never due to prolonged wearing of the splint, but rather to the want of it.—Mr. PEPPER introduced a child to the meeting, in whose case early acute hip-joint disease had been successfully met by the application of a Thomas's splint. In his opinion a sprain or an injury of the joint was always the prime factor in starting the disease, but there existed at the same time some vice of the constitution such as struma, and the existence of this latter made it so important to continue the use of the splint for some months after all symptoms had appeared. In cases of fixed flexion, even when severe, the application of a Thomas's splint was sufficient to procure straightening of the limb, provided, of course, that no real ankylosis had taken place; extension could seldom be required.—Mr. BARWELL considered that in cases where the limb was much flexed it was best to administer chloroform, and then if the flexion did not disappear, the use of extension was indicated. In some early cases of hip joint disease there was no evidence of lameness, only a sense of weariness and the existence of a tender spot over or near the trochanter. The slightest abduction of the unsound limb would cause movement of the child's pelvis. After prolonged use of a Thomas's splint it was difficult to estimate how complete the cure might be; Mr. Thomas's own method of examining showed that the only way was to make tentative efforts and watch. Stiffness of the limb, if not of the joint, did occur after a long use of the splint.—Mr. NOBLE SMITH thought the great lesson taught by the demonstration was the importance of fixing the spine as well as the limb; he strongly condemned the appliances which secured fixation of the pelvis and limb only. Surgeons would do well to follow Mr. Thomas in perfecting their knowledge of mechanical principles and details.—Dr. MAIR asked if Mr. Thomas's splint was applicable to cases of fracture of the neck of the thigh-bone.—Mr. RUSHTON PARKER thought the great use of the splint was in obtaining perfect rest for the limb. Some difficulty might be experienced in the perfect adaptation of the apparatus, but a moderate amount of rough mechanical skill and the use of common-sense ideas would be found sufficient to master all the details.—Mr. COLLIER asked for information regarding cases in which fluid existed in the joint; also regarding the use of extension, and the causation of night-starts in the limb.—Mr. THOMAS replied at some length.

CAMBRIDGE MEDICAL SOCIETY.

FRIDAY, APRIL 1ST, 1887.

E. CARVER, F.R.C.S., President, in the Chair.

Dislocation of Lens.—Mr. DEIGHTON showed a patient with complete dislocation backwards of the lens of more than twenty years' duration. There was no history of a blow or fall. T = +?, vision only central; with + 11 D. V = $\frac{20}{60}$. With the ophthalmoscopic

mirror the lens could be seen freely movable in the vitreous, and of an opaque bluish-white appearance. Examination of the fundus revealed extensive patches of superficial and complete atrophy of the choroid. The optic disc was cupped. There were dust-like opacities in the vitreous. Vision in the other eye was $\frac{20}{70}$. The patient had suffered severely from syphilis.

Puerperal Fever.—Mr. WHERRY gave a report of an outbreak of puerperal septicæmia in Bedford, Gamlingay, and seven villages around. There were at least twenty deaths occurring in the practices of seven different medical men. The outbreak at Gamlingay was especially mentioned; cases occurred from November, 1884, to August, 1885. There were thirteen cases of fever and nine deaths. There was one case of sudden death. The patient expressed herself as feeling perfectly well, had a good appetite, and went downstairs. Her temperature was never below 103°, nor her pulse under 120. One week after her confinement, while taking tea in bed, she fell back dead.

Sanitation of the Lying-in Chamber.—Dr. BOXALL pointed out that much of the illness following delivery was essentially of a preventable nature. Septic poison could only be produced within the passages where air was permitted to enter or any decomposable material was left behind. A special liability, however, existed in the poison, ready made, so to speak, finding an entrance from without. The antecedents of the nurse should be inquired into, with a view to ascertain if she had been brought into contact with any person suffering from any illness attended with suppuration, no matter what its primary nature. With regard to antiseptic agents, he urged the advisability of employing one of universal applicability. Sublimate was incompatible with soap (hence the hands must be well rinsed before they were immersed in the solution), and with oils (hence sublimated glycerine or vaseline should be substituted for carbolic oil or lard as a lubricant). Carbolic acid was incompatible with Condy; Condy, again, was decomposed by soap, while iodine entered into combination with the alkali contained in it. For the hands and instruments he advocated the invariable employment of corrosive sublimate (1 in 1,000), or carbolic acid (1 in 20); solutions of the same strength to douche the vagina in every case during the first stage of labour, and after labour subsequently to douche the uterus also where anything indicated such a proceeding. But, after the first douche, the solution might usually be reduced to half the strength. The sublimate douche, frequently administered, was not unattended with danger, and he would never advise its use unless the patient were under constant observation. In ordinary cases, when the douche was given as a routine practice, he considered Condy (colour of claret) or boracic acid (saturated solution) of sufficient potency. Intra-uterine irrigation should never be entrusted to the nurse, however efficient she might be.—Dr. INGLE thought that such sanitation as had been described by Dr. Boxall might be of service in lying-in institutions, with trained skill and careful medical oversight; but in general practice he thought it undesirable that much interference with the parturient should be encouraged, other than great cleanliness.

Specimens.—By Mr. WHERRY: 1, Tumour of Testis; 2, Enchondroma of Fingers.

SOUTH AUSTRALIAN BRANCH (ADELAIDE).

FRIDAY, NOVEMBER 26TH, 1886.

J. C. VERCO, M.D., President, in the Chair.

Collapse after Puncture of Hydatid of Spleen.—Dr. J. DAVIES THOMAS related the case of a woman, aged 27, who consulted him on account of abdominal tumour, which was diagnosed as hydatid of the spleen. Dulness extended to the eighth rib in the mid-axillary line, and the lower border of the tumour extended almost to the middle line at about two fingers' breadth above the umbilicus. An aspirating needle was introduced, and at the depth of an inch and a half clear fluid flowed, of which about three ounces were withdrawn, the object of the aspiration being to ascertain the depth at which the cyst lay. Five minutes later her face suddenly flushed, and erythematous, itching patches appeared on the face, neck, and arm; she complained of abdominal pain, and in a few minutes the face became dusky, the hands and feet cold, and the radial pulse almost imperceptible. For three quarters of an hour she appeared to be moribund, the radial pulse was absent, the cardiac action scarcely perceptible, and the respirations hurried and laboured. Hypodermic injections of ether were given, and the patient rallied, but the radial pulse was not perceptible for two hours and a half after the operation; great thirst, vomiting, and diarrhœa were subsequent symptoms, and the temperature rose to 102.6° F. In forty-eight hours, however, after the operation, the patient had quite recovered from the effects, and the tumour was smaller. Reference was made to two recorded cases where aspiration of a cyst in an abdominal organ was followed by collapse and death, and to a third case (Bryant and Fagge) where a similar result was thought to have been brought about by transfixion of the portal vein. Cases of sudden death following puncture of pulmonary hydatids were mentioned; most of them seemed to have been due to sudden flooding of the lungs with hydatid fluid, but in one case it was possibly due to shock. In the abdominal cases Dr. Davies Thomas suggested that the symptoms of shock were produced by a sudden inhibitory influence on the heart, probably exerted in a reflex manner through the sympathetic supplying the liver or spleen as the case might be.—The PRESIDENT had recently observed shock and collapse after aspiration of hydatid of the liver. Such cases showed the possible seriousness of the operation, and that it should not be lightly undertaken.—Dr. GARDNER agreed as to the gravity of the aspiratory operation, and thought an anæsthetic diminished the danger of shock.—Mr. HAYWARD mentioned two cases; one in which aspiration of a pulmonary abscess resulted in death from shock in three minutes, and another in which alarming symptoms had arisen from the lungs becoming flooded with hydatid fluid.

Diabetes Insipidus.—Dr. C. E. TODD read notes of a case of diabetes insipidus which derived benefit from the administration of codeia.—The PRESIDENT said that in using codeia in diabetes, the proper amount to be taken was a very important point which required further elucidation.—Mr. JAY mentioned a case of diabetes mellitus much benefited by codeia in small doses.

Hydatid of Liver.—The PRESIDENT contributed notes of a case of hydatid of the liver in a girl, aged 8 years. Dulness on percussion reached up to the third rib on the right, and to the sixth rib on the left in front; the heart's apex was displaced, being half an inch outside the nipple-line; the lower border of the liver-dulness was one inch above the umbilicus. Abdominal section was performed by Dr. Verco; the cyst was incised, the adventitia stitched to the abdominal wound, and the cyst removed. On the fifth day, having done fairly well up to that time, she had convulsions, with rising temperature, increased rapidity of pulse and respiration, and loss of consciousness; she died the same day. The necropsy showed that the hydatid had excavated the whole of the right lobe of the liver; at the line of junction of the cyst and abdominal wall there was complete union by recent lymph. The walls of the cavity had folded together over a considerable area, especially at the outer and back part, so that the opposed surfaces had come together, and here lymph had been poured out, which had united the surfaces by plastic adhesions, and had to this extent obliterated the sac. The specimen proved conclusively that when by free incision all the contents were removed, if the cyst walls were thin and supple enough the pressure of the abdominal walls through the medium of the abdominal viscera would bring the opposite surfaces of the cyst into contact; and where they could remain in apposition, plastic lymph would be exuded, and, without any suppuration or granulation, this would organise, and within a few days obliterate a large area of the cyst by primary adhesion, a vastly more rapid process than the filling up of so large a cavity by the tedious process of suppuration and granulation. Such primary adhesion was only possible when there was complete evacuation of the sac and removal of the mother cyst; *débris*, left after puncture with a large trocar, intervening between the walls of the sac, prevented apposition, and therefore adhesion. This was a strong argument in favour of free incision and extraction of the mother cyst, and was a contra-indication to the distension of these hydatid sacs in the subsequent washing out; such distension was liable to break down again these recent adhesions, and so retard the process of cure.

Living Specimens.—Dr. GARDNER: Removal of Larynx.—The PRESIDENT: (1) False Joint of Ulna; (2) Depressed Fracture of Skull of Fifty Years Standing, without Symptoms.

Pathological Specimens.—Dr. GARDNER: Multilocular Hydatid Cyst of Liver.—The PRESIDENT: Large Hydatid of Liver.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, MARCH 18TH, 1887.

H. R. HATHERLY, M.R.C.S., President, in the Chair.

Rabies and Hydrophobia.—Dr. BELL TAYLOR delivered an address in which he said that there were no signs during life, or appearances after death, that could be considered proof of rabies. Hydrophobia in the human subject was the rarest of diseases. Only a small proportion of human beings bitten by rabid animals contracted the disease. M. Pasteur did not induce a mild attack of hydrophobia in order to protect his patients from a fatal attack; the vast majority of them were never in any danger of hydrophobia. If they were fortunate, M. Pasteur's injection had no effect, and then they were said to be cured. Up to the last day of last year M. Pasteur had inoculated 2,496 patients; a very small proportion of these had been bitten by

rabid animals; some had not been bitten at all. Many were protected by their clothes, boots, or gloves; most, if not all, had been cauterised, and if M. Pasteur's system had been worth a rush, not one would have died, yet up to the end of last year fifty-three perished of hydrophobia, twenty-two had died since, and as no one was safe for at least a year, there was no telling how many might yet develop the disease. He deprecated the tacit acquiescence of the profession in a system which was not only futile but dangerous.—Mr. BURNIE criticised Dr. Bell Taylor's statistics, pointing out the absurdity of taking all M. Pasteur's cases *en masse*, instead of considering separately those in which there was clear evidence of a bite by a rabid animal.—Mr. CAVE called attention to the fact that the views of the recognised leaders in the veterinary profession upon the diagnosis of rabies were completely opposed to the opinions quoted by Dr. Taylor.—Mr. VICTOR HORSLEY remarked that the experiments upon which M. Pasteur based his treatment had been fully confirmed, and his death-rate was far below that of the average, according to all published statistics. The real point at issue was how could we prevent rabies in the lower animals or in man as it appeared in the form known as hydrophobia? Rabies was a zymotic disease which could be easily recognised by anyone conversant with its symptoms and the lesions it produced; and the experience of Prussia and other countries proved that restrictive legislation, when properly carried out, could completely stamp out the disease.—The discussion was continued by Dr. RANSOM, Mr. WORTH, Dr. STEPHENSON, and Mr. GRESSWELL.—Dr. BELL TAYLOR briefly replied.

OXFORD DISTRICT BRANCH.

WEDNESDAY, APRIL 27TH, 1887.

THOMAS H. CHEATLE, M.R.C.S., in the Chair.

Intubation of the Œsophagus.—Mr. G. H. RODMAN read a paper on intubation of the œsophagus as an alternative to gastrostomy, in which he said that statistics did not show very satisfactory results from gastrostomy. Full details regarding intubation were given, and three cases in which it had been tried were referred to. One of these was shown; the patient, who had been admitted in a starving condition, had gained 1 st. 3½ lbs. in twelve days.

Eye-Injuries in Agricultural Labourers.—Mr. MORGAN read some notes on the injuries to the eye to which agricultural labourers were especially liable. The cases quoted included blows on the eye from branches flying back while the men were hedging, cereal grains impacted under the eyelids, not noticed at first, and leading to suppuration, etc.

Suprapubic Lithotomy.—Mr. MORGAN read a case of suprapubic lithotomy, and made some remarks on the advantages of the operation.

Removal of Tumour from the Rectum by Whitehead's Method.—Mr. SYMONDS read a paper on the removal of a tumour from the rectum by Whitehead's method.

BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, MAY 5TH, 1887.

E. NOBLE EDWARDS, M.R.C.S., President, in the Chair.

Abdominal Puncture for Flatulent Distension.—Mr. W. FURNER related two cases. In one, what was supposed to be large intestine proved, *post-mortem* three days later, to be small intestine, the punctures appearing like small punch-holes, though without fæcal escape. The patient died of acute rheumatism. The other case was one of abdominal section for obstruction; small punctures were made in a portion of inflamed intestine, each of which was followed by fæcal escape. He maintained that it was not always certain whether the intestine distended was large or small; and, further, that the operation of puncture was never free from risk of fæcal escape, whether the intestine was inflamed or not.

Treatment of Malignant Disease of Cervix Uteri.—Dr. JOHN PHILLIPS read a paper in which the advantages and dangers of ligature, écraseur, and galvano-cautery were discussed. The uselessness of condurango bark and of Chian turpentine was pointed out. A comparison of Sims's operation with Schroeder's method of amputation was made. The author had abandoned the latter for exsection and caustic applications of chloride of zinc (100 per cent. solution), with a subsequent course of arsenic. The most favourable cases for operation were those in which one or both lips of the cervix were involved, but the uterus was quite mobile. When, in addition to the cervical lesion, there was some slight swelling in one or other broad ligament, an operation might still be done. When, with a mobile uterus and an infected cervix, the mucous membrane of the posterior *cul de sac* was involved, the curette was especially indicated. Total excision of the uterus for malignant disease of the cervix could not be too highly deprecated.—The PRESIDENT mentioned a case in which he had excised the cervix with the galvanic écraseur.—Mr. W. FURNER suggested that Battey's operation might be practised with advantage in these cases.—Mr. VERRALL made some remarks, and Dr. PHILLIPS replied.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, MAY 6TH, 1887.

S. C. SMITH, M.D., President, in the Chair.

Diphtheritic (?) Slough of Vagina.—Dr. GORDON BLACK was called to see a girl suffering from feverish conditions and a slight swelling in the neck. Nothing else was complained of but a slight itching of the genitals. Examination showed an acute gangrenous condition of the vulva, with ashy sloughs resembling diphtheritic inflammation. Later there were suppurating glands in the axilla, also covered with slough, and the groins were red and spongy. Under general treatment and the local use of iodol and iodoform, recovery took place. There was no subsequent paralysis, and no history of infection could be obtained. The theory of diphtheria was put forward as a possible hypothesis.—Dr. CHURTON related the case of a man who had extensive sloughing of the soft palate, of black colour, ultimately extending to the cheeks, and proving fatal by hæmorrhage. No source of infection could be traced.—Dr. CAMERON thought the case could hardly be diphtheritic from the described character of the ulceration and the fact that diphtheria was seldom solitary.

Fracture of Thigh in a Case of Paraplegia.—Dr. BLACK described a fracture of the thigh in a patient who had been completely paraplegic for thirty years from an accident in youth. The fracture was reduced without pain or spasm, and healing was rapid and complete.—Dr. S. C. SMITH had seen a similar case make a good recovery.—Dr. CAMERON related a case where compound fracture of the thigh in a patient suffering from locomotor ataxy proved rapidly fatal.

On the Convenience of Estimating the Amount of Urine Voided by its Weight.—Dr. SPOTTISWOODE CAMERON spoke of the difficulty, in private practice, of obtaining exact measurements of urine passed, owing to the absence in most houses of measures of less than half a pint capacity. Weights, however, down to half an ounce were always at hand, and it was easier for a patient to weigh the urine than to measure it. To simplify the calculation required, the following method was accurate enough for average quantities: The weight of the urine should be written down in ounces and decimals; the number should be multiplied by the last two figures of the specific gravity, placing the product beneath and three places to the right. The difference was the bulk of the urine in fluid ounces.—Dr. S. C. SMITH said people objected to use their ordinary measures for urine, but would not object to weigh the vessel containing it. He thought highly of the plan.—Dr. GRIFFITH spoke of the necessity, in estimating the urine passed in twenty-four hours, of beginning with an empty bladder, the first morning's urine being rejected, and measurement begun from that time. This was the plan now adopted at the Leeds Infirmary.

Emmet's Operation.—Dr. BRAITHWAITE described fourteen cases in which the operation had been performed. As operations, eleven were successful, two imperfect, and one was a failure; but as relieving symptoms, six were successful, four unsuccessful, and two were complicated with other affections which rendered the result difficult to estimate.

Therapeutic Memoranda: Ergotin: Hydriodate of Hyoscin.—Dr. ALLAN referred to a former communication he had made to the Society on the use of ergotin in cough, and further experience confirmed its value. It was especially useful when the cough was violent and persistent in either bronchitis or phthisis, given as a nightly draught in doses of ten to twenty grains. He had not seen any disadvantages connected with it, but he had found it of less use when the condition was acutely febrile. He had also tried sclerotic acid in doses of one or two grains. He recommended hydriodate of hyoscin as a cerebral sedative where morphine and chloral were unsuitable, especially in delirium tremens; gr. $\frac{1}{150}$ was an average dose given subcutaneously.—Mr. OAKLEY preferred the subcutaneous use of ergotin. Simples differed greatly, and he never used a specimen for other cases until he had proved its effect on the uterus in a case of midwifery.

Adenoid Vegetations in the Naso-pharynx.—Dr. BRONNER described several cases, and said that he preferred in most instances operating without any anæsthetic but cocaine. He had found Dalby's steel nail very useful.

Gaseous Enemata.—Dr. GIBSON showed the original form of Dr. Bergeon's apparatus for the rectal injection of sulphide of hydrogen

and disulphide of carbon. He was using the latter on several cases with apparently good results.

Aneurysm of Thoracic Aorta with Asthmatic Symptoms.—Dr. CHURTON showed this specimen from a man, aged 50. Though no physical signs existed, the presence of an aneurysm had been inferred from the fact that attacks of dyspnœa always came on if the patient moved about much even if in bed. The aneurysm, which was small, sprang from the third part of the arch, and was in contact with the bifurcation of the trachea.

Specimens.—Dr. BRAITHWAITE showed a specimen of Pyosalpinx.—Dr. ALLAN showed some specimens of Intestinal Lesion in Pig Typhoid.

ACADEMY OF MEDICINE IN IRELAND.

MEDICAL SECTION.

FRIDAY, APRIL 29TH, 1887.

JAMES LITTLE, M.D., President, in the Chair.

Chronic Interstitial Nephritis.—Mr. C. H. ROBINSON read a paper on a case of chronic interstitial nephritis.

Ideal Paralysis; Neurosis of the Viscera.—Mr. W. BERNARD, of Londonderry, read a paper on ideal paralysis; and also one on a case of neurosis of the viscera, ending in dilatation of the stomach. He also exhibited macroscopic and microscopic specimens of the latter case.—Mr. CONOLLY NORMAN said Mr. Bernard's first case exemplified the extreme difficulty attending the diagnosis of apparent physical affections in the insane. It also recalled to his mind the record of a case carefully described by Dr. Edward Geoghegan. The patient had remained for eighteen months absolutely in one position, and during that time he never spoke. One day he made a slight voluntary movement, and the attendants taking him, as it were, "on the hop," ran him along the room; and from that time his motor condition gradually improved. When he began to move he seldom spoke, and then in a sulky, unsatisfactory manner. Since the publication of Dr. Geoghegan's report, the patient so far recovered that he had been discharged and readmitted as a paid servant in the kitchen; but no account could be got from him how or why he maintained the fixed position so long. Instances of absolute silence for years had also some affinity. He remembered a case recorded in one of the German journals, eight years ago, of a man who had been found wandering in a village and was committed to a lunatic asylum, where he remained for years and never spoke, being silent probably through a delusion, so that his identity was not discovered.—Dr. FITZPATRICK mentioned the case of a girl, aged 20, admitted into St. Vincent's Asylum, suffering from hysterical mania, and she exhibited delusions assuming a variety of diseases. At one time she fancied her arm was paralysed, and after long persuasion that it was not, she got the use of the arm again. At another time she remained without speaking for months. During these delusions she took her food and gave no trouble to the attendants. At length, in January last, after twenty years of intermittent delusions, she got an attack of epilepsy, followed by paralysis of the right side, and she never spoke from that time to her death. He had always thought that there was structural disease in the brain, and his prognosis was verified after twenty years.—Mr. COX made some remarks, and Mr. MOLONEY asked, Was there any history of hereditary insanity or of intemperance in Mr. Bernard's case?—The PRESIDENT doubted whether surgical interference would be useful where the stomach was so enormously dilated as in Mr. Bernard's second case, because, even if a fresh pylorus was constructed by the skill of the surgeon, so long as the stomach remained dilated it would form a receptacle for decomposing matters, alimentary and secreted.—Mr. BERNARD, in reply, said that the first case had nothing in common with that mentioned by Dr. Fitzpatrick. There was no hereditary tendency to insanity.

Calculous Pyelitis, followed by Albuminoid Disease.—Dr. J. W. MOORE presented the case of a porter, aged 17, who, when admitted to the hospital, said that his legs began to swell a fortnight previously, when also severe pain in the left groin set in. There was extreme emaciation, and a generally phthisical aspect, but no cough. He was very thirsty—a symptom of diagnostic importance. There was a loud apex systolic heart murmur. There was fulness of the abdominal cavity, especially in the epigastrium which was remarkably prominent. The fulness was in part accounted for by the presence of considerable tympanites, but dulness on percussion in the flanks revealed a moderate ascites, and the right hypochondrium, the epigastrium, and the umbilical region were all occupied by a vastly enlarged liver, hard to the feel, perfectly smooth, and of uniform dimensions. The first touch of the liver suggested the probable existence of albuminoid change in the organ. The spleen was not enlarged to any extent. The urine was found to be highly albuminous, showing on microscopical examination a few hyaline tube-casts, but no pus-corpuscles or blood-cells. It was acid in reaction, and its specific gravity was only 1010. There was moderate anasarca of the lower extremities, and the left leg was flexed, as in hip-joint disease. The patient died three weeks after admission. At the necropsy, the lungs and heart were found to be practically healthy. The liver weighed 7 lbs., was very firm and hard, and yielded a pink coloration with aniline blue. The pancreas and spleen were inseparably welded together by old adhesions; they weighed together 13½ ounces. The spleen was slightly congested; its capsule was thickened and presented appearances of former perisplenitis. It showed the characteristics of the "sago-spleen" of albuminoid disease. The pancreas was firm, almost cartilaginous, and the neighbouring glands were enlarged. The left kidney, or what remained of it, was embedded in a mass of dense, cartilaginous-looking connective tissue. On cutting through this, the organ itself was found almost entirely destroyed, converted into a multilocular cyst, with intervening bands of chondroid connective tissue. The cysts contained a horribly fœtid urino-purulent fluid, and branching calculi were found in some of them. The pelvis of this kidney was obliterated, as the result of old-standing calculous pyelitis, and the ureter also was thickened and widely dilated down to a point about two and a half inches above its entrance into the bladder, where it was completely occluded by a smooth oval calculus. This was of a bluish black colour (from deposition upon it of a sulphide), resembling a piece of limestone rounded by the action of the sea. Passing downwards from the tunica adiposa, and invading the sheath of the left psoas muscle, a fœtid perinephritic abscess had tunnelled, so causing the pain and stiffness in the left hip-joint. The absence of pus in the urine was satisfactorily explained by the complete occlusion of the left ureter, as above described. The left kidney and its surrounding connective tissue weighed 6 ounces, but the right kidney weighed more than twice as much—14½ ounces, or between three and four times the normal weight of the viscus. It had evidently undergone compensatory hypertrophy to a very marked extent; but at the moment of death it was the seat of albuminoid disease, only in a less degree to the liver. A histological examination confirmed the widespread existence of albuminoid disease.—The PRESIDENT said the case illustrated the difficulty attending the diagnosis of renal mischief. The morbid specimen had not the very pale colour and consistency for which the genuine albuminoid liver was distinguished.—Dr. J. W. MOORE briefly replied.

REVIEWS AND NOTICES.

A RAIVA. Por EDUARDO ABREU. Lisboa. 1886.

DR. ABREU'S Monograph on Rabies is published at the National Press, and appears in the form of a quasi-official report to the Portuguese Government, partly critical, and partly experimental, as to the present position of the inoculation controversy.

Dr. Abreu belongs to the party of which Professors Peter and Colin may be taken as the heads, which holds that M. Pasteur's theories must not yet, at any rate, be taken as proven, that there is still need for rigorous inquiry into the facts of the cases, and that the statistics of numbers, and of the results obtained, present certain unsatisfactory features which stand in much need of being cleared up.

Although Dr. Abreu presents an outwardly studious attitude of respect, almost of reverence, towards M. Pasteur, the critical portion of his work is written with a good deal of force, and his arguments are generally clearly stated. It is, he thinks, much to be regretted that there has been such an enormous concentration of energy and thought upon this question of the prophylaxis of rabies, when the experience of the German Empire (as of some of our own colonies) shows that it may be stamped out or prevented by efficient police regulations, and he urges that the treatment of human rabies has always been the fruitful field for empirics, and that no disease amenable to treatment has given occasion for so many "cures" as this incurable one. There is more force in his arguments founded on M. Pasteur's published tables concerning the apparently extraordinary increase of rabies, and the number of people bitten by rabid animals since the practice of inoculation commenced; and the evidence upon which the diagnosis was founded in many cases is very severely criticised. He points out also that, on the one hand, while many who were subsequently inoculated had been previously treated by a thorough cleansing and cauterisation of the wound, on the other, many more who had been bitten by suspicious animals neglected this precaution in favour of the less immediate treatment.

Dr. Abreu holds very strongly by this immediate cleansing and thorough cauterisation of the wound in cases of suspicious bites. He believes that if this be properly performed, examples of development of human rabies would be very rare, and gives reasons for the opinion that the virus only very slowly enters the general system. He considers, too, that the normal mortality after bites from rabid dogs is placed by Pasteur at too high a figure.

The difference between the scientific basis upon which inoculation proper, as for anthrax, chicken cholera, is founded, and the theoretical assumption on which its practice is advocated as a prophylactic against rabies, is pointed out. In all the former cases there is evidence of the modified virus producing a mitigated attack of the disease in question which confers a sufficient immunity, but no such attack is produced, or is desired to be produced, by the inoculation for rabies.

The fact that Pasteur has, since his treatment of Joseph Meister, made important modifications in his practice, is taken to prove that finality can hardly yet have been reached. Pasteur's explanation of the death of Louise Pelletier after inoculation is questioned, on the ground that the inoculation period of the virus of rabbit rabies is not rigidly confined to seven or eight days, as it is said to be. Dr. Abreu's position as to these cases of death after inoculation would have been stronger had he written subsequently to the deaths of Wilde, Gofti, Foulup, Albert, and others, which have created a somewhat widespread feeling of distrust as to the safety of the intensive method of inoculation recently adopted.

The experimental portion of this monograph details test or checking work done in Paris and in Dr. Abreu's laboratory at Lisbon on the lines of Pasteur's own experiments. He claims to have proved: (1) That the paralytic form of rabies which is characteristic of the disease when developed in rabbits has not a constant incubation period, and that the development or non-development of rabies within a fixed time cannot be held to be a distinctive diagnostic sign as between dog rabies and rabbit rabies; (2) that convulsive and paralytic symptoms similar to those produced after inoculation of trephined animals with the virus of rabies may be produced by the same operation followed by inoculation with a non-virulent fluid; (3) that the evidence with regard to the rendering of dogs refractory to the influence of the virus of rabies by means of inoculation has not amounted as yet to demonstration.

On these points and throughout the whole monograph Dr. Abreu appears to have the courage of his opinions, and he exhibits ability in power of analysis and expression. His work appears to us to be worthy of attention as coming from one who represents the opinion of a party, now, apparently, in a minority, which holds that the frame of mind in which Pasteur's theories and practice on this great question should be followed should be one of rigorous, even of distrustful, scrutiny, and that the scientific basis for inoculation as a prophylactic for rabies is not yet established.

THE MODERN TREATMENT OF STONE IN THE BLADDER BY LITHOLAPAXY. By P. J. FREYER, M.A., M.D., M.Ch., Bengal Medical Service, Civil Surgeon Mussoorie. London: J. and A. Churchill. 1886.

BY an oversight, this important little book has escaped notice in these pages until now. It is a valuable contribution to the surgery of stone in the bladder, and the reader is at once impressed with the thoroughly surgical spirit of the writer, and with his evident desire to be absolutely truthful, to suppress nothing, and to neither exaggerate nor extravagantly praise. Dr. FREYER is a disciple of Professor Bigelow, and, having only recently practised lithotrity, it is natural that he should be thoroughly imbued with Professor Bigelow's teaching and practice, so much so, indeed, that we think the only flaw in the book is the want of notice, and even mild disparagement of the practical men, whose united labours in France and in England went to make lithotrity what it was, when first Professor Bigelow became interested in it. All else in the book is admirable. Dr. Freyer graphically describes the necessary instruments and all the details of the modern operation of lithotrity, and his account of the lithotritist's fatigue after crushing a three-ounce stone is true to nature. Naturally enough he has nothing very new to say with reference to the practical details of the operation, and his devotion of a whole chapter to "A new method of diagnosis of stone," which method simply consists in washing out the bladder with tube and aspirator, and listening for the click of a fragment or small calculus against the end of the tube, reminds us that Dr. Freyer is a young lover, to whom the wiles and pretty ways of his somewhat ancient mistress, lithotrity, possess all the charm of novelty. The most interesting chapter is the one dealing with "Difficulties and complications met with." Here we find the touch of the thoroughly practical man. When urethral stricture coexists with stone in the bladder, Dr. Freyer recommends the division of the stricture by urethrotome, but the stones he has met with, where stricture has been present, have not been large, and much urethral instrumentation has not been required, otherwise we fancy he would have more to say in favour of dilatation only of the stricture. An interesting case is related where, although a sound could be passed, no lithotrite could be introduced, and it is characteristic of the frankness of the author that he admits that he had to perform lithotomy. In another case a stone was found partly in the prostatic urethra and partly in the bladder, and it could not be seized by the lithotrite. A No. 18 cannula was introduced as far as the stone, the aspirator applied, and water pumped in; the stone was thus forced out of the urethra into the bladder, where it was seized and crushed.

Dr. Freyer has performed 128 operations upon 126 individuals, the stone having, to his knowledge, only twice recurred. The calculi varied in weight from 5 grains to 3¼ ounces, and, excluding three operations on female children, there were 125 operations on adults, with 5 deaths, or a mortality of 4 per cent. Dr. Freyer may well be proud of such results, and he has earned the thanks of the profession for publishing his plain unvarnished tale, which will be read by all practical surgeons with interest and profit.

NOTES ON BOOKS.

The Medical Annual, 1885-6 (John Wright and Co., Bristol) is a condensed record and review of the year's progress in medicine, surgery, and general science. It includes an annual review of popular and general science, astronomy, chemistry, zoology, physiology, and botany. There is a brief review of the therapeutics of the year 1885 by Dr. Wynn Westcott, and an article on the additions to the *British Pharmacopœia* by the same author; a summary of progress in skin diseases by Dr. Tom Robinson, with brief summaries by other writers of psychological medicine, midwifery, the eye, digestion, etc.; copious notices of new inventions, a list of books of the year, a gazetteer, a dose-index, a somewhat detailed statement of the arrangement of medical schools and examining bodies, a report of health-resorts at home and abroad by Mr. George Norman, a trade directory, and a great deal of miscellaneous matter of a useful character. Altogether this is a book conveniently planned, put together with much industry, and containing a great deal of useful information in a moderate compass.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

NEW MIDWIFERY FORCEPS.

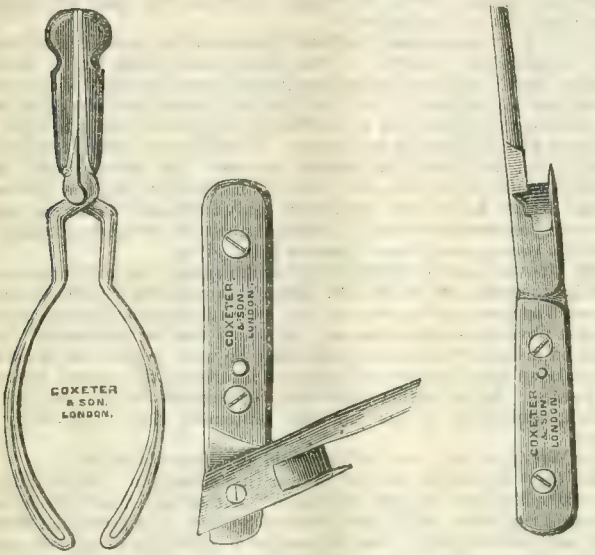
I BELIEVE it is a recognised fact that the chief difficulty, if it can be counted as such, in the use of the forceps lies in the introduction of the upper blade. When the lower blade is introduced first it is an obstacle to the application of the upper one, from its presence in the vagina, and by the uterine contractions which are set up dynamically by it. It is easier to introduce the lower blade, chiefly on account of the relative positions of patient and operator, for on whichever side the patient may lie it will be found more convenient for the hand to trace out the under-surface of the fœtal head than the upper. However, a great authority says: "If we use the curved forceps, that is, with the second pelvic or sacral curve, then the upper blade is generally the best to introduce first."

After this I take it for granted that whether the upper blade be introduced first or last it is always the more difficult to apply.

In order to obviate this difficulty, Mr. Coxeter has constructed for me a pair of forceps having the lock adjustment reversed to those in ordinary use. It is obvious that if the upper blade of the latter kind be first introduced and held *in situ*, it will lie well against the perineum, and between them there will not be room to pass the lower blade without first displacing the handle of the other forwards, which is not good for the uterus. Whereas, with my forceps, when the upper blade

is in position (having its lock forwards) there will be plenty of freedom for the passage of the lower blade.

I have often noticed that it is not so much the actual use of the forceps that alarms the patients as the preparation for the simple operation. "Drawing the patient to the edge of the bed and baring the buttocks" is not a pleasant procedure, but hitherto a necessary one on account of the rigid blade. In these instruments I have endeavoured to obviate this also, for in the handle of the upper blade adjoining the lock there is a lateral hinge which flexes backwards, but which is rigid to forward pressure; when closed it moves on two plates with a concealed pivot, constructed in such a way as not to impair the strength



of the blade for leverage or traction, neither is it conspicuous when the handles and locks are in apposition. The shanks are made sufficiently open to admit the index finger comfortably for traction, and the handles are full long.

When the handle is flexed the upper blade is shortened, and can be introduced without altering the position of the patient, supposing she is in the usual obstetric position. The upper blade being passed, the lower easily follows.

I venture to hope that with these instruments practitioners will be able to apply them immediately there arises a clear indication that forceps are necessary, instead of waiting, as one is often tempted to do, until the patient herself is impressed that something more must be done before her delivery can be effected, and until the previous difficulty is increased by mechanical congestion. Therefore, without advocating the undue use of the forceps (which is to be deprecated) the busy practitioner will be able to save a little time, and his patient, at least, some discomfort, by bringing about the mutual satisfactory result of a speedy delivery.

WM. D. HASLAM, M.D.,
Late Obstetric Assistant to University College Hospital.

12, Mecklenburgh Square, W.C.

A SIMPLE ASPIRATOR FOR TRACHEOTOMY.

EVERY now and then a valuable life is thrown away by operators, in the enthusiasm of the moment, sucking a tracheotomy-tube; and still more frequently the surgeon is tempted to fill his mouth with blood in operations about the trachea. This, if not dangerous, is at any rate disagreeable, and could easily be obviated by an apparatus which can be put together at a moment's notice, and has been found of considerable use at this institution.

It consists of an ordinary bottle with a well fitting cork, which is perforated by two glass tubes bent at right angles; one of which is used for drawing at with the mouth; the other dips to the bottom of the bottle, and has its open end connected with some india-rubber tubing, which is attached to the tracheotomy-tube or passed into the trachea, as may be necessary. The bottle may be partially filled with a strong antiseptic, and is easily emptied by blowing down the tube and reversing its action.

SIDNEY BARWISE, late Resident Obstetric and Ophthalmic Officer, Queen's Hospital, Birmingham.

GONORRHŒA BAGS AND SUSPENDERS.

MESSRS. LYNCH AND CO., Aldersgate Street, have forwarded us a sample of a new suspender and gonorrhœa-bag introduced at the instance of Mr. W. E. Dawson. The suspender for use in cases of orchitis and epididymitis is made in the ordinary way of silk or cotton, with this difference, that half-way round the front and the whole of the back of the bag is made of a waterproof material; thus the garments are kept dry and evaporation can proceed freely at the front. It will allow lint, saturated with an evaporating lotion, to be applied round the swollen testicles during business hours. The gonorrhœa-bag, instead of being made of the usual macintosh material, which, for want of ventilation, often becomes unbearable in a few hours, is manufactured of light bleached calico. It is intended that the discharge should exude into a small piece of absorbent cotton-wool placed in the bottom of the bag. The cheapness with which these bags are supplied should secure cleanliness and constant renewal as circumstances demand.

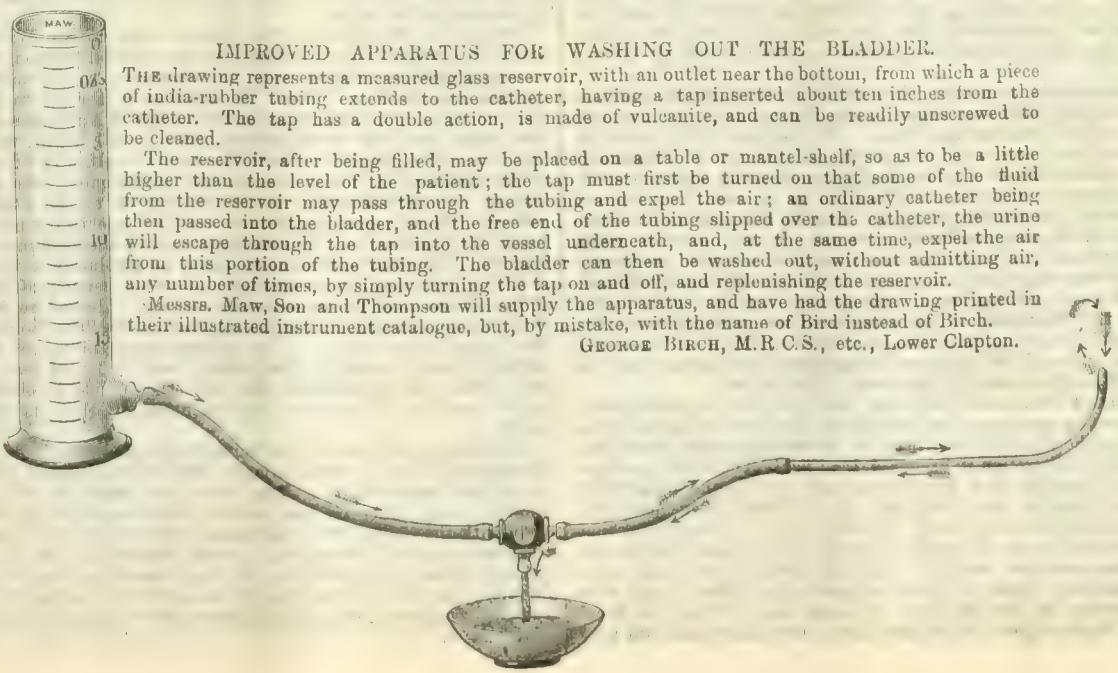
IMPROVED APPARATUS FOR WASHING OUT THE BLADDER.

THE drawing represents a measured glass reservoir, with an outlet near the bottom, from which a piece of india-rubber tubing extends to the catheter, having a tap inserted about ten inches from the catheter. The tap has a double action, is made of vulcanite, and can be readily unscrewed to be cleaned.

The reservoir, after being filled, may be placed on a table or mantel-shelf, so as to be a little higher than the level of the patient; the tap must first be turned on that some of the fluid from the reservoir may pass through the tubing and expel the air; an ordinary catheter being then passed into the bladder, and the free end of the tubing slipped over the catheter, the urine will escape through the tap into the vessel underneath, and, at the same time, expel the air from this portion of the tubing. The bladder can then be washed out, without admitting air, any number of times, by simply turning the tap on and off, and replenishing the reservoir.

Messrs. Maw, Son and Thompson will supply the apparatus, and have had the drawing printed in their illustrated instrument catalogue, but, by mistake, with the name of Bird instead of Birch.

GEORGE BIRCH, M.R.C.S., etc., Lower Clapton.



GENERAL COUNCIL
OF
MEDICAL EDUCATION AND REGISTRATION.

SESSION 1887.

Thursday, May 12th, 1887.

Mr. MARSHALL, President, in the Chair.

Address to Sir Henry Acland.—Sir WILLIAM TURNER moved that the following address to Sir Henry W. Acland, K.C.B., be approved and signed by the Council:

"To SIR HENRY WENTWORTH ACLAND, K.C.B.

"We, the members of the General Medical Council, desire to express to you on your retirement from the Presidential Chair, to which you were elected in July, 1874, our warmest thanks for the invaluable services which you have rendered as President during the past thirteen years.

"We would record that you have with singular devotedness applied yourself to the service of the Council, and that you have conducted its business with a dignity, courtesy, and impartiality which have secured for you the confidence, regard, and affection of its members.

"We would also recall the fact that you have been a member of the Council since its establishment by Parliament in 1858, and that your action during that long period has had for its object the improvement of medical education, the elevation of the status of the medical profession, and the establishment and maintenance of harmonious co-operation between the Council and the several medical authorities of the United Kingdom.

"We would also express the hope that you may, in your retirement, have the enjoyment of your well-earned leisure."

Dr. QUAIN seconded the motion, which was agreed to.

Assistant Examiners for the Apothecaries' Society.—The debate on Mr. Brudenell Carter's motion was then resumed.

Dr. HUMPHRY said the question was one of carrying out the provisions of the Act of Parliament which the Council was called upon to administer. After referring to the various arguments which had been brought forward, he said there was one ground, and one only, upon which the Medical Council could venture to refuse compliance with the request of the Apothecaries' Society, and to go before the Privy Council in this matter, and that ground was that it would be injurious to the interests of the public, because they were convinced that a proper and adequate examination in medicine, surgery, and midwifery could not be instituted at the Apothecaries' Society by aid of the Council. Had they any sufficient ground for making such a statement? If so, they might go to the Privy Council with a clear conscience and with the certainty that they would be upheld; but if they went on any other ground they would not be listened to for one moment.

Mr. COLLINS said no matter what might be their private opinions upon the subject, they were bound to take the words of the Act, and to express their opinions upon them. In the year 1815, when the Apothecaries' Act came into force, it was well known to Parliament that the apothecaries of England kept open shop and supplied medicines to patients. They were entitled to do so, and their Act not only permitted but actually compelled them to examine their Licentiates in the science and practice of medicine. It was, therefore, going in the very teeth of the Act for the Council to say that the Society of Apothecaries ought not to be perpetuated as a medical institution, because it was a trading body. He pointed out that even in the charter of the University of Aberdeen there was nothing to prevent its licensees from selling medicines, and it was quite possible that the young man who sold Dr. Struthers his medicine at Blackfriars had the diploma of the University of Aberdeen in his pocket.

Sir WILLIAM GULL said that since they met on the previous day he had taken an opinion on the question of the discretion given to the Council, and he was told this, that the Government never went into the grounds of discretion if exercised *bonâ fide*. The whole question was, Was it desirable that they should have an Apothecaries' Hall? He did not think it was. Why had the College of Surgeons such a high reputation over the whole civilised world? It was this, that they went through the Hunterian Museum to get their diploma and all that was associated with it. They did not go to an apothecary's shop to get their diploma. Then we heard about giving drugs, were drugs necessary for the recovery of a sick man? When the Royal Prince of England was ill of typhoid fever, how many doses did they think he had? Not four. The real question was how should they set free the profession of medicine in England from the trammels of the past. Medicine was once given even for fractures. It was the law of nature to get a man well, and it was his duty as a physician to find that there were no hindrances in the way of the exercise of those natural powers by which the patient recovered. It was not drugging and prescriptions; he wanted to get his profession clear of that. The Colleges of Physicians and Surgeons in England would undertake to supervise and test the education of medical men, and that being so he contended that the existence of the Society was entirely unnecessary.

Dr. QUAIN protested against being considered as pretenders in professing to cure diseases by administering drugs. He had seen them of use in thousands of cases, and where they failed the fault lay not in the drugs, but in the diagnosis.

Mr. R. MACNAMARA said the Act of Parliament had itself disfranchised the Apothecaries' Society. It was there stated that, unless under certain conditions, the qualification granted by the Society of Apothecaries was not registrable, and the Medical Council was now called on to exercise their discretion as to whether they would put it in such a position that it should be registrable. That being so, was it *pro bono publico* that that something should be done? He thought that the Council would say it was not. If the Council went wrong the Apothecaries' Society had redress; but thoroughly impressed as he was that it would be a retrograde step in medical education, he most reluctantly gave his vote against these examiners being given.

Dr. GLOVER said Sir William Gull spoke against the continuance of the Apothecaries, but in his (Dr. Glover's) opinion his speech was not a speech against apothecaries, and not even against drugs, but a speech against physicians altogether and the whole medical profession. He resolved medical practitioners into men who were to go to the bedside and take an extraordinary and inhuman interest in the natural history of disease. He altogether objected to the spirit of Sir William Gull's speech, especially to his summary statement that drugs were a sham.

Sir WILLIAM GULL said he never said anything of the kind.

Dr. GLOVER said he was glad to hear that correction. He found in the attitude of the Colleges at that moment an additional reason for granting the prayer of the Apothecaries' Society. The profession knew very well that for many years he was one of a number of persons who tried to diminish the number of corporations, but he was quite prepared by a legislative process to bring about that reduction. The Legislature did not see fit to cut off the corporations, and therefore he declined to be the executioner of an old corporation which one of the Colleges mentioned by Sir William Gull brought into existence; if it was to be disestablished it should be by the act of the same Parliament which had called it into existence.

Dr. CHAMBERS supported the motion, believing that the existence of the Apothecaries' Society was necessary, in order to meet the requirements of the public.

Dr. MCVAIL thought that the object sought by Sir William Gull and others would best be attained by the Medical Council itself becoming a great examining body, or responsible for all medical and surgical examinations. There was nothing in the Act to show that Parliament intended to extinguish the Society of Apothecaries. Whatever might have been the intentions of Sir Lyon Playfair, the Council was bound to act on the words of the statute itself. The past history of the Apothecaries' Society was an honourable one. The reports of visitors were as favourable to the Society as to the other bodies visited. But whatever might have been the case in the past, in the future the examination of the Society would be the examination of the Council. The final examination would be absolutely in the keeping of the Council, and the examiners would be independent of the Society if the Act was to be carried out in its entirety. He had no doubt that if the Medical Council refused the application the Privy Council would itself appoint examiners. The present step was one of the most serious steps ever taken by the Council, and he hoped that it would not refuse the application that had been made in order that it might carry out the spirit and intention of the Act of Parliament.

Dr. KIDD agreed that, if the Council appointed examiners, it would be responsible for the examinations. But was the Council prepared to accept that responsibility? The Council was asked to set up an examining body under its own control, which would be a competing body with the College of Physicians and the College of Surgeons; and that was a state of things greatly to be deprecated. If the Medical Council refused the application, the matter would go before the Privy Council; and if the Privy Council directed the Medical Council to appoint examiners, the responsibility would be taken off the shoulders of the latter.

Dr. HERON WATSON maintained that the claims of the Society of Apothecaries were such as to command the favourable consideration of the Council. After all, the responsibility of the Council was not so great as had been suggested. The Council would have to appoint examiners; but, if the examination was not satisfactory, it could be reported to the Privy Council.

Dr. A. SMITH, in supporting the amendment, expressed his entire concurrence with the views propounded by Sir William Gull.

Mr. BRUDENELL CARTER, in reply, said it was a moral obligation on the part of members of the Council to fulfil their statutory obligations or retire from the position they occupied. As to the intentions of the Government, he would call attention to the statement of Sir Lyon Playfair to a deputation that waited upon him, to the effect that the clause was introduced specially for the protection of the Society of Apothecaries and the Apothecaries' Hall in Ireland, and possibly the Glasgow College of Surgeons. Stress had been laid upon the changes made in the statements in the medical journals with reference to the Society of Apothecaries. Those changes, however, were only an indication that the Society had improved its position in the estimation of the profession. An apothecary had long meant a medical practitioner as well as a dispenser of drugs. It was true that the Society of Apothecaries was a trading body; but the Licentiates of the Society were not a trading body in any sense, any more than the Prince of Wales was engaged in trade because he was a member of the Fishmongers' Company.

The amendment was then put and negatived, the numbers being—For the amendment, 9; against, 19; majority, 10. One member did not vote, and two were absent.

The debate was then adjourned.

Friday, May 13th.

Mr. MARSHALL, President, in the Chair.

Assistant Examiners for the Apothecaries' Society.—Mr. Carter's motion with reference to the Society of Apothecaries was put to the Council, and carried without further debate.

Mr. CARTER then moved that, in pursuance of the motion made on the previous day, Messrs. Makins, Walsham, and Andrew Clark be appointed assistant examiners to the Society of Apothecaries. He said that since the previous meeting he had conferred with the legal advisers of the Society of Apothecaries on the question raised by Dr. McVail as to whether the Council could appoint any other number of examiners than those applied for by the Society. It appeared that the words "on the application of such corporation" were a condition precedent to the exercise of any power by the Council; that the power of the Council could only be called into activity by the application of the corporations concerned, and, if that were so, it could not be said that the power exceeded the stimulus which called it into operation. On the application of the corporation it was in the power of the Council to assent or to refuse, but he did not think that the Council had power to appoint more examiners than were applied for. The Society of Apothecaries having already full statutory powers to grant a licence to practise medicine and midwifery, it appeared to be the intention of the Act to provide statutory powers to examine and qualify in surgery, and that that intention would be satisfied by the appointment of surgical examiners. He fully recognised the fact that under the terms of the Act the assistant examiners appointed by the Council would be authorised to speak to the Council with peculiar authority, and be in a position to say that the examination was not conducted in a satisfactory way, and then the Council would have power to intervene; in that way they would exercise a paramount authority, irrespective of their votes or numbers. It was manifestly desirable that a corporation conducting an examination under the Act should be placed in a position of absolute responsibility for the work which it undertook; and if, after a time, the work was not satisfactorily done, it might be the duty of the Council to report to the Privy Council that the examinations were unsatisfactory. He did not think it was necessary to discuss the matter from a purely legal point of view, but he would put it to the Council whether, as a matter of courtesy and practical wisdom, it would not be best to comply with the request of the body asking for assistance. The Society of Apothecaries would have absolute confidence in any gentleman appointed by the Medical Council, but examination was not an art that could be learned in a day. The Society had followed the recommendation of the Council in regard to their appointment of surgical examiners. Those gentlemen were doing the work to the entire satisfaction of the Society, and the Society asked that they should be confirmed in their position. It was quite understood that those gentlemen, if appointed by the Council, would have powers in excess of those of the ordinary members of the Board.

Mr. SIMON seconded the motion.

Mr. R. MACNAMARA said he had no personal acquaintance with the three gentlemen named, but he believed they had done good work and were thoroughly good surgeons. Mr. Carter had stated the result of his interview with the legal advisers of the Society of Apothecaries. He (Mr. Macnamara) attached very little value to lawyers' opinions. Lawyers and accountants stood very much on the same platform. If you went to an accountant, the first question he would ask was: "On which side do you want the balance brought out?" and, in like manner, a lawyer would inquire: "In what direction do you wish the opinion?" It was perhaps not put as coarsely as that, but it amounted to the same thing. Mr. Carter had stated that it was desirable that the responsibility for the examination should entirely rest on the body which he represented, and which conferred the qualification. What then became of the Medical Council? Was it not responsible under the Act for the conduct of the examinations which conferred the qualification to practise? The Society of Apothecaries having approached the Council and asked for the appointment of examiners, it was, he considered, in the power of the Council to appoint any number of examiners it thought fit. The Act distinctly stated that "it shall be the duty of the examiners to maintain the standard of efficiency in medicine, surgery, and midwifery." He (Mr. Macnamara) considered himself a very good surgeon, but he had only delivered two women in the course of his life, and how could he be expected to report on examinations in midwifery? Clearly there ought to be an examiner, responsible to the Council, who could assist at the midwifery examination, and report upon it. The same observation applied to surgery and medicine. It would be impossible for the inspectors of the Council to be present at all the examinations, but the examiners would be present at them all, and they would be both inspectors and reporters. He proposed that the subject be remitted to the Executive Committee, which he thought was the best body to discharge the duty. The Society of Apothecaries could approach the Committee and make any suggestions as to the persons to be appointed, and he was quite sure that the Committee would take any such suggestion into its most careful consideration. He concluded by moving:

"That it be remitted to the Executive Committee to appoint, under Section 5 of the Medical Act of 1886, assistant-examiners in medicine, surgery, and midwifery, to assist at the examinations conducted by the Society of Apothecaries in London, and to fix the amount of remuneration to be paid such examiners by the Society of Apothecaries."

Dr. PETTIGREW seconded the amendment.

Mr. SIMON said that no mention was made in the motion of the subject of remuneration, but he was quite willing that an addition should be made which would include that subject. He thought that the best arrangement to make would be to accept the existing arrangements of the Society of Apothecaries from July 1st next, and if Mr. Carter would modify his resolution accordingly, he (Mr. Simon) would cordially concur in it. He differed entirely from Mr. Macnamara as to its being the intention of the clause that the Council should appoint all sorts of examiners. It was absurd to suppose that it was the intention of Parliament that the Council should overwhelm the Society of Apothecaries with an *embarras de richesses*; the intention was that the Council should supplement a recognised deficiency in the examining powers of the corporation.

Dr. DUNCAN asked Mr. Simon to state his opinion with regard to the clause quoted by Mr. Macnamara.

Mr. SIMON said that the clause evidently contemplated a variety of cases, and no doubt the word "respectively" ought to have been introduced. It was, he thought, evident that a surgical examiner was not expected to secure excellence in the midwifery examination, or the midwifery examiner in the surgical examination. Each had to deal with efficiency in his own subject. There could be no doubt, he thought, as to the meaning of the clause. If the College of Surgeons had assistant examiners in medicine, these examiners would see to the excellence of the examination in medicine but not in surgery; that would be out of the province of the assistant examiner, but it would be within the province of the inspector.

Sir WILLIAM TURNER called attention to the words of Subsection 2, Section 5, "and for that purpose the assistant examiners should have such powers and perform such duties in the conduct of the examinations as the General Council may from time to time prescribe."

Mr. CARTER said he thought that Mr. Simon's suggestion provided the best way of dealing with the case, and he would accept the amendment if modified in the way proposed.

Sir WALTER FOSTER could not vote for Mr. Carter's resolution, because he was afraid that it would place the Council in a dangerous position for the future. The action they were about to take in a grave

matter of that kind would become a precedent, and the question, therefore, ought to be approached with great deliberation. He regarded the Council as the supreme body for the regulation of medical examinations, and he could not allow a body that came to it asking it for continued existence to dictate the method in which the Council should proceed. The resolution asked for the appointment of three examiners specially named, so as to have their position rendered legal. That was outside the function of the Apothecaries' Society. The clauses attacked were drawn and passed with the intention of enabling the Council to keep in existence a body which was excluded from combination with other bodies. The Act gave the Council discretionary power to appoint any number of examiners they thought fit, with the view of making any body that might be left out in the cold complete in itself. It was not contemplated that the Council was to send to the Apothecaries' Society additional examiners in medicine and midwifery, because that examination was already admitted on the *Register*, and recognised as a proper examination. There was no necessity to interfere with what they had already declared to be right and proper, but it was necessary to interfere in the department in which the examination ought to be made complete. He could not, therefore, consent to Mr. Carter's resolution, and he thought that the wisest course would be to refer the matter to a committee. He could not accept Mr. Macnamara's amendment, because it contemplated a thing which the Act did not contemplate, namely, the appointment of examiners in three subjects. He could accept an amendment like that which was to be proposed by Dr. McVail, because he thought it was desirable to proceed with deliberation and caution. He thought that the debate should be deferred for a while, in order to give the Executive Committee an opportunity to bring up a report on the subject.

Dr. PETTIGREW said he did not think that by appointing additional examiners in surgery only the Council would be fulfilling its duties. It was the duty of the examiners to maintain the standard of efficiency in medicine, surgery, and midwifery.

Dr. MCVAIL said he thought that the best way of getting out of the difficulty would be to appoint such a committee as was indicated in the motion of which he had given notice. The Act stated that certain universities were still able to hold a qualifying examination, but with regard to other bodies, it assumed that they were unable to hold a qualifying examination singly, and it therefore provided for joint examinations. But, in the event of any body not being able to enter into combination, the Act practically said that it might join with the Council, and the examiners appointed by the Council had actually the power of controlling the examinations. It was not a question of inspection. They were now in the position of forming a union with the Apothecaries' Society exactly as the College of Surgeons might have formed a union with it had it chosen to do so. The men sent by the Council were put precisely on the same footing as the men who would be elected by the Royal College of Surgeons, but they were to be responsible not for surgery merely, but for medicine, surgery, and midwifery. That was the express provision of the Act of Parliament. They were now at the beginning of a new era, that of State examination in medicine. It was of no use to say that the Act was badly drawn; the duty of the Council was to carry out its provisions. Mr. Carter by his proposals was in reality doing one of the worst things he could do for his Society. He had got the Society joined with the Medical Council, and he ought to be proud of that conjunction, and the Society ought to have the full benefit of it. To do as Mr. Carter suggested would be to make a perfect farce of the whole idea of conjoint boards. The best thing would be to postpone the discussion until they knew really where they stood.

Mr. CARTER said that, with the permission of the Council, he would withdraw his motion in favour of the amendment proposed by Mr. Macnamara. When that amendment was brought forward as a motion, however, he should vote against it in favour of an amendment to be proposed by Sir Walter Foster.

Sir WILLIAM GULL said the Council had decided that the Apothecaries' Society was to have a qualifying examination, and the Council was asked to help them to such powers as might enable them to carry out that examination. Dr. McVail, however, had suggested that the Council itself should become an examining board, and appoint examiners in all sorts of subjects. He was reminded of an old English saying: "Why make your bridge much wider than the flood?" The Apothecaries' Society could not examine in surgery, and it naturally came to the Medical Council for the necessary powers. Dr. McVail would no doubt endeavour to show that the powers given by the Act extended to the limits of all space, affecting the movements of all the heavenly bodies. It appeared to go back to the beginning of creation, and to extend to the very end. With his old friend Benjamin Disraeli he said, "Thank God we are not governed by logic." The responsibility of the Council was limited to the appointment of the particular examiners required. They were to be responsible to the Council, and to do their duty well. Dr. McVail had said that the Council was responsible for the entire examination. He would no doubt say next that the Council was responsible for the issues of life and death. Their duty simply was to help in a liberal spirit the gentlemen at Blackfriars. Let them behave liberally to those gentlemen, and give them the assistance they needed. Mr. Carter's motion was well drawn, and he should vote for it.

Dr. LEISHMAN said he heartily supported the amendment of Mr. Macnamara. Mr. Simon had stated that in taking up a position hostile to the Society of Apothecaries, the Council was guilty of disrespect and discourtesy towards it. He (Dr. Leishman) should be sorry to be a party to anything that was disrespectful or discourteous, but it would be remembered that in supporting the motion passed on the previous day he had distinctly stated that he could not support it unless he believed that the Council could appoint any number of examiners that it saw fit according to the Act of Parliament—not any number of examiners that the Apothecaries' Society might choose to nominate. The examiners proposed in the motion were distinguished surgeons eminently qualified to discharge the functions of examiners, and Mr. Carter asked the Council to appoint them as its own examiners and as co-examiners with the Board of the Society of Apothecaries. Their duty would be to secure the maintenance of a standard of efficiency in medicine, surgery, and midwifery; not one word, however, of the examination in medicine and midwifery would they ever hear. That surely would be an evasion of the plain words of the Act of Parliament as interpreted by the plainest common-sense. It had been contended that it was the duty of the Council simply to make sure that there was a good surgical examination, and that the Council should be content with what its inspectors might hereafter tell it as to the nature of the examinations in the other subjects. The inspectors, however, had a very different duty to discharge from those of the assistant examiners under the Act. Their visits would be few and far between, but the supervision exercised by the examiners was intended to be a constant one. He thought that Mr. Macnamara's amendment ought to be adopted, but his support of that amendment would not debar him at a future stage from supporting the proposal of Dr. McVail. He was distinctly of opinion that the examiners to be appointed should be responsible to the Council for every detail of the examination.

Dr. HAUGHTON felt bound to vote against both the motion and the amendment. He could not vote for the motion because he did not think it was at all authorised by the Act that the examiners should be named by the corporation applying for assistance. Again, there was no guarantee given as to what subjects the examiners, if appointed, would examine in. He was strongly of opinion that, under the only possible construction of the Act, the Council had a right to appoint examiners not only in surgery, but in midwifery and in medicine.

Dr. HERON WATSON said the "appointed day" was near at hand, and there was but little time to make the requisite arrangements. If the matter was to be sent to a committee, when was the committee to report? And when the committee had reported, the Council would find itself in the same position as before. It would be far better for the Council itself to go into committee on the subject, in order to avoid further delay. It had adopted that course in considering the question of the conjoint scheme, and it could not do better than follow that precedent. The matter would then be brought to a conclusion, and the requisite examiners could be appointed without any difficulty. The Council had power to appoint as many examiners as it thought fit; and the object to be attained was to render the examination equivalent to the examinations held by other bodies, or, in the language of the Act, "to make it an examination which should be a qualifying examination under the Act." When the additional examiners were appointed the Society would be converted into an examining board capable of giving a certificate qualifying for registration. It would be the duty of the assistant examiners to inspect the examinations, and to see that they were such as to test a man's capacity for practising medicine, surgery, and midwifery. In addition to that, it would be the duty of the inspectors to see that the requisite standard was maintained. It was a mistake to suppose that there was any intention of casting a slur upon the gentlemen who had been named. The Society had applied for certain persons to be appointed, and in so doing they had gone beyond their powers. The examinations at present carried on by the Society of Apothecaries were somewhat different from those carried on in other parts of the kingdom. There was a primary examination, and there was a final examination consisting of two parts. The primary examination was upon the first

Wednesday in each month. The first part of the final examination was on the second and fourth Wednesdays in each month, and the second part was on every Wednesday and Thursday. Was it to be expected that the three gentlemen who were appointed would attend the examinations week after week during the whole year? When the Council appointed the examiners it should insist that no such burden should be placed upon their shoulders. The examinations ought to be at stated periods, and at such intervals as would correspond to the commencement and conclusion of the summer session. If he was rightly informed, the sum charged for examination was six guineas. Was that to be continued? He would appeal to the Society whether it would not be becoming in it to cease to compete upon such terms with other bodies for the granting of diplomas. He supported Mr. Macnamara's amendment, holding himself free to support Dr. McVail's proposal or any other.

Report of Pharmacopœia Committee.—Prior to the short midday adjournment, Dr. QUAIN proposed, and Mr. MACNAMARA seconded, the adoption of the Report of the Pharmacopœia Committee, which was unanimously agreed to.

Assistant Examiners for the Apothecaries' Society.—On the resumption of the debate with reference to the Society of Apothecaries

Mr. CARTER asked permission to withdraw his motion, which was granted.

Mr. Macnamara's amendment then became the substantive motion, namely, "That it be remitted to the Executive Committee to appoint under Section 5 of the Medical Act, 1886, assistant examiners in medicine, surgery, and midwifery, to assist at the examinations conducted by the Society of Apothecaries in London; and to fix the amount of remuneration to be paid to such examiners by the Society of Apothecaries." This motion, however, was also withdrawn in favour of the following amendment by Dr. McVail, which thereupon became the substantive motion: "That a committee be appointed to consider, with such legal assistance as they may require, the number of assistant examiners that should be appointed to the Society of Apothecaries of London, the subjects in which they should respectively examine, and the powers and duties which they may consider the Council should by order prescribe, and also as to the remuneration of the assistant examiners, and to report to the Council at its present session." To this the following amendment was moved by Sir WALTER FOSTER: "That pending a full consideration of the best mode of carrying out the resolution of the Council to appoint assistant examiners to the Society of Apothecaries under the provisions of the Medical Act, 1886, and subject to further resolutions of the Council under Section 5 of the Act, the Council hereby appoints Messrs. Makins, Walsham, and Andrew Clark as assistant examiners for the Council for one year from July 1st, 1887."

Sir W. FOSTER, in moving the amendment, said he did not see how the Council could, during the present session, get all the information it needed for its guidance. The matter was a very serious one. Whatever might have been the intention of Parliament, it appeared to be contradicted by the words, and the Council might be compelled to take steps which the framers of the Act never intended. It might be necessary to consult the legal adviser of the Council, and even to take a still higher opinion, and perhaps to confer with the leading officials of the Privy Council. The gentlemen he had named would not be appointed at the dictation of the Society of Apothecaries, but because they knew them to be members of the profession, and because of the suggestion of the Society that they were proper persons to carry on the examination. If a period of twelve months was provided for, the Council would have time to get the best legal advice as to the mode of procedure. By appointing examiners for a year to complement those of the Society of Apothecaries, they would not be prejudging the question in any way, and he thought that that would be the most desirable course to adopt.

Dr. QUAIN, in seconding the amendment, said that the proposed delay would enable the Council to take the necessary legal advice, and also to see what the Society of Apothecaries was doing, and what it proposed to do. It would be impossible to present a satisfactory report on the subject during the present session of the Council. He did not see, however, how there could be any difference of opinion on the question of whether the Council should appoint examiners in all subjects or in one only. If the College of Physicians of Dublin had not united with the College of Surgeons, would the Medical Council think of dictating to them who their examiners in medicine should be? They would not tolerate it for a moment. And yet the Act applied as much to the College of Physicians as to the Society of Apothecaries. All that the Council had to do was to supply the deficiency of the Society of Apothecaries in regard to surgery.

Dr. LEISHMAN asked if Sir W. Foster would object, instead of nominating three examiners in surgery, to nominate one in surgery, one in medicine, and one in midwifery.

Sir W. FOSTER said that would prejudge the question.

Dr. LEISHMAN said that Sir W. Foster's proposal prejudged the question the other way.

Sir W. FOSTER said there was nothing in his amendment which prejudged the question, the gentlemen appointed being styled "assistant examiners" simply.

Dr. A. SMITH objected to Sir W. Foster's amendment, which he considered to be a mere substitute for the original motion of Mr. Carter. It was necessary that the Council should have complete control over the examinations, which it would not have if the amendment were adopted.

Dr. BRUCE supported the amendment. Whatever might have been intended by the Act, the words required that the assistant examiners should see that the standard of efficiency in surgery, medicine, and midwifery was maintained; but it was impossible that the Council should take the responsibility of all the examinations. Looking at Subsections 1 and 2 of Clause 5, he thought it was clear that the duty of the Council was to supplement the existing Board by assistant examiners. The amendment only proposed the continuance of the present arrangement for a year. Next year the Council could take the whole thing into its hands, and see that the examinations were such as to make the qualification what it ought to be.

Sir WILLIAM TURNER said it was clear from the elaborate discussion that had taken place on the question that it involved points of the utmost difficulty, which, as laymen, the members of the Council were not competent to solve. Dr. McVail's motion, perhaps, with some little modification, was, he thought, the best that could be adopted. An important statutory function was imposed upon the Council, and it required authoritative guidance in its exercise. For that purpose he thought it best to refer the matter to a committee. The Council needed also some advice as to the meaning of Subsection 2, giving the assistant examiners such powers and requiring them to perform such duties in the conduct of the examinations as the Medical Council might from time to time prescribe. Sir Walter Foster's amendment, he thought, was in reality a proposal to shirk the difficulty for a year.

Sir W. FOSTER said that, so far from shirking the difficulty, he was so conscious of the gravity of the case that he wanted more than two days to consider it.

Sir WILLIAM TURNER said that it certainly shirked the difficulty for the present session, and it gave the sanction of the Council for another year to the Society of Apothecaries to conduct its examinations precisely as they had been conducted. That was one important reason why he could not vote for the amendment. It did not simply put off the appointed day until June 30th, but till some time in the year 1888, and there was nothing in the Act which gave them power to do that.

Dr. QUAIN: Supposing the College of Surgeons of Dublin or of London was in the same position as the Society of Apothecaries, would you think it necessary to appoint examiners in surgery as well as in medicine?

Sir WILLIAM TURNER: It is not what I consider necessary, but what is the interpretation of the Act of Parliament.

Dr. HAUGHTON said that the Council had not yet considered the answers of the Attorney-General, the Solicitor-General, and Mr. Muir Mackenzie, to the two questions which had been sent to them. He thought that an authoritative verdict had been given on the question at present under discussion. The question had been raised as to whether, if the University of Edinburgh or any other university were to give a degree in medicine, another in surgery, and another in midwifery, the holder of those three degrees would have the right to have his name inserted upon the *Register*. As far as he could read the answer of the legal gentlemen who had been consulted, it was in the affirmative. "Such evidence can be afforded, either by the diploma or diplomas granted by the combined body, or by a certificate, or in any other manner that the General Council or Branch Council may consider satisfactory." It was the duty of the Council to say whether they approved of that interpretation, and he presumed that, having consulted such eminent lawyers, they would come to the conclusion that the conjoined bodies or universities might send up diplomas or qualifications without a special certificate. The Apothecaries' Company was already qualified to give a diploma in medicine and midwifery, and the Council, in supplying an additional examination in surgery, put the Society in the position of a conjoint body, and not into the absurd position of a State examination in medicine—a higher position, perhaps, than that of any university in the land. By add-

ing surgery to the subjects of the Society of Apothecaries they would be able to give three diplomas, the production of which entitled their holders to be placed upon the *Register*. He thought that more time was necessary for the consideration of the subject, and he therefore supported Dr. McVail's motion.

Dr. McVAIL said that the point raised by Dr. Haughton was not at present before the Council.

Dr. HAUGHTON said that it would have to come before the Council during the present session, and instructions would have to be given to the Registrar respecting it. He had communicated with the authorities in Dublin, and the answer he had received was that it was considered absolutely in the power of the Council to give directions to the Registrars in the sense he had indicated. If that course was adopted the interpretation of Subsection 2 was unmistakable, that they were merely adding a third limb to the Apothecaries' Society.

Mr. SIMON said he did not pretend to be learned in the law, he only pretended to be a very careful reader of English, and he thought he could positively say that the Council would not be going beyond its powers in agreeing to the amendment. The assistant examiners would be appointed for a limited time only, and the Act of Parliament distinctly stated that the examiners were to be appointed "from time to time." According to his reading of the Act their duty was simply that of supplying a specific deficiency, and that appeared to him to be the common-sense view of the matter. The Apothecaries' Society could not qualify in surgery, and the most important substance of the new Act was to provide for that and similar cases of what had been called fragmentary qualifications, or what used to be called half-qualifications. Such qualifications had to be made whole by supplying what was deficient in the examining board. The Council had not a general commission to improve the examinations of the licensing bodies, except by an appointed agency, that of their inspectors, and the power of reporting, when needful, to the Privy Council. Some gentlemen had confounded those two things which had to be done in different sections of the Act. The hesitations that had been expressed were, he thought, of the nature of straw-splittings. If it was desirable that the Council should go into what might be called the legal subtleties of the case, and obtain legal advice, be it so; but in that case what Dr. McVail desired to refer to a committee would be within the ordinary function of the President and the Executive Committee, who could take the matter into consideration, obtain legal opinions, and, if necessary, communicate with the Privy Council and the law officers of the Crown on the subject. It would certainly take a considerable time, and could not be completed within a moderate number of days, even if within a moderate number of weeks, because at every turn new legal subtleties might spring upon them. He accordingly supported Sir Walter Foster's amendment that the Council should provisionally accept the arrangements in force at the Society of Apothecaries, and for a limited time appoint the gentlemen named to be assistant examiners, subject to the further resolutions of the Council under Section 5 of the Act. With that provision, everything was reserved. If there was a reference at all, it ought to be to the Executive Committee, with power to take legal advice on any point that appeared ambiguous.

Dr. DUNCAN, in supporting Sir W. Foster's amendment, said he did so on the grounds mentioned in Sir W. Foster's speech, but not on those mentioned by the other speeches made in support of the amendment, from which he differed entirely, especially from Mr. Simon's.

Dr. GLOVER said he yielded to no man in his admiration of Mr. Simon, and he was sorry to differ from him on the present occasion. The Medical Council had an awkward habit of putting off its duties. The business ought to be settled during the present session. If the duty was postponed, as Mr. Carter had suggested, the Society of Apothecaries would be living for twelve months in a state of suspended animation.

Mr. CARTER said that on the part of the Society of Apothecaries he cordially supported Sir W. Foster's motion. It appeared to him that the Council was in this position, that, having sanctioned a certain principle, every member of the Council would be desirous of bringing that principle into effective operation at the earliest possible moment, and to overcome as speedily as might be any difficulties that stood in the way. Dr. Heron Watson had called attention to the weekly meetings of examinations, to the fees paid, and other matters of that kind. All those things, however, were settled by the Act of Parliament, but it was the intention of the Society, as soon as it was relieved from its present condition of suspense, to apply to Parliament for an Amendment Act which would enable it to bring its arrangements more in harmony with the requirements of the present day. The Society had applied to the Privy Council to bring some power with regard to fees into the Act of 1886, but the Privy Council had refused. All those matters would have to be dealt with, and they would depend to some extent upon the number of candidates that might present themselves for examination. If the Society was enabled to hold its examinations at less frequent intervals, and if the number of candidates did not materially increase, possibly a smaller number of examiners might be competent to do the work. The question of remuneration, too, would obviously depend upon the amount of work that would be required. He had been pained to hear suggestions as to "dictation" on the part of the Society of Apothecaries, for certainly no such thing was intended. He had omitted to put in his motion that the appointments were to be for a year only. If Sir Walter Foster's amendment were adopted, there would be ample time to consider the difficult problems requiring solution, and to allow the ordinary work of the Society to be conducted in a smooth and uninterrupted manner. As to the doubts expressed in reference to the sufficiency of the examinership, he thought they might have some foundation if the body were a new one, but it should be remembered that it had licensed 9,000 persons, and had been doing its work for seventy years, and that on the first intimation from the Council it had put three eminent hospital surgeons upon its staff of surgical examiners.

Dr. STRUTHERS said that they now saw the fruits of the College of Physicians refusing to absorb the Apothecaries' Society. Sir Walter Foster's amendment had been characterised as a side wind; he would rather call it an apothecaries' bridge.

Dr. HERON WATSON: Blackfriars Bridge.

Dr. STRUTHERS said it certainly prejudged the question. He had no personal objection to any of the gentlemen named; one of them was a graduate of his own University, and had been his co-examiner in anatomy for many years. With regard to Mr. Simon's interpretation of the words of the Act, that gentleman's talent appeared to consist very largely not in solving but in making legal difficulties.

Sir WILLIAM TURNER said that the Council had no choice in the matter. It was obvious that the examiners were to take cognisance of medicine, surgery, and midwifery, and he wanted no lawyer's opinion upon the subject.

Mr. CARTER said that the three surgeons named were Licentiates of the Society of Apothecaries, and Mr. Makins was also a Licentiate of the Royal College of Physicians of London.

Dr. KIDD said if there was anything recognised amongst those who took an active part in conducting examinations in the present day, it was that they should be conducted by experts; but it appeared from the report of the visitors that the examiners at the Society of Apothecaries were not bound to examine in any special subjects, but undertook the examinations for periods of five weeks each.

Mr. CARTER said that that method had been altered on the recommendation of the Medical Council.

Dr. KIDD said he was happy to hear it. It was the duty of the Council to see that the examination was conducted as directed by the Act, and they would be neglecting their duty if they allowed such a system to go on for a single day.

Dr. McVAIL said that if the amendment were carried, the Council would be simply perpetuating the Society of Apothecaries for a year, just as it would have been if the Act had not passed. If the amendment were passed, the result would be that when there was the least difference on the part of any combining body in England, Scotland, or Ireland, it would lead to the split up of the whole thing, and to the appointment of more examining bodies. If a committee were appointed, it could report during the present session, and recommend some course for the adoption of the Council.

A show of hands was then taken for the amendment, and it was negatived, 12 voting for it and 14 against it.

It was then proposed that the debate should be adjourned, but on a show of hands being taken this was negatived. On the names being taken down, however, the motion was found to be carried by a majority of one.

The Council then adjourned.

Saturday, May 14th.

Mr. MARSHALL, President, in the Chair.

London School of Medicine.—A communication was received from the London School of Medicine for Women asking the Council, in the event of their appointing examiners in surgery for the Society of Apothecaries, to urge upon the Society the duty of recognising the School, and admitting its students to the benefit of the Society's examination and licence.

Sir WILLIAM GULL stated that at a future meeting he would call attention to the subject.

An interim report was received from the Income and Expenditure Committee. It stated that:

"The average annual income of the General Council and of the three Branch Councils for the past five years has been as follows:

	£	s.	d.
General Council	5,679	5	0
English Branch Council	4,730	14	3
Scotch Branch Council	1,933	0	2
Irish Branch Council	1,276	4	0

"The average yearly total income (£8,877 14s. 6d) of all the Councils for the past five years, as set forth in Table (A), includes, however, exceptional receipts from the new edition of the *Pharmacopœia*. If the average yearly amount (£881 6s. 4d.) which has resulted from the sale of the *Pharmacopœias* during the past five years be deducted, the average annual income of the General and three Branch Councils amounts altogether to £7,996 8s. 2d., that is to say, in round numbers to about £8,000. The Committee are unanimously of opinion that there are at present no available means of increasing the income of the Council. It has been suggested that a registration-fee might be charged for medical students, but the Committee are unanimously of opinion that this cannot be recommended. The expenditure of the General Council and of the three Branch Councils during the past five years is set forth in Table (B), which shows the annual averages during that period to have been as follows:

	£	s.	d.
General Council	5,679	5	0
English Branch Council	875	19	10
Scotch Branch Council	444	9	1
Irish Branch Council	487	2	7

"The expenses and balances of receipts of the three Branch Councils for the past five years are set forth separately in detail in Table (C).

"It results, therefore, that the annual average of the total income for the past five years of the General Council and of the three Branch Councils—excluding, for purposes of comparison, the exceptional receipts that have, as before stated, arisen in connection with the *Pharmacopœia*—amounts to £7,996 8s. 2d., and that the expenditure has been £6,789 14s. 8d., thus leaving a yearly balance in favour of income of £1,206 13s. 6d. These yearly balances have, from time to time, been invested in consols by the Branch Councils, thus giving now a total of investments of £38,169 17s. This expenditure will, at the present rate of payment, be increased by the enlargement of the Council, and the increase will probably be to the extent of nearly one-fourth, the proportion in which the number of Council members will be ultimately increased. It becomes thus manifest that if the income and expenditure of the enlarged Council are to be brought into satisfactory relation, and if there are no means available for increasing the income, it will be necessary to reduce the expenditure. Among the items of expenditure, those which are attendant upon the meetings of the General Council have received the serious consideration of the Committee, and the Committee are of opinion that this expenditure should be reduced, but they defer making any proposal as to the method of effecting such reduction until the report by the Procedure Committee shall have been considered by the Council.

"May 12th, 1887. G. M. HUMPHRY, *Chairman.*"

Opinion of Counsel on Combined Examinations.—The following case and opinion were read with reference to the combination of medical bodies:—

"You are requested to advise on behalf of the General Medical Council (*a*) Whether the sanction of the Council is necessary in order to enable the medical bodies mentioned in the Act of 1886 to combine for the purposes of the examinations therein mentioned, or whether such bodies can combine without the sanction of, or reference to, the Council. (*b*) If counsel are of opinion that the medical bodies can legally combine without the sanction of the Medical Council; whether the General Council or Branch Councils, through their Registrars, can or should require evidence, either from the diploma or diplomas granted by such combined bodies, or from a certificate to accompany such diploma or diplomas, that the person receiving it or them has passed the necessary qualifying examination, and that the examination has been conducted by bodies who have legally combined under the Act of 1886.

"OPINION.

"(*a*) In our opinion, the sanction of the General Council is not necessary in order to enable the medical bodies mentioned in the Medical Act, 1886, to combine for the purposes of the examinations therein mentioned, and such bodies can combine without the sanction of or reference to the General Council. (*b*) In our opinion, the General Council or the Branch Councils, through their Registrars, can and should be satisfied that each person who presents himself for registration has passed the necessary qualifying examination, and that the examination has been conducted by bodies who have entered into a valid combination, under the Act of 1886, s. 3. Such evidence can be afforded either by the diploma or diplomas granted by the combined bodies, or by a certificate, or in any other manner that the General Council or Branch Council may consider satisfactory.

"R. E. WEBSTER.
"EDWARD CLARKE.
"The Temple, March 30th, 1887. "M. MUIR MACKENZIE."

New Zealand and the Medical Act of 1886.—An Order of Council was read declaring that Part II of the Medical Act of 1886 shall apply to New Zealand.

Public Health Diploma of University of Aberdeen.—The regulations of the University of Aberdeen for the diploma in public health were laid before the Council.

International Conference on Hygiene at Vienna.—A communication was received from the Science and Art Department with regard to the International Conference on Hygiene to be held in Vienna in September. It stated that, should the Council desire to nominate a delegate, the Secretary of State for Foreign Affairs had expressed his willingness to furnish his name to the Austro-Hungarian Government.

Assistant Examiners for the Apothecaries' Society.—The adjourned debate on Dr. McVail's motion was then resumed.

Dr. MCVAIL accepted a suggestion of Mr. Simon to insert in the motion the words "or collectively," so that the clause might read "the subjects in which they should respectively or collectively examine."

Dr. HAUGHTON moved as an amendment the omission of the words "a committee be appointed," and the insertion in their place of the words "the Executive Committee be requested." He maintained that the Council had no power to thrust on the Society of Apothecaries an examination in medicine and midwifery. The right principle had been adopted by the Council, but the members appeared to be hopelessly divided on the best mode of carrying it out, just as the judges would be in trying to treat a case of fever. It was necessary to take legal advice on the subject, and perhaps to consult the Privy Council; and that certainly could not be done during the present session of the Council. The best course was to refer the question to the Executive Committee. It would, moreover, be creating a sort of Frankenstein—a kind of State-examining board, giving degrees even higher than those of the universities.

Dr. MCVAIL objected to remitting the question to the Executive Committee—a small body, whose members were mostly of one way of thinking; but he had no objection to include all the members of that body in the committee to be appointed under his motion.

Dr. HAUGHTON said that in that case he would not press his amendment.

Dr. HERON WATSON protested against postponing the matter to another session, and urged that the Society of Apothecaries should be aided by the appointment of such examiners as the Council thought fit, in order to make the board an efficient one.

Dr. QUAIN moved that the Council at once proceed to appoint examiners in accordance with the resolution already passed. He said there was no pretence for saying that the Council could do anything more than appoint examiners in surgery. The Society had only applied for such examiners, and the Council could only act according to the words of the statute, "on their application."

Mr. B. CARTER, in seconding the amendment, said the intention of the Act of Parliament was as clear as a pebbly brook, although its language in many respects was defective and involved. He therefore had no sympathy with the imaginary difficulties that had been raised by many speakers. It required that no men should be admitted to the profession without passing a qualifying examination in its three main branches, and it called on the Council to render such an examination practicable where it was not practicable at present by supplying assistant-examiners. The peculiarity of the case was that the Society of Apothecaries had the examiners, although they had not the statutory right, and he asked the Council to recognise the existing position of things. He had consented to a reference to the Executive Committee because that committee consisted of gentlemen accustomed to transact business expeditiously, and he knew that when they went to the law officers of the Crown the contention that was raised about the responsibilities the Council was going to assume would be scattered to the winds. He could not, however, agree to a reference to a committee *ad hoc.*

Mr. SIMON thought it would be better that the Council settled the matter itself without reference to a committee. The simplest way of dealing with it would be to invite Mr. Muir Mackenzie to attend and answer any questions that might be put to him. They could then proceed step by step, and so finish the whole thing. Some of the

members dissented from the principle of what they were doing, but if his suggestion were adopted they would be able to take part in the consultation, while the appointment of a committee would cause great embarrassment. If they did it in full Council, with the assistance of the legal adviser, they could not go very wrong, and much time would be saved; but if the question were referred to a committee to take exhaustive legal advice, it could not be concluded during the present session of Council.

Sir WILLIAM TURNER supported Mr. Simon's suggestion as a practical way out of the difficulty.

Dr. HERON WATSON suggested that Mr. Simon should propose that the Council resolve itself into Committee in order to comply with the request of the Society of Apothecaries. The sooner that was done the sooner they would enable the Society to discharge its new functions.

Sir WILLIAM GULL said he could see his way clearly enough, and he had no doubt that it was his duty to help to appoint assistant examiners, and in his opinion it should be done at once. Any plain Englishman could in five minutes do all the work which had taken the Council three days.

Dr. DUNCAN said the Council had settled that they were to proceed with the appointing of the assistant examiners, but underlying all other questions was the point whether the Council were to take charge of the entire examination by the Apothecaries, or whether they were merely to do what the Act of Parliament prescribed, namely, to appoint assistant examiners. Dr. McVail and his supporters hoped to establish the principle that the Apothecaries' Society should in future exist merely virtually and not in reality, and that as an examining board it should be a mere creature of the Council. That was not the intention of the Legislature in passing the Act. Assistance was not required in anything but surgery, and he would suggest the following amendment:

"That the assistant examiners about to be appointed are to be such as are required by the Apothecaries' Society with a view to the completion of the Board of Examiners under the Act of 1886."

Mr. MACNAMARA thought the difficulty might be solved if the legal adviser attended at two o'clock next Tuesday. If once the construction of the Act was settled, the whole thing would go smoothly.

Dr. Quain's amendment was, by permission, withdrawn, and the following, moved by Mr. SIMON, and seconded by Dr. QUAIN, was substituted for it:

"That the Council will on Tuesday next, at two o'clock, consider in Committee the steps by which to give effect to its resolution of May 13th for the appointment of assistant examiners to the Society of Apothecaries, and that a request be made to Mr. Muir Mackenzie and Mr. Farrar for their attendance on that occasion."

Dr. STRUTHERS thought that the amendment was not incompatible with Dr. McVail's motion.

Dr. MCVAIL said that, in the interest of the Apothecaries' Society, the matter should be quickly settled. The committee he proposed could prepare for the discussion on Tuesday and lay before the legal advisers the difficulties which the Council felt and which they were incapable of settling. By motion after motion Mr. Simon was obstructing the inquiry, showing that he was determined that his view of the duties of the Council should prevail.

Mr. SIMON considered that such personal imputations were contrary to the practice of the Council. He clearly showed that he was not pressing any personal view by asking that the legal advisers of the Council might attend.

Dr. MCVAIL said he did not impute any personal motive to Mr. Simon, who was acting simply in accordance with what he considered to be his duty, but he was conducting his opposition with a persistency that was unusual in the Council. If they declined to proceed with the matter until Tuesday, they must either have an absurdly long session or be called together again before June 30th.

Dr. BANKS considered Mr. Simon's suggestion as the only practicable way of getting out of the difficulty.

Dr. KIDD thought that the different views which had been expressed might be harmonised. The Council had by the statute to fix the time of the examinations, to decide how the standard of education and examination was to be maintained, and to consider the powers and duties to be conferred on the examiners, as well as the remuneration. It would probably harmonise the views of the Council if Dr. McVail's motion down to the words "remuneration of the assistant examiners" were adopted, with the addition of the words, "and to report on Tuesday at two o'clock, when the legal adviser should be requested to attend."

Dr. BRUCE considered that the proper thing to do was first to settle the legal question, and then, if necessary, a committee might be appointed.

Dr. GLOVER said he had watched the proceedings of the Council for many years, and he wished to ask the older members if they ever remembered a question of such magnitude being settled without the previous appointment of a committee to draw up a careful statement. After the friendly vote of Thursday he appealed to Mr. Carter to give the members credit for wishing as well to the Society as he did himself.

Mr. SIMON said there were groups in the Council taking fundamentally different views of a point of law, and a committee could not settle the difficulty. After hearing the opinion of the legal adviser, however, each member would be able to satisfy himself as to the construction of the law.

Dr. STRUTHERS thought the motion and amendment might be worked in together. There were other points to be considered besides that of the construction of the law, and a committee might prepare a statement to be placed before counsel, so that on Tuesday a decision might be arrived at.

Dr. QUAIN, replying to Dr. Glover's question, said the usual method had been for the President to communicate to the solicitor what was the question under discussion, and no doubt that course would be followed on the present occasion.

Mr. Simon's amendment was carried—21 voting for it, and 5 against it.

It was then put as a substantive motion.

Dr. KIDD moved, and Dr. PETTIGREW seconded, the amendment which the former gentleman had mentioned in his speech; but on a division it was defeated by 18 to 8.

The PRESIDENT said he should regard it as his duty in the present crisis to prepare a case and a series of questions to be submitted to the lawyers before Tuesday. He congratulated the Council on the failure of Dr. McVail's motion, because the words "such legal assistance as they may require" involved an exceptional and altogether wrong power. If appointed, the committee would have been able to go outside the legal advisers of the Council, and obtain opinions from any part of the kingdom.

Mr. Simon's motion was then carried *nem. con.*

The Apothecaries' Hall of Ireland.—Mr. COLLINS moved:

"That inasmuch as the King and Queen's College of Physicians and the Royal College of Surgeons in Ireland had declined to comply with the request of the Medical Council of February 16th, 1887, that the Colleges should combine with the Apothecaries' Hall of Ireland for the purpose of holding qualifying examinations in accordance with the provisions of the Medical Act, 1886, and the Governor and Court having made application to the Medical Council for the appointment of assistant examiners, the Council do now appoint such examiners accordingly."

He said the Council had already on its minutes full particulars of the case, and therefore it would be unnecessary for him to enter into much detail, but there were certain portions of the statement by the College of Physicians which were calculated to produce an erroneous impression upon the members of the Council. The Act of 1791 was "for the more effectually preserving the health of His Majesty's subjects, for erecting an Apothecaries' Hall in the city of Dublin, and regulating the profession of an apothecary throughout the kingdom of Ireland." It could not, therefore, be true, as contended by the College of Physicians, that the licence of the Apothecaries' Hall was only a licence in pharmacy. At that time, too, the College of Physicians was just as much opposed to the apothecaries of Ireland practising medicine as they were at the present day. In one part of their statement it was said that in 1791 there were no apothecaries in Ireland, properly so called, but the Act was passed "at the request of the Master, Wardens, and commonalty of the Corporation of Apothecaries, and other apothecaries of the city of Dublin," so that there were apothecaries there at that time. He acknowledged that the Hall mixed up trade with profession, but the Irish Parliament intended that they should do so. There was not a single word in the Act confining the appellant examiners to materia medica, pharmacy, and chemistry, nor were they precluded from examining in the practice of medicine. The legal opinion of Sir Joseph Napier was that it would be an anomaly to give the appeal to the College of Physicians without expecting them to examine in the practice of medicine. As a board of examiners, they had to institute examinations for apprentices and assistants, and then the final examination for licence to practise as an apothecary. An apprentice and assistant, if three times rejected, had an appeal to the General Council of the Hall, but an apothecary was allowed to appeal to the College of Physicians, who had to examine him to see that he had not been unfairly rejected in pharmacy or in the practice of medicine. It had been stated that the College of Physicians had not declined to comply with the request

of the Hall, but their offer to do so was based on impossible conditions, and in his opinion that was the same thing as declining. For three or four years, efforts were made to bring about a conjoint scheme in Ireland, and the three corporate bodies finally did not combine because the two Colleges could not agree upon pecuniary matters. When the visitors from the Council attended at the examinations, the Hall came off just as well in the reports as any of the other bodies, and was complimented by the visitors on the examination in midwifery.

At four o'clock, the debate was adjourned till Monday.

Monday, May 16th.

Mr. JOHN MARSHALL, President, in the Chair.

Pharmacy Acts Amendment Bill.—A communication from the Parliamentary Bills Committee of the British Medical Association, requesting the attention of the Council to the provisions of the Pharmacy Acts Amendment Bill, was received and entered on the minutes.

Practical Education Committee.—This Committee was appointed in February last, to ascertain two points—(1) to consider the best methods of increasing the practical element in medical education, as by a system of limited pupilage with a registered practitioner; and (2) by insistance on more clinical, therapeutical, and pathological teaching and work in medical schools. The Committee now reported that it had had under its consideration the large proportion of rejections at the final examinations of many of the medical authorities, together with other facts which seemed to show a deficiency in the knowledge of practical subjects on the part of candidates. It was of opinion that such deficiency was, primarily at least, the concern of the medical authorities, and that they were best able to make such changes in their curriculum and examinations as would effect the improvements to be desired in medical teaching. On the question of pupilage, and at what period of the curriculum it could be most advantageously taken, the Committee suggested that a period of not less than six months should be spent in personal pupilage—not necessarily six consecutive months, but six in all; and that they should be taken during the long vacations and after the examinations in anatomy and physiology had been passed. On the subject of school and hospital study the Committee drew the attention of the Council to a resolution which had already been before it, and which stood recorded on page 140, vol. xxiii, of its Minutes—namely:

That it be a recommendation to the licensing bodies that, in admitting candidates to professional examinations, care be taken that attendance on courses of study prescribed for any second professional examination shall qualify only if made after the first examination has been passed, and generally that attendance prescribed for any subsequent examination must be made after passing the immediately preceding examination.

In conclusion the Committee offered the following suggestions:—

1. That the Council, with a view to increasing the practical elements in medical education, should circulate a recommendation to the examining bodies to make the practical part of examination in medicine, surgery, and midwifery more extended and more searching than it has hitherto been; so that it may form a surer guarantee of the possession by the candidate of the required skill for the safe practice of the above-named arts. 2. That it be a recommendation to the examining bodies, in their clinical examinations, to give more prominence to the recognition and treatment of common diseases; and to facilitate the extension and searching power of these examinations; the "final" or qualifying examination should be divided into two parts, of which the ultimate should consist mainly of clinical work and the personal application of diagnosis, prognosis, and treatment to set cases, leaving to the penultimate the testing of the knowledge possessed by the candidate of the other subjects contained in the curriculum of school-work. 3. That it be also recommended that there should be an interval of at least twelve months between the two parts of the final examination, and that this interval should be passed in such occupations as will involve the charge of patients under the supervision of competent persons recognised by the authorities of the school at which the candidate has been educated, which authorities should be responsible for the genuineness of the evidence afforded of the candidate's diligence and care of such number of cases of medicine, surgery, and midwifery as the examining body shall deem expendient.

On the motion of Mr. WHEELHOUSE, seconded by Dr. STRUTHERS, the report was received and entered on the minutes.

Procedure Committee.—The report of the Procedure Committee appointed to consider under what rules of meeting and procedure and with what appointment and authorisation of standing committees and sub-committees the Council may best provide for the regular, effective, and economical discharge of its statutory duties, was received and entered on the minutes.

Visitation and Inspection of Examinations.—The Executive Committee now presented an interim report, stating that it had passed the following resolutions:—

(*a.*) That it be an instruction to the inspectors on the present occasion that they give special attention to the quality of the practical examinations, and to the sufficiency of the means and appliances which are in use in them for testing the qualifications of candidates. (*b.*) That each inspector, within the period of twelve months from the date of his commission, inspect, as regards his subject matter, the qualifying examinations of all the licensing bodies, and report thereon to the Council.

Adjourned Debate on the Apothecaries' Hall of Ireland.—Mr. COLLINS, resuming his speech in support of the appointment of assistant examiners, said the Irish apothecaries were incorporated in the reign of Queen Elizabeth, and that after 300 years of corporate existence unconnected with any general drug establishment, it was considered desirable, in consequence of the difficulty of procuring pure medicines, that the Corporation of Apothecaries should be empowered to provide and superintendent a national institution for the preparation of reliable medicines in addition to their function of regulating the profession of an apothecary throughout the kingdom of Ireland. In 1791 an Act was passed founding the Apothecaries' Hall, and that Act contained provisions for the education and examination of apprentices, assistants, and licentiate apothecaries. Before 1791 the advice of the apothecary was just as valid as that of a surgeon or physician. Acts of Parliament passed in 1817 and 1823 stated that persons might be admitted into hospitals on the certificate of a certified apothecary or surgeon, and defined the term "medical officer" as meaning a physician or surgeon or apothecary. In 1841 two important Acts were passed, one providing that "no person shall be received into or detained in any lunatic asylum without a medical certificate of two physicians, surgeons, or apothecaries," so that the certificates of two apothecaries were equally valid with those of the certificates of any two physicians or surgeons. The second Act provided that "no ship carrying a certain number of passengers is to proceed on voyage without having on board a physician, surgeon, or apothecary." If the examinations of the Apothecaries' Hall, as was said by the College of Physicians, was confined to pharmacy, materia medica, and chemistry, could it be said that its licentiates would be capable of signing a certificate to consign a person to a lunatic asylum or to take charge of a passenger-vessel or of a dispensary? He referred to the scheme that had been voluntarily entered into between the three bodies as being a recognition on their part of the apothecaries as a medical corporation. Since the passing of the Act of 1886 they had had from the College of Physicians in Ireland the greatest possible hostility, as the Council would easily understand from the tone of the statements in Council, and the letters that had appeared in the JOURNAL. Since 1791, the Hall had passed about an annual average of forty men, and, taking the population into consideration, that was about an equal proportion to those licensed by the English Society. During the whole period the Irish Hall had licensed about 4,000 apothecaries, while in the same period the London Society had passed 22,000. With regard to its curriculum and examination, the Apothecaries' Hall had no occasion to be ashamed. The Medical Act of 1886 placed all the various bodies in a new position. The Apothecaries' Hall must come up to that position and undertake the responsibilities, and his colleagues were fully prepared to do so. If they failed to rise to their responsibilities they would deserve to die. The College of Physicians stated that the number of Licentiates in Dublin was only 387, but at the present time there were between 900 and 1,000 in Ireland. Then, if the number were only 800, that would be one-third of the medical practitioners of Ireland. He hoped that the Council would do the same justice to the Apothecaries' Hall of Ireland as they had done to the Apothecaries' Society of England.

Dr. BRUCE seconded the motion. The General Council had recognised the English Society, and in all fairness they ought to recognise the Apothecaries' Hall of Ireland. If the Council withdrew from the Apothecaries' Hall the right of granting further degrees, the retrospective effect upon the men who had already taken the diploma must be considered. Professor Struthers had had a great deal to say in reference to the interests of the public in connection with the Apothecaries' Society of England, but he (Dr. Bruce) held that Parliament itself was the guardian of the interests of the public. If it had been intended that the Apothecaries' Hall should be extinguished, the extreme functions would not have been delegated to the Medical Council.

Mr. TEALE said he felt very strongly that the Council had no other course open to it but to accede to Mr. Collins's motion. They had been urged on legal grounds to refuse to recognise the Apothecaries of Dublin, but as far as the legal question had been settled by the Council, it had been settled in a contrary way. By the Act of 1858 they had been obliged to register the Licentiates of the Hall, and the Act of 1886 had not disturbed that arrangement.

Dr. STRUTHERS said he entirely agreed with what had been advanced in favour of Mr. Collins's proposal, but what surprised him was that no notice had been taken of the legal difficulty which stood in the way of the Council. The Council were threatened with an action at law by the Dublin College of Physicians. The letter from that College gave notice that, in the opinion of the President and Fellows of the King and Queen's College of Physicians, Ireland, the

Apothecaries' Hall of Ireland was not a body authorised to grant a diploma in respect of medicine. Opinions had been obtained from the highest authorities in Ireland on both sides of the question. In their statement the College of Physicians said "that the Apothecaries' Hall had no legal power to grant a licence to practise medicine is shown by the opinion obtained in 1863 by the Poor-law Commissioners for Ireland, who submitted for their own information the following query to eminent counsel—whether the Apothecaries' Hall, Ireland, has powers and is competent under its charter, or by usage, or by any common law or right, or otherwise, to grant a diploma or licence to practise medicine." The opinion was: "We think that the Apothecaries' Hall, Ireland, has no power to grant a diploma or licence to practise medicine." The Apothecaries' Hall had themselves obtained on May 3rd an opinion from Mr. Purcell, Q.C., who said: "I am clearly of opinion that the General Medical Council has no power to exclude the holders of such diploma from registration." The legal question raised by the College of Physicians was that the Apothecaries' Hall was not competent under the new Act to grant diplomas "in respect of medicine." The Judicial Committee of the Privy Council was the proper body to give a decision on the subject, and he would therefore move:

"That, inasmuch as a legal question has been raised by the King and Queen's College of Physicians in Ireland as to the right of the Apothecaries' Hall of Ireland to have assistant examiners appointed for them, to enable them to separately hold qualifying examinations within the meaning of the Medical Act, 1886, or to enter into a combination with the Royal College of Surgeons of Ireland for that purpose, the General Medical Council decline to appoint assistant examiners for the Apothecaries' Hall unless directed to do so by the Privy Council."

Dr. DUNCAN asked whether the Society of Apothecaries laboured under any legal disability—whether, for example, its Licentiates were refused admission to the army, the navy, or the poor-law boards of Ireland?

Mr. COLLINS said that those bodies recognised the licence of the Society as a qualification in medicine.

Dr. A. SMITH said the statement of Mr. Collins was misleading. The mere licence of the Society of Apothecaries was not held to be sufficient.

Mr. COLLINS: Because it requires the licence of the College of Surgeons with it, and the College of Physicians is in the same position.

Dr. KIDD, in seconding the amendment, said the Council had to consider two points: first, as to whether the Council was empowered to grant assistant examiners to the Apothecaries' Hall; and secondly, whether it could register men presenting a diploma or certificate, or having passed a qualifying examination held by the College of Surgeons of Ireland and Apothecaries' Hall. It was necessary to obtain a legal decision upon the question. The Act of Parliament showed how that opinion could be obtained. If the Council refused to appoint examiners, the Privy Council itself could be appealed to, and might make the appointment. An analogy had been drawn between the two bodies in England and in Ireland; but there was really no analogy between them. The English Apothecaries were distinctly directed in the Act to examine in medicine, but no such direction was given to the Irish Apothecaries. Mr. Collins had argued that, because they were not distinctly prohibited in the Act from examining in medicine, they could legally do so. On the same ground, they might examine in Sanscrit. The Act stated that the Company was to be "a company of judicious apothecaries, well skilled in preparing and compounding medicines," not a word being said about the practice of medicine. The Act of 1886 had laid down certain definitions, and the question was whether the Irish Apothecaries' Hall came within those definitions. In the opinion of Lord O'Hagan and Mr. Justice Lawson, the Apothecaries' Company were not entitled to grant a diploma in medicine; and if they were not, it was impossible for them to combine with a surgical corporation. The College of Surgeons entered into combination with the King and Queen's College of Physicians to hold a qualifying examination, and they used every effort in their power to induce the College of Physicians to take in the Apothecaries. On the receipt of the communication from Sir Henry Acland, the College of Surgeons indicated to the College of Physicians two courses that appeared to be open: to take the Apothecaries into the original combination, or, allowing that to remain as it was, to form a second combination between the College of Surgeons and the Apothecaries. The College of Physicians, in reply, altogether refused to take the Apothecaries into the original combination, and raised the question whether it was in the power of the College of Surgeons to enter into the second proposed combination. Thereupon the College of Surgeons took legal advice, and were informed that they had full power, if they pleased, to enter into the second combination, assuming that the Apothecaries had power to enter into combination with the College of Surgeons. That of course raised a doubt in the minds of the College of Surgeons, and they sent a communication to Apothecaries' Hall stating the nature of the legal advice received, and adding that they were prepared to entertain a communication from Apothecaries' Hall in reference to a combination on being satisfied that Apothecaries' Hall had power to enter into combination within the meaning of the Act. A resolution, however, was passed by the Apothecaries' Hall stating that they had used their best endeavours to enter into combination, but that they had been refused admission both by the College of Physicians and the College of Surgeons. He was sure that Mr. Collins, who had moved the resolution, did not mean to state anything that was not true, or that was likely to mislead the Council, but the statement was certainly a mistake, since the College of Surgeons had expressed their willingness to combine if the Apothecaries' Hall had the power to enter into a combination. If they obtained judgment from the Privy Council that they had that power, the College of Surgeons was quite ready to receive a proposal from them, and relieve the Council from the difficulty as to the question of examiners.

Mr. SIMON said the contention of the Irish authorities that the Apothecaries were not authorised to grant a diploma in respect to medicine was, he maintained, a wrong contention. He would refer to the Act of 1858, the preamble of which stated that it was expedient that persons requiring medical aid should be able to distinguish qualified from unqualified practitioners; and one of the enactments of the Act was that a person holding the licence of the Apothecaries' Hall was qualified in the sense of the preamble. He appealed to the common sense of the objectors whether it was not a medical qualification. The question to be considered was: was the Apothecaries' Hall a medical corporation? In order to decide that they must look to the definitions at the end of the Act, where they found that the expression "medical corporation" meant "any body in the United Kingdom other than a university for the time being competent to grant a diploma or diplomas conferring on the holder, if he has passed a qualifying examination, the right of registration under the Medical Act." The licence of the Apothecaries' Hall, if the examination of the Hall had been integrated in the manner provided by the Act, was a qualifying examination—of that, he presumed, there was no doubt.

Dr. STRUTHERS: If it was "competent"—that was the word he dwelt on.

Mr. SIMON said the word "competent" was settled by the previous Act. It was "competent" to grant a diploma which conferred the rights of registration, but subject to the condition imposed in the earlier part. The case was in a nutshell. A medical corporation told them that it had failed to make a combination that would enable them to give a qualifying examination, and applied to the Council to appoint assistant examiners under the Act of Parliament. They could not legally refuse the application.

Dr. LEISHMAN complimented Mr. Collins on the manner in which he had submitted the case of the Apothecaries' Hall to the Council. The first question to be determined was, whether the Apothecaries' Hall was a medical corporation. There could be no doubt that it was, and the Council, therefore, had no right to refuse their request. They had no alternative but to repeat in the case of the Apothecaries' Hall of Ireland the course that they had seen fit to adopt in the case of the Apothecaries' Society of England, and appoint assistant examiners.

Sir WILLIAM TURNER thought it might facilitate coming to a right conclusion if the points about which there was a difference of opinion were referred to the legal adviser, who would attend to-morrow.

Dr. MCVAIL said there could not be the least doubt that the Act of 1858 made the Licentiates of the Dublin Society of Apothecaries medical practitioners, entitled to recover fees and to sign death-certificates. The Society was therefore in the position of a medical corporation, and he could not see any ground for doubting what was the duty of the Council in this case.

Mr. B. CARTER said he believed that no medical man was permitted to enter the public service unless he was qualified both in medicine and surgery. When at Nottingham, he had taken the trouble to find how many Licentiates of the Apothecaries' Hall in Ireland were in practice there, and he found there were three, one of whom held no other medical qualification. In 1873 that gentleman became a Licentiate in Midwifery of the Royal College of Surgeons of Ireland, and in 1877 he obtained a qualification in medicine from the Apothecaries' Hall in Dublin, no doubt for the purpose of getting the appointment he held as "formerly surgeon to Her Majesty's prison in Nottingham." That was a proof that the licence of the Apothe-

caries' Hall had been recognised as conveying a right to practise medicine, and that the licence of the College of Surgeons made up the double qualification.

Dr. BANKS regretted that he could not support Mr. Collins's motion. He could not vote for giving examiners to the Apothecaries' Hall until he was satisfied that the legal question was in their favour.

Mr. MACNAMARA moved the adjournment of the debate.

Dr. HERON WATSON seconded the motion, which was agreed to, and the Council then adjourned.

Tuesday, May 17th.

Mr. JOHN MARSHALL, President, in the Chair.

THE Council on assembling resolved itself into Committee, and sat with closed doors.

Assistant Examiners for the Apothecaries' Hall, Ireland.—The adjourned debate on the Apothecaries' Hall of Ireland was resumed by

Mr. R. MACNAMARA, who said that none of the Acts referred to by Mr. Collins said one word about the Hall examining in medicine. At present there were in Dublin two Universities and the Royal Colleges of Physicians and Surgeons in Ireland all prepared to qualify for the Medical Register, and they were asked now to set up a fourth body in that city. He contended that the Apothecaries' Hall in Ireland was not entitled to give a licence in medicine. In 1881 the Irish Medical Association, including all ranks of the profession, stated before the Medical Acts Commission that the Apothecaries' Hall of Ireland could not be considered to be anything more than a body for the licensing of pharmacists, and the Dublin Branch of the British Medical Association stated that they considered that the Apothecaries' Hall of Ireland could not be regarded as a medical authority inasmuch it was a trading company. Mr. Collins argued that the public services recognised their qualifications, but they also recognised non-registrable qualifications, such, for instance, as the licence of the Coombe Lying-in Hospital or the Rotunda, and those hospitals might just as well call upon the Council to recognise and register the qualifications which they gave in midwifery. He supported most earnestly the proposition laid before them by Dr. Struthers.

Dr. QUAIN said that Parliament had by a large majority decided to maintain all existing bodies by whom degrees or diplomas were granted so long as the course of examination was satisfactory, and among those bodies was included the Apothecaries' Hall. If the Council did not consent to recognise the Apothecaries' Hall they must be prepared to take the responsibility, for the Privy Council would be guided by law and not by sentiment.

Sir W. FOSTER said that the Society of Apothecaries, Dublin, was a body which, up to the present time, had had the power to put a man on the Register, and it was not the province of the Council to deprive any body of that power. As the Apothecaries' Hall had not been able to combine, it was the duty of the Council to try and fill up the deficiency by appointing examiners.

Sir WILLIAM GULL said that it was *pro bono publico* that he should vote against granting the demand of the Apothecaries' Society.

Sir DYCE DUCKWORTH said he also should vote against the request.

Dr. HUMPHRY said that the Apothecaries' Hall was an examining body which existed under as good authority as any in the United Kingdom: it was capable of giving a licence under the Act of 1858, and it had its representative on the Medical Council. It appeared to him that the Apothecaries' Society of Ireland was in precisely the same case as the Apothecaries' Society of England, and what had been done with regard to the latter Society it was incumbent upon them to do for the Irish Society.

Dr. Struthers's amendment was then put and negatived, 21 voting against it and 8 for it. The original motion by Mr. Collins was then put and carried by 21 to 8.

Assistant Examiners for the Apothecaries' Society.—Mr. B. CARTER moved:

"That the assistant examiners to be appointed for the Apothecaries' Society of London be examiners in surgery."

This was seconded by Mr. SIMON and agreed to.

Mr. B. CARTER moved, and Mr. SIMON seconded:

"That these assistant examiners be three in number."

Dr. MCVAIL said there was no intimation of the number of students to be examined, or of anything connected with the mode of carrying out the examination.

Mr. SIMON said that during the last two years the Society had found that three were sufficient, and it was content to go on appointing and paying that number.

Dr. M. DUNCAN asked what was the number of candidates.

Mr. B. CARTER said the candidates numbered 250 annually, and examinations were held weekly.

Dr. MCVAIL did not think that three surgical examiners would be sufficient for 250 candidates. He would move, as an amendment:

"That the Council, instead of proceeding to adopt this motion, postpone action until it has received information regarding the methods of carrying out the details of the examinations, written, oral, clinical, and operative, and the numbers of students on the different days of examination throughout the year."

Dr. KIDD seconded the amendment.

Dr. BRUCE said that, until the report of the inspectors was received, it would be prudent not to interfere too much with the Apothecaries' Society.

Sir W. FOSTER considered that the whole of the discussion was a waste of time. Surely three examiners were sufficient to examine five candidates a week.

Dr. STRUTHERS said that he would offer no further opposition to the Apothecaries' Society getting whatever they wanted.

Dr. HERON WATSON said that it seemed to him that the number of examiners proposed was altogether insufficient to carry out the examinations satisfactorily.

MR. B. CARTER said that the authorities of the Society felt that they were now entering upon a new condition of things, in which it was quite impossible to foresee what number of students would present themselves. For the last three years the surgical part of the examination had been conducted by gentlemen of the highest character and the most acknowledged ability, who had not found themselves overworked. He proposed, therefore, that for the present, for the space of a year, the examination should be conducted pretty much as it had been, although it was highly probable that the surgical examiners would feel it necessary to examine in surgery over a large field of knowledge, and possibly with greater strictness than before. If the number of candidates was increased, or even maintained, no doubt the Society would come to that Council, probably at its next meeting, to ask for a further addition to its strength. He assured the Council that no effort should be wanting to maintain a high standard of professional knowledge in every department. The proposal he was authorised to make was a tentative one, and next year he pledged himself to place before the Council full information with regard to the demands made upon their examiners, the way in which those demands had been met, and any requirements which might be rendered necessary.

The amendment moved by Dr. McVail was then put to the Council, and negatived by 21 votes against 5.

The original motion was then put to the vote and carried.

The PRESIDENT said the next proposition, moved by Mr. Carter and seconded by Mr. Simon, was:

"That each of these examiners be paid an annual stipend of £100."

Dr. MCVAIL asked if they supposed they could get men capable of doing this work who would give themselves up to it for that pay. He would move that this question of remuneration be postponed.

Sir WILLIAM GULL thought they were going upon very unprofessional ground in saying that it would be a sham to get men to examine for £100 a year in surgery. He should vote for the motion.

Dr. STRUTHERS thought the proposition a very handsome one.

Dr. HAUGHTON entirely concurred with Sir William Gull's idea that the honour of the position had to be considered.

Mr. CARTER said it was the intention of the Apothecaries' Society to apply to Parliament for power to increase its fees. It was the feeling of the Society that that which might be an adequate payment for a licence in one department of the profession was an inadequate payment for a licence in all parts of the profession.

Dr. McVail's amendment not having been seconded, the motion was put to the vote and carried by 20 votes against 1.

Mr. CARTER then moved:—

That, for a term of one year, from the 1st of July next, and subject to the orders of the Council, Messrs. Makins, Walsham, and Andrew Clark be appointed by the Council to be surgical examiners to assist the Apothecaries' Society of London in its conduct of its qualifying examinations.

Mr. SIMON seconded the resolution, which was agreed to.

London School of Medicine for Women.—Sir WM. GULL said a communication had been received from the London School of Medicine for Women, petitioning the Council that, in the event of their appointing examiners in surgery to the Society of Apothecaries of London, they would urge upon the Society the duty of recognising this school, and admitting its students to the benefits of the Society's examinations and licence. They could not do what they were requested to do by the School of Medicine for Women, but he thought it would be right to pass a motion such as he had provided:—

That although the General Medical Council has no power to urge the duty of examining candidates, male or female, upon any examining body, and therefore cannot do more than receive the communication from the London School of Medicine for Women (*Minutes*, vol. xxiv., pp. 214, 215), the Council are not unwilling to express the hope that examining bodies may, if within their powers, find it desirable to admit women on equal terms with men to the privilege of examination.

Dr. BANKS seconded the motion.

Dr. QUAIN expressed his regret that the Council were again asked to appeal to the Colleges, looking at the certainty that that appeal would be rejected. In Dublin there were a number of bodies which did receive women, and that was surely sufficient. He moved the previous question.

Mr. SIMON seconded the previous question, which was put to the Council and carried.

The Council then adjourned.

Wednesday, May 18th.

Mr. JOHN MARSHALL, President, in the Chair.

Registration of Foreign and Colonial Diplomas.—On the motion of Mr. WHEELHOUSE, seconded by Dr. STRUTHERS, it was agreed:

That the Executive Committee be empowered to take the necessary steps for carrying into effect the clauses of the Medical Act, 1886, relating to the registration of the diplomas of colonial and foreign practitioners, and that the Committee report to the Council from time to time their proceedings thereon.

Pharmacy Acts Amendment Bill.—The communication which had been received from the Parliamentary Bills Committee of the British Medical Association, requesting the attention of the Council to the provisions of the Pharmacy Acts Amendment Bill, was referred to the Executive Committee.

Sanitary Authorities and the International Congress on Hygiene.—Mr. MACNAMARA moved:—

That in compliance with the request contained in the last paragraph of the communication from the Science and Art Department, dated April 30th, 1887 (Minutes, vol. xxiv, pp. 229, 230), the names of the medical bodies which have authority to give registrable diplomas or certificates for proficiency in sanitary science, public health, or State medicine, be returned to the Science and Art Department as being "Genuine Sanitary Authorities," which might wish to send delegates to the International Congress on Hygiene.

Dr. HERON WATSON seconded the motion.

Sir DYCE DUCKWORTH said that the College of Physicians never sent delegates to such congresses, because the Government of the country was too stingy to pay the expenses.

Dr. GLOVER suggested that the General Medical Council might send a direct representative to the Congress.

Dr. HERON WATSON said all that was wanted by the Government was a list of the bodies.

The PRESIDENT said that if any delegate were sent by the Council he would have to pay his own expenses.

The resolution was agreed to.

Report of the Procedure Committee.—On the motion of Dr. HERON WATSON, seconded by Dr. PETTIGREW, the Council resolved itself into committee to consider the report of the Procedure Committee.

The following resolutions were arrived at:

That the General Council shall meet each year on the fourth Tuesday in May, and, if necessary, again on the fourth Tuesday of November, unless the President, for reasons of public emergency, should think otherwise, but, as provided by Section 9 of the Medical Act, 1858, meetings of the Council may be called at other times by direction of the President, or on a written requisition signed by eight members of the Council and addressed to the President.

That the Executive Committee shall consist of eight members of the Council, exclusive of the President; and of the eight members to be elected, four shall be chosen from the English Branch Council, two from the Scotch Branch Council, and two from the Irish Branch Council.

That the quorum of the Executive Committee shall be five.

That the Executive Committee shall, as a rule, hold four meetings in the year. These stated meetings of the Council shall be on the Monday before the fourth Tuesday of the months of February, May, July, and November.

That two new Standing Committees be appointed, one to be termed the Education Committee, which shall consider and report on all matters concerning preliminary general education and examination, concerning the registration of medical students, and concerning the course of professional study; the other to be termed the Examinations Committee, which shall consider and report on all matters connected with the professional examinations, and with the inspection and visitation of these examinations.

That the Education Committee and the Examinations Committee shall each consist of nine members, three from each division of the kingdom, with power to appoint a Chairman and Subcommittee; that these Committees shall prepare reports on such subjects as may be indicated to them by the Council at its sittings, or by the President at other times; and that the reports, when finally approved by the Committee, shall be presented to the Council at its meeting in May. That, in the fulfilment of these duties, the respective Committees shall have power, under the control of the treasurers, to print and circulate their reports among their members.

That the members of the Education Committee and the Examinations Committee shall be elected annually at the May meeting of the Council, on the nomination of Branch Councils.

That all the Committees of the Council, including the Executive Committee, be appointed annually at the meeting of the Council in May, or at the corresponding meeting as arranged in Chapter A.

The Council then resumed, and the resolutions passed in Committee were adopted.

Revision of Standing Orders.—It was resolved to delegate to the Executive Committee the revision of the standing orders so as to bring them into harmony with the resolution of the Council.

Visitation of Examinations.—Mr. MACNAMARA drew attention to the importance of appointing visitors to the examinations.

The PRESIDENT stated that the English Branch Council had passed a recommendation to the effect that the appointment of inspectors of examinations be postponed until the autumn session of the Council.

Mr. MACNAMARA said he had great hopes that examinations under the conjoint scheme between the College of Physicians and the College of Surgeons (Ireland) would be held in July. It was, therefore, desirable that the question of the appointment of inspectors should be settled to-morrow.

Registration of Graduates.—Sir WILLIAM TURNER moved:—

That the General Council instruct the Branch Registrars to register, after the appointed day prescribed by the Medical Act, 1886, graduates of Universities who have passed a qualifying examination in medicine, surgery, and midwifery, either on the production of a diploma or diplomas in respect of medicine and surgery, or on the production of an authorised list of such graduates, duly certified by the University.

Dr. HAUGHTON seconded the motion.

The resolution was agreed to.

Report of the Practical Education Committee.—On the motion of Mr. WHEELHOUSE, seconded by Dr. GLOVER, the report of the Practical Education Committee was referred to the Education Committee to be appointed during the present session of the Council.

The Council then adjourned.

Thursday, May 19th.

Mr. JOHN MARSHALL, President, in the Chair.

Apothecaries' Society.—The PRESIDENT announced that the legal advisers would be asked to furnish the Council with a *précis* of the opinions they had given with regard to the Apothecaries' Society.

The Late President.—The PRESIDENT said he had received a letter from the late President, Sir Henry Acland, acknowledging the receipt of the address which had been sent to him, and stating that during twenty-nine years it had been an equal privilege to learn from his colleagues and to serve with them in a complex task which was in several relations of vital importance to the nation. The great kindness displayed in the address would remain one of the chief treasures of his passing years.

The Appointed Day.—The REGISTRAR read a letter from the Clerk to the Privy Council:—"Sir,—I am directed by the Lord President of the Council to acquaint you, for the information of the General Medical Council, that the Lords of the Council yesterday passed an order for the postponing, until the 30th June next, the 'appointed day' named in the Medical Act, 1886." The communication was ordered to be entered on the minutes.

Election of Committees.—The Executive Committee was reappointed. A ballot was then taken for two additional members to the Committee, one from Scotland and one from Ireland, Dr. Heron Watson and Mr. Macnamara being elected. The members of the Business Committee, the Pharmacopœia Committee, the Dental Committee, the Finance Committee, the Education Committee, and the Examinations Committee were elected.

Financial Statement.—Dr. QUAIN announced that the funds of the Council were exhausted by the meeting in February, but the English Branch Council had sufficient funds to pay the fees of this meeting, and they would do so conditionally on the Scotch and Irish Branch Councils remitting at an early period the balance due J He therefore thought there would be no difficulty about the members of the Council receiving their cheques at the conclusion of the present meeting.

Devolution of Business.—Mr. SIMON moved:—

That the Council delegate to the Executive Committee to exercise the powers and discharge the duties of the Council, so far as the Executive Committee shall, in the absence of the Council, find necessary or expedient, except as follows:—(1) As to making representations or reports to Her Majesty in Council or to the Privy Council; (2) as to making general rules or recommendations; (3) as to deciding, under Section 29 of the Medical Act, 1858, whether any medical practitioner has been guilty of infamous conduct in a professional respect.

Dr. HAUGHTON seconded the motion.

The motion was agreed to after some discussion.

Assistant Examiners at the Apothecaries' Hall, Dublin.—On the motion of Dr. HAUGHTON, seconded by Mr. COLLINS, it was agreed:

(*a*) That this Council do appoint two assistant examiners to the Apothecaries' Hall of Ireland. (*b*) That these examiners do examine in surgery. (*c*) That, for a term of one year, from the 1st of July next, and subject to the orders of the Council, Sir William Stokes and Mr. Edward Hamilton be appointed. (*d*) That the fee to each assistant examiner at the stated quarterly examinations shall be five guineas. (*e*) That, in the event of any vacancy occurring among the assistant

examiners appointed by this Council, it be remitted to the Branch Council in the division of the kingdom in which the vacancy has arisen to appoint an *ad interim* examiner or examiners.

Inspectors of Examinations.—The Council then proceeded to appoint inspectors of examinations from a list submitted. The matter was discussed in the absence of strangers. On their readmission, the PRESIDENT stated that the inspector in medicine appointed for one year was Dr. Finlay; in surgery, Dr. E. H. Bennett; and in midwifery, Dr. A. H. F. Barbour.

Delayed Publication of Register.—Dr. GLOVER called attention to the fact that the *Medical Register* had not appeared till April 29th, so that one-third of the year was gone before it was published. In some former years the *Register* had appeared in February. It had never been so late as on this occasion. He had every reason to believe that the fault did not lie with their excellent Registrar, who took the greatest possible pains not only to have the work accurately, but promptly done; but, whoever was to blame, the fact was a very objectionable one, and he hoped in another year it would be remedied.

Dr. QUAIN said the explanation was to be found in the many changes required and the difficulty of bringing out so large a volume. There had been a certain delay in the Stationery Office. The Council had succeeded, with very great difficulty, in getting the Government to allow the Stationery Office to print it. For the book, as printed by Kelly, they paid 11s. 8d. a copy for 421 pages, but the Stationery Office printed the *Register* for this year, comprising 1154 pages, carefully read, at a cost of 5s. 3d.—the book, being nearly three times the size, was printed at half the price. The Government themselves used 2,000 copies, so that the Council was very much in their hands. It was an immense advantage to the Council to have these 2,000 copies circulated throughout the country, in courts of law, registries, police courts, and elsewhere. They were therefore very much indebted to the Government for what they had done, and they could not be too pressing in the matter, although they would not fail to represent how important it was that they should have it in fair and reasonable time.

Dr. BRUCE thought the motion might have a good effect on the Stationery Office.

The REGISTRAR said the *Register* some years ago came out much later than the average had been for the last ten years. There was more work in it considerably now than there used to be, and this year the *Register* had been delayed a little because when the revise was ready to be printed, a useful addition was suggested, namely, the dictionary headings, and it was necessary to see a further revise to insure that this was all done in proper form. He had tried various ways of expediting the appearance of the *Register*, but as the work was done under contract, he could not get the Stationery Office to carry it on with the same speed as it would be done if it were in the hands of their own printers, in which case, however, it would cost double as much.

Sir WILLIAM GULL, Dr. STRUTHERS, and Dr. MCVAIL all bore testimony to the admirable manner in which Mr. Miller did his work.

Dr. GLOVER said he had very carefully guarded himself in regard to the Registrar. No one was more sensible than himself, from many years' experience, of Mr. Miller's courtesy and enormous industry, but he was quite satisfied that the question he had brought forward was an important one.

Inspection of Examinations.—With reference to a notice of motion "that the Council take into consideration the interim report of the Executive Committee, and the suggestions of the Branch Councils in regard to the appointment of inspectors of examinations," Dr. STRUTHERS said he would withdraw the motion, only calling attention to one point. He thought there was no respect in which examinations were more deficient than in the quantity and amount of time given. He would merely suggest the reconsideration of that point. His object in giving notice was entirely accomplished by Mr. Macnamara's motion.

Foreign Dental Diplomas.—Dr. HAUGHTON had on the programme the following notice of motion:—

That British physicians and surgeons, holding foreign diplomas in dentistry, shall have the option of their names and titles being recorded either on the British or foreign lists at their own discretion, without being required to appear on both lists as if different persons, and that, in any case, their titles be recorded in decent Latin, and not in the "jargon" used in medical prescriptions.

Since giving notice he had found that the 1887 *Register* was exactly in conformity with the requirements of the Dental Act. He would, therefore, withdraw his motion.

The business of the session then terminated.

The PRESIDENT said he did not himself regret the time that had been spent, because many points had been settled. He congratulated the Council on having, as it were, remodelled its machinery in such a way as to secure greater advantages and greater economy.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 21st, 1887.

THE MEDICAL DRAMA: ACT THE THIRD.

THE General Medical Council, after sittings of a costly and protracted nature, at which many speeches inordinate in their length and wearisome in their repetition have been delivered, has arrived at the conclusion which we pointed out as foregone and inevitable. The resolution moved by Dr. Struthers asked the Council to stultify its previous resolution (moved by himself), which justly declared that it was a duty incumbent on the Colleges of Physicians and Surgeons of London to join the Apothecaries' Society in the conjoint examinations for licensing the general practitioners of England instituted by the Medical Act of 1886. It affected to meet the situation by victimising the only body not in fault, and by putting the knife to the throat of the only body in the country which has recognised its duty to the public and the profession, by instituting and assisting to institute prosecution of quacks; by protecting the public interests and guarding the public safety; and by effectually barring the way against the ever-impending flood of prescribing and visiting chemists. It further suggested that the London Colleges of Physicians and Surgeons, whose blindness and obstinacy had brought about such a deplorable state of things, should be rewarded for their ill-doing by receiving an unchecked monopoly, and by achieving by sheer force of determined egotism the full success which should be the meed only of public service and self-sacrificing generosity. It might have been thought that a series of propositions, self-condemned by such evident and plain considerations, might have been dealt with briefly, sharply, and without waste of time. The causes, characters, and cure of the ludicrous verbosity and oratorical extravagances of the General Medical Council are, however, a study by themselves, and one on which we propose shortly to enter. Meantime, we can only rejoice that at the cost of the valuable time of able and busy men, and at an outlay of professional funds which can ill, indeed, be spared, a rational result was tediously reached at the end of a most irrational discussion. Most of the speeches made were lamentably wide of the mark, and many can only be read, even in the highly condensed form in which we present them, with a smile. The elaborately diffuse and wrong-headed dissertations on the meaning in an Act of Parliament, of this sort, of the words "if they think fit," might of course have been saved by taking the opinion of the legal advisers of the Council. This would have replaced in less than five minutes the lengthy and valueless opinions of which so many individual members delivered themselves. The fanciful opinions of one member and another on the use of drugs in medicine or on the

origin of homœopathy might have been in place at a students' debating club, but it is rather hard that professional funds should be squandered so largely and such excellent brains wasted in the discussion of academic theories of this kind. Some notable speakers revelled in their favourite paradoxes, and seemed to think that this was the sort of stuff they were entitled to deliver themselves of at the expense of the professional funds entrusted to their keeping. On the whole the discussion reached the climax of diffuseness, irrelevance and paradox, and will intensify the dislike and irritation with which these long-winded and most costly debates are regarded by the profession. The sole subject of congratulation is that the only reasonable result was attained in the end, and that the very extravagance of this long-drawn oratory will tend, quickly we hope, to cure itself.

Some extraordinary opinions were enunciated during the discussion, and arguments which impress one chiefly by their strange want of sympathy with the needs and position of the English practitioner. Thus it was urged that little or no weight should be attached to the services which the Apothecaries' Society has rendered, and which alone it is in a position to render, in defending the public and the profession against the irruption of irregular practitioners and visiting chemists. Counter-practice, we were gravely told, would not be prevented—indeed, more than one speaker of the highest position went so far as say that he thought it a very good thing. Why, then, prevent every chemist and druggist who chooses to do so from undertaking a visiting and prescribing medical practice? With ironical inconsistency it was urged that the Apothecaries' Society, after being slaughtered as an examining and licensing body, might still continue to spend its energies and funds in the grateful task of prosecuting offenders against the public safety and the professional interest—a duty which, with the large funds at their command, and within the prescribed limits of their powers, the Medical Council and the Colleges have steadily refused to undertake, and have thrown upon the meagre resources and overworked energies of the voluntary associations to which Mr. R. H. S. Carpenter and Mr. Brown have devoted so much useful and valuable service. One speaker, to relieve his speech, read for the amusement of the Council a quotation from a letter by Mr. R. H. S. Carpenter. There is often much in the style of this gentleman's correspondence to deplore. But it would on such an occasion, and before such an audience, have been at least as much to the point and more graceful to have paid a well-deserved tribute to the enormous energy and self-sacrificing devotion which he has shown in the public service, and the heavy sacrifices which he has made, in performing duties of professional defence and public prosecution which should properly fall on the Council itself and on the wealthy corporations, whose members he has defended from encroachments on their professional privileges and public rights.

The position taken by some of the leading speakers at the College of Physicians, when it was there resolved not to admit the Apothecaries' Society to union in the Conjoint Board, was that it was desirable to retain a secondary class of practitioners for the poor; and many eminent persons, leaders in the Councils of the two Colleges, have maintained this thesis as an apology for their course of action. The *coup de grâce* to that line of argument was given by the official representative of the College of Physicians when he exerted himself at the Council to secure the extinction of that class which so many of his eminent colleagues had expressed their desire to differentiate and keep alive. These are a few of the inconsistencies of a debate which will long remain as a painful but necessary record of a public transaction, which it is hard to suppose that anyone can regard without misgiving and forebodings.

The conclusion reached was the necessary and only logical result of the action of the Colleges—taken as it was announced with singular unanimity—but of which three out of five of the Fellows sitting at the General Council, Sir Henry Acland, Dr. Quain, and Dr. Matthews Duncan, appear to have disapproved. But the ill which, as we think, the Colleges have, in their wisdom and with the best intentions, done in this matter will live long after the precise nature of their action has even ceased to be remembered as a matter of exact record. Out of love of professional interests and dignity they have taken a step which may easily lead to an abyss of which the depths have not yet been fathomed, and which lies already not far from the path on which they have entered. The overwhelming mass of the profession have, at repeated great meetings, and in petitions and statements signed by thousands, prayed for medical reform by combination of the examining bodies for the purposes of a maximum licence. Select Committees and Royal Commissions, a series of Cabinets, and successive Parliaments have pronounced in favour of the same principle. Towards this all recent efforts have tended, and this was the object of the recent Act, and of all that has led up to it. Very much has been accomplished in this direction in Scotland, and in Ireland arrangements are in progress to the like effect. The immediate result of the action of the two London Colleges is the consecration of the opposite principle of competition. This one member of the Council was acute enough to see, and he employed it as an argument on behalf of the cause which he was pleading. Already it has led the Council into a supplementary discussion of great length, in which the far-reaching consequences of the defiance by the two Colleges of the spirit and palpable object of the Act of 1886 are plainly visible to the eye of common-sense. Dr. McVail emphasised this impending difficulty by the view which he took of the duties and responsibilities of the Council in following out the course which justice to the Apothecaries' Society has rendered incumbent on them. He pointed out that the appointment, by a State body, of examiners who will take part in licensing general practitioners imposes on the Council serious and peculiar responsibilities. The surgical examiners so appointed are *pro tanto* State examiners, and the direct responsibility which examination by their own agents and nominees brings to the Council implies the duty of seeing that this examination is conducted in the manner in which the Council wish to see all such examinations conducted by the bodies whom they only supervise. It is, from the necessities and conditions of the case, a type which they have to construct, and of the excellence and sufficiency of which they are the sole responsible guardians as well as the executive agents. It would never do for a body such as the General Medical Council, with its representative character, its high State functions, and grave censorial habits and duties, to set up a type inferior to that of the bodies whom it inspects, and whose standard of examinations it seeks to raise and complete. How far do the arrangements for surgical examination which they have provisionally sanctioned satisfy such conditions? Three examiners for surgery, clinical surgery, and operative surgery for a total annual payment of three hundred pounds for examining and passing into the profession some three hundred persons annually! Contrast this meagre arrangement with the

surgical part of the examinations for general practitioners conducted by the triple Examining Board of Scotland, composed by union of the Colleges of Physicians and Surgeons of Edinburgh and of the Faculty of Physicians and Surgeons of Glasgow. These conjoint bodies, which have not by any means been free from attack within and without the Council as to the efficiency and completeness of their examinations, pass, it is stated, a smaller number of licentiates into the profession annually than the Apothecaries' Society.

What is their staff and method of surgical examination? They have, we understand, ten examiners in surgery furnished by the Edinburgh College of Surgeons, five supplied by the Faculty of Physicians and Surgeons of Glasgow; as examiners in clinical surgery, six surgeons of the Glasgow Royal Infirmary, four surgeons of the Glasgow Western Infirmary, four surgeons of the Edinburgh Royal Infirmary; twenty-four examiners, then, disposing altogether, for the purposes of clinical examination, of an immense wealth of clinical material, and with every possible facility for all the other purposes of examination. Set against this the cheap and meagre staff and the limited coincident resources provisionally sanctioned by the General Medical Council. It is obvious that, if this were anything else than a merely provisional arrangement, it would open the way to strange conclusions, painful comments, and sad results.

Look a little into the future, and it is not difficult to see that to set up such a standard would hardly be possible, even if it were creditable to the Council. A more searching prevision would see the strange outcome which might issue. A cheap and meagre staff, with such slight clinical and operative resource, is, on any ground not the type which the General Medical Council has a duty to create as its peculiar work in the line of examinations. Further, it would offer a premium to bodies now making, or having made, costly and extensive arrangements for adequate examination, such as we have mentioned, to split up into separate fractions or units and to claim from the General Medical Council co-operation and sanction in making individually "complete" but cheap and scanty examination arrangements, such as these which it has now provisionally established. The College of Surgeons of England might demand to be "completed" by a total staff of three examiners in medical subjects; or the College of Physicians by a State-nominated staff of three assistant-surgeons, and each go their own way in a battle of rivalry on the Council model. Any one of the, at present, incomplete Scotch and Irish bodies might pick a quarrel with its neighbour now in union, and, with this premium before it, claim a cheap but technically complete staff and a registrable licence.

It is easier to ridicule than logically to answer arguments such as those which Dr. McVail advanced. At any rate it is plain that the Colleges have forced upon the Council a duty of which it has yet to realise all the difficulties and the dangers. It has eased itself by a provisional arrangement; but it has not yet fully faced them. The Apothecaries' Society has now become, by the forced consequence of the act of the Colleges, a body having a partially State-conducted examination. That examination must be on the highest level necessary for the admission of fully qualified general practitioners. It must set the standard. This cannot be beneath that of the less responsible Colleges and Boards not so honoured by State-participation. *Noblesse oblige;* the direct intervention of a State-body gives henceforth to the examination of the Apothecaries' Society a dignity, and imposes in this respect obligations which are of a high and peculiar order. The honour is great, and the prestige of these examinations will be henceforth singularly enhanced. These advantages, at least, the two London Colleges have, however unwittingly, conferred upon the examining body at Blackfriars. It may not turn out so much to their advantage as they anticipated. Mr. Upton shrewdly remarked, in a recent letter which he addressed to us when we spoke of the Apothecaries' Society as the Cinderella among corporations, that it might be well for the prouder sisters seated in the more aristocratic regions of Pall Mall and Lincoln's Inn Fields to remember the ultimate destiny of Cinderella. Is this hint destined to become a prophecy? As things are now, it would be hard to say.

THE INFLUENCE OF CONCAVE GLASSES ON MYOPIA.

It is somewhat humiliating that, notwithstanding the number of years that the refraction of the eye has been studied, and the perfection to which the means of diagnosing errors of refraction has attained, there should be no general agreement as to the proper optical treatment of myopia. That such, however, is the case is shown by the fact that within a few months of each other two authorities so much respected as Landolt, of Paris, and Foerster, of Breslau, have expressed opinions which are diametrically opposed.

Landolt (*Refraction and Accommodation*, 1886) holds the view that a myope should never wear glasses which require him to use his accommodation. In low myopia, therefore, glasses are only to be worn for distant vision, while in moderate degrees glasses must be given for near vision, which under-correct the myopia and enable the wearer to see at a given distance without using his accommodation. In extreme degrees, complications are so frequent that each case must be considered on its merits. We believe that this custom of under-correcting the myopia for near vision is widely adopted in the French school, and it has some adherents in this country.

Foerster, however (*Arch. of Ophthal.*, December, 1886), takes an opposite view; he believes that it is, as a rule, desirable that a myope should constantly wear his distance-glasses, and cites numerous cases in which the constant wearing of fully-correcting (and in some instances of over-correcting) glasses for many years was not injurious.

Landolt founds his treatment, first upon the possibility that the action of the ciliary muscle may have a tendency to increase the myopia; and, secondly, on the assumption that in myopia (and, indeed, in any form of ametropia) the normal relation between accommodation and myopia is altered, and that it is an advantage to the myope to be able to see near objects without using his accommodation.

Foerster, on the other hand, believes that the accommodation has nothing directly to do with the increase of myopia, but that this is due chiefly to the act of convergence; accordingly he advises the wearing of the fully-correcting glass, in order that the patient may be induced to hold objects far away from his eyes, and thus use less convergence. To insure this in the case of children, he advocates the use of mechanical appliances, in order to prevent too close an approximation of the eyes to the book. The eyes, with their correcting glasses, are, of course, in the same condition as emmetropic eyes with regard to the accommodation required. This practice of advising patients with slight and moderate myopia to wear their correcting glasses always has been very generally adopted, we believe, in this country.

The most interesting part of Foerster's paper is that in which he quotes

fifty-one cases in which glasses, which either fully corrected or over-corrected the myopia, had been worn for many years. In none had the myopia undergone any considerable increase, and in none had a large myopic crescent developed. From these cases he draws the conclusion that the constant wearing of fully-correcting glasses cannot be injurious to a myope. It should, however, be pointed out that nearly all these cases had reached the age at which myopia frequently becomes stationary before the use of the glasses was commenced. They, therefore, only show that this treatment is safe in myopes who have attained the age of puberty, and have not large myopic crescents.

The probability is that both sides are too dogmatic, and that the safe course lies between them. That an immense number of myopes can wear fully-correcting glasses almost as constantly as if they were a part of their face, without the least discomfort or injury, is a matter of every-day experience. On the other hand, many myopes find it extremely fatiguing to use the accommodation required for near vision when they are wearing their correcting glasses, and it is not at all improbable that myopia which is progressing rapidly may be aggravated by such efforts.

In young people with myopia of moderate degree, which shows no signs of rapid increase, full correction, with constant wearing of the glasses, is perfectly safe; older persons, even though they have not reached the presbyopic age, often require weaker glasses for near vision, but if, after a little perseverance, they can use their correcting glasses for near vision, it is surely better that they should do so, and thus be placed in a condition as nearly as possible identical with emmetropia. In a matter of this kind much will depend upon individual habits and character, and it is impossible to lay down hard and fast rules.

There can be no question that excessive convergence in young subjects is most injurious; whether it is necessary to employ mechanical contrivances to prevent this is a matter which we do not intend to discuss here. It is of importance, however, that all conditions which favour the approximation of the eyes to the book should be carefully guarded against, and when, owing to a high degree of myopia, the glasses which remove the far-point to a safe distance cannot be worn because of the diminution that they produce in the size of the image, convergence must be diminished by adding prisms to weaker glasses.

WILL THE UNIVERSITY OF LONDON BE REFORMED?

The Senate's scheme for the reform of the University of London has now been sufficiently long before the public for it to be possible to gauge to some extent the character of the support which it is likely to receive and the opposition which it is likely to encounter. Lord Granville, the Chancellor of the University, devoted the greater part of a rather lengthy speech on Presentation Day to a rehearsal of the chief points in the scheme, but his persuasive eloquence will probably have but little effect upon its numerous opponents. As we ventured to prophesy when commenting on them a month ago, the proposals made by the Senate satisfy no one. The teachers consider the share that would be assigned to them in the new constitution altogether inadequate; Convocation dreads to see its growing influence diminished; and a large number of the graduates fear that the *prestige* of the University will suffer.

Lord Granville's speech, stamping the scheme with the most complete official sanction, has drawn increased attention to it, and has elicited several valuable criticisms. One of the most important contributions to the controversy has been made by Professor Ray Lankester, who, in a letter addressed to the *Times*, has stated the case with great lucidity and force, and yet in a temperate tone. It is a relief to find a teacher holding views as pronounced as Professor Lankester who is yet able to refrain from invective against the University, and to see clearly and admit frankly the great work which it has done, and, to a lesser extent, is still doing. He very truly contends that the University is, and for the last forty years has been, an Imperial University, as ready to examine and certify as to the attainments of a British subject in India, Australia, or Africa, as on those of a resident of London or Manchester. It has been the foster-mother of colleges in many provinces, colonies, and dependencies; and the growth of more than one of these colleges has been so vigorous that they have already claimed the right of autonomy, and have received charters as universities. The University of London never was a university for London in particular, and the contention of the teachers is that higher education in London is now sufficiently well organised to provide the elementary parts of a real London University. If this be granted, then the question for decision is whether the constitution of the existing University of London should be so modified as to enable it to fulfil the functions of a local University, or whether it is worth while to conserve it, with its present constitution, as an Imperial University.

The question whether there is any use for such a University is one easily answered so far as the medical faculty is concerned. With a teaching University or other body granting degrees to medical students educated in London, with the Victoria University granting degrees to students educated in Manchester, Liverpool, and Leeds; with the University of Durham granting degrees to resident students; and with the old Universities of Cambridge and Oxford now honourably discharging the duty towards the profession, it can hardly be contended that, so far as England is concerned, many medical students would seek degrees from an Imperial University.

It will be remembered that the scheme for the reform of the University of London was formulated by a Committee of the Senate over which Lord Justice Fry presides. After having been discussed by the Senate and adopted in principle, it was referred back to the Committee in order that it might be further discussed with the representatives of Convocation. A meeting was accordingly held on Wednesday last; and it was apparent, we understand, that the objections to the scheme which the Special Committee of Convocation were disposed to raise would be met by concessions on the part of the Senate. The main features of the plan, however, will be those indicated by Lord Granville; that is to say, the scheme as published in the Journal on April 16th will be modified in detail only. The fault of this scheme, now formally adopted by the Senate and the Chancellor, is that it does not show any appreciation of the real dilemma. Experience and discussion have already shown that no scheme can be made to fulfil both indications except one which is tantamount to the creation of a new university. If the two Royal Colleges of Physicians and Surgeons in London were to obtain a charter empowering them, acting conjointly, to grant degrees to London medical students, then the wants of the metropolitan medical schools would be amply provided for.

The Privy Council will have to deal shortly with a whole series of applications for charters from bodies interested in higher education in London, and will probably be disposed to consider the application from the medical corporations in relation with others. Whether

it is altogether wise or safe to hand over medical degrees for London students to the Colleges, and to effect the ruin of the University of London with the result of giving them a monopoly, is a subject fairly open to discussion, and which is not likely to escape attention. Their recent attitude to the profession in the matter of the Conjoint Board has not conciliated for them many friends, either in the public or the profession, and its results will have to be taken into account.

Dr. W. B. Hadden and Dr. T. D. Acland have been appointed Assistant-Physicians to St. Thomas's Hospital.

We are informed that the eye-department at St. Mary's will in future be open on Tuesdays, Fridays, and Saturdays, at 9 A.M., Fridays being specially devoted to operations and selected cases. Diseases of the ear will in future be seen on Monday and Thursday, at 3 P.M.

The London Court of Aldermen, at their meeting on Tuesday, sealed an application on the part of the Governors of Bethlem Hospital to the Charity Commissioners for permission to frame a scheme to enable them to admit paying patients.

The death of Dr. J. S. Jewell, of Chicago, is announced, at the age of 50. He was Professor of Nervous and Mental Diseases in Chicago Medical College, and founder of the *Journal of Nervous and Mental Diseases.*

We are requested to state that all drawings intended for insertion in the next volume of the *Transactions of the Pathological Society of London* must be sent to the Honorary Secretary, Dr. Coupland, 14, Weymouth Street, W., before May 31st.

ANATOMICAL SOCIETY.

A meeting of the Anatomical Society of Great Britain and Ireland will be held at the rooms of the Medical Society, Chandos Street, on Monday, June 6th, at 5 P.M.

CREMATION.

A further cremation took place at the Crematorium, Woking, last week. The body, which was that of a young Indian Rajah, was consumed in about an hour and a half. The ashes, in accordance with an Indian custom, were placed in water.

BATH CONVALESCENT HOME.

It having been found impossible to raise £5,000 required for the endowment of the convalescent home given to Bath to commemorate the Jubilee, the scheme has fallen through.

TOXIC AMBLYOPIA.

A special meeting of the Ophthalmological Society will be held on June 23rd, for the purpose of collecting facts in reference to toxic amblyopia. Communications, whether written or *vivâ voce*, which bear on the subject will be acceptable. Facts in elucidation of the following points are particularly desirable. 1. Cases of true alcoholic amblyopia, that is, failure of central vision in drinkers who do not use tobacco in any form. 2. Cases of recovery from any form of toxic amblyopia (for example, from tobacco, bisulphide of carbon, etc.) without complete discontinuance of the toxic agent. 3. Cases of complete persistent pallor of the optic disc, consequent on a long-continued exposure to any of these forms of poisoning. 4. Evidence whether second attacks of central amblyopia ever occur, whether induced by the original agent or by any other.

THE ABUSE OF HYPNOTISM.

It is difficult to imagine anything more repulsive than the exhibition at present being given at Paris, at which a hypnotised woman is made to expose herself to the most serious risks in a den of lions, for the pleasure and entertainment of a public eager for a new sensation. We have frequently urged that the phenomena of hypnotism are of such a nature, and are attended by such disastrous results to the subjects, that they are quite unsuited to be made matter for public amusement. We venture to hope that should this exhibition find its way to England it will be promptly checked in the interest alike of the "subject" and of the public whose minds cannot fail to be degraded by such unhealthy excitement.

THE INTERNATIONAL MEDICAL CONGRESS. WASHINGTON.

We are asked to state that during the six days' session of the Ninth International Medical Congress, the *Medical Register* of Philadelphia will be issued daily. It will be full size, and will contain a complete report of the general session and all the sections. It will at once be seen that this will offer to those who cannot attend the Congress a chance to have a full report of the proceedings daily.

SAVAGE DOGS.

Since the withdrawal of the order for muzzling dogs, the number of persons bitten by savage dogs has largely increased. A number of persons so bitten have applied to Mr. Barstow, at Clerkenwell, this week for summonses against the owners of the animals, but in the present unsatisfactory state of the law, no action can be taken until the person bitten can prove that the dog has previously bitten other persons.

CONVERTED BURIAL GROUNDS.

As an evidence of the success which has attended the labours of the Metropolitan Public Gardens Association in transforming disused burial grounds into gardens and places of recreation for the London poor, it was stated by Lord Dorchester at the opening of the disused burial ground of St. Martin-in-the-Fields, that between 40 and 50 acres of ground had in this manner been devoted to public enjoyment.

GREAT YARMOUTH HOSPITAL.

His Royal Highness the Prince of Wales on Wednesday last laid the foundation of a new hospital at Great Yarmouth. The old building, which has just been demolished, and which was built in 1838 upon a site granted by the Corporation, contained only twenty beds; whereas the new structure, which will have a façade in the Italian style freely treated, the designs for which were furnished by Messrs. Bottle and Olley, will allow room for forty beds. The entire cost, with furniture, will be £11,676, of which sum £3,276 remains to be subscribed.

CONVERSAZIONE OF THE METROPOLITAN COUNTIES BRANCH.

The *conversazione* of the Metropolitan Counties Branch, to be held on Thursday next at the South Kensington Museum, promises to be a very pleasant evening. Already a large number of distinguished guests have accepted the invitation sent out in the names of the President and Council. The members of other Branches of the British Medical Association, we are pleased to learn, will be well represented. Gentlemen who may not yet have replied to the invitation are requested to do so at their earliest convenience, in order to facilitate the arrangements for the large assembly which is expected.

TRAINED NURSES.

At the annual meeting of the Metropolitan and National Nursing Association, presided over by the Duke of Westminster, it was stated that while the demand for trained nurses was rapidly increasing, there was an increasing number of suitable candidates offering themselves for training. Funds were not augmenting in proportion to the development of the Association's work, and an earnest appeal was made to the public for additional support. It was reported that 600 cases had been nursed during the year, and the number of visits paid had been 18,138. Subscriptions amounted to £722 3s., and donations to £636 14s. A nurse had given £100 to enable the Committee to open a home at Westminster.

THE HOME HOSPITALS ASSOCIATION.

THE ninth annual report of the Committee of Management of this Association states that the number of patients admitted during the year shows an increase of ten over the year 1885, while the average cost per patient has been 11s. 11d. less. Two hundred and forty-two patients were admitted during the year 1886; the average stay of each patient during the year was 17.9 days. Twenty-eight women suffered from cancer and diseases of the breast, and an equal number from uterine disease. There were three deaths during the year, one that of a patient admitted in the previous year.

DANGERS OF FOREIGN PRACTICE.

THE ignorance and superstition of the uneducated populations in foreign countries are often the source, not only of annoyance, but of serious danger to medical men sent to help them in times of epidemic. In the Argentine Republic a physician was lately murdered by peasants because he refused to drink a bottle of carbolic acid which he had used for purposes of disinfection. In Sicily, quite recently, several practitioners who had undertaken to disinfect the houses in which patients had died from cholera were hooted and pursued by the inhabitants, and only escaped severe injuries by the intervention of the police.

THE APPOINTMENTS AT GUY'S HOSPITAL.

THE following are the assistant-physicians at this hospital: Dr. Hale White becomes Senior Assistant-Physician; and at the recent meeting of the Governors, G. N. Pitt, M.A., M.D.Cantab., M.R.C.P. Lond., late Fellow of Clare College and present Demonstrator of Pathology at Guy's Hospital; L. C. Wooldridge, M.D., D.Sc.Lond., M.R.C.P.Lond., late George Henry Lewes and Grocers' Research Scholar, late Croonian Lecturer at the Royal Society, and present Demonstrator of Physiology at Guy's Hospital; and E. C. Perry, M.A., M.B.Cantab., late Captain of the school at Eton, Fellow of King's College, Cambridge, and Senior Classic in 1880, and late Demonstrator of Anatomy at Cambridge, were elected to the three vacant assistant-physiciancies.

CORPORAL PUNISHMENT.

A SCHOOLBOARD teacher was recently charged at the Newport police-court with assaulting one of his scholars, aged 13. The defendant, according to the evidence, gave the lad, who was admittedly a dull boy, a sum to do, and in consequence of the boy taking too long over his task, he was first thrashed with a cane, and then struck on the face with the defendant's hand, blackening one eye. The boy, who evidently thought he had received an excess of punishment, began to retaliate by aiming his slate at the head of his monitor; the accused thereupon swung the lad round by the collar, and his head coming into contact with a desk, received a wound from which blood flowed. The magistrates held the punishment to be excessive, and fined the defendant 20s. Unjustifiable severity has in this case been very leniently dealt with.

HOSPITAL MUSEUM CATALOGUES.

WE have often indicated the necessity for a good catalogue to every museum, especially in the case of hospital museums. Next to the ward, the *post-mortem* theatre, and the dissecting-room, the museum is the best place for study. A badly arranged museum, without a printed catalogue kept well up to date, is the surest way of discouraging students from study, of instilling into their minds the mischievous idea that a museum is useless, and of creating a yet more dangerous prejudice against pathology itself. Hence we are glad to hear that a catalogue of the Charing Cross Museum, prepared by Mr. J. H. Morgan, will shortly appear, and that the second volume of the University College Museum, Pathological Series, will also soon be published. Lastly, we have been informed that a supplement to the fine catalogue of the pathological collection in the Museum of the College of Surgeons will also shortly see the light. Would a digest of the London museum catalogues be too severe or too barren a task for some young and active man to undertake? Such a task would be by no means impossible. A purely scissors-and-paste compilation from the printed special catalogues, or even from their indexes of classification only, would be by no means absolutely useless.

A HOSPITAL FOR DIPHTHERIA.

IT can hardly be denied that some danger attaches to the admission of cases of diphtheria into the wards of a general or children's hospital, yet at the present time no other course is possible, owing to the interpretation which the Local Government Board has been advised to put on the wording of the Act by which the Metropolitan Asylums Board was constituted. The disease is very prevalent in America, and no general hospital there will admit such cases; consequently a movement is on foot, with the approval of the profession in that city, to establish a special hospital for diphtheria in New York. A special form of heated ambulance will be provided for conveying patients from their homes to the hospital. It remains to be proved, however, whether the segregation of a large number of cases under one roof will not constitute a special danger.

CRUELTY TO CHILDREN.

DURING the last fifteen months the London Society for the Prevention of Cruelty to Children has dealt with 258 cases of various kinds of ill-treatment of children. Of these, 131 were of injuries caused by outrageous kickings and beatings with pokers, straps, and boots, twenty-two of deliberate starvation, and twenty-six of thoughtless neglect, such as locking children up foodless and fireless for the day. Six of the cases had ended fatally. The report pointed out that it was neither the poor who committed these cruelties, nor persons with large families. Cruelty, it states, is wholly independent of surroundings and wages; it is the work of selfish, sullen, cowardly haters of children, the average age of the victims of their dastardly assaults being below five years. The income of this deserving society last year was £1,680, of which, at the close of the year, £245 12s. 6d. remained in hand.

VICTORIA UNIVERSITY, MANCHESTER.

THE Court of Victoria University met in Owens College, Manchester, on May 12th, and agreed to forward a Jubilee Address to Her Majesty, the address to be presented through the Home Secretary. An application from the Yorkshire College at Leeds to be admitted a College of the University was received. In accordance with the statutes, the matter was referred to the Council for report. In the charter of Victoria University, arrangements are made for the admission of the Yorkshire College. In the event of the College being admitted a College of the University, it will be incumbent on the University authorities to devise some means whereby the practical examinations shall be conducted at one centre. At present the Liverpool candidates are examined in Liverpool—both in the written and practical parts of their subjects—and the Owens College candidates in Manchester. To have a third centre, with a different set of practical questions, seems to be undesirable.

THE LUNACY ACTS AMENDMENT BILL.

The quarterly meeting of the Medico-Psychological Association was held at Bethlem Hospital on Tuesday, May 17th, the principal business of the meeting being to consider a memorandum from the Parliamentary Committee of the Association containing observations and suggestions in regard to the Lunacy Acts Amendment Bill. In the absence at first of Dr. Savage, Dr. Rayner occupied the chair. A long discussion ensued, in which Drs. Ringrose Atkins, Outterson Wood, A. R. Urquhart, J. Murray Lindsay, S. W. D. Williams, Hayes Newington, Hack Tuke, G. H. Savage, H. Rayner, S. H. Agar, Robert Baker, and Evan Powell took part. In opening the discussion, the Chairman animadverted upon some observations made by the Lord Chancellor in introducing the Bill, and to his having made use of certain words, that is "accused" of lunacy, "supposed" examination, etc., which, if rightly construed, associated lunacy with

crime, and further implied perfunctory work or laxity on the part of medical men in their professional duties in connection with lunacy. Suggestions having been freely made on the various clauses of the Bill, it was agreed that the memorandum should be circulated among the members of the association, now numbering upwards of four hundred. A strong opinion appeared to prevail that the magisterial intervention proposed by the Bill should not be allowed entirely to over-ride medical opinion; and, further, that there should be a power of appeal to the Home Secretary in cases of refusal or reduction of pensions. It was also urged that members of the association should seek to impress most earnestly on members of the House of Commons with whom they were acquainted that insanity is a symptom of disease, and that the primary aim and object of all legislation in regard to it should be the care and proper treatment of the afflicted persons suffering from it.

IMPORTANT NOTICE TO STUDENTS: THE ROYAL COLLEGES AND THE NEW MEDICAL ACT.

It has been decided to hold an extra pass or final examination on Friday, June 17th next, for the licence of the Royal College of Physicians of London, and for the membership of the Royal College of Surgeons of England (under the old regulations), in order that candidates who have completed the required curriculum of professional study may have an opportunity of obtaining the licence of the College of Physicians, or the diploma of Member of the College of Surgeons in time to register it under the conditions now in force before the new Medical Act comes into operation (June 30th). Those candidates who were referred for three months in April last, and those referred for not more than six months in January, will be specially allowed to present themselves for re-examination on June 17th. Candidates are reminded "that they must give fourteen clear days' notice in writing," stating the subjects in which they desire to be examined, and whether for the licence of the College of Physicians or the membership of the College of Surgeons, to the Secretary, Examination Hall, Victoria Embankment, London, W.C.

EDINBURGH UNIVERSITY CLUB, LONDON.

Sir Alexander Christison, Bart., M.D., presided over the last quarterly dinner of this club, held at the Holborn Restaurant, on Thursday, May 13th. Forty-one members and thirty-nine guests were present. The toast of "The Colonies," gracefully proposed by the Marquis of Lothian, K.T., Secretary for Scotland, was received with the utmost enthusiasm, and eloquently responded to by Sir Saul Samuel (Agent-General to New South Wales), Sir Graham Berry (Agent-General for Victoria), and Sir Patrick Jennings (late Premier of New South Wales). A specially interesting feature of the meeting was the presentation by Sir Edward Sieveking, M.D., on behalf of the club, of handsome silver candelabra to Dr. J. B. Potter, on his resignation of the office of Honorary Treasurer, which he has held for a period of ten years, during which his labours have been indefatigable and eminently successful, the club being now in so satisfactory a financial condition as to be able to give a triennial prize of twenty guineas to the University of Edinburgh. Dr. Potter is succeeded in his important post by Dr. J. J. Pringle. Excellent vocal music was given at intervals by Dr. Lavies and a party of friends. The club now numbers nearly 400 members, and it is felt that this number might easily be increased. The Honorary Secretaries are Henry Rutherford, Esq., Barrister-at-Law, 2, Harcourt Buildings, Temple, E.C., and Surgeon-General W. Gerard Don, M.D., Junior Army and Navy Club, St. James's Street, S.W., either of whom would be glad to hear of Edinburgh graduates anxious to join the club.

DEATH OF PROFESSOR VULPIAN.

Dr. Vulpian died on Wednesday evening, May 18th, aged 61. Dr. Vulpian, who was born in 1826, was the son of a distinguished lawyer. He took his degree of M.D. in 1854, and soon afterwards was attached to the Museum of Natural History. In 1867 he was appointed Professor of Pathology to the Faculty of Medicine: and, though attacked under the Empire as a materialist, he was called in when the Comte de Chambord was dying at Frohsdorf. For the last eleven years he had been a member of the Académie des Sciences. He was an ardent champion of the Pasteur treatment, and even taxed M. Peter with want of patriotism in questioning the safety of the "intensive" treatment. M. Vulpian was the author of many medical works, among them being his treatises, *Des Pneumonies Secondaires* (1860), *Leçons sur la Physiologie Générale et Comparée du Système Nerveux*, *Leçons sur l'Appareil Vasomoteur*, *Clinique Médicale de l'Hôpital de la Charité*, and *Maladies du Système Nerveux*. Much of his earlier work was done in conjunction with Professor Charcot.

BEHIND THE AGE.

The result of a Local Government Board inquiry into the application of the Town Council of Poole for leave to borrow £3,000 for the erection of public baths showed the town to be unprovided with any system of sewerage, and the inspector said that he did not think the Local Government Board would be justified in giving encouragement to the growth of an increasing town like Poole, unless a thorough system of sewerage was simultaneously carried out. The Town Clerk said an eminent engineer had reported upon a system to cost £28,000, but the Council had taken no steps. The Mayor, upon being questioned by the inspector, made reply that he did not want the death-rate of Poole, which was now 18 per 1,000, to increase, and he thought it would do so if they had a system of underground sewers instead of the present cesspool system. The inspector pointed out that the assumption was not warranted by facts and experience. It is hardly credible that such an opinion should be entertained by any intelligent individual in these days of advanced sanitary knowledge.

GENERAL ASSOCIATION OF MEDICAL MEN IN FRANCE.

The General Association of French medical men lately held their twenty-eighth meeting in the amphitheatre of the Assistance Publique. M. Henri Roger, who presided, delivered an address in which he mentioned the sums bequeathed to the Association by Dr. Roth (10,000 francs, = £400) to be divided with the Œuvre de l'Hospitalité de Nuit; and by Mme. Cloquet (20,000 francs, = £800). The Association has given substantial proof of its utility in the pensions it has bestowed upon different persons belonging to, or connected with, the medical profession. In a report presented by Dr. Bucquoy, it was stated that the Œuvre Spéciale des Retraites has a capital of 1,000,000 francs (£40,000), and gives 73 yearly pensions of 600 francs (£24). In a few years the Œuvre will be enabled to raise these pensions to 1,200 francs (£48). The meeting ended with a banquet at the Hôtel Continental, given by the General Council of the Association to the delegates of the local societies.

PASTEURISM AND ITS RESULTS.

At a recent meeting of the Conseil d'Hygiène et de Salubrité de la Seine, M. Dujardin-Beaumetz presented a report on a case of rabies which lately occurred at the Hôtel Dieu. This case cannot be included amongst those belonging to the Department of the Seine. The patient was a shepherd at Serena-Badajoz (Spain). He, as well as several other persons, amongst whom was his son, was bitten by a mad wolf on February 15th. His son died, and he himself immediately went to M. Pasteur's laboratory, where he was treated on March 15th; three days later symptoms of rabies appeared, to which the patient succumbed on March 20th, at the Hôtel Dieu. M. Dujardin-Beaumetz considers that in this case treatment was begun too late for a successful result, a month having elapsed between the date of the bite and the commencement of treatment.

OVER-PRESSURE IN FRANCE.

At a recent meeting of the Académie de Médecine, M. Gustave Lagneau called further attention to the disastrous effects of the intellectual over-pressure to which boys are subjected at the present day, during the ten years they pass in the *lycées*. The examinations at the

École Polytechnique, the École Normale Supérieure, the École Centrale, the École Navale, require so severe a course of study, that the effect of the strain on the constitution is often very serious. MM. Ernest Martin, Béard, Charcot, and Henrot, have found a considerable number of students belonging to these establishments affected with myopia, dyspepsia, phthisis, nervous exhaustion, followed in many cases by impairment of the intellectual powers. It has therefore become a matter of the utmost importance to recognise that the intellectual culture of doubtful quality and stability produced by the present system, is only gained at the expense of physical development. The fact that out of 1,000 French conscripts, 460 were declared unfit for service, is painfully significant. M. Dujardin-Beaumetz, who is physician to an École Normale for young girls, declared that the educational programme in girls' schools was equally in need of radical reform. The prolonged hours of study and the severe examinations were injurious alike to body and mind. He deplored the tendency of the present day to educate as teachers girls who were often better fitted for other employments. The competition in this field is almost incredible. In Paris alone, 4,171 girls, provided with teachers' certificates, are seeking for situations of this kind, while only about 100 vacancies occur during the year.

THE HOSPITALS' ASSOCIATION.

THE third annual meeting of the Hospitals' Association was held on Wednesday last in the rooms of the Society of Arts, Sir Andrew Clark presiding. The annual report, which was read, reminded the meeting that the Hospitals' Association was formed to promote co-operation among the managers of hospitals, asylums, poor-law infirmaries, and similar institutions throughout the country. The number of members and associates had steadily increased during the year. Sir Andrew Clark had formulated a scheme, which the Council had adopted and decided to distribute by circular letter throughout the country, inviting all persons interested in the treatment of the sick poor to affiliate themselves to the Association in London by the formation of local branches. Sir Andrew Clark, in the course of some remarks, referred to the announcement that the Council of the Association contemplated having a tabulated statement of the expenditure of the various hospitals prepared. He wished to utter a word of caution about that matter. He very much doubted if it were possible to make a just relative inference from such returns. In the first place, difference of locality often implied difference of cost. Then patients were of different characters, different occupations, and different habits, and the dietetic treatment had of necessity to be accommodated to these differences, while, again, the treatment by physicians of various diseases widely differed. Further, there were seasonal out breaks of disease. This spring, for instance, there had been almost an epidemic of pneumonia, and this form of seasonal disease had demanded, or was thought to demand, an expenditure on quinine or wine that would add to the expenses of hospitals that received many patients suffering from such disease. He would, therefore, be extremely careful not to assume that there was bad management in one hospital because it seemed costly, and good management in another because it appeared not to cost so much. At the monthly meeting of the Association, held in the evening at the rooms of the Medical Society, a paper was read by Dr. William Collier on "The Best Means to Prevent the Abuse of Hospital Charity."

IMMUNITY BY INJECTION OF CHEMICAL BODIES.

DR. L. C. WOOLDRIDGE recently communicated to the Royal Society a method by which he had been able to protect rabbits from anthrax, which is of considerable interest in connection with the general question of the nature of protection in this and other diseases depending on micro-organisms. The method consists in cultivating the anthrax bacillus in an alkaline solution of a peculiar proteid body which can be obtained from the testis and thymus gland. The growth is not abundant, and after two days at 37° C., it is removed from the culture fluid by filtration. A small quantity of filtered liquid is injected into the circulation of a rabbit, and the animal can then withstand the inoculation of extremely virulent anthrax blood. The bacillus itself grown in this peculiar culture-fluid has no protective influence; it either kills or it has no effect. The result is extremely curious, for hitherto protection against zymotic disease has been effected by the communication to the animal of a modified form of the disease against which protection is sought; in Dr. Wooldridge's experiments the protection must be produced by some chemical body the product of the activity of the bacillus. The observation belongs to a new order of facts, and appears to fall in with M. Pasteur's theory as to the method in which immunity to hydrophobia is produced by inoculation of the spinal cord of rabid rabbits. Both find some support in Professor Cash's experiments with perchloride of mercury, in which it was shown that after animals had taken a sufficient quantity of the drug, they were no longer liable to anthrax.

A MONOGRAPH ON ANTHRAX IN CATTLE.

A SECOND edition of the work of MM. Arloing, Cornevin and Thomas, *Le Charbon Symptomatique du Bœuf: Pathogénie et Inoculations Préventives*, has just been published. The numerous works that have appeared on this subject, and the discoveries which have been made since the first edition of this book saw the light, have enabled the authors to make many important additions to the second edition. The question of the different processes of preventive inoculation is treated at length, and the results obtained by experiments upon cattle are fully described. A chapter at the end of the book deals with the economic results of preventive inoculations. In treating of the three forms of charbon described by Chabert—essential charbon, symptomatic charbon, and splenic fever—the authors endeavour to prove that the latter differs from symptomatic charbon in that it is due to the evolution of a microbe in the organism, and is a bacteridian charbon, while symptomatic charbon is due to a special element different from bacteridia, and is a bacterial charbon. In describing symptomatic charbon the authors give a complete account of the symptoms and lesions which characterise this affection. Special chapters are devoted to the physiological study of the specific microbe, and the effect which heat, desiccation, and different chemical agents have upon it. The book is, in fact, a complete theoretical and practical treatise on the subject.

RIVER WATER AND TYPHOID FEVER IN PARIS.

AT a recent meeting of the Académie de Médicine, M. Cornil read a work of MM. Chantemesse and Vidal, upon *River Water and Typhoid Fever in Paris*. In this work the authors prove by statistics the connection between the appearance of typhoid fever and of the distribution, in Paris, of river instead of spring water. Pettenkofer's theory of ground-water, together with the discovery of the typhoid bacillus, have led the authors to conclude that by the diminution in the bulk of water the pathogenic organisms are concentrated, and consequently their dangerous properties acquire greater virulence. Boiling renders the cultivations of these bacilli sterile. M. Léon Colin remarked that the relation existing between the renewed outbreak of typhoid fever in the barracks and the use of river-water had been clearly proved by recent epidemics. River-water is now forbidden for drinking purposes in the barracks. M. Ranse was of opinion that when the Administration was obliged to distribute Seine-water instead of spring-water, the Paris population should be duly apprised of the fact, in order that proper precautions may be taken.

CORROSIVE SUBLIMATE IN INTRA-UTERINE IRRIGATION.

DR. BRAUN, from recent observations, has arrived at the following conclusions concerning the use of corrosive sublimate in irrigation of the uterus and vagina: 1. Vaginal or intra-uterine irrigation is frequently followed by absorption of the injected liquid; 2. When this occurs mercury is quickly detected in the fæces; 3. If the return of the injected liquid be in any way prevented, absorption occurs rapidly; 4. The 1 in 1,000 solution of sublimate should be used only in

serious cases, such as tympanites of the uterus, putrefaction of the fœtus in the uterine cavity, or septic puerperal fever. The injection should not occupy more than a minute in the performance, and should be followed by a copious injection of distilled water. 5. The 4 in 1,000 solution should be injected only in cases of expulsion of a macerated fœtus or in endometritis consecutive to the expulsion of the fœtus in premature delivery; 6. This solution may be of service in puerperal endometritis, accompanied by a fœtid vaginal discharge; in these cases irrigation should be followed by an injection of pure water; 7. Irrigation should be performed only by a medical man; 8. Irrigation with corrosive sublimate should seldom be employed in women suffering from extensive wounds of the vulva, in those who have been taking mercurial preparations, in cases of atony of the uterus, in anæmic women, or in patients suffering from disease of the kidneys.

QUININE IN ALBUMINURIA.

In the *Bulletin Médical des Vosges*, M. Pernet reports a case of albuminuria that was rapidly cured by the administration of quinine. The patient, a coffee-house keeper, aged 37, habitually enjoyed good health. On going to bed after a long walk in the country, during which he had perspired freely, he was seized with chills, which were soon followed by fever. Subsequently, bilious vomiting set in, with sleeplessness and loss of appetite. There was great emaciation; the skin remained dry. Pressure over the gall-bladder produced great pain. The pulse was 72. Examination of the urine revealed a considerable quantity of albumen, but no sugar. As the patient also suffered from worms, one gramme of calomel was given, together with a small quantity of opium. On the following day the urine was found free from albumen. It was then discovered that the albuminuria was intermittent, and of the tertian type. Seventy-five centigrammes of quinine were administered to the patient daily, with the remarkable result that the albuminuria disappeared as if by enchantment. The treatment, however, was continued in progressively decreasing doses for several days, when the patient entered on a period of convalescence.

EXPECTANT TREATMENT OF EXTRA-UTERINE PREGNANCY.

Dr. Beugnies-Corbeau, of Givet (Ardennes), describes in the *Union Médicale* of April 2nd a case of extra-uterine gestation which had been left to nature, owing to the mismanagement of a former medical attendant. He saw the patient in 1883. She was robust, and about fifty years old, and was subject to epistaxis. Twelve years previously she was pregnant for the first and last time. During her pregnancy she was subject to violent attacks of abdominal pain. Her physician believed that she was not pregnant, but that she had ovarian disease. At term she was seized with labour pains. The physician came with all his instruments, and, after waiting for three days in the house without diagnosing the case, went away believing, it seems, that he had to deal with an inflamed ovarian cyst, or some kindred disease, which he was pleased to call "dropsy of the ovaries." After three years of ill-health, an enormous abscess developed on the gluteal region, fragments of a fœtal skeleton came away through it, and a sinus was left, which was very slow to heal. A second abscess opened in the same region on the opposite side, a third in the hypogastrium, and a fourth in the perineum. Both hip-joints became fixed apparently through muscular spasm. The last fistulous track discharged one of the scapulæ, which took five months in passing through the perineal structures. Being exceedingly tortuous, this fistulous passage remained open for two years. After so many years of suffering, the patient was restored to perfect health. This case does not speak volumes in favour of the expectant treatment of extra-uterine pregnancy.

POISONING BY PILOCARPINE.

Dr. A. G. Glinsky, of the Kharkov Alexandrovskaia Infirmary, reports (*Proceedings of the Kharkov Medical Society*, part 1, 1886, p. 109) a case of poisoning by pilocarpine—the first of its kind, according to the writer, in medical literature. A gentleman who had been in the habit of using a solution of pilocarpine as a stimulant for the hair swallowed a considerable dose of the fluid instead of a solution of quinine. About five minutes afterwards, profuse perspiration, first of the face and then of the whole body, set in, together with salivation. These symptoms were speedily followed by dimness of sight, prostration, trembling of the limbs, a sensation of cold, noise in the head, and a general sense of confusion. On seeing the patient, about an hour after the accident, Dr. Glinsky found profuse, cold, clammy sweat in big drops on the face and body, coldness of the limbs, slight cyanosis of the hands and lips, a subnormal temperature, pulse 84, full, dicrotic, respirations 14, profuse salivation, great contraction of the pupils, spasmodic shiverings, general restlessness, extreme weakness, and trembling of the lower extremities. The treatment consisted of the internal administration of tannin, and emetics, together with the hypodermic injection of atropine ($\frac{1}{3}\frac{1}{5}$th of a grain, given in three doses). A quarter of an hour after the injections a striking improvement took place; the perspiration ceased, the pupils became dilated, and tremor disappeared, and on the following day the patient was quite well. Dr. Glinsky adds that, in the period 1879-85, 160 cases of poisoning by 23 toxic substances were admitted to the Alexandrovskaia Infirmary. In eighty-five of these, phosphorus matches supplied the poisonous material. He shows by statistics that this kind of poisoning finds an increasing number of victims in Kharkov every year.

THE FUNCTION OF THE THYROID IN DOGS.

The dog has two thyroid bodies, one on the right and the other on the left of the median line, and quite distinct from each other. Schiff has made careful observations (*Revue Médicale de la Suisse Romande*, 1884), which show that, while the removal of one of these bodies has no effect, a train of remarkable phenomena ensues if both be removed. Of these, one of the most singular is the series of rapid muscular contractions which is set up, chiefly in the temporal muscles. There are usually two or three contractions in a second, but the muscles of opposite sides do not contract synchronously. Another result is the vermicular movements of the lingual muscles, which, like the preceding, may begin even two days after the operation. A third characteristic is the apathetic condition of the animal; this begins the day after the operation, but takes some time to reach its maximum. Ewald, after confirming Schiff's statements on the above points, mentions another symptom—namely, a peculiar odour generated by the animal; it is possible, however, that change of diet may account for this. Ewald's results (*Berliner Klin. Wochenschr.*, No. 11, 1887) differ from Schiff's in a more important particular—namely, as regards the fate of the animal operated on. Schiff found that if an interval of twenty-five or thirty days were allowed between the operations on the right and left glands, the animal survived; whereas, in Ewald's experiments, the dog always died, although in one case thirty-nine, and in another fifty, days intervened. Death was preceded by dysphagia; the wounds had perfectly healed. Schiff's most remarkable discovery, however, was this: If the thyroid of one dog were inserted into the abdominal cavity of another, through a small wound in the integuments, the latter animal could then bear extirpation of both thyroids; hence it was concluded that some material necessary to the nervous system is elaborated by the thyroid body. Evidently this material may be vicariously elaborated by some other organ or organs, if only sufficient time be afforded, as when one gland is removed some time before the other, or the procedure just mentioned is adopted. Accordingly, the idea suggested itself to Ewald to make injections of the thyroid juice of a dog into other dogs, in order to see what immediate effects upon the nervous system resulted. Portions of thyroid substance were rubbed down with a little water, and then squeezed through linen or filtered. The liquid matter was then used for injection, and numerous experiments led to the following conclusions, confirmatory of the original assumption: Within two hours a peculiar

hypnosis set in. Injections of blood or muscle-juice used in control-experiments had no effect. If from unknown causes the injected thyroid-juice was not absorbed, it caused merely a local abscess, and no general results followed. No result followed the use of splenic-juice, but the author is uncertain about absorption in this case. Direct injection of thyroid-juice into the veins in three cases had no effect. Thus these experiments so far confirm Schiff's theory that some material having a powerful influence on the central nervous system is elaborated by the thyroid body, but they require to be repeated and extended. They are interesting when viewed in conjunction with recent researches into the function of the thyroid body in this country.

METHYLAL.

In a preliminary note in the *Vratch*, No. 10, 1887, p. 227, Dr. M. Motrokhin, of Professor V. K. Anrep's laboratory in Kharkov, states that he has made a number of experiments on men, dogs, rabbits and frogs, as to the physiological action of methylal, the new hypnotic, to which attention has lately been called by Dr. Personali. The following is the mode of preparation. A mixture of 1 part of methyl-alcohol, 1½ parts of pure concentrated sulphuric acid, and 1½ parts of water, is subjected to distillation. The distillate is purified by treating it with potash, filtering and re-distilling with chlorinated lime at 42° C. The product obtained is pure methylal. It is a light, colourless, easily evaporating fluid of a pleasant aromatic odour, somewhat resembling that of ether and chloroform. It is neutral in reaction, and has a specific gravity of 0.8605 at 20° C. It is easily soluble in water, alcohol, and oils. The results of Dr. Motrokhin's experiments may be summed up as follows: 1. When inhaled, methylal produces sleep, which ceases soon after discontinuing the inhalation. 2. Sensibility to pain is diminished during sleep. 3. The respiratory movements become slower and deeper, but remain regular. 4. Methylal does not seem to have any influence on the heart. 5. In man, the inhalation of two ounces of the drug gives rise to anæsthesia, which is especially marked about the head, and to a state of light intoxication. No unpleasant secondary effects are observed either during or after narcosis. 6. The drug causes a diminution of reflex action, and lessens the irritability of the cerebral cortex. 7. It neutralises the spasmodic action of strychnine and picrotoxin, when these substances have been given in moderate quantity. When the dose of the alkaloid is large, methylal hastens the fatal issue, since in that case it has also to be given in poisonous doses. Hence methylal can have only a limited sphere of usefulness as an antidote. 8. The drug is administered either internally or through the lungs. Subcutaneous injection of it is very painful, and often gives rise to local gangrene of the skin. With reference to Dr. Motrokhin's paper, Dr. Serges Popoff, of Professor P. P. Sushtchinsky's laboratory, writes (*Vratch*, No. 11, 1887, p. 258) that, as far as his own researches show, methylal is far from having no effect on the heart. On the contrary, it considerably retards the beats of that organ both in frogs and warm-blooded animals; it appears to act directly on the cardiac muscle and its ganglia. Moreover, the drug causes slowness and difficulty of breathing, which are dependent upon the action which it exerts on the central nervous apparatus. On the whole, Dr. Popoff is inclined to think that the use of methylal in practical therapeutics will be attended with certain difficulties.

SCOTLAND.

ANDERSON'S COLLEGE MEDICAL SCHOOL.

The first meeting of the governors of this College, which will in future be carried on as a separate corporation, was held on May 6th, when office-bearers were appointed. A committee was elected to look out for a suitable site for the erection of buildings, for which a donation of £500 from Dr. David Mackinlay was announced. The separation of the Medical School of Anderson's College has been rendered necessary by the inclusion of Anderson's College in the scheme of the new Technical College for Glasgow and the West of Scotland. The governors of the Medical School number thirty, and £5,000 has been paid over to them for the erection of buildings.

PORT GLASGOW AMBULANCE CLASS.

Certificates in connection with the Ladies' Ambulance Class of Port Glasgow were distributed on May 14th. The class numbered sixty-nine, and forty-eight entered for examination, all of whom passed. At the close of the proceedings, Dr. Taylor, who had conducted the course, was presented with a testimonial by the ladies.

COMPENSATION FOR DEFECTIVE DRAINS.

In the Glasgow Sheriff Court, on May 13th, £150 was awarded a tenant from his landlord, as compensation for loss sustained by him through the defective drainage of the house he occupied. The tenant had notified the insanitary condition of the house to the landlord, who took no proper steps to remedy it. The death of one child of the tenant and the serious illness of others were said to be due to the unhealthy condition of the house. On this account the sheriff awarded large damages, found that the tenant was entitled under the circumstances to leave the house, and ordered the rent, which he had consigned, to be returned to him.

ROYAL SOCIETY, EDINBURGH.

At a meeting of the Royal Society, Edinburgh, held on Monday, Lord McLaren presiding, Professor D'Arcy W. Thompson read a paper on the Blood of Myxine or Hag Fish, and stated that hitherto the blood corpuscles of that fish were supposed to be round, and to thus differ from other fish which have oval corpuscles, but that he believed they were in the hag fish, as in other fish, not round but oval. He also made another communication on the Larynx and Stomach in Cetacea. A paper by Professor Grainger Stewart was deferred, owing to his absence on deputation duty in London.

EDINBURGH UNIVERSITY UNION.

The efforts which are being made (and which have so nearly attained their object) to have a sufficient sum of money to start the Edinburgh University Students' Union free from debt have this week been still further encouraged by a donation of £50 from Mr. Andrew Carnegie, the Scottish-American millionaire and philanthropist, and by the resolution of the Lord Provost's Committee of Edinburgh Town Council to recommend the Town Council to vote a subscription of £100 towards the University Union. The proceeds of a public entertainment next week will go to help the same laudable object.

PAISLEY INFIRMARY.

The deficiency in the revenue of Paisley Infirmary having threatened to mar the usefulness of the institution, a special effort has been made to supplement the amount already received; and to this effort the firms of Clark and Co. and J. and P. Coats have each given £100; Messrs. W. Fulton and Sons, £20; Mr. W. B. Barbour, M.P., £10 10s.; and Provost Cochran, £10; while other sums may be expected.

HEALTH OF GLASGOW.

Dr. Russell's report for the fortnight ending May 7th gives the number of deaths as 480, in contrast with 530 in the preceding fortnight. This is a diminution of 2 per 1,000, due to a low mortality from pulmonary diseases, and a diminution in the deaths from unclassified miscellaneous causes, showing a generally improved condition of health. The spring—the most trying season for Glasgow—had passed without raising the death-rate above 30. A mortality of 24 in what was practically the last fortnight of spring, had not been recorded for at least the last seven years. Of the total deaths, 47 per cent. were of persons below 5 years of age; the diminution had occurred in those above 5 years of age, and in reality the infant death-rate had increased. The causes were mainly measles and whooping-cough. There had been 29 fatal cases of whooping-cough, and the

average age was 20 months. There had been 21 deaths from measles, of which 17 were of children who averaged only 20 months. Thus a high infant mortality was concealed beneath a low general death-rate. The mortality last week was at the rate of 24 per 1,000, as against 23, 25, 25, and 27, for the four previous weeks, and 24, 28, 30, and 28 for the corresponding weeks of the four preceding years.

IRELAND.

CORONERSHIP OF SOUTH WEXFORD.

Dr. Joseph Cardiff has been elected coroner for South Wexford. He was unopposed.

THE IRISH CONJOINT SCHEME.

The first examination under the conjoint scheme between the King and Queen's College of Physicians and the Royal College of Surgeons in Ireland will commence on Monday, July 4th. The examination will begin with the junior grade, and be followed by the second, third, and final examinations. No examiners have as yet been appointed by the respective Colleges to conduct these examinations.

THE PREVALENCE OF RABIES.

Rabies is said to have been prevalent for some time in the neighbourhood of Thurles. Four dogs have been destroyed during the last few days. Two boys who had been bitten were recently sent to Paris for treatment by M. Pasteur. One returned cured, but a telegram from Paris announces the death of the other.

THE LABOURERS' ACT: DROGHEDA UNION.

The Drogheda guardians some time since offered their medical officers half-a-crown for each house inspected by them under the Labourers' Act; the officers, however, claimed five shillings. Finally an action at law was taken against the guardians, which was recently tried before the Chief Baron, when the jury found for the full amount claimed by the medical officers. This unexpected result has already had its effect on the board, and last week an application from a firm of solicitors on behalf of Drs. P. J. Smyth and I. B. Kelly for £27 and £29 respectively for inspecting and reporting on houses under the Labourers' Act, was at once ordered to be paid.

HEALTH OF IRELAND: QUARTERLY REPORT.

The births registered during the quarter ended 31st March last amounted to 29,054, being equal to 23·9 per 1,000; and the deaths to 25,392, or 20·9. Although diseases of the respiratory system were prevalent in many parts of the country, and some zymotic diseases proved very fatal in a few localities, the state of the public health during the quarter may be regarded as satisfactory, the general death-rate being somewhat below the average, and the mortality from zymotic diseases less than usual. The total deaths from zymotic affections amounted to 1,319, showing a decline of 87 as contrasted with the previous quarter. Measles caused 148, or 79 in excess; scarlatina 236, a decline of 59; typhus fever 93, a number much below the average; whooping-cough, 253; and diphtheria 87, or somewhat above the average. There were 145 deaths from enteric fever, or a decrease of 45; 244 from diarrhœa, and 6 from simple cholera. There were 562 inquests reported to the registrars during the quarter, a number equal to 1 in every 45 of the total deaths registered.

QUEEN'S COLLEGE, CORK.

The following prizes have been awarded for the past session. Practice of Medicine: W. J. O'Meara, first; G. Kelleher and J. V. Ryan, equal. Medical Jurisprudence: W. J. O'Meara, first; J. H. Wilson, second. Midwifery: G. W. Jenney, first; C. Porter, second; J. B. Smith, third. Surgery: E. W. Jenney, first; J. B. Smith, second. Materia Medica: J. Hennessy, first; W. J. O'Donnell, second; J. J. Tracey, third. Practical Chemistry: J. Hennessy, first; J. Ambrose, second; J. J. Tracey, third. Practical Physiology and Histology: James Jackson, first; J. B. Smith, second; J. Macpherson, third; J. W. Wolfe, fourth. Practical Anatomy: Third Year: James Jackson and J. Ryan, equal; E. W. Jenney and J. W. Wolfe, equal. Second Year: W. J. O'Donnell, first; J. Hennessy, second. Anatomy and Physiology: Third Year: James Jackson, first; J. B. Smith and E. W. Jenney, equal. Second Year: First prize postponed; W. J. O'Donnell, second; J. Tracey, third. Exhibition in Practical Medicine: William Kelleher. Exhibition in Practical Surgery: Wm. J. O'Meara.

THE REUBEN HARVEY MEMORIAL PRIZE.

Notice has been given that the second award of the triennial prize will be made on July 1st, 1888. The competition for the prize, which was founded in memory of a distinguished Dublin physician and physiologist, is open to all students of the various schools of medicine in Dublin which are recognised by the medical licensing bodies in Ireland, and also to graduates or licentiates of these bodies of not more than three years standing at the time of the award. The prize is awarded to the writer of the best essay on any subject selected by the candidate, evidencing original research in animal physiology or pathology, and must be illustrated by original drawings or preparations. The essays, bearing fictitious signatures, are to be lodged with the registrar of the King and Queen's College of Physicians on or before June 1st, 1888.

BELFAST DISTRICT LUNATIC ASYLUM.

According to the annual report just issued, the admissions to the asylum during the year 1886 were, males, 117; females, 79; total, 196. Including those under treatment at the beginning of the year, the total numbers for the year were, males, 460: females, 306; total, 766. The discharges during the year have been, males, 85; females, 45; total, 130. Deaths, males, 25; females, 10; total, 35. The average daily number of residents showed an increase of 37 over the previous year. There were 130 persons discharged during the year, 7 as unimproved but harmless, 42 as improved, and 81 recovered, being 40·5 per cent., calculated on the number of admissions, or 10·3 per cent. on the total number resident. During the year 35 deaths occurred, being 16·9 per cent., calculated on the admissions, or 4·3 per cent. on the total number under treatment. Of these, 11 were due to chronic brain disease and nervous degeneration, 5 to acute brain disease, 2 to exhaustion from refusal of food, 3 to phthisis, 5 to congestion of the lungs, 2 to disease of the heart, 3 to bronchitis, 2 to abdominal disease, and 4 to senile debility. One death occurred from suicide in a patient who had not previously exhibited any suicidal tendency. The general sanitary condition of the establishment during the year had been most satisfactory, and no case of contagious or infectious disease had occurred. The question of increased accommodation, which is much needed, is under the consideration of the Board. The gross expenditure for the year amounted to £12,837 0s. 5d., which gave a cost per head of £21 14s. 4¾d., being a decrease of £1 4s. 4¼d. as compared with the previous year. During the year, Dr. Henry MacCormac, for nearly forty years the consulting physician to the asylum, died, and his place was filled by the election of Dr. Richard J. Purdon. Dr. William Graham, the Assistant-Physician, was promoted to the Armagh District Asylum, and Dr. Samuel Graham was elected his successor.

St. Thomas's Hospital.—On Monday, the 16th inst., the Dean, in the name of the students, past and present, of St. Thomas's, of whom above one hundred were in the library, presented Mr. Denison, the retiring librarian, with a clock and a purse of 120 guineas, together with an illuminated engrossed list of the subscribers to the fund, numbering 309. Dr. Ord paid a high compliment to the character and many valuable services of Mr. Denison, to his happy influence on many generations of students, and wished him a long enjoyment of his well-earned repose. Mr. Le Gros Clark bore similar testimony, and a vote of thanks to the chairman terminated the proceedings.

Cambridge.—Mr. Henry Walter Pigeon, M.A., M.B., of Christ's College, has been examined and approved for the degree of Master in Surgery.

LUNACY ACTS AMENDMENT BILL, 1887.

As ordered by the House of Commons to be printed, April 13th, 1887.

THE following amendments are suggested by the Parliamentary Bills Committee, British Medical Association, April 26th, 1887 :—

SECTION 3, SUBSECTION 9, PAGE 4, LINES 9 and 10.—It is suggested to *omit* "whether it is necessary for him personally to," and to *insert* "shall personally ;" also to *omit* Subsection 10 of Section 3 ; and to *omit* Section 5, pp. 8 and 9.

*** If magisterial intervention is necessary for the protection of persons who are in reality not insane, as is implicitly held in the Bill, it appears to be necessary that the alleged lunatic should be seen in every case in order to make that interview effectual (under Section 3). And inasmuch as cases of urgency can, under the Bill, be dealt with under the "urgency" clause (Section 4, p. 8), it is thought to be desirable that all the "private" lunatics dealt with under Section 3 should be personally seen and examined by the judge, magistrate, or justice who has been petitioned to sign an order for their reception and detention as lunatics. The provision under which a lunatic may practically have his case reconsidered *de novo* more than two weeks after the medical certificates and "petition" had been signed, opens the door to much abuse and litigation, owing to the special circumstances under which it would come into operation. The omissions suggested would, if carried out, remedy this evil, and in no wise interfere with the just safe-guarding of the interests or liberty, either of a person who was still a lunatic, or of one who, having been lunatic, had recovered.

SECTION 3, SUBSECTION 12, PAGE 4, LINE 35, after "thereof," to *insert* "and all documents and papers relating thereto shall be held to be privileged."

Contingent Suggestion.—SECTION 6, PAGE 9, LINE 34.—Unless the words "does anything in pursuance of this Act" are intended to include those who receive and detain a person, in the operation of Subsection 1, it is suggested (but if they are intended to include them the suggestion is not made) after the first "Act" to *insert* "or who receives and detains a person as a lunatic under this Act."

*** This suggestion is respectfully urged in order to provide the same protection to those medical men and others who receive and detain patients, in the manner required by the Act, as is provided in the Act for the medical men who sign the medical certificates of mental unsoundness of the very same patients. The character of some actions brought in recent years against the medical officers of public lunatic hospitals indicates the necessity for protection of the kind here sought and the inadequacy of the present law to afford such protection.

SECTION 7, SUBSECTION 2, PAGE 10, LINE 19, to *omit* "either ;" at line 20 to *omit* "or whether making such visit or not," and in place of these words to *insert* the word "and ;" in Subsection 3, line 30, to *omit* "or," and *insert* "and after personal examination of the alleged lunatic, and ;" in Form 17, page 57, line 17, after "1887," to *insert* "having personally examined, and ;" in Form 12, page 55, line 4, after "practitioner," to *insert* "and having personally examined A. B."

*** It is felt to be desirable that the existing requirements that the justice who signs the order of admission of a pauper lunatic to an asylum shall personally see and examine the alleged lunatic should not be discontinued under the present Bill.

SECTION 9, SUBSECTION 3, PAGE 12, LINES 15 and 16.—It is suggested to *omit* "under an order made on the application of," and thus enable governors of lunatic hospitals to apply for such orders of reception.

SECTION 15, SUBSECTION 6, PAGE 14, LINE 7.—To *omit* the words "not being an officer of the workhouse ;" and for "practitioner" read "practitioners ;" and in line 8, for "examines" substitute the word "examine."

*** The object of the change above suggested is to make it clear (the effect of the Subsection being matter of controversy) that the medical officer of a workhouse shall receive some remuneration for the examination or certification of an alleged lunatic in the workhouse (except in cases where he has contracted to perform every duty, and all the duties that may devolve upon him, in return for a fixed salary).

SECTION 15, SUBSECTION 7, PAGE 14, LINES 10 and 17.—It is suggested that the words "alleged" and "deemed" be so explained in the Act as to make it clear to whom they would apply ; and in Subsection 8, page 14, line 26, to *omit* "for each day, or part of a day, after the first and before the notice is given, during which the lunatic remains in the workhouse."

*** At present the Subsection appears to expose the medical officer of a workhouse to ruinous damages for not acting in a case where he is in doubt as to the mental state of the pauper.

SECTION 24, PAGE 19.—It is suggested (*a*) to *omit* this Section. (*b*) If the Section be not omitted, it is suggested, at page 19, line 30, to *omit* "a special report of the medical superintendent of the asylum or hospital, or the medical proprietor or attendant of the licensed house, or of the medical attendant of the single patient, as to the mental and bodily condition of the patient with ;" and on line 37, after the word "directed," to *add* "by the medical superintendent of the asylum or hospital, or the medical proprietor or attendant of the licensed house, or of the medical attendant of the single patient." And *omit* Subsection 5. And line 41, for "special report" to substitute "certificate ;" and line 42, to *omit* "or does not justify the accompanying certificate." And page 20, line 19, for "report" substitute "certificate ;" and line 20, to *omit* "special reports and ;" and line 21, to *omit* "and such reports" to end of Subsection 8.

*** These suggestions flow from the belief that, except where the number of patients is small, the provisions of the Section would periodically necessitate a very large amount of extra routine work on the part of the medical superintendent, and thus for a time completely absorb his whole attention, to the detriment of his other numerous and important duties. And in the very large asylums it would seem to be impossible to thoroughly carry out the provisions of this Section within the space of time allowed by the Bill. Imperfectly recovered lunatics will constitute a serious danger to the community when at large, and the tendency of the Section will certainly be to set many persons at liberty before recovery has become sufficiently established.

* SECTION 22, SUBSECTION 2, PAGE 16, LINE 36.—To *omit* "would" and remainder of Subsection 2, and *insert* "made the last payments for his maintenance, or who is liable for, or who is the chief guarantor of, the payments for such maintenance."

*** As it stands, it is almost inevitable that the Subsection would occasionally place the power to discharge a patient in the hands of undesirable persons.

SECTION 25, SUBSECTION 4, PAGE 21, LINE 12.—After the word "house," to *add* "on a report to the Lord Chancellor, a copy of which shall be sent to the person in charge of the patient, and to the person who pays for his maintenance."

SECTION 32, PAGE 21.—It is suggested, at line 16, after the word "order," to *insert* "and who shall give satisfactory security for the payment and discharge of the expenses of such examination."

Further, it is suggested to add to this Section the same provisions with regard to the medical persons who sign the certificates under this Section as are made in Sections 8 and 9.

*** It is to be anticipated that under this Section vexatious and wholly unnecessary proceedings will sometimes be instituted, and that it is likely to lead to the discharge of persons who are in an unfit state to be liberated.

SECTION 33, PAGE 24.—It is suggested to *omit* Subsection 2. And in Subsection 5, page 24, line 42, for "twenty-four hours" to substitute "three clear days," and to make the same alteration at Subsection 8, page 25, lines 15 and 16 ; and on page 25, to *omit* line 17.

*** These suggestions would preserve to persons who are boarders the advantages of the Section, and would enable other arrangements to be made when a boarder was about to use the power of self-discharge to his own disadvantage during a recurrence of mental disturbance, excitement, morbid impulse, or propensity.

SECTION 34, PAGE 25.—It is suggested that, after the word "confined," the words "for more than two years" be added.

SECTIONS 38 AND 39.—It is suggested that these Sections be omitted.

Should they not be entirely omitted, it is suggested to *omit* Section 39 and all of Section 38 after the word "be," page 28, line 10.

*** The correspondence of patients in asylums is thought to be already duly protected, inasmuch as all letters to certain persons and authorities must be forwarded, unopened, and any letter written by a private patient, and not forwarded to the person to whom it is addressed, must be endorsed to that effect, and laid before the Visiting

Commissioners, Committee, or Visitors, as the case may be, on their next visit.

* Section 46, Page 32, Lines 22, 24, 36, and Page 33, Line 1.—To read "licensee or licensees;" line 24 to add "his or" at the end of the line.

Section 47, Page 34, Line 15.—After the second "the" to add "other or;" at the end of the line to add "the survivor or;" and in line 16, after "survivors," to add "or one of the survivors, or a successor or one of the successors in the licence, as provided in the last preceding section (46)," and in line 20, after "survivors" to add "or survivor."

*** These suggestions would, it is thought, more fully and clearly provide for the carrying out in practice of the obvious intentions of the two Sections, especially where there is only one licensee, or where there are only two licensees, as the case may be.

*** With regard to Sections 49, 50, 51, 53, 54, 55, 56, 57, 58, the Committee would represent that it does not seem necessary to subject the registered hospitals to special restrictions and disabilities which are not imposed upon other public asylums.

Section 55, Page 37, Line 28.—It is suggested that the words "in the same county" be omitted.

* Section 58, Page 38.—It is suggested to add a Subsection that for each registered lunatic hospital a medical superintendent should be appointed, whose time should be devoted to the work of his appointment.

*** Section 77, Subsection 1, Page 44.—It is suggested that this Subsection be omitted. It is submitted that the provisions at present made by law are adequate to ensure the proper sending of documents; and it would not be feasible to secure in all cases that the oath of one witness should be available for the purpose of proving that each document is "properly addressed and put into the post in due time."

FORMATION OF A BRANCH OF THE BRITISH MEDICAL ASSOCIATION IN COLOMBO, CEYLON.

A meeting was held at the Colonial Medical Society, Colombo, Ceylon, on Saturday, February 26th, to promote the formation of a Ceylon Branch of the British Medical Association. The following gentlemen were present:—W. R. Kynsey, Esq., F.K Q.C.P., L.R C.S.I., Principal Civil Medical Officer and Inspector-General of Hospitals; J. L. Vanderstraaten, Esq., M.D.St. And., M.R.C.P.Lond.; J. D. Macdonald, Esq., M.D., C.M.Glasg.; W. G. Van Dort, Esq., M.D., C.M.Aberd.; W. G. Rockwood, Esq., M.D.Univ.Madras, M.R C S.Eng., M.R.C.P.Lond.; P. G. Borrowman, Esq., M.B., C.M.Edin.; W. G. Keith, Esq., M.B., C.M.Edin., L.R.C.S., and P.Edin.; C. Vangeyzel, Esq., M.B., C.M.Edin.; S. Fernando, Esq., M.B., C.M.Aberd.; P. S. Brito, Esq., M.B., C.M.Aberd., M.R.C.S.Eng.; E. Gratiaen, Esq., L.F.P. and S.Glasg.; Henry A. Keegel, Esq., L.R.C.P.Edin., L.F.P. and S.Glasg.; S. L. Anthonisz, Esq., L.R.C.P. and S.Edin., L.F.P. and S.Glasg.; O. Johnson, Esq., L.R.C.P.Edin., L.F.P. and S.Glasg.; E. N. Schokman, Esq., Lic. Ceylon Med. Coll.

It was proposed by Dr. Vanderstraaten, and seconded by Dr. Macdonald: "That Mr. Kynsey do take the chair." Carried unanimously.

Proposed by Dr. Van Dort, seconded by Dr. Vangeyzel: "That Mr. H. Keegel do act as secretary to this meeting." Carried unanimously.

The notice convening the meeting, and the list of names of the members of the medical profession in Colombo to whom notice had been sent were then read.

The Chairman proceeded to state the object of the meeting. He referred to the great necessity which existed for the formation of a Branch of the Association in the island, to bring the profession together, to facilitate investigation into matters of professional interest, and to promote discussion. It was to be regretted that the establishment of a Ceylon Branch of the British Medical Association had not been undertaken earlier, and he earnestly hoped that every effort would now be made to further the welfare of the movement now about to be set on foot.

It was proposed by the Chairman and seconded by Dr. Borrowman: "That it is desirable that a Branch of the British Medical Association be formed in Ceylon, and that this meeting do hereby proceed to form a Branch, subject to the approval of the home authorities." Carried unanimously.

Dr. Keith proposed and Dr. Brito seconded the adoption of a suitable constitution for the Branch, which was carried unanimously.

Dr. Macdonald, Medical Superintendent of the General Hospital at Colombo, exhibited the following microscopic preparations of the anchylostoma duodenale in the various stages of its development:—1. Ovum undergoing segmentation; 2, embryo moving inside ovum; 3, the living embryo—commencement of encystment; 4, the encysted parasite—the cyst undergoing calcification; 5, the living embryo; 6, the mature worm. The specimens exhibited were cultivated by Dr. Macdonald from the fæces of patients at present under his treatment for anchylostomiasis in the General Hospital. The treatment adopted by him, and the amount of success resulting from it, will form the subject of a paper to be read before the Branch at an early date. Dr. Macdonald connects a special form of anæmia very prevalent in Ceylon with the presence of the anchylostoma duodenale in the intestines of the patient, and has directed his treatment in the first instance to the expulsion of the parasite, with, as he asserts, a fair amount of success.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1887.

ELECTION OF MEMBERS.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Meetings of the Council will be held on July 13th and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, June 23rd and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

Francis Fowke, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

Inquiries are being pursued on the following subjects

Diphtheria, The Etiology of Phthisis,

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on Old Age and on the Connection of Disease with Habits of Intemperance are now closed.

Reports are in preparation upon the Inquiries made into Acute Rheumatism, Diphtheria, and Habits of Intemperance, a full Report on Old Age, and a Supplementary Report on Puerperal Pyrexia. All the above will be published in the Journal as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the Geographical Inquiry are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 429, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

South-Eastern Branch: East Kent District.—The annual meeting of the above district will be held at the Kent and Canterbury Hospital, on Thursday, May 26th, at 3 P.M., Mr. Pugin Thornton in the chair. The Chairman will be glad to see members and their friends to luncheon at his residence, St. George's Place, between 1 and 2.30 P.M. The dinner will take place at 5 P.M., at the Royal Fountain Hotel. Gentlemen proposing to dine are particularly requested to inform the Chairman by Tuesday, the 24th, that proper arrangements may be made. Agenda:—Usual business of annual meeting. Mr. Raven will propose the following resolution: "That no speaker in a debate shall occupy more than five minutes, or shall speak more than once without permission of the Chairman." Papers: Mr. Raven: Puerperal Albuminuria. Mr. Garraway: The Dead Faillure—Limited. The Chairman: Case of Goître associated with Placenta Prævia. Dr. Gogarty will show specimens of Thoracic Aneurysm.—W. J. Tyson, Honorary Secretary, 10, Langhorne Gardens, Folkestone.

South Midland Branch.—The annual meeting of this Branch will be held at the General Infirmary, Northampton, on Thursday, June 2nd, at 2.30 P.M. Members wishing to bring forward communications at the meeting will oblige by sending the titles of the same without delay to the Honorary Secretary. The President, H. B. Spurgin, Esq., requests the pleasure of the company of the

* This mark is placed opposite to the suggestions which are thought to be of minor importance.

members to luncheon at his residence, 82, Abington Street, prior to the meeting, at 1 P.M. Gentlemen accepting will kindly write to the President.—CHARLES J. EVANS, Honorary Secretary.

LANCASHIRE AND CHESHIRE BRANCH.—The annual meeting of this Branch will be held at Stockport on or after June 15th. Members wishing to read papers or show cases are requested to communicate at once to the Honorary Secretary, CHARLES E. GLASCOTT, M.D., 23, St. John Street, Manchester.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the Royal Forest Hotel, Chingford, on Thursday, June 2nd, at 6 P.M. The chair will be taken by J. S. Bristowe, M.D., F.R.S., President of the Branch. Business:—Election of Secretary. At 6.15 (sharp) the members and their friends will dine together. Tickets, exclusive of wine, 8s. each. Those intending to be present are requested to communicate as soon as possible with the Honorary Secretary.—J. W. HUNT, M.D., Honorary Secretary, 101, Queen's Road, Dalston.

MIDLAND BRANCH.—The annual meeting will be held at the Derby Infirmary, on Thursday, June 9th, at 2 P.M. Members desirous of reading papers, exhibiting cases, etc., are requested to communicate with me before May 20th.—W. A. CARLINE, M.D., Honorary Secretary, Lincoln.

STAFFORDSHIRE BRANCH.—The third general meeting of the present session will be held at the Medical Institute and Bell Library, Cleveland Road, Wolverhampton, on Thursday, May 26th. The President, Dr. W. G. Lowe, will take the chair at 3 o'clock in the afternoon.—VINCENT JACKSON, General Secretary, Wolverhampton.

EAST YORK AND NORTH LINCOLN BRANCH.—The annual meeting will be held at the Infirmary, Hull, on Wednesday, May 25th, at 1.30 P.M. Gentlemen who intend to make any communication, or to propose any resolution, are requested to inform the Secretary not later than May 15th.—E. P. HARDEY, Honorary Secretary, 80, Spring Bank, Hull.

BATH AND BRISTOL BRANCH.—The sixth ordinary meeting of the session will be held at the Grand Pump Room Hotel, Bath, on Thursday, May 26th, at 7.30 P.M., C. Gaine, M.R.C.S.Eng., President. The following communications are expected: Dr. W. H. Spencer: Cases illustrating the Antipyretic and Antiseptic Treatment of Phthisis. Mr. R. J. H. Scott: A Successful Case of Gastrostomy. Dr. E. J. Cave: A Case of Hemiplegia and Hemianæsthesia. Mr. Pagan Lowe: Hypermetropic Headaches.—R. J. H. SCOTT and E. MARKHAM SKERRITT, Honorary Secretaries.

CAMBRIDGESHIRE AND HUNTINGDONSHIRE BRANCH.—The annual meeting of this Branch is proposed to be held at Bishop's Stortford, on Friday, June 24th, 1887. Henry Cribb, Esq., President-elect. It is proposed to have one or two selected subjects for discussion in addition to the president's address, to be followed by communications and exhibition of specimens as time may permit. Members wishing to make communications or to exhibit specimens are requested to state their intention to Dr. Anningson, Cambridge, for insertion in the programme of proceedings. A dinner will be arranged at the Railway Hotel, Hockerill, at (probably) 6.30 P.M., of which the particulars will be given later.—BUSHELL ANNINGSON, Walthamsal, Barton Road, Cambridge.

SOUTHERN BRANCH.—The 14th annual meeting will be held on Thursday, June 16th, 1887, at the Army Medical School, Netley. Dr. J. R. Kealy (President) will take the chair at 1 P.M. Members desirous of reading papers are requested to communicate at once to the Honorary Secretary, J. WARD COUSINS, Portsmouth.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE spring meeting of this Branch was held at the Freemasons' Hall, Neath, on Thursday, April 28th; H. N. DAVIES, Esq., President, in the chair, and twenty-one other members present.

New Members.—Messrs. David Finlay, M.B. (Bridgend), Alexander Cook, Esq. (Cardiff), and R. Prichard, M.D. (Cardiff), were duly elected.

Communications.—The following communications were read:

1. Resolutions passed by the Metropolitan Counties Branch on the exclusion of the Apothecaries' Society from the conjoint scheme.

2. Communication from the Association of General Practitioners, enclosing resolutions (*a*) protesting against the exclusion of the Apothecaries' Society from the conjoint scheme; (*b*) approving proposal for facilitating the obtaining of the M.D. degree in London; (*c*) asserting the need for general practitioners having a voice in the governing councils of their Colleges.

3. Communication regarding the payment by the Association of the travelling expenses of representative members of Council.

4. Communication from the Manchester Medico-Ethical Association, enclosing report of a sub-committee on coroners' inquests.

Resolutions.—The following resolutions were unanimously passed:

1. That this meeting cordially approve of the resolution passed by the Metropolitan Counties Branch at its meeting on December 3rd, 1886.

2. That this meeting cordially approve of the resolutions passed by the Association of General Practitioners.

3. That the sub-committee on payment of travelling expenses of representative members of Council be referred to the opinion already expressed by this Branch, at its meeting on July 8th, 1886, which is as follows: "We are of opinion that it is not desirable at present that the Association should pay the travelling expenses of Branch representatives on the General Council; but would suggest that there should be power given to any Branch desiring to do so to elect as its representative a member of the Association who is not a member of the Branch he represents."

4. That the whole system of coroners' inquests requires to be remodelled.

5. That copies of the report to the Manchester Medico-Ethical Association on coroners' inquests be obtained and circulated for discussion at the autumn meeting.

Medical Benevolent College.—A communication from the Organising Secretary of the Medical Benevolent College, insisting upon the need for increasing the amount of annual subscriptions, was read.

After the meeting, the members and some visitors dined together at the Castle Hotel.

ISLE OF WIGHT DISTRICT: SOUTHERN BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held at the Sandown Hotel, Sandown, on April 28th, 1887. In the absence of the President through ill-health, the chair was taken by J. NEAL, M.D.

The minutes were read and confirmed.

New Members.—Messrs. George Arthur Barr, of Newport, and K. W. Ingleby-Mackenzie, Ryde, were proposed by Dr. WILLIAMSON, seconded by Dr. GROVES, and carried unanimously.

Report of Work.—In the absence of the President (Mr. Lloyd), Mr. GREEN read a report of the work of the District for the past year, showing that the average attendance had been larger than in any previous year, but deploring the fact that the most important meeting of the year, the annual meeting, was always the worst attended. It was proposed to put upon the agenda of the next meeting a discussion as to the advisability of altering this meeting.

Vote of Thanks to President.—A vote of thanks to Mr. Lloyd for his performance of the duties of President during the past year was proposed by Dr. WILLIAMSON and seconded by Dr. GROVES, the Secretary being requested to convey the same to him; and the condolence of the Society upon the illness which necessitated his retiring from practice.

New President's Address.—Dr. WILLIAMSON then assumed the chair, and having thanked the members for his election as President, read his address, "A Plea for the Study of the Elimination of Drugs from the System." On the conclusion of this, a hearty vote of thanks was moved by Dr. GROVES and seconded by Surgeon BARNES. Carried *nem. con.*

Removal of Name.—The SECRETARY read a letter from Dr. Davey requesting to have his name removed from the Branch.

Election of Officers.—The following officers were elected: President-elect: Dr. Buck, Ryde; Vice-President-elect: Dr. Harvey, Ventnor. The following were then re-elected: Honorary Secretary and Treasurer: Mr. Green, Sandown; Secretary for Collective Investigation: Dr. Robertson, Ventnor; Representative on Branch Council: Dr. Neal, Sandown.

Next Place of Meeting.—Newport.

A vote of thanks to the Secretary was proposed by Dr. GROVES, seconded by Dr. BUCK, and carried.

The members afterwards dined together.

DORSET AND WEST HANTS BRANCH: SPRING MEETING.

THE spring meeting of this Branch was held at the Crown Hotel, Blandford, on Wednesday, May 4th; JOHN COMYNS LEACH, M.D., President, in the chair. There were also present twenty-seven members and visitors.

Branch Council.—Dr. G. H. Batterbury, of Wimborne; Dr. C. Childs, of Weymouth; Dr. J. Davison, Dr. W. Frazer, Mr. P. W. G. Nunn, and Dr. W. V. Snow, of Bournemouth; and Dr. P. W. Macdonald, of the Dorset County Asylum, were elected members for the ensuing year.

Representative of the Branch on the Council of the Association.—Dr. W. G. Vawdrey Lush, of Weymouth, was re-elected as representative of this Branch on the Council of the Association for the ensuing year.

New Members.—The following gentlemen were elected: Mr. Aubrey Blakiston, Wareham; Dr. William Clibborn, Bridport; Mr. A. N. Davis, Dorset County Asylum; Mr. J. F. Dixon, Westborne; Dr. E. H. Greves, Bournemouth; Mr. W. B. Kendall, Dorchester; and Dr. D. J. Lawson, Portland.

Next Meeting.—It was resolved that the summer meeting be held at Abbotsbury.

Travelling Expenses of Representatives on the Council.—A communication was read from a Sub-committee of the Association respecting the payment of the travelling expenses of Branch representatives to the four quarterly meetings of the Council of the Association in London; and it was resolved: "That the entire cost should be borne by the Parent Association."

Communications:

1. Mr. W. E. Good: Case of Compound Comminuted Fracture of Humerus. Patient shown. Specimen.
2. Mr. J. R. Philpots: Case of Enchondroma. Patient shown. Specimen.
3. Dr. Snow: On the Use of Oxygen in Medicine.
4. Surgeon-Major Cotter, M.D.: Cases of Syphilis.
5. Dr. McLean: On the Epidemic of Typhoid in Portland during the months of September, October, and November, 1886.
6. Dr. Griffin: Instrument Case for Watch-pocket.
7. Dr. Griffin: Old Illustrated Work on Anatomy, published at Vienna, 1627.
8. Dr. Spooner: Electric Laryngoscopic Lamp.

Dinner.—The members dined together at the hotel.

OXFORD AND DISTRICT BRANCH.

An ordinary meeting of the Branch was held on April 27th, at the Radcliffe Infirmary, at 3 o'clock; Mr. Cheatle, of Burford, in the chair. There were present twenty-four members and one visitor.

New Members.—After the usual formal business, a ballot was taken for R. J. Kerby, M.D. Bruss., Newbury; H. G. Lee, M.D. St. And., Thame; and J. Maunsell, M.D., Qu. Univ. Irel., Woodstock. They were elected as joining members of the Branch. Mr. W. Allin Thompson, of Oxford, was proposed for election as a joining member at the next meeting.

Next Meeting.—It was decided that the next, the annual, meeting should be held at Burford.

Travelling Expenses of Representatives on Council.—It was unanimously decided that the expenses of the representatives of the Branch on Council should not be paid.

SPECIAL CORRESPONDENCE.

A WINTER TRIP TO "THE FORTUNATE ISLANDS."

V.

Climatic Characters of Orotava: its Equal Temperature in Winter and Summer.—Slight Diurnal Range.—Small Rainfall.—The Automatic Mechanism of the Trade-Winds and the Terral.—Summer Resorts.—Laguna.—Icod.—Villa Flor.—Some Clinical Records.—Steamship Communication.—Hotel Accommodation.

Mr. Ernest Hart's letters continue as follows:

Plants are, as Belcastel has well said, the incorruptible witnesses whose testimony is superior to that of the most ingenious observations on the mildness or the rigour of the air which they breathe. Hence the care with which I have studied the flora of Orotava and the botanical details into which I have entered in my previous letter. His discussion of the climatic character of Orotava is accurate, full and well expressed. I have, thanks to the kindness of Dr. George Perez, had the opportunities, by the examination of a series of meteorological observations, of which I shall append a summary to these letters, of proving the accuracy of the statements of Belcastel, and I shall epitomise his report of the value of Orotava from the medical and hygienic point of view which he published in 1862. It is founded upon correct data, which the meteorological observations of to-day and my own personal experience amply confirm. "How is it," he asks, "that in this island there is evidence of such incessant and universal vitality both of plants and animals?" From one year's end to the other the variation of temperature does not exceed 18°, and this within the limits which are most favourable to life. That is the whole magic of this climate. There is no excessive heat in summer; no cold in winter. Very small rainfall, and that chiefly at night. No chill at sunset; no heavy dews; no frosts; no sirocco. It is a climate full of geniality with neither bite nor burn. A garden of flowers which bloom perennially. It has the charms of temperate zones, without their fluctuations and their drawbacks; the delights of southern continents without their pests, such as mosquitoes, venomous beasts, and insects, their excessive heats, their miasmas, or their heavy rainfall. We take first the temperature: the mean temperature of the year is 68.5°; the mean temperature of London is 50°; that of Pau, 55.9°; that of Nice, 59.3°; and of Madeira, 66°. In this mild climate the temperature oscillates between averages of which the lowest is very clement; and the remarkable uniformity of temperature throughout the year is shown in the following table.

January ...	62.2° F.	July	76.1° F.
February ...	62.1 ,,	August ...	73.2 ,,
March ...	64.2 ,,	September ...	71.8 ,,
April ...	64.6 ,,	October ...	69.3 ,,
May	69.2 ,,	November ...	68.0 ,,
June	73.1 ,,	December ...	66.7 ,,

Thus between the hottest month and the coldest month the temperature does not vary more than 14°, while in London the variation in temperature between the extreme temperatures of summer and winter amounts to 26.1°; in Pau, to 35.8°; in Rome, 28.2°; in Nice, 29.9°; in Algiers, 23.5°; Madeira, 14.9°. Again, if a comparison be made of the winter temperature, that is to say of the temperature of the months of November, December, January, February, and March, the mean temperature in London is 41.7°; of Nice, 49.6°; of Rome, 51.1°; of Algiers, 58.3°; Madeira, 61.7°; and Orotava, 63.8°. So that between the winter of Nice and of Rome and the winter of Orotava there is a difference much greater than between Nice and London; and Orotava is as far superior in winter temperature to Nice, both in equality and in mildness, as Nice is to London. Moreover, it is not a mere lessening of temperature, but quite another world. Neither at Nice, at Rome, at Naples, nor anywhere in France or Italy can you dispense in the winter with fires at given periods of the day. I have felt it colder in going out after sunset along the Promenade des Anglais at Nice, than almost anywhere else. I have shivered in a great coat in crossing the Libyan Desert in March, and twice I have passed through heavy hailstorms. On a dahabieh on the Nile, ice will form on deck sometimes at night, so great is the fall of temperature after sunset. At Orotava, as Belcastel picturesquely puts it, a chimney would be ashamed of its perpetual nudity. There are none. Throughout the winter you bathe in the sea at Port Orotava, with as much pleasure as at Brighton in July. The mean temperature of January at Nice is about 44°; the temperature at Port Orotava is 62°, and so slight is the variation of temperature throughout the day at Port Orotava, that the extreme range during the six winter months during any one day does not exceed 5.4°; whereas even at Madeira, where the equable temperature throughout the day is especially a noticeable feature, the diurnal range of temperature amounts to about 12°; that is to say the January temperature of Port Orotava corresponds to that of June in London, with the difference that it varies only 5° from early morn till midnight. The variation from day to day is equally slight. Orotava is not less remarkably favoured in respect to the singular dryness of the air, which makes it peculiarly valuable for a large class of invalids suffering from chest and throat affections, and in this respect it has an enormous advantage over Madeira. The rainfall at Madeira is estimated at 29 inches by Dr. Grabham; that of Teneriffe amounts on the average to 14.7 inches, so that Orotava is twice as dry.

Among the salient meteorological peculiarities of Orotava to which it owes much of its happy freedom from excessive heat and glare during the day, or from sudden fall of temperature through radiation from the soil at night, are those due to the action of the trade winds and the reaction due to their relation to the Peak, their influence on cloud-formation, and the prevalence of the *terral*, or land wind, at night. From early sunrise to 8 or 9 in the morning the sun usually shines with undimmed brilliancy and unchecked, and during these hours the Peak is commonly seen free from clouds, but then, during nine months out of the twelve, the north-east trade wind sets in from the sea and blows direct against the Peak; the moisture with which it is laden quickly condenses into soft, rounded cloud-masses at a height commencing usually at 3,000 feet and reaching an elevation of about 5,000. Above this the Peak usually towers into a region of sunlight. This cloud parasol protects Orotava during the day from the too powerful effects of the sun's rays and effectually moderates the diurnal temperature of the air. During all the day this cool, soft, and refreshing sea-breeze prevails usually till 4 or 5 in the afternoon, then a reaction occurs, and as the sun declines in the horizon and before it sets a current of cool air sets in, forming a gentle wind which blows from the mountainous lands outwards to the sea. This disperses the cloud cap, so that the Peak comes habitually once more clearly into view from below; it blows the clouds over the land and over the contiguous sea, and thinly veils the sky, so that as the sun sets the heavens do not present the brilliant clearness of a tropical night, and often the moon is surrounded by double lunar haloes.

This slight cloudiness of the sky at sunset and the prevalence of the relatively cool *terral* in the upper strata of the air have the peculiarly beneficial effect of arresting the rapid radiation from the surface of the earth and the sudden nocturnal falls of temperature which are so noticeable and so dangerous in Egypt, in India, and other southern health-resorts.

I will not load this letter with the tabular reductions of the careful observations which have been made by Dr. Victor Perez at Port Orotava. They entirely confirm Belcastel's results. At least as interesting are some tables, from which I shall hereafter draw, with which I have been favoured by an English gentleman resident at La Paz, which is about 400 feet higher than Port Orotava, closely adjoining the hotel. On this higher level the temperatures are slightly lower in the winter, and perceptibly so in the summer months; but they are not less equable and mild. If lower temperature is desired in summer, it can easily be found in the Villa Orotava, which is situated at a height of 1,000 feet above the sea, and which is within half an hour's ride from the port. Laguna, again, offers, as I have said, a summer climate which leaves nothing to be desired; and so do various other stations which can be named in the island and Villa Flor. There are the capabilities of a high mountain station which would rival Davos, but they are not yet developed by suitable residences for invalids. Thus Teneriffe seems to possess all the resources which could be desired for residents throughout the year. Its capabilities as a summer resort still await further development, and I believe that it is intended to arrange hotel accommodation near La Paz, at Icod, and at Laguna, which will be a great boon to those who desire to spend the summer months in Teneriffe. Meantime there is no small number of houses to be had which were built by the vine-holders and cochineal-planters in the days when these agricultural industries were a source of great wealth, which they have now ceased to be. These houses, built in the Spanish style and suitable to the climate, may be rented at present at very low rates. I heard of rents of furnished villas varying from £2 a month up to £10 a month, the latter being the rent of a beautiful villa with a delightful garden. The wages of servants are very low indeed, and their diet is most frugal; so that, at the present scale of prices, permanent residence in Orotava is as cheap as it is delightful and healthful. I cannot but think that it is destined to become the most favoured health-resort for Englishmen, and indeed for Europeans generally. I say especially English-speaking people, because the Grand Hotel and Sanatorium at Orotava is under the management of an English director, and because a large number of the best families of the island have English connections, and many of them speak English with singular purity and fluency. The long commercial connection with England, which was developed during the European blockade in the Napoleonic wars, has left permanent traces of English proclivities throughout the island, and English-speaking people will find themselves, in all the more settled parts of the island, much at home. Russians are beginning to make their appearance; and no doubt our American cousins, who always find out the choicest spots in the world and sooner or later make settlements there, will before long discover Orotava, and add to its resources and to its attractiveness, as they never fail to do.

Medically, Teneriffe is of course peculiarly suited to that important and numerous class of invalids who suffer from affections of the lungs and of the air-passages. I saw some very remarkable cases of cure, and heard of many others well authenticated. The prettiest villa in the place belongs to the widow of an English physician who came there to die forty years ago, and lived for thirty-five years afterwards, a happy, healthy man, who long overcame all traces of advanced lung-disease, which brought him to Teneriffe. He died only five years since. One lady, who was anxious to give me all the details of her case, had suffered repeated attacks of hæmoptysis, with laryngeal ulceration. She had been treated by eminent physicians in the capitals of Europe, and had sojourned at Palermo and on the Riviera for two seasons. She reached Orotava unable to walk, feeble, and greatly reduced in weight. She had spent six months there, and was now moving about freely, enjoying her life. The laryngeal ulceration had healed; her voice was normal; she had gained largely in weight, and was rapidly advancing to convalescence. She said to me: "I have tried every climate in the world, but I have never found anything which deserved to be called a climate until I came to Orotava." She wisely intends staying there for three years. Other and hardly less remarkable cases came under my notice of patients convalescing in various stages of phthisis, Bright's disease, and diabetes. Some had recently been resident in Madeira, and all were alike emphatic in their praises of the delights of the scenery, the comforts, and the perfection of the climate of Orotava. It is a great thing for Orotava that it has recently acquired the services in medical practice of a graduate of the London University. Dr. George Perez whilst in London was medical resident at the French Hospital, and at the Brompton Consumption Hospital; he afterwards studied at the Rotunda Hospital, Dublin. In addition to a high range of medical acquirement and experience, he is well versed in the accessory sciences; a man of excellent judgment and prudent character, and an agreeable companion. He has the confidence of a large circle of London physicians, and no doubt his recent return there has done much to promote the prosperity of the island.

All this sounds rather like a fairy tale, and one naturally asks one's self how it is that a climate which has such remarkable and indubitable advantages had, till now, attracted so little attention and drawn so small a number of visitors? The answer, I believe, is to be found in the difficulties of transit, which had hitherto rendered Teneriffe relatively inaccessible, and in the absence till now of adequate hotel accommodation, as well as in certain difficulties of municipal regulations. All these have suddenly and recently been removed. The wise policy of the Spanish Government in making the Canaries a free port, and removing all duties' and customs' difficulties have attracted to these ports the steamers of the great ocean lines between London, Liverpool, and Southampton, and our Australian colonies and the African coast. A few years ago, when I was in Madeira and wished to visit Teneriffe, I found that although I could get there without much difficulty, I could not with any certainty determine how and when I should be able to get away. All this is now altered. You have now the choice of the great ocean steamers of the Shaw-Savill line and of the New Zealand Shipping Company line; the excellent, but smaller and much cheaper, steamers of the British and African Steam Navigation Company and of the African Steamship Company. In going to Madeira you can add to this list the great steamers of the Castle line or of the Union; and from Madeira to Teneriffe there are now frequent steamers, the journey occupying only a day. From Plymouth to Teneriffe the passage is made often in less than five days, and from Liverpool to Teneriffe by African lines you can make the passage to Teneriffe and back for the singularly low fee of £15, which includes maintenance on board steamer on the most liberal scale for the eight days' journey out and the eight days' journey back to Liverpool, these steamers taking longer over the passage. I went out, as I mentioned, by the African line, and found the boat of 2,000 tons thoroughly comfortable, and the voyage very enjoyable. I returned by the New Zealand Shipping Company's steamer *Tainui*, a magnificent ocean steamer of nearly 6,000 tons, having a refrigerating apparatus on board, and a chamber containing 12,000 carcases of fresh meat, with an accessory refrigerator for the benefit of the passengers, which supplied the table every day with fresh meat, fish, cream, fruits, and vegetables, which could not have been surpassed had we been living in London, with all the resources of the daily markets at our disposal. Thus the transit difficulty no longer exists.

Of the arrangements at the Grand Hotel at Orotava, I cannot speak too highly. It combines the conveniences of an hotel with the comforts of a club. You have the services of a French *chef* in a Cuban palace surrounded by beautiful gardens, in an unequalled climate, beneath a sunny sky, and overlooking the broad Atlantic, seen always in its summer moods, with drawing-rooms overlooking gardens such as few noblemen's residences in England possess, a suite of reading-rooms placed in spacious covered verandahs, and a garden billiard-room, overhung with masses of bougainvillia, to which you can resort bare-headed and in evening dress till midnight. This is a combination of comforts which it would be hard, and within my experience not possible, to rival elsewhere.

The other stations of Teneriffe do not yet present the same attractions in the way of creature comforts, but seeing that the hotel and sanatorium was opened only in October last, and that already this season upwards of 500 visitors have been at Orotava, there is no reason to doubt that the enterprise which has been so well begun will be equal to supplying the increasing requirements of the larger number of persons who will, it may be anticipated, in the future seek at Orotava the rest, health, and physical conditions of happiness which it is so well fitted to supply.

PORTMAN CINDERELLA DANCES.—A sum of £150 has been handed over to the building fund of the new hospital for North London by the committee of the Portman Cinderella Dances. As an acknowledgment of the gift, the committee of the hospital have determined to name one of the new beds "The Portman Cinderellas."

A sum of £1,000 has been given as a jubilee gift towards laying out the castle grounds of Guildford, recently acquired by the corporation as a place of recreation, by the Right Hon. G. Cubitt, M.P.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Hypnotism in Midwifery.—Mortality among Nurslings in France.—The late Professor Gosselin.

In the *Gazette des Hôpitaux*, M. Dumontpallier reports a case of delivery during hypnotic sleep. The patient, a young woman, aged 24, was admitted into the Pitié Hospital in the sixth month of pregnancy in order to be treated for pains in the uterus. The patient was easily thrown into hypnotic somnambulism by pressure on the vertex and by verbal suggestion; these measures were of themselves sufficient to relieve her pain. Later on, in the beginning of labour, hypnotism was again tried. The uterine contractions took place about every ten minutes, and lasted from one minute to one minute and a half. During somnambulism the patient distinctly felt the contractions, but said they were not painful; when not under hypnotic influence, however, the pains became intense, and she begged to be put to sleep again. Towards the end of labour, the pain became so severe that it was found impossible to keep her in a state of hypnotism. During somnambulism the contractions were more powerful and shorter; the interval between them was only four minutes. M. Dumontpallier reserves his opinion as to the effect of somnambulism on the frequency and force of the contractions, and on the duration of labour. While the patient was in that condition she was perfectly conscious, and talked freely with the people about her. In making a comparison between the analgesia produced by somnambulism and that by chloroform in midwifery, the author states that they differ only in the fact that under chloroform cutaneous sensibility remains intact, while in the somnambulistic state it is extinguished.

At a recent meeting of the Academy of Medicine, M. Blache read a note on the application of the Law of December 25th, 1874, for the protection of young children and nurslings. Statistics show an increase of 466 in the number of nurslings under supervision in 1885, as compared with those of 1882. Of 4,817 nurslings under supervision in 1885, 2,480 were nursed at the breast, 1,792 were bottle-fed, and 545 were under the charge of persons appointed for the purpose. Of the total number, 2,541 were males, and 2,276 females; 3,416 were legitimate, and 1,401 illegitimate, showing an increase of 422 in the number of illegitimate children over that in 1882. The number of deaths was 403 out of the 4,817. The mortality among the nurslings under supervision in the Department of the Seine was 9.99 per cent. in 1880, while in 1885 the percentage fell to 8.36 per cent. Out of 1,000 children, 74 who were nursed at the breast, and 113 who were bottle-fed, died. Of the 74 in the former category, 25 succumbed to diseases of the digestive organs, while among the 113 bottle-fed infants, 68 deaths were ascribed to similar causes.

M. Gosselin, the President of the Académie des Sciences, whose death was announced in the JOURNAL of May 7th, was the author of numerous works. Amongst these are the *Compendium of Practical Surgery*, written in collaboration with Aug. Bérard and Denonvilliers; *Lectures on Abdominal Hernia*, published in 1865; *Lectures on Hæmorrhoids* (1866); and his great work, the classic *Clinique Chirurgicale de l'Hôpital de la Charité*, which will remain as a worthy monument of his professional life. In all his writings M. Gosselin laid much stress on the manner in which clinical instruction should be carried out. He said that it should consist of a visit to the different wards, followed by a formal lecture, in which the particular affection of each patient that had been seen, with its etiology, symptoms, prognosis, and treatment, should be set forth in detail. Among M. Gosselin's more recent works are *New Researches upon the Action of Antiseptics in the Dressing of Wounds* (1883); and a note upon the *Functional Condition of the Triceps Femoris Muscle after Transverse Fracture of the Patella.*

SWITZERLAND.

[FROM OUR OWN CORRESPONDENT.]

Thallin in the Treatment of Gonorrhœa.—Washing out the Stomach in Ileus.—Cæcal Hernia.—Repeated Attacks of Typhoid in the same Person.—Respiration and the Frequency of the Pulse.—Actinomycosis in the Human Subject.—Dermoid Cyst of Ovary.—Ectasia of the Diaphragm.—Medical Students in Swiss Universities.—Medical Practitioners in Switzerland.—Transfusion in Poisoning by Carbonic Oxide.

PROFESSOR E. KREIS, of Zurich, has recently carried out in Professor Klebs's laboratory a series of experiments on the influence of thallin on gonococci. He found that a solution of sulphate of thallin of a strength of from 4 to ½ per cent. completely destroyed the microbes. It may also be mentioned that the drug proved a powerful germicide in regard to the anthrax-bacillus and *staphylococcus aureus*. In view of Dr. Kreis's statement, Professor Goll, of Zurich, treated several cases of gonorrhœa, both acute and chronic, with injections of solutions of thallin of various strengths. When given at the beginning of the inflammatory stage injections of a 2 to 2½ per cent. solution of the sulphate caused rapid subsidence of the inflammation and quickly changed a purulent into a milky, sero-mucous discharge. In a group of cases seen on the fifth, eighth, or ninth day of the affections, the same injection, repeated twice or thrice a day for six or ten successive days cured the patient in from eighteen to twenty-five days. The thallin treatment seemed, to a certain degree, to prevent such complications as epididymitis, cystitis, irritability of the bladder, etc. In cases of gleet, Professor Goll obtained good results from irrigation of the urethra by means of a Nélaton's catheter, with a 1 or 1½ per cent. solution of thallin. Internal administration of the drug in doses of 25 centigrammes every three hours cured a very bad case of gonorrhœal cystitis with epididymitis in five days. In another man, aged 70, long standing cystitis of gonorrhœal origin was speedily relieved by the internal use of the drug in daily doses of 25 to 30 centigrammes.

Kussmaul's method of treatment of intestinal obstruction proved successful in a remarkable case reported by Dr. Paul Sandoz, of La Chaux-de-Fonds. The patient was a tabetic man, aged 35, who had suffered for ten days from stercoraceous vomiting, incessant hiccough, enormous abdominal distension with absolute stoppage of the bowels; these symptoms depended, in the opinion of Dr. Sandoz, on a temporary paralysis of the muscular coat of the intestine. The stomach was washed out twice daily for ten successive days. On each occasion this at once relieved the vomiting and hiccough for several hours, but no stool was passed till the tenth day. Dr. Sandoz has no doubt that his patient's life was saved by the treatment.

In the *Correspondenz Blatt für Schweizer Aerzte*, December 1st, 1886, p. 652, Dr. M. von Arx, of the Olten Cantonal Hospital, describes an interesting case of left-sided scrotal cæcocele which may be advantageously studied in connection with Mr. F. Treves's paper on the subject published in the JOURNAL of February 19th, p. 382. The patient, a wood-cutter, aged 82, died from catarrhal pneumonia. He had had a double scrotal rupture since boyhood, but had never worn a truss, and, in spite of the enormous size of the swellings, which reached down to the lower third of his thighs, had continued his daily work up to a couple of days before his death. On opening the herniæ, the left sac was found to contain the whole jejunum and ileum, and behind them the cæcum with its appendix, as well as part of the ascending colon. This portion of the large intestine—that is to say, the cæcum *plus* the ascending colon—measured 20 centimètres in length, and was freely movable within the hernial sac, which enclosed also a long piece of the meso-colon. The right hernial sac contained a loop of the large gut and a piece of the omentum as large as a man's fist. According to Dr. Arx there is only one similar case in literature (recorded by Lebert) of a double scrotal rupture where the cæcum was situated in the *left* hernial sac. He draws attention to the comparative rarity of cæcocele. Dr. J. Pfister (see his work *On the Anatomy and Treatment of Cæcocele*, Zurich, 1883) was able to collect only thirty-four cases of the kind.

Professor H. Eichhorst, of Zurich, relates the case of a woman who had three attacks of typhoid fever: one in 1882, another in 1884, and a third in 1886. A similar case, occurring in the person of a trained nurse, is mentioned by Dr. Hermann Mueller, who, moreover, himself passed through four distinct attacks of the disease; one of these was severe, but the others were only *typhus levissimus*. Dr. Mueller's two brothers had each two severe attacks of typhoid fever in the course of a year; one of them succumbed to a second attack.

At a meeting of the Zurich Medical Society, Dr. H. von Wyss related the case of a perfectly healthy lady, aged 29, in whom the frequency of the pulse and the heart-beats was regularly changed during the various phases of respiration. During inspiration the number of beats was increased, whilst in expiration it was diminished again, the greater frequency being observed during the short pause between the two acts. The sphygmographic tracings obtained during absolutely quiet and superficial breathing most distinctly showed a regular alternating change in the pulse, as well as a regular rhythmical rise of the pulse-curve during the period of greatest frequency.

Professor Redard, of the Geneva Dental School, lately met with a case of actinomycosis in a lad, aged 17. The first symptom of the disease, in the shape of a swelling on the left side of the lower jaw, had been noticed in the middle of December, 1885, and the patient died in the beginning of August, 1886. The starting-point of the disease seemed to be a carious molar tooth.

The same author describes the case of a dermoid cyst of the right

ovary in a woman, aged 29. The tumour contained a piece of bone with six well-formed dental alveoli, and with as many well-developed and perfectly fitting bicuspids and molars, besides several other teeth free and "unattached."

A rare case of left-sided ectasia of the diaphragm is published by Dr. Arthur Hanau, of the Zurich Pathological Institution. The patient, aged 67, who died from purulent cystitis, with inflammation of the ureter and pyelo-nephritis, had also three gastric ulcers which had caused enormous dilatation of the stomach. The fundus of that organ lay high up in the concavity of the left half of the diaphragm, which reached as high as the level of the third rib, and measured 22 × 22 centimètres, while the right half reached only to the fourth intercostal square, and measured 16 × 17 centimètres. The muscular substance of the diaphragm presented fatty degeneration.

During the winter session of 1886-87, there were 735 medical students—648 male, 87 female—in five Swiss Universities. At Basle there were 131 men; at Berne, 185 men and 42 women; at Geneva, 102 men and 5 women; at Lausanne, 25 men and 7 women; and at Zurich, 205 men and 36 women. Of the 87 women only 11 were natives of Switzerland, the foreign element being supplied mainly by Russia and Poland.

According to our *Correspondenz Blatt*, there are at present 1,475 medical practitioners in Switzerland; of these, 1,131 belong to three medical associations, as follows: 800, living in eighteen German cantons, belong to the central Verein; 238, living in five French cantons, to the Société Médicale de la Suisse Romande; and 93, living in the Tessino Canton, to the Società Med. della Svizzera Italiana.

On January 25th a young woman suffering from carbonic oxide poisoning, was brought to Professor Lichtheim's *clinique*, in Berne. As a last resource, transfusion of blood was mentioned in a clinical lecture on the case. Of the whole fairly large audience, consisting mainly of more or less robust Swiss, Russian, and Polish men, only a single person offered to give blood for the operation. This was a Russian girl, aged 22, rather delicate, of nervous temperament, and decidedly anæmic. The name of the fair volunteer was Alexandra A. Suisrnova, of Moscow, and she was about to present herself for her final examination two weeks later. Her offer having been accepted, 500 cubic centimètres of blood were taken from her arm. Unfortunately, the patient did not rally, but died soon after the transfusion. Miss Suisrnova was soon restored to her usual health, and on February 7th she took her M.D. degree in due course.

LIVERPOOL.

[FROM OUR OWN CORRESPONDENT.]

The Epidemic of Measles.—Meeting of Sanitary Inspectors.—The Cost of the Infectious Diseases Hospitals.—The Summer Camp for Destitute Boys.—The Typhus Epidemic in Flint.

MEASLES continues to be very prevalent here, but the last report shows some improvement. It was stated in my last letter that for the week ending April 9th the death-rate was 28.5, with 38 deaths from measles. For the week ending April 16th, the mortality-rate was 25.2, with 42 deaths, or 31 above the average. The rate for the next week reached 28.6 again, with 49 deaths, or 40 above the average; and for that ending April 30th, the death-rate dropped again to 26.9, with 39 deaths from measles. The rapid increase in the number of victims week by week has naturally occasioned considerable alarm. At the meeting of the Health Committee on April 28th, the medical officer of health stated that he was in communication with the School Board authorities on the subject. But when the Health Committee assembled last week, it appeared that the School Board were then holding a meeting, when presumably this matter would be considered. In the meantime no children are readmitted into schools from infected districts unless furnished with a note from the medical officer. Dr. Bligh stated at the Committee meeting that every spring German measles made its appearance in the vicinity of Kent Square, a district in which German emigrants congregate in large numbers. The medical officer of health, however, said that he had never heard of this. In connection with Dr. Bligh's statement, it is interesting to note that, whether this epidemic has been affected by it or not, it is an undoubted fact that the number of emigrants passing through Liverpool on their way to the United States has been unusually large this year. The present epidemic may fairly be considered to have commenced about February 12th. The returns since then run as follows: February 12th, 47 cases, 13 deaths; 19th, 96 cases, 24 deaths; 26th, 98 cases, 23 deaths; March 5th, 131 cases, 24 deaths; 12th, 141 cases, 19 deaths; 19th, 196 cases, 20 deaths; 26th, 171 cases, 33 deaths; April 2nd, 274 cases, 25 deaths; 9th, 294 cases, 38 deaths; 16th, 129 cases, 42 deaths; 23rd, 328 cases, 49 deaths; and April 30th, 312 cases, 39 deaths. During the whole of last year the total number of deaths from measles was 273. In the past twelve weeks, 349 fatal cases have occurred.

On April 25th an important meeting of public sanitary inspectors was held in Liverpool to consider the desirability of forming an association of public sanitary inspectors for the north-western district. Mr. Jerram, Chairman of the London Association, was present, and strongly supported the scheme. It was decided to carry out the proposal, to form the proposed association on the London model, and to affiliate it with the metropolitan body.

It appears that the completion in its entirety of the adopted plan for the infectious diseases hospitals is likely to prove a costly matter. At the last meeting of the City Council a recommendation from the Hospitals Committee was, after a sharp debate, accepted by a narrow majority, to the effect that application be made to the Local Government Board for sanction to borrow £12,500, being £8,500 for completing alterations required at the Netherfield Road Hospital, and furnishing it, and £4,000 for completing and furnishing the Grafton Street Hospital. The Council also accepted a tender for the erection of the Grafton Street Hospital for the sum of £13,937, a small portion of this being in respect of fittings. The tender for carrying out the proposed alterations at the Netherfield Road Hospital amounts to £13,470. At this institution it is proposed to erect a new administrative block, laundry, and mortuary, and to alter the east and west pavilions. The plans have been approved. But these money-items look insignificant by the side of the fact that up to March 31st last the total expenditure on our new waterworks at Vyrnwy amounted to £1,531,541 13s. 5d.

For two years past a summer camp for destitute boys has been formed on the sea-shore near Hoylake, and it is arranged to have one there this year; 229 boys passed through the camp in 1886 as against 125 boys in the first summer. This institution has become very popular; and, unlike many other charities, is in a healthy financial condition.

It is stated that the outbreak of typhus fever in Flint has all but subsided, the authorities having taken most admirable precautions. It is sad to learn that the only fatal case so far recorded is that of Dr. T. A. Evans, the medical officer.

CORRESPONDENCE.

A JUBILEE FUND FOR EPSOM COLLEGE.

SIR,—I have been waiting to see if any of the leading members of our profession would begin some movement to commemorate the Jubilee of Her Most Gracious Majesty the Queen, and that would also at the same time have the effect of benefiting the less fortunate members of the profession to which we belong, but up to the present time I have seen no sign of anything being done in that direction. I know, Sir, that it is from no want of loyalty that the members of the medical profession have so far not taken combined action to mark their high regard for the Jubilee of our beloved Queen in some practical and solid way, but I believe it is because they are waiting for someone to initiate a movement that would recommend itself to their approval for that purpose.

Now, Sir, there is scarcely a week passes but an appeal is made to the profession for assistance by some "object of charity" belonging to our body by reason of old age, sickness, death, or misfortune, and seeing that the various sections of the community are vieing with each other to celebrate the Queen's Jubilee in some substantial form, I venture to ask you to lend your aid and influence to bring about such a movement as will be creditable to our profession and a great gain to those who have particular claims upon our sympathies, and who look to us to smooth some of the rough places of this life, and aid them in procuring the creature comforts to make life bearable.

When we take into account the number of members (16,000), belonging to the medical profession in this country, and know the great want there is of help for the sick and needy amongst them and their families, I cannot but think that it only requires your help in pointing out the duty of our members to do something worthy of our noble profession to alleviate the wants of our less fortunate brethren in order to secure its accomplishment. We see what can be done by united action in raising money by such examples as those of the committees of the Women's Jubilee Offering to the Queen, and I think we have sufficient men of influence amongst us, who might be prevailed upon to act as a central committee,

and to call meetings of our professional brethren in every town throughout the kingdom, in order to raise subscriptions for the purpose I have indicated; and I believe, if that were done, the results would be most satisfactory.

When we see the number of almshouses that are empty at Epsom through the want of funds, and that the number of applicants for pensions, etc., is so much in excess of the funds that are at the disposal of the Medical Benevolent Society, in connection with the College at Epsom, I think it is quite time we were up and doing. If the matter is thoroughly taken in hand, I feel sure that, before many months are past, we should be in a position to go to the head master of the College at Epsom, and ask his advice as to how to expend a sum of £10,000.

I now leave the matter in your hands, and ask your powerful aid in furthering this much-needed object; and there can be no doubt that the success of such a movement would not only be a wise and beneficent act to testify our loyalty and appreciation of the blessings conferred upon our country during the reign of our gracious Sovereign, but would be an honour to our profession and a means of rendering assistance and conferring comfort and happiness on many.

I shall be glad to give ten guineas towards any fund that may be begun in connection with the Medical College at Epsom.—I am, etc.,

Crewe. JAMES ATKINSON.

*** We appreciate our correspondent's excellent intentions and practical benevolence, and shall be happy to aid him, but we cannot undertake the great task which with so facile a pen he "leaves in our hands." To commence such an enterprise with any chance of success he must first secure the active personal co-operation of the leaders of the profession in all the cities of Great Britain and of the Executive of the Medical Benevolent College. A central committee and local committees must be formed, and a series of public meetings be held, local secretaries appointed and set to work in every village, town, and city, and an active and ubiquitous system of canvassing pursued. A host of friends and sympathisers must be induced to give their vigorous co-operation, and some must be prepared to devote their whole energy and a large part of their time to it. We are prepared to give all our editorial support to such an effort—well begun and prosecuted with vigour on large lines—but personally the time and efforts of the editor of this JOURNAL are pretty fully occupied on the kindred work of developing the self-supporting and provident effort on the part of the members of the medical profession to secure each man for himself the means of obtaining of his own right provision against sickness, accident, and disablement, and pensions in old age by the machinery of the Medical Provident and Annuity Society. The two objects are kindred and congenial. For let prudence and self-aid do what it may, there will always remain misery to be alleviated and calamity to be solaced and consoled.

EARLY TRACHEOTOMY IN DIPHTHERIA.

SIR,—Dr. Muirhead's letter in the JOURNAL of April 9th has caused me to peruse again Mr. Watson Cheyne's essay in that of March 5th, in which he suggests that tracheotomy be performed in diphtheria "as soon as it is certain that the larynx is affected," and that all membranous patches be frequently and thoroughly treated by antiseptics. He admits, however, that with children it is difficult to carry out the latter part of this treatment effectually. I would venture to submit that in actual practice it would be found impracticable. The sick and apprehensive child is worried even by the introduction of a spatula or spoon into the mouth, and the frequent swabbing of the throat would set him struggling, and would exhaust him in the extreme. And though with the tube in the trachea he could not cry aloud, his face would express such anxiety and distress that, from sheer pity, or at the entreaty of the parents, the local treatment would have to be given up. Spraying with Sanitas water is generally all that one can do as regards local antiseptic treatment.

On the advisability of early tracheotomy there can hardly be two opinions, though the operation need not be resorted to directly the larynx is affected, for the child may quickly recover without operation, if the laryngeal affection be but slight. There is always a reasonable hope that the turning-point in the disease is already reached. It is only when the dyspnœa is seen to be increasing that the operation is demanded, and this is determined by watching the child for a while. Prolonged expiration, a failing colour in the cheeks, and increasing restlessness afford other and important indications for operating. The doubt, moreover, in the mind of the medical attendant as to whether the time for opening the trachea has arrived or not should be construed in favour of immediate operation.

In my experience, children with laryngeal diphtheria in private practice do not show nearly so good a percentage of recoveries after tracheotomy as do those who are at once taken to a hospital and are operated on at the first indication. In strangulated hernia it is just the reverse; the percentage of recoveries after operation is far higher in private practice, for there there has been, as a rule, no temporising, no delay, while in hospital work the cases of herniotomy are not nearly so successful.

At the Hospital for Sick Children, Great Ormond Street, there have been, in a little less than five years, 66 cases of tracheotomy for laryngeal diphtheria, out of which number there have been 25 recoveries—a percentage of about 38.[1] And at St Mary's Hospital during the last four years there have also been 66 cases (almost entirely amongst children); of these, 20 recovered, or about 30 per cent. In the total of 132 cases there have been 45 successful results, or a percentage of 34. I feel sure that if an equal number of tracheotomies in children with laryngeal diphtheria in private practice could be collected—not selected, as statistics too often are—the percentage of recoveries would not show nearly so favourably. I confess that my own cases have been so unfavourable that I should be little anxious to display them—as a rule I have been called in to operate as a last resource. In laryngeal diphtheria tracheotomy should not be regarded as a last resource, but as a most valuable therapeutic measure, if only it be performed early enough.—I am, etc.,

Seymour Street, W. EDMUND OWEN.

BERGEON'S TREATMENT OF PHTHISIS.

SIR,—My reason for sending you this communication is that, within the last month or two, I have frequently been asked by medical men what opinion I had formed of the results obtained in my experience of Bergeon's treatment of tubercular disease of the lungs. I therefore conclude that there is a wish amongst my professional brethren to know what has been the outcome of the observations of those who have been working at this subject.

My study of Bergeon's treatment was commenced in October of last year, and was chiefly conducted in my wards in the City of London Hospital for Chest Diseases. The cases I selected were certainly tubercular, as was shown by the physical signs of lung-disease, and the presence in the sputum of each patient of the tubercle bacillus. As regards the kind of case selected, it was of the type in which fever was not high, the urine free from albumen, and expectoration was moderately copious.

In not one single instance in which this treatment was carried out under my supervision was there the slightest evidence of any permanent good result having been achieved. Beyond a diminution of the amount of expectoration, an occasional lessening of the cough, and an unimportant lowering of the temperature, there was no evidence of any benefit having been derived from Bergeon's treatment in these cases of mine. As those results can be secured by means less unpleasant to the patient than Bergeon's method, I have ceased to employ it in the treatment of tubercular disease of the lungs.

No one who is acquainted with the history, including the fate, of the various drugs which, in times past and present, have been highly recommended for the curative treatment of tubercular disease of the lungs, would be at all surprised to hear that restoration to health from that condition of disease had occurred while the patient was undergoing Bergeon's system of treatment. I doubt whether any system of drug-treatment ever yet extensively tried in the attempt to combat this terrible disease has not, at some period of its history, been rushed into fashion by the publication of wonderful recoveries from consumption said to have been owing to its employment.

I have no doubt that these records are, as a rule, strictly accurate in every detail, excepting the not unimportant one of ascribing the good result to the use of this or that drug. That tubercular lung-disease occasionally ends in arrest of the disease and restoration of the patient to good health is a fact well known to every man whose experience of that disease is extensive.

That any drug can be relied upon to produce those happy results is, I venture to say, a proposition which to-day would receive practically no support from those who have a sufficiently large experience in the treatment of tubercular lung-disease to entitle them to speak upon the subject with some amount of confidence.—I am, etc.,

Harley Street, W. G. A. HERON.

[1] Of these operations, Dr. John Thomson (now of Edinburgh) had 13, with 7 recoveries; Dr. Lewis 12, with 5 recoveries; and Dr. Hinds 16, with 6 recoveries.

UNSOUND FISH.—During the past month the Fishmongers' Company has seized at Billingsgate upwards of 33½ tons of fish as unfit for human food.

MEDICO-LEGAL AND MEDICO-ETHICAL.

NECESSITY OF INQUESTS.

R. J. B. writes: I should like to ask your opinion on the following case. A servant-girl, being apparently in good health, prepares supper for a family living in this neighbourhood; the bell is rung for her to clear the table, and no answer being obtained, the mistress goes to the girl's bedroom and finds her lying apparently dead on the floor of the room. I am sent for, and on arrival find this is only too true. There are no external marks of violence; the deceased is a fine and well-nourished young woman, of 19 years. I look carefully for bottles, etc., which might contain poison but discover nothing. She had been nine months living as servant in the present family and they had noticed "shortness of breath" and at times she had complained of pains after her food. She has not been under a medical man's care nor has she taken any medicine at all. On seeing the mother, the latter gives no history of rheumatic fever, and in fact states that the only illness she has suffered from is "whooping cough" when a child. The county coroner, who lives some distance away, is communicated with, and he sends a telegram to me, with prepaid answer, asking if there is anything beyond natural causes to account for death. I report that there is no evidence of violence or poisoning. Two days afterwards I hear that the girl has been taken away for burial, and there is neither inquest nor *post-mortem* examination to be held. This announcement greatly surprised me and it is the talk and wonder of the neighbourhood. Seeing that it is a very unusual thing for a cheerful and well-nourished girl of 19 to drop down dead, and seeing that there is no history of rheumatism, and that she has never been under a medical man's care, don't you think it absolutely necessary and right that an inquest should be held on such a case?

*** It certainly appears to us that the case reported by our correspondent should have been carefully inquired into and the cause of death ascertained. It was a sudden and unexpected death and in our opinion one of those cases in which an inquest should have been held and a *post-mortem* examination of the body ordered by the coroner. If the decision of the coroner is formed upon a telegraphic message containing a negative opinion, his judgment as to the necessity of an inquest can hardly be expected to be sound, and it is not surprising that as the body of the deceased has been removed for burial without *post-mortem* examination, medical certificate, or proper public inquiry, that the fact should be "the talk and wonder of the neighbourhood" as our correspondent asserts.

The coroner having no power to issue any order for burial or certificate as to the cause of death, except after the holding of an inquest, we can only presume that the body was buried on an order from the registrar who may have registered the death, without his being able to afford to the Registrar-General any particulars as to the cause of death or the circumstances attending it. In the present case the death may have been due to natural causes or to violence direct or indirect, to poisoning, suicide, or murder. In the investigation of such a case many important medico-legal questions would arise, and unless the coroner is in possession of imformation other than that which our correspondent supplies, we can only believe that he has failed in the conception of his duties, or has been misinformed as to the details of the case. Should our correspondent and others in the neighbourhood feel that the death of the deceased still demands a more complete and public inquiry we should advise that a letter be addressed without delay to the Home Secretary, laying before him precise and accurate information respecting the case signed by a few responsible inhabitants of the district. The Home Secretary will then communicate with the coroner and, if considered desirable, an official inquiry will follow.

We have often pointed out what we consider an omission in the Registration Acts, namely, that deaths can be registered, burial orders given, and bodies interred without the certificate of the cause of death being obtained from a duly registered medical man, and in the absence of any inquest being held on the body. The Registrar-General has by instructions to the registrars rendered them more careful than formerly in the registration of deaths, but this does not cover the defective law on the subject. No loophole should be left open which might possibly facilitate the commission of crime, and no action should be spared to allay suspicion in the public mind that persons dying unexpectedly or suddenly can be quietly interred without medical certificate of the cause of death or a properly conducted inquest.

PERPLEXED writes: On May 10th I was summoned by the police to view the body of a woman supposed to be dead. On arriving at her house I found her seated on the closet dead, and where she had been apparently for two or three hours, rigor mortis having just set in. I informed the police that she was dead, and that the cause of death was quite uncertain. I have been greatly astonished to hear that an inquest has taken place to which I was not even called, and that the coroner and jury returned a verdict of death from natural causes. Could any of your readers inform me how such a verdict was arrived at, in the absence of any medical evidence?

*** In the above case we consider that our correspondent should have been summoned to give evidence in the case, and that a *post-mortem* examination should have been made. How the verdict was arrived at we do not know; we suppose it was guessed at. Inquests held in this fashion, as described by "Perplexed," are of no public utility, either from a legal or a medical point of view. Whatever is worth doing at all is worth doing well, and if the primary object of an inquest is to ascertain the cause of death, this can only be done by the aid of medical evidence, otherwise the coroner's certificate of the finding of the jury to the registrar is of no real value as a scientific record of the cause of death.

PROVIDENT DISPENSARIES.

DR. RALPH GOODING (Blackheath) writes: Rather more than a year ago a provident dispensary was established about a mile from this place. It is managed by a well-known chairman and an influential and representative committee, and no doubt does some good. Are the following customs strictly within the rules of professional etiquette?

1. To send ladies armed with the usual circular "touting" for customers, not only among the working classes, but also in the homes of well-to-do tradesmen and private patients of the neighbouring practitioners.

2. For the members of the staff to distribute circulars extolling the advantages of the institution.

3. For the staff to take under treatment patients actually under the care of a local practitioner, the invalids having been admitted members of the dispensary a few hours previously.

If you will kindly answer these inquiries in your next, you will confer a great favour on a large number of anxious practitioners.

*** We print this letter without in any way endorsing the statements contained (or implied) in it as regards the dispensary alluded to. We have no reason to affirm or deny that any such practices as alleged prevail there.

With regard to our correspondent's questions we cannot see (1) how ladies or other persons can be prevented from delivering any circular they please to any person they please, but the rules of every provident dispensary, or the practice of their committees, ought to exclude well-to-do people.

2. Is there any reason why members of the staff should not circulate in any legitimate manner any statement with regard to the institution which they believe to be true?

3. At the provident dispensaries managed by the Metropolitan Provident Medical Association, there is a rule that members are not to be admitted to treatment till after a month's subscription, except on the payment of an emergency fee of an amount sufficient to prevent any such practice as this, and such should, in our opinion, be the rule at all such institutions.

In giving these answers to our correspondent, it seems to us that we are following the dictates of common-sense and fairness rather than any rules of "professional etiquette." We are induced, however, to believe that the distinction is one without a difference.

"INACCURATE" DISPENSING.

AT the Westminster Police-court, on Tuesday, May 10th, James Cowen, chemist, 3, Greycoat Place, Westminster, was summoned before Mr. D'Eyncourt, at the instance of the District Board of Works, under the Adulteration of Food and Drugs Act, for selling a preparation of quinine not of the nature and substance demanded. Mr. Lightfoot, an inspector employed by the District Board, took a prescription containing 24 grains of quinine disulphate to the defendant, and when compounded, the medicine was found to contain only 14.56 grains, a deficiency of nearly 40 per cent. Defendant said he had been a dispenser for thirty-five years, and he could not account for such a mistake occurring. Mr. D'Eyncourt said, giving him credit for it being a mistake, he must fine him 40s., for it was most important that prescriptions should be accurately dispensed.

SCOTCH LICENTIATES AND APOTHECARIES' PRIVILEGES.

MR. JAMES GILROY writes: In the JOURNAL of April 30th, Mr. Upton, in reply to my letter appearing on that date, says "he entirely adheres to what he has expressed in previous letters, and has *not the slightest doubt* as to his opinion being correct." There is a Dutch proverb which says "A man's own opinion is never wrong," and this, I suppose, applies to the present instance, seeing Mr. Upton has entirely and absolutely failed to substantiate his opinion, either by references to medico-legal works, such as Glenn or Greenwood, or by the citation of legal decisions. In addition to that, he simply contradicts himself, as seen by the following, taken from page 600 of the JOURNAL of March 12th. Mr. Upton then and there says, regarding the note at page 238 of Glenn's Abstract: "What that note means, and no more, is that, if a Scotch or Irish diploma entitle the holder to do in Scotland or Ireland what the English apothecary can do in England, the penalty under the Apothecaries Act (1815) cannot be enforced against such person if he practises here as an apothecary." This is Mr. Upton's opinion on March 12th. Now, I have shown him and your readers that the Scotch apothecary is not, nor never was, what Mr. Upton would apparently wish to say he is, namely, licensed to compound drugs only. I have shown he has, and always had, the right to apply them, that is, to prescribe them; and if Mr. Upton can show that in the English apothecary he has a different right, then his opinion has some ground of foundation; as it is, his case has not a leg to stand upon. I refer him to page 908 of the JOURNAL of April 23rd, if he wants proof of the custom in Scotland, in addition to the references I have given him to legal works. The truth is, Mr. Upton is on the horns of dilemma, and he might just as well admit it.

THE TITLE OF PHYSICIAN.

AN OLD MEMBER B. M. A. asks: Is an M.R.C.S. (Lond.) and L.R.C.P. (Lond.) entitled to the qualification of a physician, and eligible to be appointed as such to an infirmary?

*** A Licentiate of the Royal College of Physicians of London is a physician according to law, and is entitled to act as such in a public or private capacity.

MASTERS AND SERVANTS.

M.D.—If our correspondent (the answer to whose communication has been unwittingly delayed) will refer to the *Code of Medical Ethics*, second edition, pages 42 and 47, rules 2 and 4, he will therein find it distinctly laid down that, under all but very exceptional circumstances, a medical man lies under the strongest moral obligation of secrecy. This rule we would advise him to follow in the case in question. At the same time, if the disease is likely to incapacitate his patient for a lengthened period, "M.D." will, in our opinion, do well to intimate the fact to the master, but without disclosing or hinting at the real nature of the malady.

A PRACTITIONER.—The best course will be in the first place to communicate the facts to Mr. James R. Upton, Clerk to the Society of Apothecaries', Blackfriars.

NAVAL AND MILITARY MEDICAL SERVICES.

CHANGES OF STATION.

THE following changes of station among the officers of the Medical Staff of the Army have been officially notified as having taken place during the past month :—

	From	To
Surgeon-General W. S. Murray, M.B. ..	Netley ..	.. Egypt.
Dep. Surg.-Gen. Sir J. A. Hanbury, K.C.B.	London ..	.. Gibraltar.
,, ,, D. A. C. Fraser, M.D. ..	Dover ..	.. Netley.
,, ,, R. W. Meadows, M.D. ..	Bombay ..	.. Devonport.
Brigade-Surgeon R. W. Clifton	Edinburgh ..	.. Curragh.
Surgeon-Major A. Brebner, M.D. ..	Bengal ..	.. Newry.
,, A. A. Macrobin, M.D. ..	Bengal ..	.. Dublin.
,, W. Donovan	Mauritius ..	.. Woolwich.
Surgeon T. M. Corker, M.D.	Kilkenny ..	.. Buttevant.
,, J. D. Day, M.B.	Dublin ..	.. Loughrea.
,, T. F. MacNecce	Alderney ..	.. Aldershot.
,, C. R. Woods, M.D.	Preston ..	.. Bradford.
,, A. J. Struthers, M.B.	Edinburgh	.. Glasgow.
,, E. Butt	Dundalk ..	.. Belfast.
,, F. J. Lambkin	Brighton ..	.. Canterbury.
,, G. T. H. Thomas	Bengal ..	.. Portsmouth.
,, J. D. Moir, M.B.	Egypt ..	.. Devonport.
,, C. W. Johnson, M.B.	Egypt ..	.. York.
,, H. T. Baylor	Buttevant ..	.. Limerick.
,, H. E. Cree	Egypt ..	.. York.
,, H. M. Ramsay	Aldershot ..	.. Malta.
,, E. Eckersley, M.B.	Sunderland	.. Sheffield.
,, T. Browning	Curragh ..	.. Spike Island.
,, G. F. H. Marks, M.D.	Bradford ..	.. Preston.
,, R. N. Buist, M.B.	Newcastle ..	.. York.
,, F. S. Le Quesne	Cork ..	.. Madras.
,, C. S. Cronin	Aldershot ..	.. Bengal.
,, F. J. Morgan	,, ..	.. Devonport.
,, H. C. Thurston	,, ..	.. Devonport.
,, B. H. Scott	,, ..	.. Devonport.
,, W. C. Poole, M.B.	,, ..	.. Dublin.
,, G. Raymond, M.B.	,, ..	.. Cork.
,, E. A. Burnside	,, ..	.. Portsmouth.
,, T. M'Culloch, M.B.	,, ..	.. Home District.
,, A. B. Hinde	,, ..	.. Portsmouth.
,, J. Ritchie, M.B.	,, ..	.. York.
,, S. Macdonald, M.B.	,, ..	.. Edinburgh.
,, E. Corcoran	,, ..	.. Chatham.
,, A. O. C. Watson, M.B.	,, ..	.. Curragh.
,, E. W. Gray, M.B.	,, ..	.. Curragh.
,, D. Stiell, M.B.	,, ..	.. York.
,, L. E. A. Salmon	,, ..	.. York.
,, G. A. Wade, M.B.	,, ..	.. Portsmouth.
,, E. G. Browne	,, ..	.. Belfast.
,, G. Hilliard, M.B.	,, ..	.. Devonport.
,, C. R. Elliott, M.B.	,, ..	.. Colchester.
,, C. A. Young	,, ..	.. Dublin.
,, J. W. Bullen, M.D.	,, ..	.. Cork.
,, B. J. Inniss	,, ..	.. York.
,, R. C. Thacker	,, ..	.. Curragh.
,, W. N. Murphy, M.D.	,, ..	.. Cork.
,, S. F. Clark, M.B.	,, ..	.. Dover.
,, E. M. Hassard	,, ..	.. Dover.
Quartermaster J. Thomson	— ..	.. York.

CIVIL SURGEONS IN INDIA.

THE Government of India has decided that, for the convenience of the public service, medical officers serving in the Civil Department are to act also under the orders of the Military Medical Department, who will place them on Boards, &c., when their services are required, without waiting for the sanction of the head of the Civil Department.

HALF-PAY AS APPLIED TO MEDICAL OFFICERS.

M.S. sends us a personal illustration of the hardship entailed on medical officers by the rules regarding half-pay. In his case, during the late war in the Soudan, he was in charge of a field hospital, and was present in all the actions around Suakin, but towards the end of the expedition, in consequence of the continued exposure, he contracted dysentery, and was invalided to England. After five months' sick-leave in England, he was placed on half-pay, and this lasted for twelve months. This enforced inactivity, the result of disease contracted in and by the service on which he had been employed, not only caused loss of a certain amount of pay, but also entailed loss of time to be counted towards promotion and retirement. Had he been an officer of the Royal Engineers, the year on half-pay, having been caused by illness originating in and due to the service, would, by Royal Warrant, have counted the same as full-pay service toward promotion and retirement. M.S. asks why should such different measure be meted out to him because he happens to be a medical and not an engineer officer of the army. We are not aware of any satisfactory reply that can be made to this query.

THE Greenwich Hospital pension of £50 a year for fleet and staff surgeons, vacant by the death of Deputy-Inspector General J. C. T. Forbes, has been awarded to Staff-Surgeon John Jolliffe.

THE RANK OF ARMY MEDICAL OFFICERS.

PILGRIM writes : I have just read your speech as chairman of the Parliamentary Bills Committee Meeting of April 26th. Every medical officer of the army ought to feel deeply indebted to yourself and that Committee for your noble struggle on their behalf. Would you permit me, as an old hand who has seen much service, active and other, to say one or two words? You rightly desire that nothing should weaken the bond uniting the army medical officer to his profession. So do I. Remember, however, that to all intents and purposes he is a soldier as well as a physician. The army medical officers have won eleven Victoria Crosses, and the Army Hospital Corps one, or twelve in all. It may be taken for granted that a Royal Engineer officer is none the less efficient as a military engineer, or proud of being one, because his profession is honoured with military rank and title, and that he is a captain, a major, a colonel, and so forth. Why should it be otherwise with a military surgeon, or, rather, physician? I do not see why he as a soldier should not, like other soldiers, be allowed to earn military rank and title, and all that these mean in military and civil life. His subordinates—those he commands in the Army Hospital Corps—are thus honoured, and why not he? You suggest such titles as "Surgeon-Lieutenant," "Surgeon-Colonel," and "Surgeon-Major-General." To military ears and in society these, I fear, would sound oddly, and not altogether advantageously. Besides being a doubtful prefix in this connection, the word "surgeon" conveys an erroneous, because quite inadequate, impression as to the nature and magnitude of the services rendered by the medical officers of the army. No Engineer officer, proud as he is of his profession, would like to be styled "Engineer-Lieutenant," "Engineer-Colonel," or "Engineer-Major-General." He would naturally feel it to be awkward, and not likely to benefit him. What commissariat or pay officer would like to be called "Commissariat-Captain," or "Pay-Major So-and-So?" And depend upon it that in such a machine as our army is, if you make any distinction in this respect, it is almost certain to tell against the medical officers. The composite titles you have kindly suggested for these officers would not, therefore, I think be desirable. But those of Lieutenant, or Captain, or Major, or Colonel, or Major-General, are titles which would, of course, be as well understood and as much respected in regard of the different grade of officers of "the Royal Physicians," or "Surgeons" (as I would call them), as are the same titles in the Royal Engineers and other portions of the army.

INSTRUCTION FOR VOLUNTEER MEDICAL OFFICERS.

DR. F. H. APPLEBY (Surgeon 4th Notts Volunteer Battalion) writes : In the JOURNALS of May 7th and April 30th, were letters respectively from Surgeons Pearce, Mears, and "N.," which implied that permission to attend the school at Aldershot had been refused to regimental surgeons. I had the privilege and pleasure of a visit there last year, which I hoped to repeat in the autumn. On seeing these letters, I wrote to my commanding officer on the subject, and enclose you the reply he received from the War Office in answer to his question, which I think will set the matter satisfactorily at rest in one way :

My dear Col. Eyre,—I find there is no regulation or order excluding surgeons of Volunteer regiments from the school at Aldershot, but there is a decision that they cannot receive allowances unless they belong to the Volunteer Medical Staff Corps.—Yours truly, R. H. KNOX.

Col. Eyre, M.P.

THE NAVY.

FLEET-SURGEON GERALD MOLLOY has been placed on the retired list with the rank of Deputy Inspector-General. His commissions are dated : Surgeon, May 16th, 1857 ; Staff-Surgeon, December 27th, 1867 ; and Fleet-Surgeon, November 13th, 1878.

The following appointments have been made at the Admiralty during the past week ; C. W. MAGRANE, Staff-Surgeon, to the *Carysfort* ; J. O'B. WILLIAMS, Surgeon, to the *Albacore* ; J. D. TREVOR ROPER, Surgeon, to the *Foxhound*, temporarily ; ASTLEY COOPER, Fleet-Surgeon, to the *Dædalus* ; WILLIAM D. LONGFIELD, Fleet-Surgeon, to the *Indus* ; GODFREY GOODWIN, Fleet-Surgeon, to the *Royal Adelaide* ; JAMES D. SMITH, M.D., Fleet-Surgeon, to the *Rupert* ; JOHN L. BAGNALL OAKELEY, Surgeon, to the *Royal Adelaide* ; JOHN D. HENWOOD, Surgeon, to the *Minotaur* ; EDWARD J. BIDEN, Surgeon, to Plymouth Hospital.

THE MEDICAL STAFF.

DEPUTY SURGEON-GENERAL T. N. HOYSTED has been brought on the administrative medical staff of the Bengal Army, *vice* Deputy Surgeon-General R. Wolseley, deceased.

The undermentioned gentlemen, who are serving in the Madras command, have been posted as follows : Surgeon C. K. POWELL, M.D., doing duty Bangalore Station Hospital, to do general duty, Eastern District ; Surgeon R. J. FAYLE, doing duty Wellington Station Hospital, to do duty Station Hospital Secunderabad. Surgeon P. J. NEALON, M.D., doing duty Rangoon Station Hospital, to do duty Station Hospital, Wellington.

Surgeon T. A. P. MARSH, serving in the Madras Command, has leave to England for six months on medical certificate.

Surgeon-Major W. J. WILSON, serving in the Bombay Presidency, is appointed to the medical charge of the Mhow Station Hospital, *vice* Surgeon-Major T. M. O'Brien, permitted to resign.

Quartermaster C. A. COX died at Netley on April 13th. His commissions bore date—as Lieutenant of Orderlies, June 9th, 1877 ; as Quartermaster, July 1st, 1881. He served in the China war of 1860 with the 1st Dragoon Guards, and was at the capture of the Taku Forts and Pekin (medal with two clasps) ; and in the war with the Zulus in 1879 (medal with clasp). He had also the medal for long and meritorious service.

INDIAN MEDICAL SERVICE.

THE services of Surgeons C. P. LUKIS and G. A. EMERSON, both of the Bengal Establishment, are permanently placed at the disposal of the Government of the North-West Provinces and Oude.

Brigade-Surgeon C. J. J. JACKSON, M.D., Bengal Establishment, has retired from the service, which he entered as Assistant-Surgeon August 4th, 1855, attaining the rank of Brigade-Surgeon January 10th, 1881. His latest appointment was that of Superintendent of the Lunatic Asylum at Moorshedabad. He has no war record.

Surgeon T. GRAINGER, M.D., Bengal Establishment, is appointed to the officiating medical charge of the 4th Native Infantry, *vice* Surgeon-Major G. P. Mackenzie, M.B., who has been temporarily transferred to civil employment.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Tuesday, May 17th.

Prevention of the Spread of Rabies.—Lord MOUNT-TEMPLE, in moving the second reading of the Registration of Dogs in the Metropolis Bill, said there was a large number of homeless dogs wandering about the streets of the metropolis. Experience, both in England and in other countries, showed that the muzzle was, to a great extent, a failure. He argued that not only did muzzles prevent dogs lapping water, but they hindered breathing to some extent in hot weather. As far as he had studied the matter, therefore, it seemed to him that muzzling dogs to prevent rabies was a delusion and a snare. The Bill provided that, after December 31st, 1887, a complete register should be kept not only of persons who took out licences for dogs, but also of the dogs themselves, with their numbers upon badges, to be borne on their collars. Dogs found in the streets without the badge and collar would be liable to be taken possession of by the police, and the owners would be liable to fines for contravention of the Act specified in the schedule.—Viscount CRANBROOK said the Bill simply dealt with the metropolis, and he did not know why the noble lord need have argued as if it applied to the whole country. The greatest difference existed among experts as to the cause of rabies, and he thought it very desirable that there should be an inquiry on the subject. He should propose a Committee, but that it should not sit until the report of the Commission now considering hydrophobia in human beings and M. Pasteur's system had been received. He should not be prepared to assent to the further progress of the Bill until there had been an inquiry upon the subject.—Lord BELPER considered the use of the muzzle was far more likely to be efficacious in preventing the spread of rabies than the scheme proposed in the Bill. He expressed the hope that the Committee to be appointed would consider whether some means could not be devised for extending the area of publication in which muzzling was to be enforced.

The Bill was read a second time.

HOUSE OF COMMONS.—Thursday, May 12th.

Medical Supervision on Trans-Atlantic Liners.—Dr. TANNER called attention to the entirely insufficient medical requirements and supervision on board trans-Atlantic liners for emigrants and steerage-passengers; also to invite inquiry into the great risks incurred by master mariners and seamen on board vessels making long voyages, in consequence of the former being obliged to act as physician and surgeon to the crew in addition to his other duties.—Baron H. D. WORMS said that certain sections of the Passenger Act clearly laid down that every passenger-ship must carry a duly qualified medical practitioner. A duly qualified medical practitioner was assumed to be one who had taken a diploma as a doctor, surgeon, or, in some cases, an apothecary. He had often thought that an apothecary ought not to be included under that head. It was not, however, possible for the Board of Trade to ascertain whether the persons appointed were duly qualified or not. Of course, if any case of incompetency were brought under their notice, the Board of Trade could exercise their power in the matter. At all events, the proprietors of the great trans-Atlantic lines did their utmost to procure competent medical officers. The Board of Trade could in no way assist the steamship companies in the selection of such officers, but only possessed a power of veto when their attention was called to incompetency. Hospital accommodation on board emigrant ships was, no doubt, sometimes inadequate, but it was the endeavour of the Board of Trade, through their officials, to see, as far as possible, that the accommodation was proper, that the rules as to cleanliness were observed, and, indeed, that every precaution was taken to comply with the requirements of the law. While he had been at the Board of Trade, no case had been brought before him of infringement of the regulations, or of neglect on the part of the surgeons or doctors with regard to emigrants.

Monday, May 16th.

Poor-Law Officers.—Mr. RITCHIE, in answer to Mr. WADDY, said district medical officers and relieving officers were, speaking generally, appointed for life, subject, of course, to the proper performance of their duties, and their salaries could not be reduced without their consent. It was not the case that there had been on the whole a great decrease in the number of paupers during the last few years, although, no doubt, in particular instances, this had been so. Neither was it the case, in his opinion, that many of these officers were receiving salaries out of proportion to the duties they had to perform. He could not undertake to suggest that the Royal Commission on the Civil Service should extend their inquiries to the salaries of poor-law officers, as this would be entirely beyond the scope of their labours, but the question of the powers which should be possessed by boards of guardians with respect to their officers would receive consideration in connection with the County Government Bill.

The Food-Supply in the Army.—The House having gone into Committee of Supply upon the army estimates, Dr. FARQUHARSON complained of the inadequate rations provided for our soldiers, which only included three-quarters of a pound of meat a day for each man, which, when cooked, would only weigh from four to six ounces. This amount of food was insufficient to keep a grown man in health, seeing the amount of fatigue he had to undergo, and it was far too small to enable the growing lads who formed our recruits to attain their proper proportions. The soldier was induced to enlist on the promise of free rations, but he afterwards found the promise to be a delusion and a snare, for his dinner was the only really free meal he got. A large number of desertions were to be accounted for on this ground. He suggested the appointment of a Committee to consider the matter.—Mr. NORTHCOTE replied that the position of the soldier now was much better, both in regard to pay and rations, than it was a few years ago. He believed it would be no advantage to the soldier to increase his rations by reducing his pay, because the liberty of choice which the soldier now had of purchasing certain articles of food for himself would be taken from him. The suggestion with respect to the appointment of a Committee should, he said, receive due consideration.—Colonel HUGHES-HALLETT complained that the short-service system had caused deterioration in the physique of the army.

OBITUARY.

ROBERT TIFFEN, M.D., M.R.C.S.ENG.,

OF WIGTON, CUMBERLAND.

THE subject of this notice was one of the oldest and most respected members of the profession in the north of England, and his death will cause a gap which will not easily be filled. He had been in failing health for a few months from an affection of the throat, which interfered with his sleep at night, and during a recent visit to London he consulted Dr. Morell Mackenzie. After a short rest in Devonshire, where he had gone to visit a grandson who was seriously ill, he returned to his residence on the 4th inst. feeling far from well. On the following day his symptoms became more severe, and he died on the 12th inst. from a severe attack of pneumonia. The sad intelligence of his death cast quite a gloom over the town in which he had carried on a large practice for more than forty years, and where he had been a most useful member of the community. During this period he had shown himself active in promoting every scheme which had for its object the improvement of the district in which he lived. For many years he was Captain of the Wigton Volunteers, and a few years ago, on his compulsory retirement, he was granted the rank of Honorary Major. He held enlightened views on sanitary matters, and took an active part in promoting the drainage and water supply of the town. He was held in high esteem by his professional brethren, and many years ago he occupied the presidential chair of the local Branch of the Association, in whose welfare he always took a warm interest. For several years he acted as the representative of the Branch on the Parliamentary Bills Committee, in the proceedings of which he took an active interest. He was also very regular in his attendance at the annual meetings of the Association, but although a ready and effective speaker, he seldom took an active part in the proceedings. His funeral, which took place on the 16th, was a public one. All the shops in the town were closed, and all classes of the community were represented at the grave side. In addition to the members of his own family, there were a number of his medical brethren from other towns in the county, a large number of the clergy and magistrates, members of the local board and board of guardians, and troops of friends and patients both rich and poor, showing the great respect in which he was held by all classes. He is succeeded in his practice by his son Dr. C. J. Tiffen, who had been in partnership with him for some years, and in addition he has left another son who is in practice as a solicitor at Richmond, Yorkshire, and one daughter, who is married. Much sympathy is felt for his family, as, in addition to the loss of their father, their mother, who had borne up bravely during her husband's illness, became ill immediately after his death, and succumbed after an illness of three days to the same malady (pneumonia).

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

THE Registrar-General has just issued his quarterly return relating to the births and deaths registered in England and Wales during the first or winter quarter of this year, and to the marriages in the three months ending December last. The marriage-rate corresponded with the very low rate in the corresponding quarter of 1885, which was considerably lower than that recorded in the corresponding period of any year since the commencement of civil registration in 1837. The birth-rate and the death-rate were also much below their respective averages. The temperature of the air during the quarter was below the average, and the weather generally was favourable to the public health.

The births of 219,515 children were registered in England and Wales during the three months ending March last, equal to an annual rate of 31.5 per 1,000 of the population, estimated by the Registrar-General to be nearly twenty-eight and a quarter millions of persons. This birth-rate was 3.5 per 1,000 below the mean rate in the corresponding quarters of the ten years 1877-86, and was lower than the rate in the March quarter of any year since 1838. The birth-rates in the quarter under notice ranged in the several counties from 20.3 in Rutlandshire, 24.4 in North Wales, and 26.1 in Sussex, to 34.8 in Nottinghamshire and in Monmouthshire, 35.3 in Staffordshire, and 36.8 in Essex. In the twenty-eight great towns for which the Registrar-General publishes weekly returns, the birth-rate last quarter averaged 32.9 per 1,000 and ranged from 26.9 in Halifax and 27.1 in Bradford, to 37.9 in Newcastle-upon-Tyne, 38.9 in Preston, and 42.3 in Cardiff. The births registered in England and Wales during the quarter under notice exceeded the deaths by 76,169; this represents the natural increase of the population during that period. From the Board of Trade returns, it appears that 61,293 emigrants sailed from the various ports of the United Kingdom at which emigration officers are stationed; of these, 28,879 were English, 5,817 Scotch, and 10,574 Irish. The proportions of British emigrants to a million of the respective populations of the three divisions of the United Kingdom were 1,022 from England, 1,457 from Scotland, and 2,179 from Ireland. Compared with the corresponding quarter of 1886, the proportional amount of emigration last quarter showed an increase of 32 per cent. in England, 66 per cent. in Scotland, and 75 per cent. in Ireland.

During the first quarter of 1887, the deaths of 143,346 persons were registered in England and Wales, equal to an annual rate of 20.6 per 1,000 of the estimated population. This death-rate was 1.6 per 1,000 below the mean rate in the corresponding quarters of the ten years 1877-86, and 2.2 below the rate in the first quarter of 1886. Among the urban population of the country, estimated at rather more than eighteen millions of persons, the rate of mortality during the quarter under notice was equal to 21.0 per 1,000; in the remaining or rural population of little more than ten millions of persons, the rate did not exceed 19.8 per 1,000. These urban and rural rates were below their respective averages for the six preceding corresponding quarters. The rate of mortality last quarter among infants under 1 year of age was 0.7 per cent., and that of persons aged between 1 and 60 years was 9.9 per cent., below the respective average rates in the ten preceding corresponding quarters; the death-rate among persons aged upwards of 60 years, however, exceeded the same average by 1.1 per cent.

The 143,346 deaths registered in England and Wales during the three months ending March last included 4,391 which were referred to measles, 2,764 to whooping-cough, 1,624 to scarlet fever, 1,331 to diarrhœa, 1,209 to fever (including typhus, typhoid, and simple fever), 973 to diphtheria, and 30 to small-pox; in all, 12,322 deaths resulted from these principal zymotic diseases, equal to an annual rate of 1.77 per 1,000, against an average rate of 2.27 in the first quarters of the ten preceding years. The mortality from measles showed an excess, while that from each of the other principal zymotic diseases was below the average. Only 30 deaths from small-pox occurred in the whole of England and Wales during the quarter under notice, and, with the single exception of the preceding three months, when only 11 were recorded, were fewer than in any quarter on record.

The rate of infant mortality, or the proportion of deaths under 1 year of age to registered births, was 143 per 1,000, and almost corresponded with the average rate in the ten preceding March quarters. While the rate of infant mortality in London did not exceed 131 per 1,000, it averaged 156 in the twenty-seven large provincial towns, among which it ranged from 120 in Portsmouth, 123 in Nottingham, and 126 in Bolton, to 171 in Bradford and in Cardiff, 192 in Cornwall, and 212 in Plymouth.

PURIFICATION OF METROPOLITAN SEWAGE.

A REPORT on the purification of metropolitan sewage was presented at the last meeting of the Metropolitan Board of Works, when attention was called to the more extended experiments which the Board decided to carry out in March last with respect to the system tried at the Grosvenor Road pumping-station, and subsequently at the Crosness outfall. The precipitates used were lime and protosulphate of iron. One million gallons of sewage had been treated daily by this process, the result being fairly clear effluent water. Recently, additional apparatus had been set up, and nine million gallons of sewage daily had been treated for several months. The method of treatment has been found so satisfactory that it will be applied to the whole of the sewage discharged into the river Thames. The total quantity of sewage treated during the year is said to have been 994,000,000 gallons. The wet sludge obtained therefrom amounted to 30,614 tons, which, on further settlement in the subsiding tanks, was reduced to 18,191 tons. Of this quantity, 16,747 was pressed into 5,310 tons of sewage-cake, the remaining 1,444 tons being treated in various ways. About 3,000 tons of the sewage-cake have been supplied free of charge to farmers and others who have applied for it for agricultural purposes.

THE OFFICIAL LYMPH SUPPLY.

DR. BROWN (Bacup) reports that his experience with ivory points charged with calf-lymph from the Local Government Board has been successful; on April 21st he received 6 charged ivory points and vaccinated 6 infants, in all 18 insertions. Result, every insertion successful, 14 vesicles large and 4 small, no unpleasant symptoms of any kind.

HEALTH OF ENGLISH TOWNS

DURING the week ending Saturday, May 7th, 5,899 births and 3,704 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons. The annual rate of mortality, which had been 21.6 and 20.6 per 1,000 in the two preceding weeks, rose again during the week under notice to 20.9. The rates in the several towns, ranged in order from the lowest, were as follow:—Birkenhead, 16.0; Bolton, 16.7; Nottingham, 17.2; Hull, 17.5; Leicester, 17.5; Derby, 17.8; Bristol, 18.0; Birmingham, 18.8; London, 18.9; Sheffield, 19.5; Portsmouth, 20.4; Sunderland, 20.5; Leeds, 20.7; Bradford, 21.6; Newcastle-upon-Tyne, 22.3; Wolverhampton, 22.6; Brighton, 23.0; Cardiff, 23.0; Plymouth, 24.4; Norwich, 24.7; Liverpool, 26.0; Blackburn, 26.8; Salford, 27.0; Halifax, 27.0; Oldham, 27.2; Huddersfield, 27.8; Manchester, 31.0; and the highest rate during the week 34.2 in Preston. The death-rate in the twenty-seven provincial towns averaged 22.6 per 1,000, and exceeded by 3.7 the rate recorded in London, which, as before stated, was only 18.9 per 1,000. The 3,704 deaths registered in the twenty-eight towns during the week under notice included 548 which were referred to the principal zymotic diseases, against 558 and 529 in the two preceding weeks; of these, 249 resulted from measles, 160 from whooping-cough, 45 from scarlet fever, 39 from diarrhœa, 32 from diphtheria, 22 from "fever" (principally enteric), and 1 from small-pox. These 548 deaths were equal to an annual rate of 3.1 per 1,000. The zymotic rate in London during the week under notice was equal to 2.7 per 1,000, while in the twenty-seven provincial towns it averaged 3.4, and ranged from 0.5 and 0.6 in Birkenhead and Wolverhampton, to 5.9 in Liverpool and in Manchester, 6.7 in Salford, and 7.3 in Norwich. The deaths referred to measles, which had been 291 and 261 in the two preceding weeks, further declined during the week under notice to 249, and showed the largest proportional fatality in Sheffield, Oldham, Liverpool, Manchester, Salford, and Norwich. The fatal cases of whooping-cough, which had been 134 and 132 in the two previous weeks, rose again during the week under notice to 160, and caused the highest death-rates in Liverpool, Bradford, Oldham, Blackburn, and Huddersfield. The deaths referred to scarlet fever, which in the five preceding weeks had increased from 37 to 51, declined during the week under notice to 45, and included 19 in London, 5 in Liverpool, and 3 in Bristol. The 39 fatal cases of diarrhœa showed a slight decline from recent weekly numbers. The deaths from diphtheria, which had been 21 and 25 in the two previous weeks, further rose during the week under notice to 32, of which 20 occurred in London, and 2 in Liverpool. The 22 fatal cases of fever exceeded by 7 the very low number recorded in the preceding week, and included 5 in London, and 3 in Manchester. The death referred to small-pox occurred in Cardiff, and was the sixth fatal case of this disease registered in that town since the middle of March. The number of small-pox patients in the Metropolitan Asylum hospitals, which had been 7 and 6 at the end of the two preceding weeks, were 5 on Saturday, May 7th; one new case was admitted to these hospitals during the week. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 4.3 per 1,000, and was slightly below the average. The causes of 81, or 2.2 per cent. of the 3,704 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

In the twenty-eight large English towns, including London, dealt with in the Registrar-General's weekly return, which have an estimated population of 9,245,099 persons, 5,703 births and 3,494 deaths were registered during the week ending Saturday, May 14th. The annual rate of mortality, which had been 20.6 and 20.9 per 1,000 in the two preceding weeks, declined during the week under notice to 19.7. The rates in the several towns, ranged in order from the lowest, were as follow: Bolton, 10.7; Derby, 12.8; Leicester, 14.9; Sunderland, 15.8; Brighton, 16.3; Hull, 17.2; London, 17.3; Bristol, 17.5; Halifax, 18.4; Cardiff, 18.5; Portsmouth, 18.5; Birkenhead, 19.8; Sheffield, 20.5; Bradford, 21.0; Nottingham, 21.6; Oldham, 21.8; Blackburn, 21.9; Birmingham, 22.6; Leeds, 22.7; Plymouth, 23.0; Salford, 23.6; Preston, 24.5; Norwich, 24.7; Wolverhampton,

25.2; Newcastle-upon-Tyne, 26.2: Manchester, 26.4; Liverpool, 26.9; and the highest rate during the week, 29.0, in Huddersfield. In the twenty-seven provincial towns, the death-rate averaged 21.8 per 1,000, and exceeded by as much as 4.5 the rate recorded in London, which, as before stated, did not exceed 17.3 per 1,000. The 3,494 deaths registered in the twenty-eight towns during the week under notice included 235 which were referred to measles, 136 to whooping-cough, 47 to scarlet fever, 33 to fever (principally enteric), 27 to diarrhœa, 20 to diphtheria, and 2 to small-pox; in all, 500 deaths resulted from these principal zymotic diseases, against 531 and 548 in the two preceding weeks. The zymotic death-rate was equal to 2.8 per 1,000. In London the zymotic rate was 2.3, while it averaged 3.3 per 1,000 in the twenty-seven provincial towns, among which it ranged from 0.0 and 0.4 in Wolverhampton and Leicester, to 5.9 in Liverpool, 6.4 in Huddersfield, and 9.0 in Norwich. The fatal cases of measles, which had declined in the three preceding weeks, from 291 to 249, further fell during the week under notice to 235, and caused the highest death-rates in Liverpool, Sheffield, Manchester, Salford, Newcastle-upon-Tyne, and Norwich. The deaths referred to whooping-cough, which had been 132 and 160 in the two previous weeks, declined last week to 136, and showed the highest proportional fatality in Liverpool, Sheffield, Huddersfield, Birmingham, and Blackburn. The 47 fatal cases of scarlet fever showed an increase of 2 upon the number in the preceding week, and caused the highest rates in Hull and Oldham. The deaths referred to different forms of fever, which had been 17 and 22 in the two previous weeks, further rose during the week under notice to 33; this disease was proportionally most prevalent in Liverpool. The 27 fatal cases of diarrhœa showed a further decline from recent weekly numbers. The deaths referred to diphtheria, which had increased in the three preceding weeks from 21 to 32, declined during the week under notice to 20, a lower number than in any week since September last; they included 9 in London, 2 in Liverpool, 2 in Brighton, and 3 in Huddersfield. Small-pox caused 1 death in Portsmouth and 1 in Cardiff, but not 1 in London or in any of the twenty-five other large provincial towns. The Metropolitan Asylum Hospitals contained 7 small-pox patients on Saturday, May 14th, and 3 new cases of this disease were admitted during the week under notice. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 3.6 per 1,000, and was below the average. The causes of 74, or 2.1 per cent. of the 3,494 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

In the eight principal Scotch towns having an estimated population of 1,299,000 persons, 903 births and 529 deaths were registered during the week ending Saturday, May 7th. The annual rate of mortality, which had been 22.0 and 22.5 per 1,000 in the two preceding weeks, declined again during the week under notice to 21.2, but slightly exceeded the average rate during the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 9.4 in Leith, 13.0 in Perth, 17.1 in Paisley, 18.9 in Edinburgh, 22.8 in Glasgow, 23.7 in Dundee, 23.9 in Aberdeen, and 26.0 in Greenock. The 529 deaths registered during the week in these Scotch towns included 31 which were referred to whooping-cough, 25 to measles, 11 to diarrhœa, 2 to scarlet fever, 2 to diphtheria, 1 to fever, and not one to small-pox; in all, 72 deaths resulted from these principal zymotic diseases, against 95 and 89 in the two preceding weeks. These 72 deaths were equal to an annual rate of 2.9 per 1,000, against 3.1, the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns during the week under notice were recorded in Dundee, Greenock, and Aberdeen. The fatal cases of whooping-cough, which had been 36 in each of the three preceding weeks, declined during the week to 31, and included 16 in Glasgow, 8 in Dundee, 3 in Edinburgh, 3 in Aberdeen, and 3 in Greenock. The deaths referred to measles, which had been 30 and 27 in the two previous weeks, further declined during the week under notice to 25, of which 12 occurred in Aberdeen, 9 in Glasgow, and 3 in Greenock. The 11 fatal cases of diarrhœa exceeded those recorded in any recent week, and included 3 in Glasgow. The deaths referred to scarlet fever, which had steadily declined in the four preceding weeks from 11 to 8, further fell during the week under notice to 2, both of which occurred in Edinburgh. The 2 fatal cases of diphtheria also showed a decline, and were recorded in Glasgow. The death referred to fever occurred in Edinburgh. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 4.5 per 1,000, against 4.3 in London. As many as 57, or 10.8 per cent., of the 529 deaths registered during the week in these Scotch towns were uncertified.

During the week ending Saturday, May 14th, 868 births and 536 deaths were registered in the eight principal Scotch towns, having an estimated population of 1,299,000 persons. The annual rate of mortality, which had been 22.5 and 21.2 per 1,000 in the two preceding weeks, rose again during the week under notice to 21.5, and exceeded by 1.8 per 1,000 the mean rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 10.8 in Leith, 14.6 in Perth, 17.4 in Dundee, 19.2 in Greenock, 20.5 in Paisley, 22.6 in Aberdeen, 23.6 in Glasgow, and 23.7 in Edinburgh. The 536 deaths registered during the week in these Scotch towns included 78 which were referred to the principal zymotic diseases, against numbers declining from 95 to 72 in the three preceding weeks; of these 36 resulted from whooping-cough, 15 from measles, 12 from scarlet fever, 7 from diphtheria, 5 from "fever," 3 from diarrhœa, and not one from small-pox. These 78 deaths were equal to an annual rate of 3.1 per 1,000, which slightly exceeded the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic death-rates in the Scotch towns during the week under notice were recorded in Dundee, Glasgow, and Aberdeen. The fatal cases of whooping-cough, which had been 36 and 31 in the two preceding weeks, rose again during the week under notice to 36, of which 18 occurred in Glasgow, 7 in Dundee, 6 in Edinburgh, and 3 in Aberdeen. The deaths referred to measles, which had declined from 30 to 25 in the three previous weeks, further fell during the week under notice to 15, and included 10 in Glasgow, and 5 in Aberdeen. The fatal cases of scarlet fever, which had steadily declined from 11 to 2 in the five preceding weeks, rose again during the week under notice to 12, of which 6 occurred in Glasgow, and 3 in Aberdeen. The 7 deaths from diphtheria exceeded those recorded in any recent week, and included 4 in Glasgow, and 2 in Paisley. The fatal cases of fever, which had declined from 8 to 2 in the three previous weeks, rose again during the week to 5, of which 2 occurred in Glasgow and 2 in Aberdeen. The 3 deaths referred to diarrhœal diseases were considerably below the average. The death-rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 5.1 per 1,000, against 3.6 in London. The causes of 67, or 10.4 per cent., of the 536 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending Saturday, May 7th, 479 deaths occurred in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 28.8 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 31.0; Belfast, 26.5; Cork, 18.8; Drogheda, 29.6; Dublin, 35.1; Dundalk, 21.8; Galway, 30.3; Kilkenny, 46.5; Limerick, 32.4; Lisburn, 19.3; Londonderry, 21.4; Lurgan, 15.4; Newry, 10.5; Sligo, 0.0; Waterford, 23.2; Wexford, 17.1. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.3 per 1,000, the rates varying from 0.0 in Londonderry, Newry, Kilkenny, Drogheda, Wexford, Sligo, and Lisburn, to 8.7 in Dundalk; the 5 deaths from all causes registered in the last named district comprising 1 from diphtheria and 1 from diarrhœa. Among the 114 deaths from all causes registered in Belfast are 1 from measles, 2 from typhus, 5 from whooping-cough, and 2 from diarrhœa; the 24 deaths in Limerick comprise 1 from typhus and 1 from diarrhœa; 2 of the 10 deaths in Waterford were caused by whooping-cough; and the 9 deaths in Galway comprise 1 from simple continued fever. In the Dublin Registration District, the births registered during the week amounted to 225 and the deaths to 248. The deaths represent an annual rate of mortality of 36.6 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 35.1 per 1,000. Twenty-three deaths from zymotic diseases were registered, being 4 below the average for the corresponding week of the last ten years; they comprise 6 from measles, 3 from scarlet fever (scarlatina), 1 from typhus 5 from whooping cough, 1 from ill-defined fever, 3 from enteric fever, 3 from erysipelas, etc. Fifty-nine deaths from diseases of the respiratory system were registered, being 18 over the number for the preceding week and 19 in excess of average for the 18th week of the last ten years; they comprise 33 from bronchitis, 10 from pneumonia or inflammation of the lungs, 3 from croup, and 2 from pleurisy. The deaths of 13 children under 5 years of age (including 11 infants under one year old) were ascribed to convulsions. Three deaths were caused by apoplexy, 2 by epilepsy, 9 by other diseases of the brain and nervous system (exclusive of convulsions), and 16 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 40 deaths, mesenteric disease 7, and cancer 8. Six accidental deaths and one case of homicide were registered. In 31 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending Saturday, April 30th, that the annual death-rate recently averaged 28.3 per 1,000 in the three principal Indian cities; it was 23.1 in Bombay, 24.3 in Calcutta, and 36.0 in Madras. Cholera caused 46 deaths in Calcutta and 1 in Madras; 2 deaths were referred to small-pox, and 19 to measles, in Bombay; while "fever" was fatally prevalent in each of these Indian cities. According to the most recently received weekly returns, the annual death-rate averaged 27.7 per 1,000 persons estimated to be living in twenty-two of the largest European cities, and exceeded by as much as 7.1 per 1,000 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 33.7, and almost corresponded with the rate in the preceding week; the 600 deaths included 17 from typhus and typhoid fever, 7 from small-pox, and 16 from scarlet fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 19.2 per 1,000, and ranged from 16.7 in Christiania to 20.7 in Stockholm; scarlet fever caused 3 deaths in Christiania, and measles 2 deaths in Stockholm, while diphtheria and croup were somewhat prevalent in each of these cities. In Paris the death-rate was equal to 28.1 per 1,000 (against 28.7 and 29.4 in the two preceding weeks), and exceeded by as much as 9.8 per 1,000 the rate recorded in the corresponding week in London; the deaths included 71 from measles, 48 from diphtheria and croup, 27 from typhoid fever, and 10 from small-pox. The 193 deaths in Brussels, of which 4 resulted from measles and 3 from diphtheria, gave a rate of 22.3. No returns from Geneva appear to have been received since the beginning of the current year. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 23.1 per 1,000, the several rates being 19.5 in the Hague, 22.3 in Rotterdam, and 24.0 in Amsterdam; 4 deaths were referred to diphtheria, and 6 to measles, in Amsterdam, while no zymotic disease was fatally prevalent in either of the other two Dutch cities. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 28.4 per 1,000, and ranged from 22.2 and 24.7 in Berlin and Trieste, to 32.5 and 38.0 in Munich and Buda-Pesth. Small-pox caused 9 deaths in Buda-Pesth, 5 in Vienna, 5 in Prague, and 1 in Trieste; diphtheria 24 in Berlin; typhoid fever 9 in Hamburg; and whooping-cough 16 in Berlin, 8 in Prague, and 10 in Buda-Pesth. The death-rate in Rome was equal to 31.5, and in Venice to 27.3 per 1,000; 12 deaths were referred to small-pox in Rome, and 1 in Venice; measles caused 8 deaths in Rome, and typhoid fever 2 in Venice. In Cairo the death-rate was 35.4, and in Alexandria 42.2 per 1,000; diarrhœal diseases caused 89 deaths in Cairo and 35 in Alexandria; 7 fatal cases of small-pox were recorded in Alexandria and 1 in Cairo; and 10 deaths resulted from typhoid fever in Cairo and 3 in Alexandria. In four of the largest American cities the recorded death-rate averaged 24.8 per 1,000, and ranged from 19.5 in Baltimore to 28.1 in New York. Diphtheria caused 27 deaths in New York and 16 in Brooklyn; measles 14 in Philadelphia, 10 in New York, and 9 in Brooklyn; and 8 fatal cases of typhoid fever were recorded in Philadelphia.

Hospital Sunday at Birmingham has resulted in £5,351 bein placed to the credit of the local institutions.

City of London Truss Society.—The report presented at the 18th annual festival of the City of London Truss Society, presided over by the Lord Mayor, records the fact that since its institution this charity has relieved more than 425,000 of the suffering poor. During the past year upwards of 9,000 men, women, and children had been benefited by the Society, comprising 6,000 males and considerably over 1,000 females. There were something like 600 children under one year of age, 256 persons between 70 and 80, five between 85 and 90, and one had been relieved who had attained the patriarchial age of 105 years. At the close of the festival subscriptions were announced to the amount of £600.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen have been admitted Licentiates of the College.

G. W. Adams, Heatley, Warrington; A. J. Adie, Charing Cross Hospital, W.C.; A. H. Barker, Wantage, Berks; A. S. Barling, Leeds; F. A. Barton, 6, Cambridge Terrace, Dover; C. Batchelor, St. Mary's Hospital, W.; G. W. Blomfield, 105, Downs Road, Lower Clapton, E.; W. G. Bower, The Vineries, Southport; F. M. Brown, 65, Guilford Street, Russell Square, W.C.; L. H. Brown, 73, Cazenove Road, Stamford Hill, N.; H. M. Burke, 6, Seaton Avenue, Mutley, Plymouth; R. Capes, Belmont, Harrogate; G. H. Charlesworth, 23, North Street, Wandsworth; A. E. Chilcott, 16, Halsey Street, Cadogan Square, S.W.; R. G. Cookson, 2, Grenville Street, Russell Square, W.C.; A. W. Comber, King's College Hospital, W.C.; C. J. Davenport, St. Bartholomew's Hospital, E.C.; F. M. Davies, St. Bartholomew's Hospital, E.C.; A. P. de Carvalho, The Mount, Debden Green, Loughton; W. F. Dewsnap, 1, Theresa Terrace, Hammersmith, W.; G. M. Fox, 5, Oxford Street, Bilston; S. C. G. Fox, Westminster Hospital, S.W.; F. T. Frost, 6, College Road, Bromley, Kent; E. C. Garman, The Hollies, Wednesbury; E. F. Gardner, 11, Lancaster Road, South Norwood Park, S.E.; E. S. Goody, 53, Grosvenor Square, S.W.; *R. N. Goodman, 21, Belsize Square, N.W.; F. C. Goodwin, King's College Hospital, W.C.; B. C. Gowan, 20, Courtfield Road, Cromwell Road, S.W.; *C. T. Green, St. George's Hospital, S.W.; W. Green, 7, Grafton Street, Mile End Road, E.; J. T. Henderson, Leeds; J. Holt, General Infirmary, Leeds; C. J. J. Hood, King's College, W.C.; S. P. Hosegood, University College, W.C.; N. R. Howse, 74, Victoria Dock Road, E.; E. Humphry, St. Bartholomew's Hospital, E.C.; J. Hutton, St. Bartholomew's Hospital, E.C.; J. W. Jaques, St. Bartholomew's Hospital, E.C.; *A. W. James, Dispensary, Stoke Newington, N.; J. A. James, 44, Bath Row, Birmingham; T. W. Kelly, St. Bartholomew's Hospital, E.C.; R. Kirkpatrick, Thornhill, Bolingbroke Grove, Wandsworth Common, S.W.; J. L. W. Kitching, Great Finborough, Stowmarket; F. J. Lankester, 73, Charlotte Street, Portland Place, W.; H. Lawson, 19, Dawson Square, N.W.; J. N. Lewis, University College, W.C.; W. W. L. MacLean, Ellerslea, Fulham Park Gardens, S.W.; A. J. Macnab, King's College, W.C.; J. Malpas, University College, W.C.; H. J. Marston, 81, St. Paul's Road, Highbury, N.; C. Metzgar, Guy's Hospital, S.E.; *M. Miley, 21, Belsize Avenue, Hampstead; F. W. Morison, 2, Dynham Road, West Hampstead, N.W.; A. H. Nott, 21, Belsize Square, N.W.; M. W. Oldham, Southam, near Rugby; F. H. Oliver, Charing Cross Hospital, W.C.; S. Oliver, King's College Hospital, W.C.; E. B. Osmond, Middlesex Hospital, W.; C. O. Parsons, St. Thomas's Hospital, S.E.; A. E. Paul, 62, Ladbroke Grove Road, Notting Hill, W.; *W. P. Peake, St. Bartholomew's Hospital, E.C.; J. J. Pitcairn, 53, Great Dover Street, S.E.; F. Preston, 30, Woodstock Road, Poplar, E; T. Pye, St. Bartholomew's Hospital, E.C.; H. A. Sansom, St. Thomas's Hospital, S.E.; C. E. Scudamore, 92, Dempsey Street, Stepney, E.; C. C. Sen, University College Hospital, W.C.; W. A. Shelswell, 280, Goldhawk Road, Shepherd's Bush, W.; G. S. Shute, Guy's Hospital, S.E.; H. Simmons, 32, Bernard Street, Russell Square, W.C.; F. T. Simson, 10, Viceroy Road, South Lambeth, S.W.; A. H. Smith, 28, Chorlton Road, Manchester; E. S. Smith, St. Mary's Hospital, W.; E. Solly, 103, Lambeth Palace Road, S.W.; A. H. Spurrier, London Hospital, E.; T. E. Stuart, St. Thomas's Hospital, S.E.; E. E. Thompson, Tenbury; W. Thompson, General Infirmary, Leeds; W. Tinker, 80, Cromwell Road, South Kensington, S.W.; H. B. Todd, Park Cottage, Streatham Place, S.W.; H. Tonks, London Hospital, E.; H. E. Vincent, Milton House, Sunny Bank, South Norwood; R. F. Waites, 83, The Grove, Ealing, W.; J. E. Walker, 67, Torrington Square, W.C.; C. W. Ward, Oxford Villa, Whitstable; W. S. Warliters, 82, Cambridge Street, Eccleston Square, S.W.; W. R. Watson, 9, Hunter Street, Brunswick Square, W.C.; P. H. Whiston, 19, Vincent Square, Westminster, S.W.; V. Wigglesworth, Owens College, Manchester; G. C. Wilkin, 15, Hyde Park Square, W.; J. T. C. Williams, 52, Litchfield Road, Bow, E.; W. A. Young, 48, Burton Crescent, W.C.

* Approved by the Examining Board.

UNIVERSITY OF DURHAM.—FACULTY OF MEDICINE.—Examination for Degrees in Medicine and Surgery, Epiphany Term, 1887. At the First Examination for the Degree of Bachelor in Medicine, old regulations, the following candidates satisfied the examiners:

J. E. Brogden, St. Bartholomew's Hospital; H. C. Halsted, St. Bartholomew's Hospital.

Re-examination in Chemistry only:

C. F. L. Dixson, St. Bartholomew's Hospital.

Re-examination in Botany only:

W. J. Essery, King's College; J. E. Nihill, St. Bartholomew's Hospital.

First Examination for the Degree of Bachelor in Medicine, new regulations.

Elementary Anatomy and Physiology, Chemistry with Chemical Physics, and Botany with Medical Botany:

S. A. Bonton, St. Bartholomew's Hospital; H. Robinson, Yorkshire College, Leeds.

Elementary Anatomy and Physiology:

T. S. Irvin, College of Medicine, Newcastle-upon-Tyne; W. E. Peacock, College of Medicine, Newcastle-upon-Tyne.

Chemistry with Chemical Physics, and Botany with Medical Botany:

R. H. Calvert, Yorkshire College, Leeds; A. R. Douglas, College of Medicine Newcastle-upon-Tyne; W. F. Fisher, London Hospital; A. J. Hopper, College of Medicine, Newcastle-upon-Tyne; R. Muschamp, Yorkshire College, Leeds; W. S. E. Raines, College of Medicine, Newcastle-upon-Tyne; R. A. Welsh, College of Medicine, Newcastle-upon-Tyne.

Chemistry with Chemical Physics:

C. R. Adams, St. Thomas's Hospital; R. C. Benington, L.R.C.P., M.R.C.S., L.S.A., St. Thomas's Hospital; H. S. Collier, St. Mary's Hospital; C. H. East, M.R.C.S., L.S.A., King's College; F. W. Gunn, King's College; F. S. Harris, London Hospital; D. L. Hubbard, M.R.C.S., L.S.A., King's College; J. F. Johns, London Hospital; E. W. D. Kite, M.R.C.S., L.S.A., Queen's College, Birmingham; H. B. Lavies, M.R.C.S., L.S.A., King's College; C. N. Lovely, London Hospital; W. P. Palmer, L.R.C.P., M.R.C.S., L.S.A., St. Bartholomew's Hospital; H. S. Stockton, M.R.C.S., L.S.A., Charing Cross Hospital.

Second Examination for the Degree of Bachelor of Medicine, new regulations.

Second-class Honours in order of merit:

F. W. Gunn, King's College; E. A. Falkner, Middlesex Hospital.

Pass List in alphabetical order:

C. R. Adams, St. Thomas's Hospital; A. P. Arnold, College of Medicine, Newcastle-upon-Tyne; S. A. Bonton, St. Bartholomew's Hospital: F. Bulman, College of Medicine, Newcastle upon-Tyne; H. S. Collier, St. Mary's Hospital; G. W. Davis, L.R.C.P., M.R.C.S., St. Thomas's Hospital; W. R. Dix, College of Medicine, Newcastle-upon-Tyne; C. H. East, M.R.C.S., L.S.A., King's College; W. A. Hatton, College of Medicine, Newcastle-upon-Tyne, and London Hospital; D. L. Hubbard, M.R.C.S., L.S.A., King's College; A. M. Jones, M.R.C.S., L.S.A., Guy's Hospital: T. M. Kimpster, College of Medicine, Newcastle-upon-Tyne; H. B. Lavies, M.R.C.S., L.S.A., King's College; R. H. Shaw, College of Medicine, Newcastle-upon-Tyne; T. Watts, The Owens College.

UNIVERSITY OF EDINBURGH.—Medical Degrees Examination. Second Professional Examination. The following is the official list of candidates who have passed:

R. O. Adamson (with distinction), W. B. Aitken, Richard Arthur, M.A., Benjamin Barnard, J. J. Bennetts, W. A. Betts, J. B. Bird, J. R Bird, R. D. Booth, R. L. Booth, F. D. Boyd, F. P. Bremner, Reginald Broadbent, D. W. Brown, John Bruce, James Brunton, G. C. Cameron, T. V. Campbell, M.A., F. H. Carlyon, S. W. Carruthers, D. B. Carse, W. J. Cattan, E. J. Cheetham, C. H. T. Chevallier, L. B. Christian, C. S. Clark, M. W. W. Cowan, Alexander Dott, T. W. Eden (with distinction), A. S. Edwards, R. C. Elsworth, R. A. Fleming, M.A., William Fordyce, M.A. (with distinction), J. S. Fox, J. H. R. Garson, A. W. George (with distinction), E. B. Gleaser, H. L. Gordon, George Govan, Curt Grobbelaar, B.A., A. C. Hall, V. B. Harley, F. A. A. Holmden, C. W. Howatson, Sydney Jamieson, C. A. Johnston, D. J. Jones, P. J. Kenna, T. L. Kennish, E. J. Keogh, A. L. Kerr, William Kinnear, M.A., J. T. Kitchin, J. A. Kuhne, B.A., J. H. W. Laing, M.A. (with distinction), A. S. Lawrence, S. M. Laurence, W. G. Laws, J. A. Lowson, William Lundie, M.A., James M'Donald, J. R. M'Intosh, B.A., D. J. Mackay, Henry Mackay, Frank Mason, Kenneth Maxwell, E. F. Maynard, T. C. Meikle, James Middlemass, M.A., G. V. Miller, J. G. Moffat, J. C. Montgomery, John Montgomery (with distinction), T. H. Morgan, R. H. Morrison, Robert Muir, M.A. (with distinction), B. L. Paton, Julius Petersen, F. G. Phillipo, A. F. R. Platt, Kanta Prasad, J. F. Pridie, J. R. Radcliffe, J. C. Rattray, A. G. Reid, Robert Renton, Richard Richmond, Charles Robertson, R. J. Robertson, J. B. Robinson, Tennent Ronalds, M.A., D. M. M. Ross (with distinction), H. C. N. Sakir, G. S. Samuelson, M. B. Saunders, C. B. Savory, J. F. Scott, W. A. Scott, Ebenezer Shaw, George Shields, J. H. Slayter, J. H. Smith, James Smuts, William Smyth, Edward Stechan, J. F. de Sylva, J. B. Thackwell, J. G. Thomas, David Traill, M.A., N. G. Trotter, D. F. D. Turner, B.A., Herbert Vine (with distinction), J. W. Watterson, W. H. Webster, William Weir, B.Sc., E. N. K. Wells, Andrew Westwood, T. B. White, A. J. Whiting, A. R. A. Wilhelm, A. M. Williamson, H. M. Woodhead, E. A. Woodward, R. E. B. Yelf, C. W. Yeoman, F. S. Zaytoon.

First Professional Examination.—The following is the official list of candidates who have passed:

J. S. Anderson, M.A., F. W. Barton, J. E. A. G. Becker, A. J. Bienemann, F. M. Black, H. D'A. Blumberg, N. T. Bond, E. A. Braithwaite, T. M. Brown, L. C. Bruce, R. D. Buchanan, H. J. M. Buist, W. C. Burns, Percy Capper, E. J. W. Carruthers, Charles Cochrane, C. J. van Coller, S. G. Connor, P. J. De Villiers, R. J. Douglas, G. H. Drury, Alexander Dunbar, E. H. Duncan, M.A., Thomas Edmondson, Henry Edwards, Matthew Elder, Samuel Elliot, A. C. Elliott, D. P. M. Farquharson, E. C. Fischer, Gerald Fitzgerald (with distinction), George Fleming, W. D. Forsyth, J. A. Foulis, John Francis, W. C. Fraser, W. M. D. Gallie, A. Gardner, P. H. Gillies, A. C. E. Gray, William Griffith, W. E. Haworth, C. D. Holmes, G. B. Jameson, J. T. C. Johnson E. H. Jones, Thomas Knowles, J. J. J. Kotzé, L. G. L. Kvern, E. P. T. von Landsberg, James Lawson-Williams, C. F. Lees (with distinction), T. H. Lewis, William S. M'Dougall, J. M. M'Gill, M.A. (with distinction), W. G. Macgregor, Archibald Mackintosh, J. L. Macrae, G. S. Mansfield, A. W. Messer, J. W. Michie, E. A. Mills-Roberts, C. A. Morgan, John Morison, Robert Muir, John Newington, F. J. Nicoll, William Owen, William Paterson (with distinction), E. A. Penfold, George Pernet, G. B. Peiterson, R. J. Pope, B.A., D. R. Price, W. H. Ramsay, J. M. Reid, W. H. Richardson, E. H. Ridley, Alan Robertson, J. A. Robertson, J. H. Robertson, J. D. Robson, M. P. Rodgers, R. M. Ronaldson, R. D. Q. Rose, F. W. F. Ross, R. S. Ross, A. F. Rutherford, W. B. Sandes, F. W. Schmidt, C. W. Scott, W. G. Sellar, R. P. Sharman, William Simmers, M.A., J. A. Sinclair, W. C. Smith, John Spurway, W. C. Stevenson, James Sutherland, J. M. Sutter, A. G. Thompson, A. K. Thomson, Peter Thornton, J. M. Walls, L. J. Weatherby, Evan Williams, G. J. Williams, J. W. Wilson, J. M. Wood, J. B. Young.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH, AND FACULTY OF PHYSICIANS AND SURGEONS, GLASGOW.—The triple qualification examinations in Edinburgh, which commenced on April 27th, have just concluded, and the following passed the First Examination:

W. H. Hillyer, Kent; C. Schnehage, Orange Free State; S. W. Wolfe, Co. Cork; M. J. Mahony, Yorkshire; T. Finney, Buxton; R. S. Wilde, Winchester; J. A. Dyson, Hull; A. S. Taylor, Walker-on-Tyne; W. T. Rogers, Lincolnshire; J. Stoddart, Dumfriesshire; R. Maclean, Ross-shire; W. J. H. Cumming, Kent; F. M. Graham, Monmouth; M. L. Mackintosh, Sussex; G. R. Cadell, Carreden; E. S. Dale, Cheshire; W. Pirie, Arbroath; W. Pace, Glasgow; C. W. J. Dunlop, Co. Down F. H. Amner, Kew; J. Thornley,

Hull; C. E. Lownds, Newcastle-on-Tyne; R. V. Sutton, Cork; A. D. C. Meade, Co. Cork; R. W. Morrow, Co. Down; T. E. P. Pollard, Co. Clare; A. McCune, Kilwinning; I. Laud, Bradford; H. B. Murray, Dublin; C. L. Ashby, Cambridge; D. Fogarty, Clifden; G. M. Stocks, Edinburgh; D. F. Todd, Belfast; W. J. Reid, Poonah; C. Leach, Milnrow; C. B. Richards, Tottenham; T. B. Brooke, Cambridgeshire; H. Powell, Manchester; R. D. McPhail, West Indies; R. A. Shepherd, Barbadoes; J. H. Boland, Dundee; J. Murton, Kent; E. Byrne, Co. Cork; E. G. Rice, Glanworth; J. R. Mason, Lancashire; J. A. T. R. Cormack, Bengal; R. H. Bland, Penrith; R. H. Barber, Worcester; G. H. Jenkins, Worcestershire; W. Morris, Pontypridd; J. E. Gribble, Australia; W. E. Toyne, Sheffield.

Passed the Second Examination:

J. J. Keane, Listowel; J. H. Pestell, Victoria; A. J. Keiller, Edinburgh; H. A. Lawson, Sligo; W. H. Hillyer, Kent; C. Schnehage, Orange Free State; T. Warren, Armagh; B. A. Hamp, Wolverhampton; C. L. Ashby, Cambridge; C. E. Lownds, Newcastle-on-Tyne; J. H. Lloyde, Bedford; C. E. Salmon, Edinburgh; F. F. Armytage, Huddersfield; F. Murphy, Cork; R. Lewis-Hughes, Anglesea; H. McN. Smith, Nova Scotia; T. W. Madge, Devon; W. E. Wales, Belfast; A. C. Rodrigues, Demerara; A. S. Taylor, Walker-on-Tyne; F. M. Bovill, London; A. Beverley, Skipton-in-Craven; C. H. Sykes, Yorkshire; J. Gilmour, Co. Derry; G. D. Backhouse, Preston; F. McDowell, Aldershot; G. O. Moorhead, India; T. Ireland, Germany; W. B. T. Connolly, Dublin; M. M. Mercer-Adam, Boston.

Passed the Third Examination, and admitted L.R.C.P. Edinburgh, L.R.C.S. Edinburgh, and L.F.P. and S. Glasgow:

T. Readman, Whitby; F. Wilson, Halifax; J. Silverwood, Huddersfield; W. H. Hillyer, Kent; T. K. J. Fulton, Hyderabad; F. St. J. Lawrence, Madras; F. W. E. Coates, Salisbury; W. Ferriday, Openshaw; J. E. Brogden, Essex; A. J. Lowe, Bedford Leigh; A. J. Rollinson, Kirton-in-Lindsey; J. S. Reynolds, Co. Wexford; L. G. Peters, Kent; H. W. Crogan, Surat; E. D. Wellburn, Scarborough; G. W. K. Hector, Aberdeen; J. G. O'Neill, Hastings; C. Fryer, Norfolk; W. J. Shannon, Co. Down; L. S. Holmes, Victoria; J. J. Drinkwater, Llangollen; A. F. Smith, Barnsbury; J. R. S. Park, Inverness-shire; L. E. de Boucherville, Mauritius; F. M. Sykes, Clitheroe; D. Thompson, Ontario; F. M. Brown, New Brunswick; A. B. Thompson, Ontario; G. T. S. Hughes, Doncaster; J. Teixeira, Demerara; T. Thompson, Belford; H. G. Tandy, London; G. C. Peachey, Calcutta; A. Green, London; C. Hicks, Toddington; C. W. Wilson, Ulverstone; J. R. Lownds, Newcastle-on-Tyne; T. J. Connolly, Co. Limerick; D. E. Edwards, South Wales; E. E. Jones, North Wales.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—At the April examination, the following gentlemen were admitted Licentiates in Surgery:

J. S. McLaren, Edinburgh, and H. S. Nelson, Isle of Man.

The following gentlemen passed the First Professional Examination for the Licence in Dental Surgery:

J. P. Roberts, Liverpool; J. W. Daniels, Cheshire; F. Page, Edinburgh; J. Turner, Edinburgh; H. B. Eyard, Bath.

The following gentlemen passed the Final Examination, and were admitted L.D.S. Edinburgh:

P. S. Spokes, Reading; A. Stevens, London; D. Thomson, Edinburgh; J. G. Fraser, Caithness.

ROYAL UNIVERSITY OF IRELAND.—M. Ch. Degree Examination, April-May, 1887. The Examiners have recommended that the following be adjudged to have passed the examination:

J. Aherne, Queen's College, Cork; T. C. Donaldson, Queen's College, Belfast; J. H. Earls, Queen's College, Cork; J. Entrican, Queen's College, Belfast; A. W. Esler, Queen's College, Belfast; W. E. St. L. Finny, School of Physic, Trinity College, Dublin; H. J. Gahagan, M.B., Ledwich School of Medicine and Surgery; W. Hackett, Queen's College, Cork; R. E. Harcourt, Queen's College, Belfast; R. W. Leslie, Queen's College, Belfast; T. Lusk, M.D., Queen's College, Belfast; J. A. Macdonald, Queen's College, Belfast; J. M. Macnamara, Queen's Colleges, Cork and Galway; W. B. McQuitty, Univ. Stu., Queen's College, Belfast; W. K. McRoberts, School of Physic, Trinity College, and Carmichael College; W. McSweeny, Queen's College, Cork; E. J. McWeeney, Univ. Stu., Catholic University School of Medicine; J. R. Mangan, M.D., Queen's College, Cork; P. F. Mannix, Queen's College, Cork; W. H. Murdoch, Queen's College, Belfast; J. J. Orr, Queen's College, Cork; S. A. Powell, Royal College of Surgeons, Ireland, and Queen's College, Belfast; M. Purcell, Queen's Colleges, Cork and Galway, and Catholic University School of Medicine; R. S. Smith, M.D., Queen's College, Belfast; W. Stewart, Queen's College, Belfast; J. W. Watson, M.D., Queen's College, Belfast; W. W. White, Queen's College, Cork.

M.A.O. Degree Examination. The Examiners recommend that the following be adjudged to have passed the examination:

J. Barry, M.D., Queen's College, Cork; J. Entrican, Queen's College, Belfast; A. W. Esler, Queen's College, Belfast; W. B. McQuitty, Univ. Stu., Queen's College, Belfast; W. K. McRoberts, School of Physic, Trinity College, and Carmichael College; W. McSweeny, Queen's College, Cork; E. J. McWeeney, Univ. Stu., Catholic University School of Medicine; J. R. Mangan, M.D., Queen's College, Cork; S. A. Powell, Royal College of Surgeons, Ireland, and Queen's College, Belfast; W. C. Steen, M.D., Queen's College, Belfast; E. W. Waters, M.B., Queen's College, Galway; W. W. White, Queen's College, Cork.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly Examinations for the Licences of the College, held on Monday, May 9th, 1887, and five subsequent days, the undermentioned candidates were successful.

For the Licences to Practise Medicine and Midwifery.—J. T. Abbott, Dublin; A. W. Bewley, Bray, Co. Wicklow; W. G. Booth, Manchester; W. M. Branson, Sheffield; H. F. Cartmel, Manchester; R. H. Dickson, Ballynahinch; C. G. FitzGerald, Dublin; R. A. Flynn, Dalkey, Co. Dublin; A. S. Goff, Dublin; W. R. Graves, New Ross, Co. Wexford; J. T. Harty, Cork; G. J. Lough, Belfast; C. J. Lyons, Mullingar, Co. Westmeath; J. Magauran, Cavan; J. H. Morgan, Skibbereen, Co. Cork; O. Norris, Wakefield; H. Roberts, Liverpool; H. P. Sluggett, Cardiff; H. W. Smith, Stroud, Gloucestershire; J. E. Stott, Liverpool; T. O. Williams, Gaerwen, Anglesea.

For the Licence to Practise Medicine only.—C. E. Boyce, Dublin; E. Burrows, M.D. Univ. New York, London; F. N. Burwell, Dronfield; E. J. Cotton, Mount Anville, Co. Dublin; C. E. Dawson, Headingley, Leeds; W. Dunbar, Sheffield; J. M. Ehrhardt, Birmingham; H. B. B. Greene, Cheltenham; R. W. Harley, Dublin; J. G. Harries, Haverfordwest; J. H. Lister, Leeds; W. S. McGeagh, London; J. E. O'Meara, Cashel, Co. Tipperary; P. H. Power, Rathgar, Co. Dublin; H. H. Sales, Leeds; T. T. Teahan, Killorglin, Co. Kerry; G. Thorpe, Clay Cross, Derbyshire; J. Westwood, Edgbaston, Birmingham.

For the Licence to Practise Midwifery only.—A. K. F. McCutcheon, Dublin.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen, having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received Certificates entitling them to practise as Licentiates of the Society, on May 12th, 1887:

Brodrick, Harry Edward, M.R.C.S., Badwell Ash Hall, Bury St. Edmunds.
Crew, Henry Charles, 35, Shaw Road, Dudley, Worcester.
Danvers, Herbert, Cape Colony.
Rutter, George Herbert, 91, Lady Margaret Road, Tufnell, N.
Scott, Walter Frederick, 5, St. Helen's Gardens, Notting Hill.
Strahan, Samuel Alex. Kenny, Berry Wood, Northampton.
Waites, Richard Foulstone, 83, The Grove, Ealing, W.

MEDICAL VACANCIES.

The following vacancies are announced.

BAKEWELL URBAN SANITARY DISTRICT.—Medical Officer of Health. Applications to the Clerk.

BIRMINGHAM AND MIDLAND EYE HOSPITAL. Dispenser. Salary, £70 per annum. Applications by May 25th to the Secretary.

BOROUGH OF BEDFORD.—Public Analyst. Applications to the Town Clerk.

BRACKLEY URBAN SANITARY DISTRICT. Medical Officer of Health. Applications to the Town Clerk.

CHARING CROSS HOSPITAL.—Medical Registrar. Applications by May 21st to the Secretary.

CHARING CROSS HOSPITAL.—Assistant-Surgeon. Applications by May 25th to the Secretary.

COOTEHILL UNION.—Medical Officer, Drum Dispensary. Salary, £120 per annum, and fees. Applications to Mr. Thomas Graham, Honorary Secretary. Election on May 23rd.

DENTAL HOSPITAL OF LONDON, Leicester Square, W.C. —Assistant Dental Surgeon. Applications by June 1st to the Secretary.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark Street, S.E.—Registrar and Chloroformist. Salary, £30 per annum. Applications by May 30th to the Committee of Management.

FLINT URBAN SANITARY DISTRICT.—Medical Officer of Health. Salary, £20 per annum. Applications to the Town Clerk.

KILBURN, MAIDA VALE AND ST. JOHN'S WOOD GENERAL DISPENSARY.—House-Surgeon. Salary, £100 per annum. Applications by June 15th to the Honorary Secretary.

LINCOLNSHIRE COUNTY PAUPER LUNATIC ASYLUM.—Medical Superintendent. Salary, £400 per annum. Applications by June 1st to the Committee of Visitors.

LIVERPOOL NORTHERN HOSPITAL.—Assistant House-Surgeon. Salary, £70 per annum, with board, etc. Applications by May 31st to the Chairman of the Committee.

LLANELLY URBAN SANITARY DISTRICT.— Medical Officer of Health. Salary, £40 per annum. Applications to the Clerk.

MASON SCIENCE COLLEGE, Birmingham.—Professor of Physiology. Applications by June 30th to G. H. Morley, Esq.

NEWCASTLE-ON-TYNE INFIRMARY.—House-Physician. Salary, £100 per annum, with board, etc. Applications by May 25th to the Chairman of the House Committee.

ONGAR UNION.— Medical Officer and Public Vaccinator. Salary, £75 per annum and fees. Applications by May 30th to Charles Smith, Esq.

PARISH OF ST. MARY, Newington.— Medical Officer of Health. Applications to the Vestry Clerk, Vestry Hall, Walworth, S.E.

ROTHERHAM HOSPITAL.—Assistant House-Surgeon. Applications by May 31st to the Secretary.

ST. THOMAS'S HOSPITAL MEDICAL SCHOOL.— Professor of Systematic Physiology. Applications by May 21st to the Medical Secretary.

ST. THOMAS'S HOSPITAL.—Librarian. Salary, £150 per annum. Applications by May 28th to the Secretary.

STAINES UNION: Rural Sanitary Authority.—Medical Officer of Health. Salary, £75 per annum. Applications by May 23rd to J. A. Engall, Esq.

UNIVERSITY OF CAMBRIDGE.—John Lucas Walker Studentship in Pathology.— Annual value £250, for three years. Applications by May 31st to Professor Roy, Trinity College, Cambridge.

UNIVERSITY COLLEGE.—Holme Professorship of Clinical Medicine. Applications by May 28th to the Secretary.

UNIVERSITY COLLEGE HOSPITAL, London.—Resident Medical Officer. Applications by May 31st to the Secretary.

UPPER SEDGLEY URBAN SANITARY DISTRICT.—Medical Officer of Health. Salary, £50 per annum. Applications to the Clerk.

VICTORIA HOSPITAL FOR CHILDREN, Queen's Road, Chelsea, S.W.—Assistant Surgeon. Applications by May 25th to the Secretary.

WEST LONDON HOSPITAL, Hammersmith Road.—House-Physician. Board, lodging, and attendance. Applications by May 26th to the Secretary.

WEST LONDON HOSPITAL, Hammersmith Road.—House-Surgeon. Board, lodging, and attendance. Applications by May 26th to the Secretary.

WEST SUSSEX, EAST HANTS, AND CHICHESTER GENERAL INFIRMARY AND DISPENSARY.—House-Surgeon. Salary, £100 per annum, with board, etc. Applications by May 27th to the Honorary Secretary.

MEDICAL APPOINTMENTS.

BROWN, James A., M.B., C.M., appointed Assistant House-Surgeon to the Royal Albert Hospital, Devonport, *vice* G. H. Bennett, L.S.A., resigned.

HESLOP, W. J., F.R.C.S.E., appointed Medical Officer of Health for the Stretford Rural Sanitary District, *vice* Mr. George Pettinger, deceased.

KEMPE, J. A., M.R.C.S., L.R.C.P., appointed House-Surgeon to the Royal Alexandra Hospital for Sick Children, Brighton, *vice* George Morgan, L.R.C.P., M.R.C.S., resigned.

KIDD, Thomas, L.R.C.S.I., L.A.H.Dub., and L.M., appointed Medical Officer to the Rathvilly Dispensary of the Baltinglass Union, *vice* W. J. Weldon, M.D., resigned.

LESLIE, W. Murray, M.B., C.M.Edin., appointed Public Vaccinator to the Poplar Union.

MARK, Leonard, L.R.C.P., M.R.C.S., appointed Surgeon to the Chelsea, Brompton and Belgrave Dispensary.

MOXHAM, M. Camplin, M.R.C.S., L.R.C.P., L.S.A., appointed House-Surgeon to the Central London Ophthalmic Hospital, *vice* G. Barker, M.R.C.S., resigned.

SMYTH, James Camac, L.R.C.S., L.R.C.P., appointed Medical Officer to the County Antrim Prison, and Medical Officer to the Brookfield and Edenderry Spinning Mills and Factories.

VALPY, C. E., B.A., M.R.C.S.Eng., appointed Assistant House-Surgeon to the Cancer Hospital, Brompton, *vice* A. C. Dove, M.B., M.R.C.S., resigned.

OBSOLETE RAILWAY CARRIAGES.—An inquest was held a short time ago at St. Bartholomew's Hospital on the body of a youth, aged 14, who died in consequence of injuries received while attempting to jump from a train while in motion; he missed his footing and fell between the platform and the train. The carriage was not provided with a continuous footboard. A representative of the railway company made the excuse that there were only a few carriages without the continuous footboard, and that they were rapidly becoming obsolete. It is, in fact, most important that this obsolescence should become complete, for the persistence of a few exceptional carriages is, in consequence of their rarity, a greater source of danger.

FRAUDS ON HOSPITALS.—The serious charges made against the management of the great Hospital in Vienna have already resulted in the resignation of the director. An inquiry is to be held by a special commission appointed by the Austrian Government. The warden and other officials of one of the Chicago hospitals (Cook County) have been indicted, and will shortly be tried for fraud and malfeasance.

MORE CENTENARIANS.—According to the *Kievskoïe Slovo*, March 21st, 1887, a soldier's widow, named Praskovia Fedorova, aged 106, has lately been admitted to the Odessa Town Hospital. Her memory is said to be still very good. The *Allgem. Centr. Zeitung*, April 2nd, 1882, says that a widow, named Steuer, had just died at Pretzsch, near Wittenberg, in her 108th year. An old soldier named John Ramsay Ruin has just died in Middlesbrough Workhouse, at the age of 106 years. He was at the battles of Corunna and Waterloo, where he was slightly wounded.

STARVATION AND PRIVATION.—A return recently presented by the Home Office to the House of Commons states that in the year 1886 as many as forty persons died in the metropolitan district whose deaths, according to the finding of the coroner's jury, were either caused by starvation or accelerated by privation. The county of Middlesex is responsible for four-fifths of these forty deaths; fifteen occurred in the Central Division, sixteen in the Eastern Division, and one in the Western.

ABORTION-MONGERS.—Henry Simmonite, described as a medical botanist, Mary Clay, seamstress, and Ellen Pearce, midwife, who were indicted for the wilful murder of a woman named Drew at Sheffield, on whom Simmonite is said to have performed an illegal operation, resulting in Drew's death on March 17th, have been convicted at Leeds of manslaughter. Pearce has been sentenced to ten years' penal servitude, and the other two prisoners to penal servitude for life.

LONDON HOSPITAL.—The new Nursing Home and the new College buildings in connection with the London Hospital and Medical School will be opened by their Royal Highnesses the Prince and Princess of Wales this day (Saturday).

UNIVERSITY COLLEGE, LONDON.—The distribution of prizes of the Faculty of Medicine, University College, London, will take place on Wednesday, June 1st. The chair will be taken by Sir George Young, Bart., M.A., LL.D., at 3 P.M.

SUCCESSFUL VACCINATION.—Mr. Hayward, public vaccinator of the Whitstable district of the Blean Union, and Mr. J. R. Nunn, Public Vaccinator for the Feckenham District of the Alcester Union, have received the Government grant for successful vaccination, the former for the third time.

THE Queen has been pleased to appoint Sir William Withey Gull, Bart., M.D., D.C.L., Physician Extraordinary to Her Majesty, to be one of the Physicians in Ordinary to Her Majesty in the room of Wilson Fox, Esq., M.D., deceased. Her Majesty has also been pleased to appoint James Reid, Esq., M.D., to be one of Her Majesty's Physicians Extraordinary.

MEDICAL MAGISTRATE.—Dr. E. Sparshall Willett, of Wyke House, Isleworth, has been appointed a Justice of the Peace, and taken his seat on the bench at the Sessions House, Clerkenwell.

THE death-rate of Hove for the quarter ending March is reported by the medical officer, Dr. Kebbell, to have been 14.1 per 1,000, while there had been only one fatal case of infectious fever in the district for upwards of nine months.

WESTMINSTER HOSPITAL MEDICAL SCHOOL.—Mr. Edward Cullimore has been elected to the Natural Science Entrance Scholarship.

THE New York Academy of Medicine is making a collection of the autograph manuscripts of eminent men of science. At a recent meeting an autograph letter of Professor Virchow, containing a biographical sketch of himself written in 1866, was presented to its library.

MINERAL WATER HOSPITAL, BATH.—Her Majesty the Queen has been graciously pleased to command that this hospital shall be called the Royal Mineral Water Hospital.

PRESENTATION.—Dr. G. Johnstone, on his removal from Tow Law, where he has resided for many years, to Sheffield, has been presented by his friends with a beautifully illuminated address, and a case of cutlery and ornaments.

THE demand for accommodation at the Morley Convalescent Home at St. Margaret's for London working men is said to be so great that a new wing is being built.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.—ROYAL MEDICAL AND CHIRURGICAL SOCIETY, at 8.30 P.M. Dr. Haig: The Relation of a Certain Form of Headache to the Excretion of Uric Acid. Dr. Finlay: Three Cases of Alcoholic Paralysis (Multiple Neuritis).

WEDNESDAY.—BRITISH GYNÆCOLOGICAL SOCIETY, 8.30 P.M. Specimens will be shown by Dr. Grigg, Dr. Edis, Mr. Lawson Tait, and others. Dr. Routh: On the Various Modes of Treatment to be adopted for the Worst Cases of Uterine Flexions. Adjourned discussion. Council at 8 P.M.

FRIDAY.—CLINICAL SOCIETY OF LONDON, 8.0 P.M. Report of the Committee on Joint-disease in connection with Locomotor Ataxy. Dr. Robert Maguire: Cases illustrating Acute Dilatation of the Heart produced by Alcoholism. Dr. H. Handford: Case of Endemic Hæmaturia due to the Presence of the Distomum Hæmatobium. Dr. Dawtrey Drewitt: Case of a Child with a Patch of Lupus, which has been treated partly by Scraping and partly by Salicylic Acid. Mr. William Anderson: Cases of Hammer-toe. Dr. Arthur Davies: A Case of Rhythmical Tremors affecting one limb only. Mr. George Eastes: Chronic Spasmodic Affection of Inspiratory Muscles, with loud Crowing Inspiration.

QUEKETT MICROSCOPICAL CLUB, 8.0 P.M. Mr. Underhill: On Spiders. Mr. B. T. Lowne: On the Larva of Musca Vomitoria.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which should be forwarded in stamps with the announcement.

BIRTHS.

HALL.—On May 14th, at Townsend House, Dilwyn, Herefordshire, the wife of Thomas Lambert Hall, M.R.C.S., of a son.

HOWSE.—On May 11th, at 59, Brook Street, Grosvenor Square, W., the wife of Henry G. Howse, M.S., F.R.C.S., of a daughter.

MERSON.—At De-la-Pole, near Hull, on May 8th, the wife of John Merson, M.D., of a son.

MARRIAGE.

NASH—PERCIVAL.—On May 12th, at West Haddon, by the Rev. A. O. James, M.A., vicar of Long Buckley, assisted by the Rev. E. A. Barraclough, vicar of West Haddon, William Gunner Nash, M.R.C.S.E., L.S.A., third son of John Nash, Esq., Farnham, Surrey, to Louisa Gertrude, second daughter of Charles Percival, Esq., Fox Hill, West Haddon, Northamptonshire.

DEATHS.

CROWFOOT.—On May 12th, W. E. Crowfoot, J.P., F.R.C.S., at Beccles, aged 80.

TIFFEN.—At The Limes, Wigton, Cumberland, on May 12th, Robert Tiffen M.D., aged 63 years; also on the 15th instant, Ann, his wife, aged 59 years.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, M. Th., 3; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30: Ear, M., 9: Skin, Th., 1; Dental, W.S., 9.15.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY.....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's —1 30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M: North-west London; Chelsea Hospital for Women.

FRIDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY.....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

QUERIES.

RESIDENCE OF SIR CHARLES BUNBURY.

INQUIRER asks for information as to the residence of Sir Charles Bunbury, who he believes was a Court physician during the reign of George III.

ANTIFEBRIN.

NOVICE asks the best method of giving the new remedy, antifebrin; also the best mode of dissolving the powder. What are the doses?

MEDICAL PRACTICE IN AUSTRALIA.

KISMET will feel greatly obliged for any information respecting the prospects of a medical man going to Australia with a few hundred pounds, and as to whether there are any appointments to be had in that country.

KAVAINE AND ULEXINE.

J. HUTCHINSON, M.D., would like some information as to the value and dose of kavaine and ulexine as local anæsthetics.

TREATMENT OF LOSS OF SMELL AND TASTE.

INQUIRER would feel obliged to anyone who could suggest a remedy that would restore the senses of smell and taste to a young married lady, aged 28 years, who is otherwise quite healthy. Her powers of smelling and tasting were quite normal up to five years ago; since then they are almost persistently absent, returning occasionally for a moment and then disappearing.

MEDICAL CIRCULATING LIBRARIES.

J. M. (Tobermory, N. B.) asks for the names of a few good medical circulating libraries, and their terms.

DROITWICH BATHS.

J. M. M. asks for information regarding the "salt baths" of Droitwich. What classes of cases of gout and rheumatism are deemed to be benefited by their use?

ANSWERS.

ATLAS OF SKIN DISEASES.

J. W.—DR. DUHRING'S *Atlas of Diseases of the Skin*, is one of the best for ordinary purposes and is moderate in price.

TREATMENT OF GLEET.

DR. C. R. ILLINGWORTH (Clayton-le-Moors) writes: I think both "G. B." and "Hors de Combat" would find the following of service, used as an injection three or four times a day: ℞ Sol. hydrarg. bichlor. ʒiii; zinci. sulph. gr. xii; vini opii ʒj-ʒiss; aquæ add. ʒvi.

I regard all gleets as being due to the presence of micro-organisms in the mucous membrane of the urethra. Hence, I think, the value of the bichloride as a germicide in their treatment.

CLIMATE OF RED BLUFF, CALIFORNIA.

DR. J. S. PARKINSON (Sacramento, Cal.) writes: I send some figures, from which "F.R.C.S.E." (in the JOURNAL of April 9th, 1887) can judge of the climate of Red Bluff. I could not recommend it as an all-year residence, the temperature during the summer months being uniformly high, without the cool nights which prevail further down the valley.

It is only rational to bear in mind that anyone coming to California in search of climate must find by experience that which suits him best. In this section of the State, Auburn and Collax in Placer Co. would be more desirable residences. Commencing with the June number of the *Sacramento Medical Times*, the meteorological table will be extended to include these with other health-resorts.

Red Bluff, California: Elevation above sea level, 332 feet. Mean temperature, spring, 59.8; summer, 79.7; autumn, 63.2; winter, 46.8; average annual, 62.4. Highest temperature, 110.8; lowest temperature, 19.0; annual rainfall, 27.46; relative humidity, 59.3; prevailing wind, S.

The above figures are from an average of seven years, except the humidity and wind, which while practically true for a lengthened period, are really figures for 1886.

NOTES, LETTERS, ETC.

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Amount already acknowledged	16	15	0
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President, Sir William Jenner, Bart., K.C.B., M.D., F.R.S.

As it is desired soon to close the subscription list, any persons desirous of contributing should forward their subscriptions without delay to the Honorary Treasurer, R. Clement Lucas, B.S., F.R.C.S., 18, Finsbury Square, E.C., by whom they will be acknowledged. Cheques should be crossed "City Bank."

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Subscriptions already announced .. £594 0s. 6d.

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ERROR.—The name of Dr. W. R. Dakin appeared in the last list as M. C. Dakin

DEGREES FOR LONDON MEDICAL STUDENTS.

J. WHITEHOUSE, F.R.C.S. (Sunderland) writes: For the reason given in the leading article on the above subject in the JOURNAL of April 16th, namely, "there

can be little doubt that the various universities throughout the kingdom will strive to the uttermost to prevent a falling off in their revenues," we hear the first cry from the university which will probably feel the most acutely and certainly the creation of a degree for London students.

Dr. Mears states that the proportion of London students who take degrees in London is twice as large as that of Edinburgh or Durham. This information will surprise many, as also will the fact that only 8 to 10 per cent. of Edinburgh and Durham students take the degree of M.B. For Dr. Mears to compare the difficulties of the Durham students with those of the London students going in for the London degree, and to come to the conclusion that they are equal, seems to me rather absurd. The great difficulty in obtaining the one accounts for the journey northwards of so many students to obtain the other. It is not that students as a rule prefer to see "Dunelm." rather than "Lond." after their M.D. Dr. Mears says that "if the proposed new university should give its degree to more than 4 or 5 per cent. of London students, it would lay itself open to the suspicion of underselling the other universities." This sounds very strange, for if the new degree is in no way inferior to other degrees in standard, and it is hardly likely to be, surely it will not undersell the other universities even if 50 per cent. obtain it. With the vast clinical field for instruction in London, it seems almost ridiculous that in order to get an ordinary degree they have to leave London and put up with a year's sojourn at a small provincial school.

The Physiological Aspect of Certain Marriages of Affinity.

A Surgeon of Twenty-Five Years' Standing, writes: A discussion is being carried on in the columns of the *Guardian*, as to the origin and propriety of the prohibition of marriage with a deceased wife's sister, the discussion having taken its rise from the recent appearance of a one-sided article on Affinity, in *Hook's Church Dictionary*. Up to the present time six writers in favour of the existing state of things, and only one against, have had a voice in the matter. Whether this is to be taken as indicating the average condition of opinion in the country, or the Editor's idea of impartiality, is a moot point. But most persons who take the trouble to read the several letters will find that the forces are not so unevenly distributed as might be imagined, for the noble lord who began the discussion is evidently more than a match for his half-dozen clerical antagonists.

It is well known that but for the clergy, as represented by the bishops, a relaxation of the law in regard to the particular kind of marriage would long since have been carried in this country, as it has been in the Colonies, a Bill for the purpose having almost yearly been passed by the Commons, and with equal frequency thrown out by the Lords, owing to the non-content bishops. Such being the case, the appearance of the article on Affinity above referred to, by no less a person than the Rev. Dr. Espin, Chancellor of Chester, is not a little remarkable; for, although it is clearly intended to support the prohibition in question, it contains an admission that there is no direct Scriptural authority for such prohibition, especially if the Revised Version (as to Levit. xviii) be accepted. The gist of the article, which I have before me and have read more than once, is that marriages of the kind under discussion were condemned in the writings of certain Fathers of the Church, and also in the Law of Moses, by implication or analogy.

Of the Fathers of the Church I will not presume to speak, except to say that many of them, whilst condemning the marriage of a layman with his deceased wife's sister, denounced marriage on the part of the clergy altogether; and that as the bishops and the majority of the clergy have put on one side the authority of the Fathers in the latter respect, there is some inconsistency in producing the same authority to enforce prohibition in the former respect. But a question of supposed analogy between the two sexes is quite as much a medical as a clerical question. It is the fashion just now to proclaim the equality of the sexes, and if by this it be intended only to declare their equal rights as to property and so forth, no great harm can arise. Physiologically, however, it is not true, and it is the duty of the medical profession to protest against the promulgation of any dogma based upon such a false idea.

To put the issue in a clear light, it may be well to quote a few lines from Dr. Espin's article on Affinity: "It is to be observed in connection with this subject that marriage with the wife of a deceased brother was not, properly speaking, permitted by the Jewish law at all. On the contrary, it was strictly forbidden (see Levit. xviii 16, xx 21), and denounced too as a defilement and an abomination. On the other hand, in Deut. xxv 5-10, it is enjoined as a sacred duty, under certain circumstances only, when a brother died childless. The general result is surely clear enough. The alliance in question, *which, be it observed, is precisely similar so far as affinity is concerned to a marriage between a a widower and his late wife's sister* [the italics are mine], was sternly prohibited as a rule by the general moral law. But to protect those agrarian rights which were at the basis of the Hebrew system and institutions as regards property, and to prevent the extinction of a family in Israel, this marriage was—not permitted—but rendered imperative under special circumstances by the law of God. And the ignominious penalties annexed to violation of this obligation (see Deut. xxv 9, 10; Ruth iv 11) show how abhorrent the connection was to Jewish customs."

If we are to accept this as a correct explanation of the apparent deviation from consistency in the two statutes, it would seem that a regard for property and name may be made under certain circumstances to over-ride the "general moral law." But I think that even a Chancellor should hesitate before attributing such derogatory principles to the Most High.

It is a physiological process more than anything else that lends importance to the married state. Consequently we may be well assured that the restrictions imposed by the God of Nature upon His creatures in regard to the selection of suitable partners for that state will be found closely connected with some physiological law, such law probably including in its scope not only mankind, but the whole class to which man belongs. I believe this rule to be both proved and illustrated in the apparently exceptional statute above referred to; and if I am right, it only shows what profound knowledge was possessed by the framer of the Mosaic Law, because the facts upon which the opinion is based have only recently appeared in the annals of science.

The chief physiological law involved in the question is the law of heredity, and this is more peculiar than many persons suppose. Children inherit the proclivities of their parents, especially when both parents have the same proclivities. As shown by the cultivation of the lower animals, and it holds equally in the case of human beings, the breed may be greatly improved by a careful selection of partners, whose vicious tendencies are antagonistic and whose good qualities are alike. Marriages of consanguinity, however, by concentrating upon the offspring reduplicated tendencies to certain diseases and reduplicated vicious propensities of many sorts, with often a minimum of reduplicated tendencies to good, cause the race to deteriorate. But marriages of mere affinity have no such effect, and of this sort is marriage with a deceased wife's sister. As to whether marriage with a deceased brother's wife is one of mere affinity, we shall see.

Here, however, it is desirable to refer to the italicised sentence in the above extract, in which it is virtually asserted that a *widow* and a *widower* are on equal ground so far as the effects produced upon them by their former married life are concerned; for unless this be conceded, it is impossible to regard marriage with a brother's wife and marriage with a wife's sister as "precisely similar so far as affinity is concerned." To this assertion, if it be understood of widows and widowers having children by their previous marriages, I give the most unqualified contradiction. Indeed, the fact may be regarded as well-established, (putting *widows* physiologically in quite a different category from *widowers*), that, with very rare exceptions, *traces of the first child's father are discoverable in all succeeding children of the same mother, whatever the direct paternity of these may be.* The corresponding fact, as regards the lower animals, makes dog-fanciers (and others interested in preserving purity of breed) extremely careful to protect their female charges from being corrupted. For a cross-strain of any kind once contracted is rarely eradicated, but lasts more or less for the rest of life, the vicious marks making their appearance in all at every puppy that is born in succeeding litters, no matter how pure a breed the putative father's or the mother's originally may have been (see *Mayhew, on Dogs*, p. 191).

The father has no similar power of transmitting traces of his former wife to the children of her successor, for the diseases which are occasionally contracted by contagion are quite distinct from the collaterally inherited traits referred to. Consequently, the brother's wife, if she have had children by that brother, and the wife's sister, connected by mere affinity, do not stand in the same relation to a man who may contemplate marriage with either; nor are the two cases by any means parallel, as Dr. Espin and the prohibitionists generally suppose. The former kind of marriage is infinitely more nearly allied to incest than the latter, which can only be called incest by an outrageous misnomer. But the absence of children on the part of the brother's wife makes an immense difference, and reduces that kind of marriage to much the same level as marriage with a deceased wife's sister. It was the knowledge of this fact which rendered possible the exceptional statute known as the law of the levirate, above referred to, and no fancied superiority of the rights of property to the moral law. As might be expected, there is generally a greater distinction between half brothers and sisters when they have different mothers than when they have different fathers; and this is sometimes very noticeable, though not always remarked, because children of the same father and mother occasionally differ very much.

It is singular that *collateral heredity* was not more closely studied by physiologists long ago. Pedigrees have been considered complete which have run in the direct lines only; and yet it must be patent to everyone, that, if Miss A. marry Mr. B., and after having children, become a widow, she is no longer in the pristine physiological condition bestowed upon her by her parents, but has acquired an additional "strain," which it is impossible to prevent from descending in some measure to the children of any future husband, C. or D.

It is more than probable that the effect produced upon the ovaries by impregnation is not only special upon the particular ovum which becomes developed into the particular child begotten, but general over the entire mass of at least one, if not both. And even if this be denied, it is sufficient to mention the placental endosmosis and exosmosis which for nine months the fluids of mother and child undergo to convince an unbiassed judgment that new elements have entered into the mother's constitution which cannot fail to influence more or less her future progeny. But where impregnation has failed to take place, no such effects can follow, and the feeling of repugnance on the part of the deceased husband's brother to take the childless widow for his own wife, to which feeling, as one usual, Dr. Espin has referred, is attributable to mere sentiment.

I have no doubt in my own mind, as I have already said, that it was knowledge of the remarkable fact above adduced that led to the difference in the Mosaic Law as to the brother's wife when childless and the same brother's wife when in the ordinary course she had a family; and I do not think there is any difficulty in perceiving that a wife's sister, in the scale of affinity, not to say consanguinity, is more remote than either.

P. S.—For confirmation of the more startling statements made in the foregoing argument, the reader is referred to Dr. Alexander Harvey's papers in the *Monthly Journal of Medical Science* for 1849 and 1850, and to his essay on Cross-breeding; to *Kirke's Physiology*, under the head of Impregnation of the Ovum; to *Carpenter's Comparative Physiology*, in which is the following sentence (p. 586): "It appears from Mr. Newport's ingenious experiments, that the contact of a single spermatozoon is not adequate to produce complete fecundation, but that the penetration of a certain number of spermatozoa is requisite; and he has ascertained that fecundation may be effected partially (so as to occasion some, though not all, of the normal changes in the ovum), by a smaller amount." And similarly Dr. Tyler Smith, in Chapter I of his *Manual of Obstetrics*, says, "The pathogenetic influence may, I think, even be seen in the mammalia, and in the human female. In the well-known case of the mare covered by the quagga, the foals produced afterwards by intercourse with her own kind still bore the stripes of the quagga. In the human female, it is found that a woman having married and borne children by her husband becomes a widow, marries a second time, and bears children to her second husband which have the lineaments of her first husband."

Death of Dr. Bracey.

Mr. Herbert Bracey writes: The obituary column of the Journal of April 30th contains a very kindly-worded notice of the death of my brother, Mr. C. J. Bracey, but as many of his friends are desirous of learning the cause of his premature decease, may I trouble you to state in your next issue that my brother had been suffering for the past eighteen months from retention of urine due to prostatic disease, associated with the formation of numerous calculi. That an operation was successfully performed by his friend Mr. Page, of St. Mary's Hospital, on March 26th, and that for three weeks he went on satisfactorily, the wound having healed, but that sickness (which had been a troublesome symptom from the first) caused great prostration, and that he died on April 21st from exhaustion.

The Late Severe Weather.

Dr. J. Carrick Murray (Straurner) writes: Three months ago I wrote you a letter, in answer to a correspondent, about the then severe weather in Britain (see pages 313 and 314 in the Journal of February 5th, 1887). My note was evidently appreciated by the public, as it was copied into many English and Scotch

papers. Having promised in it to give the remaining three months of winter weather, I ask leave to do so till the end of April.

Since January 23rd (last date) it has never been frost all day, a clear bright sun warming the air by 10 or 11 A.M.; such days were the healthiest. We had snow at 3 P.M. on March 11th, which was all dissolved by 11 A.M. on the 12th; 14th, snow from 6 A.M. till 12.30 P.M., which was melted by the sun by 5 P.M. the same day; 21st, snow fell during the night to two inches, which was dissolved by the bright sunshine of March 22nd.

On April 23rd, 24th, 25th, and 29th, there were sunshine and showers, with sleet and hail. We had wind from north-west to west, and south-west to south for 63 days; north-east, east to south-east, for 25 days; nil or variable for 10 days—in all, 98 days. We had:

Bright sunshine all day (or nearly) on	34	days.
Sun with clouds	28	,,
Snow	4	,,
Hail	4	,,
Rain	36	,,
	106	

Counting the snow, hail, and sleet as rain, that makes eight days too many, but it has always been fair for some part of each day during my observation for the two years just passed, and we had sunshine on each of the days of snow and hail. From the north wind we are pretty sheltered by the Inch Hills, on the north and east side of Loch Ryan, which raises the cold wind, and it becomes warmed coming over the loch. East wind seems to me to be lost coming across the country, especially as it is so apt to meet here a warm western current, many thousands of square miles in volume, from the mighty Atlantic, causing hail, snow, or sleet, and even rain to fall further inland. Whatever the reason, it has often been observed that snow may be all round and Stranraer escape; indeed, many of my days of recorded sunshine are reported from easterly districts as snowstorms. Stranraer might be a first-class resort for both summer and winter residents, but it is a very slow place. This should please visitors for a month in summer, as in most water-side towns the reverse holds good. But surely something might be made of it and its great advantages. If lines of tramcars were started from the foot of the Post-office Street to Kirkcolm, a village six miles up the west side of Loch Ryan, and another from the same place to Cairnryan, six miles to the eastern side, they would pay, and intending bathers might get out at the most suitable place. At Cairnryan the cottages are so close to the loch that bathers may undress in their room, have their dip, and dress again at leisure in their bedroom.

Loch Ryan has many yachts and rowing or sail-boats, but has no swimming baths or bathing machines, a want which has been much felt, but should not continue, as the shores require them more than any place I have seen, bathing-places near the town being too flat and exposed.

Cucaine in Obstetric Practice.

DR. E. HEAD MOORE writes: I was interested to observe by the issue of April 30th, the success that had accompanied the use of cucaine in labour and gynæcological cases in the hands of Dr. G. H. Roqué Dabbs. Directly after his first article recommending the use of this drug in solution, I had prepared, by Messrs. Gale and Co., of Bouverie Street, some hollow cones of cacao butter, containing each five grains of cucaine, and in practice I am certainly of opinion that their use diminishes the pain attendant on the dilatation of the os, especially in primiparæ. Unfortunately, since I have had them in use, I have met with only one case of rigid os, and that not a very severe one, but the apparent relief afforded by the insertion of one of the cones in this case will certainly encourage me to adopt the same in any future cases. It would be interesting if Dr. Dabbs would inform his readers what quantity of the solution he uses; he mentions the strength, but not the amount of the drug he employs.

A Consulting-Room Thief.

DR. RALPH GOODING (Blackheath) writes: The consulting-room thief alluded to by Mr. Hutton gave me a call a week or two ago. He stated his child was suffering from hip disease, and he feared an abscess was forming, and he wanted me to advise as to hospital treatment. He could not remember the person's name who recommended him to me, and declined to give his address, stating he lived about half a mile from my residence. He said his wife was nervous, and I was not to tell her too much. He arranged for her to bring the child to me at a stated hour, which she, of course, never did. He was a youngish man, between 30 and 40, short dark hair, whiskers and beard, and wore a light overcoat, and soiled leather, or dogskin, gloves.

Treatment of Writers' Cramp.

DR. DE WATTEVILLE writes: I have been frequently asked by medical men and others as to the whereabouts of Mr. Wolff, some of whose cures of writers' cramp I described in the JOURNAL two years ago. It may be of use to some of them to know that Mr. Wolff is at present in London (54, Welbeck Street) for the purpose of treating cases of writers' cramp.

WE wish it to be distinctly understood that when a manuscript is forwarded to the BRITISH MEDICAL JOURNAL, it is implied that a similar manuscript has not been sent elsewhere, unless special notice of the fact be given; we shall regard any infringement of this rule as a breach of faith.

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A LECTURE
ON THE
INFLUENCE OF HEREDITARY PREDISPOSITION IN THE PRODUCTION OF IMBECILITY.

By FLETCHER BEACH, M.B., M.R.C.P.,
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"HEREDITY," according to Ribot, "is that biological law by which all beings endowed with life tend to repeat themselves in their descendants; it is for the species what personal identity is for the individual." This law applies not only to the physical, but also to the mental life. Examples of heredity of the external structure and the internal conformation of the body have been known from ancient times, and the Romans had their Nasones, Labeones, Buccones, Capitones, and other names, derived from hereditary peculiarities. The heredity of disease has also been observed from the foundation of the art of medicine; and the transmission of a tendency or disposition to certain diseases, such as gout, tuberculosis, and cancer, is well known to all of us. The same biological law holds good as regards the mental life. Ribot gives several examples of the heredity of intellect in the lives of Bacon, Hallam, Macaulay, and others; and recently Mr. Sully has written an article, in the *Nineteenth Century*, on the "Precocity of Genius." The modes of mental life are also transmissible in their morbid form, and the study of mental diseases contributes many facts in favour of heredity. In former times, it was held that insanity may proceed from purely psychological causes, and, in accordance with the theological notion, was due to the presence of an evil spirit in the sufferer, or to the enslavement of the body by sin. This idea of mental disease has long since been exploded, and it is recognised on all sides that disease of the mind is due to disease of the brain; and, as every part of the organ is transmissible, the heredity of mental affections is not the exception, but the rule. In connection with this, we must take into account the metamorphosis or transformations of heredity. Dr. Moreau, of Tours, says: "It shows an incorrect conception of the law of heredity to look for a return of identical phenomena in each new generation. A family whose head dies insane or epileptic does not of necessity consist of lunatics or epileptics; but the children may be idiots, paralytic, or scrofulous. What the father transmits to the children is not insanity, but a vicious constitution, which will manifest itself under various forms in epilepsy, hysteria, scrofula, rickets. Thus it is that we are to understand hereditary transmission." The passion for drink is not always transmitted in that identical form, for it often degenerates into mania or idiocy. "A frequent effect of alcoholism," says Dr. Magnus Huss, "is partial or total atrophy of the brain; the organ is reduced in volume, so that it no longer fills the bony case. The consequence is a mental degeneration, which in the progeny results in lunatics and idiots." So with deaf-muteness in the parents there may be in the children some infirmity, as obtusement of the mental faculties, or even idiocy.

Dr. Legrand du Saulle calls attention to the fact that, in houses of correction, are to be found "creatures who are whimsical, irritable, violent, with little intelligence, refractory, ungovernable, and incorrigible. These are the children," he says, "sometimes of drunkards, epileptics, or lunatics. Sometimes, and this is the most frequent case, their father is unknown, and their mother is scrofulous, rickety, hysterical, a prostitute, or a lunatic." Many of the patients in the Darenth Asylum are the children of parents of this kind.

Examining now into my own experience, I find that of 836 cases where I have been able to obtain information, there is a history of hereditary predisposition in 637, or 76 per cent. Of various authors who have examined into this cause, Moreau, of Tours, found a percentage of nine-tenths; Ludwig Dahl, of 50 per cent.; and Dr. Langdon Down, of 45 per cent. The reason for my percentage being higher than that of Ludwig Dahl and Langdon Down is probably that, agreeing with and adopting the foregoing statement of Moreau, I have included causes which those authors have not. I include the following: Intemperance, insanity, imbecility, epilepsy, phthisis, chronic neuralgia, paralysis, disease of the brain, excitability, extreme nervousness, cancer, deaf-dumbness, suicide, a masturbating father, and a mother who is a prostitute. Many of these causes act together in the predisposition to imbecility.

The following table gives the numbers and percentages of these causes fully:—

	Male.	Female.	Total.	
Intemperance	36	39	75, or a percentage of	8.97
Intemperance and other causes	77	59	136, " "	16.26
Insanity	32	29	61, " "	7.29
Insanity and other causes	30	13	43, " "	5.14
Imbecility	8	5	13, " "	1.55
Imbecility and other causes	12	5	17, " "	2.03
Epilepsy	25	22	47, " "	5.62
Epilepsy and other causes	31	16	47, " "	5.62
Phthisis	83	59	142, " "	16.98
Chronic neuralgia	4	3	7, " "	0.83
Paralysis	20	3	23, " "	2.75
Disease of the brain	5	0	5, " "	0.59
Excitability	7	0	7, " "	0.83
Extreme nervousness	1	3	4, " "	0.47
Cancer	3	2	5, " "	0.59
Deaf-dumbness	2	0	2, " "	0.23
Suicide	0	1	1, " "	0.11
Masturbating father	1	0	1, " "	0.11
Mother a prostitute	0	1	1, " "	0.11
	377	260	637	76.08

It will be noticed from the above table that there is a history of hereditary predisposition in 377 males and 260 females, corresponding with the ratio of males to females in the asylum, where there are always half as many again of the former than the latter sex. The "other causes" mentioned above are intemperance, insanity, imbecility, epilepsy, and phthisis occurring in the parents or their relations. Phthisis and cancer have been included, because I am of opinion, with Dr. Ireland, that whatever weakens the organism of the parent may be a cause of idiocy in the offspring. Moreover, Dr. Clouston recognises a peculiar form of insanity due to phthisis in the parents, and I see no reason why imbecility should not also be the result. At any rate phthisis alone, or in combination with other causes, was present in nearly half the cases.

It is not necessary to defend intemperance as a predisposing cause, for there is no doubt, as Huss has said, that the result is a morbid degeneration in the parent, and the product is imbecility in the children. I entered fully into this question in a paper read at Cambridge a few years ago, and subsequent experience has not only borne out but has amplified the results then arrived at. Chronic neuralgia, excitability, extreme nervousness, and suicide are included, because they are all forms of a neurotic diathesis, and, therefore, may predispose to mental derangement in the offspring. In this opinion I am supported by Dr. Maudsley, who recognises that not mental derangement only, but other forms of nervous disorder, may predispose to mental unsoundness in the children. He especially notes neuralgia and suicide, and though he does not mention the word "excitability," he refers to the fact that persons with "the insane temperament" are likely to suffer an entire overthrow of their mental equilibrium. Again and again were neuralgia, nervousness and occasionally excitability, noted in connection with other causes. No defence is needed for the inclusion of paralysis and disease of the brain as predisposing causes, while Menckel has given several instances of imbecility in children of deaf-mute parents. A prostitute mother is mentioned by Legrand du Saulle as a cause of children with little intelligence, and a masturbating father certainly must suffer from considerable enervation of nerve element. The children of parents suffering from the above causes may not always be born imbeciles, but there is no doubt that they inherit nervous instability, which is easily upset by a slight cause, and imbecility is the result. That this is so is proved by the fact that several brothers and sisters of the patients at the Darenth Asylum have either suffered from or died of convulsions.

On examining further into the histories, it was noted that in some cases several members of the family suffered from one of the predisposing causes, such as insanity or epilepsy. Also it was discovered that the grandfather on the paternal or maternal side often transmitted the hereditary predisposition through the father or mother to the patient, instances being thus given of atavism or reversional heredity. Marriage of first cousins was noted in fourteen cases. In most of these there was marked mental unsoundness on both the father's and the mother's side, the most notable case being one where the father was intemperate, the grandfather intemperate and insane, the uncle intemperate and imbecile, and the mother's father was paralysed. In two cases, second cousins had married, in two the father's parents were first cousins, and in one the father had married his niece. Some cases illustrating hereditary predisposition in imbeciles are appended.

E. B., aged 7. Father had syphilis before marriage and communicated it to mother; mother very nervous; eldest sister of mother has suffered from epileptic fits; paternal grandfather of patient imbecile; maternal grandfather very nervous; maternal grand-aunt insane. This case is a good illustration of several causes acting together to produce the imbecility, for we have insanity, imbecility, epilepsy, and great nervousness in the parents' relations. The child is stated to have been quite right at birth, and to have gone to school, where she made good progress, until two years before admission. The immediate cause of the imbecility is said to have been a fright, but it was noticed that she was becoming nervous a year before. On admission she was bright-looking, with good features, but was very vicious and bad tempered. She would scream at the top of her voice and then stop suddenly and pull out her hair. Lately she has become quiet, very helpless, and more imbecile.

E. P., aged 6. Mother consumptive, excitable, nervous, and has fits occasionally; cousin of mother insane; uncle and brother of father epileptic. One brother of the patient was born with convulsions. The history of the case was that the child had always been bright, but for the last twelve months she had become "dangerous." She had paroxysms of rage without apparent cause, during which she would tear out her hair, and bite her own and her mother's fingers. On admission she was bright and intelligent looking, and good tempered in disposition. Her mental capacity was fair, her powers of observation, imitation, and attention being good. She improved very much during her residence in the asylum, was quiet, well-behaved, and answered questions intelligently. She was taken out by her friends, after being in the asylum five months. The immediate cause of the overthrow of the child's mental equilibrium is not apparent; the excitability from which she is said to have suffered had disappeared when she was admitted, and practically her mental condition was fairly sound when she was discharged, although she had been in the asylum a very short time.

D. A. P., aged 8. Father "touched in his mind;" paternal grandfather and grandmother died in an asylum; paternal great-grandmother committed suicide; maternal aunt subject to fits. The hereditary predisposition is here seen extending through three generations on the father's side, while epilepsy is present on the mother's side. The mother had a good deal of worry during pregnancy. The child did not speak till a short time before admission. There was evidently a good deal of excitability and destructiveness present, for she never could be left with babies; she would dress and undress them, and smack them, and if she had a doll, the mother says, she would "limb" it. The hereditary neurosis was evidently well-marked in this family, for the eldest child was excitable, and the second dull; this was the third child. On admission, she was a well-nourished, dark complexioned, good-tempered child, with a pleasing expression, subject to fits occasionally. She has made a little progress since her residence in the asylum.

T. J., aged 7. Father suffered from numbness in the left arm, and had a few fits before his death from heart-disease; paternal aunt died of fits; uncle and aunt of father died of paralysis, as also did mother's grandmother and aunt. Both sides of the family, but especially the father's side, were affected. The child was bright and cheerful until 2 years of age, when he was taken with a fit while teething. After this fit he used to have them every four months, and they continued up to the time of admission. He was then a bright-looking boy, of a restless disposition, and always in mischief; mental capacity fair. Under treatment he has considerably improved, and has made good progress in school and in the tailor's shop. In 1881, it was noted that he had had no fit for two years. In 1883 he had another fit, and he has had one since.

J. W. A., aged 13. Father intemperate and sulky; aunt epileptic, and has an imbecile child; grandfather and grandmother died of apoplexy. The mother had a fright when six months pregnant. The case is a congenital one, and is interesting, showing as it does the strong influence of neurosis in the family: first, from the fact that there are two other imbecile children besides this one; and, secondly, in that the aunt, who is epileptic, has also an imbecile child. The boy was of a cheerful disposition, with small mental capacity. He was nearly five years under training, and made next to no progress.

E. K., aged 11. Maternal great-grandmother insane; maternal grandmother and aunt epileptic; maternal great-uncle was epileptic, and died paralysed; paternal grandmother epileptic; paternal aunt has a daughter who is insane. The mother fell downstairs when four or five months pregnant, and became insensible. This is an exceedingly interesting case, not only as showing the action of several predisposing causes in producing the imbecility, but also because the predisposition is seen to extend in the direct line through three generations on the mother's side and two on the father's side, while the father and mother are mentally sound. This is as well-marked a case of atavism, or reversional heredity, as could be wished for. The side lines are also affected, for the maternal grand-uncle and maternal aunt are epileptic, and the paternal aunt has an insane daughter. With such a history, it is not surprising to find that the child was not only a born imbecile, but one of the very lowest type. On admission she was found to be paralysed on the right side, and to suffer from frequent fits. She could not utter a word. She gradually became helpless, and had to be fed.

C. L. M., aged 9. Father insane; mother imbecile; maternal uncle insane; phthisis on father's side of family; mother frightened when pregnant. The child was a well-marked microcephalic imbecile, her head measuring only 15⅝ inches in circumference. Naturally her mental capacity was very small. Her special senses were very defective; she was paralysed on the right side, and quite helpless. She died fifteen months after admission, and on examination the posterior half of the left lobe of the brain and the posterior third of the right contained serous fluid. The brain, after the fluid had drained away, weighed only 16 ounces.

M. E. W., aged 7. The grandmother, sister of grandmother, and aunt of child, all died in asylums; father and mother mentally sound. This is another case of atavism, the hereditary predisposition extending through two generations in the direct line, in the latter, however, affecting the mother's sister. The case was a congenital one of low type, with small mental capacity. She was the eldest child; one younger had died of brain-disease. She only lived two months after admission, and on examining the brain after death, the convolutions were found to be very simple in character.

M. D., aged 14. Father very irritable; some paternal uncles have died of "head" disease, and one paternal uncle is imbecile; paternal grandfather died "raving mad." There is not much doubt that the father's irritability, which was said to be increasing, was a sign of the insane temperament, more especially as one of his brothers was an imbecile, and some others had died probably insane, or at least of disease of the brain. Besides this child, there have been nine others, of whom seven had died of convulsions, and two, who were alive, had had fits. The case was a congenital one, of fairly high type. She made good progress in school, and was apt with her needle. She was discharged after seventeen months' residence, as the mother thought she could manage her, but was readmitted nine months afterwards, being very obstinate and not amenable to treatment. She again became well-behaved, and made considerable progress.

S. J. J., aged 6½. Father has "drinking bouts" every six weeks; paternal grandfather died in an epileptic fit; mother a martyr to neuralgia; maternal aunt imbecile; maternal grandfather paralysed. Here the intemperate habits of the father were no doubt an outcome of his father's neurotic temperament; while the severe neuralgia of the mother was probably due to her father's diseased brain, more especially as her sister was an imbecile. The mother fretted a good deal while pregnant, in consequence of her husband's intemperate habits, and the child was a born imbecile of what is known as the Mongol type. His mental capacity was small, and he made very little progress while in the asylum.

Many other cases might be quoted in illustration of the influence which hereditary predisposition has in the production of imbecility; but the above are fairly typical; some being congenital cases, and others being born with unstable brains easily upset by a comparatively slight cause. Other points than those noted might have been touched upon, but it would have been difficult to do so in the time allotted to this paper.

ILLUSTRATIONS OF EXCEPTIONAL SYMPTOMS AND EXAMPLES OF RARE FORMS OF DISEASE.

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[*Continued from page 985.*]

XXII.—Note as to the Inheritance of Tissue Proclivities.

There are some clinical facts which make it seem probable that diseases of special tissues and parts may be inherited as such, and quite independently of the inheritance of diathesis. The best illustrations that I could quote of this would be from diseases of the eye and diseases of the skin.

A young lady, who was apparently in good health, was the subject of relapsing ophthalmia, attended by phlyctenulæ and ulcers. It had begun at the age of 4, and it still persisted when, at the age of

15, she came under my observation. There was a history that her maternal grandmother had suffered in a similar way through exactly the same period of life, after which her eyes had got quite strong. I attended a rather delicate young lady, the daughter of a surgeon, for central ulcerations of the corneæ; which left nebulæ when they healed. On comparing these some time afterwards with some that were present in her mother's eyes, I found that they were exactly alike. Her mother had suffered at the same age as her daughter afterwards did. The inheritance of various forms of local skin disease, more especially on the hands and fingers, is very constantly observed.

A gentleman, whose health was excellent, came under my care at the age of 57, for psoriasis of the finger-nails. He had been under treatment for psoriasis of his hands and feet ever since the age of 15. He told me that his mother had had dry hands, and that one of his children presented the same condition. In all three the hands were always worse in cold weather, the skin chapping and peeling. It was clearly an example of local peculiarity of tissue rather than of any disorder of the general health.

It would seem not improbable, in connection with this inheritance of tissue-proclivity, that conditions which are in the first individual who suffers matters of personal acquisition, may become subsequently family inheritances. The case which I have recorded in the *Medico-Chirurgical Transactions*, in which a lad whose mother was bald from alopecia areata, acquired at the age of 6, was born almost hairless, and without mammary glands, is the most remarkable instance which I can adduce of this kind. Probably, however, it is only an extreme instance of what in minor forms is very common.

XXIII.—On Conditions allied to Raynaud's Disease.

Under the name of Raynaud's disease we recognise a condition of enfeebled circulation in the extremities which gives a tendency to symmetrical gangrene of the tips of the digits. There are other conditions of altered nutrition in the same parts, and in association with a similar class of causes, but in which gangrene is not threatened. I have described what I ventured temporarily to name "last joint arthritis"—a very peculiar affection in which the terminal joints of all the digits suffer from disorganising inflammation of a more or less rheumatic type. It is definitely influenced by weather and by exposure to cold, so much so that it might be considered a sort of articular chilblain. It is usually associated with inherited gout, in combination with feeble circulation and liability to chilblains.

In the following case we have neither gangrene nor arthritis, but a peculiar erythematous inflammation beginning at the digit-tips, causing destruction of the nails, and gradually spreading upwards. Miss P. was sent to me by my colleague, Mr. Couper. Her age was 41; she inherited gout, was a total abstainer, and of decidedly feeble circulation. Her fingers had for long been "liable to die and become white." For fifteen years she had suffered much from redness of the fingers and toes, which was worse in cold weather, and which she had considered chilblains. In childhood, however, she had not suffered from chilblains more than others. Five years ago her nails had begun to suffer. Most of them when I saw her were destroyed, being represented only by thin horny lines which crossed the nail lengthwise. It did not appear that the nails had ever been thickened. They became thin and fibrous. The whole finger-tip was withered. The fingers from the tip almost to the knuckle were of dusky red colour, smooth, glazy surface, with some slight tendency to desquamation. There was no moist eczema, the condition resembling rather lupus erythematosus. The redness was, however, not well margined, as in the latter malady, and neither the face nor the ears were in any way affected. I saw the patient on a warm day, and was told that in cold weather the swelling was much greater. The toes were in exactly the same condition as the fingers, and although some suffered more than others, not a single digit had escaped.

By some the condition which I have described would be diagnosed as dry eczema, by others I think it would be considered erythematous lupus, and others might be content to name it chronic onychitis. Undoubtedly it is much like all these diseases, and partakes of the features of all. Especially, perhaps, does its external resemblance come near to eczema. We know, however, of no type of eczema which attacks all the digits at once, and restricts itself to them whilst persisting without cure for many years. Clearly the most important feature in the case, that which leads us nearest to the cause, is the fact of the disease attacking the tips of the digits and having been preceded by the liability to "die." Had the patient in the earliest stage been sent to live in a warm climate, not improbably the disease would never have progressed. If this be true, the condition is essentially a chilblain, that is, a chronic erythematous inflammation of a peripheral part induced by cold; still it differs from chilblains, for the latter do not usually destroy the nails, do not persist continuously all the year, and seldom attack all the digits at once and in the same degree.

If I were to attempt a pathogenetic analysis, it would be this: Inheritance of gout, attended, as it so often is, by peculiarities of circulation; inheritance of tissues prone to chilblain-inflammation; exposure to a cold climate; and, finally, enfeeblement of general vigour by too abstemious regimen.

XXIV.—Notes on the Earliest Symptoms of Locomotor Ataxy.

The following case is of interest in reference to the very earliest symptoms of ataxy. A very intelligent medical student was himself the subject. He told me that, three years ago, he had had syphilis, with eruption and all the usual phenomena. Although he had treated himself with specifics, he had had relapses of eruption almost ever since, and only got rid of a troublesome psoriasis palmaris a few months before I saw him. In the Easter of 1886, after a long exposure in cold air during the day, he woke up next morning with deafness in the left ear and loud ringing in both. For this he at once took iodide freely, and got well. The symptom which had excited his alarm and brought him to me was tingling in the feet. This tingling had for some weeks been almost constant, and had been preceded by a sensation of "pins and needles." It affected his left foot much worse than the right, but the right also to some extent. He had no real pain. His patellar reflex was good, and the pupils acted well. He could walk well, but if he got tired the tingling in the feet got worse. Before the occurrence of this tingling, he had been for eighteen months liable to what he called rectal pain, which was, I have no doubt, a spasm of the sphincter. It used to wake him in the night, and keep him awake for from a few minutes to half an hour.

Another case at present under my observation is noteworthy on account of the absence of pupil-symptoms or lightning pains, although the gait is very marked. Mr. N. had a hard chancre, which lasted two or three months, six years ago. He had treatment, and does not recollect any secondary symptoms. He married two years later, and has now three healthy children. He has always lived a regular life, and was never excessive in sexual indulgence. About three years after his marriage, he began to experience numbness of the lower part of the abdomen and stiffness of the legs. "I do not feel to have the free action in my legs that once I had;" "If I close my eyes I feel as if I should fall;" "A year ago I used to play football; now I could not run two yards for any motive whatever." These were the expressions used when he came first to me on February 23rd, 1886. I found that his gait was most characteristic, and that he could not stand steadily with his eyes shut. The patellar reflex was wholly absent, but his pupils were of normal size and acted well on exposure to light. He said that he had never had severe pain in his legs, but only a disagreeable heavy numb feeling, attended by a sensation of cold over the abdomen. His bladder was at times rather sluggish, and his sexual function was weaker than formerly.

My advice to Mr. N. was that he should be most careful as to sexual intercourse and other causes of spinal fatigue, and that he should take for a long time small doses of mercury. A year later he came to me again. He was on the whole better, but the essential symptoms were still present. He could walk better, and did not feel inclined to fall when his eyes were closed, but the knee-jump was wholly absent. The pupils still acted well. He had taken mercury the whole year, but as he had also reduced his sexual intercourse to once a month it was impossible to say whether the arrest of symptoms, which were before rather rapidly developing, was due to what was given or what was forbidden.

XXV.—An Example of Enormous Overgrowth of the Papillæ of the Tongue on its whole Surface.

An interesting condition of tongue—being, however, simply an extreme development of what in minor degrees is common—was presented in the case of Mr. B. This gentleman, a surgeon, came up for what he called "cracks in the tongue." The so-called cracks were, however, simply deep fissures between masses of overgrown papillæ. The surface of the tongue was tolerably level, but marked with lines in a sort of pattern more or less like a fern-leaf. On touching the tongue, the papillæ could be laid on each side, and made to exhibit deep depressions between their rows. There were no ulcerations whatever, and no sclerosis. It was not possible to make any distinction between filiform and fungiform papillæ, all being coarse and large. There was very little fur, and, on the right side of the median cleft, a well-marked pink streak passed, due to some alteration in the apices of the overgrown papillæ.

Mr. B. had never suffered from any special disease; his attention

had been particularly directed to his tongue of late by curious shooting sensations in it, which, he said, came on if he talked much; it was not in the least sore in eating. I believe that what he complained of were purely nervous phenomena, but they had made him anxious as to the possible development of cancer. They had followed what he called "a nervous breakdown" six or eight months ago. This "breakdown" had been an attack of giddiness, attended with a feeling of nausea, and followed by great muscular weakness; he had been sent away from home, and had regained his health. I have seen this condition of general papillary hypertrophy in very many cases, and with some differences as regards the condition of papillæ involved. In most cases it is obviously the filiform ones which are chiefly implicated; these may be seen to be very much branched at their apices, looking almost like the tops of a field of oats. In the present instance there was no branching, and the surface was minutely nodular all over. When the filiform only are involved the fur usually accumulates on them, which, in this instance, it did not.

XXVI.—On Notches in the Upper Central Incisor Teeth which resemble those of Syphilis.

There is a state of notching of the upper incisor teeth, which affects the two central ones of the permanent set, and produces a condition very deceptively like that of syphilis. The notches are central, and very conspicuous. A chief point of difference from the syphilitic tooth is that the tooth is usually wide instead of narrow at its free edge. Syphilitic teeth almost always show narrowing, like a screw-driver, as well as notching. Another point of difference is that the teeth, when looked at carefully, are seen to be craggy and very hard, not worn as the syphilitic tooth. In a very marked example of the pseudo-syphilitic notching, the father of the patient told me that the condition was hereditary, and the youth's mother had teeth of the same kind. In this instance, there was no history of fits in infancy or of the use of mercury or teething powders. Nor, indeed, were the conditions those of stomatitis, or mercurial, teeth. The defects occurred in pairs of teeth, and did not damage the whole row. Nor were the first permanent molars—the test teeth of the mercurial set—involved. I have in several other examples of craggy teeth been assured that the peculiarity was in the family. I feel certain, therefore, that we must admit inheritance as an occasional explanation of peculiarities in the form of the teeth. I was once shown, in one of the Paris hospitals, a pair of teeth such as those which I have above described, and great surprise was expressed that I could not admit that they were characteristically syphilitic.

XXVII.—The Tongue in Leprosy.

The patient whose case supplies the preceding note, Mr. D., is at present suffering from a most severe development of tubercles over the whole of his face and ears, and he has at the same time lumps in his tongue. These lumps are chiefly in the middle region, posteriorly. They project as ridges and bossy masses, which, in parts, look almost warty. There is a certain amount of induration in the substance of the organ, almost as far forwards as the tip. It is exactly the sort of ill-defined lumpy and ridgy induration which we often see in syphilis. There are fissures between the lumps, but no ulcerations. I have but very rarely had the opportunity of observing disease of the tongue in leprosy. I believe it is rare, for both at home and abroad I have seen many lepers.

XXVIII.—On "going to sleep" of the Limbs.

The symptom which patients call "going to sleep" of the limbs, and especially when it occurs in the lower extremities, is one of considerable interest. It is a sort of numbness attended by defective perception of size, so that the limb feels unwieldy and large. There may be no actual anæsthesia, and no "pins and needles." An intelligent patient, whom I pressed to describe his sensations, said it was exactly like what one feels after the foot has been asleep from pressure on the chair, and the tingling of "pins and needles" has just passed off. The following case may illustrate this symptom.

A healthy-looking farmer, aged 40, came to me complaining chiefly of "sleepiness in his lower limbs." It had been present almost continuously for two years, being, however, at some times much worse than others. It gave him great annoyance, for although he could walk well and was accustomed to ride much on horseback, yet his legs never felt comfortable; they were always, as he said, numb, "just short of the pins and needles stage." The condition was pretty much the same in both the lower extremities, and did not affect any other part. The concomitant symptoms left no doubt that it was part of locomotor ataxy. The pupils were small and sluggish, the patellar reflex was absent, and severe pains had been experienced in the legs on many occasions; the pains had been of the ordinary gnawing or burning kind, but it was interesting to note that they were as a rule worse in the daytime, and were better in bed. They were invariably worse when fatigued, and occasionally, when extra-tired, they had kept him awake all night. The legs were occasionally restless, and he could not keep them still for more than a few seconds at a time. The connection between the pains and want of rest was curiously illustrated by the patient's statement that if he missed an hour's sleep which he was accustomed to take in the afternoon, he invariably had a bad night from pains in the leg. It was his belief that iodide of potassium had frequently relieved his pains, but as they were of irregular occurrence, it was difficult to feel certain on the point. This patient's antecedents were of much interest, and I must suggest three causes possibly acting in combination as those to which his disease was due. He had suffered from syphilis fifteen years ago, he had been married three years, and he had on one occasion exposed himself to unusual fatigue, accompanied by wet and cold. From the occasion last alluded to he definitely dated the commencement of his ailment. He had been out at a sham fight with his corps of volunteers on a very cold and rainy day. He had been on his feet from eight o'clock in the morning till eight in the evening, wet through, and often standing still for an hour or two at a time. When he got home in the evening he found, for the first time, that the backs of the thighs were numb, and after this it soon extended to his legs. As regards the syphilis, it appeared that he had been well treated, and had no secondaries. He had one healthy child.

XXIX.—Perforating Ulcer of the Septum Nasi in a Case of Common Lupus.

An interesting example of the perforating ulcer of the septum in definite connection with lupus came under my observation in March, 1886. Miss A. K., aged 30, was sent to me by Dr. Ransome, of Nottingham. She was a slim and delicate-looking woman, and although neither of her parents had died of consumption, several aunts, uncles, and cousins had done so. In early life she had suffered from chilblains, and for ten years or more she had been the subject of lupus. The disease had come to an end on her nose, having destroyed the tip and alæ, but leaving a sound cicatrix. On the right arm also there was a large area of sound scar, which had been left after lupus-ulceration. On her right cheek there was another large sound scar, but with a thick patch of non-ulcerated lupus growth, the size of a shilling, on one edge. This patch was of the ordinary, semi-transparent apple-jelly-like growth, and was conclusive as stamping the case one of common lupus.

I now come to the condition of the septum, which was the feature of most interest. There was a perforation large enough to have admitted a shilling, the front edge of which came to within an eighth of an inch of the columna, but without causing any deformity. Posteriorly its edge could be seen with tolerable ease, and although there was no thickening it was clearly not quite sound, for it bled on the slightest touch. At other parts the edge of the ulcer seemed quite healed. No bone had ever come away, and no disease could be discovered in other parts of the nares or in the mouth.

The case was a good one in proof of the association of common lupus with hereditary tendency to tuberculosis, and of the association of the perforating ulcer of the septum with common lupus. There was not the slightest reason for suspecting syphilis. Indeed the manner in which the ulceration of the tip and alæ of the nose had healed was quite conclusive as to its nature.

ON THE TREATMENT OF CONGENITAL DISLOCATION OF THE HIP, WITH TWO CASES.

By RICHARD BARWELL, F.R.C.S.,
Senior Surgeon to Charing Cross Hospital.

It is unfortunate that such a term as "congenital dislocation of the hip"[1] should be applied to a condition which is not a divulsion of parts previously in normal contact and relationship. Perhaps it may be that, in a few very rare instances of breech presentation, or of some cross-birth, a hip-joint previously normal may become luxated; but such cases—if, indeed, they occur—form but a minute portion of those that we see and know in practice by the name above given. Dislocation from intra-uterine arthritis is merely speculative pathology. The very vast majority of cases are instances of deficient acetabulum; in a certain number the head of the femur is also undeveloped and small; it is usually somewhat flat and misshapen.

[1] See Pathological Society's meeting, JOURNAL, April 23rd, 1887.

The degree of acetabular absence or deformity varies very much. In some instances there is merely a wide, shallow, triangular depression, without any projecting lip or margin; in other cases, a cavity of some depth but with little brim is present; yet this cavity is small and narrow, one of its normal constituents—generally the iliac—being excluded from its formation.

It is not, however, my intention minutely to discuss in the present paper the different anatomical abnormalities of so-called congenital dislocation. My present object is to relate certain cases of successful treatment, and to point out the clinical conditions which should render our prognosis hopeful or otherwise. Traumatic dislocation occurring during birth—which is an imaginable, if not an imaginary, lesion—might, no doubt, be reduced, if it were very soon discovered; but a congenital dislocation resulting from one of the defects in development above described is not amenable to such treatment; if we take reduction in its usual and customary sense—that is, a more or less rapid replacement and retention of the femur within its socket. The successful cases of treatment by M. Pravaz and by Dr. Buckminster Brown cannot properly be termed reduction. The former case was more than two years under treatment, and the result was not a replacement of the caput femoris into a cavity ready and fit to receive it, but the widening out of a previously narrow acetabulum. Formation of a new cavity on a previously flat, innominate bone is excluded by the remark that, when the femur was brought into place, the head seemed, after a few days, "tolerably fixed in position." This distinction is clinically most important, in the point of view both of treatment and of prognosis. The question is, can we distinguish during life such patients who have some acetabulum, however narrow, possessing a certain amount of projecting lip, from such as have, instead of a cotyloid cavity, a mere flat, or nearly flat, surface.

In all cases of congenital dislocation the thigh-bone is loose[2] on the pelvis in every direction save that of abduction, and there is a certain new mobility added, namely, when the child lies flat on the back one limb is found to be shorter than the other. This brevity can be increased by pressing the sole of the foot upward, and it can be diminished, or in some cases entirely eliminated, by drawing the leg down. If this task of manipulating the limb from the ankle be confided to an assistant while the surgeon keeps his hand on the great trochanter and pelvis, in such wise that he can detect the changing relationships between these parts, he will feel the former bone rise nearer to the crest of the ilium when the leg is pushed up, and recede further from it when the limb is dragged down. Moreover, in many cases he will observe, just at the moment when the limb is only very little shorter than the other, a peculiar and sometimes a well-marked impulse or jog. This the assistant will also feel, and he may at the same time remark that at this instant further descent of the limb is somewhat more resisted. In other cases no such jog occurs, but the limb glides down smoothly and evenly. This impulse is of a peculiar character, such as once felt makes a strong impression, and gives very plainly to the surgeon's hand the sense of some unevenness—of some ridge of bone. This jog or impulse marks, I believe, the presence of a certain amount of rim or lip of an acetabulum, imperfect, small probably, perhaps even partly filled with fibrous or granulation tissue; but, nevertheless, of one which may be enlarged and whose abnormal contents may be absorbed by continuous pressure of so fitting a substance as the head of the femur, if only continuous pressure can be maintained. Such were the clinical conditions in the two cases I am about to relate. But I would first point out that, although there is no spasm of muscles, there is, nevertheless, contracture, or, as Sir J. Paget would call it, "adaptive atrophy," that is to say, that the muscles have fitted themselves to the length of limb which subsists when the head lies on the ilium, and therefore are shorter than normal; it is this brevity which causes the thigh to shorten itself again when downward traction is abandoned. Also I may say that it is this muscular shortening which Pravaz and Brown overcame by long-continued traction, but which may be more quickly conquered by section, to the great saving in time and health of the patient.

A. T., aged 12, from South America, was brought to me on October 16th, 1883, by Dr. Robertson, of Dulwich. Her birth had been by head-presentation, nor was anything unusual observed until she was about two years old, when great slowness in learning to walk and much difficulty in balancing the body was noticed. She was, when I saw her, a stout, heavy child, large for her age. The symptoms, which need hardly be specified, clearly indicated congenital dislocation of both hips; the trochanters when she stood, or when, she being recumbent, the limbs were pushed up, lay very close to the crest of the ilium; by downward traction those processes could be made to lie within a very short distance of Nelaton's line. Always, just as those parts were approaching that line, a distinct jolt could be felt; this was a little more marked on the right than on the left side.

In preparation for the proposed treatment, I had a firm belt constructed, to embrace tightly the pelvis, including the upper end of the femur, with understraps to prevent riding upwards; also the necessary appliances for prolonged weight-extension.

November 10th. With the assistance of Dr. Robertson, Mr. Braine giving ether, I operated thus: Dr. Robertson making traction and slight abduction of the left limb, I passed in a long tenotome, just outside the tendon of the adductor longus, and divided that musele, the greater part of the short and large adductors, and the gracilis, keeping my instrument quite close to the pelvic bones. Downward traction still continuing, the rectus was observed to be very tight. I separated this muscle from the anterior inferior iliac spine,[3] through a puncture on its outer side. The same was then done on the right limb, but, after dividing the above-named muscles, considerable tension of the gluteus medius seemed also to render section of that tendon desirable. The punctures were covered with plaster and collodion, and extension with a weight of 2 lbs. applied. No fever followed; the child had very little pain, and only an ecchymosis about an inch in diameter on the inside of the right thigh. She lay for six weeks very still, being docile and patient, the weight being gradually increased up to 4 lbs. within the first fortnight.

January 5th, 1884. I found, on cautiously attempting to press upwards the limbs, that very considerable resistance was offered; also in rotation the trochanter described an evident half-circle. Dr. Robertson undertook to see that passive motion in the manner agreed upon was carried out. I also gave orders for the construction of a machine, whereby she might get exercise without putting any weight on the hip.

March 5th. The machine answers perfectly—a sort of go-cart, with crutch-handles for the axilla, while she also supports herself by the hands on a frame of wood. With this she can go on the level; she is carried to and fro where this cannot be used.

It hardly seems desirable to carry out elaborate notes of this case. After using only this means of progression about ten months, she was allowed to have crutches, and after another period these were changed for sticks. I saw her in January, 1887, walking without support, and without limp or swaying of the body. In her clothes there was nothing unusual in her gait and mode of standing; when undressed, the projection of the nates was a little more marked than usual, but as she is fat and fleshy, it is difficult to say how much of this is merely due to size of soft parts.

F. C., aged 10, from Australia, was brought to me by his mother on May 8th, 1886. He had congenital dislocation of the left hip. The symptoms were unmistakable; on drawing down the thigh, a distinct and particularly marked jolt was felt, and at the same time increased resistance. Consultations were afterwards held separately with Sir J. Paget and Mr. Erichsen.

May 22nd. I divided the adductors and the rectus; it was not necessary to divide the middle gluteus. The child had no fever, and but very little pain; an ecchymosis about one inch and a half in a backward direction.

This patient bore the confinement well, but he was a gay, light-hearted boy, and did not keep quite as still as was desirable. Weight-extension up to 3 lbs. and the pelvic belt was kept up for five weeks. Upward pressure of the femur was at that epoch strongly resisted.

July 6th. I put on an instrument something like Pancoast's hip-splint, namely, a round steel rod, articulated by ball-and-socket joint to a metal plate at the hip, and also jointed in the sole of the boot. The metal plate was secured in place by a pelvic and perineal band, and when the instrument was in place, the rod could be lengthened by a ratchet arrangement. With this instrument, and with careful superintendence, he was allowed to go about, still wearing the belt. In the early part of August he went with his parents a tour in Scotland.

On September 30th, I tried his gait walking between two persons (without the instrument). I found that even with full weight on the limb the trochanter hardly yielded upward. The boy said he felt much more secure on the limb—felt firm and strong. After this, passive movement (the instrument being screwed to the full length of the other limb) was employed daily.

October 2nd. On this day I examined him very carefully; there was great resistant power at the hip; indeed it was impossible, unless

[2] Although it may be unadvisable to speak positively on this much controverted subject, yet I think I may state that I have seen two cases of, to say the least, very early luxation, or of luxation late in infra-uterine life; in both the thigh was much more fixed than in any of my other cases of congenital dislocation.

[3] In order to avoid, in section of these muscles, subsequent subcutaneous oozing and ecchymosis, it is necessary rather to peel their origins from the bone, than to cut through the muscles themselves.

unwarrantable force had been used, either to press upward or to pull downward the great trochanter, which lay not more than one-sixth of an inch above Nelaton's line. He walked very well and straight arm-in-arm with persons on either side. I did not think it prudent to let him go alone. I also thought it advisable that he should wear the instrument on board ship.

Both these cases are in excellent condition; the former not leaving England, I have been able to watch longer; she is well able to go about, to take walks, to enjoy life, and has no limp. The latter I am sorry not to have longer under observation, but he was so firm and well on the limb that the result was most satisfactory.

AN OLD-FASHIONED METHOD OF TRUSSING RUPTURED INFANTS.

By WALTER PYE, F.R.C.S.,
Surgeon to St. Mary's Hospital.

The difficulty of providing efficient trusses for the retention within the abdomen of the common inguinal hernia in infants, and especially in the case of very young infants, is too well known to stand in need of much insistence. All, even the healthiest of these patients, are incontinent, and in all the skin very easily becomes sore; but, in a large proportion of ruptured children, these difficulties are aggravated by their puny, ill-developed condition.

In most cases, no doubt, it is possible, by dint of great care on the part of the instrument-maker, to apply a spring truss of a Coles's or some similar pattern, neither so slight as to break within a week, nor so strong on the other hand as to render permanent the condition it is intended to cure: and it may be allowed, further, that abrasions may generally be prevented by great and constant care on the part of the mother or nurse, by frequent changes of napkins, careful drying and powdering of the skin, and so on.

But, for hospital cases, such carefully made spring trusses are too expensive for ruptures of ordinary severity, and those which are supplied, being of an ordinary stock pattern, are almost invariably too strong, exercising a pressure upon the soft abdominal tissues which is actively harmful. If they are not so powerful, the usual result is that they speedily break. In any event, the rate of growth of the pelvis of an infant is so rapid that in no case can a given truss be expected to fit for more than a few weeks.

It is, too, almost impossible for mothers who may have to earn their living, or who at least have to keep their house and family in working order, to devote a large share of their time to any unusual elaborateness in the toilet of the last arrival.

There are thus many objections to be urged against the use of spring trusses, although they are still the most generally used. A better pattern, in many cases, is that of an encircling strap of well-prepared rubber, with a pad inflated with air or filled with glycerine. If the rupture be double, the best shape is that of a horse-shoe truss, arching round the penis. This truss allows for tolerably rapid growth, and will retain most ruptures well enough; but in bad cases it is found that the necessary pressure involves an undue tightness of the whole girdle; moreover, even the best rubber is apt to perish by constant use.

The imperfections of the instruments are so patent, and the difficulty of properly trussing ruptured infants is a matter of such universal experience, that it is not a little curious that a method of treatment so simple and so generally efficient as the use of the woollen or worsted truss, now to be considered, should be still so little known as it is.

My own knowledge of it is derived from hearing Mr. E. Lund describe it in his Hunterian Lecture in 1885 (London: Churchill, 1886, p. 48) as an old and efficient treatment. Following up the reference he there gives, it will be found that the original account is given by William Coates, of Salisbury, who in the *Medical Times* for 1848 describes the proceeding as one employed by a "gude wife" in his neighbourhood, and says that its excellence is such that it is his duty to make it generally known. He states that the result of extensive trials has been uniformly a radical cure of the disease, and that it consists simply of a skein of Berlin wool, or, for infants, lamb's wool; this encircles the pelvis, one end is passed through the other at a point corresponding with the inguinal ring; the free end is carried between the thighs, and is fastened behind to that portion which forms the cincture. He says, further, that "This simple and cheap contrivance can be worn during the morning and evening ablutions, and then changed for a dry one. No attention is required on the part of the nurse, except at the moment of changing, and with ordinary care the skin is never galled."

Mr. Lund's description (*loc. cit.*) is, it will be seen, similar, but more particular. "Worsted known as Berlin wool is made into a skein of twenty threads, which stretched out straight shall be about twenty-two inches long, the threads being tied across at intervals of two or three inches, to keep them together. One end of the skein is placed over the abdominal rings. The folded worsted is passed horizontally across the abdomen, over the line of the crest of the pelvis to the opposite side, round the hips, behind the pelvis and over the hip on the side of hernia. The folded end is then passed through the loop of the skein, and will here form a knot or bulged portion, which must be carefully adjusted so as to lie against the hernial opening, and, being carried down the upper part of the thigh between it and the scrotum (in the male), it is brought round the external side of the thigh near to the great trochanter, and there tied or fixed with a safety pin to the band of worsted already round the pelvis."



Inasmuch as ever since I heard this description I have used this method (with some slight modifications which I shall mention) of trussing infants, without, I think, a single exception, and as I have on no occasion felt tempted to revert to a more mechanical form of support, I ventured some few months back to ask Mr. Lund whether I might put on record from my own notes the results both as to the successful restraint of the hernia and the proportion of permanent cures. I asked him, also, whether he had any further suggestions which might be of help to me. Mr. Lund wrote to me in reply: "You will note that I was very careful to give the credit to the originator of the plan, but for years past—I almost think since the notice first appeared—I have referred to it in my surgical lectures and demonstrations. However, in spite of this, I have frequently had letters from old students, or from practitioners to whom I had shown the plan, asking how it should be done, they very generally getting 'muddled' as to the position of the loop or the length of the skein. I am glad you have found out a good quality of worsted which will wash and wear well, as I know this is a desideratum."

Mr. Lund also kindly offered me the use of the block for the accompanying illustration, which comes from his published lectures.

With regard to my own experience of the method, I find that I have employed it in altogether 73 cases, the ages of the patients ranging from 3 weeks to 5 years. The ruptures were in all cases inguinal. There were four apparently ovarian, and in two only was there a rupture on both sides. As to the retention of the rupture by the truss, I know of four cases only where it failed. One of these was the case of a syphilitic infant 4 weeks old, with a double inguinal and an umbilical hernia, which died of mal-nutrition and marasmus a week after she was brought to the hospital. Another was in a child 5 years of age, with a large hernia which no truss had retained, and for the cure of which a radical operation was afterwards performed. In the other two cases the mothers did not seem willing to undertake, or mentally capable of understanding, a manœuvre in itself as simple as most other stages of the dressing of a baby.

On the other hand, in one case of a child 5 years old, sent up to me for an operation for radical cure in consequence of repeated failures in trussing, the worsted skein retained the rupture perfectly, and a cure soon resulted. It must be allowed, however, that the number of failures may be a little larger than my record shows, for, of the total number, eight did not appear in my out-patient room after the first time, so that for them I can only speak to the fact that at the time of first application the worsted appeared efficiently to restrain the descent of the rupture. In all of the 61 remaining cases the skein truss was found to be a permanently efficient method, except in the other case of double rupture, in which the two skeins which were required, although they retained the herniæ, were too cumbrous and awkward.

With regard to the question of cure, it is, I suppose, within the experience of every surgeon that, if a rupture in an infant be properly

and continuously retained, it will almost always disappear—generally very quickly—unless some persistent cause favouring its descent, such as phimosis, obstinate cough, as in whooping-cough, calculus, etc., be allowed to persist. This is certainly borne out by those of the 60 cases which I have been able to follow up, and, excluding those who were first trussed later than three months ago, out of 21 answers I have received, in 19 the rupture is reported as never coming down now.

There are certain points of detail in which my own experience is not quite in accord with Mr. Lund's, and to which it may be worth while drawing attention. First, a good deal depends upon the kind of wool, or rather of worsted, employed—for, although the two words are often used indifferently, wool and worsted are not the same things, the latter having a much greater twist. Real Berlin wool I have found not to wear well; it does well enough when new, but spoils in one or two washings. "Alloa yarn" or "five-ply fingering" (Peacock brand), on the other hand, are improved for the purpose of these trusses by washing, and they are not too harsh for the skin of any except the tenderest infant, in whose case a skein of "lambs'-wool" does best.

Nothing except wool or worsted seems to act as an efficient truss when applied in the same way; this is due, no doubt, to the elasticity of the animal fibres, which is distinct, although limited. In some cases in which the ruptures were large, and occurred in children between 3 and 5 years of age, I have found it useful to increase the elasticity by using, instead of the simple skein, a loop of the same material loosely knitted, or crocheted into a flat band about two inches wide, and applied in the same fashion.

I doubt whether a skein of twenty threads only, as Mr. Lund advises, will be found thick enough, except for very small infants, and I have sometimes found it necessary to use as much as double that number. It must be clearly understood that no pad of any sort is to be worn underneath the loop. Nurses often makes this mistake; indeed, as to the whole method, some little patience will be called for in order to secure that it shall be carried out intelligently, or disappointment will surely ensue. But this patience will not be thrown away if the end is gained of saving mothers from the endless worry and expense which a ruptured infant so frequently entails upon them; and if I seem to have been needlessly particular as to details, it is because I am convinced of the value of this old-fashioned treatment, and am anxious that it should not get discredit from lack of fulness of description.

WHAT IS THE BEST METHOD OF DEALING WITH A LOST EYE?

By W. ADAMS FROST, F.R.C.S.,
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Until recently it was not questioned that enucleation was the proper treatment for an eye that had lost all useful vision, and was in a state capable of giving rise to sympathetic inflammation. But although there was uniformity of theory there was much diversity of practice, for in a given case there was always a doubt whether sympathetic inflammation would really occur, eyes which had appeared almost certain to cause it having not unfrequently been known to remain innocuous during the patient's whole life. Hence, when the probability of sympathetic mischief occurring seemed remote, many a surgeon hesitated to urge the excision of an eye which was not unsightly, although, on theoretical grounds, he would have found it difficult to have excused himself from so doing. This, added to the natural disinclination of patients to submit to an operation, has led to the loss by sympathetic inflammation of an immense number of eyes that might have been saved.

It is true that a well-fitting glass eye upon a good stump causes so little deformity that it is seldom noticed by the ordinary observer. Unfortunately all glass eyes do not fit well and all stumps are not good, and an eye that is immobile, turned in a different direction to its fellow, and sunken, gives to its wearer a somewhat sinister appearance, and altogether debars him from certain walks in life. Another accusation that has been brought against enucleation is that it may cause meningitis. In these circumstances any substitute for the operation which, while ensuring the safety of the sound eye, would neither cause disfigurement nor endanger life, was sure to be warmly welcomed.

As regards meningitis following enucleation, the complication is so exceedingly rare (probably it does not occur more than three times in 1,000 operations), that it may be doubted whether any major operation upon a part in such close relation to the cerebral meninges would be more free from the risk. Evisceration was, however, proposed by Alf. Graefe chiefly with the view of diminishing or abolishing the risk of meningitis, two cases of which had occurred in his own practice. His contention is that since none of the channels of communication between the eye and the brain are opened in evisceration, the risk of meningitis occurring is much lessened or entirely removed, a view that is supported by Wecker and others.

Now, in the first place, it is by no means certain what are the channels by which inflammation extends to the meninges. In the second place, a fatal meningitis has been set up by intraocular suppuration following a simple needling of opaque capsule. Out of twenty *post-mortem* examinations upon cases of meningitis after enucleation, in nine the most careful search, including in several a careful microscopical examination of the optic nerve, failed to discover any evidence of inflammation in the contents of the orbit external to the globe. In one there was orbital cellulitis, in two the optic nerve was affected, and probably also in two others. In one the inflammation was traced along the sixth nerve to the cavernous sinus. In the remaining five the record is imperfect (Nettleship, *Trans. Oph. Society*, vi, p. 445; Deutschmann, *Arch. f. Oph.*, xxxi, iv, 251). In most of the cases there was phlebitis of the cerebral sinuses, and in the majority the meningitis, which was of a purulent character, was as marked at the convexity as at the base.

The path by which we should expect the inflammation to reach the brain would surely be the veins, and this might occur without any change being discoverable in their walls. The optic nerve and its sheaths, from their intimate connection with the meninges, would also seem to be a likely channel, but from what we know of sympathetic inflammation we should expect the progress of the inflammation along this path to be very slow, and the meningitis to be confined to, or most intense at, the base, whereas in the majority of cases the first symptoms of meningitis usually appear within forty-eight hours and the convexity is nearly as frequently affected as the base. Recent experiments, moreover, have shown (Gifford Knapp's *Arch. of Ophth.*, June, 1886), that the course of the lymph-stream in the nerve-sheath is towards the eye, hence, although by means of cell-proliferation inflammation might travel in opposition to the sluggish lymph-stream, as probably occurs in sympathetic inflammation, yet rapid absorption could hardly take place.

It is difficult to see what right the supporters of evisceration have to claim that the veins are not implicated. Surely septic absorption could take place from the interior of the sclerotic through the open mouths of the trunks formed by the union of the venæ vorticosæ at least as easily as by the veins of Tenon's capsule, which are imbedded in soft tissues. Indeed, if septic inflammation should occur, the risks in evisceration must be much greater, for its products are confined in a closed cavity, whereas, after enucleation, free drainage and irrigation can be procured. That this is a matter of no little importance is shown by a case recorded by Mr. Priestley Smith, in which well-marked symptoms of meningitis followed enucleation (*Oph. Rev.*, iv, 40), but subsided upon the orbit being thoroughly syringed out with an antiseptic solution.

It is true that in evisceration the optic nerve and the sheaths are not directly implicated, but it has long been known that the supra-choroidal space communicates freely with the latter, and Deutschmann's experiments upon the production of sympathetic inflammation have shown that substances introduced into the interior of the globe may travel along the nerve-sheath; how much much more likely would this be to occur if optic papilla had been forcibly dragged or scraped from the lamina cribrosa, as is the case in evisceration.

Bearing in mind, however, the fact that changes have been found in the nerve or sheaths in only a very small proportion of the cases of meningitis, and that when such changes occur in the early stages of sympathetic inflammation meningitis is an exceedingly rare complication in man (although it is frequent in experimenting on rabbits), we are justified in concluding that, as a rule, meningitis after enucleation is not due to extension along the optic nerve, but to some other cause, probably venous absorption, and this is as likely to occur after evisceration as after enucleation.

The occurrence of meningitis is, however, in the minds of most of us such a remote possibility that the choice between evisceration and enucleation would probably in any case really depend upon the immunity they respectively confer upon the sound eye, and the kind of stump left by each.

As regards the first point, the eviscerators say that, since the cause of sympathetic ophthalmitis is an inflammation of the uveal tract, travelling to the other eye by continuity of tissue, all that is neces-

sary is to remove the affected tract; that the sclerotic performs an entirely passive part, and may safely be left. Now, it seems to me very doubtful if we are justified in thus looking upon the sclerotic as a mere packing-case. It undergoes changes in cyclitis and posterior staphyloma. The vessels that supply its ciliary zone come from common trunks with those which supply the ciliary body, and they are dilated from the same causes. Can we conclude that a chronic inflammation, whose chief characteristic is its tendency to spread along certain lines, attacking the anterior segment of the uveal tract, will never invade the tissues over it, or that, having done so, will subside when the starting-point is removed?

It is difficult to believe that the micro-organisms that have been found in the choroid, aqueous, and vitreous, of the exciting eye, may not also exist in the lymph-spaces around the dilated vessels of the sclerotic. It is true that in evisceration an attempt is made to render the cavity of the sclerotic aseptic; but everyone knows the difficulty of ensuring this when once septic inflammation has commenced. Can there be any doubt that, were septic inflammation to take place in the cavity of the sclerotic, it would be at least as liable to extend along the optic nerve and its sheaths as a similar inflammation of the vitreous or choroid?

There is, however, another point in which evisceration is inferior to enucleation, namely, that there must always be more doubt as to whether the process that eventually implicates the other eye has not already passed beyond the seat of operation. It may be thought that the few millimètres of the optic nerve removed in enucleation can afford no additional safeguard; but I think it quite probable that they do. We know that the inflammation of the uveal tract may very soon give rise to papillitis; but the experiments of Deutschmann and the clinical history of cases show that its progress along the nerve is very slow. In evisceration, the retina and papilla must be rudely torn from the lamina cribrosa, and some portion of inflamed tissue may easily be left. In enucleation, on the other hand, a clean section of the nerve is made a few millimètres behind the globe, and if the inflammation has not already extended beyond the point of section, the safety of the sound eye is ensured. How long it takes for the inflammation to extend beyond the usual point of section can only be gathered from cases in which sympathetic inflammation has occurred after the operation. This happened (*Clin. Soc. Trans.*, xiii, p. 207) in a case of Mr. Nettleship's, in which the interval between the injury and the operation was only ten days, and I believe that this is the shortest time on record.

It seems not improbable that sympathetic irritation might be caused by evisceration, the ciliary nerves being compressed by the contracting sclerotic, and the stump becoming tender.

As regards the cosmetic effect of simple evisceration I have no experience, but it is not easy to see why it should be superior to that of enucleation. It is, however, quite otherwise with Mules's operation of evisceration with the introduction of a glass sphere into the sclerotic. There can be no question in the mind of anyone who has performed the operation, or seen its results, of the excellency of the stump that is produced; not only are its movements free, but the natural prominence of the eye is preserved. Although, however, I readily admit the excellent result that Mules's operation gives, I think that its advocates have painted the results of enucleation in too sombre colours. A stump that will not carry a mobile and sufficiently prominent glass eye is certainly the exception, and if care were taken always to cut the muscles as long as possible, it would be still rarer. Still there can be no doubt that a better stump can be obtained, and obtained with more certainty, by Mules's operation than by enucleation. It has, moreover, an advantage over simple evisceration in that there is no cavity in which secretion can collect. It remains, therefore, for us to see if we cannot combine the safety of enucleation with the cosmetic effect of Mules's operation. The following is a suggestion having this object: that the globe should be enucleated in the usual way, that the four recti should then be held apart, and a glass sphere be introduced into Tenon's capsule, and the tendons, capsule, and conjunctiva be united over it.

I regret that at present I have only had the opportunity of performing this operation once, and that the proposal is therefore at present merely a suggestion, the value of which must be decided by future experience. The case on which I operated was one of rupture of the globe of three weeks' standing. The conjunctiva having been divided in the usual way, each rectus in succession was seized with forceps, divided, and secured by a ligature passed through it and the conjunctiva; the enucleation was then completed, and the four recti being held apart by means of the sutures, Mules's sphere was introduced into the capsule of Tenon without any difficulty; opposite recti, with the conjunctiva, were then united across it by passing one of the ligatures through the opposite tendon, the other ligature being then removed. This method of suturing was certainly defective; a single suture for each pair of muscles is insufficient, and it would probably be better to suture the muscles first with catgut, and then to unite the conjunctiva separately. The sutures cut out on the fourth day, and the globe, which was exposed, was then removed. The reaction was considerable, but not greater than usually occurs after a Mules's operation.

Should subsequent experience prove this operation to be feasible, it will possess the advantage over evisceration of not spoiling the eye as a specimen. If all lost eyes are to be reduced to a pulp and removed piecemeal, our pathological knowledge will be at a standstill.

How the mobility of the stump after this operation will compare with that left by a Mules's remains to be seen. The recent researches of M. Motais (*Arch. d' Oph.*, 1886, p. 157) have shown that the globe does not rotate so freely in the capsule as was at one time supposed, but that with every movement of the eyeball there is a considerable movement of the capsule; indeed, this is evident from the fact that in performing enucleation we not unfrequently find extensive adhesions between the globe and capsule, although there had existed no obvious impairment of movement.

In considering this part of the subject we must distinguish the movements of the stump from those of the artificial eye that it supports. After Mules's operation the movements of the stump are as free as those of the normal eye, but the movements of the artificial eye, although free within certain limits, are more limited. This must be so, for the artificial eye rests upon, instead of beneath, the conjunctiva, hence its movement in any direction is checked by its edge being driven into the conjunctival *cul-de-sac*. The free mobility of the stump left by Mules's operation, so far therefore from being an unmixed good, may possibly be hurtful, by causing friction between the stump and the glass eye; at any rate, there can be no harm in making the movements of the stump and eye co-extensive.

Conclusions.—1. That enucleation is safer than either simple evisceration or Mules's operation in respect of the sound eye and probably also of the life of the patient. 2. That in respect of the latter it can be rendered still safer by taking antiseptic precautions and ensuring free drainage from the orbit. 3. That by Mules's operation a good stump may be obtained with certainty, while in enucleation it is occasionally defective. 4. That by combining enucleation with the introduction of a glass sphere into Tenon's capsule, it is probable that we shall obtain the safety of the one operation with the cosmetic effect of the other.

THE OPERATIVE TREATMENT OF TRICHIASIS WITH OR WITHOUT ENTROPION,

AND A SHORT NOTE ON ARGYLL ROBERTSON'S OPERATION FOR ECTROPION.

By ARTHUR H. BENSON, M.A., F.R.C.S.I.,
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It is not my purpose to review the whole subject of palpebral surgery, but briefly to comment upon two of those methods of operating more recently introduced, which have been practised with such success at St. Mark's Ophthalmic Hospital, and elsewhere. I am induced to do so by the fact that although neither of them can now be regarded as novelties, they are not yet as universally known and practised as, I think, they deserve. As my experience of them enlarges, so also does my faith in their efficacy in rendering permanent relief to a class of cases hitherto most difficult to deal with, and the opprobrium of ophthalmic surgery. It is, however, only by discussions, such as I anticipate to-day, that the real value of any mode of procedure can be ascertained, and a collective experience acquired. The experience of one is seldom the experience of all.

In 1882, when this Association met at Worcester, I read a paper on what I then thought was a novel method of dealing with partial trichiasis; namely, by electrolysis. I then wrote from a comparatively small experience of the method, but expressed a belief that it would rapidly supersede all the other operations in use to procure permanent destruction of the hair follicle and its aberrant cilium in a certain limited class of cases. Since then I have had large opportunities of judging of its effects, and have operated on many hundreds of cilia, and yet have nothing to take from my former statements regarding its superiority. I have also had letters from some of those who have tried it with satisfaction. Moreover, Dr. Michel, of Missouri, who, unknown to me, had practised electrolysis in these cases for

some years, has favoured me with a pamphlet in which the same convictions are expressed.

The following is the method I now adopt in treating those cases of partial trichiasis where, without marked entropion, a few cilia grow from abnormal positions in the free border of the lid, and rub on the cornea. A continuous current battery (Leclanché) of 10 or 15 cells, is placed close to the patient; an electrolysis needle (I often use a common sewing needle) is attached to the negative pole (zinc) and a pad or sponge to the positive electrode. The needle is then inserted into the lid border, along the course of the cilium to be destroyed, to a depth of about four or five millimètres. The circuit is completed by making contact with the pad on the skin of the brow, cheek, or temple close by. Dr. Michel makes the patient hold the pad in his hand, and close the current at will. Hydrogen is developed by decomposition of the watery elements of the follicle, etc., and is given off around the needle, as evidenced by the formation of a white ring of bubbles. A few seconds' application, if the battery is working well, suffices to produce this effect, and the hair is then wiped away, bringing with it a small mass of dead tissue. If the hair does not quite readily come away, it is better to reapply the needle and destroy the bulb more thoroughly. Each cilium must thus be destroyed. The operation is decidedly painful, and this is its one fault. In some cases it may even be advisable to give an anæsthetic, where many hairs have to be so treated. It is obvious that this method of destroying hairs is equally applicable to other parts of the body as to the lids, a fact pointed out in my former communications on this subject.

I need not recapitulate the favourable comparison that suggests itself between this and the actual or potential cautery, illaqueatio, or Gaillard's and Herzenstein's sutures.

When the ingrowing cilia are very numerous, or where there is some entropion associated with the trichiasis, some plastic operation is required to transplant the whole set of cilia away from their faulty position into a more innocuous one. Spencer Watson's ingenious method of transposition of the cilia was, though itself short-lived, the parent of a long series of modifications, the last of which is the only one concerning which I wish to speak.

Spencer Watson, Nicati, Gayet, Warlomont, Story, and Dianoux, all in their various ways, transposed the cilia with a flap of palpebral skin. The disadvantages of this soon became apparent in those cases where the transplanted flap touched the cornea; and as such constituted a large section of the total, these all readily gave way to Van Millingen's suggestion of transplanting mucous membrane to the lid border. At first rabbit's conjunctiva was used, and subsequently buccal mucous membrane (Story), which best fulfils the indications.

The operation, as I now do it, is as follows: Knapp's clamp is inserted, and the lid firmly squeezed, the ciliary border being everted as far as possible. An incision is then made through the free border of the lid for its whole length, and about six millimètres deep, so placed that all the cilia are in the anterior or skin division of the lid, and no hairs or roots in the posterior or conjunctival division. If any such are seen in the posterior flap they are to be carefully removed. A second clamp similar to the one used on the eyelid is then applied to the lip, upper or lower, according to circumstances. When screwed tightly up so as to prevent bleeding, two parallel incisions are made through the mucous membrane, equal in length to the incision in the lid, and varying in distance apart from three to five millimètres, according to the amount of displacement in the cilia to be corrected.

The strip of mucous membrance so made is dissected off with scissors, and any loose fat removed from its under surface. It is then as rapidly as possible transferred into the slit left in the eyelid, and fixed in that position by three sutures, one at either end and one in the middle. The operation so far is almost bloodless. The clamp is then, and not till then, removed from the eyelid; considerable hæmorrhage follows for a few minutes, which, however, does not seem in any way to risk the subsequent life of the transplanted mucous membrane which, in twenty-four hours, is in most cases adherent to, and in vital union with, the tissue of the lid.

The lip-clamp is then removed, and the patient dismissed with some iodoform ointment and a wet compress of boric acid solution applied to the eyelid. No dressing is put on the lip, which heals readily and almost painlessly. The result is, in a large proportion of cases, very satisfactory. The faulty cilia are mechanically bossed out from contact with the cornea by the buccal mucous membrane transplanted, and thus a new and broad free border is formed to the eyelid, whilst the hairs, restored to a harmless position, serve their useful and ornamental purposes as well as ever. Moreover, the effect is permanent, though undoubtedly a certain amount of shrinking of the flap cours after some time. I shall not attempt to make a comparison of this operation with those that preceded it, a comparison easily made, and wholly in favour of this.

Argyll Robertson's Operation.

Ectropion has been, and is still, one of the most difficult of all the deformities of the eyelids to treat successfully; and yet, owing to the great disfigurement produced by it, as well as the annoyance it causes in other ways, it is one urgently calling for treatment.

Argyll Robertson, in 1883, published his account of "A New Operation for Ectropion;" his experience of it, at that time, only extended to five eyelids, in two of which he could not state the result. As the operation seems to be one of real value, and as so few cases have since been published, I think it may not be out of place to mention those I have done or assisted at, and also to describe certain modifications in the method which I have found useful.

The operation is usually performed as follows: A suture with two needles; a piece of sheet lead, one inch long and a quarter of an inch broad, curved to suit the shape of the globe; and a piece of medium thin india-rubber drainage-tube, are required. The needles are passed through the border of the lid from skin to conjunctiva, and out again through the inferior conjunctival *cul-de-sac* to the skin, an inch or so below the margin of the lid. The punctures near the lid-border are about half an inch apart, and the counter-punctures below about a quarter of an inch apart. The piece of lead is then slipped under the two threads inside the lid, between them and the palpebral conjunctiva, and the drainage-tube is passed under the external loop of suture near the margin of the cornea. The suture is then drawn tight, and tied over the lower end of the piece of drainage-tube. As the suture is tightened, the border of the lid is bent inwards over the edge of the leaden plate, and the elasticity of the drainage-tube keeps up a constantly applied pressure for from five to ten days. When the apparatus is removed the lid is found to have recovered its normal position, either wholly or in great part.

Where the eversion is extensive, occupying nearly the whole margin of the lid, I have obtained good results by applying a double apparatus, that is, two sets of sutures and two pieces of drainage-tube over the one piece of lead. By this means a more complete command is obtained over the eyelid, and the pressure, being more evenly distributed, need not be excessive on any one point.

In the earlier operations I experienced considerable difficulty in keeping the sheet of lead in its place beneath the sutures. Dr. A. S. Patton, the house-surgeon at St. Mark's Hospital, suggested making holes in the lead near its inferior margin. Through these the sutures are passed from within outwards, before being carried through the inferior *cul-de-sac* of the conjunctiva. The lead is thus kept in perfect position, and the *technique* of the operation simplified without any corresponding disadvantage. In most cases I have found it necessary to tighten the sutures from time to time, as the lid moulded itself to the lead; this was effected by lifting the loop of suture near the margin of the lid with a strabismus-hook, and passing small rolls of cotton wool under it.

The following are brief notes of the cases done at Saint Mark's Ophthalmic Hospital during the past two years.

Case I.—Mary B., aged 40 (No. 39), suffering from chronic lippitudo, with everted lower eyelids. The canaliculi were slit, and three days later (April 30th, 1884), I performed Argyll Robertson's operation on the left eyelid, the double suture being used. Result, "most satisfactory."

Case II.—The same patient had her right eyelid similarly operated on by Dr. Keane, our then house-surgeon (May 7th, 1884), with a like satisfactory result, the lids in each case being "almost quite restored to their normal position."

In the first of these cases, the india-rubber tube was cut short near the sutures, the result being that the sharp corner of the cut tube pressed upon and ulcerated the skin in its neighbourhood, causing much unnecessary pain. I now always have the tube long enough to rest against the brow above, and the cheek an inch below the inferior suture.

Case III.—James D., aged 70 (No. 80), had senile cataract and ectropion on each side. I did Argyll Robertson's operation on his right lower eyelid, resulting in a "complete cure of the deformity;" and, on June 3rd, 1885,

Case IV.—I did the same on his left eye. The sutures were left in for five days; after which the patient returned home with the lids "in perfect position." The interval of time between the two operations was not noted.

Case V.—Edward T., aged 23 (No. 195), suffering from ectropion, right and left, with great thickening of the everted conjunctiva, which was constantly caked with dry discharge. On July 25th, 1885, I did

Argyll Robertson's operation on the right eye. After six days, the sutures were removed, but the lead was forgotten in the conjunctival sac for nine days longer.

CASE VI.—On August 6th, 1885, Dr. Story did a similar operation on the same patient's left eye; the sutures were removed after four days. Portions of both eyelids were noted as being in "fairly good position" some time after the operations: but, owing to the great thickening of the conjunctiva, a perfect result was not to be expected.

CASES VII and VIII.—Robert G., aged 50 (No. 319), was admitted August 19th, 1885. Argyll Robertson's operation was done on each side by Dr. Story. The result was "not satisfactory," though there was some improvement. The lead, after the operation, was very liable to slip out of its place, and so it got hardly a fair chance.

CASE IX.—On October 3rd, 1885, the operation was repeated on the left eye. It was followed by considerable swelling of the lid and pain, so that the suture had to be removed after three days. It was then found that the lid had sloughed through its whole thickness from the pressure of the india-rubber tubing. When the raw surfaces became healthy, their edges were pared, and brought together with sutures—thus making a modified Adams's operation of it, with quite excellent result, the lid being in position, and very slight deformity resulting from the scar.

CASE X.—Patrick M. (No. 32), ectropion of the left lower eyelid. On October 10th, 1885, Dr. O'Devaine did Argyll Robertson's operation, adopting Dr. Patton's modification of the holes in the lead. The sutures were removed after four days, and the result was noted as "most satisfactory." This patient was again seen on July 26th, 1886, that is, nine months after the operation, and the lid was still in perfect position.

CASE XI.—J. M., aged 40 (No. 116). Ectropion of both lower eyelids. On June 12th, 1886, Dr. Story did Argyll Robertson's operation (Patton's modification) on one eyelid. The sutures were removed after seven days. The result noted was only a very partial success. In this case the point of exit for the lower sutures was not as low down on the cheek as usual.

CASE XII.—J. H., aged 22 (No. 42). Ectropion from chronic marginal blepharitis. The canaliculi were first slit, being wholly everted. This did not relieve him, so on June 9th, 1886, I did Argyll Robertson's operation (Patton's modification) on his left eye. The apparatus was removed after three days, with an entirely negative result.

CASE XIII.—On June 19th, 1886, I did the same operation on his right eye. The sutures were left in for ten days, and frequently tightened by inserting rolls of cotton-wool under them. The result, after an interval of six weeks, was "considerable improvement."

CASE XIV.—On July 7th I did the same operation on the left eye again. The sutures were left in for ten days, and frequently tightened in the same manner. The result noted was "perfect."

Notes.—1. Where the whole length of the lid-border is everted, it may be advisable to use the double-suture arrangement (Case I).

2. Where only a small portion of the lid-border is everted, a smaller piece of lead, with Patton's holes, remains in perfect position, and effects a cure with less annoyance to the patient (Cases XII, XIV).

3. Where only slight swelling of the lid follows, and rapidly subsides, subsequent tightening of the sutures is necessary (Cases XII, XIII, XIV).

4. The final result is not obtained for some weeks after the apparatus is removed. The swelling of the conjunctiva at first diminishes the result, and subsequently cicatrisation of the conjunctiva increases the permanent inversion.

5. A repetition of the operation in some cases effects a cure.

6. In one case a small abscess formed in the line of the inferior sutures.

7. In one case the lid sloughed through its whole thickness.

Abstract of the Fourteen Operations recorded in the Paper.—In four, the result was "perfect;" in five, "considerable improvement" was noted; in three, "slight improvement" was recorded; in one, the result was "negative."

SUNDERLAND is to have a new hospital for infectious diseases, the building of which will cost £14,796. The site has cost £5,000.

THE Manchester county magistrates have made an order putting in force the "Dogs Act" for three months in the districts of Stretford, Urmston, Flixton, and Barton-on-Irwell.

A CENTENARIAN.—The hundredth birthday of Mrs. Ann English was celebrated at Sheffield by about sixty old women, whose ages ranged from 65 to nearly 100.

UNIVERSITY COLLEGE.—The Fellowes Clinical Gold Medal has been awarded to Mr. C. W. Jecks, and the Fellowes Clinical Silver Medal to Messrs. H. P. Dean, G. R. Murray, and W. B. Ransom.

STIFFNESS OF THE GREAT TOE JOINT IN MALE ADOLESCENTS.

BY HOWARD MARSH, F.R.C.S.,
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THIS condition, respecting which Dr. Reginald Lucy asks for information in the JOURNAL of April 2nd, is one of considerable interest, and may, I think, be very usefully discussed, for though it is by no means rare, though its pathology is obscure, and though its successful treatment is often difficult, I am not aware that any full account has ever been written of it. As I chance to have the following notes of cases by me, they may, perhaps, serve as a contribution to the subject. All the cases I have met with, now upwards of twenty in number, have been so much alike in their clinical features, that it is unnecessary to multiply instances; two examples will be enough.

CASE I.—A lad, aged 16, who came to St. Bartholomew's Hospital, said that, two years before, he had first observed that towards the end of the day his right great toe had become stiff and painful. These symptoms had slowly increased, and he was now always in suffering. He pointed to the metatarso-phalangeal joint as the seat of the trouble. This joint was slightly enlarged in consequence of expansion of the articular end of the metatarsal bone, and, to a somewhat less marked degree, of the base of the phalanx. There was no thickening of the synovial membrane. The toe itself was quite straight, but it was set on to the metatarsal bone in such a way, that from the metatarsal joint to its end it took a rather downward direction. This was the constant position of the toe, the patient being unable either to raise or depress it, even with the strongest effort he could use. On trying to extend it in the ordinary manner in taking a step forward, he felt severe pain, and, to avoid this, he habitually walked "whole-footed." He was unable even to commence the act of standing on tiptoe. The joint, when I examined it, was quite cool, but he said that at night it often felt hot, and was found to be so when the fingers were placed on it. This was always the case if he had been walking on it for any distance. On testing its movements, I found the metatarso-phalangeal joint almost rigid against extension, though it admitted of some degree of flexion. The patient said he had never had rheumatism, nor was there any history of it or of gout in his family.

CASE II.—A gentleman, aged 23, stated that his right great toe had first troubled him eight years before (that is when he was 15). The condition of the toe was similar to that described in the last case. The articular ends of the metatarsal bone and the first phalanx were distinctly enlarged, and their margins were heaped up and nodular; the joint was so stiff that, while it could not be moved at all by the patient, I could carry it through only a few degrees of flexion; and extension was more limited than flexion. The toe itself was quite straight, but, as in the previous case, its distal end was slightly pointed downwards. The joint was now normally cool, but the patient said that after walking it became hot, as well as painful and swollen. He had wished to enter the army, but as his gait was awkward, and "whole-footed" on this side, and as he could not walk more than half a mile without pain and increasing lameness, he had been compelled to relinquish the idea. In the eight years during which the affection had lasted, many forms of treatment had been employed. He had rested the toe for some months, walking as little as possible, and always on his heel, so that the toe did not reach the ground; the joint had been freely painted with iodine, and at another period freely and repeatedly blistered. It had also on two occasions been forcibly moved when he was under the influence of gas. Nothing, however, had done any material good. Just before I saw him he had been advised to submit to excision of the joint, or amputation of the toe, a course he was himself inclined to take, for he was unable, in the present condition of the toe, to follow any occupation with anything like comfort. I found that both his parents suffered from osteo-arthritis, that he himself had had two attacks of acute rheumatism, that his knuckles were markedly enlarged, and that he often had fugitive pains in his knees, shoulders, and other joints.

The cases in the group of which the two just related may be taken as representative present a close resemblance to each other. All have occurred in male patients between the ages of 12 and 25; in all the affection has been seated in the metatarso-phalangeal joint of the great toe. Twice I have met with it attacking both great toes in the same patient. The condition in all the cases presented the characters of a slowly advancing, sub-acute inflammation, attended with almost complete stiffness of the toe. The joint is usually free from any marked

degree of heat, indeed in some cases it has been cold, and the skin over it congested and blue. In many instances it becomes hot and tender after prolonged exercise, and there may even be slight inflammatory redness of the surface. Sometimes distinct grating has been felt between the articular surfaces. In many instances the articular margins are irregular, and expanded by "lipping" or by low-crowned nodular formations of new bone, such as are found in osteo-arthritis in older persons. Any attempt to move the joint freely causes pain.

In many instances the affection may be recognised at a glance by the appearance of the patient's boot. This, having been worn over a stiff toe whose joint is enlarged, is seen to be straight in the sole, bulged over the large joint, and from that point to its end smooth and unmarked by the wrinkling and creasing which would be produced by the natural movements of the toe within it.

The origin of the affection is obscure. A few of the patients have ascribed it to injury. In one instance it commenced after the toe had been accidentally driven against the edge of a stair as the boy was running upstairs without his boots; in another, after the toe had been contused by the fall of a heavy piece of wood upon it. In some the patients have been wearing boots that were too short; but, though this has been suggested as a cause, I am not convinced that it is so, for the toe of the opposite foot, though under the same disadvantage, very rarely suffers; nor have I either noticed any deflection of the toe such as usually occurs when the anterior part of the foot is cramped, or met with the affection in boys under 12. In some instances there has been a strong family history of rheumatism, or of osteo-arthritis; but in many this has been completely absent. I have followed some of the cases up for six or seven years. In some the affection has, as in Case II, persisted and led to marked and permanent anatomical changes closely corresponding with those of the common forms of osteo-arthritis. In many, after persisting, though with periods of subsidence alternating with exacerbations, for two or three years, it has slowly disappeared, leaving the toe only somewhat stiff and the joint a little enlarged.

The idea may appear fanciful—too fanciful, perhaps, to be discreetly put into print—but I have often thought that the condition is in some way connected with the development of puberty. The cases are so strikingly alike, so strictly, in my experience, limited to patients between the ages of 12 and 20, and so frequently unaccompanied by any other joint-affection, that they seem to constitute a specialised group depending on some common cause, and vague as the suggestion may be, this cause seems in some way associated with the change to which I have alluded. It is well known that morbid conditions of the joints are sometimes connected with functional activity of the generative organs. Dr. Ord has recorded instances in which female patients have, with each menstrual period, suffered attacks of osteo-arthritis, which have subsided when menstruation ceased; and at the present time I have a girl, aged 15, under my care with hip-disease, in whom the affection has, under prolonged rest, become very slight; but with each menstrual period she has a return of pain and lameness, simulating an ordinary relapse; and when menstruation is over the exacerbation of the joint-symptoms disappears. In cases in which there is a history of osteo-arthritis in the family, or in which an injury of the toe has occurred, these influences may probably be associated with the disturbance of the generative organs in producing the joint-affection. However, I know so little of the subject that I will not venture on any attempt to trace it further.

The treatment of these cases, like that of many forms of osteo-arthritis, is often, it must be allowed, unsatisfactory. Of course, the patient should be provided with well-fitting boots of soft leather, made with low heels, and of good length and width in front. He should have only moderate exercise. If, as is sometimes the case, there is a tendency to flat-foot, means should be taken to remedy this condition. Hot douching of the toe, night and morning, with salt-water, and the use of two or three small blisters, will sometimes be useful. In several cases, I have manipulated the toe under gas—in some with marked relief, while in others, though movement was produced at the time, no permanent good was done. In some instances in which the joint was hot and tender, I have applied a leather splint to maintain complete rest. In one case I kept the toe fixed in plaster-of-Paris for three months. Complete rest, however, has appeared to be of very slight benefit, and I do not think it should be long maintained. When other symptoms, or a family history of osteo-arthritis, are present, appropriate remedies for this condition should be employed. In one case I thought iodide of potassium was beneficial. Excision of the joint may be justifiable in some of the worst cases; but I have never resorted to it, nor have I seen a case in which it has been performed; neither have I any experience of amputation of the toe.

DEFORMITIES OF THE GREAT TOE.

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Consulting Surgeon (late Surgeon and Ophthalmic Surgeon) to the Gloucester Infirmary.

THREE varieties of deformity have during the past month been separately described in the JOURNAL, but all of them, as I believe, having a similar origin, and each of them depending for satisfactory treatment on a correct appreciation of the function as well as a due regard to the anatomy of the part involved.

It cannot be too strongly enforced that the principal function of the flexor muscles, paradox though it seem, is not to flex the great toe, but to press it during progression, be it in walking or in running, against the ground in all its length. Herein is manifest the advantages of having the phalanges in two rather than in three segments, as in the case of the other toes. The point of greatest pressure being at the point between the two phalanges, there is no uprising anywhere; whereas in the case of the smaller ones, the downward pressure being at the joint between the second and third phalanges, the backward traction causes a distinct uprising at the joint between the first and second. This result, however good for gripping the ground, could not give that firm, solid base from which the body may be propelled onwards, which it is the main purpose of the great toe (in man so greatly developed) to supply. This curious arrangement of two phalanges for the first and three for the other digits (common to all mammals) cannot be shown, so far as I am able to discover, to be or to have been of the slightest advantage to any inferior animal, recent or fossil, although it is, as I maintain, essential to the design of the human foot. I would add that in the case of the great toe, the up-lifting effect of the backward traction of the long flexor is also felt at the joint behind the one at its attachment; but this is not an inter-phalangeal, but the great metatarso-phalangeal joint. By this means effective provision is made for relieving that joint from the severe pressure which the weight of the body, coming directly on it when it occupies the position of the lower pier of an up-tilted arch, would otherwise occasion.

Another point of importance is that the flexor muscles are powerful abductors, drawing the great toe away from the middle line of the foot, towards which it tends when at rest, and bringing into a line with the inner margin, or even beyond, so as to form a slight concavity, the different directions being due to the form of the articular surfaces of the metatarso-phalangeal joint. This double effect of the flexors is impeded by eversion of the foot, and it must of course be prevented by fixing the great toe in a diverted position, as is done by the conventional median-pointed boot. In these boots the necessary abduction which the action of the flexor muscles should cause cannot take place, and drawing downwards against the sole of the boot is either impossible or is instinctively avoided on account of pain due to uneven pressure on the articular surfaces which action of the flexors would involve. This pressure cannot, however, be entirely avoided; thus irritation and finally, it may be, destructive disease, is set up in the joints. This the muscles, becoming in turn irritable, aggravate, and deformities ensue, varying in character according as the different forms of boot and modes of walking, or other cause, may influence them.

Once a bending at the inter-phalangeal joint established, the long flexor draws the second phalanx backwards, but the tip of it cannot turn downwards, as in ordinary flexion, that being prevented by the sole of the boot. This may produce flexion of the first, with (relative) extension of the second phalanx, a condition described to the Clinical Society by Mr. Davies-Colley and reported in the JOURNAL of April 2nd. It may be that the toe will remain straight and become stiff, as described by Mr. Lucy in the same number. It may even be that the second is drawn under the first phalanx, the distal end of the latter projecting upwards. In all these cases there will be evidence of much irritation having existed in both of the toe-joints. Far more commonly the great toe allows itself to be diverted with very little resentment as manifested in the joints, and becomes fixed in that position. For rectifying this common condition an apparatus is depicted and described in the JOURNAL of April 30th.

But while admitting the necessity in some cases for resections—which, however, are, at best, mutilations—and the utility of medicaments, local and general, as well as of apparatus, I submit that all those things have a tendency, as the discussion at the Clinical Society showed, to divert attention from the necessity of fully restoring the function of the part, which alone can bring about a satisfactory cure. This result, clearly, cannot be attained in any case without boots giving plenty of room for the great toe to come into straight line, but these being provided, disappointment is felt at the absence of

any disposition of that part, even when no structural change is apparent in it, to occupy the room provided. The sock may easily cause sufficient pressure to prevent this, and the best plan is to cut a hole in it, in that way setting perfectly free the great toe, which may be clothed with a few turns of bandage tied around. In time, socks may be substituted having a straight inner line, or, better still, a separate stall for the great toe. The invitation to occupy the space provided in the boot must also be kept open; the leather must not be allowed to fall in, but be frequently pressed upwards, and may, when the boot is not in use, be supported by wool stuffed within. Better still, of course, is the use of a well-made boot-tree. More generally the loss of the power of voluntary action of the flexor muscles is the explanation why the great toe shows no disposition to return to its proper place, and it is with difficulty that this power can be restored. The best way to practise the movement is with bare feet; the assistance of the eye in the attempt to do it is very great. In time the habit of walking with firm pressure of the great toe against the ground in every step becomes even automatic. Given sufficient patience and determination, and it is surprising how bad a condition may be removed, and perfect recovery of outline and of function attained by these means alone. Of course, all this holds good in less degree in proportion to the amount of structural change in the joints. It is important, I should add, that, in walking, the feet should be directed forwards, not everted when, as already stated, the action of the flexors is impeded.

The connection of the deformity described by Mr. Davies-Colley with flat-foot arose at the Clinical Society's meeting. I recognise with him that generally or frequently they are not found together. It is rather in cases where the long flexor muscle consents, so to speak, to entirely suspend its functions that the additional deformity occurs. In such cases the bowstring or tie-rod effect (as I have called it) of the long flexor is lost, and the arch sinks for want of the persistent bracing which vigorous action of that muscle affords.

STIFFNESS OF THE GREAT TOE IN ADOLESCENTS.

By J. M. COTTERILL, M.B., F.R.C.S.E.,
Assistant Surgeon, Edinburgh Royal Infirmary.

Considerable doubt and difference of opinion have been expressed by various surgeons as to the precise pathology of this condition, which consists of an apparent flexion of the great toe, accompanied by stiffness, and frequently by pain, in its metatarso-phalangeal joint. There seems to be no mention of the subject in any standard work on surgery, but I do not consider it a rare condition; for instance, I have seen three cases during the last month.

Mr. Davies-Colley, in a paper read before the Clinical Society of London, is reported to have attributed it to one of two causes; either (1) injury to the joint followed by contraction, or (2) pressure of short rigid boots upon an abnormally long great toe. Rheumatism, gout, contractions of tendons and ligaments, are amongst other causes suggested by various authorities. Mr. Symonds says: "It occurs in young boys, especially those with flat feet. Some of the boys had a long great toe." The general consensus of opinion seems to have been strongly against the idea of flat foot being an important factor. Mr. Davies-Colley "did not think flat foot had much to do with it"; while another speaker stated that this deformity was unknown in barefooted races, though flat-foot was common with them.

I am convinced that most, if not all, typical cases are dependent upon a combination of flat foot (or a tendency to it) with rigid and short boots. Flat foot alone will not produce it; ill-fitting boots alone will not do so; it requires a combination of the two. A short boot might perhaps set up irritation in the joint, but will not cause the disarrangement of parts peculiar to this disorder. The process, then, I take to be as follows: The patient has a short, shallow, and rigid boot, which firmly grasps the toe, making it an absolutely fixed point. Given, then, the condition of flat foot, or even that of an undue laxity in the ligaments which should support the instep, the patient on walking causes depression of the proximal end of the first metatarsal bone. This necessarily alters the relations of the structures at the distal end of the bone; that is at the metatarso-phalangeal joint, as follows: (1) The articular cartilage of the metatarsal bone is uncovered on its dorsal aspect, as would happen in strong flexion of the toe (this I have verified on a good dissected specimen); (2) the dorsal portion of the capsular ligament is at the same time put severely on the stretch. These fibres do not at any time admit of great movement of the toe in flexion, and the pain referred to the part, and sub-inflammatory changes taking place in it are, I believe, amply explained by these two circumstances. I need not remind any practical surgeon of the severe pain caused by the continued stretching of ligamentous structures.

In the early stages the only symptom is slight pain, referred to the dorsal aspect of the joint (as one would expect), and increased on movement. A little later one finds swelling of the soft parts, or of the bone itself, with redness and inflammation. This may go on to general involvement of the joint, with more or less complete fibrous ankylosis in the distorted position, and contractions of plantar ligaments and muscles. Not infrequently in old-standing cases there appears to be an atrophic condition of the parts concerned, rather than an increase in their size. It is now easily explained why barefooted races are exempt from this disorder: the element of the fixed toe is wanting. The apparently abnormal length of the great toe sometimes noticed is caused by the lengthening of the inner side of the foot by the conversion, more or less complete, of the arch of the instep into the straight line of flat-foot. It, moreover, may occasionally happen that the inflammation caused by the deformity, existing as it does in close relation to the epiphyses of young and rapidly growing bones, stimulates them to an increased growth.

Mr. Davies-Colley suggests the name "hallux flexus." I must beg to protest against the adoption of this term, as, if my pathology be correct, it implies a misconception of the truth: for it is not in reality a flexion of the hallux, but of the metatarsal bone. I would suggest the name "hallux rigidus," as free from the above objection.

Rheumatism and gout have, I believe, nothing beyond an accidental relation to this disorder.

In confirmation of the views expressed above, it must be borne in mind that "hallux rigidus" always occurs in young growing people, who are constantly on their feet—in short, the very class which supplies nearly all our cases of flat-foot. Another, and to me, at least, a most convincing argument, is that I have never failed to cure any case of early disease (that is, before ankylosis) by taking proper means to support the instep.

In more advanced cases, where the pain is severe and swelling considerable, fomentations, rest, gentle support with light splints, and other such means will suggest themselves. When the more severe symptoms have responded to this treatment, the important point is to keep up the instep.

In the third and most advanced set of cases, where firm ankylosis is present, with contractions of muscles and ligaments, little, if any, real improvement can be expected from blistering, tenotomy, and the like; while the routine practice of using splints for an indefinite period is, as might be expected, merely palliative, and as a cure is as unsatisfactory as it is irrational. The proposal made by Mr. Davies-Colley is probably the correct one, namely, to excise the proximal half of the first phalanx; and I should treat the case in such a way as to ensure a certain amount of movement in the new joint.

REMARKS ON THE TREATMENT OF QUINSY, ESPECIALLY IN INFANTS.[1]

By W. E. GREEN, M.R.C.S.

The subject of quinsy is one which has had a special attraction for me for many years, on account of its painful nature, its frequent recurrence in the same individual, and the rarity with which one was able to abort a case, or do more than wait until Nature came to the relief about the ninth day, or we were able to shorten the sufferings by the knife, often a most difficult matter, owing to the impossibility of opening the mouth. We were not idle even then, the treatment often commencing with free scarification of the tonsil or a blister behind the ear, and steam inhalations, while drugs of many kinds were used, of which aconite was the favourite, and was followed or given either with chlorate of potassium, perchloride of iron, or bark, and, to promote suppuration, one-tenth of a grain of calomel every hour. Even with these heroic procedures, we rarely cut short a case.

In 1875 I filled up a return on the subject, issued by Dr. Brunton in the *Practitioner* (this being one of the first attempts at collective investigation of disease). It was not until the following year, when, in talking over the subject with my cousin, the late Dr. Maund, he told me he found guaiacum give more relief than any other drug. From that time I have nearly always used this drug, but have not found the desired result from it alone. Then I was led to give aconite with it, and have found this treatment increasingly efficacious; but by experience have come to the conclusion that it is better to give the drug more and more frequently, until at the present I am of opinion

[1] Read at the Ryde meeting of the Isle of Wight District of the British Medical Association.

that one ought to be able to abort about nine out of every ten cases, provided the case is seen within the first forty-eight hours. My present prescription is: ℞ Tr. aconiti ℥ij; tr. guaiaci ℥ss; glycerinæ ad ℥j. Twenty drops every hour in sweetened water till easier, then every four hours till well. The patients always say that the first dose gives relief, and each successive dose more and more.

Between December 29th and January 14th I had a run of nine cases, one on the fifth and one on the sixth day of disease, and every one of these had been cut short, two or three even going on with their usual duties. One of this series of cases was an infant aged 8 months, which brings me to the subject of this communication.

On Sunday, January 9th, I was asked to see a baby who was ill. I found a very fat child, suffering from difficult breathing, quick pulse, temperature 100°, apparently in considerable pain. The appearance of the child pointed apparently to a trouble in the throat, and there was a good deal of swelling below the angle of the jaw on the left side. On placing a finger in the child's mouth, a swelling of the left tonsil extending almost across the fauces was felt. The parents said the child had been bad since Friday, the 7th, and could not now take the breast or swallow easily. I ordered a mixture containing one grain of carbonate of ammonia, half a minim tr. aconiti, and one minim tr. guaiaci, in a drachm of sweetened water every hour. At night the child was worse, almost livid, but the parents had given the mixture regularly. The temperature was 101.6°. I thought it would be necessary to perform tracheotomy unless improvement took place, as the nostrils were too small to pass a proper sized tube.

January 10th. The temperature was 105.6°; the breathing was somewhat easier; and the swelling below the jaw somewhat less. There was a good deal of bronchitis, and the child was in a critical condition. I ordered one minim and a half tr. aconiti every hour; and, as the guaiacum was adhering to the bottle, two minims of the tincture to be given in each dose of medicine. In the evening the little patient was better; the temperature was 103.4°.

January 11th. The temperature was 101.4°; the swelling had almost disappeared, and the child was much better. In the evening the temperature had fallen to 100°. I directed that the medicine should be taken every four hours; and next day, with the exception of bronchitis, the child was practically well. It has since made an excellent recovery.

The large amount of aconite that the child took is worthy of note; I believe its life was saved thereby. One minim and a half was given every hour for thirty-six hours, half-minim doses having failed to check a rapid rise in temperature. I have often seen these large doses well borne by infants and young children, but I always prescribe a stimulant with the aconite. I give ammonia to very young children and either strychnine or nux vomica to older ones.

I have never known or read of a case in so young a child, and therefore thought these notes might be interesting.

OBSTETRIC MEMORANDA.

LABIAL AND VAGINAL THROMBUS.

The infrequency of thrombus of the genitals in connection with labour may be inferred from the fact that M'Clintock and Hardy make no mention of it in their observations on 6,634 consecutive deliveries, while Sinclair and Johnston, in their analysis of 13,748, record only seven cases, of which all were labial, three occurring before delivery, and forming more or less of an obstruction, and four after delivery. The following cases I had an opportunity of seeing within a fortnight of one another, and they illustrate very well the two great dangers of the accident, namely, acute anæmia from hæmorrhage, and septicæmia.

Case I.—Pluripara, aged 34 or 45 (variously stated), had in two previous labours suffered from *ante-partum* hæmorrhage, the fœtus on one occasion being dead-born; she had also miscarried five times. In this, her twelfth or thirteenth pregnancy, there was considerable *ante-partum* hæmorrhage during ten hours, after which a dead fœtus and a fatty placenta were expelled unaided, followed by slight *post-partum* hæmorrhage. The perineum was sufficiently ruptured to require a stitch, and a walnut-sized thrombus was then observed in the right labium majus. Six hours later the thrombus, equal to the head of a new-born babe, and occupying the right half of the vulva and the right half of the perineum, resembled a huge scrotal tumour, the vulvar orifice being pushed quite out of sight and in contact with the left thigh, while the swollen translucent labium minus rested on the top of the tumour like a penis; there was an exceedingly abrupt and well-defined line of demarcation between the majus and minus labium, the outer part having a natural skin tint, the inner a bright red, like a blood-clot covered with the thinnest of transparent pellicles, threatening rupture in two places. The patient was catheterised to obviate straining, and put under the influence of opium. Two hours later the thrombus was still somewhat larger, and the inner red part had in some places taken on a blue tint. Two hours later the thrombus ruptured in the threatened spots, plenty of blood and clot came away, but hæmorrhage ceased spontaneously without any bleeding vessel being detected. The patient was extremely anæmic and exhausted, and for some days there was a feeling of fulness in the right groin, apparently from extension of the thrombus up into the iliac fossa; but under stimulants and antiseptic dressings she made an excellent recovery, without any noteworthy rise of temperature, got up on the fifteenth day, and on the twenty-second required no further attendance.

Case II.—Primipara, aged 23; a female, breech-presenting, child was easily delivered after fifteen hours in labour. Two hours afterwards the patient had become anæmic and faint from the considerable hæmorrhage that had since set in; the uterus was well contracted, but there was still oozing. On passing the finger into the vagina there was found occupying the lower half of its right wall a smooth, immovable body, of the size of a hen's egg, with an aperture below, evidently a thrombus which had ruptured into the vagina. A tampon was left in for twelve hours to check further hæmorrhage, after which carbolic douches were used twice daily for many days. Nevertheless, from the third to the seventh day inclusive, the temperature was between 103° and 105° morning and evening, after which it gradually fell to normal; on the fourteenth day she first passed urine without the aid of a catheter, and the next day she was up and quite well.

Manchester. Wm. Rushton Parker, M.A., M.D.Cantab.

OPHTHALMOLOGICAL MEMORANDA.

SPASMODIC ENTROPION: NEW METHOD OF TREATMENT.

I saw at the Bolton Eye Hospital, in May last, a man aged 60, who had a spasmodic entropion of the left lower eyelid, and an affection of the left eye requiring an iridectomy. The entropion was successfully treated in the following way: the edges of the upper and lower lids were brought into, and kept for six days in, close apposition by a single suture placed midway between the commissures. Some days after the removal of the suture I performed an iridectomy on the left eye, and during the patient's residence in hospital there was no return of the entropion, and months afterwards he reported that the lid had not given him any trouble. The time during which normal fixation must be maintained in order to overcome the morbid condition will vary with the patients, and circumstances may render a more or less peripheral suture desirable.

This new method of treatment is likely not only to diminish the number of spasmodic entropions requiring operation, but also to be useful in some cases of ectropion. David McKeown, M.D.

Manchester.

THERAPEUTIC MEMORANDA.

INTOLERANCE OF IODIDE OF POTASSIUM.

T. Y., one of my patients, a well-developed man about 40 years of age, suffering from ulcerated sore-throat and febricula, of fair average good health, and presenting no indications of any grave constitutional disease, had been treated by me for a considerable time with iron and potassic chloride combined with quassia. The results were satisfactory so far as the febrile condition was concerned, but by no means so with respect to that of the throat, the ulcerated state of which seemed rather aggravated than alleviated by this method of treatment. As this morbid condition presented a syphilitic aspect (the patient having suffered from it in the past), I had recourse to antisyphilitic remedies, iodide of potassium with bichloride of mercury, and induced thereby a marked improvement in the state of the throat, but which was attended by a most serious condition of collapse. Obliged, therefore, to reject this therapeutic course of action, I speedily restored the patient's strength by reverting to the original treatment; but, by a provoking reversal of order, the throat now grew worse again in proportion. Again was the treatment altered to meet this annoying dilemma, syrup of iodide of iron being administered, combined with mercury; but before the patient took his first bottle of this fresh prescription he fell suddenly into so alarming a state of collapse, that I was summoned hastily in the

middle of the night by his terrified wife, who thought him *in articulo mortis*, so menacing an aspect did his condition present. Happily, this unfavourable condition was soon dispelled, and has not since re-appeared, the patient soon regaining strength after this latest method of treatment had been discarded and my old original line of action resumed. J. BRINDLEY JAMES.

Bermondsey.

THE TREATMENT OF A COLD.

THE recent publication of an interesting article in the *Practitioner* by Dr. Whelan on the treatment of colds, tempts me to put on record the plan I have adopted with the greatest satisfaction for several years. At the very outset of the attack I give the following mixture: ℞ Liq. morphinæ acet., ♏ 30; liq. ammon. acet., ʒvj; spir. chloroform, ʒj; aq. camph. ad. ʒvj., misce. A tablespoonful to be taken in the forenoon and afternoon, and two tablespoonfuls at bedtime. If there be an irritable dry cough, I give in addition one drop of ipecacuanha wine in a teaspoonful of water every five or six minutes for four or five times in the day if necessary. Two days of this treatment destroys most colds, and the cure is confirmed by a grain of quinine taken dry on the tongue in the forenoon of the two or three days following.

Gloucester Terrace. LEONARD W. SEDGWICK, M.D.

ARSENIC IN CYSTIC GOITRE.

HAS arsenic any specific effect upon the thyroid gland? The following case would seem to indicate such; and, failing further experience, I publish it for what it is worth, hoping that some one else will give the drug a trial.

Some two years ago, a woman appeared among my out-patients with an enormous goitre, of which the incision (so far as I could ascertain) had been proposed at another London hospital. The swelling presented several fluctuating bosses, one of which (just above the sternum) had suppurated. The latter was opened, with great relief to the very distressing symptoms. After complete evacuation of the pus, a copious drain of glairy fluid tinged sometimes with blood, set in, and in the course of a few weeks the patient (who had refused to remain in hospital, and had not attended regularly) was reduced apparently to death's door from extreme anæmia—the bronchocele still remaining of considerable size, though somewhat smaller than at first. Removal of the tube failed to arrest the downward course; various drugs, including iron and quinine, were tried without the least benefit. Eventually five-minim doses of liquor arsenici hydrochloricus three times a day were prescribed. This acted "like a charm;" the woman rapidly regained strength, and the thyroid enlargement entirely disappeared. I have since met with two cases in which the same results seemed to follow, but as these were very slight, and as the patients ceased to attend as soon as they got better, I cannot speak of these very positively.

Bayswater. HERBERT SNOW, M.D., Surgeon Cancer Hospital.

CLINICAL MEMORANDA.

"RUBEOLA SCARLATINOSA."

THE question raised by Dr. Haig-Brown in the last paragraph of his notes on rötheln, measles, and scarlatina, published in the JOURNAL of April 16th, as to the existence of two varieties of rash in rötheln, one scarlatinal, the other measly, or the alternative that under the name of rötheln we are confounding two separate diseases, is one of much interest and importance. The existence of a mild disorder which has many resemblances to measles, and is often confounded with it, is familiar to all of us under the name of rötheln or rubella. Is there a variety of the same disease, much less common than the above, which mimics scarlatina as varicella does variola, or the common form of rubella does measles? One of the epidemics observed by Dr. Haig-Brown at Charterhouse affords important evidence in this direction, especially when taken with the observations of Filatow, who has described a similar epidemic in subjects who had previously suffered from undoubted scarlet fever. Other observers have recorded their belief that during the epidemic prevalence of rubella, the rash is apt to be modified in the direction of measles, if prevailing at the time, or to be more or less scarlatinal in appearance if scarlet fever be prevalent. More observations are much wanted to elucidate these points, especially by those who have the opportunity of witnessing epidemics in schools and public institutions. Meantime, it certainly appears to be established that epidemics of a mild disorder may occur accompanied by a rash closely resembling the typical diffuse punctiform rash of scarlet fever, which yet are in reality distinct from it. Is the so-called "rubeola scarlatinosa" an independent disease?

Manchester. HENRY ASHBY, M.D.

REFLEX ASSOCIATION OF THE EYE AND NOSE IN DISEASE.

DR. CHEATHAM, of Louisville, U. S. A., has reported, in the *American Practitioner* of April 2nd, several cases of diseases of the eye, which he considered due to nasal reflex, and which have only been cured after successful treatment of the concomitant nasal lesion. This observer also states that "certain cases of glaucoma have been relieved by stretching the nasal branch of the fifth nerve, and these cases might not improbably be the result of chronic nasal disease." The following case in my practice is confirmatory of the suggestion.

Mrs. D., aged 30, from Canada, when consulting me in the spring of 1885 regarding her daughter, told me that she herself was suffering from severe and increasing glaucoma, for which she had had the best advice in the metropolis and on the continent. Iridectomy had been performed on one eye, but without benefit. The pain was so intense that she was almost constantly applying cucaine, to an extent that was seriously injuring her health. Early in 1886 this lady was attacked with double pneumonia, followed by asthma, for which she was treated in my absence from home by my colleague Mr. Percy Jakins. On recovery, it was found that she was suffering from polypi in both nostrils; these I completely eradicated after ten or twelve sittings. In July 1886 she left England to reside in Jersey, and I did not see her again until quite recently (May 1887). I was gratified to find that not only were her nostrils free from recurrence of the growth and that she had no return of her asthma, but that her eyes were entirely free from pain, and that her sight had greatly improved. This change in her ophthalmic symptoms had taken place without any further treatment of the eyes, and, as she herself suggested, had dated from the cure of her nasal disease.

LENNOX BROWNE, F.R.C.S.Ed.,
Senior Surgeon to the Central Throat and Ear Hospital.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

RADCLIFFE INFIRMARY, OXFORD.

CASE OF SPLENIC LEUKÆMIA.

(Under the care of W. COLLIER, M.D., M.R.C.P.)

A. J., aged 16, farm labourer, was admitted to the Radcliffe Infirmary on December 23rd, 1885. He had been ill for about twelve months, with swelling of the abdomen, frequent attacks of epistaxis, and increasing weakness.

Condition on Admission.—He looked extremely ill, and had a pale, waxy complexion, with œdema and puffiness about the eyes; there was great abdominal distension, with œdema of the legs. Urine: specific gravity 1020, acid, about one-third albumen. The heart's apex was displaced upwards. A soft systolic murmur, loudest at apex, was present. The lungs were normal. The abdomen was much distended, fuller on the left than the right. The superficial veins were congested and prominent. On examination the spleen was found to be enormously enlarged, extending forwards to within a quarter of an inch of the umbilicus, and downwards to the level of the iliac crest. There was slight enlargement of the liver. No enlargement of the lymphatic glands in any part of the body was discovered. Microscopic examination showed an enormous increase of white blood-corpuscles, many of which were double the ordinary size and extremely granular; on counting, the proportion was found to be one white to nine red. Ophthalmoscopic examination showed congestion of the vessels, but no signs of retinal hæmorrhages.

The patient was ordered tr. ferri perch. ♏x.; liq. arsenici hydroch. ♏v. three times a day, the arsenic being increased to ♏viii. after a few days, and this he continued to take during his stay. At the end of two months the patient's general health was very markedly improved. The area of splenic dullness was certainly diminished, and the proportion of white blood-corpuscles decreased; he was therefore made an out-patient, February 20th, 1886, and continued to attend fortnightly. On March 27th, he was looking so well and ruddy, and doing his farm work with such ease, that the medicine was discontinued, and he was advised to come and show himself every month or two.

Two months later (May 27th) the patient was again seen, and ex-

pressed himself as feeling perfectly well, though the condition of the abdomen was much the same as when he left the hospital. On July 17th, when he next came to the hospital, his condition had changed markedly for the worse: he looked very ill, and complained much of extreme weakness. He was at once readmitted, and ordered liq. arsenici hydroch. and iron, the arsenic being rapidly increased from ♏v. to ♏x. thrice daily. At the end of six weeks the patient had so much improved in every respect, that he was made an out-patient, and continued to attend till the middle of September. In the early part of October he got rapidly worse, and as he lived twelve miles from the infirmary he was unable to get there. On November 14th he died, apparently of exhaustion.

Necropsy.—The body was emaciated; the lungs were healthy. In the heart there was no valvular lesion; there was a peculiar mottling of the muscular tissue, especially of the columnæ carnæ. Under the microscope, many of the fibres appeared much shrunken, and had their central parts composed of pigmented granular matter; in places the muscular fibres had entirely disappeared, and were replaced by rows of coarse granules, which gave a fatty reaction with osmic acid. The liver and spleen were bound together by inflammatory adhesions. The spleen was much enlarged, measuring eight inches in the longitudinal and five inches in the transverse diameter. The capsule was much thickened, the pulp extremely dense and resisting; sections showed great increase in the fibrous tissue. The liver was slightly enlarged, and had a peculiar mottled appearance. The structure had undergone a good deal of fatty degeneration; in parts the liver cells had almost entirely disappeared, those which were left being ill-defined, and their central parts filled with granular pigmented matter. The capillaries were enormously dilated and filled with blood-corpuscles. The kidneys on section showed large patches, involving both medullary and cortical portions, of a glistening white colour, contrasting markedly with the more normal parts. Under the microscope the tubules appeared enormously dilated and distended with leucocytes.

Remarks.—There can be little doubt that, in this case, the drugs used (arsenic and iron) did much to arrest the onward progress of the disease, as when first admitted to the hospital the patient appeared to be almost in a dying condition, but quickly improved under the treatment. On the other hand, after leaving off these drugs for a few months, although he was leading the healthy life of a farm labourer, and was in no way stinted in food, all the bad symptoms returned, to be again for a time relieved by the same drugs. It was interesting to observe, as has often been noticed in similar cases, that although the proportion of leucocytes to red discs was as high as 1 to 9, there was no marked pallor of the lips or cheeks.

GENERAL INFIRMARY, LEEDS.

TUBERCULAR GROWTH OF OPTIC TRACT, CRUS CEREBRI, PONS, AND UNCINATE CONVOLUTION, CAUSING HEMIANOPSIA, PARTIAL HEMIPLEGIA, AND UNILATERAL ANOSMIA.

(Under the care of Dr. Churton.)

[Reported, with remarks, by T. Wardrop Griffith, M.B., Resident Medical Officer.]

The patient, a man, aged 35, was admitted on November 18th, 1886, complaining of weakness and of pain in the right side of the face. A detailed examination could not be made until the 20th, as during the first two days of his stay in hospital the patient was delirious and rather violent. His mental condition then became more satisfactory, and, though he was dull and stupid, he answered questions fairly well.

He stated that he had been ailing about two years, with general weakness, and that during the last six months he had had pains in his head and down the right side of his face. He had been married twelve years; his wife had never been pregnant; he denied venereal disease. On examination the patient was seen to be a man of poor physique, with dark hair and eyes, and looking younger than the age stated. He could stand with difficulty, and walked with a weak, unsteady gait. His movements were uncertain, and he got much "involved" in attempting to put on his shirt after examination. His legs were fairly nourished; there was slight tenderness on manipulation of muscles; the knee-jerks were a little increased, but there was no distinct clonus. His grasp was moderately good; the "deep reflexes" of the upper limb were well marked. Sometimes the face seemed slightly drawn to the right side, but no actual paralysis of left side was made out. There was nowhere any impairment of tactile sensibility. His gums were much swollen, and he had some painful stumps in the right upper jaw. Physical examination of the chest was negative. There was no optic neuritis or atrophy. Both testicles were very small. Polyuria was present, as noted below.

On November 27th the lines on the right side of the face were certainly better marked than on the left, and the tongue, on protrusion, pointed slightly to the left, but no further evidence of hemiplegia could be made out on examination of the limbs, the reflexes being equal, and the grasp being good on the left side. In making a routine examination, however, he was found to have well-marked left hemianopsia, and this, with the above-noted evidences of hemiplegia, pointed strongly to a gross lesion on right side of brain.

The ophthalmoscopic examination was still negative. On being tested by the clinical clerk, Mr. E. Lambert, with a variety of substances, it was established that the sense of smell was less acute on the right than on the left side. The patient went steadily down hill until three days before his death, when he refused all food, and, in spite of rectal alimentation, rapidly emaciated, and died with failing pulse and respiration.

A striking feature in the case was polyuria, the measured amount of urine, in addition to a considerable amount that he passed in bed, varying between 90 and 170 ounces in the 24 hours. The specific gravity varied from 1005 to 1000; it contained no albumin. Three days before death he passed a much smaller amount of urine, with a specific gravity of 1011, and containing a trace of albumin. For at least forty-eight hours before death he passed no urine at all, and, to anticipate, the bladder was found empty after death.

As regards treatment, the patient's delirium was kept in check by small doses of chloral-hydrate and bromide of potash. Inunction with mercury was instituted, but was discontinued in two days, as it did not seem to suit him.

The *post-mortem* examination showed that the heart, lungs, liver, spleen, and kidneys were all normal. Both testicles were small, and rather fibrous on section; the tubules did not pull out readily. On microscopic examination the walls of the tubes were found markedly thickened, the epithelial lining degenerated, while there was a very slight increase in the connective tissue stroma.

On removal of the skull-cap the surface of the dura mater was found normal. There was no undue fulness nor thrombosis of venous sinuses. The arachnoid was found raised off the brain more than normally by a marked excess of fluid, an excess which was confined to the upper surface of the brain.

On turning the brain base upwards, the optic commissure was found rather pushed over to the left by the under-noted growth, and the locus perforatus posticus, very ill marked on account of some thickening of the membranes, which especially, by approximating the right crus and tract, had the effect of lessening the size of the interpeduncular space. On examining the optic tract region, one was at once struck by the much greater thickness of this region on the right than on the left side. A mass of tissue lay just external to the optic tract and posterior part of the optic nerve on the right side. This was found to be pressing on the right uncinate convolution, and causing distinct erosion of the uncus for about a depth of one-eighth of an inch. The extreme tip of the uncus was unaffected.

On now tracing out the right optic tract, we find it clear as far back as three lines from the commissure, and, on naked eye examination, normal on section; but now it seemed involved in some pathological process, rendering it quite soft and of a fleshy brown colour. This condition extended back on to the crus, whose superficial part (crusta) was involved all the way along to the pons. On the pons were two small slightly raised nodules, ill-defined and almost confluent, and having the same brownish colour and jelly-like appearance on section. The membranes could be readily separated from the surface of the pons, leaving the elevated nodules quite smooth. The mass of tissue referred to above could be separated from the optic tract, but was continuous with the tissue of the crus; it seemed to consist of membrane secondarily affected.

A careful microscopical examination was made of the growth in the optic tract, and of the nodules in the pons, and the appearances presented were those characteristic of tubercle. There was great infiltration of small round cells, together with several typical tubercles with large giant cells. Many of the vessels showed thickening of the adventitia. A careful examination of sections for the bacillus tuberculosus was attended with negative results.

The distribution of the lesion in this case accounts for the symptoms of left hemianopsia, and slight left facial palsy of the type met with in hemiplegia. The loss of smell on the same side as the lesion is accounted for by the destruction of the anterior part of the uncinate convolution. (See Ferrier's *Functions of Brain*, second edition, page 321.)

The case points to the great importance of an examination of the

field of vision in all cases of suspected brain mischief, the persistent hemianopsia being in this case the first symptom pointing with anything approaching to certainty to some gross organic disease.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 24TH, 1887.

GEORGE D. POLLOCK, Esq., F.R.C.S., President, in the Chair.

The Relation of a certain form of Headache to the excretion of Uric Acid. By ALEXANDER HAIG, M.A., M.B.—Previous papers by the author on the influence of diet in this headache, and its clinical relationship to gout, were referred to. An investigation of the urine was undertaken with a view of testing the relationship to gout. Meat and cheese were taken with the object of bringing on a headache, for purposes of experiment. The relation of this headache to the excretion of uric acid at first appeared equivocal, but definite results were obtained on separating the urine excreted during the headache from that before and after. There appeared to be retention of uric acid before the headache, excessive excretion during the headache, and diminished excretion after the headache. The excess during headache balanced the diminution before and after; there was no absolute excess of uric acid; hence the previous equivocal results. During a headache there was little or no alteration of the excretion of urea. The relation of the uric acid to the urea was important, and was greatly altered during the headache. When, as the result of plus exercise, there was a large excretion of urea and uric acid (though in their normal relation) headache was not far off, and if anything caused the uric acid excretion to fluctuate, headache would be present during its excess, and absent during its diminution. This fluctuation in the excretion of uric acid did not affect the urea, was temporary and transient, and there was proof that urates might accumulate, while the kidneys were quite sound. The theory which best explained everything in this connection was that of diminished alkalescence of the blood. Did gout consist in a diminished power of forming ammonia to neutralise acids, resulting in a permanent diminution of the alkalescence of the blood? The influence of meat-diet and beer in this respect, and the well-known connection of fourpenny ale with gouty deposits, were referred to. A dose of acid, either introduced from without or formed internally, might cause temporary retention of uric acid, and so lead to headache. Beer would do this. Retention possibly did not explain everything, as the excess during the headache appeared to exceed the previous retention. There might be temporary excessive formation as well, hence the good effect of salicylate of soda, which diminished the formation of uric acid. The good effect of a meal on this headache was due to the fact that it increased for a time the alkalescence of the blood. Hence, also, the good effects of a somewhat vegetarian diet and alkalies in its treatment. The relation here shown between the headache and the excretion of uric acid had an important bearing on the pathology of gout and other diseases connected with uric acid in demonstrating the way in which temporary retentions of uric acid might be occasioned, and in supporting the theory of diminished alkalescence of the blood, as a cause of these retentions.—The PRESIDENT, after congratulating the author on his paper, referred to his own acute suffering in his younger days from violent headaches, which ended usually in bilious vomiting. His urine he had generally noticed during the headache was very light coloured, and had no deposit. His cure he found in ten grains of calomel, which would melt away his headache in a most satisfactory manner in three-quarters of an hour.—Dr. W. B. CHEADLE was much obliged for any addition to our knowledge of the causes of disease, but thought that Dr. Haig's hypothesis would certainly not explain all cases of headache of this character. Such were frequent, for instance, in women who were not great meat-eaters, and in many people of various constitutions after the vibrations of railway travelling. An Eton boy of his acquaintance, who spent his holidays in Ireland, was always reduced to a state of violent megrim and extreme depression which kept him to bed after returning from his journey. In another case it followed on the scent of some flowers such as hyacinths. In his own case, megrim was easily brought on by foul air. He should be glad if Dr. Haig could explain the causes of these results by his theory of diminished alkalescence. Megrim was sometimes markedly relieved by a dose of wine, and he knew of no reason whatever to suppose that that tended to produce alkalescence of the blood.—Sir DYCE DUCKWORTH imagined that the author of the paper wished really to confine his remarks to some results of gout, though he had used some rather broad expressions. Some people of gouty heritage could for a wonderfully long time resist its effects, although living in the lap of luxury with three meat meals a day, and much champagne or beer; others broke down soon, and these latter were chiefly of the bilious class, with dark hair and skin. There were several ingenious suggestions in the author's paper.—Dr. PERCY KIDD confessed himself a sufferer from two sorts of headache, one which he could find nothing to improve, the other brought about by railway journeys and bad air, for which wine was of use, and also sodium salicylate and calomel. He had not made any elaborate experiments on the urea and uric acid that were passed. As to diminished alkalescence of the blood, on which Dr. Haig laid so much stress, he could only remark that it was presented to them as a mere hypothesis, and he should be glad to hear any evidence Dr. Haig had to give them of it—Dr. OGIER WARD pleaded guilty to three sorts of headache (1) after wine, (2) associated with gout, as he gathered from the tophi he had picked out of his knuckles when he was a boy, (3) a distinct nervous form of hemicrania, with optical and other characteristic signs which followed upon looking at pictures, breathing foul air, and other causes. This was occipital, and relieved by strychnine. He had found draught-beer pernicious, but bottled beer much less so, owing to the soda which was mixed with it. He had with the last form of headache high-coloured lithatic urine of high specific gravity. He would ask Dr. Haig if he had found his spirits rise before the headache as his own generally did.—Dr. HINGSTON FOX asked what means of estimating uric acid had been found convenient; he had found Haycraft's the most accurate, but too lengthy and elaborate for ordinary clinical use.—Dr. HAIG, in reply, agreed with the President that he had found calomel useful in treatment, and had often noticed that urine passed during the headache and containing much uric acid was light coloured and without deposit. He explained at some length a diagram which illustrated the theories of Garrod and Latham as to the retention of uric acid in the liver and spleen, and the function of alkalies in washing it out and so annihilating its ill-effects. He had made many experiments on the results of drugs, and had found as a rule that what increased the alkalescence of the blood diminished the secretion of uric acid. He was looking forward to much increased experimentation.

Three Cases of Alcoholic Paralysis (Multiple Neuritis). By DAVID FINLAY, B.A., M.D.—The three patients, all married women, came under the care of the author in the Middlesex Hospital in the course of last year. The first, E. F., aged 28, a confirmed drunkard, had suffered from weakness in the knees for more than a year. To this succeeded difficulty of walking and numbness in the hands and arms, soon followed by paralytic symptoms. In the hospital she lay helpless in bed with the legs flexed, rambled in her talk, and had delusions. The muscles of the arms and legs were much wasted, and she had double wrist-drop and foot-drop, with much pain on pressure or passive movement, and abolition of plantar and patellar reflexes. She had complete control over her bladder and rectum. Abundant large and small *râles* were heard over both lungs, and the epigastrium receded during inspiration. The liver was enlarged. On electrical examination the muscles of the legs and arms generally showed the reaction of degeneration. The optic discs were normal. She gradually got worse, and died on the seventeenth day after admission. The urine was normal and the temperature hectic throughout. *Post-mortem*, the lungs were found to be the seat of tubercular disease, and the liver was large and fatty. On microscopic examination the cord and spinal roots were normal. All the nerves examined showed advanced degenerative changes, and the extensor carpi radialis longior muscle was crowded with connective-tissue nuclei and round cells. The second case, M. J. P., aged 28, had a history similar to the other, and the symptoms were much the same as regards the nervous system. There was less degenerative reaction, however, and less wasting. The temperature was seldom above normal. The liver was enlarged, but the lungs were not diseased. At the *post-mortem* examination the brain and its membranes appeared normal. The cord, on section, seemed somewhat atrophied in the grey matter, but no other change was noted. Under the microscope the cord did not present such a typically healthy appearance as in the former case. The greater number of the large cells in the anterior cornua were shrunken, the branching processes were less clearly defined, and many had dropped out of their places, leaving holes in the section; but these results were probably due to comparatively unsuccessful preparation. Most of the nerves examined showed similar changes to those found in the other case; but these were less strongly marked, except in the anterior tibial nerve. The spinal nerve-roots were sound. The third case, E. C., aged 43, resembled the other two as regards the history and many of the clinical phenomena, differing, however, in result, slowly progressive recovery having taken place. She had regained the use of her limbs, could now walk and dress herself without help, and had lost her delusions. Reflexes, however, had not yet returned, and her feet and

legs had lately become œdematous. Reference was made generally to the clinical and pathological history of the disease, and particularly to the history of the individual cases, as excluding the idea of causes other than alcoholism being concerned in the production of the symptoms. The frequent co-existence of tubercular disease was also discussed, and reference was made to a recent paper by MM. Pitres and Vaillard in this connection. The paper concluded with a few remarks upon the treatment of the case which had recovered. Microscopic specimens and drawings were shown.—Dr. W. HALE WHITE thought Dr. Finlay's facts and specimens were of considerable value, as there were few so definite to be obtained elsewhere. He had found it the common rule that where the effects of alcohol were shown upon the nervous system, they were comparatively inconspicuous elsewhere; on that part of the system which was first attacked, the subsequent effects were concentrated. The effects shown in the muscles might possibly be due to the nerves, but he thought it unlikely, as he had found thickening of the skin in alcoholic patients which he did not think could be secondary. He should have expected that the bladder and rectum would be affected in more than one of the three cases.—Dr. HADDEN was glad to have noticed that Dr. Finlay had called attention to the flexion of the legs in his patients, a symptom which he had himself generally observed. He should be very glad to learn more of its cause, and the cause of the superficial tenderness which Dr. Finlay had found in common with most observers. Had he found the nerve-trunks tender? He had himself only found that rarely. Did he consider the œdema trophic? He had himself seen various conditions of the skin apparently due to trophic injury in similar cases; in one patient there were as many as three trophic eruptions rapidly following each other. Three years ago, in a case of alcoholic paralysis, he had examined the spinal cord, and found no change; in a later case he examined the peripheral nerves, and found much the same condition of degeneration as Dr. Finlay had shown them. Lancereaux had described a slight spinal sclerosis in such cases, but had laid little stress on it. We tended at present to label all cases of multiple neuritis as alcoholic, but it was very possible that when our knowledge was more complete, we should differentiate their causes.—Sir DYCE DUCKWORTH had had four similar cases under his care in St. Bartholomew's Hospital during the last six months. They were all women who were more astute than men in their statements as to alcoholic habits. From the one fatal case among them, an assistant was preparing specimens which were in essentials similar to those of Dr. Finlay. The leucocytes in the sarcolemma of the muscles which appeared in one of Dr. Finlay's cases, he took to be a new feature. In some of his cases the nerve-trunks had been tender at first, but had grown normal after a while. One case was recovering, with the gait of a high-stepping horse. He had found the most satisfactory treatment was by quinine, strychnine, shampooing, and complete abstinence from alcohol.—Dr. ORMEROD had found the nerve-trunks sometimes tender in these cases, but not always. The tenderness of the muscles, he thought, was more constant, and due to a kind of inflammation, as evidenced by the leucocytes. He agreed in remarking the general flexion of the limbs. Some rules for prognosis were much wanted. Oetinger expected death as a rule; the English authorities did not. The mental condition was often characteristic, and helped to differentiate this neuritis. There were many varieties of delusion or hallucination. Some patients would say they had been walking about when they had been lying in bed all the time. One out-patient, when he came to the hospital, always imagined he was in some familiar market; others would tell detailed stories which had no foundation whatever. There were some analogies to this, as Dr. Claye Shaw had pointed out, in alcoholic insanity.—Mr. W. H. JESSOPP had been interested in learning that in one case the optic nerve and fundus of the eye were normal, and he ventured to ask if the sight of the surviving case was normal. In France, it was the common theory that toxic amblyopia was produced by alcohol; in England, nearly every case was attributed to tobacco. It might be possible to find a good test-case in a woman who had nervous affections that were purely alcoholic. He had once before hoped to show alcoholic amblyopia in the case of a woman some time ago, but he found after all that it was due to her smoking.—Dr. FINLAY, in reply, said that the vision of his surviving patient was normal as far as he could judge; the fundus oculi was also normal in appearance; he would make further tests for central amblyopia. The specimens he showed would agree with the hypothesis that there might be inflammation beginning in the perineurium, which contracted and killed the external nerve-fibrils. He admitted that he had no satisfactory clue as yet as to the cause of the changes in the muscle which he brought under their notice. He had found superficial hyperæsthesia at first, leading on to anæsthesia. The nerve-trunks he had found tender in some cases.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, MAY 6TH, 1887.

F. H. ALDERSON, M.D., President, in the Chair.

Clinical Cases.—Mr. KEETLEY showed a Case of Excision of Epithelioma of the Fauces, affecting the Adjacent Parts of the Palate, Tongue and Maxilla, with previous Ligature of the External Carotid. Mr. EDWARDS: A Case of Recent Suture of the Patella.—Mr. WAINEWRIGHT: A Case of Suture of the Patella.—Mr. DUNN: A Case of an Albino.

On some of the Rarer Forms of Rectal Fistulæ.—Mr. EDWARDS read a paper in which he discussed the question of dealing with the sinus, extending upwards by the side of the bowel from the internal opening of a complete fistula. The treatment should depend upon the position of the sinus to the muscular coat of the bowel; if submucous it should be laid open, but if sub-muscular it was better to leave it, thus avoiding the risk of incontinence due to division of the fibres of the internal sphincter. A cure might be looked for after the frequent injection of the sinus with tincture of iodine. Fistulæ having their external orifices situate behind a plane passing transversely through the centre of the anus usually had their internal aperture in the middle line dorsally, while those with their external orifice in front of this plane generally terminated in an internal opening immediately opposite. He defined horse-shoe fistulæ as having one or more external orifices on either side of the anus, with an internal one in the middle line behind. Surgeons of the present day, when operating upon such fistulæ, either slit up the sinus on both sides of the gut, thus dividing the sphincter in two places, or contented themselves with the division of one sinus, hoping that the other might heal of itself, with or without the insertion of a drainage-tube.—Mr. GOODSALL recommended complete division of the sphincter in the middle line, dorsally, laying open the abscess cavity and internal opening, and the subsequent slitting up of each lateral sinus from the external orifice to the central dorsal incision. By this means the whole of the fistulous track would be laid open, and the sphincter would only suffer one division, and this in the most favourable manner, namely, at right angles to its fibres, thus avoiding all risk of subsequent incontinence. Cases were related, one of fistula completely encircling the bowel, and the other of fistula originating in the pelvi-rectal space, that is, between the bowel and levator ani muscle.—Mr. WHITMORE and Mr. KEETLEY made some remarks, and Mr. BENHAM narrated some cases of rectal fistulæ which he had treated with success by injecting carbolic (1 in 20) solution.—After some remarks from Mr. S. BENTON, Mr. CHAPMAN said he had used pure carbolic successfully in three cases of rectal fistulæ.—Mr. EDWARDS, in reply, said that no reliance could be placed upon the cure of a case with carbolic injections.

Some Points in the Selection and Administration of Anæsthetics.—Dr. HEWITT read a paper, in which he dealt with the following points: (1) the best method of administering nitrous oxide and ether, either in succession or in combination; (2) the prevention of vomiting during or after the administration of an anæsthetic; (3) the danger of inducing general anæsthesia in persons suffering from obstructive dyspnœa; and (4) the possibility of dangerous symptoms occurring from the administration of opium or morphine prior to chloroform, ether, or other anæsthetics. He exhibited an apparatus which he had used for three years, consisting of a Glover's portable ether-inhaler, fitted with a special form of face-piece, and with a bag capable of holding two gallons of gas. By means of this apparatus any desired combination of nitrous oxide and ether could be given. In a large number of cases he had given half a grain of cucaine in half an ounce of water shortly before the administration of an anæsthetic, with the object of lessening the sensibility of the gastric mucous membrane. Vomiting after an anæsthetic was best prevented by keeping the patient upon his side, and by moving him as little as possible. Persons suffering from obstructive dyspnœa were dependent for their existence upon an increased activity of their respiratory mechanism, and failure of respiration was very likely to ensue under chloroform or ether.

Aseptic Ether-Inhaler.—Mr. LLOYD showed an improvement in ether-inhalers, which consisted in a bag of very fine india-rubber, the cost of which would be found to be so immaterial that one could be used for each patient anæsthetised; thus the ether apparatus could not become a source of infection, either of the tubercle bacillus, or any infectious disease.—After some remarks from Mr. DAVIS, Mr. MACKINLAY, and Mr. ALDERTON, Dr. HEWITT replied.

On the Association of Mitral Stenosis with Gout and Granular Kidneys.—Dr. G. N. PITT read a paper on this subject.

Specimens.—Mr. DUNN showed: (1) Sarcoma of the Os Uteri; (2) Sarcoma of the Dura Mater; (3) a Kidney and Adjacent Parts showing

a large Extravasation of Blood into the Peri-renal Tissue of the Left Side.—Mr. BENTON showed a Pedunculated Growth removed from the Rectum of a Man aged 46.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

WEDNESDAY, MAY 11TH, 1887.

Inspector-General LAWSON in the Chair.

Some Evidence respecting Tubercular Infecting Areas.—Dr. ARTHUR RANSOME read a paper in which he showed that there were strong reasons for believing that tubercle was very rarely directly transmitted from person to person. Many medical men had never seen such a case. Many of those recorded as cases of infection would have taken place without infection. Most of the cases of supposed infection lived under conditions favourable to indirect infection. It was difficult to see why drainage of the land and the sandy condition of a soil should affect direct contagion, but it was easy to see why indirect infection should be thus affected. Numerous instances of infected areas were given from records of barracks, public institutions, ships, etc., and cases of infected houses were given from private practice, from the *Collective Investigation Record*, and from other sources. In all these the outside conditions as to ventilation, drainage of soil, etc., were favourable to the intensification of the virulence of the morbific agent. The mortality tables of certain districts in Manchester and Salford showed that in certain streets and courts, consisting of back to back houses, and with no thorough ventilation, the disease was much more common than in other parts, and that it occurred again and again in the same house in these parts. In all, 41 cases of such coincidence of deaths were detected in five years in Ancoats in a population of 5,600, and in Greengate, Salford, with a population of 2,600, in six years there were 20 such double or treble deaths.—In the discussion which followed, Inspector-General LAWSON, Drs. SCRIVEN, PRINGLE, and MOIR, and Messrs. PAGET and SHIRLEY MURPHY took part.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, MAY 11TH, 1887.

G. GRANVILLE BANTOCK, M.D., President, in the Chair.

Foreign Body in the Bladder.—Dr. FANCOURT BARNES exhibited a hairpin, encrusted with a large amount of phosphatic deposit, which he had removed from the bladder of an unmarried girl, aged 25.—Mr. LAWSON TAIT said that hairpins in that situation were frequent, so much so that Mr. Syme had invented a special instrument for their removal, somewhat like a cephalotribe. In about thirty cases of stone in the female bladder he had operated on, he had only met with one without a foreign body nucleus.—After some remarks from Dr. HEYWOOD SMITH and Dr. MANSELL-MOULLIN, Dr. RUTHERFORD said that phosphatic deposits formed round metallic bodies in the bladder sooner than on other substances.—Dr. EDIS, Dr. GRIGG, and others took part in the discussion.

Diseased Uterine Appendages.—Mr. LAWSON TAIT showed two specimens. The first he had removed from a patient aged 40. She had been seen by a number of medical men, who agreed that she was suffering from myoma. At the operation he had found only a small myoma and double pyosalpinx. Continuous hæmorrhage had been going on for three years, and had defied every kind of treatment. In the second case, an attempt had been made to remove the appendages about six years previously, but after opening the abdomen the operator had been frightened by adhesions.

Ovarian Papilloma.—The PRESIDENT exhibited two specimens from the same patient, a widow, aged 55. One was a portion of an ovarian tumour, in which the disease was seen to affect the surface; the other was the whole organ, weighing about half an ounce, in which the papilloma was seen to spring from the surface of a small pedicle.

Solid Tumour of the Left Ovary.—The PRESIDENT showed this specimen also, removed from a married woman, aged 39. On admission the patient's breathing was so much oppressed by ascites that he was obliged to tap her at once, drawing off twenty-two pints of fluid. There was also œdema of the lower extremities. This disappeared in two days, but so rapid was the effusion that on the seventh day she was nearly as large as before. At the operation, the peritoneum was very much injected, and the slightest amount of sponging caused sanguineous oozing. He therefore very freely washed out the peritoneal cavity, and, to avoid the leaving in of any air, left at least a pint of the water in Douglas's pouch to be removed by the drainage-tube.—Dr. A. PHILLIPS HILLS thought that a great end had been obtained in cleansing the peritoneum without the use of sponges.—Dr. BEDFORD FENWICK made some remarks.

On the Various Methods of Treatment to be adopted for the worst cases of Uterine Flexions.—Dr. ROUTH read a paper on this subject.

PATHOLOGICAL SOCIETY OF MANCHESTER.

WEDNESDAY, MAY 11TH, 1887.

J. DRESCHFELD, M.D., President, in the Chair.

Abnormalities of Development.—Dr. PATERSON showed specimens of abnormalities of development: 1. A Case of Double Monster, consisting of two Well-formed Lambs United Anteriorly, and with Communications between the Thoracic and Peritoneal Cavities. 2. A Cast of a Hand with a Double Thumb. 3. A Hottentot Skull, extremely Dolichocephalic, and presenting Two Supernumerary Molar Teeth in the Lower Jaw, and an Articulation between the Squamous Portion of the Temporal Bone and the Frontal Bone.

Internal Strangulation of Intestine.—Dr. THOMAS HARRIS showed a specimen of internal strangulation of the bowel, from a man, aged 20. There was a whipcord-like adhesion about an inch and a half long, stretching from the tip of Meckel's diverticulum to the mesentery of the lower part of the ileum, and through the aperture so formed a loop of bowel had become strangulated. There had also been a twist of Meckel's diverticulum, which had ruptured near its base, and death ensued from acute peritonitis consequent upon extravasation of fæces.

Bilharzia Hæmatobia.—Dr. HARRIS also exhibited a bladder, which had been sent from Alexandria, affected with the ova of the bilharzia hæmatobia. The bladder was also the seat of a large epitheliomatous tumour, which nearly filled the cavity of the organ. As no clinical history had been obtained, no statement could be made as to whether there might not be a connection between the malignant growth and the lesions usually associated with the bilharzia hæmatobia.

Specimens.—Dr. LEECH showed a Preparation from a Case of Aneurysm of an Aortic Cusp.—Dr. BURY showed a Preparation from a Case of Congenital Heart-Disease.—Dr. DRESCHFELD showed Preparations from Cases of Leprosy.

ISLE OF WIGHT DISTRICT: SOUTHERN BRANCH.

THURSDAY, APRIL 28TH, 1887.

J. NEAL, M.D., in the Chair.

Elimination of Drugs from the System.—Dr. WILLIAMSON delivered an address entitled "A Plea for a Fuller Study of the Elimination of Drugs from the System," in which he said that, even with regard to those points which had been the subject of research, very contradictory statements prevailed in many cases. Without attention to the elimination of medicinal substances administered, however, the important subject of excretion could not be regarded as fully considered in any given case. Such knowledge would lead us to deal more tenderly with feeble excretory organs, and would also render us more cautious in using drugs which, in the course of their elimination, might repress or retard necessary excretions. In view of thorough attention being paid to the question, Dr. Williamson proceeded to indicate the chief lines on which it would be requisite to work. These were mainly three, namely, the channels available for elimination, the channels chosen by individual substances or classes of substances, and the process of elimination itself in health as well as in disease, and particularly as regards its alteration, diminution, or suppression. All could help in the work by following up every case of idiosyncrasy, tolerance, cumulation, or other irregular action of a drug that came under observation.

EAST SURREY DISTRICT: SOUTH-EASTERN BRANCH.

THURSDAY, MAY 12TH, 1887.

W. F. COLES, M.D., in the Chair.

Suppuration in Malignant Disease.—Mr. HOWARD MARSH read an interesting paper on the association of suppuration with malignant disease, pointing out the difficulty which often attended diagnosis in such cases, and the most reliable methods of discriminating. Cases were mentioned where high fever, hectic and night-sweats seemed to indicate suppuration, but none was found on incision. On the other hand, abscess may exist without pyrexia. Free incision often gave considerable relief in malignant growths.—In the discussion which followed, Drs. HORROCKS, HEARNDEN, J. H. GALTON, THOMPSON, and FOWLER described illustrative cases which had come under their observation.

Chronic Vaginitis.—Dr. HORROCKS read a paper on chronic vaginitis, in which he emphasised the necessity of seeing that syringing was properly performed, recommended lotio nigra in chronic cases, and

pointed out that a thorough application of caustic solution will often succeed when milder measures had failed. He described a case of ruptured vulvo-vaginal cyst causing a discharge, the cause of which was not made out until a careful inspection had been made, as showing the necessity for such an examination, besides the usual digital examination of the vagina.—Drs. COLES, CARPENTER, THOMPSON, Mr. HOWARD MARSH, and Mr. MATTHEY took part in the discussion which followed, Dr. Carpenter recommending perchloride of mercury injections in order to ensure destruction of the "resting spores," which perpetuate the inflammation unless thoroughly eradicated.—Mr. HOWARD MARSH testified to the benefits of sharp stimulation as in cases of chronic ulcer.

Syphilitic Ulceration of Tongue.—Dr. P. T. DUNCAN exhibited a case of extensive ulceration of tongue and pharynx (syphilitic) in a boy, aged 13.

REVIEWS AND NOTICES.

PILOCEREUS SENILIS AND OTHER PAPERS. By WALTER MOXON, M.D., F.R.C.P. London: Sampson Low and Co. 1887.

IT is certainly a great pleasure and refreshment, in the somewhat dry and dusty region of literature where are situate the remarks of many modern medical men on Things in General, to come across such a delightfully humorous and suggestive little book as this collection of a few letters and papers of the late Dr. Moxon. It can be no surprise to those who knew Dr. Moxon's varied nature and genius for mixing the grave with the gay to find so much wisdom clothed with playful talk, and so much deep thought showing through the thin veil of paradox. The mere literary critic finds much in which he can see a masterly touch; the medical student is amused and puzzled and impressed; and the master, whether of theory or practice, comes upon some things that he is glad to have the opportunity of reading again and of thinking over in his less busy moments. The quaint and humble title comes, as the author's friends tell us, from a fantastical parallel Dr. Moxon chose to suppose between himself and that grey hoary *cactus* that the scientific world calls *Pilocereus senilis*. They are both, it is true, inhabitants of the world that are not like many others.

The shorter and earlier papers were contributions to the *Guy's Hospital Gazette* in 1873-6, and none of them is better than the lively sketch (p. 16) of the house-surgeon under his first *subpœna*, when he is required, in the words of the writ, "to be and appear in your proper person at Westminster Hall," etc. "This order reminds you of the same idea in a caution on the nigger placard, 'No ge'l'man 'mitted unless he comes hisself.' So far there is no serious difficulty, but lower down it says you are, when there, 'to tell the truth *on the part of the plaintiff.*'" It naturally struck Dr. Moxon as odd that "the truth on the part of the plaintiff" could be anything different from the truth on the part of the defendant. He had got no further than that towards the understanding of "truth," as the world means it, and missed his opportunity that time of getting any light on it from the legal authorities. Again, of Napoleon III, he tells us, there is just this quiet *post-mortem* record: "The brain and its membranes were in a perfectly natural state," and that might well make a less reflective mind than Dr. Moxon's pause a moment to consider how little our progress in the knowledge of the brain is likely to help us. After these lighter pieces follow four essays on subjects that had been well thought out, and which explain in plain enough terms the solid convictions of the author with the pungent intellectual aroma that makes them so individual. The three first are the most important, and centre round the aims and method of study in medicine, a subject on which Dr. Moxon did not hesitate to avow himself, in some points at least, a heretic. He was keenly alive to the immensity of the field of study, the slightness, in comparison with the magnitude of the task, of the real progress that had been made in many departments where too much was claimed, the ignorance of some most central points that still exists and may prove to be permanent. Speaking in an introductory lecture to the students of Guy's Hospital, he says: "Medical theories are short-lived creatures, made out of a little dust of facts, in themselves lifeless, which someone fashions into a shape, and breathes into it a little puff of himself—a breath of life that's not divine; so that they soon fall to pieces again, when they have served their maker's purpose; and the relics of these wretched broken-down theories are blown about the ever-shifting desert-dust of medical literature; or else they stick about the little bits of real truth in the shape of obsolete names and false descriptions.....The people who make these theories.....look soberly only on conclusions, and—if I may so speak—are drunk on the premisses. They draw conclusions when they should have known that conclusions which have to be fetched are not worth the having. In their haste to anticipate the natural development of inquiry, they are like children who poke open buds in a hurry to have flowers.....Don't make guesses falsely respectable by calling them 'theories.' Call them 'guesses;' it is better English." Some of this is surely only too true; but may there not also be "a truth on the part of the defendant?" May it not be that men such as we know them from ancient and modern history will, perhaps, not go on piling up these little heaps of dusty facts unless they have the delights of guessing in recompense, and of calling their guesses theories, that all the world must believe or disbelieve. And Dr. Moxon himself, too, dilates with the greatest pleasure and with all due reverence on the noble career of John Hunter, and pictures to us vividly how it led to practical issues, for there was "Hunter the physiologist answering the questions of Hunter the surgeon." But might not that have been phrased accurately enough by saying that Hunter the surgeon framed guesses for himself that he was wise enough not to give to the world before he had put them to the test of such physiological knowledge as he could command? Various of the guesses of his most fertile mind came to little or nothing, and he had reticence and wisdom enough to say very little about them, and not to let them encumber the ground. The world of modern medicine and surgery is too vast to be mastered by anyone by a purely inductive method; by anyone, in short, who will master all its facts before he makes his guesses. It contains only too much of the unknown, and "science," as Dr. Moxon says, "is extremely bad at dealing with the unknown." It has had too many triumphs of late to be quite humble and patient enough. To anyone of such wide outlook as Dr. Moxon, who can, however vaguely, realise the size of the unknown, this may at times be exasperating. He tells his students in plain terms, "Never trust a man for what he cannot know," and warns them strongly against trying "to get a reputation for a large unfilled capacity.....It is all imaginary," he exclaims; "never believe him. It is an empty boast of sham flatulency, a very vanity of vanities. The mind is never bigger than what it holds." True, perhaps; but it is elastic, and in genius it has an expansive force *sui generis*, which is an unknown factor in altering its contents.

It must have been a hard task for such a man as Dr. Moxon to lecture year by year on a subject so full of "guesses" as materia medica and therapeutics; and we are not surprised to find him guarding himself against hasty, ill-tested therapeutical doctrines. "A steady process of induction is what we want; induction often in its humblest degree, which shall often give a scarcely communicable experience to guide the watchful physician. Such inductions as that quinine cures ague, iodide of potassium cures tertiary syphilis, tarry preparations cure scaly eruptions are the best stock of even nineteenth century medicine; and, however mean in the scale of mental performances, are of priceless value in the shivers of intermittent fever, the tortures of cranial syphilis, and the itch of psoriasis with which you have to do."

Throughout the book there are many passing arrows aimed at some examination-systems, especially that of the University of London, which came most under his notice as his own *alma mater*, and embodied something, at least, of what he disliked enough to print in capitals—CRAM. But it is not attacks upon examination-systems that we want so much now-a-days, but rather reconstruction. The critic has his uses, and must never be lost sight of. The more urgent need, however, is for the man who knows and appreciates the world of critics and their sayings, and can go further, nevertheless, and produce some positive practical result that he can steadily advocate and actually set in working order. But no differences as to medical theory or practice need deprive anyone of pleasure in reading a little book with such fine touches in it as this has, and containing such a strong infusion of that keen "interest that," as its author says, "neutralises difficulties as acids neutralise alkalies."

ANATOMY, DESCRIPTIVE AND SURGICAL. By HENRY GRAY, F.R.S. Eleventh Edition. Edited by T. PICKERING PICK. London: Longmans, Green, and Co. 1887.

IT is twenty-nine years since this work made its first appearance and took its place as the most popular text-book in the English language. This position it still holds, after having passed through ten editions and descended to an entirely new generation of readers—a fact which affords the best possible evidence of the special fitness of the book for the requirements of those for whom it was intended.

The plan laid down by the author, whose premature death did not permit him to see a second issue of his *magnum opus*, has remained

practically unaltered in the hands of the editor. The engravings from Dr. Carter's designs still constitute the pictorial backbone of the volume; and, save for the introduction of an essay upon General Anatomy by Mr. Holmes, the text retains its original scope and arrangement. The labour of revision has not, however, been a merely nominal task, for the bulk of the treatise has been increased since the original issue by no less than 140 pages, exclusive of those devoted to the histological supplement; the illustrations have been augmented by nearly 200 cuts; and the number of emendations and additions by which the letter-press has been kept abreast with advancing knowledge would be difficult to count.

The chief features of improvement in the edition now before us are the use of colour-printing in the engravings of vessels and nerves; the introduction of a few new drawings (the best of which are figs. 474 and 574 from Delépine); and some serviceable contributions to the text. The work has, in fact, steadily progressed with each successive issue towards the ideal standard which we hope it will soon be made to reach, but from which it is at present separated by a number of defects, mostly of lesser magnitude, which a rigid and unsparing revision is needed to amend.

Before speaking of the things that might be done to bring the book nearer to the more scientific status to which it has a right to aspire, it is necessary to advert to something that ought to be undone. We mean the ruthless excision of all the references to muscular variations that formerly occupied a place in the text. It is true that matter of this kind is unnecessary for the junior student; but the more advanced pupil would surely be glad to learn something about the myological abnormalities that so constantly come before him in the course of his dissecting-room experience; and, were the required information printed in a smaller type, it would be available for the one without vexing the mind of the other. We should indeed have preferred to see, in place of such an ignominious expulsion, some endeavour to render the facts stated in a more complete and interesting way than before, by such augmentation and comment as might have been drawn, with but little trouble, from the many recent contributions to the subject in our scientific journals, and from such compilations as that of Testut, whose *Anomalies Musculaires chez l'Homme Expliquées par l'Anatomie comparée* has done a great deal to facilitate the study and comprehension of the subject. To gain this advantage, we should, if necessary, have been reconciled to sacrifice in the interests of space the whole of the pages bearing upon General Anatomy and Development, which are now so completely independent of naked-eye anatomy in our teaching arrangements that it is difficult to see any good reason for maintaining an artificial bond of union through the printer and bookbinder. Were these sections cut adrift from Gray's *Anatomy*, to shift for themselves as an independent publication, there would then be abundance of room for the necessary expansion of the more legitimate material of the volume.

A complete list of the items calling for revision would exceed our limits, but an allusion to a few taken almost at random in the course of perusal may be of service by way of example. First, it will be seen that the description of the joints, although greatly improved in recent editions, is unequal in its different parts. Thus, upon so important a matter as the mechanism of the rib-movements the information is very scanty and unsatisfactory, and the equally interesting phenomena of pronation and supination are very inadequately discussed. In connection with the latter point, by the way, the views of Herberg as to the associated movements of the ulna are referred to as though they were entirely novel, while the much earlier presentment of the theory by Duchenne is in no way acknowledged. Nor is Morris's lucid exposition of the other side of the question either mentioned or utilised. On the other hand, a good addition has just been made to the arthrology by the insertion of a list of the muscles through which each joint movement is effected; but here, also, the necessity for careful revision is apparent, for the information does not always harmonise with that in the succeeding portion of the book, and two important articulations, those of the clavicle with the sternum and scapula have quite escaped attention. The original illustrations are, for the most part, clear and accurate; they are, at any rate, too good for the companionship of figs. 243 and 244, which are said to represent the ligamentum teres, but they might with advantage be reinforced by a few sectional views of the joints, after the manner of the cuts in Henle's *Bänderlehre*.

In the account of the muscular system there are several imperfections that have escaped the vigilance of the editor, both in the descriptive and in the physiological parts of the subject. The important tendinous expansions from the muscles of the ball of the thumb to the extensor tendon of the last phalanx, figured by Albinus in the last century, and fully described by Duchenne twenty years ago, are unnoticed; a similar defect appears in the description of the muscles of the ball of the great toe, and the action of these, as well as that of the other muscles of the sole of the foot, is omitted altogether. Next, to take a larger muscle—perhaps the first upon which the student will exercise his scalpel—the pectoralis major, which, as pointed out by Wagstaffe in an early volume of the *Journal of Anatomy*, is always inserted by means of three superposed laminæ, is described in the usual incorrect manner. The action of the diaphragm, again, is neither clearly nor thoroughly set forth, and the bald statement that "the arch is lowered one or two inches in forced inspiration" would scarcely satisfy an examiner who values precision. Finally, we may point to a very common but very misleading form of expression, that appears in more than one place, where an endeavour is made to explain the action of a muscle upon two or more articulations; for example, we are told that the pronator radii teres, "when pronation is fully effected, assists other muscles in flexing the forearm," and we are left to infer that the ability of the muscles to effect flexion is conditional upon a foregoing pronation, whereas it need hardly be said that the shortening of the fibres of the pronator during the latter movement would greatly diminish its power to accomplish the former. The supinator longus, too, is said to flex the forearm when supination is produced, "if still continuing to act;" and here the misstatement is aggravated by the fact that the capacity of the supinator to aid the movement of supination at all is, at least, extremely doubtful. Three of the illustrations—an inaccurate section of the neck (fig. 260) and two ill-drawn sections of the tongue (figs. 264 and 265)—ought to be replaced by others.

In the arterial section the principle of omitting reference to variations has fortunately not been carried into effect, and the account of the vessels of the extremities leaves little to be desired. The description of the arteries of the brain, however, is not quite up to date, and a little more labour, as well as two or three "section" diagrams, might have been devoted to the relations of the thoracic vessels. We may notice, also, a rather unfortunate proposal to substitute the name "transverse" aorta for "arch" of aorta, and thus to extend the application of a term that never ought to have been applied.

The story of the anatomy of the central nervous system is somewhat briefly told, and might be enlarged to some extent for the benefit of the senior student. At any rate, in these days of cerebral surgery, some outline of the relation of the principal sulci and convolutions to the surface of the cranium might fairly be expected, and the very indifferent drawings of the convolutions might be replaced by something more accurate and less inartistic.

The sections dealing with the abdominal and thoracic viscera also fall somewhat behind the modern development of anatomy. The great advantage to be gained in the study of visceral relations by an acquaintance with what may be termed "sectional" anatomy, and with casts taken from organs that have been frozen *in situ*, has been ignored; and, although the results of the labours of Pirogoff, Braune, and His appear in the correction of the many errors which discredited all our text-books until within a very recent period, there is no direct reference to the work of these anatomists, and scarcely a single engraving to show how much may be learned from the ingenious methods of demonstration which they were the first to employ.

It is in no cavilling spirit that we call attention to these and the like shortcomings, but from a desire that all parts of so good a text-book should be made of equal authority. The volume, as it stands, can be warmly recommended as one from which the student may acquire the great mass of anatomical details required by our examining boards more easily than from any other book at present in existence; and it will only be superseded when a new edition or a new work is prepared from a new standpoint—one in which every preconceived idea is to be subjected to an impartial examination before it is passed to take its place amongst the established facts of anthropology.

GRIFFITHS'S MATERIA MEDICA AND PHARMACY. Edited and in part written by ALFRED S. GUBB, L.R.C.P., M.R.C.S., etc. Gold Medallist, late Resident Medical Officer, French Hospital, London, etc. Third Edition. London: Baillière, Tindall and Cox. 1887.

THIS work, in its earlier editions, belongs to a time when good manuals on the subject of materia medica and pharmacy were comparatively rare, and it formerly rejoiced in a fair amount of popularity. It has now been brought down to date, and comes once more to the front, though its competitors are now numerous and formidable. The salient features of the book consist in a careful and succinct tabulation and arrangement of the various medicinal agents, which are described as briefly as is consistent with completeness. The pharmaceutical manipulations and preparations are relegated to the second half, so as not to

interfere with the materia medica proper. The same genius for tabulation and arrangement is observable in this as in the earlier part of the book, and the study and apprehension of these not too interesting details must thereby be greatly facilitated. The editor, in altering the work to bring it into conformity with the last edition of the *Pharmacopœia*, has evidently adhered as far as possible to the original plan, to which the work owed much of its popularity. He has succeeded in doing this very satisfactorily, and, notwithstanding the extensive manipulation which recent changes and additions must have rendered necessary, the general plan of the work is the same. Many of the cumbersome and unnecessary chemical formulæ which found place in former editions have been omitted in the present edition, and some of the more detailed descriptions of quasi-obsolete drugs and preparations have been curtailed or recast.

The work is one eminently suited for students of materia medica and pharmacy, for whose especial benefit it has presumably been written. The space allotted to the physiological action and therapeutical uses of drugs has been kept within the narrowest possible limits. The student who is not yet called upon to familiarise himself with the mere recondite details of the effects and uses of drugs is thus spared an unnecessary infliction, and he is left free to keep his attention fixed on the matter in hand. It would appear as if Dr. Griffiths had foreseen the differentiation of materia medica and therapeutics which has now been effected by most of the examining boards in the country, and of which he was always an ardent advocate. Materia medica and therapeutics stand in the same relation to each other as anatomy and surgery. One must necessarily be learned before the other, but both need not, and, indeed, should not, be learned at one and the same time.

On the whole we can congratulate Dr. GUBB on the way in which he has executed his task. The book is well and clearly printed, and is of a convenient size—details which are not without their importance.

PRELECTIONES ANATOMIÆ UNIVERSALIS. By WILLIAM HARVEY. Edited, with an autotype reproduction of the original, by a Committee of the Royal College of Physicians of London. London: J. and A. Churchill. 1886.

RARELY in the literary history of the world have events of such surpassing interest happened so rapidly as those which occurred during the middle of April in the year 1616. On the 13th died Cervantes, great amongst the Spaniards; on the 23rd our own greater Shakespeare; in the interval Harvey, then in his thirty-seventh year, inaugurated by his lectures a new physiology and a new medicine. His notes of these lectures as they were delivered, in accordance with the Lumleian Bequest, before the Royal College of Physicians on April 16th, 17th, and 18th, 1616, are now for the first time published to the world in *fac-simile*. The work is of priceless value, since in it the doctrine of the circulation of the blood is for the first time formulated, and the notes are twelve years earlier than the authoritative enunciation of Harvey's views upon this subject, which appeared in 1628, under the title of *Exercitatio Anatomica de Motu Cordis et Sanguinis in animalibus*. The history of the notes, which are in the handwriting of Harvey himself, is remarkable. They were obtained by the British Museum, when the library of Sir Hans Sloane was sold, in the year 1753, and were described by Dr. Lawrence (the editor of the noble quarto volume of Harvey's works, which was published by the Royal College of Physicians) in 1766, as well as by Mr. Aikin in 1780. Subsequently, by some mischance, they were placed amongst the printed books in the library, and were vainly sought for by Mr. Pettigrew, and later by Dr. Willis. For many years it was feared that the manuscript was irrevocably lost; but in 1877 the volume had been restored to its proper place in the collection, and it was described by Sir Edward Sieveking in his Harveian oration. To prevent a like catastrophe again befalling it, Dr. George Johnson was induced to move the College to have the work reproduced in *fac-simile*, and to their credit be it spoken, his motion was adopted.

The work is the outcome of that love and veneration for Harvey which have always characterised the College of which he was the greatest ornament, a feeling which manifested itself during his lifetime by the erection of his statue in its hall, a year after the publication of his great treatise on the generation of animals; and, shortly afterwards, by his election as President under circumstances which rendered the honour a peculiarly graceful tribute to the great work of his life. After his death the long train of physicians who accompanied his corpse, "lapt in lead," as Aubrey, one of the bearers, tells us, far beyond the walls of the city, was a further testimony to this feeling. More than a hundred years later his memory was still green at the College which he loved so well, for his works were collected and published in a sumptuous manner by collegiate authority. Again, within the last few years, the little church in a quiet Essex village, where his remains lie, has been saved from ruin by the munificence of the same body, and now the last tribute of respect is seen in the noble and carefully edited volume which gives—such is the perfection of modern skill—every stroke of the pen made by Harvey to enunciate, in its original form, his grand demonstration of the circulation of the blood. To render the work more useful, the autotype reproduction is accompanied by a translation carried out by experts from the British Museum under the supervision of some of the most scholarly Fellows of the College of Physicians.

The notes are clearly the heads of the lectures which Harvey delivered in his Lumleian Lectures on Anatomy. Many of the observations are initialled by the author, and various notes are appended which probably served as directions to himself to be noted whilst he was lecturing. The notes are full of corrections and additions which appear to have been made by the lecturer in revising his work before its final delivery. They are written in Latin, with a remarkable intermixture of English words and sentences such as we might expect to find in the work of one who jotted down the ideas which occurred to him in notes, merely for his personal use. Thus we read in the description of the thorax, "Figura in homine more flatter quam cæteris Animalibus;" and throughout, the Latin is such as a student might write for himself, and is in marked contrast with the sonorous periods which occur in his later book on the generation of animals. The whole subject of anatomy is, as the title states, considered, and it is interesting to remark that even at this period of Harvey's career his observations upon generation occupied more of his attention than the question of the heart and circulation, and though each part of the body is considered, these two subjects are referred to at much greater length than the rest.

In reading through the work, we have found but little to criticise or remark upon; the editing has been well and carefully done, and the transcription is unusually successful, whilst the autotypes have been reproduced in a most satisfactory manner. In folio 78, and again in folio 79, the astrological symbol for Jupiter ♃, has been transcribed as the Greek letter ψ, though it is correctly reproduced in folios 87 and 88. The College of Physicians is to be congratulated upon the enterprise which it has shown in forwarding the publication of this work, which although it can never command an extensive sale, or even a large circle of readers, will always remain as one of the most interesting of the records of Harvey's work, and will be duly appreciated by the more highly cultured amongst physicians and physiologists.

AN ELEMENTARY TEXT-BOOK OF BRITISH FUNGI. By W. DELISLE HAY, F.R.G.S. London: Swan Sonnenschein, Lowrey, and Co. 1887.

IT is true that the word "text-book" is often applied in the most arbitrary manner, but it would be difficult to define it so loosely as to include Mr. DELISLE HAY'S little work; as for its being an "elementary text-book of British fungi," one can only suppose that either the author does not know what the British fungi are, or that he confuses catalogue and text-book as synonymous terms. In any case no scientific reader will be likely to overlook the misnomer.

The work consists of a catalogue of those mushrooms and toadstools which are known to be edible, and of those which are poisonous. Very few forms are even mentioned, other than the species of agarics, though one or two ascomycetes, such as the morels, truffles, etc., are referred to. This double catalogue occupies some 120 or so of the 230 pages of text; the remaining pages are filled partly with directions for growing and cooking mushrooms, etc., and with a disquisition on their poisonous and other properties, and partly with remarks on the general features of the larger hymenomycetes, and on the "structural anatomy" and the "classification of fungi." Here again it is only the agaricini, polyporei, and their allies which are seriously in view, since we may almost ignore the sparse notes on peziza, morchella, helvella, and a few others. Why puff-balls (which are gasteromycetes) are grouped with tubers (which are ascomycetes) on page 31 is not clear; the classification generally is antiquated and unsuitable. The author is clearly unacquainted with the meaning of the word "parasitic," or he would not make himself responsible for such misapplications of it as occur on pages 33 to 40; for example, the genus deconica is gravely described as "parasitic on dung."

With respect to the culinary recipes, they are to be looked at from two points of views. No doubt a dinner of mushrooms and toadstools may be rendered very attractive, and may be wholesome and good; indeed, there is no reason to doubt Mr. Hay's authority on

such matters, but the rather monotonous sections dealing with these hints on cookery are here incorporated in a so-called "elementary text-book of British fungi." The most interesting chapter in the book is, to our mind, that on the "Chemistry and Toxicology of the Fungi." If the author of this book is to be accepted as a guide, medical men have still much to learn in a very dangerous and wide field. On page 159, for instance, we read of a suppositious case of poisoning by lorcheline: "We have no physician who could diagnose the case, because all knowledge of fungus poisons is a dead letter here. The poison in question acts in so peculiar a manner, disturbing neither the brain nor the alimentary canal, that the mischief would probably be relegated to organic or functional disorder, to the visitation of God, as the juries say. Suppose bulbosine were used. Physicians could only assume that a poison had been administered; they could not swear to it, because they could not recognise the symptoms, and of any fungus poison there lives not yet the chemist who could find a trace in the body of one done to death thereby, supposing that the material of the fungus itself had not been used."

With regard to the lists of edible and poisonous species, they are undoubtedly above the average. The author knows the distinctive characters, and, on the whole, puts them quite clearly. Had the book been confined to this part of the subject it would have been well; but outside this special department it is very disappointing.

Even in his own subject, however, Mr. Hay appears to be under an illusion as to what elementary knowledge means; it would need much practice and careful work to enable children, for instance, to use his list with safety, and when we note how easily a harmless form may be confounded with a dangerous one, for example, species of amanita, clytocybe, entoloma, and others, it seems unwise to push enthusiasm too far. We should certainly regard the list of esculent forms as including too many dubious and tough, useless ones, and would prefer to see the latter placed in a separate list, and the doubtful ones tacked on to the list of poisonous forms. For instance, the tough clavarias and woolly lycoperdons, and several woody species seem practically useless as food; while amanita strobiliformis and its congeners are too like some of the poisonous white species of the same and allied genera to be safe. At any rate it is not elementary science, but advanced acquaintance with such species, which alone will save the daring.

And now a word or two about the plates. There are about sixty plates of figures attached to the text, the first fifteen or sixteen of which contain illustrations which bear upon the subject-matter of the book; the remainder consist of figures of microscopic and other fungi which are not even mentioned. Is this "padding?" If it is, it must be condemned as very bad "padding," for all these figures seem to be copied from an old and well-known handbook, which has served its time; and even if they were pertinent—and we have seen that the vast majority of them are not—they would not be suitable illustrations for a work which had any real claims to be called "an elementary text-book of British fungi."

NOTES ON BOOKS.

Unicode: A Universal Telegraphic Phrase-book. (London: Cassell and Co. 1886.)—This little volume of 100 pages consists of a code of cipher words for commercial, domestic, and familiar phrases in ordinary use in inland and foreign telegrams, the compilation of which has, we are informed, been made under the personal supervision of telegraphic experts of long experience. The economical advantages attending the use of a code known to both sender and receiver in telegraphic communication are very great. The limits of a sixpenny inland telegram are found, in many instances, to afford room for little more than a lengthy address, and the opportunity such a code affords for expressing by a word or two, phrases, of which the following may be taken as specimens, from a medical man to his patient, or *vice versâ*: "Passed a sleepless night, and is feverish this morning"; "Slept well, and has taken nourishment this morning"; "Operation has been performed successfully"—would seem to have much to recommend it. The benefits of condensation, however, are far greater when applied to foreign telegrams, the cost of which is in many instances prohibitive. The advantage claimed for this over other published codes is the exclusive use of Latin words for ciphers, which strictly conform to the regulations of the International Telegraphic Conference at Paris, London, and Berlin. In previous codes ordinary English words have been used as ciphers, and this is said to have led to some difficulty in deciphering the telegram. The present work answers well the purpose for which it is intended. At end of the book a list is given of firms and establishments by which the unicode is used.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

APPARATUS FOR WASHING OUT THE BLADDER.

DR. SOLOMON C. SMITH (Halifax) writes: May I be allowed to draw the attention of Mr. George Birch, who in the JOURNAL of May 21st gives a sketch of an instrument for washing out the bladder, to an article by me in the *Lancet* for March 22nd, 1884, on Aseptic Bladder-Washing, in which I described an apparatus on a similar principle.

Good inventions always repeat. I have no doubt the three-way junction pipe attached to the catheter had been invented a score of times before I wrote my paper, just as it has already since then been reintroduced three or four times, always as a novelty.

Of these arrangements the one devised by Mr. Buckston Browne is, in my opinion, the best in the market for comfortably washing out the bladder. Mine never got into the market; it was a tool which could be, and was intended to be, made by any country tinner for a few pence, and therefore was not worthy of such immortality as an illustrated catalogue provides.

If Mr. Birch will put his junction close to the catheter, and make sure that the way through the tap is as large as the internal calibre of the catheter, it will, I am sure, act very well, as in fact mine does; but if one is to go to the expense of an apparatus out of an instrument-maker's shop, I think that Mr. Buckston Browne's is practically the handier of the two.

NEW MIDWIFERY FORCEPS.

R. H. A. HUNTER, L.R.C.P.Ed., etc. (Battersea), writes: In the JOURNAL of May 21st, I observe the description is given of a new form of midwifery forceps by Dr. Haslam. Allow me to state that the improvement in the construction of the lock to which Dr. Haslam seems to attach most importance in his new instrument was first brought to the notice of the profession through the medium of your columns three or four years ago by myself. About that time Messrs. Krohne and Sesemann made a pair of forceps for me having the lock reversed, as Dr. Haslam suggests, which I have ever since used, and can testify as to their advantages over any others I have tried. My method of applying them is as follows: with the patient on her left side—there is no necessity to bring her to the edge of the bed, nor for any exposure—I pass the upper blade with the convexity towards the sacrum until introduced, when, by making one quarter-turn, it is readily placed in position. When introducing the lower blade, the handle of the upper is pressed against the perineum with the hollow of the left hand between the thumb and forefinger.

JAS. MARTIN, F.R.C.S.I. (Portlaw, Co. Waterford) writes: With reference to Dr. Haslam's invention of a new midwifery forceps, I have to state (1) that the alteration of locks was introduced fifty years ago by the respected accoucheur, Dr. Radford, of Manchester; (2) that over forty years ago I had one made in the workshop of the Mayfield factory in this village for my valued friend the late Dr. Elliott, of Waterford, having the lock reversed and with the handle hinged; (3) many others have since then invented the same design, some having brought forward their views in the journals, others discovering that they had been forestalled before rushing into print. There is nothing to Dr. Haslam's discredit in the fact that human thought often runs in like grooves.

ASSOCIATION FOR THE ORAL INSTRUCTION OF THE DEAF AND DUMB.—The report of the committee of this Association for 1886 records satisfactory progress made in the extension of the oral system of teaching. The School Board classes are said to have increased in number and efficiency. During the year ten students had attended the training colleges, three of whom had received the Association's certificate and were now engaged (one at Fitzroy Square and two by the London School Board). The school had been attended by 59 pupils (38 boys, 21 girls). The Association has been applied to for information by the Royal Commission now sitting, and has supplied evidence by Sir Wm. Dalby and Mr. Van Praagh, who were appointed to represent the committee before the Commission. The financial position was not so satisfactory; there was a debt of nearly £800, and a progressive diminution of annual subscriptions by the death of former benefactors.

PRESENTATION.—The nurses and staff of the Derby Infirmary have presented Mr. E. C. Green, the late house-surgeon, with a handsome gold watch, as a mark of their esteem, and of their appreciation of his courtesy and kindness.

THE Association for Preventing the Adulteration of Butter in Amsterdam has offered a prize of 1,000 florins for the best means of detecting any foreign elements in natural butter made from the milk of the cow.

A BRICKMAKER at Alperton, Harrow, charged before the Edgware magistrates with permitting offensive and injurious matter to flow from his premises into the River Brent, has been fined £25, and ordered to pay the costs, amounting to 8 guineas.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, MAY 28th, 1887.

ILLNESS OF THE CROWN PRINCE.

FOR some time past rumours, all the more disquieting perhaps from their very vagueness, have been current as to the health of the Crown Prince of Germany. It was whispered that he was suffering from cancer either of the tongue or of the larynx, and although this was authoritatively denied, the physicians in attendance showed such determined reticence on the subject that the uneasiness which began to be felt among the public in Germany was not much relieved by the official contradiction. The case at last entered on a phase when concealment was no longer possible, and it is gratifying, now that the worst is known, to find that things are by no means so bad as had been feared. We gather, from the information placed at our disposal, that the Crown Prince has been suffering for some time from a growth on his left vocal cord. This was partially destroyed with the electric cautery by Professor Gerhardt some months ago, but, after a period of quiescence, began to grow again so rapidly as apparently to warrant the worst suspicions of the medical men who had charge of the case, as to the malignant nature of the growth. Excision of one half of the larynx had, we are informed, been contemplated; but Dr. Morell Mackenzie (who was specially summoned from London) and Professor Virchow have dispelled these apprehensions for the time, and the treatment carried out by the former has thus far been so successful as to give grounds for hope of a favourable issue.

In looking at the prospects of the august patient from a medical standpoint the question of prognosis presents itself under a twofold aspect. It has to be considered from the point of view of the preservation of life, and from that of recovery of the voice. As regards the first point, life may be threatened either mechanically by the size of the growth, or by its malignancy. Dr. Mackenzie's well known skill with the laryngeal forceps seems to have obviated all risk of suffocation in the present instance, but only time can answer the question as to the nature of the tumour. However benign a growth may be at first, it is always liable, under the influence of advancing age or other circumstances, to change its character. There is reason to believe that this general statement applies with more than ordinary force to laryngeal growths subjected to the repeated irritation inseparable from the use of forceps. It is only very seldom that a papilloma with a distinct pedicle can be got away entirely, and even then the stump requires further treatment. In the case of sessile growths, they can never be thoroughly removed with forceps, and even with the best modern improvements in galvano-cautery and the help of cocaine, the operation is extremely difficult, requires to be frequently repeated, and can seldom be so complete as to prevent recurrence. It is obvious that all this cannot be done without a considerable amount of irritation, both to the growth itself and the delicate parts with which it is surrounded, so that it cannot be wondered at if laryngeal growths, which at first showed no trace of malignancy, should often in the end become so. This, of course, is by no means an absolute rule, and, though the possibility of such a transformation must always be borne in mind, the result of Professor Virchow's examination gives good grounds for hope—so far as human knowledge can do so—that the growth will retain its present harmless character.

The question of recovery of the voice in such cases so largely depends on the site and anatomical relations of the tumour, that, in the absence of detailed information on these points, it is impossible even to hazard a conjecture as to the ultimate result. The Prince's voice is said to be already stronger, and it is reasonable to believe that the improvement will continue as the cause of the mischief disappears. It may be hinted, however, that the recovery of the voice is often relative, however successful the surgical treatment may be; a considerable amount of hoarseness is very frequently left behind, and the voice becomes easily fatigued. Patients even sometimes find that their voice is worse for some time after the operation than it was before. This is due to the inflammatory reaction set up by the treatment, and need not cause any apprehension.

When discounted to the fullest extent, however, it must be allowed that the removal of laryngeal growths *per vias naturales* is one of the most legitimate triumphs of modern surgery, and Dr. Mackenzie's fellow-countrymen cannot but feel a certain pride in his having so well upheld the credit of English medicine abroad.

THE STANDARD STRENGTH OF PHARMACEUTICAL PREPARATIONS.

IN our issue of January 8th this year, we published a report of a case of prosecution under the Sale of Food and Drugs Act for selling tincture of opium, which was not of the nature, substance, and quality of the article demanded by the purchaser.

The complainant had purchased of the defendant, a registered chemist and druggist at Sheffield, three ounces of tincture of opium. Although the defendant, according to the report of the *Sheffield Daily Telegraph*, stated that he purchased and sold the tincture as of *British Pharmacopœia* quality, it was found, on analysis, to contain less than one-third the proper quantity of opium and somewhat more than one-half the proper proportion of alcohol. Competent witnesses, including the borough analyst, the president of the Sheffield Pharmaceutical Association, and Dr. White, the medical officer of health, deposed that tincture of opium meant in the trade a tincture of the strength described in the *British Pharmacopœia*, and that none other was recognised by pharmacists or the public.

This evidence was not contradicted, nor was the accuracy of the analysis disputed, but the Sheffield stipendiary considered that he ought to dismiss the complaint on the following grounds:—That if the purchaser had in some way especially asked for "tincture of opium," made according to the recipe of the *British Pharmacopœia*, and had been supplied with a tincture professed to be so made, there would be a ground of complaint, but that in this case no such special request had been shown. He even went so far as to state that he was

of opinion that if a preparation contained any opium and any alcohol whatever it could legally be sold as tincture of opium.

The case was accordingly dismissed. In commenting on the case we ventured to say that the decision seemed opposed to all common sense principles, and was probably bad in law. In support of our contention, we quoted an order in Council dated February 3rd, 1851, the Medical Act, 1862, the Pharmacy Act, 1868, and the Sale of Food and Drugs Act, 1875. Notice of appeal against the stipendiary's decision was duly given, and on May 17th the case was heard in the High Court of Justice, Queen's Bench Division, before the Lord Chief Justice and Mr. Justice Smith. The counsel for the appellant duly stated the facts of the case, and adduced arguments to show that it should be remitted to the magistrate.

No one appeared in support of the stipendiary's decision; and, according to the report in the *Pharmaceutical Journal*, the Lord Chief Justice, in giving judgment, said:

"I should have been glad to have heard the case argued, but I must decide it on the evidence before me; and the evidence that strikes me as important is the evidence in which the learned magistrate sets out that a certain number of persons, apparently intelligent persons, a doctor of medicine, a medical officer, public analyst, and so forth, six or seven of them, depose—it is put in a general way—that tincture of opium was a well-understood term in the trade, and that the material sold by the defendant was not of the nature, substance, and quality of tincture of opium, as understood by persons usually dealing in that article. The above-mentioned witnesses also deposed that the *British Pharmacopœia* preparation was the only one recognised by the medical profession and by pharmacists generally. That is the evidence which the learned magistrate has very candidly and properly returned to us, and I have no doubt he has extracted it fairly. What is the result of it? The result of it is that in terms these witnesses, who certainly by their description appear to be highly competent witnesses, swore that the drug sold in this case was not of the nature, substance, and quality demanded by the purchaser. I say 'demanded by the purchaser,' because it must be taken, in the absence of proof to the contrary, that he was a person dealing in the article, and wanting the article, and the person who sold it was a chemist and druggist, and it was proved or admitted—proved, I think—that the *British Pharmacopœia* preparation was the only one recognised by persons in his position, and that this was not according to, nor anything like according to, the *British Pharmacopœia*. The analysis shows that. Under these circumstances what is one to do? The magistrate has decided on the ground that he did not ask for tincture of opium according to the *British Pharmacopœia;* but he asked for tincture of opium, and he did not get that which all the evidence in the case shows to be a stuff of the nature, substance, and quality generally understood as tincture of opium by people dealing in it. I cannot but think that, that being found, as there is no evidence on the other side, and we have heard no argument on the other side, I am reluctantly—I say that simply on account of the magistrate—brought to the conclusion that he is wrong, and the case must be remitted to him."

Mr. Justice Smith, in concurring, said:

"I am of the same opinion. The applicant at the respondent's shop asked for three ounces of tincture of opium. Now what is the meaning of that? I think—and that is where I differ from the learned magistrate—the meaning of that is three ounces of the tincture of opium of commerce, or the article which is usually sold by way of commerce as tincture of opium. If that be so, then the evidence before the magistrate is all one way, because the evidence of the gentlemen whose evidence has been set out on the depositions is that this tincture of opium is a well-known term in the trade, and the material sold by the defendant was not of the nature, substance, and quality of tincture of opium as understood by persons usually dealing in that article. It seems to me, if that be so, the purchaser did not get a drug of the nature, substance, and quality of that which he asked for."

Judgment was accordingly given for the appellant with costs. As the Sheffield Health Committee had our fullest sympathy in their determination, after the magistrate's decision, to carry the matter to a higher court, so now we recognise their public spirit shown in carrying out this determination, and we congratulate them most heartily on the result of the appeal.

And at the same time we cannot avoid feeling considerable satisfaction that our view of the case has been so fully borne out at the Queen's Bench. We have little or nothing to add to the very decided remarks we made (*ante*, pp. 84, 85) on the magistrate's decision. It must be admitted that the law is not very precise as to what is the standard for drugs and their galenical preparations.

It, therefore, seems to us desirable that the Sale of Food and Drugs Act should be so amended that the *British Pharmacopœia* should be clearly stated to be the standard for all drugs and preparations described and formulated in that volume.

THE POSITION OF MEDICAL OFFICERS OF HEALTH.

We have had occasion lately to chronicle several instances of harsh and unfair treatment by local authorities of their medical officers of health; and it is manifest that the present haphazard method of appointing and remunerating these officers cannot continue much longer without most serious detriment to the progress of public hygiene in this country. It is only to be expected that if promising men, who might otherwise take up preventive medicine as a regular profession, find that they are to look for manifold disagreeables and disappointments as a guerdon for their labours, they will seek other and less painful avenues to usefulness and a competence. The clamour which has of late been making itself increasingly articulate will not be appeased by the stale and deceptive promise of a thorough and searching reform Bill for local government. Mr. Ritchie is, no doubt, sincerely desirous to justify his admission into the Cabinet by producing the County Boards Bill, to which he devoted his energies last winter. Vague promises are held out that the Bill shall be introduced after the Whitsun holidays; but it is idle to hope that it can become law this session.

We have over and over again urged that the principles of the reform which it is intended to bring forward should be made known, whatever the chances of the immediate consideration of the measure by Parliament. There is a great body of educated public opinion outside St. Stephen's which must be reckoned with, and the opportunity might usefully be taken of obtaining the crystallised views of representative medical and hygienic societies and organisations before an attempt is made to get the Bill through Parliament. Meanwhile, the position of the medical officer of health is going from bad to worse.

The degree of efficiency of sanitary administration throughout the country is very varied in different districts, especially in rural districts where sanitary affairs are subordinated to poor-law matters. Whilst many sanitary authorities have been working, and are still working, in all important directions for the improvement of their districts, appointing the best officers they can obtain for a reasonable remuneration, following generally the advice of those officers, and reaping their reward in the increased healthfulness of their districts

and increased attractiveness for residents; other authorities have, since their constitution, done no efficient work, or little of primary importance in the way of necessary improvement. Indeed, some of these latter authorities evince no desire even to be properly instructed as to the sanitary requirements of their districts, asking for no reports from their medical officers of health, and paying little or no regard to them when presented. And, unfortunately, it is in the very districts which are in the most unwholesome condition that this apathy is most observable. Many health-officers have exhibited much courage in pressing their good advice upon authorities little disposed to adopt it, and often in distinct disparagement of their own individual interests as private medical practitioners; but in some instances they are exposed to further discouragements which they find it difficult to fight against. In rural districts it is not uncommon for the sanitary authority to tack the sanitary work carelessly on to that of poor-law administration, and to award to the poor-law medical officers trifling annual sums for acting as medical officers of health in their respective districts. In this way the letter of the law but not its spirit is obeyed.

Some striking examples of this unsatisfactory state of things are referred to by Dr. Ballard in his report on the recent sanitary survey made under the direction of the Local Government Board. In the Whitby rural district, for example, sanitary administration is described as being "very inefficient; the sanitary officers are absurdly underpaid, their salaries having recently been reduced 26 per cent. There are three medical officers of health (two of them being district medical officers) who admit the wretched condition of their districts, but do little or no work because of their dissatisfaction with the scale of payment." The work of the inspector of nuisances is also "totally inefficient, his remuneration being ridiculously small, and his one object apparently being to keep things quiet." In the neighbouring district of Pickering, we find that the health-officer's "reports and recommendations are not much regarded by the sanitary authority," whose administration is "very lax." In Bodmin, the "medical officer of health has not exerted much influence with the sanitary authority, and is underpaid." In Tenby, the "medical officer of health does little or no work, and makes no reports, because," he says, "his advice is systematically ignored." At St. Thomas, Exeter, the medical officer of the workhouse acts as health-officer. He is only engaged on occasions of some serious outbreak of disease, and is then paid by fee. In another case, involving an area of 126,000 acres and a population of 15,000, recently reported on by Dr. Blaxall, we find that the medical officer of health receives only £50 per annum, which, considering the extent and character of the district, and the time required to enable the officer to make skilled and methodical inquiry into the circumstances connected with the occurrence or prevalence of disease in the district, is a wholly inadequate remuneration to secure an efficient performance of the onerous and responsible duties of the office.

Another source of discouragement to health-officers, of which several examples have lately come to our knowledge, is the reduction of the officer's already inadequate salary on the occasion of his reappointment. The Central Board have not altogether neglected to fight against this practice, and we are glad to find that in many cases they have refused to repay a moiety of the salary from the Parliamentary grants, on the ground of the inadequacy of the remuneration. But the authorities at Whitehall do not appear to go upon any regular system in their controversies with the local authorities as to this matter, nor do they seem to have thoroughly grasped the question as a whole. Evidently, therefore, care and vigilance must be used when the time comes by those immediately concerned to secure that this fundamental question is settled on a sound and satisfactory basis.

THE TWO ASPECTS OF PHTHISIS.

In dealing with phthisis, we are always prone to regard it mainly either as a true lung-disease or as a constitutional malady, with a pulmonary lesion as its most constant, and usually most important, local expression. The former is the tendency of the student and young practitioner, who are apt to think that through the stethoscope may be learnt most of what is worth knowing about the disease; the latter becomes more and more the view which arises from a wide experience of phthisis, and gradually impresses itself upon us as vitally important, especially with regard to prognosis and treatment. Dr. H. G. Sutton puts this strikingly in his recently published and profoundly suggestive lectures on *Medical Pathology*. He says: "In considering phthisis and the treatment of phthisis, do not think of the lungs so much, for it is simply harassing to one's self, and leads to the death of the patient, and no one benefits by it. How can a lung be repaired if there is not sufficient blood going through it? The one object in the treatment of phthisis is to get more blood through the lung to repair it; hence the importance of rest, food, and fresh air."

All the main principles in the treatment of phthisis now generally adopted, namely, liberal dietary, tonics, open-air life, change of climate, etc., aim at the improvement of the constitutional condition, the assumption underlying these measures being either that the local condition is inaccessible to therapeutics, or else that it may be confidently expected to improve with the improvement in the organism generally. No doubt since the discoveries of Koch, patient and enterprising efforts have been made to strike at the real origin of the disease by measures directed to the destruction of the tubercle-bacillus. Hence has arisen the wide adoption of antiseptic inhalations, and more recently the injection of sulphuretted hydrogen, carbonic acid gas, etc.

Without seeking to prejudge the results of experiments still in progress, it must, we think, be owned that the net result of this local therapeusis in phthisis has hitherto been very small. Inhalations do good unquestionably, but in what class of cases? Chiefly in old cavities filled with putrid secretion, where the *rationale* of their action is too obvious to require demonstration; but we are still without evidence of their utility in incipient phthisis; in other words, their influence in checking the development or limiting the activity of the bacillus is still an unproved hypothesis. It is to be feared that Koch's discovery, whatever may prove its ultimate value, has done mischief in the department of therapeutics, by tending to obscure the view put forward so bluntly and yet so truly by Dr. Sutton, that in the treatment of phthisis we should think of the organism, and not of a single organ.

Local measures of another kind have had a wide popularity and a certain utility in phthisis. We refer to counter-irritants, the efficacy of which has been particularly insisted upon by Professor Jaccoud. No one can try them patiently without being convinced of the resulting benefit. They relieve cough, and enable us to dispense with anodynes, but it seems doubtful whether they have any other beneficial action whatever.

Many years ago it was proposed to treat early cases of phthisis by strapping the apex, after the fashion adopted so usefully in pleurisy. It may be doubted whether this practice is now ever adopted, and there can hardly be a doubt that the proposal was based upon a radical misconception of the nature and requirements of the disease. All our knowledge now tends to show that phthisis arises from inactivity, and not from over-action, of the lungs; and, so far from endeavouring to limit the play of pulmonary function, one of our chief aims, apart from the actual presence of hæmorrhage, is to promote it.

While the constitutional view of phthisis is, for the present at least, much the more useful with a view to treatment, Dr. Sutton would, no doubt, be the last to deny the indispensable value of a correct estimate of the local signs. Especially is this so in diagnosis. We may strongly suspect the existence of phthisis before the lungs yield any sign, but we can hardly get beyond the point of mere suspicion. Asthenia, emaciation, night-sweats, and febrile disturbance may combine, with a bad family history, to make us view a case with the gravest anxiety, although the stethoscope yield no abnormal indications; but, while the lungs remain free, we always continue to hope that our suspicions may prove unfounded. Again, the extent of the local lesion is always a very vital point. A patient with a cavity in one apex, while the rest of his lungs is sound, is in a very different position from one in whom we find evidence of disseminated tubercle throughout a large area of the pulmonary substance. The progress of the local lesion, which only local investigation can determine, is also a point of cardinal importance. There is the most radical difference between a case of phthisis in which the local signs remain quiescent for months or years, and one in which they creep steadily onwards. The former case allows an opportunity for treatment, and permits a more or less favourable prognosis; the latter case is sure soon to terminate fatally.

It is evident that in phthisis it is essential that the relation of the local and the constitutional condition be correctly estimated and steadily kept in view.

Mr. Lawson Tait has been appointed Honorary Consulting Surgeon to the Brooklyn (U.S.A.) Hospital for Women.

The Goldsmiths' Company has determined to mark the Jubilee of Her Majesty by subscribing £5,000 towards a public recreation ground at Acton.

The first edition of Mr. Christopher Heath's most complete and admirable *Dictionary of Surgery* has, we are glad to hear, been exhausted, and a new edition is now issued with a few verbal corrections.

Dr. James Hector, C.M.G., Director of Geological Surveys and Curator of the Colonial Museum for the Colony of New Zealand, has been appointed an Ordinary Member of the Second Class or Knight Commander of the Most Distinguished Order of St. Michael and St. George.

The managers of the Metropolitan Hospital Sunday Fund have arranged for public meetings in every part of the metropolis during the early part of June, to advocate the claims of the several hospitals in those districts. It is expected that the speakers will include some members of the Royal Family.

The following are the members of the medical profession selected by the Council of the Royal Society to be recommended for election into the Society: Professor J. Theodore Cash (Aberdeen); Dr. W. R. Gowers; Surgeon-Major George King, M.B. (Calcutta); Sir J. Kirk, G.C.M.G. (Zanzibar). Fifteen candidates in all were selected; the ballot takes place on June 9th.

The Council of King's College, London, has appointed Mr. Edgar Crookshank, M.B.Lond., Lecturer on Bacteriology. This appointment is interesting, as being the first of its kind in this country, and as indicating the growing importance attached to this branch of medical science.

In consequence of the resignation of Sir Edward Sieveking, Dr. David Lees has been appointed to fill the vacancy created in the ranks of the Physicians to In-patients, St. Mary's Hospital. Dr. Walter Pearce has been elected Physician to Out-patients. Dr. Pearce is already known to the profession through the active share which he has taken in promoting the Volunteer Medical Service Corps.

DR. WITHERS MOORE.

We are pleased to learn that Dr. Withers Moore, President of the Association, has so far recovered from his late severe indisposition as to be able to resume his professional duties to some extent. We are sure that all members of the Association will be glad to hear of the President's restoration to health, which, it is to be hoped, may be complete and permanent.

ILLNESS OF PROFESSOR BILLROTH.

Professor Billroth has been dangerously ill. He suffers from a fatty heart and great exhaustion. At one time his life was despaired of, and intense feeling was manifested, not only by the whole of the medical profession and the medical students of the city, but by leading personages throughout Europe, and telegrams were received from friends in all parts of the world making anxious inquiries. We are glad to hear that Professor Billroth's illness has taken a more favourable turn, and that he is now rapidly regaining his usual state of health.

THE WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

The Cavendish Lecture will be delivered at the West London Hospital by Sir Andrew Clark, on Friday, June 3rd, at 8.30 P.M., the subject being "On a Frequently Successful and Speedy Method of Treating Hay Fever." The fifth annual dinner of the Society was held, under the Presidency of Dr. Alderson, at the Criterion Restaurant, on Wednesday, May 18th. Upwards of ninety members and guests were present. Amongst the latter were Sir Edward Sieveking, Canon Morris, of Chester, Dr. Hughlings Jackson, Dr. Broadbent, Major-General Goldsworthy, M.P., and Dr. Dolan, of Halifax.

PENJDEH SWELLING.

A special medical commission, under the direction of Dr. Rapschewski, appointed to inquire into the cause of the disease known as the "Penjdeh swelling," which has prevailed for several years among the Russian troops in the Transcaspian territory, will shortly leave St. Petersburg. General Komaroff's troops in the Murghab valley suffered severely from the ailment, which, since the summer of 1884, has attacked 90 per cent. of the men, rendering many of them unfit for service for several months. The belief of medical men is that the disease is of bacterial origin; but on this and other points the commission will doubtless arrive at some practical conclusion.

MEDICAL AND SCIENTIFIC ASPECTS OF TEMPERANCE.

The following course of lectures to medical students on the Medical and Scientific Aspects of the Temperance Question will be delivered by Dr. B. W. Richardson, F.R.S., at the Parkes Museum of Hygiene, 74A, Margaret Street: Lecture I, Physiological, on June 1st; Lecture II, Pathological, June 8th; Lecture III, Therapeutical and Practical, June 15th, commencing each evening at 7.30. The National Temperance League offers a prize of ten guineas for the best report of the

lectures (about 5,000 words), and five guineas for the second best, written by medical students, which must be sent to the Secretary, Mr. Robert Rae, 337, Strand, before June 30th.

THE COLD WEEK IN MAY.

It is a popular belief, which often finds expression in the daily papers, that the third week in May is a notoriously cold week. But meteorological observations do not support the belief if the averages of several years are taken. Thus the Marlborough observations for 1865-84, published in the *Naturalist's Diary*, show a steady rise of nearly two degrees in the mean temperature for each week in the month of May. The means for each successive week are: first, 47.3°; second, 49.1°; third, 50.8°; and fourth, 52.8°. It is obvious that slight differences of this kind could not be distinguished by the senses, and it is probably from the occurrence of extremely low temperatures on one or two days, which are lost in the general mean, that the third week has got its bad reputation. We are not aware that the cold week shows itself by variations in the vital statistics of the country.

THE QUEEN'S JUBILEE.

At a court held by the Queen at Windsor Castle on the 16th inst., deputations were introduced by the Right Hon. Henry Matthews from (1) the University of Edinburgh, consisting of Principal Sir William Muir, K.C.S.I., Professor Campbell Fraser, Mr. T. Graham Murray, Dr. P. Heron Watson, the Right Hon. the Lord Advocate, C.B., M.P., Sir Dyce Duckworth, Professor Sir William Turner, Professor Grainger Stewart, Professor Armstrong, and Mr. Taylor Innes. Sir William Muir, Professor Campbell Fraser, and Professor Sir William Turner had the honour of kissing hands. (2) The University of London deputation, consisting of Earl Granville, K.G., Chancellor, Sir James Paget, Dr. Wood, Sir John Lubbock, M.P., Sir William Gull, Dr. Quain, Dr. Weymouth, Dr. Baines, Mr. Osler, and Mr. Arthur Milman, registrar. Earl Granville, Sir James Paget, and Dr. Wood had the honour of kissing hands.

CHARGES AGAINST THE GENERAL HOSPITAL, VIENNA.

The charges made against the administration of the General Hospital in Vienna, by Herr Pernerstorfer, a member of the Austrian Reichsrath, involved the statement that the patients were underfed, neglected, and often maltreated. As the hospital habitually contains over 2,000 patients, it was only to be expected that a searching Governmental inquiry would be held; this has been held by the Statthalter of Lower Austria, and Herr Pernerstorfer was invited to take part in it. It is said that Herr Pernerstorfer is very much at a loss to adduce proofs of some of his allegations. He is reported to have collected a great deal of gossip from discharged servants, and many of the stories which he related as new are declared to refer to incidents which occurred years ago. A report will shortly be published dealing with all Herr Pernerstorfer's charges *seriatim*, and it will probably be shown that even those which had some truth in them were exaggerated.

MASSAGE IN TRAUMATIC ORCHITIS AND EPIDIDYMITIS.

In the *Meditzinskoïe Obozreniè*, No. i, 1887, p. 41, Dr. Evgeny D. Kürduemoff, of the Moscow Military Hospital, says that he recently tried the massage treatment in three cases of orchitis and in two of epididymitis, all the patients being soldiers who had received some injury to the parts, in the course of gymnastic exercises, etc. Massage was resorted to, with the view of bringing about a resolution of the painful induration and enlargement, on the 7th, 11th, 14th and 15th day of the disease, after ordinary means had failed. The treatment was carried out once a day, and the number of sittings required varied from five to ten, each lasting from ten to twenty minutes. The manipulations consisted in alternate centripetal rubbing and kneading of the epididymis, testis, and hypogastric region. The results were most satisfactory. The swelling and induration seemed to "melt away under the hand." In every case the pain, tenderness, and feeling of weight diminished after the first sitting. In no case were any unpleasant secondary effects observed. Dr. Kürduemoff thinks that massage may also advantageously be tried in the initial stage of acute inflammation of the testicle, with the object of removing congestion, and promoting absorption of serous infiltration, as well as in plastic orchitis.

THE GOOD EFFECTS OF MUZZLING.

Dr. Whitelegge, medical officer of health, Nottingham, giving the experience of the enforcement of the muzzling regulations in Nottingham, calls attention to the fact that the first application of these regulations was followed by a reduction in the number of known cases of rabies. Their withdrawal was followed by a gradual increase, and in December there was a very marked advance. After the resumption of the muzzling in December, the cases fell again, and they have been extremely rare since that time. The few cases which have occurred since then have almost without exception been traced to bites by strange dogs, or bites inflicted during the abeyance of the regulations. If the county authorities have erred, it is, Dr. Whitelegge thinks, in the direction of failing to enforce muzzling over a sufficiently wide area and for a sufficiently long time.

THE RIVER LEA.

In a lecture on the River Lea, delivered lately at the Parkes Museum, Major Flower, C.E., denied that the Lea was the elongated sewer that some supposed it to be. Above the New River intake, there was practically no pollution at all. Coming to Cheshunt, they found one of the chief sources of pollution. Here there was a population of 7,900 persons, and all the drainage was carried into the Lea, but fortunately under a mandamus this was about to be stopped. With regard to the condition of the river below Tottenham Locks in 1885, a great improvement had been made since then in the Tottenham sewage system, and the condition of the river was very much better. The effluent which passed into the Lea from the Tottenham Sewage Works was quite pure, and had a beneficial effect upon the water. That the water was of vast importance to the metropolis was shown by the fact that during last year the New River Company supplied daily upwards of 29,000,000 gallons of water to 147,255 houses, most of which came from the Lea.

THE LONDON HOSPITAL.

The Prince and Princess of Wales visited the London Hospital, Whitechapel Road, on Saturday last for the purpose of formally opening the Nursing Home, the new library, and other college buildings which have been recently added to the institution. The Royal party traversed some of the wards, and entered the Nursing Home, which was then opened by the Princess. An address was presented, on reaching the Medical College, by the Duke of Cambridge (president of the hospital). The Prince of Wales, in his reply, referred to the great benefits conferred on humanity by the hospital, both directly and indirectly, through the opportunities it afforded to students. Dr. J. Langdon Down, in thanking his Royal Highness on behalf of his colleagues and the students, said that the money with which the new buildings were completed had not at all diminished the funds of the hospital, as a rent was paid by the teaching staff to the hospital for the use of the buildings. The cost of the Nursing Home has been defrayed out of a sum of money paid as compensation by the East London Railway, which runs beneath the hospital.

MEETING OF THE BRITISH ASSOCIATION IN MANCHESTER.

All the arrangements for the approaching meeting of the Association in Manchester are already in a forward state. The guarantee fund is large. On Wednesday evening, August 31st, Sir William Dawson will resign the presidential chair to Sir Henry E. Roscoe, the President for this year. The evening lectures will be given by Professor Harold Dixon, of Owens College, "On the Rate of Explosion of Gases;" and by Sir Francis de Winton, on "Explorations in Central

Africa." Two *conversaziones* will be given, one at the Town Hall, and the other at the Royal Jubilee Exhibition. We understand that an unprecedented number of distinguished foreign *savants* have signified their intention to be present. The buildings at Owens College will be the centre, where reception-rooms, etc., will be arranged, the large new spacious biological museum being admirably adapted for this purpose.

BUTTERINE AND OLEOMARGARINE.

In the course of evidence lately given before the Select Committee of the House of Commons, Sir F. Abel described oleomargarine as consisting of oily matters and fat, and butterine as a mixture of substances separated from animal fat—or oleomargarine—churned together with different proportions of milk, nut or seed oils of a palatable character, and unobjectionable colouring matter. In most cases, in order to give a butter flavour, a portion of strong Dutch or Danish butter was added. Butterine was a perfectly wholesome article of food, more wholesome than inferior butter. Mr. Thomas, of the Local Government Board, believed the Sale of Food and Drugs Act was sufficient to deal with the adulteration if it was fully enforced. Mr. Allen, President of the Society of Public Analysts, stated that butter was sometimes adulterated with butterine to the extent of from 15 to 95 per cent. Mr. Otto Hehner recommended that butter and butterine should be sold separately, and that the mixture of these should be declared illegal.

MOMORDICA BUCHA.

At a recent meeting of the Paris Biological Society, M. A. Duprat made a communication concerning the physiological effects of the *momordica bucha*, a cucurbitaceous plant of Brazil. The fruit of this plant is prescribed in dropsy. It may be given in injections composed of the watery extract of the fruit, or as a draught prepared from the fruit, after it has been macerated in brandy at 25° C. (77° F.). The injection acts as a drastic purgative, giving rise to severe pain, whilst the draught causes vomiting. *Momordica bucha* is used only by quacks, and is generally considered dangerous in Brazil. M. Duprat has made experiments with the extract obtained by hydro-alcoholic maceration of the fruit, diluted with water. From these he concludes that *momordica bucha* acts as a local irritant, causing vomiting and diarrhœa, according to the dose and the manner in which it is administered; it will cause death if taken in sufficiently large doses. The use of the drug by unqualified persons should be forbidden, but in the hands of medical men it may be very useful as a purgative.

LEEDS INFIRMARY POST-GRADUATE CLASS.

A correspondent writes:—The concluding lecture of a most successful course was delivered on the 13th inst. by Dr. Barrs on Albuminuria, after which Dr. Griffiths, the house-physician, gave a very interesting demonstration on urine tests. The value of this course to the hard-working country practitioner, and indeed to others whose time for reading is limited, and whose opportunities are necessarily and unavoidably restricted, has been very great. After each lecture demonstrations in the wards and in the *post-mortem* room have been a most valuable, practical, and useful part of the course. Immediately after the lecture a meeting of the members was held under the presidency of Dr. Scott, of Ilkley, for the purpose of discussing the desirability of a second course, the subjects to be treated of, the remuneration of the lecturers, and other matters relating to the success of a future course. The desirability and practicability of admitting qualified men to clinical studies and operative surgery by payment of fee rather than by sufferance was introduced by one member, but ruled out of order by the chairman. The meeting unanimously resolved that another course should be commenced, and that Drs. Barrs and Roberts, the honorary secretaries, who had so satisfactorily framed the last course, should arrange the practical details of the future one, which is to commence on the second Friday in October next, when Mr. Wheelhouse is expected to give the introductory lecture. Although the late class was a comparatively large one (41), a general belief was expressed that many more gentlemen in Leeds and surrounding towns and district would take advantage of the next course. It was stated at the meeting that since its formation two of the class had been removed; one by the sudden and lamented death of the late much respected Dr. Murray, of Burley-in-Wharfedale, the other by the removal to London of Dr. John Fletcher Little, late of Ben Rhydding, who, by his characteristic energy, was largely instrumental in the formation of the class. Before the meeting closed a vote of sympathy with the widow of the late Dr. Murray was passed, and a resolution that the class fee (£2 2s.) should be returned to her as a mark of respect to his memory. Very cordial and grateful votes of thanks were unanimously and enthusiastically accorded to the staff, specially including Dr. Griffiths, the house-physician, and to the honorary secretaries for their valuable services.

DEGREES FOR LONDON MEDICAL STUDENTS.

The Councils of University and King's Colleges appear to be in nowise discouraged by the peremptory rejection of their proposals by the Royal Colleges of Physicians and Surgeons. In the month of March last, identical resolutions were adopted by the Councils of the first-named Colleges to the effect that a petition should be presented to the Crown, praying that a charter to confer degrees in arts, science, and medicine, and any other faculties to be afterwards determined, might be granted to a suitably constituted body in and for London; attendance on an approved course of study in these institutions and others within the metropolis that might be recognised by the University to be a condition of obtaining such degrees; and an adequate representation of each of the two Colleges to be incorporated in the governing body of the University. The two Royal Colleges were in consequence asked if they would come into such a scheme, and constitute in fact, if not in name, the medical faculty of the new University. The Royal Colleges were doubtless staggered by the presumption of these upstart younger brethren, and hardly appeared to think the proposal was to be taken seriously. The two teaching Colleges, however, have perhaps not been sufficiently impressed by the awful dignity of the rebuff administered, and have persisted in their scheme. Conferences have been held between delegates from King's College, headed by the Bishop of London, and from University College, headed by Mr. Erichsen, and a petition to the Crown embodying the above-mentioned resolutions was drawn up; this petition has now been accepted by the Councils of both the teaching Colleges, and will be in due course presented. The number of petitions for charters which will shortly reach the Privy Council is so considerable, and the proposals on many important points will be found to be so conflicting, that there seems every probability that the Privy Council will issue a Royal Commission on University Education in London as the only way out of the difficulty.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

The annual general meeting of the Society was held at 53, Berners Street, on Wednesday, May 18th, Sir James Paget, Bart., President, in the chair. From the report for 1886 it appeared that the number of members was 343—20 less than in 1885. Only 5 new members had been elected, 16 had died, and 9 had resigned or ceased to be members. The Society had lost two vice-presidents during the year by the deaths of Mr. Cooper Forster and Dr. Harvey Kempton Owen. The number of widows receiving grants was 64, the same as in 1885; but the number of orphans had been reduced from 9 to 6, and there were 3 orphans receiving grants from the Copeland Fund. Five widows had been elected, and 1 orphan; 5 widows had died or become ineligible for further assistance; and 3 orphans had ceased to receive relief, having reached the age of 16. The amount distributed in grants had been £2,750, and the expenses had been £243. Owing to want of funds the directors had not been able to make any present to the

widows and orphans last Christmas. Two legacies had been received—one of £50 from the executors of Miss Annie Lyne, through Dr. Stokes; another of £300 from Dr. Harvey K. Owen, V.P. The funded property had been increased by the purchase of £145 Metropolitan Consolidated Stock. Mr. Mould was elected Vice-President in the room of Dr. Iliff, deceased; and the following gentlemen were chosen directors in the place of six senior who retired in rotation—namely, Dr. Birkett, Dr. H. M. Duncan, Mr. Langton, Dr. F. M. Bright, Dr. F. de Havilland Hall, and Mr. Malcolm Morris. Mr. Ware, Dr. Quain, Dr. John Clarke, and Mr. Fuller were elected trustees of all the funded property of the Society. A special grant of £26 was made to one widow. Votes of thanks to the editors of the medical journals were carried unanimously for their kindness in assisting in making known the objects of the Society. It was resolved that the centenary of the Society should be celebrated next year by a dinner. A vote of thanks to the chairman closed the proceedings.

THE PHARMACY ACTS AMENDMENT BILL AND THE GENERAL MEDICAL COUNCIL.

It will have been noted that the General Medical Council, having expended £2,000 of verbosity and long-drawn eloquence on the debates in which it indulged in the first week of its sitting, transacted its subsequent business with hot haste. Interests outside of fights for or against individual corporation interests by no means attracted the same attention. Thus, the communication from the Parliamentary Bills Committee of the British Medical Association, concerning the dangerous clauses in the Pharmacy Acts Amendment Bill for teaching "Materia Medica" to chemists and druggists by Act of Parliament, was referred to the Executive Committee without debate. That august body is by no means so efficiently "executive" or so prompt in its action as the name which it bears is generally held to imply. In the normal state of things it would probably not meet till July—that is to say, after all Parliamentary activity is nearly at an end. To give any effect to such a reference—which was, we believe, intended in a friendly spirit—and to prevent it from being a discreditable sham, it would be necessary for the Executive Committee to meet immediately after Whitsuntide. The professional interests involved are large, and the question is an important one for general practitioners. It can hardly be supposed that the General Medical Council will thank its executive for converting such a reference into a farce, and plainly intimating to the profession that corporate and general interests of the profession are the main objects of its care and expenditure. It can hardly be doubted therefore that the Executive Committee will hold an early session, in time to influence the fate of the clauses indicated.

THE PARKES MUSEUM.

A very successful series of sanitary demonstrations to the medical profession has just been given in the Parkes Museum. The first of the series was given by Professor Corfield; he dealt chiefly with the defects in sanitary appliances and bad materials and workmanship, pointing out the dangers that arise from them. The second was given by Mr. Rogers Field, B.A., M.Inst.C.E. His demonstration was on house-drainage; and he pointed out the necessity for giving particular attention to all the details of sanitary arrangements as well as to the general principles, for if the details were improperly carried out it might render the drainage bad and dangerous to health, although the principles on which it was based might be correct. He gave a description illustrated by diagrams of the drainage of the Museum, which he had especially arranged for the Council to illustrate the principles of house-drainage: it is so constructed as to be open to inspection. The closing demonstration of the series was given on May 16th by Mr. Percival Gordon Smith, of the Local Government Board, and related principally to the construction and ventilation of houses. He exhibited several recent improvements and adaptations, and also mentioned several methods of dealing with house-refuse and sewage. The demonstrations, which have been largely illustrated by models and specimens in the Museum, have been much appreciated, there being a large attendance of the medical profession on each occasion.

THE BROWN INSTITUTION.

The report presented to the Committee of the Brown Institution at its meeting this week by Mr. Victor Horsley, F.R.S., the professor-superintendent, states that the number of cases admitted into the hospital continues to show a steady increase from year to year. The number of cases of hydrophobia showed a marked diminution, only six having been admitted in 1886, as against eighteen and nineteen in 1885 and 1884 respectively. No less than twenty-three persons, members of the medical or veterinary profession, worked in the laboratory of the institution in 1886. Among the researches carried out have been those on the pathology of scarlet fever and of foot and mouth disease, by Dr. Klein; on prophylaxis against anthrax, by Dr. Cash; on the coagulation of the blood, by Dr. Wooldridge; and on the minute analysis of the representation of movement in the nervous system, by Dr. Beevor and Mr. Horsley. The professor-superintendent has also made researches on the etiology of rabies and its prophylactic treatment for the Commission on Hydrophobia, on the pathology of the thyroid gland, and on epilepsy. The results of many of these investigations have already been noticed in these pages, and others are not yet complete. The value of the work carried on in the institution is very great, and the contributions made to comparative pathology during the past year, especially by Dr. Klein and Mr. Horsley himself, have been of the first importance.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

The meeting of the Royal Medical and Chirurgical Society on Tuesday, May 24th, touched upon several points of considerable interest. Dr. Haig's paper included an elaborate and careful medico-chemical analysis of the elimination of urea and uric acid in his own case of megrim, showing that the crises were marked by a large excess in the proportionate elimination of uric acid as compared to urea. Much interest in the matter was shown by many who had suffered from similar headaches, and it was obvious that much remains to be found out as to the causes and treatment of such distressing symptoms. The methods of medical chemistry are not easy, and the arguments, though not conclusive, are often suggestive as to treatment. If a tendency to acidity in the blood be the true cause of such acute pain as a severe headache, we may hope to hear more of the intravenous injection of alkalies such as is practised in France, but does not seem as yet to have received much attention from Dr. Haig. Dr. Finlay exhibited some excellent microscopic specimens and drawings taken from two fatal cases of alcoholic paralysis, which tend to establish on a firm basis the modern theory that it is essentially an ascending peripheral neuritis; for they showed the complete degeneration of the peripheral nerves, both in hand and leg, along with integrity of the spinal cord. The condition of the muscles of the extremities was clearly demonstrated to be one of advanced degeneration, with abundant leucocytic infiltration, a point which has been hardly touched upon in England, and which raises the question as to whether such apparent results of degeneration after inflammation are wholly due to an original inflammation of the nerve or perineurium, or may be independently excited. The exact method of action of the alcoholic poison is one of interest in many respects, and is still for the most part imperfectly understood.

OVER-PRESSURE IN FRANCE.

At a recent meeting of the Société de Médecine, M. Christian replied to the communication presented by M. Lagneau to the Académie de Médecine on March 8th, 1887, in which the latter pointed out the dangerous effects of mental overwork, and condemned the curriculum of the principal schools, particularly that of Saint Cyr and the Ecole Polytechnique. According to M. Lagneau, a large number of students leave these schools with their brains fatigued and worn-out, and find themselves at the age of 35 or 40 incapable of intellectual effort. In

opposition to this view, M. Christian brought forward statistics collected by himself among his patients at the national asylum at Charenton, and also at Maréville between the years 1876 and 1887. Out of ninety-nine military officers under treatment for insanity, only seventeen had passed through the Government schools. Of the seventeen, in only eleven could precise information be obtained as to their history. Out of these eleven, in six instances the disease could be traced to hereditary causes; two had received severe head-injuries from falls, and three were victims of melancholia. In M. Christian's opinion, insanity from mental over-exertion is more often met with in officers who have risen from the ranks than in those that have passed through the Government schools.

AN UNFOUNDED CHARGE AGAINST A MEDICAL MAN.

ANOTHER of those terrible charges of indecent assault against medical men, by which individual members of the profession have only too often suffered irretrievable wrong, has been tried and decided at the Central Criminal Court. Dr. Ralph Hodgson, who was the victim of this groundless charge, is a young medical practitioner, who has practised at Lewisham for the last two or three years, and bears an irreproachable character. The prosecutrix, a domestic servant, aged 24, went, it is said, to the defendant's surgery on March 8th for the purpose of having a tooth drawn; and went again on March 11th, but no complaint was made respecting the defendant's conduct on these occasions. On March 15th she called a third time at the surgery, when, according to her story, the defendant asked her to partially undress for the purpose of examination, as he thought she was suffering from a weak heart. It was on this occasion that the alleged indecent assault was said to have been committed. The prosecutrix also stated in evidence that she screamed twice, but nothing of this was heard by another patient, who was waiting in an adjoining room. Having charged the defendant with committing an assault and demanded money of him, he summarily ejected her into the street. For the defence, medical evidence was adduced to show that the examination by the defendant was an ordinary medical one, and the defendant himself was called, and he swore that he had not been guilty of any indecent conduct. The Recorder, in summing up, dwelt on the discrepancies of the evidence for the prosecution, and the jury had no difficulty in arriving at a verdict of not guilty. The case appears to have rested upon uncorroborated evidence of the complainant, and the jury by their verdict have cleared the character of the unfortunate gentleman attacked. Such a verdict, however, affords no reparation for the frightful injury inflicted and the grievous suffering which such a vile charge must cause. Unless prosecuted for perjury, the complainant escapes all punishment; and the prosecution for perjury is, in the present state of the law, one of the most difficult and hazardous proceedings, and has in itself the painful disadvantage of raking up once more an unfounded scandal. What the course taken in the present case may be we do not know, but, in any case, the defendant will have the sympathy of his profession and, we hope, of the whole locality in which he resides.

RED TAPE AND ITS CONSEQUENCES.

THE difficulty of moving poor-law, and sometimes, also, sanitary, officials in the presence of infectious disease, where the preservation of life depends in no small degree upon promptitude of action, was recently exposed at the inquest on the body of a child who had died in the Infectious Diseases Hospital of the Ince Local Board, near Wigan. It appears that on May 7th a poor woman was admitted to the hospital suffering from typhoid fever, and there gave birth to the deceased. The hospital was in sole charge of a nurse, aged 60, whose husband is almost as old, but no help seems to have been provided. The child was not taken from the mother, and it is not surprising, therefore, that within twenty-six hours it was found to have been overlain. It was given in evidence that efforts had been made to secure the child's removal, but, in the words of the coroner, it could not be done, "in consequence of a lot of red-tapeism." In summing up, the coroner commented on the fact that the woman in charge of the hospital was practically by herself, which meant that for seventy-six hours she was kept awake nursing and attending to the wants of these people without any help. All the while communications were being made to the nuisance-inspector and the clerk to the local board, as well as to the relieving officer, the woman was left by herself, and no provision seemed to have been made for clothing the child, who had to be wrapped up in towels for want of something better. In the result, the jury found that the deceased came by his death accidentally, but added a rider to the effect that the management of the hospital was very lax in that the mother was left from the time of her confinement to her decease without any care except that of the aged nurse, and they suggested that the proper authorities should reconsider the question of the management of the hospital, so as to preserve life in the future. We should be sorry to think that such cases as this often occur.

ST. GEORGE'S HOSPITAL.

ON Wednesday, May 18th, the present students and a large number of old St. George's men assembled in the large lecture theatre in the medical school, to hear an address from Mr. George D. Pollock, one of the consulting surgeons, on the occasion of the opening of the new physiological laboratory and class rooms. The address was in great measure a review of the vast strides which had been made in medicine and surgery in the fifty years during which Mr. Pollock had been connected with the medical profession. He commenced by congratulating the school on having a teacher of physiology of such ability as Dr. Delépine. For many years physiological facts have been taught as dogmas, while the student remained in perfect ignorance of the simplest methods employed for their demonstration. Hence the facts and the theories based upon them were received simply on the authority of their discoverers. It was necessary to teach men to work for themselves, and the object of the new building was to provide a more convenient class room for the teaching of practical physiological chemistry and histology, and for the demonstration of facts having a practical bearing on the practice of medicine. Beginning with the year 1837, when he entered as a student, Mr. Pollock traced many of the changes and improvements which had occurrred in the hospital arrangements, up to the present time, not the least important of which was the remission of a fee of £50, which, till comparatively recently, all house-physicians and house-surgeons were compelled to pay for board and maintenance during their year of office. This, and the fact that no fees were exacted from those who held dresserships or clerkships, the lecturer dwelt on as especially affecting the welfare of the school. He further indicated the saving of time which resulted from the concentration of the various teaching departments under one roof, a marked contrast to the old days, when the school was at least a quarter of a mile from the hospital. The lecturer also spoke of the many mechanical aids to diagnosis which had come into use during his half century of professional experience, and concluded with a few happily chosen words of advice to the younger members of his audience. The address was received with marked attention, and was loudly applauded at its termination.

MALTHUSIAN PRINCIPLES AND PRACTICE.

A FEW weeks since a medical man, the author of a book called *The Wife's Pamphlet*, was called upon to answer for his conduct by the licensing body of whom he held his qualification. He is accused of having published and exposed for sale an indecent publication, and of having appended thereto advertisements of an unprofessional character. The Malthusian League affect to see in this call to order another example of the intolerance which they allege to have been shown throughout towards these doctrines by what they style the "conventional classes." An appeal has therefore been made on behalf of the victim of oppression. As a matter of fact, however, an

endeavour is made to confound two things essentially different. No one objects to medical men proclaiming their belief in the gruesome prophecies to which Malthus has given his name if they be really of opinion that the human race, at some future period, is destined to battle with the "limits of subsistence." It is quite another matter when pamphlets are scattered broadcast among all sorts and conditions of people dealing with artificial methods of preventing conception. Even if such publications only fell into the hands of persons whose moral and intellectual education and capacity would nominally entitle them to be conversant with the subject-matter, their influence cannot be commended; but, as is well known, they are at least as frequently bought by young people, on whom they are exceedingly likely to produce the most prejudicial effect. Such a course will be challenged generally as inconsistent with the principles which guide the medical man in his course through life. His professed mission is to favour a condition of physiological health, and not to foster practices which run counter thereto. The licensing body which has taken this matter in hand is handling a very thorny subject. It is dealing with a matter in which the best motives are apt to be found combined with a course of action of the most dangerous tendency. The judges must be content to be denounced either as persecutors or as latitudinarians. The person charged cannot be condemned without a fair hearing, and it is almost doubtful whether, whatever be the result, the end of so much publicity to erratic views will not be worse than the beginning.

LIEBREICH'S LANOLINE.

Dr. Ernest Wende, writing in the *Medical Press of Western New York*, states that as the result of his experiments with lanoline (the new basis of ointments introduced into therapeutics by Professor Oscar Liebreich, of Berlin), he had found that owing to its non-irritant properties, to its rapid absorption and retention by the skin, cucaine could advantageously be combined with it for the treatment of certain diseases. In burns and scalds he found local treatment with a lanoline and cucaine ointment very satisfactory. One of the formulæ which he used for the purpose was the following: R Cucainæ mur. 1.00, lanolini 24.00, thickly spread upon a piece of soft linen or cambric. Should a more cooling application be desired, the following may be recommended; R Cucainæ chlorid. 2.00; aquæ destill.; lanolini āā 17.00; cetacei 4.00. Or, the painful surface may first be painted with a 2 per cent. solution of cucaine, to be immediately followed by a dressing of: R Acidi carbolici 5.00; lanolini 95.00, spread on lint or some soft cloth. This plan, besides being soothing and protective, has the advantage of being antiseptic, an important point if there is much discharge. The intolerable itching of pruritus ani may be relieved by the application of the following: R Cucainæ chlorid. 1.00—2.00; lanolini 20.00. But as this irritation is generally symptomatic of some disease such as hæmorrhoids, eczema, fistula, thread-worms, constipation, hepatic disorder, etc., it is essential in every case to discover its real cause. Should this be eczema, erythema, or herpes, the following ointment will usually effect a cure: R Cucainæ chloridi 1.00; bismuthi subnit. 2.00; lanolini 20.00. The small excoriations which are so often associated with pruritus heal readily on application of the following: R Argent: nitrat. 0.50—1.00; lanolini 9.00.

HYPODERMIC INJECTIONS OF EUCALYPTOL IN PHTHISIS.

At a recent meeting of the Académie de Médecine, M. Ball read a note on the treatment of phthisis by hypodermic injections of eucalyptol. Out of twenty-one patients on whom the method had been tried, six had died, ten had left the hospital in an improved state, and five were still under treatment. Among the latter was a patient in whose sputum tubercle bacilli were found in May, 1886; there had been none since October. M. Ball thinks that eucalyptol counteracts the septic phenomena of the disease. Its principal effects were cessation of nocturnal sweats and of diarrhœa, diminution of expectoration and fever, and improvement in the general state. The injection consists of eucalyptol in four times its volume of olive-oil, with one gramme of the mixture for each injection. M. Proust read a communication of Dr. Roussel, of Geneva, on the same subject. M. Dujardin-Beaumetz stated that he had found that eucalyptol had a beneficial effect in reducing the pulmonary secretion; but he had not, like M. Ball, found that it destroyed the bacilli. The diminution of the expectoration caused by eucalyptol was occasionally followed by symptoms of oppression. Moreover, the constant exhalation of the eucalyptus through the air-passages caused great disgust to the patient. M. Dujardin-Beaumetz recommended the solution of eucalyptol, in medicinal liquid vaseline, at 20 to 30 per cent. Injections of fifty centigrammes to one gramme of eucalyptol should be given daily. He had obtained similar results with injections of arachis oil, and did not consider eucalyptol injections of much service in tuberculosis.

ANTIPYRIN.

M. Germain Sée has lately reported some cases in which he had observed the anæsthetic action of antipyrin. In cases of subacute rheumatism or hydrarthrosis, in which salicylate of soda, and even the actual cautery, had failed, antipyrin dispelled the pain and stiffness in a few days. Similar results were obtained in acute gout. This effect of antipyrin is more especially visible in such cases as facial neuralgia, obstinate headache, neuritis, lumbago, and other muscular pains. It also relieves the acute pain associated with locomotor ataxy and with certain forms of heart disease. M. Sée gave three to six grammes a day, in a watery solution, each spoonful of which contained one gramme. The drug does not affect the action of the heart or the circulation. Subcutaneous injections of two grammes of antipyrin in a dog weighing ten kilogrammes caused decided diminution of sensibility in the limb in which the injection was made; it seemed to act directly upon the muscular nerves.

CRANIOTOMY IN EGYPT.

In a letter addressed to the *Shiffa*, a medical paper published in Arabic, Dr. Grant Bey, of Cairo, the respected Senior Surgeon to the Egyptian Railways, calls attention to the disgraceful conditions under which the native midwives exercise their calling. Owing to the Mahometan prejudice against male medical attendants, these women have practically the monopoly of the practice of midwifery, though it would seem they are not required to afford proof of any special knowledge of the subject before being allowed to practise. They are ignorant of the use of any obstetrical instruments except the rude weapons with which they perform craniotomy or embryotomy. The moment any difficulty is experienced in effecting the delivery of the child, the native midwife has recourse to this operation, with results which are hardly more fatal for the child than for the mother. One native midwife claimed to have performed ten craniotomies in a single day, and there can be little doubt that the practice is carried to such an extent as to account in some degree for the fact that the population of Egypt remains stationary. Moreover, they are so much in the habit of procuring abortion, almost without any attempt at concealment, that medical men are pestered with applications to "*faire cette petite operation.*" Several instances are given of the brutal and inconsiderate manner in which the midwives proceed. Notwithstanding the dislike entertained for male medical attendants, some of the better class people will, under great pressure, have recourse to them. It was in this way that the writer of the letter was called in to attend a native woman, on whom the midwife in attendance proposed to perform the favourite operation of craniotomy. The patient was a primipara, and was said to have been in labour for twenty-four hours. On examination the head was found to be still at the brim, but delivery was effected without any extraordinary difficulty by means of the forceps. In a subsequent case the midwife had used a rough

piece of iron twisted into a hook, with which she had separated the head, but had been unable to bring down the body. This was removed by turning, but the maternal structures had been so extensively lacerated that the patient died. Representations have been made to the authorities, and the facts laid before them, with the object of instituting some sort of standard for native midwives, and to provide for suspension in cases of flagrant malpraxis. So far, however, no steps have been taken in the matter. For reasons which are not made clear, the lying-in hospital at Qasr-el-Ainy has been done away with, and a valuable means lost of imparting instruction in the principles and practice of obstetrics. The Sanitary Board, whose duty it is to control matters bearing on public health, would appear to be in a chaotic condition, its sittings, when they take place, being devoted to personal recriminations and the elaboration of "jobs." Dr. Mohammed Aly Pasha, when Sanitary Inspector at Cairo, formerly used his powerful influence to improve matters, but since his death things have become worse than ever. The authorities in Egypt at present appear to be indifferent to matters outside the scope of diplomatic interference.

SALOL.

SOME details concerning this new remedy have already been given in recent numbers of the JOURNAL (March 5th, p. 537, and April 9th, p. 793), but some further information on the subject may be acceptable. Salol was discovered three years ago by Professor Nencki, of Berne. It is a derivative of salicylic acid, in which one atom of hydrogen is replaced by the phenol group. It is a white powder, slippery to the touch, with an aromatic smell but no taste, soluble in alcohol, but not in water. According to M. Nencki's experiments on animals, salol, when given with the food, is again resolved into its two component elements, which are found in the urine in the form of urate of salicyl. This decomposition seems to be effected by the pancreas in the duodenum, and not in the stomach, which explains the absence of nausea, vomiting, etc. The dose is the same as that of salicylate of sodium, but it may be increased to six or eight grammes daily. The urine, under the influence of this drug, becomes completely black, as after the absorption of carbolic acid. The latter, moreover, is found in salol in the proportion of 38 per cent. No symptoms of poisoning are observed, probably on account of the fact that the carbolic acid is recombined in the stomach, and not absorbed. Salol gives better results than salicylate of sodium in rheumatism, and causes more rapid subsidence of the fever. It possesses antipyretic properties, and in phthisis it has lowered the temperature from 40° to 36° C. (104° to 96.8° F.). In such cases it is best to begin with small doses—for example, fifty centigrammes. The use of salol is indicated in diabetes. It is employed as a local antiseptic in all intestinal catarrhs; and, as Levachoff has shown that salicyl dilutes the bile, it may also be given in typhoid fever to disinfect the ulcers, and in cholera to destroy intestinal parasites. One of its most important uses is found in the treatment of catarrh of the bladder. Urine treated with salol does not become putrid until after a period of from four to six weeks. As an antiseptic, salol may advantageously be substituted for iodoform and corrosive sublimate. Although salol does not kill the bacilli, it prevents their development, and, applied to wounds, may be more efficacious than any other antiseptic.

TOTAL EXTIRPATION OF THE UTERUS IN GERMANY.

READERS of German medical journals must be astonished at the large series of total extirpations of the uterus which different operators have recently recorded. This perilous operation is of a nature totally different to the numerous varieties of abdominal section which have developed since the establishment of ovariotomy. In the *Centralblatt für Gynäkologie* for April 23rd, Dr. C. H. Stratz writes some severe strictures on "Furor Operativus," in reference to an article published by a Cologne surgeon in a recent number of the *Archiv für Gynäkologie*. This surgeon claims to have performed sixteen cases of his "extra-peritoneal method of extirpation of the uterus." The indications for operating were in five cases cancer, in one fibroma (operation incomplete), in four endometritis, in three "retroflexio or versio fixata," in two prolapsus, one of these being complicated with endometritis, in one "pruritus uterinus," and in one neuralgia and retention of urine, making up the sixteen cases, the incomplete operation being excluded. The fact that out of sixteen cases only five were cancerous is sufficient to characterise the questionable boldness of the operator. "It is astounding," Dr. Stratz observes, "to read on what slight excuse a difficult and dangerous operation was performed." In one case the patient complained of sacral pains, and could also localise distinctly to the uterus the point whence quite intolerable pain proceeded. This fact induced the surgeon to operate. As for the operation itself, the surgeon admitted that the extirpation was not complete, his practice being to cut away as much as he could, for in all cases some of the muscular wall was left behind, in some a portion of the uterine mucous membrane as well, or even a complete piece of uterus close to the tube. All the cases recovered, but Dr. Stratz sees no defence of the modified operation in this fact. Dr. Stratz severely criticises the surgeon's anatomical knowledge, but admits that the man whom he takes to task has at least not shunned publicity. The surgeon in question appears to possess the boldness and courage of a Mansfeld or a Christian of Brunswick; it would be well and still more to the point if he cultivated the true scientific principles of his contemporary professional countrymen.

LAPAROTOMY IN AMERICA.

IN the *New York Medical Record* for March 19th, Dr. Gill Wylie publishes tables of 125 laparotomies performed by him between November, 1882, and December, 1886. Of these, 74 were cases of removal of the appendages, with 5 deaths; 26 were ovariotomies, with 3 deaths (1 gangrenous, 1 suppurating cyst, 1 tapped eleven times); 7 were suprapubic hysterectomies, with 3 deaths; 18 were miscellaneous, of these 1 died—a case of general acute peritonitis due to bursting of a suppurating tube. Thus the total mortality was 12. Dr. Wylie has found that washing out the peritoneal cavity with a great quantity of water heated to about 105° is a powerful and efficient agent in preventing or counteracting shock, as well as an excellent method of cleansing the peritoneum and checking capillary hæmorrhage. In two cases where the shock was severe, the peritoneum was washed out with about two gallons of hot water, and the results were most satisfactory. Dr. Wylie further believes that the tympanites, vomiting, and other symptoms supposed to be due to septic peritonitis after laparotomy are best overcome by enemata and, if these fail, by a quick purgative. He thinks it probable that in many cases the persistent and exhausting vomiting may be the direct result of intestinal distension due to bands of adhesion. He usually gives enough opiates to relieve pain and restlessness, and to keep the respiration down to 16, or even 12 in some cases. But when tympanites or eructations and characteristic vomiting set in, he at once moves the bowels by turpentine or ox-gall enemata, or by a seidlitz powder or Rochelle salts. Dr. Wylie says in conclusion that he took the hint that a brisk purgative would cure septic peritonitis from a remark of Mr. Lawson Tait, but the method of effecting it, and the explanation as to preventing intestinal obstruction, he claims as his own.

SCOTLAND.

SUMMER TRIP TO NORWAY.

FOR those of the profession who enjoy a holiday of sailing and beautiful scenery out of the ordinary tourist's track, and who do not purpose attending the International Medical Congress at Washington, we heartily recommend a study of the programme of the North of Scotland Steam Navigation Company in relation to trips to Norway. This Company has had specially constructed for passenger-tourist traffic a very fine vessel called the *Saint Sunniva*, by which trips are

made to Norway, visiting all places of interest there, and giving an unequalled opportunity of observing the mountain and fjord scenery of Norway economically and yet comfortably. For patients to whom a voyage of from two to three weeks is recommended one could not do better than send them by the *Saint Sunniva*.

MEDICAL MEN AS ARCHERS.

RARELY is there a competition among the Royal Company of Archers (the Queen's Body Guard in Scotland) at which some member of the medical profession fails to take an honourable place. At a competition last week for the "Dalhousie Sword," the trophy was gained by Dr. W. Allan Jamieson, Physician to the Fever Hospital, and Lecturer on Diseases of the Skin, Edinburgh.

PRESENTATION TO DR. JOSEPH BELL.

LAST week a large meeting was held in the Royal College of Surgeons' Edinburgh for the purpose of presenting a testimonial to Dr. Joseph Bell, who recently completed his term of office as Surgeon to the Royal Infirmary, having served that institution almost constantly since his graduation. It was presided over by the President of the College, Dr. Argyll Robertson, and was attended by a large number of the medical profession. The presentation consisted of a portrait of Dr. Bell, from the easel of Mr. James Irvine, and bears the following inscription: "Presented to Joseph Bell, Esq., M.D., F.R.C.S.Ed., on the termination of his appointment as Surgeon to the Royal Infirmary, by numerous students of the School of Medicine, and by many professional friends in town and country. 1887." Dr. Littlejohn spoke in laudatory terms of Dr. Bell's services as a surgeon and teacher, and stated that the movement to present Dr. Bell with a testimonial had originated with the students; and Mr. R. A Fleming, representing the students' committee, bore testimony to the high esteem in which Dr. Bell was held by the students. The chairman, in making the presentation, wished Dr. Bell long years of usefulness by the exercise of those brilliant talents by which he had achieved for himself a high position among Edinburgh surgeons, and by which he had done so much to relieve suffering. Dr. Bell replied, expressing strongly the warm feeling he has always felt for students of medicine.

IRELAND.

DR. STAFFORD, of Boyle, has been appointed a justice of the peace for the County Roscommon.

THRONE HOSPITAL, BELFAST.

MRS. SHIEL, the lady-superintendent of this institution, has resigned, and the Board of Management are seeking a successor.

COUNTY ANTRIM GAOL.

DR. J. C. SMYTH has been appointed medical attendant to this institution, in the room of the late Dr. John Moore. This appointment meets with the cordial approbation of both the public and the profession.

LONGEVITY IN IRELAND.

DURING the March quarter the deaths registered in Ireland included thirteen which occurred among centenarians. Three died at 100 years, one at 101, one at 102, one at 103, four at 105, and one each at 106, 108, and 109 years respectively.

BELFAST ROYAL HOSPITAL: QUARTERLY MEETING.

THE usual quarterly meeting of this institution was held on April 24th, under the presidency of Mr. W. T. B. Lyons, D.L. The staff reported that 499 intern patients—233 medical and 266 surgical—had been treated during the quarter, and that 47 operations had been performed. During the same period there were treated as extern patients 3,260, of whom 894 were medical and 2,366 surgical; and 160 minor operations were performed. A bequest of £500 had been received from the representatives of the late Mr. James Carlisle, and £250 had been received in miscellaneous donations. The general subscriptions, and those from the working-classes, were nearly up to average. Satisfaction was expressed by various speakers at the thoroughly efficient state of the institution.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

WITH the intention of enabling students who commenced the study of medicine before 1882, and who intend presenting themselves at the "old scheme" examination of this College, to register their diplomas before the date named, the Council have ordered that the primary examinations shall commence on June 13th instead of June 20th, as previously announced, and the final examinations about a week later.

ACCIDENT TO A MEDICAL MAN.

WE are sorry to record that Dr. R. W. Stewart, of Glasslough, Co. Monaghan, has met with a serious accident, resulting in a compound fracture of the right leg, rendering amputation necessary. He is reported to be progressing favourably.

OVERCROWDING IN WATERFORD.

IT was recently reported by the sanitary officer that in four tenement-houses in Waterford he found no fewer than 131 human beings, and a horse which shared the room of one of the inmates. A family of eight was found in a small room not properly capable of accommodating more than two persons.

SANITARY STATE OF MACROOM.

DURING the past five weeks fifty-one cases of fever have taken place in Macroom, probably due to its insanitary condition. The city engineer has recently drawn the attention of the Public Health Committee of the Corporation of Cork to the neglect of ordinary sanitary regulations, and the pollution of the Dripsey, a tributary of the river Lee.

ST. JOSEPH'S HOSPITAL FOR SICK CHILDREN, DUBLIN.

THE annual meeting of the supporters of this hospital was held on May 22nd. Dr. McVeagh, one of the physicians of the hospital, read the annual report. The institution is now in the fifteenth year of its existence. Although the accommodation had been enlarged it still falls far short of what was needed to meet the requirements of such a city as Dublin, to say nothing of the urgent calls made on its space by the provincial districts. From August 2nd, 1886, to the present date 337 patients had been admitted to the wards. Of these 167 were cured, 23 died, 8 were removed for infectious diseases, 24 were sent out under treatment, 12 were discharged as incurable, 38 recovered, and 65 are at present in the hospital. To the accident ward 18 girls and 16 boys were admitted with serious injuries. Of these 1 boy and 1 girl died. In the surgical wards 11 girls and 9 boys underwent operations of the first magnitude, besides which 54 smaller operations were performed with only one death, which occurred after excision of the hip. At present the beds available are 70, but there is accommodation for 100, and it is only the absence of sufficient funds which prevents the unoccupied beds being utilised. During the above-mentioned period the number of extern patients treated at the dispensary was 4,823. The report also stated that it is contemplated to establish a clinical class during the ensuing session, which would afford students an opportunity of studying the diseases peculiar to early life. In reference to this hospital, which is ably managed by the Sisters of Charity, the report of the recent Dublin Hospitals Commission states:—

"That there is special need of a large and well-supported hospital of the kind in Dublin cannot be doubted, and when we consider the healthy situation of this institution, the commodiousness of the building, and its excellent management, we regret exceedingly that, owing to the want of funds, its sphere of usefulness has been so much restricted."

BRITISH MEDICAL TEMPERANCE ASSOCIATION.

THE annual meeting of the Central Irish Branch of the British Medical Temperance Association will be held in the Royal College of Surgeons, Dublin, on Tuesday, June 7th, at 4.30 P.M. The chair will be taken by the President of the Branch, Deputy Surgeon-General F. L. G. Gunn. Brigade-Surgeon F. E. McFarland (President of the North of Ireland Branch), Dr. T. Collins, Dr. Lunn, Mr. Learson, and Mr. Robert Morton, F.R.C.S., Nenagh, will speak. The meeting is open to all members of the medical profession.

VACCINATION.

ACCORDING to the returns of vaccination for the first quarter of the year, it appears that 17,818 persons were successfully vaccinated in Ireland; in 3,458 cases the operation was postponed, while 84 children were reported as insusceptible of vaccination. The deaths of 1,677 unvaccinated children under three months old were registered during the quarter, making a total of 23,037 children with regard to whom particulars as to vaccination were ascertained. The registrar's notes show that the disparity between this number and the number of births registered was in great part owing to the difficulties in the way of vaccination caused by the inclement weather which prevailed.

THE ROYAL UNIVERSITY AND NIGHT LECTURES.

IT may be remembered that the Standing Committee of this University passed a resolution towards the end of March last that certificates of night lectures attended after the 31st of that month should not in future be accepted for any medical examination of the University. This enactment, made so sudddenly and without warning, was felt to press very hardly on many meritorious students who certainly are not themselves to blame, although the system of night lectures may, in the opinion of some, be objectionable. Judging from a resolution adopted at the recent meeting of the University Senate, the Standing Committee seem to have acted too precipitately in this matter. They have been requested, on the motion of the ex-President of the King and Queen's College of Physicians, seconded by Dr. Whittle, of Belfast—neither of whom can be considered as men likely to be in favour of a defective method of education for medical students "to consider and report upon the question as to the acceptance of night lectures;" and it was also enacted that, "pending the future determination of this matter by the Senate, the resolution recently arrived at regarding the non-acceptance of such certificates should not come into operation." We are glad that the Senate saw the justice of this proposal, and were not induced to uphold a resolution of a subordinate committee which was open to a charge of invidiousness and gave rise to much discontent. By the resolution now adopted the whole question of the recognition or non-recognition of night lectures can be fairly and fully debated; and we may take it for granted that, whatever conclusion is arrived at, the interests of the students will not be allowed to suffer.

MEDICAL ATTENDANCE AND ORGANISATION COMMITTEE.

AT a meeting of the above committee, held on Tuesday, May 24th, the following resolution was carried unanimously: "That it is desirable that hospitals should enter into arrangements for co-operation with provident dispensaries in their neighbourhoods, and that a sub-committee be appointed to prepare a scheme defining the relations that should subsist between them."

The following were appointed as the sub-committee: Sir Spencer Wells, Bart., Dr. W. M. Ord, Dr. Gilbart Smith, Dr. W. E. Steavenson, Dr. J. G. Glover, Dr. Walter Smith, Dr. F. H. Alderson, Dr. J. C. Steele, Mr. W. G. Dickinson, Mr. W. Bousfield, Lieut.-Colonel Montefiore, and Mr. W. G. Bunn (secretary).

It was also resolved: "That the governing bodies of hospitals be requested to consider the advisability of attaching a provident branch to the out-patient departments."

The Chairman (Sir Spencer Wells) was empowered to name a sub-committee to consider the best means of carrying out the resolution.

The next meeting will be held on Tuesday, June 14th.

MEMORIAL PORTRAIT OF SIR WILLIAM JENNER, BART., K.C.B., M.D., etc.

NUMEROUS friends and many former pupils of Sir William Jenner have for some time past desired that there should be an enduring memorial of one so generally and so highly esteemed, and who has attained to so distinguished a position in his profession. With this object a preliminary meeting has been held, and Sir William Jenner has consented to sit for his portrait to Frank Holl, Esq., R.A., to be presented to Sir William by the subscribers; a replica to be presented to the Royal College of Physicians, and also to University College, London.

In order that as many as possible of Sir William Jenner's friends and former pupils may take part in the memorial, it has been decided that any sum, however small, may be subscribed; and that the names only, and not in any case the sum subscribed by each, be published.

A Committee is in course of formation, and anyone desiring that his name be added thereto should signify the same without delay to one of the following: C. J. Hare, M.D., 15, Manchester Square, W., G. D. Pollock, Esq., 36, Grosvenor Street, W., Honorary Treasurers; J. Russell Reynolds, M.D., 38, Grosvenor Street, W., Sir Henry Pitman, M.D., 28, Gordon Square, W.C., Honorary Secretaries, to any one of whom subscriptions may be paid.

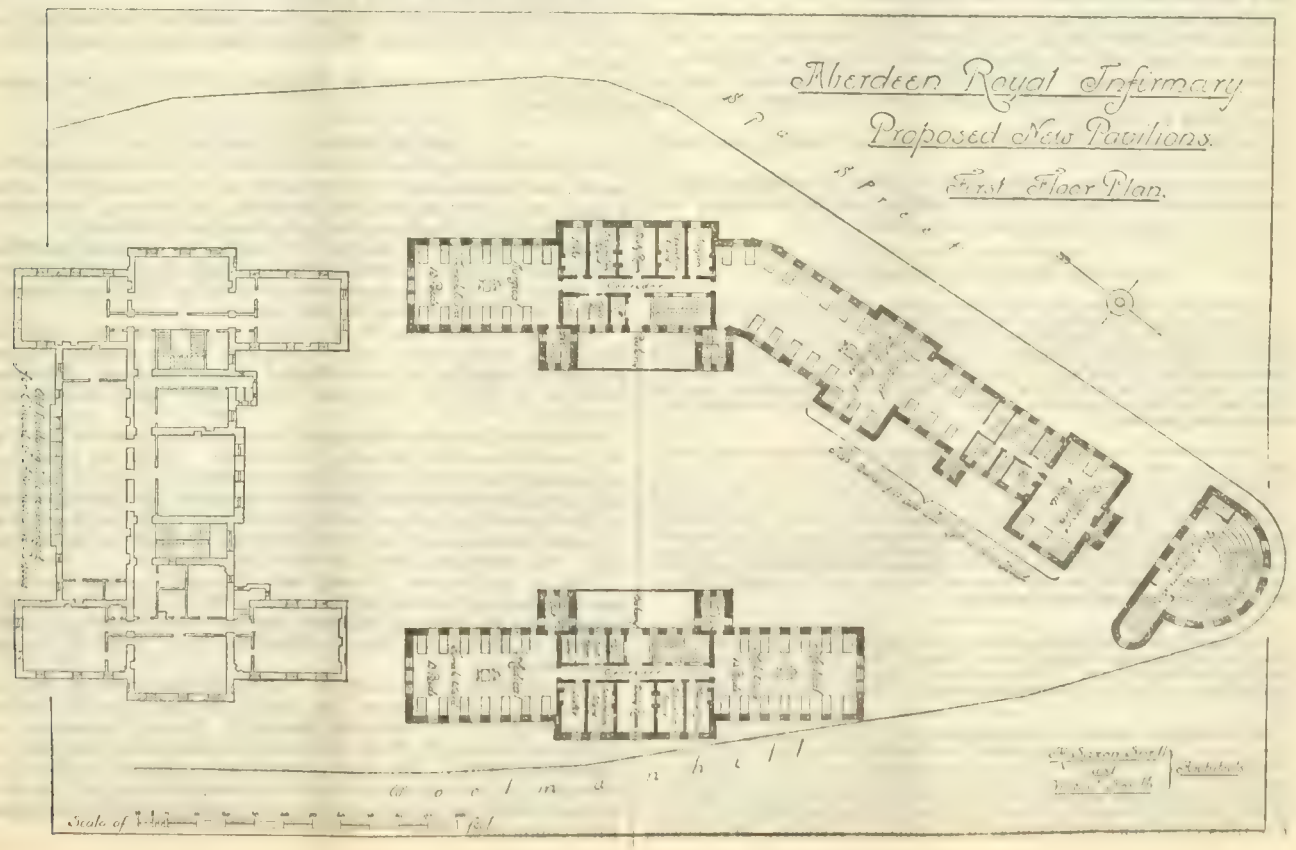
ABERDEEN ROYAL INFIRMARY.

DESCRIPTION OF DESIGN FOR ENLARGING THE ROYAL ABERDEEN INFIRMARY.

THE accompanying plans and bird's-eye view of the proposed alterations and additions to the Aberdeen Royal Infirmary Buildings are designed by Mr. Saxon Snell. The present front main building will be used for administrative and clinical purposes only, and all patients will be accommodated in new pavilions to be erected at the rear of the ground facing respectively Spa Street and Woolmanhill. The plans have been prepared, in conjunction with Messrs. W. and J. Smith, and with the assistance of and suggestions by the Medical Staff, Superintendent, and Plans Committee.

The West Pavilion retains the present so-called Typhus House, converting it into special wards. A large extension of this building to the south gives the new surgical hospital, and, attached to it, the operating theatres. All the wards in this, as well as in the other pavilion, will be admirably lighted, and will provide for thorough cross ventilation. The cubic space provided throughout is 1,400 feet per bed. In the centre block of the pavilion, on each floor, there are provided rooms for the house-surgeon and sister, two separation wards, duty-room, bath-room, and lift. The special wards are provided with similar accommodation to the extent necessary for them. On the basement of the West Pavilion, on the level of Spa Street, there is accommodation, with separate access, for the Treasurer's offices, and also for the Dispensary. At the north end of the West Pavilion, and quite detached from it, is the Pathological House, containing in the basement, mortuary, ambulance-shed, and other accommodation; on the ground floor, the Museum; and over it the *Post-mortem* Theatre. The new East Pavilion is shown, as it was preferred by the Medical Staff, and contains a complete medical hospital. An alternative plan was considered, which kept up the present Typhoid House, but though it was a practicable plan, it was not thought nearly so convenient, and accordingly the suggestion was abandoned. It was not thought desirable to sacrifice anything for the sake of an old building not originally constructed for wards. The centre block of the East Pavilion contains exactly similar accommodation to the centre block of the West Pavilion. On the third story of the centre block of the East Pavilion, on a floor by itself, and in a position completely detached from all other wards, is the accommodation for the treatment of erysipelas. The following is the number of beds for patients which will be provided:—Surgical, 63 males, 39 females; eye, 6 males, 6 females; lock, 6 males, 6 females; diseases of women, 6 females; medical, 39 males, 39 females: erysipelas, 4 males, 4 females. Total, 118 males, 100 females. Separation wards, 15. Grand total, 233. The number of patients at present varies from 152 to 175. The approximate cost of the new design will be £30,890. This is at the rate of £130 for each bed, and the economy of adopting the proposal to extend the present building rather than to erect a new one will appear when it is remembered that the Edinburgh Infirmary cost £477 a bed, and that this was economical when compared with St. Thomas's Hospital, which cost £777, or the Hôtel Dieu in Paris, upon which £1,215 a bed was expended.


ABERDEEN
ROYAL INFIRMARY
VIEW
SHEWING PROPOSED
NEW PAVILIONS
H SAXON SNELL ARCT
W & J SMITH


Aberdeen Royal Infirmary
Proposed New Pavilions.
First Floor Plan.

ASSOCIATION INTELLIGENCE.

THE President of the Council of the British Medical Association begs to inform the Members that the New Premises, 429, Strand, are now in full occupation, and are open to inspection by the Members. The President of the Council hopes that every Member of the Association will visit the New Offices and inspect the arrangements whenever an opportunity offers.

May 20th, 1887.

NOTICE OF QUARTERLY MEETINGS FOR 1887. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on July 13th and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, June 23rd and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE and on the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE are now closed.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, and HABITS OF INTEMPERANCE, a full Report on OLD AGE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 429, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The next meeting will be held at the Royal Forest Hotel, Chingford, on Thursday, June 2nd, at 6 P.M. The chair will be taken by J. S. Bristowe, M.D., F.R.S., President of the Branch. Business:—Election of Secretary. At 6.15 (sharp) the members and their friends will dine together. Tickets, exclusive of wine, 8s. each. Those intending to be present are requested to communicate as soon as possible with the Honorary Secretary.—J. W. HUNT, M.D., Honorary Secretary, 101, Queen's Road, Dalston.

CAMBRIDGESHIRE AND HUNTINGDONSHIRE BRANCH.—The annual meeting of this Branch is proposed to be held at Bishop's Stortford, on Friday, June 24th, 1887. Henry Cribb, Esq., President-elect. It is proposed to have one or two selected subjects for discussion in addition to the president's address, to be followed by communications and exhibition of specimens as time may permit. Members wishing to make communications or to exhibit specimens are requested to state their intention to Dr. Anningson, Cambridge, for insertion in the programme of proceedings. A dinner will be arranged at the Railway Hotel, Hockerill, at (probably) 6.30 P.M., of which the particulars will be given later.—BUSHELL ANNINGSON, Walthamsal, Barton Road, Cambridge.

SOUTHERN BRANCH.—The 14th annual meeting will be held on Thursday, June 16th, 1887, at the Army Medical School, Netley. Dr. J. R. Kealy (President) will take the chair at 1 P.M. Members desirous of reading papers are requested to communicate at once to the Honorary Secretary, J. WARD COUSINS, Portsmouth.

SOUTH MIDLAND BRANCH.—The annual meeting of this Branch will be held at the General Infirmary, Northampton, on Thursday, JUNE 2nd, at 2.30 P.M. The President, H. B. Spurgin, Esq., requests the pleasure of the company of the members to luncheon at his residence, 82, Abington Street, prior to the meeting, at 1 P.M. Gentlemen accepting will kindly write to the President. Members wishing to bring forward papers or cases at the meeting will oblige by sending the titles of the same without delay to the Honorary Secretary. The following communications have been promised:—Mr. W. H. Bull: A Case of Compound Depressed Fracture of the Skull; Trephining; Recovery. Dr. Buszard: Some Forms of Locomotor Ataxy. Dr. Newman: Visit to a Swiss Hospital—Antiseptic Methods. Mr. Milligan: A short paper on Suprapubic Lithotomy. Mr. C. R. Owen: A Case in which the Entire Scalp has been removed. Dr. Jones: Abnormalities of Refraction of the Eye, a Cause of Headache and Allied Symptoms. Mr. Kennedy: Puerperal Eclampsia. Mr. Rogers has also promised a paper. Mr. Evans (if time permit) will make some remarks on the recent action of the Society of Apothecaries.—C. J. EVANS, Honorary Secretary.

LANCASHIRE AND CHESHIRE BRANCH.—The fifty-first annual meeting for the election of office-bearers and council will be held in the Pendlebury Memorial Hall, Stockport, on Wednesday, June 15th, at 2.30 P.M. The subject of the President's address will be "The Position of the General Practitioner in the Profession." During the course of the meeting a presentation of a piece of plate will be made to Dr. Edward Waters, of Chester. The members will dine together in the Palm House, Royal Jubilee Exhibition, Old Trafford, Manchester, at 6 P.M., tickets (application for which should be made at once) 7s. 6d. each (exclusive of wine). Members will be conveyed from Stockport to the Exhibition by train free of charge. Gentlemen wishing to read papers or show cases are requested to communicate with the Honorary Secretary without delay.—CHARLES EDWARD GLASCOTT, M.D., Honorary Secretary, 23, St. John Street, Manchester.

MIDLAND BRANCH.—The annual meeting will be held in the Board Room of the Infirmary, Derby, on Thursday, June 9th, at 2 P.M. After the transaction of the usual business, the report from the four secretaries respecting reorganisation of the Branch will be laid before the meeting. Papers to be read and discussed:—1. Dr. Newman: Goitre, Treatment by Operation in Swiss Hospital. 2. Dr. Elder: Notes of my Fifth Nephrectomy, with Remarks on the Treatment of Hydro-nephrosis. 3. T. Sympson, Esq.: Report of Case of Myxoma of the Leg. 4. C. H. Hough, Esq.: The Treatment of Fracture with Plaster-of-Paris Splints. 5. Dr. Webb: Mistakes in Diagnosis. Luncheon will be provided by the President-elect, at the Infirmary, at 1 o'clock. Dinner at the Midland Hotel at 5 o'clock; tickets 7s. 6d., exclusive of wine.—W. A. CARLINE, M.D., Honorary Secretary and Treasurer.

METROPOLITAN COUNTIES BRANCH: NORTH LONDON DISTRICT.

A MEETING of this District was held in the drawing-room of the Deaconesses' Institution and Training Hospital, Tottenham, N., on Thursday evening, April 28th, 1887.

Myelitis.—Dr. BRISTOWE, President of the Branch, gave a clinical address, and cited several cases of myelitis of much interest.

Eucalyptus Oil in Diphtheria.—Dr. OGIER WARD read a paper on the treatment of diphtheria by eucalyptus oil. His cases were fairly chosen, some recovering, and one or two fatal.

Cases.—Surgical cases which had been treated in the hospital were shown by Dr. E. HOOPER MAY, and some nervous cases by Dr. RASCH.

The meeting, which was the first held at Tottenham, was numerously attended.

SOUTH-WESTERN BRANCH.

THE annual meeting was held on May 18th, at the Athenæum, Plymouth, and was attended by between fifty and sixty members. After a short valedictory address, the President, Dr. POWELL, introduced Mr. P. Swain, the President-elect, who then took the chair.

Vote of Thanks to the Retiring President.—On the motion of Dr. ALEXANDER (Paignton), seconded by Mr. CARLYON (Redruth), a cordial vote of thanks was unanimously accorded to Dr. Powell for his services as President during the past year.

Report of Council.—Mr. W. J. SQUARE moved that the Report of the Council be approved and adopted, and that a donation of ten guineas be made to the British Medical Benevolent Fund. This was seconded by Mr. D. THOMPSON (Launceston), and unanimously agreed to.

Payment of Travelling Expenses of Representatives on the Council of the Association.—The following resolution: "That the travelling expenses of the representative member or members of any Branch for their attendance at the four quarterly meetings of the Council be paid by the Association, so soon as the Branch, by a resolution adopted at a general meeting, shall have decided to ask that such expenses be so paid," was after some discussion carried *nem. con.*

Place of next Annual Meeting, and Choice of President-Elect.—It was unanimously resolved, on the motion of Dr. BAMPTON (Plymouth), seconded by Dr. POWELL (Torquay), that the annual meeting in 1888 be held at Exeter, and that Dr. John Woodman, F.R.C.S., be the President-elect.

New Members of Branch Council.—The following were elected, on the motion of Mr. PEARSE (St. Tudye), seconded by Mr. GOULD (Hatherleigh): E. J. Dourville, Exeter; J. Somers, Broadclyst; J. D. Harris, Exeter; F. Webb, Dawlish; L. Mackenzie, Tiverton; J. Woodman, Exeter. Dr. Deas (Exeter) was re-elected as Honorary Secretary, and was also elected as the representative on the Council of the Association, as well as representative member of the Parliamentary Bills Committee.

In the evening the annual dinner of the Branch was held at the Royal Hotel. Most of the members who attended the meeting were present, as well as a number of guests, invited by the President, amongst whom were Admiral Phillimore, the Mayor of Plymouth, the Revs. Prebendary Wilkinson and B. Bird, Inspector-General Haran, R.N., Deputy Surgeon-General Meadows, A.M.D., Lieutenant Dicken, R.N., etc.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIFTH ANNUAL MEETING.

THE fifty-fifth Annual Meeting of the British Medical Association will be held at Dublin, on August 2nd, 3rd, 4th, and 5th, 1887.

President: Withers Moore, M.D., F.R.C.P., Senior Physician to the Sussex County Hospital, Brighton.

President-elect: John T. Banks, M.D., D.Sc.(Hon.), F.K.Q.C.P.I., Regius Professor of Physic in the University of Dublin.

President of the Council: Sir B. Walter Foster, M.D., M.P., F.R.C.P., Professor of Medicine in Queen's College, and Physician to the General Hospital, Birmingham.

Treasurer: C. Macnamara, F.R.C.S., Surgeon to the Westminster Hospital, London.

An Address in Medicine will be delivered by W. T. Gairdner, M.D., F.R.C.P.Ed., Professor of Medicine in the University of Glasgow.

An Address in Surgery will be delivered by Edward Hamilton, M.D., Fellow and Professor of Surgery in the Royal College of Surgeons in Ireland.

An Address in Public Medicine will be given by the Rev. S. Haughton, M.D., F.R.S., D.C.L., Senior Fellow, Trinity College, Dublin.

All the rooms required for the purposes of the meeting will, by the kindness of the Provost and Senior Fellows, be provided in Trinity College. The Sections of Medicine, Surgery, Obstetric Medicine, Therapeutics and Pharmacology, and of Pathology, will be held in the Medical School, and the remaining Sections and Subsections in the Museum Buildings of the University. The President's Address will be delivered in the Dining Hall, and the General Meetings will be held in the Examination Hall, where also the stated Addresses will be delivered.

The scientific business of the meeting will be conducted in eight Sections and two Subsections, as follows, namely:

Anatomical Theatre.

A. MEDICINE.—*President*, William Moore, M.D. *Vice-Presidents*, H. C. Bastian, M.D., F.R.S.; J. Magee Finny, M.D. *Honorary Secretaries*, T. Gilbart Smith, M.D., F.R.C.P., 68, Harley Street, Cavendish Square, London, W.; C. J. Nixon, M.D., 2, Merrion Square, Dublin.

Chemical Theatre.

B. SURGERY.—*President*, Sir George H. Porter, M.D. *Vice-Presidents*, Alexander Ogston, M.D.; John Fagan, F.R.C.S.I. *Honorary Secretaries*, W. Thomson, F.R.C.S.I., 34, Harcourt Street, Dublin; R. J. Godlee, F.R.C.S.Eng., 81, Wimpole Street, London, W.; C. B. Ball, M.D., F.R.C.S.I., 16, Lower Fitzwilliam Street, Dublin.

Surgical Theatre.

C. OBSTETRIC MEDICINE.—*President*, A. V. Macan, M.B. *Vice-Presidents*, T. More Madden, M.D.; A. L. Galabin, M.D. *Honorary Secretaries*, Wm. J. Smyly, M.D., 56, Fitzwilliam Square, Dublin; Wm. Duncan, M.D., 6, Harley Street, Cavendish Square, London, W.

Medical Theatre.

D. THERAPEUTICS AND PHARMACOLOGY.—*President*, Wm. Whitla, M.D. *Vice-Presidents*, Matthew Charteris, M.D.; D. J. Leech, M.D. *Honorary Secretaries*, Chas. Y. Pearson, M.D., 42, King Street, Cork; Michael McHugh, M.B., 25, Harcourt Street, Dublin.

Theatre of Physiological Laboratory.

E. PATHOLOGY.—*President*, Samuel Gordon, M.D. *Vice-Presidents*, A. W. Foot, M.D.; David J. Hamilton, M.D. *Honorary Secretaries*, Theodore D. Acland, M.D., 7, Brook Street, Grosvenor Square, London, W.; Henry T. Bewley, M.B., Willow Park, Booterstown, Co. Dublin.

Divinity Theatre.

F. PUBLIC MEDICINE.—*President*, Sir Thomas Crawford, M.D., K.C.B. *Vice-Presidents*, John S. Taylor, M.D.; R. Thorne Thorne, M.D. *Honorary Secretaries*, John Wm. Moore, M.D., 40, Fitzwilliam Square West, Dublin; John F. W. Tatham, M.D., Town Hall, Salford.

Examination Room.

G. PSYCHOLOGY.—*President*, J. R. Gasquet, M.B. *Vice-Presidents*, Frederick Needham, M.D.; Oscar T. Woods, M.D. *Honorary Secretaries*, Conolly Norman, F.R.C.S.I., Richmond District Lunatic Asylum, Dublin; T. Lyle, M.D., Rubery Hill Asylum, Bromsgrove, Worcestershire.

Physical Theatre.

H. OPHTHALMOLOGY.—*President*, H. R. Swanzy, M.B. *Vice-Presidents*, D. Argyll Robertson, Pres.R.C.S.Edin.; Priestley Smith, M.R.C.S.E. *Honorary Secretaries*, A. H. Benson, M.B., 42, Fitzwilliam Square, Dublin; A. W. Sandford, M.D., 13, St. Patrick's Place, Cork.

SUBSECTIONS.

Engineering Theatre.

I. OTOLOGY.—*Chairman*, E. Woakes, M.D. *Vice-Chairman*, J. B. Story, M.B. *Honorary Secretary*, D. D. Redmond, L.R.C.S.I., 14, Harcourt Street, Dublin.

LARYNGOLOGY AND RHINOLOGY.—*Chairman*, W. H. MacNeill Whistler, M.D. *Vice-Chairman*, Kendal Franks, M.D. *Honorary Secretary*, R. A. Hayes, M.D., 56, Merrion Square South, Dublin.

Local Honorary Secretary.—George F. Duffey, M.D., 30, Fitzwilliam Place, Dublin.

Members desirous of reading papers, or joining in the discussions, are earnestly requested to communicate, without delay, with the Secretaries of the respective Sections.

The front hall over the main entrance to Trinity College will be fitted up as a reception-room, and will be opened at 12 o'clock noon, on Monday, August 1st, and on the following days at 9 o'clock in the forenoon, and will remain open until 6 o'clock in the afternoon of each day, for the issue of tickets to members and for supplying all necessary information.

PROGRAMME OF PROCEEDINGS.

TUESDAY, AUGUST 2ND, 1887.

9.30 A.M.—Meeting of 1886-87 Council. Council Room, Museum Buildings.
10 A.M.—Service at the Pro-Cathedral, Marlborough Street. Sermon by the Rev. T. Martial Klein, S.J., F.R.U.I.
11.30 A.M.—First General Meeting. Report of Council. Reports of Committees; and other business. Examination Hall.
4 P.M.—Choral Service at St. Patrick's National Cathedral. Sermon by the Most Rev. the Lord Bishop of Meath.
8.30 P.M.—Adjourned General Meeting from 11.30 A.M. President's Address. Dining Hall.

WEDNESDAY, AUGUST 3RD, 1887.

9.30 A.M.—Meeting of 1887-8 Council. Council Room, Museum Buildings.
10.30 A.M. to 2 P.M.—Sectional Meetings. Medical School and Museum Buildings.
3 P.M.—Second General Meeting. Address in Medicine. Examination Hall.
9 P.M.—Soirée given by the President of the Association and by the Dublin Branch. Royal University of Ireland.

THURSDAY, AUGUST 4TH, 1887.

9.30 A.M.—Meeting of Council. Council Room, Museum Buildings.
10.30 A.M. to 2 P.M.—Sectional Meetings. Medical School and Museum Buildings.
3 P.M.—Third General Meeting. Address in Surgery. Examination Hall.
7 P.M.—Public Dinner. Leinster Hall.

FRIDAY, AUGUST 5TH, 1887.

10 A.M. to 1.30 P.M.—Sectional Meetings. Medical School and Museum Buildings.
3 P.M.—Concluding General Meeting. Address in Public Medicine. Examination Hall.
4.30 to 6 P.M.—Garden Party.
9 P.M.—*Conversazione* given by Surgeon-General Hassard, C.B., P.M.O Ireland, and the officers of the Medical Staff. Museum of Science and Art.

SATURDAY, AUGUST 6TH, 1887.

Excursions.

ANNUAL MUSEUM.

THE Annual Museum will be held on August 2nd, 3rd, 4th, and 5th, in the Anatomical Department of the Medical School of Trinity College, Dublin.

The Museum will be arranged in the four following Sections, and intending exhibitors are requested to communicate with the Secretary of the Section or Sections in which they propose to exhibit.

SECTION A.—Food and Drugs. (Honorary Secretary, F. J. B. Quinlan, M.D.Univ.Dub., 29, Lower Fitzwilliam Street, Dublin.)

SECTION B.—Recent Books, Instruments, and Appliances—Medical, Surgical, and Electrical. (Honorary Secretary, John Lentaigne, F.R.C.S.I., 29, Westland Row, Dublin.)

SECTION C.—Anatomical and Pathological Specimens and Drawings, Microscopes and Microscopical Preparations. (Honorary Secretary, Alex. B. McKee, M.B.Univ.Dub., Royal College of Surgeons, Dublin.)

SECTION D.—Hygienic and Sanitary Appliances. (Honorary Secretary, H. C. Tweedy, M.D. Univ. Dub., 2, Gardiner's Row, Dublin.)

Particulars should be supplied to the Secretaries of the objects proposed to be exhibited and the amount of space required. No show cases will be allowed.

As it is intended to print a catalogue, with appendix of advertisements, it is requested that inquiries be addressed to the Secretaries as early as possible.

All articles sent to the Museum for exhibition should be addressed to care of Professor Cunningham, Medical School, Trinity College, Lincoln Place, Dublin, and delivered, carriage paid, between the 5th and 26th of July.

Chairman of Museum Committee—Wm. Thornley Stoker, F.R.C.S.I., 16, Harcourt Street, Dublin. Vice-Chairman—D. J. Cunningham, M.D., 69, Harcourt Street, Dublin.

EXCURSIONS.

THE following excursions on Saturday, August 6th, have been arranged:—

1. *Dublin Bay.*—The London and North-Western Railway Company, has generously granted one of its express steamers for this excursion, which eminent marine zoologists have kindly undertaken to accompany for the purpose of dredging, trawling, and taking soundings in several places between Lambay and Greystones. Lunch will be served on board at two o'clock, and the steamer will return to the North Wall before seven o'clock.

2. *Powerscourt and Dublin Waterworks.*—By train to Bray, drive through Powerscourt Demesne and to the Waterfall; thence to the Waterworks, where lunch will be served at two o'clock. The return journey will be by the Glen of the Downs to Bray, and thence to Kingstown in time for the mail boat.

3. *Glendalough and Ovoca.*—On reaching Rathdrum by rail, conveyances will start for Glendalough, and after an hour's stay will return to Rathdrum. A special train will leave for the Meeting of the Waters, and thence for Glenart Castle, Ovoca, where the party will be entertained by the Earl of Carysfort, K.P., and return to Kingstown at 7 P.M.

4. *The Boyne.*—By rail to Drogheda, thence by cars and carriages to Monasterboice, Mellifont Abbey, Slane, New-Grange Sepulchral Tumulus (where light refreshments will be served), and the Battle-field. Dinner at Drogheda at 4 P.M. Return from Drogheda at 5.41 P.M. by limited mail, or by later trains.

E. D. MAPOTHER, M.D., Chairman, Excursion Committee.

FRANCIS FOWKE, *General Secretary.*

SPECIAL CORRESPONDENCE.

A WINTER TRIP TO "THE FORTUNATE ISLANDS."

VI.

Climatic Details of Orotava and the Canary Islands.—The Figures of V. Buch, Fritsch, Biermann, Honneger, G. V. Perez, and Mordey Douglas.—Dry and Wet Bulb Tables.—Maximum and Minimum Temperature in Orotava Valley.—Rainfall.—Temperature of the Sea.—Las Palmas.—Synopsis of Temperature Readings.—Laguna and its Meteorological Record.

THE climatic conditions of Teneriffe appear to me of so much medical interest that it is important to furnish authentic data in some detail for this new chapter in medical climatology. In the course of a short holiday residence, under the most favourable circumstances, it is of course possible to be misled by the impressions derived from temporary and passing conditions, and to view things through the rose-coloured medium of a holiday mood. I have, therefore, in addition to the data furnished by our observations and the information communicated by the friends, residents, and travellers whom I met at Orotava and in other parts of the Canaries, collated and summarised all the authentic meteorological and climatic tables accessible from all sources; and at the risk of making this letter very dull reading, I add these substantial testimonies to the general statements which precede.

Until recently, meteorological observations in the Canary Islands have been but scanty. The figures given by V. Buch in his work on the Canary Islands (*Phys. Beschreibung der Canarischen Inseln*, Berlin, 1825) have done duty in numerous subsequent publications, both medical and scientific; but we are not told how the figures were obtained, and, besides, they only relate to two of the islands, namely, Santa Cruz and Las Palmas. In 1866 Fritsch reviewed the existing material on this subject (*Meteorologische u. klimatograph. Beiträge zur Kentniss der Canarischen Inseln; Peter, Mittheil. Jahrg.*, 1866). In January of this year Dr. Biermann ably summed up the various observations to date (see *Meteorolog. Zeitschrift*, January, 1877), including his own observations from March to July, 1884, and from December, 1885, to June, 1886, besides those of Herr Honegger and others. Honegger's observations of the rainfall for ten years are of great interest. I am able to add to the above the unpublished observations of Dr. G. V. Perez, of Port Orotava, which extend over nine months ending March 31st of this year, a summary of statistics from the Government Observatory at Laguna, and a manuscript series of temperature readings, kindly furnished to me by Dr. Mordey Douglas, relating to Las Palmas.

The following table gives the monthly averages of three daily readings of the dry bulb and wet bulb thermometers and of the barometric pressures. It is arranged from Dr. George V. Perez's recent observations at Port Orotava, and the corresponding average relative humidity at 9 A.M. is taken from Glaisher's Hygrometrical tables:—

TABLE I.—*Port Orotava: Monthly Averages from three Daily Observations made by George V. Perez, at 9 a.m., 2 p.m., and 7 p.m.*

	Dry Bulb Thermom. in ° F.			Wet Bulb Thermom. in ° F.			Average Relative Humidity at 9 A.M.	Barometer.
1886	9 A.M.	2 P.M.	7 P.M.	9 A.M.	2 P.M.	7 P.M.	Saturation=100	
July ..	75.7	77.2	75.5	69.8	72.3	70.1	74	76.5
August ..	74.8	79.7	76.6	71.2	70.5	70.7	79	76.47
September	76	78.8	76.6	70.5	72.3	70.5	71	76.47
October ..	74	76	74	67	71	64.9	66	76.65
November	69.6	72	69.8	62.4	66	63.1	64	76.5
December	70	70	67.4	60.4	62.9	60.8	53	76.6
1887								
January ..	64.4	68	65.3	58.6	61.1	58.6	67	76.5
February	64.5	68	67	57	60.4	58	63	76.6
March ..	68	71	69.4	61.5	64.7	62.7	64	76.3

The above table tells its own tale. The thermometer, even in January, averages between 60° and 70°, while in the hot months there is an increase of moisture in the air, and, lastly, the barometric pressure averages are remarkably constant.

The next table consists of monthly averages of the daily readings of the maximum and minimum thermometer (mercurial and spirit respectively) in the Valley Orotava, 300 feet above the sea, together with the number of days on which the observations were made.

TABLE II.—*Maximum and Minimum Temperature Averages in ° F. Valley Orotava. Winter, 1886-87.*

	Spirit Thermometer.				Mercurial Thermometer.			
	No. of Days.	Average.	Extreme Readings.		No. of Days.	Average.	Extreme Readings.	
1886								
Oct. ..	4	61.3	60	63	5	70	70.5	69
Nov...	25	57.7	53.5	65	26	68	73	63
Dec...	27	54.2	51	57	27	66	71	64
1887								
Jan...	28	52.6	49	58.5	27	63.8	68.5	58.5
Feb..	25	54.5	51	60	31	67.5	71	51

Table II exhibits the remarkable steadiness of temperature at Orotava in an unmistakable manner. The highest reading during the winter season was 73° in November, the average maximum for this month being 68°. The spirit thermometer never sank below 49° in January—that is, 49° was the coldest temperature observed; and the minimum for this month is as high as 52.6°.

Next come Biermann's observations at Port Orotava. The cloudiness is expressed in figures lying between 0, a clear sky, and 10, a sky fully overcast; but, as explained in the last Orotava letter, the clouds obey regular laws there, owing to the position of Teneriffe, which cuts off the north-east trade wind, and the regularity of the land and sea breezes. The north-east wind, or *brisa*, is naturally chiefly felt at the sea-level; and, since its upper limit is for the most part about 7,000 feet above this level, its operation is much checked by high mountains. Teneriffe in particular cuts off this wind completely, and thus only gentle land and sea breezes play south and south-west of the Peak—that is, over Orotava. Even on the north aspect of Teneriffe the mountain-wall shows its influence by a land-breeze during the

night, though this is, of course, far weaker than the sea-breeze by day, which is reinforced by the trade wind. Dr. Biermann has noted a land-breeze even at 7 A.M. at Orotava, while a few miles out at sea the waves were agitated by the north-east wind; and clouds have been seen to move with a direction west or south-west while there has been a sea-breeze below of strength between 1 and 2 in the opposite direction. The *brisa* brings moisture with it; it is the rain-bringer, not a dry wind, as it is in this country; and it blows during the greater part of the year. Up the mountains the *brisa* is cooled below the saturation-point of the air, and clouds form. Their lower level is between 2,500 and 4,000 feet high, and their thickness is about 3,000 feet, the upper and lower limits being strikingly level. The coast is often sunny while the mountains are cloud-covered, but the clouds may reach far over the sea. The formation of this cloud-veil begins regularly each day an hour or two after the sea-breeze, especially on the low north-east part of Teneriffe; and after sundown it passes away, often with great rapidity. On one occasion cloudiness 8 was noted, and ten minutes afterwards the sky was quite clear. Seen from above, the clouds appear as a snow-white sea, with the higher parts of Gran Canaria and Las Palmas peeping through. The temperatures above and below the cloud-layer were twice taken by Dr. Biermann—namely, in November, 1868, when they were respectively 64.7° and 57°; and also in June, 1884, when they were found to be 62° and 59°.

TABLE III.—*Dr. Biermann's Observations at Port Orotava in 1884 and 1885.*

	No. of Days Observed.	Temperature. Average of 3 Daily Observations at 7 A.M., 2 P.M., 9 P.M.	Average percentage Humidity at 7 A.M., 2 P.M., 9 P.M. (Saturation = 100)			Cloudiness, 7 A.M. (0 to 10).	Strength of Wind at 7 A.M., 2 P.M., 9 P.M. (0 to 10).		
1884									
Mar.	21	62.4° F.	68	58	69	6.1	0.7	1.3	0.8
Apr.	15	65.5°	63	54	63	4.3	0.9	1.8	1.4
May	9	65.3°	63	57	63	8.1	1.1	1.6	1.7
1885									
Jan.	30	59°	77	57	78	6.4	1.7	2.3	2.0
Feb.	26	51°	73	64	78	4.7	1.7	2.5	1.5
Mar.	30	59.2°	76	65	77	7.9	1.5	2.6	1.5
Apr.	28	62°	70	64	75	5.8	1.7	2.8	1.7
May	11	65.6°	70	66	75	5.6	1.4	2.8	1.4

The average daily temperature, from observations taken every two hours during three days, was 58.8° F. 59.2°, and 63.5° respectively, but calculated from the same three days from the readings at 7 A.M., 2 P.M., and 9 P.M., it was 58.3°, 59.3°, and 63.1 respectively.

Table IV contains a number of average temperatures for each month by different observers. Kreitz's figures are to be found in Piazzi Smyth's work on Teneriffe, and Honegger's in Marcet's *Southern and Swiss Health Resorts*. Dr. Oehrval's are new, and Belcastel's averages are from his work *Les Iles Canaries, etc.*, Paris, 1862, but he does not state their origin.

TABLE IV.—*Average Temperature in °F. for each Month in Port Orotava by Various Observers (Dr. Biermann).*

	Kreitz.	Honegger. At 300 ft. high in Port Orotava.		Oehrval.	Belcastel.
January	61.0	58.8	62.0	63.4	62.2
February	60.4	60.0	62.6	60.4	62.0
March	62.9	61.0	63.7	62.0	64.2
April	67.6	63.7	66.5	65.3	64.5
May	70.5	68.3	69.7	63.8	69.4
June	74.3	70.8	72.5	—	73.8
July	77.3	72.8	75.3	—	76.4
August	76.8	74.6	77.0	—	73.2
September	77.0	74.0	74.5	—	71.7
October	74.0	68.9	71.9	—	69.2
November	68.5	66.5	69.2	—	68.3
December	66.0	61.7	65.3	—	66.7

The average temperature for the whole year, deduced from this table, is, according to Kreitz, 69.7°; Honniger, (66.9° and) 69.4°; and Belcastel, 68.5°.

The next table has not yet been published, except in Dr. Biermann's article, where the figures are given in millimètres. It contains the complete record of the rainfall during the ten years ended May, 1885, with the exception of one year, 1877-78; and, as there is usually no rain in summer, each year is made to begin with August.

TABLE V.—*Herr Honegger's Observations of the Rainfall (in métres) in Port Orotava from 1874 to 1885 (1877-78 excepted).*

	1874-75.	1875-76.	1876-77.	1878-79.	1879-80.	1880-81.	1881-82.	1882-83.	1883-84.	1884-85.	Average.
August	—	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.039
September	—	0.08	0.08	0.05	0.0	0.02	0.02	0.0	0.0	0.31	0.078
October	—	2.7	2.3	0.58	2.2	0.57	2.1	0.13	1.1	0.88	1.4
November	0.82	1.6	1.0	1.2	4.8	0.8	1.0	0.38	2.8	3.0	1.76
December	6.4	2.1	1.1	1.1	1.2	0.08	1.1	2.2	5.4	1.1	2.16
January	0.55	5.3	0.5	1.8	0.6	0.4	3.5	0.5	3.4	3.6	2.0
February	3.38	2.1	1.8	0.5	3.1	2.9	0.8	2.7	7.0	1.1	2.56
March	1.88	2.0	1.1	0.0	1.6	0.6	3.6	1.5	3.2	5.5	2.12
April	0.63	1.6	0.08	0.0	0.8	1.1	1.1	0.34	0.17	1.5	0.76
May	0.58	0.3	0.0	0.0	0.4	0.85	0.07	1.5	0.4	0.0	0.44
June	0.03	0.0	—	0.0	0.0	0.07	0.0	0.1	0.0	—	0.007
July	0.03	0.0	—	0.0	0.0	0.02	0.0	0.01	0.0	—	almost 0
Whole year	14.3	17.0	8.0	5.4	15.0	7.7	13.4	9.5	24.0	17.5	13.4

There is less rain at Orotava than in the neighbouring places owing to its position between two mountain spurs (Biermann).

TABLE VI.—*Days on which Rain fell during the above period (see Table V).*

	1874-5	1875-6	1876-7	1878-9	1879-80	1880-1	1881-2	1882-3	1883-4	1884-5	Average.
Aug.	—	0	1	0	0	0	0	0	0	1	0.2
Sept.	—	2	1	2	0	3	1	0	0	4	1.4
Oct.	—	7	10	2	4	3	10	2	6	7	5.7
Nov.	4	4	6	6	10	7	4	3	13	14	7.1
Dec.	23	6	5	4	6	1	7	8	15	7	7.2
Jan.	2	12	3	4	4	4	9	3	9	15	6.5
Feb.	7	4	3	5	8	7	2	6	14	5	6.3
March	6	6	6	0	6	6	8	10	18	18	8.4
April	7	1	4	0	6	0	2	6	5	7	5.0
May	5	3	0	0	6	4	2	7	3	0	3.0
June	1	2	—	0	0	1	0	1	0	—	0.6
July	1	0	—	0	0	1	0	1	0	—	0.4
Whole year	56	50	41	23	50	46	45	47	83	78	51.8

The temperature of the sea was obtained on various occasions both by Oehrval and Biermann, and the results are in the following table:

TABLE VII.—*Temperature of the Sea in °F. at Port Orotava.*

	1884. Dr. Oehrval.	1885. Dr. Biermann.
January	67.1	66.9
February	65.8	65.1
March	64.4	64.6
April	65.3	64.4
May	65.0	65.3
June	66.2	67.3
July	68.0	—

For the neighbouring island of Las Palmas, Dr. Mordey Douglas has furnished a complete series of observations of the maximum and minimum thermometer in the shade, of which Table VIII gives a synopsis.

TABLE VIII.—*Las Palmas: Synopsis of Maximum and Minimum Temperature Readings. (Dr. Mordey Douglas.)*

	1886. November	1886. December	1887. January.	1887. February.
Mean of highest temperature	70.7	67.9	66.0	65.9
Mean of lowest temperature	61.0	56.1	55.6	55.1
Mean daily range	9.7	11.0	10.4	10.8
Mean temperature	65.8	62.0	60.7	60.5
Absolute highest temperature	72.9	70.0	69.0	69.0
Absolute lowest temperature	56.0	51.0	51.0	50.0
Extreme range of temperature in 24 hrs.	16.0	17.0	17.0	18.0

The last series of observations is from the Government observatory at Laguna, 2,000 feet above the sea. They are complete for the year 1885, and the synopsis furnished is as follows:—

Barometric Pressure	Mean barometric height	=28.7 in.
	Mean oscillation	= 0.84in.
	Maximum height	=29.0 in.
	Minimum height	=28.28in.
Temperature	Mean temperature	= 61.7° F.
	Mean oscillation	= 48.5°
	Maximum temperature May 16th	=105.0°
	Minimum temperature Jan. 17th	= 38.3°
	Extreme oscillation	= 98.6°
Humidity	Maximum rain in one day, January 19th	= 1.37 in.
	Mean relative humidity (saturation=100)	=75.6
	Mean tension of vapour in inches	= 0.425
	Days of rain, 55 ; of hail, 5 ; of mist, 44.	
	Prevailing wind, N—NE.	

The above tables enable the reader to form a fairly accurate idea of the advantages of the climate of Port Orotava. The average temperature during the day in the winter season is about 65° F., and at night the temperature is between 50° and 60° ; indeed, the narrow temperature range is one of the chief characteristics of the place. There is just sufficient moisture in the air to render it agreeable. There is very little rainfall comparatively speaking, and that chiefly at night. The refreshing land- and sea-breezes play with perfect regularity ; in short, all the conditions present make the climate an ideal one both for lovers of health and lovers of Nature. Orotava has the exceptional advantage of being quite free from mosquitoes, which cannot be said of Las Palmas or Santa Cruz. In the Canaries generally there are no poisonous snakes or venomous reptiles.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Treatment of Vaginal Fistula by Injections of Chlorinated Water.—Effect of Fasting on the Power of Resistance of the Animal Economy to Poisonous Alkaloids.—Drinking-Water and Typhoid Fever.—Chloride of Methyl in Neuralgia.—Proposed Changes in the Concours d'Agrégation.

M. HERVIEUX lately reported a case to the Société Médicale des Hôpitaux, of vaginal fistula which was successfully treated by chlorinated water (*liqueur de Labarraque*). The patient, who was twenty-three years of age, had suffered from the affection for four years. She was in a cachectic state, and was unable to walk or even to stand. She had acute pains in the region of the pelvis, and a fœtid discharge, with insomnia and loss of appetite. Chlorinated water was injected into the fistula every day during five months, with the result that a complete cure was effected.

At a recent meeting of the Paris Biological Society, M. Roger communicated a note on the effect of fasting on the power of the animal economy to resist the action of poisonous alkaloids. In a former paper he showed that the liver, when containing glycogen, was capable of arresting a part of the alkaloids passing through the organ into the system. When a 1 in 400 solution of sulphovinate of quinine was injected into a peripheral vein of a rabbit in the proportion of 6 centigrammes to every kilogramme of the weight of the animal, it was found to produce a toxic effect, whereas a dose of 16 centigrammes to the kilogramme was required to produce death when the same substance was injected into the portal vein. When the animal had fasted for twenty-four hours a larger dose was required. If glucose be added to the solution injected, however, or if three hours before the experiment a certain quantity of sugar be given, the liver again becomes capable of arresting part of the alkaloid. The effect of neutral sulphate of atropine on rabbits which had been deprived of food for twenty-six hours showed that the animal resisted the poison better in the fasting than in the normal state. After five days of fasting, when the liver no longer contained glycogen, the organ was found incapable of arresting nicotine.

In the *Union Médicale*, M. Richardière publishes statistics showing the importance of the part played by drinking-water in the etiology of typhoid fever. He thinks, however, that the air, the presence of fæcal matter, and contact with the patient should also be taken into account. M. Richardière agrees with M. Collin that the waters of the Seine and the Ourcq should no longer be distributed for drinking purposes, and looks upon them as being the cause of the increase of the disease in Paris.

At a recent meeting of the Société Médicale des Hôpitaux, M. Debove made some remarks on the use of chloride of methyl in neuralgia. Since his last communication in 1884, M. Debove had treated 150 cases of sciatica with this drug, and had found only one case in twenty that was not amenable to its action. Lumbago and neuralgia were cured by chloride of methyl almost instantaneously, and if the pain recurred it could easily be checked by a repetition of the medicine. The treatment should never cause erythema ; the action should be rather superficial, and the greatest possible number of nerve-branches should be excited. Great care should be taken in the case of patients suffering from diabetes and albuminuria, and also in fat persons, whose skin is very irritable. Out of eighteen cases of facial neuralgia, sixteen were cured in this way. The medicament may be applied to the face in the form of spray.

The Faculté de Médecine has made the following modifications in the programme for the *concours d'agrégation :* The written essay on an anatomical or physiological subject is discontinued ; and also the thesis. The following programme is proposed in place of the present one : There shall be two preliminary examinations. The first is to consist of a lecture for three-quarters of an hour on a subject in medicine, surgery, physics, chemistry, or natural history. This lecture must not have been printed or delivered previously. The candidate must prepare his lecture in the presence of another candidate, and without reference to any books whatever. Three hours are allowed for preparation. The second test is to consist of a verbal summary by the candidate of his own scientific researches. There shall be two final exercises. The first is to consist of a lecture prepared in twenty-four hours ; the second of one or more practical demonstrations. In the case of medicine and surgery, the candidate must examine one or more patients chosen by the jury. In order to establish his diagnosis, he can use the hospital laboratory. In the *concours* in anatomy and physiology, or in natural science, one or more theoretical and practical demonstrations will be required. It now remains with the Conseil Supérieur de l'Instruction Publique to ratify these alterations proposed by the Faculty of Medicine.

BERLIN.

[FROM OUR OWN CORRESPONDENT.]

The Crown Prince's Throat Ailment.

APART from all personal considerations connected with the Crown Prince and the Prussian Royal Family, this case is in itself highly interesting from a medical point of view. I think, therefore, you may like to have a few lines, which will give a general sketch of it.

His Imperial Highness has been suffering from slight hoarseness since the beginning of the year ; indeed, some people think that his voice has never been quite clear since his visit to Italy last autumn. He was treated in the ordinary way by Dr. Wegner, his Physician in Ordinary (who is also Surgeon-General of the Garde-du-Corps, and Inspector-General of the Hospitals of the Army) till the month of March, when Professor Gerhardt was consulted. Professor Gerhardt examined the Crown Prince's throat carefully, and found a small growth on the left vocal cord, and used the electro-cautery on several occasions with marked benefit and relief to His Imperial Highness. The growth had almost entirely disappeared towards the end of March ; and, owing to the Crown Prince's constant occupation with the festivities connected with the birthday of the Emperor William, the treatment was then suspended. As some of the growth still remained, however, the Crown Prince was advised to go to Ems in April, where he took the waters most diligently for some weeks. During his residence there and on his return reports were carefully circulated in the newspapers that His Imperial Highness had benefited considerably, and had almost recovered the former use of his voice. Exactly the contrary was the truth. Some increase of the growth was found to have taken place, and the members of the Royal Family in Berlin and London were beginning to feel really anxious. Professor Bergmann was then asked to see His Imperial Highness with Professor Gerhardt, and later on Professor Tobold, of Berlin, the well-known specialist in diseases of the throat, was also called in. These were subsequently joined by Dr. von Lauer, the Emperor's Physician in Ordinary and Chief of the Army Medical Department.

The tendency of the growth to enlarge was then fully established, and it became a question whether the new formation could be removed by the internal method, or whether a more extensive operation was necessary. Under these circumstances it was thought desirable, before resorting to tracheotomy, to have the advantage of the unique experience of Dr. Morell Mackenzie, who was summoned from London, and arrived in Berlin on Friday afternoon, May 20th. The same evening a consultation was held, and Dr. Mackenzie was asked to remove a portion of the growth with the object of ascertaining its exact nature. The following morning Dr. Mackenzie succeeded, in the presence of Drs. Gerhardt, Tobold, and Wegner, in removing a small portion of the growth, which was immediately handed over to Professor Virchow for microscopic examination. Professor Virchow pronounced it not to be of malignant

structure, all that was found being the inflammatory products of irritation.

This decided the diagnosis, and the treatment also. It is hoped that it may be possible to remove the base of the growth by forceps or destroyed by cautery.

NEWCASTLE-UPON-TYNE.

[FROM OUR OWN CORRESPONDENT.]

The Newcastle Exhibition.—The Dispensary.—The Infirmary.

THE Newcastle Jubilee Exhibition was opened with great pomp by H.R.H. the Duke of Cambridge on Wednesday last. Though intended as an exhibition of mining and engineering industries, it yet contains many things pertaining to our own profession, from specimens of drugs, surgical instruments, microscopes, etc., to doctors' hansoms and broughams. Messrs. Brady and Martin of this town have a stand on which they show chemical and physical apparatus for use in laboratories; microscopes by Beck and other makers, with complete adjustments for all branches of microscopical work; surgical instruments, instruments for physiological demonstration, artificial limbs and deformity apparatus, models of organs and regional anatomy for teaching purposes, etc. Messrs. Mawson and Swan show their patent filters for total removal of lead and organic matters, etc. Messrs. Burroughs, Wellcome, and Co., London, exhibit many of their special preparations of malt and cod-liver oil, also tabloids and tablets of various kinds, etc. Dr. H. E. Armstrong, the medical officer of health, exhibits for the Newcastle Corporation and the River Tyne Port Sanitary authority models of the new infectious hospital lately completed, which is probably one of the most complete in the kingdom, and also a model of the new Floating Infectious Hospital lately placed in the River Tyne for the use of the seamen. Many other stands have exhibits which come within the category "medical," but the whole exhibition is full of interesting and instructive exhibits.

A vacancy having occurred on the staff of the Dispensary through the resignation of one of the physicians, Dr. Young, who has left the district, the Committee advertised for candidates. I understand that only two applied, Dr. Beatley and Dr. Hardcastle, both gentlemen in practice in the city. Considerable personal feeling has been introduced into the election by the action of certain members of the staff, who have pressed forward the candidature of one of the applicants. The election will be a close one.

At the quarterly meeting of the governors of the Infirmary, the accounts presented showed a saving of over £300 as compared with the first quarter of the previous year. A committee was appointed to prepare a communication to the Secretary of State for the Home Department, respectfully inviting the Queen to allow the institution to be designated the Royal Infirmary. This was proposed by Dr. Philipson on account of certain life governors having given up certain privileges which they possessed.

CORRESPONDENCE.

TESTIMONIAL TO DR. WATERS.

SIR,—Reverting to your notice of this fund (on p. 747 of the JOURNAL of April 2nd last), I have to ask you to receive and kindly publish a second list of subscribers to it. And will you at the same time give me a little space to explain a misapprehension by some members of the Association? Prior to the first movement of the Council of the Lancashire and Cheshire Branch towards raising this testimonial, the members of the Chester Medical Society had united with the citizens of Chester and other friends and neighbours of Dr. Waters in collecting a fund to present him with his portrait. The required sum had been subscribed before the notice of our Council's first meeting on the subject was issued, and it was the declared wish, both of the Chester Medical Society and Dr. Waters, that the "Chester Testimonial" should be "separate and distinct" from any other that might be raised by the members of the Lancashire and Cheshire Branch particularly and the members of the profession generally. The ceremony of presenting the Chester Testimonial took place early in the spring, and was recorded in the medical and other journals; hence the erroneous belief that there was only one testimonial, and that it had been presented. Many have objected that the subscription was not limited to a guinea. The Council fully discussed this question and decided against either an upward or a downward limit. An analysis of the subscription-list proves that 73 per cent. of the subscribers have had the courage of their opinions and contributed a sum not exceeding "the conventional guinea," and those intending subscribers who follow their example will be in good company. There is some advantage in the £55 4s. gain to the fund from the 27 per cent. who did not limit their subscriptions to a guinea each.

At a meeting of the Branch Council on May 18th it was decided to present the testimonial (plate) to Dr. Waters at the annual meeting of the Branch at Stockport on June 15th. I am unwilling to believe that the profession generally will fail to recognise the life-work of Dr. Waters, achieved after upwards of a quarter of a century's toil and unremitting self-sacrifice. This testimonial is an opportunity for practical proof of that recognition, and I hope to receive many more subscriptions. Finally, may I request the early payment of promised, but unpaid, subscriptions?—I am, etc.,

JOHN W. WATKINS, Honorary Treasurer.

Newton-le-Willows, Lancs., May 23rd.

SECOND LIST OF SUBSCRIPTIONS.

	£	s.	d.
Mr. Wheelhouse	5	5	0
Dr. M. M. Bartolomé	3	3	0
Mr. Reginald Harrison	2	2	0
Sir Wm. Roberts	2	2	0
Mr. Husband	2	2	0
Dr. Essex-Bowen	2	2	0
Mr. Geo. Hall Cook	2	2	0
Dr. John Cameron	2	2	0
Dr. Holman	2	2	0
Mr. Mitchell Banks	2	2	0
Mr. Chas. White	1	1	0
Mr. Thos. Jones, F.R.C.S.	1	1	0
Dr. Jas. Corns	1	1	0
Mr. Wm. Hall, F.R.C.S.	1	1	0
Dr. E. J. Longton	1	1	0
Mr. Thos. Moreton	1	1	0
Dr. Jas. Ross	1	1	0
Dr. A. T. H. Waters	1	1	0
Mr. F. Mason	1	1	0
Dr. A. C. E. Harris	1	1	0
Dr. G. B. Barron	1	1	0
Dr. Jas. Barr	1	1	0
Dr. Chas. Brown	1	1	0
Dr. G. F. Duffey	1	1	0
Dr. Chas. W. Thorp	1	1	0
Dr. H. Simpson	1	1	0
Dr. T. R. Glynn	1	1	0
Mr. W. H. Manifold	1	1	0
Dr. Macfie Campbell	1	1	0
Dr. Glynn Whittle	1	1	0
Dr. C. Lapage	1	1	0
Mr. E. H. Beaman	1	1	0
Mr. T. Sympson	1	1	0
Dr. Wm. Carter	1	1	0
Dr. F. Vacher	1	1	0
Dr. Shuttleworth	1	1	0
Dr. W. Hall, junior	1	1	0
Dr. C. Rayner	1	1	0
Mr. R. W. Watkins	1	1	0
Mr. J. P. Langshaw	1	1	0
Mr. Chauncey Puzey	1	1	0
Dr. R. Caton	1	1	0
Mr. E. Lund	1	1	0
Dr. T. L. Rogers	1	1	0
Dr. J. E. Burton	1	1	0
Dr. W. E. W. Vaughan	1	1	0
Mr. W. J. Fleetwood	1	0	0
Dr. W. Berry	0	10	6
Mr. G. H. Whitaker	0	10	6
Mr. W. C. Barnish	0	10	6
Dr. Starkey Smith	0	10	6
Mr. J. T. Jones (Corris)	0	10	6
Mr. F. J. Bailey	0	10	6
Dr. Jas. Lambert	0	10	6
Mr. E. A. Monks	0	10	6

SIR WILLIAM GULL AND DR. QUAIN: DRUGS OR NO DRUGS.

SIR,—One of the interesting digressions indulged in during the late session of the General Medical Council is to be credited to Sir William Gull, who, in the course of the discussion relating to the status of the Society of Apothecaries, accused that Society of having fostered popular prejudice as to the treatment of disease by means of drugs. Without going into the question as to whether this method is in itself desirable or otherwise, we can readily admit that the idea is one which has a strong hold on the public mind. Neither the custom nor the taste for medicines is by any means confined to this country. Whether the professor of the healing art be the "wise man" of the American Indians or his congener in oriental climates, he is invariably expected to prescribe or administer medicine in some form or another. In England, a certain scepticism has for years been growing up as regards the value of medicinal agents, and has by this time infected a large number of our younger practitioners. From this point of view the effect cannot be considered to be otherwise than harmful. Men who have cultivated a contempt for drugs in their student days will, in all probability, have failed to make themselves familiar with their effects and uses, with the result that when they are called upon to divest themselves of that freedom of opinion and practice which are the privileges of hospital life, and have to deal with the public on terms of equality, they find their ignorance of the means of gratifying the whims and prejudices of their patients a terrible hindrance to a successful career.

It is all very well for men in the position of Sir William Gull to scoff at physic, and to carry their scepticism into practice, but it would be a suicidal policy in a junior member of the profession. The late Dr. Moxon thoroughly grasped the situation when, after an introductory lecture, in which he had expressed but a mediocre confidence in the value of therapeutics, he warned students that they must not attempt to force their own views on a suffering public. A doctor

without medicine, he says, is like a poet without rhyme, a priest without a creed, or, he might have added, a licensed victualler who did not sell victuals. Medicines may not be the most important factor in the treatment of disease, but they are a factor without which the rest will be unwelcome.

The conscientious therapeutist, however, is a man who, though entitled perhaps to our respect, is to be regarded with a certain amount of suspicion. Strong in his knowledge of the physiological effects of the drugs he employs, he is animated by a desire to cure disease in spite of Nature, or, at any rate, without Nature's aid. He would repudiate with scorn the idea of giving inert drugs simply to calm the patient's apprehensions. He is addicted to the use of powerful alkaloids which will act in doses measured by hundredths of a grain. He gives morphine instead of paregoric for a cough, nitro-glycerine instead of orange-flower water for headache, and cucaine injections in place of soap liniment for rheumatic pains. The patient is certain to get something for his money. These gentlemen represent the credulous element in medicine, but show a prodigious activity and devotion to work.

The critical party in medicine, on the other hand, is less enterprising; some of them even content themselves with "observing" their patients, and profess a pious horror of anything in the nature of interference with the *vis medicatrix naturæ*. The latter, as Dr. Quain observed, lay themselves open, as ministers of the healing art, to the charge of obtaining money under false pretences, since they conscientiously abstain from any attempt at a cure.—I am, etc.,

A CONSULTANT.

THE GENERAL MEDICAL COUNCIL AND THE APOTHECARIES' SOCIETY.

SIR,—I think it fortunate for the future interests of the profession that in your leading article on May 21st you have so clearly pointed out the results that must inevitably follow such action as that taken by the General Medical Council, when it approved of the appointment of three surgical examiners, who, without other aid, are to test in one year the fitness, in all matters surgical, of 300 candidates for entrance into the profession. No information was given as to the hospitals in which these three gentlemen were to conduct the clinical examinations, or as to the amount of clinical material at their disposal. The Council was told nothing concerning the arrangements for carrying out the operative part of the examination. It may be that the rooms of the Society in Blackfriars are licensed for anatomical purposes under the Anatomy Act, and that one of the three gentlemen appointed holds, also, the personal licence which the Act requires; but of these matters the Council had no knowledge one way or the other; and, without making any inquiries, it at once accepted the nominees of the Society. For twelve months the Apothecaries' Hall, so far as the Council is concerned, is to go on precisely as it would have done had there been no new Medical Act. Had the Hall become affiliated with the College of Surgeons its surgical examination would have undergone great modifications. A committee would have been appointed to consider every detail, and carefully to make new regulations to ensure the thorough testing of the candidates. Less than this on the part of the College of Surgeons it is impossible to conceive, but the Council entirely dispensed with all such proceedings, and at once gave its sanction to whatever Mr. Carter, for the Company, proposed.

It may be said that after all it is only for a year that the present arrangement is to continue; but such a perfunctory and meagre system of examination would not have been tolerated by the College in Lincoln's Inn Fields for a single day. This surgical examination is now, in the eyes of the profession and of the public at large, the examination of the General Medical Council, and Licentiates of the Apothecaries' Society must in future be regarded as licentiates also of the Medical Council—the highest medical authority in the empire. It has been said that in the past the nineteen examining bodies were not entirely free from competition with one another in a downward direction. They are now to compete with the Medical Council itself. It may be safely affirmed that no surgical body in the kingdom, either before or since the passing of the Medical Act, ever did provide so inadequately for the examination in one year of 300 students, and were any of the Colleges now to divest themselves of all examination arrangements in excess of those formally sanctioned last week by the Medical Council for twelve months, then, whoever might censure such conduct, the Medical Council certainly could not.

For twenty-nine years the Medical Council has been incessantly urging on the examining bodies that they should raise and improve their standards, and particularly that they should demand more clinical and practical work from those who sought their degrees or licences; and whenever, by inspection or otherwise, particular examinations have been found to be insufficient, the fault has been attributed to competition—to "the battle of the shops." The opinion has over and over again been expressed that if only we had a one-portal system under the direct control of the Medical Council, everything would be right. What could a poor Medical Council do, so long as it had no direct control of any examination, but could only act mediately through other bodies, and, moreover, could only send recommendations which it had not the power to enforce. After the long period of twenty-nine years, it is now in direct and actual charge of examinations, and I think the profession must have been startled by the manner in which the Council has entered on its new and transcendently important work.

But, Sir, I think it is more than doubtful whether anyone will ever be put on the *Medical Register* from having passed an examination at the Apothecaries' Hall under the conditions arrived at last week. I am of opinion that there has been a misapprehension regarding Sections 3 and 5 of the Medical Act of 1886,[1] and that the Council having given only surgical examiners to the Apothecaries' Society, the examination will not be a qualifying examination within the meaning of the Act.

In the discussions last week at the Council table it was not doubted that the inspectors spoken of in Subsections 2 and 3 of Section 3 would also inspect the examinations constructed under Section 5; and it was, therefore, held to be competent for the Council to limit its appointment of assistant examiners to one subject—in the case of the Apothecaries' Societies, to the subject of surgery. But the concluding words of Subsection 2 of Section 3 dispel entirely such a supposition; they expressly *limit* the work of the inspectors to "all or any of the qualifying examinations held by any of the bodies *aforesaid*"—that is, to the bodies mentioned in Subsection 1 of Section 3: bodies either themselves entitled to grant qualifications both in medicine and surgery, or combinations of bodies one of which at least can qualify in medicine and one at least in surgery. An examination in medicine, surgery, and midwifery by such bodies, and inspected by inspectors as provided in Subsections 2 and 3, constitutes a qualifying examination. But these inspectors have no duty whatever under Section 5. This section builds up another qualifying examination in medicine, surgery, and midwifery, quite distinct from that constituted by Section 3. In Section 5, it is through assistant examiners that the Council is to act, and not at all by inspectors; and, just as under Section 3 the inspectors are to inspect in medicine, surgery, and midwifery, so under Section 5 the assistant examiners are to examine in medicine, surgery, and midwifery. The words of Subsection 2 of Section 5 are: "It shall be the duty of the said assistant examiners to secure at the said examinations the maintenance of such standard of proficiency in medicine, surgery, and midwifery," etc.; and then, at the end of this same subsection, it is stated that "any examination held subject to the provisions of this section shall be deemed to be a qualifying examination within the meaning of this Act." There is thus under Section 3 a qualifying examination, and under Section 5 another qualifying examination; each is complete in itself, but there is no connection whatever between them; each must be worked out in accordance with the directions contained in its own subsection; no subsection of Section 3 has anything to do with Section 5, and no subsection of Section 5 has to do with Section 3.

I cannot doubt, therefore, that the surgical examiners that alone were given to the Apothecaries' Society last week do not constitute that examination a qualifying examination, and candidates who pass it could not, I think, be legally registered. There is still time before June 30th to repair the error that has been committed, but rectified it must be if the licence of the London Society of Apothecaries is to remain a registrable qualification. In doing so, the surgical arrangements made last week should also be considered; the whole examinations in medicine, surgery, and midwifery should be recast, and an examination instituted that would be a type and example to all other degree- or diploma-granting bodies. If this were accomplished in a manner worthy of the Medical Council, the Cinderella of the Corporations would be so transformed that the Colleges in Pall Mall and Lincoln's Inn Fields, Royal though they are, would soon be charmed to court her alliance.—I am, etc.,

D. C. MCVAIL.

Western Medical School, Glasgow, May 23rd, 1887.

SIR,—I have been wasting my time and sorely trying my temper by reading through your reports of the recent session of the General Council. Your strictures on their sayings and doings are not one whit too severe, but I fear their ways are quite past mending, unless you attack them from the financial side. There is, however, one sentence

[1] The Act was printed in the BRITISH MEDICAL JOURNAL, July 3rd, 1886, p. 36.

in your admirable leader with which I would venture to disagree entirely. Referring to the examination at the Apothecaries' Hall in the future, you say "That examination must be on the highest level necessary for the admission of fully qualified general practitioners." Now it appears to me that the examination ought to be on the lowest level and not the highest. What is the highest level necessary? I suppose the level of our University examinations continues to rise every year; at any rate it is certain that the standard required of them is very much higher now than it was twenty years ago. The Apothecaries' Society would certainly meet with the fate of the frog in Æsop's Fables, if it tried to fix its standard at their level. Why are our out-patient rooms so crowded? Why is there so much counter and unqualified practice going on? I believe it is because the action of all the leading powers (including the General Council) has of late years tended to keep out of the profession those to whom alone it would have been worth while to practise amongst the poor of our large cities. If the General Council will take care that no one gets his licence at the Hall who is not safe to practise, and further that no one who is safe to practise is rejected—that is, take care that the standard is not made any higher than is absolutely necessary to secure the minimum knowledge on the part of the candidates, it would be a real service to the public. It appears to me that if a man can show that he is safe to practise, there ought to be some place where he will not be rejected; it ought to be the business of the General Council to take care that an examination is held and so conducted that no one who is safe to practise should be rejected.

I approve of the action of the two Colleges, but not on the grounds given by Sir Dyce Duckworth, whose views are almost as objectionable as those of Professor Struthers, and I trust that the Hall will continue to have a separate existence somewhat on the lines I have indicated.—I am, etc.,

F.R.C.P.

DEGREES FOR LONDON MEDICAL STUDENTS.

SIR,—It was with the greatest surprise that I saw a letter of Dr. Mears in the JOURNAL of May 7th had been unnoticed. It contained statements which, if correct, will prove how utterly unreliable are general impressions.

A Scotch M.D. has in the past not been looked upon as an exceptionally distinguished member of our profession, nor as a *rara avis* in the country generally; and yet, according to Dr. Mears, they should be just as exceptional as those of London, being produced at the same rate per cent. I do not dispute the fact, though I hope some one more able than myself at statistics may be able to do so; but, as a London man, I do distinctly assert that an M.D. London was looked upon as an exceptional prodigy, and not to be found certainly at every street-corner in general practice.

Now in the North—and I am only speaking, of course, locally and from local knowledge—Scotch M.D.'s are almost the rule. I find, as a matter of fact, that amongst the 316 members of the North of England Branch we have, M.B.'s and M.D.'s together, 148. Certainly they are over 4 per cent. in this part of the kingdom.

He omits to mention what I think would be particularly interesting at the present juncture—the number of qualified London men attending Newcastle Infirmary with a view to taking the M.D. degree at Durham.

No doubt considerable opposition will be met with from the northern schools at the prospect of the justice which has now some chance of being meted out to London students; and I think the more the matter is sifted the stronger will be their case; and I cannot help feeling that this very moderate percentage suggested by Dr. Mears will be somewhat increased by a more careful investigation.

The idea of London underselling the North in the matter of medical degrees must be meant for a joke.—I am, etc.,

NORTH COUNTRY PRACTITIONER.

THE PROVINCIAL SCHOOLS AND THE NEW DEGREE FOR LONDON MEDICAL STUDENTS ONLY.

SIR,—The controversy as to whether the Royal Colleges should have the power to grant degrees to their licentiates has gradually been converted into an entirely different question—namely, the granting of degrees to London medical students. I hope that this change in the nomenclature of the proposed legislation has taken place unconsciously, and that there is no intention to debar provincial schools from sharing with the London schools the advantages of the proposed change. Hitherto there has been no distinction between London and provincial students in being admitted to the examinations of the Royal Colleges. There is no argument for granting a degree to a London student which does not apply to a student from a provincia school who is ready to pass the same examinations and has gon through an identical curriculum. The University of London admits provincial students on the same footing as London students; then why should the Royal Colleges wish to be more exclusive? No one has recently done more for medical reform than Sir Walter Foster, M.P., and there is no one who could advance more ably in Parliament the change desired; but, if the students who sit under him are not to share the new privileges with those with whom they were formerly on the same footing, Sir Walter Foster will only be true to the schools and to the profession in opposing any such illiberal proposal.

I write this letter in order to obtain a clear expression of the position of provincial students in regard to the proposed new degree.—I am, etc.,

SIDNEY BARWISE.

Birmingham.

LUNACY ACTS AMENDMENT BILL.

SIR,—I regret to observe that in the amendments to the Lunacy Acts Amendment Bill, 1887, suggested by the Parliamentary Bills Committee of the British Medical Association, no notice is taken of the great hardship which will be inflicted by the urgency clauses upon the friends of patients, many of whom will barely rise above the level of the pauper class. For example, a man is attacked with acute mania, is violent and dangerous to himself or others, and requires immediate removal to an asylum. Under Section 4, the friends can remove the patient to the asylum upon an order in writing of a relative accompanied by one medical certificate; but under Section 3, Subsection 7, they must within seven days present a petition for a magistrate's order, accompanied by two medical certificates, neither of which "shall be signed by the medical practitioner who signed the medical certificate accompanying the urgency order." Thus the unfortunate friends have to bear the expense of providing three medical certificates. This is not all, however, for under Section 3, Subsection 11, should the justice before whom the petitioner comes for his official order "deem it necessary," he may "have the assistance of the clerk of the petty sessional division," who "shall be entitled to the prescribed fee to be paid by the petitioner."

Surely it is hard enough to have to pay for three medical certificates, which no reasonable person who has knowledge of these matters believes are necessary, without adding the fee of the county clerk. With reference to the three medical certificates, I would urge that one certificate obtained within, say, seven days, in addition to that accompanying the urgency order, together with the necessary certificate of the medical superintendent of the asylum, would be an ample safeguard against any possible chance of improper detention, which, I presume, is the intent and spirit of the Act.—I am, etc.,

T. OUTTERSON WOOD, M.D., F.R.C.P.Edin., etc.

Margaret Street, W.

THE LATE DR. WILSON FOX.

SIR,—As a grateful friend and admirer of the late Dr. Wilson Fox, I am anxious to be allowed to suggest a form of memorial which might, I think, be agreeable to his family as well as highly consonant with his own life and aims.

It is understood that he left behind him, all but ready for publication, a most valuable and exhaustive work on an important branch of medical science. Such a work, the product of many years' labour, is at once costly to publish, and unlikely to bring any pecuniary return. Would it not be a suitable and graceful way of commemorating our dear and honoured friend if those who mourn his loss combined to raise the sum—its amount could easily be ascertained—which is required to bring his *magnum opus* before the world, without cost or trouble to those whom he has left behind?

I withhold my name, which is immaterial, and beg to subscribe myself,

ONE WHO OWED MUCH TO WILSON FOX.

THE BROWN DEFENCE FUND.

SIR,—We, the undersigned, crave your permission for a few remarks in connection with the above case. Having allowed a fair time to elapse since attention was called to the matter by the letter of Drs. Barnes and Broadbent and Mr. Sydney Jones, in the JOURNAL of April 23rd, and finding only an inconsiderable response to the appeal, we think we might invite further notice of the case. Up to the present date but £20 9s. 6d. has been received, which goes a short way indeed towards defraying the law costs, amounting to over £160.

Mr. Brown being personally known to us, we believe we can confidently state that he became involved in the matter through no indiscretion or imprudence on his part. Indeed, his position was one in which any member of our profession might find himself at any moment; and as he can but ill afford to be at such a serious loss, we

solicit help on his behalf. As we believe many of his professional brethren would contribute a small amount where they cannot spare much, we desire to make it known that we will gladly receive any contributions, however small, as it is apparent to all that if even a limited number of the medical practitioners of the country would each give half-a-crown, or even less, the whole sum required would be paid off many times over.

In conclusion, we might say (should it be so wished by those contributing) that the donors will be acknowledged without the amount being specified.

Hoping we shall not make this appeal in vain, and thanking you for the interest you have shown in the matter, and the courtesy you have extended to us,—We are, etc.,

ROBEY AND ROBEY, 129 and 143, St. John's Hill, New Wandsworth, S.W.,
J. H. T. CONNOR, 49, St. John's Hill, S.W.,
R. F. FRAZER, 185, Lavender Hill, S.W.,
M. G. BIGGS, 101, Northcote Road, S.W.,
MABYN READ, Clapham Common Gardens, S.W.,
J. T. BOYD, 73, St. John's Hill, S.W.,
JAMES E. LAWRENCE, East Hill, S.W.,
T. A. IVES HOWELL, 14, High Street, Wandsworth,
G. STANLEY MURRAY, Meadowside, Putney,
RICHARD R. W. ORAM, Cremyll, Wandsworth Common,
R. H. A. HUNTER, Clifton House, Battersea.

May 23rd, 1887.

OPERATING PHYSICIANS.

SIR,—From time to time acrimonious discussion has taken place at various hospitals and societies as to the right of those in charge of the department for diseases of women to operate through the abdomen on ovarian and uterine tumours, the surgeons contending that these cases rightly belong to them, and the obstetric physicians arguing that it is unfair and unjust to limit their usefulness to operations *per vaginam*. The custom hitherto at general hospitals has been for obstetric physicians to hand their abdominal cases over to the surgeons in rotation; but, in recent years, a strong feeling has cropped up among gynæcologists that the rule in general hospitals should be altered in their favour, and various reasons have been urged in support of these views. Seeing that times and practice have changed, and believing that it will be for the benefit of all concerned if some plan can be devised by which this source of disturbance among members of a hospital staff can be removed, I propose to state the cases on both sides as fairly as possible, and to suggest that which seems to be a reasonable and practicable solution. My remarks will have particular reference to the case of general hospitals, though I shall conclude with some observations relating to the proper surgical management of special institutions.

The case of the surgeons is based on three grounds—first, the benefit of the patients; secondly, their own interests; and, thirdly, on grounds of professional morality. They say that as they are more accustomed to undertake serious surgical procedures, they are more used to meet various emergencies, and that in the department of abdominal surgery their experience, as evidenced by abdominal sections for various conditions of the abdominal viscera, though it may be small as compared with that of a few well-known abdominal surgeons, is much greater than that of the obstetric physicians at their hospitals, and that this, in the interest of patients, must not be given up. They also state that these cases are a part of their surgical birthright, and that to deprive them of this class of patient would be to rob them of some of their most interesting and instructive material. They also urge that gynæcological practice is purely surgical, as much so as that of general surgery, and that to pose before the public as physicians yet to practise surgery is not commendable, and should not be permissible in a profession which is supposed to pride itself on its honour. It is the clear duty of the College of Physicians to see that its Fellows do not infringe its rules as to operating; but, unfortunately for the sake of peace, this body does not appear to be alive to the necessity of safeguarding its professional status.

The case of the obstetricians is, briefly, that though they have gradually become enabled to operate on uterine tumours, etc., *per vaginam*, they are still debarred from attacking similar growths through the peritoneum, and this, they urge, is an improper and unjustifiable limitation, seeing that they know more of these cases than general hospital surgeons. This is doubtless true, and it would be easy to show that the general run of hospital surgeons not only do not know, but, if wise, do not pretend to know much about this sort of diseases. But, on the other hand, it must be remembered that obstetric physicians at general hospitals have, ordinarily, absolutely no experience of abdominal work, hence no benefit to the public can accrue from allowing them, untrained and inexperienced as most of them are in abdominal work, to operate on such cases. Moreover, if we are correctly informed, the mortality of those few who have succeeded in being permitted to operate on these cases is certainly not encouraging. The manner in which this lack of experience, as well as other difficulties, is to be overcome, will now be suggested.

The whole difficulty can, I believe, be surmounted if all parties to the discussion agree to treat the matter in an impartial spirit, and to that end the following propositions are submitted. The physicians and surgeons of general hospitals should advise their managing committees to make all future appointments to the gynæcological department surgical. Their ground would be that such work is surgical, and that it is not consonant with the best professional feeling that physicians should practise surgery. If this were done, the title of such officer would be—Mr. So and So, Surgeon or Assistant-Surgeon for Diseases of Women and Obstetrics, or Gynæcological Surgeon, or simply Gynæcologist. His duties would be the same as at present, with the addition that he would, as a surgeon, operate on his own cases of tumours of the ovaries, uterus, and appendages through the abdomen, but similar cases occurring in the medical wards would go under the care of the general surgeon corresponding to any particular physician. Thus the general surgeon would get some amount of pelvic surgery, while the specialist would, as is but proper, be confined to his own domain, and not allowed to operate on any part, even in females, which is not strictly in his province, for diseases of the kidney, bladder, breast, liver, etc., are not peculiar to women.

As regards special hospitals, somewhat similar arrangements should be pressed on their managing committees, that is, to give future appointments to surgeons. One of these institutions which stands well in professional repute has for some years past adopted this wholesome plan, and, in the best interest of the others, we have no hesitation in saying that the adoption of a similar rule would work well for them in professional and public estimate. Unfortunately the physicians who, in the main, officer these hospitals are apt to forget that they chose their own vocation as physicians for diseases of women and not as abdominal surgeons, hence when they desire to operate on tumours of viscera other than those peculiar to women they overstep their proper limits, and falsify the very argument which has been used in their behalf, namely, that their great experience in uterine and ovarian cases entitles them to operate on them, for in interfering with diseases of the kidneys, liver, etc., no such claim can be made out. The cobbler must stick to his last; and if my suggestions be acted on, not only will he do so, but all these causes for disagreement among members of hospital staffs will be abolished. I feel sure that all right-minded men will not desire to sail under false colours, and, also, that the general body of the profession will co-operate in putting these matters on some such solid basis as is here suggested.—I am, etc.,

SURGEON.

A JUBILEE FUND FOR EPSOM COLLEGE.

SIR,—I am very pleased, indeed, to learn that you are willing to aid in the above project by giving all your editorial support to any extensive effort that may be made to bring it to a success. That is precisely what is needed, in my opinion, to give the movement the necessary impetus to ensure it a prosperous termination; and that is what I mean in saying I would "leave the matter in your hands," for I am sanguine that if the able advocacy of the JOURNAL of the British Medical Association, with its wide-spread circulation, is given towards impressing upon our profession the present necessity and the future usefulness of the object in view, and that it would be a gracious form of recognition of the Queen's Jubilee, its success would be more ensured in that way than by any other initiatory course.

I quite agree with the system of organisation which you point out it is necessary to create for the purpose of raising the fund. But, as you are aware, the machinery is already practically in existence. The British Medical Association has branches covering the chief places in the country. These branches have their chairmen, committees, and secretaries, and could act as sub-centres for the districts surrounding them, at the same time being controlled by a central committee in London. I have not the least doubt that the executive of the Medical Benevolent College would only be too glad to render assistance, and the various universities, colleges, and hospitals, etc., might also be made into good auxiliaries. Large sums have been collected for the Imperial Institute and Jubilee Funds this year by societies and committees who have had to begin their work by first getting together their working bodies without any pre-existing aid or established organisation whatever, but, as I repeat, in our case the means of doing the work are ready, and it only requires the sympathy of the members of the

Association to be enlisted, and a little enthusiasm thrown into the work, in order to bring about the desired result.

Now, sir, I cannot expect you to take this burden upon you as a whole, but only by your JOURNAL can I or any other individual hope to give the matter the necessary publicity, or focus into one channel the opinions or assistance of many. I see that through your pages is the direct and proper avenue to draw the attention of the members of the Association to the desirability of co-operating to promote this Jubilee Fund for Epsom College, and those who are willing to take part in raising it might communicate with you to that effect. You could publish the names of those who assent, and then steps could be duly taken to set the working arrangements in order. If I were to take the lead in this matter I am afraid that many might think I was presuming too much, but I wish to act conjointly in labouring and contributing with the rest. If Manchester be fixed as one centre I should be happy to take the management of a committee to embrace Crewe and the towns in its vicinity, to work in connection with that centre, and this method of grouping and the division of labour could, without very much difficulty, be carried out on the same lines throughout the country.

The present opportunity for raising such a fund is specially seasonable, and should not be neglected. Why should not we, like the members of other societies, celebrate the Queen's Jubilee in a distinctive manner? I think we shall all agree that medical science during the last fifty years has made unexampled progress, and that it is a befitting time to celebrate the conquests we have made in that period over the multitudinous enemies and ills that flesh is heir to. But besides the increased knowledge and skill which have been acquired by our profession in Her Majesty the Queen's reign, we must not forget that trouble and misfortune are often the lot of our brethren, and, as you truly say, "Let prudence and self-aid do what it may, there will always remain misery to be alleviated and calamity to be solaced and consoled." Let those, therefore, who are influential amongst us take up this question of a proposed Jubilee Fund for Epsom College, and by showing that they have an active sympathy in the work the matter would be brought to a successful issue, and we should then in time to come be able to look back upon the Queen's Jubilee as the auspicious opportunity that enabled our profession to do a deed worthy of itself. —I am, etc.,

JAMES ATKINSON.

Crewe, May 24th, 1887.

*** Those who concur with Mr. Atkinson are invited to communicate directly with him. "Facta Quam Verba" must be the motto of such an undertaking.

PHYSICIANS v. M.D.'s.

SIR,—It was with great regret I read in the JOURNAL of May 7th another of those insulting attacks on the status of physicians with which your paper has been latterly teeming. I did think that, after the *exposé* by the Visitors of the Medical Council, who stated that the fundamental medical degrees of certain leading universities are not fit even for registration, that our M.D. friends would have become at least discreet, if not modest. This time the attack comes from a particularly unexpected quarter. Principal Cunningham might, it seems to me, act more wisely than make St. Andrews University, of all the places in the world, the theatre for a fling at physicians and surgeons, all of whom have enjoyed a training and passed examinations that have as yet to be officially pronounced to be such as not to be entitled to registration. The Principal seems to convey that poor villages enjoy a monopoly of physicians; whereas the most casual reference to a directory will show that even M.D.'s are to be found in such places. He also tells us that universities would make a little more money if M.B.'s would not usurp the prefix "Dr.," as then they would be able to dispose of a larger number of their higher degrees.

Higher degrees, forsooth! There is something specially tickling in these words "higher degrees," after the astounding revelations of the Visitors' Report of 1885. The Principal further tells us—by way, I suppose, of administering a clean knock-down to us presumptuous physicians and surgeons—that his graduates have just obtained a degree which will place their names on a roll which includes some of the most illustrious physicians and surgeons in the kingdom. Surely this is a strange way to depreciate us and hold up the M.D. aloft to the high heavens! We cannot, after all, be so very contemptible, if getting on the same roll with us be one of the honours in store for the Principal's fledglings. He further vouchsafed to inform his hearers that the recipients of St. Andrews degrees would ever after enjoy a university standing.

Now, I shall merely observe that the standing conferred by any university which does not require an Arts degree prior to medical graduation differs in no essential respect from that conferred by any other licensing body, while the standing conferred by those universities which do demand such Arts degrees has been so entirely overturned by the amazing display of classical ignorance brought to light at the visitation referred to, that, in pity to themselves, university graduates should put some bridle on the indiscreet among their fellows. I am sorry to think that the sale of degrees must be falling off at St. Andrews when it becomes necessary to praise up their goods from the Principal's chair.

I conclude by inviting public attention to the following quotation from page 301 of the Visitors' Report on St. Andrews University, and all who will read it will agree with me in deploring the fact that physicians should be so often confounded with persons so little entitled to enter the noble domain of medicine: "From a careful survey of the conditions under which the degree of M.D. is conferred, and the method of conducting the examination, we have been forced to the conclusion that the examination fails in being a reliable test of professional knowledge of medicine, surgery, and midwifery, and that it tends in no way to improve medical education or to raise professional status."—I am, etc.,

Cashel, May 18th. THOMAS LAFFAN.

NAVAL AND MILITARY MEDICAL SERVICES.

RELATIVE RANK.

AN INTERVIEW WITH THE DIRECTOR-GENERAL OF THE MEDICAL DEPARTMENT OF THE ARMY.—At the request of Mr. Ernest Hart, Chairman of the Parliamentary Bills Committee of the British Medical Association, the Director-General of the Army Medical Staff was kind enough to grant an interview to him, with a view, if possible, to elicit some precise information on the question which has so seriously occupied the minds of the Medical Staff of the army at home and abroad. At the request of the editor, Surgeon-General Maclean, who happened to be in town, was present at the interview, with the approval of the Director-General, who not only gave a patient hearing to the representations made to him, but received those who made them with great cordiality.

The Director-General at the outset expressed his astonishment that, while it was evident from the letters and articles in the medical press that the service was in a state of agitation, no complaint had reached him or the military authorities from a single medical officer at home or abroad. Two administrative medical officers had, indeed, in the course of conversation, asked a question on the effect the announced abolition of relative rank was likely to have on the position of medical officers; to these questions his reply was "no effect at all." Sir Thomas Crawford pointed to the regulations of the service which dealt with the subject of grievances and the channel through which representations regarding them should be made by individual officers, and explained how impossible it was for either the military or medical authorities to deal with grievances brought to their notice only through the medium of the press.

The Director-General, at great length, entered into an explanation of the governing motives of the abolition of relative rank, which was not intended, directly or indirectly, to affect the rank or social status of the Medical Staff at all. It was found that relative rank, as the term is understood in the combatant ranks of the army, was the cause of much inconvenience, and acted frequently to the injustice of senior officers, who were, by its operation, often placed in positions of inferiority to their juniors in the service; and the Director-General was emphatic in his assurance that it was to do away with this anomalous state of things that relative rank was abolished, not with the least intention of affecting the Medical Staff, or lowering their position by a side wind.

It was explained to the Director-General that, however little the medical service had been intentionally injured by this abolition, the practical effect of the measure had been to lower the status of medical officers, not only in their own estimation, but in that of their brother-officers in the combatant ranks; and that in many ways this had been in a very practical and unpleasant manner brought home to them in their daily life and experience. Sir Thomas Crawford, taking

the *Army List* in his hand, pointed to the fact that, notwithstanding the abolition of the term "relative rank," the position of army medical officers remained the same, as shown by the words printed in italics at the head of the list of the different grades, surgeons-general ranking *with* major-generals, and so forth; and that, when the amended warrant is promulgated, this point will be made even more clear than it is at present. The Director-General added that he did not think any reasonable doubt could exist on the point, but that, if any suggestion could be made which would still more clearly express the fact that the rank of army medical officers remained intact, he had no doubt effect would be given to it. On the subject of the misapprehension existing in the minds of combatant officers Sir Thomas Crawford was very emphatic; he had no doubt that, in the event of a military officer denying to any military medical officer any of the rights conferred on him by warrant, redress would at once be accorded by the military authorities on proper official representation, but that it was impossible to deal with matters of this kind officially merely on general and vague representations in the press.

Turning to the questions of substantive rank and military titles, added to those indicative of professional status, the Director-General explained the sense in which the authorities understand the term "substantive military rank" to be that it belonged exclusively to those who have to administer discipline and military law. Medical officers are engaged solely for health purposes; they are not responsible for duties which pertain to all that is understood by military command. The rank of a medical officer, so far as his own duties are concerned, is substantive; but to ask for titular designations which belong, and always have belonged, to the purely fighting branch of the army, is neither dignified nor reasonable. The Director-General insisted much on the fact that if such a demand was granted, which he believed to be put forward only by a few, the effect would be to increase and intensify any existing jealousies between the combatant and medical ranks of the army, and, he believed, would act prejudicially on the minds of a portion of the department, leading them to subordinate their purely medical duties to their military positions; adding that, in his experience, the medical officers in the army who were really respected, and who commanded the esteem of their combatant brother officers, were those in plain terms known to be "good doctors."

With regard to the fact that military titles are given to officers in the Commissariat and Pay Departments, Sir Thomas Crawford explained that the intention is for the future to draw officers for the above departments from the combatant ranks; that it was found impossible to withhold such titles from those who happened to be in the departments already, but that in time to come the Pay Department is to be so organised as that, necessity arising, officers serving in it may be recalled to military duty.

This is, as nearly as possible, in the terms, and certainly conveys the sense of the explanations so kindly given by the Director-General, by whose permission we publish them, without note or comment, for the consideration not only of the medical officers of the army, but of the younger members of the profession who may be contemplating a career in the Medical Department of the army.

HONORARY RANK FOR ARMY MEDICAL OFFICERS.

MEDICAL STAFF CORPS writes: I venture to trespass on your very valuable time, and ask you to persist in your endeavours and stand forward and fight for us in this good cause. The Director-General's position with reference to the War Office would be one of continual friction were he to comply with all the many demands made through him to the Horse Guards. Of matters medical they have had enough, and a feeling exists now of such strong opposition to us that it will require great pressure to have this matter of rank not only decided but granted. Rank, or position, or title is as much our right as it is that of any other commissioned officer in the service. We are told that the position of an army medical officer is what he individually makes it for himself. That is true with everyone, but the medical officers in the service claim for themselves a recognised military rank. They do not want to hide their profession behind a military uniform, nor do they intend to sink their profession by adopting a military title. The Medical Staff Corps as now constructed consists of several thousand trained men. They have under their charge hospitals for treatment of the sick of the entire army both at home and in the numerous stations abroad. The work is military, and more dangerous to life than that of any other combatant or non-combatant branch of the army. In times of war the medical officers and the Medical Staff Corps have shown that they are as capable of fighting as those of the other arms of the service, and many cases of individual bravery are on record, showing that it is as necessary for a medical officer to carry arms as it is for any other officer, if for no other object than for the protection of the sick and wounded placed under his charge. We ask for rank similar to all other branches of the army. It would make no alteration in our duties. It would level us up to the level of all other officers serving the Queen.

S. B. (Allahabad) writes: On the part of the medical officers in this division I thank you for your unwearied exertions on our behalf and your earnest advocacy of our claims. We feel deeply grateful to you for so prominently and forcibly representing our just demand for equality with other departments in respect to the grant of honorary rank. We read with great interest the account of the interview with the Secretary of State in the JOURNAL of March 26th, and at once (on April 16th) telegraphed to you that "the Medical Staff in India believe that honorary rank is absolutely necessary for equality with other departments, and that relative rank is now worthless." What we fear is that a revised paragraph of the Royal Warrant will be issued restoring relative rank or relative precedence. Under the altered circumstances of the other departments, the restoration of relative privileges would only lead to further discontent. Relative rank is now inferior and valueless. We all most earnestly pray you to continue your exertions on our behalf, and not to accept as satisfactory anything short of the honorary rank given to the other departments. I have been in communication with most of the senior officers in India, and all, without exception, are of opinion that honorary rank is now absolutely necessary for our position in the service. We thank you most sincerely for the great and important services which you have rendered the Medical Staff, and earnestly hope that you will be successful in obtaining for us a recognised military position and rank in the service.

M.B.M.S. writes: Your correspondent who points out the places at which the officers of those departments who have been given honorary rank are placed during war might have completed the picture by indicating the position of the medical officer under like circumstances. The bearer column is with the fighting line, and here are the instructions which govern the position of the medical officer in charge of each regiment or battery: "The medical officer and regimental bearers will never lose touch of their corps during an action, but keep in close proximity to them." So that the medical officer gallops with his regiment of cavalry wherever it goes. He stands by his battery whilst the guns are in action, and he is with the first line of attack if with the infantry. Great as has been our mortality when fighting savages who have not firearms, what will it be when we come, as we assuredly soon shall, to fight a European nation with rapid-firing arms of precision? Will the bullets only hit the "combatants," and kindly pass by the officer who must never lose touch of his corps in action (*vide* Medical Regulations, Sec. ix, para. 718), or will they wing their way some miles behind to the honorary major of the Pay and Commissariat Department comfortably quartered on board ship or in good quarters on shore. What puzzles most people is how the War Office has the effrontery to even attempt to maintain its present position, and why it does not yield with a good grace what it must do later on to force of circumstances. Nothing short of honorary or substantive rank meets the justice of the case, and nothing less will satisfy us.

M. S. writes: To obtain a thoroughly efficient and contented Medical Staff, medical officers must have the same rank and titles as other officers, departmental and combatant. The titles must be absolutely the same, or they will most certainly be considered inferior. The title must be thus: Captain Smith, Surgeon, Medical Staff, or Major Smith, Surgeon-Major, Medical Staff, or Lieutenant-Colonel Smith, Brigade-Surgeon, Medical Staff, in precisely the same manner as Captain Brown, Deputy Assistant Commissary-General, Commissariat and Transport Staff, or Lieutenant-Colonel Brown, Assistant Commissary-General of Ordnance, Ordnance Store Department, or Chief Paymaster, Army Pay Department. The compound term or title will not do in the case of the medical officer any more than in that of the officers of other departments; that is, Surgeon-Captain Smith, Medical Staff, Surgeon-Lieutenant-Colonel Smith, or Brigade-Surgeon-Lieutenant-Colonel Smith will no more meet the case than would Commissary-Captain Brown, or Commissary-Lieutenant-Colonel Brown, or Paymaster-Lieutenant-Colonel Brown, of the Pay or Commissariat Departments.

If this much-vexed question, which constantly affects the position of every medical officer in the army, and will most certainly sooner or later prevent the best class of medical students competing for the military services at home or in India, is not settled in the only way it can be settled, by honorary army rank, the same as to other army departments, then let medical aid to the army in peace and war be rendered by a purely civil medical service.

A. M. S. writes: The department in medical charge of the troops, and responsible for the sick and wounded officers and men under all conditions of unhealthy climates and service in the field, when, at a distance from special advice, life and health must depend on the medical aid present, should be thoroughly efficient. To secure this efficiency, it is necessary to obtain the best medical men available, which can only be done if the Army Medical Service is popular with the medical profession, including the professors and the schools. At present there exists in the department and in the profession very general discontent and a strong sense of unworthy treatment of the medical officers, owing to recent changes, by which relative rank in the army is abolished and medical officers are deprived of all army rank, retaining merely a precedence such as is granted to certain civil officials in India and elsewhere, while officers of the Commissariat and Ordnance Store Departments, who also had the same relative rank, are now granted honorary army rank.

Medical officers, as army officers, claim army rank, which they have always hitherto held, as a right. They alone of all the departments go into action with the troops, and share all the dangers of combatants, as is proved by the twelve Victoria Crosses won by the department, and by the large proportion killed and died on service during the recent campaigns in India and Africa, where the duties were very severe, and their services were acknowledged by all ranks to be very efficient.

Medical officers are entrusted with the medical charge and military command of all army hospitals, including the sick and wounded patients, officers and men, the Medical Staff Corps, a military corps for hospital service, the quarter-

masters, medical staff (who have honorary army rank), and the medical officers themselves, who alone of the whole *personnel* of the hospitals have no army rank whatever. In fact, although medical officers accompany the troops into action (under fire), and thus come first, after the combatants, on the battle-field, at all other times they must come last, ranking after all departmental officers holding honorary rank, as of course actual army rank will have the advantage over any simple precedence, however expressed in an army warrant.

As long as army rank and titles were restricted to professional soldiers, most medical officers were averse to obtaining honorary army rank, although relative rank was always unsatisfactory, as it was neither clearly expressed nor generally understood; but now that relative rank has been abolished, medical officers deprived of all army rank, and honorary rank in the army has been granted to other departmental officers and non-combatants, medical officers are convinced that, unless they are to become civilians, wearing no uniform, their position in the army will never be satisfactory until they are granted precisely the same army rank as the departmental officers of the Commissariat, Ordnance Store and Pay Departments. This question of army rank for medical officers affects the interests of the army even more than those of the medical department or profession. If the public wish to supply the best possible aid to the sick and wounded officers and soldiers, they will grant the just claims of the medical officers of the army.

A HAPPY MEDIUM writes: If I may address you a few lines on the vexed question of rank to medical officers it is to endorse the suggestion that "a happy medium" may be adopted. It would dispel the notion amongst some of our military brethren that we wish to ape them in their military titles, and would convince the Secretary of State for War that we do not wish for "titles so dissociated from the duties of our honourable profession," by calling us with a prefix of our profession, and coupling with it the rank military, which would make it patent to everyone what we were, and what corresponding military status accompanied it; as captain-surgeon, major-surgeon, lieutenant-colonel-surgeon, colonel-surgeon, major-general-surgeon. If such a course were adopted, I cannot help thinking the requirements of the case would be met.

PRECEDENCE AMONG VOLUNTEER SURGEONS-MAJOR, AND WHO IS THE OLDEST?

JAMES WILLIAMS, F.R.C.S.Eng. (Surgeon-Major to the 2nd Battalion Brecknock Volunteers, South Wales Borderers), writes: In reply to the latter part of "M.D.'s" question, "who is the oldest Volunteer now serving, and has been continuously from 1859 (if any)?" I would state that I joined in May, 1859, and have served continuously, and hope to accompany the battalion again in July to Aldershot. I may add that I attended the Queen's Review in June, 1859, as surgeon to the corps.

SIR JOHN W. REID, K.C.B., AS DIRECTOR-GENERAL OF THE NAVAL MEDICAL DEPARTMENT.

SURGEON, R.N., writes: It is now over seven years since Sir John Reid took the reins of office as the head of our department, and it is only by looking back and comparing the present with the past that the profession in the navy must recognise and feel how much we are indebted to him for rescuing our position from its then unpopular condition, and elevating it to the position which it now holds—that of undoubted popularity.

Sir John Reid has done so much for our branch of the service that he might still add to that obligation by deferring the rest he has so justly earned, and consent to guide our destinies for a few years longer by accepting the extension of his office, which the Admiralty would be only too willing to offer.

MEDICO-LEGAL AND MEDICO-ETHICAL.

ACTION FOR THE RECOVERY OF FEES.

THE case of Duncan *v.* Rivaz, decided recently by the Lord Chief Justice and Mr. Justice Smith, was one in which a medical practitioner tried unsuccessfully to support an award which he had obtained for fees due to him for professional services. He attended Mrs. Rivaz, the defendant, for some time in 1885, she being then labouring under an attack of temporary insanity. As his fees were not paid, he brought an action to recover them, and her solicitors, after considerable delay, agreed to refer the matter to two medical gentlemen. She was then again insane. Her solicitors, when agreeing to refer the action, at the same time stated that their client had expressly prohibited them from taking that course, and that they must reserve her rights to dissent when she recovered. What may have induced Dr. Duncan and his legal advisers to accept a reference on such terms, or to go on with it, we do not know; but the case was heard in June last before the arbitrators named—Dr. Andrews and Mr. Bruce Clarke—and they made an award in favour of the plaintiff for the whole amount he claimed. This award may be taken as indicating their opinion that the fees were not unreasonable under the circumstances, but it is, as the Court have decided, useless for any practical purpose. Dr. Duncan treated it as a legal decision in his favour, and issued execution against the defendant and sold her furniture, though the amount realised proved insufficient to satisfy his claim. This conduct may not improbably have brought upon him a course of litigation which may cost far more than the amount of the fees originally in dispute. Dr. Duncan and his legal advisers should have known that while Mrs. Rivaz was insane, the agreement made by her solicitors to refer the action was worthless.

Common sense, as well as law, requires that an agreement should be made by persons who are capable of understanding what they are doing. Contracts made by insane persons cannot be enforced against them, and the agreement to refer the action, was, as the Court has shown, no agreement at all. If such persons are engaged in litigation, their case is conducted not by themselves, but by a guardian or next friend appointed on purpose to represent them. The action could not have proceeded while Mrs. Rivaz was unable to understand and look after her own interests, unless the Court was satisfied that someone was appointed able to do so in her place; and it is extremely doubtful whether, in such a case, any mode of trial, except in open court, would be sanctioned.

As it is, Mrs. Rivaz has not unnaturally declined to be bound by a decision given against her by a tribunal to which she never consented to confide her case, and the award given in Dr. Duncan's favour has been set aside. On the facts as stated, this result was inevitable.

UNQUALIFIED PRETENDERS.

M.D. writes: A surgeon in a neighbouring part of London has opened a branch surgery in our suburb, and has placed in charge of it an unqualified assistant, who works what is in fact an independent practice, the principal occasionally putting in an appearance. The assistant holds himself out as an exceptionally qualified man, prints after his own name on the labels for bottles, etc., the imposing letters, "L.A.S.A., R.S.D.E.," has the effrontery to signify his willingness to be called into consultation with us former residents, and now has gone so far as to sign two death-certificates.

We think that in this last he has committed an actionable offence and has laid himself open to penalties, which we naturally wish to enforce.

*** OUR correspondent's best course is to communicate with Mr. James R. Upton, the Clerk of the Apothecaries' Society, Blackfriars.

THE RIGHT TO KEEP A CHEMIST'S SHOP.

MEMBER OF THIRTY-SEVEN YEARS' STANDING.—We have submitted the question whether a person holding the diplomas L.K.Q.C.P.I., L.M., M.R.C.S.E., could legally keep a chemist's shop, to Mr. James R. Upton, Clerk to the Apothecaries' Society, and Solicitor to the British Medical Association, who writes: The Pharmacy Act, 1869, Section I, is to the following effect. "Nothing contained in the first fifteen sections of the Pharmacy Act, 1868, shall affect any person who has been registered as a legally qualified medical practitioner before the passing of this Act; and the said clauses shall not apply to any person who may hereafter be registered as a legally qualified practitioner, and who, in order to obtain his diploma for such registration, shall have passed an examination in pharmacy." I think, therefore, that if the gentleman about whom Dr. ——— writes, was on the *Medical Register* before the passing of the Pharmacy Act (August 11th, 1869) he can keep a chemist's shop without registration as a chemist, but if only registered as a medical practitioner after that date he cannot do so, unless pharmacy formed one of his subjects of examination for the diploma he holds from the College of Surgeons."

Under the present regulations for that diploma, candidates prior to their admission to the second examination on the principles and practice of surgery, medicine, and midwifery are required to produce a certificate of having studied practical pharmacy during three months. But to satisfy the terms of the Act actual examination in pharmacy appears necessary.

PRACTITIONERS AND PATIENTS.

R. L. M. writes: I was in attendance on a patient who desired a consultation to which I assented. The consultant and I agreed on a certain line of treatment and had arranged for a second consultation. But in the meantime I was informed that my services would not be required as they had called in another practitioner; no cause was assigned for my dismissal, as I was carrying out the treatment upon which we agreed. I informed the consultant of this and he said he would not visit the patient unless he was sent for in connection with the gentleman who had been called in. He expressed his opinion to me that the conduct of the parties was most unjustifiable, and I desire to ask you would it not have been more in keeping with the dignity of the profession to have refused to go under any circumstances?

*** Our opinion of the case submitted by "R. L. M." is aptly expressed in the following extract from the *Code of Medical Ethics*, second edition, page 49, rule 9:—"The right of a patient to change or discard his medical adviser is unquestionable; but, like other rights, it is limited by the legitimate claims of others: and, *a priori*, a medical practitioner is justly entitled to expect that he shall not, *sine causâ*, and without reasonable courtesy and explanation, be superseded in attendance on a case. In such event, moreover, the superseding practitioner is morally and ethically bound to take due care that the same courteous respect which he individually would exact be paid to his discarded *confrère* alike by himself, and by those whom he has been called in to professionally advise."

At the same time, we are not, under the circumstances related, prepared to admit that the consultant in question should abstain from meeting the superseding practitioner, unless the latter, in like manner with the patient, knowingly treated the discarded attendant with unprofessional discourtesy.

THE CHARGE OF MANSLAUGHTER AGAINST A MEDICAL ASSISTANT.

MR. WILLIAM THOMSON (Manchester) writes: Last week Dr. Illingworth wrote to me to the effect that there would appear in the JOURNAL (May 14th) a letter in which he had drawn attention to extracts from my letter to him, which "were strangely different." I have read Dr. Illingworth's letter in the JOURNALS of March 19th and May 14th, but fail to see the "strange difference" in the extracts from my letters.

He refers to the "astounding revelation" that I did not test for meconic acid. He is surely aware that meconic acid is not one of the poisonous principles of laudanum. Mr. Brown, of Edinburgh, in whom Dr. Illingworth places

his trust, states that the medicine contained morphine in the free state equivalent to 1.38 grains of morphine hydrochlorate to the fluid ounce, besides some more in solution.

I understand Dr. Illingworth's argument to be that if the jury had been told that the medicine only contained a very small quantity of laudanum (in spite of there being an enormous dose of morphine present), Irvine, who prescribed and made it up, would have been liberated and justice would have been done. Dr. Illingworth informed me that, as a lover of right and justice, he was taking this matter up for discussion in your JOURNAL, but he gave you a garbled newspaper account of the trial, although he, I believe, was present at it, and presumably knew that the newspaper account was not a strictly accurate one, whilst he does not tell you that the dose prescribed was a tablespoonful, and after taking several doses—that is, several times 1.38 grains (according to Mr. Brown's analysis) of hydrochlorate of morphine—the woman died. Dr. Illingworth does not seem to understand that "dark colour" may be applied to a medicine which is not quite colourless. If the woman had been the only case Irvine would probably have escaped punishment. Unfortunately, however, for him, a child for whom he made up a medicine to contain (according to his own account) bismuth, chloral, and carbonate of potash, also died of morphine-poisoning; and I found in this medicine, as I did in the one given to the woman, a white powder, which was mainly composed of free morphine, and which was present in the medicine to the extent of 3.135 grains of the hydrochlorate per fluid ounce. Of this Dr. Illingworth takes no notice. As everyone knew that Irvine did not intend to injure either the woman or the child, no one could but sympathise with him in the position in which he was placed; and I think if Dr. Illingworth had acted wisely, he would have allowed the matter to rest and be forgotten. Dr. Illingworth's letter will, I fear, give reason to Mr. Irvine to exclaim, "Save me from my friends."

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Friday, May 20th.

Lunacy Districts (Scotland) Bill.—The Marquis of LOTHIAN moved the second reading of this Bill, and explained that its object was simply to rectify an error which had crept into a previous Act on the subject, and to give power to alter the areas of lunacy districts in Scotland in places where the population had largely increased. Although the Bill had not yet been printed and circulated, he hoped that their lordships would now assent to its second reading.—The Earl of WEMYSS thought it would be establishing a bad precedent to allow a Bill which their lordships had not seen to be read a second time.

The Bill was read a second time.

HOUSE OF COMMONS.—Thursday, May 19th.

The Dundrum Lunatic Asylum.—Colonel KING-HARMAN, in reply to a question put by Mr. W. CORBET, as to how many special inquiries into charges made against the resident medical officer of the Dundrum Criminal Lunatic Asylum had been held within the last five years, said special inquiries of the nature indicated had been held. There was a departmental inquiry held by order of the Government towards the close of 1881 and the beginning of 1882 into a number of matters connected with the administration of the asylum, as to which the hon. member was informed in reply to a question put by him to the then Chief Secretary, on May 3rd, 1883. In 1885 there was an inquiry on the general operation of this asylum, and as to the advisability of structural additions and rearrangement of buildings. Reports of this nature were regarded as confidential, and the Government could not undertake to lay them upon the table of the House.

Army Medical Officers.—In answer to Mr. W. CORBET, Mr. E. STANHOPE said: There are several reasons why medical officers do not count time on half-pay towards promotion and retirement, as combatant officers do. In the first place, the early voluntary retirement of a combatant officer is often an economy to the public, and the means of saving another officer from compulsory retirement at a comparatively early age. This does not apply in the Medical Staff, where there is no compulsory retirement before the age of 55, and it is desirable to retain trained medical officers as long as they continue efficient. Moreover, the retired pay of medical officers is on a more liberal scale than that of combatant officers.

Friday, May 20th.

Intemperance in India.—Mr. S. SMITH called attention to an announcement that it was in contemplation to establish fifty-two outstills for the manufacture of spirits in the Hooghly district of Bengal, and asked whether the Under-Secretary for India would communicate with the Government of India with a view to suppressing these provocations to intemperance.—Sir J. GORST replied that the question and others recently put by the hon. member seemed to suggest that the Government policy in India was to encourage intemperance for the sake of revenue. He was informed that the precise contrary was the fact. The consumption of spirits was checked by a repressively high duty, and since 1872, in consequence of improvements in the Abkari Administration, the number of liquor shops had steadily decreased, notwithstanding the increase of the population during that period.

Vaccination Cases.—Mr. STUART WORTLEY, in reply to Mr. PICTON, who raised a question as to the case of a Mr. King, who had been convicted and fined for not complying with the law after the unvaccinated child had died, said the fact that the child died before the vaccination officer, after repeated application, proceeded to enforce the fine, did not alter the liability of Mr. King.

Tuesday, May 24th.

Compulsory Vaccination.—In replying to a question put by Mr. PICTON, Mr. RITCHIE said that he sympathised with the object of the hon. member, as he knew that there were a considerable number of people who entertained conscientious objections to compulsory vaccination. So far as he was individually concerned, he endeavoured to give his personal attention to every case brought before the department, and was always willing, within the limits of the law, to exercise any powers he possessed to see that the law was not unduly strained.

UNHEALTHY AREAS IN THE METROPOLIS.

MR. STUART WORTLEY, as Under-Secretary for the Home Department, will, when the House of Commons reassembles, bring in Bills to confirm provisional orders of the Home Secretary for the improvement of an unhealthy area at Shadwell, and another at St. Giles-in-the-Fields.

OBITUARY.

WILLIAM EDWARD CROWFOOT, J.P., F.R.C.S.,

IT is with deep regret we record the death of Mr. W. E. Crowfoot, one of the Vice-Presidents of the East Anglian Branch, and President in 1856, which took place at his residence in Beccles on Thursday, May 12th, after a short illness. Mr. Crowfoot was in the enjoyment of healthful vigour, considering his advanced age, up to May 6th. He was born on December 9th, 1806, and received his early training at North Walsham, and afterwards at the Norwich Grammar School, under Dr. Valpy. He was subsequently a student at Guy's Hospital, and became a Member of the Royal College of Surgeons and a Licentiate of the Society of Apothecaries in 1828, and a Fellow of the Royal College of Surgeons by examination in 1845. His professional practice was begun with his father, and for more than fifty years he continued his unwearied and constant attention to the arduous duties of a medical practitioner, in the discharge of which he won universal respect and esteem. When still quite a young man, he took an active part in local public matters. Mr. Crowfoot joined the Town Council in 1844, and was elected Alderman on the retirement of his father. In the following year he was elected to the Mayoralty, which he also served in 1852 and 1853. He was an active supporter and consulting surgeon of Beccles Hospital, and for many years he enjoyed a large consulting practice. He was for several years Vice-Chairman of the Board of Guardians for the Wangford Union. He was appointed a Justice of the Peace for the county by the Lord Lieutenant of Suffolk in 1871, and was constant in his attendance on the Bench up to the last month of his life. Mr. Crowfoot identified himself very closely with, and took a warm and personal interest in, the education and improvement of the working classes. He was a man of very considerable mental ability. His naturally scholarly mind had been assiduously cultivated and enriched by reading and European travel. Mr. Crowfoot married, in 1833, Ellen, the daughter of William Miller, Esq., and had issue three sons and two daughters, who survive him. Mrs. Crowfoot died in 1870.

HOSPITAL FOR EPILEPSY AND PARALYSIS, REGENT'S PARK.—At St. George's Hall, on Thursday evening, a grand variety entertainment, comprising two short comedies and an exhibition of "Mrs. Jarley's Waxwork," was given in aid of the Hospital for Epilepsy and Paralysis, Regent's Park, with the assistance of several amateurs. The entertainment was the first of a series which the friends of the hospital are promoting with the object of raising a fund of £2,500 for the purchase of the lease and the extinction of the debt with which the hospital has for some years been burdened.

PRINCESS MARY OF CAMBRIDGE opened at Richmond, on Saturday last, as a public garden, a portion of the grounds of Buccleuch House, which the Vestry lately purchased from the Duke of Buccleuch.

DR. R. S. MAIR, of Bayswater, has been appointed Physician to His Highness Prince Malcom Khan and the Persian Embassy, *vice* Dr. Vincent Ambler, deceased.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE BOARDING-OUT SYSTEM.

A DEPUTATION from the Association for the Advancement of Boarding-out waited upon the President of the Local Government Board with an influentially signed memorial praying for certain amendments of the departmental orders having reference to the boarding-out system. They asked (1) that the boarding-out orders should be extended to all unions; (2) that the orders should apply to the children of deceased and bedridden parents in the workhouses and infirmaries; (3) that children under the age of two and over the age of ten should be included, so that families might live together. Mr. Ritchie expressed himself willing to agree to the two first requests. With regard to the age upwards he was disposed to acquiesce, so far as brothers and sisters were concerned, but with regard to the age downwards, he considered that as the allowance made was in excess of the cost of keeping the child, persons had a strong inducement to become foster-parents, more with a view to profit than to the welfare of their charges. On this point he withheld his judgment. The wish of the deputation that the foster-parents should report to the boarding-out committee in the case of the illness of the children, etc., had been met by recently issued orders. It was also asked by the deputation that boarding-out committees should be established within the limits of the unions. The President of the Local Government Board said he was willing that in cases where children boarded-out beyond the limits of the guardians it should be optional with the latter to establish the committees.

DIPHTHERIA AT WINCHESTER.

CONCURRENCE OF DIPHTHERIA AND SCARLATINA.—The recent prevalence of diphtheria in Winchester has been inquired into by Dr. H. F. Parsons, and his report on the subject affords confirmation of some points that have already been observed in other outbreaks. Diphtheria does not seem to have been a very fatal disease in Winchester heretofore. In the twelve years 1874-85 only 20 deaths altogether were registered from this cause, 7 of these being in the year 1877 and none in 1885. In 1886, however, 11 deaths were registered as from diphtheria, besides 2 from "croup," and in the first three months of 1887 there have been 5 deaths from diphtheria, 1 from "malignant sore-throat," and 1 from "croup." These 16 deaths represent a much larger number of attacks. In the course of Dr. Parsons's inquiry he learnt of and investigated 62 cases of undoubted diphtheria in 39 separate households occurring since the beginning of 1886, besides some 21 cases of sore-throats which, from their association with cases of diphtheria or other circumstances, there was reason to suspect were of the same nature. There has been for some six months past a continuous succession of attacks, with a temporary lull in December, but there has been at no time an "explosion" of many simultaneously commencing cases. The disease has occurred in almost all quarters of the city. There have been cases in the narrow, crowded streets of the old part of the town, as well as in the open suburbs; high up on the chalky slopes on both sides of the valley, as well as in the low-lying parts which are situated on alluvium and made earth, and are subject to fluctuations in the level of the subsoil water. There is a general concurrence of testimony that, as already stated, sore-throats not of a distinctly diphtheritic nature, but such as would be called "tonsillitis" or "follicular pharyngitis," were very prevalent in Winchester during the autumn of 1886 and the following winter, and one of the local medical men expressed the opinion that these numerous cases of sore-throat were essentially of diphtheritic nature. The prevalence, concurrently with diphtheria, of sore-throats of an ill-defined character has often been observed elsewhere; and there is reason to think that such sore-throats, although from a clinical point of view they may not be described as diphtheria, yet are etiologically of the same nature, and, indeed, that it is by these unrecognised cases that the contagion of the disease is often conveyed.

To Dr. Parsons it appears that the recent prevalence of diphtheria in Winchester may be, to a considerable extent at least, explained by the spread of contagion from person to person, especially through the agency of these undeveloped cases. This view is supported by several circumstances recorded in the report. In one instance, a man, X., who had been suffering from sore-throat, was set to do some work with two other men. They were rewarded with a mug of ale, of which the man X. drank first, followed by the two other men. Both of these latter were taken ill two or three days later, and one of them had a distinct attack of diphtheria, followed by paralysis of the soft palate.

Another point of interest in this Winchester epidemic, and one which has been noticed on previous occasions, both by Dr. Parsons and by other observers, is the concurrence with diphtheria of cases of scarlet fever. In some of the households attacked with the latter disease, there have been cases of sore-throat without conspicuous rash, presenting some resemblance to diphtheria. In one instance, a child was pronounced by the medical man who saw it first to be suffering from scarlet fever, but by another who saw it later it was said to have diphtheria, and was taken into the county hospital under that name. It recovered, and returned home in a month's time, and within a week of its return two other children in the same house were taken with scarlet fever. In another suburb of the city the numerous family of a general dealer suffered from scarlet fever, which did not come to the knowledge of the authorities, the wife who nursed the children sometimes attending to the shop. Another case of scarlet fever occurred at the same time in the same street in a household which dealt at this shop, and in the same family there subsequently occurred two cases of sore-throat, without rash, described by the mother as "like diphtheria," though the medical man who saw one of them says that he thought it scarlatinal. There were also in two households in the same street, and in one in the next, cases of decided diphtheria. This concurrence of scarlet fever and diphtheria in the same locality is deserving of closer investigation than it has on all occasions obtained, as instances have been recorded in which the one disease has seemed to have been contracted from the other.

LODGING HOUSES AND INFECTIOUS DISEASES.

D. H. G. asks to be informed as to the law in the following case. A. takes apartments; four days after his arrival his child falls ill with scarlet fever. B., the lodging house keeper, informs the other lodgers, who at once leave. Could B. have insisted on A. leaving his apartments at once when she knew what the ailment of the child was? Is A. obliged to take and pay for the whole house; and is A. responsible for the expenses of such disinfection as the sanitary officer deems necessary? B. of course could not let her house until put in a sanitary state.

*** The law is contained in Sections 126-129 of the Public Health Act, 1875, by which penalties are imposed (1) on persons responsible for the exposure of infected persons, etc., in "any street, public place, shop, inn, or public conveyance," and (2) on knowingly letting for hire "any house, room, or part of a house in which any person has been suffering from any dangerous infectious disorder, without having such house, room, or part of a house, and all articles therein liable to retain infection" properly disinfected. B. could not insist on A. committing the offence of exposing his child while in an infectious condition, nor could she insist on A. taking and paying for the whole house. She would, however, have a claim to be reimbursed any reasonable amount of expense to which she had been put in disinfecting the premises.

POPULATION OF THE ST. GILES DISTRICT.

DR. S. R. LOVETT, medical officer of health, writes: In the JOURNAL for April 16th, 1887, page 855, in the table of "The True Death-rates of London Sanitary Districts during the Year 1886," you give the estimated population in the middle of 1886 for St. Giles district as 41,348. The Registrar-General's death-rates are made (*vide* Weekly Returns) from the corrected enumerated population (Census 1881) 45,382. How does your statistician base the loss of population of 4,034? In the decade 1871-81 there was a considerable loss of population in this district, which I attributed largely to the carrying out of two large schemes under the Artizans' Dwellings Act, 1875, causing a temporary clearance of the people, but now large blocks of Peabody Buildings have been erected in Great Wild Street, Drury Lane, and Little Coram Street, Bloomsbury, which are occupied by as many residents as formerly lived on the areas. Many residential flats have also recently been built in Bloomsbury, occupied by an increased number of residents. On the other hand, clearances have been made for the new street from Oxford Street, etc., to Charing Cross, which have temporarily turned away some of our population. My estimate of the population for the year 1886 is:

Registration sub-districts.	St. George, Bloomsbury	Bloomsbury Parish	16,804
	St. Giles South	St. Giles Parish	14,870
	St. Giles North		13,404
	Whole St. Giles District		45,178

I should certainly like the calculations of your statistician and myself to be in accord.

*** 1. Dr. Lovett is incorrect in stating that the Registrar-General's death-rates are based upon the populations of 1881; the Registrar-General does not publish any death-rates of London sanitary districts, nor give any estimates of their populations.

2. The population of St. Giles North sub-district in 1886 is estimated by Dr. Lovett at 13,404, or within 433 of the number enumerated in 1881. The annual births in this sub-district have steadily declined year by year from 452 in 1881 to 265 in 1886, a decline so marked as to indicate a considerable decrease in the population, the cause of which is doubtless to be found in the last paragraph of Dr. Lovett's letter. The birth-rate in 1881 was equal to 32.7 per 1,000, while it was only 19.8 in 1886, based upon Dr. Lovett's estimate of the present popula-

tion of the sub-district. If, however, the birth-rate in 1885-86 in St. Giles North be assumed to have declined since 1881 no more than the London birth-rate generally, it would imply that the population of that sub-district in 1886 is about 8,930, a number less by nearly 4,500 than the estimate of Dr. Lovett. From this it would appear that Dr. Lovett's estimate overstates the population, and that the number as published in the JOURNAL is approximately correct.

HEALTH OF ENGLISH TOWNS

DURING the week ending Saturday, May 21st, 5,701 births and 3,594 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons. The annual rate of mortality, which had been 20.9 and 19.7 per 1,000 in the two preceding weeks, rose again during the week under notice to 20.3. The rates in the several towns, ranged in order from the lowest, were as follow:—Wolverhampton, 12.3; Leicester, 14.2; Sunderland, 14.9; Halifax, 15.2; Birkenhead, 16.6; Leeds, 16.8; Bristol, 17.3; Nottingham, 17.5; Brighton, 18.1; Birmingham, 18.2; Sheffield, 18.3; Hull, 18.8; Derby, 18.9; London, 19.0; Bradford, 19.1; Portsmouth, 19.3; Huddersfield, 20.3; Bolton, 20.4; Blackburn, 21.4; Plymouth, 23.7; Liverpool, 25.4; Salford, 26.2; Cardiff, 26.9; Newcastle-upon-Tyne, 27.9; Preston, 28.1; Oldham, 28.8; Norwich, 29.2; and the highest rate during the week 31.1 in Manchester. The death-rate in the twenty-seven provincial towns averaged 21.4 per 1,000, and exceeded by 2.4 the rate recorded in London, which, as before stated, was only 19.0 per 1,000. The 3,594 deaths registered in the twenty-eight towns during the week under notice included 532 which were referred to the principal zymotic diseases, against 548 and 500 in the two preceding weeks; of these, 237 resulted from measles, 158 from whooping-cough, 48 from scarlet fever, 47 from diarrhœa, 22 from diphtheria, 19 from "fever" (principally enteric), and 1 from small-pox. These 532 deaths were equal to an annual rate of 3.0 per 1,000. The zymotic rate in London during the week under notice was equal to 2.5 per 1,000, while in the twenty-seven provincial towns it averaged 3.4, and ranged from 0.0 and 0.5 in Wolverhampton and Bolton, to 6.0 in Newcastle-upon-Tyne, 6.7 in Norwich, 7.6 in Salford, and 8.6 in Oldham. The deaths referred to measles, which had declined in the four preceding weeks from 291 to 235, were 237 during the week under notice, and showed the largest proportional fatality in Brighton, Liverpool, Newcastle-upon-Tyne, Manchester, Oldham, Salford, and Norwich. The fatal cases of whooping-cough, which had been 160 and 136 in the two previous weeks, rose again during the week under notice to 158, and caused the highest death-rates in Birmingham, Oldham, and Blackburn. The 48 deaths referred to scarlet fever showed a slight further increase upon recent weekly numbers; this disease caused the highest proportional fatality in Preston, Salford, Halifax, and Blackburn. The 47 fatal cases of diarrhœa exceeded those recorded in any preceding week of this year. The deaths from diphtheria, which had been 32 and 20 in the two preceding weeks, rose again during the week under notice to 22, and included 12 in London, 2 in Salford, 2 in Liverpool, and 2 in Oldham. The fatal cases of fever, which had risen from 17 to 33 in the three preceding weeks, declined again last week to 19, of which only 4 were recorded in London. The death from small-pox occurred in Brompton, and was of an adult who had recently been to Paris to see a brother who died from the same disease in that city. The number of small-pox patients in the Metropolitan Asylum hospitals, which had been 5 and 7 in the two preceding weeks, had declined again to 5 on Saturday, May 21st; no new case was admitted to any of these hospitals during the week. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 2.8 per 1,000, and was somewhat below the average. The causes of 79, or 2.2 per cent., of the 3,594 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

IN the eight principal Scotch towns, having an estimated population of 1,299,000 persons, 824 births and 532 deaths were registered during the week ending Saturday, May 21st. The annual rate of mortality, which had been 21.2 and 21.5 per 1,000 in the two preceding weeks, declined again to 21.3 during the week under notice, but exceeded by 1.0 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 15.7 in Edinburgh, 15.8 in Leith, 19.7 in Paisley, 20.0 in Aberdeen, 21.1 in Perth, 22.6 in Greenock, 23.4 in Dundee, and 24.5 in Glasgow. The 532 deaths registered during the week in these Scotch towns included 42 which were referred to whooping-cough, 10 to measles, 6 to "fever," 6 to scarlet fever, 3 to diphtheria, 3 to diarrhœa, and not one to small-pox; in all, 70 deaths resulted from these principal zymotic diseases, against 72 and 78 in the two preceding weeks. These 70 deaths were equal to an annual rate of 2.8 per 1,000, which was slightly below the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic death-rates in the Scotch towns during the week under notice were recorded in Perth, Leith, and Dundee. The deaths referred to whooping-cough, which had been 31 and 36 in the two preceding weeks, further rose during the week under notice to 42, and included 16 in Glasgow, 10 in Dundee, 8 in Edinburgh, and 4 in Leith. The fatal cases of measles, which had steadily declined from 30 to 15 in the four previous weeks, further fell during the week under notice to 10, of which 7 occurred in Glasgow, and 2 in Aberdeen. The 6 deaths from scarlet fever showed a decline of 6 from the number in the preceding week, and included 3 in Glasgow. The fatal cases of fever, which had been 1 and 5 in the two previous weeks, further rose during the week under notice to 6, of which 2 occurred in Glasgow. The 3 deaths referred to diarrhœal diseases corresponded with the number in the preceding week, and were considerably below the average. The fatal cases of diphtheria, which had been 2 and 7 in the two preceding weeks, declined during the week under notice to 3, of which 1 occurred in Glasgow, Edinburgh, and Paisley. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 5.2 per 1,000, against 3.6 in London. The causes of 67, or 12.6 per cent., of the 532 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

IN the week ending Saturday, May 14th, 371 deaths occurred in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 22.3 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 10.3; Belfast, 21.6; Cork, 14.9; Drogheda, 38.1; Dublin, 28.6; Dundalk, 34.9; Galway, 26.9; Kilkenny, 12.7; Limerick, 28.3; Lisburn, 24.2; Londonderry, 28.5; Lurgan, 15.4; Newry, 24.6; Sligo, 9.6; Waterford, 16.2; Wexford, 17.1. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.2 per 1,000, the rates varying from 0.0 in Waterford, Newry, Kilkenny, Drogheda, Wexford, Sligo, Lurgan, and Armagh, to 6.7 in Galway; the 8 deaths from all causes registered in the last-named district comprising 2 from typhus. Among the 93 deaths from all causes registered in Belfast are 2 from measles, 4 from whooping-cough, 1 from diphtheria, and 2 from simple continued fever; 1 of the 23 deaths in Cork and 1 of the 5 in Lisburn resulted from enteric fever; of the 16 deaths in Londonderry, 1 was caused by typhus and 1 by diarrhœa; and the 8 deaths in Dundalk comprise 1 from diphtheria. In the Dublin Registration District, the births registered during the week amounted to 188, and the deaths to 165. The deaths represent an annual rate of mortality of 24.4 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 23.6 per 1,000. Twenty-one deaths from zymotic diseases were registered, being 9 below the average for the corresponding week of the last ten years, and 2 under the the number for the week ending May 7th: they consist of 9 from measles, 2 from scarlet fever (scarlatina), 1 from typhus, 4 from whooping-cough, 1 from cerebro-spinal fever, 1 from enteric fever, 2 from diarrhœa, and 1 from dysentery. Deaths from diseases of the respiratory system, which had risen from 41 in the week ended April 30th to 59 in the following week, fell during the week to 32, which number is 11 below the average for the corresponding week of the last ten years; the 32 deaths comprise 21 from bronchitis and 6 from pneumonia or inflammation of the lungs. The deaths of 11 children under 5 years of age (including 9 infants under 1 year old) were ascribed to convulsions. Three deaths were caused by apoplexy, 8 by other diseases of the brain and nervous system (exclusive of convulsions), and 6 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 24 deaths, mesenteric disease 3, and cancer 5. Five accidental deaths and one case of homicide were registered. In 19 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

IT appears, from statistics published in the Registrar-General's return for the week ending Saturday, May 7th, that the annual death-rate recently averaged 25.3 per 1,000 in the three principal Indian cities; it was 22.3 in Bombay, 26.3 in Calcutta, and 36.5 in Madras. Cholera caused 52 deaths in Calcutta, and 9 in Madras; 6 deaths were referred to small-pox and 16 to measles in Bombay, while "fever" was fatally prevalent in each of these Indian cities. According to the most recently received weekly returns, the annual death-rate averaged 27.0 per 1,000 persons estimated to be living in twenty-two of the largest European cities, and exceeded by as much as 6.1 per 1,000 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 38.7, and showed a further increase upon the rates in recent weeks; the 688 deaths included 5 from small-pox, 10 from scarlet fever, 15 from diphtheria, and 20 from typhoid fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 22.3 per 1,000, and ranged from 19.4 in Christiania to 22.7 in Copenhagen; whooping-cough caused 8 deaths in Copenhagen, measles 10 in Stockholm, and scarlet fever 3 in Christiania, while diphtheria and croup were somewhat fatally prevalent in each of these cities. In Paris the death-rate was equal to 27.4 per 1,000 (against 29.4 and 28.1 in the two preceding weeks), and exceeded by as much as 8.5 the rate during the corresponding week in London; the deaths included 12 from small-pox, 52 from measles, 22 from typhoid fever, and 38 from diphtheria and croup. The 178 deaths in Brussels, of which 6 resulted from measles and 5 from croup, gave a rate of 20.5. No returns from Geneva have been received since the beginning of the current year. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 23.3 per 1,000, the several rates being 17.4 in the Hague, 21.8 in Rotterdam, and 25.5 in Amsterdam; measles caused 3 and diphtheria 3 deaths in Amsterdam, and 2 deaths were referred to whooping-cough in the Hague. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 27.7 per 1,000, and ranged from 21.1 and 25.4 in Berlin and Dresden to 33.3 in Buda-Pesth and 38.0 in Prague. Small-pox caused 10 deaths in Prague and 7 in Buda-Pesth; measles 18 deaths in Munich and 17 in Vienna; and diphtheria showed fatal prevalence in Berlin and Hamburg. The death-rate in three of the largest Italian cities averaged 31.4 per 1,000, and was equal to 29.1 in Rome, 29.8 in Venice, and 33.2 in Turin; small-pox caused 11 deaths in Rome and 1 in Venice; 14 deaths were referred to measles in Rome and 11 in Turin; and 2 fatal cases of typhoid fever were recorded in Venice. In Cairo the death-rate was 42.2 per 1,000, and in Alexandria 32.2; diarrhœal diseases caused 92 deaths in Cairo and 24 in Alexandria; and 3 deaths from small-pox occurred in Cairo and 2 in Alexandria. In four of the largest American cities the recorded death-rate averaged 27.6 per 1,000, and ranged from 18.5 in Baltimore to 31.7 in Philadelphia. Diphtheria caused 42 deaths in New York and 13 in Brooklyn; 17 fatal cases of typhoid fever occurred in Philadelphia and 4 in Baltimore; and 32 deaths were referred to measles in Philadelphia and 18 in New York.

It appears, from statistics published in the Registrar-General's return for the week ending May 14th, that the annual death-rate was recently equal to 24.3 per 1,000 in Bombay; the deaths included 34 from measles, 1 from cholera, and 100 from different forms of "fever." The usual returns from Calcutta and Madras do not appear to have been received. According to the most recently received weekly returns, the annual death-rate recently averaged 28.4 per 1,000 persons estimated to be living in twenty-one of the largest European cities, and exceeded by as much as 8.7 per 1,000 the mean rate during the week in the twenty-eight largest English towns. The death-rate in St. Petersburg was 36.1, and showed a decline from the increasing rates in recent weeks; the 643 deaths included 4 from small-pox, 13 from scarlet fever, 16 from diphtheria, and 29 from typhoid fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 26.3 per 1,000, and ranged from 19.4 in Christiania to 29.5 in Stockholm; diphtheria caused 5 deaths in Copenhagen and 9 in Christiania; 16 deaths were referred to measles in Stockholm, and 9 to whooping-cough in Copenhagen. In Paris the death-rate was equal to 27.0 per 1,000 (against 28.1 and 27.4 in the two preceding weeks), and exceeded by as much as 9.7 the rate for the corresponding week in London; the deaths included 11 from small-pox, 43 from measles, 38 from diphtheria and croup, and 10 from typhoid fever. The 193 deaths in Brussels, of which 7 resulted from measles and 2 from typhoid fever, gave a rate of 22.3 per 1,000. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 24.1 per 1,000, the several rates being 22.6 in Rotterdam, 22.8 in the Hague, and 24.5 in Amsterdam; diphtheria caused 3 deaths in Amsterdam and 1 in the Hague; and 6 fatal cases of measles were recorded in Amsterdam, and 1 of typhoid fever in Rotterdam. The Registrar-General's table includes nine German and Austrian cities, in which

the death-rate averaged 27.6 per 1,000, and ranged from 21.6 and 25.1 in Berlin and Hamburg, to 34.7 in Breslau and 38.0 in Prague; small-pox caused 12 deaths in Buda-Pesth, 7 in Prague, 1 in Vienna, and 1 in Trieste; diphtheria and croup were fatally prevalent in Berlin, Hamburg, and Dresden; while 26 deaths resulted from measles in Munich and 17 in Vienna. The death-rate in three of the largest Italian cities averaged 32.0 per 1,000, and ranged from 28.6 in Rome to 35.1 in Turin; small-pox caused 9 deaths in Rome and 5 in Turin; 18 deaths were referred to measles in Turin and 13 in Rome; while diarrhœal diseases were fatally prevalent in Venice. In Cairo the death-rate was 42.2, and in Alexandria 37.4 per 1,000; 13 deaths resulted from typhoid fever and 11 from whooping-cough in Cairo; small-pox caused 5 deaths in Alexandria, while the mortality from diarrhœal diseases was excessive in both of these cities. In four of the largest American cities the recorded death-rate averaged 25.0 per 1,000, and ranged from 19.5 in Baltimore to 27.7 in New York. Diphtheria caused 36 deaths in New York, 14 in Brooklyn, and 6 in Philadelphia; 3 fatal cases of small-pox and 15 of scarlet fever occurred in New York; and 13 deaths were referred to measles in Philadelphia and 5 in Brooklyn.

REPORTS OF MEDICAL OEFICERS OF HEALTH.

PORTSMOUTH. *Pollution of Soil by Cesspits and Faulty Sewers.*—Dr. B. F. Mumby had necessarily but little personal association with the facts and figures of the report for 1885, since he only took up office in December of that year. He has done his best, however, to put them forth clearly and succinctly, the usual tables of statistics and charts being available for reference. The death-rate for the year was 19.7 per 1,000, varying from 24.3 in Kingston to the very low rate of 14.2 in the Southsea sub-district. The deaths from zymotic diseases numbered 311, or 103 below the decennial averages. The decrease was mainly due to the very few deaths from measles and scarlet fever. Eight cases of small-pox were notified during the year, but none of them proved fatal. Diphtheria was prevalent during the month of June, and 42 deaths were registered from this disease. The old story as to the pollution of the soil by cesspits and a faulty main sewer is again told in reference to the large number of enteric fever cases. This disease was most prevalent in the middle of September, but most fatal in the first week of August; 762 cases were reported, of which 90, or 11.6 per cent., proved fatal. It is to be hoped that the repairing and relaying of the sewer, now in progress, will have its due effect on the incidence of this disease. The town possesses an almost inexhaustible supply of excellent drinking-water, on the constant service system—thus doing away with cisterns for drinking purposes, and all the risks of contamination which they entail.

WALLASEY.—*Need for Hospital.*—The general improvement in the mortality-rate manifested throughout the country during 1885 extended to this district, and the health-officer, Dr. Craigmile, reports that the death-rate for that year, 14.9 per 1,000, was lower than any year, with one exception, since 1869. The returns of infant-mortality were also very favourable. Whooping-cough was the most fatal of zymotic diseases. Measles and scarlatina occurred in so mild a form and caused so few deaths, that Dr. Craigmile dismisses them in a very few words. He instances one case of typhoid fever as an eloquent testimony in favour of a hospital for infectious diseases. It was that of a woman who was utterly neglected, having no nursing and almost no nourishment, and no medical attendance until too late. The plans for a new hospital have been prepared, and were in a fair way to be carried out at the time the report was issued. The comparatively low temperature and considerable rainfall in August, September, and October, 1885, had a great influence on the prevalence of diarrhœa, only 11 deaths being reported.

WOLVERHAMPTON.—*Carelessness with Regard to Infection.*—Dr. Henry Malet's account of the prevalence of infectious diseases during 1885, more especially of scarlatina, carries with it a useful lesson to the community at large. He records cases of gross carelessness and ignorance with regard to infection, and shows the impossibility of keeping the disease in check apart from hospital isolation. In the poorer or east district this was well exemplified; for, in spite of the great disadvantages of poverty, crowding, a large child-population, and a bad type of disease, there was a rapid decline from quarter to quarter. The milder outbreak in the west, on the other hand, increased, the better houses affording no excuse for compulsion in removals. The general death-rate (19.4 per 1,000) and the zymotic death-rate compare favourably with those of the large towns. The deaths from scarlet fever were considerable, though much below epidemic years. Whooping-cough was also high, but the deaths from diarrhœa were remarkably low.

WARRINGTON.—Mr. Gornall had no very serious outbreak of zymotic disease to contend with during 1885. The zymotic death-rate for that year was 1.2 per 1,000, which, compared with other towns, is a satisfactory record, while the general rate of 18.45 per 1,000 was the lowest ever recorded for Warrington. The frequent occurrence of enteric fever in certain localities where the houses are old and very defective is a leading feature in this report. Mr. Gornall emphasises the dangers arising generally from unsanitary dwellings, points out the many defects existing in the borough, and urges the necessity of immediate action in demolishing all houses unfit for habitation. Mr. Gornall will allow no doubt on the minds of the ratepayers as to what he considers defective in the sanitary administration of the borough. He gives a long list of localities and dwellings needing improvement, specially pointing out the danger incurred by allowing side streets and back passages to remain unpaved. The pail system is reported to work most favourably.

INDIA AND THE COLONIES.

BURMAH.

AN INTERESTING EXPERIMENT.—The health of the British troops in Upper Burmah suffered severely during the monsoon of 1886. The Surgeon-General of Her Majesty's Forces in Bengal advised a sea-voyage, with a view to the improvement of the health of a certain number of officers and men. For this purpose the steam troop-ship *Tenasserim* was placed at his disposal. The ship left Calcutta on September 19th, 1886, with forty-two invalids, under the medical charge of Brigade-Surgeon Hamilton, in a very debilitated state of health. On arrival at Rangoon, two of the sick were disembarked, their ailments being of a nature not likely to be benefited by a cruise; eighty other invalids and one sick officer (Surgeon Hathway) were taken on board. The cruise lasted for thirty-two days, and the result was in a high degree satisfactory, as 61 per cent. of the invalids at the end of it were reported fit to return to duty in India, 25 per cent. had greatly improved, ten invalids obtained no benefit, and six had grown worse.

On November 2nd, the *Tenasserim* began her second voyage with three sick officers and 103 soldiers, and arrived at Port Owen (Tavoy Island) on the following day. This is described as a charming place, in every way suitable for a hospital ship. Unfortunately, a case of choleraic diarrhœa occurred on October 31st, which did not, however, prove fatal; but it was followed on November 6th by another, which proved fatal on the following day, the disease "being no longer doubtful"—in other words, cholera. Tents were at once pitched on the beach, and every man fit to be sent ashore was landed during the day, re-embarking for the night, as there was a risk of rain. The men were encouraged to sleep on deck, and the part of the ship from which the cases came was kept empty. The ship was thoroughly disinfected, and all soiled bedding was destroyed. On the 7th and 8th several severe cases of diarrhœa occurred, of which one proved fatal.

Brigade-Surgeon Hamilton, although he acted as if the cases were cholera pure and simple, notes that, on the whole, they much resembled what is known as "Peshawur fever," with choleraic diarrhœa, in the course of which men pass rapidly into a collapsed condition, from which they do not rally. The significant fact, however, is recorded that most of the severe cases came from among the men lying on the starboard side in wooden bunks, the same side as that on which the first case of choleraic diarrhœa occurred. Brigade-Surgeon Hamilton believes that the energetic sanitary measures taken prevented the further spread of the disease.

On November 10th the ship sailed for the Tavoy River, and on the 13th for Rangoon, which was reached on the 15th, making a voyage of fourteen days inclusive. The vessel soon after sailed for Calcutta, arriving at that port on the 23rd. The Surgeon-General remarks that the experiment, short as it was, proved a great success; in all fully 90 per cent. of the invalids embarked during the two voyages benefited greatly by the change, and were restored to health much more quickly than they would have been in any other way. Surgeon-General Madden invites the attention of the Commander-in Chief to the fact that in contravention of a Royal Warrant, which directs that the command and discipline of general as well as other hospitals should be vested in the medical officer in charge, a military officer was sent in command, and we gather that in this, as on most other like occasions, the system did not work well. It is probable that this experiment will be repeated on future occasions; if so, it is to be hoped that the experience gained, as embodied in this report, will be kept in mind. It is a fortunate circumstance that so capable a medical officer was placed in charge as Brigade-Surgeon Hamilton, who has won the hearty commendation of his official superiors by the way in which he conducted this interesting experiment. It is a mistake, however, to suppose that this is the first time invalids have been sent to cruise in the Bay of Bengal for

the benefit of their health, although not in a ship so well suited for the purpose or so well furnished with the needful appliances as the *Venasserim* was. We hope to see a repetition of the experiment in years to come.

PESHAWUR.—The Lock Hospitals, which were closed in 1885, have been reopened in the city of Peshawur on the same footing as formerly.

RAAH SAKARAM RAO SAHIB, of Trichinopoly, has liberally offered to pay the whole cost (3,500 rupees) of the construction of the Ariyolr Hospital, and wishes it to be called Victoria Jubilee Hospital, a commemoration of the auspicious event of the Queen's Jubilee.

MEDICAL NEWS.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen, having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received Certificates entitling them to practise as Licentiates of the Society, on May 19th, 1887:

Baxendell, Arthur, Rose Hill, Denton, Lancs.
Clark, Percy John, 22, Margaret Street, W.
Cockerton, Herbert, St. George's Hospital, S.W.
Crowther, Astley Brodie, Laurel Bank, Luddenden, Manchester.
Date, William Horton, 1, St. Leonard's Place, Moseley, Birmingham.
Elias, James, 3 Essex Road, Sale, Manchester.
Ewbank, William Withers, 14, Hilgrove Road, Hampstead.
Wood, Frederic Charles, Hutton, Brentwood, Essex.

MEDICAL VACANCIES.

The following vacancies are announced.

ANCOATS HOSPITAL, Manchester.—Junior Visiting Surgeon. Salary, £60 per annum, with board, etc. Applications to the Honorary Secretary.

BAKEWELL URBAN SANITARY DISTRICT.—Medical Officer of Health. Applications to the Clerk.

BOROUGH OF BEDFORD.—Public Analyst. Applications to the Town Clerk.

BRACKLEY URBAN SANITARY DISTRICT. Medical Officer of Health. Applications to the Town Clerk.

BRIGHTON, HOVE, AND SUSSEX THROAT AND EAR DISPENSARY.—Honorary Dental Surgeon. Applications by May 28th to the Committee of Management.

CHELSEA HOSPITAL FOR WOMEN, Fulham Road, S.W.—Anæsthetist. Applications by June 1st to the Secretary.

DENTAL HOSPITAL OF LONDON, Leicester Square, W.C.—Assistant Dental Surgeon. Applications by June 1st to the Secretary.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark Street, S.E.—Registrar and Chloroformist. Salary, £30 per annum. Applications by May 30th to the Committee of Management.

FLINT URBAN SANITARY DISTRICT.—Medical Officer of Health. Salary, £20 per annum. Applications to the Town Clerk.

GOREY UNION.—Medical Officer, Killenagh and Wells Dispensary. Salary, £135 per annum, and fees. Applications to Mr. William Porter, Honorary Secretary, Tomgar House, Ballycanew. Election on June 6th.

HOSPITAL FOR CONSUMPTION, Brompton, S.W.—Resident Clinical Assistant. Applications by June 18th to the Secretary.

KILBURN, MAIDA VALE AND ST. JOHN'S WOOD GENERAL DISPENSARY.—House-Surgeon. Salary, £100 per annum. Applications by June 15th to the Honorary Secretary.

LINCOLNSHIRE COUNTY PAUPER LUNATIC ASYLUM.—Medical Superintendent. Salary, £400 per annum. Applications by June 1st to the Committee of Visitors.

LIVERPOOL NORTHERN HOSPITAL.—Assistant House-Surgeon. Salary, £70 per annum, with board, etc. Applications by May 31st to the Chairman of the Committee.

LLANELLY URBAN SANITARY DISTRICT.—Medical Officer of Health. Salary, £40 per annum. Applications to the Clerk.

MASON SCIENCE COLLEGE, Birmingham.—Professor of Physiology. Applications by June 30th to G. H. Morley, Esq.

MILLER HOSPITAL AND ROYAL KENT DISPENSARY, Greenwich Road, S.E. Junior Resident Medical Officer. Salary, £30 per annum, with board, etc. Applications by June 10th to W. Bristow, Esq.

MILLER HOSPITAL AND ROYAL KENT DISPENSARY, Greenwich Road, S.E. Senior Resident Medical Officer. Salary, £60 per annum, with board, etc. Applications by June 10th to W. Bristow, Esq.

ONGAR UNION.—Medical Officer and Public Vaccinator. Salary, £75 per annum and fees. Applications by May 30th to Charles Smith, Esq.

PARISH OF ST. MARY, Newington.—Medical Officer of Health. Applications to the Vestry Clerk, Vestry Hall, Walworth, S.E.

QUEEN'S COLLEGE, Birmingham.—Professor of Surgery. Applications by June 15th to the Secretary.

ROTHERHAM HOSPITAL.—Assistant House-Surgeon. Applications by May 31st to the Secretary.

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Brighton.—Assistant-Physician. Applications by June 8th to the Chairman of the Medical Committee.

ROYAL UNITED HOSPITAL, Bath.—Resident Medical Officer. Salary, £100 per annum, with board, etc. Applications by June 10th to the Secretary.

STAINES UNION.—District Medical Officer. Salary, £65 per annum and fees. Applications by June 6th to J. A. Engall, Esq.

STAMFORD HILL AND STOKE NEWINGTON DISPENSARY.—Resident Medical Officer. Salary, £105 per annum, and £50 per annum for extras. Applications by June 8th to the Honorary Secretary.

ST. THOMAS'S HOSPITAL.—Librarian. Salary, £150 per annum. Applications by May 28th to the Secretary.

UNIVERSITY COLLEGE.—Holme Professorship of Clinical Medicine. Applications by May 28th to the Secretary.

UNIVERSITY COLLEGE HOSPITAL, London.—Resident Medical Officer. Applications by May 31st to the Secretary.

UNIVERSITY OF CAMBRIDGE.—John Lucas Walker Studentship in Pathology.—Annual value £250, for three years. Applications by May 31st to Professor Roy, Trinity College, Cambridge.

UPPER SEDGLEY URBAN SANITARY DISTRICT.—Medical Officer of Health. Salary, £50 per annum. Applications to the Clerk.

VICTORIA HOSPITAL FOR CHILDREN, Chelsea, S.W.—Resident Medical Officer. Salary, £50 per annum, with board, etc. Applications by June 7th to the Secretary.

WHITEHAVEN AND WEST CUMBERLAND INFIRMARY.—House-Surgeon. Salary, £120 per annum, and extras, with apartments, etc. Applications by June 11th to the Secretary.

MEDICAL APPOINTMENTS.

BAILEY, T. Ridley, M.B.Edin., re-appointed Medical Officer of Health for Bilston.

BOLTON, Richard E. U., M.R.C.S.Eng., L.R.C.P.Edin., appointed Medical Officer to the Carlow Union, *vice* E. Campbell Hearne, L.R.C.P.Edin., L.R.C.S.Edin., resigned.

BROWN, James A., appointed Assistant House-Surgeon to the Liverpool Infirmary for Children, *vice* Dr. E. L. Fox, appointed House-Surgeon.

CANT, William Edmund, M.D., F.R.C.S., appointed Assistant Surgeon to the Central London Ophthalmic Hospital.

CARLESS, Albert, M.B., appointed Ophthalmic Clinical Assistant to King's College Hospital.

COX, A. H. Lissant, M.R.C.S., L.R.C.S., appointed House-Surgeon to King's College Hospital.

HENSLEY, A. E., M.R.C.S., L.S.A., appointed Assistant House-Physician to King's College Hospital.

MACNAB, Allan J., M.R.C.S., L.R.C.P., appointed House-Surgeon to King's College Hospital.

LACEY, T. S., L.R.C.P.Ed., appointed Certifying Factory Surgeon to the Royton District, *vice* J. Anderson, M.D., resigned.

MARIETTE, E. P. A., M.R.C.S., L.S.A., appointed House-Accoucheur to King's College Hospital.

OWENS, J. V., M.R.C.S., L.S.A., appointed House-Surgeon to King's College Hospital.

PEDLEY, R. Denison, L.D.S., M.R.C.S., appointed Assistant Dental Surgeon to the National Dental Hospital, Great Portland Street, W.

SANDERS, Charles, M.B.Lond., M.R.C.S.Eng., appointed Medical Officer of Health for the Borough of West Ham, *vice* Dr. Drake, resigned.

STEPHENS, P. J., L.S.A., appointed Assistant House-Accoucheur to King's College Hospital.

WHEATLEY, James, M.R.C.S., L.S.A., appointed House-Physician to King's College Hospital.

WHITWELL, Ewen, L.R.C.P., L.R.C.S., L.F.P.S.G., appointed Assistant Medical Officer to the Friendly Societies' Medical Association, York.

SOCIETY FOR THE PREVENTION OF HYDROPHOBIA AND REFORM OF THE DOG LAWS.—There was a special meeting of the General Committee of this Society at the offices, 50, Leicester Square, on May 13th, Professor Horsley in the chair. Among the members present were Mr. Ernest Hart, Mr. Everett Millais, Mr. Arthur Nicols, F.C.S., F.R.G.S., Professor Penberthy (of the Royal Veterinary College), Professor Pritchard, and Dr. W. Sinclair Thomson. The special business of the meeting was to receive from the Parliamentary Bills Committee a short Act for the temporary muzzling of all dogs throughout the United Kingdom; but the Chairman gave particulars of a recent interview with Lord Cranbrook, President of the Privy Council, as indicating clearly the necessity for immediate drafting of a Bill to cover the whole question of the keeping and hygiene of dogs. The Parliamentary Bills Committee was, therefore, requested to prepare a Bill at once on the lines agreed to in January as the basis of proposed legislation, such Bill to include the provisions of the temporary Muzzling Act. Professor Penberthy drew attention to the fact that these proposals did not include quarantine on imported dogs, which he considered of the utmost importance; and Professor Pritchard made some remarks to the same effect. In a discussion which followed, Mr. Ernest Hart reminded the meeting that the proposals which were to form the basis of the Society's Bill included a system of police registration and supervision which would be far more effective than any possible quarantine. Mr. Everett Millais, while fully aware of the value of quarantine, did not see how it could possibly be carried out. Mr. Huscroft, the assistant secretary, pointed out that, although quarantine had frequently been discussed, it was always considered impracticable. Professor Horsley

felt constrained to admit that quarantine would be impracticable. Ultimately a resolution was adopted requesting the Parliamentary Bills Committee to consider the possibility of including in their draft Bill provision for a system of veterinary inspection and supervision for imported dogs.

THE BRITISH MEDICAL TEMPERANCE ASSOCIATION.—The annual meeting of the British Medical Temperance Association was held at 11, Chandos Street, Cavendish Square, on Tuesday, May 24th, Dr. Norman Kerr in the chair. The annual report showed that there are now 350 members (abstaining medical men) in the United Kingdom, and 72 associates (abstaining medical students). Dr. Kerr presented a report of the past three and a half years' work of the Dalrymple Home for Inebriates, 103 cases having been admitted, of whom 36 per cent. are known to have done well; 48 per cent. were admitted under the Habitual Drunkards' Act, and 53 voluntarily. A paper was read by Dr. Walter Pearce on a case of acute cardiac dilatation due to alcoholism. Dr. J. J. Ridge showed experiments which seemed to prove that alcohol promotes the growth of the bacteria of decomposition when present in quantities less than 2 per cent.

KING'S COLLEGE HOSPITAL.—The annual festival of King's College Hospital was held lately in Middle Temple Hall under the presidency of the Lord Mayor. In proposing success to King's College Hospital, the Chairman stated that the assured income of this institution was only about £2,000 per annum, and it had to depend for the bulk of its expenditure upon legacies, donations, and similar sources; it had some difficulty, therefore, in making both ends meet. The expenditure really exceeded the income by about £3,000, and this year they were under the necessity of reserving £6,000 for structural alterations, so that they required £10,000. Donations amounting to £1,876 were announced by the Secretary. Sir Joseph Lister, in responding for the medical staff, paid a warm tribute to Mr. F. O'Meara, an able member of the resident staff, recently drowned in the steamship *Victoria*.

THE FRENCH HOSPITAL.—An entertainment in aid of the French Hospital and Infirmary in Leicester Square was given at Willis's Rooms on Tuesday last, when H.R.H. the Prince of Wales was present, and a distinguished assemblage of French and Italian residents in London. A new building is shortly to be erected in Shaftesbury Avenue which will accommodate twice as many patients as the present building. During the twenty years the hospital has been in existence it has given relief to 4,400 in-patients and over 100,000 out-patients. The Queen has given her patronage and a handsome subscription to the building fund.

The Local Government Board has issued an order enabling boards of guardians on the 21st of June next to make suitable modifications in the regulations in force with regard to discipline and the diet of the poor in workhouses and other similar establishments.

CHILDREN'S JUBILEE TRIBUTE.—A very considerable sum has been already received towards the children's Jubilee tribute, which takes the very appropriate form of the erection of a new and much-needed wing to the Hospital for Sick Children, Great Ormond Street, of which the Queen is the patron.

ALCOHOLIC POISONING IN A CHILD.—A little girl, aged 4 years and 11 months, is said to have died at Whitchurch (Salop) from the effects of drinking half a pint of brandy which the mother had left by the bedside. The child was unconscious for thirty-four hours before death.

THE total amount of subscriptions to the fund for erecting the Victoria Hospital at Bournemouth, of which the foundation-stone is to be laid on June 21st, is £5,000, and a like sum is available for the purpose from the old Dispensary Committee. The plans for building suggest a cost of about £7,000.

LONDON SCHOOL OF MEDICINE FOR WOMEN.—Miss Eleonora Lilian Fleury, a student of this school, has taken the first place in the honours list and an exhibition of £20 in the recent examination in medicine at the Royal University of Ireland.

MR. JUSTICE HAWKINS, at the York Assizes this week, sentenced to death, with a recommendation to mercy, Henry Cowley, 65, described as a surgeon's assistant, and Henrietta Elizabeth Powell, 64, midwife, for performing upon Elizabeth Harding, a dressmaker of Birmingham, an illegal operation which ended fatally.

THE Prince of Wales has promised to attend the bazaar to be held in the Westminster Town Hall, on June 2nd, 3rd, and 4th, in aid of the funds of the East London Hospital for Children at Shadwell.

SEATS FOR FRENCH SHOP-GIRLS.—A few philanthropic French women are striving to establish the custom of having seats at the large linendraper shops and others, for the use of the shop-girls. At present they are obliged to be on their feet from 8 o'clock A.M. to 6 o'clock P.M., excepting the hour devoted to the mid-day meal.

DR. MILNER FOTHERGILL proposes to give three lectures on "The Modern Tendency of Disease" at his house in Henrietta Street, W., on June 2nd, 9th, and 16th (Thursdays), at 4 P.M., free to all members of the profession on presenting their visiting cards.

METROPOLITAN CONVALESCENT INSTITUTION.—An influential meeting, in support of the Metropolitan Convalescent Institution, was held this week at Grosvenor House, presided over by the Duke of Westminster. This institution was founded in 1840, since which 100,000 poor people have been admitted free of charge. During the past year 4,500 cases have been treated. At the Walton and Kingston Homes of the institution, 3,884 patients were admitted during the past year, 38 more than in the previous year. At the Bexhill Home, 881 patients were admitted, being 96 less than last year. The subscriptions to the institution for the year amounted to £3,637, being £42 less than last year. The donations showed a decrease of £74. A sum of £1,000 is needed for carrying out the structural improvements necessary to meet the increased demands upon the sea homes.

MEDICAL MAGISTRATES.—Dr. J. Lloyd Roberts has been placed on the Commission of the Peace for the Borough of Denbigh. Brigade-Surgeon T. T. Barnewall, L.R.C.S.Irel., on the retired list of the Army Medical Department, has been placed on the Commission of the Peace for the County of Dublin. Dr. T. J. Stafford, of Tangier, Boyle, County Roscommon, has been appointed to the Commission of the Peace for that county.

PROSECUTIONS UNDER THE FOOD AND DRUGS ACT.—At the last meeting of the City Commission of Sewers it was resolved that it be referred to the Sanitary Committee to consider and report the number of examinations which had been made, the prosecutions instituted, and the result thereof under the Sale of Food and Drugs Act, 1875, up to the present time.

MR. J. L. CLIFFORD SMITH, Secretary of the Social Science Association, has been appointed Secretary of the Royal Holloway College.

A BIOGRAPHY of Dr. W. G. Grace, the cricketer, by Mr. W. Methven Brownlee, will shortly be published by Messrs. Iliffe and Son.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY.—OBSTETRICAL SOCIETY OF LONDON, 8 P.M. Specimens will be shown by Mr. Lockwood, Dr. Bluett, Dr. Malins, and others. Dr. Cullingworth: A Case of Cæsarean Section. Dr. Champneys: On the Separation and Expulsion of the Membranes. Dr. Walter Griffith: On Tubo-Ovarian Cysts.

SOCIETY OF MEDICAL OFFICERS OF HEALTH, 7.30 P.M. The following papers will be read. The President: On an Improved System of Flush-closets for Small House Property. Dr. B. A. Whitelegge: The Powers and Responsibilities of Local Authorities in regard to Rabies. Mr. Shirley F. Murphy: A few Facts Concerning the Recent Prevalence of Winter Diarrhœa in London.

FRIDAY.—WEST LONDON MEDICO-CHIRURGICAL SOCIETY, 8 P.M. Mr. H. Percy Dunn will show the specimens which have been added to the Museum of the West London Hospital during the session. Mr. F. Swinford Edwards will show a collection of Urinary Calculi. The President: An Hypertrophied Heart. Dr. P. S. Abraham: Microscopical Sections of Ossification of the Cauda Equina. Dr. Bullock: A Skull from a Case of Hereditary Syphilis. Brigade-Surgeon W. Curran: Sketches of Aortic Aneurysms and Sarcoma of the Lung. The Cavendish Lecture, by Sir Andrew Clark, on A Frequently Successful and Speedy Method of Treating Hay Fever.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which should be forwarded in stamps with the announcement.

BIRTH.

GREENER.—On May 21st, the wife of M. H. Greener, M.B., C.M., Cardiff, of a daughter.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, M. Th., 3; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, M., 9; Skin, Th., 1; Dental, W. S., 9.15.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY—9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY—10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's—1 30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M: North-west London; Chelsea Hospital for Women.

FRIDAY—9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY—9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE wish it to be distinctly understood that when a manuscript is forwarded to the BRITISH MEDICAL JOURNAL, it is implied that a similar manuscript has not been sent elsewhere, unless special notice of the fact be given; we shall regard any infringement of this rule as a breach of faith.

QUERIES.

REGISTRATION OF BRITISH DEGREES IN CANADA.

J. asks what is the fee to be paid for the registration of British degrees in the Dominion of Canada? To what quarter should application be made in order to effect such registration?

SWEDISH SYSTEM OF GYMNASTICS.

SURGEON R.N. asks where he can obtain a detailed account of the Swedish or Ling system of gymnastics.

ASYLUM FOR A HYDROCEPHALIC CHILD.

C. A. writes: A widow, a patient of mine, with limited means, has a hydrocephalic boy, aged 7, whom she is desirous of getting into some asylum or institution. Will any of your readers kindly give me information concerning such a place?

FILTER FOR HOME USE.

M. O. H. wishes to know what is the best and cheapest filter for ordinary home use.

TREATMENT FOR LOSS OF SMELL.

DOWNS will be grateful for advice as to the treatment of the following case. A married woman, aged 35, after suffering from nasal catarrh for some weeks, recovered. Since then, about two months ago, she has been unable to smell anything whatever. The application of stimulants has had no beneficial effect.

COMPLETE SELF-ENUCLEATION OF AN EYE-BALL.

MR. J. GROSVENOR MACKINLAY (Stratford Place, W.) writes: As reported in the JOURNAL of May 21st, I recently brought before the Ophthalmological Society the details of a case of self-mutilation, in which a woman completely enucleated one of her eyes. If any members of the profession have had any cases under their observation, and will kindly favour me with particulars, I shall be greatly obliged to them.

ANSWERS.

M.D. BRUSSELS.

M. D. BRUX. writes: Will any graduate or other person inform me what course to pursue to have the above degree registered on June 1st next or after?

*** The Honorary Secretary of the Brussels Medical Graduates Association (Dr. Pocock), to whom we have referred our correspondent's letter, writes as follows:—"The General Medical Council decline to give any assurance beforehand as to which foreign medical degrees will be registered under Clause 16 of the new Act. They say each case will be treated on its own merits. Whether this refers to each degree, or to each individual holder of foreign degrees, I cannot say. I think, myself, we shall have no difficulty in proving that Brussels is a "proper" examination, in which case the Council is bound to register the degree. In a few days every known graduate of Brussels will receive a communication from me by post. The Act does not come into force till June 30th instead of June 1st.

AUTHORS AND TYPE-WRITERS.

A. M. B.—Probably the most convenient and the cheapest way of having a MS. prepared for reading easily at a meeting and subsequently for press is by having it copied by type-writing. Particulars may be obtained at the Type-writing Offices, 6, Adam Street, Adelphi, W.C. The scale of charges, we believe, is about one shilling per thousand words for the first copy; when two extra copies are supplied, at sixpence per thousand words for each copy, and a reduced rate for further copies. It often saves trouble to have a paper or address written off at once from dictation so as to save all trouble in writing, and the charge for this is two-and-sixpence per hour.

WORKS ON ATMOSPHERIC AIR.

COSMOS.—The standard work on atmospheric air is Angus Smith's *Air and Rain*, published by Longmans, Green, and Co. Professor Tyndall's work *On Floating Matter in the Air* refers only to suspended aerial solids.

CERTIFICATE IN PSYCHOLOGICAL MEDICINE.

M.S.—The following works may be recommended to candidates wishing to obtain the certificate of efficiency in Psychological Medicine granted by the Medical Psychological Association: *Manual of Psychological Medicine*, by Drs. Bucknill and Hack Tuke; Dr. Savage's *Handbook of Insanity and Allied Neuroses*.

NOTES, LETTERS, ETC.

MASSAGE.

THE daughter of a well-known medical man, who is under the necessity of earning her living, and has been carefully trained to massage and the use of electrical instruments, can be recommended as a *masseuse*, etc.; excellent references. Address Miss Vernon, 59, Carlton Hill, N.W.

THE INVERSION OF THE OBJECT ON THE RETINA.

DR. W. W. IRELAND (Prestonpans) writes: It does not seem to me that Dr. Sankey's letter on "Inversion of the Object on the Retina," in the JOURNAL of May 21st, is of the same value as his well-known writings on insanity. He tells us that when one looks through the eye of an animal so prepared that the light passes through it, we see the images of objects inverted, but then the same process of inversion has also taken place in our own eye. It is thus a case of double inversion. The image which has passed through the prepared eye is seen by us as inverted, therefore he argues that the ordinary image on our retina is upright. Not so; the image passed through the prepared eye seems inverted, therefore an ordinary image falling upon our retina must be inverted for it seems upright. When we look at an object, say an arrow, placed with

the feathers upwards and the point downwards to the earth, the refracted rays from the feathers pass through the lenses of the eye to the lower portion of the retina; those from the arrow head or point pass to the upper part of the retina. The mind has learned, through comparison with the sense of touch, to associate those rays which fall upon the upper retina with what in the object is below, and *vice versâ*. On looking through a prepared eye the process is reversed; the rays from the feathers of the arrow pass to what would be the lower portion of the animal's retina, and then passing through the back of the prepared eye, go to the upper portion of the living human retina, where, agreeably to the association already described, they appear as below; and the rays from the other extremity or point of the arrow pass to the lower portion of the human retina, and thus appear as above, that is, the whole image appears reversed.

Now I argue that because the image transmitted through the prepared eye appears reversed, therefore the original image was not upright, if upright means that the upper rays from an ordinary object go straight to the upper (frontal) part of the retina, and the lower rays to the lower (maxillary) part of the retina. It thus appears to me that the view taught in the schools about inverted images is correct.

MR. GUSTAVUS HARTRIDGE writes: Dr. Sankey, in his communication to the JOURNAL of May 21st "On Inversion of the Object on the Retina," refers to the method of demonstrating this by taking a bullock's eye and removing a circular portion of the sclerotic around the optic nerve, when an inverted picture of all objects within its range is seen. Dr. Sankey then extends the experiment by preparing several eyes in the same way. Calling the first eye B, he places in front of this a second eye C; then the image depicted on B will be upright, because the rays forming the image have passed through two eyes and suffered two inversions. By continuing the series, and placing a third eye D in front of C, the image at B will again be reversed as shown thus

B¦ C! D¦ E!

in which the image at B is inverted, at C non-inverted, and so on alternately; but our own eye is at A, and thus corresponds with the whole non-inverted series as C, E, etc., and therefore your correspondent argues that images formed on our retina are upright.

This experiment surely adds support to the inversion-theory if any were needed, for Dr. Sankey admits that each additional eye causes the image on B to be reversed, for with one eye alone at B it is inverted, with two (B and C) upright, with B, C, D again reversed, and so on. We must consider the retinal image on the observing eye at A as inverted, then on placing B before it the the image would become upright, with C again inverted, and so for the whole series, then A, C, E would correspond to the inverted, and B, D, F to the non-inverted series. Dr. Sankey does not, I suppose, dispute that objects above us form images on the lower part of the retina, that those to the left fall on the right hand side of the retina, yet we know their real position.

The great advantage of inverted images is that for a given sized pupil a much larger retinal picture can be formed than would be the case if no inversion took place; for in the latter case all images must necessarily occupy a smaller space on the retina than the size of the pupil. We have no direct cognisance of the image on the retina, nor of the position of its different parts, but only of the stimulation of the retina produced by the image, which stimulation is conducted by the optic nerve to the nerve-centre, and it is for the brain to construe the retinal pictures aright.

F. W. CLARK, L.R.C.P., M.R.C.S., writes: I would venture to point out a fallacy in the argument brought forward by Dr. Sankey in the JOURNAL of May 21st, with a view of proving that the image of external objects formed upon the retina is upright. He cites the experiment of taking a fresh bullock's eye, removing a portion of the sclerotic around the optic nerve, and observing the inverted picture of objects within its range. He then adds that by taking a series of such eyes, the picture will alternately be inverted and upright, thus:

B¦ C! D¦ E! F¦ and so on,

and then says that if A represent our own eye, the image upon our retina will be upright, since it corresponds with the whole non-inverted series, as C, E, etc. It is true that the image upon our retina would in such a case be upright, but why? The image upon our retina is not the direct image of an external object, but is the image of an inverted image formed by B. Hence it appears that if the rays of light pass directly from an object into our eye, the image upon the retina will be inverted, whereas if the rays pass first through another eye to our own, the image will of course be upright.

The teachings of the science of optics are totally independent of the manner in which the brain becomes cognisant of the relative position of external objects, and I must confess that I do not see the slightest incongruity in the accepted theory of the reinversion by the brain (or perhaps rather, I should say, by the intellect) of the inverted images of external objects formed upon the retina.

DR. GEORGE F. BURDER writes: Dr. Sankey's note in the JOURNAL of May 21st induces me to ventilate a view on the subject of erect vision which differs, I believe, from that generally held. It seems to be supposed that if the image of objects on the retina is inverted, some explanation must be necessary to account for our not seeing objects inverted. I am disposed to contend that no explanation whatever is required, and that it is only through a confusion of ideas that any explanation can be either demanded or offered. Why should we see objects inverted? What is the inversion of an object? Take the figure of a man. If inverted his head would be resting on the ground, but in the image his feet will be on the ground, just as in the reality. Should it be said in reply that every object ought to be seen inverted, ground and all, the obvious rejoinder would be that universal inversion is no inversion at all. It is a contradiction in terms, for inversion implies dislocation, and universal inversion implies the absence of dislocation. What is required for erect (and generally for correct) vision is that all the parts of the image shall bear their true relation to each other, and this they do.

When we spread a map upon a table we do not insist upon its north side facing the north, and it would be thought very foolish to ask for an explanation of the fact that in the "inverted" position the map is equally correct. Certainly, in travelling we sometimes place our map in its true position, with a view to identify objects or to find our way, but this case only furnishes an additional illustration to my argument. Here we have before us both the map and the country mapped, and we desire to compare the two. In vision we have the objects only, and know nothing of the (so-called) image but what physiologists teach us. The image is one step in the process by which we see objects; we do not see the image.

THE USE OF CUCAINE IN MINOR SURGERY.

MR. ARTHUR W. LOVERIDGE (Newport, Mon.) writes: I have lately had two cases in which the topical application of this drug has proved of great service in rendering the parts insensible to the knife, they are, moreover, quite the kind of cases one meets in private practice constantly, when it is desirable to perform the operation with as little pain and inconvenience as possible to the patient. These two points are very difficult to obtain single-handed. The natural dread in many people of the use of any anæsthetic will be quite sufficient for them to put off an otherwise trivial operation. This difficulty will soon be overcome if future experience tends to confirm the very gratifying results I have obtained. The first case was that of a man who consulted me for the relief of a very painful axillary abscess, hard, inflamed, and exquisitely tender to touch, so much so that he would not hear of an incision, which I assured him would give instant relief. Not having any cucaine solution handy, I told him to call next day, by which time I had secured a 4 per cent. solution of the hydrochlorate, which was applied with a camel's hair pencil; after waiting five minutes I was enabled to use the bistoury without giving the patient any pain. The other case was a rather more formidable one and occurred very recently, a patient called having a medium sized sebaceous tumour of the scalp as large as a walnut, I told him the only proper course was to remove it. By arrangement I called at his house a week later; I adopted just the same means as in the former case with regard the cucaine, and was able to dissect out cleanly the whole of the tumour together with the entire cyst wall, the patient complained of no pain, but said he could feel me pulling upon the tumour. I put in one catgut suture, and the small incision healed straight away.

POISONING BY NUTMEG.

DR. A. CUMMINGS AIR (South Norwood) writes: In the JOURNAL of May 14th, Dr. James Alexander, after describing a case of poisoning by nutmeg, asks "if any of your readers can recall a case of similar poisoning?"

I met with an instance several years ago, in which a middle-aged woman took one nutmeg, scraped and mixed with hot water as a remedy for arrested menstruation; two hours after taking it she was seized with extreme thirst, giddiness, and prostration; but to her the most painful effect was, in spite of the prostration, an intolerable restlessness, causing her to tramp up and down the room almost incessantly, holding on to the various articles of furniture for support; there was also "tightness of the chest" obliging her to loosen her dress. The symptoms continued (in spite of an emetic, strong coffee, and sal volatile), more or less during the whole of the evening and night, and then passed off completely.

To judge by the paucity of the information in the text-books with regard to poisoning by nutmegs, it must be, I should think, a very rare accident, and as nutmeg is so constantly taken as a flavouring for puddings, etc., even by very young children, it leads to the belief that, as in the case of the poisonous fungi, the toxic properties must be liable to great variations, caused by peculiar conditions of soil or season.

Dr. Garrod says: "Nutmeg in large doses is said to possess narcotic properties, well marked, causing drowsiness and even complete stupor and insensibility." Mr. R. Hughes in his *Manual of Pharmacodynamics*, quotes several cases of poisoning by nutmegs.

MR. T. P. DEVLIN (Carlisle) referring to the case of poisoning by nutmeg reported by Dr. James Alexander in the JOURNAL of May 14th, writes: A similar case came under my notice during the early part of this year. A young lady one evening ate a whole nutmeg, being fond of it; this was about 7 P.M. Shortly afterwards feeling sleepy, which she ascribed to having been up the greater part of the previous night at a ball, she went to bed, and slept very heavily till late next morning, when she was with some trouble aroused; she got up and dressed, but had no appetite for breakfast, still felt very drowsy, and vomited slightly several times. When I saw her about 10.30 A.M., vomiting had stopped, her face was pale, and she was unable to raise her eyelids; she did not complain of any giddiness, only feeling very drowsy and great disinclination for exertion. The treatment which I adopted, and under which the symptoms quickly passed off, was the use of strong coffee, cold douching of the head and face, enforced exercise in the open air, and a mixture containing ammonia. I have also failed to find reference to nutmeg-poisoning in any work I have consulted.

MR. A. J. REEVE TYLER (King's Norton) writes: I was called one evening about 10 o'clock to see MRS. E. M. I found her complaining of giddiness, faintness, and disturbed vision. The pulse was feeble, the skin cold and clammy, pupils dilated, no pain anywhere. I was told she had taken the whole of a medium-sized nutmeg scraped up and steeped in gin, as an emmenagogue. The treatment I adopted was just to administer an emetic, which had the effect of bringing away a large quantity of the nutmeg. I then gave her brandy, ordered her to be wrapped in blankets, and hot-water bottles applied to her feet. I also gave her a stimulating mixture and an aperient. Next morning the patient was nearly well, only complaining of a feeling of lassitude.

I could not find any record of similar cases, or any mention of nutmeg as an emmenagogue, though from what I gathered from the patient and her friends, it is frequently used as such.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGE OF PHYSICIANS OF LONDON AND THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

FIRST EXAMINATION.

THE following were the questions at the first examination in March last. (Candidates had to answer at least four questions, and in Chemistry at least one question in each Section had to be answered. Candidates unable to answer four questions were not allowed to proceed with their Examination.) Part I.—*Chemistry, including Chemical Physics.* Section I.—1. Explain clearly the construction of the ordinary Mercurial Barometer. Why does the mercury fall on ascending heights? What is understood by the term "boiling-point," and what is the connection between the boiling of liquids and the atmospheric pressure? 2. What is understood by "conduction" and "insulation" as applied to electricity? Describe an electrical machine for frictional electricity, and make clear the objects of conduction and insulation in the machine. How would you proceed to electrify a person with positive electricity.

Section II.—3. Show, by equations, the result of the action of Sulphuretted Hydrogen upon the following bodies in solution:—Chlorine, Sulphurous Acid, Ferric Chloride, Sulphate of Copper, and Ammonia. 4. Give two methods for the preparation of Sulphur Dioxide, and explain the bleaching effect of this acid and that of Chlorine. 5. A piece of pure silver is dissolved in Nitric Acid. Describe the preparation from this solution of Lunar Caustic, of Chloride and of Oxide of Silver. Give the properties and formulæ of these bodies.

Section III.—6. How may Urea be prepared from the Urine? What is its com-

position and its formula? How do you account for the presence of Carbonate of Ammonium in stale Urine? 7. Describe different methods by which Starch can be converted into Grape-sugar. How is this sugar distinguished from Cane-sugar, and how is it detected in a solution? 8. Describe the preparation and composition of ordinary Aldehyde. What are its leading properties? How is Chloral-hydrate prepared? What is its composition, and how is it related to ordinary Aldehyde?

Part II.—*Materia Medica and Pharmacy.*—1. Give an account of the action of Digitalis. What are the doses of this drug and of its preparations? 2. What are the officinal compounds and preparations containing Arsenicum? Give the strength of the preparations, and the doses of all. What is the action of Arsenious Acid? 3. Give the preparations of Ergot, Colchicum, and Ipecacuanha, and the composition of the Pulvis Ipecacuanhæ Compositus and Pilula Ipecacuanhæ cum Scilla. Mention the composition, strength and dose of the Hypodermic Injection of Ergotin. 4. Give a description of (*a*) Chloroform, (*b*) Iodoform, and an account of the action of each. Enumerate their preparations, and mention the doses of those used internally. 5. Describe the action of the following Sulphates:—Sulphate of Iron, Magnesium, Quinine, Sodium, Zinc; and give the dose of each. 6. What is the source of Pilocarpine? Give an account of its action. How would you administer it, and in what dose?

Part III.—*Elementary Physiology.*—1. How would you recognise under the Microscope—A. The varieties of Muscle; B. A Medullated Nerve-fibre? 2. How does Plasma differ from Serum, and how may each be obtained from Blood? 3. What is the composition of the Atmosphere? How does expired differ from inspired Air? What are the chief changes produced in the Blood by Respiration? 4. What are the chief constituents and uses of the Gastric and Pancreatic Juices? 5. In starvation, the body-temperature is reduced. Explain this. 6. What is meant by A. Afferent Nerve, B. Efferent Nerve, C. Nerve-Centre? Give instances of their use.

SECOND EXAMINATION.

Anatomy.—1. Enumerate the bony surfaces which form the anterior fossa of the base of the Skull. What markings and foramina are there in this fossa, and what do those foramina respectively transmit? 2. Give the origin, course, and distribution of the External Popliteal Nerve and its branches. 3. Describe the origin, course and distribution of the Arteries which anastomose in the fossæ of the Scapula. 4. Describe the dissection of the anterior part of the Perineum down to the superficial layer of the triangular ligament. 5. Give the position, relations, connexions, and arterial supply of the Stomach. 6. Give the origin, insertion and nerve-supply of the following Muscles:—(*a*) Levator Anguli Scapulæ. (*b*) Flexor Sublimis Digitorum. (*c*) Rectus Abdominis. (*d*) Adductor Magnus.

Physiology.—1. Describe the act of Deglution, including its Nervous Mechanism. 2. Describe the Mucous Membrane of the Uterus. State the changes which occur at the Menstrual period and during Gestation. 3. Explain the effects of the Respiratory Movements on the Circulation of the Blood. 4. State and explain the effects of Exercise on the Excreta. 5. Describe the Structure, Action, and Nervous Mechanism of the Iris. 6. Give the structure of Adipose Tissue. What is the Chemical Composition of the Fats contained in it? From what constituents of Food may Fat be formed?

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. W. I. Donaldson, Glasslough; Dr. C. R. Illingworth, Clayton-le-Moors; Mr. H. C. Gordon, Woolwich; Mr. G. Meadows, Hastings; Surgeon A. Perry, Gibraltar; Miss Marshall, London; Mr. A. W. Patchett, Shaw; Dr. Hime, Londonderry; Mr. J. Jones, Leeds: Mr. G. W. E. Russell, London; Mr. W. R. P. Jones, Wrexham; Dr. W. R. Jefferies, Chatham; Mr. W. Fuller, Stoke-next-Guildford; Dr. Kebbell, Hove; Mr. G. A. Armstrong, Edinburgh; Dr. C. Aitken, St. Mawes; Dr. Mears, Newcastle-on-Tyne; Dr. C. Reid, Stafford; Mr. C. B. Lockwood, London; Mr. A. C. Mann, London; Dr. P. Hunt, London; Brigade-Surgeon Orton, Hamburg; Mr. R. J. Sprakeling, Bootle; Our Swiss Correspondent; Surgeon A. M. Kavanagh, Cairo; The Secretary of the Local Government Board, London; Dr. E. M. Crookshank, London; Dr. W. R. Whitehead, Denver; Messrs. Brown and Co., Westerham; Mr. J. H. Barnard, Paris; Mr. W. Adams Frost, London; Mr. D. G. Edwards, Clydach Vale; Mr. G. Stillingfleet Johnson, London; Dr. W. Collier, Oxford; Surgeon-Major J. Rogers, Cairo; Dr. T. S. Short, Birmingham; Dr. G. F. Burder, Clifton; Mr. F. W. Clark, Croydon; Mr. G. Carden, Cheltenham; Mr. H. Graham, London; Mr. E. Hurry Fenwick, London; Dr. Duffey, Dublin; Dr. T. Whipham, London; Dr. Tom Robinson, London; Dr. Maxwell, Woolwich; Dr. H. J. Philpot, London; Dr. Woodham Webb, Neuilly-sur-Seine; Mr. G. A. Atkinson, Edinburgh; Mr. R. Lucas, Dalkeith; A. M. S; Mr. J. W. Watkins, Newton-le-Willows; Mr. R. Rae, London; Mr. W. G. Axford, Devonport; Surgeon-Major Hamilton, Oudh; Mr. R. H. A. Hunter, London; Mr. T. E. Jones, Llanrwst; Mr. A. Roberts, Keighley; Mr. H. L. Pearson, Rock Ferry; Mr. T. Kitchin, Whitehaven; Hon. Cecil Sandys, London; Mr. W. F. Fryer, London; Mr. W. Thomson, Manchester; The Secretary of the Military College, Oxford; Mr. Blackett, London; Mr. J. Tusworth, Liverpool; Mr. J. Collett, Brighton; Mr. W. T. Jackman, London; Messrs. Maple and Co., London; Mr. J. Girling, York; Mr. F. F. Flynn, Sunderland; Dr. A. P. Hillier, Cape Colony; Dr. Savage, London; Dr. W. Gripper, Wallington; Dr. J. MacNab, Stirling; Dr. G. Elder, Nottingham; Mr. J. Atkinson, Crewe; Dr. Wolfe, Glasgow; Physician; Mr. C. A. Greaves, Derby; Mr. J. H. Wraith, Darwen; Mr. E. Whitwell, York; Messrs. Bush and Co., London; Mr. J. B. Jessett, London; Dr. J. M. Booth, Aberdeen, Mr. J. Lewis, Birmingham; Mr. H. F. Hatzhorne, London; Mr. J. W. Vickers, London; The Secretary of the South-Western Branch; Mr. R. Davies, Bath; Surgeon J. B. Clibborn, Lisbon; Mr. T. P. Lowe, Bath; Dr. J. Milner Fothergill, London; Mr. H. S. Bleckley, Manchester; Dr. Carline, Lincoln; Mr. W. Willowes, Abergele; Dr. C. Sanders, London; Mr. F. Hensman, London; Dr. C. Hailes, Clifton; The Secretary of the British Medical Temperance Society, London; Mr. P. Allsop, London; Mr. S. Brearley, Batley; Mr. J. Williams, Brecon; Our Manchester Correspondent; Surgeon H. Pocock, Aldershot; Dr. Ireland, Prestonpans; Mr. G. Hartridge, London; Mr. J. T. Maclagan, Edinburgh; The Secretaries of the Brown Defence Fund, London; Mr. Plowman, London; Dr. G. Stanley Murray, London; Dr. H. R. Smith, Southsea; Mr. W. Habgood, Banstead Downs, near Sutton; Mr. W. Steer, London; Mr. H. E. Crook, Northfleet; Dr. G. O. Parker, Clifton; Surgeon-Major Vacy-Ash, London; Dr. J. Martin, Portlaw; Mr. H. Haslock, Chichester; Dr. S. C. Smith, Halifax; Mr. W. R. Elliston, Ipswich; Surgeon A. S. Rose, Netley; Mr. R. P. Hetherington, Netley; Mr. C. H. Y. Godwin, Netley; Dr. Kinkead, Galway; Surgeon-General Stewart, Lymington; Surgeon-General Furnell, Monte Carlo; The Secretary of the Parkes Museum, London; Mr. J. Wheatley, London; The Superintendent of the Belfast Royal Hospital; Dr. Tatham, Salford; Dr. C. C. Scott, Twickenham; Dr. R. S. Mair, London; Mr. J. Black, London; The Secretary of the Harveian Society, London; Dr. E. Cosgrave, Dublin; Mr. E. Fordyce, Cambridge; Surgeon H. S. McGill, Netley; Dr. T. Stafford, Boyle; Our Edinburgh Correspondent; Mr. C. Roberts, London; Mr. H. Davies, London; Mr. W. R. Jones, Wrexham; Dr. W. E. Cart, London; Dr. R. Mowbray, Newtonstewart; Messrs. Iliffe and Co., London; Mr. T. Dorman, Dumfries; The Secretary of the Electro-Dynamic Institute, London, etc.

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AN ADDRESS

ON THE

BEHAVIOUR OF FLUID IN THE CHEST AND THE TREATMENT OF EMPYEMA:

WITH SPECIAL REFERENCE TO THE VALUE, AS AN OPERATION, OF REMOVAL OF RIB.

Delivered at a Meeting of the South-Eastern Branch at Gravesend.

By JAMES F. GOODHART, M.D., F.R.C.P.,
Physician to Guy's Hospital.

THE subject of my paper this afternoon is empyema, and the behaviour of fluid in the chest. It is an interesting and a large one, and treated—as I shall necessarily have to treat it—in a somewhat cursory manner, many points must remain untouched. And, first of all, it occurs to me to say—although I must not dwell upon so speculative a matter—how interesting, and withal important, a question is the process of the pouring out of fluid. How comes it that fluid is so rapidly effused, and sometimes as rapidly absorbed? Where lies the difference between the latter case and those where week after week goes by before the natural conditions are replaced?

We cannot tell; yet behind the answer lies a much more precisely directed treatment, for did we but know what was likely to be the course of a particular effusion, so we could the better say, this case for absorbents, that for aspiration. As it is, the patient is often the sport of the medical man's available energy. That early aspiration is *the* thing in pleuritic effusion is the outcome of the raw robustness of medicine with a lean to surgery. This leads me to say that some hold that an empyema is the outcome of serous effusion in the majority of cases. Fraentzel, in Ziemssen's *Encyclopædia* says: "we must now, therefore, regard it as an established fact that primary purulent pleuritis is of extremely rare occurrence." Pathologically, this may be, perhaps, true; in practice it is most misleading. If we tap a pleuritic effusion in the first week, the fluid may possibly be of somewhat equivocal appearance. A storm of effusion necessarily means free dilution of the corpuscular part of the disease. But, unless you can show that a would-be empyema can be arrested in the serous stage, there is no point in the assertion; and this cannot be shown. Whereas, on the other hand, it can be shown that pus forms with great rapidity; that some serous effusions are by no means deterred from becoming empyemata by preliminary tappings; and that many serous effusions remain for weeks and months in the pleura, and never became purulent, unless, perhaps, after an ill-conducted aspiration.

That an empyema is no mere act of apostasy on the part of serum, I will instance—and only instance—the well-known fact that empyema is much more common in children than in adults. Empyema is not common in adults. I should think two or three cases a year would be more than a full average in my wards at Guy's; whereas, in any children's hospital with an equal number of beds it is as common as possible. What is the reason of this? Surely one cannot be far wrong in attributing it to the intensity of reaction in growing tissues to inflammatory irritation, to the rapidity with which cells grow, and to the greater sensitiveness in young life to sudden changes in their environment. Old age is callous, and one may well suppose that there comes a time to endothelium when it resembles the old and well-worn cab-horse, which takes repeated imprecatory flagellations without seeming to mind them, and certainly without any appreciable increase of its pace. It is a little different with the unbroken colt. In children, inflammation of the pleura is often associated with a most active formation of lymph, and being so, there must necessarily be much risk of this material degenerating and forming pus. And there cannot be a doubt that this is the explanation of many a case of empyema. Let me just indicate the practical bearing of this. In the first place, when the abscess is opened, this lymph is liable to block the tube and prevent the evacuation of the pus; it may lead to loculation of the cavity, and thus prevent complete drainage; and it may also—although I do not think as much of this as some would—contract round the lung and prevent its re-expansion.

Therefore it should always be an object to get away as much of this as possible; and, in passing, this is best done, in my opinion, not by washing out the pleura, but by having as free an opening as possible. In the second place, this corpuscular development being unusually rich in childhood, the fluid of an effusion may be turbid, and yet not be incapable of absorption; and I have seen several instances where a consideration of this kind has led to the adoption of simple aspiration rather than incision, and with success. I think it possible that some, at any rate, of the recorded cases of empyema cured by simple aspiration have been of this sort. At least I doubt whether an equal number of ordinary abscesses could be found recorded as cured by the same means.

But, turning now to the behaviour of fluid in the chest, it seems to me that incomplete knowledge and inefficient treatment have resulted from the too precise statements made in text-books. For example, in any case of pleurisy we expect the dulness, absence of respiration, of tactile vibration, etc., at the base of the lung; and we draw a line round the chest at the particular spot, and say there is the water-line; and we watch it, as we suppose, in the daily rise and fall. And if, further, it should be a case where we deem it necessary to tap, we guide the operation in accordance with that line. This is all right as far as it goes, but, as regards the position of the fluid, the knowledge that is thus obtained is very inefficient. At least I shall venture to say that it is no uncommon experience to put in an exploring needle with these indications for a guide, and to find nothing come out. It is an old observation that if, in children, you wait to tap until you can find a spot where dulness and absence of respiratory murmur meet, you may often wait until Nature or some better informed man wipes your eye. It is common enough that one draws fluid from such part of the chest as is apparently filled with air in inspiration, and gives clear resonance on percussion. The explanation of the fact may perhaps be that a good deal of fluid is required to damp the vibrations of the thoracic wall, or to drive out all the air and to produce dulness and complete absence of respiration. The respiratory sounds, too, may be transmitted by neighbouring lung. All this I admit; but then, on the other hand, the admission is to some extent countervailed by another well-known fact—that many of the physical signs indicating fluid are produced by a quite moderate quantity. I have repeatedly seen a large part or the whole of the lower lobe of the lung quite airless when the amount of fluid has been no more than five or six ounces.

Well then, again, how great is the impairment of movement of the affected side in most cases of pleuritic effusion. It always seems to me that this is far more in many cases than can be explained by the existing amount of fluid, and more by far than a simple dry pleurisy effects.

An allied phenomenon is what is called Skoda's tympanitic resonance, one of the most valuable sign-posts in existence. It points to a generally impaired resonance all over the affected side, and whether you deem it to depend upon the diminished volume of air contained in the lung under the part percussed, or to diminished vibration of the thoracic wall, the diminished resonance is not adequately accounted for by so small a quantity of fluid as will often be found to exist at the base of the lung.

Now these various phenomena are, it seems to me, fairly well explained by supposing that the fluid does not persistently occupy the base of the chest by the force of gravitation, but is more or less drawn up or pumped up or spread over the lung by the inspiratory expansion of chest-wall and lung, and varies therefore from time to time, according as the inspiratory force is weak or strong in this part or in that.

I think it may fairly be said that in pleuritic effusion, the lung is placed upon a water-bed, and just as in a water-bed the water recedes from such parts as are subject to most pressure and accumulates for the time being elsewhere, so in the pleura there is more or less displacement under the inspiratory forces, and the water covers more or less of the lung. If the fluid be in small quantity it may be spread all over the surface; if in large amount, then such parts as have most free play will best allow of the continuance of lung-expansion, and thus displace the fluid to less favoured positions; and in these no doubt there will be a tendency for the fluid ultimately to be permanently located.

To my mind this supplies a satisfactory explanation of the extent of the dulness—the greatly impaired movement, met with in so many cases; of the existence of fluid in places where, from all the physical signs obtainable, it could not have been predicted, and we are prepared to be cautious, even if we lack the experience which certainly will make us so, as regards confidently affirming the existence of fluid at the base, because of such signs as dulness to percussion.

Lung collapsed from disease is a potent cause of dulness; and, given the existence of a small amount of fluid hampering the expansion of

the lung, the base will undergo most collapse, not altogether because the fluid accumulates there, but because under all conditions of restricted action it is the less expanded, and the surrounding parts close in and make for complete airlessness. This hypothesis enables us also to see very well that in old people, with but little inspiratory power, and with impaired movement of the chest from senile changes in the cartilages, etc., a small quantity of fluid will produce an extreme amount of collapse; and the fluid will, in the absence of adhesions, be located at the base. Old people live much in the attics of their lungs, and find them, unfortunately, too often but garrets unpleasantly near the sky. The vigorous, on the other hand will stand a good deal of fluid in the chest without the occurrence of any marked collapse.

This is, however, not the whole of the matter. Experiments have been made by Dr. Garland, of Boston, Massachusetts, upon dogs, which go to show that the fluid accumulates according to a particular curve. The experiments were upon dogs which were suspended by their heads, and their pleuræ then injected with either plaster-of-Paris or cocoa butter. I need hardly say that the results of such proceedings must be taken with a considerable amount of qualification. But Dr. Garland found that the lung was smaller in volume, having contracted before the encroaching fluid; but with medium-sized injections it was nowhere compressed or plunged into fluid, as we read in text-books. The cast all lay between the lung and the diaphragm. "In other words," he says, "instead of the fluid compressing and deforming the lung, as we are taught, I found that the lung retained its own outline, being merely reduced in volume, and that it dictated shape to the fluid." Dr. Garland attributes this storage under the diaphragm to what he terms the retractile force of the lung, and I should certainly suppose that the expiratory forces are as active as the inspiratory, within their limits, in modifying the position of the fluid.

Now all this upon the behaviour of the fluid I mean to lead up to the very practical question—what happens when we open an empyema? It seems to me that the generally received doctrine may be put in this way. A hole is made in the chest-wall, the natural vacuum is destroyed, the lung becomes collapsed, and it becomes a simple question of draining a barrel, while closure of the cavity has to take place by means of the gradual retraction of the inflammatory material formed in the pleura, and by granulation from the bottom, as in an ordinary abscess. And this is so sometimes, but when it is, the outlook is a bad one for the patient. He is likely enough, and quite properly so, to come chiefly within the province of surgery, and to have his ribs battened in by the excision of an inch or two of from two to six of them. Then possibly, between the clouds, he may be seen at one of the medical societies as a cure, and then, in due course of time, he will succumb to lardaceous disease. I state it thus to impress what I believe to be the fact. Empyemata, with free entrance and exit of air, are mostly bad cases, and although they may be relieved by such measures as I have spoken of, sinuses generally remain, and there is a great risk of the supervention of lardaceous disease or phthisis. But this is, happily, not the average condition when an empyema is opened. If we watch a few we soon see that it cannot be so, and for this reason, that the patient begins to breathe with the implicated lung within a very short time of the chest being opened. I should say that this is so in the majority of cases in children, and I say in children first because empyema is one of the special experiences of childhood, as I have already said and you well know; and because, for the most part, the empyema is more recent, and, therefore, more favourable a case than in adults. In adults, phthisis and all sorts of morbid conditions in the lung itself interfere with the more normal condition. Hence one must make a difference. Therefore, I say that in the majority of empyemata of children, directly the pus is let out, the lung begins to act again more freely. Well, but you say, how can it? You have put in a drainage-tube, and let air into the pleura, and thus collapsed the lung. I have, however, done nothing of the kind, at least so I maintain. When you pass a catheter into the bladder you let out the urine, but the bladder does not fill with air. As the urine flows out the walls close in, and the parts are as air-tight at the end as at the beginning.

There seems to be a sort of idea abroad that by opening the chest you inevitably fill the pleura with air at every movement of respiration, but it is not so if the lung is in anything like a healthy state. If it is bound down by very old tough adhesions no doubt this does happen, but in recent cases, directly the pus is let out the tension is relieved, and there is a rush towards the opening; the ribs fall in a little, the diaphragm goes up, the mediastinum yields, the other lung somewhat also, and all the parts press shoulder to shoulder, in the same way as the surrounding parts drop down as the bladder contracts when the urine is voided, and the vacuum is never totally destroyed, even by the inspiratory act. We interpet all our facts so much in accordance with preconceived or pretaught notions; and no doubt when we have to deal with an empyema after opening, and hear the sniffling in and out of the air at the opening, in accordance with the respiratory movement, it is easy to conclude, albeit as I contend too hastily, that the air is going in and out of the general pleural cavity. In the same way we pass in several inches of drainage-tube, and could pass several feet for that matter if we wished it; and we may, perhaps too hastily, think what a huge cavity is here! But the exact state of affairs is this. Just round the opening there is more or less space into which air enters freely; of course, during inspiration so much of the cavity is opened no doubt; elsewhere, the pleural surfaces are still in contact. They can, of course, be separated when we pass in a tube, but pull out the tube, and the passage it made for itself disappears again, and it has entered no cavity whatever, if by that we mean a gaping space. If all go on well adhesions form all over, except just round the opening or along the sinuses more or less, and the parts are then nearly sound again, and respiration soon goes on fairly well.

There are some points about pneumothorax which I think tend to corroborate these statements very strongly. It is said, and it quite coincides with my own observations, that pneumothorax is decidedly uncommon after fracture of the ribs and wound of the lung. My colleague, Mr. Howse, has observed that pneumothorax, under these circumstances, is more common in old people than in the young, and this is precisely what one would expect if the line of argument already adopted be correct. In old people the ribs have stiffened, and are therefore unable to fall in and reduce the size of the thoracic cavity. In young people the chest is reduced to a minimum capacity, and the inspiratory suction is diminished in proportion. The differences in the case of pneumothorax at these two periods are similar to those in empyema in the young and adult; in both cases—in young people with healthy lungs, the lung and chest-wall fall on each other: in the adult, with old lung disease, or in the old person with stiff ribs, the two cannot play so well together, and thus when air has a chance of admission to the pleura, it separates the two surfaces, and leads to collapse of the lung. Yet further, it is a recorded fact well known to army surgeons and some few others, that an incised wound of the thorax by no means necessarily gives rise to pneumothorax. As Mr. Howse puts it, the exposed lung remains in apposition with the sides of the wounded pleura, and moves with each act of respiration.

See now the importance of all this in its bearing on the treatment of purulent effusion. The simile of the barrel is not applicable for the majority of cases, and it is therefore not necessary to get to the bottom of the chest in order to drain it effectually, and, as a matter of fact, the opening is usually made a third or half way up the chest, and its site may, in fact, for the most part, be determined by local exigencies, rather than upon the question of which is the best spot for drainage. Of late years, indeed, Mr. Marshall, guided, if I remember rightly, to that spot by the fact that when empyemas open spontaneously they very generally made their way forward, somewhere below the nipple, has suggested that position as a not unsuitable one for making an opening; and obviously if dependency were necessary for emptying the cavity, this could never be the place to make an incision. Mr. Marshall believes that the selection of a particular spot for the spontaneous opening of empyemata is determined by the course of the muscular fibres. There is one spot less protected by muscles than other parts, and this being the point of least resistance, gives way first, and thus settles the site. I also take the fact of spontaneous opening being prone to occur here, or somewhere in front, sometimes, indeed, quite under the clavicle, to corroborate the opinion I have expressed that fluid plays round the lung much more than we are in the habit of thinking, Now this all bears upon the practice of excision of the ribs, which is becoming a daily more common and dogmatically advocated plan of draining the chest in empyema. The prevailing impression seems to me to be that in empyema the lung collapses, and there is a cavity of large size which must contract and granulate up from the bottom. I thought the same myself once, and in that light looked upon the disease as a very desperate one, for granting the full power of the pleura to form a copious supply of lymph, and of the ribs to sink in to a great extent, yet even with all this help it hardly seemed a likely thing that the cavity could be obliterated. But a larger experience tells one, I think, that the argument is only good for cases that are neglected by long standing, and for cases in which pre-existing disease of the lung is the cause of the empyema. These are the cases in which the surgeon is at his wit's end to procure obliteration of the cavity, and, do

all he can with excision of the ribs, and what not, many are the cases of this sort in which the surfaces will not come together, and the cavity will not close. But this is not the rule; it is the exception.

It has been the common practice of surgery of the last few years to make a free incision in these cases, and this plan has been very generally adopted, I think, at Guy's Hospital, and certainly so both by Dr. Taylor and myself at the Evelina Hospital. A large-bore rubber drainage-tube is inserted and retained as long as may be necessary. I myself prefer that this tube should be shortened after a week or ten days, so that it is just long enough to pass in between the ribs and no more. This allows for the continued patency of the opening into the pleura as long as may be necessary, and believing, as I do, that the idea of drainage being required from the very lowest part of the pleura is a mistaken one, I have been confirmed in this opinion by finding that, in the large majority of cases, this plan is successful. So far as I can make out, there have been forty-seven cases operated upon in the Evelina Hospital in the last five or six years, some under my own care, others under Dr. Taylor, and to those I may add three others which have occurred to me elsewhere in the last few months, making a total of fifty; of these, forty-two have quite recovered; a sinus has remained in three, and there have been five deaths. As regards these, however, it is only fair to say that one was due to suppurative pericarditis in addition to the empyema; another to the empyema being double; a third was due to a foreign body in the bronchus and septic pneumonia; a fourth was a huge collection, with a history of eighteen months' duration, and death occurred within a few days of the operation; and the last case had been operated upon, and was doing well, when the child caught measles and died from the effects of broncho-pneumonia. I do not think that in any one of the five was there any difficulty as regards the drainage from the simple incision, and none of them can be supposed to have any bearing upon the question whether or no excision of a portion of one or more ribs is advisable as a rule. In this series of cases a portion of rib has been excised three times;[1] all three were under my own care. In two of them the operation was done when I was away for my holiday, and although several weeks had elapsed since the incision, I am not prepared to say that I might not have waited longer, and still with the hope of a good result. Nevertheless, to make the case as full as possible in favour of excision of the ribs, I will say that here were two cases in which simple incision was not satisfactory, and excision of a rib had to be practised. One of them healed up and did well; the other, after several months, has still a sinus, and I propose to have still more of the ribs removed. In the third case, a small piece of one rib was removed at the first operation, because it was quite impossible to pass a tube into the chest of any size sufficient to ensure adequate drainage.

Now in the *Lancet* for 1886 (On the Surgical Treatment of Empyema, vol. i, 1886, p. 51) my friend Mr. Godlee, for whose surgical skill I have the highest possible respect—so much so, indeed, that I would almost rather distrust my own opinion than his in this matter—published a series of thirty cases of empyema in children, and in nineteen of them a piece of rib was removed. I suppose it will be allowed that any operation, if unnecessary, is harmful; and I feel further disposed to say that the resection of a rib in young children is an operation of some severity, do it with what ease you may, although it is not a proceeding that need be made much of, if it can be shown that any gain comes of it. Well here is one observer who thinks it advisable to excise a piece of rib in two-thirds of his series of cases; another only about once in every fifteen cases.

I cannot think that there can have been such a difference between the two sets of cases; and I believe the difference of treatment is to be attributed to our starting on different bases. Mr. Godlee starts on this basis. He says, let us consider the manner in which a cure is effected under the circumstances of free incision into the chest (*Lancet*, 1886, vol. i, p. 51). "The lung, unless it has previously become adherent to the chest-walls at some points, is lying at the back of the thoracic cavity, occupying the hollow formed by the angles of the ribs, and perhaps adherent also to the structures in the middle and posterior mediastina. The process which has to take place in order that the opening may close is a bringing together of the walls of the cavity and the surface of the lung. Now it is quite impossible for the lung to be distended by any inspiratory efforts; this would be opposed to the laws of physics, and no suction power is available as long as there is a free opening into the chest, yet somehow the closure of the cavity is brought about." Well, if physics decline to have my explanation, I feel disposed to say so much the worse for physics. Anyhow, I have seen a large empyema close up in eight days, which is an equal dilemma for the granulating-up-from-the-bottom and contractile-closure theories. Or, take a recent case that has happened to me: A little girl, aged 8 years, has had an obscure chest mischief since early in January. She does not throw it off, has an evening rise of temperature, and her spine is beginning to curve. I find, on examination, the left side considerably retracted, the heart displaced a little to the right of the sternum. No absolute dulness anywhere, but tubular breathing at the apex under the clavicle, and a generally deficient movement of that side of the chest, and a very poor inspiratory murmur. A needle is put in at the angle of the scapula, and pus drawn; a free incision is then made, and four ounces of pus evacuated. A small piece of rib was excised in this case, because the ribs were so close together that no adequately large drainage-tube could be passed between them. There has been practically no discharge since; the temperature has averaged 99°, or under. The tube was removed on the ninth or tenth day, and the child appears to be well.

Cases such as these (and I have no doubt whatever there are some here who could match them) are by no means satisfactorily cleared up by an explanation of their course such as Mr. Godlee seems to me to sketch, but I venture to think such things are reasonably probable by the means I have indicated. It may indeed be said that the contraction of lymph goes on with extreme rapidity, so much so, indeed, that it is difficult to fix limits to its capacity in this respect, and I should admit this if the contraction were free to act in all directions; but this is not so in the chest; the contractile force is materially limited by the ribs, can only act to any large extent when it has reduced the thoracic wall to the state of forced expiration, by dragging on the lung and diaphragm. But then there is this other difficulty in that explanation. It is in just those cases which close up rapidly that the amount of lymph is smallest, therefore, in just those cases in which repair takes place most quickly and perfectly, the contractile force is most, and I think practically altogether, in abeyance.

I cannot pursue this matter further; I will only say in conclusion, that I never have a rib excised unless the case is an old standing one, or there is no room to put in a large drainage-tube; and as a part of the outcome of the experience I have attempted to condense, I interfere with the pleura as little as possible, and for as short a time as possible. Therefore I never wash out the chest, and I attempt to do away with the drainage-tube at the earliest possible period. A free incision is made in the chest wherever is most convenient, pus having been previously proved to exist at the selected spot by the exploring syringe. A large sized tube is put into the opening perhaps 5 or 6 inches long. This is shortened within a few days, and if all goes well after a week or ten days, the length may have been reduced to an inch or so, just enough in fact to go between the ribs and no more. The external opening should be kept open long enough to insure that there is no re-collection going on inside. The last case I have had has been treated by a silver tube I had made on the principle I advocate, of keeping the external wound open and leaving the pleura alone. It is a flattened oval ○ an inch long, with a bore of 4 millimètres by 12. It has a thin metal shield which can be moulded somewhat to the side of the chest. It answered admirably, keeping the ribs apart and giving a free vent, and this in a case not very favourable to success, for the child was only 2 years old. The case was operated upon by my colleague Mr. Symonds; the tube was removed on the fifteenth day, the wound healed up forthwith and the child has since then remained well.

In conclusion, let me say that I have not intended to make any objection to the removal of ribs in properly selected cases, and such I take to be very long-standing cases, or when, which according to our experience is I think not very common, the ribs come so close together that a properly large tube cannot be inserted, or is nipped between them. But it is my belief that in the present day resection of ribs is a common operation, and becoming yet more so. Whereas I think it is quite unnecessary for the great majority of cases. This is the main point of my paper, and the one I hoped to see well discussed.

[1] There is now in the hospital a fourth case of excision of a rib. The child was in the hospital three or four years ago, and is therefore one of the fifty; but it appears that she has been well in the meantime, and has lately developed another empyema on the same side.

Poisoning by Sewer-Gas.—The death of a child, aged 3, the daughter of a bricklayer's labourer, occurred this week at Hackney Wick from poisoning by sewer-gas. Mr. Bothamley, the surgeon who examined the house in which deceased lived, said, from a sanitary point, it was not fit to live in, and two other children of the family were suffering in a similar way. The attention of the sanitary authorities was called to the matter.

Some official statistics just issued as to the death-rate in the principal Austrian towns show that Vienna has become, since the construction of its water-works, one of the healthiest of cities.

REMARKS
ON
THE TINCTURE OF THE MURIATE OF IRON.

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Having purchased the last edition of Dr. Garrod's work, called the *Essentials of the Materia Medica and Therapeutics*, under the impression that it contained all the most important medicines now in use, I am much surprised to find that it contains no reference to the tincture of the muriate of iron—a medicine which has long been held in high estimation by our most eminent practitioners in Scotland. In example of this, the late celebrated Sir Robert Christison states, in the last edition of the *Dispensatory*, that it "is a favourite preparation with many for obtaining the tonic action of iron, and it is an exceedingly convenient form for administration. It has also been thought by some to possess specific virtues in disease of the urinary organs, and is used somewhat indiscriminately in this class of affections. It is serviceable in dysuria, connected with loss of tone of the bladder, and it has been found to diminish the mucous secretion of that organ. Sometimes it acts as a gentle diuretic."

After reading this description it does appear remarkable that it should have been so entirely ignored and an attempt made to supersede it by the comparatively inert preparation of the tinctura ferri perchloridi.

Had Dr. Garrod condescended to consult the *Edinburgh Medical Journal*, he would have discovered that in addition to the merits assigned to the tincture of the muriate by Sir Robert Christison, it possesses others of greater value, as it has a powerful influence in purifying the blood, as is fully illustrated in its effect in zymotic diseases, more especially in erysipelas, diphtheria, and puerperal fever.

In illustration of its effects in erysipelas, my brother, George Hamilton Bell, who was one of the most successful practitioners of his time, and I wrote a paper many years ago which I read to the Medico-Chirurgical Society, and afterwards published in the *Edinburgh Medical Journal* (*vide* the *Edinburgh Medical Journal* in 1851). Very soon after the publication of the said paper I met the celebrated Dr. Begbie, then President of the Royal College of Physicians, when he informed me "that he had been induced to try my new remedy in a severe case of erysipelas, and it far exceeded his expectations, as it cured the case in three days, although he had anticipated an attendance of three weeks."

As a further proof of its influence I may cite the case of an elderly English gentleman, who, in passing through Edinburgh on his way to Shetland, was attacked with erysipelas. I was sent for, and found him in high fever, his face much swollen, and his right eye closed. He said it was a source of great distress to him, as he required to go to Lerwick in three days. I told him that I did not think it was possible for him to travel so soon. He was quite convalescent in nine days, and was able to proceed on his journey.

Being strongly impressed with the idea that diphtheria is a blood-disease resulting from inhaling impure air, I was induced to employ in its treatment the tincture of the muriate of iron, and I have had the gratification of finding that it acts as a specific in the disease (*vide* the *London Medical Review*, March, 1861). In illustration of this fact I find that Dr. Begbie, in his interesting history of the disease, states that in his practice the mortality was equal to that of cholera, eleven having died out of twenty, while in my practice the mortality was only one in thirty. The last case which came under my care was seen by two medical practitioners, who declared that it was hopeless, and that it would prove fatal in a few hours; but this rash and injudicious opinion proved erroneous, as the patient made a good recovery.

Considering that puerperal fever, like erysipelas and diphtheria, is obviously a blood-disease resulting from exposure to impure air or inoculation of polluted matter, I suggested many years ago that it should be treated with the tincture of the muriate of iron; but I had no opportunity of employing it myself until a comparatively recent period, when I was requested to see a patient in the Maternity who was considered to be in a hopeless state. She was put under the tincture of the muriate of iron, and she left the hospital in health (*vide Edinburgh Medical Journal*, June, 1872).

I might refer to several other cases of the disease which were successfully treated; but I shall satisfy myself with referring to the last which came under my treatment. It occurred in a woman, aged 20, who lived in an ill-aired locality. She was delivered with forceps on November 21st, and seemed to be doing well until the 25th of the month, when she had a rigor, followed by pain in the abdomen, rapid pulse, and high temperature, scanty and fœtid lochia. In a few hours the pulse rose to 130 and the temperature to 103.5° F. She was put under the salicylate of soda, and had the vagina washed out with tepid milk and water, but with little benefit, as on November 26th she was suffering severe pain in the left iliac region, tympanites, and the temperature was 102.5°.

I was now requested to see her, and I ordered her to have 30 drops of the tincture of the muriate of iron every two hours, and to have the vagina washed out with a solution of Condy's fluid, in proportion of 1 to 8, twice a day. By the time she began the tincture the pulse had risen to 135, and the temperature to 103.5°.

On the 27th the pulse had fallen to 100, the temperature to 100.6°, and the lochia were quite free from fœtor. The bowels were moved with castor-oil, and a quantity of offensive matter with flatus was discharged. In the evening the pulse rose to 120 and the temperature to 102°, but in other respects she was the same as in the morning.

November 28th. The patient had passed a good night, and was free from pain; the lochia natural; pulse 100, and the temperature 100°. To have a dose of Gregory's mixture.

November 29th. Doing well.

November 30th. She had had a return of fever. The face was flushed and anxious-looking; pulse 120, temperature 103°. She had had a slight rigor. On inquiry, it was ascertained that the tincture had been neglected to be given. It was renewed, and ordered to be given regularly, and a linseed poultice to be applied to the abdomen.

December 1st. She had had several hours' sleep, and perspired freely. She had less pain, but the pulse still kept high, being 100, and the temperature 103°.

December 2nd. All her symptoms were relieved; the pulse was 96, and the temperature 98.7°. From this period she gradually recovered her health and went to the country.

I might add other circumstances in illustration of the important merits of the tincture of the muriate of iron; but I consider that I have said enough to satisfy every unprejudiced and judicious person on the subject, and to show the egregious error of having ignored so precious a medicine and attempting to supersede it by the tincture of the perchloride, the medicinal properties of which, according to my observation, are so much more limited, especially as a remedy in erysipelas and diphtheria.

On several occasions I have been satisfied in regard to this fact. In one case of erysipelas I was exceedingly disappointed and disgusted. It occurred in a lady who had come from the Highlands, where she had been laid up for a length of time with a severe attack of rheumatic fever. Soon after her arrival in town she was attacked with erysipelas. I ordered her to have the tincture of the muriate of iron, and I attended her day after day, for some time without any abatement of the disease. I was therefore induced to look at the medicine she was taking, and I discovered that the apothecary had stupidly sent her the tincture of the perchloride. The tincture of the muriate was immediately substituted, and in three days the disease was subdued.

As to its efficacy in diphtheria I have to record that I was requested to attend a case of the disease by a friend who was about to attend a lady in her confinement, and who was afraid that he might carry infection to her. I found that the patient had been treated by the tincture of the perchloride; but without any benefit. I put her under the tincture of the muriate of iron, and she was rapidly restored to health.

I have not a doubt that were scarlet fever treated in the same manner as I have recommended in diphtheria, it would be equally successful in both diseases.

The distribution of prizes to the students of the Medical School of St. Thomas's Hospital will be made by Sir Henry Wentworth Acland, K.C.B., M.D., F.R.S., Regius Professor of Medicine in the University of Oxford, in the Governors' Hall, on Wednesday, the 15th June, 1887, at 3 P.M.

French Academy of Medicine.—The prize (£40) for an essay on a subject connected with the diseases of childhood will be awarded in 1888 for the best essay on "Paralysis during Childhood." The paper must be based on clinical observation as to the causes and nature of the disease. The papers must be forwarded to the Academy before March 1st, 1888.

ON THE TREATMENT OF PAROXYSMAL DYSPNŒA OCCURRING IN ANEURYSM OF THE ARCH OF THE AORTA.

By HENRY F. A. GOODRIDGE, M.D., F.R.C.P.,
Senior Physician to the Royal United Hospital, Bath.

PROMPT, energetic, but withal judicious, treatment can seldom be more imperatively required than in dealing with those formidable paroxysms of suffocative dyspnœa which are apt to supervene in the progress of aneurysm of the aortic arch, and which may even be the first intimation of the presence of that insidious disease. The too ready assumption that the obstruction to the passage of air was seated in the larynx has led in the past to the indiscriminate recourse to tracheotomy in these cases. Given stridulous breathing and threatening asphyxia, and this operation was at once deemed necessary to avert the fatal issue, no better result at times ensuing from its performance than to demonstrate that the obstruction giving rise to the symptoms was not in the larynx at all, but lower down. Hence the importance of having in every instance, as far as possible, a correct notion of the seat of the obstruction before deciding upon the measures to be adopted for the relief of the patient. Taking it for granted that this can vary in three ways, and in three ways only—namely, that it may be in the larynx, in the trachea, or partly in both situations—we will consider briefly each of these varieties.

1. *In the larynx.*—Here, as just observed, the obstruction was formerly thought to exist, and here alone. It was held to be due to closure of the glottis, brought about by the aneurysmal tumour causing traction or compression of the recurrent laryngeal nerve, and consequent disturbance of the innervation of the intrinsic muscles (crico-thyroid, of course, excepted). The nature of this disturbance was matter of speculation. Spasm and paralysis were alternately invoked to explain the phenomena, and when bilateral effects followed upon a unilateral cause, it was assumed that reflex agency came into play. With the discovery by Dr Felix Semon of the law that in all cases of progressive affection of the roots or trunks of the laryngeal motor nerves, due to organic lesions of the latter, the abductor fibres and muscles first succumb, we began to tread on firmer ground, and the frequent occurrence of unilateral abductor paralysis as a complication of aneurysmal or other tumours developing in the vicinity of the recurrent nerve became at once intelligible. But unilateral abductor paralysis thus brought about, it is needless to say, is a persistent condition, and fails to explain those sudden paroxysmal attacks of urgent dyspnœa, with more or less prolonged intervals of comparative freedom, which we meet with in the course of many aneurysms of the aortic arch. If we would admit, therefore, the existence of this class of cases, we have little but hypothesis to help us to understand them. Nevertheless, were the clinical facts in any case to make it clear that the obstruction was seated in the larynx, it would not be less clear that tracheotomy in ultimate resort was required to obviate this source of danger.

2. *In the trachea.*—Here, we know, the obstruction is direct and mechanical, proceeding from the aneurysmal tumour itself, which, in its growth, comes to press upon, displace, distort, or even bulge into the wind-pipe, diminishing its lumen, and producing local irritation; and this, for the self-same reason, usually happens at or near the bifurcation. To Dr. Bristowe we are indebted for having first shown that an obstruction of this seat and nature may be the sole efficient cause of the paroxysmal attacks under consideration. He had a patient with aneurysm of the aortic arch, who suffered from "occasional sudden, terrible exacerbations" of dyspnœa, and in whom, *post-mortem*, the trachea was found much compressed and narrowed by the aneurysmal tumour, while both recurrent laryngeal nerves were unaffected. Dr. Bristowe remarks (Lumleian Lectures, 1879): "Exacerbations of dyspnœa occurring in narrowing of the trachea may be due in some measure to spasm of the muscular fibres of the affected part, but are referable in some degree to the accumulation of mucus in or below the point of narrowing, and to difficulty of dislodging it, owing to the mechanical impediment existing there to the performance of an effective cough, and to temporary swelling of the mucous membrane." From what we know of analogous conditions elsewhere we cannot but recognise these influences as real and potent, and perhaps another influence of more special character may have a a share in the result, namely, temporary rise of pressure in the arterial system, with corresponding distension of the aneurysmal sac. Now if a case were of this class, that is to say, if the obstruction were clearly situated in the trachea, with laryngoscopic inspection or other evidence testifying at the same time that the recurrents were not implicated, and that the glottis was free, tracheotomy, it need not be said, would be utterly useless as a means of relief. Before proceeding to inquire what alternative means are at our disposal in such a case, we will say a word or two concerning the third variety.

3. *Partly in the larynx and partly in the trachea*, the obstruction thus being of a complex character. The proof that this co-existence does occur is derived from two circumstances. 1. In many instances in which tracheotomy has been performed, a certain amount of relief has ensued, which, as we have just seen, could not happen were the obstruction limited to the trachea at the usual spot. 2. Either during life by inspection with the laryngoscope, or after death by the observed atrophic condition of the erico-arytænoideus posticus muscle, the concurrence of unilateral abductor paralysis has been ascertained. In certain cases that have occurred in my hospital practice both these points have been well illustrated. The patient's breathing was easier after the operation, and *post-mortem* the abductor muscle of the side involved was found distinctly atrophied. I venture to think that the majority of cases of paroxysmal dyspnœa connected with aneurysm of the arch, fall under this category. Be that as it may, in reference to tracheotomy it is manifest that its utility here will vary according to the greater or less share taken by the laryngeal affection in causing the obstruction.

Having thus endeavoured to define the conditions under which tracheotomy would, or would not, be available on these occasions, we may ask now, what other resources have we at our command? Our aim of course can only be temporary relief. Aneurysms of the aortic arch, which by their size and situation give rise to compression of the recurrent nerves and constriction of the trachea, we know, are not very amenable to any curative methods yet introduced. But to relieve these terrible paroxysms of dyspnœa which are incidental to their progress, and which for the moment place the life of the patient in imminent peril, is an object worthy of every effort. Conium vapour, chloral, chloroform, etc., may perhaps occasionally be of some service in mild attacks; but in severe ones they certainly cannot be depended on, they may indeed be harmful.

There are two measures which I think may be spoken of more favourably. One is blood-letting. The good effects of this I witnessed many years ago, as I am reminded by notes of the case. It was one of identically the same character, proved to be so *post-mortem*; a free venesection was resorted to, and it brought speedy and great relief. It is a suggestive fact that in many cases of aortic aneurysm a copious hæmoptysis, when it has not *per se* caused death, has been attended with marked improvement of the breathing. Only to take up from the table the interesting autobiography of my old and honoured master (*Memoirs of Life and Work*, by Charles J. B. Williams, M.D., F.R.S., etc.), at page 227 is quoted from the *Lancet* of December 11th, 1847, Mr. Cadge's account of the last illness of the eminent surgeon, Liston, who, it will be recollected, fell a victim to the disease we are considering. We read "……he coughed up between thirty and forty ounces of florid arterial blood; it was expelled almost without effort; the blood was in one clot, and without froth or mucus; fainting came on, and the hæmorrhage ceased……from that moment he lost all sense of choking or constriction in the throat……." Again (and this is more directly to the point), three days before the end, when the breathing was more laboured, "it was resolved to take away more blood, and the loss of twenty ounces afforded the greatest relief; the breathing became easier……"

Nor has the benefit of venesection in the treatment of aortic aneurysm in general been altogether unrecognised by writers on the subject; but, as a resource in these particular emergencies, it would seem almost to have escaped notice. Its *modus operandi* is sufficiently clear; it relieves congestion, diminishing, perhaps, the local swelling of the mucous membrane; it relaxes spasm; and it reduces arterial pressure, temporary increase of which, as we have before observed, may have a share in the causation of these disturbances; while, in reference to more radical treatment, we know that it tends to promote coagulation in the aneurysmal sac.

Tracheotomy being contra-indicated, let us suppose that, looking at the patient all round, there is reason to hesitate in the employment of blood-letting; have we anything else to fall back on? A very limited experience would lead me to suggest the hypodermic administration of atropine in dose sufficient to produce mydriasis (miii to miv of the solution of the sulphate of atropine). In a case of appalling severity a year or two ago, this proceeding yielded me most satisfactory results. Unfortunately, I had not the opportunity of following up this case to its termination; but the suffocative dyspnœa, coupled with the intense tracheal stridor and other physical

signs present, could leave no doubt whatever as to its nature. I do not venture upon any explanation of the mode of operation, but so striking was the relief afforded in this instance that, under similar circumstances, I should certainly have recourse to hypodermic atropine again.

ON THE TREATMENT OF FIBROIDS OF THE UTERUS BY ELECTRICITY: THE APPARATUS AND INSTRUMENTS.

By W. WOODHAM WEBB, M.D., M.R.C.P.Lond., Neuilly-sur-Seine, France.

"Qui uti scit, ei bona." So it always has been, and so it is now. Men knew something about the power of steam before Watt made it useful. Electricity was a matter of interest before Franklin raised his first conductor. The Hunters and Bell thought and wrote about ovariotomy, but it was not ventured upon till McDowell saw how to do it and dared to do it. Others, with the principle of electrolysis in their heads, have made only imperfect attempts to apply it to the reduction of fibromas. Apostoli, by devising a simple manœuvre, has succeeded in making it effectual. Knowing how to control the power in his hands, he does what others had tried to do. *Ei bona.*

What was the problem before him? To relieve the symptoms caused by uterine fibroids, to check their growth, and, if possible, to get rid of them. Therapeutics and surgery had met with but partial success from all that was tried and all that was done. It would be useless to go into details on this point.

The *clinique* of Dr. Apostoli, in Paris, is held three times a week, and is open to all surgeons on presentation of a card. It is situated in an old part of the city, with a dense population of working people around it; but many of the patients come from long distances, recommended by their home medical attendants. The applicants are all women, mostly with diseases peculiar to their sex, and diseases of the pelvic organs are the most common. The average attendance each day is from thirty to thirty-five, and minute observations are systematically recorded by a secretary, as oral reports are made while the examinations and operations go on.

Patients present themselves, as they do to other practitioners, with tumours of every variety. It would strain the pertinacity of a Hofmeier to describe and picture them all. There are simple cases of subinvolution, giving rise to a series of tormenting symptoms, and threatening future mischief if not corrected. Women, the victims of chronic metritis, with thickening, induration, consolidation of the pelvic tissues, tubal and ovarian pains, and all the attendant miseries so difficult to manage, come in numbers. In some cases the tumours are nothing more than a symmetrical overgrowth of the walls all round the uterine cavity, though such hypertrophies are seldom free from the accompaniment of other outgrowths. There are intra-uterine polypi, dismissed without much trouble; submucous ingrowths, both small and of enormous dimensions, causing danger from loss of blood, besides the inevitable distress. There are mural or interstitial fibromas, more or less isolated, either impacted in the pelvis and the source of repeated hæmorrhages and ceaseless pain, or rising up in the abdomen and offering perplexing difficulties to an operator. Not infrequently the pedunculated subperitoneal fibroids and other complicated cases with multiple and multiform tumours have to be dealt with. Incipient ovarian and broad-ligament cysts occasionally turn up, and in a short time are made to disappear. But it is curious to note how comparatively rare are the fashionable tubal diseases. There is no stereotyped specific way of operating upon these tumours; they are treated according to circumstances. But, as most of them are amenable to electricity in some form, it is the remedy chiefly resorted to.

No novelty is claimed for the fact of electricity being used; the novelty is in the way of using it. Others have proved by unregulated proceedings that some good could be done. The intensity of the current they put in action was insufficient, uncertain, and unmeasured, and it was directed to parts out of the uterine cavity. Some patients had their sufferings relieved, and some tumours were reduced in size, but in the hands of all who tried it the operation was painful, dangerous, and empirical. Now the current passed is of an intensity formerly impossible; its strength is exactly determined, and its application is always intra-uterine. What is done is done with a definite object, with a mastery over the agent employed, and a foresight of the results to be obtained.

The two ends proposed are, first, the relief of urgent symptoms, and secondly, the diminution of the size of the tumour. These are arrived at by repeated cauterisations of the uterine mucous membrane, and the modification of the nutritive action in the diseased mass by the powerful current which is sent through its tissues.

The first point to be considered is the apparatus required for carrying out this treatment. It is necessary to have, and to understand the management of, a battery capable of generating a continuous uninterrupted current of electricity, rising from 10 to 200 or 300 milliampères in strength, provided with a regulator by which the circuit is made to include any number of elements we may desire. It should also have both commutator and interrupter (or rheotome). Such an instrument is to be obtained without difficulty for the cabinet, from the best makers, such as Weiss. It is not so easy to find a satisfactory durable battery for transport, and the outdoor operator must be content with such as he can get till a battery combining the requisites of portability, small volume, and great development is perfected.

The instrument of next importance is the galvanometer for measuring the intensity of the current. It can no more be dispensed with in the use of electricity for the purpose in question than can be the scales in chemistry. It indicates by the deflection of the needle the passage of the current, and marks the smallest variation of intensity. Without it the attempt to estimate the strength by the number of cells engaged would lead to deception. The graduation should be extended to at least 250 milliampères, since the essential point in this method of treatment is to secure the combined effects of the highest tolerable intensity.

After the galvanometer comes the sound, charged to convey the current into the uterine cavity. Actually, any metal will serve the purpose if properly modelled. But as the positive pole corrodes all other metals except gold, aluminium, and platinum, one of these must be chosen to avoid the double difficulty of a rough and injured instrument and the loss of power from the absorption of the electricity by the metal. Platinum is found to answer best. The usual form of the uterine sound is adopted, nearly straight or very slightly curved. The length must be such as to reach to the end of the cavity of an enlarged uterus. The sound or trocar must slide into an isolating handle, furnished with a screw for fixing it at various points, according to the penetration necessary, and an aperture for connecting the sound with the conducting wire. The end passed into the uterus is of course bare, while that part which extends from the mouth of the uterus through the vagina to the handle must be covered with a movable, insulating sheath of celluloid. Before being used the whole ought to be disinfected by plunging into boiling water or some antiseptic solution. By having one end of this sound sharpened, it is converted into a trocar for puncturing the presenting part of the mass, and forming an artificial channel for the current, when the uterine cavity is directly unattainable.

But the master point of this method of treatment—the key to the possibility of passing such strong currents of electricity through the body, lies in the modification of the external electrode. The intensity being the same at the two poles if they have the same surface, the cauterising power will be the same. The skin is a bad conductor, and the strong current employed, in escaping from the interior through it to the point of the electrode, will develop heat up to burning point. To overcome this obstacle, the surface of the cutaneous pole must be extended. The density of the current is thus diminished, and it is rendered inoffensive. If at the same time the resistance of the epidermis is lessened, by making it thoroughly wet, all fear of an eschar is removed. It was in 1882 that Dr. Apostoli devised the form of electrode which he still uses. Wet potter's earth, fine and free from sand, or the modelling clay of artists, is spread out into a layer, uniformly about half an inch thick, and large enough to cover the lower part of the abdomen. The form, which is best made in a mould, is preserved by its being enveloped in folds of large-meshed tarlatan. This allows the clay to exude sufficiently to apply itself closely to the skin, and to moisten it, without spreading too far and soiling the dress. Laid in its place when all is ready for the operation, it can be kept in perfect contact with the skin by slight pressure of the hands of the patient. The circuit is completed by partially imbedding in the clay a small plate of soft metal, properly connected with the conducting wire. This contrivance is not elegant, but it is efficient, and surpasses all that have been proposed as substitutes. It and the skin upon which it has been laid are quite cool to the touch, after the passage of a current of more than 200 milliampères strength, for eight or ten minutes; and there is no blistering or subsequent peeling of the skin.

Ordinary telegraph-wire will answer the purpose as conductors, and is cheap and convenient, but it is not so pliant as the rheophores covered with silk. It is important to see that these conductors are

in perfect condition. If not in good order, especially at the points of attachment, the current is interfered with. A sudden rupture during the operation would cause a severe and painful shock to the patient. Her involuntary movement might dislodge the uterine trocar, and occasion a wound in some adjacent part.

A contrivance for irrigating the vagina, both before and after the operation, must be provided. The fluid used is a solution of the sublimate or of phenol. This is also to be employed for washing the hands; and the speculum, sounds, and trocars, with the handles, should be immersed in it when prepared for use. The celluloid sheath of the sound or trocar especially requires cleaning after every service, and its canal must be scrubbed out with a pipe-brush in boiling water or the phenol solution. The sounds and trocars, instead of being much rubbed, are better purified by boiling water or the flame of a spirit lamp. So much for the appliances; at another time, the operations and the cases for which they are fitted will be described.

ON SOME LATER EFFECTS OF RICKETS.

By J. A. COUTTS, M.B.Cantab., M.R.C.P.,
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In a disease like rickets, presenting such marked and obvious effects in the osseous system, it is scarce matter for surprise that the constitutional symptoms are often, or generally, overlooked and under-estimated. Looked upon and described by the older writers, from the time of Glisson and Whistler downwards, as a purely local affection, it was close upon the middle of the present century before the general and, in my opinion, more important symptoms came to be recognised. But, even then, attention was almost entirely directed to such matters as splenic and hepatic enlargements and derangements of the pulmonary and digestive organs, and, beyond the casual recognition that rickety children were more liable to convulsions than others, but little stress was laid upon the important evidences of suffering furnished by the nervous system. As proofs of this suffering, besides convulsions, might be instanced the frequent occurrences of such complaints as hyperæsthesia, mental backwardness, tetany, laryngismus stridulus, muscular weakness, loss of cremasteric reflex, etc. When the number and frequency of these complaints is taken into consideration—and it is remembered that some of them, such as laryngismus and tetany, are seldom seen apart from it—there can remain but little doubt as to the implication of the central nervous system in rickets. Now the reason of this involvement is not far to seek. Rickets is a disease of malnutrition, produced either by improper feeding or by some cause, inherited or otherwise, which prevents the proper digestion and assimilation of food, which may be perfectly correct in quality and quantity for the time of life in question. It may seem to some that I place the digestive factor in too high a place as regards the causation of rickets, but few, I take it, will doubt the prominent part played by it in most cases of the disease. In the effects of this malnutrition almost every organ and tissue of the body may be implicated, and it would be strange if so complex and delicate a structure as the infantile brain should suffer no damage. That it does not escape this damage is evidenced by the neuroses so common amongst rachitic children, and they may be regarded as the natural outcome or expression of the cerebral malnutrition. Assuming, then, that the infantile brain suffers damage during the rachitic period from the general malnutrition, it may be asked: Is this damage only a temporary one, restricted to the rachitic period, or does it ever render itself evident by any signs in later years? The answer in most cases, no doubt, will be of the first kind, and, just as enlargements of the bony epiphysis, spleen, etc., may all disappear and leave no trace of their former presence, so any marks of cerebral disturbance may vanish, and the child grow up as intelligent and free from neuroses as one that has never suffered from rickets. That the answer should be in all cases of this favourable character is, I would contend, hardly to be expected from the nature of the case. It must be remembered that the period of the rachitic suffering is that of the greatest physiological activity and evolution of the brain, and that damage or malnutrition is more likely to be resented and prove harmful then than at any subsequent time. The amount of harm done, and its evidences, are hard to estimate and to recognise in so complicate an organism as a young child, but simpler yet strictly analogous examples are to be found if we turn from the animal to the vegetable kingdom; probably the amount of harm done to a growing plant by the withholdance of nutriment or by malnutrition is inversely proportional to the age of the plant. But just as in rickets our chief guides to diagnosis are the changes produced in the bones, so, it may be, the disappearance of them may possibly conceal the origin of some of the sequelæ of the disease. It is well known that children may be profoundly rachitic in infancy, and yet present no traces of it in the bones a few years later on.

Of the later effects of rickets, it is my intention to deal only with those that concern the nervous system. Most others, but not all, come under the province of the surgeon. Some of these neuroses are directly connected with the actual time of suffering from the disease, and are continuous into later life; others are separated from it by varying intervals of time.

This question as to the connection of neuroses in later life with a past rickets is not a new one. Dr. Gowers, in his book on *Epilepsy*, page 23, out of a large number of cases, ascribes at least 10 per cent. of them to this cause. Nearly two-thirds of his cases beginning in infancy, the conditions of origin of which could be ascertained, arose from so-called dentition-convulsions. "Few persons," he writes, "who have attended closely to the diseases of children can fail to be convinced of the truth of the opinion, long ago urged by Jenner and now widely accepted, that almost all convulsions associated with dentition are really due to the constitutional condition of retarded development which we call rickets—that is, to the irritability of the nervous system which accompanies this condition. The further details of the cases I am considering fully confirm this; for in a large number of cases there was a history of late walking, late teething, and in many of crooked limbs. But these facts do not fully represent the influence of rickets in the production of epilepsy. In many of the cases just described the course of the attacks was continuous from infancy to adult life. In others, however, there were intermissions, especially during the period of childhood. In several, for instance, the fits ceased at 7, to commence again at 10 or 11 years. Now, in twenty-seven other cases which commenced after the period of childhood was over, repeated convulsions had occurred during the first dentition, accompanied, in many, with other signs of rickets. It seems reasonable to ascribe to these convulsions of infancy a share in predisposing to the convulsions of later life, and the addition of these cases raises the number in which a causal influence may with probability be ascribed to rickets to nearly 10 per cent. of the whole."

With these words of Dr. Gowers I cordially agree. My own experience of epilepsy, founded almost entirely on cases in childhood, gives as high a percentage as 17 which had been preceded by rickets in infancy. This larger percentage of mine is possibly due to the age of the subjects with whom I have chiefly had to deal, or is accidentally connected with my much smaller number of cases. In these cases there was a history of rickets, with infantile convulsions, followed by epilepsy in later life; but it is an allowable hypothesis that a similar state of cerebral irritability or malnutrition may exist in many cases, and yet convulsions be absent owing to absence of a direct exciting cause. Then, if such a condition, when accompanied by convulsions, is responsible for epilepsy in later life, it is quite conceivable that without this accompaniment it may be the cause of epilepsy or other neuroses at times of greatest stress upon the nervous system—that is, at second dentition or puberty. It is the associated cerebral condition and not the mere convulsions, its outward and visible signs, which must be held the responsible agent for any after-neuroses. Thus, had Dr. Gowers chosen to extend his cases of epilepsy due to rickets beyond those in which convulsions were present in infancy, he might have fairly ascribed a larger percentage even than 10 to this causal influence.

I have taken epilepsy in the first place, not as being the most frequent of these possible sequelæ of past rickets, but because, on such good authority as that of Dr. Gowers, its connection with infantile convulsions allies it more immediately with its cause than any other neurosis.

Turning next to chorea, one of the most frequent and well-marked neuroses of childhood. It has been for some time past my custom to inquire in cases of chorea as to a history of rickets in earlier life, and the search has not been unproductive. Out of fifty-one cases of chorea, in which such inquiry was made, in eleven there was a fairly reasonable history to warrant an assumption of earlier rickets. This, in several of the cases, was confirmed by the permanent bony changes produced in the head, chest, or limbs. Thus, assuming my deductions as to the past history to be correct, this would give as high a percentage as 21 for cases of chorea which had been preceded by rickets. The rheumatic hypothesis to account for chorea has, I fear, been urged by its adherents too far at the present day to admit of any other possible cause receiving favour. But a past rickets as a predisposing one would not exclude rheumatism as an immediate exciting cause in many cases. Moreover, the most enthusiastic advocates of the rheumatic theory have to admit that, in many instances, some other factor besides it is necessary to explain the origin of the complaint.

Whether past rickets and chorea stand to one another in any other relation beyond an accidental one may be an open question. Of their frequent association I entertain no doubt. It is easy to test the matter by trial, and anyone doing so will, I venture to think, be convinced of the truth of this association. Dr. Donkin, on the other hand, in his able and interesting analysis of 105 cases of chorea (*Westminster Hospital Reports*, vol. i) states "rickets was notable by the absence of its signs." But he mentions that four of his cases had convulsions when infants, a fact in itself strongly suggestive of rickets, and that in many other cases inquiry as to convulsions had not been made. The question as to the former presence of rickets is not to be judged merely from the absence of bony changes, but by the careful and special inquiry into the past history on this point, and in Dr. Donkin's cases I cannot find that such special inquiry was made. In such a number of children, most of them taken from the east of London, it would be strange indeed if some of them had not suffered from rickets as infants, and, if true, would give rise to the suggestion that freedom from rickets in infancy predisposes to chorea in later life.

Of mental backwardness I have spoken as being one of the symptoms that prove the involvement of the central nervous system in rickets. So extreme, indeed, may be this backwardness that it is difficult at times to settle whether a case is one of rickets only or of congenital mental defect; and it is interesting to mark the improvement of the mental along with that of the rachitic conditions. These are the cases more especially that have been spoken of under the description of "cerebral rickets," and were supposed to indicate hypertrophy of the white cerebral matter in the sufferers. As regards this hypertrophy I know little beyond the fact that it has the great name of Hilton Fagge as one of the vouchers for it. Most pathologists would find it hard to prove or disprove its existence in any given instance; and, in my view, the supposition of such a condition of the cerebral matter is unnecessary for the explanation of any of the nervous disorders in the disease. Although in most children the mental backwardness is limited to the rachitic age, yet in others I believe it persists throughout life. I see many patients with a past history of late teething, late walking, etc.; and the mothers complain that they are as far behind other children in learning and intelligence in later years as they were behind those of their own age as infants.

The connection of headaches with past rickets has been noticed by more than one observer besides myself. Dr. Day, on headaches in children, writes: "If the headaches go on, the head gets larger at the sides and more prominent at the forehead; and this appears all the more obvious as the child loses flesh and the face shrinks. In rickety children this headache is not uncommon, and the recovery is the more slow and tedious." With the writer I am at one as regards the frequency of headaches with the shape of head described, but I am far from agreeing with him as to the shape of the head being the consequence of, or even subsequent to, the headaches; and still further from accepting the pathological reasoning furnished by him as accountable for the complaint. From the short description given the head-shape would seem to be that which is not uncommon amongst children who have suffered from rickets, and both it and the accompanying headaches I am inclined to attribute to that disease.

Migraine in children has been described as presenting all the same characteristic features as in adults, with the addition of feverishness at time of attack. My own experience of typical cases of it in children has been too limited to admit of my including it as one of the neuroses having a possible origin in rickets.

Besides neuroses presenting such marked characteristics as those already dealt with, there are many of an ill-defined nature common in rachitic children. These are such as tooth grinding, somnambulism, night terrors, etc. In connection with somnambulism, I have under my present care three markedly rachitic children who suffer from it: one, a child of three years old, with marked enlargements of the epiphyses and bandy legs, who has walked in her sleep almost from the time of learning to walk, three months ago.

Many others of these children, again, can only be described under the general and unsatisfactory term "neurotic;" presenting such symptoms as ill-development, wasting, nervousness, etc. Many such afford examples of the nervous hand posture, described by Dr. Francis Warner, along with over-mobility of the digital phalanges, tongue, etc.—signs, according to the last named writer, indicative of brain ill-nourishment, leading to instability either of nerve-centres or cells.

In what has gone before I have treated the subject by endeavouring to discover in children who were neurotic what traces were afforded of a past rickets. But it might be looked upon from the other point of view—namely, what evidences of neuroses are furnished by children that have been undoubtedly rachitic in infancy.

In my note-books I find records of forty-three cases in which were well-marked evidences of a past rickets, judging by the permanent changes in the osseous system; but of these forty-three cases, twelve were distinctly of a neurotic temperament—that is, as nearly as possible, 28 per cent. Of these neurotics, two were epileptics, three somnambulists, one choreic, five suffered from recurrent headaches, and one was subject to attacks, described as faints, which were judged to be *petit mal*. This would seem to confirm the view that children who have suffered heavily from rickets are as much prone to neuroses in later life as they are during the actual time of the duration of that disease.

These views as to the connection of neuroses with a past rachitic condition are only put forward as possibilities, and not as being capable of rigid demonstration by aid of statistics. Indeed, from the nature of the case statistics can furnish but unreliable evidence as to their truth. This will be manifest when the variety of the symptoms in rickets, their frequent escape from detection, and the paucity of traces left behind by them, are taken into account; and the whole matter must be viewed in a general light. But if it may be assumed that in rickets the brain, at its most active period of evolution and development, suffers from the general malnutrition, and that this malnutrition leads to instability of the nervous centres, then, I would contend, the question passes the limit of the possible and enters that of the probable. This instability of the nervous system may be permanent, although revealing itself to us by no known methods of research until some greater strain than ordinary is made upon it, as at second dentition or puberty, for instance. That the intervening times are free from manifestations of neuroses need not militate against the view of such a condition of nervous system. We have ample illustrations of permanency of such a cerebral condition, with intermittency or infrequency of its manifestations, in such diseases as epilepsy and migraine. The same arguments apply to the objection that no pathological changes are found *post-mortem* in the brains of those dying with rickets. In but few cases of epilepsy, I take it, are any pathological changes found *post-mortem* in the brain sufficient to account for it, and yet few would doubt the cerebral origin of the disease. Of course I am aware that it might be urged against these views as to the connection of neuroses with a past rickets, that the same condition of malnutrition might be present in older children, owing to the same want of food of proper quality or quantity, just as in the rachitic period. In answer, I would state that, in the case of these children in the East of London, the question of ill-feeding rests not so much on the absence or deficiency of food that may be in itself perfectly nutritious, but on the fact that it is unsuitable for the time of life. The food that is administered to, and pressed upon, the unfortunate infant, is probably perfectly suitable for children of the age with which I am dealing. In but few of my hospital patients of more advanced age have I any reason to suspect the possibility of starvation. I would not deny, however, that it may be an accessory factor in some cases. Another objection, and one harder to meet, is that children, as seen at the East London Hospital, who may be entirely free from any neurotic suspicion, would present nearly the same percentage of rickets amongst them as those with any neuroses that I have dealt with. This, from the difficulty of ascertaining and determining the normal percentage, can never, probably, be satisfactorily answered. If one judged from infants merely, the percentage of rachitic ones would rise to 40 or 50, or even higher. But it must be remembered that these infants were probably brought to the hospital on account of suffering from rickets, and any percentage drawn between them and the rest of the children of their own age would be fallacious as determining the amount of rickets in the whole community. This clearly does not apply in the case of older children who are past the rachitic age. Taking this fact into consideration, and remembering the high mortality amongst rachitic children, I do not think the percentage of those who have suffered from rickets in infancy would amount to as high as ten, even, amongst my older hospital patients. But, as I said before, the question does not admit of solution by statistics of this sort. A partial answer to the objection is that where rickets is most prevalent there neuroses are most frequently met with.

If these views—suggestions rather—as to the remote sequelæ of a past rickets, should be accepted as probable, then my short paper would be a plea for the further consideration of the importance to be attached to the complaint, its prevention, and treatment. Few diseases are so readily preventable by proper attention to infantile diet and hygiene, or so amenable to proper treatment when incurred. Even those cases which are not preventable can be profoundly modified in their severity by the means taken to arrest its advent. It must be remembered that the mortality returns are no indication of the number of deaths attributable to rickets. Like syphilis, seldom

or never fatal *per se*, it is frequently so owing to its complications, which get the credit of causing death, and the original cause escapes mention in the death-certificate. Apart from the liability to death from the complications associated with the disease, rickety children are much less able than others to withstand the numerous and manifold ills that the infantile flesh is heir to. In spite of this, too often the comforting assurance is given to mothers "that the child is only rickety, and will get all right in course of time, and no further anxiety or trouble need be incurred." That this masterly inactivity and trust in time is often disastrous in its results is only too well known to both physicians and surgeons connected with children's hospitals. Moreover, that 10 per cent. of adult epilepsies, on high authority, have their origin in rickets, should call also for a more guarded prognosis in many cases of the disease, more especially when it is allied with convulsions. The all-prevalence of rickets, and its association with the English name, still remains a reproach to us as medical practitioners.

ON THE UNSATISFACTORY RESULTS OF UNILATERAL REMOVAL OF THE UTERINE APPENDAGES.[1]

By LAWSON TAIT, F.R.C.S.,
Surgeon to the Birmingham and Midland Hospital for Women.

In previous publications I have had repeated occasions to point out that, under the term "removal of the uterine appendages," in order to keep a clear logical notion of the actual details of the proceedings, it is necessary to make such subdivisions as will indicate the purpose for which the operation is undertaken.

One writer has maintained that operations should not be classified on any other grounds than their mere anatomical relations, and that the intentions and purposes of the operation should not enter into the element of classification at all. This, of course, is a conclusion which will not bear investigation for a moment, for we are at once met by the difficulty that it would be impossible to recognise any distinction between the operation for the induction of premature labour and the crime of abortion-mongery, unless we had distinctly in mind the intentions and purposes of the operation. Not only so, but in the case of an amputation at the lower third of the thigh for a smashed knee-joint, there are precisely the same anatomical relations as when the operation is done at the same point for chronic inflammatory disease, yet it has long been the practice to separate in statistical tables primary amputations from those of a secondary character. We have therefore many points to take into consideration besides mere anatomical details in the classification of operations. This is strikingly the case in the operations for removal of the uterine appendages, where we have a clear and precise division at once rendered necessary by the fact that, in certain groups of cases, it is absolutely essential to remove the appendages on both sides.

Thus if we operate for the arrest of the hæmorrhage of a myoma, or for the purpose of reducing its size, it would be perfectly futile to remove the appendages on one side only, unless those of the other side were already absent. So if we desire to prevent impregnation in such rare cases of deformity as I think may justify the removal of the uterine appendages, in order that risk of life may not be incurred, both sides of the uterus must be rendered sterile.

On the other hand, actuated by the sound principle that no organ should be removed which is not diseased, in all the cases of the various forms of chronic inflammatory mischief in the uterine appendages which have come under my care, I have not in a single instance removed the second set of appendages when they have been ascertained to be healthy. At first sight it would appear as if there is no need for interfering with the second side when only one side is diseased, whether the disease be characterised by occlusion and distension of the tube, or by dense adhesions which render the functions of the organ impossible, and give rise to such intolerable suffering as to make life a burden. But first-sight conclusions and *a priori* arguments are often found, upon larger experience and more careful research, to be fallacious; and I greatly fear that the conclusions which I have arrived at on this point, and upon which I have up to the present acted, are not likely to bear the test of careful investigation. I have been made painfully familiar with the frequency with which operations of this kind have proved absolutely useless for the purposes of the operation, and where the disease has recurred on the other side, and demanded a second surgical interference.

The time has therefore come when I should put on record the evidence in my possession, and leave for the judgment of my professional brethren a question which is certainly novel and startling. The question is whether it would not be better to advise the complete removal of the uterine appendages in any case where an operation is demanded by the presence of serious disease on one side only.

As the first contribution to the solution of this important problem, I have submitted the histories of all the cases of unilateral removal of the uterine appendages on account of chronic inflammatory disease operated upon by myself up to December 9th, 1884, at which time I completed my first series of one thousand cases of abdominal section. The reasons for this selection are, I think, sufficient, the strongest of them being that the time which has elapsed from then till now gives me a fair period, though by no means a complete one, at the conclusion of which to give the after-histories of the cases. It will be seen from what I have to say of some of these cases that the complete results will probably not be evident for two or three years to come, and by that time the evidence will be stronger, I believe, in the direction, which is clearly indicated at the present moment, that if we have to remove one set of appendages for chronic inflammatory disease, it will be far better to remove them both.

The cases are twenty-seven in number; and as the operation proved fatal in one of the cases the inquiry is limited to twenty-six. This group may be subdivided as follows:

	Cases.
Abscess of ovary	1
Chronic ovaritis with adhesion	2
Hæmatosalpinx	4
Hydrosalpinx	4
Pyosalpinx	15

These twenty-six cases form, curiously enough, as nearly as possible, one-fourth of all the cases that I operated upon, during the period of one thousand cases, for chronic inflammatory disease of the uterine appendages. But the relations which this group of twenty-six cases have to the general relations of the total cases of this kind operated upon indicate very remarkable conclusions. Thus pyosalpinx is unilateral relatively to hydrosalpinx as about seven is to four; hydrosalpinx is unilateral relatively to hæmatosalpinx as about four is to one; and hydrosalpinx is relatively frequent to chronic ovaritis with adhesion as eight is to one. Without being exactly cognisant of what these relations might prove to be on careful examination, I was abundantly aware that the commonest cases of pelvic suffering amongst women, matting of the pelvic contents, or glueing of the ovaries and tubes to all the other organs, with the occlusion of the tube and its distension either by serum or pus, were almost uniformly bilateral.

I was also perfectly aware of the fact that hydrosalpinx was almost uniformly symmetrical, but I have been profoundly struck with the curious fact that we may find a large pyosalpinx densely adherent, with its corresponding ovary, to other organs on one side, and a perfectly healthy set of appendages on the other, and it was the frequent recurrence of second operations in this class of cases which struck me so forcibly as to lead me into this special research, the more so as it was also in this group that I met with cases of death from neglect of second operations.

We now know that pyosalpinx has a lethal significance far more serious and extensive than any of us could have dreamt of in the beginning of this kind of practice, some seven or eight years ago. On the contrary, whilst I cannot say that I am free from suspicion that hydrosalpinx is occasionally fatal, I cannot be very well brought to believe that its risks are great, and I do not think that we could imagine chronic ovaritis with adhesion having a fatal result. But the curious thing is that, over the whole group of these diseases, the amount of suffering is not in proportion to the risk of life which is run, but is directly the reverse.

I have over and over again removed large rotten Fallopian tubes, distended with eight or ten ounces of pus, when there has been hardly any pain at all, and where the symptoms have been almost entirely confined to mere general constitutional disturbance.

Only a few weeks ago I removed from the wife of a medical practitioner in this town a huge unilateral pyosalpinx just on the point of bursting, which undoubtedly had not existed more than twelve or fourteen days. With equal certainty this pyosalpinx would have burst and killed the patient within a week, and yet she had no great pelvic pain from the beginning of her illness to the end of it. I had the utmost difficulty in persuading her husband to permit me to perform the necessary operation; but when it came to be performed in his own presence, nothing could exceed his expressions of gratitude for

[1] Abstract of paper read before the Birmingham and Midland Counties Branch.

the successful firmness with which I pressed the interference which was urgently demanded.

In analysing the list to see in what direction light can be shed upon this interesting group, it is first of all to be noted that of the twenty-six women only four were single, and I happen to know that of these four two were not virgins. Of the twenty-two women who were married, nine only had had children before being operated upon at all, and as they had all, with the exception of one, been married a number of years, this large disproportion of sterility, nearly 42 per cent., has a very palpable significance. Of these twenty-two women, all, with one exception, so far as I know, maintained marital relations after the first operation, but in only three cases have they since become pregnant, that is, there has been a contingent fecundity of little more than 14 per cent. Of the twenty-six, a second operation has already been required in one case of hydrosalpinx, one case of hæmatosalpinx, one case of chronic ovaritis, and one case of pyosalpinx. In the cases of pyosalpinx there are five of them already dead, under such circumstances as make it absolutely certain that the other side had become diseased, ruptured, and given origin to acute peritonitis. I know that this is the case in four of them, and Dr. Thelwell Pike, in the following letter, gives fairly conclusive evidence that this was the case in the fifth.

"Malvern, December 24th, 1886.

"My dear Tait,—Miss C. died some two years ago, and I have never ceased to regret that both appendages were not removed at the time of operation. She went away into Devonshire, and when there, so far as I can get the history, she was seized in the same way as when you saw her, and died in forty-eight to sixty hours from, it was stated, acute peritonitis; in fact, I have no doubt the other appendages became diseased, and if she had been here, I have no doubt you would have relieved her. Never again will I consent to only one set of appendages being removed under similar conditions."

From recent examination of seven of the cases on the list, I am perfectly satisfied that they are in such a condition as to warrant the belief that they will all require a second surgical interference. It will thus be seen that the unilateral operation has already been proved in thirteen out of twenty-six cases to be an absolute failure, and to have been successful in the sense that it has left the functions of the other side unimpaired, the disease not having there recurred, in only three out of twenty-six. It will be remembered that, in one of these latter cases, the husband and medical attendant of the patient strongly objects to that particular form of success.

The confusion into which this kind of gynæcological work has been thrown by the introduction of such unfortunate terms as "Battey's operation," "spaying," "normal ovariotomy," and "oöphorectomy," is very well illustrated in the group of cases now under consideration, and it justifies me in making another plea for the use of a term such as "removal of the uterine appendages," or any such other which will not involve either personal association or theoretical conclusions, so far as a term can do so, of the operations performed. To term these operations by the name of any particular person is, of course, ridiculous; to speak of the removal of a suppurating Fallopian tube as an "oöphorectomy" is nonsensical, and still more absurd would it be to speak of such an operation as a "spaying" or "castration."

All other methods of cataloguing these cases than the one I suggest are open to this initial difficulty, that cases in which the removal of the uterine appendages is undertaken, group themselves, from one point of view, at once into two classes—those in which it is absolutely essential to remove the appendages on both sides, and those in which it may be possible to remove only the appendages of one side. But here we come to a group in which the question has yet to be decided as to whether it is necessary or advisable to make the operation of necessity bilateral. So far as I know, the present contribution is the first and only evidence to be obtained on the subject, and it is quite

The following table is an abstract of the cases:

No.	Initials.	Residence.	Medical Attendant.	Age.	Married or Single.	Disease.	Operation.	Date.	Recovered.	Remarks.
			Abscess of Ovary.							
1	C. P.	Smethwick	Dr. Payton	25	S	Right side	Removal	August 14th, 1883	R	Will require second operation.
			Chronic Ovaritis, with Adhesion.							
2	C. A.	Nottingham	Dr. Howitt	30	S	Left side	Removal	April 8th, 1884	R	Will require second operation.
3	— L.	Leamington	Dr. Eardley Wilmot	28	M	,,	,,	May 27th, 1884	R	Second operation has been performed.
			Hæmatosalpinx.							
4	S. R.	Stafford	Dr. Cookson	40	M	Left side	Removal	November 1st, 1883	R	Will require second operation.
*5	H. B.	Dudley Port	Dr. Price	30	M	,,	,,	December 17th, 1883	R	Has never become pregnant.
6	E. K.	West Bromwich	Dr. Lawson	30	M	,,	,,	July 12th, 1884	R	Second operation performed.
*7	M. H.	Smethwick	Dr. Pitt	31	M	,,	,,	October 29th, 1884	R	Requires second operation.
			Hydrosalpinx.							
8	E. T.	Birmingham	Mr. Watkin Williams	28	M	Right tube	Removal	May 23rd, 1879	R	Has never become pregnant, and still suffers.
9	E. W.	,,	Mr. Lawson Tait	37	M	Left ,,	Opened and drained.	April 13th, 1880	R	Has never become pregnant.
*10	H. P.	,	Sir James Sawyer	39	M	Right ,,	Removal	September 27th, 1882	R	,, ,, ,,
11	E. B.		Dr. Pugh	36	M	Left ,,	,,	May 5th, 1884	R	Second operation performed.
			Pyosalpinx.							
12	M. F.	Birmingham	Mr. Greene	26	M	Left tube	Opened and drained.	March 28th, 1881	R	Died for want of second operation.
*13	E. T.	Walsall	Dr. Sharpe	—	M	Right ,,	Removal	October 7th, 1881	R	
14	L. W.	Birmingham	Mr. Newton	18	S	Double	Opened and drained.	December 30th, 1881	R	,, ,, ,, ,, Died subsequently from incomplete operation.
15	E. B.	,,	Mr. Briggs	27	M	Left tube	Removal	August 17th, 1882	R	Never been pregnant.
*16	A. A.	Longton	Mr. Ashwell	36	M	,,	,,	October 15th, 1882	R	Has had two children since, and is again pregnant.
17	H. C.	Malvern	Dr. Pike	19	S	Right ,,	,,	November 7th, 1882	R	Died for want of second operation.
*18	J. K.	Birmingham	Dr. Kenny	39	M	,,	,,	November 22nd, 1882	R	Has not been pregnant; will probably require second operation.
19	E. G.	,,	Dr. Welch	21	M	Left ,,	,,	April 3rd, 1883	R	Has had one child since.
20	M. L.	,,	Mr. Hallwright	20	M	Right ,,	,,	July 26th, 1883	R	Second operation performed.
*21	E. S.	,,	Dr. Wilson	30	M	,,	,,	August 28th, 1883	R	Has had one child since.
22	E. M.	,,	Mr. Mann	36	M	Left ,,	,,	January 29th, 1884	R	Has not menstruated since.
23	J. S.	Nuneaton	Mr. Nason	24	M	,,	,,	April 7th, 1884	R	Will require second operation.
*24	M. G.	Fillongley	Dr. Beadnell	25	M	,,	,,	April 17th, 1884	R	Died for want of second operation.
25	M. B.	Birmingham	Dr. Taylor	29	M	Right ,,	,,	July 7th, 1884	R	Cannot be traced.
*26	B. B.	Edinburgh	Dr. Hart	26	M	Left ,,	,,	October 11th, 1884	R	Requires second operation.

The asterisks indicate those patients who had been pregnant before operation.

likely that opinions may vary as to the conclusions to be derived from it; and I for one am quite prepared to admit that, so far as it has gone, by itself it is not large enough to base any absolute conclusion upon. But the opinion which I have formed from it—which is substantiated by more recent investigation not yet mature enough for publication, and which has made an increasingly strong impression on my own mind—is that, if a patient is suffering sufficiently to justify abdominal section for chronic inflammatory disease of the uterine appendages, and only one side is found to be affected, the operation, to be of that lasting and complete benefit to the patient which we desire all our operations should be, must be made bilateral. On such a point as this, of course, the desire of the patient must be paramount, as upon most others; and, if a patient places herself under my care for such an operation, and makes it an imperative condition that I should not under any circumstances remove the second set of appendages if they were found healthy, I should yield to her decision; but I should argue the question with her, and advise her not to subject herself to the risks of a second operation, as seems to be by far the greater tendency in unilateral operations. The list that I now present puts such incomplete operations in a very unsatisfactory light.

ENTIRE FREEDOM FROM PAIN AND UNDUE REACTION AFTER EVISCERATION AND INTRODUCTION OF THE GLASS VITREOUS.

By P. H. MULES, M.D.,
Surgeon to the Manchester Royal Eye Hospital.

I am unwilling to delay in making generally known a means of relief from pain and undue reaction after eviscerating the contents of the globe. I am certainly indebted to Mr. Lang for a hint, the correct interpretation whereof remains with me, for, whilst I drained the globe without benefit in my early cases, he drained the subscleral space by removal of the whole sclera, and to that attributed his success. Severe pain has always followed evisceration, which the introduction of the glass sphere in nowise diminishes or increases.

The pain is due to a rapid pouring out of serum into the subscleral space, with subsequent infiltration and tension of the orbit; it is a pressure, not an inflammatory pain. To avoid this, after completing all the steps of the operation as hitherto conducted, cut the external canthus, burrow freely back into the orbit with a pair of sharp scissors to the back of the sclera, taking special care to open the subscleral space; introduce an antisepticised horsehair drain, the cut ends just passing through the cut canthus; apply a dry, thin, absorbent pad, and an ice-bag over all.

There has not been the slightest pain or undue reaction in the two cases I have just completed, and I submit these suggestions with a feeling of hope that we have overcome the only contra-indication of the operation.

SURGICAL MEMORANDA.

SUB-PERIOSTEAL EXCISION OF SHOULDER-JOINT.

On September 14th, 1885, W. C. applied to me; his shoulder-joint was swollen, hot and painful; its mobility was much curtailed, the movements being limited to abduction in common motion with the scapula, and a slight power of advancing and retracting the elbow. The ankylosis was almost complete; there was very great nocturnal pain, and over the insertion of the coraco-brachialis was a sinus of some age, still discharging; this led, through a distance of five or six inches, to the inner side of the shoulder-joint.

He was placed under the influence of iodide of potassium, and rested for three weeks, when, the nocturnal pain still remaining great, I resolved to remove the head and neck of the humerus.

On October 28th, with the assistance of Mr. Watson and Drs. Connan and Vise, I proceeded to perform Ollier's sub-periosteal operation, with proper antiseptic precautions, under the carbolic spray, the skin-incision reaching from the outer side of the coracoid process to the insertion of the pectoralis major, the latter not being cut; the periosteum was then incised along the inner edge of the bicipital groove, and the tendon turned out with a retractor. The usual rotations in and out enabled me, by means of the raspatory, to separate the thickened periosteum with great facility; the head of the bone was then pushed out of the wound, and the saw applied just below the great tuberosity; two inches and a quarter of bone were then removed. The inner side of the periosteal pouch thus made was seen to be covered with nodules of new bone. The glenoid surface was healthy.

A drainage-tube was conducted down the sinus over the insertion of the brachialis anticus, from the wound. Some iodoform was placed in the gap, which was carefully closed; healing took place in about ten days; passive motion was commenced about the fourteenth day. The head and neck of the bone were covered by pits and depressions, soaked in pus, and deeper in the cancellous substance were many loose sequestra.

On March 25th, 1887, there was no tenderness; abduction could be effected nearly to the shoulder-line; he could place the forearm behind his back, and could advance the arm well to the front; was beginning to recover the power of rotation; had great purchase in lifting from the ground, and was doing a good day's work. A new joint apparently existed between the coracoid and acromion processes.

Tunbridge Wells. Cleland Lammiman, F.R.C.S.

LATE RICKETS.

The following case may be of interest as bearing on Mr. Clutton's paper on Late Rickets in the *St. Thomas's Hospital Reports* for 1886.

K. P., aged 25, consulted me in 1883 for extreme genu valgum, the inner malleoli being sixteen inches apart when the knees were close together and the thighs parallel. She also suffered much pain in her knees, which often gave way under her suddenly, throwing her to the ground with much violence. The previous history is of much interest, for up to 14 or 15 she was as well formed as the rest of her family, but at that time her health failed, she became weak and listless, her wrists and ankles became enlarged, and her knees distorted. She had cod-liver oil and tonics given her, but was told that nothing could be done for the deformity. When she consulted me she was quite strong in health, but most anxious to be relieved from her pain and crippled condition. On August 23rd, 1883, I did a double McEwen's operation for her, with the result of making her three inches taller, and enabling her to get about actively and well—in fact, as well as her sisters.

The evidence of rickets in this case rested chiefly on the swollen condition of the epiphyses of the wrist and ankle; but, if I had seen Mr. Clutton's paper before, I might have found other evidence.

T. D. Ransford, F.R.C.S.,
Assistant-Surgeon, Royal United Hospital, Bath.

CLINICAL MEMORANDA.

HYPODERMIC INJECTIONS OF CUCAINE IN FACIAL NEURALGIA.

Colonel G., an old and well-known campaigner in South Africa, has for the last eight years suffered most acutely at varying intervals from this disease. During the attacks, which lasted from a few days to three weeks, the spasms occurred nearly every ten minutes. The right side was the one affected, and while the attack lasted, merely touching the moustache was sufficient to bring on acute spasm. This was so marked in some of the attacks that taking food became an almost unbearable process.

During the eight years in different parts of the country, and at different hands, every variety of treatment had been adopted, even to the extraction of all the teeth in the right half of the upper jaw. Morphine, even in large doses, never gave more than very temporary relief, a very strong current from a battery being, in the patient's experience, the only remedy of the least value, and this at best but a slight one.

In November, 1886, during an attack which had already lasted a fortnight, I saw the patient for the first time, and he then sent for me to request me to divide the nerve. This operation, however, according to most writers, is not attended with very satisfactory or permanent results, and I persuaded him to allow me to try the effect of cucaine before proceeding to this last resource. One-sixth of a grain injected into the cheek hypodermically gave on the first day relief for several hours. For three successive days after this one-third of a grain gave relief only for an hour or so. After this I injected half a grain night and morning with the most completely satisfactory results. After three days at this rate I gradually diminished the dose, and the pain ceased entirely.

Since this occasion, during the last six months, two attacks have begun, but have in both cases been stopped at once by the injection of cucaine in half-grain doses.

During the intervals of attack no cucaine is ever used, but, armed with a hypodermic syringe and a few of Burroughs and Wellcome's

half-grain tabloids, the patient now goes away for several days at a time on shooting expeditions, confident of being able to "doctor" his old enemy effectually should he venture an attack while camping away from home.

A. P. HILLIER, M.D. Edin.

Cape Colony.

TOXICOLOGICAL MEMORANDA.

POISONING BY PENNYROYAL.

THE rarity of poisoning by pennyroyal or oleum pulegii is emphasised by the fact that standard works on toxicology, like Guy and Taylor, contain no account of the toxic symptoms produced by this drug, nor any indications as to appropriate treatment. Moreover, I find on inquiry that recurrence to pennyroyal is very common when menstruation has ceased suddenly, and that it can be procured with the utmost facility. These considerations have led me to describe the symptoms and the treatment employed in the following case. About an hour after the drug had been taken I found the patient (a woman aged 40) in an extremely collapsed condition. The face was pale, cold, and bedewed with beaded sweat, and the hands and feet were cold and clammy. She lay apparently unconscious, but could at first be roused by shaking and shouting to her, rapidly sinking, however, into a state of profound coma. The pupils were normal in size, and responded to light. The action of the heart was exceedingly weak, irregular, and fluttering, the pulse at the wrist being scarcely perceptible. The first cardiac sound was almost inaudible, while there was distinct reduplication of the pulmonary second sound. There was jactitation and feeble retching, with much salivation, but no vomiting and no purging; temperature 97° F. The breath smelt very like peppermint. The treatment adopted was as follows. First I gave her three-quarters of a tumblerful of water, followed immediately by a hypodermic injection containing one-fifth of a grain of apomorphine. This latter quickly produced the desired effect, the vomited matters having a strong peppermint-like odour. After the vomiting the patient seemed about to die, and having no ether with me I administered brandy hypodermically. The result of this was excellent; the heart-sounds at once began to improve in tone, and the pulse in force, and in twenty-four hours the patient was practically well. Thus the symptoms taken together seem to point to severe cardiac depression approaching to paralysis, and appear to indicate that pennyroyal should be classed among the narcotic heart poisons. It transpired afterwards that the woman had taken ʒj of the essence of pennyroyal (which she had obtained from a chemist), and which is composed of ʒj olei pulegii to ʒvii of spirit.

York. J. GIRLING, L.R.C.P.Lond., M.R.C.S.

REPORTS
OF
HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

KING'S COLLEGE HOSPITAL.

CASE OF FRIEDREICH'S DISEASE.

(Under the care of Dr. FERRIER, F.R.S.)

A. F., aged 18, admitted on January 28th, 1887, was unable to walk or stand; he had a marked lateral curvature in the dorsal region, convex to right above to left below; his feet were markedly deformed—a talipes cavus; his speech was slow.

He said he could play with other boys till 11 years old, when giddiness prevented him; he was giddy in the dark as long as he could remember; he had been unable to walk for the last four years, and had had some difficulty in feeling the ground with his feet. His father said he had always been delicate; he had convulsions when teething; he could walk in the dark when young; he got tired on walking a short distance when 7 years old; the feet were noticed to be drawn up and the back arched when 8 years old; the left leg was affected before the right; when 14, he had a sore heel, and had not walked since; alteration of speech and shaking of the head was then noticed; there had been nothing of that sort in the family before; his mother died of phthisis; father well; one sister alive and healthy. He looked well-nourished; complexion not clear; chest normal, except for a hæmic murmur to left of the sternum, second interspace; tongue flabby and indented; appetite good; bowels regular. The viscera seemed generally normal, except the testicles, which were of the size of a small bean.

The symptoms of ataxy were: when supported and attempting to walk his legs were alternately crossed; when in bed he could raise them to a given point, though with some uncertainty; the uncertainty was more marked when the eyes were closed. The hands could be held out steadily, but either index was put to the nose with uncertainty, which was marked when the eyes were closed. The head oscillated often when sitting up, and this was more marked when he turned his head; he was unable to stand at all.

The arms were well-developed, and the muscles of normal nutrition, but the grasp of the hands seemed not proportional to this development. The calves and thighs were slight, flaccid, and with feeble muscularity. Faradic contractility was present in all muscles, and readily obtained. There was contracture of the extensors of the toes in either foot, and talipes cavus; no tremors nor choreic movements of the limbs. Sensibility to touch, pain, and temperature was generally normal, except the dorsum of the feet, where all were deficient, and slightly on the soles and shins. The muscular sense of arms and fingers was normal, and electro-sensibility was present; no pains nor cramps; no knee-jerk nor plantar and cremasteric reflexes; umbilical and epigastric reflexes well-marked.

There was considerable spinal curvature; speech was slow; a deficiency of lip movement was shown by the inability to disclose the upper incisors; the tongue, when projected, was unsteady, with a little tremor. He was very myopic; the fundus oculi Mr. McHardy found normal, except for a thinning of the choroid round the disc from the myopia, and two specks of disturbed choroidal pigment in the right fundus. The pupils reacted to accommodation and light; they were occasionally and variably unequal; the eyelid and ocular movements were normal. He was perfectly intelligent, and with a good memory, and had no headache nor giddiness.

Dr. Ferrier called attention to the chief points in which this form of tabes differed from the ordinary form of tabes dorsalis; first, the age; secondly, the apparently hereditary character and usual tendency of other members of the same family to be similarly affected; thirdly, the absence of all ocular and pupillary symptoms; fourthly, the absence of shooting pains. Sensory disorders had not, as a rule, been observed in this form of tabes; but in this case there seemed to be some impairment of the sensibility, especially of the dorsum, slightly also of the plantar surface of the feet. The disease affected the same tracts as the ordinary tabes, but others as well, namely, the lateral and direct cerebellar tracts. It ran a chronic course of indefinite length, and was quite incurable.

NEWCASTLE-UPON-TYNE INFIRMARY.

SUPRAPUBIC LITHOTOMY IN A BOY.

(Under the care of Mr. PAGE.)

[Notes by Mr. MAYNARD, House-Surgeon.]

J. C., aged 14, was admitted on January 28th, 1887, suffering from stone in the bladder.

On February 7th, Garson's bag having been introduced into the rectum and filled with eight ounces of warm water, six ounces of warm boracic lotion were injected into the previously emptied bladder. A suprapubic incision, two inches in length, was now made, the bladder exposed, incised, and a stone extracted with a pair of ordinary dressing forceps. The bladder-wound was not sutured; the skin-wound was closed with a continuous catgut suture, allowing a drainage-tube introduced into the bladder to protrude at its lower end. The stone, which was about the size of a blackbird's egg, weighed 85 grains.

Two days later the wound gaped widely, and was covered with a superficial slough. The abdominal wall wound was swollen and œdematous, and the temperature rose. The urine, coming freely through the wound, was foul, and necessitated frequent irrigation of the bladder with warm, weak Condy's fluid. The cellulitis went on to suppuration in the left iliac region, the pus escaping from the wound. This state of affairs improved slowly; on March 2nd, nearly all the urine was passed by the natural channel. The wound was almost closed, but some pus flowed when pressure was made in left iliac region.

On March 26th the wound was quite healed. No urine had passed through the wound for ten days.

REMARKS BY MR. PAGE.—The operative advantages of suprapubic over lateral lithotomy are, I think, sufficiently obvious. The bladder is undoubtedly more easily reached, and the risk of wounding important structures avoided by the high operation. It must not,

however, be forgotten that Cheselden abandoned the high operation on account of its being more fatal than the lateral. The objection to the suprapubic incision seems to me to be the difficulty of thoroughly draining the bladder, and this difficulty is increased by the employment of Garson's bag. After the bag is removed, the bladder sinks again into the pelvis, and the channel for the exit of fluid from the bladder becomes less direct. On the other hand, discharge from the wound readily finds its way into the bladder, and may necessitate frequent irrigation to avoid the risk of septic poisoning from the absorption of decomposing fluid. Primary union of the bladder wound would overcome this objection, and it seems to me this is the only direction in which we can hope to improve upon the old method of operating. I do not believe much will be gained from Listerian precautions. It may come to pass that the high operation as a substitute for lateral lithotomy will again be abandoned, and for the same reason—its higher mortality. Further experience will show, and in the mean time it is desirable that all cases of suprapubic lithotomy should be recorded.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 27TH, 1887.

W. H. BROADBENT, M.D., F.R.C.P., President, in the Chair.

Acute Dilatation of the Heart produced by Alcoholism.—Dr. R. MAGUIRE read notes of two cases. He said that alcoholism produced acute changes in the nervous and circulatory systems. The latter were not usually of serious moment, but might occasionally be important, as shown by the two cases here given. The first patient, aged 23, when applying for treatment showed œdema of the legs and some ascites. The pulse was small, weak, and of low tension, beating at the rate of 140 per minute. The heart-beat was diffused; apex outside nipple, not lowered; epigastric pulsation excessive. Cardiac dulness was extended vertically and laterally. The cardiac sounds were short, weak, and spaced; a slight systolic murmur was heard. There was dyspnœa, but no abnormal pulmonary sounds. The urine was excessive in quantity, and of low specific gravity. There was no history of rheumatism or of previous cardiac symptoms, and, after excluding all other causes, it seemed clear that the dilatation of the heart was produced by alcoholism, of which the patient gave a pronounced history. Under treatment by cardiac tonics the symptoms and the enlargement of the heart entirely disappeared. The second patient (aged 43), when first seen, had œdema of the legs, tremor of the tongue and hands, and complained of nervousness and want of sleep. The pulse was small, feeble, and easily compressible. The after-beat of the heart was outside the nipple line, and was somewhat diffused. The transverse dulness of the heart was increased in extent. The cardiac sounds were short and sharp, but no murmurs were to be heard. As in the previous case, no cause could be found for the dilatation of the heart, other than acute alcoholism, of which the history was clear. Under treatment the symptoms entirely disappeared. The mechanism by which alcoholism produced the dilatation was probably not by increasing the peripheric resistance, but by poisoning the heart-muscle itself, so causing it to give way before a normal, or even a reduced, arterial tension.—The PRESIDENT said the subject of the paper was novel, and he had not met with any observation bearing on it before. He said it was not easy to understand how this particular effect was produced. He thought that taking large quantities of diluted alcohol without food might aid.—Dr. ORMEROD asked what form of alcohol was taken—he thought this was not without importance in the production of these symptoms, as evidenced by an observation by Leyden as to beer-drinking.—Dr. STEPHEN MACKENZIE thought the condition in this case was doubtless due to the poisonous effects of alcohol, but in certain cases it might also be due to inflammatory changes.—Dr. EWART said that beer-drinking was very common in this country and in Germany, and it seemed difficult to credit the explanation offered. He did not think he was likely to overlook so obvious a cause of cardiac dilatation. He certainly never thought that the dilatation began in the left ventricle, or was due to toxic effects. He asked whether the pulsation at the wrist was also counted at the heart; he had noticed that the actual rapidity of the heart's beat was often greater than the pulse seemed to show. He also asked what effect Dr. Maguire had remarked as the result of dilatation of any or all the cavities of the heart. It had occurred to him that when the cavity of the heart was dilated the surplus of blood probably remained in the dilated cavity at each contraction, otherwise part of the circulation would be deprived of its share of blood.—Dr. HINGSTON FOX inquired whether the urine had been examined more than once in testing for albumen?—Dr. MAGUIRE, in reply, said that the favourite drink was gin. The urine had been systematically and carefully examined. He had carefully eliminated any possible peripheral resistance, and had remarked that at no time was arterial tension present.

Joint-Disease and Locomotor Ataxy.—Dr. GLOVER proposed a vote of thanks by the Society to the Committee which had conducted the inquiry on the connection of joint-disease and locomotor ataxy, with especial reference to the chairman, Sir James Paget.—Dr. ORMEROD seconded the motion, which was agreed to with acclamation.—The PRESIDENT said the report would settle the whole question, and reflect credit on the whole Society.—Mr. BILTON POLLARD, in thanking the Society for the vote of thanks as a member of the Committee, said that the report comprised observations of a large series of cases of joint-disease and locomotor ataxy. He said that they had not been able to arrive at absolutely certain conclusions, but, so far as the cases allowed of, they had tried to settle the points raised in the debate.

Endemic Hæmaturia.—Dr. HANDFORD communicated a case that he had had under observation for a year and three-quarters. The patient was a fresh-complexioned, healthy-looking man, aged 24. He had gone to Natal at the age of 21, and remained there three years and a half. He first passed blood in the urine on the voyage home. While in Natal he enjoyed the best of health, except for two attacks of dengue. When first seen, in November, 1885, he complained of pains in the loins, occasional discomfort in micturition, and the passage of blood in the urine. Numerous ova and embryos of the distomum (Bilharzia) hæmatobium were discovered in the urine, and were still to be found, though in much smaller numbers, at the present time (March, 1887). The following were the points of chief clinical interest raised: (1) Could the parasite multiply within the human body, or was an "intermediate host" necessary? (2) In the latter case, and in the absence of reinfection (and the conditions for reinfection were not known to exist in this country), what was the "expectation of life" of the parasites, and might the host reasonably expect to outlive his guests? (3) Was any parasiticide treatment useful? (4) What was the method of infection, and what precautions should be recommended with a view to prophylaxis?—Dr. SHARKEY said he had received some specimens from Cairo, in which the ova were found in the kidneys, in the lymphatic glands, and even in the skin, giving rise to nodules.—Dr. ABERCROMBIE said he had seen them in the substance of the lungs.—Dr. HANDFORD, in reply, thought it was a waste of time to attempt to find an intermediate host for this parasite in this country. The case he had related was interesting as being not much interfered with by treatment, and free from any chance of reinfection.

Case of a Child with a Patch of Lupus Treated partly by Scraping and partly by Salicylic Acid.—Dr. DREWITT read a paper on the case of a child in whom a patch of lupus had been divided for treatment into two parts, of which one part had been treated with salicylic acid and creasote, and the other by scraping. An unusual opportunity was thus offered of comparing the two methods. There had been altogether eight applications of Unna's plaster of salicylic acid and creasote during one month, each application having been preceded by washing the patch with a solution of cucaine; at the end of that time the granulation nodules had all suppurated out, leaving little pits surrounded by unhurt, healthy skin. There had been no return of the disease in either part. Unna claimed for the salicylic acid treatment that it removed old bands. This it had failed to do in this case; in fact, some new thin bands had been formed, but still the scars left by the salicylic acid were smaller and less hard, and had less tendency to contract than those left by scraping; and, judging from this case alone, there was distinct evidence in favour of the salicylic acid treatment of lupus. The case was shown with a drawing.

A Case of Hammer-Toe, with some Remarks upon the Deformity.—Mr. W. ANDERSON described this case. The patient, a youth, aged 19, had been suffering from hammer-toe, presenting the usual characters, and affecting the second digit of the right foot. The history showed that the condition had been noticed from early infancy, and that an aunt and two cousins on the paternal side had been similarly affected. The deformity was treated by removal of the head of the first phalanx, which was exposed by a longitudinal incision through the integuments and extensor tendon. The toe was straightened, and healing took place by first intention. The following points with reference to the disease, as illustrated by an analysis of twenty cases, were then brought forward:—1. The complaint was peculiarly one of early life; the period of commencement, in genuine examples, appearing to range between infancy and the age of 21. 2. The lesion was almost always limited to the first phalangeal joint of the second toe, but occasionally appeared on the metatarso-phalangeal joint of the great

toe (which developmentally must be regarded as belonging to the interphalangeal series). The cases described as "hallux flexus" by Mr. Davies-Colley a few weeks since were of this nature. 3. True hammer-toe was often bilateral, but when this was the case one foot was commonly attacked several years before the other. 4. A history of an inherited tendency to the disease might often be obtained. 5. The development of the complaint did not appear to be affected by either sex or class, or to be connected with any special constitutional diathesis. 6. There was no good reason to believe that it was caused by ill-made boots. There was, of course, no doubt that the distortion was sometimes associated, probably as a mere coincidence, with evidences of the habitual use of misshapen foot-covering, but in many cases the normal form of the foot was preserved, and there was no reason to believe that the shoemaker had ever been at fault. 7. The essential pathological lesion was a contraction of the plantar fibres of the lateral ligaments and of the glenoid plate, probably the result of a peculiar form of chronic inflammation. Secondary changes of form occurred in the articular surfaces, particularly in the cartilage, and might lead to a trigger-like action of the affected joint during forcible flexion and extension. The muscles, tendons, and fasciæ took no part in the etiology, but might be secondarily affected. 8. The treatment recommended was removal of the head of the first phalanx in the manner described. Two specimens, one lent by Mr. Shattock, and some drawings, were shown to illustrate the pathology of the affection.—Mr. W. ADAMS said that a study of the dissections would show that it was the lateral ligaments which were at fault. He advised division of these tendons, which was generally successful, especially between twelve and eighteen years of age. He thought Mr. Anderson's suggestion was new and useful, and would certainly take the place of toe-amputation. It had been traced to a neurotic origin, and he certainly thought that the idea of its being caused by defective boots might be dismissed at once. The pathology still remained to be ascertained.—Mr. NUNN said he had little doubt that in most cases it arose from a defect in the development of the spinal cord. He had known the case of a lady with hammer-toe, but her son did not develop it until he was 13 or 14.—Mr. PARKER said he had seen a great many cases in young children, and even infants, and it was therefore quite independent of boots, etc. Moreover, it was difficult to think that an accidental cause should in so large a proportion of the cases affect the second toe. In practice he invariably removed the toe.—Dr. BROADBENT asked whether the condition was more frequent in town children than in the country.—Mr. ANDERSON said he was unable to answer this last question. At present the pathology was involved in great obscurity.

Specimens.—The following living specimens were exhibited: By Dr. ARTHUR DAVIES: A Case of Rhythmical Tremors affecting one Limb only.—By Mr. GEORGE EASTES: A Woman suffering from Chronic Spasmodic Affection of the Inspiratory Muscles, with loud crowing Inspiration.—By Mr. BERNARD PITTS: A Case of Congenital Scoliosis and other Defects.—By Mr. BATTLE: A Case of Congenital Talipes, treated by Removal of a Wedge of Bone from the Outer Side of the Foot.—By Mr. BLACK: A Case of Double Congenital Dislocation of the Hip.

This meeting concluded the session.

HARVEIAN SOCIETY OF LONDON.

THURSDAY, MAY 19TH, 1887.

EDMUND OWEN, M.B., F.R.C.S., President, in the Chair.

CLINICAL EVENING.

Cases of Skin-Disease.—Mr. MALCOLM MORRIS showed three patients. The first was a man, aged 28, suffering from dermatitis herpetiformis, or hydroa. The disease appeared four years before, when the patient was on his way to Zanzibar, since which time he has never been free from it. The eruption appears in successive crops of vesicles, or bullæ, on an erythematous base, and is symmetrical in its distribution. The itching is intolerable, causing loss of sleep. The disease had been diagnosed at different periods as scabies, eczema, and prickly heat. The treatment which had been adopted—but at present with only a moderate amount of success—was prolonged baths to allay the irritation, and phosphorus and other nervine tonics internally. The next was a case of true leprosy. Mr. Malcolm Morris demonstrated the various points in the case, and pointed out that all three varieties of the disease usually described were present in the patient. On the body was an extensive macular eruption of characteristic appearance. There was complete anæsthesia of both forearms, thighs, and legs, and on one foot a large perforating ulcer. The tubercles were present in the pharynx and larynx; they had also attacked the face, but had now disappeared. Both the ulnar and the popliteal nerves were greatly enlarged, and there was atrophy of the interossei muscles, causing the characteristic claw-like contraction of the fingers. The patient had suffered from the disease for seven years. Was born and had lived all his life in India. The third patient, a girl aged 22, had suffered for sixteen months from Raynaud's disease. When admitted into St. Mary's Hospital on March 18th, one foot was swollen and of the deepest purple colour. The ankle was stiff and painful. One special point of interest in the case was the absence of symmetry. The treatment adopted was daily galvanism with a continuous current, the result being most satisfactory, as the discoloration had entirely disappeared.—Dr. JELLY objected to the terms "true" and "false" leprosy, and thought there was only one disease, though it varied somewhat in type in different localities. He thought all cases presented three different stages of the disease, and dwelt at some length on the special features of each stage. The disease was probably not contagious in the ordinary sense of the word, but it was transmitted.—Dr. MAGUIRE had made inquiries in the Leper Hospital at Bergen, in Norway, and had found that the statistics showed a progressive and rapid diminution in the number of cases existing along the coast line of Norway. Seeing that leper hospitals existed in Bath and its neighbourhood up to comparatively recent times, it was by no means improbable that, as Dr. Buzzard had suggested, some of the anomalous cases of muscular atrophy occasionally met with might be due to remains of leprosy, which had disappeared in England, as it was now in process of disappearance in Norway.—Mr. SEDGWICK had seen leprosy in India and elsewhere, and he fully agreed with Mr. Morris that this was a well-marked case of the disease. He directed attention to the occasional great tendency of the disease to spread, as in the Windward Islands, the Cape Colony, and other localities. Some of this extension was due to hereditary influences, as had been well illustrated in the Report on Leprosy of the Royal College of Physicians in 1867. But there was another and as yet imperfectly recognised source of danger, as regarded the communicability of the disease, to which attention had been lately directed by Dr. Wynne, the Medical Superintendent of the Leper Asylum, Robben Island, Table Bay. From time to time leper mice had been caught in the leper wards of this institution by the occupants; leper pigeons had been shot; and tame pheasants and poultry, including several young turkeys, limped about the doors of the leper wards with unmistakable leprosy. The pigeons were shot, to keep them off the roof of the medical man's quarters, as rain-water for cooking purposes was collected; and it was certainly allowable to assume that the flesh of leprous animals, when used as food, might be capable of communicating the disease.

Sarcomatous Tumours of Abdomen.—Dr. MAGUIRE showed a case of sarcomata of the abdomen. The patient, aged 31 years, six months ago noticed a hard mass round the umbilicus, and shortly afterwards complained of vomiting and swelling of the abdomen. On admission into hospital, a tumour of the abdominal walls, involving the umbilicus, was found. It was red, hard, and in size about three inches square. The abdomen contained fluid, which was removed to the extent of 310 fl. oz., and presented the ordinary appearances of ascitic fluid. The liver and spleen and the lymphatic glands were not enlarged. The case was at this time thought to be one of gumma, with peri-hepatitis, but it did not yield to anti-syphilitic treatment. After four tappings a hard mass was found in the left inguinal region, and subsequently others appeared in connection with the ensiform cartilage, the liver, and one apparently in the omentum, while now very little fluid could be detected in the abdomen. The temperature had never been raised. In spite of the large masses of new growth in the abdomen, the patient seemed in fairly good health, and at the present time was following his occupation as a coachman. It was suggested that since the first signs noted had been the presence of the hard mass in the umbilicus, and symptoms referable to an affection in the transverse fissure of the liver, a connection between the two might be traced along the umbilical veins.

Congenital Absence of Pectoral Muscles.—Dr. MAGUIRE showed a case of congenital absence of the pectoral muscles of the right side. The patient was a boy, aged 9 years, who was somewhat weakly and backward in intellect. The pectoralis minor was entirely absent, and of the pectoralis major only the clavicular portion was present. There was no deformity of the shoulder, and the movements of the arm seemed to be normal. When the mother was three months pregnant she received a kick on the abdomen. In another case which Dr. Maguire had lately met with, the whole of the pectoral muscles, again on the right side, were absent. Such cases were probably not recorded, and therefore it was of no use to search out the literature. It would seem, however, that absence of the large muscles from con-

genital defect was not common, and from chance references met with the pectoral muscles appeared to be more liable to the deformity than others. Ziemssen had made use of such a case to experiment upon the production of emphysema from weakness of an intercostal space.

Bronchiectasis.—Dr. EDWARD SQUIRE showed an interesting case of bronchiectasis occurring in a lad, aged 17. All the symptoms of the disease were present in the most definite manner; the existence of a large cavity at the base of the right lung opened up the important question of incision of the chest and lung-wall and free drainage.—The PRESIDENT expressed surprise that an abscess cavity so favourably situated for drainage should have escaped the surgeon's knife so long.

Macroglossia.—Mr. EUSTACE CALLENDER showed a case of macroglossia occurring in an infant of two months. The tongue was constantly protruded from the mouth, but did not interfere with suckling nor seem to affect the general health. Distinct increase had been noticed since birth.—The PRESIDENT remarked on the morbid anatomy of these cases, and pointed out that the hypertrophy was occasionally due to overgrowth of the lymphatic tissue, or some interference with the lymphatic circulation. In a case of his own under recent observation, the macroglossia had depended on the presence of nævoid tissue in the substance of the tongue. The prognosis was unfavourable in these cases.—Dr. MAGUIRE stated that some years ago he had published in the *Journal of Anatomy* an account of the examination he had made in a case of this disorder. He had found that the enlargement of the tongue was due to dilatation of the lymphatics, and these could be seen in all stages of development, until, in the final stage, a cystic lymphangeioma was produced. Another case, which he had since examined, presented a similar appearance, and in both cases the tongue affection was complicated by the presence of hygroma at each angle of the jaw. He knew of one case which recovered after the use of Paquelin's cautery.—Mr. HERBERT ALLINGHAM, while admitting the possibility of nævoid and lymphatic disease as a cause of the macroglossia, had seen cases where a simple muscular hypertrophy existed, and in which cure had resulted from excision of a wedge-shaped piece of the tongue.

Melanotic Sarcoma of Eyeball.—Mr. HENRY JULER showed a case of melanotic sarcoma of the eyeball in a woman, aged 60. The case had been neglected until the eyeball had been completely destroyed, and so much fungous extension of the disease had occurred, that it was questionable whether complete removal of the growth was possible. Another case was also shown in which a sarcomatous tumour of the orbit existed. The eyeball was pushed upwards and forwards, but vision was perfect; a hope was expressed that it might be found possible to remove the whole growth. Mr. Juler also demonstrated an interesting series of ophthalmoscopic cases.

SOUTH WESTERN BRANCH.

ANNUAL MEETING.

WEDNESDAY, MAY 18TH, 1887.

P. SWAIN, F.R.C.S., President, in the Chair.

President's Address.—The President delivered an inaugural address, which will be published in a future number of the JOURNAL.

Diphtheritic Ophthalmia.—Mr. J. ELLIOT SQUARE read a paper on this subject, and showed two children who had suffered from the disease.

Gastric Hernia.—Mr. J. D. HARRIS gave an account of a case of hernia in which the stomach formed a large portion of the protruding mass.

Astigmatism.—Dr. J. R. ROLSTON described some cases of astigmatism

Inversion of the Uterus.—Dr. KEMPE described a case of this affection of long standing successfully treated by incision.

Perforation of the Stomach from Carcinomatous Disease.—Dr. PALM related a case and showed the specimen.

Report of Council.—The report of the Council stated that there were 191 members on the roll, and pointed out that there were still a large number of unattached members of the Association in the district. The report endorsed resolutions adopted at a meeting of the Plymouth Medical Society expressing regret at the absence of any candidate from the West of England as a direct representative on the Medical Council, and recommending steps to be taken to bring forward and obtain support for such a candidate at the next election. The Council regretted that no intermediate meetings of the Branch for the purposes of medical discussion had been held, and suggested the desirability of members in different towns taking the initiative, in accordance with the new rule adopted last year.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, MAY 18TH, 1887.

JOHN URQUHART, M.D., President, in the Chair.

Rupture of Uterus.—Dr. J. OSBERT WILSON communicated a case of rupture of the uterus in a patient aged 33, in her second confinement. After a tedious labour she was delivered of a full-sized male child, which had evidently been dead for some time. Ten minutes later the placenta was removed, and the uterus contracted firmly. The patient felt well on recovering from the anæsthesia, and the vagina was washed out with a warm weak solution of carbolic acid. On the following evening, after sleeping a good deal, she suddenly complained of intense cold, and Dr. Wilson found her greatly excited and only partially conscious, the extremities cold, the pulse imperceptible at the wrist, the heart beating tumultuously 120 times per minute, the uterus well contracted, and the abdomen somewhat tympanitic. In spite of treatment, the patient became more collapsed, and expired five hours afterwards. A partial *post-mortem* examination was made, and a large rent was discovered in the left side of the uterus, slightly posterior to the broad ligament. The uterus was nine inches long, and the tear extended about two-thirds of that distance, going down close to the os. There were old adhesions in the upper part of the peritoneal cavity, but no recent peritonitis. The placenta had been attached to the anterior wall of the uterus. The true conjugate of the brim measured four inches and a half, but the pelvis was of the masculine type. Dr. Wilson believed that the tissues of the woman were weak and friable from long-continued labour, want of sleep, the death of the child, putrid discharge, and the use of chloroform.

Artificially-induced Conjunctivitis.—Dr. URQUHART narrated a case of conjunctivitis in a girl aged 19, of hysterical disposition, produced by the introduction of small chips of wood under the eyelids. This the girl had done in order to render her unfit for discharging her duty as a reader.

Case of Scleroderma.—Dr. MICHIE showed a young woman suffering from scleroderma. The disease had commenced four years before and affected both wrists and ankles, both palmar and plantar surfaces, and a patch over the ensiform cartilage.

Case of Tobacco Amblyopia.—Dr. MCKENZIE DAVIDSON showed a patient suffering from weakness of vision who had been a confirmed smoker for many years.

Treatment of Nævus.—Dr. MAYER showed a boy who had suffered from a large nævus of the lower lip, which had been treated by subcutaneous injections of tincture of the perchloride of iron. The treatment lasted three months, and two to four minims were injected on fifteen different occasions, at intervals of from three to ten days, according to the amount of irritation. Collodion was applied after each injection. The result was exceedingly satisfactory.

Case of Parasitic Otitis.—Dr. MACKENZIE BOOTH described a case of otitis externa resulting from the presence of aspergillus. The patient, a young man aged 21, complained of itching and deafness in the right meatus, which on examination was seen to be entirely covered with a mouldy-like substance. Microscopical examination showed the sporangia of aspergillus. The patient had for some time been living on the ground-floor of a damp dwelling.

Diseased Uterus and Appendages.—Dr. J. OSBERT WILSON showed the uterus and appendages from the body of a woman who had suffered for several months from ulceration of the cervix. The uterine cavity and the Fallopian tubes, which were dilated, were full of stinking pus, and both ovaries were bound down by adhesion to the peritoneal pouches on each side of and behind the uterus.

ACADEMY OF MEDICINE IN IRELAND.

PATHOLOGICAL SECTION.

FRIDAY, MAY 13TH, 1887.

WALTER G. SMITH, M.D., President, in the Chair.

Malformation of the Shoulder-joint.—Dr. E. H. BENNETT exhibited a specimen of malformation of the shoulder-joint, probably resulting from a burn. The limb belonged to a man of middle age. It was noticed before the dissection was made that the shoulder joint, although not completely fixed, was limited in its range of motion. There was nothing abnormal in the muscles. On clearing away the soft parts on the outside of the joint, he found what at first sight appeared to be the head of the humerus directly underneath the muscles, without any capsule; while the upper part of the bone was distorted and bent. There was no disease of the scapula or glenoid cavity. The length of fibrous capsule was very small. On turning the specimen it was seen that the head of the humerus was half buried in an ossified capsule; while the remaining half of the capsule

was free, soft, and flexible, and received the attachments of the capsular muscles normally on the axillary side. There were no deep cicatrices involving the muscles, and the tendons and joint had been in no way affected except by the skin-contraction. On the inside the cartilage of the joint was perfectly normal. The head of the bone was greatly distorted in position. He did not think there had been any fracture of the bone, but believed that the flexion of the upper part of the bone and distortion of the head of it had been produced by the limited range of movement resulting from the superficial cicatrices. The remarkable thing was the association of the deformity with the cicatricial destruction on the ulnar border of the hand and along the forearm, as the marks of the burn, though it was only of the skin, reached as high as the axilla.

Capillary Transudation.—Mr. STORY exhibited an apparatus intended to illustrate an experiment of Korner's upon capillary transudation. The experiment was known to him (Dr. Story) only second-hand through an article on the pathology of glaucoma written by Birnbucher and Czermak in Von Graefe's *Archiv*, December, 1886. In glaucoma the increase of tension of the eyeball could be produced only by an increase of the fluid that went into the eye, or by a diminution of the fluid coming out of the eye, or possibly by the joint operation of both of those causes. Before proceeding to frame hypotheses as to the production of glaucoma, those two authors thought it necessary to find out what were the physical laws governing the passage of fluids through tubes which, in part of their course, had walls that were permeable to fluids and movable. The blood went into the eye through arteries and came out through veins. Between the arteries and the veins it passed through capillaries which had permeable and distensible walls. By the experiment of Korner—which the apparatus represented—fluid was passed through a tube formed partly of india-rubber and partly of brass, to which two manometers were attached. Another portion of the tube, which was enclosed in a glass cylinder, was formed of a membrane that admitted of filtration—namely, the ileum of a monkey, off which the peritoneal coat had been stripped. When water was allowed to flow freely through the system, a filtration of the fluid took place through the membranous part of the tube into the glass cylinder, which cylinder might be termed the tissue-chamber, and the filtration went on steadily until the pressure in this chamber became higher than the pressure on the exit tube, and higher than the pressure in the portion of the membranous tube next to the outflow. He found that no matter what was the pressure applied—whether there was a restricted arterial current or a restricted venous current—the pressure in the tissue chamber rose till it became higher than that in the distal portion of the membranous tube, and then this portion of the tube collapsed and all flow ceased. The conclusion which Korner drew from his experiment—the result of which was published in 1873—was that there must be some exit for the fluid from the tissues of the body independent of the venous circulation—namely, the lymph vessels—or the rise of pressure in the tissues would ultimately stop the flow in veins completely. Birnbucher and Czermak, then, in attempting to produce an arrangement which would permit a constant flow to go on, hit on the expedient of placing within the membranous part of the tube a spiral wire which prevented the membrane from collapsing. When this was set going the proximal (or arterial) end of the tube was seen to be raised up from the wire by the pressure of the contained water, while at the distal (or venous) end of it the membrane was pressed down upon the spiral by the higher pressure in the tissue-chamber, and they concluded that a filtration took place from the inside of the membranous tube into the glass cylinder at the proximal end, and that a filtration back again from the chamber into the tube took place at the distal end. The pressure in the tissue-chamber became higher when they restricted the "venous" outflow, when they increased the "arterial" pressure, and when they used a more permeable filter at the arterial end, or a less permeable one at the venous end of the membranous tube. Birnbucher and Czermak stated that they had made a microscopical examination of glaucomatous eyes, and had found that, in addition to the ordinary well-known blocking up of the angles of the anterior chamber by adhesions of the root of the iris to the cornea, even the venæ vorticosæ were affected, and that in the emissary vein coming out from the ampullæ there were signs of inflammation, which had thickened the walls of the veins and destroyed the permeability of the space surrounding them; and that there was also an internal inflammation inside the veins, so much so that some of them were completely blocked up by proliferation of the endothelium. The result of the experiment showed that in glaucomatous eyes there was a *vera causa* capable of increasing the intra-ocular pressure.—The PRESIDENT said the reasoning founded on this experiment was applicable to the circulation of the blood in other organs besides the eye.—Dr. BENNETT said if these experiments gave the true reading of the action of the vessels in producing the aqueous humour, the latter should be more akin to serum in its constitution than the name indicated. If it were the result of such constantly changing pressure as had been described, its condition would be not far from that of albumen.—Mr. STORY replied.

Fracture of the Skull.—Dr. HEUSTON exhibited the skull and brain of a gentleman, aged 60, who had fallen from a window into a flagged area on his head, a distance of twelve feet. After the accident he presented no evidence of serious lesion for five days, when symptoms of cerebral irritation began, resulting in hemiplegia of the left side of the body on the tenth day, when he died from paralysis of the muscles of respiration. The skull presented a fracture occupying the posterior portion of the right parietal bone, which included a somewhat quadrilateral area, the enclosed portion of bone being further broken into three portions, the upper of which was depressed, while the two lower were elevated at their junction. From the posterior-inferior angle of this fracture a fissure extended through the masto-occipital and petro-occipital sutures to the jugular foramen, from which a fracture extended into the foramen magnum posterior to the occipital condyle. An extensive clot was found occupying the position of the fracture, and also filling the posterior fossa of the skull between the dura mater and the bone; the dura mater in this situation presented a laceration an inch in length. The right cerebral hemisphere presented a laceration at the junction of the occipital with the temporo-sphenoidal lobe, extending obliquely upwards and backwards for an inch and a quarter, and being half an inch in breadth. The inferior aspect of the right lobe of the cerebellum showed a laceration occupying the biventral lobe half an inch in length.

REVIEWS AND NOTICES.

DISEASES OF WOMEN: A HANDBOOK FOR PHYSICIANS AND STUDENTS. By Dr. F. WINCKEL, Professor of Gynæcology, and Director of the Royal University Clinic for Women in Munich. Authorised Translation by J. H. WILLIAMSON, M.D., Resident Physician Allegheny General Hospital, Allegheny, Pennsylvania, under the Supervision and with an Introduction by THEOPHILUS PARVIN, M.D., Professor of Obstetrics and Diseases of Women and Children in Jefferson Medical College, Philadelphia. Edinburgh: Young J. Pentland.

DR. WINCKEL's work well deserved translation into English. A very large number of treatises and text-books on gynæcology have been written by distinguished British and American authors, but hardly one of the type of Dr. Winckel's *Diseases of Women*. The best English works on this subject are all clinical or surgical, rather than pathological, and the personal element is ever predominant, experience being put before tradition even of the soundest kind. *Diseases of Women* is a text-book where pathology is placed throughout in the foremost position. The brief passages on treatment are soundly written, we admit, but it is for pathology that the work will be consulted. The chief feature of excellence is a complete and uniform harmony of the synthetical and analytical aspects of the subject. Anatomical parts and their diseases and malformations are fully classified, and each disease is described in detail. Rare conditions are not omitted, trifling affections are carefully noted, yet too great prominence is not given to either, so that the reader learns about a rarity without acquiring an exaggerated idea of its importance, and reads about a trifle so as to discover that the trifle is a fact, though none the less trifling on that account. In short, a sense of due proportion is conveyed to the student of *Diseases of Women* by the excellent literary method of its author. Fortunately, method, unlike language, is little affected by translation.

The translator has done his work well. The orthography of gynæcological terms and the choice of synonyms is as unsettled across the Atlantic as in England and Germany, hence criticism of the scholarship displayed in this particular work would not be fair either to the author or translator. The latter has preserved the technical terms used by the former. We regret, however, to find such an expression as "hyper-secretion." Not only have the original, somewhat inartistic, woodcuts been reproduced, but the German words printed on the blocks have been retained, so as to serve the office of reference usually fulfilled by figures or italic letters. Hence in the printed explanations we read, "*Linke Niere*, left kidney. *Blase*, bladder." This system may have prevented errors in reference, so frequent when

letters or figures are employed, and may serve to teach German to English readers, but it is not likely to be universally adopted. Dr. Williamson has mastered a difficult task, as German translation is not easy even to German scholars, and *Diseases of Women* is not a very small book. His labours will not be in vain, for he has done English medical readers a service.

The Introduction must not be passed over, for it is original, and its author is a well-known American obstetrician. Dr. Parvin holds Dr. Winckel's work up to admiration, because it does not encourage "reckless laparotomies." He talks of hapless victims of bold surgery, no better than they were before their appendages were removed. He speaks of oöphorectomy as though it were a fashion. "Many of the profession," he observes, "can remember when division of the cervix was, under the inspiration of Sir James Simpson, a frequent operation, but now it is rarely performed." In respect to after-histories, Dr. Parvin lays stress upon the suggestion thrown out by Dr. Winckel that the woman who has undergone oöphorectomy, and finds herself some months afterwards as miserable as she was before the ovaries were removed, is not likely to consult the surgeon who operated upon her, but will more probably apply to some other practitioner. Dr. Parvin does not spare his own countrymen. "It must be confessed," he writes, "that cervico-plasty has been frequently done when there is no necessity for it." He adds to a paragraph on the above-named operation a wholesome aphorism to be remembered by the surgeon engaged in the diagnosis of a case: "Take care, or you will find what you are looking for." No doubt Dr. Parvin is perfectly justified in discouraging indiscriminate operating, but some diseases of the appendages are so definite and so intractable as to compel patients to seek advice and surgeons to undertake radical methods of cure.

Dr. Parvin, who has supervised this translation, besides adorning it with the valuable Introduction just noticed, has rejected the "very extensive bibliography" contained in the original. This is to be regretted, for the true student will always appeal from his text-book not only to Nature, but also to those original monographs on which all text-books are founded. In future editions it is to be hoped that the tables of reference will be restored.

DUBLIN HOSPITALS COMMISSION. REPORT OF THE COMMITTEE OF INQUIRY, 1887. Together with Minutes of Evidence and Appendices. Presented to both Houses of Parliament by command of Her Majesty.

ALTHOUGH published a year after the evidence on which it is based had been given, we do not think the time devoted to the preparation of the Report of the Commission appointed to "inquire into and report upon certain matters connected with the management and working of the several hospitals in the city of Dublin" has been thrown away.

The issues and principles involved are of so great importance to the State, the profession, and the public, and the subject is so intricate, that if the Report was to have any weight it was above all things essential that it should bear the stamp of careful consideration, and be the expression of mature and deliberate conviction. That it is so is evident from the distinct proposals made as to the future management of the Parliamentary grant, the conditions on which a share in it should be obtained, the suggestions thrown out that in the future "all hospitals will be supported by the rates—that what is necessary shall not be dependent upon the casual assistance of the benevolent, will perhaps be the ultimate solution of the hospital question."

The noble passage, quoted in full in the JOURNAL of April 30th, in which the Commissioners express their opinion in favour of State aid to hospitals in the interests of medical education, and the grounds on which they decline to recommend Union hospitals as fields for clinical instruction, indicates that they have taken a wide and intelligent view of the subject, and are alive to the difficulties which surround it.

In addition to the minutes of evidence, the Report embodies an interesting history of the Dublin hospitals, an abstract of their organisation and management, authoritative information as to their incomes, educational facilities, and work, and a review of the various Commissions which have inquired into the distribution and *raison d'être* of the Parliamentary grants.

Three things at first sight strike us as singular: the large number of hospitals (not including two large minor hospitals, nor that for incurables)—nineteen for a population of about 346,693; a Parliamentary grant of £15,850 per annum in aid of some of these hospitals; and the number of Commissions—five, and one Select Committee in seventy-eight years, which have inquired and reported. This multiplicity of hospitals has necessarily involved a large proportion of medical officers. "There are thirty-eight surgeons and twenty-five physicians holding staff-appointments in the general hospitals of Dublin, not to speak of oculists, gynæcologists, and assistant surgeons and physicians." This gives an average of fourteen beds to each surgeon or physician, or, taking extremes, the beds range from nine to twenty-seven, forming a striking contrast with England and Scotland, where the evidence shows the range of beds to be from thirty-five to eighty-five for each medical officer. To commemorate Her Majesty's Jubilee it is proposed to add yet another hospital.

The Commissioners recommend that the share of the Parliamentary grant now enjoyed by the Cork Street Fever Hospital, the Houses of Industry Hospitals, and the Lock Hospital should be withdrawn. In the case of the former, powers exist under the Public Health Acts for providing funds for its maintenance from other sources, but for the two latter, subsisting almost entirely on these grants, withdrawal means the closing of these institutions.

To this fact the Commissioners are alive. "How then," they ask, "is this hospital (the Lock) to be supported in the future?" It is plain there "are but two ways," private charity or a local rate. They presume the latter "will be the ultimate solution, and believe it will be attended with great benefits, moral and material, to the community at large." One manifest advantage predicated in the Report—the power to retain patients until they are cured—appears to us a *non sequitur*. That power has been withdrawn by Parliament from the Lock Hospitals specified in the Contagious Diseases Prevention Acts, and we do not think it probable that the advocates of the spread of venereal diseases will be visited by such wisdom or common sense as shall induce them to grant such powers to local bodies.

Although we entirely concur with the Report "that there are few persons who would not wish to see this hospital"—nay, more, every such hospital—"made, as it were, a stepping-stone for those who enter it towards the attainment of a better life," we think it doubtful policy to close the hospital until provision has been made for supplying its place. In addition to the withdrawal of the grant, the Commissioners advise that the buildings of the Houses of Industry Hospitals should be handed over to the North Dublin Union. This recommendation is based on double grounds: (1) That the removal of the Carmichael School of Medicine to the south side of the city had destroyed the only basis on which the continuance of the grant could be justified; and (2) the urgent need of additional accommodation for the inmates of the Union, to which the buildings are stated to have originally belonged.

If these hospitals are closed, then, the question of compensation of the medical staff must be considered. The Commissioners rightly point out that, although only two receive salaries, yet all will suffer serious pecuniary loss, and suggest that, under 19 and 20 Vic., c. 110, the medical officers appear to be entitled to pension. We trust this may be true, and that these gentlemen will be justly and liberally dealt with.

With the Rotunda Lying-in Hospital the Report deals at considerable length, severely condemning the limited organization of its governing body, while admitting the excellence of the work done by the institution, and the high standard of education maintained. In connection with it the question is raised of how long a hospital physician or surgeon should hold office. Whatever may be said in favour of an unlimited tenure of office, or fixed limit of age, in the case of general hospitals, we do not concur with the Commissioners in "holding that the provision in the charter limiting the master's term of office to seven years is radically bad" because it is too short. It would be impossible to exaggerate the value of the position of the master of the Rotunda Hospital, whether regarded as a field for clinical experience, a position of professional pre-eminence, or one of considerable pecuniary profit. It is not advisable, in the interests of obstetrical science, that one man, to the exclusion of all others, should hold the position for even seven years; but that he should monopolise it for twenty or thirty would be simply intolerable, and we are surprised that the Commission did not advise an alteration of the charters of both lying-in hospitals in the direction of an enlargement of their medical staffs.

Commenting severely on the present condition of Mercer's Hospital, the Commissioners give a well merited meed of praise to the Mater Misericordiæ. "As it stands now," says the Report, section 236, "it has fulfilled the prediction upon which Dr. Bristowe ventured in his report, to which we have referred, that when completed it would be one of the finest hospitals in Europe, and fully merits Dr. Robert MacDonnell's glowing eulogium, that 'it is a glorious institution, and one of which the county is justly proud.'"

The Report condemns *in toto* the purchase system, whether existing

in general or lying-in hospitals, and whether the money paid for appointments is divided by the staff, or partly passed to the funds of the hospital. That an able man because poor shall be excluded from the advantages of a hospital appointment, or forced to get into debt to obtain one, is a crying evil, nor can we conceive how so vicious a system can be defended.

The Commissioners conclude from the facts detailed that Dublin has too many hospitals but not enough beds, there being only 919; they consider 1,000 or 1,200 are required to meet the necessities of the city; that the multiplicity of hospitals has led to a multiplicity of the medical staffs, to waste of money and material, to a reduction of educational efficiency, and to a loss of relief-giving power, and that to meet these defects amalgamation of hospitals is the common-sense remedy.

Next, passing to the financial system, the Report shows that in 1884-5, the total income of the Dublin hospitals from all sources was £70,000, and that of the ten general hospitals about £50,000, which, by the withdrawal of the Parliamentary grants, would be reduced to £40,000. The average yearly cost of maintenance of each bed being £56, this sum would be clearly inadequate to meet the need for hospital accommodation, and as only £15,000 of the total income is derived from permanent sources, the conclusion is forced on the Commissioners that "it seems to us clear that unless the incomes of the general hospitals in Dublin derived from sources other than the Parliamentary grants is capable of very considerable expansion, their withdrawal would be attended with most disastrous consequences."

That difficulty is experienced in other places in obtaining subscriptions for such charities, and how little pecuniary gratitude is shown by those directly benefited by them, appears by Sir Rutherford Alcock's letter in the *Times* of March 19th. He estimates the contribution to the Hospital Saturday Fund from the working population at 2½d per head per million treated, and that the bulk of permanent contributors does not exceed 100,000 out of a population of 4,000,000. If in so rich a city as London, with a population equal to that of all Ireland, these difficulties exist, it follows that in a poor country and comparatively small city, the expansion of income declared essential by the Commission cannot be reasonably counted upon.

Leading up to the conclusion that the grants should not be withdrawn, a history of their origin is given, which explains the singular circumstance, not only that they were granted at all, but why the Houses of Industry Hospitals were entirely supported by the State. In England a Poor-law system has existed from 1601, and even then it was only the completion of previous measures, by the addition of a compulsory rating instead of voluntary or quasi-voluntary contributions. In Ireland there was nothing of the kind. While the principle of Poor-law relief was established in England in the reign of Elizabeth, it was not extended to Ireland until the reign of Victoria; and hence: "Hospitals, especially such as were connected with a House of Industry, supplied the wants which are, or rather ought to be, supplied by Union hospitals."

By a stipulation in the Act of Union these grants were to be continued for twenty years. After that period the various Commissions which inquired and reported recommended these payments on the grounds of general utility, and as aids to institutions intended for those not necessarily paupers; to these reasons were then added those of educational benefits, and finally the present Commissioners state that the educational ground "is of course the only ground which can be for one moment admitted" as justification for State aid. From this conclusion we are compelled to dissent, and we think the Commissioners must have forgotten that half the expenses of medical charities in Ireland, including Union hospitals, are paid from the Imperial exchequer. To us this seems an admission that public health is no mere local matter, and is therefore fairly entitled to State aid, and we fail to see why a principle admitted in the case of Union hospitals should be so utterly inadmissible in that of general hospitals, more especially as the latter save their inmates from the stigma of pauperism.

To the objection that the recognition of the educational ground would be to admit a precedent which could not be refused to other places besides Dublin, they very practically reply, *Beati possidentes*, and furthermore point out that such grave defects exist in the hospital system so fatal to the efficiency of the Dublin medical schools and so difficult to cure that the money will be well spent in remedying these evils.

We entirely agree with them in both arguments. We see no good grounds why grants enjoyed for a century should be removed; *primâ facie*, by long use the hospitals have acquired a prescriptive right. Nor is it a sound argument that because other places have not got similar grants, they should be taken from the place that has. Whatever force such a plea might have in regard to giving new grants, it certainly has none in respect to the removal of existing rights, but is only one of those fatal fallacies of false finance so dear to dabblers in political economy.

Finding the difficulties in the way of amalgamation insuperable, the Commissioners recommend the capitalisation of the grant; the investment of the capital sum in the name of trustees; and the distribution of the income by a Board of twelve representative persons, to be increased to thirteen on the Roman Catholics joining the Hospital Sunday movement. The Board proposed seems fairly satisfactory, but we do not see why the hospitals should not be directly represented on it. The professional element, too, is decidedly defective, provision in the scheme being made for only two medical men, one for each of the Colleges of Physicians and Surgeons. Doubtless a small committee works better than a large one; but it would not make the Board unwieldy, while it would add much to its strength and efficiency, if the senior medical officer of each hospital entitled to participate was made a member of it.

The conditions (published in the JOURNAL of April 30th) entitling to a share in the fund are excellent, but we consider the third and fourth are no less essential than the first and second. While admitting freely the right of the managers or supporters of a hospital to make it as exclusive as they like, we maintain that no hospital is entitled to assistance or support from public funds or local rates which requires a religious test from its officers, and which does not admit clergymen of all denominations to visit patients of their own persuasion whenever their services may be required.

If these recommendations are adopted, the Commissioners believe that, amongst the nineteen Dublin hospitals, it will be a case of the survival of the fittest; that the weaker and smaller institutions will either die of inanition or be absorbed by the stronger; and that, in either case, benefit will result both to the poor and to medical education.

Whatever difference of opinion there may be as to the deductions drawn from the evidence and the conclusions come to by the Commission, there can be none as to the merits of the Report itself. In arrangement it is logical; in style it is lucid; as a literary production it is masterly, and shows that a broad and liberal view has been taken of the question at issue.

CLINICAL STUDIES OF DISEASE IN CHILDREN. By EUSTACE SMITH, M.D., F.R.C.P., etc., Physician to the East London Children's Hospital, and to the Victoria Park Hospital for Diseases of the Chest. Second Edition. London: J. and A. Churchill. 1887.

THE number of systematic treatises on diseases in children has greatly increased during the last few years, and Dr. EUSTACE SMITH is himself the author of one of the most complete and elaborate of these; there is, however, still room for such careful clinical studies as he has put together in this volume. The first edition was published some years ago, and the second is largely re-written; the chapters on Croupous Pneumonia, Pleurisy, and Tubercular Peritonitis are, we are told, almost entirely new. The plan followed in each case is to describe the symptoms and physical signs in the order in which they are observed, to illustrate special points or exceptional events by quoting cases, to discuss the differential diagnosis, and finally to dogmatise as to treatment. It is hard to say in which division of his subject Dr. Eustace Smith shows to greatest advantage, for in each the reader feels himself to be under the guidance of an observant and thoroughly practical physician. The chapters on Pneumonia and on Pleurisy may be taken as fair examples of the studies. It is often extremely difficult to distinguish between the early stages of acute pneumonia and pleurisy: it is only by a careful study of the whole aspect of each case that error can be avoided. Dr. Smith directs us to note that the initial symptoms in pleurisy—pain in the side or belly, followed by cough, and fever with but slight reduction of strength—are tolerably constant, and that the disturbance of the pulse-respiration ratio is not great, nor the facial expression one of much distress, while in pneumonia the pain is absent or slight, the pulse-respiration ratio is perverted, the prostration is extreme, and the child looks very ill. "When effusion has taken place, the dead flat percussion note with greatly increased resistance, the cavernous or blowing, or merely weak bronchial breathing, and the increased resonance of voice or cry—these signs discovered at the base, and found at the front of the chest as well as at the back, are very characteristic, and if the disease be an acute primary one are diagnostic of pleurisy."

The other subjects treated in the volume are Collapse of the Lung, Acute and Chronic Catarrhal Pneumonia, Pneumonic Phthisis and Fibroid Induration of the Lung, Acute Tuberculosis, Tubercular Meningitis, and Tubercular Peritonitis. The numerous cases cited are

well reported, and really illustrative of the points under discussion, and throughout the volume the remarks on treatment fully bear out Dr. Eustace Smith's reputation for fertility of resource in clinical difficulties.

NOTES ON CHINESE MATERIA MEDICA. By C. FORD, F.L.S., HO KAI, M.B., and M. E. CROW, M.P.S. Reprinted from the *China Review*, pp. 214—220.

THIS paper is the first of a promised series of communications on various articles in the Chinese Materia Medica, which, as yet, has received little investigation. Some few treatises have certainly appeared on Chinese medicines, but an enormous amount of research will be required to place the subject on a satisfactory basis. The authors announce their intention to publish, at irregular intervals, in the *China Review*, notes on certain selected drugs. As far as possible, members of individual natural orders are intended to be dealt with together, a more feasible plan than an attempted pharmacological or therapeutical grouping. Where required a full botanical description of the plants will be given.

In the present article two members of the Loganiaceæ are discussed —Gelsemium elegans and a variety of Strychnos, probably Strychnos nux vomica. The first named—Gelsemium elegans—has its botanical characters extremely well given. The root (rhizome?) is stated to contain a tetanus-producing alkaloid, producing, with peroxide of manganese and sulphuric acid, a deep purplish-violet coloration, changing to one of a rich purple hue. The drug so far is chiefly interesting from a toxicological aspect, several cases of criminal and suicidal poisoning having occurred. The symptoms closely resembled those produced by toxic doses of Gelsemium nitidum. Notes of the general action on dogs and guinea-pigs are given by Dr. Wharry, which seem to indicate an action allied to that of Gelsemium nitidum, but with a greater tetanising tendency. The Strychnæ species is briefly described, and little of general interest is noted except the somewhat remarkable statement that the seeds are not commonly known by the Chinese to be poisonous.

We shall look with interest to further accounts of work by these authors. The general action on lower animals might be carefully given where interesting, so that pharmacologists may be invited to investigate fully certain of the drugs.

THE PRINCIPLES AND PRACTICE OF OPERATIVE SURGERY.—By STEPHEN SMITH, A.M., M.D., Professor of Clinical Surgery in the University of the City of New York, etc. New and thoroughly revised edition. Illustrated with one thousand and five woodcuts. Edinburgh: Young J. Pentland.

IN the preface to this new edition, Dr. STEPHEN SMITH lays particular stress on the advance of antiseptic surgery since the first issue in 1879. He is an ardent supporter of Listerism, and declares that at the Bellevue Hospital, where he holds the appointment of Surgeon, the practice of antiseptic surgery rigidly conforms to formulæ based on the latest facts established in antisepsis. The work itself is an expansion of a *Handbook of Surgical Operations*, published in 1862. For quite other reasons than deficient merit, it is not likely to replace the well-known text-books of Erichsen, Holmes, and Bryant, in this country, but Dr. Smith's *Principles and Practice of Operative Surgery* is a valuable work of reference. Like many other American publications, it abounds in details of a kind always sought for by practical surgeons, but too often disdained by high-class operators who compile systematic works. The abundance of illustrations, many it is true very old and familiar to students of medical literature, increase the value of this text-book.

THE DISSECTOR'S GUIDE. Being a Manual for the Use of Students By D. J. CUNNINGHAM, M.D., etc., Professor of Anatomy and Chirurgery in the University of Dublin. Head and Neck (with fifty-seven illustrations). Edinburgh: Maclachlan and Stewart.

THIS is the third volume of Dr. CUNNINGHAM'S *Guide*. The chief merit of the work lies in the author's general attention to minute details, but its division into volumes is a serious defect. A single portable book is the ideal of a manual on dissection. It must be admitted that the requirements of modern examiners have been powerful agents in making such publications bulky, or splitting them into two or more volumes. We question whether the *Dissector's Guide* should be called a "manual for the use of students." The word "advanced" should at least be placed before "students," or in place of the latter word, "candidates for the higher medical qualifications" would be more satisfactory. Better still would be the words "for the use of demonstrators of anatomy." For that class of teachers Dr. Cunningham's work is peculiarly well suited. The order of dissection is well arranged, so that the dissector's fingers can follow the directions as they are read out. The anatomy of the brain and organs of sense will be dealt with in a separate volume.

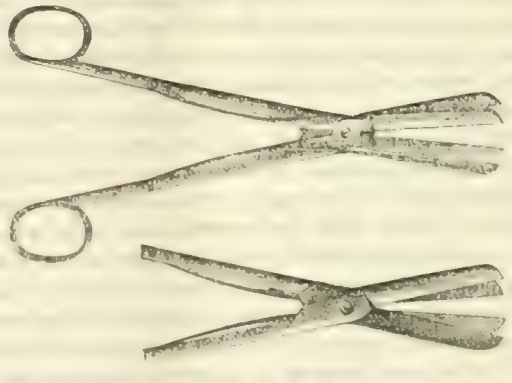
NOTES ON BOOKS.

Illustrirter Aerztlicher Almanach. Von Dr. ADOLF KÁLLAY. Wien: Braumüller. The general plan of this almanack is excellent. There is a classified list of health-resorts and mineral waters, a collection of notes on useful drugs, with model prescriptions, and a list of the professors and teachers at all the universities and medical schools of Europe. The execution, at any rate with regard to Great Britain, leaves much to be desired. The multitude of misprints and the general want of accurate information raises a suspicion against the whole volume which is, perhaps, undeserved, as the author, who practises at Carlsbad, is probably better informed about the German universities and watering-places.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

A SCISSOR-CLAMP FOR EXTERNAL HÆMORRHOIDS OR OTHER SMALL TUMOURS.
(REGISTERED)

IT has long been the aim of surgeons to devise an instrument that would cut and clamp by the one single movement of the finger and thumb. Such an instrument I have endeavoured to place before the medical profession. Its action is self-evident, and requires no explanation. The simplicity of the instrument at once strikes the observer. Nevertheless, it has taken eight months' hard working out; the great difficulty found in practice was to get the clamp to work and clamp throughout its whole length before the scissor-blades began to move.



With the instrument as it now is this has been accomplished, the clamp being firmly closed before the blades of the scissors begin to move. Anyone requiring it can have a rack fixed on the handles so as to fix the clamp-action without holding the instrument. It has been beautifully made for me by Messrs. Maw, Son, and Thompson, Aldersgate Street, London. The instrument is elegant in form, light in weight, and very powerful. FRED. A. A. SMITH, M.D, C.M.
Cheltenham.

THE death-rate of Hastings for the last quarter was 17·42 per 1,000. Of the 219 deaths, 43, or 19.63 per cent., occurred among non-residents or visitors.

CURATIVE BEVERAGE IN DIABETES.—"Martineau's remedy" for diabetes is an aerated (carbonic acid) water in which carbonate of lithium and arseniate of sodium are dissolved under pressure during the process of manufacture, in the proportion of three grains of the former to one-tenth of a grain of the latter in each two pints of the carbonised water. It is used instead of ordinary aerated water at meal-times.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 4th, 1887.

MEDICAL DEGREES FOR LONDON STUDENTS: ANOTHER NEW DEPARTURE.

WE announced last week that the Councils of University College and King's College, London, had initiated a scheme for obtaining a charter for a university in and for London, the constituent colleges of which should include those two Colleges and such other colleges and medical schools as desire to take part in its formation. This is a short and ready cut to the creation of a teaching university in London, founded upon the educational units existing in the metropolis, and having a basis and representative constitution corresponding to that of the majority of successful universities. The copies of the petition have not been circulated, but we are enabled to publish in another page the text of the propositions made; and it will be well for the deans and Councils of the metropolitan medical schools to study the petition with care, and consider what part they will take. The essential points in the scheme are (1) to establish a teaching university in London granting degrees of average standard (equal to those of the Edinburgh University); (2) representation of the teaching bodies—medical as well as lay—on the governing body of the university; (3) the Colleges of Physicians and of Surgeons to constitute the Medical Faculty, with free scope and full liberty of action in all matters medical; (4) the licence of these two bodies to be the preliminary to the degree; (5) attendance at the affiliated colleges and schools to be necessary, as at all other universities; (7) to make the new university essentially a London one, leaving the present "London University" to discharge its "imperial" functions.

The course adopted by the Councils of the two Colleges appears to have been somewhat hurried. It is much to be regretted that communications of a formal nature do not appear to have been made, with a view to ascertaining the opinions of other teaching bodies. The Councils of these Colleges do not include a very large professorial element, and contain only a small proportion of actual teachers. The first immediate effect of the scheme has been to reveal elements of dissension in the Council of one of the bodies. Lord Kimberley, Dr. Buchanan, Mr. Cozens-Hardy, M.P., Dr. Wood, Mr. Prevost, Sir Julian Goldsmid, and Lord Justice Fry are reported to have tendered their resignation as members of the Council of University College, on the ground that the proposed scheme will inflict an injury on the University of London, of the Senate of which body many of these gentlemen are members. This, however, although a sufficient reason for the action of the seceding members, does not touch the gist of the question, and, influential and important as are the protesters, University College could afford to bear the loss to its Council if the scheme received the support of the metropolitan medical schools generally, and if there arise out of it—what all agree to be needed—a true teaching university in and for London, on the Councils of which the great teaching bodies of the metropolis are adequately represented. There can be no doubt in any unprejudiced mind that such a body would be far better fitted to perform efficiently, justly, and with due regard to the various and shifting exigencies of metropolitan teaching, the functions of a university than would the two Colleges of Surgeons and Physicians of London apart. The latter are at best anomalously constituted corporations, themselves in urgent need of reform, and without the necessary representative character. It would be in many respects a misfortune for the schools to be left in their hands exclusively, and such a scheme as is here put forward is at once more reasonable in its essence and more just in its basis and framework than the monopolist scheme of the two medical corporations. On the other hand, the scheme is drawn with too obvious an eye to the special pride of place of University and King's Colleges; the medical schools generally may well claim to be put on a perfectly equal and commanding footing in the governing body. These points will require discussion and adjustment. The intervention of jealousies and individual interests is the rock on which all these schemes seem likely to split. Each faction seeks to promote the interests of its own pet institution, and to make the public need a means of local aggrandisement. Surely it may be possible in the end to treat all such opposing efforts as mutually destructive, and to organise a plan in which all may join. For this it is likely, as we have said from the first, that a Royal Commission will be necessary.

RECENT GERMAN LITERATURE OF GASTRIC DISORDERS.

BROUSSAIS held the opinion that the origin of all diseases was to be ascribed to gastric inflammation, using this term in its most extended meaning to include all derangements of the *primæ viæ*. Although such a doctrine only provokes a smile nowadays, the subject of disorders of the stomach is no doubt of extreme importance. In Germany unusual activity has been displayed in this department during the last few years, and it will be interesting to ascertain what advances our medical brethren in that country are making in this respect, and from what standpoint, to use their own favourite expression, they view disorders of the stomach. Their medical journals are teeming with papers on the subject, and the *Berliner Klin. Wochenschr.*, No. 7, 1887, contains an analysis of five recent papers all dealing with the stomach and its secretions.

The point chiefly debated is the theory of Van d. Welden, that in cancerous stenosis of the pylorus free hydrochloric acid ceases to be secreted by the stomach, none being found if its contents are examined two or three hours after a meal; while, on the other hand, in so-called nervous dyspepsia, in dilatation and in simple gastric ulcer, this acid is commonly increased, certainly is never absent.

It may be premised that in order to determine whether any acidity present is due to free acids or to acid salts, a saturated alcoholic solution of tropæolin may be used; this turns to a deep brownish-red with free acids, but to a light yellow with acid salts. Bidder and Schmidt have definitively established the fact that free hydrochloric acid is present in the healthy stomach during digestion by elaborate chemical procedures, which are, however, too complicated for clinical use. The

further differentiation of any free acids is easily made by methyl-violet, which turns to an intense blue with free hydrochloric acid, even when diluted up to 1.25 per 1,000. This is the usual test, but, as will be seen presently, Cahn and Mering object to it. There are other colour-tests, but all are influenced more or less by albumens and peptones (Ewald). As to lactic acid, which Ewald declares to be present only in the beginning of digestion, its presence is ascertained by a mixture of carbolic acid and ferric chloride, diluted with water to an amethyst-blue tint; this turns to a greenish-yellow with even .5 per 1000 of lactic acid. The liquid contents of the stomach, withdrawn by aspiration through a slender soft tube, one end of which the patient swallows with gentle assistance, should be filtered to separate the peptones. The lactic acid may be also separated by shaking up with ether.

To go back to the theory that the absence of free HCl is a constant sign in cancer of the pylorus, Cahn and Mering (*Deutsches Archiv. für Klin. Med.*, Bd. xxxix, p. 233) contest this on the ground of the unreliability of the tests commonly used, in particular the methyl-aniline test. Not only neutral chloride solutions but magnesia-mixture may produce a blue with this test; so may certain neutralised fluids from the stomach; also dissolved peptones, as before mentioned; amido-acids, and, in a less degree, mucin. They also state that lactic and fatty acids are not formed when a meat diet is given, but only free HCl (*Zeitschr. für Klin. Med.*, Bd. xii, H. 1, 2), whereas Ewald insists that lactates are formed as usual, while he agrees that the fatty acids are absent in such diet. The above authors find that free HCl is not absent in cancer of the stomach.

P. Zweifl endeavours to assist the diagnosis of cancer by ascertaining the time of absorption of iodide of potassium (three grains), by testing either the saliva or urine (*Deutsches Archiv. für Klin. Med.*, Bd. xxxix, H. 3, 4). Its presence is usually to be shown within from eight and a half to seventeen minutes. A longer time than twenty minutes would accordingly indicate either cancer or simple dilatation of the stomach, and the latter diagnosis can be excluded by the sound or by gaseous distension.

Jaworski and Glusinsky protest against drawing clinical conclusions from physiological observations on dogs' stomachs (*Zeitschrift für Klin. Med.*, Bd. xi, H. 1, 2). They used three methods of examining the digestion, namely, Leube's ice-water method, testing after a meal, and their own albumen method. The two first methods have been shown to be unreliable by Ewald, Riegel, and others, and the last is still more so. This exists in giving a little cooked egg, and examining after a time the aspirated contents of the stomach. The authors conclude that the stomach is not a chemical digestor, but merely a recipient of the food, a view which has been very sharply criticised by Boas.

Riegel has an article in the *Zeitschrift für Klin. Med.*, 1886, xi, H. 1, concerning the pathology of "hypersecretio acida," based on the careful observation of four cases. It is very doubtful how far it is justifiable to seize upon a particular clinical fact—in this case an over-secretion of hydrochloric acid—and to erect a clinical structure upon it and call it a disease *sui generis* (hypersecretio acida). But such is the fashion of the day, though far less in this country than in Germany.

In these four cases albumens were digested in normal time, but bread-stuffs were digested very slowly. The stomach was distended in all four; the appetite was good; there were pyrosis and thirst. The best treatment was "washing out" the stomach, and the use of alkalies; the diet was chiefly albuminous, and small doses of opium were given with benefit for the thirst. Thus these four cases were published as if hyperacidity were a curiosity, but presently Riegel, in a further article (Bd. xi, H. 2 and 3 *ib.*) admits that the symptom is a common one.

In this article Riegel goes into the whole subject of gastric disorder. Leube's method of examining the contents of the stomach a certain time after a meal is used, but chemical tests are also instituted to determine the power and strength of pepsine, and the amount and kind of acidity. Riegel distinguishes four groups, as regards the acidity present, in which, namely:

1. There is normal acidity (possibly, however, with severe derangement).
2. Free HCl and peptic power have quite disappeared.
3. Free HCl is present, but organic acids preponderate.
4. The peptic secretion is increased.

In cancer no free HCl was found, and no pepsine, but Riegel differs from Ewald in ascribing the absence of free HCl to its neutralisation by the cancerous juices. Each author has observed a case of duodenal cancer also with loss of HCl.

Riegel's views have lately been published *in extenso* in the *London Medical Record*, so they are here mentioned but briefly. In dilatation of the stomach free HCl was never missed. In one case of toxic gastritis, however, from poisoning by H_2SO_4, there was enormous distension (to the symphysis pubis), and in this case no free HCl was ever found. In the cases of dyspepsia (coming under the two last groups) the amount of HCl varied extremely, but it was seldom absent. The term "catarrh" is avoided. In nervous dyspepsia Leube is confirmed in the statement that the peptic power is intact. Riegel prefers the evening for washing out the stomach, so that it may have about twelve hours' rest afterwards. In cancer even large doses of HCl failed to make any difference in the acidity and peptic power of the contents when examined after aspiration.

Jaworski has just written again on the subject of hyper-acidity (*München. Klin. Wochenschr.*, No. 7, 8). This symptom, he insists, accompanies all disorders of the stomach, acute and chronic; but, if the condition persists long, the HCl becomes much lessened, and may entirely disappear. In other words, the "acid catarrh" may pass on to chronic "mucous catarrh," with entire derangement of function. This may occur from various causes, which are placed under two heads, namely, (*a*) spontaneous; (*b*) the use of alkaline drinks. Amongst the spontaneous causes of diminution or even cessation of HCl are the following: (1) Gastric ulcer with hæmorrhage. The latter is preceded by great excess of HCl (and Riegel classes it under "hypersecretio acida"), which at last leads up to and is temporarily relieved by hæmorrhage; but in some cases HCl ultimately ceases to be formed. (2) Dilatation. (3) The prolonged use of alcohol or other irritants (*Wien. Med. Wochenschr.*, No. 49, 1886). (4) Old age has a great predisposing influence (*ib.*, No. 50). The causes due to the persistent use of alkaline drinks embrace the prolonged use of Carlsbad and similar mineral waters, alkalies generally, and even borax.

Jaworski's cases were observed in the *clinique* of Professor Korczynski, of Cracow; the modes of examining the gastric contents are detailed in the already cited *Zeitschrift für Klin. Med.*, 1886, Bd. xi, H. 2 and 3. Finally, Kraus (*Prager Med. Wochenschr.*, 1887, Nos. 7 and 8) publishes cases showing that occasional examinations may only mislead.

Such is the present state of the question. Progress appears to be arrested for a time for want of a simple and certain method of ascertaining the amount of HCl and lactic acids present, together with the amount of bases.

SANITARY CONTROL OF FACTORIES AND WORKSHOPS.

THE *Moniteur Belge* has published the text of an important report by the Belgian Minister of the Interior, and of two decrees of the King, which have for their object the improvement of the sanitary regulation of factories and workshops in Belgium. In that country the supreme control of most sanitary matters, such as the adulteration of food and the condition of the dwellings of the poor, is at present vested in the communal authorities, and the system seems to be in need of reform in many important respects. But in the control of dangerous and unhealthy factories and workshops the Central Government has some voice, and the need of reform in this control, as shown by the inquiries of the Commission on Labour, has called forth the recent Royal decrees.

The first of these decrees provides, amongst other things, that future applications for permission to carry on one of the establishments of this latter class must be accompanied by detailed information as to the measures proposed, in the interests of the work-people, for counteracting the dangers attaching to the particular business, and also by a special report, prepared by an official or a competent technical commission on those measures. The authorisation to be granted by the Central Government is to prescribe specifically the measures which that special report shows to be essential. The managers of each authorised factory are, further, to make an annual report to the Minister of the Interior, showing the approximate number of hands employed, their age and sex, the duration of their daily labour, the amount of rest during each day and each week; the means of warming, lighting, and ventilating the workrooms; the rules of cleanliness observed in the workshops and by the workers; the amount of air-space for each person; the arrangements for medical assistance in cases of accident; the precautions taken against explosions and fire, against the escape of steam, gas, and dust, and against accidents from machinery; and the measures for ensuring generally good sanitary arrangements in the workshops, as regards the alternation of work, the meals, the bath-rooms, the closets, etc. The Government reserves power to impose any fresh restrictions that may from time to time appear necessary.

In the circular letter, in which the Minister of the Interior draws the attention of the provincial governors to this decree, the great need that exists for the improvement aimed at is set out, and the Minister further incidentally refers to the fact that boys under twelve years and girls under fourteen years of age are prohibited from working in mines, and points out that a similar restriction should be attached to the more dangerous and unhealthy occupations now being dealt with.

The second of the Royal decrees has for its object the improvement of the medical supervision of unhealthy and dangerous factories. The Corresponding Members of the Medical Provincial Commission are to be augmented, and are to be appointed in all towns and communes where their presence may be deemed to be useful. They are to be nominated by the King for a term of six years, on the proposal of the governors, and with the approval of the provincial medical authorities. They are to supply all information required of them by the Medical Commission, and at the end of each year they are to draw up a report on the matters deserving attention. Hitherto these Correspondents have been obliged to be members of the medical profession, but in future the post may be held by apothecaries, veterinary surgeons, burgomasters, communal secretaries, schoolmasters, journalists, engineers, or architects. The Minister of the Interior hopes that the opportunity of obtaining the title of "Correspondent" will encourage many persons to co-operate in the work of sanitary reform in the country.

RELATIVE RANK.

LETTERS from all parts of the world continue to pour in upon us. It is becoming more evident every day that unless something is done to allay this universal discontent, the medical services of the British and Indian armies will become so discredited at the sources of supply as eventually to drive the authorities to seek recruits among the least eligible ranks of the profession. It appears to us from the evidence before us, which is simply overwhelming, that the gulf between the combatant and medical branches of the army is becoming wider and deeper every day, and we must add that this fact, for such it is, is not sufficiently appreciated by those in authority on both sides of the question. Our correspondents, one and all, say that it is useless to go on repeating that the abolition of relative rank has made no difference; to those whose duties are confined to administrative work in London offices, probably it has not; but the executive officers of the departments of the medical services at home and abroad tell a different story, and with one accord say that their official and social positions have been perceptibly lowered by this measure. Ere it is too late, we most earnestly urge the authorities concerned to take up this question seriously, and to find some reasonable settlement of the points at issue. It is quite clear that an explanatory word or two in a warrant will not satisfy the service, or meet the requirements of the case. Whatever the intention of this measure was, its effect has been most mischievous. It is not the business of the press to suggest a remedy; those who unintentionally did the wrong must find the remedy.

In this connection attention may be drawn to the letter which we publish to-day recalling the terms of the Warrant of 1863, which, far from treating relative rank as of no value and its abolition or otherwise as unimportant, attributed to it the highest importance. That Warrant superseded the Royal Warrant of 1858, which was the issue of a most important Royal Commission. The supersession of the privileges granted by the Warrant of 1858 was the beginning of the subsequent and present troubles.

DR R. H. B. NICHOLSON, of Hull, has been elected president of the Literary and Philosophical Society of that town.

AT the coming election for members of Council of the Royal College of Surgeons there will be three vacancies to fill, as it is the turn of Sir Spencer Wells, Mr. Wood, and Mr. Jonathan Hutchinson to retire. Mr. Hutchinson will offer himself for re-election, and it is expected that the other retiring members will imitate his example. Mr. Willett, and most probably Mr. Gant, will be candidates for seats on the Council.

Sir Edward Sieveking, having fulfilled the period of twenty years as a physician to in-patients at St. Mary's Hospital, has been appointed consulting physician.

Sir Spencer Wells was elected Corresponding Foreign Member of the French Academy of Medicine at a sitting last Tuesday; and he has also received the diploma of Honorary Fellow of the German Society of Surgery, conferred at the Congress recently held in Berlin—both very rare and highly valued professional distinctions.

We regret to report that on Saturday last Mr. Lund was seized with severe indisposition while engaged in examining at the Hall on the Embankment. His condition was so serious as to render removal out of the question, and he still remains at the Hall; but we are glad to say that he has much improved in health, and it is hoped that he may be removed to-day (Saturday).

Surgeon-General O'Nial, C.B., prior to his departure for England, was entertained at dinner by Brigade-Surgeon Gore and the officers of the Army Medical Staff, at Cairo. Covers were laid for thirty-seven, and the guests included Sir Evelyn Baring, Her Majesty's Minister Plenipotentiary, Major-General Hales Wilkie, Surgeon-General Murray, and officers of the head quarters staff and departments.

The death of Dr. Alfred Edward Hooker, House-Surgeon to the Presbyterian Hospital, New York, from diphtheria, contracted from a patient in the hospital, occurred on April 27th. Dr. Hooker, who is described as a young man of great promise, is another example of the heavy debt which our profession yearly pays to that dread disease—with how little recognition from the public!

THE MEDICAL PROFESSION IN RUSSIA.

According to a recent return there were, in 1886, 17,459 medical men, 550 medical women, 2,229 veterinary surgeons, and 450 dentists in the Czar's dominions.

THE JACOB TESTIMONIAL.

We are requested to inform subscribers to the Jacob Testimonial, that the presentation of the address and a purse of 500 sovereigns will be made on Monday, June 6th, at 5 o'clock P.M., at the Royal College of Surgeons, Dublin.

ST. JOHN AMBULANCE ASSOCIATION.

Two series of lectures—one for male and one for female pupils—have recently been given in connection with the Co-operative Society, Gloucester, by Mr. J. P. Wilton, M.R.C.S., of that town. The classes were attended by nearly one hundred members.—Dr. Charles Sanders gave during the winter a gratuitous course of lectures in connection with the West Ham Church Institute. Sixteen out of the nineteen members of the class who presented themselves for examination obtained the certificate of the St. John Ambulance Association. Dr. Sanders was presented by his class with a handsome edition of the works of Charles Dickens.

UNIVERSITY COLLEGE, LONDON.

Sir George Young, Bart., the newly-elected President of University College, after distributing the prizes to the successful students of the Medical Faculty, spoke at some length on the necessity of a teaching university for London; he insisted on the claims of University College to have a share in the constitution of such a university, and shadowed forth the scheme of the petition printed at page 1232. The fact that with a total number of 337 students, and an entry last year of 104, only 45 passed the medical examinations of the University of London, is perhaps as strong an argument as could be found in favour of the contention that that University is not meeting the wants of medical education in London, when it is remembered that University College specially lays itself out to attract and prepare candidates for the University examinations.

LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

Dr. L. C. Wooldridge, commenced his course of three lectures on "Physiology and Nutrition," in the theatre of the Royal College of Surgeons, on June 1st, and will be succeeded by Mr. Christopher Heath, who will deliver three lectures on "Certain Diseases of the Jaws:" the first, on June 8th, on Cystic Diseases; the second, on June 10th, on Tumours; and the third, on June 13th, on Disease of the Temporo-Maxillary Articulation and Closure of the Jaws. The annual course of lectures will be brought to a close by Mr. Henry Power, who will deliver three lectures on "The Relations of Ophthalmic Disease to Affections of the General System," commencing on June 17th. The lectures will commence at four o'clock precisely each day.

THE PUBLICATION OF INDECENT LAW REPORTS.

We notice with satisfaction that a Bill has recently been introduced by influential members of the House of Commons to prevent the publication of indecent details in proceedings of courts of justice. The most important clause runs as follows: "In any proceedings, civil or criminal, it shall be lawful for the Court at any time by order to direct that the details of matters of an obscene or indecent nature in such proceedings, or in any specified part or parts thereof, shall not be published." The order is to be made in open court, and disobedience in respect of it will be visited with a month's imprisonment or a fine of £50. No person, however, is to be punished in respect of any *bonâ fide* report of any question of law raised or decided in any case, with such statement of the facts as is reasonably required to render such report intelligible, or in respect of any publication of any report to counsel, solicitor, parties, witnesses, or other person concerned in any legal proceedings for the purpose of such proceedings. What may be the prospect, in the present state of public business, of the measure becoming law we cannot pretend to determine, but there is a very urgent need for some such restriction, and we hope that the time is not far distant when this Bill, or some similar one, shall be entered on the Statute Book.

CREMATION IN NEW YORK.

During last year rather less than ninety incinerations were performed at the crematory for New York, whereas the income from not less than 150 would be required to defray the annual outlay. The shareholders, however, are prepared to make good the deficiency by an assessment. The report of the Society explains that in addition to the religious scruples of various denominations, an unexpected obstacle has been encountered in the position taken by the health authorities of New York city, who have refused to issue permits for incineration, on the ground that the laws of the State provide that all dead human remains shall be disposed of by interment. Such a radical change in the customs, tastes, and prejudices of a people could, of course, hardly be expected to be effected in so short a space of time. Indeed, although we may venture to anticipate that the public will, as years go by, show more favour to this method of disposing of the dead, the habit of inhumation, sanctioned by centuries of usage, will probably never entirely disappear until the Legislature abolishes it. Such a course can necessarily only be possible in the far distant future.

FIRES IN THEATRES.

The burning of the Opera Comique in Paris has once more directed attention to the peculiar liability of theatres to be destroyed by fire, the appalling loss of life by which such catastrophes are too often attended, and to the means which should be taken as measures of safety. It is a significant fact that the danger to this theatre had been recognised by successive Ministers since 1883. In the spasm of energy which always follows such an event, several members of the Paris Municipal Council have addressed a letter to the Prefect of the Seine demanding that the Municipal Council should be convened at once in an extraordinary session, with a view to adopt without delay measures calculated to ensure the safety of the public at all places of

public entertainment. The authorities at Vienna, immediately after the burning of the Ring Theatre, introduced numerous reforms, yet it is said that only one of the theatres of Vienna—the new Opera House itself—is safe. At the last meeting of the Metropolitan Board of Works attention was called by one of its members to the requirements of the Board for structural alterations in the Variety Theatre, Hoxton. The action taken by the Metropolitan Board of Works for ensuring the safety of the London public in theatres, music-halls, and other places of amusement has been in the right direction, but much remains to be done.

A CHILD WITH THREE RIGHT HANDS.

At a meeting of the Obstetrical Society of New York in March, Dr. Grandin exhibited a photograph and drawings of a case of deformity in a child, aged 13 months, which he had seen in Long Island City. According to the report published in the *American Journal of Obstetrics*, the child was a female, had six teeth, and, with the exception of the deformity described, was healthy in every respect. The upper arm of the right side consisted of two humeri, each articulating with a radius and an ulna. Between these radii and ulnæ were a third radius and ulna, possibly also articulating with the lower of the two humeri, the arm being semi-pronated. There were three hands, the upper (during semi-pronation) had four fingers and one thumb, the latter always contracted, showing absence of the extensor muscle, and on its ulnar side two rudimentary fingers; the middle hand had four fingers, always contracted, the thumb lacking; the third hand had five fingers. Thus the child possessed on the right side two humeri, three radii, three ulnæ, three hands, with a total of fourteen perfect and two rudimentary fingers. The hand resembled a monstrous crab more than anything else. Each hand could be moved separately. In regard to heredity, the father's aunt had two thumbs on each hand, and another relative, still on the father's side, had some peculiarity in the joints of one hand. The child's brother had a rudimentary tail, so to speak, in the shape of a coccyx projecting at least one inch.

THE METROPOLITAN COUNTIES BRANCH.

The *conversazione* given by this Branch on Thursday evening, May 26th, was a very agreeable and altogether successful event. The guests, who numbered nearly 1,300, were received by the President, Dr. J. S. Bristowe; the President-elect, Mr. A. E. Durham; the Treasurer, Mr. Sibley; the Honorary Secretaries, Dr. Grigg and Mr. Eastes; and others of the office-bearers of the Branch. The South Kensington Museum, which contains in itself the wherewithal to render a visit enjoyable, was brilliantly lit by electricity. In one room an excellent programme of music was given by the string band of the Chatham division of the Royal Marines, whilst, in the lecture-theatre, Mr. Plater's Glee Union sweetly discoursed glees, madrigals, and part-songs. A special performance of the National Anthem was given in the course of the evening by the band and the glee union united, when the "Jubilee" verses were sung by the latter. Among those who accepted the invitation of the President and Council, and most of whom were present, were Sir Albert Woods, Sir Saul Samuel, Sir R. Thorburn, Sir A. Borthwick, M.P., Lord Chief Justice Fry, Sir A. Rollit, M.P., Prebendary Harry Jones, Mr. W. S. Savory, Sir S. Wells, Sir G. Elliot, M.P., Admiral Sir G. Richards, Sir Graham Berry, Sir Arthur Watson, Mr. Frank Holl, R.A., Mr. J. Pettie, R.A., Mr. T. O. Barlow, R.A., Sir A. and Lady Shea, Dr. A. Gamgee, Dr. P. H. Watson (Edinburgh), Professor Balfour (Oxford), Mr. C. G. Wheelhouse (Leeds), Sir W. B. Foster, M.P., Mr. H. R. Ker (Halesowen), Professor Rawdon Macnamara (Dublin), Mr. Cadge (Norwich), Dr. C. Holman (Reigate), Dr. Evans (Northampton), Mr. Sympson (Lincoln), Dr. Crosse (Norwich), Dr. Needham (Gloucester), Dr. Bowles (Folkestone), Dr. Parsons (Dover), Professor D. MacAlister (Cambridge), Dr. Trend (Southampton), Dr. Waters (Chester), Mr. Lawson Tait (Birmingham), Dr. J. B. Pettigrew (St. Andrews), Sir A. Blyth, Sir T. Crawford, M.D., Sir C. Mills, M.P., Sir W. Smart, Sir John Reid, Professor Flower, Sir P. Jennings, Mr. John Addison, M.P., Dr. T. Robertson, M.P., Mr. Justice Wills, Sir W. Charley, the Rev. H. White, the Master of the Skinners' Company, the Presidents of the Geological and Pharmaceutical Societies, and of the Anthropological Institute, Mr. Henniker Heaton, M.P., Dr. Günther, General Sir R. Wilbraham, the Bishop of Gibraltar, Professor Liveing (Cambridge), Surgeon-General Mackinnon, Mr. T. L. Bristowe, M.P., Dr. R. Farquharson, M.P., Professor B. Price (Oxford), Field-Marshal Sir P. Grant, and Dr. Aitken (Netley). The physicians and surgeons of the metropolis, and other members of the Branch, were also present in large numbers.

PASTEUR'S TREATMENT OF HYDROPHOBIA.

The number of persons subjected at the Institute to the Pasteur treatment during the fourteen months from the end of October, 1885, to the end of December, 1886, was, according to the report of the Perpetual Secretary, 2,682. Of this number, 2,164 had been bitten by animals known for certain to have been mad at the time of biting, and the remaining 518 by animals suspected to have been mad. Of the 2,164 bitten by animals undoubtedly mad, and treated according to Pasteur's method, 29 persons died, representing a proportionate mortality of 1.34 per cent. Of the 518 bitten by animals presumed to be mad and subjected to Pasteur's treatment, only 2 died; that is 0.38 per cent. The statistics of rabies before the discovery and application of Pasteur's method gave a mortality at lowest of 16 per cent. If the above 2,164 persons had not been treated by the Pasteur method, the mortality among them would have been, not 29, but 346. That is to say, of the 2,164 persons, 317 owe their present existence to Pasteur's method. With regard to the most dangerous cases, there were 48 persons bitten by mad wolves, 186 persons bitten on the head or face by animals known to be mad, and 28 bitten on the head or face by animals presumed to be mad. Of the 48 in question, 7 died—a mortality of 14 per cent. The mortality in similar cases before the use of Pasteur's method was believed to have been 60 to 80 per cent. Moreover, 3 of the 48 persons had actually developed rabies before the application of the treatment, and their deaths may, therefore, be left out of account, thus reducing the mortality of this class under M. Pasteur's treatment to 8 per cent., as against 60 to 80 per cent. without M. Pasteur's treatment. That is, out of the 186, 163 would have died but for M. Pasteur's treatment, whereas, with M. Pasteur's treatment, only 9 died. Of the 28 in the last class, only one died—a mortality of 3.57 per cent. The statistics of the results of the intensive treatment applied to the more dangerous cases are particularly interesting; out of the 136 specially serious cases in which the simple treatment was applied, 9 died; in 50 specially serious cases in which intensive treatment was applied, no mortality whatever followed.

MICRO-ORGANISMS OF SCARLATINA.

In his lecture at the Royal Institution on May 27th, Dr. Klein mentioned some further researches which he has been making with regard to the organisms of scarlet fever. In addition to facts formerly reported, he now states that similar organisms to those of the Hendon disease in cows have been found in the blood and tissues of patients suffering from scarlet fever, and also in tins of condensed milk, which were inspected in connection with certain cases of scarlet fever. We must defer our remarks on this research until we have published an important paper on the contagium of scarlet fever by Dr. Allan Jamieson, and Mr. A. Edington, whose results do not apparently coincide with those obtained by Dr. Klein. As Dr. Klein's researches are open to grave criticism, the matter as yet cannot be looked on as settled. On the occasion of a discussion at the last meeting of the Royal Agricultural Society on the report of the Agricultural Department of the Privy Council on milk scarlatina, on which a report was presented, attention was called to Dr. Klein's lecture at the Royal Institution on this subject. Lord Egerton

thought the Council should suggest to the Agricultural Department of the Privy Council to undertake further investigations into the subject, with a view to making clear whether it was possible that scarlatina could be communicated direct from the milk of cows. It was pointed out by Mr. Cope that the report of the Privy Council was the result of an inquiry into an outbreak of disease at Hendon, and that Professor Axe had ascertained that the eruptive disease of the udder and teats of cows existed not only at Hendon but at four other places at the same time, and that the outbreaks of scarlatina and this disease were identical in point of time, but, as a matter of fact, no outbreak of scarlatina occurred in connection with the four other places. It was stated that the Agricultural Department had received instructions from the Government to make any inquiries necessary when an opportunity was afforded by an outbreak of this eruptive disease, and it was decided by the Royal Agricultural Society to ask for an exhaustive Governmental inquiry into this important matter.

BIRMINGHAM MEDICAL BENEVOLENT SOCIETY.

THE sixty-fifth annual general meeting of this Society was held on May 27th. Dr. James Johnstone was in the chair, and there was a good attendance of members. Dr. Thomas Savage, honorary secretary, read the annual report of the directors, which stated that during the year the Society had accomplished its usual amount of work in a quiet, unostentatious manner. The invested funds of the Society at the end of 1886 amounted to £10,978. During the year fifteen annuitants had received grants, varying in annual value from £10 to £40. The roll of benefit-members contained 272 names. The financial statement showed that the total receipts during the year amounted to £615 2s. 4d., and grants had been made to the amount of £465. A new annuitant, a member of the Society, who was in reduced circumstances, had been added to the list, and a grant of £40 a year had been made. The widow of a deceased member had also been made an annuitant. Since the commencement of the present year the widow of a deceased member had died. She was in the receipt at the time of her death of £25 a year, and had received a total of £837 10s. from the funds of the Society. Her husband had paid, as a member of the Society, 17 guineas. Twelve new members had been elected, and six had died. Mr. Alfred P. Evans, West Bromwich, was appointed president; Dr. Charles Warden, president-elect; Mr. Arthur Oakes, Birmingham, and Mr. J. Arthur, Henley-in-Arden, vice-presidents; Dr. Marriott, Leamington, Mr. Priestley Smith, and Mr. William Thomas were added to the directorate; Mr. Bartleet and Sir James Sawyer were reappointed treasurers; and Dr. Thomas Savage was re-elected honorary secretary. The members afterwards dined together at the Grand Hotel under the chairmanship of Mr. Evans, the new president.

OBSTETRICAL SOCIETY OF LONDON.

AT the meeting held on Wednesday, June 1st, it was unanimously agreed that Her Majesty the Queen be presented with a humble address from the Society on the occasion of the completion of the fiftieth year of her reign. Mr. Lockwood exhibited microscopic sections from a human embryo one-third of an inch in length, showing deficiency of the greater part of the spinal cord. Dr. Bluett exhibited the fœtal membranes from a case of natural labour; two tumours were found in the membranes, and Dr. Herman believed that they might represent an amorphous fœtus and its cord. Dr. Herman brought forward the upper part of a vagina with the cervix and base of the bladder, which sloughed away spontaneously from a woman who had not been pregnant for eight years. She recovered, but a vesico-vaginal fistula remained. Dr. Malins exhibited some hydatids from the mesentery. Dr. William Duncan showed a sloughing fibroid polypus; and Dr. Williams, Mr. Meredith, and Mr. Malcolm brought forward some remarkable ovarian tumours, which, together with Dr. Bluett's specimen, were referred to a committee. A good discussion followed the reading of a paper "On a Case of Cæsarean Section" by Dr. Cullingworth. The merits of Porro's operation, as compared with Cæsarean section, were actively debated. The other papers which were read were a monograph "On the Mechanism of the Third Stage of Labour" by Dr. Champneys, and an instructive memoir "On Tubo-Ovarian Cysts" by Dr. Griffith. The debate on the latter was adjourned.

THE EFFECT OF INFECTIOUS DISEASES ON THE EXHALATION OF CARBONIC ACID.

AT a recent meeting of the Académie des Sciences, M. Arloing made some remarks on the exhalation of carbonic acid in infectious diseases produced by aërobic and anaërobic microbes respectively. If the microbes are aërobic, they rob the blood-corpuscles of their oxygen, and deprive the tissues of their agent of combustion (bacillus anthracis, microbe of chicken-cholera). If the microbe is anaërobic, and acts as such in the organism, then oxygen should be a hindrance to the manifestation of its properties (gangrenous septicæmia). Between two animals which succumb—one through inoculation of the aërobic microbe, and the other through the introduction of the anaërobic microbe—important differences are met with in respect to the intensity of respiratory combustion. M. Arloing chose for these experiments diseases which sometimes attack the human species—namely, malignant pustule and gangrenous septicæmia. In these affections, M. Arloing found that the quantity of carbonic acid exhaled diminished during the course of the malady, and especially in the few hours before death. In the case of malignant pustule, the modification appeared to begin as soon as the effects of inoculation began to show themselves; while in gangrenous septicæmia there was for a few hours a slight increase in the quantity of carbonic acid exhaled. In both cases there was diminished respiratory combustion.

HAMMER-TOE AND HALLUX FLEXUS.

SOME interesting facts relating to these deformities were brought before the Clinical Society by Mr. William Anderson, Assistant Surgeon and Lecturer on Anatomy at St. Thomas's Hospital, as reported at page 1215 of this day's JOURNAL. The condition known as hammer-toe has until recently been looked upon as a natural result of improperly-shaped boots, and in most cases has been summarily disposed of by amputation of the offending member. It is now, however, shown to present several features deserving attention, and to offer an entirely unsolved problem for the curious in pathological speculation. The actual lesion, as pointed out by Mr. Shattock and Mr. Anderson, who have investigated the matter independently, is a contraction of the inferior fibres of the lateral ligaments and of the glenoid plate, and neither muscles, tendons, nor fasciæ are at fault, except perhaps as a secondary result in very advanced cases. In typical examples the disease is confined to the first inter-phalangeal joint of the second toe; but it was shown that the condition recently described by Mr. Davies-Colley as "hallux flexus" was dependent upon changes of essentially the same pathological nature in the metatarso-phalangeal joint of the great toe—a fact of some anatomical interest in connection with the mode of development of the first metatarsal bone. The affection is bilateral in about one-half of the cases; it is essentially one of early life, rarely if ever originating after the age of 21, and sometimes appearing during infancy; and it is often inherited. The two sexes are equally liable to the deformity of the second toe, but hallux flexus has hitherto been seen only in males. A condition resembling hammer-toe, in which several, or all, the digits are affected, is occasionally met with, but this is probably of a wholly different nature. With regard to causation, it was demonstrated that the much-abused shoemaker must be acquitted of any share in the production of the deformity, although the use of ill-made boots is frequent enough as a concomitant, and may aggravate the inconveniences of the affection. These views, which were confirmed in the discussion by the remarks of Mr. Adams, Mr. Nunn, and Mr. Parker, not only open up a field for pathological investigation, but they have a very direct bearing upon the treatment of the disease. Mr. Anderson condemns tenotomy as

useless, and amputation as an unnecessary mutilation, which is, moreover, not unlikely to induce distortion of the adjacent toes; but he strongly recommends the removal of the head of the phalanx (or of the metatarsal bone in hallux flexus), the joint being laid open by a longitudinal incision through the dorsal integuments and extensor tendon. Mr. Adams, on the other hand, prefers subcutaneous section of the affected ligament, followed by the use of an extension-apparatus for some months after the operation. The paper was illustrated by a case showing the earliest stage of the complaint, before any deformity had appeared, by two casts lent by Mr. Adams and by dissections made by Mr. Shattock and Mr. Anderson.

POISONING BY CHLORATE OF POTASH.

Dr. Willie, of Halle, lately observed a case of poisoning by chlorate of potassium. The patient had taken 50 grammes of the drug daily for a month. The following were the symptoms: vomiting, profuse diarrhœa, dyspnœa, weak action of the heart, and cyanosis. The colour of the blood became like chocolate. In the milder cases of poisoning by chlorate of potassium, gastro-intestinal phenomena are exhibited, with vomiting and congestion of the liver and spleen. Abdominal pains are complained of, and there is loss of appetite. The urine is diminished in quantity, and contains albumen; delirium, coma, tonic and clonic spasms, and unconsciousness sometimes supervene. Death occasionally takes place when the patient's condition appears to be improving.

PARTHENINE.

The *Journal de Médecine* publishes the following note on parthenine. Parthenine is an alkaloid (or rather a resinoid extract) obtained from the *Parthenium hysterophorum*, a plant which grows in Cuba, in the Antilles, Patagonia, etc., and has long been employed as a febrifuge by the natives of Cuba. The *Parthenium hysterophorum* contains, besides parthenine, four other inert alkaloids, and parthenic acid, which crystallises. Parthenine has a bitter taste. In doses of 1 to 20 centigrammes it increases the digestive power of the stomach; in doses of 2½ grammes it slightly lowers the temperature. It has no influence on the urinary secretion. Experiments made with this substance prove its value as a febrifuge and as a remedy for neuralgia.

TRAUMATIC DISPLACEMENT OF THE PENIS.

Dr. Wagner, of Leipzig, has recently described, in the *Münchener Med. Wochenschrift*, a remarkable case which he had seen in 1883, in Professor Thiersch's wards. A child, aged about 5, had his prepuce accidentally torn off. The penis retracted under the scrotal integuments, and it appears that the surgeon who first attended the case did not recognise this condition, probably believing that the penis had been torn away with the prepuce. For twelve years the patient continued to pass urine through a fistulous depression above the scrotum. Professor Thiersch then performed a plastic operation, having discovered the position of the penis. He cut down on the incarcerated organ, separated adhesions, and adjusted the integuments around the glans. The result was perfectly satisfactory, and the penis was completely restored to its functions.

PROSTITUTION AND INSANITY.

At the first (Moscow) congress of Russian alienists, Dr. Praskovia N. Tarnovskaia, of St. Petersburg, communicated (*Vratch*, No. 9, 1887, p. 216) the results of the anthropometric examination of fifty habitual prostitutes, who had all been inmates of brothels for a period of not less than two years. For the sake of comparison she examined in the same way fifty peasant women of the same age, and as far as possible of the same intellectual development, etc. The results of this —probably unique—investigation may be summed up as follows: 1. The prostitutes presented a shortening, amounting to half a centimètre, of the antero-posterior and transverse diameters of the skull. 2. As many as 84 per cent. of habitual prostitutes showed various signs of physical degeneration, such as irregularity in the shape of the skull, asymmetry of the face, anomalies of the hard palate, teeth, ears, etc. 3. In 82 per cent. of the prostitutes the parents were habitual drunkards. 4. In 18 per cent. of cases the prostitute examined was the last survivor of a large family of eight to thirteen children, all of whom had died at an early age. 5. These facts afford grounds for the belief that prostitutes, as a class, furnish the largest contingent of subjects predisposed to nervous and mental affections. There is no special work in any language on this subject, nor are there any statistics as to the number of prostitutes yearly admitted to asylums. Dr. Tarnovskaia urges the desirability of collecting such statistics for the purpose of determining the part which professional prostitution plays in the causation of mental and nervous disease.

THE ACTION OF THE URETERS IN THE HUMAN SUBJECT

In the *Ejenedelnaia Klinitches Kaia Gazeta*, No. 1, 1887, p. 13, Dr. A. J. Zamshin, of St. Petersburg, describes an interesting case. The patient was a Finnish woman, aged 42, who was admitted under the care of Professor A. J. Lebedeff with an extensive recto-vesico-vaginal fistula, and in whom he was enabled to make direct observations on the fully exposed vesical orifices of both ureters. Dr. Zamshin made nine observations, each lasting nearly an hour, and the results may be given as follows: 1. In man, as in animals, the contractions of the ureters have a peristaltic character. 2. Contractions of both orifices do not coincide in time. Synchronous contractions on both sides were seen by the observer only very rarely. Of forty-seven contractions of the right and ninety-seven of the left ureter during five sittings, only three occurred simultaneously. 3. The number of contractions in the same ureter in the same period varied at various times; during a period of ten minutes, the right ureter, on four different occasions, underwent 12, 10, 4 and 7 contractions. 4. The quantity of urine discharged by the ureter at one contraction, as well as that expelled during a given period, varied on different occasions. 5. The quantity of urine discharged at a single contraction of the ureter varied, as a rule, from 0.8 to 2 cubic centimètres, the greatest quantity being 4 cubic centimètres. 6. No increase in the frequency of the contractions could be produced by an increased supply of drink. 7. Analysis showed that 10 cubic centimètres of the urine from the right ureter contained 95 milligrammes of urea and 68 milligrammes of chlorides, the corresponding figures for the left ureter being 85 and 65.

DETACHMENT OF THE RETINA.

Subsequent to Dr. Wolfe's successful demonstration of his operation for detachment of the retina at Paris in 1884 (Journal, December 20th, 1884), the attention of the profession in France was directed to the subject; and in the following year it was discussed at the annual Congress of the French Ophthalmological Society. In 1886 M. Warlomont reported to the meeting that he and M. Dransart had been successful in the treatment of some cases of that disease by iridectomy; and an inquiry into the merits of the two methods was entered upon at the instance of the Society. The result of that inquiry was communicated to the annual meeting in Paris on May 3rd. M. Poncet, the reporter, in summing up, stated that the greater number of the members of the French Ophthalmological Society had not been successful in any operative method hitherto employed for detachment of the retina. It appeared, therefore, that abstention from operative interference was desirable if it was wished to avoid the consequencees of sympathetic inflammation. M. Coppez, on the other hand, reported to the same meeting that, in eighteen comparatively recent iridectomies, he obtained only one complete and one partial cure. Five times the operation had proved injurious. With Wolfe's operation, in seventeen cases he twice obtained complete reapplication of the retina, and in almost every case a considerable improvement, which was still maintained, though several months had elapsed since the operation. In two (desperate) cases only, the operation appeared to have aggravated the process of

atrophy, which moreover existed at the time of the operation. M. Coppez therefore concludes that iridectomy rarely cures even recent detachments, and frequently makes matters worse, whilst Wolfe's operation is more rational and more efficacious. It is true that it produces few cures, but it almost always makes some improvement, and only rarely gives rise to complications. According to his observations it is also less painful, less serious, and, above all, more reliable than iridectomy. This discussion is a satisfactory indication of the interest and study bestowed upon the subject. It is the first step towards bringing the positive and negative conclusions into harmony. We would mention only one point which must not be left out of consideration, namely, that detachment of the retina should not be studied *en bloc*. The serum effused behind the retina may involve various regions, and the amount of loss of vision may either correspond to the site of the detachment, or the abolition of sight may, through other complications in its train, be out of all proportion to the apparent local lesion. This will determine the nature of the surgical interference. It is evident that when a detachment is situated on the border of the ora serrata bulging into the zonula, an iridectomy, performed at the border of the sclerotic, may evacuate the fluid, and a beneficial result will also be obtained in the state of general infiltration of the deep structures, whilst in other conditions Wolfe's operation seems to be the only means at our disposal for the emergency.

THE DANGER OF EMOTIONAL EXCITEMENT.

THE habit of reading sanguinary recitals bristling with the details of the most hideous crimes is one which can hardly fail to produce an unhealthy moral tone in those addicted thereto. Instances are not wanting in which the perusal of the legendary feats of Dick Turpin and his congeners has paved the way to the commission of crime by young and inexperienced persons, to whom crime had been described with a halo of heroism and courage, in which, as a matter of fact, it is generally wanting. The Birmingham coroner recently held an inquest on a young woman, the circumstances of whose death open up another point of view in the harmful results which may accrue from inconsiderate tampering with the emotions. The young woman in question had been to the Grand Theatre to witness the performance of a piece called "The World against Her." She was very much affected by what she saw, and took the earliest possible opportunity of putting an end to an existence which she had just seen depicted in such gloomy colours. No doubt suicide is a comparatively rare sequel to a theatrical performance; but most of us are probably familiar with the depression, occasionally of a very marked character, which may follow a more than usually lugubrious novel or play. Such an effect is, fortunately, ephemeral as a general rule, and affects one less acutely than the troubles of daily life. There are moments, however, when the mind becomes more amenable to such enervating influences, and there are persons who are constitutionally prone to experience violent emotional disturbance, and on whose nervous system too dramatic a recital may produce a really damaging shock. It is more particularly in individuals whose imagination is undisciplined and has not been made subservient to the reasoning faculties, that the most harmful effects are to be witnessed; and, under certain circumstances, the psychical depression may, as in the present instance, give rise to a suicidal impulse. In women and children the absence of due control over the emotions is frequently due to the unhealthy development which results from the ordinary system of female education. Violent emotional disturbances, when frequently repeated, leave a mark on the mind akin to the wrinkles which follow their expression on the features, and disfigure one like the other. Too great care cannot be shown in shielding the young and the emotionally weak from such influences, the effect of which may be injurious and lasting.

CUCAINE HABIT AND CUCAINE ADDICTION.

UNDER this title Dr. Mattison, of Brooklyn, calls attention to the severe and often fatal constitutional symptoms which have followed the use of this valuable but over-rated drug. There is little room for doubt that, consequent on the "craze" which was created in its favour, cucaine has been used with a recklessness which has produced the most untoward results. On the strength of experiments with large quantities of the drug, the activity of which may have been deficient, or to which the particular patients may have been unusually tolerant, it has been administered and injected, in doses varying from one grain to fifty, for every conceivable purpose, from procuring local anæsthesia during labour to the extraction of a tooth. If want of caution in the employment of cucaine were alone to blame for the sad mishaps of which Dr. Mattison has compiled so appalling a table, the burden of responsibility might reasonably be shifted from the drug to the medical man who used it, but experience has shown that even in what are considered to be perfectly safe doses, symptoms of considerable severity are apt to be produced. At present it is difficult to say with certainty whether the striking differences which are observed with identical doses are due to variations in the quality and potency of the drug, or to individual susceptibility. The present comparatively low price of the drug may possibly act unfavourably on its quality, especially as the competition between rival houses is very severe. This point can only be elucidated by instituting careful inquiries into the source whence the drug was obtained in every case where unexpected symptoms are observed. Next to the ophthalmic surgeons, the dentists showed the greatest enthusiasm in endeavouring to avail themselves of the valuable properties of this modern addition to therapeutical agents. The most brilliant results were reported as obtained on every hand for awhile, but lately not only has the efficacy of the drug for dental purposes been questioned, but the inconveniences and even danger which is apt to accompany or follow its use have been made public. The inevitable reaction against the extravagant pretensions advanced on behalf of this drug has already set in. The sooner its use is restricted to the cases in which it may reasonably be employed, and in doses and with precautions calculated to minimise its drawbacks, the better will it be for medical men and their patients. It should never be forgotten that cucaine is a potent alkaloid not to be trifled with. We have, so far, not had to record many cases of cucaine addiction, except on the part of medical men in the case of their patients; and it is to be hoped that any prospect of this will now be averted.

ENUCLEATION AND EVISCERATION OF THE EYEBALL.

ENUCLEATION of the eyeball is so frequently performed without any appreciable constitutional disturbance following, and an artificial eye is often so good an imitation of the natural organ, that it is apt to be forgotten that occasionally a fatal result follows, and that it is sometimes impossible to avoid serious disfigurement, owing to the want of sufficiency, prominence, and range of movement of the artificial eye. Deaths from meningitis are exceedingly rare in proportion to the number of operations, probably as rare as from tetanus after amputation of a finger, yet we are from time to time reminded by the occurrence of a case that the risk is a real one. Such a reminder was furnished by the case read by Mr. Lang before the last meeting of the Ophthalmological Society (JOURNAL, May 14th, p. 1043). The subject was rather fully discussed last year, on the occasion of a most able paper read by Mr. Nettleship before the same society, and an important paper appeared about the same time by Professor Deutschman. Mr. Lang's case does not throw any fresh light upon the pathology of the subject, which is obscure in respect of several points. We may sum up the present state of our knowledge or belief as follows: 1, that meningitis is more likely to follow if the excised eye is in a state of active suppuration, and that the risk is increased if the eye is punctured or ruptured during the operation; 2, that the inflammation is septic in character, but that the channel by which the meninges are reached is undetermined, and is possibly not the same in all cases. Recent investigations on the normal direction of the lymph-streams of the optic nerve (Gifford, *Archiv. of Ophth.*, 1886), and the results of the

examination of fatal cases, render it improbable that the inflammation travels along the nerve-sheath; it is much more probable that it reaches the brain by the lymph spaces surrounding the orbital blood vessels, and that when the optic-nerve sheath has been found to be affected it is in consequence of the inflammation having travelled into it from the cranial cavity; consistent with this is the fact that in some cases both nerves have been found to be implicated; 3, death is the usual result, but recovery has occasionally ensued after undoubted symptoms of meningitis. In some of these cases the favourable result seemed to be attributable to a free exit having been given to the orbital discharge, and the cavity having been irrigated with an antiseptic fluid. It was with the view of obviating the risk of meningitis that Alfred Graefe, in 1884, proposed to substitute for enucleation the operation of exenteration, or the removal of the cornea and all the contents of the sclerotic, the latter being then brought together with sutures. It is questionable how far the risk of meningitis is really diminished by this proceeding, since the supra-choroidal space is in as intimate relation with the lymph-channels as Tenon's capsule, with which it communicates at many points, and the complication is too rare for negative evidence to be of any value. Moreover, it is not universally admitted that the operation is as efficient a safeguard as enucleation against sympathetic inflammation; the risk, however, being in this case more definite, it will be easier to gauge the efficiency of the operation after further experience. The cosmetic effect of an artificial eye is not always satisfactory, although we believe that there has been a tendency of late to overrate its shortcomings, and that some of the defects complained of are often avoidable. Any disfigurement is the more to be regretted as the promise of a good artificial eye is often a more powerful inducement to a patient to submit to enucleation than the most vivid picture of the risks of sympathetic inflammation. In order to avoid the deformity that occasionally follows enucleation, Mr. Mules, of Manchester, has introduced his operation of eviscerating and then enclosing a glass sphere in the cavity of the sclerotic. No one who has performed this operation, or seen its results, can fail to appreciate the immense advantage that it gives from a cosmetic point of view. The artificial eye is as prominent as its fellow, and its movements are very free. The question of its comparative safety is of course the same as that of exenteration, for the glass sphere can hardly be held to introduce any new element of danger. With the view of combining the effect of Mules's operation with the supposed greater safety of enucleation, Mr. Adams Frost, at the annual meeting at Brighton, described an operation which he had performed and which consisted in enucleating in the ordinary way, and then placing the glass sphere in Tenon's capsule, which, with the muscles, was united over it. At the last meeting of the Ophthalmological Society, Mr. Frost exhibited a case in which the glass sphere had been worn eight months, and Mr. Lang described fourteen cases in which he had performed the operation with satisfactory results. Should the tissues covering the glass sphere prove to be sufficiently durable, this operation will have one advantage over Mules's; namely, that it will be possible to preserve the lost eye as a specimen, a matter of no inconsiderable importance from an educational point of view.

GLUCOSE AND GLYCOGEN.

At a recent meeting of the Academy of Sciences M. Chauveau presented a note on glucose, glycogen, and glycogenesis, in relation to the production of heat and of mechanical action in the animal economy. M. Chauveau believes himself to be in a position to affirm that a preponderating part is played by the glucose of the blood in organic combustion, which is the source of heat and of muscular action. The liver is really, as Claude Bernard taught, a centre where sugar is constantly being produced; there is another where it is as constantly destroyed. This is not in the lungs, but in the systemic capillaries. M. Chauveau bases his conclusions on the following results of his own experiments: 1. In fasting animals, sugar exists in the blood of the arteries and veins of the circulatory system; but in the upper hepatic vessels the blood is richer in sugar than anywhere else, even when it has been collected without arrest of the circulation, thus avoiding the causes of error arising from the stagnation of the blood in the liver. This organ then is really a sugar-producer. 2. This relative abundance of glucose in the blood is observed in the upper hepatic veins, not only in fasting animals, but also in those that have been nearly starved when the sugar derived from former nourishment and provisionally stored in the liver in the form of glycogen has long since been exhausted. From this it must be inferred that the liver is an active centre of spontaneous sugar-production. 3. The blood of the left heart contains as much sugar as that of the right; which is proof that the sugar is not destroyed during the passage of the blood through the pulmonary system. 4. In the vessels of the general circulation the venous contains less sugar than the arterial blood-which shows that the capillaries of the general circulation are really a centre for the destruction of sugar. M. Chauveau concludes with the following observation. On comparing the blood of two organs whose heat-producing activity in the physiological state is very unequal, it is always found that the incessant destruction of glucose is much more active in the organ in which organic combustion is greatest; in other words, the quantity of heat produced in the animal tissues, which is always proportional to the intensity of the combustion, is likewise proportional to the absorption of the glucose of the blood in the capillary system.

SCOTLAND.

LEGACY TO EDINBURGH INFIRMARY.

A legacy of £1,000, free from legacy duty, has been paid to the Royal Infirmary, Edinburgh, by the trustees of the late Mr. William Archibald, S.S.C., Edinburgh.

REGISTRATION OF PLUMBERS.

The scheme for the registration of plumbers, which, under the auspices of the Plumbers' Company, has been attended with such success in London, has been taken up in Scotland. Last week the first meeting was held in Dundee in favour of the scheme, at which certificates of registration for efficient plumbing were presented to plumbers from different parts of Scotland by the Plumbers' Company of London.

EDINBURGH ASSOCIATION FOR INCURABLES AND LONGMORE HOSPITAL.

From the last report of this institution we gather that, during 1886, accommodation was provided for twelve additional patients, bringing the total number of beds up to 66. 176 applications were under consideration in 1886, as against 115 in 1885. During the year 1886 the ordinary expenditure was £3,523 7s., while in the previous year it was £2,784 1s., an increase of £739 6s. On the other hand, the amount of subscriptions and donations received during the year was £2,055 8s. 4d., while in 1885, it was £2,200 2s. 8d., a decrease of £144 14s. 4d. The Queen, it was stated, had given in November a donation of £50, and become patroness of the association.

THE LORD HIGH COMMISSIONER AND EDINBURGH MEDICAL CHARITIES.

One of the functions belonging to the Sovereign of Great Britain, and specially provided for by the Scottish Act of Union, is the appointment of a Lord High Commissioner to the General Assembly of the Church of Scotland at its annual meeting in Edinburgh, in May. The Lord High Commissioner practically holds a miniature court during his residence in the old palace of Holyrood, and considerable festivity takes place. One of the most pleasing features of the affair, however, is the attention which is given to the medical charities, such as the Royal Infirmary, Sick Children's Hospital, and the Home for Incurables, etc. On this occasion Her Majesty appointed to the post, the Earl of Hopetoun, and he and his Countess have certainly not been backward in showing kindly attention to various medi-

cal charities. When they visited the Royal Infirmary, the distinguished party were shown over the institution by Sir Douglas Maclagan, Dr. Affleck, and other members of the staff, and by Dr. S. G. Fassin, Superintendent, and Mrs. Pringle, Lady Superintendent. The Countess caused a bouquet to be given to each of the patients in the infirmary, and subsequently sent a large quantity of toys to the children in the Edinburgh hospitals. The Earl of Hopetoun also visited the new medical buildings of the University.

NORTHERN INFIRMARY, INVERNESS.

At the annual general meeting of the supporters of the Northern Infirmary, held at Inverness, it was stated that the average number of patients during the past year had been greater than in previous years, and that this had led to a deficit of £520 during the year, the income having been £1,894, and the expenditure £2,414. At the same meeting it was intimated that a legacy of £2,000 by the late Major-General Pope, C.B., had been paid over to the funds of the institution. This substantial contribution, together with an expected increase of subscriptions, will probably suffice to meet the wants of this deserving institution.

COMBE LECTURES, SCOTLAND.

Of the many courses of "Combe Lectures" delivered by Dr. Andrew Wilson there is none more important than the course delivered by him to the teachers of schools in Scotland. The third course of such lectures was begun last week, in the Oddfellows' Hall, Edinburgh, and was well attended. Dr. Wilson referred in his opening lecture especially to the great benefits that had accrued to public health through the appointments of Commissioners of Sewers, and he gave most interesting details as to the outbreaks of cholera in Great Britain at various times, mentioning that the outbreak in London in 1848 was close to the same ditch where the earliest fatal case occurred in 1832; that the first case in Leith in 1848 occurred in the same house in which the epidemic of 1832 began; and that in 1848, at Pollockshaws, the cholera took its first victim from the same room and the same bed in which it broke out in 1832. The subject of this year's course of lectures is "Health, as related to the Home and School."

IRELAND.

Two of the Dublin Hospitals—the Mater Misericordiæ and St. Vincent's—have each received £500 by the will of the late Mr. William Magrath.

THE ROYAL BARRACKS, DUBLIN.

We understand that the Secretary of State for War has decided to have the sanitary condition of these notoriously unhealthy barracks thoroughly investigated. Sir Charles Cameron, Medical Officer of Health for Dublin, and Dr. Grimshaw, Registrar-General for Ireland, have been requested to serve on the Commission to be appointed for the purpose of this inquiry.

THE IRISH CONJOINT SCHEME.

At the last meeting of the King and Queen's College of Physicians, the College examiners under the conjoint scheme were nominated. It was acknowledged that it would be advisable that, as far as possible, the Censors and existing examiners should be elected *pro tem.* to the examinerships appointed by the College, as the annual elections would have to take place, as usual, on St. Luke's Day, October 18th. The following Fellows were accordingly nominated, and as with commendable good taste, and in deference to the general feeling of the College, all other candidates withdrew, they will be elected at the next meeting of the College as examiners in the subjects opposite their names:—In Medicine: Dr. Finny, Vice-President; Dr. J. Hawtrey Benson, Censor; Dr. Foot, and Dr. Nixon. In Midwifery: Dr. W. J. Smyly, Censor. In Forensic Medicine and Hygiene: Dr. MacSwiney, Censor; and Mr. Redmond. In Materia Medica: Dr. Duffey and Dr. Quinlan. In Histology: Dr. Purser. In Physics: Dr. W. G. Smith and Dr. Ashe. For the benefit of candidates for the L.K.Q.C.P.I., whose hospital and other certificates will not be completed prior to May 30th, the College has resolved that candidates presenting themselves for examination this month will be admitted on current certificates. As previously stated, the examinations under the new scheme will commence on July 4th. Both Colleges have agreed to accede to the petition of the students praying to be admitted to the second and third professional examinations under the conjoint scheme under the regulations of those examinations as conducted hitherto by the Royal College of Surgeons.

MEMORIAL TO THE LATE DR. E. D. MULLAN.

In the Derry Cemetery a memorial stone has recently been erected over the grave of this gentleman. The monument is of Sicilian marble in the Gothic style, the base being panelled and carved, and is seventeen feet high. On the front panel are the arms of the deceased. The angles are fitted with red granite columns polished, having carved caps and moulded bases. The face of the die contains the following inscription:—"In memory of Edward Duddy Mullan, M.D., of this city. Died 3rd July, 1886. Erected by his associates and friends in token of their regard and in testimony of his worth."

IRISH MEDICAL ASSOCIATION.

The forty-eighth annual general meeting of the Association will be held at the Royal College of Surgeons on Monday, June 6th at noon. The Council and officers for the ensuing year will be elected, and the report of the Council and the usual resolutions concerning the interests of the profession will be submitted to the meeting. The annual breakfast and dinner will take place as usual.

THE LABOURERS' ACT: DROGHEDA UNION.

The medical officers who recently obtained a judgment against the guardians for fees payable under the Labourers' Act last week through their solicitors informed the Board that if the amount due was not paid at once further proceedings would be instituted. A sum of £120 had been lodged in Court by the guardians, leaving a balance due of £195, which it was resolved to discharge without further delay. The medical officers have been requested to send the guardians the names of any labourers in their districts, but have declined to do so without being remunerated for their trouble.

FEES IN LUNACY CASES.

Two magistrates having recently signed an order for a fee of one guinea to be paid to Dr. Acheson, medical officer of Castlerea workhouse, for having examined a lunatic inmate of the house, the matter was brought before the Local Government Board, who refused to sanction the payment. It appears by the tenth section of the Act, 30 and 31 Vic., cap. 1—8, bearing on the subject, that no one except the medical officer of a dispensary district can give a certificate in such cases.

ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

The annual meeting of the Royal Medical Benevolent Fund Society of Ireland will be held at the Royal College of Surgeons, Stephen's Green, Dublin, on Monday, June 6th, at 4.30 P.M., when the chair will be taken by the President of the College, Sir William Stokes, M.D.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

The annual meeting of the Fellows of the College for the election of a President, Vice-President, and Council, will be held on Monday next. At this meeting the two important motions, of which due notice has been given, will be considered, arising out of the recent efforts made to amalgamate the School of the College of Surgeons with the Carmichael College of Medicine, which fell through in consequence of the action of some of the professors of the former school. Mr.

William Thomson will move: "That, having regard to the interests of medical education in Dublin, it is desirable to diminish, as far as possible, the number of proprietary schools; and that, with a view to carrying out this principle, it be an instruction to the Council to take such steps as may be necessary to effect, in the first instance, an amalgamation between the College School and the Carmichael College of Medicine." This motion will doubtless give rise to an animated debate. But considering the action of the late Council on the matter, and the disinclination of the directors of the Carmichael College to enter into the proposed amalgamation, it is not probable that any practical result will be arrived at. The admission of the Apothecaries' Hall of Dublin into a conjoint scheme will again be brought forward by a motion of Sir Charles Cameron, who will propose: "That the College regrets the failure of the attempt to unite the Colleges of Physicians and Surgeons and the Apothecaries' Hall for the purpose of holding examinations. The College is of opinion that a fresh attempt to effect this tripartite combination should now be made—the Medical Council having recognised the Apothecaries' Hall as a medical corporation—and should such an attempt again fail, the College considers that the Council should, if possible, form a combination with the Apothecaries' Hall." At a meeting of the Council of the College held on Tuesday last, the following gentlemen were elected examiners for the ensuing year: Examiners in Anatomy and Comparative Anatomy: W. Thornley Stoker, Robert L. Swan, John Barton, Frederick A. Nixon. Examiners in Surgery: William Thomson, Charles B. Ball, Richard F. Tobin, Edward S. O'Grady. Examiners in Physiology and Histology: Edward Dillon Mapother, J. Alfred Scott. Examiners in Medicine and Therapeutics: M. A. Boyd, Richard A. Hayes. Examiners in Chemistry, Physics, and Medical Jurisprudence: J. Dallas Pratt, Samuel H. Webb. Examiners in Midwifery and Gynæcology: Samuel R. Mason, J. J. Cranny. Examiners in Ophthalmology: Arthur H. Benson, Henry R. Swanzy. Examiners for the Diploma in Midwifery: J. J. Cranny, Henry Croly, William Roe. Examiners for the Diploma in Public Health: Edgar D. Flinn, Edwin Lapper, W. Kaye Parry, C.E., H. C. Tweedy. Examiners in Preliminary Education: Frank Davys, Robert Morton, H. C. Tweedy.

A TEACHING UNIVERSITY FOR LONDON.

A NEW SCHEME.

"THE humble petition of University College, London, and King's College, London, to the Queen's Most Excellent Majesty in Council," is so important a document in its bearing on the question of degrees to London medical students and on the future prosperity of the metropolitan medical schools, that we subjoin the effective clauses.

The petition first recites the well-known facts with regard to the demand for greater facilities for London students to obtain degrees, and the manifold educational facilities possessed by the metropolis; that it contains the Library of the British Museum, the national collections of science and art, and the head-quarters of the principal learned societies; also the Inns of Court, the Royal College of Physicians of London, the Royal College of Surgeons of England, and other important corporations, to which, in England, has been committed authority to admit to the practice of the law, of medicine and surgery, and of other professions; together with eleven general hospitals, each with its legally-recognised medical school, and educational institutions, special schools, and libraries too numerous to mention.

The petition states that for the last sixty years, apart from professional instruction, the work of university education has, in London, been carried on almost entirely by University College and King's College, and summarises the history of these two Colleges.

The petition then recites: That the University of London was founded for the purpose of conferring degrees upon qualified students of these Colleges, and of such other similar institutions as might thereafter be affiliated to the University. No official representation upon the governing body of the University was given to these Colleges, or to any of the institutions that were afterwards affiliated to it; and the teachers in these Colleges, and in the institutions so affiliated, were never associated, as such, in the work of the University. In 1857 the principle of affiliation was abandoned by the University, and its examinations, with the exception of those for medical degrees, were thrown open to all persons, without reference to their place of education, or to their having, or not having, attended any regular course of instruction. That, except by the situation of its head-quarters, the University of London does not belong more to London, or to the London district, than to any other part of England, or of the empire; and that valuable as has been the influence which it has exercised over many educational institutions, and great as have been the services thus rendered to the cause of education, its existence and present work do not supply the place, or furnish an argument against the establishment, of a University, in the sense hereinbefore defined, in and for London.

The petition then instances the precedent of Owens College, and concludes as follows: That in view of the considerations hereinbefore stated, your petitioners humbly represent to Your Majesty that it is expedient that a University of the complete character above described should be constituted in and for the London district.

That the University should give degrees in arts, science, and medicine, and should have power to add other faculties, corresponding to its other provinces of study and of educational work.

That University College, London, and King's College, London, should be designated in the charter as Colleges in the University.

That power should be given to the University to admit on application other Colleges in the metropolitan district; the conditions of admission to be that the University shall be satisfied—

a. That the College is established on a basis justifying the expectation of its permanent existence, and is under the independent control of its own governing body.

b. That the College possesses a sufficient staff, buildings, and appliances for study, with adequate arrangements for teaching, in one or more of the faculties of the University.

That the admission of a College to the University should entitle it to representation on the governing body of the University, to the inclusion of its senate, professors, or academic board in the assemblies of the appropriate faculties of the University, and to the admission of its students, duly qualified by attendance on a regular course of instruction in the College, as candidates for degrees in such faculties.

That Colleges admitted to the University should not thereby be brought in any respect under the control of the University except only as regards the regulations for the duration and nature of the studies to be required of the students of the College as a qualification for University degrees.

That the governing body of the University should include, besides representatives of its Colleges, representatives of the assemblies of the faculties of the University.

That such a University, once established, would promote various improvements in the university education of London, which are generally admitted to be needful, such as:—The greater concentration of the teaching of particular subjects in the earlier scientific stages of medical education; the foundation of additional chairs, attached either to particular institutions or to the University, for the further prosecution of special studies or of original research; the promotion of new faculties; the encouragement of general education as preliminary to the training for all professions; and, finally, such a presentation to the public of the needs of higher education in London as may secure from the corporate or private munificence of London the endowments necessary to enable it to keep pace with the growth of population and with the progress of learning.

Your petitioners further humbly represent to Your Majesty—

a. That, as your petitioners have been informed, it is the intention of the Royal College of Physicians of London and of the Royal College of Surgeons of England to petition Your Majesty to confer upon them jointly, or upon a body composed of their representatives, the power to confer medical degrees.

b. That while recognising the expediency of the establishment in and for London of a degree-giving body whereon the medical profession may have official representation, your petitioners cannot but regard the giving of a degree as the appropriate function of a University, and would deprecate a severance of the medical faculty from other faculties in the University which they contemplate.

c. That for the purpose of such representation it is desirable that the Royal College of Physicians of London and the Royal College of Surgeons of England should be specially associated with the University, and should be suitably represented on its governing body, thus providing for the direct representation of the medical profession on the governing body of the University, and that the recognised medical schools of London should be admitted to the University by the teaching members of the school being included in the Assembly of the

Faculty of Medicine and the students becoming admissible as candidates for degrees in that faculty.

d. That with a view to avoid multiplication of bodies conferring a diploma or licence to practise, it is expedient that the conjoint diploma of the two Royal Colleges above-named should be a preliminary condition for obtaining a medical degree in the University, the conferring of such diploma remaining, as at present, the function of the said Royal Colleges, and not of the University.

Your petitioners are further desirous that Your Majesty should be the Visitor of the University and should name certain members to serve on its governing body.

Your petitioners therefore humbly pray Your Majesty to be pleased to grant a charter to a body of persons, to be appointed as is described in this petition, to be a University in and for the London district, having power to grant degrees in the faculties of arts, science, and medicine, with power to add other faculties; and that Your Majesty will be pleased to make such orders in the premises as to Your Majesty in your royal wisdom and justice may seem meet.

And your petitioners will ever pray.

THE NEW LUNACY BILL.

At the conjoint meeting of the Gloucestershire, Worcestershire and Herefordshire, and Bath and Bristol Branches of the British Medical Association, held at Gloucester, May 17th, 1887, at which upwards of 100 members were present, the following resolution was passed unanimously:

"With reference to the new Lunacy Bill, this meeting desires to express its great dissatisfaction with the position which is conferred upon the magistrate under Clauses 3 and 5, whereby he is authorised to visit the patient and decide questions of disease, which, in the opinion of this meeting, could only properly be decided by a medical man. It considers the special exclusion of the houses of medical men as residences for insane single patients of all classes under Clause 3, Subsection 23, and Clause 28, as most undesirable, and it regards these provisions as a distinct and a most undeserved indignity to the whole medical profession."

*** 1. With regard to the first point in the enclosed resolution, namely, the action of the magistrate, etc., under Clauses 3 and 5 of the present Lunacy Bill, the Parliamentary Bills Committee has suggested the omission of Clause 5, and of other parts, to harmonise with that omission. But Clause 3 establishes the principle of magisterial intervention (which, indeed, was opposed by the Committee of the Metropolitan Counties Branch, in 1885). The Parliamentary Bills Committee has understood magisterial intervention to be the chief cardinal principle of all the three recent Lunacy Bills, and held to be essential by the three several Governments, and has directed its efforts to obtain some modification or omission of details in that clause that appeared to be undesirable.

2. On the second point, that certain clauses provide for "the special exclusion of the houses of medical men as residences for insane single patients of all classes," there appears to be some misapprehension. These clauses apparently do not provide for the exclusion mentioned, but specify conditions to which exception may be taken. The departure from the general method of the Bill under those clauses (Section 3, Subsection 23, and Section 28) was adversely commented upon in a leading article in the JOURNAL of April 3rd, 1886, p. 649.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The abstract of the petition to the Queen for a supplementary charter issued to the Fellows by the Council is in the subjoined terms:—

The following are the purposes for which application is about to be made to the Crown for a supplementary charter.

1. To enable the College to hold "lands, tenements, rents, and hereditaments" of an annual value not exceeding £20,000 instead of £2,000, as by present charter.

2. To enable the Council to determine by rules and regulations instead of, as at present, by by-laws, the conditions of admission to the Fellowship by examination, and to determine by by-law, instead of by charter, the fees payable for such Fellowship.

3. To empower the Council to elect to the Fellowship Members of twenty years' standing, not exceeding ten (instead of two) in each year, on the payment of the same fee as required for the Fellowship by examination.

4. To authorise the election by the Council of any number of persons, not exceeding two in each year, whether a Member or Members of the College or not, having, in the opinion of the Council to be ascertained and expressed in such manner as the Council may from time to time think fit and direct, rendered distinguished service in the advancement of surgery or the sciences allied thereto, such persons to be and be called Honorary Fellows; such Honorary Fellows not to pay any fee, and to be ineligible to vote for the election of members of the Council.

5. To provide that Fellows may vote in the election of the Council either in person or by voting papers, such papers to be signed, authenticated, and delivered in such manner as the Council shall from time to time think fit and direct. No election of members of Council to be valid unless there shall be present at the meeting for the purpose of such election such number of Fellows as the Council may from time to time think fit and direct.

6. To render Fellows of ten (instead of fourteen) years' standing eligible for election as members of Council, and to abolish the restriction in regard to their practising as apothecaries.

7. To simplify the mode of nomination of Fellows, candidates for election to the Council, by requiring in each case only one nomination-paper to be signed by three Fellows.

8. To dissolve the Midwifery Board.

9. To enable the Council to increase the number of members of the Board of Examiners in Dental Surgery, and to require that those members of the Board described as "persons skilled in Dental Surgery," who shall in future be elected, shall be persons registered under the Dentists' Act of 1878. EDWARD TRIMMER, Secretary.

May 23rd, 1887.

ROYAL MEDICAL BENEVOLENT COLLEGE.

At the annual general meeting of the governors of the Royal Medical Benevolent College at Epsom, held on May 25th, Mr. Hird, who has for so many years been a devoted friend of the College, resigned the office of Treasurer. He received a most hearty vote of thanks for his invaluable services, and was elected a Vice-President of the institution. Dr. Holman, of Reigate, who by a unanimous vote of the Council had been recommended to succeed Mr. Hird, was then elected Treasurer. For many years we have known Dr. Holman as an earnest worker in the South-Eastern Branch, and on the Council of the British Medical Association. He deserves the support of his professional brethren, and we hope he will receive it. He is associated on the Council, amongst others, with Dr. Jonson, Sir Edward Sieveking, Sir Trevor Lawrence, M.P., R.v. Ed. Northey, Mr. France, Sir Joseph Fayrer, Mr Morrant Baker, Mr. Page, Mr. Bloxam, Dr. Frederick Taylor, Mr. Malcolm Morris, and Mr. Propert, the son of the founder.

The head master, the Reverend Cecil Wood, commands the confidence of the Council, and is working in entire harmony with his masters and pupils. Various reforms have been introduced into the working of the school, but pecuniary support is absolutely necessary to enable the charitable objects of the institution to be carried out, whether as regards the pensioners or foundation scholars. It is, perhaps, not sufficiently known that the College has valuable scholarships to the universities. Two, of £60 a year, tenable for four years, have quite lately been given by Dr. Haviland, of Cambridge. There are seven free medical scholarships to the metropolitan hospitals, besides several small exhibitions. It is to be hoped that the strenuous efforts of the Council to carry out the wishes of the founder of the College may be met by a large increase in the number of pupils. Generous pecuniary aid is also required to allow help to be given to the aged, the necessitous, and the infirm; education free of cost to the sons of the less prosperous members of the profession, and almost at cost price to the sons of other practitioners. It is reasonable to hope that the excellence of the instruction, moral as well as intellectual, which is given at the College will attract such numbers of pupils whose fathers do not practise medicine as will make the institution successful and prosperous, from the financial as well as from the scholastic point of view.

DR. RIEGER has been appointed Professor of Psychiatry in the University of Würzburg.

MR. F. BOWREMAN JESSETT, F.R.C.S., has been appointed one of the vice-presidents of the Surgical Section at the International Medical Congress to be held at Washington.

THE general meeting of the Dutch Association for the Advancement of Medical Science will be held on the 4th and 5th of July next, and a Medical Congress will be held in Amsterdam in the beginning of September.

ASSOCIATION INTELLIGENCE.

THE President of the Council of the British Medical Association begs to inform the Members that the New Premises, 429, Strand, are now in full occupation, and are open to inspection by the Members. The President of the Council hopes that every Member of the Association will visit the New Offices and inspect the arrangements whenever an opportunity offers.

May 20th, 1887.

NOTICE OF QUARTERLY MEETINGS FOR 1887.
ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Meetings of the Council will be held on July 13th and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, June 23rd and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary*.

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE and on the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE are now closed.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, and HABITS OF INTEMPERANCE, a full Report on OLD AGE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 429, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

CAMBRIDGESHIRE AND HUNTINGDONSHIRE BRANCH.—The annual meeting of this Branch is proposed to be held at Bishop's Stortford, on Friday, June 24th, 1887. Henry Cribb, Esq., President-elect. It is proposed to have one or two selected subjects for discussion in addition to the president's address, to be followed by communications and exhibition of specimens as time may permit. Members wishing to make communications or to exhibit specimens are requested to state their intention to Dr. Anningson, Cambridge, for insertion in the programme of proceedings. A dinner will be arranged at the Railway Hotel, Hockerill, at (probably) 6.30 P.M., of which the particulars will be given later.—BUSHELL ANNINGSON, Walthamsal, Barton Road, Cambridge.

SOUTHERN BRANCH.—The 14th annual meeting will be held on Thursday, June 16th, 1887, at the Army Medical School, Netley. Dr. J. R. Kealy (President) will take the chair at 1 P.M. Members desirous of reading papers are requested to communicate at once to the Honorary Secretary, J. WARD COUSINS, Portsmouth.

LANCASHIRE AND CHESHIRE BRANCH.—The fifty-first annual meeting of the Branch will be held in the Pendlebury Memorial Hall, Lancashire Hill, Stockport, on Wednesday, June 15th, 1887, at 2.30 P.M. (The Council meets at 2). Order of business:—Introduction of the new President. The President's address: subject, "The Position of the General Practitioner in the Profession." The report of Council. Election of office-bearers: President-elect, Vice-Presidents, Honorary Secretary. Election of Representative members on the Council of the Association. Election of new Council. Presentation of testimonial to Dr. Waters. Medical and surgical communications; Mr. Dambrill-Davies will show his opaque white glass Drainage-Tubes. Dr. Cullingworth will mention the case of a patient, aged 62, on whom two ovariotomies and a lithotomy have been performed within a period of twenty-seven months. Dr. Davidson will read a paper on a medical subject. Dr. McKeown will make some observations on one of the conditions under which Squint is developed. Luncheon, provided by the members of the profession at Stockport, will be served at the Pendlebury Memorial Hall, from 1 to 2.30 P.M. The members will dine together in the Palm House, Royal Jubilee Exhibition, Old Trafford, Manchester, at 6 P.M.; tickets 7s. 6d. each (exclusive of wine). Special notice: If you intend being present at the dinner in the Palm House, Royal Jubilee Exhibition, Old Trafford, Manchester, the accommodation being strictly limited, you are specially requested to write, enclosing remittance, at least four days before the meeting to Dr. Godson, Cheadle House, Cheadle, Manchester, otherwise a seat at table cannot be guaranteed. Members holding dinner tickets will be conveyed by train from Stockport to the Exhibition Station, Old Trafford, free of charge. The charge for admission to the Exhibition is one shilling, payable at the entrance.—CHARLES EDWARD GLASCOTT, M.D., General Secretary, 23, St. John Street, Manchester.

MIDLAND BRANCH.—The annual meeting will be held in the Board Room of the Infirmary, Derby, on Thursday, June 9th, at 2 P.M. After the transaction of the usual business, the report from the four secretaries respecting reorganisation of the Branch will be laid before the meeting. Papers to be read and discussed:—1. Dr. Newman: Goitre, Treatment by Operation in Swiss Hospital. 2. Dr. Elder: Notes of my Fifth Nephrectomy, with Remarks on the Treatment of Hydro-nephrosis. 3. T. Sympson, Esq.: Report of Case of Myxoma of the Leg. 4. C. H. Hough, Esq.: The Treatment of Fracture with Plaster-of-Paris Splints. 5. Dr. Webb: Mistakes in Diagnosis. Luncheon will be provided by the President-elect, at the Infirmary, at 1 o'clock. Dinner at the Midland Hotel at 5 o'clock; tickets 7s. 6d., exclusive of wine.—W. A. CARLINE, M.D., Honorary Secretary and Treasurer.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The annual general meeting of this Branch will be held at the Medical Institute, Edmund Street, Birmingham, on Thursday, June 16th, at 3.30 P.M. The annual dinner will be held after the meeting at the Grand Hotel, Colmore Row, at 6 o'clock.—ROBERT SAUNDBY, M.D., JORDAN LLOYD, F.R.C.S., Honorary Secretaries.

NORTHERN COUNTIES AND ABERDEEN, BANFF, AND KINCARDINE BRANCHES.—A joint summer meeting of these Branches will be held at the Seafield Arms Hotel, Cullen, on Friday, June 24th, 1887, at 3.15 P.M. An omnibus excursion to the Binn Hill of Cullen *viâ* Old Church and Cullen House, returning by Woodside Road and Seatown Gate, is arranged for those who can attend in the forenoon. Conveyances leave Cullen at 12.15 P.M. Luncheon at Binn Hill at 1.15 P.M. Luncheon and omnibus, 2s. 6d. per head. Dinner (exclusive of wine, but inclusive of attendance) in Seafield Arms Hotel, Cullen, at 3.30 P.M.; 3s. 6d. each. Business (Aberdeen, Banff, and Kincardine Branch): 1. Minutes, etc. 2. Ballot for admission of Dr. A. T. Gordon, Beveridge, Aberdeen, as ordinary member of Branch.—J. W. NORRIS MACKAY, ROBERT JOHN GARDEN, J. MACKENZIE BOOTH, Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH.—The annual meeting of this Branch will be held at the Holborn Restaurant on Wednesday, June 29th, at 5.30 P.M. President, John S. Bristowe, M.D., F.R.S.; President-elect, Arthur E. Durham, Esq., F.R.C.S. Dinner at 7 P.M.; tickets 7s. 6d. each, exclusive of wine. New rules for the Branch, proposed by the Council, will be submitted to the meeting for adoption.—W. CHAPMAN GRIGG, M.D., GEORGE EASTES, M.B., Honorary Secretaries.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—The next meeting of the above District will be held at East Grinstead on Wednesday, June 29th. C. E. Collins, Esq., will preside. The following papers are promised. The Chairman: A Few Remarks on Five Cases of Amputation of the Breast. Mr. Percy E. Wallis: A Case of Intestinal Obstruction with Gangrene in a Young Girl. Gentlemen desirous of contributing short papers on cases are requested to communicate with the Honorary Secretary, T. JENNER VERRALL, 97, Montpellier Road, Brighton.

BORDER COUNTIES BRANCH.—The annual meeting of this Branch will be held at Hawick on Friday, July 1st, at 1 o'clock. The usual election of office-bearers for the ensuing year will take place, and Dr. McLeod will give his Presidential address. Members of the medical profession wishing to join the Association or Branch should give immediate notice to the Secretary, together with the names of their proposers. The Secretary will be glad to receive intimation of papers for reading, and patients or specimens for showing.—H. A. LEDIARD, Honorary Secretary, 41, Lowther Street, Carlisle.

SYDNEY AND NEW SOUTH WALES BRANCH.

THE annual meeting of this Branch was held in the Royal Society's Room, Sydney, on March 4th, 1887.

Financial Statement.—The Honorary Treasurer (Mr. G. T. HANKINS) read the financial statement and balance sheet, showing a balance of £207 1s. 6d. to the credit of the branch.

Dr. SCOT SKIRVING proposed, and Dr. QUAIFE seconded, "That the balance sheet, as read, be adopted." Carried.

Annual Address.—Dr. KNAGGS delivered the annual address. A vote of thanks to him, proposed by Dr. SHEWEN and seconded by Dr. W. CHISHOLM, was carried.

Members of Council and Officers.—The following gentlemen were elected members of the Council for the ensuing year: Drs. Knaggs, Chambers, Skirving, Hankins, Quaife, O'Reilly, Fiaschi, Creed, McCormick, and MacLaurin.

The election of office-bearers then took place as follows: The Hon. J. M. Creed, M.L.C., was elected President; Dr. Chambers, Vice-President; Dr. Scot Skirving, Honorary Secretary; G. T. Hankins, Esq., Honorary Treasurer; Drs. Ellis and Crago, Auditors.

Dr. QUAIFE proposed "That a hearty vote of thanks be accorded to the Honorary Treasurer for the trouble he had taken with regard to the financial matters of the Branch." Dr. ELLIS seconded the proposition, which was carried.

The Hon. Dr. CREED proposed a vote of thanks to the auditors, Drs. Ellis and Crago. Carried.

Dr. Ellis proposed a vote of thanks to the retiring officers. Seconded by Dr. Crago, and carried.

Dr. Knaggs then retired from the chair, which was taken by the newly-elected President (Dr. Creed), who thanked the members for the honour they had done him by his election.

Notices of Motion.—The Honorary Secretary (Dr. Skirving) announced that he had received the following notices of motion:

Dr. Clubbe to move: 1. "That this Association is of opinion that the present system of payment of medical officers by the various Friendly Societies is very unsatisfactory." 2. "That a committee be formed to inquire into the subject and to formulate some scheme of reform."

Dr. Knaggs to move: "That this Branch take measures to inaugurate the quarterly registration of preventable diseases in this Colony."

Dr. Haynes Lovell to move: "That at future meetings the press shall be requested not to give particulars of any professional papers except by the invitation of the President."

Dr. Quaife to move: "That the resolutions passed by the Branch on August 6th, 1886, relative to subscriptions and British Medical Journal, be now rescinded."

EAST KENT DISTRICT: SOUTH-EASTERN BRANCH.

The annual meeting of the above district was held at Canterbury on Thursday, May 26th; Mr. Pugin Thornton in the chair.

The usual business of the annual meeting was gone through; Dr. Tyson, of Folkestone, being again elected Honorary Secretary for the ensuing year. The next meeting will take place at Ramsgate in September.

Resolution.—Mr. Raven's resolution, "That no speaker in a debate shall occupy more than five minutes, or shall speak more than once without the permission of the Chairman," was carried *nem. con.*, with the addition of the words, "to whom all remarks must be addressed."

Papers.—Mr. Raven read a paper on Puerperal Albuminuria, which gave rise to a good discussion.

Mr. Garraway read a most amusing and instructive paper on The Dead Failure, Limited. Mr. Garraway, in a vein of irony, suggested the establishment of a journal for the record of unsuccessful cases, failures, and mistakes; arguing that more instruction would be derived from them than from the publication of those triumphs upon which we are wont to plume ourselves.

Specimen.—At the close of the meeting, Dr. Gogarty showed an interesting specimen of Thoracic Aneurysm.

The members afterwards dined together at the Royal Fountain Hotel.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

The May meeting of this Branch was held at 198, Union Street, Aberdeen, on Wednesday, May 18th, at 8 o'clock P.M.; the President, Dr. Urquhart, being in the chair.

Minutes and Nomination of Member.—The minutes of last meeting were read and approved, and Dr. A. T. Gordon, Beveridge, Aberdeen, was nominated for ballot at the next meeting as an ordinary member of the Branch.

CONJOINT MEETING OF THE GLOUCESTERSHIRE, BATH AND BRISTOL, AND WORCESTERSHIRE AND HEREFORDSHIRE BRANCHES.

A meeting of these branches was held at Gloucester on Tuesday, May 17th, 1887, when Dr. Batten (President of the Gloucestershire Branch) took the chair. Upwards of one hundred members were present. Dr. Batten, in a few appropriate words, introduced Mr. Jonathan Hutchinson, who then gave a most interesting address, illustrated by plates and pictures from his own collection and others, on Pathology illustrated by Diseases of Skin.

It was proposed by Mr. Ellis (Gloucester), and seconded by Mr. Waugh (Midsomer-Norton), that a cordial vote of thanks be given to Mr. Hutchinson for his address—carried with acclamation.

Lunacy Acts Amendment Bill.—A resolution, the terms of which are given at p. 1233 of this day's Journal, was proposed by Dr. Needham (Gloucester), seconded by Dr. Currie (Lydney), and carried unanimously. The Secretary was instructed to forward a copy of the resolution to the Parliamentary Bills Committee of the Association. In the discussion on the resolution the following gentlemen took part: Drs. Needham, Soutar, Waddy and Bond, of Gloucester; Dr. Chapman, of Hereford; Dr. Stewart, of Clifton; Dr. Willis, of Monmouth; and Dr. Buck, of Worcester.

Representative of Gloucestershire Branch on Council of Association.—The Gloucestershire Branch, on the proposition of Dr. Wilson, of Cheltenham, seconded by Mr. Waddy, of Gloucester, unanimously elected Dr. Needham as their representative on the Council of the British Medical Association.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIFTH ANNUAL MEETING.

The fifty-fifth Annual Meeting of the British Medical Association will be held at Dublin, on August 2nd, 3rd, 4th, and 5th, 1887.

President: Withers Moore, M.D., F.R.C.P., Senior Physician to the Sussex County Hospital, Brighton.

President-elect: John T. Banks, M.D., D.Sc.(Hon.), F.K.Q.C.P.I., Regius Professor of Physic in the University of Dublin.

President of the Council: Sir B. Walter Foster, M.D., M.P., F.R.C.P., Professor of Medicine in Queen's College, and Physician to the General Hospital, Birmingham.

Treasurer: C. Macnamara, F.R.C.S., Surgeon to the Westminster Hospital, London.

An Address in Medicine will be delivered by W. T. Gairdner, M.D., F.R.C.P.Ed., Professor of Medicine in the University of Glasgow.

An Address in Surgery will be delivered by Edward Hamilton, M.D., Fellow and Professor of Surgery in the Royal College of Surgeons in Ireland.

An Address in Public Medicine will be given by the Rev. S. Haughton, M.D., F.R.S., D.C.L., Senior Fellow, Trinity College, Dublin.

All the rooms required for the purposes of the meeting will, by the kindness of the Provost and Senior Fellows, be provided in Trinity College. The Sections of Medicine, Surgery, Obstetric Medicine, Therapeutics and Pharmacology, and of Pathology, will be held in the Medical School, and the remaining Sections and Subsections in the Museum Buildings of the University. The President's Address will be delivered in the Dining Hall, and the General Meetings will be held in the Examination Hall, where also the stated Addresses will be delivered.

The scientific business of the meeting will be conducted in eight Sections and two Subsections, as follows, namely:

Anatomical Theatre.

A. Medicine.—*President*, William Moore, M.D. *Vice-Presidents*, H. C. Bastian, M.D., F.R.S.; J. Magee Finny, M.D. *Honorary Secretaries*, T. Gilbart Smith, M.D., F.R.C.P., 68, Harley Street, Cavendish Square, London, W.; C. J. Nixon, M.D., 2, Merrion Square, Dublin.

Chemical Theatre.

B. Surgery.—*President*, Sir George H. Porter, M.D. *Vice-Presidents*, Alexander Ogston, M.D.; John Fagan, F.R.C.S.I. *Honorary Secretaries*, W. Thomson, F.R.C.S.I., 34, Harcourt Street, Dublin; R. J. Godlee, F.R.C.S.Eng., 81, Wimpole Street, London, W.; C. B. Ball, M.D., F.R.C.S.I., 16, Lower Fitzwilliam Street, Dublin.

Surgical Theatre.

C. Obstetric Medicine.—*President*, A. V. Macan, M.B. *Vice-Presidents*, T. More Madden, M.D.; A. L. Galabin, M.D. *Honorary Secretaries*, Wm. J. Smyly, M.D., 56, Fitzwilliam Square, Dublin; Wm. Duncan, M.D., 6, Harley Street, Cavendish Square, London, W.

Medical Theatre.

D. Therapeutics and Pharmacology.—*President*, Wm. Whitla, M.D. *Vice-Presidents*, Matthew Charteris, M.D.; D. J. Leech, M.D. *Honorary Secretaries*, Chas. Y. Pearson, M.D., 42, King Street, Cork; Michael McHugh, M.B., 25, Harcourt Street, Dublin.

Theatre of Physiological Laboratory.

E. Pathology.—*President*, Samuel Gordon, M.D. *Vice-Presidents*, A. W. Foot, M.D.; David J. Hamilton, M.D. *Honorary Secretaries*, Theodore D. Acland, M.D., 7, Brook Street, Grosvenor Square, London, W.; Henry T. Bewley, M.B., Willow Park, Booterstown, Co. Dublin.

Divinity Theatre.

F. Public Medicine.—*President*, Sir Thomas Crawford, M.D., K.C.B. *Vice-Presidents*, John S. Taylor, M.D.; R. Thorne Thorne, M.D. *Honorary Secretaries*, John Wm. Moore, M.D., 40, Fitzwilliam Square West, Dublin; John F. W. Tatham, M.D., Town Hall, Salford.

Examination Room.

G. Psychology.—*President*, J. R. Gasquet, M.B. *Vice-Presidents*, Frederick Needham, M.D.; Oscar T. Woods, M.P. *Honorary Secretaries*, Conolly Norman, F.R.C.S.I.; Richmond District Lunatic Asy-

lum, Dublin; T. Lyle, M.D., Rubery Hill Asylum, Bromsgrove, Worcestershire.

Physical Theatre.

H. OPHTHALMOLOGY.—*President*, H. R. Swanzy, M.B. *Vice-Presidents*, D. Argyll Robertson, Pres. R.C.S. Edin.; Priestley Smith, M.R.C.S.E. *Honorary Secretaries*, A. H. Benson, M.B., 42, Fitzwilliam Square, Dublin; A. W. Sandford, M.D., 13, St. Patrick's Place, Cork.

SUBSECTIONS.

Engineering Theatre.

I. OTOLOGY.—*Chairman*, E. Woakes, M.D. *Vice-Chairman*, J. B. Story, M.B. *Honorary Secretary*, D. D. Redmond, L.R.C.S.I., 14, Harcourt Street, Dublin.

LARYNGOLOGY AND RHINOLOGY.—*Chairman*, W. H. MacNeill Whistler, M.D. *Vice-Chairman*, Kendal Franks, M.D. *Honorary Secretary*, R. A. Hayes, M.D., 56, Merrion Square South, Dublin.

Local Honorary Secretary.—George F. Duffey, M.D., 30, Fitzwilliam Place, Dublin.

Members desirous of reading papers, or joining in the discussions, are earnestly requested to communicate, without delay, with the Secretaries of the respective Sections.

The front hall over the main entrance to Trinity College will be fitted up as a reception-room, and will be opened at 12 o'clock noon, on Monday, August 1st, and on the following days at 9 o'clock in the forenoon, and will remain open until 6 o'clock in the afternoon of each day, for the issue of tickets to members and for supplying all necessary information.

PROGRAMME OF PROCEEDINGS.

TUESDAY, AUGUST 2ND, 1887.

9.30 A.M.—Meeting of 1886-87 Council. Council Room, Museum Buildings.
10 A.M.—Service at the Pro-Cathedral, Marlborough Street. Sermon by the Rev. T. Martial Klein, S.J., F.R.U.I.
11.30 A.M.—First General Meeting. Report of Council. Reports of Committees; and other business. Examination Hall.
4 P.M.—Choral Service at St. Patrick's National Cathedral. Sermon by the Most Rev. the Lord Bishop of Meath.
8.30 P.M.—Adjourned General Meeting from 11.30 A.M. President's Address. Dining Hall.

WEDNESDAY, AUGUST 3RD, 1887.

9.30 A.M.—Meeting of 1887-8 Council. Council Room, Museum Buildings.
10.30 A.M. to 2 P.M.—Sectional Meetings. Medical School and Museum Buildings.
3 P.M.—Second General Meeting. Address in Medicine. Examination Hall.
9 P.M.—Soirée given by the President of the Association and by the Dublin Branch. Royal University of Ireland.

THURSDAY, AUGUST 4TH, 1887.

9.30 A.M.—Meeting of Council. Council Room, Museum Buildings.
10.30 A.M. to 2 P.M.—Sectional Meetings. Medical School and Museum Buildings.
3 P.M.—Third General Meeting. Address in Surgery. Examination Hall.
7 P.M.—Public Dinner. Leinster Hall.

FRIDAY, AUGUST 5TH, 1887.

10 A.M. to 1.30 P.M.—Sectional Meetings. Medical School and Museum Buildings.
3 P.M.—Concluding General Meeting. Address in Public Medicine. Examination Hall.
4.30 to 6 P.M.—Garden Party.
9 P.M.—*Conversazione* given by Surgeon-General Hassard, C.B., P.M.O. Ireland, and the officers of the Medical Staff. Museum of Science and Art.

SATURDAY, AUGUST 6TH, 1887.

Excursions.

ANNUAL MUSEUM.

THE Annual Museum will be held on August 2nd, 3rd, 4th, and 5th, in the Anatomical Department of the Medical School of Trinity College, Dublin.

The Museum will be arranged in the four following Sections, and intending exhibitors are requested to communicate with the Secretary of the Section or Sections in which they propose to exhibit.

SECTION A.—Food and Drugs. (Honorary Secretary, F. J. B. Quinlan, M.D. Univ. Dub., 29, Lower Fitzwilliam Street, Dublin.)

SECTION B.—Recent Books, Instruments, and Appliances—Medical, Surgical, and Electrical. (Honorary Secretary, John Lentaigne, F.R.C.S.I., 29, Westland Row, Dublin.)

SECTION C.—Anatomical and Pathological Specimens and Drawings, Microscopes and Microscopical Preparations. (Honorary Secretary, Alex. B. McKee, M.B. Univ. Dub., Royal College of Surgeons, Dublin.)

SECTION D.—Hygienic and Sanitary Appliances. (Honorary Secretary, H. C. Tweedy, M.D. Univ. Dub., 2, Gardiner's Row, Dublin.)

Particulars should be supplied to the Secretaries of the objects proposed to be exhibited and the amount of space required. No show cases will be allowed.

As it is intended to print a catalogue, with appendix of advertisements, it is requested that inquiries be addressed to the Secretaries as early as possible.

All articles sent to the Museum for exhibition should be addressed to care of Professor Cunningham, Medical School, Trinity College, Lincoln Place, Dublin, and delivered, carriage paid, between the 5th and 26th of July.

Chairman of Museum Committee—Wm. Thornley Stoker, F.R.C.S.I., 16, Harcourt Street, Dublin. Vice-Chairman—D. J. Cunningham, M.D., 69, Harcourt Street, Dublin.

EXCURSIONS.

THE following excursions on Saturday, August 6th, have been arranged:—

1. *Dublin Bay.*—The London and North-Western Railway Company, has generously granted one of its express steamers for this excursion, which eminent marine zoologists have kindly undertaken to accompany for the purpose of dredging, trawling, and taking soundings in several places between Lambay and Greystones. Lunch will be served on board at two o'clock, and the steamer will return to the North Wall before seven o'clock.

2. *Powerscourt and Dublin Waterworks.*—By train to Bray, drive through Powerscourt Demesne and to the Waterfall; thence to the Waterworks, where lunch will be served at two o'clock. The return journey will be by the Glen of the Downs to Bray, and thence to Kingstown in time for the mail boat.

3. *Glendalough and Ovoca.*—On reaching Rathdrum by rail, conveyances will start for Glendalough, and after an hour's stay will return to Rathdrum. A special train will leave for the Meeting of the Waters, and thence for Glenart Castle, Ovoca, where the party will be entertained by the Earl of Carysfort, K.P., and return to Kingstown at 7 P.M.

4. *The Boyne.*—By rail to Drogheda, thence by cars and carriages to Monasterboice, Mellifont Abbey, Slane, New-Grange Sepulchral Tumulus (where light refreshments will be served), and the Battlefield. Dinner at Drogheda at 4 P.M. Return from Drogheda at 5.41 P.M. by limited mail, or by later trains.

E. D. MAPOTHER, M.D., Chairman, Excursion Committee.

DR. WARD COUSINS gives notice that he will propose the following alteration of By-law 9, for the purpose of making the term of office of the President of Council correspond with the constitution of the annual representative Council:

Present by-law.—"The President of the Council shall be elected by the Council. He shall hold office for three years; and at the first meeting of the Council after the determination of such office, a new President of Council shall be elected for the ensuing three years."

Proposed alteration.—"The President of the Council shall be elected annually by the Council, and shall be eligible for re-election for a period of three years. At the first meeting of the new Council in every year, a President of Council shall be elected for the ensuing year."

FRANCIS FOWKE, *General Secretary.*

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Pulmonary Thrombosis in a Chlorotic Patient.—Erysipelas commencing in the Liver.—Morrhuol.—Physiological Action of Remijia Ferruginea.

M. RENDU has recently published a case of pulmonary thrombosis in a chlorotic woman, aged 23. On her admission into the hospital she was seized with a fainting-fit, but two hours afterwards, while sitting up in bed, she was able to give an account of her illness, which presented all the symptoms of pure chlorosis. At ten o'clock the same evening she woke up, cried out, and died suddenly without cyanosis or congestion of the face. The necropsy showed that all the organs, even those of the venous system, were perfectly healthy; but the left lung was found to be in a state of complete atelectasis. The left pulmonary artery contained a yellowish-grey clot adhering to its walls; the

corresponding bronchial artery was quite healthy. M. Rendu remarked that, although thrombosis was frequently met with in cachectic affections, it was rare in chlorosis. M. Gaucher said that phlegmasia alba dolens was not so rare in chlorosis as was commonly supposed.

In the *France Médicale*, Dr. Louis Boucher recently described a case of hepatic erysipelas in a woman aged 63. Eighteen years previously she had received a blow on the right side of the abdomen. Bilious fever, with severe jaundice, gastric disturbance, and obstinate constipation ensued. The menopause occurred without any complications. In 1879 the patient was attacked with erysipelas, after violent hepatic pains, which lasted two days. On January 3rd, 1887, she was suddenly seized with fever and tremors, and a recurrence of the hepatic pain. The temperature was 39.2° C. (102.4° F.), the pulse 120. The urine was deep red; the tongue white. She complained of intense pain in the region of the liver, which was hot, as if it were the seat of inflammation. No alteration of shape could be detected. An opium-poultice was applied, and a sedative given at night. The following day the patient was very restless; her sleep had been interrupted by nightmare and starts; the fever was worse. Ten centigrammes of extract of digitaline were ordered every hour. Towards night the pains in the liver disappeared; but the throat was dry, there were pains in the ear, and the face became swollen. On January 6th, well-marked erysipelas showed itself, and spread from the lobe of the ear over the right side of the face; the temperature fell to 38° C. (100.4° F.). Recovery took place in a few days. The improvement which followed the appearance of the exanthem on the skin led Dr. Boucher to conclude that the hepatic disturbance was in reality the primary manifestation of erysipelas. He thinks that the disease spread through the intestinal canal, the stomach, and the œsophagus, to the pharynx, thus causing the dryness of throat and pains in the ear, which were the premonitory symptoms of the cutaneous eruption.

The *Tribune Médicale* publishes two interesting cases in which the exhibition of morrhuol, which is the active principle of cod-liver oil, proved very efficacious in disease of the respiratory organs. In one, the patient, a child aged 7, with scrofulous antecedents, as shown by frequent eruptions and impetigo, was affected with purulent pleurisy. Auscultation discovered extensive moist *râles*, and percussion revealed slight dulness at the base of the left lung. In a short time an abundant purulent effusion took place; this was drawn off, and the pleural cavity was washed out antiseptically. Three capsules of morrhuol were then given every day; although the patient had never been able to take cod-liver oil, these were swallowed and digested with facility. A month after the operation the little patient was in a most satisfactory condition, and this has been steadily maintained for two years. In the second case, a young girl, aged 14, who was the subject of scoliosis, suffered from chronic bronchitis. The family-history pointed strongly to hereditary tubercle. The general weakness of the patient made it difficult to administer nourishment. Four capsules of morrhuol were given daily; under this treatment she recovered her appetite, and rapidly gained strength. The bronchitis soon disappeared; at the date of the report the patient's general state was comparatively satisfactory. The daily quantity given need not exceed five to six capsules, but this should be continued for a considerable length of time.

At a recent meeting of the Biological Society, MM. Pinet and Duprat communicated a note on the physiological action of remijia ferruginea. The preparations employed in the experiments were a watery, and a hydro-alcoholic, extract of the root of the plant. Both extracts, when tested with litmus paper, showed a decided acid reaction. The hydro-alcoholic was much less active than the watery extract. The experiments were made on frogs weighing thirty grammes, and the dose was the quantity contained in three divisions out of twenty in a Pravaz syringe. A quarter of an hour after an injection into one of the hind feet, the animal was found to show general hyperexcitability with considerable increase of respiratory movement, and of cardiac pulsation. In some of the animals, the energy of the ventricular contraction was so great as to produce asphyxia, which continued throughout the entire duration of the intoxication. The heart was found to be abnormally red. The electrical contractility of the muscles remained intact. Ligature of the iliac artery on one side with injection of the extract into the opposite limb, produced no difference in the result. Section of the lumbar nerves on one side with injection into the opposite limb caused convulsions only on the side on which the innervation remained intact. When the spinal cord was divided below the medulla, no convulsive action took place. Ablation of the cerebral hemispheres in no way affected the phenomena above described. MM. Pinet and Duprat conclude that remijia ferruginea acts chiefly on the medulla.

VIENNA.

[FROM OUR OWN CORRESPONDENT.]

Rapidity of the Blood-Current in the Kidney and other Organs.—Influence of Fevers on Mental Affections.—Rare Abnormality of the Sexual Organs.—The University of Vienna.

DR. GÄRTNER, assistant to Dr. Stricker, Professor of General and Experimental Pathology, recently made an interesting communication to the Imperial-Royal Society of Physicians of this city on the rate at which the blood flows in the kidney and other organs. Several similar experiments had previously been recorded. Claude Bernard examined the rapidity of the blood-current in salivary glands when at rest, and when subjected to irritation; Sadler and Gaskell (under the direction of Ludwig) that in passive and in irritated muscles; and among the researches on this subject made in the Ludwig laboratory, must also be mentioned those of Slavjanski on the rapidity of the blood-current in the inferior vena cava, and of Basch and Tappeiner on its rate of movement in the portal vein. This method of separately examining each organ as to the rapidity with which the blood passes through it has, however, other advantages besides the immediate results obtained by these inquirers. Each organ can thereby be examined as to the presence of nerves in the blood-vessels, and as to the different conditions under which these nerves act either in the way of narrowing or distending the vessels. Some hints for therapeutic use might also be got by ascertaining the various ways in which the vessels of a particular organ are influenced in respect of the quantity of blood contained in them. This mode of investigation, moreover, makes it possible to perform comparative experiments as to the quantity of blood passing through two different organs of the same animal in equal spaces of time. From such experiments it is clear that the rapidity of the outflow of the blood from the renal vein is greater than that from the femoral vein below Poupart's ligament, though the region drained by the latter is comparatively much larger. Dr. Gärtner performed his first experiments on the kidney of the dog. A cannula, provided with a tube to carry away the out-flowing blood, was introduced into the renal vein, and the blood-current was observed either by counting the blood-drops as they fell, or by Ludwig's graphic method. When the operation was performed with sufficient care, and without doing any injury to the kidney itself, the loss of blood was comparatively slight, and did not interfere in any way with the experiment. In a curarized animal, when artificial respiration was suspended, the rapidity of the blood-current diminished exactly in proportion as the blood-pressure increased. In three cases, not a single drop of blood escaped for more than a minute, when the animal was near suffocation. The oscillations of the blood-pressure were also shown by the quantity of out-flowing blood; to each fall of the blood-pressure curve corresponded a quicker dropping of blood, and when the arterial blood-pressure increased the drops again fell more slowly. It was known that when the suffocation of the animal was continued for a longer time, the blood-pressure again decreased, but there was no corresponding increase in the number of falling blood-drops. This was another proof of the truth of the theory established by T. Wagner and Openchowski, that the decrease of the blood-pressure which preceded the death of the animal did not arise from weakness in the blood-vessels, but from diminished action of the heart. Dr. Gärtner further remarked that Carl Ludwig and Thiry had, by direct inspection of the exposed kidney, observed that it became pale, and that the blood-vessels contracted when the medulla oblongata was irritated. This phenomenon, on which one of the most important points of the doctrine of circulation is based, when produced in the manner described by Carl Ludwig and Thiry, is so slight that no exact idea can be obtained of it, even when the experiment is repeated for several times. By the experiment of the out-flow of the blood, however, the contraction of the vessels can be demonstrated even to a great audience. Besides the kidney, Dr. Gärtner said he had performed some experiments on the crural vein. On suffocation of the animal, the action of the blood-current was contrary to that in the renal vein. The blood-drops fell with a rapidity directly proportional to the increase of blood-pressure. Such an antagonism had already been proved to exist by other methods; for instance, it had long been known by thermometry that after division of the sciatic nerve in animals the blood-vessels of the hind legs became paralysed. It was observed that, in such cases, the temperature of the hind legs was raised, and their size also increased, as well as the pressure in the veins. Here also no other mode of operation could produce the phenomena in so striking a manner as what may be called the bleeding method. Be-

fore the sciatic nerve was cut through, the blood could be seen falling drop by drop from the mouth of the cannula, while after division of the nerve-trunk gushed out with great force and rapidity, as if a sluice had been opened. Its flow could again be diminished and slackened, when the peripheral end of the sciatic nerve was irritated by electricity. Dr. Gärtner stated that, together with Dr. T. Wagner, he had performed similar experiments on the brain, and that he would give an account of them at one of the next meetings of the Society.

Dr. Julius Wagner, assistant to Dr. Leidesdorf, Professor of Mental Diseases, recently published a paper in which he called attention to the good effect of acute infectious and febrile diseases on mental affections. Numerous cases recorded by distinguished writers, together with observations which he had personally made in the Vienna *Irrenanstalt*, went to show that, in a good many cases of mental disease, recovery, either permanent or temporary, resulted from intercurrent acute infectious maladies, such as typhoid fever, cholera, intermittent fever, the acute exanthemata, and erysipelas. Of these, typhoid fever was the most important. Many epidemics of that disease occurring in lunatic asylums had been described, and they were sufficient to show that the recovery of the patient's reason after the fever was more than a mere coincidence. Dr. Wagner describes in detail a case which came under his own observation. The patient, a woman aged 27, was the subject of acute mental disease, which had come on during lactation, and showed no tendency to recovery; on the contrary, the disorder threatened to pass into a condition of secondary imbecility, when the patient was attacked by typhoid fever, whereby her mental state became improved to such a degree that it was hoped she would completely recover. After a time, however, a relapse in the mental disease took place, which makes the temporary amelioration directly following the fever all the more striking. Dr. Wagner also referred to a number of cases in which the intercurrence of cholera and intermittent fever had had a markedly beneficial effect on mental disease. Of the acute exanthemata, small-pox was known to have a good effect on mental affections; cases had been recorded in which progressive paralysis had been cured or ameliorated by the intercurrence of small-pox. Good results were also obtained from vaccination in cases of commencing progressive paralysis. Equally numerous were the observations on the favourable influence of erysipelas on mental disease. Dr. Wagner describes two such cases which he had himself met with. Besides the cases of mental disease in which the acute fevers already mentioned had a good effect, Dr. Wagner refers to others in which they had no effect at all, and in order to determine the conditions under which benefit was produced, he groups the collected cases under four headings, as four points had especially to be taken into account, namely, (1) the sex; (2) the age of the patient; (3) the duration of insanity before the occurrence of the fever; and (4) the form of the mental affection. With respect to the third point, he arrives at the following important conclusion: When a patient suffering from mental disease is attacked by one of the above-mentioned fevers within six months of the commencement of his insanity, there is a very great probability of his being cured of the latter affection. As regards the fourth point, Dr. Wagner's various observations convinced him that, as was to be expected, the cases known as "acute curable mental disease," formed the majority of the recoveries; but cases in which a proportionately good effect was produced, even when the mental disease was of long standing and had become chronic, were sufficiently numerous to lead Dr. Wagner to discuss the question whether it would be justifiable in any way to make use in the treatment of mental disease of the remedy thus offered by Nature. He does not hesitate to answer this question in the affirmative, and to recommend that the artificial production of fevers should be introduced into the therapeutics of insanity. Dr. Wagner alluded to experiments which had already been made in this direction by Rosenblum and Motschut-Roffsky with the virus of relapsing fever. Dr. Wagner, however, is inclined to prefer the use of the virus of erysipelas and intermittent fever, as the diseases produced thereby are comparatively mild; he especially recommends the virus of erysipelas, of which pure cultures could be obtained very easily.

At a recent meeting of the Imperial Royal Society of Physicians, Dr. Friedinger, the director of the Vienna Foundling Hospital, made a communication relative to a very peculiar anomaly of the sexual organs in a nurse who was at that time in the hospital. The clitoris was about two inches and a half long, with a prepuce and a urethral orifice at the point, through which urine was passed. The organ had also a urethra at its posterior part leading into the bladder; the whole organ thus exactly resembling a penis hanging down between the labia and covering the opening of the vagina. The woman had never been pregnant before. Dr. Friedinger remarked that neither he nor Dr. Hofmann, Professor of Legal Medicine, to whom he had shown the woman, had ever seen such an abnormality.

According to official statistics, the University of Vienna was attended last winter by 6,157 students. Of these, 204 ordinary and 19 extraordinary students belonged to the theological faculty; 1,911 ordinary and 232 extraordinary students to the faculty of law; 2,318 ordinary and 675 extraordinary students to the medical faculty; and 460 ordinary and 338 extraordinary students to the philosophical faculty. This shows an increase of 231 in the number of students in all the faculties as compared with the corresponding period of last year. There were 320 more in the faculty of medicine, and 6 more in that of philosophy, but the faculty of law shows a decrease of 89, and that of divinity a decrease of 8. Of foreigners attending the medical classes during the last winter, there were 95 Americans, 33 Germans, 13 Swiss, 30 Englishmen, 76 Roumanians, and 37 Servians.

CORRESPONDENCE.

THE GENERAL MEDICAL COUNCIL AND THE APOTHECARIES' SOCIETY.

SIR,—The letter of Dr. McVail in the JOURNAL of May 28th first deals with the conditions under which the qualifying examinations under the Medical Act of 1886 are to be conducted by the Society of Apothecaries—and which he is of opinion should have been settled by the Medical Council—and then raises a doubt whether, as he states, by appointing assistant examiners in surgery, the Council has in fact enabled the Society to grant a qualifying examination at all.

I myself think that if, instead of discussing at such length a foregone conclusion, the Council had occupied itself in settling the general outline of the conditions under which the qualifying examination was to be held, it would have done a far more useful work. I say "general outline," because it would have been impossible to settle details, which can only be worked out by practical experience. As it is, the Council has left the Society very much to frame those conditions for itself; but I can assure Dr. McVail that many of his apprehensions in this respect are assumed, and are consequently groundless, and I have no fear whatever but that at the end of the year the Council will be thoroughly satisfied that the "standard of proficiency in medicine, surgery, and midwifery," required under the Act, has been fully secured.

I have said that Dr. McVail raised a doubt as to whether the Society can, under existing circumstances, hold a qualifying examination at all. But he does more than this; he settles that doubt judicially. At first he "thinks it more than doubtful"; then he is "of opinion that there has been a misapprehension"; and at last, becoming bolder, he "cannot doubt that the surgical examiners that were alone given to the Apothecaries' Society do not constitute the examination a qualifying one." I do not feel quite certain whether, when Dr. McVail wrote his letter, he had before him the actual text of the resolutions passed by the Council, and which are as follows:

(*a*) That, in pursuance of the application made to the General Medical Council by the Society of Apothecaries of London by letter dated April 12th, 1887, for the appointment of assistant examiners to the Society, under the provisions of the Medical Act of 1886, the Council hereby consent to appoint assistant examiners accordingly.

(*b*) That the assistant examiners to be appointed for the Apothecaries' Society of London be examiners in surgery.

(*c*) That these assistant examiners be three in number.

(*d*) That each of these three examiners be paid an annual stipend of £100.

(*e*) That, for a term of one year, from July 1st next, and subject to the orders of the Council, Messrs. Makins, Walsham, and Andrew Clark be appointed by the Council to be surgical examiners, to assist the Apothecaries' Society of London in the conduct of its qualifying examinations.

The first resolution makes it, I think, absolutely free from doubt that the Council have done what the Act requires, and that this resolution is in no way weakened or affected by the terms of the subsequent resolutions.

By virtue of Section 5, Subsections 1 and 2, of the Act of 1886, any persons, whatever their qualifications, may be appointed by the General Council to assist at the examinations, and to secure the maintenance of the required standard of proficiency in medicine, surgery, and midwifery. The Act in no way provides that the assistant examiners shall possess any special qualifications, but their

appointment by the General Council is deemed to be sufficient evidence of their fitness for the discharge of their duties.

The inspectors under the Act have no duty in connection with any examination conducted under Section 5; the powers and duties which it is intended should be conferred upon the assistant examiners by the General Council under Subsection 2 would, in fact, render any reports made by inspectors superfluous. I am compelled, therefore, to affirm that Dr. McVail's statement that candidates who after June 30th pass the examination at the Hall "could not be legally registered," has no foundation in point of law; nor do I think it necessary to give his argument in this respect any more serious attention than I feel will be bestowed on it, when the occasion arises, by the able Registrar of the Medical Council.—I am, etc.,

June 1st, 1887. JAMES R. UPTON, Clerk to the Society.

SIR,—There is much misapprehension abroad as to the powers and duties of the General Medical Council. The JOURNAL of May 28th contains examples, from two opposite quarters, of mistakes as to the true functions of that body, and I venture to try to put the medical public right on these points. I may claim to be impartial, as I know something of the working of this much-abused body, and yet I can hardly be accused of being an accomplice in its guilt.

Dr. McVail falls into the more natural error of stretching the prerogatives of the Council. His contention, though plausible, is unfounded. The Act is certainly ill-expressed, and I confess for a time I was inclined to take my colleague's view of the meaning of Section 5, but on a broad construction it is evident that Parliament merely meant to complement the examination of the Society of Apothecaries. It would never in an indirect way have set up a new kind of function for the Council.[1] For what are those functions, strictly understood? The answer to which brings me to consider the exoteric opinions that prevail as to that body. "General Medical Council" is a very unfortunate name. It is a pity that it was not called "The Council of Medical Education and Registration." This would more truly have described its powers and duties. These pertain solely to forming schemes for examination, to inspecting these examinations, and, finally, to registering the qualifications obtained. What particular reference had Sir W. Gull's remarks to any of these functions? They may possibly bear on medical education, but that was not the subject under discussion; and, besides, nothing could be worse than constant criticism and tinkering of the present regulations. If Sir William wishes to discuss proper and improper scepticism as to the value of drugs in medicine, let him open the subject—as he is so well fitted to do—in your paper, and I can assure him no symposium will prove more attractive to the thinking members of the profession. Dr. Fothergill has well expressed the ardent desire of us all to learn how best to treat such an every-day disease as typhoid fever.

As I have said, the profession at large magnifies our office, and hence it expects us to do what we have no power to perform. One thing we are often asked to do, namely, to put down quackery. The answer is: Parliament has not given us any power to do so outside our profession. Inside, the duty devolves upon the different licensing bodies. And yet, with all due deference to our Mentors, I doubt if much good is to be obtained by any penal proceeding. I have heard it remarked by one of the wisest, if not the wisest, of medical men that no one was ever made good by any Act of Parliament. Neither will any penal clause, however stringently administered, make honest men and gentlemen of every one of us. The only security against intra-professional quackery is the general elevation of tone of the whole body of medical and surgical practitioners, including the much-maligned but not necessarily degraded apothecary.—I am, etc.,

WILLIAM BRUCE, M.D.

INTRA-LARYNGEAL SURGERY AND MALIGNANT DISEASE OF THE LARYNX.

SIR,—In the second part of your first leader of May 28th I find some points of great importance, not only to laryngologists, but to the medical community and to the public in general, discussed in a sense which induces me to offer, with your permission, some remarks on the subject.

It is impossible within the space of a letter to discuss all the statements to which I take exception, and I must therefore only refer to two of the most important, namely, (*a*) the alleged tendency of benign laryngeal neoplasms to become transformed by repeated operative interference into malignant ones; and (*b*) the question of the early diagnosis of malignant disease of the larynx. I can, however, not abstain from protesting in passing against the statements concerning the supposed enormous difficulties of intra-laryngeal operations, the bold assertions that it was "only very seldom" that a papilloma with a distinct pedicle could be got away entirely, that sessile growths could "never be thoroughly removed with forceps," that the operations required to be "frequently repeated" and could "seldom be so complete as to prevent recurrence." The first three of these statements are answered by the results of intra-laryngeal operations published within the last twenty-five years by the most trustworthy observers of all nations. Moreover, again and again patients afflicted with sessile and multiple laryngeal growths have been shown before and after operation to medical societies, so that even those who do not themselves practise these operations have had opportunities of forming an opinion on the value of intra-laryngeal surgery.

The statements concerning the frequent repetition of the operation and the recurrence of the growths are inaccurate, unless fibromata, which form a very considerable fraction (31 per cent.) of all benign neoplasms of the larynx, and which when extirpated never return, are excluded. On the other hand, even the percentage of the recurrence of papillomata is only 33⅓, so that the corresponding statements of the leader require very considerable modifications. I take the liberty of referring those of your readers who take an interest in these questions to a review which I wrote eight years ago in the *London Medical Record* (November 15th, 1878, p. 491, *et seq.*), and in which they will find a substantiation of the views expressed in the foregoing lines.

With regard to the first of the two points, which demand a fuller discussion, namely, the alleged special liability of benign laryngeal growths to change their character when subjected to the repeated irritation inseparable from the use of forceps, I challenge proofs of the correctness of this statement, not mere renewal in other words of the assertions; and I beg to say at once that I shall not consider such phrases as "there is reason to believe," or "it cannot be wondered at if," etc., in the light of proofs.

It is with good reason that I speak so definitely. The mischievous assertion to which I refer has been made before this, but has never been supported by proofs. It is time that this question should be finally settled; for, if the statement be true, it means, in my opinion, simply the death-knell of intra-laryngeal surgery. I, at least, fail to see how a conscientious man could ever plunge his forceps into the larynx, if he had just reason to fear that by his manipulation he may change the character of a benign growth into a malignant one. This is a point of vital importance.

But I ask again, where are the proofs of this assertion? When I wrote the review before referred to—and I firmly believe, from my knowledge of laryngological literature, that the proportions have not changed at all since, or, if so, only for the better—I looked through the whole laryngological literature then in existence, and I found that in about five hundred cases of intra-laryngeal removal of papillomata, two instances were recorded in which, after the operation, a change into malignant growth was stated to have occurred. It is not at all proved that even in these two cases the malignant changes were due to the operations. It is well enough known that benign growths sometimes assume a malignant character without any surgical interference (Virchow, *Die Krankhaften Geschwülste*, vol. i, p. 349). I am quite ready to believe that a permanent irritation, even of healthy tissues, might lead to the formation of heteroplastic growths; but I still decidedly adhere to the opinion which I expressed eight years ago, namely, that such a formation or a degeneration of benign into malignant neoplasms only takes place when there is a certain inclination to constitutional vice, with or without irritation. If prolonged and repeated irritation alone is sufficient to produce malignant disease, why does not every chimney-sweep get cancer of the scrotum? why not every inveterate pipe-smoker cancer of the lip or of the tongue? why, in every case of multiple recurrent papillomata in the larynx which has been subjected to most energetic, prolonged, and frequently repeated operative treatment, is a change into epithelioma not in the end observed? and why, again—if irritation alone be the factor that decides the tendency to transformation of a benign into a malignant neoplasm—do harmless goîtres, which have never been subjected to any operative or other irritation, sometimes undergo malignant changes?

The truth, it appears to me, lies midway. Even prolonged irritation of benign growths will not produce transformation into malignant tumours unless there be a constitutional tendency to malignant dis-

[1] I do not pretend to be a lawyer, but I think a lawyer could answer Dr. McVail's argument as directed to the second subsection of Section 3. The words are: "a qualifying examination held by any of the bodies aforesaid," not by "a university or any combination of bodies as aforesaid." The Apothecaries' examination has been made, by the addition of assistant examiners, a "qualifying" examination, and it is now one of the bodies "aforesaid," or mentioned there, namely, "a medical corporation."

ease; whilst, on the other hand, if there be such a tendency, it will be more quickly brought into action if the supposed benign growth be subjected to prolonged and repeated irritation.

If this be true, the whole question of intra-laryngeal interference in the case of growths turns, as it ought, upon the early differential diagnosis between benign and malignant laryngeal neoplasms. Now this is frequently a question of very great difficulty, and one in which even the most experienced laryngoscopist is not exempt from occasional mistakes. It is impossible to enter, in the space of a letter, fully into all the points which must here be taken into consideration. There are, however, a number of symptoms, none of them decisive in itself, but each of some significance, which will, especially when several of them occur simultaneously, raise at once the suspicion of malignancy in the mind of an experienced observer. Speaking from a rather considerable experience of both benign and malignant laryngeal neoplasms, I should say: if, in the case of a person who has passed the age of 35, a small warty growth makes its appearance on one of the vocal cords, causing, at a very early period of its existence, intense hoarseness, or even aphonia; if the vocal cord to which it is attached at an early period becomes congested, and still more if its mobility should become defective; if there be signs of irritation in the neighbourhood; if the neoplasm, after partial or total destruction or removal, reappears very soon again, and grows rapidly—these are circumstances which ought to warn the observer to be on his guard. The absence of constitutional symptoms does not in the least exclude malignancy. It is characteristic of intrinsic laryngeal cancer that often enough it causes only in later stages pain, dyspnœa, dysphagia, swelling of neighbouring lymphatic glands, cachexia, etc.

What is to be done under these circumstances? From the general considerations developed above it will be seen that, if my views are correct, it would be the worst possible fault of art to irritate the suspected neoplasm by continued cauterisation or similar methods, for should there be really a tendency to transformation into cancer—in most cases, however, as will be shown hereafter, there is primarily malignant disease—this tendency would simply be intensified by such proceedings. It is under these circumstances that the exploratory intra-laryngeal removal and microscopic examination of a small fragment of the growth come into play. Should the latter show evidence of epithelioma, scirrhus, sarcoma, etc., the diagnosis is of course settled.

But here let me again raise my voice, as I did in a paper read in November of last year before the Clinical Society, in warning against the fatal mistake of drawing from the negative result of the microscopic examination the inverse conclusion that the growth was not malignant, and that now a non-discriminating surgical interference in the patient's larynx was quite justifiable. Thrice even during last year have I had the opportunity of seeing the utter fallacy of such a conclusion. In the first case, the one reported before the Clinical Society, the examination made by Mr. Shattock and myself of the first piece removed from the suspected case showed the characteristics of an apparently innocent papilloma, whilst the examination of the second fragment, which was removed only five days after the first, so that nobody will think here of a transformation having taken place in the meantime, revealed that we had in fact to deal with a cornifying epithelioma. In the second case in point of time, which my friend, Mr. Butlin, brought before the Clinical Society, and which I had the opportunity of seeing repeatedly with him, the results of the microscopic examination were at first very doubtful, and by no means characteristic of malignant disease, and only the clinical features of the growth from the first raised Mr. Butlin's suspicion, a suspicion which was later confirmed by the more decisive evidence afforded by the examination of a fragment subsequently removed. The most convincing instance, however, and one that really teaches much in this whole question, has since occurred in my practice. I recently removed a warty growth, being, with its base of healthy tissue, one-sixth and one-seventh of an inch in longitudinal and transverse diameters, from a vocal cord. My friend, Mr. Shattock, kindly made transverse sections through the whole growth and its base. If one of these sections be gently moved along under the microscope, it is seen that about three-fourths of the specimen show nothing but the common characters of inflammatory tissue—namely, an enormous number of small round cells; then there occur, scattered in the midst of this inflammatory tissue, some small epithelial proliferations, and here and there a few cell-nests; and if the slide be again shifted a little, we find ourselves suddenly in the middle of the most typical cornifying epithelioma that could be seen.

The practical importance of this is obvious. Supposing I had left the last small portion of the growth, that is the part which yielded these decisive results, in the larynx—and need I say that it was great good luck that I removed it in one piece with the rest?—the dictum of the pathological expert could only have been innocent inflammatory new growth. Supposing now I had (what I certainly should not have done under any circumstances), trusting to the microscopic result, began cauterising and otherwise irritating the base of the growth, supposing that it had reappeared, that I had again removed a fragment, and that this time the expert had found evidence of epitheliomatous disease, what would have been the verdict?

According to your leader, I see only one reply namely, that I had by my continued irritation caused an originally innocent growth to undergo malignant degeneration. And yet this growth was malignant before it ever was touched.

Here, then, Sir, is the salient point of view, from which this letter is written. I wish to defend my specialty against unjust charges, and on the other hand to assign to accessory means of investigation, however valuable in themselves, their proper position.

With regard to the first point, I believe that probably in all, or at any rate nearly all, the cases in which a malignant degeneration is said to have taken place after, or rather in consequence of, intra-laryngeal interference, the disease was malignant from the very first, and was only not recognised as such. With regard to the second, I am certainly grateful for the help which the microscope has often given me in difficult and doubtful cases, but I do not expect it to do impossibilities. The pathologist can only give an opinion on the fragment that has been submitted to him, and not on the disease from which the patient suffers, unless he detects in that fragment positive evidence of malignant new growth. Considering the fortuitous character of the removal, the fact that growths need not at all be uniform in their structure, that papillomatous excrescences sometimes spring from an epitheliomatous basis, etc., the piece removed may be, and often is, quite inconclusive as to the true character of the malady. It would be a grave fault to disregard, under such circumstances, all one's well-founded clinical apprehensions. The question is parallel to that of the examination of the sputum in suspected phthisis for bacilli. If they are found, well and good; the diagnosis is settled; just as little, however, as the physician after one negative examination of the sputum would doubt his own diagnosis, which he has founded upon a number of other well-marked clinical symptoms, is the laryngologist entitled to dismiss, after one negative examination of a particle of the suspected growth, all those fears which preceded the examination. Here is the point where judgment and caution are required. In many cases the proper course, it appears to me, under such circumstances, consists—unless the character of the growth declares itself in the meantime by other symptoms—in the cautious repetition (if necessary, several times) of the exploratory removal and of the microscopic examination. No dogmatic rule, however, can be laid down in this respect. Each case must be judged on its own merits, and it ought never to be forgotten that time is precious in these cases, and that, by waiting too long, the chances of a real cure by radical operation may be irretrievably lost.

The questions here involved are too manifold and too numerous to be discussed in the space of this letter, which has, I am afraid, already attained an excessive length. I trust, however, that the interest which, from a clinical, pathological, and therapeutical point of view, is attached to the whole subject will serve as an excuse for troubling you with the foregoing remarks.—I am, etc.,

Wimpole Street, W. FELIX SEMON, M.D., F.R.C.P.Lond.

SIR,—The interest which I have for some years taken in the subject of laryngeal carcinoma emboldens me to ask to be allowed to comment shortly on some of the statements in your very interesting article in the JOURNAL of May 28th, on the "Illness of the Crown Prince." I do not know whence the opinion is derived that benign growths of the larynx are peculiarly prone to become malignant. So far as I am aware, there is no evidence to prove that this is so; on the contrary, there is a great deal of evidence to prove that they rarely become malignant, even under what may be regarded as great provocation. May I venture to suggest that your author takes an exaggerated view of the difficulty of removing successfully pedicled papillomata of the larynx, and of the necessity of cauterising the stump? My own experience of such matters is very inferior to that of some of my friends who devote themselves solely to laryngology, but it is sufficient to enable me to take a much more hopeful view of the intra-laryngeal method than would be gathered from your article. But the chief points to which I would allude are the results of the microscopic examination of a fragment removed with the forceps, and the manner in which our journals (particularly some of the daily journals) have spoken of the triumph of British over German laryngeal surgery.

Since I directed attention to the importance of the removal and careful microscopic examination of fragments of questionable laryngeal growths in 1883 (*Malignant Disease of the Larynx*, p. 26 and p. 43), I have enjoyed numerous opportunities of examining such fragments, both in my own practice and in that of others. And I have learned how misleading and dangerous it is to rely on the examination of a single fragment, unless the appearances are pathognomonic of such a disease as squamous-celled carcinoma (epithelioma). If the structure of the fragment is of doubtful import, or such as one might find in inflamed tissue, it is essential, before a decided opinion can be expressed, that a second or even a third fragment should be removed and examined. One or two cases recently reported have shown the immense importance of this caution, and the blunders which must have resulted had it been neglected.

In the case of the Crown Prince, I understand that the fragment which was removed was very small, and was removed with difficulty on account of the surrounding swelling. I have every respect for the marvellous manipulative skill of Dr. Morell Mackenzie, but I also know how impossible it is under such circumstances to select with anything approaching certainty such a fragment as is best fitted for examination. We all of us admit the superiority of Professor Virchow in microscopic anatomy; but, after all, he can only express an opinion on the structure of what has been submitted to him for examination.

The question is at present in a very unsettled condition, and some, if not many, of us here feel the gravest apprehensions regarding the real nature of the ailment of the Prince. The occurrences of the past few days do not afford the least proof that Dr. Mackenzie is right and the German physicians are wrong, and I do hope that our journals, whether lay or medical, will refrain from any expressions of triumph until we are in a position to know that Dr. Mackenzie has really "well upheld the credit of English medicine abroad."—I am, etc.,

HENRY T. BUTLIN.

82, Harley Street, W.

RIGHT UPPER CANINE TOOTH REMOVED FROM THE LEFT ORBIT OF A CHILD.

SIR,—Permit me to thank Mr. Storer Bennett for his courteous criticisms upon the case which appeared in the JOURNAL of April 23rd. In my paper I clearly expressed the opinion that the tooth was a supernumerary right upper canine, but Mr. Storer Bennett questions the correctness of my conclusion, and considers that it ought to be described "as a supernumerary tooth, resembling a right upper canine." Now, there is a great deal of difference between mere accidental resemblance and identity of conformation. The tooth presents the special characters of a right upper canine belonging to the temporary set, and appears to be a well-developed tooth for a child 2 years of age. It has been forwarded to the Curator of the Museum of the Royal College of Surgeons, and I hope Mr. Storer Bennett will kindly examine it for himself, and then record his opinion.

With reference to my explanation of the curious eruption of a right canine tooth in the left orbit, I cannot admit that your correspondent has quite exploded it by his letter. It still appears to me that this tooth, during the early stages of growth, must have occupied the right maxilla. A well made supernumerary tooth presents special characters which at once affiliate it to one of the normal forms, and strongly suggest its original site in the primitive dental groove. During the follicular stage, each papilla assumes a shape which actually corresponds to the form of the coming tooth, and certainly this definite shape has a formative relation to the position of the papilla on the rudimentary jaw. For my own part, I see no reason to doubt that supernumerary teeth, which can be fairly classified as molars, canines, or incisors, have passed through the regular evolutionary changes within their special follicles, just like their normal associates.

In conclusion, I still regard the theory of "crossed displacement" as a very probable explanation of my case; at the same time, I beg to assure Mr. Storer Bennett that I am ready to cast it to the winds of Heaven as soon as he has kindly provided me with something better, and something more consistent with the known facts of dental development.—I am, etc.,

J WARD COUSINS.

Portsmouth, May 19th, 1887.

A PHILANTHROPIC PROFESSION AND A NIGGARDLY PUBLIC.

SIR,—It is not usual to discuss in the public press a confidential communication. Your correspondent, "M.D.," appears to think otherwise, as in his letter with the above heading, which appeared in the JOURNAL of May 14th, he criticises a scheme sketched out in a circular marked "private" and which must have been shown to him in confidence.

He, however, totally misinterprets the aim of the proposed association, which is not designed to reduce the guinea fees of eminent specialists to a fixed charge of five shillings a visit, but in great part to relieve the overcrowded out-patient wards of our hospitals of that portion of the *habitués* who are able to make a small payment instead of accepting advice gratis. The staff will not consist of gentlemen at the head of the profession, but of younger men of perhaps equal competence, who are working their way to that position by the long and meritorious labours that "M.D." describes. The remarks of your correspondent as to the gratuitous work of eminent specialists do not therefore apply.

Under the present system, patients of small means suffering from diseases of the eye, ear, etc., have but two alternatives; namely, either to go to eminent specialists, whose fees are usually two guineas for the first visit and one guinea afterwards (younger men having to charge practically the same under existing ideas as to professional etiquette), or to attend at the hospitals, where they pay nothing. A large number, being unable to afford the former, pocket their pride, and adopt the latter course. How this arrangement benefits the profession I fail to see. It must be remembered that the bulk of the gratuitous labour to which "M.D." alludes is done by the junior members of the hospital staffs, and not by the gentlemen who "have arrived at the period when guineas flow in." During the long years of probation, when these useful coins are few and far between, I cannot but think that the younger men would not be injured by receiving a certain number of "fixed fees of 5s. a visit," instead of treating probably the same patients for no fee at all. I fancy that when the scheme is published, it will be seen that the "vicarious philanthropy" about which "M.D." is so much exercised is not an element in the question, and that the benefits of the association will be equally divided between the needy portion of the public and the junior members of the profession who have taken up special branches.

"M.D." seems to think that it is the natural function of men working at special branches to pass through "years of patient and anxious labour," uncheered by fees of either five shillings, or one guinea, and that having reached the happy "period when guineas flow in," they should rest, and be contented, while doing what they can to prevent any change in the system. The younger members of the profession, however, will probably think differently, and not regard the efforts of the "peers, members of parliament, bishops, authors, and others," with the contempt he displays.

It may, nevertheless, be a satisfaction to him to know that the plan will not in any way affect his *clientèle*, as under the rules, only the class a little above the very poor, such as clerks, governesses, etc., will be able to attend the institution. That they will prefer to do so, rather than obtain charitable treatment at hospitals, which is at present practically their only resource, is, I think, certain. Consequently, this "niggardly" class will not be making a fresh call on the philanthropy of the profession, but taking a decided step in the other direction.—I am, etc.,

EDWIN H. BAVERSTOCK, Hon. Secretary.

36, Queen Square, London, W.C.

ON THE TREATMENT OF ANEURYSM BY IODIDE OF POTASSIUM.

SIR,—At p. 930 of the JOURNAL of April 30th Dr. Suckling, of Birmingham, states that he treated his cases of aneurysm according to "Tufnell's plan," along with iodide of potassium "in large doses, commencing with ten grains and increasing to a dose of a drachm or more, according to tolerance and effects;" and he adds that "in two or three cases the iodide seemed to do harm, the pulse becoming very quick." Had Dr. Suckling been fully cognisant of all the facts bearing on the treatment of aneurysm by iodide of potassium, he would have known that this quickening of the pulse is due to an overdose, and is one of the things to be guarded against. A full statement of these facts is to be found in the *Ed. Med. Journ.* for June, 1876, p. 1142; in the JOURNAL for April, 1879, p. 511; in the second edition of my *Clinical Lectures on Diseases of the Heart and Aorta*, 1882, p. 453; and in the *Lancet* for February, 1886, p. 356. With your permission I shall restate these facts concisely, for the instruction of those whose treatment fails through ignorance, and the information of those others who, even in the present day, continue to practise the unscientific and hazardous plan of filling the sac with iron wire, apparently unaware that we now have a perfectly reliable method of treating aneurysms, the success of which is entirely commensurate with the earliness of our diagnosis and our acquaintance with the principles on which the treatment is based.

As recumbency reduces the heart's pulsations from six to more beats

per minute, it is always advantageous and often necessary to begin the treatment of aneurysm by putting the patient to bed. The patient's pulse must then be counted daily at the same time for several days, so as to ascertain his normal pulse-rate when recumbent. Next we prescribe the iodide, in ten-grain doses every eight hours. The pulse-rate is noted for several days subsequently; if it remains unaffected, the dose of the iodide is increased to fifteen grains every eight hours; and should the pulse-rate still remain unaltered, the dose may be still further increased. It is unusual, however, for more than fifteen grains to be given with advantage, and it is more usual to find it impossible to give more than ten grains every eight hours without raising the pulse-rate. The proper dose, once ascertained, must be steadily continued till the desired effect is secured. Marked improvement is generally observed in three months, sometimes in less. If the case is got early enough the cure is practically complete; but even when treatment is delayed till the aneurysm has attained a large size, the relief is usually remarkable, and it is obtained without risk.

The action of the iodide is to dilate the arterioles and thus lower the blood-pressure over the whole body, the force of the heart being at the same time slightly diminished. The result of this lowering of the blood-tension is that the aneurysm is no longer actively dilated with each pulsation, and the walls of the sac behave like a hollow muscle opposed to an obstacle with which it can successfully cope, and become slowly hypertrophied, the sac itself at the same time gradually diminishing in size. That the walls of the sac may hypertrophy, it is of importance that the blood-tension should not be too much lowered, and for this reason the pulse-rate requires to be closely watched at the commencement of the treatment, as a rise in the pulse-rate is the only available indication of an injurious lowering of the blood-tension. As the iodides not only lower the blood-pressure, but also remove the albuminates from the blood, there is no need to starve the patient. If we do so we unduly lower the blood-pressure, impoverish the blood, and render a curative hypertrophy of the walls of the sac more or less impossible. The superadding of "Tufnell's plan" to the treatment by iodide of potassium is, therefore, no improvement, but the reverse; and though just at first we must be a little careful in dieting our patient, because recumbency and repletion are liable to induce gastric attacks, yet it is needful to feed the patient well during the iodide treatment, otherwise good results are not so surely obtained. It is always necessary for an aneurysmal patient to be a total abstainer from all alcoholic drinks, both during treatment and ever after.—I am, yours, etc.,

GEORGE W. BALFOUR.

Edinburgh.

OPERATING PHYSICIANS.

SIR,—Although an "operating physician" myself, I can endorse much that is advanced by "Surgeon," but his arguments are too heavily weighted by surgical bias to be strictly fair.

Abdominal surgery is a new product. The magnificent results of a very few special surgeons, and in special hospitals, have brought all the abdominal organs within reach of the knife. This is so much taken from the physician. The scramble that is now going on amongst obstetric physicians and surgeons is unseemly and not for the good of the patient. The fact is that both these should stand aside. Only a few special men are capable of doing abdominal surgery, and those few may be physicians or surgeons as it happens. They are not made at Lincoln's Inn, though, curiously enough, almost every man of note in abdominal surgery comes from the Edinburgh school, and began life with a medical degree. Force of circumstances and Providence have made them what they are.

Almost every case of abdominal surgery differs, and it requires surgical genius to deal with difficulties as they arise. Every step of an amputation or ordinary surgical operation can be laid down in black and white, but it is not so in abdominal surgery. After the abdomen is opened, nothing is defined. The bulk of men in my own line of work now do ovariotomy, oöphorectomy, salpingotomy, hysterectomy, etc. Many of them do it so badly that if their results were placed alongside of six or seven special surgeons (who get the bulk of the worst cases), the exhibition would be statistically a terrible one. Big operations (and big fees too) have their attractions, and nearly every man now "goes for" a leading part in the professional drama. Abdominal surgery is as "land reclaimed" by a few special surgeons. It is a great work, and it should be handed down from one to another of them who have the special gifts and special opportunities of becoming familiar with the work. Most hospital-surgeons, after getting placed on the staff, follow on by rotation, and it is perfectly dreadful to think of abdominal surgery as I know it, and see it falling into the hands of a "rotated" surgeon, though he be a gold medallist in anatomy and surgery, and I say exactly the same of the average gynæcological physician.

If "Surgeon" could change to-morrow all the existing gynæcological physicians into "surgeons for diseases of women" or "gynæcological surgeons," we should still be exactly where we are except in name. Changing the name would not alter the facts, but almost every man in the future would be satisfied with a surgical degree if it carried with it these hospital appointments and professional prizes.

Twenty years ago a medical degree was absolutely necessary for an obstetric physician. Already these are debarred all hospital appointments for the so-called pure surgeon and pure physician, and the few appointments that are open to gynæcologists "Surgeon" would, by the stroke of the pen, make surgical. Is this fair? Many leading surgeons sweep the whole domain of surgery, treat any medical cases that come in their way, aspire to abdominal surgery, and would take everything but midwifery, and such gynæcology as can be dealt with by medicines only, from the obstetrical physician. Virtually this would be getting rid of the latter altogether, for unless the minimum midwifery fee were fifty guineas, a living fit for a gentleman could not be made at it, and most of us hope to live by our profession.

Personally I chose my vocation as physician for diseases of women, and not as an abdominal surgeon, and I am prepared to "stick to my last." The surgeon claims part ownership of the strictly pelvic surgery, and the physician shares the more medical cases. The obstetrical physician overlaps both, but the surgeon is always trying to clip the one wing and the physician the other, so that the poor obstetrician has a chance of a fall if he does not remember that he is

Edinburgh. BETWEEN TWO STOOLS.

ENTERORRAPHY.

SIR,—I should not have ventured to trespass on your space after your full account of the meeting at the Medico-Chirurgical Society, had not the time at my disposal for replying to the discussion been so limited that I was forced to omit, or pass very rapidly over, points which deserved much more notice than I was able to give them. I shall be glad if you will allow me the opportunity of making these clearer.

And, first, the objection raised as to the respective length of time taken by the performance of Lembert's and my own suture. Is it reasonable to compare the time taken to use Lembert's stitch by a surgeon accustomed to practise it, and the time taken by the same surgeon in using mine, to which he is not accustomed? Moreover, the risk to the patient in these operations lies not so much in the length of time which the entire operation absorbs, although that is important, as in the period during which the bowel is outside the abdomen and exposed; this dangerous time I claim to be far shorter during the use of my stitch than with any other, for whilst my own can best be done with only the cut ends exposed at the level of the skin, the whole of the rest being reduced, no other stitch can safely be used in this position, but requires that at least some appreciable amount of both ends should lie outside, in which case the bowel wall is further irritated by the constant friction produced by the removal and replacement of warm towels, sponges, etc., to say nothing of the ever-varying temperature to which it is thereby subjected.

With regard to the total penetration of the bowel by the stitch, as opposed to the partial one of Lembert, I should like to point out that sutures are useful for two reasons, one of which appears to be overlooked: first, as a means of approximating tissues designed to unite; and, secondly, as a means of exciting plastic inflammation in those tissues, and thereby securing their union.

Union of the intestine has two distinct stages, in each of which distinct tissues play the principal part; in the choice of a method of suture regard should surely be had to both. The first epoch is occupied by the union of the peritoneal surfaces; this is apparently immediate, or almost so, but temporary. During this period, the plastic lymph effused covers in any suture that may be used, but the point here is that, in so far as stitches and knots irritate a peritoneal surface, so far and so much adhesion from effused lymph is to be expected. Now, whilst this is wanted between the opposed surfaces of divided ends, it is not wanted between these and the peritoneal surfaces of viscera and abdominal wall around, where adhesion would be harmful. It will readily be appreciated that whilst the knots in Lembert's stitch are outside the bowel, and tend to excite such production of plastic lymph on the neighbouring surfaces, forming subsequent adhesions which will be more or less permanent in proportion to the length of time during which these sutures remain *in situ*; in my stitch, the knots and threads are separated from the reformed peritoneal sac by the whole thickness of the bowel, and therefore can have no such action. Inasmuch as all sutures pass at last into the

lumen of the bowel, however applied, and not into the peritoneal cavity, it is unnecessary to speculate whether or not they could do any harm there.

But the secondary or permanent union takes place by connective tissue formed partly from the cellulo-fibrous layer of Gross, and partly from the subserous layer. Gross himself, in describing his experiments on animals and their results, pointed out that the main permanent union was due to the action of the cellulo-fibrous layer, and the microscopical sections shown by me demonstrate perfectly this fact, as well as the share taken by the subserous layer. Now, bearing in mind the second reason for the use of sutures, is there not an advantage in the passage of the suture through both these layers in the production of a firm and satisfactory result?

The comparison between the ligature around an ovarian stump and these sutures is manifestly no parallel at all. The conditions are absolutely different. In the one a stump is left which is no longer to have any further office to perform in the economy; and the more thoroughly this is bound down by adhesion, so long as no band is formed under which a loop of bowel may be strangulated, the better. In the other, an attempt is made to restore the *status quo ante* in an organ, one great essential in the efficiency of which is its complete freedom of movement; in proportion as this is obtained will the operation be really successful. It will be seen at once that this comparison will not hold water. And is it not the fact that in any case in which symptoms of sudden obstruction appeared, the previous occurrence of an ovariotomy would at once lead the surgeon to suspect the possibility of internal strangulation under a band resulting therefrom?

This letter is already too long, or I should have liked to have said something about the objection to arguments based upon experiments upon animals; but doubtless the answer is already apparent enough.
—I am, etc., E. STANMORE BISHOP.

NAVAL AND MILITARY MEDICAL SERVICES.

RELATIVE RANK AND WHAT IT MEANT.

SIR,—As a statement has been made in high quarters that the expression "relative rank" had no particular meaning or special value, permit me to call attention to the fact that in the year 1863 a Royal Warrant was issued prescribing the privileges attaching to the relative rank of medical officers, and that in this warrant occurred the following sentences:—

"Relative rank should carry with it all precedence and advantages attaching to the military rank with which it corresponds."

"Choice of quarters shall be regulated by relative rank according to date of commission."

"Relative rank shall not entitle the holder to salutes from ships or fortress, nor to the turning out of guards; but it shall entitle him, if commissioned, to salutes by sentries, or by individual soldiers."

"All commissioned officers serving with the troops shall be entitled to funeral honours, according to their relative military rank."

The warrant from which the foregoing extracts are taken abrogated certain privileges which had been conferred on medical officers by the Royal Warrant of 1858. Had these privileges not been tampered with, the position and status of medical officers in the army would have been established beyond all cavil.—I am, etc., M. S.

HONORARY RANK.

DR. WM. STEWART (Surgeon-General retired) has addressed the following letter to Mr. Ernest Hart, Chairman of the Parliamentary Bills Committee: The medical officers of the army owe you a deep debt of gratitude for the able way in which you have advocated their cause in the matter of the abolition of relative rank. I have always held that medical officers, from the nature of their military duties, their technical and professional training, and their weighty responsibilities, especially in time of war, should be invested with actual or army rank, rather than honorary rank; but if there be any insuperable obstacle to the former, then honorary rank is the only alternative, now that relative rank has been proclaimed by the highest authority to be a meaningless term. From an experience of a third of a century in all the various grades (executive and administrative), I feel certain that it is the want of definite rank and standing that has done more than anything else to perpetuate that unworthy and petty jealousy that has all along stood in the way of military medical initiative and advancement; and exposes medical officers, whenever an opportunity offers, to unfair disparagement in the columns of certain so-called service journals. Grant medical officers proper military rank and status, and all heart-burnings and jealousy on the part of their opponents would, I believe, die a natural death. The article in the JOURNAL of May 7th is a splendid one; it gives a summary of the chief points bearing on the question, and of the important and twofold duties of the Medical Staff.

A SURGEON-GENERAL writes: I quite agree with your correspondent "Pilgrim's" (JOURNAL, May 21st) remarks touching such titles as "Surgeon-Lieutenant," "Surgeon-Colonel," etc. A medical officer sees as much active service, and often much more, than his so-called combatant brother officers, and there is no reason that I see why any word should be prefixed to his army rank to deprive it of any advantage or honour it may carry.

I have two near relatives in the Indian army wherein I served. One is a Commissariat officer, and he is called plainly Colonel A., not Commissary-Colonel A.; the other served all his time in the Revenue Survey, and was never on active service; he has retired as plain Major-General A., not as Revenue-Survey-General A. Both occupations are perfectly honourable and worthy of being followed by soldiers, and yet I am sure my relations would resent having their rank spoiled by these prefixes.

I remember, when I first joined the army, the engineers were always spoken of, and looked down upon by the cavalry and line, as "non-combatants;" but they made a stout fight of it, and insisted upon having their position recognised. If we likewise are determined, and insist upon it, the Horse Guards must grant our just demands. They have raised the question, and it should not now be allowed to rest until we have settled it satisfactorily, once for all.

INSTRUCTION TO VOLUNTEER MEDICAL OFFICERS.

ON Wednesday, May 25th, the last of a course of lectures to volunteer medical officers was given by Dr. Walter Pearce, in the Parkes Museum. Dr. Farquharson, M.P., occupied the chair, and there was a large attendance of medical officers and of members of the Volunteer Ambulance Department. The subject of barrack and camp hygiene was illustrated by diagrams lent by the authorities at Netley Hospital, and also by equipment, etc., supplied by Messrs. Savory and Moore, and by the Maignen Filter Company. Surgeon Stewart, M.D., Middlesex Yeomanry Cavalry, moved a vote of thanks to the chairman, which was seconded by Surgeon Stokes, London Rifle Brigade. Dr. Farquharson, in reply, said that he took much interest in the subject of the lecture, especially in that of soldiers' rations. He hoped that ample opportunity would be given for the discussion of the Army Medical Estimates in the House of Commons, and he should be ready to put forward the grievances of Volunteer Regimental Surgeons, and their deprivation of pay and allowances while under instruction at the Medical Staff Depôt, Aldershot.

ANNUAL DINNER, ARMY MEDICAL DEPARTMENT.

THIS was held at the Holborn Restaurant, on June 1st, Sir Thomas Crawford, K.C.B., in the Chair. Present: Inspectors and Surgeons-General Lawson, Balfour, Gordon, C.B.; Ker-Innes, C.B.; Sir T. Longmore, C.B.; Massy, C.B.; Manifold, Fraser, Mackinnon, C.B.; Irvine, Hendley, C.B.; Ekin, C.B.; Muschamp, Fuller. Deputy Inspectors and Surgeons-General Swettenham, Laing, Fox, Fraser, Reade, C.B.; Marston, Roberts, Veale, Watts, Sly, Don. Brigade-Surgeons Ashton, Herbert, Wade, Warren, Prescott, Gribbon, Maunsell, Wright, Lensk, Mackinnon, Lloyd, Adcock, Tomlinson, Clarke, Anderson, C.I.E. Surgeons-Major Lane, Churchill, Hensman, Staples, Maunsell, Scott, C.M.G., O'Dwyer, McNalty, Nash, Beattie, Johnston, Macartney, Morgan, MacSwiney, Macrobin, Frazer, Roe, Clery, Williamson, Ash, Donovan, Bushe, Allin, Miller, Gormley, Scott, Powell. Surgeons Ligertwood, Fenn, Ryan, Tuthill, Kirkpatrick, Seymour, Clark, Flood, Harwood, Mac Neece, F. M. Baker, Twiss, Sloggett, Porter, Johnston, Reade, Semple, Carte, Sheldrake, Zimmermann, Bostock, Hale, Minniece. Guests: Sir Charles McGrigor, Bart.; Sir J. W. Reid, K.C.B.; Sir William Mac Cormac, Inspector General Dale; Messrs. Pollock, Holt, Hart, and Glover.

MIDLAND VOLUNTEER MEDICAL ASSOCIATION.

OCTAVIUS M. WHITE (Surgeon, Tower Hamlets Rifle Brigade) writes: You gave in the JOURNAL of May 14th a report of a spirited meeting of the Midland Volunteer Medical Association. It would be interesting to know what is the position or intended line of action of the Central Volunteer Medical Association, which has been inactive for a year or more. I hear that Mr. Maclure has handed to the Central Association a fund exceeding £100 which has accumulated from the subscriptions of the members of the Volunteer Ambulance Department. With the questions of rank, pay, and allowances of volunteer medical officers while attending school of instruction, there is useful work to engage the resources of the Central Volunteer Medical Association. I would suggest that a meeting be called to discuss and pass resolutions on these subjects.

SIR J. W. REID.

CONSISTENCY, R. N., writes as follows: "Surgeon R.N.," in the JOURNAL of May 28th, would give the mass of his brother officers the opinion that he is a married man, and has neither read the letter in the *United Service Gazette* of April 23rd, nor the portions of the report of "Admiral Hoskins's Committee," therein referred to, in which Deputy Inspector-General J. W. Reid is represented to have stated as one of the grievances of Inspector-Generals: "The office of Director-General has been conferred and perpetuated on an officer on the retired list, destroying all hopes of their preferment."

PROFICIENCY EXAMINATIONS FOR VOLUNTEER MEDICAL OFFICERS.

ACTING SURGEON.—1. The regulations relating to the "proficiency" of volunteer medical officers and the board of examination are laid down in Volunteer Regulations, 1884, sec. viii, para. 337.

2. The following are the chief subjects of the examination: Constitution of the Army Medical Department, classification and organisation of army hospitals; the medical administration of an army corps, and the detail of hospital establishments in the field; the organisation and *personnel* of bearer companies and field hospitals; the formation and management of dressing stations; the application of the various articles composing the equipment of army hospitals in the field, and the authorised means for the transport of sick and wounded soldiers, and the proper mode of employing them; general sanitary regulations and precautions to be taken for ventilation and water-supply in barracks, hospitals, and camps; diet and clothing of the soldier, and personal hygiene of troops; medical regulations for the examination of recruits; instructions regarding infectious diseases and cholera epidemics; injuries and diseases to which troops are liable in the field, with regard to the special circumstances of campaigning, with the duties of medical officers in camps and bivouacs, and during marches.

3. The information is to be obtained from the Regulations of the Army Medical Department, 1885, the Manual of the Medical Staff Corps, and Parkes's *Hygiene*.

PRECEDENCE AMONG VOLUNTEER SURGEONS-MAJOR, AND WHO IS THE OLDEST?

SURGEON-MAJOR JAMES WILLIAMS, J.P., F.R.C.S., who is now for the second time Mayor of Brecon, writes: *Re* "precedence among volunteer surgeons-major, and who is the oldest?" allow me to point out two slight errors in your last paragraph. You state 2nd Battalion, it should be 1st. Also you state that I attended the Queen's review in June, 1859; it should be was presented at the Queen's *levée* as Surgeon of the 1st Company Brecknock Volunteers.

Colonel H. Gore Lindsay, who founded the Brecknockshire Volunteers, and was our first Colonel, writes me thus: "I can vouch for your having been appointed Surgeon to the 1st Company Brecknock Volunteers in May, 1859;" further, "you were presented at the Queen's *levée* in your uniform as Surgeon of the corps in June, 1859, so there can be no doubt as to your having been gazetted before that."

DR. PHILIP ED. HILL, Acting Surgeon 1st Volunteer Battalion South Wales Borderers, writes: In reference to the above question, now under discussion in your JOURNAL, permit me to state my belief that Surgeon-Major James Williams, 1st Volunteer Battalion, South Wales Borderers, is the senior volunteer surgeon at present actively serving on the medical staff, and has been continuously so since 1859. I base this statement upon the following.

He was presented as Surgeon of Volunteers at a *levée* in 1859. Colonel Gwynne, who until recently commanded the regiment, informs me that Surgeon-Major Williams joined the 1st Brecknock Rifle Volunteers in May, 1859—the year the volunteer movement was first set on foot—as Surgeon to the Brecon Company, and he has been a member of the 1st Company Breconshire Volunteers, now known as the 1st Volunteer Battalion South Wales Borderers, since that date, and from this length of service he thinks Surgeon-Major Williams must be the senior medical officer serving in the force.

Under these circumstances I take it that he is entitled to seniority of rank at the forthcoming review at Aldershot.

RISKS OF ARMY MEDICAL OFFICERS.

A CORRESPONDENT in Egypt sends us the following table, which is of interest as showing the risks run by officers of the Medical Staff in time of war. It will be seen that, as regards security to life, it is far better to be in the Artillery, Engineers, or Infantry, to serve on the General Staff, or in any other department of the army, rather than in the so-called non-combatant Medical Staff. The specially high death-rate in the Camel Regiment might possibly be explained by the military authorities.

NILE EXPEDITION, March 18th, 1884, to July 31st, 1885.

OFFICERS.

Arms of Service.	Percentage of Deaths to Strength.
Camel Regiment	30 43
Cavalry	7.40
Artillery	0.00
Engineers	0.00
Infantry	4.89
General Staff	4.48
Chaplain's Department	0.00
Commissariat Department	0.00
Medical Staff	6.93
Ordnance Department	0.00
Pay Department	0.00
Veterinary Department	0.00

THE NAVY.

THE following appointments have been made at the Admiralty during the past week:—ROBERT HICKSON, Surgeon, to the *Dolphin*; W. C. AXFORD, Surgeon, to the *Lion*; F. J. BURNS, Surgeon, to the *Pembroke*, additional; W. M. FEAE, Staff-Surgeon, to the *Gorgon*; Deputy Inspector-General WILLIAM J. EAMES, to Jamaica Hospital; JOHN DUDLEY, Staff-Surgeon, to the *Cruiser*; C. A. MACAULAY, Surgeon, to the *Constance*; C. E. GEOGHEGAN, Surgeon, to the *Belleisle*; H. F. ILIEWICZ, Surgeon, to the *Jackal*; FRANCIS WOORE, Surgeon, to the *Iron Duke*; WILLIAM GRAHAM, Fleet-Surgeon, to the *Unicorn*; HENRY A. CLONE, Fleet-Surgeon, to the *Durham*; MATTHEW F. RYAN, Staff-Surgeon, to the *Tamar*; HENRY BEAUMONT, Staff-Surgeon, to the *Invincible*; MICHAEL RONAN, Staff-Surgeon, to the *Rover*; A. M. FRENCH, Surgeon, to the *Agincourt*; J. M. ROGERS, Surgeon, to the *Pembroke*; C. J. NEWLAND, Surgeon, to the *Invincible*.

Surgeon R. A. SIMPSON, M.B., has been allowed to withdraw from the service with a gratuity, he having entered it March 31st, 1879. During the Egyptian war, in 1882, he was Surgeon to the *Minotaur*, and received the medal for the campaign and the Egyptian bronze star.

THE MEDICAL STAFF.

SURGEON-MAJOR GEORGE FOWLES, of the Medical Staff Corps, has been appointed Quartermaster in the place of C. A. Cox, deceased.

Surgeon-Major R. DE LA C. CORBETT, whose term of service in Bengal has expired, is directed to proceed to England in the *Jumna*.

Surgeon W. M. JAMES, having returned from sick leave to England, is posted to general duty in the Mhow Circle, Bombay Command.

Surgeon M. O'C. DRURY, having returned from field-service in Burma, is posted to general duty in the Poona Circle, Bombay Command.

Surgeon A. KIRWAN, who has been serving in the Bengal Command, is detailed to proceed to England in the *Jumna*.

Inspector-General PATRICK GAMMIE, died at Stanhope Gardens, Queen's Gate, on May 20th, at the age of 73. He entered the service as Assistant-Surgeon, June 17th, 1836, became Surgeon March 2nd, 1847; Surgeon-Major May 1st, 1855; Deputy Inspector-General December 31st, 1858; and retired with the rank of Inspector-General August 7th, 1867. Hart's *Army List* informs us that he served in the Sutlej campaign in 1845-46, and was with the 80th Regiment at the battles of Moodkee and Ferozeshah, and in medical charge of the 31st Regiment at Buddiwal, Aliwal, and Sobraon (medal and three clasps).

Consequent on the transfer of Surgeon-Major C. B. Jennings from Chuckrata to Jhansi, Surgeon J. R. STUART, M.B., is appointed to the civil medical charge of Chuckrata, Bengal, from April 1st.

Surgeon HOWARD CARR, M.D., who is serving in Bengal, and Surgeon F. H. M. BURTON, serving in the Madras command, have obtained six months' leave of absence on medical certificate.

Surgeon-Major R. H. GARDNER, Medical Staff, has been transferred to the medical charge of the Station Hospital, Dum-Dum, *vice* Surgeon-Major Cuffe, C.B., ordered to Burmah.

Surgeon BABTIE, Medical Staff, to be Staff-Surgeon, Fort William, *vice* Surgeon-Major R. H. Gardner, M.D., Medical Staff, transferred to Dum-Dum.

INDIAN MEDICAL SERVICE.

SURGEON-MAJOR E. G. RUSSELL, M.D., Bengal Establishment, Civil Surgeon of Nuddea, is to act as Civil Surgeon of Hooghly, during the absence on leave of Surgeon-Major W. H. Gregg, M.B.

Surgeon-Major H. G. HALL, Madras Establishment, officiating in medical charge of the 13th Native Infantry, is appointed Officiating Medical Officer to the 1st Cavalry, *vice* J. North on furlough.

Surgeon-Major C. HATCHELL and Surgeon R. R. WEIR, both of the Bengal Establishment, have obtained leave of absence for one year on medical certificate.

Surgeon-Major R. A. K. HOLMES, Bengal Establishment, Superintendent of the Central Prison at Lucknow, has special leave on urgent private affairs for six months.

Surgeons G. C. HALL, R. H. CASTOR, F. G. MAIDMENT, M. J. T. J. BLANCARD, and I. P. DOYLE, are admitted on the Madras Establishment from March 22nd, the date of their arrival at Bombay.

Messrs. R. J. MACNAMARA, M.D., H. W. PILGRIM, G. B. FRENCH, E. H. BROWN, C. N. BENSLEY, S. H. HENDERSON, D. W. SCOTLAND, C. R. M. GREEN, J. H. SELLICK, E. C. HARE, F. C. CLARKSON, J. G. JORDAN, J. D. M. SWINBURNE, H. M. MORRIS, A. R. P. RUSSELL, J. MORWOOD, M.D., and E. A. W. HALL, recently appointed to the Bengal Establishment, reported their arrival at Bombay on March 22nd.

Brigade-Surgeon G. C. CHESNAYE, Bengal Establishment, honorary surgeon to the Viceroy, is appointed to officiate as Examiner of Medical and Fund Accounts, Bengal, during the absence on furlough of Brigade-Surgeon G. S. Sutherland, M.D.

Surgeons-Major W. FINDEN and A. B. SEAMAN, and Surgeons H. HAMILTON, M.D., and P. DE H. HAIG, all of the Bengal Establishment, have been granted an extension of leave each for six months on medical certificate.

Surgeon-Major H. J. LINTON, Bengal Establishment, in medical charge of the 24th Punjab Infantry, has leave of absence to Cashmere on private affairs till October 15th.

Brigade-Surgeon S. M. SHIRCORE, late of the Bengal Establishment, has resigned his appointment as Honorary Surgeon of the Central Bengal Light Horse.

Surgeon H. ST. C. CARRUTHERS, Madras Establishment, is appointed to act as Civil Surgeon of Salem from the date of Surgeon-Major Hazlett assuming charge of the Fourth District.

Surgeon-Major G. A. MACONACHIE, M.D., Bombay Establishment, Presidency Surgeon, 1st District, and Professor of Ophthalmic Medicine and Surgery and Comparative Anatomy, Grant Medical College, has returned to duty from furlough.

Surgeon L. J. PISANI, Bengal Establishment, is appointed to the officiating medical charge of the Queen's Own Corps of Guides, *vice* Surgeon J. Lewtas, M.B., on furlough.

Surgeon-Major W. A. D. FASKEN, M.D., Bengal Establishment, Civil Surgeon of Goruckpore, is granted privilege leave for three months, from May 17th.

Surgeon R. T. WRIGHT, Bengal Establishment, Civil Surgeon of Jounpore, is appointed to be in visiting charge of Azimghur, until the return from leave of Surgeon J. F. MacLaren.

Surgeon C. T. RUNDLE, of the Madras Establishment, is transferred as Civil Surgeon from Toungoo to Akyab, Burmah.

Brigade-Surgeon JOHN CRUICKSHANK, M.D., of the Bombay Establishment, has retired from the service, which he entered as Assistant-Surgeon, February 26th, 1856, attaining to the rank of Brigade-Surgeon, November 27th, 1879. Dr. Cruickshank served in the war with Persia, 1856-57, including the forced march on Borazjoon, and the night attack and battle of Khooshab (medal with clasp). During the Indian Mutiny, 1858, he was at the siege and capture of Chendaree, Jhansi (severely wounded), and Powree, and pursuit of the rebels; in medical charge of a flying column in pursuit of rebels under Feroze Shah, and in the action at Runnode (mentioned in despatches, medal with clasp, and gratuity for wounds).

Surgeon-Major P. S. TURNBULL, M.D., and HENRY COOK, M.D., of the Bombay Establishment, have been promoted to be Brigade-Surgeons. The former entered the service October 1st, 1860; the latter, March 31st, 1865. Dr. Cook has no war record, but Dr. Turnbull was engaged in the Abyssinian war in 1867-68, where he was in the action at Arogee, and at the capture of Magdala (medal).

Surgeon E. CRETIN, M.B., of the Bengal Establishment, is appointed to the civil medical charge of the Shwebo district, Burmah, in place of Surgeon J. F. Barry, transferred.

The services of Surgeon-Major A. N. ROGERS HARRISON, of the Madras Establishment, are placed at the disposal of the Public Works Department.

Surgeons-Major T. C. H. SPENCER, and F. A. DAVY, M.D., both of the Madras

Establishment, have each received leave of absence on medical certificate for 182 days.

Surgeon-Major R. Boustead, Bombay Establishment, has returned to duty from sick furlough.

THE VOLUNTEERS.

Mr. R. H. Lucas has been appointed Surgeon to the Suffolk Yeomanry.

The undermentioned gentlemen have resigned their appointments in the corps specified:—Surgeon G. F. Garrett, 2nd Volunteer Battalion of the Gloucestershire Regiment (late the 2nd Gloucestershire Volunteers), commission dated March 29th, 1876; Acting-Surgeon Thomas MacQueen, M.B., 1st Cinque Ports Artillery, commission dated August 21st, 1880; Acting-Surgeon T. Deville, M.D., 1st West Riding of York, commission dated July 19th, 1877.

MEDICO-LEGAL AND MEDICO-ETHICAL.

THE CHARGE OF MANSLAUGHTER AGAINST A MEDICAL ASSISTANT.

Dr. C. R. Illingworth writes: Let me place clearly before Mr. Thomson and all whom it may concern that my argument depends upon no other fact than this, that Irvine was found guilty by juries who had no other idea or impression given them than that he had put three ounces of laudanum into an eight-ounce bottle of medicine. I challenge Mr. Thomson, Mr. Sydney Smelt, or anyone else, whether juryman or not, to declare and show otherwise.

The first and chief step I took was an appeal to the colour of the medicine placed before the jury. It was not dark enough to indicate the presence of three ounces of laudanum; but counsel for the prisoner refused to show the jury the bottle I had mixed at the trial for purposes of comparison. Mr. Brown's analysis, however, confirmed the observations I made in your columns on May 28th and June 26th, 1886. There was little or no laudanum present, and the odour was "not the genuine opium flavour."

Mr. Thomson's opinion, based upon the colour and odour of the mixture alone, is of course of no scientific value whatever. There is still some of the medicine left in the custody of the Manchester police, for the opinion of a third analyst if necessary. Mr. Thomson may, I should think, secure some for examination if he should so desire.

Mr. Thomson, in his letter of May 28th, speaks of several other matters besides the laudanum one, namely, "the presence of a large quantity of morphine," "a garbled and incorrect newspaper account," "the dose prescribed," "if that had been the only case," etc. Those matters can be disposed of in a perfectly satisfactory manner afterwards. I am discussing the first and most important part of the question, and I am not to be led off by side issues. Mr. Thomson makes but a sorry defence of his action in the matter. He says I must be "aware that meconic acid is not one of the poisonous principles of opium." Has Mr. Thomson, then, any other way of testing for laudanum other than the test for meconic acid? He also makes the ridiculously far-fetched excuse that the words "dark coloured" may be applied to a medicine which is not quite colourless. Do such statements as these—the only two which have reference to the question at issue—explain the "great difference" in Mr. Thomson's two letters to me? I think not. If Mr. Thomson was so firmly convinced of there being a very small quantity of laudanum present, why did he not correct Dr. Bailey—the medical man referred to in my letter of May 14th—who gave it as his opinion in Mr. Thomson's presence that the patient must have taken half an ounce of laudanum at each dose? Further, if Mr. Thomson never tested for laudanum, he could not know whether there was little or much present, except by the "dark colour" and the "odour of opium" he refers to in his letters to me.

Mr. Thomson's idea of my argument is a very crude one. He has evidently not read the letter which appeared in your columns on June 26th last year. Let him defend his position there also. I still claim that the verdict of negligence cannot be sustained against Irvine; for, if there was not enough laudanum to give the reaction, the statement to which he rigidly adhered at the inquest and other trials, that he had added two drachms only from the laudanum bottle, on account of there being no solution of morphine, is fully confirmed. He could not have added morphine also, in the first place because the sol. morph. bottle was empty; in the second, because he had already added what he believed to be laudanum; and in the third because, as evidenced at the inquest, Pitman had none in the surgery. The result of Mr. Brown's analysis, in fact, clearly establishes Irvine's innocence.

As for the opinion of Mr. Thomson that the matter would have been better left alone and forgotten for Mr. Irvine's sake, I beg to inform him that Mr. Irvine has been acting as my assistant since November, and that he is anxious for its full and free discussion, assured that such a course of action can have only one result—a clear understanding amongst his professional brethren of the injustice which has been done him.

CLUB CERTIFICATES.

Justitia inquires whether it is customary to charge for writing out sick-certificates for clubs with which they have no connection. Most of his club patients belong to one or two other clubs in addition to the one through which they pay him.

*** The usual custom is to grant certificates free of charge to the member of a club; but if he should ask for a "certificate" for any other club, he is bound to pay for it, by a sum varying from a shilling to half-a-crown. The mere fact of the medical gentleman being "medical officer" say to club A, does not justify his being applied to for certificates of the rest of the alphabet. If so he would earn his money very hardly.

OFFENSIVE EXPOSURE.

W. P. M. writes: A man of the working classes has suffered for some years from cancer of the lip; it has made dreadful inroads on the tissues, and now the teeth of the lower jaw are constantly visible. His beard (which he insists on wearing) is always covered with a quantity of pus and blood, and altogether he presents a most repulsive appearance; yet he will not cover the lip, nor do anything to make himself more sightly, but insists on walking about in the public streets, shocking everyone who sees him, and actually making them ill.

Can any steps be taken to prevent him from appearing in public, or to compel him to make himself more decent; and under what powers can one act, and who is the proper person to take the steps? An answer will greatly oblige.

*** The exposure in a public place is apparently a common nuisance, and the offender might be indicted for it and punished, if convicted. We can find no statute empowering justices to deal summarily with such an offence, but in some towns it may be a matter which can be dealt with under local Acts. Indecent exposure can be punished summarily under the Towns Police Clauses Act, and exposure of a person suffering from an infectious disease under the Public Health Act; but this case does not seem to come under either of the above.

POST-MORTEM SIGNS OF STRYCHNINE POISONING.

L.R.C.P.Ed.—An analyst would not be justified in inferring the absence of poisoning by strychnine because there was no congestion of the stomach. All the writers on toxicology agree in stating that congestion or inflammation may be present, but it is not regarded by any of them as a necessary sign, or as having any diagnostic significance. The quotations you give are not from Taylor's most recent edition, and his opinions had undergone considerable modification when he brought out the third edition of his "Poisons," for he quotes a case of Ogston's, in which "the mucous membrane of the stomach was of a dark red colour, from intense congestion." It is quite clear that congestion of the stomach is not a necessary consequence of strychnine poisoning, and its absence is therefore of no moment.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

The Special Board for Medicine has given notice that in pursuance of Regulation 4 of the Regulations for Medical and Surgical Degrees (Grace, November 15th, 1883) they have defined, as follows, the evidence of medical study out of the University, required of candidates for medical and surgical degrees:

"For the time claimed by the student as passed in medical study out of the University, evidence shall be required of attendance on lectures in one of the recognised schools of medicine, or on the practice in one of the recognised hospitals.

"Of the three years during which attendance on medical and surgical practice is required previous to the second part of the third M.B. Examination (Regulation 20), not less than two years must be passed at a general hospital for medical and surgical patients; the periods not exceeding six months may be passed in attendance at a recognised asylum or hospital for the insane; not exceeding six months at a recognised hospital for children, either as a student (in Hospitals A), or as a resident medical officer (in Hospitals B); not exceeding three months at a recognised maternity hospital; not exceeding three months at a recognised fever hospital; not exceeding three months at a recognised hospital for special diseases; and not exceeding three months at a recognised ophthalmic hospital."

A list of schools and general hospitals, and of special hospitals recognised by the Board, may be had on application.

INDIA AND THE COLONIES.

INDIA.

The Medical Department of the Madras Presidency.—Several suggestions have been made by the Finance Committee for large reductions in the cost of the medical department of the Madras Presidency, only a few of which the Local Government has been able to accept. A recommendation that no less than eleven large stations at present in charge of commissioned officers should be replaced by uncovenanted medical officers, and a large saving thus effected, was strongly objected to by the Surgeon-General, who only agreed to Chicacole being placed under charge of an uncovenanted officer. The Local Government agreed with the views of the Surgeon-General. It was also suggested that the municipal and local fund authorities should be asked to contribute to the maintenance of the special hospitals in Madras, because these hospitals are resorted to by persons from all parts of the presidency. This the Local Government refused. The Committee also proposed large reductions in the staff of the Medical College; but as this was objected to on the ground of its being likely to impair the efficiency of the teaching staff, only the pay of the Professor of Medical Jurisprudence was reduced from 2,400 rupees per annum to 1,700 rupees. A further suggested reduction was that of 43,000 rupees in the estimates under the heads of stipends for medical pupils, the cost of auxiliary medical schools, the grants for medical purposes, and also for lunatic asylums. The Surgeon-General replied that 20,000 rupees was the utmost possible amount of reductions under the above headings. It is satisfactory to note that the Local Government has allowed itself to be guided by the Surgeon-General in these matters.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE TRUE DEATH-RATES OF LONDON DISTRICTS DURING THE FIRST QUARTER OF 1887.

In the accompanying table will be found summarised the vital and mortal statistics of the forty sanitary districts of the metropolis, based upon the Registrar-General's returns for the first quarter of the current year. The mortality figures in the accompanying table relate to the deaths of persons actually belonging to the respective sanitary districts, and are the result of a complete system of distribution of the deaths occurring in the institutions of London among the various sanitary districts in which the patients had previously resided. By this means alone can trustworthy data be secured upon which to calculate reliable rates of mortality.

During the first quarter of this year, 34,474 births were registered in London, equal to an annual rate of 32.8 per 1,000 of the population, estimated to be 4,216,192 persons in the middle of this year. In the corresponding periods of 1885 and 1886 the metropolitan birth-rate was 34.6 and 34.3 respectively. The birth-rates in the various sanitary districts last quarter differed greatly, owing to the wide variations in the sex and age distribution of the population. In Kensington, St. George Hanover Square, St. James's Westminster, and Hampstead, where the population contains a large proportion of unmarried females, chiefly domestic servants, the birth-rates were considerably below the average. On the other hand, in Fulham, Shoreditch, Bethnal Green, and Southwark, where the population consists largely of young married persons, the birth-rate showed an excess.

The 21,459 deaths of persons belonging to London, registered during the quarter under notice, were equal to an annual rate of 20.4 per 1,000, which was below the rate in the March quarter of either of the two preceding years 1885-86, and was considerably below the average death-rate in the corresponding period of the ten preceding years 1877-86. Among the forty sanitary districts the lowest death-rates last quarter were 14.6 in Hampstead, 15.7 in Lewisham, 16 3 in Plumstead, 16.7 in Camberwell, and 17.6 in Wandsworth. In the other districts the rates ranged upwards to 28.1 in St. Olave Southwark; 28 2 in St. Saviour Southwark, and in Stepney; 28.3 in London City, 28.6 in Holborn, and 34.6 in St. George-in-the-East. While the rate of mortality last quarter in the central districts was equal to 25.9 per 1,000, it did not average more than 20.0 per 1,000 in the rest of London. During the quarter under notice, 1,982 deaths were referred to the principal zymotic diseases in London, equal to an annual rate of 1.9 per 1,000, which was a lower rate than in any preceding quarter on record. The lowest zymotic death-rates in the forty sanitary districts were recorded in Lewisham, Woolwich, St. James Westminster, and St. Olave Southwark; while they ranged upwards in the other districts to 2.8 in Hammersmith, in Clerkenwell, and in Mile End Old Town, 4.4 in Stepney, and 5 8 in St. George-in-the-East. The 1,982 zymotic deaths included 858 which resulted from measles, 443 from whooping-cough, 193 from diphtheria, 174 from diarrhœa, 170 from scarlet fever, 142 from different forms of "fever" (including 7 from typhus, 123 from enteric or typhoid fever, and 12 from ill-defined forms of fever), and 2 from small-pox. Compared with the last quarter of 1886, the fatality of measles and of whooping-cough

Analysis of the Vital and Mortal Statistics of the Sanitary Districts of the Metropolis, after complete distribution of Deaths occurring in Public Institutions, during the First Quarter of 1887.

Sanitary Areas.	Estimated Population middle of 1887.	Births.	Deaths.	Annual Rate per 1,000 Living. Births.	Deaths.	Principal Zymotic Diseases.	Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric Fever.	Simple and Undefined Fever.	Diarrhœa.	Deaths of Children under one year of age to 1,000 Births.
LONDON	4,216,192	34,474	21,459	32.8	20.4	1.9	1,982	2	858	170	193	443	7	123	12	174	131
West Districts																	
Paddington	111,965	765	530	27.4	19.0	1.6	45	—	14	12	10	4	—	1	1	3	110
Kensington	190,357	1,072	866	22.6	18.3	2.3	108	—	45	3	11	35	—	4	1	9	153
Hammersmith	93,798	738	466	31.6	19.9	2.8	66	—	38	6	4	8	—	2	—	8	119
Fulham	58,896	728	309	49.6	21.1	1.2	17	—	7	2	3	1	—	1	—	3	109
Chelsea	99,887	856	557	34.4	22.4	2.7	68	—	40	3	3	11	1	3	1	6	124
St George, Hanover Square	88,102	461	391	21.0	17.8	1.0	21	—	6	1	5	2	—	1	—	6	148
Westminster	55,942	421	306	30.2	21.9	1.5	21	—	7	3	2	5	—	3	—	1	147
St. James, Westminster	27,849	142	131	20.5	18.9	0.6	4	—	—	3	—	—	—	—	—	1	148
North Districts																	
Marylebone	150,468	1,199	823	32.0	22.0	1.3	50	—	18	5	3	13	—	2	—	9	121
Hampstead	55,629	349	203	25.2	14.6	1.6	22	—	8	5	4	2	—	2	—	1	86
St. Pancras	243,125	1,936	1,287	32.0	21.2	2.0	119	—	34	11	12	47	—	7	—	8	134
Islington	325,907	2,457	1,474	30.3	18.2	1.5	124	—	57	9	15	19	1	13	1	9	117
Hackney	231,903	1,657	1,033	28.7	17.9	1.7	96	—	51	8	10	12	—	10	1	4	127
Central Districts																	
St. Giles	40,669	295	276	29.1	27.2	1.3	13	—	4	1	1	1	—	1	—	5	166
St. Martin-in-the-Fields	15,420	98	93	25.5	24.2	1.8	7	—	2	1	2	2	—	—	—	—	184
Strand	29,708	178	197	24.1	26.6	2.0	15	—	2	—	5	6	—	1	—	1	208
Holborn	31,052	257	221	33.2	28.6	1.4	11	—	3	—	1	6	—	1	—	1	195
Clerkenwell	69,745	607	399	34.9	23.0	2.8	49	—	24	4	2	13	—	—	—	6	117
St. Luke's	52,000	502	329	38.7	25.4	2.2	28	—	16	2	2	5	—	2	—	1	122
London City	40,061	192	282	19.2	28.3	0.9	9	—	4	1	2	2	—	—	—	—	203
East Districts																	
Shoreditch	125,452	1,282	701	41.0	22.4	1.8	55	—	28	2	12	5	—	—	—	3	127
Bethnal Green	130,619	1,320	729	40.6	22.4	1.5	50	—	24	7	5	5	—	—	1	3	130
Whitechapel	67,865	649	426	38.4	25.2	2.7	45	—	29	3	1	9	—	—	—	4	170
St. George-in-the-East	46,316	506	399	43.9	34.6	5.8	67	1	45	2	3	6	—	6	—	4	164
Stepney	58,716	559	413	38.2	28.2	4.4	65	—	39	3	4	15	—	1	—	3	163
Mile End Old Town	113,017	1,040	575	36.9	20.4	2.8	80	—	56	2	2	11	—	3	—	7	125
Poplar	152,706	1,620	880	35.6	19.3	2.3	103	—	71	2	6	16	—	3	1	4	132
South Districts																	
St. Saviour, Southwark	27,377	247	192	36.3	28.2	2.3	16	—	3	3	1	4	—	2	—	3	121
St. George, Southwark	59,596	596	401	40.1	27.0	1.9	28	—	3	8	2	11	—	1	—	3	186
Newington	118,991	986	612	33.3	20.6	2.0	59	—	9	12	5	25	—	5	—	3	149
St. Olave, Southwark	10,275	113	72	44.1	28.1	0.8	2	—	1	—	—	—	—	—	—	1	274
Bermondsey	89,434	889	527	39.9	23.6	2.7	61	—	31	8	3	11	—	3	—	5	147
Rotherhithe	41,863	416	199	39.9	19.1	1.2	12	—	2	—	1	1	—	3	—	5	127
Lambeth	280,235	2,341	1,402	33.5	20.1	2.0	142	—	49	12	13	48	1	8	2	9	140
Wandsworth	277,026	2,233	1,217	32.4	17.6	1.4	97	—	33	7	6	31	—	9	1	10	130
Camberwell	246,514	1,904	1,023	31.0	16.7	1.5	94	—	14	13	15	29	3	6	—	14	111
Greenwich	152,072	1,377	773	36.3	20.4	2.1	80	—	32	4	13	17	1	8	1	4	117
Lewisham	58,410	487	228	33.5	15.7	0.5	7	—	1	1	1	1	—	1	—	2	99
Woolwich	36,984	354	191	38.4	20.7	0.5	5	—	1	—	1	—	—	—	1	2	90
Plumstead	80,241	645	326	32.3	16.3	1.1	21	1	8	1	2	5	—	1	—	3	101

showed an increase, while that of each of the other zymotic diseases showed a decline. The deaths referred to small-pox in the metropolis, which had been 9, 2, and 1 in the three preceding quarters, were 2 during the three months ending March last, one of which belonged to St.-George-in-the-East, and one to Plumstead. The Metropolitan Asylum Hospitals contained only one small-pox patient at the end of the quarter, and 10 patients were admitted during the three months ending March last. Measles showed the largest proportional fatality in Hammersmith, Poplar, Chelsea, Whitechapel, Mile End Old Town, Stepney, and St.-George-in-the-East; scarlet fever in Paddington, Hampstead, Newington, and Bermondsey; diphtheria in Paddington, Greenwich, Shoreditch, and Strand; whooping-cough in Lambeth, Kensington, St. Pancras, Clerkenwell, Newington, and Stepney; and enteric fever in Hackney, Shoreditch, Bethnal Green, Newington, and Greenwich.

Infant mortality last quarter, measured by the proportion of deaths under one year of age to births registered, averaged 131 per 1,000, against 133 and 135 in the corresponding periods of 1885 and 1886. Among the various sanitary districts, the rates of infant mortality were lowest in Hampstead, Woolwich, Lewisham, Plumstead, and Fulham; while they showed the greatest excess in St. Martin-in-the-Fields, St. George Southwark, Holborn, London City, Strand, and St. Olave Southwark.

THE CARE OF PAUPER CHILDREN.

DURING last week the subject of the care and maintenance of pauper children has come well to the front, and enough evidence has been elicited to show that the systems require modification in the interest of the unfortunate waifs left by society to the tender mercies of boards of guardians. The Holborn Board of Guardians has for some time past been engaged in investigating allegations of cruelty at the Mitcham schools, and the report of a special committee recently came up for discussion. The report in question is stated to have borne out the statements which have already been made public of ill-treatment and neglect. Excessive corporal chastisement and the employment of the cold bath as punishment are among the charges which have been substantiated, and in several instances the conduct of the school-authorities would appear to have bordered on the cruel, not to employ a stronger expression. The male attendant who was addicted to rubbing filth on the boys' faces was suspended, and the other officials were cautioned. We are pleased, however, to notice that the guardians were not satisfied with punishing offenders, but have taken measures to prevent the recurrence of such misdemeanours in the future. It was ordered that every punishment inflicted by the officers is to be recorded, instant dismissal to be the result of non-compliance with this rule. A hope was expressed that the Local Government Board would take up the matter, and, under the circumstances, such a course would appear to be very desirable. The St. Pancras Board of Guardians has also had to inquire into certain allegations which were made as to the condition of the children who had been boarded out, in accordance with the system which is extensively practised by them. In several instances specific charges of neglect, insufficient food, and overcrowding were brought. It is only fair to state that these statements have been largely disputed and refuted. Mr. Barnardo brought up several of his *protégés* for inspection, and declared that they were quite well and free from sores, with the exception of a lad who was suffering from constitutional eczema. His agent, moreover, had made several surprise visits, and had found the bedding clean and the food suitable in quantity and quality. The Vicar of Denmead considered the reports exaggerated, but the employment of the word exaggeration would seem to imply that the statements had a foundation of some sort. Seeing that the Board of Guardians has no less than nine districts in various parts of England to which it sends children, it is evident that it is incumbent upon it to institute a searching inquiry, in order to clear up any doubts on the subject, and also to enable any precautionary measures to be adopted that may seem desirable with the facts of the case before it.

ELEGIBILITY FOR UNION APPOINTMENT.

MR. J. WICKHAM BARNES writes: If C. G. lives within the district of the Union appointment, and the present holder does not, and if it is the wish of the guardians and inhabitants that C. G. should be elected to the post, there is no reason why C. G. should withhold his consent, especially as he did not initiate the proceedings.

HEALTH OF ENGLISH TOWNS

IN the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons, 5,737 births and 3,621 deaths were registered during the week ending Saturday, May 28th. The annual rate of mortality, which had been 19.7 and 20.3 per 1,000 in the two preceding weeks, further rose to 20.4 during the week under notice. The rates in the several towns, ranged in order from the lowest, were as follow:—Sunderland, 15.7; Wolverhampton, 16.1; Portsmouth, 16.3; Leicester, 17.1; Birmingham, 17.2; Bolton, 17.2; Leeds, 17.7; Brighton, 18.1; Bristol, 18.2; London, 19.0; Norwich, 19.1; Nottingham, 19.3; Sheffield, 20.1; Blackburn, 20.1; Bradford, 20.5; Birkenhead, 21.4; Plymouth, 21.7; Derby, 22.8; Cardiff, 23.0; Salford, 23.4; Hull, 23.9; Newcastle-upon-Tyne, 23.9; Oldham, 24.1; Halifax, 25.7; Preston, 26.0; Huddersfield, 29.5; and the highest rate during the week 32.3 in Manchester. In the twenty-seven provincial towns the death-rate averaged 20.7 per 1,000, and exceeded by 1.7 the rate recorded in London, which, as before stated, did not exceed 19.0 per 1,000. The 3,621 deaths registered in the twenty-eight towns during the week under notice included 251 which were referred to measles, 143 to whooping-cough, 52 to scarlet fever, 31 to diarrhœa, 23 to diphtheria, 22 to "fever" (principally enteric), and not one to small-pox; in all, 522 deaths resulted from these principal zymotic diseases, against 500 and 532 in the two preceding weeks. The zymotic death-rate was equal to 2.9 per 1,000. In London the zymotic death-rate was 2.9, while it averaged 3.0 in the twenty-seven provincial towns, among which it ranged from 0.0 in Wolverhampton and in Halifax to 5.0 in Newcastle-upon-Tyne, 5.2 in Salford, and 5.8 in Manchester. The fatal cases of measles, which had been 235 and 237 in the two preceding weeks, further rose during the week under notice to 251, and caused the highest death-rates in Newcastle-upon-Tyne, Birkenhead, Salford, Manchester, and Norwich. The deaths referred to whooping-cough, which had been 136 and 158 in the two previous weeks, declined during the week under notice to 143, and showed the highest proportional fatality in Liverpool, Newcastle-upon-Tyne, Portsmouth, Nottingham, and Preston. The 52 fatal cases of scarlet fever showed a slight further increase upon the numbers returned in the three previous weeks; this disease was proportionally most prevalent in Salford. The 31 deaths from diarrhœa showed a marked decline from those recorded in the preceding week. The fatal cases of diphtheria, which had been 20 and 22 in the two previous weeks, further increased during the week under notice to 23, and included 14 in London, 3 in Liverpool, 2 in Manchester, and 2 in Oldham. The deaths referred to different forms of fever, which had been 33 and 19 in the two previous weeks, rose again last week to 22, and showed the highest proportional fatality in Derby and Cardiff. No death from small-pox was registered during the week under notice, either in London or in any of the twenty-seven provincial towns. The Metropolitan Asylum hospitals contained 4 small-pox patients on Saturday, May 28th, against 6 and 5 at the end of the two preceding weeks, and no new cases were admitted during the week under notice. The death-rate from diseases of the respiratory organs in London during last week was equal to 4.1 per 1,000, and exceeded the average. The causes of 79, or 2.2 per cent., of the 3,621 deaths registered during the week under notice in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

IN the eight principal Scotch towns, having an estimated population of 1,299,000 persons, 913 births and 564 deaths were registered during the week ending Saturday, May 28th. The annual rate of mortality, which had been 21.5 and 21.3 per 1,000 in the two preceding weeks, rose again to 22.6 during the week under notice, and exceeded by 2.2 per 1,000 the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 18.0 in Leith, 20.1 in Edinburgh, 22.0 in Dundee, 23.0 in Glasgow, 23.9 in Paisley, 24.8 in Aberdeen, 25.9 in Perth, and 27.4 in Greenock. The 564 deaths registered during the week in these Scotch towns included 82 which were referred to the principal zymotic diseases, against 78 and 70 in the two preceding weeks; of these, 43 resulted from whooping-cough, 19 from measles, 10 from diarrhœa, 6 from scarlet fever, 4 from "fever," and not one either from diphtheria or small-pox. These 82 deaths were equal to an annual rate of 3.3 per 1,000, which slightly exceeded the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic death-rates in the Scotch towns during the week under notice were recorded in Glasgow, Greenock, and Perth. The deaths referred to whooping-cough, which had increased from 31 to 42 in the three preceding weeks, further rose during the week under notice to 43, and included 14 in Glasgow, 7 in Edinburgh, 7 in Dundee, 5 in Greenock, 4 in Leith, and 4 in Perth. The fatal cases of measles, which had steadily declined from 30 to 10 in the five previous weeks, rose again during the week under notice to 19, of which 15 occurred in Glasgow, and 3 in Aberdeen. The 10 fatal cases of diarrhœa exceeded those recorded in any recent week, and included 4 in Glasgow. The deaths referred to scarlet fever, which had been 12 and 6 in the two preceding weeks, were again 6 last week, of which 2 occurred in Glasgow, 2 in Edinburgh, and 2 in Aberdeen. The 4 fatal cases of fever showed a decline of 2 from the number recorded in the previous week, and included 2 in Glasgow, and 2 in Aberdeen. No death was referred either to diphtheria or to small-pox during the week under notice in any of the eight Scotch towns. The death-rate from diseases of the respiratory organs in these Scotch towns last week was equal to 4.6 per 1,000, against 4.1 in London. The causes of 71, or 12.6 per cent., of the 564 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

IN the week ending Saturday, May 21st, 376 deaths occurred in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 22.6 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 20.7; Belfast, 23.5; Cork, 13.6; Drogheda, 50.7; Dublin, 25.0; Dundalk, 34.9; Galway, 16.8; Kilkenny, 55.0; Limerick, 18.9; Lisburn, 14.5; Londonderry, 12.5; Lurgan, 10.3; Newry, 14.0; Sligo, 14.4; Waterford, 16.2; Wexford, 12.8. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.5 per 1,000, the rates varying from 0.0 in nine of the districts to 13.1 in Dundalk; the 8 deaths from all causes registered in that district comprising 2 from diphtheria and 1 from enteric fever. Among the 101 deaths from all causes registered in Belfast were 2 from measles, 2 from scarlatina, 3 from whooping-cough, and 2 from diarrhœa; the 21 deaths in Cork comprised 1 from enteric fever and 1 from diarrhœa; the 7 deaths in Waterford comprised 1 from simple continued fever; 1 of the 13 deaths in Kilkenny resulted from typhus; and 1 of the 3 in Sligo, was caused by enteric fever. In the Dublin Registration District, the births registered during the week amounted to 170 and the deaths to 172. The deaths represent an annual rate of mortality of 25.4 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 25.0 per 1,000. Twenty-three deaths from zymotic diseases were registered, being 4 over the average for the preceding week, but 5 under the average for the twentieth week of the last ten years; they

consist of 8 from measles, 5 from scarlet fever (scarlatina), 3 from typhus, 6 from whooping-cough, 1 from enteric fever, and 1 from diarrhœa. Thirty-eight deaths from diseases of the respiratory system were registered, being 3 over the average for the corresponding week of the last ten years, and 6 over the number for the week ending May 14th; they comprised 23 from bronchitis, and 7 from pneumonia or inflammation of the lungs. The deaths of 11 children under 5 years of age (including 10 infants under one year old) were ascribed to convulsions. Two deaths were caused by apoplexy, 9 by other diseases of the brain and nervous system (exclusive of convulsions), and 13 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 27 deaths, mesenteric disease 3, and cancer 3. Four accidental deaths and one case of homicide were registered. In 17 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending Saturday, May 21st, that the annual death-rate was recently equal to 22.0 per 1,000 in Calcutta; of the 374 deaths in that city 30 resulted from measles, 2 from small-pox, and 104 from different forms of "fever." According to the most recently received weekly returns, the annual death-rate averaged 26.1 per 1,000 persons estimated to be living in twenty-one of the largest European cities, and exceeded by as much as 5.8 per 1,000 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 33.7, and showed a further decline from the rates recorded in the two preceding weeks; the 599 deaths included 23 from typhoid fever, 8 from small-pox, 16 from measles, and 11 from scarlet fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 24.2 per 1,000, and ranged from 21.7 in Christiania to 27.3 in Stockholm; diphtheria caused 8 deaths in Copenhagen, and scarlet fever 6 in Stockholm and 4 in Christiania; while 6 deaths were referred to whooping-cough in Copenhagen, and 12 to measles in Stockholm. In Paris the death-rate was equal to 24.7 per 1,000 (against 28.1 and 27.4 in the two preceding weeks), and exceeded by 5.7 per 1,000 the rate for the corresponding week in London; the deaths included 14 from small-pox, 56 from measles, 14 from typhoid fever, and 30 from diphtheria and croup. The 190 deaths in Brussels, of which 3 resulted from measles and 3 from whooping-cough, gave a rate of 21.9 per 1,000. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 19.6 per 1,000, the several rates being 18.2 in Amsterdam, 18.5 in Rotterdam, and 22.8 in the Hague; measles caused 6 deaths in Amsterdam and 1 in Rotterdam; while a fatal case of typhoid fever was recorded in Amsterdam and in the Hague. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 27.2 per 1,000, and ranged from 21.4 and 22.9 in Berlin and Dresden, to 35.4 and 37.9 in Munich and Buda-Pesth. Small-pox caused 13 deaths in Buda-Pesth, 9 in Prague, and 4 in Trieste; diphtheria 25 deaths in Vienna, 9 in Breslau, and 11 in Buda-Pesth; and 8 fatal cases of typhoid fever occurred in Hamburg. The rate of mortality in Rome was equal to 30.1 per 1,000, and in Venice to 19.4 per 1,000; the 210 deaths in Rome included 11 from small-pox and 18 from measles; a fatal case of typhoid fever and 1 of measles were recorded in Venice. In Cairo the death-rate was equal to 44.5, and in Alexandria to 35.6 per 1,000; diarrhœal diseases caused 97 deaths in Cairo and 28 in Alexandria; typhoid fever 14 in Cairo and 4 in Alexandria; and 2 fatal cases of small-pox occurred in Alexandria and 1 in Cairo. In four of the largest American cities the recorded death-rate averaged 23.8 per 1,000, and ranged from 19.5 in Baltimore to 27.7 in New York. Diphtheria caused 36 deaths in New York and 14 in Brooklyn; while 13 deaths from measles, and 6 from typhoid fever, occurred in Philadelphia.

It appears, from statistics published in the Registrar-General's return for the week ending Saturday, May 28th, that the annual death-rate recently averaged 29.0 per 1,000 in the three principal Indian cities; it was 24.3 in Bombay, 26.8 in Calcutta, and 34.1 in Madras. Cholera caused 59 deaths in Calcutta and 9 in Madras; 32 deaths were referred to measles, and 2 to small-pox, in Bombay, while "fever" was fatally prevalent in each of these Indian cities. According to the most recently received weekly returns, the annual death-rate averaged 26.4 per 1,000 persons estimated to be living in twenty-one of the largest European cities, and exceeded by as much as 6.0 per 1,000 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was 34.1 per 1,000, and was slightly higher than that recorded in the preceding week; the 607 deaths included 17 from typhoid fever, 27 from measles, 12 from scarlet fever, and 13 from diphtheria. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 20.2 per 1,000, and ranged from 19.4 in Copenhagen to 21.3 in Stockholm; scarlet fever caused 4 deaths in Christiania, measles 7 in Stockholm, and whooping-cough 4 in Copenhagen; while diphtheria and croup were somewhat prevalent in each of these cities. In Paris the death-rate was equal to 25.4 per 1,000 (against 27.0 and 24.7 in the two preceding weeks), and exceeded by 6.4 per 1,000 the rate recorded in the corresponding week in London; the deaths included 15 from small-pox, 49 from measles, 36 from diphtheria, and 15 from typhoid fever. The 185 deaths in Brussels, of which 10 resulted from measles and 3 from diphtheria, gave a rate of 21.3. No returns from Geneva appear to have been received for some time past. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 21.6 per 1,000, the several rates being 19.9 in Rotterdam, 20.6 in the Hague, and 22.1 in Amsterdam; 10 deaths were referred to measles and 6 to diphtheria in Amsterdam; a fatal case of scarlet fever was recorded in Rotterdam, and one of whooping-cough in the Hague. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 26.4 per 1,000, and ranged from 19.9 and 20.2 in Dresden and Berlin to 35.1 and 37.7 in Buda-Pesth and Breslau. Small-pox caused 10 deaths in Buda-Pesth, 5 in Prague, 2 in Vienna, and 2 in Trieste; diphtheria 18 in Berlin and 13 in Munich; and 36 fatal cases of measles were recorded in Breslau and 24 in Vienna. The death-rate in three of the largest Italian cities averaged 28.3 per 1,000, and ranged from 25.8 in Venice to 30.7 in Turin; 3 deaths were referred to small-pox in Rome, 2 in Turin, and 1 in Venice; 8 deaths were referred to measles in Turin and 8 in Rome; 5 to diphtheria in Rome and 2 in Turin. In Cairo the death-rate was 42.2 per 1,000, and in Alexandria 35.0; diarrhœal diseases caused 114 deaths in Cairo and 30 in Alexandria; typhoid fever 13 in Cairo and 4 in Alexandria, and 4 fatal cases of small-pox occurred in Alexandria, and 11 of whooping-cough in Cairo. In four of the largest American cities the recorded death-rate averaged 23.9 per 1,000, and ranged from 15.4 in Baltimore to 27.7 in New York. Diphtheria caused 46 deaths in New York, 18 in Brooklyn, and 7 in Philadelphia; small-pox 7 in New York; measles 37, and typhoid fever 12 deaths in Philadelphia.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

West Sussex.—The frequency with which diphtheria appears in certain parts of West Sussex has led Dr. Kelly to compare the death-rates in the various districts to see what conditions are present to account for its prevalence. In his annual report for 1885, the mortality during the past ten years from measles, scarlatina, whooping-cough, and diphtheria is contrasted in reference to the various soils met with in the county. These Dr. Kelly divides into three classes—pervious, retentive, and moderately pervious soils. On the retentive soils, which include the Weald clay, the diphtheria death-rate was nearly four times the rate met with on pervious soils, and twice that of the loamy soil between the Downs and the sea. There can be no doubt as to the increasing frequency of this disease, as there were only 76 deaths in the first quinquenniad against 138 deaths in the second quinquenniad of the past ten years. The crowding together of children in towns may account for the increased mortality there, but Dr. Kelly's experience tends to show that the disease is most common in lonely, isolated places, and least frequent in urban districts, where there is a constant intermixture of children. The subject is one of great interest, and is considered in all its bearings in this report. Small-pox was brought into two parts of the district, Midhurst and East Preston; but every precaution was taken to prevent the spread of the disease, and only one death resulted. An interesting account is given of a series of cases of diarrhœal sickness due apparently to polluted water. The water-supply was from a pond, which was clear and bright, but, when stirred up, was found to contain a black deposit of decayed vegetable matter. It could not possibly have become polluted by excreta from any previous case of enteric fever, and Dr. Kelly thinks it probable that those attacked suffered from enteritis, of which diarrhœa would be a prominent symptom. In no case was there any rash, or hæmorrhage from the bowels. The death-rate for the year was 14.6 per 1,000, the highest (16.6) being in Westbourne, and the lowest (7.3) in West Worthing.

Liverpool.—Dr. J. Stopford Taylor's report for 1885 is a record of much useful work. The attention shown to all cases of infectious disease is borne out by the comprehensive tables, dealing separately with each disease, showing localities in which there was the greatest prevalence, and giving a statistical history of the mortality therefrom. The number of deaths from these causes was large, although below the average, and, considering their preventable character, Dr. Taylor remarks that "there was no necessity for the sacrifice of so much human life." Of the 2,523 deaths, measles was responsible for the largest proportion, namely, 716, and was prevalent to such a degree in the summer that it was impossible to inquire into all the cases. Of the 374 cases of small-pox removed to the hospital, 46 were fatal. The localities from which the patients came were chiefly the densely-populated districts along the line of the docks. Very few cases occurred within the half-mile radius, and Dr. Taylor had no reason to apprehend that the hospital itself might be a source of danger. Deaths from scarlet fever were below the average. Appended to the report is a map showing the localities of the fatal prevalence of fever. The fever-mortality was less than has yet been recorded, there being 182 deaths, against an average for the last ten years of 378. Dr. Taylor also gives a table of deaths from fever and diarrhœa for the past twenty years, the gradual diminution being illustrative of the great improvement in the public health consequent on sanitary work.

Kingston-on-Hull.—*Diarrhœa due to Polluted Water-Supply.*—The reports for this borough for the years 1884 and 1885 respectively contain records of Dr. J. W. Mason's pathological experiences which are alike interesting and valuable. The mortality from zymotic diseases was considerably higher in 1884 than in the following year. Small-pox on several occasions gave rise to considerable anxiety, and the deaths from measles, diphtheria, and diarrhœa were above the average, the last-named disease causing 331 deaths. In 1885 diarrhœa was again the most fatal of the zymotic diseases, but only fifty-nine deaths occurred that year. Great interest was attached to the epidemic of diarrhœa that occurred in March, and it is believed to have resulted from the pollution of the Hull water-supply. The outbreak was peculiar in its suddenness, only a few isolated cases having occurred; and it was limited to houses supplied with Hull water, or to persons who, having business occupations in Hull, had partaken of the water. The characteristic symptoms were purging, vomiting, and pain in the bowels, attended by great prostration and cramps; and Dr. Mason reports that, although the majority of cases were amenable to treatment, yet others showed a tendency to recur. He estimates that about 18,000 to 20,000 per-

sons, in all classes of society, suffered from its effects. From personal observations during the epidemic, Dr. Mason had strong reasons for believing in the contagious nature of diarrhœa. A Special Investigation Committee found that the outbreak was attributable to the contamination of the Hull water-supply by the admission into it of sewage and other noxious matter—possibly of the excreta of persons suffering from diarrhœa at a period just anterior to the epidemic. It is a matter for congratulation that it was attended with no fatal results; and the death-rate was unaffected, since 1885 showed the lowest rate ever recorded—17.3 per 1,000. In 1884 the death-rate was 21.1 per 1,000, and Dr. Mason remarks that the gradual decrease recorded since 1868 has doubtless resulted from the great sanitary improvements which have been carried out since that time.

SALFORD.—*Ten Years' Progress.—High Diarrhœa Mortality.*—The steady improvement in the health of Salford which was manifested during the first four years of the current decennium was fully sustained during 1885. At no period since 1861 was the rate of mortality so low. Dr. Tatham includes in his report for that year a review of the sanitary history of the borough since the passing of the Public Health Act, 1875, with a brief account of the improvements that have been effected. The small-pox epidemic of 1875-76 brought about the provision of permanent hospital accommodation, and Dr. Tatham quotes figures which leave no doubt that the people of Salford are really appreciative of this beneficent institution for their welfare. Measles was the only zymotic disease which showed excessive fatality during 1885. Diphtheritic attacks were less frequent than in either of the two preceding years, and the reported cases of scarlet fever were also fewer. Eleven cases of small-pox were dealt with, and typhus fever occurred in thirty-two instances, again and again in the same house, in spite of the careful action of the sanitary officers. Enteric fever was less common than in recent years, the reported attacks numbering only 205, against 293 and 422 severally in 1883 and 1884. With regard to diarrhœa, Salford holds the unenviable position of being grouped with Preston and Leicester as possessing the highest mortality among the twenty-eight large towns. Unfortunately, her position in this respect does not improve as years roll on. Of the 246 deaths from this cause in 1885, no fewer than 229 were children under 5 years of age. In comparing the Salford death-rates from zymotic diseases with those obtaining in other parts of England and Wales, Dr. Tatham points out that the decrease has been much greater in the large towns than in the rural districts or the smaller towns. From this he infers that, although infectious diseases continue to be excessively rife in densely-crowded populations, nevertheless the sanitary efforts for their repression are commonly more successful in the great towns than in the smaller urban communities.

MAIDSTONE.—*Invasions of Small-pox.*—The principal feature of the history of this borough during 1885 was a series of invasions of small-pox. This disorder, so prevalent in London and other places, appeared again and again, and at one time threatened to become seriously epidemic. In all, 39 cases were reported, all of which were treated in hospital. Mr. Adams gives a very interesting narrative of the incidence of the cases. In every instance but one the infection was satisfactorily traced to its source. There can be little doubt that the hospital materially checked the spread of small-pox, as never before in the health officer's experience was there so great a risk of an unmanageable epidemic. The only two children attacked were unvaccinated. Diphtheria and typhoid fever caused respectively six deaths. As a probable cause of the cases of the former disease, Mr. Adams notes inhalation of sewer-gas, caused by the habit of children playing round and about the street sewer ventilators. The general death-rate was 15.8 per 1,000, whilst that from zymotic diseases was the lowest on record, namely, 1.05 per 1,000.

NOTTINGHAM.—*Schools as Disseminators of Infection.*—By a fortunate coincidence, Dr. Whitelegge's first year of office was one of exceptionally low mortality, owing to favourable climatic influences and the general absence of grave epidemics. The death-rate for 1885 was 18 2 per 1,000, which appears to be by far the lowest ever recorded. The seven principal zymotics were credited with 496 deaths, equivalent to a death-rate of 2 2 per 1,000. This also compares most favourably with those of former years; that for 1884 being 3.5 per 1,000, and the average of the seven years 1878-84, being 3.4 per 1,000. Small-pox made its appearance six times during the year, but was only known to affect ten persons, two of whom died. Measles, which appears to become epidemic every two years in Nottingham, was very prevalent in November and December. In many streets, in the poorer districts, scarcely a house escaped. Children from infected houses were, as far as possible, excluded from schools, but the Health Committee felt that, considering the home surroundings of the children, the closure of schools was likely rather to increase the evil then diminish it. Twice during the year schools seemed to play an important part in disseminating diphtheria, but fortunately the source of infection was at once detected, and the mischief confined within narrow limits. Enteric fever showed a marked decrease as compared with previous years. Including two deaths referred to "simple continued fever," the fatal cases were 44, as against 68 in 1884 and 73 in 1883. No cases were traced to milk or other food supplies. Defective drainage was frequently found, but in many instances no direct clue to the source of infection could be discovered. Dr. Whitelegge announces the erection of a permanent hospital for infectious diseases, provision being made for the reception of small-pox, scarlet fever, enteric fever, and diphtheria cases in separate blocks completely isolated from each other.

OBITUARY.

JOHN JACKSON, M.D., F.R.C.S., F.R.C.P.

DR. JOHN JACKSON, who died at his house in Brighton on March 31st last, was in his 83rd year. He was born in London November 17th, 1804, but passed his youth at his father's house, North Reston Hall, in Lincolnshire. He was at a school in Louth where Lord Tennyson and his brother were educated about the same time. He afterwards entered Catherine Hall, Cambridge, but left without a degree in order to begin his medical studies. He studied at the Westminster Medical School, and upon leaving for India, about 1826, received a testimonial to his zeal and humanity from the governing body. Dr. Jackson was in the medical service of the Bengal Presidency for twenty-five years. Like other medical officers in India, he practised both as a physician and as a surgeon, and became so well known for surgical skill that the Royal College of Surgeons of London elected him a member without any application from himself. At Ghazeepore, where he was stationed, he founded a hospital for diseases of the eye. Lord Auckland, the Governor-General, recognised his devotion by appointing him to the General Hospital at Calcutta. He was for many years lecturer at the Medical College of Calcutta. On his leaving, the students showed their recognition of his ability and kindness by the presentation of a testimonial. He was for many years the leading European physician. His influence with the native population was still more remarkable in Calcutta than his reputation amongst the English. There was at that time much less intercourse with the natives than at present. Dr. Jackson was one of the first to gain admission to the houses of Indian Ranees, and he used his power with such discretion as to win the affection and respect of natives of the highest classes. After twenty-five years of patient and successful labour Dr. Jackson returned to England in 1855. He took his M.D. degree at Cambridge in the same year. The then President of the College of Physicians procured his election to the small college club, an honour seldom conferred upon anyone who is not well known in London practice. For some years after his retirement from the service, Dr. Jackson continued to see his old Indian friends in London, his unfailing kindness of heart leading him to place his great skill and wide experience at the service of many sufferers.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the First Professional Examination for the Diploma of Fellow at a meeting of the Board of Examiners on May 23rd:

W. K. Hatch, student of King's College and Aberdeen; H. W. Dodd, E. W. Willett, and L. P. Shadbolt, of St. Bartholomew's Hospital; F. C. Hart-Smith, and F. W. Gee, of University College; W. Rawes, of London Hospital; F. C. Larkin, of Liverpool; S. H. Jones, of St. Thomas's Hospital; F. X. Da Costa, of Bombay; J. Deakin and J. E. Platt, of Manchester.

Passed on May 24th.

J. O. W. Barratt and G. T. C. Barber, of Birmingham; R. Alcock, C. F. Marshall, and T. A. Goodfellow, of Owens College, Manchester; J. H. Fardon and H. F. Mole, of Bristol; R. H. Elliott, of St. Bartholomew's Hospital.

Passed on May 25th.

R. C. Elsworth and L. E. Barnett, of Edinburgh University; P. W. Rattray and D. R. McKinnon, of Aberdeen; C. Duer, A. W. Boning, and J. L. Firth, of University College; H. W. Clarke, of Charing Cross Hospital; W. G. Nash, of Middlesex Hospital; C. H. Roberts and J. A. Hayward, of St. Bartholomew's Hospital; J. Griffiths, of St. Mary's Hospital; A. D. Fripp, of Guy's Hospital.

Passed on May 26th.

P. R. Dodwell, E. A. Falkner, and H. Caiger, of University College; H. G. G. Cook, R. Pickard, and J. J. Macgregor, of St. Bartholomew's Hospital; J. E. F. Hosking, R. D. Mothersole, R. E. Williams, and A. Parkin, of Guy's Hospital; H. S. Collier, of St. Mary's Hospital; E. Burchell, of London Hospital; F. E. Forward, of St. Thomas's Hospital.

Passed on May 27th.

A. F. Richards and J. H. Sequeira, of London Hospital; F. C. Abbott and E. A. Roberts, of St. Thomas's Hospital; E. P. Paton, D. R. P. Stephens, and R. A. Bickersteth, of St. Bartholomew's Hospital; J. Robertson, of Guy's Hospital; A. E. Baker, of Charing Cross Hospital; W. J. Foster, of St. Mary's Hospital; P. T. B. Beale, of King's College; and G. B. M. White, of University College.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At a special Examination for the Licence to practise Medicine of the College, held on Monday and Tuesday, May 23rd and 24th, 1887, the undermentioned candidates were successful.

O. J. Garrett, Manchester; A. H. Wyborn, London.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen, having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received Certificates entitling them to practise as Licentiates of the Society, on May 26th, 1887:

Clark, Calvin Worcester Day, 32, Regent Square, W.C.
Dean, Henry Percy, Anson Road, Tufnell Park, N.
De Renzi, Arthur Castriot, the Chaplain's House, Her Majesty's Prison, Wandsworth.
Harris, Worsley John, 24, Bennett Park, Blackheath, S.E.
Johnson, Harold Jossé, 174, Bishopsgate Street, E.C.
Mansell, Harry Rosser, Lynchmere, Mabelley Road, Upper Norwood.
Read, Henry George, 30, Finsbury Square, E.C.
Servaes, Francis Charles, Northern Hospital, Liverpool.
Thomas, John Lewis, Brynmour, Breconshire.
White, Charles Percival, 2, Furnival's Inn, Holborn, W.C.

MEDICAL VACANCIES.

The following vacancies are announced.

ANCOATS HOSPITAL, Manchester.—Junior Visiting Surgeon. Salary, £60 per annum, with board, etc. Applications to the Honorary Secretary.

CAMBERWELL PROVIDENT DISPENSARY, S.E.—Four Medical Officers. Applications by June 8th to the Secretary.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Resident Clinical Assistant. Applications by June 23rd to the Secretary.

GOREY UNION.—Medical Officer, Killenagh and Wells Dispensary. Salary, £135 per annum, and fees. Applications to Mr. William Porter, Honorary Secretary, Tomgar House, Ballyeanew. Election on June 6th.

HOSPITAL FOR CONSUMPTION, Brompton, S.W.—Resident Clinical Assistant. Applications by June 18th to the Secretary.

INVERNESS DISTRICT ASYLUM.—Assistant Medical Officer. Salary, £80 per annum, with board, etc. Applications by June 15th to Dr. Aitken.

KILBURN, MAIDA VALE AND ST. JOHN'S WOOD GENERAL DISPENSARY.—House-Surgeon. Salary, £100 per annum. Applications by June 15th to the Honorary Secretary.

MAGHERAFELT UNION.—Medical Officer, Draperstown Dispensary. Salary, £130 per annum, and fees. Election on June 10th.

MASON SCIENCE COLLEGE, Birmingham.—Professor of Physiology. Applications by June 30th to G. H. Morley, Esq.

MILLER HOSPITAL AND ROYAL KENT DISPENSARY, Greenwich Road, S.E. Junior Resident Medical Officer. Salary, £30 per annum, with board, etc. Applications by June 10th to W. Bristow, Esq.

MILLER HOSPITAL AND ROYAL KENT DISPENSARY, Greenwich Road, S.E. Senior Resident Medical Officer. Salary, £60 per annum, with board, etc. Applications by June 10th to W. Bristow, Esq.

PARISH OF ST. MARY, Newington.—Medical Officer of Health. Applications to the Vestry Clerk, Vestry Hall, Walworth, S.E.

QUEEN'S COLLEGE, Birmingham.—Professor of Surgery. Applications by June 15th to the Secretary.

QUEEN'S HOSPITAL, Birmingham.—Honorary Surgeon. Applications by June 18th to the Secretary.

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Brighton.—Assistant-Physician. Applications by June 8th to the Chairman of the Medical Committee.

ROYAL UNITED HOSPITAL, Bath.—Resident Medical Officer. Salary, £100 per annum, with board, etc. Applications by June 10th to the Secretary.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William Street, Strand, W.C.—House-Surgeon. Applications by June 11th to the Secretary.

STAINES UNION.—District Medical Officer. Salary, £65 per annum and fees. Applications by June 6th to J. A. Engall, Esq.

STAMFORD HILL AND STOKE NEWINGTON DISPENSARY.—Resident Medical Officer. Salary, £105 per annum, and £50 per annum for extras. Applications by June 8th to the Honorary Secretary.

TOWNSHIP OF TOXTETH PARK.—Resident Medical Officer. Salary, £100 per annum, with board, etc. Applications by June 15th to J. Moulding, Esq.

VICTORIA HOSPITAL FOR CHILDREN, Chelsea, S.W.—Resident Medical Officer. Salary, £50 per annum, with board, etc. Applications by June 7th to the Secretary.

WESTMINSTER HOSPITAL, S.W.—Fourth Assistant-Surgeon. Applications by June 14th to the House Committee.

WHITEHAVEN AND WEST CUMBERLAND INFIRMARY.—House-Surgeon. Salary, £120 per annum, and extras, with apartments, etc. Applications by June 11th to the Secretary.

MEDICAL APPOINTMENTS.

BIDWELL, L. A., M.R.C.S., L.S.A., appointed Assistant House-Surgeon to St. Thomas's Hospital.

BLACK, Robert, M.D., appointed Assistant-Surgeon to the Sussex County Hospital, *vice* J. C. Uhthoff, M.D., resigned.

BOND, W. A., M.A., M.D., B.C.Cantab., appointed Clinical Assistant in the Throat Department to St. Thomas's Hospital.

BROOK, W. F., M.R.C.S., L.S.A., appointed Assistant House-Surgeon to St. Thomas's Hospital.

BROWN, C., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Ear Department to St. Thomas's Hospital.

BULSTRODE, H. T., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Throat Department to St. Thomas's Hospital.

CALVERT, J. T., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Skin Department to St. Thomas's Hospital (Extern).

CHRISTIE, J. W. S., M.D., appointed Medical Superintendent to the County Asylum, Stafford.

DUNCAN, H., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Skin Department to St. Thomas's Hospital.

FLOOD, Alexander, L.R.C.S.I., L.K.Q.C.P.I., appointed Medical Officer to the Drum Dispensary of the Cotehill Union, *vice* James Jackson, M.B., L.R.C.S.I., resigned.

HAWKINS, H. P., M.R.C.S., L.S.A., appointed Resident House-Physician to St. Thomas's Hospital.

HINNELL, J. S., M.R.C.S., L.S.A., appointed Ophthalmic Clinical Assistant to St. Thomas's Hospital.

HUGHES, Alfred W., M.B.Edin., M.R.C.S., appointed Medical Officer of Health to the Flint Urban Sanitary District, *vice* T. A. Evans, L.R.C.P.Edin., L.M., deceased.

HUTTON, J. S., M.B.Lond., L.R.C.P., M.R.C.S., appointed House-Surgeon to St. Thomas's Hospital (Extern).

JONES, H. S., L.R.C.P., M.R.C.S., L.S.A., appointed Clinical Assistant in the Ear Department to St. Thomas's Hospital.

MACEVOY, H. J., L.R.C.P., M.R.C.S., appointed Resident House-Physician to St. Thomas's Hospital.

NEWBOLT, G. P., M.D.Durham, M.R.C.S.E., appointed Senior House-Surgeon to the Stanley Hospital, Liverpool, *vice* J. Garibaldi Corkhill, M.B., M.R.C.S., resigned.

NISBET, J. Tawse, M.B.Edin., C.M., appointed Honorary Assistant Medical Officer to the Liverpool Infirmary for Children.

PEARCE, Walter, M.D., M.R.C.P., M.R.C.S., appointed Physician to St. Mary's Hospital (Extern).

SANSOM, H. A., L.R.C.P., M.R.C.S., appointed Assistant House-Physician to St. Thomas's Hospital.

SMYTH, H. J., L.R.C.P., M.R.C.S., appointed Non-Resident House-Physician to St. Thomas's Hospital.

SOLLY, E., L.R.C.P., M.R.C.S., L.S.A., appointed Resident Accoucheur to St. Thomas's Hospital.

STAPLE, James D., M.R.C.S., Eng., L.S.A.Lond., appointed House-Surgeon at the Stockport Infirmary, Stockport, *vice* A. J. Turner, M.D.Lond., M.R.C.S.Eng., resigned.

STAVELEY, W. H. C., L.R.C.P., M.R.C.S., appointed House-Surgeon to St. Thomas's Hospital (Extern).

STEVENSON, George, M.R.C.S., appointed Assistant House-Surgeon to the Sussex County Hospital, *vice* G. G. Hodgson, M.R.C.S., resigned.

TAYLOR, Alfred Everley, L.R.C.P.&S.Ed., L.S.A.Lond., appointed Senior Assistant Medical Officer to the County Asylum, Stafford, *vice* J. W. S. Christie, M.D.

WINFIELD-ROLL, G., M.B., B.C.Cantab., L.R.C.P., M.R.C.S., appointed Ophthalmic Clinical Assistant to St. Thomas's Hospital.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.—At the last meeting of the Society of the Medical Officers of Health, presided over by Dr. Alfred Hill; it was decided, in view of the early amalgamation of the various societies of medical officers of health, to defer the annual meeting and nomination of office bearers till just before the October meeting, when the completed scheme would be in a fit state to allow the officers to be chosen from the reconstituted society. Mr. Shirley F. Murphy, in a paper entitled "A Few Facts Concerning the Recent Prevalence of Winter Diarrhœa in London," said he thought it highly probable that the cause was not related to any climatic conditions, and he attributed it to butter of foreign origin and of cheap quality. Mr. Shirley Murphy pointed out that the custom abroad being to mix milk from large numbers of farms to make butter at central depots, any capacity which the milk from any one farm might possess to cause diarrhœa was spread, and its effects were felt in many places. Dr. B. A. Whitelegge read a paper on "The Powers and Responsibilities of Local Authorities in regard to Rabies." By muzzling and by destroying stray dogs, it was urged, rabies might be reduced to a minimum; but it was not possible to get rid of the terrible disease without the co-operation of neighbouring authorities. A logical extension of the principle led to the conclusion that in an isolated

country, it was practicable by combined action to stamp out rabies in a few months. Some remarks were made by Dr. C. E. Saunders, Dr. Drysdale, and Dr. L. Parkes, the prevailing opinion being that an order covering the whole country should be issued by the central authority.

BEQUESTS.—Mrs. Pemberton Heywood, widow of Mr. John Pemberton Heywood, of Cloverly Hall, Whitchurch, bequeathed £1,000 to the Liverpool Northern Hospital, £1,000 to the Liverpool Royal Infirmary, £500 to the National Hospital for the Paralysed and Epileptic, £500 to St. John's Hospital for Skin Diseases, Leicester Square, £100 to the West Derby Nursing Institution, and £100 to the West Derby Dispensary.—Mrs. Maria Newen, of The Boltons, South Kensington, bequeathed £300 to the Hospital for Consumption and Diseases of the Chest, £300 to St. Mary's Hospital, £300 to the Cancer Hospital, £100 to the National London Temperance Hospital, and £50 to the Earlswood Asylum for Idiots.—The British Home for Incurables has received £300, less duty, under the will of Mrs. Harriet Elizabeth Mills.—Mr. Edward Hudson, of Sheffield, bequeathed £100 to the Sheffield General Infirmary, and £100 to the Scarborough Northern Sea-bathing Infirmary.—Mr. John Marsden, of Whitebanks, Chesterfield, bequeathed £100 to the Chesterfield and North Derbyshire Hospital and Dispensary.

THE DEACONESSES' INSTITUTION, TOTTENHAM.—The "Samuel Morley" Wing of the Deaconesses' Institution and Hospital, the Green, Tottenham, the entire cost of which (£4,500) has been defrayed by Messrs. Howard and Charles Morley, was opened on Saturday, May 28th, by H.R.H. the Princess of Wales. In connection with the institution are a hospital for the sick poor, and an industrial home for orphan girls. During the past year the sisters attended 2,064 "casualties," in 9,932 visits, and 4,018 outdoor patients were attended in 13,755 visits. The in-patients numbered 620, of whom 224 were medical and 396 surgical cases, including 147 accidents. Of these 416 were cured, 65 relieved, 14 attended as out-patients, 65 died, and 54 remained in the hospital.

FATAL FIRE AT A LUNATIC ASYLUM.—A fire occurred at Brook House Private Asylum for Lunatics, Upper Clapton, on Friday, May 27th. The fire, it appears, originated in the room occupied by a lady, aged 60, who was a voluntary boarder, and who therefore, by the rules of the establishment, was allowed to lock her bedroom door. She was the only victim, but the intensity of the flames and smoke was at one time so great that the other patients were rescued with some difficulty, three persons effecting their escape by the roof. At the inquest the jury expressed their unanimous opinion that great credit was due to Dr. Adams, the medical superintendent and resident proprietor, and his attendants for their behaviour on the occasion.

THE ASSOCIATION OF PUBLIC SANITARY INSPECTORS.—The second provincial conference of this Association was held at the Town Hall, Eastbourne, on Saturday, May 28th. The delegates were welcomed by the mayor and corporation, and the medical men of the town attended the conference. Papers on health, drainage, and sanitary questions generally were read and discussed. Mr. Edwin Chadwick, C.B., President of the Association, gave an able address. Dr. Fussel, medical officer of health of Eastbourne, informed the delegates that the death-rate of Eastbourne was only 11 per 1,000 of the population.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.—The Jubilee celebration of the National Hospital for the Paralysed and Epileptic (Albany Memorial), Queen Square, will take place on July 7th, when the Duchess of Albany will open the wards hitherto unoccupied, including the ward for children, which bears His Royal Highness's name, and raising the total available beds to 180. There will be a show of roses and other flowers by Paul and Son, of Waltham Cross, and other attractions will be provided.

JUBILEE OF A RUSSIAN PROFESSOR.—On the 16th (28th) April, Professor V. L. Gruber, of St. Petersburg (not to be confounded with his namesake, the celebrated aurist of Vienna), celebrated his forty years' jubilee. He was presented with a large gold medal, bearing a portrait of himself, with the legend, "To the Teacher of 8,000 Russian medical men." A silver duplicate of the medal was presented to Madame Gruber.

CHEAP DINNERS FOR THE POOR IN ST. PETERSBURG.—The St. Petersburg Society for the Organisation of Eating-houses for the People has just entered on the sixteenth year of its existence. According to the *Detskaia Pomoshtch*, No. 8, 1887, p. 251, the Society has during the last fifteen years supplied the poor of the capital with 3,500,000 cheap and good dinners. During 1886 two of the institution's eating-houses were visited by 126,522 persons, who paid 9,491 roubles (about £949), while the expenses of the Society amounted to 9,940 roubles.

THE following is the subject chosen by the Academy of Medicine, Turin, for the Riberi prize of 20,000 francs: Researches on the Nature and Prophylaxis of one or several Infectious Diseases affecting Mankind. The essays, which can be written in Latin, French, and Italian, will be received up to the end of the year 1891. Printed works may be sent in.

PROSPECTIVE CHARITY.—A bequest of 425,000 francs has been made to the municipality of Roubaix by M. Alfred Motte, the benefits of which are to be realised a century hence, when the money is to be devoted to the construction of suitable dwellings for the artisan and working classes. It is anticipated that the sum, which is to be invested in Rentes till the year 1987, will by that time amount to 20,000,000 francs.

DIPHTHERIA ON BOARD SHIP.—The Danish corvette *Dagmar*, from Copenhagen, which has been on a cruise in the North Sea with cadets, has put into Sheerness Harbour with three cases of diphtheria on board. The patients have been admitted to the Melville Hospital, Chatham.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—ODONTOLOGICAL SOCIETY, 8 P.M. Business: Casual communications by Mr. F. Henri Weiss, on the Destruction of a Permanent Tooth-Pulp by an Alveolar Abscess attached to a Deciduous Molar. Mr. Storer Bennett: 1. A Lower Jaw containing the partly-formed Second Bicuspid developed with its Cusps Downwards and the Roots Upwards between the Fangs of the Second Temporary Molar from a Subject who is supposed to have lived in the Stone Age; 2. An Extraordinary Example of Perverted Tooth-development. Mr. Bridgman: A Case of Irregularity. Paper by Professor Victor Horsley, F.R.S., on Epileptiform Neuralgia of the Fifth Nerve treated by Avulsion of the Nerve.

WEDNESDAY.—BRITISH GYNÆCOLOGICAL SOCIETY, 8.30 P.M. Specimens will be shown by Dr. R. T. Smith, Dr. Edis, Dr. Granville Bantock, and others. Mr. Lawson Tait: The Principles of Flap-splitting in Plastic Surgery.

ROYAL MICROSCOPICAL SOCIETY, 8 P.M. Mr. G. Massee: Monograph of the Genus Lycoperdon. Professors T. Rupert Jones and C. D. Sherborn: Remarks on the Foraminifera, with especial reference to their Variability of Form, illustrated by the Cristellarians.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 P.M. Mr. Christopher Heath: On Certain Diseases of the Jaws.

EPIDEMIOLOGICAL SOCIETY OF LONDON, 8 P.M. Annual General Meeting. Dr. George Turner: Diphtheria.

THURSDAY.—OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM, 8.30 P.M. Living and Card Specimens at 8 P.M. Mr. W. J. Collins: Extensive Hæmorrhage into Blind Eye, with Coarctation of Retina. Mr. Higgens: Unusual Form of Coloboma of Iris. Mr. G. E. Walker: 1. Sequel to Case of Exophthalmos; 2. Sequel to Case of Cyclotomy in Glaucoma. Mr. Story: Experimental Demonstration on the Pathology of Glaucoma. Mr. Silcock: Sequel to Case of Central Choroidal Hæmorrhage. Papers:—Mr. Story: Case of Complete Blindness of Right Eye, with Temporal Hemianopsia of Left Eye. Mr. Hill Griffith: On the Permeability of the Suspensory Ligament by Organised Substances. Dr. Bailey: Recurrent Choroido-Retinitis in Region of Macula Lutea. Mr. Nettleship: Two Cases of Quinine Amblyopia.

FRIDAY.—ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 P.M.—Mr. Christopher Heath: On Certain Diseases of the Jaws.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which should be forwarded in stamps with the announcement.

BIRTHS.

CRITCHETT.—On May 29th, at 21, Harley Street, W., the wife of Anderson Critchett, of a daughter.

DAVIES.—On Sunday, May 22nd, at 17, De la Bèche Street, Swansea, the wife of W. T. F. Davies, M.B., B.S Lond., of a son.

STEAVENSON.—On May 27th, at 39, Welbeck Street, Cavendish Square, the wife of W. E. Steavenson, M.D.Cantab., of a son.

MARRIAGES.

KENYON—LAW.—On May 26th, at St. Matthew's, Cheltenham, by the Rev. Canon Bell, D.D., Rector, John Edward Kenyon, Surgeon, 21, Park Lane, Bradford, to Georgiana Elizabeth, eldest daughter of the late Rev. Henry Law, Vicar of Chepstow, Mon.

LLOYD—HAMPSON-SIMPSON.—On June 1st, at Edgbaston Parish Church, by the Rev. Cresswell Strange, M.A., Vicar, Jordan Lloyd, M.S., F.R.C.S., of 22, Broad Street, Birmingham, to Marian (Minnie), eldest daughter of Mercer Hampson-Simpson, Esq., Priory Road, Edgbaston.

STOCKER—HODGKINSON.—On June 2nd, at St. Luke's, Westbourne Park, by the Rev. R. J. Knowles, M.A., Vicar, George Bertram, youngest son of the late James Stocker, Esq., of Guy's Hospital, to Alice Mary, eldest daughter of the late Lieutenant-Colonel Cadman Hodgkinson, 28th Regiment Bombay Native Infantry.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30: Eye, Tu. F., 9.30; Ear, M. Th., 3; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, M., 9; Skin, Th., 1; Dental, W.S., 9.15.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY—9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY—10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's—1 30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY—9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY—9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE wish it to be distinctly understood that when a manuscript is forwarded to the BRITISH MEDICAL JOURNAL, it is implied that a similar manuscript has not been sent elsewhere, unless special notice of the fact be given; we shall regard any infringement of this rule as a breach of faith.

QUERIES.

PAIN AFTER CATHETERISATION.

CYSTITIS will be glad if any member can suggest a means of alleviating the distressing spasm and after-pain of a patient suffering from chronic cystitis and enlarged prostate, which occurs every time he uses the catheter? He will not trouble to have the bladder washed out, and most suppositories have no effect.

CONSTIPATION IN INFANTS.

SEMPER FIDELIS writes: Could any of your numerous subscribers inform me what further treatment to adopt to obtain satisfactory results in the case of a child suffering from congenital syphilis, whose motions are invariably almost white, and who is extremely constipated. I have tried half-grain doses hyd. c. creta as recommended by Ringer in his *Therapeutics*, also liq. hyd. perchlor. as mentioned by some authors on pages 268 and 269, 10th edition; but the child, even several hours after hyd. c. creta, invariably has a violent paroxysm of screaming after every dose, so that I for a time desisted. Its age is 1 year. I might say that recently I have had recourse to enemata as temporary relief to the bowels.

TYLOSIS OF THE TONGUE.

L.R.C.P. writes: I have a patient aged 32, robust and fair, who for the last ten years has had a white patch of heaped-up epithelium on the right anterior portion of the tongue, and which I have classified and treated under the above head. There is no history of syphilis, acquired or hereditary, and the patient has always been temperate, likewise a moderate smoker.

The history of the development of the patch dates ten years ago, but other symptoms preceded this, namely, dryness of the tongue, pain over the (present) situation when smoking, and an intense fur (brown) on the tongue in the morning. During all this time he has suffered from eczema of the head, from which he is not quite cured (and I fail to do so), as there seems to be now a condition of the scalp like seborrhœa. He is getting bald.

For the tongue I have tried all I can think of, but what I find best is to advise the patient to abstain from smoking for a fortnight, meanwhile remove the patch by caustic potash, after which he uses glycerine of borax as a mouth-wash. This treatment makes the tongue apparently well, but after one smoke the whole returns. Recently, in addition to the return of the patch, one or two extra bald patches about the size of a threepenny-piece have appeared on the other side of the tongue (anteriorly), but all are removed by the next application of caustic potash and glycerine of borax.

These recent (small) bald patches generally appear the following morning after smoking, are tender, void of papillæ, have an inflamed base, and gradually get white, like the original on the other side. The original patch has reached the thickness of a threepenny-piece, and the dead epithelium seems to get more imbedded into the good tissue of the tongue as the disease gets older. Any suggestions on this case will be gratefully received.

ILLEGAL PRACTICE.

A MEMBER writes: How am I to proceed in suppressing "illegal practice" on the part of a chemist's assistant, who has opened a "Medical Hall" in his town, in the west of Ireland. He compounds prescriptions, visits patients in the country and town, and assumes all the airs of a charlatan. He, however, puts the name of a deceased member of the profession on the labels of the bottles that he sends to his patients.

I brought this case under the notice of the Council of the Apothecaries' Hall in Dublin. I was referred by that body to the Pharmaceutical Society, which in turn required me to deposit £15 as security against costs before they would proceed. Is there any body in Ireland with powers similar to the Society of Apothecaries of London, which would undertake a prosecution for the suppression of this quack?

ANSWERS.

REGISTRATION OF FOREIGN DEGREES.

QUARTIER LATIN should immediately register the M.R.C.S., 1878. This will constitute him a legally qualified medical practitioner. With reference to his foreign degree, the subject is as yet unsettled.

CERTIFICATES IN PSYCHOLOGICAL MEDICINE.

A MEMBER.—The next examination for certificates in psychological medicine will be held on July 25th and 26th at Bethlem Hospital.

SWEDISH SYSTEM OF GYMNASTICS.

A PHYSICIAN writes: The best practical exponent of Ling's system of gymnastics in England is Mrs. Bergmann-Osterberg, Reremonde, Broadhurst Gardens, near Finchley Road Station. Mrs. Bergmann-Osterberg has for about six years been superintendent of Board schools in regard to Ling's system, which is generally adopted there. I regard it as an admirable method of physical and moral training, and know that it has been of great value in schools in promoting physical development, punctuality, neatness, and good discipline.

A Manual of Free-Standing Movements, by Captain Hassum (Part 1), Hachette and Co., 18, King William Street, Strand. 1s. 3d.

ANTIFEBRIN.

E. F. writes: In administering antifebrin, "Novice" will, I think, be wise in commencing with a small dose, and repeating it if necessary. The range of dose is given as from 4 to 30 grains in the twenty-four hours. Dr. Sidney Phillips recommends 5 grains for an adult and 1 to 2 grains for young children (*The Year-Book of Treatment*, 1886, p. 111). Dr. Lauder Brunton found in a case of erysipelas that 2 grains every two hours reduced the temperature slowly and steadily without collapse (*Pharmacology*, p. 825). The dose must be varied, of course, to suit the age and condition of the patient, but it is not desirable to exceed 15 grains in the twenty-four hours. The action of the drug begins in an hour, reaches its maximum in four hours, and the temperature is reduced to normal in from three to ten hours, remaining so for six to eight hours. The

skin becomes moist and slightly flushed; there may be thirst or diuresis, but no disagreeable effects follow moderate doses. Antifebrin has been successfully used in scarlatina, measles, enteric fever, pneumonia, phthisis, erysipelas, and acute rheumatism. The best mode of dissolving the powder is in brandy and water or in wine. It is nearly insoluble in cold water.

ANTIFEBRIN.

DR. CLEMENT HAILES (Clifton) writes: Antifebrin being only slightly acrid to the taste, is conveniently given by the mouth in the form of solution in tinct. aurantii, it being readily soluble in alcohol. The doses I have seen stated are from 3 grains to 15 grains. I should advise "Novice" to carefully feel his way with it, as after a second dose of 4 grains which I administered to a child, aged 8, suffering from scarlatina, twelve hours after administration of the first dose, the temperature rapidly fell from 103.6° F. to 96.8° F., and the patient into a state of collapse which caused considerable anxiety. The action is prompt, and it has acted where quinine has failed. It has, I hear, been used with success in the Royal Infirmary, Edinburgh.

TREATMENT FOR LOSS OF SMELL.

M.D. writes: In answer to "Downs," I relate a case which occurred in my practice many years ago. A woman, about the same age as "Downs's" patient, applied to me on account of loss of smell following on severe and prolonged nasal catarrh. She had been to several other medical men, and had experienced no benefit from treatment, which had extended over a year or more. I prescribed blue pill, with enough opium to prevent it from purging. By the time the gums were sore the sense of smell returned. My theory at the time was that the periosteum of the under surface of the cribriform lamella was thickened, as the result of long-continued inflammation of the Schneiderian membrane, that the calibre of the cribriform foramina was thereby diminished, and that the loss of smell was the result of pressure on the filaments of the olfactory nerves passing through. I imagined that the mercurial treatment set up absorption of the thickening, and that pressure then being taken off the olfactory filaments, they again made their special reports to the smell-centre.

NOTES, LETTERS, ETC.

NURSING HOME FOR PAYING PATIENTS.

WE are requested to state that a private Nursing Home for Paying Patients has been opened at 50, Weymouth Street, Portland Place, by Miss Pollock, who was for several years sister-in-charge of one of the wards of Guy's Hospital. The house has been put into sanitary repair, and is well situated.

MASSAGE.

THE address of the lady *masseuse*, Miss Vernon, was incorrectly given in our last issue. It should have been 7, Manchester Street, Manchester Square, W.

ERRATUM.—In the JOURNAL of May 21st, p. 1119, column 2, line 15 from the bottom of the page, for "myopia" read "convergence."

AN IMPOSTOR: A WARNING TO THE CHARITABLE.

MR. W. A. PATCHETT writes: I shall be glad if you will allow me, through the JOURNAL, to warn my professional brethren that an impostor is going about soliciting alms, representing himself to be Mr. William Ashton Patchett, late of Shaw, and stating that he is a widower with two children, and entirely destitute. To confirm his statement he produces some original testimonials from Sir W. Roberts, Mr. E. Lund, etc., which were given to me when I was a candidate for a hospital appointment seventeen years ago, and which by some means he has obtained possession of.

I have come to the conclusion that the scamp must be a man who acted as assistant to me for a few days some time ago, who stole not the testimonials only, but a number of medical books also. I am informed that in London he has only too successfully imposed upon several benevolent medical gentlemen. I hope this warning may nip the rascal's extortions in the bud.

A PLEASING STIMULANT.

COFFIN varnish, or "Todtenbaum Firniss," is the name given to a stimulant which Senator Maze, in a recent address to the French Temperance Society, said was working frightful mischief among the people of the towns and villages on the eastern frontier of France. Statistics show that drinking habits are on the increase in other parts of France, particularly among the criminal classes.

SALICYLATE OF SODIUM IN ACUTE TONSILLITIS.

DR. M. R. BROWN (Chicago, U. S. A.) writes: Several articles recommending puncture or incision into the tonsil in the early stage of acute tonsillitis having recently appeared in the JOURNAL, and I failing to see mention made of salicylate of sodium infer its use in the disease is not common in England; hence I would call attention to the following treatment.

In acute tonsillitis, before pus has formed, I order ten or fifteen grains of salicylate of sodium to be taken in a little water, and repeated every three to four hours. It is almost invariably found that the pain disappears after the patient has taken one or two doses of the remedy, and more than three doses are seldom required to relieve the other distressing symptoms. The most obstinate cases generally consider themselves entirely recovered in from twenty-four to thirty-six hours after commencing the treatment.

So certain is the remedy in its effects that, on prescribing it, I do not hesitate to assure my patients of relief within a few hours after they have commenced to take it.

FUNCTIONAL APHONIA IN A SIKH

SURGEON G. H. FINK (14th Bengal Lancers) writes: While reading the JOURNAL of March 26th, I came across a case of functional aphonia in a boy, described by Dr. Walter G. Walford. It would perhaps be interesting if I mention a similar case which occurred in a gunner in No. 2 Bombay Mountain Battery, serving in Beri Valley, Beluchistan.

In June, 1886, I was suddenly called to see S. S., aged 26, a Sikh with somewhat feminine features and voice, who was reported to have suddenly been taken seriously ill, and caused a relation of his, a native officer, some alarm. On arriving in hospital, where he had been conveyed in a dooly, the patient was lying on his back on a charpoy, with a most melancholy expression on his countenance. I felt his pulse, which was slightly accelerated; the breathing was a little hurried; the skin was natural; the tongue was slightly furred on the dorsum. When spoken to he could not reply, but pointed to his throat. I examined his throat as circumstances permitted, but there was nothing particular to be noted; I felt his larynx and hyoid bone, but there was no particular sign of discomfort or pain on the part of the patient. The heart-sounds were normal; the temperature was normal; the bowels somewhat irregular, nothing else. I must, however, mention that the patient was rather slow in speech and intelligence, from my previous knowledge of him. Concluding that the case was one of those few cases of aphonia which are rarely met with in men, I informed the relative that there was no cause of alarm, as there was nothing serious. Diagnosis, nervous aphonia. Treatment: an emetic of sulphate of zinc immediately; hot fomentations to the throat and neck; Twenty-five grains of bromide of potassium at bedtime. The patient was quite well and could speak at 11.30 P.M.; he was taken ill at 6 P.M. An ounce of castor oil was ordered in the morning.

Remarks.—This patient was feminine in appearance, speech, and manners, and he lived in terror of his relative, the native officer, who was a big, burly fellow, and occasionally was given to quietly chastising his nephew, who burst into tears on these occasions. A few months afterwards, he had an attack of bronchitis, and on recovering was about to be sent on sick-leave, but at the same time his worthy relative was going on furlough, and said he would take charge of the lad and help him on the road, since he was in a weak state. On the news being broken to the nephew, he besought me not to let the big burly relative accompany him, burst into tears, and said, "Sir, if you intend sending me with him, don't send me on leave at all; I'd rather remain here." "What's the objection?" I said. "Oh, sir, he beats me, and I'm afraid he'll not spare me on the road." Fear has, no doubt, a powerful action at times.

POST-GRADUATE CLASSES AND THE DUBLIN MEETING.

T. W. L. writes: As many general practitioners are beginning to consider the attractions of different localities for them during their annual vacation; and as some—myself amongst the number—would go over to Dublin for the annual meeting in August, if post-graduate classes for three or four weeks were established, you would confer a boon if you opened up the question again which was broached a few weeks since.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. EXAMINATION FOR THE LICENCE (Third Part or Final).

THE following were the questions at the examinations in April, 1887.

Principles and Practice of Surgery.—1. Cancer of the tongue: Give the symptoms, diagnosis, and treatment. 2. Give the symptoms, the possible results, and the treatment of syphilitic iritis. 3. Describe a case of congenital talipes varus, and give in detail the treatment that may be adopted. 4. What symptoms may be produced by the presence of a foreign body in the trachea or bronchus? How would you treat such an accident? 5. Senile gangrene: What are its causes, its usual course, and termination? What methods of treatment may be adopted? 6. Describe the symptoms and treatment of villous tumour of the bladder.

Principles and Practice of Medicine.—1. Describe the course of the transverse aorta. Give its anatomical relations, with special reference to the physical diagnosis of diseases of that portion of the arterial system. 2. Enumerate the symptoms usually met with in the third week of a case of typhoid fever, as they occur from day to day, and the remedial measures that you would adopt for their relief. 3. What are the signs of a pleural effusion on the right side, rising to the level of the third rib? What symptoms would make you come to the conclusion that the fluid was purulent? and in the latter case what treatment would you adopt? 4. Describe the pathology, symptoms, and treatment of infantile paralysis. 5. Describe the course of a case of unmodified small-pox, with its possible complications; especially noting its period of incubation (including its prodromal and eruptive stages), results, and proper treatment. 6. What are the symptoms of cancer of the stomach? Indicate the principal differences that would result from varieties of site in the morbid growth. How would you treat such a case? Write in full the prescription you would give.

Midwifery and Diseases of Women.—1. Describe the chorion up to the end of the second month of gestation. 2. What are the causes of fœtal death in the last two months of gestation? 3. What are the chief methods employed for the induction of premature labour, and what are the circumstances which would determine the choice? 4. State fully what means should be adopted to prevent the occurrence of puerperal fever in obstetric practice. 5. Describe the varieties of cancer of the cervix uteri, with the diagnosis and pathology. 6. B., aged 30, was confined two years ago of her second child. She did not suckle the infant, and the catamenia reappeared one month after delivery. The periods, which were somewhat profuse, appeared regularly until a year ago, when the patient had a severe flooding. This recurred at irregular intervals until her admission to the hospital a month ago. On examination, the uterus was felt to be slightly enlarged, and the os uteri closed. What are the various conditions which may give rise to these symptoms, and what is the treatment?

ROYAL COLLEGE OF SURGEONS OF ENGLAND. DIPLOMA OF MEMBER.

THE following were the questions at the examinations in April, 1887.

Surgical Anatomy and the Principles and Practice of Surgery.—1. Describe the shape, position, and relations of the thyroid body. Mention particularly the points which would require attention in an operation for its removal. 2. Describe the arches of the foot, and the structures by which they are maintained, with especial reference to the deformity known as "flat-foot." 3. Name the most frequent dislocations and fractures occurring at the elbow-joint. Give their differential signs. 4. Describe the surgical treatment of Empyema under its various conditions. 5. How may the production of lymph as the result of inflammation be accounted for? Describe its physical and chemical properties, and mention the changes it may undergo. 6. Describe the treatment to be adopted in a case of punctured wound of the cornea with prolapse of the iris. Mention the consequences which may ensue, and the proper modes of dealing with them.

Principles and Practice of Medicine.—1. Give a full account of cancer of the stomach, including its orifices. 2. Describe the causes, diagnosis, and treatment of hæmoptysis. 3. Under what conditions is excessive elevation of the temperature of the body met with? What temperature is to be deemed dangerous, and what are the means whereby it may be reduced? 4. Give the composition, physiological action, medical uses, and doses of decoctum aloes compositum, ferrum redactum, lithiæ citras, liquor morphinæ hydrochloratis, apomorphinæ hydrochloras, pilula saponis composita, pulvis glycyrrhizæ compositus, syrupus chloral.

Midwifery and the Diseases of Women.—1. Describe the passage of a child through the pelvis with the breech presenting, with the sacrum to the right sacro-iliac synchondrosis. 2. State the circumstances in which convulsions come on in the puerperal state, and how would you distinguish between them?

3. State the means you would adopt with a view to prevent the infection of parturient and puerperal women. 4. A patient three weeks after labour has a painful fixed swelling in the left iliac fossa, with febrile symptoms. What is the probable nature of the swelling, and what course will it run?

THE MEDICAL COUNCIL.

MR. WILLIAM DONOVAN, L.R.C.P.Ed. writes: I fear the Medical Council has not been improved by its extension. It goes on even worse than before; time appears no object, speeches of an hour and a half, paid for by the profession at over a pound a minute, and debates adjourned for more speeches; this is too bad. The Apothecaries' Society is not worth it; what has it done to earn such distinction? The Society possesses full powers to suppress unqualified practice, and so glaring is the neglect of the Society to put the power in force that there is not a town in England in which unqualified practice is not carried on openly and without let or hindrance. If the Apothecaries' Society depends for its existence on the possession of the power to suppress unqualified practice, then the Apothecaries' Society, having so grossly neglected to perform its duty, should not be allowed to exist a day longer. The Medical Council is supposed to take cognisance of conduct calculated to injure the dignity of the profession, but just take up one of our halfpenny evening papers and you will see cures guaranteed by men holding registered diplomas, and if the Medical Council goes on at a pound a minute and does nothing, I think the profession could do without the Council at that price, and the Apothecaries' Companies at a very small price indeed.

BROWN DEFENCE FUND.

	£	s.	d.
Amount already acknowledged	19	8	6
Arthur Ives Howell, Esq.	1	1	0

G. STANLEY MURRAY, M.D., Putney.

OBSTINATE GLEET.

SURGEON-MAJOR VACY-ASH writes: My treatment is this. Make a lotion, either of chloralum, zinci sulph., tannin, plumbi acetas, or any of the usual astringents used in these cases, of a strength sufficient to attain its object without being felt by the patient; I mean to say, that it is quite unnecessary that scalding or pain should be produced by the application of the injection to the mucous membrane of the urethra. Take any or all of these ingredients, and make four or five separate and distinct injections, and let each injection be used for, say, three or four days. But now comes the pith of the whole thing; when injecting, the urethra should be filled (not distended), and the lotion retained in the urethra for at least five minutes. This is the point to be observed; and let this be repeated every two or three hours, the patient, if possible, kept in bed, and not materially restricted in diet, and, as I have before said, never let the injection be continued for more than three or four days. If the gleet be very chronic, and due to chronic contraction (as is often the case) of the mucous membrane, the passing of a bougie as often as the injection is changed will greatly assist recovery. Let this course be adopted, and I think most gleets will be cured. Of course, in anæmic cases the usual constitutional treatment should be adopted. In the Service one gets a large practice in this kind of disease, and what I have now written is the result of many years' trials.

VITAL STATISTICS OF BERMUDA.

MR. DUDLEY C. TROTT, M.B., B.C., F.R.C.S., writes: Seeing some considerable correspondence occurring in your columns concerning Bermuda, respecting Surgeon Barnes's paper, I should like to make a short statement. By favour of the Hon. Cavendish Boyle, Colonial Secretary, I have been allowed to look over his (Registrar-General's) report for 1886. Death-rate: 1. Still-births, 24; 2. Naval and military deaths, 52; 3. Infants under one year, 145. The Registrar-General takes away the still-births, two-thirds of the deaths in the Imperial forces, and half the children, making 293 deaths in a civil population of 15,177, being a percentage of 19.3 per 1,000. The table gives total deaths from enteric as 12; phthisis, 25; tuberculosis, 5; puerperal fever, 1; scarlet fever, 0.

The visitors have been particularly free from any contagious or infectious diseases. I have attended, I believe, all except one of the visitors ill at the Princess Hotel during last season, and there has not been one case that could be attributed to the Island or its drainage or ventilation. Of course, there is ample room for improvement, as we should have no typhoid here at all, but I think that comparatively we make a very fair return. I have personal knowledge of the drainage of the Princess Hotel, and I have it from a very competent medical friend (Dr. Eldon Harvey) that the Hamilton Hotel is also in first-class condition as regards its drainage.

CENTRAL ASYLUM, DUNDRUM: A CORRECTION.

DR. ISAAC ASHE (Resident Physician and Governor, Central Asylum, Dundrum) writes: I beg to call your attention to the fact that a report diametrically opposed to the actual state of the case has been inserted in your issue of May 28th in regard to Colonel King-Harman's answer to the inquiry of Mr. W. Corbet as to the number of special inquiries that had been held during the last five years into charges made against me. Your report reads: "Colonel King-Harman said special inquiries of the nature indicated had been held." It ought to have read: "Colonel King-Harman said no special inquiries of the nature indicated had been held." The answer was thus reported in all the daily papers, and this is in accordance with fact. The inquiries referred to were, in fact, held on my own representation, to the then Treasury Remembrancer, of the need of them.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. E. A. Turnbull, South Shields; Mr. J. H. Williams, Southampton; Messrs. H. Barton and Co., Congleton; Dr. C. S. Taylor, London; Dr. F. F. Brady, Kingstown; Mrs. Thornhill, Cork; Dr. H. Bennett, London; Mr. H. Hancock, London; Messrs. Best and Sons, London; Messrs. Moss, Rimington, and Co., Selby; Mr. F. G. Carry, Hoylake; Mr. Wickham Barnes, London; Dr. T. W. Thursfield, London; Dr. S. Phillips, London; Mr. W. F. Brook, Forham; Dr. J. Cavafy, London; Mr. G. Mackay, Edinburgh; Mr. L. D. Gamble, Abergavenny; The Honorary Secretary of the Bermuda Branch of the British Medical Association, Hamilton, Bermuda; Mr. Davies, Swansea; The Geddes Manufacturing Company, London; Mr. Hulme, Birmingham; Mr. R. A. Scott, Birmingham; Mr. W. J. Dalby, Rotherham; Mr. J. W. Bardwood, Bourn; Surgeon Kerin, Netley; Dr. Mules, Manchester; Mr. R. Davies, Bath; Dr. J. W. Moore, Dublin; Mr. E. H. Baveystock, London; Messrs. Shillingford and Co., Bicester; Mr. D. G. Edwards, Clydach Vale; Dr. Maxwell, Woolwich; Dr. F. Fox, Strathpeffer Spa; Dr. J. Mackenzie Booth, Aberdeen; Dr. A. Macdonald, Liverpool; Mr. R. B. Graham, Leven; Mr. W. J. Miller, London; Brigade-Surgeon Curran, London; The Secretary of the St. John Ambulance Association, London; Dr. J. E. Kenyon, Bournemouth; Mr. W. Smith, Colnbrook; Mr. R. H. A. Hunter, London; Messrs. Boyd and Co., Belfast; Our Paris Correspondent; The Director-General of the Army Medical Department, London; Mr. J. West, London; Messrs. W. and F. Thorn, London; Dr. Jeafferson, Newcastle; Mr. G. R. Griffith, Carnarvon; Professor Macleod, Glasgow; Mr. A. E. Layton, Stafford; Mr. T. H. Ravenhill, Birmingham; Dr. Tatham, Salford; Dr. N. S. Davis, junior, Chicago; Dr. P. Boulton, London; Mr. A. W. Mayo Robson, Leeds; Dr. Hack Tuke, London; Miss M. E. Spreat, London; Dr. Abercrombie, London; Mr. A. Green, Sydney; Mr. T. H. Walker, Newcastle; Dr. J. L. Chambers, London; Dr. F. H. Spender, Exeter; Mr. J. F. Nisbet, Sutton Park; Dr. H. H. Vernon, Southport; Surgeon A. Hayers, Cairo; Dr. C. Holman, Reigate; Dr. W. Pearce, London; Surgeon W. J. Baker, Mellbrook; Dr. Mackenzie, Glossop; Mr. F. H. Weekes, York; Mr. Duncan, Frome; Mr. H. T. Butlin, London; Mr. W. W. Wagstaffe, Sevenoaks; Dr. C. R. Illingworth, Accrington; Dr. P. M. Deas, Exeter; Mr. W. M. Campbell, Liverpool; Sir G. Young, London; Dr. J. Newton Burns, London; Mr. W. Johnson Smith, London; Mr. A. Jefferson, Liscard; Dr. J. P. Pye, Galway; Mr. R. H. White, Cockington; Surgeon-Major J. Williams, Brecon; Dr. J. Geraghty, Loughrea; Dr. E. Batt, London; Mr. P. E. Hill, Crickhowell; Dr. J. Roche, Kingstown; Mr. Sheather, London; Our Vienna Correspondent; Mr. W. Harrison, London; Dr. R. Park, Glasgow; Mr. S. Murphy, London; Dr. J. Savage, Birmingham; Dr. James, London; Mr. W. S. Hodgson, Esher; Mr. A. W. Stocks, Manchester; Dr. Batho, Pontefract; R. S.; Mr. W. H. Ormesby, Dublin; Dr. Somerville, Leith; Dr. Mickle, London; Surgeon-Major S. R. Ray, Malta; Mr. R. W. Doyne, Exeter; Mr. J. O. Jones, Llanfairtalhairarn; Mr. J. D. Staple, Stockport; Dr. Wells, Plymouth; Dr. I. Ashe, Dundrum; Dr. J. Jones, New Orleans; Dr. H. T. A. Goodridge, Bath; Dr. W. Duncan, London; H. M.; Dr. W. Scott Laing, Edinburgh; Mr. C. H. Cornish, Taunton; Mr. Wilson, London; Professor Chiene, Edinburgh; Sir Henry Thompson, London; Dr. A. Kempe, Exeter; Dr. T. Williams, London; Dr. C. W. Suckling, Birmingham; Alpha; Mr. C. J. McLean, Leeds; Dr. Turpin, Midleton; Deputy Surgeon-General Don, London; Messrs. Smith, Elder, and Co., London; Mr. E. Trimmer, London; Dr. Biddle, Kingston-on-Thames; Dr. A. T. Myers, London; Dr. P. M. Deas, Exeter; Mr. A. Bethell, Bridgnorth; Dr. W. E. Steavenson, London; Dr. C. Holman, Reigate; Mr. F. W. Smith, Leamington; Professor Mivart, Chilworth; Dr. T. Buckle, Pulborough; Mr. J. Wands, Durham; Mr. A. Clay, Birmingham; Mr. W. Weiss, London; etc.

BOOKS, ETC., RECEIVED.

Life of Charles Darwin. By G. T. Bettany. London: Walter Scott. 1887.

Dermatitis Venenata. By Jas. C. White, M.D. Boston: Cupples and Hurd. 1887

Von Ziemssen's Handbooks of General Therapeutics. Vol. VI, Electro-Therapeutics. By W. Erb, M.D. Vol. VII, Therapeutics of Circulatory Derangements. By Professor M. J. Oertel, M.D., of Munich. London: Smith, Elder and Co. 1887.

The Climatic Treatment of Consumption: a Contribution to Medical Climatology. By Jas. A. Lindsay, M.A., M.D. London and New York: Macmillan and Co. 1887.

Practical Histology. By W. Fearnley. London and New York: Macmillan and Co. 1887.

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THE CAVENDISH LECTURE

ON A

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Delivered before the West London Medico-Chirurgical Society.

By Sir ANDREW CLARK, Bart., M.D., F.R.S.,
Emeritus Professor of Clinical Medicine, and Consulting Physician to the London Hospital.

It has been sometimes said by way of reproach that the scientific workers in medicine, although eager in the pursuit of knowledge for its own sake, were careless of its practical applications to the treatment of disease. If at any time this reproach was a just one I do not know, but beyond all manner of doubt it would not be a just one now, for in almost all countries, and in nearly every school of every country, you can see not only the earnest pursuit of knowledge, but the most zealous efforts to force it into fruit for the uses of men; and in the study of no subject could you find a better proof of this than in the study of hay-fever, of which I am about to speak. From Blackley of Manchester to Mackenzie of Baltimore you will find a succession of inquirers whose efforts to discover the nature of this malady have been accompanied by efforts equally earnest and persevering to discover its most appropriate treatment. And from America, most earnest and persevering of all countries at work, we have received the largest and best fruits of this double pursuit. And to-night the plan of treatment of hay-fever which I shall have the privilege of submitting to your consideration is entirely founded upon a physiological study of the disease. It is, however, with the results of this study only in so far as they bear broadly and directly upon treatment that I propose to occupy myself. With minute discussions as to the nature of hay-fever, its physiological and pathological relations, and the causal agencies engaged in its evolution, I shall have to-night only an indirect concern. Nevertheless, as I wish to set forth the true grounds for a rational treatment of this malady, such discussions cannot be passed over entirely.

Before proceeding further, I wish to pause for a moment, and advert to the name by which this malady is known. From nothing has medicine suffered more than from hypothetical naming. What may seem to be the correct and adequate hypothesis of to-day may become the incorrect and inadequate hypothesis of to-morrow, and when the true nature of a malady is discovered, the diffusion of the discovery is hindered, if not prevented, by the retention of a name which, established by custom and continued from convenience, conceals the truth and perpetuates the error. I could adduce few better illustrations of this than the naming of the disease under consideration. The epithets of hay-fever, hay-asthma, pollen-fever, rose-cold, and peach-cold are widely open to this objection. They withdraw the attention from internal states, and they tend to narrow our ideas of causality within the limits of outward things. It is true that the pollen of certain grasses is the most common exciting agent of the paroxysm of hay-fever, but it is also true, for it has been demonstrably proved, that the paroxysm can be excited not only by other external agents, such as light and heat and dust, but also by local affections of the nose and throat, by irritations propagated from distant parts, and by influences generated *de novo* in some part of the central nervous system. It is only of late, and through researches made for the most part in America, that we have come to a knowledge of these facts. Even there, however, the tendency to hypothetical naming continues, and the term proposed by Mackenzie of Baltimore, to whom we owe so much of what is best in our recent knowledge of this subject, is not free from grave objections. He calls the disease periodic vaso-motor coryza, but in this designation there is involved a hypothesis which to-day may be doubted, and which to-morrow may be disproved. Nor are the epithets proposed by myself—periodic specific coryza and periodic nervous coryza—free from just and grave objection. We are thus in need of a proper name for our malady. No one can be rightly framed except out of its commoner physical characteristics, and no one can be safely used unless it shall imply no hypothesis, and be capable of remaining always the same however much our theories of the disease may change. Of the innumerable persons exposed in similar, if not identical, conditions, to the exciting causes of hay-fever, only a few are affected with the disease, and of those few there are, strange to say, scarcely any among agricultural labourers and gardeners, who are habitually exposed to the pollen of grasses believed by some authors to be the sole causal agents of the development of the asthmatic paroxysm. It seems, therefore, only fair to conclude that in the evolution of the malady some other agent than the external exciting cause must be directly concerned. Further investigation proves this conclusion to be correct. From experimental examination we learn the existence of a second factor in the production of this disease, a factor which resides in the mucous membrane of the nose, mouth, pharynx, and eyes, which mainly concerns the nerves of these parts, and which manifests itself in all their histological constituents by a peculiar irritability of reaction to certain excitants.

Furthermore, when in cases exhibiting this peculiar local irritability we pursue our inquiries into the characters of the constitutional state associated with it, we discover certain *bizarre* symptoms of disorder which belong exclusively to the nervous types of organisation, and which stamp the organism exhibiting them as specifically and pathologically "nervous."

Lastly, if, pursuing our investigations further still, we institute an analysis of the *differentiæ* distinguishing the nervous constitution in this disease from the nervous constitution of cognate affections, we are led to the conclusion that they reside for the most part in the respiratory and vaso-motor centres, and in the ganglia connecting and connected with both.

In this way we discover reasons for believing that there are three great factors concerned in the evolution of hay-fever, the nervous constitution, the irritable local state, and the exciting cause. As a general rule to which there are some remarkable exceptions, all these factors, although in varying degrees, co-operate in the development of an attack of hay-fever. Concerning each of them I have to offer a few observations which will make plain the ground upon which a rational treatment of this malady can be based.

The nervous constitution associated with hay-fever is sometimes inherited and sometimes acquired. For the most part inheritance comes from the arthritic and the nervous. When acquired, it is acquired most easily by those who are most closely subjected to the complex influences of over-civilisation, by those who lead laborious, sedentary, and intellectual lives, as well as by those who, avoiding the difficulties and discipline of life, seek luxury with ease, by those who prefer excitement to duty, and by those who become weak through failure to exercise their strength. And when once hay-fever appears it exhibits still further the closeness of its relationships to the nervous system by choosing the man before the woman, the educated before the ignorant, the gentle before the rude, the courtier before the clown. Some of the more general affinities of hay-fever are harder to be understood. It prefers the temperate to the torrid zone, it seeks the city before the country, and out of every climate which it visits it chooses for its subjects the Anglo-Saxon, or at least English-speaking, race.

And now concerning the second factor in the evolution of hay-fever—the condition of the mucous membrane of the nasal cavities and parts adjacent—we have divers and some diverse views. All observers are agreed that there is some pathological condition of the affected parts, but no two of them are agreed as to its exact nature. For my own part, I conclude from the investigations which I have pursued into the matter that there is one fundamental condition which reconciles all these varied and sometimes opposing views. This condition is one of irritability, and the irritability is of a sort which involves the nervous, vascular, lymphatic, and cellular constituents of the affected parts, and, when excited, disturbs the chemical, morphological, and secretory changes taking place therein. When this local irritability is provoked into action there arises a series of local structural changes which are all but characteristic of the paroxysm of hay-fever. The erectile tissue becomes distended, the blood-vessels are gorged with blood, groups of lymph-cells fill the lymphatic spaces, the mucosa is crowded with migrating leucocytes, younger epithelial cells are vacuolating and proliferating, secretion is increased in quantity and altered in character and composition, sensation is sharpened, altered, or benumbed, and the whole metabolism of the affected region is profoundly disordered.

These local changes are always present in the paroxysm of hay-fever, and whenever they concur and co-operate it may be safely said that hay-fever is present. When this local irritability exists in an extreme degree, almost any exciting agent—an odour, a vapour, dust, a touch, light, or heat—will quickly call forth the whole series of structural changes already described as almost exclusively characteristic of the paroxysm of hay-fever.

And now let me speak shortly of the third factor engaged in the evolution of this malady—that is of the external, exciting, or deter-

mining causes to which it is commonly ascribed. Authors in general, from Gordon in 1829 to Mackenzie in 1885, advocated the view that the paroxysm of hay-fever is due, in persons of a certain idiosyncracy, exclusively to the action of the pollen of grasses or of flowers upon the mucous membrane of the nasal cavities and adjacent parts. In support of this view, it is contended that the disease occurs only during the season when certain grasses and flowers are in blossom, that it may be artificially induced by the application of pollen to the nasal mucous membrane, and that it may be prevented from occurring, or may be cured when present by dwelling on board ship at sea where no pollen is to be found. Now, whilst it must be admitted that these contentions are in some degree just, and that the most common exciting cause of the hay-fever paroxysm lies in the action of the pollen of certain plants upon the nasal mucous membrane, it cannot be denied that they require qualification, and that they are inadequate to a complete explanation of all the facts which make up the history of this disease.

For on this side it may be contended as proved that the malady is less common among agricultural labourers and gardeners than among other persons, that sometimes it occurs at other seasons of the year than in the hay-season, that it has been induced by local irritants in which pollen did not exist, that it has occasionally arisen in consequence of irritation in a part with which the nose is in sympathy, and that the mere action by itself of pollen upon the nasal mucous membrane is insufficient to provoke a complete paroxysm of hay-fever. For myself, I am compelled by my inquiries to adopt the view that in the evolution of almost every attack of this malady the three factors already mentioned are at work—the nervous constitution, the local irritability, the external exciting cause—and that, whilst this last is most commonly a pollen acting more in virtue of its physical characters than of its intimate nature, it may be any other agent capable of calling into action the irritability of the parts concerned in the mucous membrane of the nose.

And now, when we consider these facts and theories of hay-fever with the view of framing a rational plan of treatment, we find ourselves beset on every side with difficulties. Theoretically the objects to be achieved by treatment are—the soothing and strengthening of the general nervous system, the allaying of local irritability, and the removal of the exciting cause.

To remove the exciting cause, or rather, speaking correctly, to remove the susceptible person from it, is to prevent the oncoming of the disease, and if you send him to sea or to the summit of some Alpine height, you will assuredly succeed. There are, however, many who cannot follow this counsel, and who must remain under the influence of the exciting cause of the malady. What can be done for the patient in such circumstances? We may strive to strengthen by tonics the weak and irritable nervous constitution, and Morell Mackenzie has had some success with valerianate of zinc and assafœtida, whilst Blackley has failed with every drug which he has tried. By common confession general treatment, although not useless, is never by itself successful.

We are therefore compelled to turn to the study of local treatment as the chief mode of relieving or curing this disease. There are three plans of local treatment:

The first plan is to *allay* the irritability of the nasal mucous membranes.

The second plan is to *exhaust* the irritability of the nasal mucous membrane.

The third plan is to remove or to modify, or to destroy by caustic, or by cautery, galvanic or igneous, such portions of the nasal mucous membrane as are found, or are believed to be, the seat of the pathogenic irritability. This third and most radical plan of treatment is practised for the most part, I believe, in America, and in the hands of Daly of Pittsburg, Roe of Rochester, and Mackenzie of Baltimore, it has been followed by lasting and signal success. But as there are not as yet at our disposal materials sufficient to form a critical estimate of the relative value of this mode of treatment, as I have myself no personal experience of the practice of it, and as in this imperfect lecture my chief object is to submit to your consideration the plan of treatment designed and practised by myself, I dismiss for the present from further consideration all operative procedures of this radical kind.

The first plan of treatment proposes to prevent or to cure hay-fever by allaying the pathogenic irritability of the mucous membrane. This was the object which I endeavoured to achieve when I began my therapeutical experiments in the treatment of this disease. From trials extending over several years, no remedies of this sort, except aconitine or atropine, returned me any results of the smallest value, and the results returned by the use of these alkaloids were so insignificant, and the effects following it were sometimes so disagreeable, that I abandoned my inquiries in this direction. The introduction of cucaine, however, and its recent employment in the treatment of hay-fever, induced me to reopen my experiments in this direction. At first my success was considerable, for three out of five cases were immediately relieved, and the relief was maintained by the frequent renewal of the application of cucaine to the nasal mucous membrane. But when, last year, my experience of the use of this drug somewhat increased, my success in using it diminished. In one case the application failed and disagreed; in another case it neither disagreed nor failed; but I was quite unable to discover in the patients the grounds of this difference of action. Nevertheless, although it appears to me that the success of cucaine as a local remedy in hay-fever has been over-rated, although the necessity of frequent application is troublesome, and although its use is not free from inconveniences which might eventually prove something worse, I am of opinion that its success and its comparative freedom from injurious consequences are sufficient to justify, with careful watching, a longer and larger trial.

There are three ways of using cucaine in the local treatment of hay-fever; it may be used in the form of a solution, of a spray, or of a nasal bougie. Personally, I prefer to use a solution varying in strength from 5 to 15 per cent., and I apply it to the interior of the nose and the back of the soft palate by means of a large camel-hair pencil attached to an aluminium shank, and bent at an appropriate angle. For use in the form of nasal bougies, from a quarter of a grain or more of the hydrochlorate of cucaine is dissolved in a mixture of gelatine and glycerine, and made of different weights and shapes, according to the peculiarities of the case in which they are to be employed. For using cucaine in the form of spray, some efficient and ingenious spray-producers have been invented. Many of them have been furnished with nozzles so constructed that the spray can be applied directly to almost any part of the nasal and pharyngeal cavities. These spray-producers, with weak cucaine solutions, are sometimes very useful in allaying the small but still troublesome irritation which, in the intervals of the hay-fever paroxysms, is apt to arise in the ears, eyes, and mouth. By the great kindness of Mr. Martindale, to whose pains, intelligence, and accuracy in matters of this kind we are all so much indebted, I am enabled to show you all these preparations of cucaine, and all the instruments wherewith they are used.

I come now to consider the second plan proposed for the local treatment of hay-fever. The object of this plan, which includes constitutional treatment, is to subdue the irritability of the nasal mucous membrane to such an extent that it shall no longer react to special or common irritants, whether pollen or dust, in a pathogenic manner. In the first place the patient is put upon such a regimen as will conduce most to the improvement of his general health. He is instructed to have a simple but liberal dietary, to be extremely moderate in the use of alcoholic stimulants, to have daily exercise, to follow early hours, and to continue, if that be possible, even at the cost of suffering, his ordinary occupations. If the patient is very weak, he is instructed to take with meals drachm doses of Easton's syrup, with three or more drops of the solution of hydrochloric of arsenic. If he is nervous as well as weak, I prescribe for him, in their full respective doses, tartarised iron, ammonium bromide, tincture of nux vomica, and solution of arseniate of soda. In some cases I think that I have seen great benefit follow the use, thrice a day, of five grains of sulphate of quinine dissolved in citric acid, and given in effervescence with carbonate of ammonia. For the strictly local treatment, there are required a common laryngeal brush and a carbolic mixture. This mixture is composed of glycerine of carbolic acid one ounce, hydrochlorate of quinine one drachm, and a two-thousandth part of perchloride of mercury. Heat will be required in order to dissolve the whole of the quinine; without heat, Mr. Martindale informs me that the glycerine of carbolic acid will dissolve only half the quantity prescribed.

Let me now describe the method of procedure to be followed in applying the carbolic acid mixture to the mucous membrane of the nasal cavities. If there is much mucus in the nostrils, cleanse them by means of a douche of warm water containing boro-glyceride[1] in the proportion of an ounce to the pint. Dip the laryngeal brush in the carbolic acid mixture, and see that the brush is full but not overflowing. Place the left hand on the left side of the forehead, and the thumb on the tip of the nose, with the shank of the brush between the thumb and two forefingers of the right hand, and the brush itself directed upwards, push it gently but firmly into one of the nostrils, carry it as high as you can without inflicting injury, move it about so as to bring the mixture in contact as much as possible with the interior of the upper part of the nostril, and then withdraw it. With another

[1] Before the introduction of boro-glyceride, I employed a five-grain solution of chlorate of potash, which was less efficient.

brush filled with the carbolic acid mixture, or with the same brush washed, dried, and replenished, you complete in the manner following the two operations required for each nostril. Having the left hand in the position already described, and the right hand holding the laryngeal brush with the hair pencil directed forwards from the body of the operator, push the brush along the floor of the nostril into the pharynx, and after ensuring free contact with the adjacent parts withdraw it. If during this operation the brush is over-full, some of the carbolic mixture will fall into the throat and excite coughing or some other discomfort. When you have thus finished the treatment of one nostril, and carefully removed any of the carbolic acid mixture which may have been spilt upon the nose or lips, you will proceed to treat the second nostril in exactly the same manner as you have dealt with the first. During the performance of these manœuvres great assistance will be obtained from the left hand of the operator being placed over the left side of the face and forehead of the patient. With this hand the operator can adjust the patient's head to the various movements of the laryngeal brush, and with the thumb of the same hand placed on the tip of the patient's nose, the opening of the nostril can be adjusted to a convenient size and shape. When the local effects of a paroxysm are severe, and have extended to the back part of the soft palate, it will be desirable to introduce through the mouth into the pharynx the laryngeal brush, moderately filled with the carbolic acid mixture, and there, by a manœuvre easily acquired and practised, to brush the posterior surface of the soft palate and the adjacent parts.

The immediate effects of these manœuvres differ in different persons and in the same person at different times. In all cases the effects are more or less disagreeable, and last from half an hour to half a day. Sometimes a little blood-stained mucus is discharged from the nose and throat, sometimes there is a slight frontal headache, sometimes there is a trivial cough, and occasionally you will have developed all the local phenomena of a paroxysm of hay-fever.

When advising a patient with hay-fever to submit to this plan of treatment for its relief, I have found it expedient to warn him beforehand of the disagreeable effects which sometimes follow the application of the carbolic mixture, and to assure him that they are both brief in duration and devoid of danger. When this warning is withheld, some patients will grossly exaggerate their sufferings, ascribe all sorts of injurious consequences to the application, and cover the physician with undeserved reproaches. Sometimes a single application of the carbolic acid mixture is sufficient to prevent for a whole season the return of the hay-fever paroxysm, and four times within my own knowledge it has never reappeared. Usually two or three applications are necessary to insure a full chance of success. The length of the interval between the applications must be determined by the character of the immediate effects. If these are mild, the applications may be renewed on alternate days; but if severe, at least three days should elapse between succeeding applications.

Of the measure of success which has followed this treatment of hay-fever, now practised over twenty years, I am unable to speak with exactitude. Patients when relieved seldom, and when unrelieved never, return to record their experiences, and I have been unable to get at the subsequent histories of more than a third of the number of persons whom I have treated. It is, however, my conviction that of this roughly estimated third whose cases I have been able to follow, a half has been cured for the season and four persons have been cured "for good." This you will say justly is not a success of which to boast. Quite so. But if you will compare the results of this treatment with the results of every other treatment, not excepting the cucaine treatment, which is its closest rival, you will have to confess that, however small may be the measure of success, it is not one which you can afford to despise. At any rate a communication of this kind is entitled to your indulgence, inasmuch as it is an honest, although very humble, endeavour to press pathology into practice and to take away the reproach which has been cast upon us of ignoring or of repudiating the natural and just alliance which should unite in closest relationships the science with the art of medicine.

Leprosy in Russia.—A committee has been appointed at Dorpat to consider the best measures to be taken for checking the spread of leprosy in the Baltic provinces, where it is greatly on the increase.

Epilepsy in Italy.—Recent statistics show that the greatest number of cases of epilepsy were met with in Liguria and Sicily during the years 1885 and 1886. At the end of last year 1,014 epileptic patients were under treatment in lunatic asylums, and 3,768 patients had been received at the different hospitals during 1883 and 1884.

Seven hundred Hebrew patients are said to be annually treated in the Jewish ward in the London Hospital.

LECTURES
ON
CERTAIN DISEASES OF THE JAWS.

Delivered at the Royal College of Surgeons of England, June, 1887,

By CHRISTOPHER HEATH, F.R.C.S.,
Hunterian Professor of Surgery and Pathology.

Lecture I.—On Cystic Diseases of the Jaws.

Mr. President and Gentlemen,—The occupant of the Hunterian Chair of Surgery and Pathology in this College has a large choice of subjects on which to address you, and my predecessors in office have accordingly ranged at will over the domain of surgery. I propose to confine myself to a comparatively small portion of surgery, but one of no little importance, and shall have the opportunity of referring for illustration to that splendid collection of pathological specimens which, begun by Hunter, has in this special department been greatly enriched by the labours of Liston and Fergusson, and is now without a rival in its perfection.

The "Injuries and Morbid Affections of the Maxillary Bones and Antrum" was proposed as the subject of the Jacksonian Prize in this College in the year 1827, but no dissertation was sent in for competition. The same thing again occurred in 1842, and this is the more remarkable because the majority of Liston's great cases had occurred before this date, and both he and Fergusson were then actively engaged in instructing large numbers of pupils, some of whom might have reduced their teaching to paper.

In 1867, "The Injuries and Diseases of the Jaws, including those of the Antrum, with the Treatment by Operation, or otherwise," was again put forth as the subject for the Jacksonian Prize Dissertation, and having seen much of Sir William Fergusson's practice, and having myself done some little work in the same direction, I ventured to compete, and had the satisfaction both of being successful and of adding to the museum a considerable number of valuable preparations, many of which I shall bring before you.

Diseases of the Antrum.

The antrum maxillare, or sinus of the upper jaw, was known as early as the days of Galen, but was first described with any degree of accuracy by our fellow-countryman, Nathaniel Highmore, of Sherborne, whose *Disquisitio Anatomica Corporis Humani* was published at the Hague in 1651. By the kindness of a former pupil, Mr. W. H. Williams, of Sherborne, whose wife is a direct descendant of Nathaniel Highmore, I am enabled to place before you the author's own copy of his anatomical work, bearing on the title-page the signatures of successive incumbents of the Sherborne practice. And yet it is remarkable that the copy of the same work in our College library is more perfect in containing a curious allegorical frontispiece, which is wanting in the Sherborne copy, although the *Frontis physiognomica descriptio* is there. At page 227 of this work will be found a plate illustrating (not quite correctly) the anatomy of the antrum, and from it Figs. 1 and 2 are reproduced. In another figure is shown a curiously inaccu-

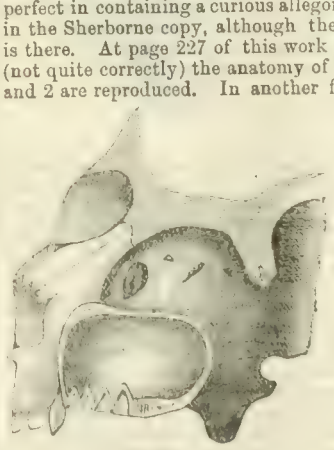


Fig. 1.

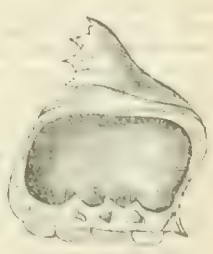


Fig. 2.

rate drawing of the antrum, which, as the author says, "is more frequently empty, but is sometimes found filled with mucus, into which the humours from the head are able to distil by a certain meatus from the cavity in the frontal bone and from the ethmoid

bone." I need hardly say that there is no such communication with the frontal sinus as is here figured, any more than there is any passage from the pituitary fossa to the palate, which is given in the same drawing.

The only normal opening from the antrum is into the middle meatus of the nose, and this is shown on the section of the skull before you, on one side with the mucous membrane *in situ*, and on the other with it removed. The size of the aperture found in a macerated superior maxilla gives a very exaggerated idea of the opening in the articulated skull, where it is encroached upon by the palate, inferior turbinate, and ethmoid bones, which narrow and subdivide the opening into two parts. In the recent subject these are covered in by the mucous membrane of the nose, so that ordinarily there is only a small oblique aperture left in front of the unciform process of the ethmoid, and close behind the infundibulum. It should be observed that this opening is at the upper part of, and not near the floor of, the antrum, and that it opens into the middle meatus of the nose. Occasionally a second smaller aperture is found behind this, and nearer to the floor of the sinus, which has always been regarded as a natural formation. M. Giraldès, however, in his *Recherches sur les Kystes Muqueux du Sinus Maxillaire* (Paris, 1860), maintains that the posterior opening, when it exists, is always the result of pathological change, and that the anterior opening is into the infundibulum, and not into the meatus itself. I believe that slight variations in the position of the opening exist; but it is undoubted that the aperture is very minute, and quite inaccessible from the nose.

Highmore describes the antrum as "a hollow, spherical or somewhat oblong in shape, and large enough to hold the terminal phalanx of the great toe." The fact is, that the size of the antrum is very variable, and this point was carefully investigated some years ago by the late Mr. W. A. N. Cattlin, F.R.C.S., who published a valuable paper in the *Odontological Society's Transactions*, Vol. ii, from which the following illustrations are taken.

As the result of the examination of a hundred specimens, Mr. Cattlin found that, as a rule, the antrum is larger in the male than in the female, and that it diminishes in size with extreme age. In the young subject likewise the cavity is small, and its walls comparatively thick. Fig. 3 shows in a transverse section both the roof and

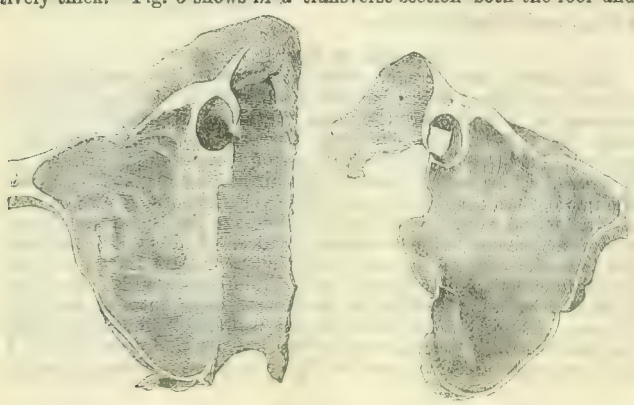


Fig. 3.

floor of an adult antrum of the common shape and size, capable of containing two drachms and a half of fluid; but a large adult antrum may be capable of containing eight drachms of fluid, whilst a small adult antrum containing only one drachm of fluid has been seen. The two antra are often unsymmetrical in size and shape; thus Fig. 4 shows a much larger and deeper cavity on one side than on the other. The antrum may even extend irregularly into the malar bone, forming a supplementary cavity there; but the most remarkable variation is due to the development of the ridges of bone which subdivide the cavity; these are very variable in size and shape. Fossæ of considerable depth are often found in the floor of the antrum, particularly at the anterior and posterior extremities, of which Fig. 5 is a good example, showing on one side a perforation by an alveolar abscess. A rare form is when fossæ or cells are developed beneath the orbital plate, or a *cul de sac* is formed close to the lachrymal groove.

Suppuration in the antrum, or, as it is sometimes termed, *abscess*, is ordinarily the result of inflammation extending from the teeth to the lining membrane of the cavity; and the disease might, therefore, be not incorrectly termed an empyema, as proposed by Otto Weber. The roots of the first and second molar teeth often, and the bicuspids and canine occasionally, form prominences in the floor of the antrum; and when these teeth become carious, the thin plate of bone covering their fangs not infrequently becomes affected, and disease is set up in the cavity. The fangs of the first molar tooth are occasionally

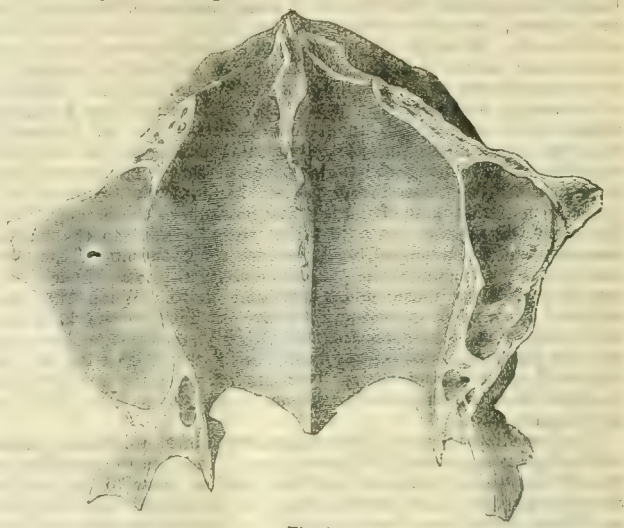


Fig 4.

found in health to be uncovered by bone, and to project beneath the lining membrane of the antrum; and, under these circumstances, irritation and inflammation would be still more likely to occur. But an abscess may be formed in the alveolus, and eventually burst into the antrum, though connected originally with teeth not usually in relation with the cavity.

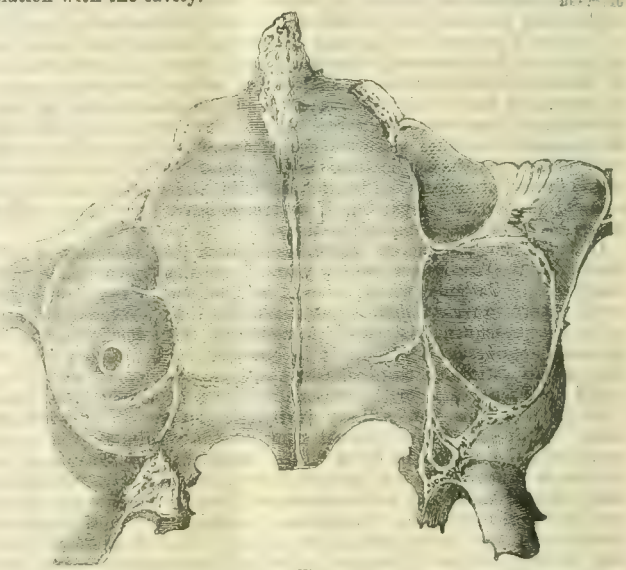


Fig 5.

The symptoms of suppuration in the antrum are at first simply those of inflammation of the lining membrane—dull, deep-seated pain shooting up the face and to the forehead, tenderness of the cheek, with some fever and constitutional disturbance; but occasionally the pain is most acute, and of a sharp, stabbing, neuralgic character. A slight rigor may usher in the formation of matter, which will find its way into the nostril when the patient is lying on his sound side, either through the normal aperture or through an opening caused by absorption, as maintained by M. Giraldès. An offensive odour is now sometimes perceptible to the patient, though not to those around him—thus differing markedly from what occurs in ozæna—and a sudden discharge of matter from the nostril, when blowing the nose, may relieve all the symptoms for the moment. The more common course of

events is, however, that without any acute pain the patient notices that he has a purulent discharge from the nose when blowing it, and perhaps is aware that, when lying down, the discharge finds its way into the throat. This latter point is often overlooked, however, though there may be a complaint of a very disagreeable taste in the mouth and a tendency to nausea in the morning, with a hawking up of pellets of inspissated pus.

With all this there is no distension of the antrum, and it is this fact which frequently misleads the practitioner. It is certain, however, that in health there is invariably an opening between the antrum and the nostril; and that, even when this is closed, the wall is very thin and readily absorbed; and it is quite exceptional, therefore, when the antrum is so distended with pus as to give rise to any prominence of the cheek. Undoubtedly cases of this kind have been recorded, but it may be doubted whether some of them were not examples of cyst, the contents of which had become purulent; for we know that cysts in the wall of the antrum readily produce great deformity. The natural opening into the nose is not at the level of the bottom of the cavity of the antrum; and hence there is always a small residuum of discharge, which the patient can only partially get rid of by holding the head on one side.

Given a patient who complains of purulent discharge from the nostril, with occasionally a disagreeable smell, and the case is too apt to be put down as one of ozæna, and treated by nasal douches, snuffs, etc. But, as already mentioned, the offensive smell is perceived only by the patient, and not by his friends, the reverse being the case in ozæna; and, again, the discharge is only occasional, is determined by the position of the head, and is simply purulent, whereas in ozæna the discharge is constant, and mixed with offensive crusts from the nasal cavities. Again, the dull ache, varied occasionally by acute pain, is apt to be referred to the teeth alone, and the most careful examination may fail to detect any special tenderness in any one tooth. Hence, after exhausting the usual routine remedies for neuralgia, I have known wholesale extraction of useful teeth undertaken with no benefit, unless it should fortunately happen that the tooth which has perforated the antrum should be extracted early, when the discharge of pus at once clears up the nature of the case.

A still more serious result may ensue if the neuralgia should, as it often does, take the form of frontal headache, and thus lead the surgeon to suppose that the discharge comes from the frontal sinus. I have twice been consulted in cases in which enterprising surgeons had proposed to trephine the frontal sinus, regardless of the serious injury to the patient's good looks, for chronic discharge which I proved to be solely due to suppuration in the antrum.

The more ordinary consequence, however, of an unrecognised empyema of the antrum is the damage done to the digestive organs by the constant swallowing of purulent fluid during sleep. Under these circumstances, the patient is always ailing, is unable to take food in the morning, and may be reduced to a state of great prostration even dangerous to life. The usual remedies for indigestion are likely to be of little service so long as the purulent drain continues.

In exceptional cases the pus, not finding an exit, distends the antrum, causing partial absorption of the walls, and thus both bulging out the cheek and thrusting up the floor of the orbit. Under these circumstances, the affection is readily recognised by the peculiar crackling which is perceived when the thinned bone is pressed upon, and the matter, if not evacuated, will shortly find a way out for itself, either by the side of the teeth, through the front wall of the antrum, or through the floor of the orbit; in either of which cases considerable necrosis and ultimate scar are likely to be the consequences. The possibility of both antra being affected either simultaneously or consecutively must not be overlooked.

The elevation of the floor of the orbit already described may simply displace the eyeball and render it temporarily blind, as in a case recorded by Mr. J. Smith, of Leeds (*Lancet*, February 14th, 1857), or it may lead to permanent amaurosis—a point to which Mr. Salter called especial attention in the *Medico-Chirurgical Transactions* for 1862.

The treatment of suppuration of the antrum consists, in the first place, in the extraction of all decayed teeth or stumps in the affected jaw, and with this object in view those teeth which are apparently sound should be tested by a sharp knock with some metal instrument, when, if tender, they should be extracted. If the cause of the mischief be removed in time, the inflammation will subside under fomentation and the application of a leech to the gum; but if matter has formed, it must be evacuated without delay. If the extraction of a tooth is followed by the flow of pus, the enlargement of the aperture in the socket by the introduction of a trocar is at once the readiest and simplest mode of evacuating the matter; but if all the teeth are apparently sound, it will be advisable to perforate the alveolus above the gum with a trocar, gimlet, or strong pair of scissors, and similar treatment would be required in the rare case of suppuration occurring after loss of the teeth in old people. If it be determined to sacrifice a tooth, the first molar is to be preferred for extraction, both on account of the depth of its socket and also because, as mentioned by Salter, it is more liable to decay than the other teeth. In puncturing through the socket of a tooth with a trocar, it is well to gauge the depth to which the instrument may safely go with the fingers of the hand which grasps it, lest injury should be unwittingly inflicted on the orbital plate by the trocar entering unexpectedly, or a trocar with a stop may be employed if preferred.

After considerable experience of both methods, I prefer the puncture above the alveolus, except when a tooth obviously requires extraction, because I find that the aperture is less liable to close up than when made through the alveolus, and because food is less likely to find its way into the antrum. It is necessary, however, not to direct the trocar quite horizontally, but a little upwards, lest in a case of highly-arched palate the floor of the antrum should be injured, as I have known on one occasion, but then fortunately with no permanent damage, except the exfoliation of a minute portion of the palate.

Whatever method may be adopted for emptying the antrum, it is important that the cavity should be thoroughly cleansed by the forcible injection of warm water until it runs freely from the nostril. For this purpose an ordinary glass syringe is quite insufficient, but I have satisfactorily employed an ordinary Eustachian catheter for the purpose, to which an india-rubber injecting bottle is adapted. After a time, and with a little instruction, patients can learn to dispense with the syringe by forcing a mouthful of water through the antrum by the action of the buccinator muscles. After thoroughly cleansing, some detergent and slightly astringent lotion should be injected to restore the healthy condition of the mucous membrane, and for this purpose weak solutions of permanganate of potash or sulphate of zinc answer admirably; but these cases are exceedingly tedious, as a rule, and take many months for their cure. If the perforation has been made throught the socket of a tooth, care must be taken that particles of food do not gain admission to the antrum, and this may be accomplished by plugging the hole with cotton-wool, or, as suggested by Salter, by fitting a metal plate to the mouth with a small tube to fill the aperture, which can be corked at pleasure, and will serve as a pipe for injection.

Ordinarily the pus is readily evacuated through the nostril, but I have seen large masses of offensive inspissated pus block up the opening into the nose and require very forcible and repeated syringing for their removal, and the same thing applies to clots of blood, which occasionally give trouble. A still more serious event is when a mass of inspissated pus gives rise to symptoms closely resembling those of a tumour of the upper jaw, and without producing that absorption which gives rise to the crackling characteristic of the presence of fluid. The following case of this kind occurred in my own practice, and the late Mr. Mason published a very similar one. A woman, aged 43, was admitted under my care, complaining of pain and swelling of the left side of the face. There was an ill defined swelling over the region of the left upper jaw, and the angle of the mouth on that side was drawn downwards. The swelling was both hard and tender; the skin over it appeared unaffected. In the mouth there was a tense, elastic, and tender swelling over the left half of the hard palate, displacing the alveolar process downwards. Slight discharge oozed from a small opening in the mucous membrane opposite the last upper molar tooth, the swelling being softer about this spot than elsewhere. The left nostril was blocked, its external wall being pushed inwards, and the patient complained of some discharge from it. The neighbouring lymphatic glands were not enlarged, and, with the exception of occasional pain in the tumour, the patient suffered no inconvenience, her general health being excellent.

She had noticed the swelling for about two years, and its commencement was attributed to exposure to cold. At times the swelling increased, and became more troublesome, especially after prolonged overwork. No history of syphilis could be obtained, and her family history was good.

Believing that I had to deal with a solid tumour of the jaw, I made an incision through the upper lip in the median line, prolonging it into the nostril of the affected side. The alveolus and hard palate having been divided with saw and bone-forceps, a way was made into the latter, and a pultaceous offensive mass, about the size of a hen's egg, was turned out with the finger. On microscopical examination this was found to consist of fatty *débris*, granular pus-cells, and acicular crystals. As the larger portion of the left half of the hard palate was partially loosened and absorbed, it was removed with the

forceps. The cavity of the wound was stuffed with a strip of lint, and the patient made an uninterruptedly good recovery.

The possible subdivision of the floor of the antrum by bony septa, already described, must be borne in mind in operating upon this cavity, and especially if there is reason to suspect the presence of any foreign body which may be keeping up irritation. In his paper already referred to, Mr. Cattlin narrates the case of the fang of a tooth lodging in one of these subdivisions, from which it was extracted with difficulty.

Hydrops Antri, or "dropsy of the antrum," is an old name (which should, I think, be abandoned) for a disease which has long been recognised, though, within the last few years, opinions have changed as to the exact pathology of the affection. The history of these cases is one of gradual, painless dilatation of the upper jaw, until its outer wall becomes so thin as to crackle like parchment upon pressure being made, or at certain points being so absorbed that fluctuation is readily perceptible. Occasionally the other walls of the jaw yield, though more slowly, to the persistent pressure, the palate becoming flattened, and the nostril blocked by the bulging of the internal wall. On the extraction of a molar tooth and perforation through its socket, as described under the previous section, or more frequently by an incision through the osseo-membranous wall of the cyst, a quantity of clear or yellowish serous fluid is evacuated, which frequently contains flakes of cholesterine floating in it. After the evacuation of the fluid the swelling ordinarily subsides, the maxilla resuming its normal relations, and the opening closing.

The old explanation of these phenomena was that the aperture between the antrum and the nostril having become accidentally obstructed, the mucous secretion, which was presumed to be constantly taking place within the cavity, was thought to be imprisoned, and, by its gradual accumulation, to produce the symptoms which have been described. Following up this idea, we find surgeons, and among others Jourdain, of Paris (1765), who very accurately described the affection, recommending the restoration of the nasal orifice by probing—a useless operation, still described in many foreign manuals of operative surgery. Bordenave, in his *Observations on Diseases of the Maxillary Sinus* (Sydenham Society's translation, 1848), gives full details of this method of probing and injecting, but, after showing that there is great difficulty and uncertainty in finding the natural



Fig. 6.

orifice, remarks that "there are very few cases in which the employment of injections through the natural openings, in the manner above described, would effect a complete cure." It is certain, however, that some of these cases, and very probably all of them, originate in the growth of a cyst or cysts within the antrum, or more commonly in the wall of the antrum, which either grow to such a size as to be mistaken for the cavity of the antrum when opened, or break into the antrum by absorption of the cyst-wall, so that on subsequent examination no evidence of cyst-formation can be discovered. This explanation is, as pointed out by Coleman, supported by the fact that in these cases of so-called hydrops antri the contained fluid in no respect resembles ordinary mucus, but is invariably a clear, more or less yellow, fluid, frequently containing cholesterine in considerable quantity. In these respects it closely resembles that found in well-marked cases of cystic growth, which have been examined in various stages of development.

A remarkable case of distension of the antrum is narrated by Sir William Fergusson, and I am able to show you the preparation, which is preserved in the King's College Museum. It was taken many years ago from a subject in the dissecting room, and from the person of an old woman. The tumour, which was of very large size, had burst shortly before death, leaving the remarkable deformity shown in Fig. 6, which is due to the complete absorption of the front wall of the antrum and its collapse, by which a prominent horizontal ridge of bone, formed by the upper wall of the antrum, has been left immediately below the orbit. The preparation shows great distension of the antrum, the diameter of which varies in different parts from two to two and a half inches, and the bony wall is so thinned out as to resemble parchment. The gums are edentulous. There is no communication between the nose or mouth and the cavity, which is lined with a membrane covered with laminated deposit. Whether this was originally a case of cystic growth, or a chronic abscess, it is impossible now to decide, but it is, so far as I am aware, a unique *post-mortem* specimen of this distension.

M. Giraldès would appear to have been the first author upon the subject of cysts of the antrum, and his thesis gained the Montyon Prize in 1853; but Mr. W. Adams may fairly claim priority of investigation, as shown by specimens preserved in St. Thomas's Museum—as indeed is acknowledged by M. Giraldès.

Mr. Adams's specimens, from one of which the drawing shown was made, show each a cyst of oval outline, attached to the inner wall of the antrum, and measuring rather more than an inch and three-quarters of an inch respectively in their long diameters. These, of course, are too small to have produced any symptoms during life. The specimens given by M. Giraldès, in his *Recherches sur les Kystes Muqueux du Sinus Maxillaire*, from one of which the illustration (Fig. 7) is taken

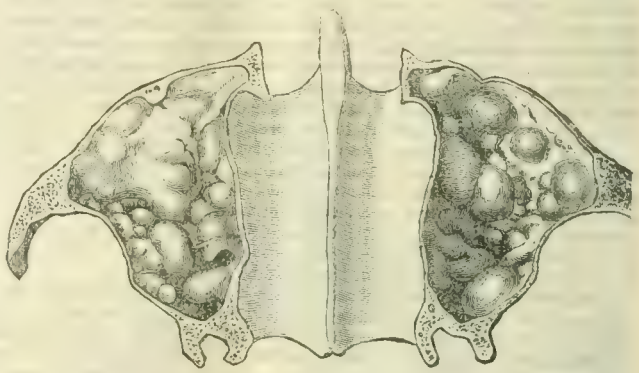


Fig. 7.

show very varying degrees of cystic growth in the mucous membrane of the antrum. In one instance there is a single cyst at the floor of the antrum, into which an opening has been made, whilst in the others the cysts are very numerous and of very variable sizes, depending, apparently, upon a cystic degeneration of the entire mucous membrane. M. Giraldès explains the formation of these cysts as being due to the dilatation of the glandular follicles of the mucous membrane, and urges that the ordinary operation of tapping the antrum would be useless in such cases, but that it would be necessary to open up the antrum so as to get at the seat of the disease. Fortunately these numerous cysts appear to be of slower growth than the single cysts, for it would be impossible to extirpate such numbers as are here seen (Fig. 7) without removing the entire jaw.

The contents of these cysts appear to be at first clear fluid, but of a viscid nature; when more fully developed the fluid becomes flaky, from the presence of cholesterine, and occasionally assumes a greenish tint; it may also become purulent, and Maisonneuve has recorded a case where pressure on the cheek produced a flow of butter-like fluid from the nose in a young woman who, for a year, had suffered from a tumour of the right upper jaw, which had been pronounced malignant, the face being enlarged and the nostril obstructed. Here puncture from the nostril, combined with pressure and injections, effected a cure, and the case must be considered as one of cyst of the antrum, but whether a mucous cyst, the contents of which had undergone solidification, or a separate formation, must remain doubtful.

Treatment.—The treatment of cystic disease of the jaw is generally sufficiently simple. The bony wall being most commonly, to some extent, absorbed, it is only necessary to incise the distended membrane and evacuate the fluid. The finger then passes readily into the cyst,

and can examine its interior, searching for any growth or tooth which may be lodged within. With curved scissors the opening can then be enlarged by cutting away the membranous wall sufficiently to allow a free passage for any discharge. The use of a simple stimulating lotion with a syringe is then all that is required to effect a cure, which, though slow, is permanent. I have treated a considerable number of cases of cyst of the jaw in this manner, and with uniformly good results.

Broca recommends to remove the membrane covering the inner wall of the cyst, and gives a case in which Nélaton discovered a plate of bony tissue derived from a malformed tooth on the inner aspect of a cyst, but this is in most cases a quite unnecessary complication of what is usually a very simple matter.

Polypus of the Antrum.—This is not a common affection, though by no means so very rare as stated by Paget. Luschka has investigated the subject, and found polypi five times in sixty subjects, some being two centimètres in length. He gives a drawing, showing a large number of these polypoid growths in an antrum, which he considers to be hypertrophies of the submucous connective tissue, covered with mucous membrane. Billroth also describes a good example of large polypus of the antrum with a long pedicle, and regards it as a very rare affection; there is a good specimen in University College Museum (No. 658).

These polypi are closely allied apparently to the small cystic growths in the mucous membrane of the antrum, described by Giraldès. Both affections consist essentially in hypertrophy of some elements of the mucous and submucous tissues. When the connective or areolar tissue predominates, the fleshy polypus is produced; when the glandular element is especially affected we have the cystic form produced. Intermediately, when the fibrous element is very loose and we have some glandular hypertrophy, the semi-gelatinous polypus is produced, which closely resembles the nasal polypus.

Polypi of the antrum are well supplied with blood-vessels, and bleed freely when interfered with. In some instances they appear to have a malignant character, or at least are the forerunners of malignant disease occurring in the antrum and jaw. Vidal de Cassis, who totally denies the existence of any true polypoid growths in the antrum, says that what have been mistaken for them most frequently are colloid tumours of the periosteum, but believes that many of the examples are cases of cystic growth. Syme, also, following the example of John Bell, maintains that polypi of the antrum always intrude from the nose, and are never developed in the antrum itself.

Sir James Paget has put on record (*Clinical Soc. Trans.*, xii) a case of polypus of the antrum in which a constant flow of clear watery fluid from the nose was the only symptom. At the *post-mortem* examination "the floor of the antrum was covered with two broad-based convex polypoid growths, deep clear yellow, with the fluid infiltrated in their tender tissue, and covered with exceedingly thin, smooth membrane traversed by branching blood-vessels. They were of rounded shape, about two-thirds of an inch in diameter and half an inch in depth; they looked like very thin-walled cysts, but were formed of very fine membranous or filamentous tissue, infiltrated with serum."

Cysts in connection with the Teeth may be classed under two heads: first, cysts connected with the roots of fully developed teeth; and, secondly, cysts connected with imperfectly developed teeth, to which the term "dentigerous cysts" has been applied in modern times. Both kinds may occur in either jaw, and, in the case of the upper jaw, may be confounded with collections of fluid in the antrum, or may secondarily involve that cavity.

Cysts of small size in connection with the fangs of permanent teeth are frequently found on their extraction, but give rise to no symptoms demanding surgical interference, though sometimes they cause pain from pressure on the dental nerves. Occasionally, however, they grow to a large size, in which case they produce absorption of the containing alveolus, and give rise to a prominent swelling. They lie beneath the periosteum of the fang, and hence have been named by Magitôt periosteal cysts. The contained fluid is rich in cholesterine.

Three specimens of cysts connected with the fangs of teeth, for which I was indebted to Mr. Holborow King, are now in the Museum of the College of Surgeons (2161). Two of them (Figs. 9, 10) are quite small (one being remarkable for the length of its pedicle); the third (Fig. 8), is of the size of a hazel-nut, and was torn in extraction. The contents of the cyst were found, on microscopic examination, to consist of degenerating pus; their walls were formed of fibrous and granulation tissues, and they had no epithelial lining. This would confirm the view of Mr. Tomes that the morbid process is probably identical with that resulting in the formation of alveolar abscess, but, being less acute, a serous cyst is formed instead of a suppurating sac. In the Museum of the College of Surgeons is another specimen of a vascular thick-walled cyst, attached to one side of the fang of an incisor tooth (2161A).



Fig. 8.



Fig. 9.



Fig. 10.

Large cysts, which produce more or less absorption of the outer wall of the maxilla, are, in my experience, very common consequences of the retention of diseased teeth, but seem to give surprisingly little inconvenience to the patients, even when of large size and producing considerable deformity of the face. They are commonly confounded with cystic degeneration of the antrum.

Treatment.—An incision into the cyst evacuates a dark-coloured clear fluid, unless inflammation should have been excited, when the contents become purulent. It is advisable to cut away the thin outer wall of the cyst freely with scissors, or, if necessary, with bone-forceps, so that the cavity may granulate up. If an incision only is made, the edges are apt to fall together and re-unite with a reproduction of the fluid, unless an india-rubber drainage-tube is inserted, which can be attached by a thread to a neighbouring tooth.

Single Cysts in the lower jaw, as in the upper, may originate in connection with the fully developed teeth, and, as in the case of dentigerous cysts, may give rise to the suspicion of a more severe affection.

According to Broca, the great majority of cysts of the jaws have their origin in tooth-follicles. These are shut sacs, but they do not enclose a true cavity, for the space between the wall and the outer surface of the dental papilla is occupied by the enamel-organ, an organised body, but very soft and gelatinous, apt to disappear under morbid influences, and thus leaving in the follicle a cavity ready to be transformed into a cyst. Dental cysts may originate in the follicles of the first or second dentition, or in the follicles of supernumerary teeth. Their contents are ordinarily clear fluid, sometimes bloody, occasionally filamentous or gelatinous, and still more rarely they contain a sebaceous matter like mastic, composed almost entirely of epithelium.

But periosteal cysts occur in the lower jaw without any apparent immediate connection with the teeth, though very possibly some irritation connected with these organs may have been the original cause of the mischief. The patient finds that he has a slowly-growing tumour of the jaw, which is painless, and gives him no trouble except from the deformity. The outer plate yields ordinarily to the pressure of the growing cyst, and thus a prominent smooth tumour is formed, over which the skin is freely movable. When the bony wall is sufficiently attenuated, the peculiar crackling already described may be produced on pressure; and, if the disease is still unchecked, the bone becomes entirely absorbed, and nothing but a membranous cyst, with particles of osseous matter imbedded in it, remains. Of this a remarkable specimen from a woman aged 45 is to be seen in St. George's Hospital Museum (H. 150). The cyst is for the most part single, and contains merely fluid, which may be clear or more or less coloured.

(To be concluded.)

HYPNOTISM IN SWITZERLAND.—The Health Committee of the Canton of Vaud has forbidden any public exhibitions of hypnotism, magnetism, or somnambulism. Even medical men must obtain permission before making scientific experiments on those subjects.

HOME FOR FEMALE INEBRIATES.—The number of persons admitted into St. James's Home for Female Inebriates, Kennington Park, during the past year was 90, making a total number of 168; of these 55 had left unsatisfactorily, and 35 after a stay of twelve months and more. Of these 29 were doing well, while 4 had returned to the Home.

NEW HYGIENIC JOURNAL IN RUSSIA.—The first number of a new Russian medical periodical, called *Meditzinskaia Beseda* (*Medical Talk*), has just appeared. The journal, which will deal with medical and hygienic subjects in a popular manner, is published at Voronej, and will come out twice a week. The editor and publisher is Dr. A. Kh. Sabinin.

OBSERVATIONS
ON
A METHOD OF PROPHYLAXIS, AND AN INVESTIGATION INTO THE NATURE OF THE CONTAGIUM OF SCARLET FEVER.

[ILLUSTRATED BY COLOURED PLATE.]

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AND
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It is admitted that scarlet fever is little if at all communicable, in its early stages, from the sick to the sound. On this first principle rests the advantage of prompt isolation, since a fair chance is thereby afforded of arresting the further extension of the disease from this its primary source. It is equally agreed that the flakes of skin cast off during desquamation contain the active contagium, and these, if inhaled or swallowed, reproduce scarlet fever in those unprotected by their having already passed through the ailment. Dr. Jamieson has endeavoured to prove that, without separation, it was possible to prevent scarlet fever spreading from one member of a family to others of the same who had not had it, even though in close contact with him, or occupying continuously the same apartment with him. The two sources of infection are probably the exhalations from the mouth and throat in the early stage, certainly the particles of dry cuticle cast off in the later. The method recommended was to disinfect the throat by painting it frequently with a strong solution of boracic acid in glycerine (a saturated solution of boroglyceride in glycerine). In dealing with the skin more exact methods were available. Those consisted in the employment of warm baths every night from the very first, and in the application to the entire surface of the body, including the head, of an ointment composed of carbolic acid gr. 30, thymol gr. 10, vaseline ʒj, simple ointment ʒj, night and morning. In this way he believed that the scales of epidermis would never become contagious, and actual experience completely bore this opinion out.

Dr. Jamieson's theory, stated concisely, was, "That the contagium of scarlet fever present in the scales when inhaled or swallowed produced such changes in the blood and tissues as to lead to the symptoms characteristic of the disease; that this contagium, which was in all likelihood an organism, in due course of time reached the skin and there ripened, so that when the dry flakes of keratine were cast off, these contained the organism in a state ready for immediate multiplication when placed under suitable conditions. Arguing from the domain of cutaneous parasitic diseases, it seemed to me permissible to anticipate that, were the soil kept continuously in a state unfavourable for the ripening of the organism, it would either perish, or at least be thrown off immature. It also appeared evident to me that for the full development of the particulate contagium of scarlet fever air was necessary, since it seemed that the late desquamation contained it in largest amount." It may be argued that the urine in post-scarlatinal nephritis, the pus from suppurating cervical glands, or the muco-purulent discharge from the ear or nose, in instances where these sequelæ occur, might all be sources of contagion. This may indeed be true, yet it is well known that mild cases, in which the only abnormal condition is the desquamation, do spread the disease. Hence as "peeling" is the sole constant element, it is also the chief source of danger.

It is self evident that it is only in cases treated at home, among those unprotected by having had scarlet fever, and young, that the efficiency of such a method can be determined. During the three years since this method of prophylaxis was first published, many opportunities of testing it have occurred, and while in no one instance did the plan fail, the following examples are specially illustrative.

Case I.—C. H., aged 15, was one of a family of thirteen children, none of whom had had scarlet fever. There was a case of scarlet fever next door, and there had also been some at the school which he attended. There was some suspicion that the milk-supply might have been the source of infection, as several families who obtained milk from the same dairy were nearly simultaneously affected, but careful inquiry elicited nothing. He shivered on January 28th, and on the 29th the rash was well out. He occupied a room on the ground floor of a large house, and was kept there so as to be further from the nursery, which was situated at the top of the house. M. H., aged 17, at that time an anæmic girl, who had had a troublesome cough all winter, went on January 30th to meet her sister at the Waverley station in the evening. On the 31st she had a sharp attack of diarrhœa, and at the same time the period came on, but scantily. Her evening temperature on January 31st was 101.8°, on February 1st, 102.6°, and she complained of sore-throat. It was not till February 2nd that a minute punctate red rash appeared on the backs of the hands, the back, and the ankles, and then gradually became more characteristic, while the temperature slowly fell. She suffered a good deal from rheumatism in the wrists, knees, and ankles, and this, a persistent tendency to diarrhœa, combined with the other circumstances mentioned above, prevented bathing being carried out quite so systematically as was desirable; but she was anointed regularly, and bathed as often as possible, and made an excellent recovery. The cough, which had lasted some months, also entirely ceased. Her elder sister frequently sat in the room beside her while she was desquamating. She occupied a room at the top of the house near the nursery. J. H., aged 19, shivered on February 2nd, rash out and temperature highest (103.6°) on the 3rd. He had a room adjoining his sister's on the top flat. All these three cases occurred within six days. The first case was from the outset separated from the others, and thus it is nearly certain the source was the same for all three, the periods of incubation being longer, but all within the generally admitted limit. No other case occurred in this family, though two servants, one who had had and one who had not had scarlet fever, suffered from slight follicular tonsillitis, in the desquamative stage of the scarlet fever cases, but associated with no rash or other symptom. This may have been a mere coincidence, since such sore-throats are common at all times in Edinburgh. From the position of the rooms inhabited by the three, one on the ground floor and two on the top, while there were no wet sheets hung up, but only the most careful treatment of the cases themselves; the scales must have been diffused to some extent through the house, yet the sole result was slight sore-throat of doubtful origin in two servants; all the other eleven children and servants remained quite well.

Case II.—In this series the method was subjected to the most severe test. H. M., aged 9 years, became sick early in the morning of March 9th, and shortly after complained of sore-throat. He was seen on the 10th, when the throat and tongue presented the usual appearances of scarlet fever, and the rash was well out. His temperature was 102°, and pulse 100; next day the temperature had risen to 103.5°, but subsequently continued to fall. The family consisted of ten children, distributed through three apartments, and none of these ten had had scarlet fever. H. M. began perceptibly to peel on March 17th. A. M., aged 6, slept in the same bed with H. M., but with his head the reverse way. He was sick early on the morning of March 11th, and the rash was well out on the 12th. He also was desquamating on the 17th. D. M., aged 3, became ill on March 14th, and was more feverish than his elder brothers; the rash, too, was more vivid, and the throat more inflamed. He began to desquamate on the 24th. Thus all three were attacked within six days, and though two younger and five older children were all day in the same room with those affected, none took the disease. One sister, aged 14, had a slight follicular tonsillitis, which lasted two days, from March 21st to the 23rd, during, that is to say, the early desquamative period of her brothers' illness. Was this the ordinary scarlatinal sore-throat, so often seen in those who are nursing cases of scarlet fever; or may we regard it as an instance of attenuation of the virus, due to an arrest of development in consequence of the baths and inunction? The treatment was very faithfully carried out by the mother, then herself not strong; by no means an easy task under all the circumstances, but as she was assured that only in this way could the spread of the disease be arrested, if she kept her children at home, as she was desirous of doing, she was encouraged to persevere. There is little room for doubt that all three brothers contracted the fever from the same source.

Case III.—T. W., aged 25, felt ill on December 30th, 1884, had sore-throat, and on the following day the rash came out. He was not seen till January 3rd, 1885, when all the symptoms of a well-marked but mild case of scarlet fever were present. His wife, who occupied the same room, as well as an infant under 1 year, and a brother-in-

A METHOD OF PROPHYLAXIS AND AN INVESTIGATION INTO THE NATURE OF THE CONTAGIUM OF SCARLET FEVER.

By W. ALLAN EDINGTON, M.D., AND ALEXANDER EDINGTON, M.B.



law, who lived in a room opening off the apartment, had not had scarlet fever. His wife attended to the bath and inunction, and cooked the food, yet no further case occurred, though desquamation was abundant.

CASE IV.—J. B., aged 3, had been playing near a house standing in its own grounds, where several cases of scarlet fever had been treated to the stage of convalescence. He had gone inside the house within a week before April 10th, 1885. At 4 A.M., on that day, he was sick, vomited, and complained of pain in the throat on swallowing. On the 11th the rash was distinctly out. The case was a mild one, desquamation was first noticed on the legs on the 19th. He was at once removed upstairs, to another part of the house, and treated in the same manner as the previous examples. There were three other children: two older had had scarlet fever, one, 2 years old, had not. The eldest girl had had the fever when two years old, and was not in contact in any way with her brother after the 10th, but she also had been in the neighbouring house. On the night of the 17th she became sick, and on the 18th complained of sore-throat, her tongue was red, with the papillæ elongated, and there was slight symmetrical congestion of the side of the fauces. In her case the disease was also mild, though the rash was well-marked. Apparently she had outgrown the protective influence afforded by her previous attack. No other case occurred in the house.

CASE V.—A. T., aged 7, took scarlet fever on December 1st, 1886, was attended by an aunt and servant, both however over 40, neither of whom had had it. They bathed, painted, and anointed her, yet had not even a sore-throat.

CASE VI.—J. and A. W., took scarlet fever on February 13th, 1887. The elder was aged 7, and the younger 4. The cases were mild, and were treated similarly to the others. A sister, aged 6, was constantly in and out of the room during desquamation, and yet did not take the disease. Neither did the father or the mother, both under 30; who were in constant attendance, and have not suffered.

CASE VII.—H. and D. took scarlet fever on February 8th and 10th respectively. The former was aged 4, the latter 7. Neither their mother nor a trained nurse who was engaged to attend them had had fever, and these were in constant association with them during their entire illness. The baths and inunction were continued till the end of February, when hæmaturia appeared. After this the bathing was persevered in, but the carbolic ointment was replaced by vaseline. No other case occurred.

CASE VIII.—In September, 1886, Dr. Jamieson saw a child aged 3, who had a smart attack of scarlet fever. In the same house there was a younger child, then aged 2, which could not be kept out of its sister's room. The treatment by baths, inunction, and application to the throat, was carried out from the first, and desquamation was used, and some months after that there had been no other member of the family attacked.

Mere insusceptibility will not explain the immunity enjoyed by those who were constantly near the patients during the desquamative period. It might possibly account for some, but comparing these and others similar with what happens in a family when no such precautions are adopted, the difference in favour of the plan is too great to be accidental. Clinical experience therefore supports the first assumption in the theory that the activity of the contagium is destroyed if the soil—the superficial layers of the skin—be kept continuously in a state unfavourable for its development. In this the removal of the desquamation as it forms by baths is one factor; the alteration in the character of the cast-off epidermis by antiseptic ointments is the other. Whether the employment of such substances as hasten cuticular exfoliation, such as sulphur or resorcin, would still further assist, must be decided by future observation.

The second assumption is, that the late desquamation contains the particulate contagium in largest amount, and that this argues that air is necessary for its maturation or ripening. The following cases tend to throw some light on this problem.

CASE I.—A nurse was sent on December 30th, 1886, to wait on three children who had been ill with scarlet fever for a fortnight. The temperature of one rose that day to 105°, and she died. The nurse remained well to January 20th, 1887, the fifth week of the children's illness, then took a slight sore-throat on January 21st, and noticed the rash the same day. On January 22nd she was admitted to the City Hospital with well-marked scarlet fever.

CASE II.—A mother, who had never had scarlet fever, occupied at night the same bed as her child suffering from it, during the whole course of its illness, yet did not herself become affected till the fifth week of the fever in her child.

CASE III.—A nurse was sent to the country to attend a case of illness of a non-infectious character. In a part of the house which communicated directly with the rest by a straight single stair, slept a man who had scarlet fever. The nurse, unprotected by a previous attack, passed the bottom of the stair several times daily, yet she remained free till between the fifth and sixth week of fever in the man, then returned home ill, and was admitted to the City Hospital with scarlet fever. There was no other known source from which she could have caught the disease. She never was in the man's room, only passed the stair which opened directly on his apartment, and continued well till he began to move about.

CASE IV.—A family of five persons residing in a district of Edinburgh, consisting of small self-contained houses, where there were no cases of scarlet fever at the time, took the disease on February 11th, 1887; and a young man in an adjoining house also fell ill on the same day. These got their supply of milk from the same dairy, while the other families in the terrace were supplied from a different one. All the families remained well till after March 13th, when the first of those affected began to go about. Nothing in the way of baths or inunction had been employed in their case. On March 19th a little girl, aged 7, was taken ill. She had been playing with some of those who had just recovered, and were probably still peeling.

In the late desquamation the cuticle becomes more freely separated, is older and drier, and consequently more perfectly oxygenated; the contagium, therefore, reaches its maturity at that stage in preference to an earlier one. The evidence submitted would not in the present position of medical science carry conviction. The positive existence of a micro-organism must be demonstrated; clinical experience does not hold the place it did once. Soon after entering on his duties as consulting physician to the City Hospital, in the end of last July, Dr. Jamieson mentioned his intention to Professor Chiene, who at once, in the kindest and most generous manner, not only placed his splendid bacteriological laboratory in the new University buildings freely at Dr. Jamieson's disposal, but also the services of his enthusiastic assistant, Dr. Edington. The questions to be answered, if possible, were:

1. To discover the organism in the desquamation, to the presence of which the contagious properties of these cast-off flakes may be inferred in some way to be due.

2. To ascertain approximately the period at which the organism first manifests itself in the desquamating epidermis.

3. Are the methods already described which have been found by clinical experience capable of neutralising the contagiousness of scarlet fever sufficient to destroy this organism, or, at least, to render it incapable of reproduction, though under suitable conditions otherwise?[1]

The answer to the first two queries will be found in the statement adjoining, which represents the results of the cultivation and inoculation experiments from the blood and desquamating cuticle, which have been carried out by Dr. Edington in the Professor of Surgery's laboratory.

It will be found that a peculiar organism has been discovered to be constantly present in the blood up to a certain date, and in the desquamation after a certain date, in the progress of the disease. This organism, when inoculated into rabbits and calves, is capable of producing a disease in all respects identical with scarlet fever in the human subject.

The calves so inoculated were under the constant observation of Dr. Wood, the medical superintendent of the City Hospital, who has during his eight years' tenure of that office had exceptional opportunities of knowing what is and what is not scarlet fever. Dr. Wood has expressed his conviction that the disease which these calves suffered from as the result of inoculation was scarlet fever, and not any mere septicæmic or erysipeloid disease.

In endeavouring to solve the third question, some modifications in the duration of inunction had to be made, for the following reason.

In practice the baths and inunction which had been commenced on the first or second day of the disease, were continued until visible desquamation on the body had, as a rule, terminated—commonly, therefore, till the end of the fourth week of the disease. Desquamation visibly commences, on the average, at the ninth or tenth day of scarlet fever—it may be earlier—immediately on the subsidence of the rash; it may be considerably delayed, but the average period is as above. Now, as it was necessary to obtain the desquamating flakes at a period in the course of the disease at which the organism which had been discovered would certainly, if uninterfered with, be present in them, we had to select a time beyond the twenty-second or twenty-

[1] Or expressed otherwise, if a parasiticide capable of killing the organisms were applied to the skin at sufficiently short intervals.

third day, and we fixed on the thirtieth day to be quite sure. At that date the characteristic bacillus had been constantly found.

Seven cases were selected; the baths and anointing were persevered in from the second day of the disease till the eighth day of desquamation, the seventeenth or eighteenth day of the disease. An ointment for inunction containing carbolic acid in the proportion of one in sixteen had formerly been employed. Now and again slight evidences of absorption of carbolic acid had taken place, and, therefore, in these seven cases, an ointment of only one in thirty-two was made use of. On the eighth day of desquamation one leg was once more carefully anointed, enveloped in a thick layer of sterilized cotton wool, bandaged and covered with a stocking, and allowed to remain undisturbed till the thirtieth day.

The wool was then removed by Dr. Edington, with the same precautions as in the other cases, and the scales transferred to sterilized tubes for cultivation. It will be seen that the wool was put on at a period of the disease before the bacillus had been obtained from the scales, in cases where no disinfectants had been applied to the skin. This method subjected the procedure, therefore, to a rather severe test.

In cultivations of scales from five of the seven cases no bacillus was found. In two it appeared in the cultivating medium; but whereas, under ordinary circumstances, the bacillary pellicle is formed in thirty-six hours, in these two instances it took six days to develop any evidence of its presence in the jelly. In five, therefore, the powers of reproduction of the bacillus had been checked by the method of treatment adopted, while in the two others a remarkable retardation of the virus had resulted. There is little doubt that, had we continued the bathing and anointing for a few days longer, the bacillus would have been absent in all. We submit, therefore, that proof, clinical and experimental, has been furnished that by such simple methods we can neutralise the contagiousness of scarlet fever, so far as that arises from the desquamating flakes of cuticle. As the organism develops centrifugally, the outer and denser layers of the cuticle cast off at the commencement of desquamation contain little of it; but when these have been broken up and displaced, and access of air is afforded to the organism rising from beneath, it rapidly attains maturity and the power of reproduction when placed under suitable conditions. But apparently, at this stage in its growth, it is easily rendered sterile if brought directly in contact with a parasiticide such as carbolic acid. The organism, as is shown by Dr. Edington, and as Dr. Jamieson had inferred from clinical observation, is highly aërobic, and apparently ripens with great rapidity when the epidermic cells in or between which it is contained come in contact with the air, as they are successively thrown off in desquamation.

The valuable assistance rendered by Dr. Wood, Medical Superintendent of the City Hospital, who selected specially typical cases for our observations, and saw that all instructions were carried out to the letter, deserves our acknowledgment.

Report by Dr. Alexander Edington

(From the Bacteriological Laboratory of the Surgical Department, Edinburgh University).

Towards the latter end of October, 1886, acting upon instructions received from Professor Chiene, I began to make investigations into the desquamation of scarlet fever, with a view to establish, if that were possible, the specific nature of its infectiveness. It will no doubt be asked why such investigations in the first instance should not have been conducted on the blood. This it was intended to do later on, but meanwhile it was deemed fitting that the organisms found in protected desquamation might be each separately inquired into, and their particular infectiveness, if any, made clear by actual experiment on animals.

As a preliminary step in this inquiry, the epidermis of scarlatinal patients was submitted to a microscopical examination, aided by the various aniline staining methods, in order to find out the precise visible nature of the organisms it was afterwards intended to cultivate. A series of cases in the scarlet fever wards of the Edinburgh City Hospital were selected, and before desquamation had begun the part to be examined—whether arm or leg, as the case might be—having been carefully washed with a solution of carbolic acid (strength 1 in 30 of water), was covered over with a piece of gutta-percha tissue, previously washed with solution, the edges being fixed down to the skin by means of flexile collodion, while over all was placed a roller-bandage, in order that as far as possible the protective tissue might not be liable to displacement, nor contaminations allowed to pass beneath it. On the termination of the period selected, and when desquamation had become pretty far advanced, the tissue was carefully raised, and some of the desquamation removed to an empty sterile test-tube.

Owing to this epithelium being dry and greasy, and further, containing many air-globules, it was found to be somewhat difficult to stain it perfectly. In order to overcome this, it was first treated with ether and caustic potash, to remove the oily matter, and then on having been transferred to the vessel containing the stain, the whole was placed under a bell-jar connected with an air-pump, and on a nearly complete vacuum having been created, it was found that the air-globules had given place to the staining fluid. The particles of epithelium were then washed, cleared in clove oil, and mounted in Canada balsam.

On microscopic examination micrococci and many minute stained points, smaller than micrococci, were usually to be seen, but nothing of the nature of bacillus or bacterium. Subsequently, small blisters were made on scarlatinal skin, and examination of the serum so obtained gave absolutely the same results.

But as it was possible, and even probable, that the infection from the skin might be due not to fully developed organisms but to spores, a series of investigations was instituted, such as might be likely to lead to the development of the supposed spores into their adult forms. A variety of methods were tried, requiring great precautions to be taken to prevent the intrusion of air-contaminations, but as such precautions were of too stringent a nature, and gave negative results; a simpler method was adopted, which, though it could not be expected to preclude entirely the entrance of contamination, yet was found to give fairly successful results. This method was as follows: the part having been washed first with carbolic soap and then with a solution of carbolic acid, 1 to 50 (we found that a stronger solution often gave negative results), was then enveloped in a sheet of sterilised absorbent wool sufficient completely to cover the part washed, which, in the case of the leg, included all the skin from above the knees downwards, toes included, and in the arm from above the elbow; then a roller-bandage having been carefully applied, a cotton stocking was drawn over all and made secure. The sterilisation of the wool used was effected by a dry heat of 160° C., kept up for an hour on each of two successive days. The sterility of such wool was tested by cultivation. On the termination of various periods of time, which varied from the nineteenth to the thirty-fifth day of the fever, the wool was removed by dividing it on the lower surface and in the long axis of the limb, and then, while an assistant gently raised it by grasping it by the middle of the upper surface, I, having previously sterilised my hands, introduced them beneath until I had reached the most central parts, carrying in them two tubes of sterile Koch's jelly which were, whilst here under cover, unplugged, and their open mouths pressed against the under surface of the wool, which was at the same time gently tapped upon from above, and then the tubes were replugged. In this way a small quantity of dusty desquamation was obtained, pretty free from air-contaminations, although we fairly anticipated that organisms, which might have been contained in the sweat-ducts, might be present. The tubes then were cleansed externally with a solution of corrosive sublimate, and their plugs singed with flame, in order that any germinative material here present might be destroyed and thus kept from contaminating experiments which might be conducted in the laboratory. The tubes were then placed in the incubator and kept there for two or three days at a constant temperature of 31° C., until, as a rule, more or less opalescence developed in the jelly, when cover-glasses were prepared from this usually impure cultivation, and sub-cultures, and plate-cultures made.

The examination of the blood was found to give the most satisfactory results only when made during the first three days of the disease, and at the bedside of the patient. It was found that otherwise the blood very rapidly coagulated, and that fibrinous threads were found in many cases around the organisms, which thus precluded either satisfactory examination or cultivation.

Cultivations from the blood were obtained as follows: Test-tubes of half an inch in calibre and ten inches in length were used; into each, three excessively fine capillary tubes, each nine inches in length, were placed, and the whole sterilised and plugged. A drop of blood was drawn from the finger, which was for two hours previously covered with a wet carbolic bandage (carbolic lotion, 1 in 20), care being taken while the drop was issuing that organisms did not alight upon it, by having a sheet wet with lotion held above it. The moment the drop issued a capillary tube was pushed into it, and on a little blood ascending, it was withdrawn, and the outer surface being cleansed with lotion, the tube was then gently passed into a tube of Koch's jelly, the plug of which was only so slightly moved as to allow of its entrance without coming in contact with it. The contained blood

was then ejected by a syringe into the jelly, care being taken that a small quantity was allowed to remain in the tube, so that contamination did not thus enter from the air in the free end of the capillary tube. The jelly was then incubated, and its further treatment conducted in the same way as those derived from the skin.

The method of isolating the various organisms demands some little attention. "Damp chambers" of the usual form, for example, flat glass bell-jars, fitting into shallow, flat glass dishes, were thoroughly cleaned, and in the latter were placed sheets of bibulous paper and enough of a solution of corrosive sublimate (1 in 1,000) poured in as would more than saturate the paper. Flat plates of window-glass, each five inches square, were cleaned and sterilised in the hot-air chamber, and thence, on cooling, transferred to the damp chamber, where they were placed upon supports. Small flasks of distilled water were sterilised by boiling on two successive days, and to each was added one or two drops of the original impure culture, which were then each freely agitated, in order to separate the individual organisms; this being done, a drop of this diluted seed-material was used to inoculate a tube of Koch's jelly, previously liquefied, and on being, by gentle agitation, thoroughly mixed, an assistant gently raised the bell-jar of one of the "damp chambers," and the liquefied jelly was gently emptied upon the plate and the cover replaced. This method, as a rule, gives excellent results, but one little point requires attention, that is, that if the flask of diluting water be quite cold, in adding to it the drop of seed-material, the jelly of this latter solidifies as extremely fine threads, which no amount of shaking will dissolve.

The following is a detailed description of the various organisms which have been isolated, and is taken to apply to cultivations made in jelly that has been neutralised by caustic potash, unless otherwise stated. It has been found that cultivations made in such jelly differed in some cases from that made in soda jelly, and this has been of considerable use as a means of distinguishing various organisms. The form of growth does not materially alter, but in potash jelly it is in almost all cases more luxuriant and more rapid, and, in addition, in some cases a peculiar and individual darkening of the deep needle-track growth results after a time.

Organisms Isolated from the Desquamation and Blood.

1. *Sarcina Lutea*.—This well-known organism occurred in 15 per cent. of the original cultures from desquamation.

2. *Streptococcus Rubiginosus* (provisional name).—Small spheres occurring frequently in short threads and as tetrads, measuring ·4μ. Grown on gelatine plates it develops in two or three days as minute yellow points, if they be ever so little beneath the surface of the jelly, but if on the free surface are of a snowy whiteness. Sown in test-tubes of potash jelly, if the needle has not much disturbed the surrounding jelly, it develops a growth which is nearly of an equal calibre throughout, being made up of small cocoons closely appressed, and usually terminating somewhat abruptly in a cocoon of larger size. The deep growth is of a yellow colour at first, but rapidly passes through varying shades of brown, until, after several weeks' growth, it is of a rusty colour. The surface-growth is usually little, confined to the area bounded by the sides of the needle-track, and of a snowy whiteness. In older tubes this surface-growth frequently spreads in the superficial jelly, as white vertical lamellæ. It occurred in 20 per cent. of the original tubes. Inoculations into rabbits, guinea-pigs, and pigs, gave negative results.

3. *Micrococcus Capsaformans* (provisional name). — Spherical or oval bodies, frequently united as dumb-bells, which are very often enclosed within a capsule, see Fig. VIII, and some also may be seen in Fig. XI. This capsule is well seen on staining with alkaline methylene-blue. In many cases these capsules appear empty, and when thus are usually kidney-shaped. It would seem that this is a form of endogenous, free cell-formation (not spore-formation), and that the depression corresponding to what would be the hilus of the kidney is the part from which the micrococci have been extruded. In one case I saw the micrococci lying together with this capsule half enclosing one of them. As a rule these capsules seem only to enclose two cocci, but in others one can notice division taking place, just as in a sarcina, for example, into four cocci; but I have never noticed the capsules corresponding to the latter. The single spheres measure 1.0 μ—1.2 μ. On gelatine-plates it develops as white points of pretty rapid growth, having a very moist appearance.

In test-tubes of Koch's jelly the deep growth is usually somewhat scanty, and made up of cocoons, having a yellowish colour, but the surface-growth is distinctive; it is usually plentiful, forming a circular, flat, coin-like growth, on which concentric rings are beautifully seen. If the growth be ever so little impure, these lines are not to be seen. It occurred in 40 per cent. of the original tubes. Inoculations gave negative results in rabbits, guinea-pigs, and pigs (see Fig. VIII).

4. *Diplococcus Scarlatinæ Sanguinis* (provisional name).—Spheres measuring 1.0 μ—1.2 μ, frequently, especially in fluid cultures, existing as dumb-bells. On gelatinous plates it forms creamy points of fairly rapid growth. On test-tubes of Koch's jelly it forms a deep growth of very closely appressed minute cocoons; while the surface-growth, usually irregularly heaped up around the needle-track, is of a slightly creamy white translucent colour. It occurred in 45 per cent. of the tubes taken from the desquamation, and in 30 per cent. of the tubes made from scarlatinal blood. Inoculations gave negative results, but this will be referred to when speaking of the bacillus scarlatinæ.

Ascobacillus (provisional name).—Small rods in their fully developed form, measuring 0.8 μ in length and 0.2 μ broad, often as dumb-bells, made up of long ovoid spheres. This organism is peculiar in that the spores are contained in large sausage-shaped capsules many hundreds of times larger than the bacilli themselves (see Fig. VII). Sown in gelatine plates it grows as canary-yellow points of rapid growth, which in the course of a few days may be one-eighth to one-quarter of an inch in diameter, when liquefaction of the jelly usually begins. In tubes of Koch's jelly the deep growth is usually seen as a dense growth of closely appressed minute cocoons; the surface growth is of a canary yellow, with an irregularly sinuous outline. After some days liquefaction is observed in the jelly. This was obtained only in one case, with the bacillus scarlatinæ, in which death resulted in twenty-four hours, and was obtained from the blood.

Bacillus Fulvus (provisional name).—Very small oval or rod-shaped motile bodies, measuring 1.0 μ—1.5 μ in length, and 0.2 μ in breadth. (See Fig. IV.) Sown in fluid broth it develops with great rapidity a creamy coherent pellicle, rapidly becoming wrinkled, but which is never very deep. This pellicle is easily detached from the sides, and if the flask be a little shaken it falls to the bottom, a new pellicle being in each case formed until the nourishing fluid becomes used up. Sown in test-tubes of Koch's jelly it forms a deep growth, made up of small cocoons, which are larger near the surface and smaller but better defined towards the bottom of the needle-track. The surface growth is semi-transparent and of a golden-brown colour, and somewhat slow in growth. Inoculation gave negative results.

Bacillus Arborescens (provisional name).—Rods measuring 0.8 μ in thickness and 4.5 μ—12.0 μ in length, most usually the former. This organism usually forms excessively long, jointed leptothrix filaments, either in jelly or in fluid media. It is non-motile (see Fig. IX). It is excessively difficult to isolate, as if a pure culture be grown on a gelatine plate, the resulting cultivation is quite invisible while the plate remains in the damp chamber; but if it be withdrawn and viewed by transmitted light, there is seen a ground-glass-like appearance in the jelly, caused by a fine reticulation of the filaments of growth. If one is working with a mixed cultivation containing this and unaware of its presence, one may fail to obtain it from the plate; but as in its growth on the plate it usually contaminates everything else, it may make its presence visible in the tubes made from other growths. Sown in test tubes of Koch's jelly, it develops little or no needle-track growth, but in a day or two at most there appear most beautiful arborescent and excessively fine filaments, shooting, in the first instance, toward the periphery of the tube, but later in all directions. It then looks just as if some very fine cotton-wool had been placed in the jelly and dispersed throughout. It does not cause any liquefaction of the jelly. If it be sown in the inclined surface of a tube of jelly it rapidly spreads over it, and in the course of twenty-four hours the surface of the jelly looks as if a piece of lint had been applied to it and withdrawn, leaving the woolly material in the jelly, but later it penetrates throughout. This usually occurred with the streptococcus rubiginosus, and was then easily isolated from the tubes by passing a needle down into the arborescent growth.

Inoculation into rabbits and pigs gave negative results. In guinea-pigs a well-marked local erythema developed, but did not spread far from the point of inoculation, and was unattended by any sequelæ.

Bacillus Scarlatinæ (provisional name).—Rods measuring 0.4 μ in thickness and 1.2 μ—1.4 μ in length, most usually forming excessively long-jointed and curved leptothrix filaments, motile (Fig. X). Sown on gelatine plates, it forms little points of liquefaction after several days. Sown in fluid broth and incubated, it rapidly forms a coherent parchment-like film, which is not easily broken up, and, even if the flask be well shaken, will yet float on the surface. Later, it develops an extraordinary deep wrinkling, which, if it be microscopically examined, is seen to be made up of a dense felted network of bacillary filaments. Sown in test-tubes of Koch's jelly, it rapidly liquefies it, but with no distinct growth-formation. The fluid thus formed is crowded with the motile bacilli, but a pellicle is not formed until the liquefaction is well advanced.

It occurred in every case but one[2] of the tubes made from the desquamation, if taken after the termination of the third week, but never before this. It also occurred in every tube made from scarlatinal blood if taken before the third day of the fever. Inoculation made into rabbits was always attended with a slight but marked erythema if they were young, but if older the erythema was better developed and most vivid at the point of inoculation. After two to five days a fine desquamation began, and usually lasted for a week to ten days. The temperature usually rose slightly in the younger rabbits, but more in the older; for example, 103° to 104° and in one case 106° F. During the first two days the animals huddled themselves in a corner of the cage and did not seem much to wish food, but usually after this they got quite lively again. The bacillus can be reobtained from the animal's blood. None died.

In guinea-pigs the same result obtained, but in them the desquamation is more copious and the flakes much thicker than in rabbits; and further, the hair if taken hold of came out.

A calf was then inoculated, and at the same time given some of a culture in milk. The calf was in good health at the time, and had a temperature of 99.5°. Six hours from the time of the inoculation, the calf developed great sickness, and the temperature taken in the axilla registered 103° F. (this was at 10 o'clock P.M.); the calf was then left for the night, but in the morning it was found to have died. At the necropsy, which was kindly made with me by Dr. Thomson, assistant to the Professor of Pathology, the following results were noted. General congestion of all the abdominal viscera; liver, well marked cloudy swelling, with many small petechiæ; spleen congested, pulp very fragile; kidneys, well marked cloudy swelling; heart, petechiæ numerous in serous surface of pericardium, and also in myo- and endo-cardium; cardiac muscle, well marked cloudy swelling; lungs, a considerable quantity of freshly exuded lymph was found at the base of the left pleura. On cutting into the tongue, with the contiguous portions of the pharynx and the larynx, there was seen to be an intense congestion of the posterior two-thirds of the tongue, and extending into the larynx, the rest of the mucous surfaces being pale in comparison. The fungiform papillæ stood out like red beads on the surface of the tongue. Examination of the tissues with the microscope showed a few bacilli here and there, but very sparsely distributed; while, on the other hand, there were many minute stained points, exactly as was found in scarlatinal blood. So far this agrees with *post-mortem* examinations made in the early stages of human scarlet fever; and if we had found bacilli plentiful there would have been suggested to me the probability of its being an organism either purely septicæmic, or one at least not specifically associated with scarlet fever.

Small pieces of tissue taken from the spleen and kidney were placed in Koch's jelly and incubated, with the result that the, to me, now familiar pellicle formed by this bacillus was developed. So far, then, this experiment and its *post-mortem* result show, first, that in all likelihood this organism had caused death, and while the state of the abdominal and thoracic organs would imply that the fatal result was due either to a high fever or to blood-poisoning, yet the state of the tongue, together with the suddenness of the attack and its rapid termination, suggests scarlet fever.

A second calf was inoculated, when only one day old, with the bacillus, care being taken that the inoculation was made with absolutely pure material as before, while at the same time the blood was examined with the microscope, and found to contain nothing of the nature of an organism. The inoculation was made in this case with a very carefully sterilised hypodermic syringe. At 6.30 P.M. this was performed, the temperature *per rectum* then being 99.6°. At 10 P.M. the animal took milk freely, and the temperature remained practically the same. Next morning, temperature 104°; sickness, slight diarrhœa, and complete prostration; throat, as far as could be seen, was in an inflamed condition. Towards the afternoon, the skin covering the thorax, upper part of abdomen. and inner side of forearm presented a general redness, which towards evening became still better marked. Evening temperature, 10 P.M., 102.8°. The animal now got a little milk. Next morning, the animal was still unwell, but the sickness was almost entirely gone, and it took a little milk. Rash very vivid, specially in throat. Temperature 101.8°, evening temperature 102°. Throat and posterior part of tongue very much inflamed. After this time the temperature became practically normal, and on the sixth day of the disease desquamation began on the chest and inner sides of fore-limbs.

Further, blood was taken from a case of scarlet fever, on the third day of fever, with the care previously described, and, to prevent its coagulation, was passed into a tube containing a little liquefied sterilized Koch's jelly; of this a part was injected into a guinea-pig and part cultivated by incubation. The guinea-pig developed the erythema as before, with succeeding desquamation, and the tube was found to contain the bacillus and diplococcus. But we have found that the diplococcus sanguinis, as well as the micrococcus capsaformans and streptococcus, while they can exist in the blood for some days, yet of themselves produce no symptoms in the animals; thus, we may conclude that the injection of scarlatinal blood, taken during the period immediately preceding the height of the fever, is, in the case of guinea-pigs, and probably also in the others, attended with the same result as the injection of a cultivation of the bacillus itself.

This bacillus, then, is to be seen in scarlatinal blood if it be taken during the first two or three days of the fever, and if the cover glasses be spread immediately after the blood is drawn. It is also to be obtained from the desquamation after the twenty-first day of the fever—that is to say, in ordinary cases, when the desquamation begins, somewhere between the ninth and twelfth day. Of course, in the severest cases, where the desquamation begins earlier, it necessarily follows that we may anticipate its earlier appearance in the desquamation. I have examined the blood of some cases from day to day, taking care to control my experiments by performing them twice in the same day, with an interval of an hour or two intervening.

To take a typical case—a young lady, who had an extremely well-marked rash. On the second day the blood, being used for cultivation as presently described, was found to contain at the end of twenty-four hours' incubation only the bacilli; on the third day, bacillus and diplococcus sanguinis; fourth day, the same; fifth day, no bacilli, only diplococcus; seventh day, diplococci and streptococci rubiginosi; on the eighteenth day, cultivation made from the desquamation by removing the wool from one leg showed that no bacilli were present; on the thirty-first day the wool was removed from the other leg, and cultivation resulted in giving a good crop of bacilli, with the diplococcus and streptococcus.

In addition, seven cases were subjected to the treatment described by Dr. Jamieson, the wool being put on on the eighth day of desquamation, and removed, as a rule, on the thirtieth day, and cultivations then made as in the other cases. As a result, it was found that only two contained bacilli, and in these cases it required six days' incubation for development of the bacillary pellicle. Thus, while the treatment did not entirely destroy the bacilli, it nevertheless evidently had a distinct action in retarding their development from the spores, as usually, in other cases, a profuse pellicle is developed in twenty-four to thirty-six hours.

If desquamation be placed in milk kept at a gentle heat for twenty-four hours, the bacilli developed can be recognised by their motility and the pellicle which they soon form. Thus it is evident that, if milk be taken as food, containing infective desquamation, the spores will have a perfect nidus and suitable temperature afforded them for development.

From what has been stated, it is pretty well proved that this bacillus scarlatinæ is the specific cause of scarlet fever, and probably the other organisms found in the blood during and at a later period than the bacillus, are merely concomitants, and pass into the blood only after the vitality of the system and tissues has been lowered by the entrance into them of this specific organism. But if one injects or otherwise inoculates a perfectly healthy animal with the diplococcus scarlatinæ sanguinis, one finds that it is able to live for some little time in the blood without, in the case of animals, giving rise to any marked symptoms. This being so, then it is quite logical to suppose that if such be carried in infecting desquamation along with the bacillus, a double infection may ensue. Whether, in such a condition, the action of the bacillus is modified by it, cannot yet be definitely stated; but if we are to rely on what has been observed during the course of this investigation, then it might be stated that in those cases where one finds an extremely vivid and general rash, there is usually present from the first the bacillus and diplococcus. Unfortunately, much cannot be said of those extremely rapid and excessively malignant cases, because, owing to various reasons, I was unable, with the exception of one case, to get the blood investigated, and in it there was present, in addition to the bacillus, the ascobacillus mentioned and described. One thing which is very certain is that this bacillus scarlatinæ is able to form spores in the blood of a living animal, thus differing from the bacillus anthracis, which only does so on the near approach of death.

The rapidity of the growth of this organism—which is such that, if one inoculates a flask of broth, the diameter of which is two inches and a half, and it be incubated, the pellicle will develop and cover it entirely over in the course of four hours—suggests an explanation of the very short period of incubation in scarlet fever, and thus

[2] This tube was accidentally broken before time had been afforded for its development, if it had been present.

the particular pabulum in the body suited for its growth may be very rapidly used up, and so spore-formation ensue.

It has been endeavoured thus to find out, by a long course of careful investigations, embodying the results of several thousands of cultivations, the specific cause of scarlet fever, and these, the records of such, are now placed before the medical fraternity.

NOTES OF A CASE OF PORRO'S OPERATION.

By Sir T. SPENCER WELLS, Bart., F.R.C.S.,
Surgeon to the Queen's Household.

So far as I have been able to ascertain, the case I now publish is the third in the United Kingdom where mother and child have both been saved by Porro's operation. The first was Dr. Godson's, the second Dr. Galabin's. In both these cases the impediment to parturition was deformity of the pelvic bones, the uterus not being diseased. In my case there was no pelvic deformity; but the presence of a large, solid, immovable uterine tumour rendered delivery by the natural passage impossible.

On May 7th, 1887, I saw a lady who had arrived in London that morning from Leeds. She was 37 years of age, and was married in April, 1880. She gave me a letter written the day before by Mr. Scattergood, of Leeds, containing the following history of her case:

"On Wednesday last I was sent for to see her at her residence four miles from Leeds, and met in consultation Dr. Glaister, her old medical attendant, who was leaving the village that day, and Dr. Stevenson, his successor in practice, who had only been in residence about a week. Having known the lady before her marriage, I had seen her in consultation about a year ago, and knew her to be the subject of extra-mural fibroids. In the beginning of November last, I saw her again, the question which had then arisen being a possible pregnancy dating from August 8th, 1886. Dr. Glaister and I then came to the conclusion that in all probability she was not then pregnant. The pelvis contained a large, hard tumour almost filling its brim, projecting low into the vagina, and making it almost impossible to feel the os uteri high up behind the pubic bone. I heard nothing more of the patient until a few days ago, when her husband called upon me and said that his wife was believed to be near her confinement. An immediate inquiry into her condition seemed imperative, and accordingly we met on Wednesday, May 4th. On examining her, the fibroids apparent on uncovering the body showed a movement which appeared to be the result of intermittent and almost rhythmical contractions of an enlarged uterus. We could not detect a fœtal heart-beat, nor feel active movements; but the lady asserted that she regularly felt the latter, and Dr. Glaister is confident of having heard the fœtal heart about a fortnight ago. It seemed to us that, as delivery *per vias naturales* could not take place, owing to the firm blocking of the pelvic brim, the probable alternative is Porro's operation."

The patient arrived in London in great discomfort, but not having suffered much from the railway journey; and I found, as Mr. Scattergood described, the pelvis completely blocked up by a solid tumour, the os uteri quite out of reach, the abdomen filled by a solid tumour, on the surface of which were several separate and movable masses, apparently outgrowths from the main tumour. To the right of the umbilicus was a solid mass, *balloting* freely, and capable of being pushed downwards and to the middle line. This, I felt confident, was the fœtal head. I could not clearly detect fœtal heart-sounds, but the placental murmur was very distinct to the left of the umbilicus and in the left iliac region.

By my desire Dr. Matthews Duncan made a careful examination of the patient on the following day (May 8th), and we saw her together on the 9th, both agreeing that Porro's operation offered the best prospect of life both to mother and child; and Dr. Duncan saying very distinctly that he believed delivery by the vagina (by craniotomy, evisceration, or any obstetric operation) was impossible. The chief point for consideration was whether, the full period of pregnancy expiring on the 13th, we should wait for that time, or for signs of commencing labour, or operate without delay. We decided upon the latter course, mainly on account of the very natural anxiety of the patient and her husband.

On the 11th of May, at 9 A.M., Dr. Day administering bichloride of methylene, and, assisted by Mr. Meredith and Dr. Godson (who undertook the care of the child), Mr. Scattergood, of Leeds, and Mr. Bishop, of Manchester, being present, all the preparations were made precisely as for ovariotomy, with all the usual antiseptic precautions, including the use of spray. I divided the abdominal wall in the median line, midway between the umbilicus and pubes, to an extent of about five inches. The uterus was free, but was covered by layers of broad ligament extending upwards from the bladder. Some of these were divided and pushed aside and downwards, and the uterine cavity was opened by careful puncture. As the liquor amnii escaped I tore an aperture in the thin uterine wall large enough to enable me to draw out the child's head. The body followed immediately on very slight traction. The funis was compressed by two pairs of forceps and divided between them. Dr. Godson took charge of the child, which cried loudly. I did not interfere with the placenta, and finding that the opening in the abdominal wall was not long enough to allow the uterine tumour to pass out, I enlarged it as high as the upper border of the umbilicus, so that the opening was about seven inches in length. I was then able to draw out the uterus with the main tumour which had filled the pelvis, and several sub-peritoneal outgrowths, with both ovaries. As just stated, the bladder was partially separated from the uterus before opening the cavity. I now completed this separation, carefully pressing the bladder forwards as Mr. Meredith passed a constricting wire around the base of the tumour, and gradually tightened it by the screw. I was naturally uncertain as to the exact position of the ureters, under such altered conditions, and therefore kept the wire more upon the base of the tumour than was perhaps quite necessary. But when it was tightened, and I had cut away the whole mass some two inches above the wire, the stump was not much larger than a five-shilling piece. I cut away as much of the solid tumour, after further tightening of the wire, as could be done safely, and passed a long pin through the remaining stump across from side to side just above the wire. On proceeding to sponge the peritoneal cavity I found a free tumour as large as a flattened orange, surrounded by and closely connected with the cæcum, the appendix cæci, and a piece of omentum. The separation of this tumour from its connections had to be effected with extreme care, and added considerably to the time occupied in the operation. Several ligatures were applied during the process, and parts of the separated omentum were cut away. The opening in the abdominal wall was then closed by silk sutures precisely as in ovariotomy. The stump was fixed at the lower angle of the wound, the lowest suture being passed not only through the parietal peritoneum and abdominal wall on each side, but also through the peritoneal coat of the stump just below the constricting wire. Salicylic wool was then pressed all round the stump under the pin, and the surface of the stump was saturated with perchloride of iron. The abdomen was then covered with pads of salicylic wool and supported by strips of adhesive plaster and a flannel belt.

No provision was made for drainage. The time occupied from the commencement of inhalation of the anæsthetic until the patient was in bed was fifty minutes. From three to four pints of liquor amnii are supposed to have escaped, but the quantity was not measured. The child weighed six pounds. The uterus with the tumour and placenta weighed nine pounds. It and the detached outgrowth were sent to the museum of the College of Surgeons on the day of operation. They may be seen there, and it may be observed that the placenta is partially detached, the uterine cavity nearly closed, and the cervical canal open. As the wire must have been constricted at least an inch below the spot where the cervix was divided, it is almost certain that the whole uterus must have been removed.

Nothing could have been more satisfactory than the progress of the patient after operation. The breasts gave no trouble, and there was no sign of milk. There was no vomiting, and no interference with bladder or bowels from the depressed stump—nor any flatulent distension of the abdomen, although there was a good deal of pain at times for several days, always relieved by the passage of flatus, and requiring rather more opium than usual. This was given by the rectum in doses of fifteen minims of laudanum. The highest temperature noted was about thirty-six hours after operation, 101.2° F. It remained about 99° until the fifth day, and then became about normal. The pulse was about 100 to 116 until the fifth day, when it gradually fell to about 80. The urine was for some days loaded with lithates, and after a week contained a good deal of mucus for a few days, but it was quite normal by the time the pin and wire came off on the fourteenth day. I had not touched the dressing until the seventh day. Then the wool was changed, the wire tightened, some shreds of the stump cut away. After this, dry cotton and iodoform in powder were applied fresh once a day, and the screw occasionally tightened. The sutures, except the lowest, were removed on the seventh day, union of the abdominal wall being perfect. Four weeks after operation—June 8th, 1887—both mother and child are, as they have been throughout, as well as after a natural labour. About half an inch remains unclosed at the lower end of the cicatrix, but the granulations are quite healthy.

TWO CASES OF TUMOUR OF THE BLADDER, RECENTLY REMOVED BY SUPRAPUBIC OPERATION: WITH REMARKS.

By SIR HENRY THOMPSON, F.R.C.S., M.B.Lond.,
Surgeon Extraordinary to H.M. the King of the Belgians: Consulting Surgeon to University College Hospital, etc.

These two cases so well illustrate certain conditions met with in papilloma of the bladder, that it may be useful to place them thus distinctly on record. Each was brought to me by my friend Mr. O. C. Maurice, of Reading, who was present at both operations.

1. A gentleman, aged 62. April 22nd, 1887, I saw him for the first time. One year and a half ago, he first saw blood in his urine; he then passed a long interval without seeing any; lately a rather free bleeding has occurred every two or three weeks. Little or no undue frequency in micturition, and very little pain are experienced.

Examined rectum: no enlarged prostate, bladder soft and yielding; no marked feature to be noted. Sounded: nothing felt. I then washed out the bladder to obtain *débris*, and observing a single shred of filmy semi-gelatinous matter in the fluid, I put it under the microscope. It was a perfect specimen of papilloma; the central axis with its vessel, with columnar epithelium radiating therefrom around the extremity and on each side. Mr. Maurice saw it with me, and recognised its exact correspondence with the papillomatous type; hence we agreed that with such evidence there was no need for further inquiry, and advised operation without needless delay. The patient is very stout, his perineum, almost concealed between the nates, was inaccessible for any purpose of operation by that route. I advised, therefore, the suprapubic operation; great obesity adding less to the difficulty above the pubes than by the perineal route, where the task of removing a tumour is more difficult and delicate, although it could not be large, judging from the brief history obtained.

May 6th. I performed the operation in the usual manner, my friend Mr. Buckston Browne assisting, and also Mr. Maurice. Partly by the knife and chiefly by the ivory separator, the bladder was speedily reached and opened. Up to this point there was no bleeding; I found a pedunculated growth, about the size of an ordinary strawberry, growing from the left side of the bladder, removed it with the finger-nail chiefly, aided by a small metal scraper, as close to the surface of the bladder as possible. The upper three-fourths of the wound was closed by stout stitches; a tube placed in the lower third; and bleeding, which for a short period had been profuse, almost ceased. It proved to be a specimen of fibrous papilloma. The patient made an excellent recovery. At the end of about ten days he appeared to be unable to empty the bladder, and learned to use the catheter. Healing of the wound now proceeded rapidly; all urine ceased to pass by it on May 24th, and it remained closed until May 31st, when it slightly reappeared, and now (June 6th) seems healed.

2. The other, a man, 44 years of age, was operated on in September, 1886, first by digital exploration, which revealed a large growth; the history of symptoms had extended over four years, hence I did the suprapubic operation at once, and removed it in the manner above described. It is unnecessary to add more, as I exhibited the patient in less than a month afterwards, at the Clinical Society; the wound soundly healed, and he was free from all symptoms.

I may add that he is at this present time actively engaged in his business and is free from all signs of the malady.

Remarks.—I have considered these two cases together because they are marked by points of interest in connection with the subject of vesical tumour. They illustrate, first, the remarkable difference which is met with in different cases of papilloma, in regard of facility in obtaining evidence of its presence in the bladder. I have on several occasions been able, as in the instance given in detail above, to demonstrate the presence of the growth at the first consultation with my colleague in the case. On the other hand, I have sometimes had to make a careful and prolonged examination of the urinary deposits, on as many as six different days, after washing out and otherwise disturbing the cavity expressly for the purpose, without being able to discover a trace of the tissue sought. This happened with the second patient, who nevertheless proved to be the subject of a large papillomatous tumour. I had no moral doubt that he was so, and advised digital examination under the circumstances; and being quite prepared for a suprapubic operation, performed it forthwith.

Secondly, the result, I think, shows the value of the perineal exploratory incision, while it in no way interferes with the high operation, which may be generally preferable to the perineal (*a*) when the tumour is large, or (*b*) placed disadvantageously for removal by the perineum, or (*c*) when the tumours are numerous and scattered, as occasionally, but not commonly, happens. In all these circumstances, with a growing appreciation of the high operation from the excellent results it has yielded me, I do not hesitate to resort to it by preference. On the other hand, when digital exploration reveals a single polypoid, accessible, and evidently amenable to the action of the forceps, no further operation is necessary. Several cases thus operated on have been living from one to six years since the operation without the slightest return of symptoms.

Thirdly, the history of papilloma is remarkably uniform in the order and progress of its chief incidents. First, a considerable hæmorrhage, without known cause, unaccompanied by pain or irritation of the bladder. It was doubtless the absence of those signs which occasioned such bleeding to be almost invariably regarded until lately as originating in the kidney. After an interval of several months, or even a year, a second attack takes place; then recurring hæmorrhages, with gradually lessening intervals between, not much pain being experienced unless obstruction to micturition is occasioned by clots. Then unduly frequent micturition gradually appears, which subsequently might be painful, although by no means necessarily so to any great extent; and finally hæmorrhage becomes more or less copious and continuous, and forms the most prominent feature of the case. Carcinoma and sarcoma, on the other hand, do not usually produce considerable hæmorrhage until the disease has reached a somewhat advanced stage. A painless hæmorrhage is very rarely, if ever, the earliest sign. The bleeding is almost invariably preceded, and sometimes for a considerable time, by signs of obstruction, by pain, or irritation of the bladder. In this respect there is a marked contrast to the history of papillomatous growths. This statement of mine has been recently called in question, probably through some misapprehension of my meaning, which may not have been made sufficiently clear. Of its general accuracy, as above stated, my large experience of vesical tumours (I have operated for their removal forty-three times) leaves no room for doubt.

Lastly, relative to the final stage in the operative procedure, the question whether it is better or not to close the bladder of the adult by sutures may be regarded by some as to a certain extent undecided. I may remark that perhaps it has not been sufficiently observed that the muscular constituent of the bladder, by its natural contractile action, narrows the opening very considerably soon after the operation, to an extent perhaps scarcely realised. The only incision I make into the bladder in operating is the simple puncture of a scalpel by the side of the hook first applied to hold the wall secure; and the little opening readily dilates to admit the index finger, while gentle stretching easily extends it as much as may be necessary to remove a large calculus or to deal with a tumour. Nevertheless, very soon afterwards, the opening little more than suffices to admit the silk flexible tube which I always place in the wound for the purpose of evacuating the bladder of its contents during two or three days after the operation. I have therefore never put a stitch into its walls, only two firm ones to close the upper two-thirds of the wound carried deep through the parietes of the abdomen, and I have never met with extravasation or suppuration in or about the line of incision or elsewhere.

If the wound appears to be slow in healing after fourteen or eighteen days have expired, and a good deal of urine is still passing through it, the patient should be taught to empty his bladder every three hours or so by catheter, as in other cases of urinary fistula indisposed to heal, and the result is usually successful, beginning sooner still if he was previously unable to empty his bladder by the natural efforts and was in the habit of using the instrument. Of this condition the first case was a good illustration; the wound healing rapidly when the urine was withdrawn habitually by catheter.

An Appropriate Jubilee Offering.—The well-timed gift of a Royal standard, made by the young ladies of Reigate, to the Royal Medical College at Epsom has been most gratefully accepted by the authorities.

Presentation.—Mr. W. Jenner Clarke, M.R.C.S., for six years assistant to Mr. Izod, has been presented with a handsomely illuminated address and a purse of over fifty sovereigns by a number of friends on the occasion of his leaving Esher.

Berlin, which has for some time suffered from the intolerable stench arising from the preparation of hides, has secured an edict setting forth that all hides shall henceforth be salted and dried at the Central Market, which is situated at a safe distance in the suburbs.

A REMARKABLE EXPERIENCE CONCERNING LEPROSY; INVOLVING CERTAIN FACTS AND STATEMENTS BEARING ON THE QUESTION—IS LEPROSY COMMUNICABLE THROUGH VACCINATION?

By W. T. GAIRDNER, M.D., LL.D.,
Professor of Medicine in the University of Glasgow.

The time seems to have arrived when, without injury or offence to anyone concerned, it is possible to bring under the notice of my medical brethren some facts, and some inferences arising more or less directly out of the facts, in a case which occurred to me some years ago, but which I have found it necessary hitherto to deal with as involving matters of professional confidence not suitable for publication. Even now I shall deem it expedient to frame this mere narrative in such terms as shall not point to any definite locality, or to any recognisable person, among those chiefly concerned; although, by a formal certificate granted only the other day, I feel, as it were, absolved from the last tie that bound me, even under the most fastidious sense of professional duty, to reticence.

Six or seven years ago the parents of a young boy, fairly healthy in appearance, but with a peculiar eruption on the skin, brought him to me, and along with him a letter from a medical gentleman whom I had entirely, or almost entirely, forgotten, but who stated himself to have been a pupil of mine in Edinburgh considerably over twenty years before. It is unnecessary to enlarge on the particulars of this case further than to state that, after more than one most careful examination, in which I had the assistance of my colleague, Professor McCall Anderson, we came to the conclusion which we announced to the parents, that the boy was suffering from incipient, but still quite well-marked, leprosy in its exanthematous form; a diagnosis afterwards amply confirmed. What struck me at the time as most peculiar was, that this case, coming from a well-known endemic seat of leprosy (an island within the tropics) and with a letter involving medical details by a medical practitioner of many years' local experience; sent to me, moreover, for medical opinion and guidance, should not have been more frankly dealt with by a diagnosis announced even to the parents, before they left the island. The father of the child was a sea-captain constantly engaged in long voyages—for the most part between this country and the island alluded to. Both father and mother were Scotch, and there were several other children, all reported as quite healthy, as also were both the parents. Under these circumstances I wrote to the medical man—who in the sequel may be called, for brevity, Doctor X.—simply stating the diagnosis arrived at, and indicating the line of treatment proposed. The parents were informed that it would be best for the child to live in this country, and his mother agreed to remain with him accordingly. And, as they appeared anxious to have every available suggestion and advice, I mentioned the name of Dr. Robert Liveing as having given much attention to the subject, and offered to write to him if they would take the boy to London, as they appeared desirous of doing. Although I wrote to Dr. Liveing, circumstances unknown to me led to a change in their plans, and, instead of going to London, they went to Manchester, where I believe some physician was consulted, but I do not remember who he was. Ultimately, the mother determined for a while to settle in Greenock, and I placed her accordingly in communication with Dr. Wilson of that town, who for some time thereafter remained in medical charge of the case.

Meanwhile, the course of post brought me in a few months a reply from Dr. X., not only entirely assenting to our diagnosis as communicated to him, but stating that he had been perfectly well aware from the first of the case being one of leprosy, but had deliberately chosen not to affirm the fact or even to allude to it in any way, either in his communications with the parents or in his letter to me. No reason was assigned for this (as it appeared to me) very remarkable reticence; but, as I did not wish to have the credit of having discovered for the first time what a gentleman so much more familiar with the disease might have been supposed to have overlooked, I took means to inform the parents of Dr. X.'s reply, and of his having been all along of the same opinion with regard to the disease as we were.

After this the matter passed out of my mind, and for several years I neither saw nor heard of this child except accidentally and in a way entirely to confirm first impressions. About three years ago, however, while engaged in lecturing on specific diseases, and among others, briefly, on leprosy, I made an effort to find out something more about this patient. The mother had removed from Greenock, and had brought over the whole family to Helensburgh, where, as I learned, they were visited by Drs. Reid and Sewell, and from the latter I now learned that the poor boy had gone steadily to the worse, and was extremely feeble, covered with sores, and in a most deplorable condition physically, but still receiving every attention and care that constant medical treatment, with the most faithful and loving maternal nursing, could afford to lighten his sufferings. I accordingly proposed, within the next few days, a visit to my old patient as a matter of satisfaction to myself. Unhappily there was no other apparent object, either as regards diagnosis or treatment, for a visit which was, nevertheless, very gratefully accepted.

The case was now in the most advanced stage of leprosy, proceeding to mutilation of the extremities, and accompanied not only by external sores, but presumably by internal lesions, which had reduced the patient to the last stage of emaciation. It was on this visit that the curious particulars now to be related were first brought to my knowledge by Dr. Sewell, and afterwards confirmed by the statement of the mother, showing very clearly, though, of course, upon second-hand information to a certain extent, that Dr. X. had a very special reason for his extraordinary reticence in the first instance. Her husband, who in his frequent voyages had opportunities of coming into communication with Dr. X., had remarked to him how very strange it was that, even in writing to a medical man about the case, he had given no hint of his opinion about it. The Doctor's reply to this was, in the end, to the effect that he had kept silence because he did not wish to compromise a boy of his own, whom he (Dr. X.) believed to be a leper, and from whom he believed at the time that the boy he had sent to this country had become infected with the disease. He further explained that he had vaccinated his own boy with virus derived from a native child in a leprous family, and, as I understood (though perhaps not definitely so stated) that leprosy had declared itself in the native child after the vaccination; and, further, that (using his own child as a *vaccinifer*) he had vaccinated our patient directly from him. Before sending the last-named patient away with his parents, he had satisfied his own mind not only that his own boy was leprous, but that he had in this way become the source of the disease to another; but, the disease in his own child being in a very mild form, he was anxious not to disclose its existence. Meanwhile Dr. X. had died; his estate had passed into the hands of trustees; and I was informed that this reputed leper-boy had been, under the instructions of his father and his guardian, placed and retained at a public school well known to me in this country, and that the boy was pursuing the usual course of a public-school education, in entire unconsciousness of the disease with which he was supposed to be affected.

This information, so communicated, placed me in rather a difficult dilemma, namely—was I justified in taking steps to ascertain the truth of the story as regards Dr. X.'s boy, either by personal investigation or, at least, by inquiries conducted so as to result in a well-grounded and scientifically exact opinion as to the facts? And, further, supposing that such opinion should turn out to be that Dr. X.'s boy was a leper, was it a matter of duty on account of others to formally disclose the fact, be the consequences to the boy what they might? It was hardly probable that a boy generally known to be a leper would be retained permanently in any public school in this country, even had it been unquestionably a matter of medical doctrine that such a proceeding was quite safe. On the other hand, the boy was receiving the benefits of an English education at the express wish and on the responsibility of his father and guardian, and without (so far as appeared) any misgivings on the part of anyone. He was an orphan, and in what was to him a foreign land; his remaining under instruction might be, and probably was, a matter of the greatest possible importance to him. To bring him, therefore, even by an indiscreet inquiry, under the ban which in many or most countries still attaches to leprosy was certainly no part of the business of an outsider, and could only be justified at all by an overwhelming sense of duty to others.

Under these circumstances I thought it well to consult, privately, one or two of those friends in London whom I believed to know most about leprosy, and among others Dr. Liveing, whom I was able to remind, at this stage, of my previous letter. These friends concurred in assuring me that, in the rather improbable event of their being personally consulted as to the retention of a leper in a public school (it being presumed, of course, that he was physically fit otherwise), they would have no hesitation at all in affirming that the other boys would not be endangered by such proceeding. As I happened to be very well acquainted with one of the medical officers (though not the ordinary medical officer) of the school in question, I communicated these

opinions to him, and stated to him at the same time the extraordinary circumstances which had begotten, for me, such a lively interest in the son of Dr. X. In the course of a few days I was informed that an inquiry had been held by the medical staff; that the boy had been sent for and privately examined (though not ostensibly ill in any sense); and that it was, beyond all doubt, considered to be a case of leprosy. The medical authorities decided, however, that under the circumstances it was not their duty to sound the alarm, or in any way to disturb the boy's education.

From this time onwards (except the death of the first patient soon afterwards) I heard nothing more of these matters till a few weeks ago, when I was asked to see Dr. X.'s son professionally on behalf of the school-authorities; and, if so advised, to request Dr. Anderson also to give an opinion as to the present state of health of this young man, who happened at the time to be visiting some friends in Glasgow. It was represented to me that he had maintained, on the whole, fairly good health since I last heard of him through my medical friend, and had not been incapacitated from school-work except on account of a contagious eczema which had been prevailing, and with which he had been affected in common with other boys. Apparently, however, the opinion had arisen that his general health was not quite so good, and that in view of a cutaneous affection of this kind, apparently communicable, existing, it was no longer expedient that he should remain at the school. Indeed, I could not but come to the conclusion that his removal, on public grounds, had been practically settled; and with every desire to soften the blow as much as possible to the poor boy, it was felt to be necessary that his guardian, at least, should receive unequivocal and unbiassed testimony as to the actual state of the facts and circumstances under which the decision was arrived at. Under these circumstances I saw and examined this boy, and made a report, along with Dr. Anderson, to the effect that the disease was evidently leprosy, though of a remarkably mild type, as shown by discolorations and cicatrices, and also by large anæsthetic areas on the back of one limb. All breaches of surface, however, and all discharge had ceased at the time of our report, and Dr. Anderson felt still in a position to affirm that no danger to others could occur from the boy's remaining at school. On this last point I did not feel able to give an unqualified assent to my colleague's opinion; but as regards the matters of fact and observation there was no doubt whatever, and our report accordingly on these was substantially as above.

A NEW OPERATION FOR HEPATIC ABSCESS.

By GEORGE ZANCAROL, M.D. Paris,
Surgeon to the Greek Hospital, Alexandria, Egypt.

THE following operation has been performed by me with excellent results for more than two years. I therefore think that a short account of my method may be of interest to surgeons and practitioners who may have cases under their care.

The operation consists in making a large opening sufficient to expose the whole cavity of the abscess, and in thoroughly cleansing it of all pus and *débris* of sloughing hepatic tissue. It may be divided into three stages: 1. Exploration of the liver; 2, Opening the abscess; 3, Cleansing the abscess-cavity.

1. *Exploration of the Liver.*—After having well washed the skin with a brush and soap and water and a 2 per cent. solution of carbolic acid, an exploring trocar is plunged into the liver to find the abscess; this exploratory puncture may have to be repeated several times, so that a good idea may be formed of the size and direction of the abscess.

2. *Opening the Abscess.*—An opening is made with the thermo-cautery into the lower third of the abscess, five to seven centimètres (two to nearly three inches) long, according to the size of the abscess, and as much as possible in the direction of its greatest diameter. This opening must be sufficiently large to enable the surgeon to see the whole cavity with ease when the edges of the opening are held well apart by retractors. To obtain this result in abscesses of the left lobe an opening in the soft parts will suffice; but if the abscess is in the right lobe, resection of one or two ribs will be necessary. This resection is also performed with the thermo-cautery, using an elevator to detach the periosteum, and Liston's bone-forceps, care being taken not to wound the intercostal artery; should this, however, happen, the hæmorrhage will cease as soon as the abscess is opened. After resection of the bone, the abscess is opened with the thermo-cautery, keeping always in the direction of the resected rib, and with the aid of two strong retractors held by an assistant, while the margins of the incision are kept open, they are pressed against the liver, and kept in close contact with the abdominal and thoracic walls, so as to prevent either pus, or the liquids used for washing out the abscess, from finding their way into the abdominal or pleural cavities. If this precaution be observed, no harm will result, even should there be no adhesion between the wall of the abscess and the parietal peritoneum; for when once the abscess has been thoroughly washed and cleansed, adhesions will be established before fresh pus can accumulate. In fifty such operations performed by me during the last two years, no purulent matter has ever escaped into the pleural or peritoneal cavities, although cases were operated upon in which no adhesions existed.

3. *Cleansing the Abscess-Cavity.*—The retractors being still held in the position already described by an assistant, a strong current of warm distilled water is allowed to play within the abscess-cavity by means of a siphon; every particle of adherent pus and necrosed tissue is removed with the fingers, or with sponges fitted to proper holders, and the washing-out is continued until the walls of the cavity look perfectly clean, often granulating, and the water returns clear. The retractors are then withdrawn, two drainage-tubes of large calibre are inserted in the cavity, and the dressings applied, which are left undisturbed for twenty-four hours; the cavity is then washed out again with warm distilled water, as above described, and the current kept on until the water returns perfectly clear.

As a rule, the temperature becomes normal immediately after the first washing, but if fever should reappear, or if the pus is abundant, the washing-out should be repeated every twelve hours; if, in spite of all this, the fever persists, or diarrhœa sets in, this would indicate that other abscesses exist in the liver, and such cases are invariably fatal.

OPHTHALMIC REPAIR AND SENILE DECAY.

By ANDERSON CRITCHETT, M.A. CANTAB.,
Ophthalmic Surgeon to, and Lecturer on Ophthalmic Surgery at, St. Mary's Hospital.

AMONGST the many interesting facts which Professor Humphry has noted in connection with longevity, there is none which at the first glance causes more surprise than that people of advanced age possess, as a rule, remarkably good healing power. Every experienced surgeon could, however, bear witness to the correctness of the Professor's observation, and I have recently had several cases under my care which show that not only will wounds in such a delicate organ as the eye unite by first intention in very aged patients, but that the healing process may make steady progress towards completion while the physical powers are in the last stage of exhaustion and decay.

I had arranged to operate for cataract in the spring of last year on a nobleman, aged 84, when I was informed by his medical attendant, Mr. Tegart, that the patient was suffering from gangrene of the foot, which, of course, necessitated the postponement of the ophthalmic operation. The patient was, however, extremely anxious that an effort should be made to restore his sight, and in the following September he had recovered a sufficient measure of health and strength to justify me in removing the cataract. The eye was rendered completely anæsthetic with cucaine, and I made my incision at the corneo-scleral margin, completing it through the tissue of an arcus senilis, which I have always found to possess good healing capacity. As the lens did not yield readily to moderate pressure, I removed it with a spoon, and without any loss of vitreous. All went well till the fifth day, when the patient had an alarming fainting fit, and remained in a state of collapse for some hours.

Although he rallied somewhat from this attack, he speedily relapsed into others of a similar character, and in spite of the most careful nursing and the constant attendance of Sir William Jenner and Mr. Tegart, he gradually grew weaker, and sank at the end of six weeks from the commencement of his last illness. I frequently examined the operated eye and tested the sight, and I was surprised to find that, notwithstanding the great physical weakness, the process of repair proceeded at the usual rate and in the most perfect manner. The vision was excellent, the patient being delighted to recognise the faces of those around him, and, with a suitable lens, telling the time by a watch correctly.

I had a similar experience last year with a lady, aged 93, who, despite an attack of apoplexy with hemiplegia six days after an operation for cataract, was able to heal my incision by first intention. I have quite recently operated for cataract on two clergymen, aged respectively 92 and 96; and in both cases, although the patients were in feeble health, the elder of them being unable to move from chair to chair without assistance, the wounds have healed well, and the sight has been fully up to the usual standard. Encouraged by these results, I lately offered to operate on a lady in reduced circumstances, who has

cataract in both eyes, and is within a few months of completing her century. She took a fortnight to consider my proposal, and then, exercising the undoubted prerogative of her sex, and perhaps, also, at such an exceptionally advanced age, a wise discretion, declined it.

In three of the four cases I have mentioned I had performed a preliminary iridectomy some months before the removal of the cataracts, and I shall in future, if opportunity favour me, adopt a similar precaution in operating upon patients of advanced age, as I am convinced that by so doing a higher average of success is achieved. Mr. Higgens, not long ago, published a series of cataract-operations on old people in which he had obtained very excellent results, and I hope that his experience and my own may encourage others to attempt the storming of these ancient citadels, for the gift of sight is none the less prized and gratefully welcomed by the aged, because it comes to them in the sunset of their life.

A CASE OF VARICOSE ANEURYSM OF THE FEMORAL ARTERY AND VEIN.[1]

By Brigade-Surgeon C. H. Y. GODWIN, M.S.,
Assistant Professor of Military Surgery, Royal Victoria Hospital, Netley.

A sergeant, aged 29, on March 21st, 1886, in a rush upon a stockade in Burmah, was wounded by a pointed bamboo stake which had been purposely fastened into the ground. The point entered the right thigh one inch and a half above the patella, and passed upwards and inwards for about two inches. Its withdrawal was followed by a gush of arterial blood. A comrade bound it up with a handkerchief, which he tightened by twisting it round with a sword. Upon reaching a surgeon some time after, the bandage was removed, when free bleeding again ensued, but the blood was dark in colour, and did not come in gushes as before. The bleeding was quite controlled by a bandage. The wound healed up in a fortnight, but the limb was greatly discoloured from blood infiltration.

On April 11th he noticed a swelling on the inner side of the middle third of the thigh, and subsequently a second swelling of a more diffused character lower down, and upon the anterior and inner surface of the thigh. The tumours gave all the indications of an aneurysm, and they were treated by digital pressure of the artery by relays of men for fourteen hours a day for a considerable time. Under this treatment the tumours are said to have become smaller. He arrived at Netley on December 8th, 1886, in good health, and was able to move about with great facility and without pain or inconvenience. He had a scar an inch and a half above the right patella. About six inches above the knee a distinct swelling was plainly visible, ovoid in form; and higher up, but more on the inner aspect of the leg, another tumour was apparent, but not so distinct in outline as the lower one. They both gave evidence of a distinct pulsation, with an impulse given to both swellings; in either swelling a thrill was perceptible to the hand. A loud, rasping, harsh, and continuous *bruit* could be heard, which was completely silenced by pressure upon the femoral artery. The sounds in the upper tumour were of the same character as those in the lower one, but not so intense.

Remarks.—No doubt both artery and vein were wounded. Were the swellings distinct, or were they connected? Distinct swellings could be accounted for by the lower and anterior tumour being a traumatic aneurysm connected with the wound in the anterior wall of the artery, and the upper and inner one a varicose aneurysm connected with the wound of the artery and vein. As the tumours were quite stationary, or, as the man thought, were getting smaller, and as there was no swelling of the leg or other inconvenience, it was not thought advisable to interfere surgically in this case.

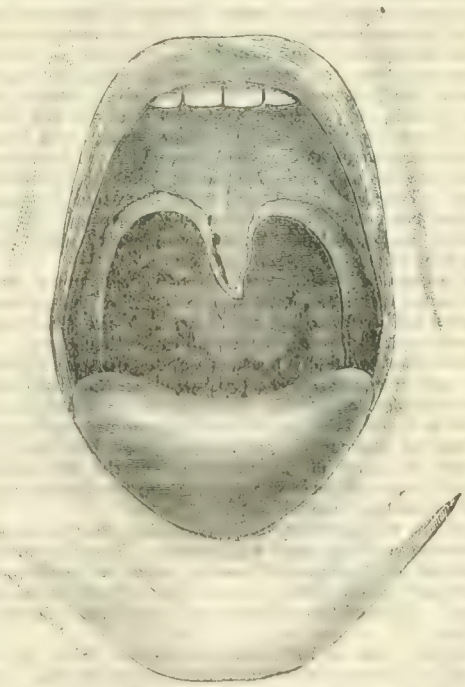
[1] Read before the Southampton Branch of the British Medical Association.

A CASE OF ANGIOMA OF THE PHARYNX.

By R. NORRIS WOLFENDEN, M.D.Cantab.,
Senior Physician to the Throat Hospital, Golden Square.

This case, apparently unique, seems worthy of record. The patient, a young girl, aged 25, of good general health, occupied as a nursery governess, was sent to me on October 25th, 1886, for advice as to the condition of her throat. What had attracted the attention of a suburban practitioner was a swelling in the front of the neck on the right side, about the level of the hyoid bone, and of the size of a hen's egg. This, however, gave rise to no inconvenience. It was soft, and was thought by us to be of lymphatic nature. Coursing through it could be felt some hard cordy vessels. On the back of the neck, chiefly on the right side and at the level of the pharyngeal tumour to be mentioned presently, there was a collection of hard, superficial, varicose veins. The back of the pharynx presented the most curious aspect. On illuminating the throat, a large angioma was seen to occupy the whole of the right side of the posterior wall of the pharynx, in the pharyngo-oral region. It appeared to spring from the posterior and lateral wall of the pharynx, behind the posterior faucial pillar, was considerably raised above the surface, and extended as far as the middle line of the pharynx. It was knotty, dense, and of purple colour. A small portion extended over to the left of the median line. Above, it reached to a little higher than the level of the soft palate, when raised on phonation; below, the mass extended to the level of the base of the tongue, and, as far as could be seen, some varicose veins extended down towards the œsophagus. The tumour was thus of considerable size, and of remarkable appearance. The tonsils being very small, it was visible on simply opening the mouth. Some tortuous varicose vessels coursed along the right anterior faucial pillar and along the right side of the uvula. The most remarkable feature of this curious condition was that the patient had never suffered the slightest inconvenience from it. Just occasionally she had felt a "lump in the throat" when she had taken cold. Though the tumour encroached upon the lumen of the pharynx, there was no interference with swallowing. The patient was apparently unaware of the fact that she possessed this angioma, and the only history to be obtained was that the soft (? lymphatic) tumour in the front of the neck was first noticed when she was seven years old. My colleague, Dr. Morell Mackenzie, to whom I showed the patient, informs me that he has never seen a similar case.

Small angiomata, particularly about the base of the tongue and the larynx, are not infrequently met with. I cannot find any such case as this, however, recorded, and the condition is probably quite unique. As the vascular tumour gave rise to no inconvenience, it was judged expedient, from its size and extent, to leave it untouched. I append a drawing of the pharynx, reproduced from one kindly made for me by Mr. P. S. Hutchinson, resident medical officer at the Throat Hospital.



In the *Annales des Maladies de l'Oreille, du Larynx, etc.*, of February, 1887, is an interesting contribution from Farlow, of Boston,[1] giving details of five cases of voluminous arteries (pulsatile and visible to the naked eye) of the posterior pharyngeal wall. It is concluded that the vessels implicated in these cases were the ascending pharyngeal branches of the external carotid arteries. Pulsating

[1] "Cinq cas d'artères volumineuses, visibles à l'œil nu, et pulsatiles de la paroi postérieure du pharynx, avec remarques," p. 69. See also *Boston Medical and Surgical Journal*, March 31st, 1887.

tumours of the pharynx have been observed by Porter and Syme, due to aneurysm of the internal carotid; and Barnes[2] has described a pharyngeal pulsating tumour which was arrested by applying pressure to the external carotid artery. Cresswell Baber[3] has recently reported a case of pulsating artery on the posterior wall of the pharynx. It is probable that this condition is by no means rare, since it has been observed at the Throat Hospital at least twice during the last year.

THE TREATMENT OF UTERINE AND PERI-UTERINE AFFECTIONS BY THE METHOD OF DR. APOSTOLI.

By GEORGE ELDER, M.D.,
Surgeon, Samaritan Hospital for Women, Nottingham.

For some time past my attention has been directed to the treatment more especially of uterine myoma by electrolysis, and most of the literature on this subject is known to me; but the manner of its use seemed not only so imperfect and uncertain, and also dangerous, that I hesitated to adopt the practice until the reading of a recent pamphlet on the treatment of endometritis by the galvano-caustic, as perfected by Apostoli, threw a new and more hopeful light upon the subject.

Dr. Webb's letter in your issue of May 7th stimulated my curiosity still further, and accordingly I went to Paris and attended Dr. Apostoli's *clinique* on two days, and will very briefly state what I saw.

1. Case of a woman, aged 41 years, who had been under treatment for a rapidly-growing soft myoma, which condensed and diminished in size after four galvano-positive applications. The floodings and pelvic pains had also ceased, and now the patient is under treatment for a form of heart-disease.

2. First visit of a woman with a myoma, who had had metrorrhagia continuously for four months. The uterine cavity measured four inches. Galvano-positive cauterisation was applied for five minutes, and two days afterwards she stated that the hæmorrhage had ceased the same evening.

3. A patient who had been under treatment for some time with an interstitial myoma in the posterior wall with the usual symptoms, and which had diminished quite two-thirds. Several galvano-punctures into the growth from the vagina had been made, and whereas, prior to beginning the treatment, she had been unable to work, and, as she expressed herself, only existed; now, and even the day after a puncture, she follows her occupation of a washerwoman, and lives.

4. A case of myoma reaching up to the umbilicus in a woman aged 31 years, and who has had since November, 1886, nine galvano-negative punctures. The last had caused some degree of suppuration and feverishness, but not sufficient to lay the patient up. The growth is diminishing, and the local discomforts ceasing, whilst *pari passu* there has been improved general health.

5. An instance of endometritis with metrorrhagia of two months' duration, under treatment since May 12th. The first galvano-positive cauterisation had relieved her, and now, after the third *séance*, there remains only a slight brownish staining of the discharge.

6. A case which originally had been under treatment for right parametritis, and which galvano-negative puncturing had cured. Now she comes complaining of what seems to be an enlarged and cystic ovary, but as it is not the seat of much discomfort, nothing is done.

7. A case of perimetritic exudation, which had been punctured thrice, with the result of resolving most of the thickening, but as there is still a considerable amount of pain, faradisation is now being used for its relief successfully.

8. A patient who had been under treatment four years ago with a myoma accompanied by much hæmorrhage. The tumour had, under treatment, all but disappeared, and the menstrual flow is now normal.

9. Examined a case where there had been general parametritis fixing uterus. Eight galvano-negative punctures had effected resolution of this mass.

10. The only case in which anæsthesia was used, was this of a woman aged 51 years, suffering from a large myoma. A galvano-negative puncture was made into the growth, and a current with the intensity of 220 milliampères used for 5 minutes.

11. A new case of a young woman with a soft, rapidly-growing interstitial myoma, brought by her medical attendant. A galvano-negative puncture was made, and an intensity of 100 milliampères used for 5 minutes, which is the average duration.

12. An instance of a bleeding myoma in a woman aged 49 years, who before coming to the *clinique* had had the usual treatment by drugs for eighteen months without effect and been unable to work; has had six punctures. Hæmorrhage began to abate after the first. Now the flow is regular, lasting only two days, and she is able to work as a washerwoman.

13. A case of right ovaralgia, who had been under other treatment for fourteen months without benefit, is being cured by faradisation.

14. A case of metritis with constant bloody discharges for two months after an abortion, when three galvano-positive cauterisations had stopped hæmorrhage, and now she comes from time to time to verify condition.

The above, although not including all the cases Dr. Apostoli showed me, gives an accurate idea of the kind of cases under treatment and benefiting by its application.

What impressed me most favourably was the extreme care taken to record faithfully the histories and nature of the cases, with the subsequent results of the treatment upon them, and in all of the patients an opportunity was given of verifying the diagnosis.

With the exception of the instance above noted, no anæsthetic was used; in fact, nothing but a very transient discomfort seemed to be felt by the patients even when a puncture was made; and the majority of them, after waiting a few minutes, dressed and left the dispensary, evidently unaffected by the application.

Dr. Apostoli stated that in no case had any serious consequences followed the method—a result, I think, to be attributed partly to his attention to thorough antisepsis, and also to his making the tolerance of the patient the measure of the strength of the application.

To my mind this treatment opens up a hitherto neglected and very hopeful era in the therapeusis of uterine diseases, which is now only beginning to receive a full measure of recognition by gynæcologists.

Dr. Apostoli has had a considerable number of American visitors, some of whom, since their return to their own country, have carried out the treatment with gratifying success; and during my own visit Mr. Skene Keith and Dr. Philip, of Edinburgh, shared with me in the valuable lessons the cases taught.

My thanks are due, first, to Dr. Apostoli for the courtesy which he showed me; and, secondly, to Dr. Webb, through whom my visit to Paris was made.

[2] Ashurst's *Encyclopædia*, Vol. v.
[3] British Medical Journal, p. 626. 1887.

OPHTHALMOLOGICAL MEMORANDA.

CATARACT EXTRACTION (V. GRAEFE'S).

A New Method of Treating an Old Complication.

It is with considerable misgiving that I insert the word *new* in my suggestion for treating a troublesome complication which will occasionally occur to every experienced operator, and I leave it to the decision of those well acquainted with cataract extraction and its literature how far I am justified in the use of the term. What shall we do if during corneal section the iris falls over the knife?

In the hands of very skilled operators this complication rarely occurs, but there are accidents against which it is impossible to guard. I will relate the history of the case which induced me to write this communication. A. B., aged 42, a strong, healthy man, admitted into the Manchester Eye Hospital for mature cataract right, commencing left. I need say no more than that everything was as usual—eye cucainised and patient in good heart, until the moment of contra-puncture, when, without the slightest warning, he lurched his head half round, throwing the upper segment of the iris over the knife and wounding it at the same time. Only two courses were apparently open. One, to proceed with the operation, cutting out the wounded and entangled iris with the knife. The other, to withdraw the knife, treat the case as one of "trauma of the iris," and operate at a later period.

The first, a usual and sufficiently practical method if a small flap is involved would in this case have sacrified a third of the whole iris, making an enormous coloboma and materially affecting vision, beside leaving the operator s hands as a piece of work of which he might well be ashamed.

The second would appear the wiser course, but in private practice it is an impolitic thing, and very likely to lose you your patient, to confess that an accident has occurred which requires the operation to be postponed. These points occurred to me at the moment, and I decided on a third course. I withdrew the knife, leaving, as may be supposed, a very shallow anterior chamber and no aqueous, but I made a fresh puncture and contra-puncture higher up, completed the corneal section (a small one), and removed the wounded iris, treating the patient as though for preliminary iridectomy. Three weeks later the

cataract was extracted, and we are mutually satisfied, the patient because he possesses excellent vision, an eye from which the lens has been removed with the smallest appreciable amount of disturbance and disfigurement, and I, because I think the problem is solved how to retain a patient with credit should such an awkward *contretemps* again fall to my share. I may add that, although I took exceptional care in re-introducing the knife, I found no difficulty in avoiding the iris with its point.

P. H. Mules, M.D.Ed.,
Surgeon Manchester Eye Hospital.

THERAPEUTIC MEMORANDA.

ANTIPYRIN AS AN ANODYNE IN LOCOMOTOR ATAXY.

In the Journal for May 28th I notice that mention is made of the observations of Professor Germain Sée, on the anodyne action of antipyrin.

M. Germain Sée believes that this drug is the remedy *par excellence* for pain, and he has found it efficacious in rheumatism, gout, and in neuralgia. Moreover, he reports that in four out of five cases of locomotor ataxy the pains were removed by the drug.

Lépine has found that antifebrin relieves the pains in this disease.

I have tried antipyrin in three cases of locomotor ataxy, in which the pains were severe, with relief in each instance; in one case with complete abeyance.

A man, aged 48, in an advanced stage of locomotor ataxy, applied to me for relief on account of severe shooting pains in the legs, of almost daily recurrence. I gave him antipyrin in ten-grain powders, one to be taken in water when the pains came on. After taking two powders the pains ceased, and he was free from them for a week, when they returned, to be again checked by a powder. He stated that he had not been so well for twelve months, having been continually in pain. It must be remembered that Althaus, several years ago, recommended salicylate of soda for the pains of locomotor ataxy, and this drug greatly resembles antipyrin in its therapeutic action.

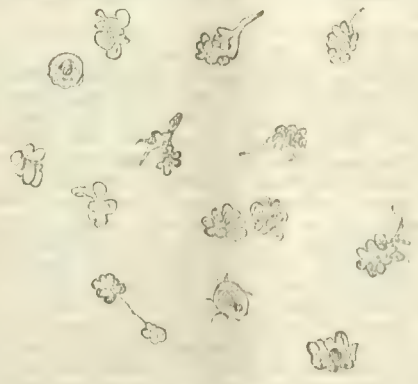
I think that antipyrin will be found to be of great use in the treatment of these hitherto intractable pains.

Birmingham. C. W. Suckling, M.D.Lond., M.R.C.P.

CLINICAL MEMORANDA.

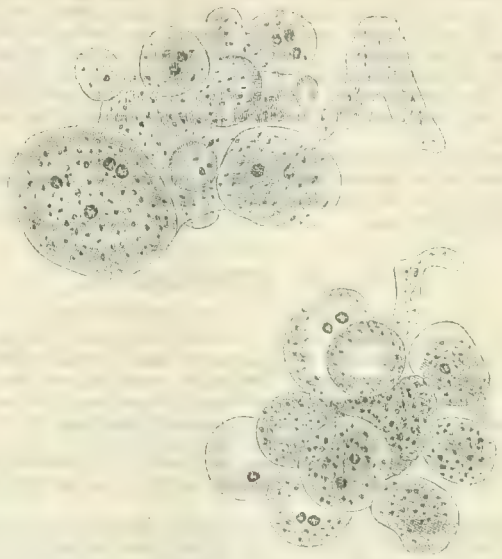
PUS-CELLS IN URINE.

Pus in the urine, as it appears under the microscope, varies in its characters. I daresay the following points are well known, and bear a simple explanation, but they may be of interest. Occurring in the urine, pus-cells are usually spherical, but in four cases I have seen them—almost all of them—irregular in shape. They possessed many processes, such as they do when they exhibit amœboid movements (only in these cases I could detect no movement), and many of them were covered with spherical outgrowths of their substance—so much covered, in some cases, as to look like mulberries. These were not so large as the nuclei of the cells, and in one of the cases, nearly all that I examined with a high power ($\frac{1}{2}\frac{1}{0}$ o. i.) contained cocci, many of them alive and in violent motion.



Pus in Urine. × 500.

On running in an aqueous solution of meth. blue, those cells which had fewest projections took the stain first—first the nucleus, then the cocci, and lastly the cell substance. Of the four cases mentioned, all had hæmaturia, two of them were of stone in the kidney, a third was suspected to be so, and the last was an obscure case, in which, however, a urethral discharge was suspected soon afterwards.



× 3,000. Pus in Urine.

I fancied that freshly-examined urine contained more of these irregular cells than did that which had been drawn for some time, but the cells preserved their form for at least six hours after the urine had been voided. I enclose some sketches of these cells.

Guy's Hospital. Harold G. Dixon, M.A.Cantab.

OBSTETRIC MEMORANDA.

A CASE OF "SIAMESE TWINS."

On May 17th, 1887, I attended Mrs. S., aged 22, in her second confinement. I found the head low in the pelvis, the face anterior, and the head almost exactly in the conjugate axis. As labour was protracted, forceps was applied, and the head was brought down with no great difficulty, but to the surprise of my principal, Dr. Lyon Smith, who gave chloroform, and myself, the child remained quite immovable. Strong traction on the head and from the axillæ had not the least effect, and, as the child was certainly dead, there was no hesitation in using force. The arms were brought down, but even then no movement was got, and the case was suspected to be one of locked twins. On thrusting the hand quite up alongside the child, I felt the pelvis of the first child all right, but from its trunk there was a broad prolongation, passing forwards above the pubes. The features of another face could also be felt, and so the fact of monstrosity was decided. The first child was born by the head being pulled forwards and upwards in front of the pubes, whilst the fingers, passed from behind into the perineum of the child, pulled in the same axis. The second child, broadly attached to the side of the first, was then dragged after it, being doubled backwards on itself, the head coming before the pelvis. The placenta, entangled somehow with the second child, was born with it. There was considerable hæmorrhage, which was checked by the injection of hot water.

We failed in our effort to get the bodies, and the following are the only details obtained. Both children, except for the area of union, were beautifully perfect. Heads, shoulders, pelves, limbs, and genitals were all complete. They were both females. A section through the line of union would have shown an oval, the longer axis extending from under the level of the axilla to a little below the umbilicus, and the shorter from the middle of the lateral region to the common umbilicus. There were two thoracic cavities, but only one abdominal cavity. There was one placenta and one umbilical cord. The cord was split for a couple of inches from the abdominal wall, which was also torn for a short distance, allowing the protrusion of a portion of bowel. The finger, inserted by this opening, discovered only one liver, but this extended quite across the cavity. The weight was

11 lbs., the length of each over seventeen inches, the breadth of the waists six inches, and their circumference sixteen inches and a half. The mother's perineum remained intact, and she made a very good recovery.

The impossibility of diagnosing such a condition in the ordinary stages of labour makes general directions as to treatment worthless, and the only point in this case which seemed to admit of discussion was—when the attachment of the children was discovered—whether to sever them at the uniting part, or to attempt delivery as they were. Whether the course pursued was the better or not, the result seems to illustrate well how much the maternal parts can be subjected to without injury.

The immunity from secondary harm to the mother is probably largely due to the speedy completion of delivery, it being all over within ten hours of the commencement of labour.

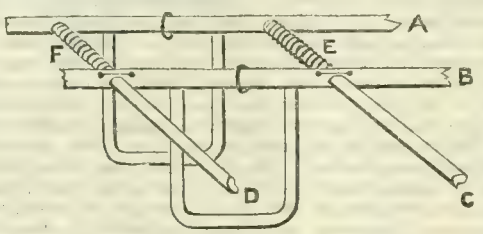
Pelton Fell, Durham. JAMES WANDS, M.B., C.M.Glasg.

SURGICAL MEMORANDA.

EARLY TRACHEOTOMY IN DIPHTHERIA.

IN reference to Mr. Owen's letter, I venture to suggest that the difficulty of thorough treatment of membranous patches with antiseptics might be lessened in practice. First, as to swabbing out the open trachea. When the Golding-Bird dilator is worn instead of a tube, the open sides of the trachea can be constantly watched, and a fragment of sponge or a camel-hair pencil gently applied. I think my patient has sometimes not even been awakened by this when asleep. There is no membrane to be removed every time we apply the dressing.

The objections to this dilator are chiefly its liability to get knocked out; the way in which the blades slip up and down instead of remaining parallel to each other; and the difficulty of replacing it quickly if knocked out. I have devised an instrument which is, I hope, free from some of these dangers, and which can be securely fastened in while allowing free examination and manipulation of the trachea. It is remarkable how firmly, indeed, the old dilator kept in place until it got a blow from the hand of the patient or of the nurse. The instrument, which I am getting Mr. Maw to make me, consists of two parallel bars, to lie just over the surface of the neck, each having fixed at right angles on its under surface a stout square loop of silver wire, which enters into and supports the trachea on each side. To one of these bars cross-pieces are fixed, which run through mortice-holes in the other, and round each cross-piece a spiral spring is coiled. The sides of the instrument can thus be pressed almost together between the thumb and finger, and the wire loops placed in the wound. When released, they separate, and are fixed at any given point by a catch. There is nothing to obstruct the tracheal opening, and, indeed, a cannula can be slipped in between the blades if desired, and the two sides withdrawn separately.



A B The parallel bars. C D The cross pieces fixed to A, and worked through holes in B. E F Spiral springs coiled round C and D.

Moreover, to prevent the possibility of dislodgement, a tape can be carried round the neck and fastened to the middle of each bar, or preferably to a ring running freely along the bar. The latter would permit considerable lateral movement of the neck and up and down movement of the trachea taking place without loosening the grip of the instrument on the sides of the trachea. We have, then, an instrument which can be introduced in an instant, if the opening is of the right size, partly fixes itself, and can hardly be dislodged by any accident, while it affords a clear view of the trachea. I need hardly say that it is a great point if the parents can be induced to keep on the child soft knitted or flannel shoulder-straps and wristlets, confining him in one position. As far as my experience goes, he generally soon gets accustomed to them. Of course, in older children and adults these are not usually necessary.

As to swabbing out the fauces: although in an adult we may depress the tongue and examine the patches carefully by the aid of reflected light each time whilst applying our sponge, is it so very distressing or difficult in the case of a child, after making a careful examination of the fauces in, let us say, the morning, to slip in a sponge-forceps every hour, if he can be got to open his mouth, and to soak gently but swiftly the fauces? Does this frighten a nervous patient much more than a cold spray? The great difficulties, of course, are to get at the larynx, and the avulsion of membrane, if both these points are necessary; but in the latter case we can employ cucaine.

Bristol. GEORGE PARKER, M.D.

ASPHYXIA FROM ROUND WORM.

ON April 14th, 1887, I was called by the police to view the body of S., a Hindu child, aged 5, who had died suddenly the evening before. According to her father, the child had been in her usual health till 4 P.M., when she was attacked with a slight cough. After this she became unconscious, and died quietly at 9 P.M. I found the body well nourished and with plenty of subcutaneous fat. The lungs were congested at the bases; all the other viscera were healthy. On slitting up the larynx I found a living round worm at the upper orifice. It was about three inches long, and appeared to have been lying above the epiglottis. The stomach was full of food, and there was no history of vomiting. It would seem, therefore, that the worm had worked its way up. I found no more worms in the stomach or intestine.

BEAVEN RAKE, M.D.Lond.,
Government Medical Officer, Trinidad.

IMPACTION OF HAIR-PIN IN THE MALE URETHRA.

A FEW days ago I was called to a gentleman who said he had passed a hair-pin, with the rounded end first, into his urethra in order to make his urine flow more freely, and then found out he was unable to extract it. The points could be distinctly felt through the glans, but it was quite impossible to get them free and make them protrude through the orifice of the urethra. After placing the patient under chloroform, I cut down upon one point, and after this was able to force the other through the glans; then, by nipping off one of the arms as low down as possible, and gently twisting the other, succeeded in getting the remaining part of the pin quite free. There was very little hæmorrhage at the time, and no subsequent fistula; in fact, no trouble of any kind followed the operation.

Kingston-on-Thames. REGINALD BAILEY, L.R.C.P.Ed.

PAINLESS DESTRUCTION OF NÆVI.

A. B., aged 2, suffering from a nævus the size of a shilling, behind the right ear, was on May 12th, 1887, treated by me in the following manner for its removal. Having first painted the healthy skin around the circumference of the nævus, for about half an inch, with a coating of collodion flexile, I applied a thick layer of a 4 per cent. solution of corrosive sublimate in collodion over the nævus. On the 25th, when I removed the collodion, the nævus had entirely disappeared, and nothing remained but a small scab. Dr. Boing was the first to suggest this method of treatment, and my object in publishing this case is to draw attention to so simple, satisfactory, and painless a method of treatment. R. H. G. HUNTER, M.R.C.S., etc.

Battersea.

BEQUESTS, ETC.—Mr. Thomas Edward Jones, of Wilmslow, bequeathed £500 to the Montgomeryshire Infirmary at Newtown; £300 each to the Southern Hospital, the Royal Eye Hospital, and the Hospital for Consumption and Diseases of the Throat, all at Manchester; £200 each to the Manchester and Salford Sanitary Association, the Manchester and Salford Institution for the Training of Nurses, and the Manchester Institution for Diseases of the Eye; and £5,000 upon a certain contingency, and the "residue" of his property absolutely to the Manchester Royal Infirmary.—Mrs. Margaret William Tryon Cumberland, widow of Lieut.-Colonel Cumberland, of Lillington, bequeathed £300 to the North-West London Hospital, £300 to the Samaritan Free Hospital, £100 to the Hospital for Women in Soho Square, and £100 to the Warneford, Leamington, and South Warwickshire Hospital.—The Mercers' Company has, on account of the Earl of Northampton's Charity, given two hundred guineas to the National Hospital for Consumption at Ventnor, and two hundred guineas (one hundred to the general fund and one hundred to the sea-side branch) to the Metropolitan Convalescent Institution.—Dr. J. Griffith Dearden has given £100 to the Middlesex Hospital.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

ROTUNDA HOSPITAL, DUBLIN.

CASE OF ECLAMPSIA WITH ACETONES IN THE URINE.

By ALFRED J. SMITH, M.B., M.Ch., M.A.O., Assistant-Physician, Rotunda Hospital.

K. K., aged 35, for the fourth time pregnant, was admitted on April 30th of this year into the Rotunda Hospital, suffering from puerperal convulsions. Her history, as far as I could make out, was as follows. She menstruated last about the middle of October, and enjoyed the best of health up to April 25th, when she began to suffer from pains in the epigastrium, frontal headache, and general lassitude. The epigastric pains continuing, she "took to her bed," and sent for a dispensary medical officer, who ordered some medicine; this gave her no relief, for on the morning of April 30th, at 3 A.M., she was suddenly seized with a most violent pain in the epigastrium and a great feeling of suffocation and oppression about the chest, which terminated in a violent convulsive attack. She bit her tongue severely, passed her urine involuntarily, and vomited incessantly. Various household remedies were employed, but, proving of no avail, they sent to our hospital for help. She was seen by an intern pupil, who advised her friends to send her at once into hospital. She was conveyed in a cab, being kept under the influence of chloroform.

On her admission on April 30th, at 5.45 P.M, she was seen by my colleague, Dr. R. Howard Fleming, who found the patient in a state of coma; pulse 136, temperature 98.6°. He passed a catheter, ordered turpentine enema, to be followed by one of pot. bromid., chloral hydrate, of each three grains; two drops of croton-oil to be put on the back of the tongue, a hot vapour-bath and chloroform-inhalations during convulsions.

April 30th, 6 P.M. Attack of convulsions. Inhalation of chloroform; enema of pot. brom., chloral hydrate, thirty grains of each.—7.10 P.M. Attack of convulsions. Inhalation of chloroform; bromide and chloral enema.—7.45 P.M. Attack of convulsions; pulse 136, temperature 98°. Dr. Macan, the Master, left instructions for labour to be brought on. Dr. Fleming examined, found os dilated to admit two fingers, shoulder presenting; performed combined version, brought leg down, and left case to nature.

May 1st, 2 A.M. Pulse 130, temperature 98.2°. Attack of convulsions, the first she has had since version. I passed catheter, and extracted a still-born, premature male child, 3 lbs. weight, 16½ inches long. The placenta I expressed fifteen minutes afterwards. There was a good contraction and no *post-partum* hæmorrhage. Ordered enema of pot. brom. and chloral hydrate, twenty grains each.—7 A.M. Consciousness returned. Her existence from the first attack until this moment was a perfect blank.—9.30 A.M. Pulse 108, temperature 98°. Abdomen distended. Turpentine enema; catheter passed; tongue, which looked very sore, was touched with nitrate of silver. A milk-diet ordered.—2.30 P.M. Complains for the first time of dimness of vision; the left eye cannot recognise fingers at one pace.—6 P.M. Pulse 100, temperature 98°. Catheter passed. Answers questions with great difficulty. A full anodyne was given.

May 2nd, 9.30 A.M. Pulse 100, temperature 95°. Passed good night. Eye-sight troublesome. Catheter passed. Looks rather stupid.

May 3rd, 4th, 5th, 6th. Patient's condition much improved. Her eye-sight is better; she can recognise objects across the room. Her temperature during the time has been subnormal, and her pulse over 100.

May 7th. Allowed up. Temperature 97.4°, pulse 105. Can recognise people walking in the street. Allowed beef-tea; milk-diet continued.

May 9th. Discharged, with instructions to attend dispensary, to wear more underclothing, and to confine herself to milk-diet.

Urine Examination.—April 30th, 5.45 P.M. Drawn off by catheter; quantity 10 oz., clear, acid, specific gravity 1030; albumen one-half by bulk; peptones, acetones, a trace of sugar, no pus. Under microscope, numerous granular casts, epithelial cells, *débris*.

May 1st, 2 A.M. Drawn off by catheter; quantity 8 oz., muddy colour, acid reaction; albumen one-half by bulk; peptones, acetones, trace of sugar. Under microscope, granular casts, epithelial cells, *débris*.—10.30, A.M. Drawn off by catheter, straw-colour, acid reaction, specific gravity 1022; albumen one-eighth by bulk; no peptones, no acetones, traces of sugar. Under microscope, granular casts and epithelial cells.

May 2nd, 10.30 A.M. Drawn off by catheter, pale straw-colour, acid reaction, specific gravity 1020; albumen one-tenth by bulk; no peptones, no acetones; granular casts under microscope.

I examined the urine each day, morning and evening, until her discharge on May 9th, and found a persistence of albumen one-tenth by bulk, with granular casts, the number under the field of the microscope being greatly diminished. The tests by which I ascertained the presence of acetones were perchloride of iron and hydrochloric acid, and solution of iodide of potassium in liq. potassæ, giving the iodoform reaction. The various reactions in this case for albumen, peptones, and acetones I showed at the Obstetrical Society of the Academy of Medicine in Ireland on May 6th.

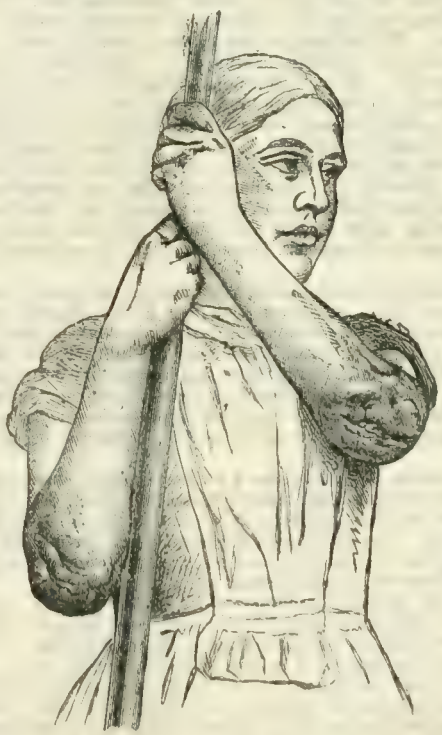
REMARKS.—When we consider the premonitory symptoms, the frontal headache, the violent epigastric pain and vomiting, associated with the marked respiratory troubles which immmediately preceded the convulsions, together with the peculiar fast small pulse, one is inclined to the belief that the acetones were the cause rather than the result of the convulsions.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, PLYMOUTH.

CASE OF EXCISION OF BOTH ELBOW JOINTS.

(Under the care of PAUL SWAIN, F.R.C.S.)

SELINA B., aged 23, a miner, from Camborne, Cornwall, was admitted on January 1st, 1885, with strumous disease of both elbow-joints. Up to two years before she had been quite healthy, when both elbow-joints became swollen and painful. In about three months an abscess formed and broke in each joint. On admission the right joint was quite stiff, preventing her from raising the hand to her mouth. It was discharging freely and was exceedingly painful. The left joint, although affected in a lesser degree, was ankylosed. On January 16th Mr. Swain excised the right elbow-joint in the usual manner, the patient making a good recovery. She was discharged on June 9th with fair motion in the joint, but with some sinuses still discharging.



In the following April she was readmitted, and the sinuses, which were still discharging, were thoroughly spooned, after which she made a perfect recovery.

On January 6th, 1887, she was again admitted into the hospital. The disease in the left elbow-joint had increased, and on January 7th

Mr. Swain excised the joint. On January 30th the wound was perfectly healed. On March 15th she was discharged, and the engraving shows her present condition. The movements in both elbow-joints are perfect; she can lift considerable weights, and is at present following her occupation as a miner at Dolcoath mine.

AYR COUNTY HOSPITAL.

FOREIGN BODY IN BRONCHUS: TRACHEOTOMY: RECOVERY.

(Under the care of W. J. NAISMITH, M.D., F.R.C.S.Edin.(Exam.), Surgeon to the Hospital.

ON December 10th, 1885, I saw, in consultation with Dr. Girvan, of Maybole, a little boy, aged 7, an only child, whose parents occupied a small farm at least seven miles from the nearest medical aid. It was alleged that upon the previous day, while amusing himself with some loose glass beads in his mouth, the boy had allowed one of them to slip into his windpipe and to nearly choke him. He had fallen down, become livid in the face, and had a series of convulsions, in the paroxysms of which he had torn his night-shirt to pieces. These had greatly subsided both in violence and frequency of recurrence when he was seen later in the day by his medical attendant, who kindly remained some hours with the child, yet totally failed in his endeavours to convince the parents of the necessity for operative procedure, or for his removal to a more accessible dwelling. The breathing at this time was somewhat embarrassed; thoracic expansion was equal and nearly normal; but the bead, on the hand being placed on the front of the neck, could be distinctly felt rattling up and down in the trachea.

On seeing him together the next day we found there had been six or eight hours' immunity from all paroxysm. The boy was dressed and sitting about, looking, as we were told, much as usual. He was silent, however, and had a distinctly congestive or "pulmonary" aspect. He was breathing 32 to the minute, with a pulse of 100 and a temperature of 99.4° F. No rattle or to-and-fro movement was perceptible in the trachea; but there was evident occlusion of the right bronchus, as no air appeared to enter the corresponding lung. There was thoracic immobility, with absence of respiratory murmur on that side, together with a nearly normal percussion-note. On the left side breathing was puerile. There was occasional cough, but no expectoration. His antecedent history was extremely good, and he was a well-developed, healthy-looking boy. Diagnosis confirmative of alleged mishap. Recommendations—immediate removal to quarters more accessible to supervision, and tracheotomy. Parental decision—both peremptorily refused, the allegation being that the fits of coughing had greatly diminished, that the boy looked much better, and that he was sure to cough up the obstruction without interference. Next day, however, the recurrence of cough and dyspnœa succeeded in wringing an unwilling consent to removal, and the boy was conveyed sixteen miles to the Ayr County Hospital, where he was admitted under my charge on December 11th, the operation being still refused.

The condition on admission, recorded in the careful notes of Mr. W. O. Dow, M.B., exhibited a change in the thoracic phenomena. The bead—presumably dislodged, during a paroxysm, from the right bronchus—was now found occluding the left, there being entire absence both of mural expansion and respiratory murmur over the left chest, and their consequent compensatory exaggeration over the right, accompanied by a somewhat hyper-resonant percussion note. The respirations were 32; the pulse 100; there was occasional slight cough.

On December 12th there was a further change, expansion and the respiratory murmur being restored to the left chest, and, though quite observable, yet less satisfactorily so, and in fact, distinctly impaired, in the right. The obstruction apparently was incomplete, and it was concluded that the bead was now at the right bronchial entrance, in a position, however, of such favour as to permit of the access of air through the lumen of its central perforation. It is here depicted of actual size, and it is of interest to note that the circumstance either of partial or complete occlusion of a bronchus depended, in respect to the perforation in the bead, on the particular position which that obstruction happened to occupy at the time; longitudinal impaction implying complete closure, while the transverse or horizontal position permitted of the respiratory act, though to a limited extent. Occasional fits of coughing, a silent yet restless demeanour, with physiognomical pulmonary characteristics, and somewhat embarrassed breathing marked the child's condition till December 16th, when it culminated in dyspnœal paroxysms of such urgency as to procure the consent of the parents to an operation, on the despairing yet not uncommon ground of "dying at any rate." The breathing was laboured, respirations 34, pulse 120, face congested, and, for the first time since admission, the bead could be felt by the hand placed on the front of the neck, rattling to and fro in the trachea. Auscultation showed the respiratory murmur equal on both sides of the chest, full and free at its commencement, but abrupt, as if suddenly shut off, at its termination. The manœuvre of inversion with succussion having failed, tracheotomy was performed under chloroform. I selected the high operation, dividing the thyroid isthmus between double ligatures, and delaying the tracheal incision till all vestige of oozing had ceased. This opening was kept patent for a few minutes with that invaluable instrument, Mr. John Duncan's dilator-forceps; but without effect, as the bead had evidently become again fixed near the tracheal bifurcation, where it could be distinctly felt by a probe, and where it was deemed expedient to leave it. The lips of the tracheal wound were kept gaping by being transfixed with strong carbolised silk ligatures, which, fastened to tapes, were secured round the neck, the boy being placed in a steam tent-bed. The temperature in the evening was 101.2° F., the respirations 38. On the following morning the observations were the same, but in the evening the temperature was 104.2°, the respirations 38. Mucous *râles* were heard at the tracheal bifurcation.



On December 18th, the temperature, both in the morning and evening, was 103.4°, and the respirations 35.

On December 19th, the temperature in the morning was 101.4°, when, after an unusually severe paroxysm of coughing, the bead was forcibly projected out of the tracheal wound, about a teaspoonful of pus welling out of the passage immediately thereafter. The temperature in the evening was 100.2°. The temperature became normal on December 21st, and the patient left the hospital on January 2nd with a healed wound.

LEPER ASYLUM, TRINIDAD.

LEPROTIC FEVER: THREAD-WORMS: ULCERATION OF CÆCUM: PYÆMIA: DEATH: NECROPSY.

(Under the care of Dr. BEAVEN RAKE.)

NATHANIEL G., aged 11, a negro, was admitted to the Trinidad Leper Asylum on September 1st, 1885, with tuberculated leprosy of eighteen months' duration. With the exception of an attack of intermittent fever in October, 1885, he continued in fair health until February, 1887, when he was found to have a fresh eruption of tubercles, accompanied by fever.

February 2nd. Temperature 103° F.; fluctuating swelling in the centre of the forehead 2½ × 2 inches; the lobes of both ears much thickened; the tongue slightly furred.

February 4th. Temperature 101.4°; the swellings less; that on the forehead very painful; urine 1023, high-coloured, no albumen.

February 7th. Temperature 102.6°; the swelling on the forehead almost gone; numerous small tubercles on the face.

February 9th. Temperature 102.6°; general hyperæsthesia; the swellings diminishing; urine 1015, high-coloured, no albumen.

February 11th. Temperature 102.6°; the right ear ulcerated.

February 14th. Temperature 103.8°; large blebs on the extremities.

February 16th. Temperature 101-8°; the blebs subsiding.

February 21st. Temperature 102°; the upper two-thirds of the right forearm swollen and painful, with some fluctuation; the legs ulcerated.

February 23rd. Temperature 102.4°; pain from tubercular deposit in the right arm and buttocks.

February 25th. Temperature 101.4°; effusion in both knees; tenderness on pressure; the pain gone from the forehead and arms; he took food fairly well.

March 2nd. Temperature 101.4°; the knees less painful, and perhaps a little less swollen; the legs extensively ulcerated.

March 4th. Temperature 101.2°; painful ulcer over the right elbow.

March 7th. Sitting up; abdomen much swollen; fluid thrill; œdema of the extremities and scrotum; blebs on the legs; magenta showed no bacilli in the fluid from these.

March 9th. Temperature 101.4°; lying down again; the swelling of the abdomen and extremities about the same; urine 1015, no albumen; acupuncture of the legs.

March 16th. The œdema of the extremities nearly gone, but the fluid n the abdomen about the same; the tongue clean; the appetite better.

March 22nd. The legs swollen; punctured again.

March 28th. The swelling gone from the extremities; a good deal of fluid still in the abdomen; walks a little.

April 1st. Much better ; eats well.

April 6th. Died suddenly about 5 A.M. ; said yesterday he felt as though he were going to be ill again.

Necropsy seven hours after death. The swelling was gone from the face and extremities, but marked tuberculation was left. There were some pints of fluid in the abdomen and pleura. The liver weighed 30 ounces. There were numerous generally-diffused infarcts, varying in size from a pin's head to a No. 6 shot ; small bile ducts were seen passing through some of them. The kidneys weighed 6 ounces. There were similar small infarcts in the cortex and medulla. In the left kidney there was a yellow infarct of about a quarter of an inch in diameter, among the straight tubes. The spleen weighed 10 ounces, and in it there were similar generally diffused infarcts. On opening the cæcum, five sloughing ulcers were found, each about a quarter of an inch in diameter. The margins were deeply undermined, and the muscular coat laid bare. The mucous membrane between the ulcers was dark in colour. There were numerous thread-worms (oxyuris vermicularis) in the cæcum. The appendix was healthy, and contained one or two thread-worms. The rest of the intestine and the other viscera were healthy. The mesenteric glands were swollen and gelatinous-looking, with small yellow points of pus. No disease of bones or joints was found. Magenta showed a few bacilli in liver, spleen, and mesenteric gland.

REMARKS BY DR. BEAVEN RAKE.—This case seems sufficiently rare to place on record. The first part is a good example of acute leprosis, that is, an eruption of tubercles, attended with fever. But the main point of interest is the sudden fatal termination when the patient was apparently doing so well. In the absence of other cause, which was carefully looked for, one must conclude that the source of the pyæmic infection was the ulceration of the cæcum. Can it be that the leprous deposit brought about such a change in the tissues that the irritation of ordinary thread-worms was sufficient to set up local phagedæna and subsequent septic absorption from the cæcum ? This hypothesis would seem to be supported by the discovery of leprosy bacilli in the viscera. The condition of the cæcum appears, in fact, to be analogous to the external ulceration occurring earlier in the case. The main treatment consisted of purgatives, quinine, and arsenic, with spoon diet.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JUNE 1ST, 1887.

JOHN WILLIAMS, M.D., President, in the Chair.

Address to the Queen.—It was unanimously agreed that an address should be presented from the Society to Her Majesty the Queen on the occasion of the completion of the fiftieth year of her reign.

A Case of Cæsarean Section.—Dr. CHARLES J. CULLINGWORTH read a paper with this title. A rachitic dwarf, aged 30, four feet two inches in height, was sent to him at full time. The pelvis was generally contracted and flat, the estimated conjugata vera being two inches and a quarter. The child was alive. There was great albuminuria, with œdema of the abdominal wall, labia, and legs. Labour began spontaneously, and when the os uteri was as large as a florin, Cæsarean section was performed with full antiseptic precautions. The child weighed 5 lbs. 9 oz., and was extracted by one leg ; it was partially asphyxiated, but soon recovered. After clearing the uterus of the placenta and membranes, its lower segment was constricted by an elastic ligature. The loss of blood was trifling. The uterine wall was united by four deep silk sutures, and the peritoneal edges by six finer superficial silk sutures. The patient died twenty-nine hours after the operation, the temperature remaining under 100° F. until two or three hours before death, when it rose to 100.8°, pulse 140. On *post-mortem* examination, no sufficient cause of death was found except acute parenchymatous nephritis.—The PRESIDENT wished to know if the kidneys and urine had been examined microscopically, and the quantity of urine passed after delivery. The low temperature was characteristic of uræmia, and he thought there was fear of carbolic poisoning when the kidneys were badly diseased.—Dr. HORROCKS thought death was probably due to shock, and that the elastic ligature, pinching the plexuses of nerves as they enter the uterus, would increase this.—Dr. J. PHILLIPS asked by what sign the seat of the placenta was determined, and why the uterus had been brought outside the abdomen before extracting the child.—Dr. W. DUNCAN thought it was better to place the elastic ligature around the cervix before opening the uterus.—Dr. TALFOURD JONES did not think that so large a dose as a quarter of a grain of morphine should be given hypodermically to a person of four feet two inches, as the lethal dose would be in proportion to body-weight.—Dr. LEWERS thought that although improved results in Cæsarean section had been reported from abroad, this success had not been met with in this country, and he preferred the old rule of delivery, when possible, *per vias naturales*. In the case under discussion this was possible.—Mr. MEREDITH thought that the Porro operation might have been preferred with a view to ensuring against the possibility of a future pregnancy.—Dr. MATTHEWS DUNCAN said that neither he nor perhaps anyone in this country had large experience of Cæsarean section, and that it was to Germany that we must look for the guidance of experience, and such wonderful successes as those of Sänger, Leopold, Credé, and Gusserow. It was such successes alone that should and would lead us in the great practical question, and they showed at present a less mortality with Cæsarean section than with Porro's operation. Both operations had a place in obstetric surgery, and he thought Dr. Cullingworth had rightly selected Cæsarean section, while, in the case upon which Sir Spencer Wells had recently operated, as there were several large fibroids, he had wisely selected Porro's operation. No amount of eloquence about the abolition of craniotomy would help forward that much to be desired result—there had been much of such talk ; nothing but success in some alternative operation would do the least good. Dr. Matthews Duncan approved of the course adopted by Dr. Cullingworth, and thought the renal disease was probably the chief cause of death.—Dr. CHAMPNEYS said that the seat of the placenta could not be diagnosed by uterine *souffle*, and that often there was no sound at the seat of implantation, while it could be heard after the removal of the placenta, and in cases where there was no placenta, as in fibroid tumours. It could not be too strongly urged that the uterine *souffle* was no guide whatever to the placental site. He thought the tracing was typical of a generally contracted flat pelvis, and that, although four or five years ago Cæsarean section would not have been justified, improved methods and antiseptics rendered it the proper practice as an operation of election.—Dr. CULLINGWORTH replied.

Mechanism of the Third Stage of Labour : The Separation and Expulsion of the Membranes.—Dr. F. H. CHAMPNEYS read a paper with this title. The views that had been expressed on the subject amounted to four : (1) the peeling off of the membranes by the traction of the descending placenta ; (2) separation by effusion of blood ; (3) wrinkling of the membranes by uterine contraction and retraction ; (4) separation of the lower pole of the ovum by retraction of the lower uterine segment. The second of these was dismissed on the ground that the quantity of blood lost in an ordinary labour was too small to produce this result, and that, with the usual eccentric implantation of the placenta, this mechanism would fail of its purpose. He criticised the expression "weight of the placenta," as having influence on the mechanism in the recumbent attitude, and also the expression "leaving (the process) to nature," as applied to its course in the recumbent attitude. He explained the natural process as follows : (1) Separation of the lower pole of the ovum by retraction of the lower uterine segment during the "premonitory" stage of labour ; this required a complete "bag of waters." (2) Wrinkling and partial separation of the membranes by diminution of the internal surface of the uterus ; this required some escape of the waters. (3) Peeling off of the membranes by the traction of the descending placenta ; this required the evacuation of the uterus. The rupture of the membranes at the proper time was an integral part of the normal process. The first stage in the process seemed calculated to prevent a very common defect, namely, the adhesion of the membranes round the lower uterine segment.

Tubo-ovarian Cysts.—Dr. W. S. A. GRIFFITH read a paper on this subject. A tubo-ovarian cyst was an ovarian cyst, usually unilocular, which communicated, by a considerable orifice, with the adherent fimbriated extremity of a dilated tube ; the uterine end of the tube, though pervious, was rarely dilated, so that though there was a potentially free communication with the uterine cavity and vagina, it was exceptional for fluid to escape in that manner. An abstract was given of all recorded cases obtained, numbering nineteen ; a description was given of a specimen exhibited ; and the subject of their formation was discussed. The literature of the subject was comprised in the original papers by Adolphe Richard, and in recent ones by Olshausen and Burnier. The specimens were divided into two groups, a small group of four in which the ovarian portion of the cyst was multilocular, the tube communicating with one loculus, and a group of eighteen, in which the cyst was unilocular. The question of unilocular cysts of the ovary was discussed, and these were identified with the larger unilocular cysts described by Olshausen. The subject of the formation of tubo-ovarian cysts was sub-divided in the follow-

ing manner and received the following answers: that the dilatation of the tube and the formation of the ovarian cyst were usually secondary and not primary factors in the formation of tubo-ovarian cysts. That the application of the tube to the ovary was physiological or possibly accidental. That the permanent adhesion of the two was effected by adhesive inflammation. That the communication between the two was generally either a primary occurrence or took place at a very early period in the formation of the cyst.

The discussion of these two papers was deferred till the next meeting.

Specimens.—Mr. LOCKWOOD exhibited a series of sections showing Absence of Spinal Medulla, with Arrest of the Development of the Spinal Column, and Retroflexion of the Lower Limbs. The embryo was eight millimètres long, and had reached about the sixth week of intra-uterine life.—Dr. BLUETT showed Fœtal Membranes in which two Tumours were found. The labour had been natural, and delivery took place at full time.—Dr. HERMAN: Spontaneous Gangrene of Cervix Uteri and Base of the Bladder. The parts had sloughed away spontaneously from a woman who had not been pregnant for eight years.—Dr. MALINS: Hydatids from the Mesentery.—Dr. JOHN WILLIAMS: A Fibroid of the Ovary.—Mr. MEREDITH: A Fibro-cyst and a solid Fibroma of the Ovary.—Mr. MALCOLM: Fibroma of Doubtful Origin. These four tumours and Dr. Bluett's specimen were referred to a Committee.—Dr. W. DUNCAN: A Sloughing Fibroid Polypus.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, MAY 25TH, 1887.

G. GRANVILLE BANTOCK, M.D., President, in the Chair.

New Instruments.—A pessary with a cup-shaped diaphragm, intended to facilitate the application of remedial agents to the cervix uteri, was exhibited by Dr. HEYWOOD SMITH. Also a modification of the *serre-nœud*, suggested by the late Dr. Meadows. The wire was fastened to a revolving drum, and could be tightened to any degree by turning a key. As both ends of the wire were wound up simultaneously there was no cutting motion.

Dermoid Tumours.—The PRESIDENT exhibited two small dermoid tumours, which he had removed on May 20th from a single lady, aged 26. The patient had been for two years under treatment for menorrhagia and uterine catarrh. Enlargement of the ovary had been only detected three months. The result had been satisfactory.

Supra-Vaginal Hysterectomy.—The PRESIDENT also showed two large fibroid tumours, together with the enlarged uterus, which he had removed on May 16th, from a single woman, aged 38. Each tumour weighed about seven pounds. The left ovary was so intimately connected with the sigmoid flexure of the colon, that only a small portion of the uterine end could be included in the *serre-nœud*. The dragging on the colon was so great that obstruction of the bowel was feared. The patient, however, had done very well.

On the Treatment of Obstinate Cases of Flexions of the Uterus.—Dr. ROUTH said experiments had shown that the main supports of the uterus were the sub-peritoneal pelvic fascia, which was immensely elastic, and the utero-sacral ligaments. The lateral were also supporters to a small degree; the round ligaments not at all. The fundus was absolutely free, and not supported except by its connection with the body of the uterus. Prolapse of the uterus was a *sine quâ non* in every flexion. The indications for treatment were to correct the prolapse, relieve local congestion, and allow free exit for contained discharges. Dr. Routh then demonstrated the use of various pessaries, and subsequently referred to the three more strictly surgical measures recommended, namely, suspension of the fundus uteri to the anterior abdominal wall, shortening of the round ligaments and oöphorrhaphy.—Dr. EDIS considered the use of intra-uterine stems a most risky proceeding Extended knowledge tended to limit materially the number of so-called intractable cases.—Dr. MANSELL-MOULLIN made some remarks, and Dr. GRIGG doubted if flexion were ever caused by jerks or falls; it was always congenital. He used the perforated diaphragm, which kept the uterus well raised in the pelvis, and diminished the congestion and bulk of the organ.—Dr. BEDFORD FENWICK, Dr. RUTHERFORD, and Dr. HEYWOOD SMITH also took part in the discussion.—Dr. ROUTH replied.

GLASGOW OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, MAY 25TH, 1887.

Uterine Polypus.—Dr. ROBERT POLLOK exhibited a small pedunculated polypus which he had removed from the os uteri of a patient who had been supposed to be suffering from prolapsus, and had been wearing a pessary.

Private Obstetric Practice.—Dr. R. POLLOK also read notes of difficulties occurring in eleven years' private obstetric practice (2,000 cases), with the treatment adopted. The difficulties alluded to included adherent placenta, funis and transverse presentations, anencephalic fœtus, obstructing tumour, placenta prævia, *post-partum* hæmorrhage, puerperal eclampsia, and extra-uterine pregnancy.—A discussion followed, in the course of which the diagnosis in the latter case was called in question by Dr. ABRAHAM WALLACE, and the author's views generally were freely criticised.

BERMUDA BRANCH.

MAY 7TH, 1887.

Deputy Surgeon-General C. GRAVES IRWIN, M.B., Principal Medical Officer, in the Chair.

Acute Tuberculosis.—Messrs. T. ARCHER and C. BIRT related a case of acute tuberculosis. The patient had suffered from enlarged cervical glands and fistula in ano for some years. He was admitted into the Army Hospital with cavities in both lungs. No hæmoptysis occurred at any time during the illness, and the man in a very short time died of tubercular meningitis.

The Effects of the Climate of Bermuda on Diseases of the Chest.—The PRESIDENT, in opening the discussion, remarked that Messrs. Archer and Birt's case just related came very *à propos* of the subject before the meeting. Cases of bronchial catarrh were of frequent occurrence, but acute bronchitis was seldom met with. In the Army Records, which were carefully kept, very few cases were reported.—Surgeon-Major MCCUTCHAN, M.S., described a case of acute bronchitis just convalescent at the Army Hospital, St. George's; but he could say, after a double term of service in the island, cases of acute bronchitis were extremely rare. In the subsequent discussion this opinion was confirmed, and it was stated that pneumonia was not common amongst the civil population; the few cases reported at service hospitals were directly due to sudden chill and exposure. Persons attacked with phthisis *de novo* in the island never seemed to do well, and a change of climate was desirable. One or two well-known persons were named as asthmatics. Numbers of bronchitic and asthmatic patients were known to resort there every winter, and enjoy perfect immunity.

Card Specimens.—Surgeon C. BIRT showed specimens of Ulceration of Intestine from Enteric Fever Patients.

REVIEWS AND NOTICES.

ORGANIC MATERIA MEDICA. By ROBERT BENTLEY, F.L.S. London: Longmans, Green and Co. 1887.

THE OFFICIAL MATERIA MEDICA. By F. T. ROBERTS, M.D. Second Edition. London: H. K. Lewis. 1887.

THE ORGANIC MATERIA MEDICA. By W. SOUTHALL, F.L.S. Fourth Edition. London: J. and A. Churchill. 1887.

THERE is, with the exception of the new field of bacteriology, no department of medicine which has shown such very decided restlessness and activity as the region of therapeutics, with its closely-allied sections of materia medica and pharmacology. Within the past five years various new works have appeared, and some have passed through several editions, and the older text-books have either disappeared or undergone such radical changes as may justify one in regarding them as new works. Whilst one cannot contemplate with satisfaction the tendency to multiply and increase new remedies and drugs in endless variety, there is a considerable amount of comfort in reflecting that the more recent text-books have contributed to healthier views upon many vexed questions of treatment. The scepticism of the last twenty-five years was the direct result of the extravagant praises showered upon useless drugs. The scepticism about the value of remedies and treatment of the present day too often has its root in ignorance of the elementary principles and details of materia medica; hence, any means by which this ignorance is to be dispelled, and information about the sources, doses, and combinations of drugs in a concise and handy way brought within the reach of the student and practitioner, is a solid advantage.

PROFESSOR BENTLEY'S handbook, in about 400 pages, affords a very safe and accurate and, at the same time, speedy, introduction to the study of the organic materia medica. The classification or arrangement of the various plants upon the plan adopted by Bentham and Hooker is a very decided advantage in this new work, and the table of contents is especially valuable. We cannot but regret that the author leaves the student in a little confusion about the meaning of

the word "pharmacology." The definition of the various subdivisions of materia medica he adopts from Pereira, though all recent writers use the old terms in an entirely different sense; thus, "pharmacology" as used by them always means the science of the action of remedies upon a *healthy* organism, in contra-distinction to therapeutics, which exclusively deals with the effects of remedies upon *diseased* organisms. The question of habitat is dwelt upon in each case with great clearness and accuracy, and that of adulterations is treated in a way which must be a considerable boon to the students of pharmacy. The author confines himself chiefly to the pharmacognosy of the various organic substances of the *Pharmacopœia*, and by leaving the therapeutical aspect of the subject aside we believe that he has acted wisely, the discussion of the effects of the various remedies in disease being clearly outside the scope of the work. We should much like to see in the next edition, if possible, a plate or woodcut of every official flowering plant. Though this would necessarily add considerably to the expense, it would greatly enhance the value of the work. The only book for which there seems to be a decided necessity in this department is a work like the present, illustrated with coloured plates, after the manner of the magnificent volumes of Professor Bentley and Trimen, which are beyond the reach of the ordinary medical student.

The work of Professor ROBERTS has been so thoroughly revised and rearranged, that for all purposes it may be regarded as a new work. Its title taking in the large field of "the official materia medica," it would be unreasonable to expect in 540 pages that the various drugs could be discussed with very much detail. Originally the book was apparently intended as a companion to the author's class lectures. The present edition aims at more than this, an attempt being made to meet the wants of medical and pharmaceutical students as well as practitioners of medicine. It is perhaps unfortunate that Dr. Roberts has considered "any attempt to discuss the practical uses of drugs in disease" as "altogether beyond the scope of the work." There are now so many good text-books which give considerable space to the consideration of the various practical applications of drugs to the treatment of disease, that practitioners can hardly be expected in this busy age to refer to works which deal more exclusively with materia medica and pharmacology. The book is a very decided improvement upon the first edition, and to the students of materia medica will afford assistance in the study of a very difficult subject. There are grave objections in a text-book of this kind to the alphabetical system of dealing with the various drugs, though for reference its utility is beyond dispute; but the serious drawback of grouping the various remedies without some plan of placing together those possessing similar properties has been always pointed out by teachers. Dr. Roberts, however, does not adopt the alphabetical system which would have the virtue of easy reference, nor does he group the vegetable drugs according to their pharmacological or therapeutical virtues, but introduces a method of classification which does not appear to possess any practical advantage. Thus the part of the plant used is taken as the basis of classification, and we have the various vegetable drugs grouped under such headings as roots, barks, woods, twigs, leaves, fruits, seeds, etc. This artificial method of grouping together widely different remedial agents does not appear to have any marked advantages, whilst it is open to serious objections. Thus aconite, belladonna, horse-radish, gentian, and liquorice are discussed together, because "they are entire roots in elongated pieces," and aconite and belladonna leaves are described in another place in company with buchu, coca, and senna. The divisions of seeds, fruits, tops, and buds place closely allied substances wide apart, to the disadvantage of the student, whose labours are not certainly lightened. We do not draw attention to this with a view of finding fault with details, but because it is a departure to be discouraged, and which, if accepted by teachers or examiners, might seriously retard the progress of the science of materia medica. Each year brings to the hard-worked student of this department increasing labour, and we cannot think it is to his advantage to be driven in obtaining a knowledge, say, of belladonna, to study at page 310 the root and its preparations, then to hunt up the order to which it belongs on page 287, while the leaves must be found on page 348, and the alkaloid and its preparations are not met with till page 470 is reached.

The modest little work of Mr. SOUTHALL, originally intended as a guide or key to the excellent materia medica cabinets issued by Southall Brothers and Barclay, is all that its title-page claims for it. The fourth edition is a marked improvement upon its predecessors, and the addition, especially those bearing upon botanical details, cannot fail to be highly appreciated by the student of pharmacy and materia medica. The drugs are described under their natural orders, and the relation of each order with its allies are briefly, but clearly and ably, given, and the student is thus enabled to obtain almost at a glance a complete skeleton of the organic materia medica. In a future edition, which is sure to soon follow, we hope to see the official drugs placed in a decidedly different type from the non-official ones and the list of errata done away with. Upon the whole, the work is one which we can cordially recommend to every student who wishes to grasp with the minimum of labour the clear outlines of a dry and difficult subject.

DE L'INTERVENTION CHIRURGICALE DANS LES AFFECTIONS DU REIN. Par AGASIE BRODEUR, Docteur en Médecine de la Faculté de Paris, Ancien Interne en Médecine et en Chirurgie des Hôpitaux de Paris. Paris: G. Masson. 1886.

DR. BRODEUR'S bulky volume merits recognition in this country as an important addition to the literature of modern surgery. It consists essentially in a collection of clinical observations, but the author's treatment of his subject, the arrangement of his material, and his careful analysis and clear explanatory comment, render the work a complete and valuable text-book on renal surgery. We find here a collection of 327 cases of disease and injury of the kidney treated by surgical operation, many of which have been taken from previously published records in different countries, whilst others—and these mostly of great interest—are reported here for the first time from the practice of M. Péan and other French surgeons. The author deals systematically with his subject, beginning with a chapter on anomalies of the kidney, and then discussing in successive chapters cystic and solid tumours, injuries, the urinary fistulæ, renal calculus, and the different forms of myelo-nephritis. The final chapter is devoted to a brief description of the different methods of nephrectomy, and the book ends with a complete and very useful bibliographical index extending over thirty pages. In each chapter a group of fully recorded cases is preceded by remarks on the pathology and symptoms of the morbid condition under consideration, and followed by a statement of the general result of the operative treatment, and a review of the indications and contra-indications for active surgical interference.

This book is clearly the result of great labour. The author, moreover, has shown much ability in arranging his abundant material, and in his critical estimate of the value and range of surgical methods in the treatment of renal affections has evinced a very sound and impartial judgment. His views on the subject of treatment are the more valuable as he is not merely a plodding student of surgical literature, but also a zealous and experienced clinical observer.

We learn from Dr. Brodeur's book that the operation of nephrectomy, first performed by Simon, of Heidelberg, has been favourably received by French surgeons, and performed by them with much zeal and success. In addition to the numerous cases that have been published by Le Fort, Boeckel, Ollier, and others, thirty previously unrecorded cases, supplied by M. Péan and other surgeons of Paris, are here fully reported and tabulated. Dr. Brodeur has collected from French and other sources 235 cases of removal of the kidney, in 122 of which the operation was successful. Notwithstanding the good results of nephrectomy, and its diminished mortality in recent times, due to the adoption of antiseptic methods and to greater precision in diagnosis, Dr. Brodeur thinks it necessary to limit the range of the operation and to restrain the zeal of many of its advocates. It is suggested that the procedure has been carried too far and adopted with too much boldness, and that it should be reserved for certain classes of cases which the author endeavours to define in the course of his work.

Of nephrorraphy, the least severe of major operations on the kidney, French surgeons, it is stated, have hitherto had no experience. Dr. Brodeur, however, has been led by the results of operations that have been performed elsewhere to regard this procedure with much favour; and he is of opinion that it is indicated in every case of movable kidney with excessive pain and serious general disturbance, when special palliative treatment has failed.

The chapter on the "Manuel Opératoire" is too brief and not very satisfactory, the reader being referred to works by other authors, and to the details given in some of the cases that are reported in the body of the work. Concerning the very important and much disputed question whether, in removing a diseased kidney, it be better to perform the posterior or lumbar operation, or the abdominal or transperitoneal operation, the author has very little to state beyond the *a priori* assumption that the latter traumatism is likely to increase considerably the gravity of the operation.

SELF-HELP.—A "Physicians' Protective Association" has been started in Columbus, Indiana. Its motto is that patients who can pay but won't pay must be made to pay.

INSANITY CURABLE. Mental Disorders and Nervous Affections of Recent Origin or Long Standing; their Cause (*sic*) are now successfully treated by a New Especial Method. By GEORGE MOSELEY, F.R.C.S., L.S.A., etc. London: J. and A. Churchill. 1886. Pp. 63.

MR. MOSELEY'S discoveries concerning the nature and treatment of insanity are based on the assumption that "the blood is the true seat of mental disease," and that remedial measures must be directed "to the purification of the general mass of the blood, and to the quickening of those vital processes that make for health." He classifies his methods of treatment under the following heads:

"1. Measures designed to raise the vital tone in the substance of the brain itself, and so to place it in the best possible position for resisting the pernicious effect of an impure, ill-regulated blood-supply.

"2. Measures having the immediate object of suppressing diseased action in those organs of the body that give evidence of diminished or perverted activity. The blood-making as well as blood-purifying organs must be induced to take on healthy instead of diseased action.

"3. Measures of a very special kind, adapted to promote the transference from the internal parts of the skin of congestion and irritation in the masses of nervous matter that form the ganglia of the sympathetic system, particularly those that correspond in situation to the 'pit of the stomach.'"

The essence of Mr. Moseley's "new especial method" for the treatment of mental and nervous diseases apparently consists in the generalisation of the employment of certain derivative or counter-irritant measures which have long been known to be of service in various neuroses. Great stress is laid on the value of applications to the skin of the head and the production by artificial means of a "copious eruption of spots or pimples on the head and other parts of the body." The Turkish bath is also regarded as a most powerful curative agent in nervous and mental disorders. The author expresses his conviction that most cases of insanity of even long duration are really curable, or capable of alleviation (an important saving clause this), but only by unremitting efforts on the part of the physician.

We can but suppose that Mr. Moseley has had few opportunities of becoming familiar with the methods of treatment employed in our best institutions for the insane. Had it been otherwise, he would scarcely have written the following passages: "The intimate relationship that is known to exist between the state of the brain and the mode in which the various bodily functions are performed seems to be almost ignored by those of our profession who are responsible for the treatment of the insane;" and, again: "In reference to the curative treatment of the insane, how little, even in these days of progress, is attempted of a thoroughly rational and truly scientific character!"

All concerned in the care and treatment of the insane would welcome the discovery of any method (whether "new and especial" or not) which would promote the recovery of their patients; but we fear that, whatever profit this book may bring to Mr. Moseley or to the "non-medical persons" for whose perusal it is avowedly intended, it will in no way add to the store of information already possessed by the medical profession.

ON NERVE-STRETCHING OR NEURECTASY FOR THE RELIEF OF PAIN. By JOHN MARSHALL, F.R.S. Being the Bradshaw Lecture of 1883, with Appendix by the Author. London: Smith, Elder, and Co. 1887.

ATTENTION was drawn by the author in this lecture, which was delivered at the College of Surgeons in 1883, to an operation which was then a comparatively new one, and that lecture was, like all Mr. Marshall's work, very complete, carefully thought out, and suggestive. The feature which was most striking was that he argued that there probably would be found on the trunks of the nerves and on the larger branches sensory nerves, which he would call "nervi nervorum," the stretching of which would in many instances account for the relief given by nerve-stretching in many forms of neuralgia. In the appendix now added are some carefully executed drawings by Mr. Horsley, showing the existence of what Mr. Marshall had predicted. Sensory nervi nervorum of the medullated variety are found in the epineurium, and terminating in the tactile corpuscles or end-bulbs of Krause, or in small but perfect Pacinian bodies. Other fine non-medullated nerve-fibres are found, but these are apparently vaso-motor, for they follow the course of the smaller blood-vessels. It is claimed by the author, and the acceptance of the proof is beyond question, that the conjecture he offered as to the existence of such sensory nervi nervorum, and their relation to certain neuralgic pains, may be regarded as having been completely verified.

The lecture is for convenience divided into numbered paragraphs, and the appendix in like manner takes the headings of these paragraphs, and notifies any change or advance which has been made during the last three or four years in our knowledge. Advantage is taken of a very large series of cases tabulated by Omboni in which the operation has been performed for various affections; the different methods are further considered, and the conclusion arrived at is that nerve-stretching is an operation of positive benefit in certain classes of cases.

But two other nerve operations—neurotomy, or simple division, and neurectomy, or exsection of a portion of a nerve—have recently attracted much attention, and the advantage and applicability of these must be contrasted with nerve-stretching. Neurotomy seems to have but a temporary effect, and the parts too rapidly unite to make the operation of much use when the condition of the nerve is seriously impaired. Moreover, it is not applicable to the nerves of the limbs, owing to the extensive paresis or paralysis involved. Neurectomy promises to be of greater value in the painful affections of the head and face, but is equally inapplicable to the nerves of the limbs. It is curious, however, that sometimes the simple operation of nerve-stretching succeeds after neurotomy and even neurectomy has failed.

In conclusion, the sum of opinion as to the special applications of nerve-stretching may be thus stated. It is useless and dangerous in all cases of cerebral disease, such as confirmed ataxy, myelitis, fully established tetanus, pure epilepsy, and paralysis agitans. In reflex forms of epilepsy, in an ascending neuritis bringing about epileptiform seizures, in the early stages of a distinctly traumatic tetanus, provided that in any of these cases the peripheral cause of irritation can be clearly localised, and the nerves accurately defined, nerve-stretching may be serviceable if employed soon enough. As to the hope or suggestion that the excitation which a slight amount of stretching produces by vaso-motor or trophic changes upon a nerve might be the cause of improvement as regards pain, hyperæsthesia, anæsthesia, or paresis on the one hand, or as regards clonic spasms or paralyses on the other, it seems to rest on but little favourable clinical experience. Such states, when remediable, are cured more readily by lapse of time, or medicines, or electricity, or massage.

But nerve-stretching is certainly beneficial in peripheral disturbances of sensibility and motility, though it is more successful in purely neuralgic peripheral disorders than in those which are spasmodic. It is only admissible in aggravated and obstinate cases after other remedies have failed, and after any discoverable or reasonably conjecturable local cause has been removed. Medicinal and other remedies are constantly being discovered, but these failing, an adequately carried out nerve-stretching will certainly give temporary ease, and in proportion to its thoroughness to prolonged relief or cure. In the case of the sciatic nerve, it may be preceded by that form of stretching which is called the bloodless method—bending up the knee to the chin, extending the leg, and flexing the foot forcibly, and this must be continued for at least five minutes. In the case of any other nerve, the cutting operation should be at once employed, and the nerve stretched as close to the nerve-centre as possible. And the amount of force to be used must be left to the judgment or experience of the surgeon rather than trusting to any dynamometer or hard and fast rule of the number of pounds' weight to be lifted by the force. Should the operation fail, the only further measure is to perform neurectomy, and then stretch efficiently or even avulse the proximal nerve-stump, which will probably effectually relieve the patient from suffering, though at the cost of some local paresis or paralysis.

We cannot leave this Bradshaw lecture without expressing our sense of the value of the little work, and the importance of it to every operating surgeon and practitioner who has to treat the painful class of nerve diseases referred to. The book is all the more valuable, inasmuch as Mr. Marshall has allowed time to modify or strengthen the views expressed when the operation was a comparatively new one, and the class of cases to which it might be applied with advantage could not with confidence be determined.

ON FEVERS: THEIR HISTORY, ETIOLOGY, DIAGNOSIS, PROGNOSIS, AND TREATMENT. By ALEX. COLLIE, M.D. Aberd. London: H. K. Lewis. 1887.

THIS work is for the most part founded upon observations of "over 21,000 cases which the writer has personally treated from commencement to termination." The descriptive accounts of the various fevers are, as might be expected, practical and to the point, and the sections on diagnosis are especially likely to be useful. The author defines fever as "a more or less continued elevation of temperature." But through-

out the work the term is used in the more generally accepted sense of a group of symptoms, of which pyrexia is one. Indeed, only four lines after defining fever as a *continued* elevation of temperature, the author writes, "fever is intermittent when the temperature becomes quite normal, and remains so for longer or shorter periods."

After discussing at length the infectious nature of typhoid fever, Dr. COLLIE concludes: 1. "That exhalations from the lungs, skin, urine, or fresh stools must be infectious." 2. "There is danger of infection for some time after the stoppage of the diarrhœa." 3. "Persons over 30 are not so susceptible as persons under that age, and over 40 they are less susceptible still."

The first of these conclusions is directly opposed to Dr. Murchison's belief that "visiting or contact with the sick is neither sufficient nor necessary to produce it." The disagreement on the question of fact is due to a diametrically opposite experience of the liability of hospital nurses to contract the disease. Dr. Murchison writes: "It is universally admitted to be a very rare occurrence for the nurses or medical attendants of hospitals to contract enteric fever from the sick under their care." Dr. Collie's experience is that nurses do not infrequently contract the disease, and that Murchison "did not sufficiently realise the fact that enteric fever is a disease of infancy and childhood, and that, therefore, as in scarlet fever, many nurses would be protected by a previous attack;" and to the fact "that the poison does not spread any great distance when the ventilation is good, the cubic space abundant, and the general sanitary arrangements good." But it seems possible that the discrepancy is due to the very different importance attached by the observers to the effects of bad drainage. Dr. Collie states that "great, indeed too much, importance has been assigned to bad drainage in the propagation of enteric fever;" Dr. Murchison states that, in his experience, "when enteric fever originates in a hospital, as a rule there is something radically defective in the sanitary arrangements, and that either the air or water is polluted with decomposing excrement;" this latter statement is confirmed in the third edition of his work on *Continued Fevers*, by the editor, Dr. Cayley, who points out that from 1871 to 1882, eight attendants in the London Fever Hospital contracted typhoid fever, and, in the cases of four of these who were attacked at the same time, "the drain of the ward in which they were on duty had become obstructed by the lodgment of a piece of slate in the trap."

We are surprised that Dr. Collie, who insists so strongly "that the exhalations from the lungs, skin, urine, or fresh stool must be infectious," considers that "great, indeed too much, importance has been assigned to bad drainage in the propagation of enteric fever, and, whilst this mode of propagation should always be considered, defective drainage has not that influence in the propagation of enteric fever which has been generally supposed." Surely if his contention is true that the stools are infectious, bad drainage must be an all-important factor in the propagation of the fever; the evidence is overwhelming of the influence of bad drainage on the propagation of typhoid fever, but Dr. Collie never alludes to it, and the sole evidence he gives in support of his contention is that, when certain nurses at Homerton contracted typhoid fever in 1884, the drainage had immediately before this been rendered entirely efficient. To prove that hospital nurses may contract typhoid fever apart from bad drains, is far from proving that bad drainage "has not the influence in its propagation which has been generally supposed."

Dr. Collie's statement that the enteric ulcer "is quite distinct from the tubercular ulcer, from which it may be distinguished by the absence of the tubercles," is of very limited value. In the early diagnosis of typhoid fever, Dr. Collie does not appear to attach much value to epistaxis or to headache or diarrhœa, but "if there is in a person who has been in previously good health an undefined feeling of weakness, with loss of appetite, some thirst, and a temperature 2° or 3° above the normal during some time of the twenty-four hours, and if this should continue, the diagnosis of enteric fever should be made." Dr. Collie agrees with M. Forget, that typhoid rarely affects phthisical or tubercular people, and states "the present writer has never met with enteric fever in a phthisical subject." But this experience is certainly not universal. Pneumonia, in his experience during typhoid fever, is "almost always fatal," but we question again if this will be generally subscribed to.

Dr. Collie advises that the typhoid patient should have as much milk as he likes to take. "Some patients will take four, five or six pints in the twenty-four hours, and if they can digest the quantity it should not be refused them." He insists that "in cases where the patients refuse or cannot take any other kind of food, alcohol is indispensable; it is particularly useful in convalescence from enteric fever, when the craving for food is strong and cannot safely be gratified." Solid food Dr. Collie prohibits till the patient has been free from fever from ten to fourteen days. He recommends the use of the tepid or cold bath to procure sleep, in preference to alcohol or to opium, the temperature of the bath depending on the patient's body temperature.

The incubation period of measles, he states, is about fourteen days—a rather longer period perhaps than is generally taught. In his description of rötheln, he contents himself with quoting from Niemeyer, but no reference is made to the enlargement of lymphatic glands in that disease.

A good description is given of scarlet fever, but no mention is made of the frequent occurrence of convulsions at the onset in young children. Dr. Collie writes: "If it be not proved that all of these diseases are infectious in the very early stages, it is certain that measles is, probable that scarlet fever is." That measles is infectious before the occurrence of the rash is undoubted, but we know of no evidence that scarlet fever is so, and if such evidence exist, Dr. Collie would do well to give it.

Dr. Collie insists, with much force, on the necessity of early tracheotomy in diphtheria, and that "the physician must be careful not to be deceived by the intervals of apparent calm breathing which occur." He writes of the symptoms of diphtheria, "these may be classified as follows: (*a*) general observations; (*b*) pharyngeal, laryngeal and tracheal; (*c*) nasal; (*d*) malignant; and (*e*) cutaneous and buccal." If a classification is to be adopted, we would suggest that "general observations" is hardly in place here.

Dr. Collie seems sceptical as to whether diphtheria ever begins in the larynx or the trachea or bronchi, but believes "in the majority of these cases it is probable the pharyngeal stage of the disease has been overlooked." Of diphtheritic paralysis he says, "severe cases are very rare," but although he quotes Trousseau in his support, we suspect that more cases die of diphtheritic paralysis than is generally believed. Some die after leaving hospital apparently cured, and many of heart-paralysis towards the termination of the diphtheria itself.

Dr. Collie is no advocate of the cold-bath routine treatment, though he admits its value in cases of hyperpyrexia. Here he is at one with most practical English authorities; from the assertion that children do not bear cold well, we think that many will dissent, but it must be borne in mind that Dr. Collie's cases were probably for the most part of an unusually low standard of health and nutrition.

We have freely criticised certain parts of Dr. Collie's work, but a writer on fever must perforce enter upon so many moot points that criticism is unavoidable; and while we cannot in all respects agree with Dr. Collie's views, statements, and experiences, and should be glad to see some repetitions avoided and some questionable grammar revised, we can recommend the work as a practical and valuable record of the author's extensive experience in the investigation and treatment of fevers.

THE SCIENCE AND ART OF OBSTETRICS. By THEOPHILUS PARVIN, M.D., LL.D., Professor of Obstetrics and Diseases of Women in Jefferson Medical College, Philadelphia, and Obstetrician to the Philadelphia Hospital. Edinburgh: Young J. Pentland. 1887.

THE author having been engaged in active practice for upwards of thirty-four years, during twenty years of which he has been a lecturer, has laboured to produce a work which should be useful alike to students and practitioners. One scarcely looks for novelty in works on obstetrics; it is a department of medicine in which changes are few, and those mostly theoretical. Alluding to the etymological derivation of the various names for the art of attending women in labour, he objects to "midwifery" on the ground of its prejudicing the sex of the operator, and to "accouchement" on the ground of its foreign origin; he would prefer "maieutics" as more euphonious, but we are glad he has not had the courage of his opinions, which would have burdened the study of obstetrics with a new and unfamiliar appellation. The work proper commences with a very elaborate description of the anatomy and physiology of the female reproductive organs. It is very carefully done, and the illustrations are numerous and suggestive. The various stages of development of the fœtus from the impregnated ovum are particularly well described, and in addition to the stock drawings with which every student of obstetrics is familiar, there are several which are new to us, which aid greatly in the comprehension of this complicated process. Development is a point on which examiners as a rule do not care to press candidates too hard, but a clear understanding of the phenomena which it comprises is indispensable for a proper appreciation of many subsequent abnormalities. Questions such as the nutrition of the fœtus *in utero* are discussed and elucidated by frequent references to the most recent discoveries and hypotheses, and the whole is worked up in a pleasant style, which is humorous

without ever being trivial. In the course of his directions as to the vaginal examination, the author quotes Hubert's remark as to the accoucheur's finger being *clairvoyant*, and states that in some localities in Holland, accoucheurs and *sages femmes* have for their sign a representation of a long finger surmounted by an eye. A similar design was placed by the late Dr. Valentine Mott upon the tickets of admission to his lectures. We commend the idea to the attention of our obstetricians. The directions are all given for women lying on the back, and this is only one sign of many of the great influence which study at the continental schools has worked in American obstetrical practice. The measurements are given in the metric system, and French technical terms lie in wait for the reader at odd corners.

It is satisfactory to see that the advantages of abdominal palpation as an aid to the diagnosis of position are beginning to be appreciated. The details of the procedure are given, and the *modus operandi* is made clear by several woodcuts. Hitherto this valuable method has been dismissed with a few words, and we are glad to see the lapsus filled. The vaunted benefit of cucaine in obstetrics does not find a supporter in the author, who is disposed to consider it useless as well as undesirable. The chapter on forceps does not fall behind the others in completeness and variety. In common with many other recent works on obstetrics, Tarnier's traction forceps are described and figured, but it is difficult to believe that they will ever come into general use, even in France. The chapter on the pathology of labour is enriched with notes of cases bearing on the different ailments, which make it easy and interesting reading. Dr. PARVIN does not share apparently in the reaction against the employment of ergot during and after labour, but he shows no great enthusiasm in its use. It has at any rate ceased to be, in books if not in practice, the indispensable adjunct which it used to be. In conclusion, the book is considerably above the average work on obstetrics, and is valuable both for study and reference. There are no less than 215 illustrations, many of which are new, and the index is unusually complete. The author may be congratulated on so worthy a termination to a long and useful career.

OUR TEMPERAMENTS: Their Study and Their Teaching; A Popular Outline. By ALEXANDER STEWART, F.R.C.S.Edin. London: Crosby Lockwood and Co. 1887.

THIS book, which Mr. STEWART lays with confidence before the world, is, as he candidly tells us, "the enlargement" of an essay read to a private Society in January, 1887. For the sake of a better hearing for himself, and for the cause for which he is pleading, we cannot help thinking he would have been more judicious if he had given more attention to concentration and to some limitation of the hundred or more pages of full length quotation that he takes from all sources, from St. Paul to the *New York Times*. However, the subject has some interest in it, and it should not pass unnoticed from any imperfections in its literary treatment.

Mr. Stewart has two things very much at heart, and these are that the word temperament should be understood to express a real physical condition which is distinct, recognisable, and of serious importance in education, in medicine, and the general management of life; and, secondly, that English writers and speakers must be warned to take this fact to heart, that they must learn what "the temperaments" are, and not allow themselves to use the word lightly or inaccurately. The pure temperaments are four: the sanguine, the bilious, the lymphatic, and the nervous; and all physical conditions of men—or perhaps we should say of Englishmen—have either the characteristic of these pure and simple, or of some compound of two or more of them, which may be "balanced," or "semi-balanced," according as one constituent is in the ascendant or not. The true guides to temperament are four physical characteristics in form and three in colour. In form, the sanguine, the bilious, the lymphatic have no distinctions. Everyone who belongs to any pure stock of any of them, or any combination of them which excludes the nervous, has a square face, an "outspread" nose, a short neck, and a thick-set build. The purely nervous have a face tapering down from the high or broad forehead to a narrow chin, a "narrow" nose, a long neck, and a slim build. In the three points of colour there is more difference: the sanguine have red hair, blue eyes, and florid complexion; the bilious have black hair, black eyes, and dark complexion; the lymphatic have flaxen hair, "brown-grey (green or light hazel)" eyes, and colourless, dense, opaque complexion; the nervous have light brown hair, grey eyes, and pale clear complexion. There are many compounds that can be recognised at a glance: a man, for example, with "dark red" hair has a sanguineo-bilious temperament, and if his nose is "narrow" and his eyes "brown grey," he can claim to be lymphatico-nervous as well. If in his other characteristics, one temperament is in predominance, he is only semi-balanced. The compounds of form which result from the combination of the nervous with any of the other temperaments are shown in an oval face and medium build.

It is obvious that with seven variants that can thus be arranged we can produce 648 different compound temperaments or varieties, and that that will suffice for the present for the classification of the English race by temperament. In the negroes, where the persistence of the bilious characteristics of the "outspread" nose, the black hair, and dark complexion limit us considerably in our variants, we must admit, we suppose, that the varieties are less numerous, or else make up new schemes of temperaments for them.

When these pure and compound temperaments are as widely understood and noted as Mr. Stewart would wish, he thinks we shall be able to give a fairly complete sketch of the intellectual and emotional nature of a man from noting his seven pure or compound external characteristics; and, indeed, he is able to give us some hints at present on which we have no space to dwell. At any rate, granting the temperament known and its mental accompaniments, the child need never be wrongly trained, nor the adult mistakenly employed; and we may presume that social problems will solve themselves.

With regard to the waste caused by the misdirected education which arises from the misunderstanding of temperament, Mr. Stewart is particularly indignant; and it is a pity he should have illustrated it by figures drawn from the results of the Cambridge Higher Local Examinations. In one examination 811 senior candidates entered for examination, and 602 passed in one group or another; eleven passed in music. "Eleven only passed in music!" exclaims Mr. Stewart, "leaving 800 failures, including those who did not attempt to pass. What a gross example of a mistaken education!" But would it not have been better to note that in this particular instance the musical examination is not part of the ordinary pass examination, and is an advanced technical examination, to which few attend, and that, in fact, less than twenty took up the subject, and the failures were not 800 but eight.

As to Mr. Stewart's second charge that we use the word temperament with great inaccuracy according to his definitions, we plead guilty without hesitation. He goes so far as gravely to remark that "in the Home Rule debate May 11th, 1886, Mr. O'Brien attributes anxieties and apprehensions to Lord Hartington's temperament, which is referred to as if it were well known, though probably the speaker could not have named it if asked" (p. 344); and he is vexed with an anonymous journalist who loosely writes: "Lord Salisbury's temperament is supposed to be combative," when probably he had no thought of any of the temperaments. It might attract the attention of the Speaker or the Lord Chancellor, and it would certainly be one of the strangest of the recent additions to Parliamentary language if Mr. Stewart's suggestion were to be taken up, and Mr. O'Brien were to speak of the oval sanguineo-lymphatic leader of the Unionists, or questions were to be addressed across the table to the noble semi-balanced sanguine and bilious earl. But in sober earnest, the word temperament in any exact sense "tied to physical characteristics," as Mr. Stewart phrases it, has long been dead and cannot be revived, and it is no more worth disputing whether there be three, or four, or five, "pure" temperaments, than discussing whether there are four elements—earth, air, fire, and water.

The satisfactory point in Mr. Stewart's book is that he sees and appreciates the value of the work which is being done, largely by the energy and perseverance of Mr. Francis Galton, Mr. Charles Roberts, Dr. Beddoe, and others, in ascertaining the actual physical facts of the form and structure of the present inhabitants of the British Isles, and setting them down accurately in black and white, on that large scale which make averages worth something. That is a laborious and often for the time a thankless task, which may lead to some wide and important generalisations about race and constitution, for which we can have no doubt at least our descendants will thank us heartily.

SCHOOL-HYGIENE. By ARTHUR NEWSHOLME, M.D. Swan Sonnenschein, Lowrey, and Co., Paternoster Row.

THIS work is obviously written by an author whose main thought is for boy-life in large schools. Dr. NEWSHOLME'S book contains much of the same subject-matter, but has less reference to the public school-boy. In the first part he discusses the lighting, warming, ventilation, and general sanitary condition of school-houses. The second part, relating to "scholars," considers the effect of school-work upon children, and pleads for the amount of this work to be carefully graduated according to age. Dr. Newsholme accepts, and doubtless rightly, Mr. Edwin

Chadwick's teaching, that too early and forced education simply leads to precocity and to the production of a less well-developed individual in later life. There is room for a fuller discussion of this subject than is devoted to it in Dr. Newsholme's little book. The method of education has not less influence upon the child, either for good or evil, than has the amount of time devoted to it. A reasonable amount of study for young children can be sufficiently intermixed with play to prevent the ill-effects which are so often found to result from prematurely forcing education. A useful chapter on physical development is to be found in the volume, giving some excellent tables of the height, weight, and growth of children at different ages. The writer calls attention to the neglect in the physical education of children, and not without reason. While other countries are endeavouring to create the "healthy animal," which Herbert Spencer tells us is the first requirement, England is neglecting most seriously to concern herself with this branch of the training of her children. This omission is more conspicuous with regard to girls than boys, and but little effort is being made to awaken public attention to the serious results that must follow if the development of the brain be continued and physical education is neglected. Dr. Newsholme rightly says that the formal boarding-school walk on fine days is but a parody of the exercise required, and can have little effect in stimulating the circulation or refreshing the mind. His views on the subject are good, and deserve wider recognition. There does not appear to be any sufficient reason why girls should not enjoy boating and cricket as well as boys; of the former recreation, it may be said that it probably affords the best exercise which is known.

NOTES ON BOOKS.

The Essentials of Bandaging, with Directions for Managing Fractures and Dislocations; for administering Ether and Chloroform; and for using other Surgical Apparatus. Illustrated by 144 Engravings on Wood. By BERKELEY HILL, M.B.Lond., F.R.C.S., Professor of Clinical Surgery in University College. Sixth Edition, Revised and Enlarged. (London: H. K. Lewis. 1887.)—As this is the sixth edition of Mr. Hill's book, there is now very little to be said of the work except that its most recent form shows that every effort has evidently been made to maintain its excellence, and to adapt it to the ever-increasing requirements of the modern student. By the help of hospital colleagues, the author has added important sections on special matters relating to ophthalmic and laryngeal surgery, and the sections on the administration of anæsthetics and on antiseptic dressings have been carefully revised. Among the many good points which will doubtless serve to render this manual of great use to students and young practitioners, we might refer in terms of commendation to its thoroughly practical character, to the clearness of its numerous illustrations, and to the insertion of a full and trustworthy section on the important subject of surface-guides and landmarks.

Year-Book of Pharmacy: Comprising Abstracts of Papers relating to Pharmacy, Materia Medica, and Chemistry, etc. (London: J. and A. Churchill. 1886.)—This valuable summary of research and observation is a volume of respectable dimensions, containing abstracts of papers relating to pharmacy, materia medica, and chemistry, contributed to British and foreign journals down to July, 1886. It offers an excellent means of consulting in book form material of value which would otherwise be inaccessible to the ordinary reader. There would seem to be a prospect of several additions to the list of elementary bodies, due to the investigations of foreign chemists, and allusion is made to some noteworthy improvements in the manufacture of hydrogen which may by-and-bye prove to be possessed of great practical importance. All the new drugs and plants which have been introduced or reported upon are described, and various details of pharmaceutical interest are discussed. The second part of the volume is devoted to the proceedings, etc., of the last British Pharmaceutical Conference. The President's speech on that occasion contains an energetic protest against "factory-made" preparations, "the unofficial *Pharmacopœia* of which are mainly the advertisement pages of the medical journals." It involves a charge against medical men of prescribing and using "nostrums"—whatever that term may be taken to mean. The remedy for this state of things would be, in his opinion, a compilation of quasi-official formulæ, the issue of which by the Society would raise the very practice he condemns to the level of a science.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

CARNRICK'S PEPTONOIDS IRON AND WINE.

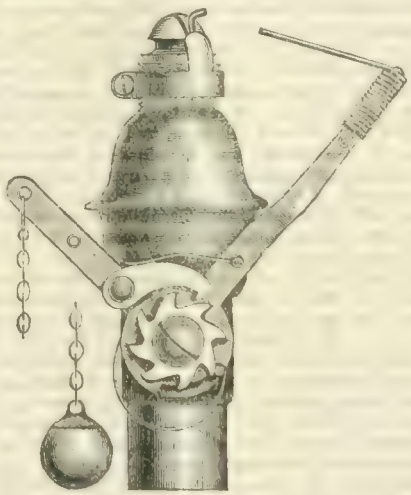
IT would be a difficult matter to determine whether in modern therapeutics drugs ordinarily so called, or dietetic preparations, hold the more prominent place. In the treatment of chronic debilitating diseases of modern life at least, the latter are of the very greatest use, and they are of equal, if not greater, value in the management of the trying period of convalescence from acute diseases. Carnrick's "beef peptonoids" have won high approval as an excellent dietetic preparation; they are made from meat, wheat-gluten, and milk, and contain in a partly digested or easily digestible form nitrogenous materials of vegetable and animal origin. The distinguishing character of the preparation is the large proportion of soluble albumen and peptone present in combination with the extractives and salts which are valued for their stimulating properties.

The new preparation submitted to us is a solution of the peptonoids in good sherry, to which a moderate dose of pyrophosphate of iron has been added. The result is a very palatable preparation, with a decided but not too strong meaty flavour, which is readily taken, is well borne even by a very delicate stomach, and may safely be recommended in those numerous classes of cases where an alcoholic and extractive stimulant, in combination with a soluble and easily assimilated food, is indicated.

The preparation is made by the Maltine Manufacturing Company, of Hart Street, Bloomsbury.

AUTOMATIC AND HAND-LIGHTING ELECTRIC GAS-BURNERS.

A VERY ingenious adaptation of an electric appliance to meet a common domestic need has been recently brought into working order by the Woodhouse and Rawson Electric Supply Company. A great number of patterns are made, but all agree in the general principle, which is that by the action of some simple fixture connected with a gas-jet, a spark of electricity is sent across the issuing current of gas and lights it. In the burner illustrated, on pulling the chain the gas is turned on and illuminated by the passage of the spark at the same time; the next pull on the chain shuts off the gas. With this burner



it is impossible to turn the gas on without at the same time lighting it. The same arrangement can be applied to an Argand burner, and for ophthalmoscopic or laryngoscopic lamps the invention ought to be very useful.

The same company manufactures "automatic gas-burners." By the touch of a press-button the current from a battery of four or six Leclanché cells is sent through the coil of a magnet; this causes an armature to vibrate and to rotate a ratchet-wheel which turns on the gas. When the gas has been lighted by the spark, the commutator

shifts the current into another circuit, leaving the flame; pressure on a second button shuts off the gas. The last arrangement can be applied to a circle of jets, such as is still too often to be seen in churches and other public buildings, its great advantage from our point of view being that a careless attendant cannot leave the gas on and unlighted.

Of the first named, "electric hand-lighting gas-burners," there are several varieties, of which full particulars may be obtained from the company at 11, Queen Victoria Street, E.C.

TURKISH NURSERY NAPKINS.

We have received samples of the Turkish nursery napkins for children's use, manufactured by Messrs. H. Barton and Co., of Congleton. Their softness renders them very suitable for use on the tender and sensitive skins of infants and children, and their absorbent qualities ensure that drying of the skin which is necessary to prevent the roughness, chapping, and excoriation otherwise liable to occur. They are made of two sizes—namely, 23 in. by 23in., and 27 in. by 27 in.; and their texture is such that while pliable and soft, they are yet durable.

SOME INTERESTING POINTS REGARDING ALBUMINURIA.

At a meeting of the Royal Society, Edinburgh, held on June 6th, and presided over by Dr. John Murray, a most interesting paper was read by Professor Grainger Stewart on the discharge of albumen from the kidneys of healthy people. Dr. Stewart, whose earliest fame was secured in connection with his investigations and writings on Bright's Disease, has for some time been conducting an exhaustive inquiry into the subject of albuminuria, as it occurs in all sorts and conditions of men. The results of these investigations will doubtless appear at a future time in a complete and tabular form, but enough has already appeared to warrant us in giving a general idea of the results obtained, more especially as these results are of great interest to the public and profession at large. He found that out of 407 urines tested and derived from healthy individuals, 129 contained albumen, or 31 per cent. Taking different groups of people he found that out of 205 soldiers, 77, or 37.56 had albumen; and of 74 of the civil population albumen was present in only 10 8 per cent. Of 40 children in one of the City poorhouses 17.5 showed albumen present, and of 40 male inmates about 60 years of age the percentage was 67.5, showing a marked increase as life advanced. Directing his attention to the effect of food and the effect of exercise upon the condition of albuminuria, Dr. Stewart found that with different classes of individuals the following were the results: Soldiers, 15.6 before breakfast, after breakfast 40 6; old men, 37.5 before and 67.5 after breakfast; children in poorhouse, 12 5 before and 17.5 after breakfast; children in an orphan hospital, 14.6 before and 28.83 after. Of a party of soldiers before taking any exertion, 29 per cent. showed albumen, and on return from an eight miles' march, the percentage was 19, showing that its absence was favourably influenced by exercise. Of a party of soldiers before breakfast, 15.6 per cent. showed albumen; after breakfast the number had increased to 40 6 per cent., but after the march it had diminished to 28.1 per cent. Before going on fatigue duty 44 per cent. showed albuminuria, but after fatigue there was 64 per cent. Of band boys playing wind instruments, the percentage of albuminuria was 20 8, while it was only 8.3 per cent. of other boys examined; after the band boys had had an hour's playing on their instruments the percentage was 12 5. Of 21 boys in the Orphan Hospital, 19 per cent. showed albuminuria before taking a cold bath, and after the bath it was shown in 23.8 per cent. of the boys. Dr. Stewart, as the present result of these investigations, has come to the following conclusions: That there is no sufficient proof that albumen is normally discharged from the human kidneys; that albuminuria is much more common among presumably healthy people than was formerly supposed, tests having demonstrated its presence in nearly one-third of the population; that the frequency of albuminuria increases as life advances; that it is more common among those whose occupations involve arduous bodily exertion than among those who lead easy lives; that albuminuria frequently follows the taking of food, especially of breakfast, which more than any other meal increases the percentage of albuminuria; that moderate muscular effort rather diminishes than increases albuminuria; that it is often induced by violent and prolonged exertion; that cold bathing produces or increases albuminuria in some individuals; and that the existence of albuminuria is not of itself a sufficient ground for the rejection of a proposal for life insurance. The foregoing is sufficient evidence of the interest of Professor Grainger Stewart's communication to the Royal Society, and will doubtless direct to this subject the attention of many observers who have it in their power, through their connection with prisons, asylums, schools, workhouses, or other public institutions and works, to investigate this interesting subject, and enable us to come to some satisfactory conclusions regarding the occurrence of albuminuria and the circumstances which affect it.

ROYAL COLLEGE OF SURGEONS.

An ordinary meeting of the Council was held at the College on June 9th. The minutes of the last meeting of Council on May 12th were read and confirmed. A report was received from the Court of Examiners of the candidates found qualified for the diploma of Fellow, and it was resolved that the diplomas of Fellowship be issued to the several persons whose names were included in that report. It was resolved to illuminate the exterior of the College buildings on June 21st in celebration of Her Majesty's Jubilee. A report was read from the Library Committee, and in conformity with a recommendation therein contained that the vacant librarianship be filled up by the appointment of a librarian specially educated for such office, that the vacancy be advertised, and that candidates be invited to send in their applications by a given date, it was resolved that the salary of the librarian be £400 per annum, to be increased after one year of service to £500, provided the person appointed shall perform his duties to the satisfaction of the Council.

A third report was received from the Committee on the Extension of the College Premises, relating to the building of an addition to the Library, and the appointment of a Pathological Curator. The report was adopted, but is subject to confirmation at the next meeting of the Council.

A report from the College Land Committee of the two Royal Colleges was read, but its consideration was postponed.

A letter was read from Mr. Edward Lund resigning his seat in the Court of Examiners. His resignation was received with special regret owing to the circumstance of its being due to ill-health. A successor to Mr. Lund in the Court of Examiners will be appointed at an extraordinary meeting of the Council to be held on Monday, the 27th instant.

A letter was read from Mr. John Marshall, reporting, as the representative of the College, the proceedings of the General Medical Council during its late session.

The best thanks of the Council were given to Mr. Marshall for his services as the representative of the College in the General Medical Council.

The following gentlemen were nominated for election, in July, as Professors and Lecturers for the ensuing year:—Messrs. Bryant, Hulke, Stewart, Warner, Lockwood, Jessop, Sutton, E. Nettleship, Marcus Gunn, J. Priestley Smith, W. Arbuthnot Lane, and W. Watson Cheyne.

The President stated to the Council that he had received from Mr. J. Talfourd Jones, of Brecon, a portrait of Jenner, which he offered for the acceptance of the College. The portrait was accepted, with the best thanks of the Council to Mr. Talfourd Jones for the same.

A letter was read from Mr. James Bankart, of Exeter, a Fellow of the College, enclosing a memorial to the Council on the subject of the new regulations of the Examining Board in England and their influence on students at provincial hospitals. The letter was referred to the Committee of Management to consider and report thereon.

Three further memorials were received in opposition to the proposals contained in the memorial forwarded by Dr. Wilks relating to the disposal of the Erasmus Wilson Fund, the receipt of which it was resolved to acknowledge.

The following motion, proposed by Mr. Macnamara and seconded by Mr. Power, was agreed to: "That it be referred to the President and Vice-Presidents to consider and report to the Council as to the propriety of re-arranging the lectures annually delivered in the College, and of making them more serviceable to the profession."

Mr. Jonathan Hutchinson gave notice of the following motion: "That a Committee be appointed to arrange for the delivery by members of the Council or others of special lectures expository of the pathological preparations in the College Museum."

It has been decided by the City Commission of Sewers to construct an artesian well at the artisans' dwellings in the City at a cost £1,750.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 11th, 1887.

THE MEETING OF THE BRITISH MEDICAL ASSOCIATION IN DUBLIN IN AUGUST.

THE meetings of the British Medical Association that have hitherto taken place in Ireland were so successful, that it may be fairly anticipated that the approaching meeting next August in Dublin will be largely attended. It is exactly twenty years since the Association paid its first visit to Ireland. Happily, there are not a few of our most esteemed members still amongst us who were present at the Dublin meeting on that occasion. The traditions of that meeting are still fresh; and although the genius of Stokes, the sagacity of Corrigan, and the eloquence of Robert Smith will be missed, the same qualities of heart and mind which gave a charm and character to the Dublin meeting of 1867 will not be wanting, we know, in making that of 1887 equally successful.

Thanks to the courtesy of the Provost and Senior Fellows of Trinity College, all the Sectional and other accommodation required for the meeting will, as on the occasion of the former visit, again be provided in the University of Dublin. Thus the work will be centralised, and time will not be lost in going from one Section to another. The Museum also—which, at some places where the Association has met, has been, owing to the exigencies of space and accommodation, not infrequently at some distance from the place of meeting—will in Dublin be in the extensive and well-lighted Anatomical Department of the Medical School. It will thus be in the same building as that in which four of the Sections meet, and the entrance to the Section of Medicine will be through it.

All the great medical bodies of Dublin have joined most cordially and generously in their desire to welcome and entertain the Association. In addition to placing its halls, lecture-theatres, and other rooms at the disposal of the Association for the purposes of the meeting, Trinity College will entertain a large number of the leading members and of the foreign guests at dinner; and we hear also that the University will probably further mark the occasion by conferring a limited number of its much prized, because rarely granted, honorary degrees on some distinguished men.

In our issue of December 11th, 1886, we gave a forecast of some of the arrangements for the coming meeting. Nearly all the details have now been fixed, and we are enabled to state them with comparative exactitude. Considerable changes have been made in the usual order of business, which, we have little doubt, will be found satisfactory. The general addresses—in Medicine by Professor Gairdner, of Glasgow; in Surgery by Professor Edward Hamilton, of Dublin; and in Public Medicine by the Rev. Dr. Samuel Haughton, F.R.S., Senior Fellow of Trinity College, Dublin—will be given in the afternoons, while the mornings will be occupied in the detailed work of the various sections. As will be seen by the programme published at page 1299, the arrangements for discussions and for independent papers which have already been made ensure that the strictly scientific work of the meeting shall not fall behind the standard of former years.

The sectional work of the meeting of the British Medical Association is now alike solid, abundant, and various. No medical meetings or congresses held in any part of the world are more remarkable for the mass of valuable, scientific, and clinical matter brought forward; and the present arrangements for providing a debate by able speakers on chosen topics of the day give to the proceedings a vivid and living interest which attracts large and often overcrowded audiences to the various sectional rooms in succession. In these respects, also, it will be seen that the Dublin meeting will not be deficient.

The social festivities, which conduce so much to the success of these annual gatherings, will not be wanting; indeed, the generous hospitality for which our warm-hearted neighbours are proverbial will be given full swing. The Royal University of Ireland has most generously placed its magnificent buildings at the disposal of the Executive Committee, and in them the President's *soirée* and annual dinner will be held. No more suitable and more elegant rooms for both these entertainments could be found. And when we say that the arrangements for these gatherings have been placed in the hands of Sir William Stokes and of Mr. Austin Meldon respectively, all will feel sure that everything will be done that will conduce to the pleasure and comfort of the large number expected to be present. Already many distinguished visitors have accepted the invitation.

One of the most interesting features in connection with the meeting will be the *conversazione* to be given to the Association on Friday evening by the Army Medical Staff. The enthusiasm with which this project has been taken up by the medical officers of the army, both at home and abroad, is most marked, and as a recognition of the services that have been rendered to the service by the Association and by the JOURNAL is most gratifying. The Museum of Science and Art in which this *conversazione* is to be given is in itself full of interesting objects, and has been granted by special permission of the Lords of the Committee of the Council of Education. The fact that Sir Thomas Crawford, K.C.B., the Director-General of the Medical Staff, has accepted the presidency of the Section of Public Medicine, coupled with the cordial spirit of fraternity shown by the officers of his department, should do much towards binding together more intimately than ever the lay and military members of the profession for their common good, and may, we trust, be still further developed under the auspices of our Association.

Special facilities will be given for visiting the beautiful country around Dublin: Bray and Powerscourt, Glendalough and Ovoca, the Boyne, and the unrivalled Bay of Dublin itself, will be the objectives of well-organised pleasure trips; while for those with more time at their disposal, more extended tours are laid out to Killarney, the Giant's Causeway, the Highlands of Donegal, and other picturesque districts of the Emerald Isle.

There will, we may add, be no difficulty after the Dublin meeting in reaching America in time for the International Congress at Washington. Berths can be booked beforehand, and the steamer picked up at Queenstown, Londonderry, or Belfast.

THE CONTAGIUM OF SCARLET FEVER.

We publish this week an important paper by Drs. Edington and Jamieson on the nature of the contagium of scarlet fever. Dr. Jamieson has for some time been making experiments on the best means of preventing the spread of this disease, and has come to the conclusion, which is illustrated in this paper by a number of striking examples, that by the use of baths to wash away the scales and the application of antiseptic ointments to fix and disinfect them, the spread of scarlatina through a family can be prevented. From this he concludes that the contagium is present in an active state in the desquamation, and he further mentions cases to show "that the late desquamation contains the particulate contagium in largest amount, and that this argues that air is necessary for its maturation or ripening."

The bacteriological part of the investigation was carried out by Dr. Edington, and consisted of examination of the skin and of the blood of scarlet fever patients. Microscopical examination of the skin in the desquamative stage showed many minute stained points, smaller than micrococci, but not of the nature of bacillus or bacterium. Cultivations were accordingly made from the skin and blood; various precautions being taken to exclude extraneous organisms, with the result that a number of micrococci and bacilli were obtained. Of these the two most important seem to be those designated by Dr. Edington under the provisional names, *diplococcus scarlatinæ sanguinis* and *bacillus scarlatinæ*. The former occurred in 45 per cent. of the tubes taken from the desquamation, and in 30 per cent. of the tubes taken from the blood: the latter occurred in every case but one of the tubes made from the desquamation if taken after the twenty-first day from the commencement of the fever, but never before this, and also in every tube made from scarlatinal blood if taken before the third day of the fever. Inoculations of the former gave negative results; inoculations of the latter caused erythema in rabbits and guinea-pigs, followed by desquamation, and in young calves a febrile condition, accompanied by a red, dry rash, followed by desquamation. Further, blood taken from a case of scarlet fever on the third day of the fever caused erythema, followed by desquamation, in a guinea-pig. The bacillus apparently disappears from the blood of patients suffering from scarlatina after the first three days of the fever, and then other organisms, chiefly micrococci, appear. Seven cases were treated on the lines described by Dr. Jamieson, and in only two was this bacillus found in the desquamation.

Dr. Klein has also recently published the results of his investigation on the Hendon cow-disease and its connection with human scarlatina. It will be remembered that at the end of 1875 an epidemic of scarlet fever occurred, which was referred by Mr. Wynter Blyth to the consumption of milk coming from a dairy at Hendon. Further investigation showed that certain of the cows at this farm were suffering from a diseased condition, consisting of the presence of sores in different parts of the skin, with ulcerations on the udder and teats. The disease is ushered in by a short initiatory fever, a dry, hacking cough, sometimes quickened breathing, sore-throat in severe cases, discharges from the nostrils and eyes, an eruption on the skin around the eyes, on the hind-quarters, and on the teats and udder, this eruption being in the form of vesicles or bullæ. Dr. Klein obtained diplococci from these ulcers, with which he has performed a number of experiments which have led him to conclude tha these organisms are the cause of human scarlatina, and that the disease in the cows was also scarlatina. The chief points which he brings forward in support of this view are the facts as to the milk-epidemic just referred to; the fact that culti vations of this micrococcus produced a similar, though more severe, disease in calves; that the same micrococcus occurs in the blood and tissues in human scarlet fever, and that the *post-mortem* appearances in animals resemble those of scarlatina. He also got the micrococcus from a specimen of condensed milk suspected of being the cause of an epidemic of scarlet fever; and, lastly, in the case of a monkey which was taken ill after drinking milk suspected of producing scarlet fever, Dr. Klein obtained the same microbe from the blood.

The results of these two researches are so totally contradictory that, till further evidence is brought forward, we must regard the matter as quite unsettled. The following seem to us to be some of the chief objections which might be urged in each case. The Edinburgh research is, in many respects, very complete; and whether the bacillus to which scarlet fever is attributed be really the cause or not, valuable information has been given as to the bacteria associated with this disease. In two points the research seems deficient: first, in that sufficient characters are not given by which the bacillus may be recognised; and, secondly, that there is no evidence that this bacillus is not present elsewhere than in scarlatina—that, in fact, it is not a common saprogenic organism. Some hesitation must also be felt in accepting the results, as this is by no means the first research on scarlatina made by competent observers, and that former researches were more or less negative, although apparently Edington's bacillus is easily cultivated, and grows with great rapidity. In the case of Dr. Klein's research, the facts in our possession do not warrant a definite expression of opinion. Dr. Klein does not state in how many cases of human scarlatina he found this organism, in what stage of the disease, or where. There are apparently no experiments on calves with scarlatinal blood to show that blood had the same effect on the animals as the organisms cultivated, and that that effect was the production of the Hendon disease, and no control experiments with the pyogenic and erysipelatous streptococci which Dr. Klein's organism very closely resembles; in fact, there seems to have been an entire absence of proper controlling experiments. In one respect Dr. Edington supplies an omission, though unfortunately incompletely: namely, he injected blood from a scarlatinal patient into a guinea-pig, with the result that he obtained a similar result to that got on injection of his bacilli. It is unfortunate that the injection was not made into a calf, when we should have seen whether the Hendon disease resulted or not. Another point adverse to Dr. Klein's view is that the Hendon disease is apparently a moist eruption, not the dry eruption of scarlet fever; while, on the other hand, Dr. Edington produced a dry eruption, followed by desquamation (not by peeling off of crusts, as in the Hendon disease), by injection of scarlatinal blood into guinea-pigs, and of his bacilli into a calf. Another very important fact is mentioned by Dr. Cameron in a paper read before the Epidemiological Society on April 14th, 1886. (See *Transactions of the Epidemiological Society*, vol. v, new series). Dr. Cameron says: "A trustworthy informant received the virus of this (the Hendon) disease into a recent scratch upon his forefinger while milking a diseased cow. He suffered from general weakness, malaise, and loss of appetite. About

four or five days after inoculation, a vesicle or small blister appeared on the finger. This became broken, and several others formed on the back of the hand. The whole hand and the fingers became swollen and inflamed, the inflammation extending in broad lines as far as the elbow. The general disturbance lasted a fortnight." Thus the result of the inoculation of the Hendon disease into man produced, not scarlet fever, but a septic condition. Several researches made in Germany—notably Loeffler's on diphtheria—have shown the presence of treptococci in the blood-organs of patients who have died of scarlet fever, and have also shown that there were cases of mixed infection, a condition not to be wondered at when the state of the throat, allowing easy entrance of bacteria into the blood, is borne in mind. It will not be surprising if the streptococci described by Dr. Klein turn out to be derived from this source, and not to have any real bearing on the causation of scarlet fever. At any rate, it is clear that we must not be too hasty in arriving at a conclusion on this subject, but must consider the matter still quite open, and await further researches by independent observers.

The Agricultural Department of the Privy Council Office has been making some investigations on the subject at the instance of the Royal Agricultural Society of England, and if there is any meaning in a report by Professors Axe and Brown which has just been officially published, the Agricultural Department disbelieves altogether the conclusions at which Mr. Power and Dr. Klein have arrived. Professor Brown, in his comments on Mr. Axe's report, appears to attach immense importance to the statement that, while the cows in five dairies were infected with an eruptive disease of the udder and teats by the agency of a herd hailing from Derbyshire, in only one of those dairies did human scarlatina result from the distribution of the milk. It has to be remembered in this connection that the fact of the identity of the cows in the dairies that escaped with those at Hendon rests upon the statement made to Mr. Axe, months after the event, by the dealer who "resolutely refused all information whatever" to Mr. Power and his colleagues. There are other points in connection with Professor Axe's report which invite criticism, but it is hardly necessary at the present juncture to discuss them.

This much, however, is clear, that the Agricultural Department and the Medical Department are working quite independently of each other, and that on one side or on both there is a reluctance to accept the conclusions of the other, and to offer mutual help in the elucidation of perplexing phenomena.

Not only the medical, but the agricultural, world is profoundly interested in having the question raised by Dr. Klein settled as authoritatively as possible. It may well be that diseases of which veterinarians have as yet taken no sufficient account may have a serious influence upon the milk yielded by cows, and thus upon the constitutions of the human beings drinking it. These two Departments of the State, paid out of the same funds, might surely contrive to work harmoniously together on a subject of so much interest to both. We do not find any indications that they propose to do this; it appears to us, therefore, to be clearly necessary that the executive government should interfere, and for the benefit of the community at large secure the appointment of a consultative committee to which the whole question should be referred, and on which should sit representatives of the medical, veterinary, dairy, and other interests involved. Such a committee would speak with an authority which both the contending forces would respect.

THE UTILISATION OF CLINICAL MATERIAL IN LONDON.

THERE appears in our correspondence columns this week a letter from "A Teacher at a London Medical School," which once more turns our attention to the great waste of invaluable clinical material in London hospitals. London teachers complain that students cross the Tweed and the Channel; students in metropolitan hospitals find that, notwithstanding full wards and crowded out-patient rooms, they do not get enough clinical instruction, whilst, beyond the range of medical schools, there is little teaching, except of that kind which is only of value to qualified men. In the Report of the Practical Education Committee, recently presented to the Medical Council, one of the two subjects discussed was the increase of the practical element in medical education by the insistence on more clinical, therapeutical, and pathological teaching and work in medical schools. The importance of certificates of attendance to clinical duties after the passing of anatomical examinations was strongly urged by the Committee, who were further of opinion that every student should have access to some means of gaining instruction beyond the walls of his own hospital, such as an allied dispensary, workhouse infirmary, fever hospital, and parochial and other midwifery department. Attention was also turned to the necessity of organizing instruction in fevers and zymotic diseases of all kinds.

Our correspondent's suggestion—which is in complete harmony with the above-mentioned Report—is that a composition ticket should be issued, which would admit the student to the practice and clinical lectures of all the medical schools and the chief special hospitals. A similar ticket could be issued, under different conditions, to qualified men. For the details of "A Teacher's" plan his letter must be consulted. The principle of the Medical Council Report and the special proposal of "A Teacher" may be considered together. The chief cause of defective medical education probably lies in the London hospital system itself. Each London medical school is not only a distinct centre of education, independent in every respect, except as to the power of granting diplomas and degrees, but a little world with strong social customs and prejudices. The sentiment of love for one's medical school needs no apology and calls for no censure. Many mischievous ideas, however, prevail in the wards and dissecting-rooms. The notion that first year's men should not work has been neutralised, but there remains too much routine of a kind that is mischievous to industrious as well as to idle students. In most schools a dressership is too highly valued in proportion to the appointment of clinical clerk. Much mischief is done by the belief that dressing or clerking for one particular medical officer all but ensures the student's future, whilst the student acquires an idea that it is useless to hold a clinical appointment under some other member of the staff. As a rule, the opinion of his fellows is against the student who works at some special subject outside his own hospital. We know of cases where qualified men, studying operative surgery for the Fellowship examination under a well-known surgeon at a flourishing medical school, were strongly blamed by their former fellow-students for not taking up that subject at their own school, where it happened that the course of operative surgery was taught by two or three demonstrators of anatomy younger than the candidates themselves.

These prejudices must be eradicated. The student must be encouraged to study in the medical wards; surgery will attract him without any pressure from teachers and seniors. Some of the greatest

evils of the profession arise from ignorance of clinical work and absence of diagnostic training in men who have learnt to be good operators. The midwifery department must not be depreciated by injudicious remarks made before students by the surgeons and physicians of a hospital. When the surgeon goes round the wards he must not allow his house-surgeon and dressers to throw obstacles in the way of other students who wish to learn. The house-staff may reign supreme when the surgeon is not in the building; when he is, authority lies in his hands, and it is his duty to teach everybody who goes round with him. This leads to the general duties of the senior medical officer. Should he have achieved fame, or success, or both together, it is inevitable that a heavy regiment of students will follow his footsteps round the wards. The hospital authorities must take care, however, that their great men do not neglect teaching duties, as is not rarely the case. In French hospitals there is wholesome control in this respect. The authorities should take steps to check the visits of hangers-on, who follow daily for months in the train of a distinguished surgeon as he goes round the wards, but clearly learn nothing. Teachers have a perfect right to remind these amateurs that they are doing themselves no good. On the other hand, teachers should do their utmost to encourage students to spend the time between two clinical appointments at their own school by holding other practical appointments elsewhere, where they can learn what may prove of value to them.

The composition ticket system deserves grave consideration. It would grate against the strongest of those prejudices which, as we have above noted, grow as natural weeds in the soil of London schools. At certain special hospitals, on the other hand, especially some of those devoted to diseases of women, the visits of unqualified students are discouraged or absolutely forbidden. Certainly, however, an arrangement with the chief ophthalmic hospitals and lunatic asylums would be very advantageous to the students at medical schools. The utilisation of infirmaries is a matter the importance of which we have repeatedly urged, and the composition ticket system might be extended so as to benefit both the student and the inmates of the infirmaries.

THE average weekly circulation of the BRITISH MEDICAL JOURNAL has now risen to 14,000, a number which is not only enormously in excess of that of any other medical journal in the country, but will be found on investigation to be considerably in excess of the combined circulation of the whole of the other medical journals in Great Britain.

THE President and Fellows of the Royal College of Physicians have issued cards for a *conversazione*, to be held at the College on Wednesday evening, June 29th, at 9 o'clock.

THE Committee on Hydrophobia will hold a meeting for the further consideration of its report on this day (June 11th). As this will probably be a final meeting, the report, which is an elaborate review of the whole question of the value of Pasteur's prophylactic, will be made public within a short time.

A FEW weeks ago we announced that there was an active competition for the vacant appointment of Assistant-Surgeon to Charing Cross Hospital. Last week Mr. Marmaduke Sheild was elected to fill the vacancy. Dr. F. W. Mott has been appointed Medical Registrar to the same charity.

EXAMINERS IN SURGERY, CAMBRIDGE UNIVERSITY.

PROFESSOR HUMPHRY and Mr. C. Macnamara have been reappointed, and Mr. Willett and Mr. Wherry elected as Examiners in Surgery for the University of Cambridge.

HEALTH OF THE CROWN PRINCE.

DR. MORELL MACKENZIE returned to Berlin on Tuesday last, and again saw the Crown Prince in consultation with Dr. Wegner on the following day. As the larynx was free from congestion, it was agreed that the operation might be repeated, and Dr. Mackenzie succeeded in removing another portion of the growth, which is the size of a split pea, and is attached on the inner aspect of the left vocal cord. The result of the histological examination of this fragment is not yet known, and it should be understood that the prognosis given by those engaged in treating the illustrious patient is most guarded. Meanwhile the Crown Prince and Princess will come to England on Monday next in the Queen's yacht, and will probably make a protracted stay in this country.

MEMORIAL TO THE LATE DR. WILSON FOX.

A DESIRE has been widely expressed that there should be some memorial to the late Dr. Wilson Fox. It has been thought by some of his intimate friends that the memorial should be personal, and that the most appropriate form would be a portrait, to be presented to Mrs. Wilson Fox. It is proposed, if the amount of the contributions permits, that replicas should be made for the College of Physicians and for University College. For this purpose a committee has been formed, consisting of Sir William Jenner, Dr. Russell Reynolds (treasurer), Mr. Erichsen, Mr. George Pollock, and as secretaries (to whom contributions can be sent), Dr. Gowers, 50, Queen Anne Street, and Dr. Barlow, 10, Wimpole Street.

WET CLOTHES.

A PERSON who enters an omnibus with a waterproof-cloak streaming with wet, and wedges him or her self between other persons not similarly protected, must necessarily convey much of the moisture on to the clothes of the neighbours, to their discomfiture and even danger. Further, the cushioned seat is the inevitable recipient of the water which flows off the impermeable, and is thus rendered uncomfortable and unwholesome for the next occupant. It would be well if the rule enforced by some of the omnibus and tramway companies of London, which have a notice enjoining passengers who wear mackintoshes to remove them on entering any of their vehicles, were made absolute throughout all the companies, for it materially adds to the comfort, or, rather, lessens the discomfort, of this cheap mode of conveyance.

THE ACCIDENT TO THE KING OF THE COWBOYS.

THE case of the celebrated cowboy, Buck Taylor, who met with an accident at Buffalo Bill's "Wild West" last week, is not without surgical interest. The peculiar character of the injury is explained by the circumstances under which it was inflicted. He was engaged in the quadrille on horseback, and was passing between two horses, when one of them, ridden by a "Western girl," swerved, and left little space for his horse to pass on. He attempted, however, to go forwards, when the swerving horse swung itself with great force against his right thigh, and he felt the bone snap as he received the blow. Buck Taylor then tried to rest the injured limb along the back of the horse, but found at once that he had lost all control over the muscles of the thigh; so he threw his arm round the horse's neck, and looked out for the right moment to slip as comfortably as possible on the tan. Unfortunately, he could not control himself as he slid off, but fell on his back and sprained the muscles of his neck. Mr. Maitland Coffin was present, and improvised a splint for the injured thigh without disturbing the patient's clothes. Buck Taylor was removed in an ambulance to the West London Hospital, and admitted into Mr. Keetley's accident-ward. A simple and perfectly transverse fracture of the right thigh-bone was discovered, at the junction of the upper with the middle third of the shaft. The

shortening hardly amounted to half-an-inch, owing, probably, to the direct violence which had broken the bone, without the aid of muscular action, and also to the transverse character of the fracture. This trifling amount of shortening is observed after an artificial transverse fracture as produced in Macewen's operation. The chief point of interest, however, in this case is the production of the fracture by direct force applied to the outer aspect of the thigh, not apparently high in degree, and without injury to the soft parts. A few similar cases have been recorded. The limb was placed in a long splint, with extension by a weight and pulley, and a kettle-holder splint was fitted to the anterior aspect of the thigh. Buck Taylor is quite the hero of the hour, and receives daily a large number of visitors, including many persons of high social position and culture, who take an interest in an unsophisticated child of nature.

ADULTERATION V. RESTRICTION OF THE TRADE IN ALCOHOL.

We are not surprised to see that the eighteen samples of beer purchased at the request of Mr. Quilter by Government agents, in the expectation of proving his thesis that noxious adulteration of beer largely prevails, resulted in quite another conclusion. All the eighteen samples turned out to be free from adulteration. Some years since the British Medical Journal went into the subject of the alleged adulteration of beer and spirits very thoroughly. A large number of samples of spirits were purchased for analysis from a number of public-houses in the East End. The result was to show that these alcoholic liquors were not adulterated, but that they were of a common description and immature. Mr. Quilter is disposed to believe that the results obtained were owing to the samples of beer having been purchased without due precaution to conceal the identity of the purchasers. That probably was not the case. At any rate, in the case of the inquiry which we prosecuted all precautions were used, and the result was as we have stated. The fact is that it suits the interests of brewers and distillers to represent that the frightful results that accrue from the undue use of alcoholic liquors and the violence of intoxicated persons are due to the impurity of the spirits and to adulteration; and they endeavour to parry the claim for restriction on the trade in alcohol by the allegation that the chief evils are due to adulteration. This is all pure nonsense. Adulteration plays a very small part indeed in the trade in alcohol, and that part probably quite innocuous. What is wanted is that adulteration shall be checked if and where it exists by all means; but what is mainly needed is restriction.

CIVILISATION AND RECUPERATION.

Dr. George Harley, F.R.S., instituted a comparison between the recuperative bodily power of man in rude and in highly civilised life, illustrative of the probable recuperative capacity of the men living in Europe during the Stone Age, in an interesting paper which he lately read at the Anthropological Institute. The essay embodied new views, and illustrated their tenability by reference to unpublished cases collected by the author or by his friends, showing that evidence existed in abundance to prove that in spite of man, through the salutary influence of civilisation, having increased not alone in mental power, but in *physique* (his strength and his stature having increased, as well as his longevity having been augmented, during his gradual evolution from a state of barbarism into one of civilisation), his power of recovery from the effects of bodily hurt, on the other hand, has materially deteriorated under the influence of the same civilising agents. In fact, it appeared from the examples cited, that every appliance adding to man's bodily comfort, every food pampering his palate and thereby exciting his appetite, as well as any contrivance either stimulating or developing his mental faculties—while increasing his personal enjoyments—materially diminishes his animal vitality, rendering him less able to resist the effects of lethal bodily injuries, or to recover from them as well and as quickly as his barbaric ancestors or his less pecuniarily favoured brethren. Dr. G. Harley further quoted selected cases from rude life in a civilised community as well as from North American Indians and South African Caffres, demonstrating the fact that as a high standard of bodily recuperative power seems to be the normally inherent attribute of the human race, the higher recuperative vitality of the savage over the civilised man is not due to his having gained, but to civilised man having lost, his *aboriginal* recuperative power.

CHANGES AT UNIVERSITY COLLEGE, LONDON.

The Council of University College, London, on Saturday last appointed Dr. Sidney Ringer, F.R.S., to be Holme Professor of Clinical Medicine in place of the late Dr. Wilson Fox, F.R.S., Dr. Ramsay (Professor of Chemistry in University College, Bristol), to be Professor of Chemistry in the room of Dr. Alexander Williamson, F.R.S., and Mr. Victor Horsley, F.R.S., to be Professor of Pathology, in succession to Dr. H. C. Bastian, F.R.S. At the same meeting, the resignation of Dr. Graily Hewitt of the Chair of Midwifery, which he has held for the last twenty years with great advantage to the College, was accepted with regret. By the promotion of Dr. Sidney Ringer the Chair of Systematic Medicine becomes vacant, and we understand that Dr. Bastian will be appointed to it.

THE COMING ELECTIONS AT THE COLLEGE OF SURGEONS.

We announced last week that there would be three vacancies on the Council of the College this year, owing to the retirement by rotation of Sir Spencer Wells, Mr. John Wood, and Mr. Jonathan Hutchinson. The election will be held at the College, on Thursday, July 7th. Sir Spencer Wells, Mr. Hutchinson, and probably Mr. Wood, will offer themselves for re-election. The other candidates will be Mr. Alfred Willett, of 36, Wimpole Street (date of Fellowship 1862, of Membership 1859); Mr. James Rouse, of 2, Wilton Street (date of Fellowship 1863, of Membership 1851); Mr. R Brudenell Carter, of 27, Queen Anne Street (date of Fellowship 1864, of Membership 1851); and Mr. George Cowell, of 3, Cavendish Place (date of Fellowship 1867, of Membership 1858). The list of candidates does not close till June 13th, so that during the course of the next few days other candidates may enter the field. As yet no provincial surgeon has come forward.

ILLNESS OF PROFESSOR BILLROTH.

As the name of the great Vienna surgeon is almost as much a household word among his English-speaking brethren as it is in Germany, a few details respecting the indisposition which recently threatened to cut short his brilliant career cannot fail to be interesting to our readers. He had been confined to bed for some time by a sharp attack of bronchitis, when acute pneumonia supervened. These conditions, combined with fatty degeneration of the heart, brought about a state of alarming prostration, from which it was for some time thought impossible that he could rally. His celebrated colleagues, Von Bamberger and Nothnagel, were in constant attendance, and it is needless to say that everything was done for his relief that the most advanced science could suggest. Billroth appears to have derived most benefit from inhalations of pure oxygen, which were prepared for him every day by Professor Ludwig. Under this treatment the dyspnœa diminished, the pulse became stronger, and consciousness gradually returned. The illustrious patient is now fully convalescent, and will in a week or two be able to go to the fine country house at St. Gilgenfer belonging to his wife. It is seldom that the illness of a member of our fraternity has excited such universal interest and sympathy in all ranks of society. The varying phases of the disease were chronicled in the daily press, as if he had been a crowned head or a statesman of the first rank; and telegraphic messages of inquiry as to his condition were continually being received from royal and other exalted personages by those in charge of the case. It is particularly pleasant to record that the Imperial-Royal Society of Physicians of Vienna has sent Billroth a formal congratulation on his recovery.

The popularity of the distinguished surgeon is due of course in the first place to the combination of exquisite operative skill with scientific culture of the best and widest kind, which makes him almost a unique figure in contemporary surgery. His professional gifts and acquirements are, however, largely aided by social graces of a sort not usually associated, in this country at any rate, with eminent surgeons. Billroth is a piano-player of repute, and is, or perhaps we should say has been, almost as agile a performer with his feet in the ball-room as he is with his hands in the operating-theatre. He is, in fact, quite one of the social stars of the imperial city, a position which he owes quite as much to the charm of his manners as to his celebrity. His purse is always open to private as well as public charity. The enthusiastic devotion of his pupils is founded not altogether on his success as a teacher, but also on many acts of individual kindness, all the more appreciated that they are known only to the recipients. We are sure that Professor Billroth's professional brethren all over the world will join us in wishing him "*In plurimos annos.*"

REGISTERED PLUMBERS.

WHEN it is considered how large a part of the defective sanitation of dwellings is due to bad plumbing work done by men with little training and qualification for the task, it is a matter for congratulation that the movement for the registration of plumbers, instituted by the Plumbers' Company, is making the satisfactory progress which was shown by the report of Mr. George Shaw, read at a meeting at the Mansion House on Monday last. The number of registered plumbers had, it was stated, reached a total of 776, of whom 126 were masters and 353 journeymen in the London district. The applications received showed that the system of registration was growing in favour with plumbers in all districts, and steps were being taken to secure its introduction throughout the provinces.

CREMATION.

A CREMATION at Milan is understood to cost only £2; but this does not include the urn or small sarcophagus, or any storage of the remains. The crematory at Milan is carried on under two processes. One is the Gorini apparatus, which is the very simplest extant for places where gas is unobtainable, and where cremation is infrequent. The other process carried out is upon the Venini principle, where gas is generated, and where several sub-divisions of the main jet can be directed to the portions of the frame which most retard reduction. But the reports which are circulated as to the time required for complete incineration are mostly misleading, and nothing authentic can be obtained until the publication of the report of the delegates of the International Cremation Societies, whose meeting is to be held in Milan in September next. At the crematory belonging to the Cremation Society of England, St. John's, Woking, Surrey, the body of a retainer of the Maharajah of Judhpore was burnt. His Highness himself and some of his suite were present, and the ashes were removed for immersion in water, according to the Hindu rite. Were the crematory belonging to the English Society constantly used, the charge for reduction might be made to range with that at Milan, provided that the hours set apart by law here for burial were in unison. A branch society of the Cremation Society of England is in full operation at Leicester, and the Town Council are considering the cost of erecting a crematory.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

AT the annual general meeting of this Society, held on May 20th, 1887, it was reported that during the past year nine meetings, with an average attendance of forty-five, had been held; one special meeting having been devoted to pathological subjects. Twenty-one new members had been elected, twelve gentlemen had resigned, mostly by reason of removal from the district, and the Society now numbers 214 members. By the lamented death of Dr. Chadwick the Society lost its first president, and one of its most active promoters. The library had been considerably increased, although less money had been spent on it than in some former years. Three additional microscopes had been purchased, and the Society now possessed five of these instruments for purposes of demonstration, with lamps and the usual accessory apparatus. The following gentlemen were elected office-bearers for the ensuing year:—*President:* Mr. Edward Atkinson; *Vice-Presidents:* Dr. Cameron and Mr. McGill; *Treasurer:* Dr. Clifford Allbutt; *Honorary Secretaries:* Dr. Jacob and Mr. Edward Ward; *Librarian:* Dr. Barrs; *Auditor:* Dr. Braithwaite; *Committee:* Dr. Churton, Dr. Dobson, Mr. W. Hall, Dr. Hutchinson, Mr. Jessop, Mr. W. N. Price, Mr. A. Roberts, Mr. Mayo Robson, Dr. S. C. Smith, Mr. H. E. Spencer, Mr. C. J. Wright, and Dr. Young.

RISKS OF FIRE IN THEATRES.

THE Prefecture of Police in Paris, it is stated, is about to apply drastic measures for diminishing the dangers of fire in theatres. The most important items are the construction of long balconies of incombustible material along the whole outside of each floor and communicating with each other; the making of new and ample exits on all sides; suppression of *strapontins*, or hinged seats; establishment of water-mains on the roof, with the necessary apparatus; and rendering uninflammable by a special preparation all scenery, woodwork, etc., in and about the stage. A Theatres Commission is to examine into the efficacy of the latter precaution, and affix an official stamp to each article in token of its satisfaction. All underground dressing-rooms are to be suppressed. In several instances adjacent shops, which are judged to add to the risks of fire, are to be demolished.

BRITISH MEDICAL BENEVOLENT FUND.

A LIST of twenty-seven applicants for relief was presented for the consideration of the Committee at the monthly meeting of this fund, held on May 31st, and grants were made to all but six. Of these six cases two were passed over because the income reported, though small, raised the applicants above the class of cases usually relieved by the committee; two were not relieved; and two were postponed: one for further inquiries, the other until the applicant's circumstances would justify a grant. To meet the £220 voted the Committee were compelled to encroach upon the deposit—a serious matter so early in the year, and a valid and urgent reason for asking the continued help of the profession to enable the Committee to cope with the increased number of cases coming before them. Thus far this year both the number of applicants and the severity of distress shown in each instance, as well as the total number of cases relieved, have been in excess of those of any former year, and no more worthy object of the charity of the profession could be found than this fund, which relieves necessitous members of the profession, their widows, and daughters, quickly and without canvassing for votes, but only after proper authentication by the actual testimony in writing of a subscriber, who may or may not be a medical man, and of a member of the profession.

"ANTHRAX IN CHESHIRE."

A GOOD deal of alarm was recently caused by the announcement that a severe outbreak of anthrax had occurred in Cheshire. An inquiry, held at the instigation of the Royal Agricultural Society, by an Inspector of the Agricultural Department of the Privy Council, as well as other information in our possession, throws considerable doubt on the whole story. It appears that at the time the disease broke out at Messrs. Percival's farm, there were on it 158 cattle, 17 horses, 208 sheep, and 127 swine; 3 sheep and 32 swine died up to March 14th, and 1 heifer and 7 swine between that date and March 21st. On April 5th the stock was examined by Inspector Duguid, who found no sign of anthrax in the sick animals, but evident symptoms of swine-fever. A pig examined *post-mortem* by him gave the lesions of swine-fever. Another sent up to the Brown Institution, and examined there, was a typical example of the same disease. Microscopical examination showed complete absence of anthrax, and inoculation, the only safe test, proved that the malady was swine-plague. The well-

known resistance of pigs to anthrax might have suggested to the local investigators the real nature of the malady. With regard to the deaths of the heifer, the two sheep, and, as subsequently reported, one horse, it turned out that the heifer died of septicæmia after abortion, the horse of ruptured intestine, and the two sheep of an indefinite malady, but which was not anthrax as determined by any other evidence than the mere observation of some bacilli in the blood after death. At a time of year when sheep are frequently found dead, two deaths among so many animals would have caused no comment had it not been for the concomitant outbreak of swine-fever among the pigs.

SICK OFFICERS FROM INDIA.

We learn that the Secretary of State for India in Council has had his attention drawn to the inconvenience which has from time to time been experienced by officers of the public services invalided from India for tropical diseases. Of late years these officers have not been able to avail themselves of the advantages of the professional advice of the President of the Medical Board of the India Office, in consequence of a restrictive order having, some years ago, been imposed on his practice in respect of Indian officers. The result of such a regulation was, that any officer in bad health arriving in England from India was debarred from directly consulting the President of the Medical Board, his opinion and advice being only available as a consultant when called in by one of his professional brethren. Such an arrangement was as ill-judged as it was unnecessary. No possible good could come of it, and in many cases it was extremely inconvenient for sick officers. We understand that Viscount Cross sees the matter in this light, and that the restriction above referred to has now been completely removed, leaving the President of the Medical Board free, when he feels inclined to do so, to include in his private practice any persons in the service of the Indian Government who may desire, at any time, to seek his professional opinion and aid. It will of course rest with that officer to give or to withhold such advice and aid as, for official or other reasons, may seem to him expedient. We feel sure that complete confidence may be placed in Sir Joseph Fayrer's judgment in such a matter. It is believed that this new rule will prove convenient, advantageous, and acceptable to officers of the Indian services; and that Lord Cross has done well in setting aside an order which from the first was manifestly anomalous and undignified.

THE INCUBATION PERIOD OF HYDROPHOBIA.

During the recent controversy as to the value of M. Pasteur's method for preventing the development of hydrophobia after a bite by a rabid dog, it seems to have been generally assumed or admitted that the belief that the period of incubation might be extended to one or even two years was founded on imperfect observation or misinterpretation of facts. Everybody, however, is not satisfied that this is so, and a case, recently reported by Surgeon-Major P. J. Freyer in the *Indian Medical Gazette*, reminds us that there is much to be said on the other side. There can be no doubt that the sufferer in this case, an officer in the 10th Bengal Cavalry, really died of hydrophobia; the death occurred on September 28th, 1886, and the patient said that two years and a half earlier he, amongst others, had been bitten by a pup, which subsequently died of rabies. Inquiries made after his death proved that the bite had been inflicted eighteen months, and not two years and a half previously; with this correction, however, the patient's statements as to the circumstances were found to be correct.

AN OFFICIAL VIEW OF BUTTER SUBSTITUTES.

It is very necessary that a common-sense view should be taken of this question. We are glad to see, therefore, that at the meeting of the Select Committee of the House of Commons, presided over by Mr. Sclater-Booth, taking evidence in relation to the two Bills on the subject of butter substitutes now before the House of Commons, Mr. Robert Bell, the analyst at Somerset House, stated plainly that he believed the proposals made in the Bills would not be effectual, and would prove irksome and vexatious to the trade. The most practical mode of meeting the difficulty in relation to selling butterine as butter was to throw upon the retailer the responsibility of selling an honest article, whether as butter or butterine. In regard to the latter commodity the retailer should be held responsible, but should be at liberty to recover from the wholesale dealer or manufacturer wherever he could prove he had been imposed upon. Asked if this would not be rather hard on the innocent retailer, witness admitted that in the abstract there might be cases which would look like injustice. He would not include the word "butterine" in an Act of Parliament. Inspectors should have the power of entering shops and taking samples, without purchase, for analysis. Where inspectors made purchases they were frequently known, and were supplied with better samples than those sold to the public. There should be a clear understanding among analysts as to the data for determining whether foreign fats were present in butter or not. It is well known that a great deal of the butter now sold is composed of 90 to 95 per cent. of butterine. It should be so labelled, and paid for accordingly. It is harmless, but should not be sold under false pretences.

TRICHINOSIS IN HOLLAND.

The report of the medical inspector of Zeeland on this subject, states that a number of people at the end of January and beginning of February suffered from the following symptoms: Swelling of the eyelids, stiffness and pain in the muscles, hardness on pressure, fever, excessive sweating, disordered digestion, heaviness in the arms and legs, sleeplessness, swelling in the face and limbs, great thirst, conjunctivitis, dry red tongue, and photophobia. These symptoms were apparently caused by trichinosis. From one woman's arm Drs. Isebree Moens and Van Rentgerhem extracted several trichinæ by means of the harpoon. The discovery of the source of infection was attended by great difficulties. All the butchers' shops were visited by inspectors. In a farm outside Goes, ten people were found to be suffering from the disease. On January 1st a pig had been killed, half had been put in salt to be cured, and the fresh half was sold to a butcher in Goes. The meat kept was left four weeks in the salt. Two samples were taken from the salted flesh and examined, besides those found in the meat in the shop. The salted piece was full of trichinæ. Those who had partaken of the meat had shortly afterwards become ill. Professor Forster, at Amsterdam, gave some of the meat to five rats, which died, and trichinæ were found in them. It is known that trichinæ, prior to their development, must pass into the digestive canal of some host other than that in which they were generated, and that rats are naturally subject to trichinæ, also that pigs devour rats, living or dead. For some time there had been a great many rats on the farm, and it is not impossible that they spread the trichinosis. The question then presents itself—in what manner did the rats become trichinous? This is not easy to answer. It is possible that a trichinous rat might have been brought over in the ship *Zuid Beveland*, which carried a large quantity of American pig's flesh, or the infection might have been due to the meat imported. The epidemic in Goes show what widespread effects a piece of infected pig's flesh may produce. The number of people attacked cannot be exactly given, but about seventy, or more than one in every hundred, inhabitants suffered. Only one of the patients died.

MEDICINAL BATHS AT LEAMINGTON SPA.

The medicinal baths at Leamington, in Warwickshire, having been considerably improved for the accommodation of visitors, were reopened last week by the Speaker of the House of Commons, in the presence of a distinguished company, comprising many eminent medical men. The baths and pump-room, now reopened, are complete, and have been restored at a great expense; and all modern improvements have been introduced. There are reclining baths; deep immersion-baths, with lift and chair; needle-baths; local baths; and

special baths. Massage is also carried out methodically. With regard to the waters, the Corporation has been reopening some disused springs; and the Old Well is supplemented by others, the property of the Corporation, from which a practically unlimited supply of the natural saline water can be obtained. The one thing which is next to be desired is that there should be an authoritative analysis of the water as it now is, and especially that the quantity of sulphite of sodium should be more positively determined. However, we know the general constitution of the waters, and that chloride of sodium predominates in them; and practical experience has long found the waters to be efficient in stimulating the functions of the abdominal organs, thus quickening tissue-change and reducing visceral derangements. Waters of this kind are capable of very varied application, and the list of diseases finding relief here is a very long one; but perhaps the chief of them, and those which were the main subject of Dr. Jephson's successful practice, were dyspepsia or indigestion, sluggish liver, and affections of the digestive apparatus generally. We wish Leamington a renewed course of prosperity. We should be glad to see public favour accorded more liberally to our native watering-places, which, in many instances, possess the same curative and renovating powers as their more expensive rivals abroad. The fact is the local authorities have allowed public attention to be taken by storm by the energetic and enterprising promoters of foreign resorts. Hundreds of thousands of pounds are expended at Carlsbad, Homburg, Kissingen, and Marienbad in developing the springs and giving them convenient and attractive surroundings. A liberal policy at Buxton and Bath has had good results in proportion. As increased facilities are furnished by the awakening enterprise of our local municipalities, the profession will be willing enough to recommend their patients to avail themselves of the hydrotherapeutic resources which Nature, without being unduly generous, has placed well within our reach. Even if many patients of the wealthier classes prefer, for reasons of their own, to go far afield for their course of treatment, there must still remain a large number of invalids who are less desirous to seek foreign climes, and these might advantageously be sent to our home resorts. To render this possible, however, these institutions must be put on a better footing, and provided with all the technical and scientific appliances and conveniences which do so much to enhance the value of the water-cure in France and Germany. The local medical men should be invited to co-operate in forming a committee of management, and the funds ought to be provided by the inhabitants, who are vitally interested in the popularity of the district as a health-resort. We welcome the signs of a movement of this kind at Leamington, and trust that it will not be permitted to flag.

MEDICINE IN JAPAN.

THE same beliefs, errors, and prejudices which characterise the history of Western medicine are to be observed in one form or another in that of ante-mediæval Japan, modified only by the influence of environment. It is a significant fact that in former times the practice of medicine and surgery was more or less restricted to the infirm, who alone were authorised to feed the sacred medical monkeys and to experiment on them. Ancient Japanese practitioners experienced the same difficulty as our own predecessors in distinguishing between the soul and the body so far as the etiology and treatment of disease was concerned. Having ascertained and described to their satisfaction the nature and construction of the non-corporeal part of man, they naturally endeavoured to devise a method of treatment *ad hoc*, and forthwith the legions of good and bad spirits, which infested mediæval medicine elsewhere than in Japan, made their entry into the receptive intelligences of primitive man. Whatever progress the Japanese effected in matters medical was largely attributable to the influence of more advanced or more enterprising neighbours. In some cases they owed not only a knowledge of the treatment, but the disease itself, the Celestials first giving them the small-pox, to be followed at a later date by syphilis. Inoculation was discovered and introduced some six centuries later, and vaccination only as recently as the year 1824. With these views as to the influence of the soul in pathology, it is not surprising to learn that before many centuries had gone by the priests had arrogated to themselves the monopoly of the healing art, and doctored both the body and the soul by the same fantastic remedies and incantations. Acupuncture was a favourite method of treatment for many centuries, and collectors of Japanese curios can show quite a variety of instruments used for this purpose. The old Daimios and Samurius of Japan carried admirably-worked, gold lacquer medicine-boxes (incos), suspended from their girdles by carved toggles (netsukis). These incos and netsukis are among the choicest products of Japanese art, and are much sought after by collectors. They are largely represented in the Ernest Hart collection. The moxa was another resource which was used without too much discrimination as to the why and the wherefore. Some practitioners went a step further, and opened the abdomen and washed the stomach and intestines when other means had failed. Whatever other results may have followed this crude form of laparotomy, the application of the ligature of arteries for hæmorrhage and aneurysms owed its existence to it. This heroic school was naturally followed by a reaction in the opposite direction, and treatment which might euphemistically be called "expectant" was taught and practised as a system, and was probably not less successful in its results than the more active method which it displaced. Very early in the history of Japanese medicine women were admitted to study and practise it. Mistakes in prescribing or dispensing medicines were punished by heavy fines, imprisonment, and even the whip. Massage was held in great repute from the very earliest times. The blind and the dumb had a monopoly of the "speciality," and they are said to have been very expert practitioners. Massage was employed in the treatment of headache, hysteria, and paralysis, and so highly were the services of the "rubbers" esteemed that degrees were conferred upon them, with ceremonial robes and white wands, surmounted by wooden balls. The fanciful anatomy taught in the Chinese schools was accepted in Japan till the end of the eighteenth century. At last the examination of the bodies of decapitated and quartered criminals enabled Sugita, a physician of eminence and learning, to discard the absurd notion of there being six lungs and several livers in the human body. This achievement, elementary as it may seem, was in its way almost as great a stride forward as that of Galileo in astronomy; for although executions were everyday incidents, none of the physicians whose duty it was to attend these "legalised experiments" had ever thought of bringing to the test of fact the traditional anatomy which was handed down from generation to generation. The curious apathy which came upon Chinese learning when it had attained a certain degree of development is also noticeable in Japanese medicine. It is only since the country has been brought into contact with European civilisation that the healing art has disencumbered itself of the ancient superstitious rites and formulæ which had been practised without doubt or variation for centuries. Thanks to the enterprise and intelligence of "young Japan," there is now nothing national about Japanese medicine, and this wonderful people has shown such a capacity for the assimilation of all that is best and most progressive in the culture of more enlightened nations, that it is by no means outside the sphere of possibility that, a century hence, Tôkiô may be as much a part of the medical "grand tour" as Vienna or Berlin is to-day.

SCOTLAND.

AMONG other ways in which Edinburgh has decided to commemorate the Queen's Jubilee, is a hospital for consumption, at an estimated cost of £10,000.

EDINBURGH UNIVERSITY AND THE JUBILEE SERVICE IN WESTMINSTER.

FOR the Jubilee Service in Westminster Abbey on June 21st, the Dean of Westminster sent to Edinburgh University three tickets of ad-

mission. These tickets have been allocated to Principal Sir William Muir, K.C.S.I., Professor Campbell Fraser, Senior Professor and LL.D., D.C.L., and to Dr. Patrick Heron Watson, LL.D., member of the University Court and Surgeon in Ordinary to the Queen in Scotland. These gentlemen will therefore represent Edinburgh University at this national ceremony.

FAREWELL DINNER TO DR. D. J. REID, DUNDEE.

DR. D. J. REID, who is about to leave Dundee to practise at Shanghai, was recently entertained at dinner in the Queen's Hotel by a number of his professional and other friends. Dr. M'Cosh, Superintendent of the Dundee Royal Infirmary, occupied the chair, and a most agreeable evening was spent.

GLASGOW UNIVERSITY.

THE final examinations for degrees in medicine began at the University on June 1st. There are no fewer than 129 candidates. Dr. William Snodgrass, M.A., has been appointed to the Muirhead Demonstratorship of Physiology, vacant by the resignation of Dr. McGregor Robertson, who, however, remains connected with the Physiological Department as Senior Assistant.

THE PROPOSED GLASGOW SOUTHERN HOSPITAL.

PUBLIC meetings are being held in the southern districts and suburbs of Glasgow to further the scheme for the Victoria Infirmary, as the proposed new hospital is to be called. At a meeting of the inhabitants of West and East Pollokshields, held on May 26th, resolutions favouring the proposal were passed. Dr. Duncan, who took part in the proceedings, said they had a reasonable prospect of bringing the movement to a successful conclusion. Subscriptions amounting to £12,000 have already been promised. £20,000 are desired, but building would be begun were £16,000 raised.

THE ABUSE OF MEDICAL CHARITIES.

THE Glasgow Medical Charities Committee held a meeting on May 26th, Dr. James Morton in the chair. The Secretary reported that he had received information regarding the abuse of medical charity and its remedy from upwards of 100 hospitals and dispensaries throughout the kingdom. The Secretary of the Glasgow Charity Organisation Society also kindly obtained much valuable information for the Committee from similar societies in London and elsewhere. A sub-committee was appointed to consider the information received, to arrange the facts and suggestions it contains regarding this question, and to tabulate them for presentation at the next meeting of the General Committee. Another sub-committee was appointed to confer with the Medical Committee of the Council of the Charity Organisation Society. The Committee also considered the necessity of making arrangements, as soon as convenient, to confer with the Parochial Boards and with the managers of the various medical charities, in order to obtain their assistance and co-operation in establishing a satisfactory system of affording medical relief and attendance to the deserving poor.

ST. ANDREWS AMBULANCE ASSOCIATION.

SEVERAL courses of lectures under the auspices of this Association have just been brought to a satisfactory conclusion. At Cleland the class taught by Dr. Duncan numbered thirty-two, and all obtained certificates, after examination by Dr. Dunlop, of Glasgow. At Kinning Park, Glasgow, a class of ladies was conducted by Dr. W. G. Gordon, and a class for gentlemen by Dr. C. W. Stewart. A class, consisting of Caledonian Railway servants, has been undergoing instruction by Dr. James Dunlop for the past three months. The Boys' Brigade in Glasgow have also added ambulance instruction to their means of training boys. One class of boys, belonging to the 32nd Glasgow Company, was regularly recognised by the St. Andrews Association, and, after examination by Dr. J. E Brodie, sixteen passed. Instead of certificates, badges to be worn on the arm, authorised by the Association and the Executive of the Brigade, were presented to those who passed. A scheme is being drawn up for the purpose of establishing a regular bearer-company in connection with the Boys' Brigade, on the lines of organisation followed in the Army Medical Department. At the annual parade of the Glasgow Brigade, held recently, four stretcher detachments, consisting of trained boys, fully equipped with stretchers, haversacks, water-bottles, etc., turned out, under the command of a medical officer. This is quite a new departure, and, we feel sure, will add a new interest of a very valuable kind to one of the most remarkable movements of recent years.

GLASGOW AND ITS EPIDEMIC MINES.

IN Dr. Russell's report for the fortnight ending May 21st, the following instructive story is narrated: "Of the ten cases of typhus reported during the fortnight, seven came from a family residing in a two-apartment house in a short open street of recent construction. The staircase leading to the house is badly ventilated. The family numbered ten souls—the father and mother, aged respectively 40 and 41, and seven children, ranging from 21 years to 2 months, with the wife's brother, a man of 36, as a lodger. There was scarcely a stick of furniture in the house. The cooking and feeding utensils were little better than savages advanced to the cooking stage of development would possess; only one knife, two tablespoons, and two teaspoons were found. The bedding was ragged, scanty, and foul; while the children especially were in a condition of filthy raggedness and vermin which is indescribable. During the winter the father earned 35s. a week as a "charger" in a suburban gasworks, the lodger 25s. Since the spring, the two men have earned 20s. a week in a brickfield; a son, aged 17, 10s. a week; and a daughter, aged 21, an average of 8s. a week. Drink is the secret of this contrast between income and domestic condition. No fewer than thirty-five pawn-tickets were found in a drawer. The house was emptied into the hospital and reception-house. The mother and lodger have died. There are always scores of such houses known to us, which may be regarded as epidemic mines all laid ready to be sprung, as in this instance."

IRELAND.

THE HOSPITAL FOR INCURABLES.

HIS Royal Highness Prince Albert Victor has consented to lay the foundation-stone of the Victoria Jubilee Wing of this Hospital during his visit to Dublin, on Wednesday, the 29th inst., at 12.30 o'clock.

PRESENTATION TO DR. JACOB.

AN address, accompanied by a purse of 500 sovereigns, was presented to Dr. Jacob, of Dublin, on Monday last. The presentation took place in the College of Surgeons, and Mr. Corley, the newly-elected President of the College, occupied the chair. Dr. Mapother, Hon. Secretary of the Testimonial Committee, read the address, which referred in complimentary terms to Dr. Jacob's services to the profession, and stated that over 400 medical men had subscribed to the testimonial. Dr. Jacob read a formal reply, and also expressed his thanks for the appreciation of his labours, as shown in the address, and by the most generous present they had given him.

THE IRISH CONJOINT SCHEME AND THE APOTHECARIES' HALL OF DUBLIN.

ALTHOUGH the King and Queen's College of Physicians have again and again announced their determination under no circumstances to combine with the Apothecaries' Hall of Ireland, Sir William Stokes, President of the Royal College of Surgeons in Ireland, shortly before retiring from that office, wrote asking the Royal College of Physicians, through its President, whether that College, having regard to the recent action of the General Medical Council in reference to the granting of examiners to the Apothecaries' Hall of Dublin, would be disposed to re-open the question of forming a "Tripartite Examinational Board." At the late annual (adjourned) meeting of the Fellows of the College of Surgeons, a motion of a similar purport (published in last week's JOURNAL, p. 1232), proposed by Sir Charles Cameron, but

also threatening that, should an attempt to reopen the question fail, the College of Surgeons would, if possible, form a combination with the Apothecaries, was adopted. The College of Physicians, as might have been expected, has declined to reopen the question. By a vote of seventeen to one it adheres to its original view as to the inexpediency of the admission of the Apothecaries into the scheme. The proposal of the College of Surgeons to combine with the Apothecaries does not, apparently, alarm the Physicians, and they reiterate their opinion, which was communicated to the College of Surgeons in March last—that such a combination would be clearly a breach of the agreement already entered into between the two Colleges. This view of the matter is, we are aware, also held by several Fellows of the College of Surgeons. Others, who are most prominent in their efforts to get the Apothecaries admitted into the scheme, publicly give as their reason for so doing that, if that were accomplished, the Apothecaries would soon be effaced. Surely this is a motive unworthy of anyone professing to be anxious to effect a combination for "public and professional weal," and not complimentary to the respectable body of which they pretend to have so high an opinion.

THE ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

THE annual meeting of this Society was held on Monday last in the College of Surgeons, Mr. Corley, President of the College, occupied the chair. The report of the Central Committee, which was read by Dr. J. W. Moore, Hon. Sec., stated that, owing to the falling off in subscriptions, the financial condition of the Society could not be regarded as satisfactory. During the year £110 was distributed to medical men, £946 to widows, and £98 to orphans. The adoption of the report was moved by the President of the College of Physicians, and seconded by Dr. Kidd. The latter gentleman suggested that as this was the Jubilee year, they might mark the occasion by the establishment of a Jubilee Fund, by which they might increase the amount of their donations to the widows and orphans even by a small amount. Dr. Kidd's suggestion was approved; and several subscriptions, including one of £21 from himself, were handed in.

AMALGAMATION OF DUBLIN MEDICAL SCHOOLS.

THE resolution brought forward by Mr. Thomson at the meeting of the Fellows of the Royal College of Surgeons last Saturday, proposing that it be an instruction to the Council to take such steps as may be necessary to effect, in the first instance, an amalgamation between the College School and the Carmichael College of Medicine, was lost. It is widely acknowledged that the proceedings in connection with the vote that was taken on this question were, in more respects than one, most irregular, and evidenced an unfortunate want of firmness on the part of the presiding officer. When the division was taken, and after the numbers on each side had been actually announced by the respective tellers to be even, three Fellows were brought into the room by the "Noes" and permitted to vote on their side. The fact of the resolution being lost by these three votes is of no consequence, as any member of the Council can, if he thinks fit, bring the matter before the Council in the same way, as was done previously, but now probably with more chance of success.

THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE College held a meeting pursuant to charter on June 6th to elect officers for the ensuing year. The following were elected:—*President*, Anthony Hagarty Corley; *Vice-President*, Henry Fitzgibbon; *Secretary of the College*, William Colles; *Council*, William Colles, Sir George Porter, George H. Kidd, William A. Elliott, Rawdon Macnamara, Edward Hamilton, Robert McDonnell, J. Kellock Barton, Philip Crampton Smyly, Edward H. Bennett, William Frazer, Sir William Stokes, William Stoker, William I. Wheeler, Samuel Chapman, Austin Meldon, William Carte, Sir Charles A. Cameron, and Kendal Franks. The contest for the vice-presidency, which excited much interest was a close one. Mr. Fitzgibbon polled 126 votes, and his opponent, Mr. Henry Gray Croly, 102. The two gentlemen are hospital colleagues. Of the new candidates for seats on the Council, two were successful, namely, Mr. William Frazer, who obtained 150 votes, and Dr. Kendal Franks, who polled 148 votes. One of the outgoing councillors, Mr. Story, failed to secure re-election. From the annual report, presented by the out-going Council, we learn that during the past year 21 candidates were admitted to the Fellowship, 103 candidates received the Letters Testimonial, 6 Licentiates received the Diploma in Midwifery, 2 practising dentists received the Dental Diploma. Analysing the returns for the various examinations, we find that at the preliminary examination (214 candidates), 28.9 per cent. were rejected. For the professional examinations for Letters Testimonial under the new scheme there were at the first, second, third, and fourth examinations respectively 52.4 per cent., 43.8 per cent., 58.7 per cent., and 29.2 per cent. rejected. A large portion of the report is occupied by a summary of the proceedings of the Council in connection with the Conjoint Scheme; of the overtures as to the admission into it of the Apothecaries' Hall of Dublin, and as to the proposed combination with that corporation in a separate scheme of education and examination, in addition to that previously entered into with the King and Queen's College of Physicians.

THE MEETING OF THE BRITISH MEDICAL ASSOCIATION IN DUBLIN IN AUGUST.

THERE is every reason to anticipate that the annual meeting of the Association, which will be held in Dublin, on Tuesday, Wednesday, Thursday, and Friday, August 2nd, 3rd, 4th, and 5th, will be one of the most successful which the Association has ever known. Apart from the inducements to pay a holiday visit to Ireland which are held out by the Association having its next meeting in Dublin, there are few places so well adapted as that city is as a meeting place for a large association. It is most accessible from all parts of England and Scotland by a splendid line of mail steamers, which make the passage from Holyhead to Kingstown twice daily in about three hours and a half. The London and North-Western Railway Company also run excellent passenger express steamers twice daily. There is ample hotel accommodation, and good lodgings, of which a list has been specially prepared by Dr. Baxter, can be easily procured. In the city itself are numerous places of interest: the Phœnix Park, Kingstown, Bray, Killiney, and other picturesque environs are easily reached by car or train; and for longer excursions to places in the County Wicklow, Killarney, the Giant's Causeway, Donegal Highlands, etc., for which special arrangements have been made after the meeting, Dublin is the best starting-point.

Anyone wishing to attend the International Medical Congress can take one of the above excursions during the week after the Dublin meeting, and embark for New York from either Queenstown, Londonderry or Belfast, according to the line of steamers he has selected.

The President-elect, Dr. Banks, will give an official dinner on the evening of Monday, August 1st. On the following morning, Tuesday, the Council of 1886-87 will meet at 9 30 A.M. This will allow the first general meeting to be held at 11.30 A.M., and it is then hoped that most of the business part of the meeting will be got through on the first day. In the evening the President will give his address. The dignitaries both of the Church of Ireland and of the Roman Catholic Church, in Dublin, have expressed their desire to pay a compliment to the Association and to the medical profession by having services in their cathedrals on the first day of the meeting. There will be a morning service at 10 A.M. in the Pro-Cathedral, Marlborough Street, at which the Reverend Martial Klein will preach. This gentleman is the Professor of Biology in University College, Dublin, and his selection by His Grace the Catholic Archbishop of Dublin to preach on the occasion of the visit of the British Medical Association is appropriate from the fact of his being a member of the profession, and at one time a surgeon in the French army, as well as a distinguished scientist.

The Most Reverend the Lord Bishop of Meath, Dr. Reichel, who is one of the most eloquent and learned of the Irish prelates, has kindly consented to preach the sermon at a special afternoon service in the ancient national cathedral of St. Patrick's.

Turning to the Sectional work, the arrangement here also will be new. The Sectional meetings will all be in the morning hours, from 10.30 A.M. to 2 P.M., and the addresses will be delivered in the afternoon, at 3 P.M. each day. By this arrangement more time than heretofore will be given to the Sections; there will be no interruption in their work, and the afternoons will be free for the general meetings

and addresses. The readers of addresses are men of wide reputation, namely, Dr. Gairdner, of Glasgow, in Medicine, the Reverend Dr. Haughton, of Dublin, in Public Medicine, and Professor Hamilton, of Dublin, in Surgery. They will be sure to attract large audiences.

The names of the officers of Sections, the subjects selected for special discussion in each, and the names of the members who will introduce these subjects, and who have already promised papers, published in the official programme, will show that, as far as the scientific work of the meeting is concerned, it augurs well. In the Section of Medicine, a discussion on Aphasia will be introduced by Dr. H. C. Bastian, F.R.S., whose writings, on this subject especially, have won for him so high a place among neurologists. In the Section of Surgery, Mr. Mitchell Banks, Dr. McEwen, Mr. W. D. Spanton and Mr. C. R. B. Keetley, will initiate a discussion on the Radical Cure of Hernia which cannot fail to be of the highest interest to practical surgeons. A topic of hardly less practical importance to surgeons, the Etiology and Treatment of Convergent Concomitant Strabismus, will occupy the attention of the Section of Ophthalmology; it will be introduced by Mr. Simeon Snell. In the Section of Obstetrics, also, two thoroughly practical subjects will be discussed, namely, the Prevention of Puerperal Fever, introduced by Dr. W. S. Playfair, and Displacements of the Uterus, by Dr. Halliday Croom. Dr. Burney Yeo has promised to initiate a debate on the Therapeutics of the Uric Acid Diathesis. A novel subject has been chosen by Dr. George H. Savage, who, in the Section on Psychology, will begin a discussion on Nervous Disorders following the Use of Anæsthetics. Sir Charles Cameron will open the question of the best method of dealing with Insanitary Property occupied by the Artisan Class, in the Section of Public Medicine, and Dr. T. Donelly will raise a discussion on the Influence of Modern Preventive Measures on the Prevalence of Infectious Diseases. In the remaining Section of Pathology, two subjects generally provocative of discussion have been chosen, and the two Subsections will also be occupied with topics of much clinical importance.

A novel feature of the programme is the *conversazione* to be given by the medical officers of the army. The proposal has been warmly taken up, and the evening will not only be enjoyable in itself, but will be an ostensible proof of the good feeling which exists between the civil and military branches of the medical profession. As a large number of medical officers will attend this meeting, we would throw out the hope that many of them will contribute, from their special experiences, to its scientific proceedings.

We are glad to learn that several distinguished foreigners have signified their intention to attend the meeting and take part in the proceedings. Amongst those who have already done so we may mention Professors Unna, of Hamburg; Kocher, of Berne; Landolt, Apostoli, and Meyer, of Paris; Reymond, of Turin; Gerhardt and Uhthoff, of Berlin; and many others who have been invited by the Reception Committee are also expected. Of our own members, Sir Spencer Wells, Dr. Grainger Stewart, Sir Dyce Duckworth, Sir Thomas Crawford, K.C.B., Drs. Robert Barnes, Argyll Robertson, Matthews Duncan, Wheelhouse, Playfair, Priestley, Gairdner, Charlton Bastian, Priestley Smith, Berry, Barr, Brabazon, Crookshank, Halliday Croom, Lawson Tait, Elder, Frost, Mortimer Granville, Spender, Karl Grossman, Grigg, Hewetson, Hovell, Keay, David Little, Mason, Myrtle, Owen Lloyd, Snell, Savage, Vose Solomon, etc., are expected.

Everyone almost has heard of the beauties of the co. Wicklow, and a glance at the brief sketch of the excursions which have been arranged will prove that every means will be taken to show to many of the visitors some of the most charming portions of that county. There will be two excursions to Wicklow, in one of which the party will be entertained by the Earl of Carysfort. The excursion to the Boyne and the sepulchral tumuli of Dowth will also be a most interesting one; while for lovers of marine scenery and zoology the excursion in Dublin Bay will be charming.

THE IRISH MEDICAL ASSOCIATION.

THE forty-eighth annual meeting of this Association was held in the Royal College of Surgeons on Monday last. Dr. Kinkead, of Galway, President of the Association, took the chair. The annual report of the Council was read by the honorary secretary, Dr. Chapman. It referred, *inter alia*, to the Medical Act of 1886, the provisions of which, it stated, are disappointing, inasmuch as they fail to protect the profession against practice by unqualified persons, and perpetuate an excessive and unnecessary number of licensing bodies granting qualifications to practise, of diverse educational grades, and without any settled standard of competency. An immediate effect of the change of law has been to induce the Irish Colleges of Physicians and Surgeons to join together for the purpose of granting a triple diploma in Medicine, Surgery, and Midwifery. This scheme, according to the report, will enable the Irish student to obtain by one series of examinations (not much more onerous than those now required by either College) the complete qualification to practise in the three essential subjects, and at less expense than heretofore required, an arrangement which is expected to prove very satisfactory. Referring to the permission given by the General Medical Council to the Apothecaries' Hall of Dublin to issue a separate registrable diploma, with the assistance of coadjutor examiners appointed by the Medical Council as provided by the Act, the Council expressed the opinion that any arrangement which would thus further increase the number of qualifying bodies, by enabling the Apothecaries' Company to issue separate licences to practise (upon educational and monetary terms as yet unknown to them) would be greatly to be deplored, inasmuch as it would increase the difficulty of keeping the standard of professional competency up to a sufficiently high level, but they hope that this objectionable arrangement may yet be averted. The report expressed the satisfaction of the Council at the choice of the profession in Ireland falling upon Dr. Kidd as their representative on the General Medical Council. A lengthy reference to the efforts of the Council of the Association in connection with the proposed amendment of the Union Officers (Ireland) Superannuation Bill wound up with the remark that "there was unfortunately no hope now apparent of a satisfactory measure of superannuation being granted to Irish poor-law officers." As a result of the action of the Council, the Local Government Board has opposed the attempt made during the past year by the guardians of some districts to reduce the salaries of their medical officers, by refusing to sanction such reductions. The Council having also observed that in several instances, when advertising the approaching appointment of a dispensary medical officer, dispensary committees had illegally laid it down as a condition that the gentleman appointed must on all occasions of absence from duty pay his substitute, they sent a copy of such advertisements to the Local Government Board, directing their attention to the illegal condition. The Council acknowledged the action of the Local Government Board in promptly checking the imposition of any illegal condition when a union or dispensary medical officer was about to be appointed.

The adoption of the report having been moved and seconded, Dr. WALSH, of Kilmacthomas, moved, as an amendment, that the following passage be added to the report:—

"Your Council will therefore be prepared to take steps without avoidable delay to ascertain the views of the Government and of the leaders of all parties in Parliament as to the terms of the Poor-Law Superannuation Bill that would be acceptable to them, and to secure their co-operation to pass a measure beneficial to the poor-law medical officers of Ireland."

Dr. Walsh said he did not desire to give a political tinge to the Association, but he thought they should ask the members of the Irish party to take their case in hand, for they could not hope to get a Bill passed through Parliament without consulting them. After some discussion, and after the amendment had been put twice to the meeting, the report, with the addition of the amendment, was carried.

Dr. MACKESY, of Waterford, moved:—

"That it would be but simple justice to the medical officers holding poor-law appointments, and would tend towards increasing the efficiency of the service, that they should be entitled to a reasonable period of leave of absence in each year, as in the case of civil servants, and that provision for the same should be made at the public expense."

An addition to the resolution of the words "and other public medica appointments," so as to include surgeons to prisons, was suggested by Dr. Falvey, and with this addition the resolution was adopted. Other resolutions having been adopted, the result of the ballot for the election of officers for the ensuing year was declared.

The new president, Mr. H. G. Croly, having taken the chair, a vote of thanks was passed to Dr. Kinkead for his devotion to the interests of the Association during his tenure of its presidency.

The annual dinner took place in the evening. The usual loyal and collegiate toasts having been given, the PRESIDENT proposed "The British Medical Association and its Dublin Branch." He said it was not necessary to speak of the good work that Association did. They looked forward with pleasure to its approaching annual meeting in Dublin next August.

Dr. GRIMSHAW, Registrar-General for Ireland and President of the Dublin Branch, responded. The British Medical Association, he said, was the largest medical, if not the largest association, in the world, numbering over 12,000 members. As President of the Dublin Branch he there represented, as he might say, the imperial interests

profession. The British Medical Association had since its birth done a great deal of work, and it had been from the first associated with the Irish Medical Association in promoting the interests of the profession and the public. At one of the earliest meetings of the British Medical Association, held fifty years ago in Liverpool, the Irish Association was represented by Dr. Jacob and Dr. Maunsell—two names which would ever be remembered in that Association. The two bodies had worked together for the accomplishment of one of the great objects which would be realised on the first day of next month—namely, the new system of medical examinations throughout the United Kingdom. Whatever opinions might prevail as to the best method of carrying out those examinations, they were all agreed that it was absolutely essential that they should send fully qualified men into the profession. He considered it a great privilege to have been so intimately connected with both Associations as he had been, and he believed it to be for the best interests of the profession that the two Associations should exist separately and at the same time work together. As regarded the approaching meeting of the British Medical Association in Dublin in August, they believed it would surpass the one held in Dublin twenty years ago, and he appealed to all present to do their utmost to make it a success. Dr. Banks had been selected as the President of the British Medical Association on that occasion, and they all knew he was a man most eminently fitted to fill that office.

Several other toasts were proposed, amongst them "The Health of the President of the Association," which was cordially received.

MEDICAL PROVIDENCE AND SELF-HELP: ITS PROSPEROUS PROGRESS.

THE cause of self-help and the means of providing against accident, disability, sickness, and old age, are making great and rapid progress under the auspices and by the valuable facilities afforded by the Medical Sickness, Annuity, and Life-Assurance Society. Admirable results were reported at the last monthly meeting of the Society, held at 38, Wimpole Street, on June 8th, Mr. Ernest Hart, the Chairman of the Society, presiding.

It resulted from the report presented that the number of proposals during May were 8, making a total to that date of 891, 3 having been received since, or 894 in all. The present month's (May) sickness-rate has been the lowest for over a twelvemonth, and is below the average for the year ending June, 1886, although the membership is larger by one-seventh. Reviewing the remarkable growth and success of the Society's work, it appeared that nearly 1,200 separate remittances of sickness-pay have been made since the commencement of the Society three years ago, involving payments to sick members of the profession of nearly £3,800. Many members have written expressing the invaluable uses of the financial resources thus secured to them in times of disability. The following figures show in contrast the rapid and unchecked improvement in the position of the Society at the time of striking each of the annual balances:—

	Members Joined.	Reserves.
June 30th, 1884	495	£1,434
,, 1885	678	6,433
,, 1886	775	11,330

While the close of the present month will probably show a total of members joined of 900, and funds of over £17,500. The whole of these funds are entirely the accumulated property of the members, it should be remembered.

The CHAIRMAN pointed out that the constitution on which he had founded the Society gave to members all the profits ordinarily taken by shareholders. The joining members possess all the capital and reserve all profits, but take no corresponding risk, all liability being strictly confined by law to the voluntary payment of the premiums. The special feature of economy in management is owing to voluntary but active and intelligent direction and strict and constant supervision. The total outlay for rent, secretary, office-work, postages, amounts only to about £400 a year. The accumulation on this account (which is strictly additional profit saved on behalf of the members) already amounts to over £1,450. The cost of management, which is now barely 4 per cent. on the income from premiums alone, is most satisfactorily small, in comparison with the oldest and best insurance companies, and is about one-third the average cost of ordinary insurance work, although of course sickness and benefit payments involve a much more complicated and laborious system of management. Economy is not secured at the cost of attention to members, each of whom receives at least four notices and four receipts yearly, and a printed copy of the annual report, with a detailed statement of the accounts, investments, etc. The Society is framed on a scheme free from fines and penalties, and thus compares favourably with many of the friendly societies, in which fines and penalties are often a source of income. In some cases such fines help largely to pay for management. There is only one extra fee—a small charge for second premium notice, sent in the member's interest, and to avoid accidental forfeiture of rights and privileges. The constitution of the Society gives all the control to the members, who elect the executive, by whom the Society is managed free of cost. The trustees, in whose names the whole of the reserves are invested, are Mr. Ernest Hart, Sir T. Spencer Wells, Dr. Ord, and Mr. J. R. Upton. Mr. Hart concluded by observing that he was informed on the best authority that the Society was not only regarded in the actuarial world as unique in the simplicity, economy, and success of its operations, but that it had solved for the medical profession a problem which the other professions had vainly aimed at solving. There was practically no outlay for advertisements, agencies, commissions, or salaries, beyond the small salary of the secretary and a clerk. Office-rent was reduced to the hire of a room. The movement was wholly mutual and co-operative. He looked forward to the time when every member of the profession would join a Society conferring such benefits on all its members. All papers and particulars could be obtained of Mr. Radley, Secretary, 26, Wynne Road, Brixton, S.W.

SCIENTIFIC GRANTS OF THE BRITISH MEDICAL ASSOCIATION IN AID OF RESEARCHES IN MEDICINE AND SURGERY, BIOLOGY, AND THE COLLATERAL SCIENCES.

THE Scientific Grants Committee of the British Medical Association invite applications for grants in aid of medical, surgical, and collateral research; £300 are annually appropriated to this purpose (exclusive of the two Scientific Research Scholarships of the Association at present held by Mr. Watson Cheyne and Dr. Sidney Martin). The Committee will shortly meet to consider applications, which should be forwarded to the office of the Association, 429, Strand, addressed to Mr. Ernest Hart, who acts as the Honorary Secretary of the Committee, and who will furnish particulars of the conditions under which the grants are allotted.

TESTIMONIAL TO DR. EDWARD WATERS, OF CHESTER.

THIRD LIST OF SUBSCRIPTIONS.

	£	s.	d.		£	s.	d.
Dr. J. T. Banks, Pres.-elect., B.M.A.	2	2	0	Dr. T. E. Hayward	1	1	0
Mr. Bickersteth	2	2	0	Mr. G. H. Percival	1	1	0
Mr. Septimus Sibley	2	2	0	Mr. F. A. Heath	1	1	0
Dr. Alfred Carpenter	2	2	0	Mr. W. Latham	0	10	6
Dr. Wm. Strange	1	1	0	Mr. R. A. Gaskell	0	10	6
Dr. C. J. Renshaw	1	1	0	Dr. A. Godson	0	10	6
Dr. Geo. Thomson	1	1	0	Mr. G. W. Joseph	0	10	6
Mr. Eames	1	1	0	Mr. F. A. Southam	0	10	6
Mr. A. H. F. Cameron	1	1	0	Dr. J. E. Garner	0	10	
Mr. E. D. McNicoll	1	1	0	Dr. A. Barron	0	10	
Messrs. Twyford and Jamison	1	1	0	A Friend	0	10	
				Dr. W. Y. Martin		10	

AT Merthyr, on Jubilee Day, Sir W. T. Lewis will lay the foundation stone of the new hospital, on which occasion he will be presented with a silver trowel bearing a suitable inscription.

HENRY COWLEY, described as a medical assistant, and Henrietta Powell, charged with causing the death of a young woman by a felonious surgical operation, and sentenced at the last Birmingham assizes to death, have had their sentences commuted to penal servitude for life.

BEQUESTS AND DONATIONS.—The Northern Infirmary, Inverness, has received £2,000 under the will of Major-General Pope, C.B.—Mr. Thomas Joseph Lynch, of Belper, co. Neath, bequeathed £100 each to the Mater Misericordiæ Hospital, the Hospital for Incurables, St. Joseph's Hospital for Sick Children, and St. Vincent's Hospital and Dispensary, all at Dublin.—The Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties, has received £270 11s. 5d. under the will of Mrs. Mary Redfern, of Rose Lea.—Mr. Henry George Street bequeathed £200 to the Queen's Hospital, Birmingham.—Mrs. Vokes has given £500 to University College Hospital.—Mrs. Andrew Fernie has given £400, additional, to the building-fund of the Great Northern Central Hospital.—The Committee of the Yorkshire Football Club have given £70 to the Halifax Infirmary.—Lady Charlotte Fitzwilliam has given £50 to the National Hospital for Consumption at Ventnor.

ASSOCIATION INTELLIGENCE.

THE President of the Council of the British Medical Association begs to inform the Members that the New Premises, 429, Strand, are now in full occupation, and are open to inspection by the Members. The President of the Council hopes that every Member of the Association will visit the New Offices and inspect the arrangements whenever an opportunity offers.

May 20th, 1887.

NOTICE OF QUARTERLY MEETINGS FOR 1887. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on July 13th and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, June 23rd and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE and on the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE are now closed.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, and HABITS OF INTEMPERANCE, a full Report on OLD AGE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 429, Strand, W.C.

BRANCH MEETINGS TO BE HELD

METROPOLITAN COUNTIES BRANCH.—*Change of Date.*—The annual meeting of this Branch will be held at the Holborn Restaurant, on Friday, July 15th, at 5.30 P.M., not Wednesday, June 29th, as previously announced. President, John S. Bristowe, M.D., F.R.S.; President-elect, Arthur E. Durham, Esq., F.R.C.S. Dinner at 7 P.M.; tickets 7s. 6d. each, exclusive of wine. New rules for the Branch, proposed by the Council, will be submitted to the meeting for adoption.—W. CHAPMAN GRIGG, M.D., GEORGE EASTES, M.B., Honorary Secretaries.

CAMBRIDGESHIRE AND HUNTINGDONSHIRE BRANCH.—The annual meeting of this Branch is proposed to be held at Bishop's Stortford, on Friday, June 24th, 1887. Henry Cribb, Esq., President-elect. It is proposed to have one or two selected subjects for discussion in addition to the President's address, to be followed by communications and exhibition of specimens as time may permit. Members wishing to make communications or to exhibit specimens are requested to state their intention to Dr. Anningson, Cambridge, for insertion in the programme of proceedings. A dinner will be arranged at the Railway Hotel, Hockerill, at (probably) 6.30 P.M., of which the particulars will be given later.—BUSHELL ANNINGSON, Walthamsal, Barton Road, Cambridge.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The annual general meeting of this Branch will be held at the Medical Institute, Edmund Street, Birmingham, on Thursday, June 16th, at 3.30 P.M. The annual dinner will be held after the meeting at the Grand Hotel, Colmore Row, at 6 o'clock.—ROBERT SAUNDBY, M.D., JORDAN LLOYD, F.R.C.S., Honorary Secretaries.

NORTHERN COUNTIES AND ABERDEEN, BANFF, AND KINCARDINE BRANCHES.—A joint summer meeting of these Branches will be held at the Seafield Arms Hotel, Cullen, on Friday, June 24th, 1887, at 3.15 P.M. An omnibus excursion to the Binn Hill of Cullen *vid* Old Church and Cullen House, returning by Woodside Road and Seatown Gate, is arranged for those who can attend in the forenoon. Conveyances leave Cullen at 12.15 P.M. Luncheon at Binn Hill at 1.15 P.M. Luncheon and omnibus, 2s. 6d. per head. Dinner (exclusive of wine, but inclusive of attendance) in Seafield Arms Hotel, Cullen, at 3.30 P.M.; 3s. 6d. each. Business (Aberdeen, Banff, and Kincardine Branch): 1. Minutes, etc. 2. Ballot for admission of Dr. A. T. Gordon, Beveridge, Aberdeen, as ordinary member of Branch.—J. W. NORRIS-MACKAY, ROBERT JOHN GARDEN, J. MACKENZIE BOOTH, Honorary Secretaries.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—The next meeting of the above District will be held at East Grinstead on Wednesday, June 29th. C. E. Collins, Esq., will preside. The following papers are promised. The Chairman: A Few Remarks on Five Cases of Amputation of the Breast. Mr. Percy E. Wallis: A Case of Intestinal Obstruction with Gangrene in a Young Girl. Gentlemen desirous of contributing short papers on cases are requested to communicate with the Honorary Secretary, T. JENNER VERRALL, 97, Montpellier Road, Brighton.

BORDER COUNTIES BRANCH.—The annual meeting of this Branch will be held at Hawick on Friday, July 1st, at 1 o'clock. The usual election of office-bearers for the ensuing year will take place, and Dr. McLeod will give his Presidential address. Members of the medical profession wishing to join the Association or Branch should give immediate notice to the Secretary, together with the names of their proposers. The Secretary will be glad to receive intimation of papers for reading, and patients or specimens for showing.—H. A. LEDIARD, Honorary Secretary, 41, Lowther Street, Carlisle.

LANCASHIRE AND CHESHIRE BRANCH.—The fifty-first annual meeting of the Branch will be held in the Pendlebury Memorial Hall, Lancashire Hill, Stockport, on Wednesday, June 15th, 1887, at 2.30 P.M. (The Council meets at 2). Order of business:—Introduction of the new President. The President's address: subject, "The Position of the General Practitioner in the Profession." The report of Council. Election of office-bearers: President-elect, Vice-Presidents, Honorary Secretary. Election of Representative members on the Council of the Association. Election of new Council. Presentation of testimonial to Dr. Waters. Medical and surgical communications; Mr. Dambrill-Davies will show his opaque white glass Drainage-Tubes. Dr. Cullingworth will mention the case of a patient, aged 62, on whom two ovariotomies and a lithotomy have been performed within a period of twenty-seven months. Dr. Davidson will read a paper on a medical subject. Dr. McKeown will make some observations on one of the conditions under which Squint is developed. Dr. Wallace will read a (1) note on the Causation of Enlargement of Kidney, Stone, and Abscess, with two cases of Successful Laparotomy for the latter; (2) Perforation of Intestine, Collection of Fæces, Pus, etc., in Abdominal Cavity cured by Abdominal Section and Sluicing with Hot Water. Dr. Barron will show a case of Removal of the Astragalus operated on twenty-two years ago. Luncheon, provided by the members of the profession at Stockport, will be served at the Pendlebury Memorial Hall from 1 to 2.30 P.M. The members will dine together in the Palm House, Royal Jubilee Exhibition, Old Trafford, Manchester, at 6 P.M.; tickets 7s. 6d. each (exclusive of wine). Special notice: If you intend being present at the dinner in the Palm House, Royal Jubilee Exhibition, Old Trafford, Manchester, the accommodation being strictly limited, you are specially requested to write, enclosing remittance, at least four days before the meeting to Dr. Godson, Cheadle House, Cheadle, Manchester, otherwise a seat at table cannot be guaranteed. Members holding dinner tickets will be conveyed by train from Stockport to the Exhibition Station, Old Trafford, free of charge. The charge for admission to the Exhibition is one shilling, payable at the entrance.—CHARLES EDWARD GLASCOTT, M.D., General Secretary, 23, St. John Street, Manchester.

SOUTHERN BRANCH.—The 14th annual meeting of this Branch will take place at Netley on Thursday, June 16th, 1887. The general meeting will be held at the Officers' Quarters, Royal Netley Hospital, at one. Luncheons will be provided by the P.M.O. and officers of the Medical Staff. In accordance with the by-laws, two gentlemen will be elected at this meeting as representatives of the Branch on the Council of the Association for the ensuing year. Members desirous of reading papers or other communications are requested to forward at once the titles to the Honorary Secretary. No communication must exceed seven minutes in length, and no subsequent speech must exceed five minutes. The address will be delivered by the President-elect at 2 P.M. During the afternoon the members are invited to visit Netley Hospital and Netley Abbey. The dinner will take place at the South-Western Hotel, Southampton, at 6 P.M.; charge 6s., exclusive of wine, etc. The Committee request that those gentlemen who intend to be present at the dinner will send in their names to Dr. Trend, Southampton, on or before Wednesday, June 15th.—J. WARD COUSINS, Honorary Secretary and Treasurer.

NORTH OF IRELAND BRANCH.—The annual meeting of this Branch will be held in the Belfast Royal Hospital on Thursday, July 7th. Members desirous of reading papers, or of bringing any other business before the meeting, are requested to communicate at once with the Honorary Secretary, JOHN W. BYERS, M.D., Lower Crescent, Belfast.

GLASGOW AND WEST OF SCOTLAND BRANCH.—This Branch will hold a meeting in Greenock on Friday, June 24th, 1887. Members will leave Glasgow at 2.5 P.M. from St. Enoch's Station, arriving at Lynedoch St. Station, Greenock, about 3.3 P.M. They will first visit the Brewery Yards Sugar Refinery, after which they will drive to Messrs. Caird and Co.'s Shipbuilding Yard, Dalrymple Street. About an hour will be spent at each place; then, if time permits, the Watt Library and Museum may be visited, and, if the weather is suitable, the company will drive round the Lyle Road. The Branch will afterwards meet in the Tontine Hotel, where dinner will be served at 6 P.M. Tickets 5s. each, exclusive of wine. Those intending to be present at the dinner should kindly signify their intention not later than Tuesday, June 21st. Members prevented leaving Glasgow at 2.5 P.M. might join the company at Messrs. Caird and Co.'s Building Yard, Dalrymple Street, by leaving town by the 3 P.M. train (Caledonian Railway), and driving from the station.—A. NAPIER, Honorary Secretary, Crosshill, Glasgow.

SOUTH EASTERN BRANCH.—The forty-third annual meeting of this Branch will be held at the Library of the Cambridge Hospital, Aldershot, on Friday, June 17th, at 2 o'clock precisely. The officers of the Medical Staff invite members and their friends to luncheon at the Medical Mess, V Lines, South Camp, from 1 A.M. to 2 P.M. After the meeting there will be an inspection of the hospital and camp, ambulance drill, etc. Carriages will be provided by the President-elect for [illegible]

an excursion to the ruins of Waverley Abbey and Farnham Castle; (2) an excursion to Farnboro' Hill, the residence of the ex-Empress of the French, the mausoleum, etc. Dinner will be served at 6 30 P.M. at the Imperial Hotel; tickets, exclusive of wine, 7s. 6d. each. Members on arrival will meet at the Medical Officers' Mess, V Lines, South Camp.—CHARLES PARSONS, M.D., Honorary Secretary, 2, St. James's Street, Dover.

EAST ANGLIAN BRANCH.—The annual meeting of the East Anglian Branch will be held at Swaffham on Thursday, July 14th, under the presidency of R. B. Marriott, Esq. Notices of papers, cases, or any matter of interest to be forwarded to Dr. ELLISTON, Ipswich, or Dr. BEVERLEY, Norwich, Honorary Secretaries.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The annual meeting will be held at Swansea, on Thursday, July 7th. Notices of papers, etc., should be sent to one of the Secretaries before June 22nd.—ALFRED SHEEN, M.D., Cardiff, D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.

SYDNEY AND NEW SOUTH WALES BRANCH.

A GENERAL MEETING of this Branch was held on Friday, April 1st, in the Royal Society's Rooms, Sydney, the Hon. Dr. CREED, M.L.C., President, in the chair. Twenty-nine gentlemen were present.

The minutes of the previous meeting were read and confirmed.

New Members.—The PRESIDENT announced the following new members: Drs. O'Neill, Pockley, Coutie, and Finlay.

Representative on Council of Association, etc.—The HONORARY TREASURER (Mr. Hankins) read a letter from Mr. Fowke, with reference to the election of a representative to the Council of the Home Association, and one from Mr. Ernest Hart, Editor of the BRITISH MEDICAL JOURNAL, relating to the publication of reports of meetings in that JOURNAL.

Dr. E. FAIRFAX ROSS proposed, and Mr. MCCORMICK seconded: "That the Hon. Dr. Mackellar, M.L.C., be elected representative of the Branch on the Council of the Home Association for the ensuing year." Carried.

Papers.—Dr. QUAIFE read some notes on a Case of Stomatitis, with Jaundice, etc.; also notes on a Case of Carbolic Acid Poisoning.

The cases were discussed by the PRESIDENT, Drs. LOVELL, CLUBBE, HANKINS, SCOT SKIRVING, and EVANS.

Medical Men and Friendly Societies.—Dr. CLUBBE moved the following resolutions:

1. "That this Association is of opinion that the present system of payment of medical officers by the various friendly societies is very unsatisfactory.

2. "That the following gentlemen form a committee: Drs. Knaggs, Scot Skirving, Ellis, Hankins, and the mover, with power to add to their number, to inquire into the subject and to formulate some scheme of reform."

Dr. ELLIS moved as an addition: "That this meeting authorises the committee to add to their number gentlemen who are not members of this Branch."

A discussion ensued, in which Drs. ELLIS, HANKINS, O'REILLY, MARTIN, QUAIFE, MEGGINSON, and SCOT SKIRVING took part.

Dr. CLUBBE accepted the addition, and the resolution as amended was carried.

Professional Papers and the Press.—Dr. LOVELL moved, and Dr. SCOT SKIRVING seconded:

"That at future meetings the press shall be requested not to give particulars of any professional papers except by the invitation of the President. Carried.

Resolutions Rescinded.—Dr. QUAIFE moved, and Mr. HANKINS seconded:

"That the resolutions passed by the Branch on August 6th, 1886, relative to the subscriptions and BRITISH MEDICAL JOURNAL, be now rescinded." Carried.

SOUTH MIDLAND BRANCH.

THE annual meeting of this Branch was held at the General Infirmary, Northampton, on June 2nd, under the presidency, of Mr. H. B. SPURGIN. Forty-two members and visitors were present, and were entertained at luncheon by the President previous to the meeting. The minutes of the last (committee) meeting were read, and its proposals confirmed, as follows:

Election of Officers.—Mr. H. Veasey was appointed President-elect; the Committee of Management was re-elected, Mr. W. H. Bull being put in the room of Mr. Spurgin; all the other officers were re-elected, Dr. Bryan being representative to the General Council, and Mr. Watkins representative to the Parliamentary Bills Committee.

Places of Meeting.—The next autumnal meeting will be held at Daventry in October, and the annual meeting in 1888 at Bletchley.

New Members.—Six gentlemen were elected members of the Association and Branch.

President's Address.—After a few valedictory remarks, the retiring President left the chair, and the new PRESIDENT delivered an address on "Syphilis in the Army," pointing out its bad effects on the constitution of the British soldier, and its importance from financial as well as other points of view. He also quoted statistics showing the results of specific disease in towns where the Contagious Diseases Acts were in force, compared with others.

Communications.—Mr. W. H. BULL read a case of "Compound Depressed Fracture of Skull: Trephining: Recovery;" and Mr. MILLIGAN showed a patient who had recovered under like circumstances. —Dr. BUSZARD read a paper on "Some Forms of Locomotor Ataxy," comparing the different forms together in some detail, with illustrative cases.—Dr. NEWMAN described his recent visit to a Swiss Hospital, giving some interesting details of the antiseptic measures there employed.—Mr. R. A. MILLIGAN related a case of Suprapubic Lithotomy in a Child, and exhibited one or two other patients.—Dr. JONES read a paper on "Abnormalities of Refraction of the Eye, a Cause of Headache and Allied Symptoms," pointing out the desirability of examining the eye more frequently than was generally done.—Mr. C. R. OWEN related a case in which the entire Scalp had been removed, particularly referring to the question of treatment.—Mr. W. KENNEDY read a paper on "Puerperal Eclampsia," with illustrative cases, dwelling more particularly on the exciting cause of the convulsions and the methods employed for its removal.

Medical Benevolent Fund.—Mr. TERRY and Dr. BRYAN advocated the claims of the Medical Benevolent Fund, and solicited aid in behalf of a distressed and superannuated member of the profession.

Votes of Thanks.—Cordial votes of thanks were unanimously passed to the ex-President for his able services during the past year; to the President for his hospitality, and for his conduct in the chair; and also to the readers of papers and cases.

EAST YORK AND NORTH LINCOLN BRANCH.

THE annual meeting of this Branch was held on May 25th. There were forty-three members present. The President (Dr. Macleod) resigned the chair to his successor, Mr. Henry Thompson.

Dr. DALY proposed a vote of thanks to Dr. Macleod for his able services in the chair during the past year. This was seconded by Dr. LUNN, supported by Mr. LOCKING, and carried unanimously. Dr. MACLEOD replied.

Officers and Council.—The following are the office-bearers and members of the Council: *President:* Mr. Thompson. *President-elect:* Dr. Frank Nicholson. *Ex-President:* Dr. Macleod. *Vice-Presidents:* Dr. Merson and Dr. Lunn. *Secretary:* Mr. Hardey. *Representative of the Branch:* Mr. Dix. *Representative on Parliamentary Bills Committee:* Dr. Macmillan. *Other members of Council:* Mr. Appleton, Dr. Baldwin, Dr. Elliott, Mr. Hagyard, Mr. R. H. B. Nicholson, Dr. Pigeon, Dr. Rockliffe, and Mr. Sissons.

Report of Council.—The report stated that the number of members had slightly increased. The meetings have been well attended, and a large number of papers of great medical and surgical interest have been brought forward. There was a very successful autumn meeting at Beverley. Complaint was made in the report of the course pursued by the Council of the Association in declining to consider a resolution of this Branch forwarded on the subject of the action of the JOURNAL in favour of certain candidates on the occasion of the recent elections to the General Medical Council, and of the exclusion of the resolution from the published minutes of the Council.

Report of the Representative of the Branch.—Mr. DIX presented his report, reviewing the work of the Council of the Association.

Report of Representative on Parliamentary Bills Committee.—Dr. MACMILLAN gave a brief account of the work done by this Committee during the year.

New Member.—Mr. W. J. C. Tomalin, Hull, was elected a member of the Branch.

Medical Benevolent Fund.—A grant of £2 2s. was voted to the Medical Benevolent Fund.

President's Address.—The PRESIDENT delivered an address in which he spoke of the changes which had taken place in the profession in Hull during the twenty-one years which had elapsed since he entered the profession; the excessive death-rate among medical men, with the prevalence of diseases of the nervous system; and concluded with a review of some of the advances in medicine and surgery during the same period.

Vote of Thanks.—A vote of thanks was accorded to the President for his interesting address.

Communications.—The following communications were made: Dr. EDWARD DALY: 1. Hydatid of Liver: Suppuration: Abdominal Section: Recovery. 2. Hydatid of Liver: Suppurating and Bursting into

Pleura: Paracentesis: Death.—Dr. MASON: Some interesting Facts relating to the Outbreak of Diarrhœa in Hull, in 1885, with special Refereuce to its Causation.—Mr. CRAVEN: First and Latest Lithotomy, with Remarks.—Dr. ROCKLIFFE: Ophthalmoscopic Cases.—Mr. R. H. BOURCHIER NICHOLSON: 1. A Case of Double Primary Amputation through Middle Third of Femur. 2. A Case of Excision of Hip a Year after Operation.

Presentation to Secretary.—In the evening the members dined at the Vittoria Hotel. After the dinner, a handsome gold watch was presented to Mr. Hardey, the Secretary, in recognition of his services as Secretary during the past eleven years.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIFTH ANNUAL MEETING.

THE fifty-fifth Annual Meeting of the British Medical Association will be held at Dublin, on August 2nd, 3rd, 4th, and 5th, 1887.

President: Withers Moore, M.D., F.R.C.P., Senior Physician to the Sussex County Hospital, Brighton.

President-elect: John T. Banks, M.D., D.Sc.(Hon.), F.K.Q.C.P.I., Regius Professor of Physic in the University of Dublin.

President of the Council: Sir B. Walter Foster, M.D., M.P., F.R.C.P., Professor of Medicine in Queen's College, and Physician to the General Hospital, Birmingham.

Treasurer: C. Macnamara, F.R.C.S., Surgeon to the Westminster Hospital, London.

An Address in Medicine will be delivered by W. T. Gairdner, M.D., F.R.C.P.Ed., Professor of Medicine in the University of Glasgow.

An Address in Surgery will be delivered by Edward Hamilton, M.D., Fellow and Professor of Surgery in the Royal College of Surgeons in Ireland.

An Address in Public Medicine will be given by the Rev. S. Haughton, M.D., F.R.S., D.C.L., Senior Fellow, Trinity College, Dublin.

All the rooms required for the purposes of the meeting will, by the kindness of the Provost and Senior Fellows, be provided in Trinity College. The Sections of Medicine, Surgery, Obstetric Medicine, Therapeutics and Pharmacology, and of Pathology, will be held in the Medical School, and the remaining Sections and Subsections in the Museum Buildings of the University. The President's Address will be delivered in the Dining Hall, and the General Meetings will be held in the Examination Hall, where also the stated Addresses will be delivered.

PROGRAMME OF PROCEEDINGS.

TUESDAY, AUGUST 2ND, 1887.

9.30 A.M.—Meeting of 1886-87 Council. Council Room, Museum Buildings.
10 A.M.—Service at the Pro-Cathedral, Marlborough Street. Sermon by the Rev. L. Martial Klein, S.J., F.R.U.I.
11.30 A.M.—First General Meeting. Report of Council. Reports of Committees; and other business. Examination Hall.
4 P.M.—Choral Service at St. Patrick's National Cathedral. Sermon by the Most Rev. the Lord Bishop of Meath.
8.30 P.M.—Adjourned General Meeting from 11.30 A.M. President's Address. Dining Hall.

WEDNESDAY, AUGUST 3RD, 1887.

9.30 A.M.—Meeting of 1887-8 Council. Council Room, Museum Buildings.
10.30 A.M. to 2 P.M.—Sectional Meetings. Medical School and Museum Buildings.
8 P.M.—Second General Meeting. Address in Medicine. Examination Hall.
9 P.M.—Soirée given by the President of the Association and by the Dublin Branch. Royal University of Ireland.

THURSDAY, AUGUST 4TH, 1887.

9.30 A.M.—Meeting of Council. Council Room, Museum Buildings.
10.30 A.M. to 2 P.M.—Sectional Meetings. Medical School and Museum Buildings.
3 P.M.—Third General Meeting. Address in Surgery. Examination Hall.
7 P.M.—Public Dinner. Royal University of Ireland.

FRIDAY, AUGUST 5TH, 1887.

10 A.M. to 1.30 P.M.—Sectional Meetings. Medical School and Museum Buildings.
3 P.M.—Concluding General Meeting. Address in Public Medicine. Examination Hall.
4.30 to 6 P.M.—Garden Party.
9 P.M.—*Conversazione* given by Surgeon-General Hassard, C.B., P.M.O. Ireland, and the officers of the Medical Staff. Museum of Science and Art.

SATURDAY, AUGUST 6TH, 1887.

Excursions.

The front hall over the main entrance to Trinity College will be fitted up as a reception-room, and will be opened at 12 o'clock noon, on Monday, August 1st, and on the following days at 9 o'clock in the forenoon, and will remain open until 6 o'clock in the afternoon of each day, for the issue of tickets to members and for supplying all necessary information.

The following discussions and papers are promised up to the present time. Members desirous of reading papers, or joining in the discussions, are earnestly requested to communicate, without delay, with the Secretaries of the respective Sections.

SECTION A.—MEDICINE.

Anatomical Theatre.

A. MEDICINE.—*President*, William Moore, M.D. *Vice-Presidents*, H. C. Bastian, M.D., F.R.S.; J. Magee Finny, M.D. *Honorary Secretaries*, T. Gilbart Smith, M.D., F.R.C.P., 68, Harley Street, Cavendish Square, London, W.; C. J. Nixon, M.D., 2, Merrion Square, Dublin.

Dr. H. Charlton Bastian, F.R.S., will introduce a discussion on Different Kinds of Aphasia, with special reference to their Classification and Ultimate Pathology. The following gentlemen will take part in the discussion: Dr. Hughlings Jackson, F.R.S., Dr. Stephen Mackenzie, Dr. Althaus.

The following papers are promised.

ALTHAUS, J., M.D. On Post-Hemiplegic Paralysis Agitans.
BATEMAN, F., M.D., Norwich. On Puerperal Aphasia.
CHURTON, T., M.D., Leeds. Meningitis after Blows upon the Head.
KNOTT, John T., F.R.C.S.I., Dublin. On the Use of Certain Organic Acids in the Rheumatic, Gouty, and Allied Diathesis.
LAFFAN, T., M.K.Q.C.P.I., Cashel. 1. On Empyema. 2. Some Points in Fever. 3. Some Cases of Paralysis.
NIXON, C. J., M.D. On the Cardiac Murmurs of the Tricuspid Area.
OWEN, Isambard, M.D., and RICHARDSON, B. W., M.D., F.R.S. On Alcoholism.
SANSOM, A. E., M.D. On Methods of Precision in Cardiac Diagnosis.
STEWART, T. Grainger, M.D., Edinburgh. On the Incidence of Albumen among the Presumably Healthy and the Diseased.
WHITE, Wm. Henry, M.D. On Mediastinal Sarcoma involving the Lung.

Papers are also promised by Dr. Douglas Powell, Dr. Dudley Buxton, Dr. Gabbett, and others.

SECTION B.—SURGERY.

Chemical Theatre.

B. SURGERY.—*President*, Sir George H. Porter, M.D. *Vice-Presidents*, Alexander Ogston, M.D.; John Fagan, F.R.C.S.I. *Honorary Secretaries*, W. Thomson, F.R.C.S.I., 34, Harcourt Street, Dublin; R. J. Godlee, F.R.C.S.Eng., 81, Wimpole Street, London, W.; C. B. Ball, M.D., F.R.C.S.I., 16, Lower Fitzwilliam Street, Dublin.

Mr. Mitchell Banks, Liverpool; Dr. McEwen, Glasgow; Mr. W. D. Spanton, Hanley; and Mr. C. R. B. Keetley, London, will open a discussion on the Radical Cure of Hernia. Dr. C. B. Ball, Mr. J. K. Barton, Professor Thornley Stoker, Mr. Walter Rivington, Mr. W. J. Walsham, Mr. F. B. Jessett, Mr. J. Langton, Mr. A. W. Mayo Robson, Dr. N. T. Hobart, Mr. H. Langley Browne, and Mr. Geo. Cowell, will take part in the discussion.

The following papers are promised.

BARTON, J. K., Esq. Operative Treatment of Morbus Coxæ.
CORLEY, A. H., M.D. On the Open Operation for Radical Cure of Hernia, with a Test Case.
FENWICK, E. Hurry, Esq. Cancer of the Prostate necessitating Colotomy.
FRANKS, Kendal, Esq. 1. On the Radical Cure of Hernia. 2. Three Cases illustrative of Renal Surgery.
HEUSTON, Francis T., M.D. On a Case of Strangulated Femoral Hernia with Gangrenous Fallopian Tube and Ovary contained in the Sac; and on the Means adopted for Radical Cure of the Hernia.
JESSETT, F. B., Esq. 1. On a Case of Gastro-Enterostomy. 2. On the Removal of Tumours of the Neck, with Cases.
KOCHER, L., M.D., Berne. Cachexia Strumipriva and Myxœdema.
MELDON, Austin, Esq. On the Treatment of Tetanus.
PEARSON, Professor C. J. Strangulated Umbilical Hernia.
RIVINGTON, Walter, Esq. On External Urethrotomy.
ROBSON, A. W. Mayo, Esq. 1. Twenty-five Cases of Radical Cure of Hernia. 2. On some Cases of Nephrotomy.
ROTH, Bernard, Esq. An Accurate and Practical Method of Recording Cases of Lateral Curvature of the Spine.
STOKER, Professor Thornley. The Theory and Practice of Operation for the Radical Cure of Hernia.
WALSHAM, W. J., Esq. Litholapaxy in Male Children.
WELLS, Sir T. Spencer. Comparison of the Cæsarean Section with Porro Operation.

SECTION C.—OBSTETRIC MEDICINE.

Surgical Theatre.

C. OBSTETRIC MEDICINE.—*President*, A. V. Macan, M.B. *Vice-Presidents*, T. More Madden, M.D.; A. L. Galabin, M.D. *Honorary Secretaries*, Wm. J. Smyly, M.D., 56, Fitzwilliam Square, Dublin; Wm. Duncan, M.D., 6, Harley Street, Cavendish Square, London, W.

The following two discussions will take place.

1. On the Prevention of Puerperal Fever. This will be opened by Dr. William Playfair; and Drs. Robert Barnes, Priestley, Atthill,

Kidd, Dill, and Galabin have intimated their intention of taking part in the debate.

2. On the Management of Anterior and Posterior Displacements of the Uterus. To be opened by Dr. Halliday Croom, of Edinburgh. Drs. Barnes, Playfair, Priestley, Kidd, Atthill, Galabin, and others, are expected to take part in the debate.

The following papers are promised.

BARNES, Robert, M.D., London. The Theory and Treatment of Placenta Prævia.
BYERS, J. W., M.D., Belfast. On the Prevention of Puerperal Fever in Private Practice.
CAMERON, Murdoch, M.D., Glasgow. The Pathology of Abortion; with Specimens.
DUNCAN, William, M.D., London. On the Best Mode of Treating Extensive Vesico- and Recto-Vaginal Fistulæ.
ELDER, George, M.D., Birmingham. A Visit to Apostoli.
GRIGG, W. C., M.D., London. On the Etiology of Puerperal Pyrexia.
HERMAN, G. E., M.B., London. Pubo-vesical Cellulitis.
MADDEN, T. More, M.D., Dublin. 1. On the Treatment of Puerperal Fever. 2. On the Treatment of some Forms of Sterility.
SAVAGE, Thomas, M.D., Birmingham. Tubo-ovarian Cysts.
SMYLY, W. J., M.D., Dublin. On the Diagnosis and Treatment of Diseases of the Endometrium.

Dr. Apostoli, of Paris, will also contribute a paper.

SECTION D.—PHARMACOLOGY AND THERAPEUTICS.

Medical Theatre.

D. THERAPEUTICS AND PHARMACOLOGY.—*President*, Wm. Whitla, M.D. *Vice-Presidents*, Matthew Charteris, M.D.; D. J. Leech, M.D. *Honorary Secretaries*, Chas. Y. Pearson, M.D., 1, Sidney Place, Cork; Michael McHugh, M.B., 25, Harcourt Street, Dublin.

The special subject for discussion is the Therapeutics of the Uric Acid Diathesis, which will be introduced by Dr. Burney Yeo, of London. Dr. Latham, Cambridge; Dr. Myrtle, Harrogate; Dr. Mortimer Granville, London; Dr. Carter, Liverpool; Dr. Hellier, Leeds; Dr. Churton, Leeds; Dr. Spender, Bath, and others, will take part in the discussion.

The following papers are promised.

ANDERSON, E. C., M.D., Wolsingham. Koumiss and Koumissised Peptones; their Varieties, Physiological Uses, etc.
CHARTERIS, Matthew, M.D., Glasgow. The Climatic Treatment of Phthisis.
COX, M. F., M.K.Q.C.P.I., Dublin. The Treatment of Acute Endo- and Peri-Carditis.
FARRAR, Joseph, M.D., Gainsborough. The Use of Acidum Sulphurosum in Typhoid.
JAMES, Prosser, M.D., London. The Effects of Topical Treatment on Mucous Membrane.
LEECH, D. J., M.D., Manchester.
QUINLAN, F. J. B., M.D., Dublin. Clinical Notes on the Therapeutic Action of Strophanthus Hispidus.
SANSOM, Ernest A., M.D., London. The Treatment of some Forms of Aortic Disease.
UNNA, P. G., Hamburg. The Improvements of the Dermato-Therapeutics.

SECTION E.—PATHOLOGY.

Theatre of Physiological Laboratory.

E. PATHOLOGY.—*President*, Samuel Gordon, M.D. *Vice-Presidents*, A. W. Foot, M.D.; David J. Hamilton, M.D. *Honorary Secretaries*, Theodore D. Acland, M.D., 7, Brook Street, Grosvenor Square, London, W.; Henry T. Bewley, M.B., Willow Park, Booterstown, Co. Dublin.

The following subjects have been selected for discussion.

1. The Pathology of Empyema.
2. The Etiology of Chlorosis.

Dr. Crookshank will give demonstrations of Preparations, Cultivations, etc., of Bacteria.

The following papers are promised.

ANDERSON, E. C., M.D., Wolsingham. On Leucin and Tyrosin.
CROOKSHANK, Edgar, M.B., London. On the Micro-organisms associated with Malaria.
MAPOTHER, E. D., M.D. Elephantiasis Induced by Posture.

SECTION F.—PUBLIC MEDICINE.

Divinity Theatre.

F. PUBLIC MEDICINE.—*President*, Sir Thomas Crawford, M.D., K.C.B. *Vice-Presidents*, John S. Taylor, M.D.; R. Thorne Thorne, M.D. *Honorary Secretaries*, John Wm. Moore, M.D., 40, Fitzwilliam Square West, Dublin; John F. W. Tatham, M.D., Town Hall, Salford.

The subjects selected for discussion are—

1. The Influence of Modern Preventive Measures on the Prevalence of Infective Diseases. Introduced by T. Donnelly, M.D., Dublin.

2. How to Deal with the Insanitary Property now occupied by Artisans and Labourers. Introduced by Sir Charles Cameron, F.R.C.S.I., Medical Officer of Health for Dublin.

The following papers are promised.

BOYD, M. A., M.K.Q.C.P.I., Dublin. Modern Diet and its Effects on Health.
FLINN, D. E., M.K.Q.C.P.I., Kingstown. The Sanitary Act as Applied to Rural Districts in Ireland.
LAFFAN, T., L.K.Q.C.P.I., Cashel. Some Remarks on the Irish Labourers' Act, with a Proposal for Meeting the Present Defective Milk-Supply for the Children of the Irish Rural Working Class.
LEATHAM, Wm., L.K.Q.C.P.I., Coalisland. How to Deal with the Insanitary Property now occupied by Artisans and Labourers.
MOUILLOT, Albert, L.K.Q.C.P.I., Gorey. On an Outbreak of Dysentery at Glynn, Co. Wexford.
QUINLAN, F. J. B., M.D., Dublin. Some Experiences in Insanitary Tenement Houses.

SECTION G.—PSYCHOLOGY.

Examination Room.

G. PSYCHOLOGY.—*President*, J. R. Gasquet, M.B. *Vice-Presidents*, Frederick Needham, M.D.; Oscar T. Woods, M.D. *Honorary Secretaries*, Conolly Norman, F.R.C.S.I.; Richmond District Lunatic Asylum, Dublin; T. Lyle, M.D., Rubery Hill Asylum, Bromsgrove, Worcestershire.

Dr. Gasquet, the President of the Section, will deliver an address.

The following subject for discussion will be introduced by Dr. George H. Savage: Nervous Disorders following the Use of Anæsthetics.

The following papers are promised.

KEAY, John, M.B., Polton. Are Airing Courts, Locked Rooms, and Restraint Necessary in Asylum Practice?
TUKE, D. Hack, M.D., London. On "Folie à Deux."

SECTION H.—OPHTHALMOLOGY.

Physical Theatre.

H. OPHTHALMOLOGY.—*President*, H. R. Swanzy, M.B. *Vice-Presidents*, D. Argyll Robertson, Pres.R.C.S.Edin.; Priestley Smith, M.R.C.S.E. *Honorary Secretaries*, A. H. Benson, M.B., 42, Fitzwilliam Square, Dublin; A. W. Sandford, M.D., 13, St. Patrick's Place, Cork.

The subject for discussion is the Etiology and Treatment of Convergent Concomitant Strabismus, which will be introduced by Mr. Simeon Snell, of Sheffield. Drs. Jeffreson, Cowell, McHardy, E. Meyer, E. Nettleship, Wood White, P. H. Mules, W. A. Brailey, Vose Solomon, F. Mason, R. Williams, and Argyll Robertson, will take part in the discussion.

The following papers are promised.

BENSON, Arthur H., F.R.C.S., Dublin. On the Treatment of Stenosis of the Lacrymal Duct by Removable Styles.
BERRY, George, M.B., Edinburgh. On Amblyopia, Diplopia, and the Etiology of Strabismus.
BICKERTON, T. H., Esq., Liverpool. On Colour-Blindness, with especial reference to its Prevalence amongst Sailors.
FROST, W. Adams, F.R.C.S., London. On Squint.
HEWETSON, H. B., Esq., Leeds. On Amblyopia from Lead-Poisoning (illustrated); nine cases.
LANDOLT, Dr., Paris. On the Re-establishment of Binocular Vision after Strabismus Operations.
LITTLE, David, M.D., Manchester. On Lamellar Cataract.
SMITH, Priestley, Esq., Birmingham. On Neurasthenic Amblyopia.
UHTHOFF, Dr., Berlin. Demonstrations of Preparations relating to (1) Chronic Alcoholism, in its Relations to the Eye; (2) Ophthalmoplegia; (3) Paralysis of Orbital Muscles.

Communications have also been promised by Dr. Karl Grossman, Liverpool; Dr. Lloyd Owen, Birmingham; and Mr. E. A. Browne, Liverpool.

SUBSECTION I.—OTOLOGY.

Engineering Theatre.

I. OTOLOGY.—*Chairman*, E. Woakes, M.D. *Vice-Chairman*, J. B. Story, M.B. *Honorary Secretary*, D. D. Redmond, L.R.C.S.I., 14, Harcourt Street, Dublin.

Dr. Thomas Barr, Glasgow, will open a discussion on Tinnitus Aurium. Mr. T. Mark Hovell, Dr. Charles Warden, Dr. J. Walton Browne, and Dr. A. H. Jacob, will take part in the discussion.

The following papers are promised.

BROWNE, J. Walton, M.D., Belfast. On Caries of the Mastoid.
WARDEN, Charles, M.D., Birmingham. On Tinnitus Aurium.

SUBSECTION J.—LARYNGOLOGY AND RHINOLOGY.

LARYNGOLOGY AND RHINOLOGY.—*Chairman*, W. H. MacNeill Whistler, M.D. *Vice-Chairman*, Kendal Franks, M.D. *Honorary Secretary*, R. A. Hayes, M.D., 56, Merrion Square South, Dublin.

The two following subjects have been selected for special discussion.

1. Phthisis of the Larynx.
2. The Reflex Neuroses of the Naso-Pharynx.

Dr. Prosser James, Dr. Woakes, Mr. Lennox Browne, Dr. R. Ellis, Dr. C. Warden, and Dr. G. Hunter Mackenzie will take part in the discussion.

The following papers are promised.

MACKENZIE, G. Hunter, M.D. The Treatment of Laryngeal Phthisis.
STOKER, George, Esq. Intermittent Nasal Neuroses.

Local Honorary Secretary.—George F. Duffey, M.D., 30, Fitzwilliam Place, Dublin.

Members desirous of reading papers, or joining in the discussions, are earnestly requested to communicate, without delay, with the Secretaries of the respective Sections.

Annual Museum.

The Annual Museum will be held on August 2nd, 3rd, 4th, and 5th, in the Anatomical Department of the Medical School of Trinity College, Dublin.

The Museum will be arranged in the four following Sections, and intending exhibitors are requested to communicate with the Secretary of the Section or Sections in which they propose to exhibit.

Section A.—Food and Drugs. (Honorary Secretary, F. J. B. Quinlan, M.D. Univ. Dub., 29, Lower Fitzwilliam Street, Dublin.)

Section B.—Recent Books, Instruments, and Appliances—Medical, Surgical, and Electrical. (Honorary Secretary, John Lentaigne, F.R.C.S.I., 29, Westland Row, Dublin.)

Section C.—Anatomical and Pathological Specimens and Drawings, Microscopes and Microscopical Preparations. (Honorary Secretary, Alex. B. McKee, M.B. Univ. Dub., Royal College of Surgeons, Dublin.)

Section D.—Hygienic and Sanitary Appliances. (Honorary Secretary, H. C. Tweedy, M.D. Univ. Dub., 2, Gardiner's Row, Dublin.)

Particulars should be supplied to the Secretaries of the objects proposed to be exhibited and the amount of space required. No showcases will be allowed.

As it is intended to print a catalogue, with appendix of advertisements, it is requested that inquiries be addressed to the Secretaries as early as possible.

All articles sent to the Museum for exhibition should be addressed to care of Professor Cunningham, Medical School, Trinity College, Lincoln Place, Dublin, and delivered, carriage paid, between the 5th and 26th of July.

Chairman of Museum Committee—Wm. Thornley Stoker, F.R.C.S.I., 16, Harcourt Street, Dublin. Vice-Chairman—D. J. Cunningham, M.D., 69, Harcourt Street, Dublin.

Excursions.

The following excursions on Saturday, August 6th, have been arranged :—

1. *Dublin Bay.*—The London and North-Western Railway Company, has generously granted one of its express steamers for this excursion, which eminent marine zoologists have kindly undertaken to accompany for the purpose of dredging, trawling, and taking soundings in several places between Lambay and Greystones. Lunch will be served on board at two o'clock, and the steamer will return to the North Wall before seven o'clock.

2. *Powerscourt and Dublin Waterworks.*—By train to Bray, drive through Powerscourt Demesne and to the Waterfall ; thence to the Waterworks, where lunch will be served at two o'clock. The return journey will be by the Glen of the Downs to Bray, and thence to Kingstown in time for the mail boat.

3. *Glendalough and Ovoca.*—On reaching Rathdrum by rail, conveyances will start for Glendalough, and after an hour's stay will return to Rathdrum. A special train will leave for the Meeting of the Waters, and thence for Glenart Castle, Ovoca, where the party will be entertained by the Earl of Carysfort, K.P., and return to Kingstown at 7 P.M.

4. *The Boyne.*—By rail to Drogheda, thence by cars and carriages to Monasterboice, Mellifont Abbey, Slane, New-Grange Sepulchral Tumulus (where light refreshments will be served), and the Battlefield. Dinner at Drogheda at 4 P.M. Return from Drogheda at 5.41 P.M. by limited mail, or by later trains.

E. D. Mapother, M.D., Chairman, Excursion Committee.

Dr. Ward Cousins gives notice that he will propose the following alteration of By-law 9, for the purpose of making the term of office of the President of Council correspond with the constitution of the annual representative Council :

Present by-law.—"The President of the Council shall be elected by the Council. He shall hold office for three years ; and at the first meeting of the Council after the determination of such office, a new President of Council shall be elected for the ensuing three years."

Proposed alteration.—"The President of the Council shall be elected annually by the Council, and shall be eligible for re-election for a period of three years. At the first meeting of the new Council in every year, a President of Council shall be elected for the ensuing year."

Francis Fowke, *General Secretary.*

SPECIAL CORRESPONDENCE.

PARIS.

[From our own correspondent.]

The Physiological Action of Hydrochlorate of Hyoscine.—Quinine in Typhoid Fever.—Knee jerk in Glycosuria.—Glycosuria of Hepatic Origin.—Tuberculosis of the Liver.—Redard's Oven for the Disinfection of Surgical Instruments.—Chloroform in Tracheotomy.—Treatment of Ischio-rectal Abscess.—Treatment of Blood-tumour by Pressure.—Prevention of Importation of Disease.

M. Gley has lately published the results of his experiments on the physiological action of hydrochlorate of hyoscine. A minim of a 1 per cent. solution of this substance, when dropped into the eye of a dog or a rabbit, produced marked dilatation of the pupil in seven or eight minutes. In man, the dilatation of the pupil and the paralysis of accommodation lasted five days after the application of a single drop of a 1 per cent. solution of hyoscine. The other eye, contrary to what took place in the rabbit, was in no way affected. M. Gley recommends the drug on account of the rapidity of its action and its feeble toxic effects. Fifteen centigrammes of hyoscine injected under the skin of a dog produced no serious result.

Dr. Pécholier recently communicated to the Académie de Médecine the results of his treatment of typhoid fever with quinine and lukewarm baths. He used this method with success in sixty-five cases. According to Dr. Pécholier, the treatment is not only curative, but abortive ; it shortens the duration of the illness. M. Dujardin-Beaumetz, having been commissioned by the Académie to report upon the method, said it erred in being too systematic. Typhoid fever should be treated in different ways, according to the great variety of complications that may occur in the course of the disease. Cold baths, calomel, and large doses of carbolic acid had been prescribed as certain remedies ; but all these were attended with certain risks. M. Pécholier's treatment was employed at the first appearance of febrile symptoms. It could not, therefore, be considered certain that the sixty-five cases said to have been cured were cases of genuine typhoid fever.

In the *Revue de Médecine*, M. Dreyfus publishes a note on knee-jerk in glycosuria. According to him, in simple glycosuria, the nervous system may act in a totally different manner than when this affection is complicated with diabetes. The abolition of knee-jerk in diabetes may in simple glycosuria give place to an exaggeration of this phenomenon, a statement which he supports by several personal observations. In the opinion of M. Dreyfus, diabetes depresses the nervous system, and especially the spinal cord, and where the tendon reflexes are found to be exaggerated in a patient suffering from glycosuria, it may be affirmed with certainty that he is not affected with diabetes.

In the same journal, M. Roger publishes a note on glycosuria of hepatic origin. He states that, functional derangement may cause glycosuria by two diametrically opposite processes, namely, either by increased activity of the liver with over-production of glycogen, or through the sugar brought by the portal vein, which, not being retained by the liver, passes directly into the blood. In the former case, glycosuria lasts as long as there is exaggeration of the glycogenic function, whereas, in the latter, the glycosuria is temporary. After giving 150 grammes of syrup of sugar in three cases of cirrhosis with ascites and development of collateral circulation, M. Roger observed glycosuria in one case. In another group of patients in whom neither ascites nor collateral circulation existed, the sugar passed into the urine in two cases out of three. In biliary lithiasis, if the hepatic alteration be slight and transient, the sugar does not pass into the urine; glycosuria appears when jaundice is chronic and hepatic disorder is persistent. In circumscribed lesions of the liver (cancer, hydatid cyst), glycosuria does not appear as long as there is no diffuse alteration of the gland-structure.

At a recent meeting of the Société Anatomique, M. Toupet showed a liver presenting tuberculosis of the biliary passages, with formation of biliary cavities. MM. Barthez and Rilliet had already described the naked-eye appearances in this form of hepatic tuberculosis, and M. Sabourin had investigated the subject microscopically. The liver shown by M. Toupet presented certain peculiar features which had not been observed before. On section the hepatic ducts were found to communicate with the biliary cavities ; the walls of the latter were studded with greyish granulations, which proved to be of tubercular nature.

The communication of the biliary cavities with the large hepatic ducts had, according to M. Sabourin, never been observed before.

At a recent meeting of the Paris Surgical Society, M. Championnière made some remarks on M. Redard's oven for disinfecting surgical instruments. By that system, instruments were disinfected by exposure to a temperature of 120° C. M. Redard maintained that chemical agents were insufficient for disinfecting. M. Championnière did not use instruments until after cleaning them and steeping them for half an hour in an antiseptic solution. Trocars were first passed through flame, then dipped into carbolic acid (5 in 100), and passed through flame again. M. Championnière thinks M. Redard's system is no better than that habitually employed; it may, however, be useful for disinfecting articles of clothing. M. Kirmisson said a similar oven was in use in M. Kocher's ward in Berne, and M. Bergmann's ward in Berlin.

M. le Dentu presented to the same society a report by Dr. Houzel, of Boulogne-sur-Mer, on four cases of tracheotomy done under chloroform. The author thinks that the use of chloroform in tracheotomy is not more dangerous than in any other operation, excepting in cases where asphyxia has reached the last stage. M. Championnière had twice performed tracheotomy under chloroform on adults in a state of asphyxia, caused by tumours of the larynx, and each time he was struck by the immediate relief of the asphyxia which followed the first inhalation. M. Verneuil said he frequently employed anæsthetics in painful operations on the larynx, and thought that chloroform should be more frequently given when tracheotomy was performed.

M. Bazy also read a note on the treatment of abscess of the ischio-rectal fossa. According to him, a small incision two centimètres in length should be made in the perineum, and the abscess-cavity should afterwards be disinfected as far as possible by prolonged irrigation. A drainage-tube should then be inserted, which should be withdrawn little by little as the walls of the abscess-cavity came together. The whole region should be kept in the most complete aseptic condition. In this way an abscess might be cured in ten or twelve days.

In a recent thesis M. Dutard relates a case in which a large effusion was successfully treated by compression. The patient, a man, aged 26, was kicked by a horse on February 9th, 1886, in the region of the right trochanter. A large effusion of blood was found in the subcutaneous connective tissue. On February 12th, though there was but slight external bruising, a fluctuating sac, about the size of a man's fist, could be distinctly felt. Strong pressure was made on the swelling with cotton wool and elastic bandages, and this was continued for many days. On March 3rd the effusion had altogether disappeared. M. Dutard concludes from numerous observations that, with very rare exceptions, pressure is the most effectual treatment in cases of extravasation of blood into the connective tissue.

At a meeting of the Académie de Médecine, M. Proust read a paper in which he said that he had come to the conclusion that sanitation and disinfection properly applied made quarantine in many cases unnecessary. The numerous cases of cholera found in recent years in ships returning from the East rendered sanitary and disinfecting measures indispensable. The eastern ports from which this disease had been brought, and which ought to be subject to the closest investigation, were Bombay, Calcutta, and Moulmain in India, Shanghai in China, and Yokohama in Japan. The products of certain parts of South America, already suspected of causing yellow fever, ought to be investigated with a view to examining their liability to cause cholera.

SWITZERLAND.

[FROM OUR OWN CORRESPONDENT.]

Electrical Irritability in Telegraphists' and Writers' Cramp.—Actinomycosis Hominis.—Extirpation of Bronchocele.—Incision of Bronchocele.—Hygiene and the Federal Council.—Mutual Help in Cases of Sickness and Death.—"Suppenanstalt" at Langnau.—"Armenbadanstalt" at Baden.—School Dinners Movement at Geneva.

AT a meeting of the Berne District Medical and Pharmaceutical Society, Dr. Dubois, of Berne, made a short, but interesting, communication on the electrical reaction of muscles in cases of telegraphists' and writers' cramp. Having recently examined three cases of the kind in which the symptoms had lasted a week, he found a considerable increase of faradic and galvanic irritability, especially pronounced in the thenar muscles, in the opponent and abductor. The patients in all three cases were telegraphists; one of them was still able to work fairly well at the apparatus, the cramp only coming on in writing messages; in the other two the writing power was good, but manipulations with the apparatus gave rise to pain and fatigue in the hand, with a general disability of the limb as regards professional movements. In a fourth case, where telegraphists' cramp had existed for a couple of years, there was no increase of muscular irritability; on the contrary, there was slight depression of the electrical reaction over the thenar region. Dr. Dubois points to the fact that in cases of telegraphists', pianists', violinists', tailors', shoemakers', watchmakers', and milkers' cramp, the practitioner has to base his diagnosis solely on the patient's statements, as there are no objective signs of the disease. The difficulty of the position is felt with special force when the patient holds some office or employment, and applies to the practitioner for a certificate enabling him to obtain leave of absence on account of the affection. Under those delicate circumstances a discovery of some objective diagnostic signs would be very welcome. Further observations will show whether increased electrical irritability in recent cases of these professional neuroses supplies anything like the practical help sought by Dr. Dubois.

In the *Correspondenz Blatt für Schweizer Aerzte*, Nos. 4 and 5, 1887, Dr. A. W. Muench, of Brestenberg, describes at length a case of pulmonary actinomycosis in a farmer aged 23, in which the symptoms have already lasted three years. The patient, who is still living (or rather gradually dying), apparently contracted the disease from one of his oxen, the actinomyces entering the patient's system either through the air-passages or through the œsophagus and peri-œsophageal cellular tissue. On examination in the summer of 1886, there was found (besides emaciation, general weakness, night-sweats, and extensive dulness over the right lung) a flat, tender, immovable, fluctuating tumour, as large as the palm of the hand, situated anteriorly at a point corresponding to the space between the fifth and eighth ribs on the right side. Caries of the ribs, with secondary pleurisy, was diagnosed. The real nature of the affection was recognised only in January, 1887, after the tumour had spontaneously burst and let out a sanguinolent serous discharge containing roundish, whitish-yellow lycopodium-like grains, varying in size from a grain of sand to a millet-seed. Microscopic examination easily revealed a characteristic radiated structure of the grains, with club-like processes (gonidia). Similar yellow-greenish fungi were found also in the bronchial secretion. The microbes took in well eosin and picrocarmine. The author, however, like Friedlaender, found that unstained specimens gave a far more distinct picture, as far as the typical structure of the actinomyces was concerned. As to the treatment of the patient, Dr. Muench freely opened the costal tumour, carefully scraped out all the accessible parts of the cavity with a sharp spoon, and applied an antiseptic dressing. The patient felt better, but the pulmonary affection is making steady progress towards the fatal issue.

Dr. Hofstetter, of Lucerne, has performed 17 thyroidectomies, with 14 recoveries, and 3 deaths. In the first 6 cases, the whole thyroid body was extirpated, and in the remaining 11, partial removal, according to Kocher's method, was practised. In the 3 fatal cases, death took place respectively five days, two months, and four weeks after the operation, two of the patients dying from carcinoma, and the other from gastric ulcer. In the cases of total extirpation, the wound healed on the average in twenty-four days; in those of partial removal in twenty-seven. In 3 cases the wound was dressed with iodoform and carbolised gauze; in 4 with oxide of zinc (according to Socin's method); in 9 with corrosive sublimate; and in 1 with pure water from a local aqueduct. As to the temperature after the operation, it never rose above 39.3° C., the average being 38.3° C. The wound healed by first intention in 7 cases. Cachexia strumipriva was observed in only 1 case.

Dr. Steiger, of Lucerne, treated 22 cases of bronchocele, by incision, with 2 deaths, caused in one case by mediastinal suppuration, and in the other by embolism. The wound healed, on the average, in forty days.

On behalf of the Swiss Medical Council (Schweizerische Aerztliche Commission), Drs. Londeregger and Baader have presented to the Federal Government a short memorandum in which they urge the establishment of a chair of hygiene and a hygienic laboratory in the Federal Polytechnic School in Zurich.

According to Professor Kinkel, of Basle (*Der Gruetlianer*, May 11th, 1887), in 1886 there were in Switzerland 1,085 societies for mutual aid in cases of sickness and death, with 213,344 members, and with funds amounting in the aggregate to 16,652,939 francs. Their annual income was about 3,858,963 francs, while their expenses were about 2,940,481 francs. Of the latter sum, 969,172 francs were given to 33,332 sick members (with a total of 765,621 days of illness); 297,715 francs were paid for medical attendance; 127,763 francs for hospital treatment; 493,675 francs were distributed in 2,689 cases of death for funeral expenses, etc.; 418,842 francs were paid in annuities

to widows and orphans; and 333,375 francs to invalids and aged persons. As regards mutual help, Basle occupies the first place amongst all Swiss cantons; not less than 44.5 per cent. of the whole population of the canton belong to societies of the kind, the yearly sick-money (*Krankengeld*) being 10½ francs for each inhabitant.

The official quarterly report, published in the *Emmenthaler Volksblatt* (May 4th, 1887,) by the so-called *Suppenanstalt* (soup establishment) at Langnau, one of the centres of Swiss cheese-making, shows that from January 1st to April 1st, 1887, 402 school children have been supplied gratuitously with 18,416 meals; 320 children received daily for the first five days of the week a large portion of soup, and on Saturday a piece of bread; 82 pupils of suburban schools were provided daily with hot milk and bread. The expenses of the society were 1,614 francs, 1,246 of which were covered by contributions from the members, 100 francs were realised by a theatrical performance given in aid of the funds by local amateurs, and 228 francs were given in donations.

The bathing establishment for the poor *(Armenbad-anstalt)* at Baden, a flourishing health resort in the Argovia, has accommodated 514 pauper patients during 1886. The institution is now open all the year round. Its funds amount at present to 137,299 francs.

As the *Bund* (May 21st, 1887) states, the cheap-dinner movement makes good progress in Geneva. A "school kitchen" is to be shortly opened by the town council to supply children with a dinner consisting of soup, butcher's meat, and vegetables at the price of 25 centimes. Poor children will receive gratuitous dinners at the expense of the town, without any distinction in regard to their nationality.

AN ALPINE WATERING-PLACE AND HEALTH-RESORT.

[From an Occasional Correspondent.]

The traveller who has left the banks of the Lake of Geneva on his way to the Simplon, the Furca, or Zermatt, passes the railway station of Louèche (German Leuk), situated a few miles beyond Sierre in the Valley of the Rhone. Northwards to his left opens a short Alpine valley leading to the Gemmi Pass, which affords communication between the cantons of Berne and Valais. At the foot of the rocky chain over which this celebrated path winds its aerial coils stands the village of Louèche-les-Bains (Leukerbad), 4,275 English feet above the sea, a mixture of Alpine châlets and modern hotels. Here numerous hot-water springs come to the surface within a limited area. They are remarkably abundant, a single one giving 6½ gallons per second. The water is limpid, devoid of smell, and its temperature ranges among the various springs from 104° to 124° F. It contains sulphates chiefly, namely, of lime (12 grains in 16 ounces) and magnesia (1.9 grains). Other elements in small quantities are found, such as sulphate of soda (0.5 grain) and carbonate of lime (0.3 grain). The Louèche springs must therefore be counted as weak non-sulphurous calcic waters. The beneficial results obtained from the cure are to be ascribed to the combined effects of the tonic Alpine climate and the method of bathing adopted. The latter consists in administering prolonged baths, beginning with one hour and augmenting daily by half an hour, until the patient remains immersed four, six, or even eight hours. After a few days (five to ten) a cutaneous eruption takes place (the "*poussée*" or "*exanthème balnéaire*"); a redness spreads from the knees and elbows to the rest of the body, face and hands excepted. This eruption may assume various degrees of severity, from a mere erythematous blush up to erysipelatous swelling with serous oozing of the skin. After keeping to its maximum for a few days the inflammatory process goes down, and the skin, after desquamation, returns to its normal state. Concurrently the length of the baths is diminished, and the cure comes to an end along with the rash (twenty-fifth to thirtieth day). A curious point to note is that a few persons escape the rash altogether, though without apparent cause.

The rash, which has been attributed by some to some specific and mysterious action of the springs, is probably due to the effect of the salts dissolved in the water. At any rate, experience has amply proved the value of the Louèche cure in various skin diseases, chiefly of the humid type, such as eczema, impetigo, herpes, ichthyosis, and psoriasis, which are benefited if not cured. Remarkable successes are obtained in cases of prurigo. Louèche is also useful in combating other diseases or symptoms, and is beneficial in some scrofulous, rheumatic, catarrhal, and paralytic affections. It does good in cases of "abdominal plethora," with congestion of the liver, and old abdominal exudations. It has the property of bringing out cutaneous syphilides in chronic cases where doubts are entertained as to the reality of the cure. Used for drinking, the Louèche water is diuretic and alterative, but it is not tolerated by all stomachs.

The baths may be taken in private rooms; but the tediousness of solitary confinement for so many hours has led to the establishment of immense "squares" containing water at 95° F., in which a number of bathers, dressed in appropriate costume, while away their time in common. The two sexes are separated under the new regulations.

Apart from this special treatment, Louèche offers important attractions, yearly more appreciated by the public, as a climatic summer-station suitable to anæmic, debilitated, tubercular subjects. Hydrotherapeutic appliances have recently been added to its resources, including the various systems of douches, etc.

In addition to the local medical men, English visitors will now find a physician who speaks their own language fluently, and has gained a practical knowledge of English medicine in the London hospitals. The presence of Dr. de La Harpe, of Lausanne, during the season at Louèche will, no doubt, decide some of our countrymen to select that pleasant Alpine resort for their summer holiday, even apart from any bathing purposes.

A very active social intercourse among the bathers makes a stay at Louèche attractive to all. The season extends from the end of June to the middle of September. The baths are reached in three hours by post, omnibus, or carriage from the station on the railway line from Lausanne to Brigue. To the more enterprising travellers, the road from Berne and Thun to Kandersteg, and over the Gemmi, will offer well-nigh irresistible temptations.

CORRESPONDENCE.

ELECTRICITY IN THE TREATMENT OF UTERINE DISEASE.

Sir,—No one interested in the progress of gynæcology can fail to have been struck by the communications which have recently appeared in the Journal on the use of electricity in the treatment of certain forms of uterine disease, as practised by Dr. Apostoli. These, and an elaborate paper by Dr. Engelman, of St. Louis, on the same subject in the last volume of the *Transactions* of the Gynæcological Society of America, appeared to me so interesting and full of promise of advance in the management of some otherwise intractable forms of disease, that I availed myself of the opportunity offered by the Whitsuntide holidays to run over to Paris to see for myself Dr. Apostoli's apparatus and work, without which no one can form an intelligent idea of his methods and results. I am indebted to Dr. Apostoli for his very courteous reception, and for the pains he took in collecting for me many interesting cases in process of treatment. I had the opportunity of closely investigating these in every possible way, not only through their carefully recorded histories, but by personally interrogating and examining the patients, and there is no reason to doubt the accuracy of the information I obtained in both these ways. I do not, of course, venture to make any statement as to the ultimate results and possibilities of this method of treatment on so short a study of it; but I saw quite enough to convince me that it was one of great power, and capable, in skilled hands, of producing very striking results. I was specially impressed with certain cases I examined of bleeding fibroids. In more than one of these the patients assured me that they had been completely prostrated with continuous hæmorrhages, which had deprived them of all power of following their usual avocations, and which had lasted for long periods, and that after not more than four or five applications of positive electro-cauterisation of the uterine cavity, the hæmorrhages had entirely ceased, and that they were now able to work as if in perfect health, and with not more than the usual monthly loss. In some of these I am quite confident that in this country laparotomy, or the removal of the uterine appendages, would have been performed; and in more than one of them I feel sure that, under the existing conditions, I should myself have advised the latter operation as the only possible means of cure. I also investigated several cases of chronic peri-metritic inflammation with intense pelvic pains of many years' duration, in which I am equally sure the removal of the uterine appendages would, amongst us, have been either considered or practised. If, therefore, a means exists in which, even in a few cases, a cure can be effected without a mutilating operation, which, even when sanctioning or performing it with a conviction of its necessity, must always be a source of deep regret, then surely a great advance is being made, and I trust the subject will receive careful study. I understand that Dr. Apostoli contemplates demonstrating his apparatus and methods at the Dublin Meeting of the Association, so that members will have the opportunity of learning something of them. It is perhaps not altogether to be regretted that this method of treatment requires so much complex and expensive apparatus, and so much technical skill in its application, that it can never come into very general use; for, like all powerful agents, it is

obviously a very double-edged weapon, capable of doing much good if skilfully applied, and most certainly capable of doing much harm if rashly and unskilfully used. One can hardly contemplate without dread the possibility of its indiscriminate application. We have, unfortunately, seen too much of the evils arising from injudicious practice in gynæcology. In its early days we went through the age of the so-called ulceration of the cervix. From this, as it led only to frequent rubbings of the cervix with nitrate of silver, perhaps no great mischief resulted, except to the nerves and pockets of the patients. Then came the ages of flexions, and, more recently, of serious surgical procedures. I am the last man to deny that in each of these there was embodied much advance, and results of great value; but it must, I think, be admitted that in both there has been exaggeration, which has often worked great harm. This new treatment, heretofore practically untried in this country, certainly calls for careful study, and it promises good results otherwise unattainable, but it is essential that it should be used with great care and much discrimination.—I am, etc.,

W. S. PLAYFAIR.

31, George Street, Hanover Square, W., June 6th.

THE BEHAVIOUR OF FLUID IN THE CHEST AND THE TREATMENT OF EMPYEMA.

SIR,—Dr. Goodhart I hope will forgive me for saying that, in his very interesting address on "The Behaviour of Fluid in the Chest and the Treatment of Empyema," which was published in your impression of June 4th, p. 1203, he appears at times to wield his pen somewhat like the brush of an "impressionist" artist; with a touch here and a dash there he does away at a stroke with "the laws of physics" and with "preconceived and pretaught ideas," leaving a comfortable colour but withal a delicious vagueness about the picture presented to us. He has honoured me with a friendly criticism on my way of putting forward the "pretaught idea" of the method by which closure of the cavity takes place in the healing of an empyema (which I would observe in passing is not the "granulating-up-from-the-bottom theory"), and brings forward another which is based upon the suggestion that although we "hear the sniffling in and out of the air at the opening, in accordance with the respiratory movement," still "the vacuum is never totally destroyed even by the inspiratory act." I confess that I am not disposed to throw over the laws of physics, and what still appears to me the only rational explanation of the process, for one which rests upon such an unlikely hypothesis; nor do I understand how a comparison can fairly be instituted between the free opening of the thoracic cavity and the passage of a catheter into the bladder, when the all-important difference is present that air does enter freely in the one case, and cannot possibly do so in the other. "When you pass a catheter into the bladder," says Dr. Goodhart, "you let out the urine, but the bladder does not fill with air. As the urine flows out, the walls close in, and the parts are as air-tight as before." Exactly so; but it is precisely because the air is sucked in when the chest is opened, in obedience to very obvious physical laws, that the comparison is, in my humble opinion, of little or no value.

I do not suppose that the lung collapses more than before when pus, previously at high pressure, is let out of the chest, simply because the lung is already actually compressed by the presence of the pus; and, indeed, there can be little doubt that the expansion of the lung (but only up to the limit of the size it would occupy if simply collapsed) has a good deal to do with the closure of the cavity; but beyond this I do not think that there is any "rush towards the opening" of the lung, impelled by some obscure force such as that in which Dr. Goodhart would appear to wish us to believe.

Why the lung does not fall away from the chest-walls in certain cases of incised wound of the parietes I can only conjecture. Sometimes it no doubt depends upon the presence of neighbouring adhesions, sometimes on previous consolidation of the lung. But it would be clearly a mistake to say (if anyone should do so) that such is the case. I have myself seen the pleura opened during the removal of a breast, and have heard the "sniffling" sound as the air entered the moment the puncture was made, and I have heard of the same thing happening when the pleura was accidentally wounded in an operation at the base of the posterior triangle of the neck. The other day I punctured a healthy pleura with an exploring trochar in endeavouring to hit a pulmonary abscess, and through this minute opening a very obvious pneumo-thorax was quickly set up, the air passing in and out with great readiness. That the actual cavity is a very considerable one in many empyemata—even in those in which very rapid closure is going to occur—is also a fact, and one which I am sure will be corroborated by any surgeon who is in the habit of putting his finger into the chest before he inserts the tube. I wish Dr. Goodhart would adopt the plan a few times of having a piece of rib excised, and asking his surgical colleague to allow him to introduce his finger. I feel sure that he also would be convinced that such is the case, and I do not doubt that the rapidity of the cure would not be interfered with.

Now as to taking out a piece of a rib in recent empyemata (for with regard to chronic cases we are clearly in agreement), I personally have never dogmatised upon the question, and I do it merely as a matter of convenience, and only when, as is usually the case in children, there is not sufficient space between the ribs to allow of the introduction of the finger for the sake of exploring the cavity and for the insertion of what I venture to think is the most suitable and efficient drainage-tube. The additional severity of the operation, except in the small minority of cases when time is of importance, I hold to be altogether trivial, and therefore I do not regard the procedure as harmful, but, on the contrary, as simply expedient; for I do maintain that a thorough exploration with the finger is highly important, and that the extraction of the enormous masses of curdy lymph, which are occasionally met with, and which can often only be discovered in the way indicated, will materially accelerate the cure of certain cases. But as regards the others, it would be manifestly absurd to assert that the removal of a piece of rib is essential, when such statistics as those of Dr. Goodhart have been made public from time to time in abundance.

There is so much in Dr. Goodhart's address with which I entirely agree, that I sincerely hope he will not think I have passed the bounds of friendly criticism in these remarks; if I have done so it has been quite unintentional.

In conclusion, I will add one other, namely, that I do not see the advantage of using a drainage-tube so long as five or six inches at first and shortening it afterwards. I am in the habit of making it from the commencement just long enough to enter the cavity of the pleura, and this appears to give the most satisfactory and the most complete drainage.—I am, etc.,

RICKMAN J. GODLEE.

81, Wimpole Street.

THE MEDICAL PROFESSION AND THE QUEEN'S JUBILEE.

SIR,—I have read with much interest the letter of Mr. James Atkinson in the JOURNAL of May 21st. I now write, not only to express my sympathy with it, but to suggest that the medical profession should commemorate the Queen's Jubilee by establishing a school for the daughters of medical men in connection with the Royal Medical Benevolent College. This would not only be a most appropriate way of commemorating the Jubilee, but would also be supplying a deeply needed want.

The unfortunate suffering members of the profession, who are obliged by hard necessity to seek the help of the Royal Medical Benevolent College, usually have families containing quite as many girls, if not more, as boys, all needing education. Under present circumstances, where are these girls to find the much-needed education? The clergy, the soldiers, the sailors all have schools for their "orphan daughters," but the medical profession has none as yet.

I would propose that the "doctors' wives," following the example of the "Women of England," should at once co-operate to form a collection for this object. I shall be delighted to give my services, and to receive any communications and suggestions from those willing and able to help in promoting such a scheme.—I am, etc.,

82, Brook Street, Grosvenor Square, W. MARY DURHAM.

THE COUNCIL AND THE COMMONALTY OF THE ROYAL COLLEGE OF SURGEONS.

SIR,—At last the draft of the petition of the Council of the Royal College of Surgeons of England has appeared, and, as was to be expected, it contains none of the reforms demanded both by Members and by a considerable proportion of the Fellows of the College. There is no provision made for an annual general meeting of Fellows and Members, and none for the admission of Members to the Council and to a share in its election.

After nearly 5,000 Members of the College have expressed their opinion that such alterations as those we have cited are desirable, and after their petition to that effect has been presented to the Privy Council, it seems impossible that the College authorities can obtain such a charter as that for which they are now petitioning Her Majesty. At all events, the Members having over a month ago lodged their counter-petition with the Privy Council, and having asked to be heard in the matter before any new charter be conferred, we can assure the Council of the College that every endeavour will be made by the

Members to secure the reception by the Privy Council of an influential deputation in their behalf.—We are, etc.,

WARWICK C. STEELE,
WM. ASHTON ELLIS,
Honorary Secretaries, Association of Members of the Royal College of Surgeons.

THE NEW SCHEME FOR A TEACHING UNIVERSITY.

SIR,—In the summary of the essential points in the scheme for a new university propounded by University and King's Colleges, which is given in the leading article published in the JOURNAL of June 4th at page 1222 it is stated (2) that the teaching bodies, medical as well as lay, are to be represented on the governing body. This is in full accord with the general tenour of the petition, and with the intention of the petitioners, who desire that the government of the new university should be in the hands of the teachers, and that every body of collegiate rank, including, therefore, all the medical schools, should be represented upon the governing body in due proportion, and should, in fact, collectively constitute the faculty of medicine. The next sentence (3) in the leading article, however, contains a proposition that the Colleges of Physicians and Surgeons are to constitute the Medical Faculty with free scope and full liberty of action in all matters medical. These two statements appear to be mutually destructive, but a reference to the actual terms of the petition does not clear the matter up; they are evidently founded on "representation" (c) to be found at the end of the petition; this clause is so loosely worded that it may be read either way. The Councils of the two Colleges have dropped this scheme upon us without taking counsel even of their own medical faculties. If it is the intention to hand over the teaching university to the two Royal Colleges, the new scheme will find as little favour in those medical faculties as in the other medical schools. If the scheme frankly gave equal rights to every medical school, and powers proportionate to the importance of each school, the assembly of the representatives of the schools really constituting the governing body *qud* matters medical, then the Royal Colleges might be left to hug their monopoly, and the scheme might become a reality.—I am, etc.,

CUNCTI ADSINT.

THE ENGLISH COLLEGES AND THE CONJOINT SCHEME.

SIR,—The Colleges of Physicians and Surgeons of Ireland have acceded to the petition of the students, permitting them to present themselves for second and final examinations under the conjoint scheme. Would you allow me to suggest that London students should petition the English Colleges for a like privilege, which I feel sure they would grant? In the event of the London Conjoint Examining Board obtaining the power of granting a degree, many old students and holders of the diplomas of M.R.C.S. and L.R.C.P.L. would then be eligible.—I am, etc.,

L.R.C.P.

EXTENSION OF CLINICAL TEACHING IN LONDON.

SIR,—Every effort is being made to attract students of medicine to London. In one respect London is superior to every medical school in the world—namely, in the vastness of its field for clinical study. If the whole of this vast field could be thrown open to students on payment of a moderate fee, there can be no doubt that it would be a very great attraction to them.

This might be done by issuing a composition ticket which should free the student to the practice and clinical lectures of all the chief hospitals. If the composition ticket were to include all the medical schools and some of the chief special hospitals, such as the Hospital for Sick Children, the Hospital for the Paralysed and Epileptic, Moorfields, and Bethlem, there would be between 5,000 and 6,000 hospital beds available for instruction.

Let me make a more definite proposal in order to show how this scheme would work.

The charge for the composition ticket would be, say, £50; of this sum £16 would be retained by the school issuing the ticket, and £34 would remain for division among all the schools, including the school issuing the ticket. Of this £34, I should propose to give £4 to each hospital having more than 500 beds (Guy's, London, St. Thomas's, St. Bartholomew's); £3 to each hospital having over 250 beds (St. George's, St. Mary's, Middlesex); £2 to each hospital having less than 250 beds (University, King's, Charing Cross, Westminster); and £1 for division among the special hospitals, to which students should be admitted only in their fourth year.

Let me be more definite still, and taking the number of students who entered at each school for their full curriculum (as given in the journals last October) for my basis of calculation, let me show what the financial result would be supposing each of these students had taken a composition ticket. Thus, 125 men entered at St. Bartholomew's; this number, multiplied by 16, gives £2,000, the sum retained in the first instance by this, the school issuing the ticket. The total number entering at the schools was 623, and as each of these would contribute £4, the total sum for clinical fees accruing to St. Bartholomew's would be 2,000 + 2,492 = £4,492. The sums accruing to each school would be as under:—

	£
St. Bartholomew's	125 × 16 = 2,000 + 2,492 = 4,492
St. Thomas's	88 × 16 = 1,408 + 2,492 = 3,900
Guy's	69 × 16 = 1,104 + 2,492 = 3,596
London	64 × 16 = 1,024 + 2,492 = 3,516
St. George's	20 × 16 = 320 + 1,869 = 2,189
Middlesex	33 × 16 = 528 + 1,869 = 2,397
St. Mary's	60 × 16 = 960 + 1,869 = 2,829
University	74 × 16 = 1,184 + 1,246 = 2,430
Westminster	14 × 16 = 224 + 1,246 = 1,470
King's	41 × 16 = 656 + 1,246 = 1,902
Charing Cross	35 × 16 = 560 + 1,246 = 1,806
Two Special Hospitals	— — 623
Total Students, paying each £50 =	£31,150

I should not propose to make the taking of this composition ticket compulsory. Students taking it would do their clinical appointments at the hospital of the school issuing the tickets. In the case of the student failing to become qualified in five years, the ticket would be cancelled. If the student obtained a qualification within that time, the ticket would become perpetual, and he would feel himself at liberty for the rest of his life to visit any of the hospitals included in the scheme for the purpose of occasionally refreshing his knowledge. The number of students taking these tickets might be smaller or greater than the number selected for illustration, but their distribution would probably be proportioned very much as above, and the financial result would be relatively the same.

Composition tickets might also be issued at a cheaper rate and for limited periods to qualified men; and I think that if this were done, we should get a large influx of men anxious to widen their grasp of medicine before beginning practice. Many men would come from the Colonies, and many a medical officer engaged in the public services would be glad to use his vacations in rubbing up his knowledge by visiting the medical schools, not upon sufferance, but as a right after paying a suitable fee.

I will for the present content myself with making the proposition in this rather crude form, with the object of ascertaining the amount of approval or disapproval with which it meets. Of its importance I have no doubt.—I am, etc.,

A TEACHER AT A LONDON MEDICAL SCHOOL.

INTRA-LARYNGEAL SURGERY AND MALIGNANT DISEASE OF THE LARYNX.

SIR,—Holding the opinion that it is undesirable for mere onlookers to discuss the merits of a case, no matter how distinguished the patient, while under treatment, I would not intrude on the discussion raised by Dr. Semon were it not for his challenge of proof of the correctness of your judicial caution that a benign growth is liable to change its character when subjected to the repeated irritation inseparable from the use of forceps. This view was first promulgated by me in a paper read before the Medical Society, printed in the JOURNAL of May 8th, 1875, and afterwards embodied in the first edition of *The Throat and its Diseases*, published in May, 1878. It was opposed for the first time by Dr. Semon in the review in the *London Medical Record* of the following November, to which he now draws attention.

Dr. Semon is very decided as to what he will consider "in the light of proofs;" and though I may not convince him, I have every confidence that the profession generally will accept what I offer as reasonable justification of the warning that removal of a laryngeal neoplasm, even when successfully effected by an intra-laryngeal operation, may not only recur in something like one-third of the cases, but may assume a malignant and even cancerous character. These words do not necessarily imply that such changes are always associated with a systemic cachexia, but one has only to point to rodent ulcer in proof of the circumstance that there is a malignancy of tissue which is represented by an obstinacy of local recurrence due to local perversion of development. Indeed, in the light of present knowledge, I am at a loss to understand why the larynx should be excluded from the application of a general principle so universally admitted. Granted—and who

denies it?—that the circumstance involves "a certain inclination to constitutional vice," it has to be remembered that this predisposition to primary malignancy is admittedly less common in the larynx than in the case of the scrotum of the chimney-sweep, or the lip or tongue of the pipe-smoker. The main reason for this, I take it, is a proportionately less constant source of irritation. No one, that I am aware, has stated or even hinted that every papilloma in the larynx, either operated or unoperated on, becomes an epithelioma any more than that every sweep or every smoker is afflicted with cancer of the scrotum or mouth respectively.

I will, in consideration of the demands on your space, abstain from repeating facts already recorded by myself, and will divide the evidence I shall offer into two classes: first, the expressions of opinion of such few authorities as are ready to my hand, and whose claims to speak are generally admitted; and, secondly, the testimony of recorded cases, with regard to which I beg, on my part, to say that I shall not consider such phrases as "the diagnosis was here at fault," or "the disease was malignant from the very first, and was only not recognised as such," or "the malignant degeneration took place after, but not in consequence of, intra-laryngeal interference," as rebutting evidence of any value; for I cannot recognise the right of anyone to make such an imputation on the skill of *confrères* of acknowledged repute.

Solis Cohen (*Diseases of the Throat and Nasal Passages*, second edition, 1879, p. 581) says: "Epithelial carcinoma is occasionally developed from benign growths—papilloma and adenoma—from irritation to which they are subjected in cough, or from ineffective efforts at intra-laryngeal extraction; sometimes it is developed at or near the site of such growths, which have been thoroughly removed by intra-laryngeal procedure or by direct access from the exterior."

The same author repeats his conviction in a more recent contribution (Injuries and Diseases of the Air-passages, in the *International Encyclopædia of Surgery*, vol. v, 1884, p. 728, and again at p. 739).

Fauvel (*Maladies du Larynx*, 1876, p. 697) says: "Dans trois autres cas, il y avait eu traumatisme du larynx, mais traumatisme interne en quelque sorte, pour enlever des tumeurs supposées bénignes développées dans un point de l'organe vocal." (These three cases are detailed.)

Gottstein (*Diseases of the Larynx*, 1883, English translation, p. 140), Bosworth (*Diseases of the Throat and Nose*, 1881, p. 379), Carl Seiler (*Diseases of the Throat, Nose, and Naso-Pharynx*, second edition, 1883, p. 162)—all express themselves in similar terms, the last writer saying that "neoplasms, which were formerly regarded as benign, have been known either to return after operation, or to change their character from a benign to a malignant form."

So much for authoritative opinions. Now for facts.

Cohen supports his statements by especial reference to the two cases of Clinton Wagner and Gussenbauer.

Clinton Wagner, who is an accomplished laryngoscopist in large practice in New York, reprinted in 1878 a lecture on Intra-Laryngeal Growths, from the *Ohio Medical and Surgical Journal*, one of his avowed objects being to refute "certain objections that have been raised by a recent writer"—to wit, myself—"against their removal *per vias naturales*." This author later reported in the *Archives of Laryngology*, vol. iv, 1883, p. 50, a case "supposed at the time to be a papilloma." Dr. Wagner "decided to attempt removal by the forceps; they were introduced twice a week for three weeks; but it was found impossible to reach the mass of growth, which was attached below the cords.....Dr. Heitzman, to whom a portion of the fragments removed was referred for examination, reported the growth to be a 'simple papilloma'" (*Archives*, vol. iv, 1883, p. 51). It is hardly necessary to say to those acquainted with the literature of the speciality that Dr. Heitzman occupies a place in the very front rank as a laryngeal histologist. The patient was also seen by another experienced laryngoscopist, Dr. Bryson Delavan. Thyrotomy was performed and the larynx cleared. This was in February, 1882. In October of the same year (*Philadelphia Medical News*, February 3rd, 1883) a second thyrotomy was performed for the removal of what was still believed to be a papilloma. Sixteen weeks later recurrence occurred of a nature to suggest the suspicion of malignancy. A further report is given in the *Archives of Laryngology*, vol. iv, 1883, p. 130, but it now figures as "Exsection of the right half of the Larynx for Epithelioma." The patient died on the twelfth day after operation.

Gussenbauer, quoted by Cohen (*International Encyclopædia*, p. 739) from the *Prager Medizinische Wochenschrift*, November 31st, 1883, "had occasion to excise the larynx for recurrent carcinoma, from an individual on whom, twenty years before, Czermak had detected, laryngoscopically, a small circumscribed nodule on a vocal band, and had explained to the patient that an operation would be eventually necessary, and from whom, some ten years afterwards, the neoplasm had been removed by Stoerk." Regarding this case, I think it will hardly be advanced that the growth was malignant when first observed by Czermak, nor, seeing that an interval of ten years took place between the necessity for excision and the removal by Stoerk, that it was cancerous at the time of his operation.

On this point the authority of Morell Mackenzie (*Diseases of the Throat and Nose*, 1880, vol. i, p. 341) is valuable. He says: "The usual duration of epithelioma of the larynx appears to be about eighteen months, and of encephaloid three years; in the cases which have been reported as lasting for ten or fifteen years, I cannot imagine that the disease was malignant from the commencement."

Tauber, of Cincinnati (*Archives of Laryngology*, vol. iii, p. 362), reports a case of removal of papilloma of the larynx, which eighteen months afterwards became malignant. "The growth was microscopically examined."

Fauvel (*Maladies du Larynx*, 1876, p. 414, obs. 80) reports a case of laryngeal growth which was removed by him from the free borders of the left cord, and looked so much like a papilloma that when Dr. Loewenberg stated, from examination of a fragment, that it was a sarcoma, Fauvel would not credit the diagnosis. There was recurrence in two years and a half in the same situation, and, in addition, a small polypoid tumour of the right cord. The glands of the neck were much enlarged, the patient emaciated, and death imminent. I would not quote this case but that Butlin (*Malignant Disease of the Larynx*, 1883, p. 10) argues against its malignancy in the first instance by throwing doubt on the microscopical examination, and adds that, "even if it be accepted, it does not follow that the recurrent tumours, the first symptoms of which commenced eighteen months or more after the first operation, were tumours of the same kind!" What, I ask, is this but an acknowledgment of a change of character under treatment; and who is to decide that the change is *post* or *propter*?

Lastly, Newman of Glasgow (JOURNAL, vol. i., 1886, p. 815), refers to one of the patients from whom the late Dr. Foulis excised the larynx. "The primary growth, which was believed to be a papilloma, was removed by Dr. Morell Mackenzie about five years previous to the time that he came under Dr. Foulis's care; the papilloma was followed by the epithelioma," which was intrinsic, and the specimen is preserved in the museum of the Glasgow Infirmary.

There are many other points in Dr. Semon's long letter to which exception could be taken, but I have confined myself to answering his challenge. I leave you, Sir, and your readers to judge whether he is correct in saying that "the proportions of proof (of this assertion that he questions) have not changed at all since they were first made, or, if so, only for the better."

Dr. Semon's apprehension that acceptance of this possibility of conversion of a benign growth into a malignant is "simply the deathknell of intra-laryngeal surgery" may be dismissed as a gross exaggeration not worthy of detailed refutation.

In conclusion, I beg to say that, in making the foregoing answer to Dr. Semon's challenge, I have not the least wish or intention to discount from the praise so justly due to Dr. Morell Mackenzie for having successfully averted, by operation with forceps in the case under notice, so serious a procedure as removal of any portion of the larynx by external operation, and this praise will remain to him, whatever the ultimate result of the case may be. I frankly avow myself one of his countrymen, who, adopting your language, "cannot but feel a certain pride in his having so well upheld the credit of English medicine abroad." I recognise that his achievement of something which other laryngoscopists of great eminence feared to attempt, or which at least they thought impracticable, "is one of the most legitimate triumphs of modern surgery," and, it may be added, of laryngeal specialism, and I therefore regret that any word should have been written by others which might be construed into a detraction from the universally generous approbation in *medical* as well as *lay* journals, which has been accorded to Dr. Mackenzie's conduct, so far, of a difficult case.—I am, etc.,

LENNOX BROWNE.

36, Weymouth Street, W.

THE DIAGNOSIS OF MALIGNANT DISEASE OF THE LARYNX.

SIR,—Although it appears to me that the correspondence which has been initiated on this subject, in connection with the illness of a distinguished foreign prince, is somewhat out of place (more especially as we have it on the highest authority that in this particular case there is no evidence of the existence of malignant disease), I would like, with your permission, to make an observation on diagnosis, with special reference to one of the fallacies with which this is beset.

I agree with Dr. Semon and Mr. Butlin in regard to the importance

of not attaching too much weight to *negative* results of microscopic examination of pieces of the neoplasm. I believe I was the first to direct attention to this point, for in my work on *The Sputum*, pp. 50-52, I record and fully illustrate a case quite as suggestive and instructive as any of the three subsequently recorded by Dr. Semon. But is there anything of real novelty in the discovery of the occasional presence of simple inflammatory tissue in a malignant growth? Every histologist knows that there is not. The same fallacy may, in fact, adhere to the microscopic examination of fragments detached in the case of malignant disease of other organs, as, for instance, the uterus (Handford, JOURNAL, April 10th, 1886). The diagnosis must, as in the case of disease elsewhere, be arrived at, not by the consideration of one sign or symptom alone, but by a judicious survey of the local and constitutional conditions, of the history, and of the results of certain methods and courses of treatment.—I am, etc.,

Edinburgh. G. HUNTER MACKENZIE, M.D.

EPSOM ROYAL MEDICAL COLLEGE.

SIR,—On behalf of my colleagues on the Council of Epsom College and myself, I would offer our warm acknowledgments to Mr. Atkinson for his eloquent advocacy of the claims of our institution to the active sympathy and generous support of all classes of the medical profession.

The Council have had to expend every legacy they have received—first, in providing for fifty pensioners, whose claims rest on their being medical men, or the widows of medical men; they must be over 60 years of age, and necessitous. Next, fifty foundation scholars, sons of medical practitioners, are educated free of all cost, and the sons of other members of the profession have been educated so nearly at prime cost as practically to leave no margin for carrying on the work of the establishment. A spacious new infirmary has been built; a gymnasium, baths, and playing-fields have been provided; and a small endowment-fund has been got together. But for many years the expenditure has considerably exceeded the receipts.

Like other large schools, Epsom has not escaped without its wave of ill-repute. These evil times were faced fairly, fully, and without flinching; the treatment was carefully, justly, but most sorrowfully carried out. How justly has been proved by the results, a minimum of remonstrance being raised. The heads of several large schools most kindly sympathised and advised with the head master and the governing body in our difficulties, and they have one and all expressed their surprise and admiration that so large a measure of justice should have been meted out with so little objection on the part of those who as parents must have suffered so terribly.

We have a head master in whom we have confidence, one who seeks to work hand-in-hand with his other masters for the good of those entrusted to their care, and who, with the boys themselves, I feel I may now say, are working as a wholesome whole for the repute of their college. We have scholarships to our universities, free scholarships to our metropolitan hospitals, and numerous exhibitions; we now only want money and boys. I wish to raise a sum which will place our pensioners and our foundationers on a firm footing, with such an amount invested as shall put these large charges outside the current expenses of the school.

Besides our provision for the classes I have mentioned, we have yet another claim on the profession. We offer a first-rate education to the sons of medical practitioners for a little more than prime cost; and we expect in a short time, by the excellence of the moral and intellectual tone of our school, to attract the sons of those outside the profession, whom we shall educate at a somewhat larger cost. We hope, therefore, to have a margin of profit on these boys to help us to pay our way, whilst the mixture of other classes with our lads will aid much in raising the general tone from the narrow lines of a class school. No class-school proper has ever succeeded; make them mixed schools, as Marlborough and Wellington, and success at once attends them. Our buildings are good and convenient for teaching, our drainage has been relaid at great cost, and is carefully supervised regularly by a skilled engineer. Our assistant masters take their luncheon at the dining-table of the boys, and so an excellent supervision is exercised over the feeding.

I think we have a right to ask for confidence and aid to carry on our labours when such advantages are offered to the profession, and when such men are found earnestly working together as Dr. Jonson, Sir Edward Sieveking, Mr. France, Sir Joseph Fayrer, Mr. Morrant Baker, Mr. John Croft, Sir Trevor Lawrence, M.P., Rev. Edward Northy, Mr. Page, Mr. Malcolm Morris, Mr. Bloxam, and Mr. Propert, with others; many of these are teachers in the great schools of medicine in London.

The idea of Mr. Atkinson that great help may be obtained if the secretaries of the various Branches of the British Medical Association will advocate our cause, is true.

Personally, I have worked for many years for the South-Eastern Branch, and on the Council of the Association, and I venture to appeal to old friends in my new capacity for help in carrying on a great and a good work.—I am, etc.,

C. HOLMAN,

Reigate, May 28th. Treasurer of Epsom College.

P.S.—Allow me to direct attention to the advertisement setting forth the advantages offered by the College, on page 90 of this week's JOURNAL.

OPERATING PHYSICIANS.

SIR,—It was with much pleasure that I read your correspondent's letter on the above *quæstio vexata*, as it is very desirable that, if possible, this continual "bone of contention" in general hospitals may be definitely settled to the satisfaction both of the surgeons and the obstetric physicians. There is much in "Surgeon's" letter with which one entirely agrees, but at the same time I feel compelled to take exception to some of his statements.

Let me premise that I am attached to a general hospital, where I cannot (and never expect to be able to) operate, and also to a special hospital, where I can do any operation I deem necessary on the diseases peculiar to women.

It has always been my opinion that obstetricians should be called surgeons, and not physicians, for surely anyone who devotes himself to midwifery practice (and *a fortiori* he who combines with it gynæcology) has far more need of surgical than medical skill, seeing that the whole process of parturition, with the accidents and injuries incidental thereto, demands much manual dexterity as well as accuracy of diagnosis.

But, sir, whose fault is it (if fault there be) that we who do so much surgery are in the anomalous position of being called obstetric physicians, and not obstetric surgeons? Is it not due to the fact that in years gone by the College of Surgeons refused to recognise this department of surgery, and that we owe our status to the large-mindedness and care of the public weal exhibited by the College of Physicians?

As the immense strides made in the diagnosis and treatment of the diseases peculiar to women (with the exception, perhaps, of ovarian tumours) is due almost entirely to the obstetric physicians, it seems to me that when your correspondent, who I presume is a F.R.C.S., constitutes himself a censor of the College of Physicians, he has taken upon himself a very unnecessary and thankless task, especially as, if I remember rightly, there is nothing in the by-laws of the College of Physicians which prevents its Fellows from operating.

Now for the remedy. By all means let every obstetric officer be called surgeon, and let the F.R.C.S.Eng. (instead of the M.R.C.P.Lond.) be the necessary qualification for getting on the staff of a hospital; but how, I would ask, will this make a man better fitted to perform abdominal section? The mere fact of being F.R.C.S. will not, unfortunately, enable the beginner to get as good results as he may expect later on, and one could name many men who, whilst lacking those coveted and valuable letters, are infinitely better performers of abdominal section than others who are surgeons to general hospitals. As, however, most of those at present holding the posts of obstetric physician have not, and cannot be expected to obtain, the Fellowship, would it not be a graceful act on the part of their surgical colleagues if (as has been conceded at some few of the metropolitan hospitals) they were permitted to perform whatever operation they deemed necessary in cases of disease peculiar to women admitted into their own wards?

Personally I am perfectly indifferent one way or the other, being able to open the abdomen when necessary in the special hospital to which I am attached, but many of my *confrères* are not so fortunate. Your correspondent is perfectly right in saying "the cobbler must stick to his last," but I am glad to think that the great majority of obstetric physicians to general hospitals have a sufficiently strict code of ethics which prevents them from treating diseases other than those peculiar to women.

Unfortunately there are, I believe, a few exceptions where the physician considers it consistent with his sense of professional morality to operate on piles, the breast, or indeed almost any disease, so long as the patient is a woman; but these (happily few) only prove the rule, just in the same way as there are some hospital surgeons at the present day who strictly adhere to Lawrence's definition of a surgeon's patient, namely, "anyone with a guinea fee."—I am, etc.,

F.R.C.S.Eng.

PROFESSOR VON LANGENBECK has been recently successfully operated on for cataract by Dr. Pagenstecher, of Wiesbaden.

NAVAL AND MILITARY MEDICAL SERVICES.

RELATIVE RANK.

LETTER FROM THE SECRETARY AT WAR TO THE CHAIRMAN OF THE PARLIAMENTARY COMMITTEE OF THE BRITISH MEDICAL ASSOCIATION.

THE following communication has this week been addressed to Mr. Ernest Hart, Chairman of the Parliamentary Bills Committee of the British Medical Association, in reply to the communication addressed by Mr. Hart to Mr. Stanhope, on the subject of relative rank, published in the JOURNAL of May 7th, p. 1009.

Pall Mall, June 6th, 1887.

Sir,—I am directed by the Secretary of State for War to acknowledge your letter of April 27th, on the subject of relative and honorary rank, and to inform you that recent verbal changes in the Pay Warrant have not affected, and were not intended to affect, injuriously either the rank, position, or privileges of medical officers in the army.

I am further to invite your attention to Article 126 of the Pay and Promotion Warrant of 1884, omitted from the revised Warrant of January, 1887, from which you will see that the classification of staff-officers of the army generally, commonly called relative rank, merely interpreted the relationship to one another of individual officers holding certain staff-appointments, the definition of such relationship being necessary to regulate the allowances, etc., attaching to their several appointments.

The grant of titular or honorary rank to the officers of the Commissariat, Ordnance, and Pay Departments was a reasonable concession to officers drawn from the combatant ranks in which they already held such titles, and, of course, rendered the term relative rank in their case unnecessary.

In the case of strictly professional departments, who had distinctive academic or professional titles of their own, it appeared sufficient to classify the several grades of such officers with the corresponding grades of combatant officers in such clear and precise terms as would leave no doubt in the mind of any person regarding the rank in the army held by them.

While in deference to the desire of the British Medical Association for information, I have been instructed to enter thus fully into recent changes, which have not, so far as Mr. Stanhope is aware, inflicted any injustice on any member of the Medical Department, and which, as already stated by him on several occasions in the House of Commons, were not intended to do so, I am to add that Mr. Stanhope has no reason to suppose that either the medical profession in general, or those members of it serving in the army in particular, are desirous that officers of the Medical Staff should be called by titles so dissociated from the duties of their honourable profession as those of colonel, major, or captain.—I have the honour to be, Sir, your obedient servant,

RALPH THOMPSON.

Ernest Hart, Esq., British Medical Association, 429, Strand.

RANK OF MEDICAL OFFICERS OF ARMY.

THE following telegram, dated Allahabad, June 9th, has been received by the Editor :—

"Medical Staff, India, unanimous in supporting movement regarding honorary rank. The composite titles proposed, 'surgeon-captain,' etc., would be found awkward and impracticable."

H. W. L. writes: In celebrating Her Majesty's Jubilee, it is sincerely to be hoped that the claims of the profession in the army will not be overlooked by the State in the dispensing of this year's honours. It is to be trusted that the long existing barrier erected by the Horse Guards separating the medical department from the other branches of the army, may soon be shattered by the unerring artillery of common sense, and the claim for substantive title conceded. There is no longer a division of feeling existing as to the justice of the claims put forward by the profession for true military titles for army surgeons, similar in every respect to the other branches, namely, those who feed and pay the army, and to whom they now feel themselves distinctly inferior, since any little military position they may have once felt they possessed, has now been abolished as a useless "term," "a mere expression," whilst these highly honoured officers have had very recently conferred upon them true military titles.

It is difficult for the civilian to at once see that by existing warrants, in a strictly military sense, these eminent military officers of the Pay, Ordnance, and Commissariat Departments are distinctly the superiors of the Medical Staff; in fact, to-day the profession in the army has no standing, no rank, no actual military position.

The medical officers of the army have rendered great service to the State, and they have had to bear all the hardships and dangers in actual warfare just as combatant officers, in addition to those other risks in which combatant officers had no share. The greatly improved health of the troops, the diminished mortality, which in recent years has reflected such credit on the surgeons, and the increased number of men of all ranks available for daily duty, compared with former years, proves that the Medical Staff of the army are working and advancing with the age in the progress of thought and teaching in the treatment of the sick and in the care of those placed under their charge.

I venture to suggest a scheme which would appear to simplify the very vexed question of substantive rank, since "relative" and "honorary" are only assimilated titles and no longer of value in the estimation of military authorities. All corps and departments as the Transport, the Ordnance, the Pay, and the Medical, to be designated by a military prefix of rank and an affix denoting the corps to which each officer belonged, thus :

Major ——— Commissary.
" ——— Ordnance.
" ——— Army Pay.
" ——— Medical Staff.
" ——— Telegraph.

ONE OF MANY writes: I beg to most strongly endorse the letter of your correspondent "M. S." in the JOURNAL of May 28th. As he says, "The titles must be absolutely the same, or they will most certainly be considered inferior." The introduction of such unwieldy and complicated compound titles as surgeon lieutenant-colonel, brigade-surgeon lieutenant-colonel, lieutenant-colonel-surgeon, etc., will give satisfaction to no one. They will only increase the confusion that already exists among our combatant brethren—let alone the world at large—as to the meaning of the present designations of the officers of the Medical Staff. All combatant officers probably know what a surgeon or a surgeon-major is, and many may understand the term surgeon-general, but I can from personal observation positively assert that very few indeed either of the officers or of the men know what is meant by a brigade-surgeon or a deputy surgeon-general, except that he is a medical man, but of what rank he may be they have not the least idea. It seems quite probable that the above unhappy medium may eventually be offered us as a sop by the powers that be; but should it be accepted (which I sincerely hope may not be the case), I can emphatically affirm that both by the officers and by the men of the combatant branches we shall still be looked upon as considerably the inferiors of the Commissariat, Ordnance, and Pay Departments of the army, an opinion which at the present moment they very strongly entertain, and a fact which is brought home to us in a hundred ways in our daily intercourse with combatant officers. We are all proud of our position as medical men, and cannot see how the fact of our being called Major So-and-so, Surgeon-Major Medical Staff, can in any way "dissociate us from our honourable profession."

At the interview between the Director-General of the Medical Staff and the Parliamentary Bills Committee of the British Medical Association, Sir Thomas Crawford stated: "Medical officers are engaged solely for health-purposes; they are not responsible for duties which pertain to all that is understood by military command." We are responsible for such duties. Do we not administer discipline and military law over a corps numbering several thousand men? The medical officer commanding a detachment of the Medical Staff Corps has, and exercises—with the sole exception of the power of convening regimental courts-martial—the same disciplinary powers over the officers and men under him as the commanding officer of a regiment has over the corps he commands. We have now administered discipline over the Medical Staff Corps for some years, quite a long enough period to judge how the plan has worked. I ask, Has the result shown that their exercise of military command has led officers to "subordinate their purely medical duties to their military positions?" It has not. Have the sick been less carefully and thoroughly tended, or have any of our purely medical duties been neglected for the sake of our purely military work? Again I emphatically say such is not the case.

The discontent in the Medical Department is universal and very great, and is not likely to be appeased till, by the granting of honorary rank pure and simple, we are put in a position of equality with the Commissariat, Ordnance, and Pay Departments, to whom we feel we should not be held to be in any way inferior. The Medical Department of the army owe a deep debt of gratitude to you and to the Parliamentary Bills Committee of the British Medical Association for the able manner in which you have advocated our rights. I am only one of very many others who earnestly hope that you will continue to exercise your powerful interest on our behalf till this vexed question has been satisfactorily settled by the concession of that honorary rank to which we are fairly entitled.

MEDICAL STAFF writes: Against any proposed scheme of military titles to army medical officers it is constantly urged that no title will be satisfactory which will disassociate them from their honourable profession. Should this objection be applied to civil life, members of the medical profession who have received orders of knighthood or baronetcies will in future add their professional title as a prefix to their courtesy title. We will thus have "Dr. Sir Wm. Gull, Bart., and Dr. Sir H. Acland, K.C.B." Surely Colonel A. Jones, M.D., Royal Surgeons, would be quite as distinctive professionally as Sir Wm. Gull, Bart., M.D., F.R.S., and in neither case is there any desire to sink the profession to which both belong.

A ROYAL CORPS OF SURGEONS.

R. P. B. TAAFFE, M.D., M.S.Lond. (Brighton) writes: Army Surgeons should agitate for changing their department into a Royal Corps of Surgeons, similar to the Engineers. The rank should be either substantive or honorary. The various corps might then be known as follows: Colonel Williams, R.A.; Major Jones, R.E.; Captain Smith, R.S. (R.A., Royal Artillery; R.E., Royal Engineers; R.S., Royal Surgeons.)

The above is the only real remedy for the grievances of army surgeons and the only logical way out of the difficulty.

WANTED A "COACH."

UNION writes: Will you kindly permit me through the JOURNAL to suggest the necessity and wisdom of some thoroughly able medical officer of the British Medical Department starting a tutorship whereby the many senior officers now called upon to undergo an examination upon many points more suitable to their younger and earlier days could be sufficiently primed for the examination? As one who has undergone the unjust ordeal, owing to many catch questions put in from time to time, I advocate the importance of such a step, and I am sure such a tutor would receive a sufficient pecuniary support. I have often heard the question asked, and I trust you will publish my letter. Many have been the urgent requests for copies of the examination papers, but no one will give the willing hand. How is it we are so different towards each other as compared with other branches of the service?

A SERVICE SUPPLEMENT TO THE "BRITISH MEDICAL JOURNAL."

A SERVICE MEMBER writes:—Some time since a proposal was mooted in your columns in connection, I believe, with the establishment of a Medical Staff Institute, that a weekly or monthly publication devoted to the Service branches of the profession was a thing to be much desired. So far as I know nothing came of that proposal and it is to revive it, though in a somewhat modified form, that I now write to you. As it is unfortunately too clear from recent events that little encouragement can be expected from those in authority at the War Office to the efforts of the Medical Staff to develop and increase that *esprit de corps* which can alone enable us to do our best work, it remains to be seen whether the Medical Staff itself, with the assistance of the British Medical Association, cannot do something towards the attainment of that object.

The publication of an "Army and Navy Supplement" to the JOURNAL, would, I submit, be a most valuable step in the right direction, should it prove on examination to be within the "domain of practical politics." A certain portion of the JOURNAL is already devoted to the Naval and Military Services, and it is this portion expanded and developed which would constitute the proposed Supplement. In it peculiarly Service questions could be more fully discussed than is at present possible owing to want of space in the JOURNAL, and officers would be enabled to give the results of their experience of the working of the medical machine in peace and war, and to hear the views of their brother officers on the subject, with mutual benefit to themselves and the whole Service; and many valuable suggestions and observations which at present wither and die for want of light, might blossom in the congenial soil of such a publication, and be fruitful of good to the soldier. Where can such a question be discussed as, for instance, the most suitable form of forage cap for the men of the Medical Staff Corps? I happen to have had borne in upon me, in drilling a mixed class of men of various corps in stretcher-drill, the great advantage of a head-dress with a chin-strap to keep it in position, and without strings at the back to foul with the stretcher-slings, but I cannot expect to be allowed to air my views in the JOURNAL, whose space is I know already so taken up, and the hopelessness of a medical officer getting a hearing in any purely service paper is well known. Another officer may be filled with an idea that a Bearer Company should be a complete unit, with its own complement of signallers, transport and horses, under a medical officer trained in such special transport duties, and unlike the present transport officer, of great value at the dressing-station; but it would take a long letter to explain it all, and the officer thinks with a sigh that he can hardly expect the Editor to fill his pages with matter only interesting to a comparatively small number of readers. General professional questions could then, as now, be given a place in the body of the JOURNAL; but Service details, as for instance the occurrence of a large number of cases of hyperidrosis of the feet and its possible relation to badly-tanned leather boots, might be admitted to the "Supplement" as of but limited interest from a civilian point of view, though important from a military standpoint.

Other features might be a periodical distribution-list of officers, with dates of joining their stations, special correspondence from the various stations, and articles on the sanitary, medical and social aspects of our foreign stations.

I have taken in this letter the Medical Staff point of view, but that the Naval, Indian, and Volunteer Services would also benefit by such a "Supplement," will be readily seen by officers of those Services.

There must be at least 2,000 members connected with the various services, and an additional annual subscription of 10s. 6d. would probably meet the expenses of the "Naval and Military Supplement." I must apologise for trespassing at such length on your space, but should it prove possible to establish such a means of communication between medical officers of the Services, another link would be forged in that chain of gratitude and affection which already binds us to the British Medical Association.

THE NAVY.

THE following appointments have been made at the Admiralty during the past week:—J. F. BATE, Surgeon, to the *Sealark*; Inspector-General of Hospitals JOHN BREAKEY, to Haslar Hospital; BERNARD RENSHAW, Staff-Surgeon, to the *Sylvia*; R. W. WILLIAMS, Staff-Surgeon, to the *Defiance*; W. C. SPILLER, Surgeon, to the *Duncan*; M. H. ATOCK, Staff-Surgeon, to the *Nelson*.

THE MEDICAL STAFF.

SURGEON-GENERAL A. H. FRASER has been granted retired pay. His commissions are dated:—Assistant-Surgeon, February 21st, 1851; Surgeon, January 26th, 1858; Surgeon-Major, February 21st, 1871; Deputy Surgeon-General, September 18th, 1877; and Surgeon-General, October 14th, 1884. Surgeon-General Fraser served in India during the mutiny of 1857-58, and was in medical charge of the Murree Depôt when the station was attacked on September 1st, 1857, and in medical charge of the troops employed in the operations of the three following days (medal). He was also in the Afghan war in 1880, and was mentioned in despatches for his services. He has but recently vacated the position of P.M.A. at Gibraltar, now occupied by Sir James Hanbury.

Quartermasters J. THOMSON, H. JOHNSON, R. HOWELL, R. GORDON, D. M'INTYRE, S. EVANS, D. LACKEY, T. F. KENNEDY, F. HEWSON, and J. D. MARSHALL have been granted the honorary rank of Captain.

Surgeon-Major FRANK POUT is granted retired pay with the honorary rank of Surgeon-Major. He entered the service as Assistant-Surgeon, October 1st, 1860; became Surgeon March 1st, 1873; and Surgeon-Major November 1st, 1875. He has no war record of service.

Surgeon-Major A. SKIPTON, of the 9th Brigade North Irish Division Royal Artillery (late the Londonderry Artillery Militia), has resigned his commission, which bore date March 15th, 1873.

Surgeon-Major J. GOOD, serving in Bengal, is appointed to the civil medical charge of Rani Khet, *vice* Surgeon S. R. Wills, transferred to Shatijehanpore.

Surgeon R. G. THOMPSON, M.D., having returned from field-service in Burma, is posted to general duty in the Presidency Circle, Bombay.

Surgeon R. E. FOOTT, M.D., is transferred from the Presidency Circle to general duty in the Sind Circle, Bombay Command.

Surgeon-Major J. MARTIN, serving in the Madras Command, is appointed to the charge of the subdistrict of Saidapett from the date of assuming charge from Surgeon-Major T. C. H. Spencer.

Surgeon C. K. POWELL, M.D., also serving in the Madras Command, doing general duty in the Eastern District, is to do duty at the station hospital at Bangalore.

INDIAN MEDICAL SERVICE.

SURGEON-MAJOR W. R. HOOPER, Bengal Establishment, is promoted to be Brigade-Surgeon, *vice* C. J. J. Jackson, M.D., who has retired.

Surgeon-Major J. RICHARDSON, M.B., Bengal Establishment, is also promoted to be Brigade-Surgeon, *vice* H. Cayley, retired.

Surgeon-Major C. H. JOUBERT, M.B., Bengal Establishment, Officiating Civil Surgeon, 24-Pergunnahs, is directed to act also as Medical Inspector of Emigrants (Colonial Emigration), during the absence on furlough of Surgeon-Major J. F. P. M'Connell, M.B.

Surgeon-Major G. MASSY, Bengal Establishment, is appointed Civil Surgeon of Lahore from April 16th, *vice* Surgeon-Major W. Center, M.B., proceeding on furlough.

Surgeon A. R. EDWARDS, Bengal Establishment, has been appointed to the civil medical charge of Sheikh Budeen.

Consequent on the departure of Surgeon-Major W. Center, M.B., on furlough, Surgeon-Major T. E. L. BATE, Bengal Establishment, is to officiate as Civil Surgeon of the first class.

Surgeon F. W. THOMSON, recently appointed to the Bengal Establishment, reported his arrival at Calcutta on April 23rd.

Surgeon-Major A. N. R. HARRISON, Madras Establishment, is appointed Civil Surgeon, Salem.

The under-mentioned gentlemen, all of the Bengal Establishment, have been granted leave of absence for the periods specified: Brigade-Surgeon C. P. COSTELLO, administrative Medical Officer, Quetta District, for six months on private affairs; Brigade-Surgeon J. E. T. AITCHISON, M.D., C.I.E., Secretary to the Surgeon-General, Her Majesty's Forces, Bengal, for one year on private affairs; Surgeon-Major G. M. DAVIS, M.D., for three months on medical certificate.

THE VOLUNTEERS.

Mr. JAMES WYLIE, M.B., is appointed Acting-Surgeon to the 6th Lanarkshire; and Mr. E. M. GARSTANG is appointed Acting-Surgeon to the 2nd Volunteer Battalion of the Loyal North Lancashire Regiment (formerly the 14th Lancashire).

Surgeon G. S. ELLISTON, of the 1st Suffolk, has been granted the honorary rank of Surgeon-Major.

Acting-Surgeon W. H. B. CROCKWELL, from the 16th Lancashire (3rd Manchester Volunteers), has been appointed Surgeon to the Manchester Division of the Volunteer Medical Staff Corps.

The undermentioned gentlemen have been appointed Acting-Surgeons in the corps specified: JOHN QUICK, the 3rd Volunteer (the Duke of Cornwall's) Brigade Western Division Royal Artillery; ROBERT SOUTAR, M.B., 1st Forfar Artillery; RICHARD BROWN, M.B., 5th Durham Rifles.

Surgeon C. W. PARKINSON, of the 1st Dorsetshire, has resigned his commission, which bore date July 17th, 1886; he is granted the honorary rank of Surgeon-Major, and permitted to retain his uniform.

M. A. GRAY DUGUID, M.B., who has been Acting-Surgeon of the 3rd (the Buchan) Volunteer Battalion of the Gordon Highlanders (late the 3rd Aberdeen Volunteers), since June 27th, 1885, is now gazetted Second Lieutenant in that corps.

The undermentioned gentlemen have been appointed Acting-Surgeons to the corps specified:—C. N. LEE, M.B., 1st Fife; C. D. GRANT, 24th Middlesex; C. A. MACMUNN, M.A., M.D., 3rd Volunteer Battalion South Staffordshire Regiment (formerly the 4th Stafford).

Surgeon and Honorary Surgeon-Major THOMAS BUCHANAN, of the 10th Lanarkshire (Glasgow Highland) Volunteers, has resigned his commission, which bore date March 20th, 1875; he is permitted to retain his rank and uniform.

Mr. ADAM FLETCHER, M.D., is appointed Surgeon to the 1st Volunteer Battalion Lancashire Fusiliers (late the 8th Lancashire).

Acting-Surgeon R. K. MORTON, of the 3rd Volunteer Battalion Norfolk Regiment (formerly the 3rd Norfolk), has resigned his commission dated April 24th, 1878.

Surgeon J. O'C. HYNES, of the 1st Nottinghamshire (Robin Hood) Rifles, is granted the honorary rank of Surgeon-Major.

Messrs. HENRY BENNETT and H. F. H. BARHAM have been appointed Surgeons to the Maidstone Division of the Volunteer Medical Staff, and Mr. HENRY SANDLAND is gazetted Quartermaster to the same division.

Acting-Surgeon R. GIRVAN, M.D., of the 2nd Ayrshire, is promoted to be Surgeon, and is granted the honorary rank of Surgeon-Major.

The undermentioned gentlemen are appointed Acting-Surgeons to the corps specified: JOHN WYLIE, M.B., 1st Dumbarton; E. G. BARNES, M.D., and A. W. ALDRICH, 6th (West) Suffolk.

Acting-Surgeon T. E. UNDERHILL, of the 1st Volunteer Battalion South Staffordshire Regiment (late the 1st Staffordshire Rifles), is promoted to be Surgeon in the same corps.

Mr. N. H. NIXON is appointed Quartermaster in the London Division of the Volunteer Medical Staff Corps.

BEQUESTS AND DONATIONS.—The Children's Hospital, Bristol, has received £100 18s. 2½d. from the annual church parade of the Ancient Order of Foresters at Holy Trinity, St. Philip's, on Sunday, May 15th.—The Grocers' Company has given £50 to the National Truss Society.

GLYCOZONE.—Glycozone is pure glycerine in which four volumes of ozone have been dissolved; it is odourless and deodorisant. Dr. Charles A. Seale (*New York Medical Record*) recommends it as a local application in offensive cancerous tumours.

MEDICO-LEGAL AND MEDICO-ETHICAL.

ALLEGED NEGLECT.

SIGMA writes: I am called to give assistance in a case of "hour-glass contraction," accompanied by severe hæmorrhage, consequent on the medical attendant absenting himself from the chamber of his patient for half-an-hour, after the close of the second stage of labour. To whom shall I look for my fee—the patient, or the medical man at whose door lies the imputation of neglect during that critical time?

*** Even if "the imputation of neglect" in the case in question were warranted—which we by no means admit—"Sigma" would not be justified in looking to the temporarily absent practitioner for his fee. Rather should he sacrifice it altogether than, by making such a claim, tend to support the injurious allegation against a brother practitioner, whose reputation as an accoucheur has, we infer from the tenour of our correspondent's private note, already more or less suffered. It should, therefore, be "Sigma's" care to endeavour judiciously to shield, as far as justly can be, his professional brother from the obloquy and prejudice which are always, in a greater or less degree, attached by patients and their friends to an error in judgment; for who, it may be asked, has not, in the course of his professional life, committed like errors, of which the "still small voice within" is the sole accuser?

THE FEES OF MONTHLY NURSES.

DOUBTFUL writes: A lady, expecting her confinement, engages a nurse for a certain date. The event occurs three weeks or so previous to this date, and the engaged nurse is unable to attend, being at another case, so that the lady is compelled to get another nurse. Can the nurse first engaged legally claim her full fee? If not, what proportionate sum should be offered her as remuneration? It is fair to state that she had refused another engagement in order to hold herself free for the expected accouchement.

*** It appears to be a contract which can only be fairly met by paying the nurse her fee.

BROWN DEFENCE FUND.

	£	s.	d.
Amount already acknowledged	20	9	6
The proprietors of the *Lancet*	2	2	0
A Fellow Sufferer	1	1	0
Small Sums	0	9	0

G. STANLEY MURRAY, M.D., Putney.

LANGMORE DEFENCE FUND.

ABOUT £70 are still required to enable the Committee having charge of the fund to defray the heavy costs incurred by Dr. J. Wreford Langmore for his defence in the recent unwarrantable action brought against him. As may be remembered, Dr. Langmore gained the verdict, with full costs, but, owing to the bankruptcy of the plaintiff, is now called upon to pay a heavy charge for legal expenses. The Committee wish shortly to close the fund, and will thank intending subscribers to send their donations without delay to Mr. George Eastes, M.B., 69, Connaught Street, Hyde Park Square, London, W., one of the Honorary Secretaries of the Metropolitan Counties Branch of the British Medical Association.

	£	s.	d.		£	s.	d.
Amount previously acknowledged	151	4	0	Mr. John Morgan	2	2	0
Dr. Maurice Davis	0	10	0	Dr. J. Russell Reynolds ..	2	2	0
"A Friend in the Fells" ..	2	2	0	Mr. T. A. Rogers	1	1	0
Dr. A. B. Garrod	1	1	0	Dr. J. F. P. Staples	2	2	0
Mr. R. J. Godlee	1	1	0	Dr. J. C. Thorowgood	0	5	0
Proprietors of the *Lancet* ..	2	2	0	Dr. John Williams	1	1	0
				Mr. E. P. Young	0	10	6

HOSPITAL AND DISPENSARY MANAGEMENT.

RICHMOND DISTRICT LUNATIC ASYLUM, DUBLIN: REPORT FOR THE YEAR 1886.

THIS report of Dr. Conolly Norman is of more than common interest. The medical superintendent is new, and he appears to have commenced his reign with the broom which is proverbial under such circumstances. There is, indeed, a literal fitness in the proverb, in the present instance, for Dr. Conolly Norman found the drainage in such a condition that he proposes to cleanse the Augean stable in a very sweeping manner. He says, "The sanitary state of this institution is deplorable. The soil-pipes are unventilated, owing to the absence of a counter-opening, and no attempt has been made to ventilate the waste-pipes from the baths, sinks, etc. There is no proper trapping, and there are no fresh-air breaks. . . . . The house drains are usually brought under the buildings, and the pipes are not jointed with cement. From the upper portion of the catch-pits (cesspools) the rats have burrowed freely into the spaces beneath the floors. . . . The baths are very insufficient in number, particularly in the South House, where bathing has to be carried on every afternoon in the week, in order that every patient may have the usual hebdomadal wash" (p. 7).

We are glad to see such an outspoken statement of the condition of the sanitary arrangements at the Dublin Asylum, and are still further pleased to observe that the governors have taken up the matter, and we trust they will not rest till a radical reform has been achieved. Sir Charles Cameron and Mr. Wilkinson having been requested to nominate a sanitary engineer, whose duty it should be to examine the drains and report, this function has been delegated to Mr. Kaye Parry.

We shall watch the future action of the directors with interest, for there seems to us to have been such an unpardonable neglect of the sanitary condition of the asylum, that we fear nothing but a terrible outbreak of fever will induce the radical change in the drainage which is absolutely necessary. The report may be temporising; or, if thorough, as it ought to be, with the facts stated in the physician's report before us, there may be a disposition to minimise the danger and to magnify the expense involved in a reconstruction of the drains. The death-rate from dysentery and diarrhœa has been large during the last decade. Almost 1 in 10 of the patients, calculated on the average number resident, have been invalided during the last year. Erysipelas is rarely absent from the institution. Altogether, a disgraceful state of things is revealed, and heavy indeed will be the blame if the responsible authorities allow it to continue.

The Inspectors of Asylums in Ireland must have been painfully struck with the facts for some years, when engaged in their laborious inspections, and it must be a source of singular satisfaction to them to know that a decisive step has at last been taken to remove the cause of so much preventable disease. The visiting physicians, too, will rejoice to find that the remonstrances which, in the discharge of their onerous duties, they must doubtless have made, with almost troublesome iteration, are no longer to pass unheeded.

A well-merited tribute is paid to the admirable work done by the late Dr. Lalor in regard to the Asylum Schools, the avoidance of mechanical restraint, and the formation of open recreation-grounds. "His humanity and sagacity were alike shown by the excellent results which followed from his labours—carried out under great difficulties—with the object of increasing the liberty and happiness of the insane under his care."

Dr. Conolly Norman has made an excellent beginning. We wish every success to his zealous labours, though they, like his predecessor's, may, and probably will, be "carried out under great difficulties."

THE PRINCE OF WALES AND THE EAST LONDON HOSPITAL FOR CHILDREN, SHADWELL.

THE Prince of Wales visited the Bazaar in aid of the funds of the East London Hospital for Children on June 3rd. His Royal Highness, who was accompanied by Colonel Clarke, arrived at the Westminster Town Hall, where the Bazaar was held, shortly before noon, and was received by Lord and Lady Holland, Lord and Lady Kilmarnock, Lord and Lady Strafford, Lord Crewe, Mr. Charles Cheston, Mr. Thomas Charrington, Mr. Stanley Dent (Chairman of the Bazaar Committee), Captain Parkington, Dr. Eustace Smith, and other officials connected with the hospital. The Prince of Wales made a tour of the Bazaar, visiting and making purchases at each stall. From the report presented at the annual meeting of the governors, it is seen that the total number of patients under medical and surgical treatment during the year, from May 1st, 1886, to April 30th, 1887, including in-patients, out-patients, and casualty cases, was 16,012; the number of attendances of out-patients and casualty cases, old and new, amounting to 35,522, making the total number of patients since the opening of the Hospital in January, 1868, 178,644, namely, 116,016 out-patients, 51,434 casualty cases, and 11,194 in-patients.

HOSPITAL SATURDAY FUND.

THE report presented at the thirteenth annual meeting of the subscribers to this fund, under the presidency of Lord Brabazon, showed a falling off in the street collection of £500 as compared with 1885. The increase in the workshop collection had, however, more than compensated for that misfortune, and the fund raised was larger than that of any other single year, the amount being £11,013, in addition to which a sum of £1 200 for another charitable purpose had been received. The sum distributed was £9,750.

LONDON TEMPERANCE HOSPITAL.

AT the annual meeting of the London Temperance Hospital, the Honorary Secretary said that, until the debt of £6,500 was paid, it would be impossible to open to the public the whole of the 120 beds; only 60 were at present in use. It was stated that, during the fourteen years the institution had been in existence, 4,000 in-patients

and more than 26,000 out-patients had been treated; during the whole of that time only 5 cases had received alcoholic treatment. The number of in-patients admitted during the year ending April 30th was 674, a number larger than the aggregate cases in the first five years, and, adding 163 cases remaining at the end of the previous year, gave a total of 737 cases treated within the year. The deaths were 57, or 8·4 per cent.

UNIVERSITY INTELLIGENCE.

MEDICINE AT THE ENGLISH UNIVERSITIES.

CAMBRIDGE UNIVERSITY MEDICAL SCHOOL continues to advance with leaps and bounds, and the views which we have from the first expressed of the immense importance of connecting medical students with the life and influences of our older English universities, are evidently shared by a great body of the profession. It will be seen, from the twenty-first annual report of the Museums and Lecture-Rooms Syndicate, that during the year 1886 considerable progress has been made in arranging the various collections, but additional accommodation is urgently demanded for the teaching of physiology and pathology. It is also thought desirable that permanent arrangements for human anatomy and medicine should be made without further delay, and that the work should be commenced as soon as possible after the present chemical laboratory is vacated. The Professor of Anatomy (Dr. Alexander Macalister) states that the past year has been one of unexampled activity. The anatomy-room was open during 268 days; 170 students attended lectures during the Michaelmas Term, and 175 during the Lent Term. The Professor delivered 47 lectures and gave 56 demonstrations, besides attending in the dissecting-room to give practical instruction on 241 days. The want of a lecture-room is said to be grievously felt, in illustration of which the Professor mentions that the anatomy lecture-room, which is seated for fifty, has been used for demonstrations, and as many as 132 have been counted in it more than once. The Professor of Pathology (Dr. C. S. Roy) reports that the teaching of pathology has continued to develop, the number of undergraduates taught being 52, as compared with 36 during the previous year. Professor Roy reiterates his complaint, made in a former report, that no efficient laboratory has been provided by the University, and as to the want of a properly qualified assistant. The Professor of Chemistry (Mr. Liveing) announces that the new chemical laboratory is making satisfactory progress.

OXFORD.

WE are glad also to be able to announce that active progress has been made towards the restoration of the "lost medical school." Since first we drew public and professional attention to this subject great reforms have been introduced. The new schools and laboratories are admirable. We lately had the opportunity of inspecting them with Professor Sanderson, to whom Oxford and the medical profession are under profound obligations. The arrangements for the first two years' study are now complete, and we shall have the pleasure of describing them. The final touch was given last week by the appointment of Professor Dunstan as a teacher of Materia Medica. In a Convocation held on June 7th a decree was carried that the Curators of the University chest be authorised to pay to the Board of the Faculty of Medicine the sum of £100 for three years, to provide regular instruction in materia medica and pharmacy. Oxford has now once more a medical school, and one which promises to be worthy of so illustrious a university.

INDIA AND THE COLONIES.

INDIA.

CHOLERA AMONG EUROPEAN TROOPS.—It is stated that the European troops in India suffered more from cholera in the year 1885 than in any of the three preceding years. The disease appears to have been general throughout the country, but was worst in the Bombay army, especially among those regiments quartered in Southern Afghanistan, where no less than 117 cases out of a total of 199 for the year occurred. The number of deaths was 122, equal to 2·14 per 100 of the total strength of the army, and 61·51 of the total number of cases.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE WORKS OF THE METROPOLITAN ASYLUMS BOARD.

IN accordance with a decision of the Metropolitan Asylums Board to publish an annual report, one of these documents was recently issued. The document is a voluminous one, and has been drawn up by the Chairman of the Board, Mr. E. Galsworthy, J.P. It is prefaced with a review of the work which has been discharged in the twenty years during which the Board has existed, pointing out that the body was called together under the Metropolitan Poor Act of 1867 to provide accommodation for the infectious sick and harmless insane poor, for whom provision had previously been made in the wards of the metropolitan workhouses or of the infirmaries attached to them. During the first ten years of its existence the asylums at Leavesden and Caterham were established for the accommodation and treatment of 4,050 harmlessly insane paupers of the chronic or imbecile class; the hospitals at Homerton, Stockwell, and Hampstead, accommodating 1,000 fever and small-pox patients of the pauper class, were built; increased accommodation for these patients was subsequently provided at Fulham and Deptford, and the training-ship *Exmouth* was established. In the last ten years the work has assumed a different aspect, and the report points out that still further duties were imposed upon the managers by Section 16 of the Poor-law Act, 1879, when the Board was called upon to establish an ambulance service for the conveyance to and from their homes of persons suffering from small-pox and fever. In August, 1882, the report of the Royal Commission on Small-pox and Fever Hospitals in the Metropolis was presented to Parliament, and the conclusions at which the Commissioners had arrived determined the managers to reconsider the policy hitherto pursued by them of treating small-pox patients in hospitals within the metropolis. The result was an almost unanimous endorsement of the Commissioners' recommendation that the managers should purchase additional sites in the country to serve as hospitals for convalescing patients. Hospital sites were purchased at Darenth and Winchmore Hill, and the hospital ships *Atlas* and *Endymion* were placed at Long Reach, in the Thames. This departure in the treatment of small-pox, the report states, was attended with very satisfactory results. From the establishment of the Board in 1867 to Lady-Day of the present year, the managers have had to deal with four epidemics of small-pox, occurring in the years 1871-2, 1877-8, 1881-2, and 1884-5, and the greatest number of beds occupied at one time during these periods was respectively 1,763, 1,000, 1,680, and 1,412, whilst the total number of small-pox patients for whom the managers were called upon to provide accommodation up to end of last year was 53,579. During the same period the number of fever patients who received treatment was 32,138. Although the Board's hospitals were established ostensibly for the reception only of pauper patients suffering from infectious disorders, it is, the report says, a fact that the great bulk of the patients who have from time to time been treated have been other than those of the legally recognised pauper class. Thus the Board has been called upon to do the work of vestries and district boards without any legal recognition of responsibility. Upon this important point the report says: "Willing as the vestries and district boards may have been, and are, that the responsibility of providing for their patients should be undertaken by the managers, yet the majority of these authorities have (in consequence of the wording of the Act of 1879, rendering it optional and not obligatory on their part to contract with the managers for the reception into their hospitals of non-pauper patients suffering from infectious disorders) absolutely declined to enter into any such contract with the Asylums Board as the Act contemplated. The consequence has been that, since the formation of the district, the managers have been discharging functions which the Legislature imposed upon the sanitary authorities. In the performance of this unpopular but important and necessary branch of its operations, the Asylums Board has received little support and not a little condemnation from many of the very authorities who have failed in the performance of one of the most important of their duties. It would seem, therefore, to be a matter for consideration whether such an unsatisfactory condition of things should continue to prevail, and whether the Local Government Board should not introduce a Bill into Parliament with the view of putting an end thereto, by delegating to the managers, or some other representative board, the duty of providing

hospital accommodation for the isolation of patients suffering from over and small-pox, both of the pauper and non-pauper classes.

In the annual report which follows, the work from January 1st, 1886, to March 31st, 1887, is reviewed under the heads mental diseases, infectious diseases, ambulance arrangements, training-ship, expenditure, and office work. In respect to mental diseases attention is called to the fact that, though accommodation for 550 additional imbecile patients at Darenth is rapidly approaching completion, the managers will shortly be called upon to consider the question of providing still further accommodation. As to infectious diseases, the report announces with satisfaction the fact that since 1885 only 144 small-pox patients have been admitted into the Board's hospitals, and that, with one or two exceptions, all these patients have been satisfactorily treated on board the floating hospitals. In regard to fever, however, the managers had had to provide for a very considerable number of patients, and the total number under treatment in the hospitals at one time exceeded by 64 the total number recorded as under treatment at any one time during the past ten years. The expenditure during the past twelve months showed a decrease for "maintenance of patients" of £28,966, and for "common charges" of £82,639, or a total of £111,605. This large decrease is principally attributable, the report explains, to four causes—the closing of the Darenth Camps and the South-Western and North-Western Hospitals, and the consequent reduction of staffs at those establishments; to the practical immunity from small-pox which the metropolis has enjoyed during the past year; to the exceptionally favourable rates at which the managers had been enabled to contract for the supply of provisions and necessaries during the past twelve months; and to the adoption, both at the asylums and hospitals, of revised dietary scales for the subordinate officials. The total liabilities of the Board on the loan account at Lady Day last amounted to £1,097,717. There are several appendices.

HISTORY OF AN OUTBREAK OF MEASLES.

MEASLES is prevalent in the urban sanitary district of Grantham, and has been so for some weeks past. It was introduced by the family of a hawker, who went there to attend the annual fair, one of his children having died from the disease in his caravan on April 1st. That was the first death from measles this year.

The sanitary authority received no information of the fact that infectious disease existed in any caravan, "compulsory notification" not being the law of the district. The new powers given under Section 9 (2) and (3), of the Housing of the Working Classes Act, 1885, have not hitherto been enforced, but it is not unlikely that this untoward event may result in action being taken in that direction.

The infection seems to have been somewhat widely disseminated through the fair, and subsequently certain schools seemed to be the active agents in spreading it; the managers, therefore, came to the conclusion that it was desirable to close them. The second death took place on April 30th; and up to June 7th there has been a total of thirteen deaths, all of children under 5 years of age, in a population of about 18,000. Most of the deaths have been due to secondary lung-affections, the disease itself having been, for the most part, of a mild type. In the absence of any definite information, it would be only misleading to attempt to enumerate the number of attacks. The annual average number of deaths from measles in the same district during the seven years preceding was 6.6. The usual thoughtless practices have not been wanting, so the disease has been spread not only in the town, but also to some five villages in the surrounding rural sanitary district. Fortunately, only two other deaths have occurred so far.

HEALTH OF CORK FOR 1886.

FROM the annual report of Dr. Donovan, medical superintendent officer of health, it appears that during the past year the total deaths registered in the city amounted to 1,648, which number included 76 from infectious diseases. The deaths during 1886 were 388 less than in the preceding year. As Dr. Donovan remarks, it is a well known fact that the saving of human life means the production of wealth, and the preservation of health is of primary importance to the welfare of the country. The Public Health Committee, by their action during the year, have shown that they fully realise this axiom, and it is to be hoped that the good results obtained will be an incentive to the corporation to help the Committee to carry out the necessary sanitary improvements which are still required in the city. The annual death-rate for the year from all causes was 20.86, the infantile death-rate 2.4, and the infectious 0.9. The cases of zymotic disease reported for the year 1886 show a well-marked decline when compared with those of previous years.

Typhus fever only caused 5 deaths during the year, only 83 cases being reported for the year. Contrasting this number with 1,261 cases in 1881, it is obvious that a marked decrease has taken place since then, due probably in great measure to the great reduction which has taken place in congested districts, and to the opening of new areas in Cork. Besides this, the isolation of fresh cases, the prompt disinfection and cleansing of patients' houses, their clothes and bedding, must all have a beneficial effect. About 260 cases of typhoid fever occurred with 17 deaths. A good deal of alarm prevailed when the disease showed signs of becoming epidemic, and some fear was entertained that the water-supply was at fault; but careful analyses made of the water, and of the history and surroundings of each case, and of the spread of the disease itself, pointed to other sources than the water to which attention should be directed. Dr. Donovan had no doubt in coming to the conclusion that with the prevailing epidemic tendency, the outbreak was mainly attributable to, first, the unclean condition of the city generally—houses, yards, etc.; secondly, to the clearing out of the old choked sewers at a time when it should not have been done, and carting their contents through the city without previous disinfection, and spreading the stuff in localities not suited to receive it; thirdly, to the absence of sewer ventilation and of a proper system of thorough and systematic flushing.

The Public Health Committee have recommended the Corporation to undertake the domestic scavenging of the city, and a meeting of the Town Council was held last week to consider the matter; but, after some discussion, it was determined to postpone its consideration for a period of three months. To carry out the proposed scheme would involve an annual expenditure, including the necessary plant, of £1,428, but it is estimated that the receipts for the sale of the manure so removed would amount to £800, reducing the cost of the scheme to £628, or about one penny in the pound. It is a subject of regret that the suggestions of the sanitary officials, the medical superintendent officer of health, the city engineer, executive sanitary officer, and general superintendent have not been adopted by the members of the Town Council.

FEVER AND SMALL-POX IN THE METROPOLIS.

IT was reported by the various committees of the infectious asylums, at the last meeting of the Metropolitan Asylums Board, that during the fortnight 100 fresh cases of fever had been received (37 at the Eastern Asylum, 25 at the Western, and 38 at the South-Eastern), as against 116 in the previous fortnight. During the fortnight 85 had been discharged, and there were left under treatment 485 fever patients, as against 463 a fortnight ago, of whom 443 were cases of scarlet fever, 3 of typhus, 34 of enteric fever, and 5 were other cases of a febrile character. During the same period 4 cases of small-pox had been admitted, and 2 had been discharged, leaving 7 under treatment—5 on the ships and 2 in the Eastern Asylums.

POOR-LAW MEDICAL OFFICERS.

WE have had forwarded to us a copy of a resolution recently brought before a provincial board of guardians, by a medical member of the same, and our correspondent leaves to our discretion whether we publish his name or not.

We have decided not to do so, but, at the same time, we publish the resolution and make some comment thereon:

——— Union.

"Sir—I am directed to give you notice that at the meeting of the Board of Guardians, on Thursday, the —— day of ———, the motion of Dr. ——— will be brought forward, "that this Board respectfully suggests to the L.G.B. the establishment of some system (with a view to secure for the poor the share of the modern improvements in medical science), of examination as in the army, the periodical examination of poor-law medical officers to include inspection without notice of the surgeries, instruments, drugs, and the professional qualifications of any of their assistants, and that poor-law medical officers be rewarded for passing such examinations by grants such as those awarded for efficient vaccination, which would be equivalent to promotion in the army."

Whilst our correspondent rightly credits us with the desire to act justly with the "sick poor," we do not think the proposition that he has made to effect the same will be very speedily adopted.

We question, further, whether poor-law medical officers would readily submit themselves to periodical examinations, including inspection without notice of their surgeries, instruments, drugs, and professional qualifications of any of their assistants, even with the glittering prospect before them of receiving a "grant such as that awarded for efficient vaccination, which would be equivalent to promotion in the army." On the contrary, we hold that the first thing to achieve towards the efficient administration of medical relief to the poor is to secure at the various unions the provision of dispensaries in no way connected with the surgeries of the medical officers; the appointment of independent dispensaries; the attendance of the sick by qualified medical men. But these suggestions have been made by Committees of the House of Commons, but, with the exception of a few unions, have not been carried out, nor are they likely to be so long as the present agricultural depression continues, nor until a more enlightened body of men than our existing boards of guardians have the control of poor-law matters.

The L.G.B. is perfectly aware of the employment of unqualified assistants, and has hesitated to interfere, probably because it is aware that the payments made to poor-law medical officers generally do not admit of any considerable outlay on paid assistants, such as fully qualified help would necessitate.

In the very union in which this poor-law medical guardian resides is to be found a district medical officer who rejoices in the very limited stipend of £10 a year.

HEALTH OF ENGLISH TOWNS

During the week ending Saturday, June 4th, 4,861 births and 3,452 deaths were registered in the twenty-eight large English towns, including London, dealt with in the Registrar-General's Weekly Return, which have an estimated population of 9,245,099 persons. The annual rate of mortality, which had increased from 19.7 to 20.4 per 1,000 in the three preceding weeks, declined again during the week under notice to 19.5. The rates in the several towns, ranged in order from the lowest, were as follow:—Derby, 12.8; Portsmouth, 13.2; Brighton, 13.7; Leicester, 15.3; Cardiff, 16.5; Bristol, 17.0; Leeds, 17.5; London, 17.9; Bradford, 18.1; Hull, 18.3; Birmingham, 18.8; Sheffield, 19.3; Bolton, 19.5; Huddersfield, 19.7; Nottingham, 20.0; Plymouth, 21.0; Halifax, 21.1; Oldham, 21.4; Preston, 21.4; Birkenhead, 22.4; Liverpool, 22.6; Sunderland, 22.9; Wolverhampton, 25.2; Salford, 25.3; Blackburn, 26.4; Newcastle-upon-Tyne, 25.9; Norwich, 27.0; and the highest rate during the week 30.5 in Manchester. The death-rate in the twenty-seven provincial towns averaged 20.8 per 1,000, and exceeded by 2.9 the rate recorded in London, which, as before stated, was only 17.9 per 1,000. The 3,452 deaths registered in the twenty-eight towns during the week under notice included 521 which were referred to the principal zymotic diseases, against 532 and 522 in the two preceding weeks; of these, 252 resulted from measles, 143 from whooping-cough, 44 from scarlet fever, 34 from diarrhœa, 26 from diphtheria, 22 from fever (principally enteric), and not one from small-pox. These 521 deaths were equal to an annual rate of 2.9 per 1,000. The zymotic rate in London during the week under notice was equal to 2.9 per 1,000, and corresponded with the mean rate in the twenty-seven provincial towns, among which the zymotic death-rate ranged from 0.0 and 0.5 in Derby and Cardiff, to 5.0 in Newcastle-upon-Tyne, 5.9 in Birkenhead, 6.2 in Norwich, and 7.2 in Manchester. The deaths referred to measles, which had risen from 235 to 251 in the three preceding weeks, were 252 during the week under notice, and showed the highest proportional fatality in Brighton, Sheffield, Liverpool, Oldham, Salford, Newcastle-upon-Tyne, Birkenhead, Norwich, and Manchester. The fatal cases of whooping-cough, which had been 158 and 143 in the two previous weeks, were again 143 last week, and caused the highest death-rates in Birmingham, Bolton, and Plymouth. The deaths referred to scarlet fever, which had steadily increased in the four previous weeks from 45 to 52, declined again during the week under notice to 44; this disease caused the highest proportional fatality in Blackburn. The 34 fatal cases of diarrhœa differed but slightly from recent weekly numbers. The deaths from diphtheria, which had increased from 20 to 23 in the three preceding weeks, further rose last week to 26, of which 15 occurred in London, 2 in Liverpool, 2 in Manchester, and 2 in Oldham. The 22 fatal cases of fever corresponded with the low number in the previous week, and included 6 in London. No death from small-pox occurred during the week under notice, either in London or in any of the twenty-seven provincial towns. The number of small-pox patients in the Metropolitan Asylum hospitals, which had been 7, 5, and 4 at the end of the three preceding weeks, was again 4 on Saturday, June 4th; one new case was admitted to these hospitals during the week. The death-rate from diseases of the respiratory organs in London during the week under notice was equal to 3.2 per 1,000, and almost corresponded with the average. The causes of 84, or 2.4 per cent., of the 3,452 deaths registered during the week in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

In the eight principal Scotch towns, having an estimated population of 1,299,000 persons, 886 births and 495 deaths were registered during the week ending Saturday, June 4th. The annual rate of mortality, which had been 21.3 and 22.6 per 1,000 in the two preceding weeks, declined to 19.8 during the week under notice, and but slightly exceeded the average rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 15.1 in Aberdeen, 17.8 in Perth, 18.8 in Paisley, 19.9 in Edinburgh, 20.3 in Glasgow, 20.4 in Dundee, 21.2 in Greenock, and 22.3 in Leith. The 495 deaths registered during the week in these Scotch towns included 32 which were referred to whooping-cough, 5 to scarlet fever, 4 to diarrhœa, 4 to measles, 3 to diphtheria, 2 to "fever," and not one to small-pox; in all, 50 deaths resulted from the principal zymotic diseases, against 70 and 82 in the two preceding weeks. These 50 deaths were equal to an annual rate of 2.0 per 1,000, which was 0.9 below the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic death-rates in the Scotch towns during the week under notice were recorded in Glasgow, Edinburgh, and Leith. The deaths referred to whooping-cough, which had increased in the four previous weeks from 31 to 43, declined again during the week under notice to 32, and included 11 in Glasgow, 10 in Edinburgh, 5 in Dundee, and 4 in Leith. The fatal cases of scarlet fever, which had been 6 in each of the two preceding weeks, were 5 during the week under notice, of which 2 occurred in Edinburgh. The 4 deaths referred to diarrhœal diseases were considerably below the average, and included 3 in Glasgow. The fatal cases of measles, which had been 10 and 19 in the two preceding weeks, declined last week to 4, of which 3 occurred in Glasgow and 1 in Greenock. Of the 3 deaths from diphtheria recorded during the week under notice, 2 were returned in Glasgow and 1 in Edinburgh. The 2 fatal cases of fever showed a further decline from those registered in recent weeks; 1 occurred in Glasgow and 1 in Aberdeen. The death-rate from diseases of the respiratory organs in these Scotch towns was equal to 4.3 per 1,000, against 3.2 in London. The causes of 64, or nearly 13 per cent., of the 495 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

In the week ending Saturday, May 28th, 897 deaths occurred in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered during the week was 23.8 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 15.5; Belfast, 27.0; Cork, 20.8; Drogheda, 12.7; Dublin, 23.2; Dundalk, 13.1; Galway, 20.2; Kilkenny, 21.1; Limerick, 36.7; Lisburn, 19.3; Londonderry, 25.0; Lurgan, 10.3; Newry, 17.6; Sligo, 19.2; Waterford, 23.2; Wexford, 25.7. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.8 per 1,000, the rates varying from 0.0 in Limerick, Kilkenny, Drogheda, Wexford, Sligo, Lisburn, Lurgan, and Armagh, to 10.1 in Galway; the 6 deaths from all causes registered in the last-named district comprising 2 from typhus and 1 from whooping-cough. Among the 116 deaths from all causes registered in Belfast are 7 from whooping-cough, 1 from simple continued fever, 1 from enteric fever, and 2 from diarrhœa; and the 3 deaths in Dundalk comprise 1 from enteric fever. In the Dublin Registration District, the births registered during the week amounted to 248, and the deaths to 163. The deaths represent an annual rate of mortality of 24.1 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 23.2 per 1,000. Thirty-one deaths from zymotic diseases were registered, being 6 over the number for the preceding week, and also 6 in excess of the average for the twenty-first week of the last ten years: they comprise 17 from measles, 1 from typhus, 3 from whooping-cough, 2 from diphtheria, 1 from ill-defined fever, 1 from enteric fever, 1 from diarrhœa, 1 from dysentery, etc. Twenty-two deaths from diseases of the respiratory system were registered, being 16 under the number for the preceding week, and also 16 below the average for the twenty-first week of the last ten years; they comprise 11 from bronchitis and 4 from pneumonia or inflammation of the lungs. The deaths of 16 children (including 12 infants under 1 year old) were ascribed to convulsions. Four deaths were caused by apoplexy, 9 by other diseases of the brain and nervous system (exclusive of convulsions), and 9 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 25 deaths, mesenteric disease 2, and cancer 4. Three accidental deaths were registered. In 25 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

In the week ending Saturday, June 4th, 367 deaths occurred in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered was 22.0 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 25.8; Belfast, 22.8; Cork, 20.8; Drogheda, 29.6; Dublin, 21.3; Dundalk, 13.1; Galway, 26.9; Kilkenny, 16.9; Limerick, 24.3; Lisburn, 19.3; Londonderry, 16.0; Lurgan, 35.9; Newry, 17.6; Sligo, 14.4; Waterford, 34.7; Wexford, 21.4. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.2 per 1,000, the rates varying from 0.0 in ten of the districts to 6.9 in Waterford; the 15 deaths from all causes registered in that district comprising 3 from whooping-cough. Among the 98 deaths from all causes registered in Belfast were 1 from scarlatina, 1 from typhus, 3 from whooping-cough, 2 from enteric fever and 1 from diarrhœa. In the Dublin Registration District, the births registered during the week amounted to 163 and the deaths to 145. The deaths represent an annual rate of mortality of 21.4 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 21.3 per 1,000. Twenty-four deaths from zymotic diseases were registered, being 7 under the number for the preceding week, and 5 below the average for the twenty-second week of the last ten years; they comprise 10 from measles, 4 from scarlet fever (scarlatina), 3 from whooping-cough, 1 from ill-defined fever, 2 from enteric fever, 1 from diarrhœa, 1 from erysipelas, etc. Twenty deaths from diseases of the respiratory system were registered, being 17 below the average for the corresponding week of the last ten years, and 2 under the number for the week ending May 28th; they comprised 11 from bronchitis, 5 from pneumonia or inflammation of the lungs, and 3 from croup. The deaths of 21 children under 5 years of age (including 16 infants under one year old) were ascribed to convulsions. Two deaths were caused by apoplexy, 6 by other diseases of the brain and nervous system (exclusive of convulsions), and 7 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 17 deaths, mesenteric disease 3, and cancer 4. Three accidental deaths were registered. In 24 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Stratford-on-Avon.—With the exception of an epidemic of scarlatina in the Alcester district, Mr. G. H. Fosbroke had no special outbreak of zymotic disease to contend with during 1885. This, however, was sufficiently troublesome, and a good deal of time and attention were devoted to searching out the causes of the outbreak and all possible channels by which infection could be conveyed. By far the greatest incidence of the disease was at Astwood Bank, in the months of November and December. An earlier outbreak of scarlatina in the Salford parish occurred at a time when the educational inspector was holding his annual examination. The schoolmaster, in his anxiety to have a good muster of children, ignored the presence of "fever" in the parish, and sent for his pupils from houses where scarlatina was known to be, thus drawing upon himself a severe censure from the school managers. With scarcely an exception, the disease was confined to the artisan class. Cases cropped up at irregular intervals through December and into January, 1886, which Mr. Fosbroke attributes to the irregular manner in which cases were discharged from the sanatorium. In 11 cases the disease was carried by patients to their families, the nurses in charge not being sufficiently alive to the tenacious manner in which the infection of scarlatina clings to the hair of patients' heads and clothing. The districts experienced marked immunity from diarrhœa and typhoid fever, and there were no extended outbreaks of diphtheria. The returns of the public health are even more satisfactory than in 1884, and Mr. Fosbroke states that they are the best he has ever had the opportunity of presenting. The general death-rates range from 14.3 per 1,000 in the Stratford rural district to 16.4 per 1,000 in the Alcester district, where the prevalence of scarlatina also caused the highest zymotic death-rate, 1.4 per 1,000.

OBITUARY.

PROFESSOR WILHELM HACK.

We have already noticed the recent sudden death of Professor Hack from heart-disease while on a tricycle, but the high position which he held in Germany calls for some notice of his life and the scientific work which he accomplished. How much more he would have done had not his career been cut short in the prime of life, those can testify who knew his ardour, his patient observation, love of truth, and the excellent abilities with which he was endowed. In his own department of medicine and surgery, he had made his mark by his original researches. He was born at Karlsruhe in 1851, where he studied at the Gymnasium. When 18, he went to the University of Heidelberg. In 1870 his studies were interrupted by the Franco-German war, and he rendered aid to the wounded on the battle-fields of Wörth and Gravelotte. Had he been permitted, he would have fought for his fatherland in the ranks of the soldiers. He graduated in 1874, and having left Heidelberg, was for some time in Vienna, attending the *cliniques* of Billroth and Hebra. He also visited the medical schools of London and Paris. Returning to Heidelberg, he attended the *clinique* of Professor Simon. An interesting episode in his life was his proceeding to the war in Servia as a physician. Afterwards he became assistant at the hospital at Darmstadt, and subsequently at Freiburg (Baden).

He was appointed Professor Extraordinary (lecturing on rhinology, etc.) in the University of Freiburg in 1884, and devoted himself to the duties of his chair with the greatest enthusiasm. We have before us the titles of nearly twenty memoirs, the most important of which have reference to operations for affections of the nasal passages and pharynx. His treatise on reflex neuroses and nasal affections appeared in 1882, and his most important practical treatise "On a Radical Operation for certain Forms of Migraine, Asthma, Hay-fever, as well as numerous Nervous Disorders" appeared in 1884.

He took an active part in the discussions affecting his own speciality at the meeting of German physicians and naturalists held at Berlin last autumn, and was engaged at the time of his death in the collection of materials drawn from clinical observations for a considerable work on rhinology.

Professor Hack's real merit consisted in establishing a connection between certain nervous nasal affections and reflex effects in other nervous tracts apparently remote. By this means he threw light on hay-asthma, migraine, etc., and gave additional methods of treatment to the neurologist. Originally, he suggested as the very point of attack the swollen membrane over the lower turbinated bones; by galvano-caustic treatment of this region, he believed that most successful results were to be obtained. Subsequently, he was ready to grant that reflex neuroses might also be due to affections of other parts of the nose. On many points it may be said that the questions raised by the original mind of Professor Hack have by no means been finally settled. How far he himself might have been induced to modify or supplement his first position we cannot tell, but, be this as it may, his name will always be honourably associated with rhinology, as indeed it deserves to be. With all the modification which experience may demand there will remain a practical gain in the relief afforded in not a few distressing cases in which, prior to the his researches, mere therapeutic negation reigned.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Monday, June 6th.

Medical Officer of the Post Office.—On the House going into Committee of Supply, and in the course of the discussion of the vote for the Post Office, Mr. PICKERSGILL called attention to the cost of the medical department of the Post Office, which was, in his opinion, excessive. He especially objected to the charge of £100 for substitutes for the medical officers who were away on their holidays, and moved to reduce the vote by the sum of £100, because it introduced into the service strangers, over whom there could not be the same effective control as was exercised over established officers.—Mr. RAIKES pointed out that the question was discussed last year, and said the provisions made had been found to be adequate for the discharge of the medical duties in the absence of the medical officer, who was an old public servant, and who, no doubt, could have secured outside the department an income larger than his official salary. The Committee divided, and the numbers were—for the amendment, 31; against, 111; majority, 80. The amendment was therefore lost.

Tuesday, June 7th.

Pure Beer.—The CHANCELLOR OF THE EXCHEQUER, in reply to Mr. BONSOR, said, since the deputation, eighteen samples of beer purchased of various publicans had been carefully analysed at the laboratory at Somerset House, and he was able to inform the House that in no single case had any adulteration, noxious or otherwise, been detected, but, on the contrary, the beers were genuine and of high alcoholic strength. This statement fully corroborated the correctness of the view maintained by the Board of Inland Revenue.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members having passed the Final Examination for the Fellowship on May 25th, 26th, and 27th, were, at a meeting of the Council held on Thursday last, duly admitted Fellows of the College, namely:

D. P. James, L.R.C.P.Lond., Tenby, South Wales, Diploma of Member, dated November 16th, 1871; C. E. Richmond, L.S.A., The Infirmary, Warrington, January 28th, 1876; E. H. Hare, L.S.A., 36, Mortlake Road, Kew, August 2nd, 1876; W. K. Hatch, M.B.Aberdeen, 45, Pall Mall, S.W., August 3rd, 1876; F. Hewkley, L.S.A., 94, Cazenove Road, Stoke Newington, November 21st, 1881; H. B. Robinson, M.B.Lond., 7, York Crescent, Lower Norwood, July 20th, 1883; W. J. Hadley, L.S.A., Cavendish Road, Clapham, November 16th, 1883; L. A. Lawrence, L.S.A., Mansfield Gardens, N.W., January 22nd, 1884; E. A. Hughes, 91, Onslow Gardens, S.W., January 24th, 1884; A. H. Tubby, L.R.C.P.Lond., 63, Studley Road, Clapham, July 29th, 1884; J. W. Carr, M.B.Lond., 40, Bloomsbury Square, W.C., October 24th, 1884; F. Heatherley, 79, Newman Street, W., January 28th, 1885; H. Lund, M.B.Cantab., Whalley Range, Manchester, July 30th, 1885; W. G. Spencer, M.B.Lond., St. Bartholomew's Hospital, August 3rd, 1885.

Four other candidates passed the Examination, but, being under the legal age (25), the grant of their Diploma was postponed. Thirteen candidates were referred, having failed to reach the required standard, five for six months, and eight for one year.

At this meeting of the Council the following member, who passed the Final Examination in May, 1885, having now attained the legal age, was also admitted a Fellow.

W. L. Braddon, Upton-on-Severn, April 23rd, 1884.

The following gentlemen, having passed the necessary Examinations for the Diploma, were, at a meeting of the Council on June 9th, admitted Members of the College, namely:

H. Cockerton, Cambridge Lodge, Lower Tooting, S.W.; H. P. Dean, Dromore, Anson Road, Tufnell Park, N.; A. C. De Renzi, Chaplain's House, H.M. Prison, Wandsworth; W. J. Harris, 24, Bennett Park, Blackheath, S.W.; H. J. Johnson, 174, Bishopsgate Street, E.C.; R. Kirkpatrick, Bolingbroke Road, Wandsworth Common; R. T. Westbrook, Guy's Hospital, S.E.; A. H. Whicher, Westcombe Park, Blackheath; C. P. White, 2, Furnival's Inn, E.C.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen, having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received Certificates entitling them to practise as Licentiates of the Society, on June 2nd, 1887:

Cotes, Digby Francis Baynes, Purton, Swindon, Wilts.
Morris, Edward Walter, Southern Hill, Reading.
Peachey, George Charles, 39, Albany Street, Regent's Park.
White, Thomas Dawe, 57, Walterton Road, W.

On the same day the following gentlemen passed the Primary Examination.

Atkins, Sidney Ernest, St. Bartholomew's Hospital.
Best, William Jenner, London Hospital.
Jessop, Arthur Rowland, Guy's Hospital.

MEDICAL VACANCIES.

The following vacancies are announced.

BIGGLESWADE DISTRICT.—Medical Officer. Salary, £120 per annum and fees. Applications by June 21st to T. J. Hooper, Esq.

BIGGLESWADE UNION, WORKHOUSE, AND INFIRMARY.—Medical Officer. Salary, £40 per annum. Applications by June 21st to T. J. Hooper, Esq.

BIGGLESWADE UNION CONTAGIOUS DISEASES HOSPITAL.—Medical Officer. Salary, £40 per annum. Applications by June 21st to T. J. Hooper, Esq.

BIRMINGHAM GENERAL HOSPITAL.—Assistant House-Surgeon. Applications by July 2nd to Henry Fox, Esq., R.N.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Resident Clinical Assistant. Applications by June 23rd to the Secretary.

H.M. PRISONS IN SCOTLAND.—Resident Surgeon. Salary, £700 per annum, with residence or allowance in lieu thereof. Applications by June 18th to the Secretary, Prison Commissioners for Scotland, 130, George Street, Edinburgh.

HOSPITAL FOR CONSUMPTION, Brompton, S.W.—Resident Clinical Assistant. Applications by June 18th to the Secretary.

HOSPITAL FOR WOMEN, Soho Square, W.—House-Physician. Salary, £75 per annum, with board, etc. Applications by June 22nd to the Secretary.

INVERNESS DISTRICT ASYLUM.—Assistant Medical Officer. Salary, £80 per annum, with board, etc. Applications by June 15th to Dr. Aitken.

KILBURN, MAIDA VALE AND ST. JOHN'S WOOD GENERAL DISPENSARY.—House-Surgeon. Salary, £100 per annum. Applications by June 15th to the Honorary Secretary.

LEEDS UNION, TOWNSHIP OF HEADINGLEY-CUM-BURLEY.—Medical Officer. Salary, £55 per annum, and fees. Applications by June 20th to John King, Esq.

LIVERPOOL DISPENSARIES.—Assistant-Surgeon. Salary, £80 per annum, with board, etc. Applications by June 27th to the Secretary.

MASON SCIENCE COLLEGE, Birmingham.—Professor of Physiology. Applications by June 30th to G. H. Morley, Esq.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street, W.—Anæsthetist. Applications by June 24th to the Secretary.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street, W.—Lecturer on Operative Dental Surgery. Applications by June 24th to the Secretary.

PARISH OF ST. MARY, Newington.—Medical Officer of Health. Applications to the Vestry Clerk, Vestry Hall, Walworth, S.E.

QUEEN'S COLLEGE, Birmingham.—Professor of Surgery. Applications by June 15th to the Secretary.

QUEEN'S HOSPITAL, Birmingham.—Honorary Surgeon. Applications by June 18th to the Secretary.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William Street, Strand, W.C.—House-Surgeon. Applications by June 11th to the Secretary.

TOWNSHIP OF TOXTETH PARK.—Resident Medical Officer. Salary, £100 per annum, with board, etc. Applications by June 15th to J. Moulding, Esq.

WESTMINSTER HOSPITAL, S.W.—Fourth Assistant-Surgeon. Applications by June 14th to the House Committee.

WHITEHAVEN AND WEST CUMBERLAND INFIRMARY.—House-Surgeon. Salary, £120 per annum, and extras, with apartments, etc. Applications by June 11th to the Secretary.

MEDICAL APPOINTMENTS.

BURDWOOD, J. Watson, L.F.P.S.G., L.S.A.Lond., re-appointed Medical Officer of Health to the Bourne Rural Sanitary District.

CARPENTER, George Alfred, M.R.C.S., L.S.A., appointed House-Surgeon to the Evelina Hospital for Sick Children.

DAVIES, Arthur H., L.R.C.P., M.R.C.S., appointed Resident Medical Officer to the Liverpool Infectious Diseases Hospital, *vice* Sydney J. Palmer, M.B., M.R.C.S., resigned.

EVANS, Chas. Walter, M.D., appointed Medical Officer of Health to the Bakewell Urban Sanitary District, *vice* T. H. Brocklehurst, M.R.C.S., L.S.A., resigned.

GIFFORD, G. T., M.R.C.S., L.S.A., appointed House-Surgeon to the Blackburn and East Lancashire Infirmary, *vice* Edmund Vaudrey, M.B., M.R.C.S., resigned.

HARRISON, Walter D., M.D.Univ.Harv., L.D.S.R.C.S.Eng., appointed Honorary Dental Surgeon to the Brighton, Hove, and Sussex Throat and Ear Dispensary, *vice* W. Lloyd Poundall, L.D.S.R.C.S., resigned.

HUGHES, Edgar A., M.R.C.S.Eng., L.R.C.P., L.S.A., appointed Registrar and Chloroformist to the Evelina Hospital for Sick Children, *vice* George Alfred Carpenter, M.R.C.S., L.S.A., resigned.

HUMPHREYS, J. R., F.R.C.S., appointed Honorary Consulting-Surgeon to the Montgomeryshire Infirmary.

KNAGGS, Francis H., M.R.C.S., L.R.C.P., appointed House-Surgeon to the Gloucestershire General Infirmary and Eye Institution, *vice* Anthony J. Bathe, M.R.C.S., L.R.C.P., L.S.A., resigned.

MCLEAN, Charles J. R., M.B. and C.M.Edin., appointed Medical Officer of Health for the Town and District of Yeadon, near Leeds.

MOTT, F. W., M.D., M.R.C.P., appointed Medical Registrar to the Charing Cross Hospital, *vice* Montague Murray, M.D., resigned.

MOXHAM, M. C., L.S.A., appointed House-Surgeon to the Central London Ophthalmic Hospital, *vice* W. Glanville Barker, Esq., resigned.

NEECH, Jas. Thos., L.R.C.P.Edin., L.F.P.S.Glasg., L.M., appointed Surgeon to the Oswestry Dispensary.

O'NEILL, J. G., L.R.C.P.Ed., L.R.C.S.Ed., appointed Assistant House-Surgeon to the Rotherham Hospital, *vice* T. H. Fiske, M.B., resigned.

POWER, D'Arcy, M.A., M.B.Oxon., F.R.C.S.Eng., appointed Assistant-Surgeon to the Victoria Hospital for Children, Chelsea.

RINGER, Sydney, M.D., F.R.S., appointed Holme Professor of Clinical Medicine, *vice* Wilson Fox, M.D., F.R.S., deceased.

ROBERTS, G. A. E., M.R.C.S., L.S.A., appointed Medical Officer to the No. 4 District of the New Winchester Union, *vice* Thomas Roberts, M.R.C.S., L.S.A., deceased.

SHEILD, A. M., B.S., M.B.Cantab., F.R.C.S., appointed Assistant-Surgeon to the Charing Cross Hospital.

TATHAM, E., M.B.Cantab., M.R.C.S., appointed Assistant House-Surgeon to the Cheltenham General Hospital, *vice* F. Mason, M.R.C.S., L.S.A., resigned.

THE ANATOMICAL SOCIETY.—At a meeting of the Anatomical Society of Great Britain and Ireland, held on Monday, June 6th, the following resolutions were adopted:—"That not less than four meetings be held in each year." "That the officers of the Society shall consist of a president, three vice-presidents, a treasurer, a council of twenty, and three secretaries." "That the officers be elected by ballot at each annual meeting." "That, as far as possible, in the election of president and vice-presidents, there shall be two representatives of England and one each from Scotland and Ireland." "That there shall be a secretary for England, one for Scotland, and one for Ireland." "That the Council shall, from amongst their number, select six members to form, together with the president, vice-presidents, treasurer, and secretaries, a committee of management." The subjoined list of officers were elected:—*President*, George Murray Humphry, F.R.S.; *Vice-Presidents*, John Struthers, M.D., John Wood, Daniel J. Cunningham, M.D.; *Treasurer*, Charles Stewart; *Secretaries*, C. B. Lockwood (England), David Hepburn, M.D. (Scotland), William Thornley Stoker, M.D. (Ireland); *Council*, William Mitchell Banks, John Curnow, M.D., J.N.C. Davies-Colley, Edward Bellamy, Frank Beddard, John Cleland, M.D., G. B. Howes, John Langton, Henry Morris, Edmund Owen, Thomas P. Pick, Johnson Symington, Robert Reid, M.D., George D. Thane, Sir William Turner, F.R.S., Frederick Treves, Alexander Macalister, F.R.S., Bertram Windle, Alfred H. Young, Arthur Thomson. The next meeting will be held on July 7th, when papers will be read by Professor Macalister, F.R.S., Dr. Brooks, and Mr. J. Bland Sutton; and specimens, etc., will be shown by Mr. Rickman J. Godlee, Mr. W. Bruce Clarke, Mr. James Barry, and Dr. W. J. Collins.

SOCIETY OF APOTHECARIES OF LONDON.—The examination in Arts of the Society was held in the Hall of the Society on the 3rd and 4th inst., when there were 201 candidates. The class-list will be published, it is understood, early next week. The third examination in Arts of the Society of Apothecaries for the year will be held on the 2nd and 3rd days of September next, and the fourth examination in Arts is fixed for the 2nd and 3rd days of December next.

TEMPERANCE IN SWITZERLAND.—Arrangements have been made for a great temperance meeting of an international character to be held at Zurich on the 9th and 10th of September next. The main topics of discussion will be the regulation of the drink traffic, the alleged nutritive properties of strong liquors, asylums for inebriates, and statistics of coffee-houses, refreshment-rooms, and other places for the sale of non-alcoholic drinks.

MR. DANIEL WEBSTER TOMLINSON has been presented with a very handsome silver inkstand by the members of the Loyal Providence Lodge of Odd-Fellows, also with a gold pencil-case and a cheque for £50 by his friends and patients in Oundle and the neighbourhood, upon his retiring from practice on account of failing health.

PRESENTATION OF PORTRAIT TO SIR HENRY ROSCOE.—The colleagues of Sir Henry E. Roscoe in the Owens College, Manchester, have presented Sir Henry with his portrait on the occasion of his resignation of the Chair of Chemistry in the college. The portrait is to hang in the college. Lady Roscoe was also presented with a replica.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 P.M.—Mr. Christopher Heath: On Certain Diseases of the Jaws.

TUESDAY.—ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M. Mr. J. D. Malcolm: The Condition and Management of the Intestine, after Abdominal Section, considered in the Light of Physiological Facts. Dr. Radcliffe Crocker: Dermatitis Gangrænosa Infantum. Mr. Hutchinson: On a Form of Chronic Inflammation of the Lips and Mouth, which sometimes ends fatally, and is usually attended by some disease of the skin.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which should be forwarded in stamps with the announcement.

BIRTHS.

BUTTERWORTH.—June 2nd, at Lucknow, the wife of Surgeon S. Butterworth, Army Medical Staff, of a son. (By telegram.)

PIGGOTT.—On June 6th, at Teignmouth, South Devon, the wife of F. Cecil H. Piggott, B.A., M.B., B.C.Cantab., M.R.C.S., L.S.A., of a daughter.

MARRIAGE.

SOUTAR—GRANT.—At Pitlochry, N.B., on June 2nd, by the Rev. J. M. Donald, B.D., Robert Soutar, M.B., C.M.Aberdeen, of Montrose, to Mary Martha, daughter of William Grant, Esq., late of Kinclune, Forfarshire, N.B.

DEATH.

BEGLEY.—On April 11th, at 26, St. Peter's Square, Hammersmith, William Chapman Begley, M.D., Trin. Coll., Dublin, F.R.C.P., late superintendent of male department for the County Asylum, Hanwell, in his 85th year.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 9.30; o.p., M. Th., 9.30; Eye, Tu. F., 9.30; Ear, M. Th., 3; Throat, M. Th., 9.30; Skin, Tu. F., 9.30; Electrician, Tu. F., 9.30; Dental, W. S., 9.30.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, M., 9; Skin, Th., 1; Dental, W.S., 9.15.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY—9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY—10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's —1 30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M.: North-west London; Chelsea Hospital for Women.

FRIDAY—9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY—9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

WE wish it to be distinctly understood that when a manuscript is forwarded to the BRITISH MEDICAL JOURNAL, it is implied that a similar manuscript has not been sent elsewhere, unless special notice of the fact be given; we shall regard any infringement of this rule as a breach of faith.

QUERIES.

WORKS OF SYDENHAM.

G. R. G. asks whether copies of the *Opera Sydenhami*, editio altera, published in 1685 (1) are very rare, and (2) what is the value of a well-preserved and complete copy?

*** We are informed by Mr. Quaritch, of Piccadilly, that copies of the work referred to are common and of no value.

ANNUITIES.

INQUIRER asks the amount required to secure an annuity of say £200 for a widow, aged 42 years, and the names of any offices where such are granted.

EDUCATION OF BACKWARD CHILDREN.

MR. A. BETHELL (Bridgnorth) writes: A clergyman, not very well off, has a son, aged 9, who is unable to learn or speak distinctly. He is of good stature. Could any member kindly inform me of any institution where the boys are not quite idiots that I could send this boy to?

A QUESTION OF DOOR-PLATES.

"PUZZLED" asks what is the correct title on the door-plate of a general practitioner in the case of (1) a M.D. and F.R.C.S.; (2) a M.B. and Surgeon? One sees such varied appellations as (1) Dr. S. Brown, Dr. Jones, Surgeon; Dr. Robinson, F.R.C.S.; or H. V. Robinson, M.D., Surgeon. (2) Horatio Brown, M.B., Surgeon; Surgeon Jones, Mr. H. V. Robinson, Surgeon.

*** It is a matter of taste which we cannot undertake to decide.

CHICORY AS A CAUSE OF HÆMORRHOIDS.

F.R.C.P. writes: In an article on "Kola Nuts" in a recent number of the *Society of Arts*, I see it stated that "kola is now often mixed with some of the preparations of coffee which enables the vendors to state that this mixture contains 'no chicory,' which is of great importance now that it is proved that the addition of chicory conduces to the growth of hæmorrhoids." Can any of your readers inform me if chicory has this effect? I drink much coffee myself, specially prepared with chicory, in preference to coffee without any, and find that my hæmorrhoids at times are very troublesome; can it be owing to my partiality for coffee thus prepared? I am a very abstemious liver, but a long residence in the East years ago landed me in England with this troublesome complaint, for which I had a successful operation many years back, but I have been again, the past few years, annoyed with my old trouble, and this article in question has made me now address you.

ANSWERS.

FAIR PLAY.—1. Application for membership is made on a paper signed by Fellows of the Society, setting out the scientific work done. 2. Papers contributed to the *Transactions* constitute a claim, but not an essential condition.

AN IRISHMAN'S communication has been forwarded to the Secretary of the Reception Committee.

W. E. S. STANLEY.—1. Yes. 2. Probably. 3. By British African or African steamship from Liverpool £15 to Teneriffe and back.

TENDO ACHILLIS.—See BRITISH MEDICAL JOURNAL, December 4th, 1886, page 1121; also February 12th, 1887, page 355.

RESIDENCE OF SIR CHARLES BUNBURY.

DR. PEARSE (Botesdale, Suffolk) writes: In reply to "Inquirer" in the JOURNAL of May 21st, I wish to say that Sir Charles Bunbury lived and died at Great Barton Hall, Bury St. Edmunds, Suffolk, which is now in the possession of Sir Henry Bunbury.

TYLOSIS OF THE TONGUE.

DR. HATCHETT (Leicester) writes: L.R.C.P. should cease to use caustics or glycerine, but let one tablet of potass. chlor. and borax be dissolved slowly in the mouth four times daily, and give some mild aperient frequently. If the patient will not give up smoking let him use only Colonel Ross's patent pipe, taking out the sponge which he will find in the stem, and filling lightly the hollow stem with absorbent cotton-wool, removing the plug of cotton-wool, and replacing it with fresh wool several times during the smoking of each pipeful of tobacco. Let him smoke no tobacco which has any admixture of dark coloured tobacco in it, and no bird's eye or fine cut, but only the very mildest flake coarse-cut tobacco; that ordinarily sold in packets is too strong, and irritates a diseased tongue. I hope L.R.C.P. will communicate with me if he feels disposed to try the above.

CONSTIPATION IN INFANTS.

PHILIP H. KIDD, M.B. (Bassingbourne) writes: With regard to the case brought forward by "Semper Fidelis," I would suggest the following plan of treatment:—If the child can still be induced to take a powder, give it each night one consisting of a grain each of hyd. c. cret. pulv. rhei, and pulv. sod. bicarb. At any rate give it three times a day about an hour after food (I presume the baby is weaned) one teaspoonful of the following mixture:—℞ Pot. iod., gr. xij; Glycirrh. ext. liq., ʒss; sp. chlorof., ʒj; tr. bellad. ʒiss; aq. ad. ℥iij. M. Ft. mist. If your correspondent adopts this line of treatment, perhaps he will be kind enough to state his experience in the columns of the JOURNAL.

NOTES, LETTERS, ETC.

THE INVERSION OF THE OBJECT ON THE RETINA.

GEORGE MACKAY, M.B., F.R.C.S. (Edinburgh), etc., writes: Dr. Sankey's fallacy lies in thinking that he can still see the "various objects" themselves, whereas he really sees only that image of them formed on the back of the eye nearest to him, namely, B. Dr. Sankey considers the case in which the image at the back of B

is an inverted one, and rightly concludes that the image on his own retina must be upright, but wrongly refers it to the primary "various objects." If the image on B had been erect, then that on his own retina at A would of course be inverted.

But no sooner has Dr. Sankey arrived at the very natural and demonstrable conclusion that the normal human or bovine eye is an inverting mechanism, then he rejects it as "incongruous." He will probably cease to do so if he remembers that the retina is only a receiving and not an interpreting surface; that rays of light falling on it are in the process of sensation referred out again, or "projected" to the points from which they respectively emanate. Thus, when looking across a room at the opposite wall, the rays which come up to the eye from the floor of the apartment pursue their way to the roof of the fundus oculi, while those coming down from the ceiling pass to the floor of the fundus, and those from the wall to which the eye is directed occupy intermediate positions. The consequence is that an inverted image is formed on the retina; nevertheless, in the act of sensation the rays are referred back to their proper sources, and the impression that floor and ceiling are in their proper relation or "erectness" results.

That the nervous apparatus of the eye possesses this power of projection can be very easily demonstrated by allowing only comparatively few rays to enter the eye at one time—thus, by moving a lighted candle into various positions (above, below, and to either side) within the field of vision of the eye of an intelligent person, who will have no difficulty in referring the light to its proper position at any moment, though his eye does not follow its movements, but is directed all the while towards some fixed object. That the muscular sense of the muscles of the eyeball is also concerned in determining the accuracy of "projection" (at least, when such a co-ordinated movement is exacted, as pointing to the flame quickly with the finger while the eye is directed forwards fixedly as before) is evident from observations of the same kind made when one or more of the ocular muscles are paralysed.

Mere "projection," however, is not the only factor concerned in our final conclusion as to the position occupied by an external object whose image falls on our retinæ. Use and wont, and the collateral education of our other senses, also play an important part.

C. A. GREAVES, M.B.Lond. (Derby) writes: In Dr. Sankey's memorandum on this subject in the JOURNAL of May 21st, he appears to have confused himself by writing down an alternating series B | C ! D | E ! in which E represents the last addition to the row of prepared eyes (and is placed in front of the others so as to be immediately exposed to the landscape or field of view), and then forgetting that in determining the signs of inversion or non-inversion, he must start from E and not from B. Of course, each successive addition reverses the signs of the other members of the series. If E be the front member, its sign will be that of inversion, E|, as Dr. Sankey admits, as to B when B was the primary recipient; the series, if ended with E, would be A | B ! C | D ! E | with the image in A inverted. The addition of F would cause the image in A (the observer's eye) to be re-erected; but really this is all beside the question, which is not whether a certain arrangement of lenses will cause the image of an object to be upright on my retina, but whether that image will be inverted when no extraneous lens is interposed. Of such inversion there is not the slightest doubt. The physiological explanation of the erectness of the mental picture is simply that correct visual localisation is acquired by associated tactile localisation; but it has always seemed to me that an explanation is scarcely necessary, considering that we look out, as it were, from our retinæ at the field of vision instead of looking at the picture on the retina as an outside observer might be supposed to do.

EDMOND MURPHY, L.K.C.P.I., etc. (Ballyroan) writes: Dr. W. W. Ireland, in his letter to the JOURNAL of May 28th, regarding the inversion of objects on the retina, refers to the explanation, believed by many, that the visual centre of the brain and the sense of touch work together, and, as the latter discovers the object to be not inverted, the former, from long use and practice, regards it likewise. Now, if such be the fact, a man who, blind from his birth, has just acquired the sense of sight should for some time after see everything about him inverted till the visual centre of his brain had learned to act in harmony with his sense of touch. I have never had the opportunity of learning whether this be so by direct inquiry from such an individual, nor have I ever seen it stated in print.

Dr. George F. Burder's theory (published in the same number of the JOURNAL) is that which has long been held by Müller and Volkmann, and seems to me the most rational explanation, namely, that everything being inverted, no correction is needed. A good example of this theory is the fact that the inhabitants of that part of the earth opposite to us feel as upright in position as we do, owing to the sky and earth retaining the same relations to their bodies and each other.

POISONING BY NUTMEG.

GEO. H. CARVELL, B.A., M.D., etc. (Toronto) writes: In answer to Dr. James Alexander *re* poisoning by nutmeg in the JOURNAL of May 14th, 1887, I wish to relate the following case.

Mrs. F., aged 24, in the third month of pregnancy, being in a good state of health, took five powdered nutmegs, weighing about one drachm each, in one dose, with sugar and water, for the purpose of procuring abortion. I saw her three hours afterwards, when she presented the following symptoms:—Pulse 140, temperature normal, delirious for a few moments, calling out loudly, then sinking into a stupor, from which she could be roused to again become delirious. The only complaint she made at any time was of an immense weight pressing upon her. An emetic of mustard and warm water acted promptly, but very little nutmeg was brought up. A dose of castor-oil was then given, followed by repeated doses of potassium bromide and ammoniated tincture of valerian. Of course no effect was produced upon the uterus by the nutmeg, and in about two days the patient recovered, entirely resigned to her pregnant condition, and at the present time is daily expecting Nature to relieve her at full term. This case was reported to the Toronto Medical Society in December, 1886, and afterwards published in the Canadian *Practitioner* of January, 1887.

CONDY'S FLUID.

An action was tried in the Chancery Division last week which had been brought by the proprietors of this well-known disinfecting fluid against one of their customers, on the ground that the fluid as sold by the latter had been wilfully diluted to such an extent that it was 50 per cent. weaker than that supplied. It transpired that the fluid was sent out in fifty-gallon casks, and was subsequently bottled. The difference in strength was not disputed, but it was urged by Dr. Tidy on behalf of the defendants that the weakening took place in consequence of the action of the wood on the solution of the salt, and not from dilution. On this evidence the prosecution broke down, and a verdict was given in favour of the defendants. It is nevertheless satisfactory to find that some attempt is made by manufacturers of sanitary materials to ensure the public getting what they ask for; and the example will doubtless have a favourable effect on retail dealers generally.

OLEOMARGARINE.

JOHN ROCHE, M.D., D.S.Sc. (Retired Indian Service, Kingstown) writes: I take the liberty of requesting that my unqualified dissent be recorded from the evidence given before the Royal Commission on butter substitutes by Sir F. Abel, Mr. Allen, and Mr. Otto Hehner. I fear that the greater number of chemists have accepted Professors Junghens, Koumiew, Odling, and Bell's early expressed opinions, and used their words, that oleomargarine or butterine is a fat and a wholesome food. Now it is not a fat, but a compound of oleine and margarine, proximate principles obtainable from fats, but no more food than is CO_2. Oleomargarine holding a little stearine or palmatine and not any butter, is not acted on by the saliva, the gastric juice, the pancreatic juice, or the bile. It is most rendered miscible with water by digestive juices. Butter is completely emulsified by the saliva, pancreatic juice, and by bile. Two ounces of melted butter with a warm drink acts as a diffusible stimulant, and diaphoretic; oleomargarine as a nauseant or emetic. It is a wholesome food in the same way as castor-oil; anyone can verify for himself.

Oleomargarine is not found in nature in either animals or vegetables; it is a compound begotten by resolving fats through heat. Butter is found in nature, in milk, and Professor Liebig's dictum must hold good, that no product from the chemists can bear a comparison to the similars adjusted by nature. To say good oleomargarine is better than bad butter is more than specious, it is certain to be misleading. Oleomargarine flavoured with butter and acidified to simulate butter is a common article on sale, most difficult of discernment by either public or practitioner; it is a fraud more ingenious than watered milk. It is used largely in confectionery, as it keeps well. The Public Health Act and public Boards are utterly inadequate for dealing with the question.

In conclusion, I would say that bad butter should not be in the market, as by clarifying through boiling, as in India, and removing the unstable and lighter oils, as in ghee, it can be made to keep well, and it has been thus much more acceptable to the natives of Hindustan for ages.

SALICYLATE OF SODIUM IN ACUTE TONSILLITIS.

MR. A. H. W. AYLING (Great Portland Street) writes: Dr. M. R. Brown, in his letter in the JOURNAL of June 4th, p.1252, has named no new thing. I believe the salicylate of sodium has been more or less freely prescribed in acute tonsillitis for some time past in this country. I have given it for more than a year with most successful results. Only ten days since I was sent for to a lady suffering with all the premonitory symptoms of acute tonsillitis, pain in swallowing, pulse 132, temperature 102.8°, much swelling, and redness of the fauces. Ten grains of the salicylate every three hours produced marked relief, lowered the pulse and temperature, and, I am convinced, cut short what promised to be an acute attack, which on the old lines of treatment would have resulted in ulceration of the tonsils with all its attendant miseries. I always prescribe the salicylate of sodium in these cases, as I am confident there is an intimate relationship between acute tonsillitis and rheumatism.

MR. EDWARD G. DUTTON (Plymstock) writes: The letter of Dr. M. R. Brown on the treatment of acute tonsillitis by salicylate of sodium reminds me of a letter written by me on February 6th (acknowledged but not inserted) under the heading of "Acute Rheumatic Tonsillitis." The case referred to in the above letter I was called to one evening, and found acute tonsillitis with intense inflammation of the surrounding structures; temperature 103.4°, pulse 120; redness, pain, and swelling of both knee-joints, profuse perspiration, with diagnostic rheumatic smell. Treatment, ten grains of salicylate of sodium every two hours. Next morning, temperature 99°; very little pain, and swelling of throat and joints subsiding. Evening temperature and pulse normal; no pain, and swelling nearly gone.

The connection between acute tonsillitis and subacute rheumatism is very interesting. It is in cases of acute tonsillitis following rheumatism, and *vice versâ*, where we should expect to find the salicylate of sodium almost specific. Why should not the poison of acute rheumatism (whatever it may be) sometimes expend itself on the structures of the throat?

TRANSVERSE SEPTA IN THE CERVIX UTERI.

DR. HOWARD MURPHY (East Twickenham) writes: M. Budin's note on transverse septa of the cervix uteri, in the JOURNAL of April 23rd, page 897, reminds me of a case of the kind. In my student days I was asked by the resident accoucheur at St. George's Hospital to go to a confinement case. I got there in the afternoon. The patient was a primipara, about 23 years of age, and the labour had proceeded about four hours. The head was still high up, the os hardly dilated at all, but the pains were rather frequent and strong, so I remained. An hour or two later I examined her again, and to my utter astonishment found two apertures to the uterus, one in front the other behind, each about the size of a shilling, separated by a thick transverse band continuous with the cervix on each side. I waited till several more pains had acted, but the head seemed to make no advance, and to present equally at each os. I now applied to the resident obstetric assistant at the hospital, but could hardly get him to come when I said the patient had "two oses to her uterus," he thought it so absurd. However, he came and found the uterus had two oses, but he could not then operate, and told me to remain with the case in hope that one os would sufficiently dilate to let the head pass. By the next morning the oses were each the size of half-a-crown, the band between an inch broad in the narrowest part, and about one-third of an inch thick, the head pressing hard on it with each pain, and showing no preference for either aperture. The patient getting weak at mid-day, I again sought the help of my instructor. He applied forceps through the anterior aperture with some difficulty, and after pulling hard for some time the band ruptured about its centre, and the labour was speedily ended. The patient recovered with no bad symptoms, and am sorry to say I never traced the history of the ruptured band after the labour.

FILTER FOR HOME USE.

DR. J. HATFIELD WALKER, F.C.S., writes: In reply to "M. O. H.," I beg to inform him that a year ago I commenced a series of experiments with various filters and filtering media, to endeavour to ascertain their relative value. I am

still conducting the experiments, but have published the first series of sixty bacteriological and chemical analyses in the *Sanitary Record*, from which they have been copied into various British and foreign papers.

From a bacteriological point of view, Pasteur's is perhaps the best; Coke's I also found to give good results; but none of these have much influence on the dissolved mineral or organic matter, nor on the ptomaines. The separation or destruction of harmful organic matter I think is of even greater general importance than the separation of bacilli.

Taking the results of both the bacteriological and chemical examination, I found that prepared charcoal, as contained in Mawson and Swan's filter, gives the best results. It separates almost the whole of the lime salts, destroys special bacilli (as B. subtilis), oxidises and destroys organic matter, even strychnine being destroyed by it.

Early Tracheotomy in Diphtheria.

Dr. C. R. Illingworth writes: The remarks by Mr. Owen in the Journal of May 21st, relative to the impracticability of special local antiseptic measures in the diphtheria of children, are most important and true. Even the simple operation of spraying the throat is a source of terror to a child. If, however, medicines can be given which, besides a pleasant taste, have a local antiseptic and general curative action combined, the necessity for terrifying local measures disappears. Such a medicine I have indicated in the Journal of May 1st, 1886. Children take it readily, and when given every hour or two hours, it constitutes a most effective local antiseptic during each act of deglutition.

The sodic iodide as a solvent for the biniodide of mercury in the treatment of diphtheria has advantages not possessed by the potassic in that, with other salts of soda, it diminishes the fibrin-forming power of the blood, and thus at once checks the effusion of false membrane caused by the irritating presence of the micro-organisms peculiar to the disease (*vide* Jones and Sieveking's *Pathol. Anat.*, p. 20).

For a child of from 2 to 4 years of age, I prescribe as follows: sol. hydrarg. bichlor., two drachms; sodæ iodid., fifteen grains; syrup, half an ounce; water to two ounces. One teaspoonful of this mixture should be given every hour until the temperature is reduced to the normal, and all false membrane has disappeared, when remedies such as iron or dilute hydrochloric acid and chlorate of potash should be given to complete the cure.

As for tracheotomy, whether early or late, the necessity for the operation would never arise if the treatment I have suggested and proved were always adopted.

Foreign Bodies in the Alimentary Canal.

D. W. Aitken, M.B. (Edinburgh) writes: I wish to record two cases in which foreign bodies were swallowed. In the first case a child, one year old, bit off close to its attachment a caoutchouc teat, thus practically the whole entering the alimentary canal. This body was ejected at stool about five days after, although during the interval between swallowing and evacuation no symptoms were manifested.

But much more remarkable is the second case. A child, aged 5 years, was brought to me with the statement that she had just swallowed a large lead button, or rather weight, such as ladies put at the corners of their dresses to make them hang well. Although cross-questioned, the child gave an intelligent account of the incident; and so while I expressed my doubt as to the truth of the statement (the body being so large), yet I advised the parent to administer large pieces of dry bread, almost no fluid, and to watch the stools—the same treatment as was adopted in the previous case. To my astonishment the mother brought the lead to me, and stated that it had been passed a few days after. No symptoms had declared themselves except a little pain a few days before the evacuations. This was probably at the time of passage through the pylorus. This mass of lead measures 2.5 centimètres in diameter, is 4 millimètres thick, and weighs 19.65 grammes, that is, practically, three-quarters of an ounce.

In conclusion, let me say I send you these cases as it seems important to know with what formidable substances the alimentary canal can deal, and how little mischief may result from their presence, especially if careful expectant treatment be adopted.

Obscure Case of Intestinal Obstruction.

Dr. E. F. Flynn (Sunderland) writes: While Mr. Stonham is to be congratulated on the excellent result of his case of laparotomy, is it not possible that the patient was suffering from peritonitis alone, and that no volvulus existed? My reasons for suggesting this are that all the symptoms of peritonitis were present, and that it did actually exist was demonstrated at the operation; might not the enema have sufficiently acted on the lower portion of the bowel to have expelled all gas from it, while the portion of the intestine above the splenic flexure retained its gaseous contents from having been paralysed owing to the peritonitis until acted upon by the operator's hand, which stimulated it into expelling the flatus *per anum*? The character of the vomiting, too, was more characteristic of peritonitis than of obstruction at the splenic flexure of the colon, in which case it would probably have become stercoraceous; while on the other hand volvulus of the splenic flexure of the colon is exceedingly rare, and all the recognised predisposing causes were absent, and had it existed for four days, it would surely have left sufficient pathological evidence to place the matter beyond all doubt.

I feel sure that Mr. Stonham will see that these remarks are written in no captious spirit, but merely to help to clear up what he very properly describes as an obscure case.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. J. Ward Cousins, Southsea; Dr. W. Aitken, Edinburgh; Dr. Taafe, Brighton; Mr. T. Holmes, London; Dr. Macpherson, London; Surgeon-Major S. Ray, Malta; Mr. E. Murphy, Ballyroan; Dr. P. J. Sweetnam, Halifax, Nova Scotia; Messrs. Leoflund and Co., London; Mr. A. Cooper, London; Surgeon H. J. Barnes, Bermuda; Dr. Jacob, Leeds; Surgeon-Major Rogers, Cairo; Mr. E. G. Dutton, Plymstock; Mr. J. T. Neech, Oswestry; Dr. Holman, Reigate; Mr. J. H. Gibson, Aldershot; Dr. Murrell, London; Mr. P. Thornton, Canterbury; Mr. G. A. Gloag, Bristol; Dr. W. A. Satchell, Bonn; Mr. E. T. Davis, Cowbridge; Dr. W. Allan Jamieson, Edinburgh; Dr. Dolan, Halifax; Professor Whitla, Belfast; Dr. Casper, Berlin; Surgeon Roche, Ayr; Mr. E. P. Hardey, Hull; Mr. T. S. Ellis, Gloucester; Dr. Maxwell, Woolwich; Dr. Percy Boulton, London; Dr. J. M. Barnett, Belfast; Mr. A. H. W. Ayling, London; Surgeon A. Hayes, Cairo; Inquirer; Mr. J. Hatchett, Ashby de la Zouche; Dr. F. J. Smith, London; Surgeon Bartlett, Jubbulpore, Bengal; Dr. G. H. Carvell, Ontario; Dr. G. Elder, Nottingham; Brigade-Surgeon T. W. Wright; Mr. W. Sykes, Mexboro; Mr. J. Ferguson, Perth; Fair Play; Mr. J. Croft, London; Mr. C. S. Loch, London; Mr. H. C. M. Gibson, Surbiton; Dr. R. M. Simon, Birmingham; Dr. C. S. Jeaffreson, Newcastle-on-Tyne; Mr. C. J. Rideal, London; Mr. Watson Cheyne, London; Dr. Sinclair, Belfast; Mr. C. Sanderson, London; Mr. W. Steer, London; Dr. Mackenzie, Glossop; Professor Gairdner, Glasgow; Dr. J. C. Voigt, Southport; Mr. R. H. Hilliard, Aylesbury; Brigade-Surgeon Harman, Winchester; Professor J. B. Balfour, Oxford; The Secretary of the Royal College of Physicians London; Mr. W. Marriott, London; Double Florin; Messrs. Moss, Rimington and Co., Selby; Dr. J. W. Watkins, Chester; Dr. W. S. Playfair, London; Dr. Pearse, Botesdale; Mr. J. Deakin, Egerton; Mr. A. A. Smith, London; Mr. Gains, Weston-super-Mare; Dr. F. Needham, Gloucester; Dr. Duffey, Dublin; Mr. R. J. Godlee, London; Mr. Lennox Browne, London; Mr. P. H. Kidd, Bassingbourne; Dr. G. H. Mackenzie, Edinburgh; Publishers of Scribner's Magazine, London; Dr. Orwin, London; Surgeon-Major Corban, Dublin; Dr. Chesnutt, Howden: Mr. A. E. Barrett, London; The Honorary Secretary of the Association of Members of the Royal College of Surgeons, London; Mr. C. B. Lockwood, London; Surgeon W. H. Allen, Pinetown, Natal; Mr. H. G. O. Wharry, Scarborough; Mr. W. A. Eniston, Ipswich; Dr. M. Dutch, Crewe; Mr. E. East, London; Mr. G. M. Allender, London; The Dee Oil Company, London; Dr. Ashby, Grantham; A. M. S.; Mr. P. H. Cogan, Bradford; Dr. R. McRitchie, Huntingdon; Mr. F. Wilson, Keighley; Mr. W. E. S. Stanley, Wellow; Mr. D. W. Tomlinson, Wansford; Dr. G. S. Murray, Putney; Our Manchester Correspondent; Dr. F. A. A. Smith, Cheltenham; Mr. J. M. Horsburgh, London; Dr. S. Morton, Croydon; Mr. A. Wattie, Echt, N. B.; Dr. A. Napier, Crosshill; Mr. Maynard, Newcastle; Dr. Tatham, Salford; Mr. D. Langdon, London; Dr. Clippingdale, London; Mr. W. Propert, London; Mr. J. A. Altham, Penrith; Dr. W. F. Grant, London; Mr. J. W. Burdwood, Bourne; Mr. O. S. Fisher, Plymouth; Dr. Thursfield, Leamington; Dr. W. H. Barlow, Manchester; Council of the Society of Arts, London; Dr. S. Phillips, London; etc.

BOOKS, ETC., RECEIVED.

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LECTURES
ON
CERTAIN DISEASES OF THE JAWS.

Delivered at the Royal College of Surgeons of England, June, 1887.

By CHRISTOPHER HEATH, F.R.C.S.,
Hunterian Professor of Surgery and Pathology.

Lecture I.—On Cystic Diseases of the Jaws.

[Concluded from page 1261.]

Cysts in connection with undeveloped teeth, or Dentigerous Cysts (coronary cysts of Magitôt), may occur in either jaw. These, as already mentioned, may suppurate and give rise to abscess, which may be confounded with suppuration within the antrum, or may project into the antrum, filling the cavity or communicating with it.

Dentigerous cysts arise in connection with teeth which from some cause have remained within the jaw, and have undergone a certain amount of irritation. They are almost invariably connected with permanent teeth, though Mr. Salter mentions a case in connection with a temporary molar occurring in the practice of Mr. Alexander Edwards, late of Edinburgh; and in a remarkable specimen belonging to Mr. Cartwright, which will be afterwards referred to, the tooth is a supernumerary one. I have also myself met with an example of cyst connected with a temporary tooth in a boy aged 4, brought to me by Mr. C. J. Fox. In this case the temporary right canine tooth was wanting, and there was a cyst developed in its situation, on cutting into which I extracted seven small irregular nodules of dentine and enamel, but no complete tooth, this being, therefore, an example of the odonto-plastic cyst of Magitôt.

Mr. Tomes explains the formation of cysts in connection with retained teeth by referring to the fact that, when the development of the enamel of a tooth is completed, its outer surface becomes perfectly detached from the investing soft tissue, and a small quantity of transparent fluid not uncommonly collects in the interval so formed. This fluid ordinarily is discharged when the tooth is cut; but when from some cause the eruption of the tooth is prevented, it increases in quantity, gradually distending the surrounding tissues in the form of a cyst.

For further microscopic details and for a full discussion of Magitôt's views, I may refer to Mr. F. Eve's very able lecture on Cystic Tumours of the Jaws, delivered in this theatre, and published in the British Medical Journal, January 6th, 1883.

When dentigerous cysts occur in the lower jaw, they form more isolated and prominent tumours than in the case of the upper jaw, and in some cases the projecting bony wall has been removed. In St. Bartholomew's Museum is a specimen of the kind (I. 119), consisting of a portion of a bony cyst, which was removed by Mr. Earle from the external and lateral part of a lower jaw. The cyst is lined with a thick and soft membrane, which has been in part separated from it. The cavity of the cyst was filled with a glairy fluid, and at the bottom of it a canine tooth of the second set was adherent to the lining membrane. The case is referred to by Stanley, who gives an accurate drawing of the preparation. In the Museum of the College of Surgeons there is a very similar preparation (2196), showing a bony cyst of oval shape, one inch in its long diameter, lined with a thick, well-formed membrane, containing an imperfectly-formed bicuspid tooth, which was removed by Mr. Wormald from the lower jaw of a female, aged 17, whose case will be found in the *Lancet*, June 22nd, 1850.

Cases of dentigerous cysts may be mistaken for solid tumours. Thus Gensoul, of Lyons, has recorded the case of a girl aged 13, whose antrum was distended with a large collection of yellow fluid, and contained a canine tooth attached to its wall, in whom he had made the incisions necessary for the removal of the tumour before he discovered its nature. Mr. Syme also has related the case of a woman aged 31, on whom he operated for a tumour of the upper jaw, of four months' standing, by laying open the cheek and removing the tumour with the bone-forceps. "The tumour was found to consist of a dense cyst, lined throughout with earthy matter in a crystalline form, and containing a clear, glairy fluid, together with the crown of a tooth, apparently the lateral incisor." In a cavity beyond the tumour was found a fully-formed canine tooth, encrusted with a thin plate of bone. The teeth are said to have belonged to the temporary set.

When the cyst occurs in the lower jaw, and is less prominent than in the two cases already mentioned, giving rise rather to a general expansion of the bone than a distinct tumour, the disease may be mistaken for a solid tumour of the lower jaw. A case of this kind occurred to that excellent surgeon, the late Mr. S. W. Fearn, of Derby, who had the courage and honesty to publish the case (British Medical Journal, August 27th, 1864), and to whom I was indebted for the very valuable preparation (College of Surgeons' Museum, 2195), from which the drawing (Fig. 11) was made.



Fig. 11.

Mr. Fearn's patient was a girl aged 13, who had a large resistant tumour of the left side of the lower jaw, which had been growing six months. There was some enlargement also of the right side, and the teeth there were very irregular. The teeth on the left side had been extracted, with the exception of the second molar and a temporary molar. No opening could be detected in the tumour, though there was a constant offensive discharge from its surface. Mr. Fearn removed the left half of the jaw from the symphysis to the articulation, and on division of the bone with the saw, a quantity of fœtid pus escaped. The tumour proved to be a bony cyst, formed by the expansion of the two plates of the jaw, which extended for some distance to the right of the symphysis—a very unusual occurrence. The cavity is lined with a thick vascular membrane, and at the bottom the canine tooth will be seen projecting from the wall. The case was evidently, therefore, one of dentigerous cyst, due to the non-development of the canine tooth, the contents of which had, from some cause, become purulent. The mental foramen, with the nerve emerging, is still visible in the preparation. The patient made a good recovery.

A very similar case is recorded by Dr. Forget in his essay on *Les Anomalies Dentaires et leur Influence sur la Production des Maladies des Os Maxillaires*, 1859. Mr. Underwood has allowed me to have the accompanying drawing (Fig. 12) taken from the model of a prepara-

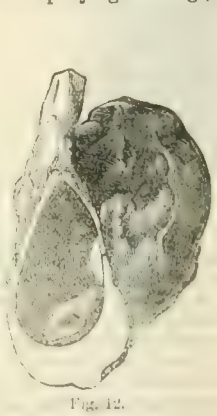


Fig. 12.



Fig. 13.

tion which he possesses, showing very beautifully a cyst of the lower jaw, which was removed by M. Maisonneuve by sawing through the bone at two points. The canine tooth is seen lying horizontally at the bottom of the cyst. The patient, aged 56, had a swelling in the lower jaw near the chin, and an opening formed behind one of his

front teeth, from which a saline fluid escaped. The man made a good recovery from the operation.

Dentigerous cysts, like other cysts, may undergo alteration, not only of the contents, but of the cyst-wall. The opportunities for recognising such changes are exceedingly rare, and the only known specimen of the kind is one in the possession of Mr. Samuel Cartwright, which shows calcification of the cyst-wall. The preparation (Fig. 13) is one of the right superior maxilla, which, having been opened, shows a bony cyst within the antrum and attached to its floor, but unconnected with it elsewhere. The cyst has been opened, and contains a supernumerary tooth loose in its cavity, though no doubt originally attached to its base. This is clearly a case of dentigerous cyst which has undergone calcification, and which, had it been expanded to a greater degree before this change took place, would in all probability have been inseparably united with the walls of the antrum.

The diagnosis of dentigerous cysts from other cysts is exceedingly difficult until they are opened, as, indeed, is the recognition of any form of cyst. A careful examination of the mouth may reveal the absence of a permanent tooth, or, as in one of Mr. Salter's cases, may show a temporary tooth occupying a permanent position, and this would direct the mind of the surgeon to the possible existence of a dentigerous cyst. On the other hand, however, it must be remembered that teeth may be wanting without being connected with any disease; thus I am acquainted with a family who have the hereditary peculiarity of a single bicuspid tooth on each side. When a cyst is sufficiently expanded for the wall to yield under the finger with the characteristic parchment-like crackle, there can be no difficulty in it recognition, but without this it is impossible in all cases to distinguish between a cyst and a slow-growing, solid tumour. Under these circumstances, it is well to insist upon the propriety of making an exploratory puncture in all cases which are not obviously solid growths, and have sprouted so that their nature can be certainly recognised. The puncture being made within the mouth will be of no moment should a more severe operation subsequently be necessary.

The accompanying engraving (Fig. 14) shows a cyst of the lower

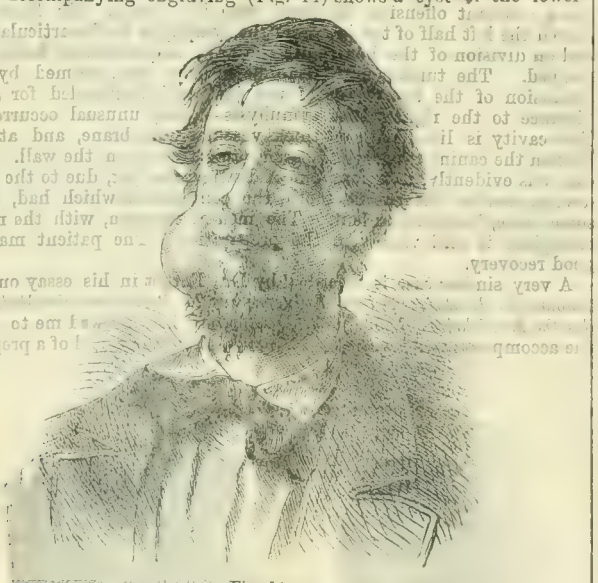


Fig. 14.

jaw occurring in a man aged 34, who was under my care in 1878. The swelling began nine years before, and was of the size of an ordinary orange, round, very hard, and fixed to the angle of the lower jaw on the right side. Its edges were well defined, there was no fluctuation nor pulsation, except that of the facial artery, which was stretched over the tumour. Externally the tumour appeared to be solid, but, examined from the mouth, the anterior part of the wall yielded slightly to firm pressure. On puncturing from the mouth through the bony wall, I entered a large empty cavity lined with soft tissue, which on microscopical examination showed portions of hyaline cartilage and cartilage with a faintly fibrous matrix, surrounded by and gradually passing into oval and spindle cells. The bony walls of the cyst were broken down and partially cut away, and this proceeding was repeated a fortnight later. The tumour gradually diminished as suppuration went on, several pieces of bone being removed, and, six weeks after the cyst had been opened, a tooth was felt fixed at the bottom of the cavity, and on being extracted proved to be a bicuspid with a perfect crown and two small fangs. After this the cavity closed, and the swelling entirely disappeared. The case is remarkable both for the age of the patient and also for the fact that the cyst was empty, the fluid which must have been present at one time having become absorbed. A careful search for a tooth was made at the time of the operation, but one could not be found, and its discovery at a later date was probably due to the destruction by suppuration of the lining membrane of the cyst, which had completely enveloped it.

In the Museum of the Royal College of Surgeons is a preparation (2194) of the right side of the body of the lower jaw, completely and uniformly dilated into a large spherical cyst. No tooth or rudiment of a tooth can be discovered in the cyst, but its inner surface is lined by a layer of small epithelial cells, and is thrown, in places, into thick projecting folds. Mr. Eve considers it probable that the cyst originated in the enamel-organ of an abortive wisdom or supernumerary tooth, and hence would consider it an example of the follicular cyst developed in the embryonic period (Magitôt).

Treatment.—The treatment of dentigerous cysts is the same as for ordinary cysts, namely, a free incision and the subsequent extraction of the contained tooth. For the cure of many of these cases simple puncture will not suffice, and it will be necessary to remove a portion of the front wall of the cyst, and to fill the cavity with lint, so as to induce granulation and gradual obliteration. This may be accomplished in most instances without any incision of the integuments, and in a few more extensive cases by simply dividing the lip, and carrying the incision into the nostril.

During the last few years very considerable light has been thrown upon the clinical history and pathology of certain cystic tumours of the jaws, both by cases occurring in my own practice and by the careful microscopic investigation of these and others by Mr. Frederick Eve, who embodied his results in a lecture given at the College of Surgeons in 1882, and published in the BRITISH MEDICAL JOURNAL of January 6th, 1883. Mr. Eve believes that, so far from multilocular cysts having a dental origin, they are produced by an ingrowth of the epithelium of the gum. They have frequently followed some form of injury, irritation by decayed teeth, or long-continued inflammation, which have induced an increased supply of blood to the parts. The multilocular cystic tumours are slow of growth, they have very little tendency to implicate surrounding parts or the neighbouring lymphatic glands, and if completely removed rarely recur and still more rarely become disseminated through the system. Their comparative innocence is probably explained by the bony capsule forming their boundary, by their low degree of vascularity, and by the remarkable tendency of the epithelial cells composing them to undergo degenerative changes.

Multilocular cysts are more often found in the lower than in the upper jaw, and in most cases in direct connection with teeth or stumps. In the *Guy's Hospital Reports* for 1847 is the notice of a case of the kind by Dr. Wilks, in a girl, aged 18, in whom there had been an enlargement of the right side of the lower jaw for twelve years. The tumour, on removal, proved to be a cystic growth: "there being four or five large cells between the internal and external plates of bone, which appeared like expanded alveoli, all of them containing fangs of teeth. The cells contained a glairy fluid." Very considerable alteration in the form of the maxilla may be produced by growths of this kind, of which a good example is seen in the drawing (Fig. 15) from a macerated specimen in St. Bartholomew's Museum (I. 308). Here the bone is irregularly expanded in great part to form septa between cysts. These, which were independent of one another, had their origin in the interior of the bone, were lined by a highly vascular membrane, and contained thin serous, or grumous, blood-tinged fluid. The walls of some of the cysts were thin and yielding, but others were thick and resisting, and this was particularly the case with the most posterior cyst on the left side, which had pressed upon and caused absorption of the left ramus and coronoid process. The preparation was taken after death from an old man, aged 75, who had noticed the enlargement for five years when he came under Mr. Coote's care in St. Bartholomew's Hospital in 1857.

The microscopic character of the solid material found more or less in all cases of multilocular cyst is well given in the following report by Mr. Eve upon a very well-marked recent specimen of the disease, contributed to the St. Bartholomew's Hospital Museum (I. 536) by Mr. Keetley. "The solid portion of the tumour was composed of columns of cells and nuclei of the epithelial type, which, when cut transversely, presented the appearance of alveoli; similar small columns branched

out from the side of the larger. The cells in the centre of the columns had in many places undergone a colloid change, and by the complete metamorphosis of the cells the cysts were formed. From the buccal mucous membrane covering the tumour in certain parts club-shaped and branching cylinders extended down from the deep stratum of the epithelium, as in the ordinary formation of epithelial cancer." Mr. Eve has found precisely the same characters in twelve specimens of multilocular cystic tumours he has examined, one of the most marked being a tumour of the upper jaw removed by Mr. Liston in 1836, and referred to in his paper in the *Medico-Chirurgical Transactions*, vol. xx, the tumour being now in the College of Surgeons' Museum (2202).

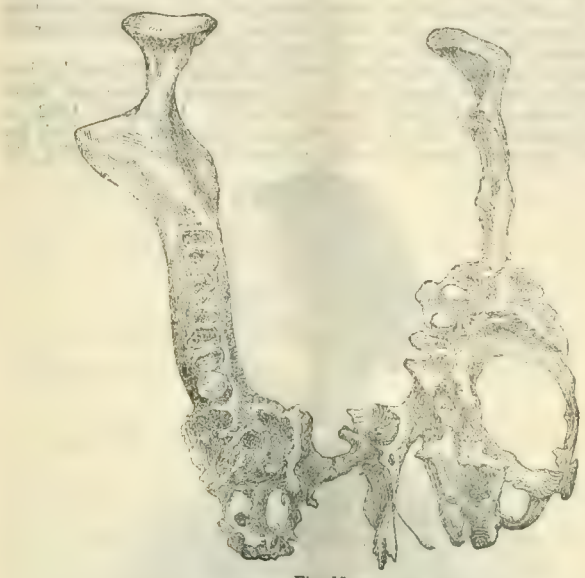


Fig. 15.

To show the identity of the foregoing with the tumours hitherto classed as "cystic sarcomata," I may quote the description of the microscopic appearances of a tumour of the latter kind removed by myself, in 1871, from a patient aged 22, whose portrait before the operation is given in Fig. 16. "The tumour was composed microscopically of straight or tortuous columns of epithelial cells, those forming the margin being elongated or cylindrical, and radiating towards the centre. At the margin of the small ulcerated opening in the gum, papillary processes extended downwards from the deep stratum of the epithelium, and were continuous with the columns forming the tumour" (College of Surgeons' Museum, 2203). The half of this tumour, deposited in the Museum of University College, is described in the valuable catalogue by Mr. Marcus Beck as a "gland-like tumour of bone," and its structure is identical with that of a tumour described by Mr. Wagstaffe in the *Pathological Society's Transactions*, vol. xxii. Mr. Wagstaffe found that the growth was composed of innumerable cysts and a solid matrix, through which a certain amount of bone was scattered; that the cysts were lined by a layer of large globular epithelium; that into the interior of the larger cysts other smaller cysts projected, and these endogenous cysts took their origin in the epithelial lining, and not in the matrix of the growth. Other cysts were also freely scattered throughout the structure, but the endogenous formations were so marked that they could be discovered as little balls by the naked eye, and removed for examination by the point of a needle. The solid structure consisted of a very peculiar arrangement of what appeared to be acini or cylinders of closely-packed cells, supported by a fibro-nucleated matrix. These acini, or rods, in many places gave the appearance of tubes; from the arrangement of their component cells, which resembled very curiously that of columnar epithelium, or of the epithelium of gland-follicles. The cut ends, however, showed no central canal. The constituents of these rods were nuclei embedded in plastic matter, and these separated by manipulation into small tailed or so-called spindle cells of similar size and character to the corpuscles of an ordinary sarcoma.

The contents of these cysts vary in consistency and colour, in some cases being clear and limpid, in others almost gelatinous and of a dark colour.

My attention was first directed to the fact that multilocular cystic disease is not always a simple local ailment by the case of a patient who was able to give me a "thirty-five years' history of a maxillary tumour," which I communicated in 1880 to the Association of Surgeons Practising Dental Surgery (BRITISH MEDICAL JOURNAL, May 22nd, 1880). The patient, when he first came under my notice in 1877,



Fig. 16.

was a healthy country gentleman, who said that as long as he could remember there had been some enlargement of the right side of the lower jaw. In 1845 this enlargement increased very rapidly, and in 1847 Sir W. Fergusson removed a tumour of the right side, sawing through the ramus horizontally and the body of the jaw close to the canine tooth. The tumour was apparently of a fibroid character, having a large cyst developed in it, and is now in the Museum of King's College. He continued in good health for fifteen years, and then noticed the formation of a cyst in the incisor region, which had frequently been tapped by Sir W. Fergusson. In July, 1877, I found cystic disease of the left side of the body of the jaw extending to the molar region, and operated by extracting all the teeth, opening up the cysts freely, and clearing out some solid growth with the gouge. From this the patient made a good recovery, with considerable consolidation of the bone; but in the November following one cyst was found to have developed anew in the incisor region, and this was treated in a similar manner. A year later a fresh development of cyst had taken place, and the operation was repeated with a good result, so that in February, 1879, the jaw was completely consolidated, and the patient was advised to have some artificial teeth fitted. In November, 1879, the patient reappeared with a large solid tumour involving the left side of the body of the jaw, which, noticed first in June, had grown rapidly of late, and now involved the skin for an area of a square inch. On December 2nd I removed the tumour by sawing through the bone immediately in front of the left masseter, and also removed a piece of infiltrated skin from the left of the median line. The wound was brought together with hare-lip-pins and sutures, and only one artery (facial) was ligatured. The patient made a good recovery, took food with a spoon, and was able to talk intelligibly after the first week, although deprived now of the entire body of the jaw. The lower end of the wound being left open afforded a thorough drain for discharge. The patient returned early in February, when the skin near the wound was found to be increasingly infiltrated, and a tumour of the size of an orange was found beneath the right deltoid. He had strained the right arm in getting into a hip-bath, but was quite clear that the humerus had not been struck. The tumour was painful, but the bone was sound, the head moving with the shaft. A week later the patient was found to have a tumour in the pelvis, pressing upon the rectum, and springing from the interior of the right innominate bone. From this time he gradually lost strength, and died at the end of March. The second tumour was pronounced by Mr. Doran to be a round-celled sarcoma, and the same growth was found in the piece of skin that was removed. The earlier tumour

appeared to be a fibroid or a spindle-celled sarcoma. No *post-mortem* examination of the internal growths could be obtained.

The specimen is preserved in the Museum of the College of Surgeons (2204), and Mr. Eve's further examination confirms the fact that the bulk of the tumour is round-celled sarcoma, but in addition the upper portion of tumour contains isolated masses composed of tortuous closely-crowded columns of small epithelial cells.

The second case bearing upon the same question was in a woman aged 44, who was admitted into University College Hospital, on November 3rd, 1875, with the following history. About nine years before, the patient first noticed a lump of the size of a pea beneath the tongue, on the right side, which gave her some pain, and for which a tooth was extracted. From that time she had a succession of abscesses (?) in the lower jaw, some of which discharged in the mouth, and one externally, and for which she had had several teeth extracted. Dr. Parsons, of Dover, had sent her to me three years before, and I then recommended her to come into the hospital; but she declined, and went on with a steadily increasing tumour of the lower jaw on the right side. About nine months before admission the tumour seems to have begun to increase with some rapidity, and within the last two months the following characteristic event happened. While eating, the patient felt a sudden crack in the lower jaw, and this occurred twice in the same week; and upon each occasion she felt great pain in the floor of the mouth and upon moving the tongue. Upon admission there was really very little to be seen externally, and a photograph taken at the time shows that, excepting a very small projection beneath the skin in front of the angle of the jaw, there was nothing to call attention to the patient's face. On looking into the mouth, however, the tumour was at once obvious, and is seen in a cast taken from the jaw at that time (Fig. 17). The right side of the

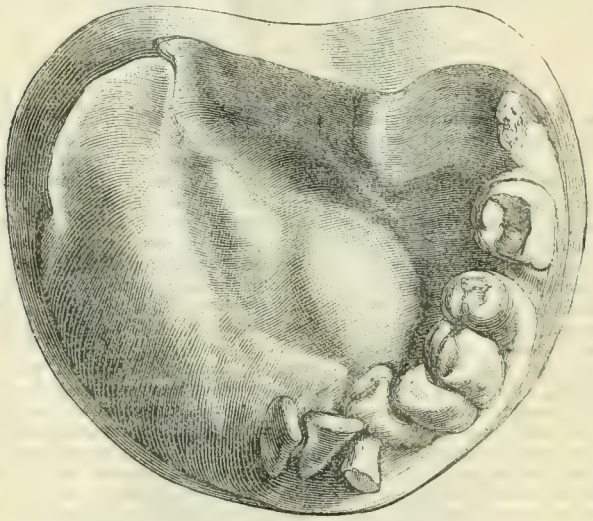


Fig. 17.

lower jaw is seen to be greatly expanded from immediately in front of the ramus to beyond the median line, the tumour measuring two inches across at the broadest part, and reaching under the tongue. Its surface was lobulated and rounded, firm and osseous in the greater part, but yielding distinctly on pressure in two or three places. The mucous membrane was entire over the tumour, except at one point where there was an opening, from which a discharge constantly exuded. The incisor teeth of the right side were displaced over to the opposite side, and were loose. The central incisor of the left side was displaced completely in front of the other teeth. The left canine and bicuspids were firmly fixed. Notwithstanding the size of the tumour, the outline of the lower border of the jaw was scarcely interfered with, the disease being mainly confined to the alveolar portion of the bone; and I, therefore, decided to operate from within the mouth, so as to avoid, if possible, all external scar.

On November 10th the patient was put under chloroform, and, a gag having been introduced on the left side, I first extracted the four incisors, and then made a free incision with a stout scalpel along the upper surface of the tumour, cutting easily through the thin bone and thick membrane forming its upper wall. A quantity of dark-coloured cystic fluid at once escaped, and I then cleared out the semi-solid contents with the finger and gouge. The finger introduced into the cavity passed completely under the canine and bicuspid teeth of the opposite side without disturbing them. I next cut away a portion of the cyst-wall with scissors, and crushed together the remainder, as far as I could, with my fingers and thumb. The actual cautery was applied to one spouting vessel in the margin of the alveolus, and the cavity was stuffed with lint dipped in a solution of chloride of zinc (twenty grains to the ounce).

The patient had very little constitutional disturbance; the plugs were gradually removed from the cavity of the jaw, which was carefully syringed out frequently with Condy's fluid, and soon began to granulate and fill up. The patient was discharged a month after the operation, when the two plates of the lower jaw had come together, and the cavity was filled up almost completely by granulation-tissue, there being only a shallow cavity half an inch long still to be filled up midway between the angle and the symphisis.

This patient again presented herself in October, 1878, nearly three years after the first operation, with a recurrence of the cysts, which were treated again by gouging and crushing in. In August, 1882, she again appeared with a formidable tumour of the lower jaw, which had already sprouted through the chin at more than one point (Fig. 18).



Fig. 18.

There could be no question now of the necessity for excising the portion of jaw involved, and this I accordingly did, removing from an inch in front of the angle on the left side to the right temporo-maxillary articulation. The patient made a good recovery, and has remained well.

There can, then, I think, be no doubt that under the term "multilocular cystic epithelial tumour," as proposed by Mr. Eve, we may include the old multilocular cysts and cystic sarcomata, both having a distinct tendency to be reproduced both locally and, in certain cases, to become disseminated.

Treatment.—Mr. Butcher, of Dublin, has for some years treated cases of multilocular cyst of the lower jaw through the mouth, by dividing the mucous membrane over the cyst freely, and then with gouge and bone-forceps removing the expanded external plate of the bone, with the contents and lining membrane of the cyst. In this operation, the teeth are interfered with as little as possible, and appear to remain firm. Granulations rapidly spring up from the denuded bone, and fill the wound made in the mouth; the cheek resumes its ordinary appearance, and no deformity or scar is left. In his work on *Operative and Conservative Surgery*, Mr. Butcher narrates three cases treated in this manner, and remarks that "the proceeding according to this plan is troublesome and difficult, but its value to the patient in having no deformity left is priceless." A valuable caution is here given respecting the facial artery, which might, without care, be divided from within the mouth in a position where it would be very difficult to secure it. Mr. Butcher also narrates and gives a drawing of a case in which, finding the disease too extensive to be treated from the mouth, he adopted Dupuytren's external incision, and then levelled the projection to the line of the healthy bone with the best results, the incision being completely hidden behind the bone.

Dr. Mason Warren has also (*Boston Medical and Surgical Journal*, 1866) written upon the treatment of cysts of the jaws, and strongly recommends a milder and even more conservative practice than that followed by Mr. Butcher, which he thus summarises: "The treatment consisted in the puncture of the sac within the mouth, evacuating its contents, and at the same time obliterating its cavity by crushing in its walls; and lastly, in keeping up, by injections, etc., a sufficient degree of irritation to favour the deposition of new bone."

I have now treated a considerable number of simple and multilocular cysts by Mr. Butcher's method, and, as has been noted, with recurrence in at least two of the latter. Mr. Butcher does not appear to have met with further trouble in his cases, and this may depend upon his "carrying out the gouging fearlessly and far wide of the disease." I should in future be guided by the age of the patient and the amount of solid material found in the cysts. In young persons with cysts having fluid contents and little growth in the bone, I should be still inclined to adopt palliative measures and to gouge very freely, carefully watching the case with a view to a more radical proceeding, should further development take place. In cases of much solid deposit in connection with multilocular cysts, and still more in cases of solid tumour with one or more large cysts, there should, I think, be no doubt as to the removal of one-half or more of the lower jaw, or of any portion of the upper jaw involved.

CLINICAL LECTURE
ON HEMIPLEGIA IN CHILDREN.

Delivered at the Hospital for Sick Children, Great Ormond Street, June 1st, 1887.

By JOHN ABERCROMBIE, M.D.Cantab., F.R.C.P.,
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Formerly all forms of paralysis in children were grouped under the head of infantile or essential paralysis, and were believed to be of the same nature. Dr. Goodhart and Professor Henoch, of modern writers, are those who have most clearly recognised that a very considerable number of cases of paralysis in children own a cerebral cause; the latter writer (*Diseases of Children*, American translation, p. 100), indeed, goes so far as to say that this paralysis is much more frequently due to cerebral than to spinal disease. I suspect that this statement is nearer the truth than many might be disposed at first to believe. The causes of hemiplegia in the adult are hæmorrhage, arterial obstruction, whether from embolism or thrombosis, and tumour, and all these causes may be found in operation in childhood. Cerebral hæmorrhage in infants must be exceedingly rare, and is very uncommon in children; almost the only known causes are purpura hæmorrhagica, the hæmorrhagic diathesis, or aneurysm of one of the cerebral arteries as a result of pre-existing heart-disease, and in a very few instances a highly vascular sarcoma has given rise to a large extravasation of blood into the brain. It is conceivable, too, that massive hæmorrhage might take place in whooping-cough, but I do not know of any instance of its occurrence. Meningeal and capillary or punctiform hæmorrhages will require separate consideration.

In regard to arterial obstruction, inasmuch as heart-disease is common in early life, it is not surprising that embolism of one of the cerebral arteries should occasionally be met with; indeed, as Dr. Goodhart (*Diseases of Children*, 2nd edition, p. 471) remarks, it is a little strange that embolism from heart-disease is not more common. It is unnecessary to say more about this variety, as it presents no distinctive characters apart from those seen in adults. Thrombosis of an artery must be the result of previous disease of the vessel, and, just as in adults, syphilis probably causes hemiplegia in this way; the point will be referred to again.

Tumours are not uncommon in children, and there is no reason why they should not occur sometimes in the motor area of the cortex, or somewhere in the motor path between this and the base; they are more commonly found, however, in the pons or crus. The same symptoms are produced in the child as in the adult, and no further reference need be made to them.

It is just worth mentioning here, as the point will not be again referred to, that cases of tubercular meningitis are not infrequently first betrayed by one-sided paralysis.

We have now run through the ordinary causes of hemiplegia in the adult, but I have only accounted for a very few of the cases, some fifty in number, of which I have notes. The remaining cases may be conveniently divided into two groups, those which succeeded one of the acute infectious diseases, and a much larger group where no such cause could be assigned.

Measles, scarlet fever, whooping-cough, and diphtheria may all be followed by hemiplegia. Four times I have known it succeed measles; in three cases the children were under 3 years of age; in the fourth the child was 5; the onset took place on the ninth day in one of the cases, in the others at about the end of a fortnight; but inasmuch as the patients often do not come under observation until some years after the onset, we must not expect too great accuracy as to dates. I have only seen one case of scarlet fever origin, and although there was no evidence of heart-disease then, one would have to bear in mind the fact that endocarditis is not uncommon during and after scarlet fever, and that it would afford a ready explanation of the paralysis, by affording facilities for the formation of an embolus. Of whooping-cough as a cause, I have also notes of only one case: a little boy just over 2 years old, was brought with well-marked hemiplegia, dating from an attack of convulsions of thirty-six hours' duration during whooping-cough about a year previously.

Diphtheria, if I may judge by my own observation alone, is a more common cause than any of the preceding, but it is often very difficult to get the necessary amount of evidence respecting the primary ailment. Thus, in one case, a little girl had been under my care for some months with hemiplegia, and all I could learn from the mother was that it had been preceded by "low fever," when one day the mother brought me another child, and told me he had never been well since he had the diphtheria, just before the child whom I was treating had been taken with her so-called "low fever." The following case is worth quoting in some detail, as I had the opportunity of watching the whole course of the affection to a fatal issue, and of making a *post-mortem* examination. G. W. (*Medical Times and Gazette*, September 23rd, 1882), aged 6, was under treatment for diphtheria, when on the fifteenth day from the onset, in the afternoon, he was seized with a convulsion which was general, and after it his mouth was drawn to the right, and he complained of right frontal headache. On the following morning he was again convulsed for twenty minutes, but on the right side only; when I saw him a few minutes afterwards there was complete left hemiplegia. He died eleven days later, no change in the paralysis having taken place. The right middle cerebral artery was found plugged by an adherent thrombus. Infarctions were found in the spleen and kidneys. There was no heart-disease, and no source for an embolus was discovered.

Of the remaining cases there was evidence of congenital syphilis in four, and there was good reason to attribute the paralysis to this cause. In three the paralysis dated from quite early infancy, having as usual been ushered in by fits. In the fourth case I made a *post-mortem* examination, and may give you the facts briefly. T. H. (*St. Bartholomew's Hospital Reports*, xvi, p. 35) came under observation at the age of 10 years 9 months. There was conclusive evidence of syphilis. At the age of 6, whilst walking in some fields, she had suddenly fallen down, and was then found to be paralysed on the right side, and that side had been weak ever since. On *post-mortem* examination a small old adherent thrombus was found in the middle of the longitudinal sinus. There was atrophy of the left hemisphere, the cortex and central parts both sharing in the atrophy; the meninges were thickened and adherent, especially over the left side and the convolutions (chiefly the ascending frontal and frontal convolutions) were sclerosed. The middle cerebral arteries were diseased.

Syphilis may have had a share in some of the other cases also, as two of the children in whom the paralysis followed measles were certainly syphilitic, and consequently may have had disease of their vessels, whilst it was a possible factor in other cases to which I shall shortly allude.

The remaining cases would seem to fall into three groups, namely, the traumatic, the congenital, and those which are neither traumatic nor congenital, and yet own none of the causes which we have been discussing. I have only seen one case where the paralysis could with reasonable probability be set down to a traumatic cause, though in some cases there can be no doubt that injury done during labour, especially when forceps have been used, has been the cause. In the case I refer to, a child at the age of 9 months, fell on to his head, causing a bruise over the right parietal bone; he was very ill for the next six months, and four months after the accident it was noticed that the left side was paralysed; when I saw him two years later there was marked left hemiplegia with rigidity.

I have seen only one case in which the paralysis was actually

noticed directly after birth, and in that case there was no evidence of injury at the time of birth; but in three other cases the paralysis was observed so soon after birth that it is a fair assumption to suppose that it was due to some disease or abnormal condition which must have existed at the time of birth. One of these is worth mentioning, as it appears to be a case in which the leg only is paralysed. A boy who was brought to me when about 5 years old, had been liable to fits since he was 6 weeks old. It had been noticed from quite early times that he did not use his left leg, in fact the mother could not say whether he had ever been able to use it; no paralysis of his arm had been observed. There was no obvious paralysis of his left arm, but his gait was quite hemiplegic in character, and the left leg was stiff at both knee and ankle-joints, and there was a very exaggerated knee-jerk on this side. It is a curious fact that in these three cases in which the hemiplegia had shown itself at the earliest possible age, there was strong reason to suspect syphilis in all, but as the evidence was not absolutely conclusive I have refrained from classifying them with the undoubtedly syphilitic cases.

The remaining cases only permit of one subdivision, namely, into those which occurred before the age of 2 years, and those in which the paralysis did not show itself until after that date. Of the former class I have notes of fourteen cases, and since these are essentially the cases of infantile cerebral paralysis, it will be worth while to spend a little time over them. The following cases illustrate the mode of onset. Edith A., brought at the age of 2 years, with well-marked left hemiplegia; when 10 months old she had a fit, lasting about a quarter of an hour; both sides were convulsed. Three weeks later, when apparently well, she was again seized with convulsions, which lasted a whole week; the left side was almost exclusively affected, and from that time she was paralysed on this side. Another case was that of Winifred H., aged 2, whom I first saw in January of this year; I learnt that six weeks previously she had been taken with a fit which lasted seven hours; for the first hour it was general, but after that was confined to the left arm and leg, and left side of the face. She had no subsequent fit, but next day the left arm and leg kept on being slowly drawn up and down; after that for a week she could not move her arm at all, and the leg not much; since then she has been steadily improving, but she throws the left foot very high when she walks. When I first saw her there was very distinct loss of power on the left side, but she has been gaining strength on that side ever since, and now walks really well. I once saw a case in which a child appeared to have a second attack of hemiplegia. The first occurred when she was 10 months old, and she lost the use of the left arm and leg; she improved much, but did not get quite well. When about 3 years old, as the mother said, she had a fresh stroke, that is, she was unconscious for several hours, and again lost the use of her left side; she remained hemiplegic after this attack, and epileptic.

The paralysis is not often permanently complete, and rigidity is seldom wholly absent; sometimes the rigidity is much increased, or only recognisable by manipulation of the paralysed limbs. Sometimes the paralysis is very slight, but the affected limbs are the seat of movements, a condition known as athetosis when the movements are slow, or post-hemiplegic hemichorea, or mobile spasm (Gowers) when the movements are more rapid.

Of the fourteen cases ten were girls, a much larger proportion than can be the consequence of mere accident; and, moreover, it is in corroboration of the fact already noticed by Dr. Gowers (*Epilepsy*, p. 127), that in children under 5, hemiplegia is twice as common in girls as in boys. In several of the cases the intellect was seriously below par, some of the children being absolutely idiotic; only a very few presented no evidence of mental deficiency. But it must be remembered that by reason of their paralysis these children had been unable to mix with others, and their education had almost always been neglected, so that their backwardness may in part have been due to want of opportunity. The fact, however, remains, that the intellect is much more liable to be affected in the hemiplegia of children than in that of adults.

In all cases improvement was much more marked in the leg than in the arm. Arrest of development of the paralysed limbs was noticed in some of the cases, the arrest falling on the bones chiefly. No obvious muscular wasting was found, and there was a good layer of subcutaneous fat even on the paralysed side. In a large majority no evidence of neurotic tendency could be elicited, but in one of the cases it was stated that all the children in the family (and they were many) had cut their teeth with fits; in two instances there was a suspicion of syphilis. Only four cases fall into my last category, that is, children in whom the paralysis was not developed until after 2 years of age. In two the paralysis succeeded epilepsy, the third was remarkable not only because the arm was much more affected than the leg, but because aphasia was the chief symptom throughout, and persisted after the paralysis had passed off. In the fourth the question of hysteria cannot be wholly excluded. The patient is a little girl, aged 8½ years, who was frightened three years ago, and has had weakness of the left arm ever since, and movements have been gradually coming on. She is said to have had hysterical fits, though I cannot say exactly what is meant by that expression. She has choreiform movements of the left hand, neither slow nor rapid, and is only able to use that hand clumsily and feebly; she drags the left leg a very little.

To sum up briefly the symptoms of this form of paralysis in children, we may say that it usually attacks children under 1 year of age, commencing with a prolonged convulsion, lasting for several hours, and sometimes even for some days, the convulsion being frequently limited to the side subsequently found to be paralysed, though often at first general. When the fit passes off the child is found to be paralysed on one side, and may have lost his speech, or his reason, or both. Sometimes the child comes out of the first fit unharmed, but is left paralysed by a second or subsequent seizure. A little improvement, especially in the leg, may be looked for early, but complete recovery is not common; arrest of growth of the paralysed limbs, a certain amount of rigidity, and clumsy, irregular movements are frequently met with. Sensation in the paralysed limbs is rarely affected. The face is occasionally paralysed on the same side as the limbs. Unilateral atrophy of the skull on the side opposite to the paralysis is sometimes very marked. The paralysis may come on after one of the acute infectious diseases, or as a result of syphilis, but in a considerable number of cases no cause can be found.

If we now turn to inquire what is the pathological condition underlying these cases, we find that, after a considerable lapse of time at any rate, there is a singular uniformity in the appearances; atrophy and sclerosis of the convolutions in the motor area of the hemisphere opposite the paralysed side is the almost invariable result, with thickening and opacity of the meninges, and changes in the vessels. The opportunity for making an examination in the early stages is so exceptional that great doubt has arisen as to what is the actual condition of things at first, and there is much diversity of opinion, even amongst those who have had the largest experience. For instance, according to one authority, an acute inflammation of the multipolar cells in the cortical grey matter is the initial change, a lesion exactly analogous to that in the spinal cord in the ordinary infantile paralysis. According to another, capillary hæmorrhage into the brain would explain all the cases, while another finds that hæmorrhage into the meninges and consecutive meningo-encephalitis is the first change. Another regards thrombosis of the veins and sinuses as the primary lesion, whilst others express their belief in embolism or thrombosis of the arteries. These diverse and diverging views are held by men of the greatest eminence, and as they cannot all be right—and it seems impossible that they should all be wrong—the only legitimate conclusion is that several different causes may terminate in the same result.

Let us now take these various theories separately; and, first, with regard to the polio-encephalitis. This is the view taken by Professor Strümpell (*Deutsch. Med. Woch.*, 1884, No. xliv); but it appears to be based on theory rather than on actual observation. He says that in old necropsies one constantly finds scars in the region of the motor centres of the brain which cannot be confounded with congenital atrophy, and which certainly result from acute inflammation of the grey substance, and he holds that clinical observation permits of a parallel being drawn between the cerebral and the spinal forms. A recent writer has tabulated 160 cases collected from various sources, and in no single instance was inflammation found in the grey substance as an independent lesion. The cause is a possible one, but we must have some further proof of it than has yet been adduced.

We may pass on, then, to hæmorrhage. I have already pointed out how exceptionally rare gross hæmorrhage must be; but capillary hæmorrhage is quite another thing, and would account very well for the atrophic and sclerotic changes ultimately found. Dr. Eustace Smith (*Disease in Children*, p. 328) is the chief advocate of this condition. The hæmorrhage, he says, generally occurs in minute scattered points. The first symptom is an attack of convulsions, from which the child will recover, with more or less of paralysis. If repeated convulsions set in, and continue with intervals of stupor, and especially if any contractions and rigidity are noticed in the hands and feet, the temperature remaining low, we should suspect hæmorrhage. He is conversant with instances of meningeal hæmorrhage, but says this is seldom a cause of paralysis. Professor Henoch (*Op. cit.*, p. 102) says that small capillary hæmorrhages often occur as the result of tubercle of the brain, tubercular meningitis, or throm-

bosis of the sinuses; and Dr. Barlow (BRITISH MEDICAL JOURNAL, Path. Soc. Rep., p. 1098) has lately described how small hæmorrhages so caused may coalesce to form larger extravasations of blood.

Dr. Goodhart (*Op. cit.*, p. 470) is the chief exponent of the meningeal theory. He holds that convulsions are an adequate cause of extensive cortical lesion by producing, first, congestion of the brain, and then meningeal hæmorrhage; or they may initiate chronic changes in the meninges which will thicken them, compressing and causing atrophy of the brain, or a large cyst. He admits all the other causes that have been mentioned as likely, but is very doubtful about Strümpell's hypothesis. It appears to me that the chief objection to these theories of hæmorrhage is that there ought to be no special tendency for them to affect one part of the brain more than another; but I am not aware that the sclerotic changes are found to any great extent elsewhere in the brain than in the motor area. The sclerosis is not necessarily limited to the motor area; but when not so limited, it is generally found in adjoining convolutions, as if it had spread there, and is not scattered about as might fairly be expected on the hæmorrhage hypothesis.

The next theory—that of thrombosis of the veins and sinuses—is supported by Dr. Gowers (*Diagnosis of Diseases of the Brain*, p. 194). This occurs, according to him, in children suffering from debility, exhausting diseases, especially acute specific diseases, or from blows on the head, now and then in very young children without any exciting cause, and it is frequently seen during hot seasons. Thrombosis in arteries, he says, is a very rare lesion in childhood far more rare than combined thrombosis in sinuses and veins. The initial symptoms closely resemble those that have been observed when a cortical vein has been plugged in adults. After death thrombosis is found in the longitudinal sinus and in the veins leading into it. The circulation is slow, and the conditions are favourable to coagulation.

No doubt Dr. Gowers is right in saying that, if the vessels are healthy, thrombosis will be more likely to take place in the veins than in the arteries; but the same objection cannot be applied to embolism, which, in my belief, is the chief cause of paralysis in children. Dr. Gowers contends that, if embolism were the cause, we ought to find a cavity, and not shrinking and induration; but surely it is a rare result in embolism for the part shut off to become completely liquefied, and it is well known that very often the obstruction is not permanent, and the clot gets washed on, though not until irreparable damage has been done.

Dr. Ross (*Diseases of the Nervous System*, 2nd edition, vol. ii, p. 480), a great authority on diseases of the nervous system, admits softening as one of the precursors of sclerosis, and Dr. Goodhart (*Op. cit.*, p. 471) accepts embolism as the probable cause in the cases coming on after the exanthemata. In this I entirely agree with him, for you will recollect that in the case of G. W., already quoted, the paralysis was proved to have been due to embolism of the middle cerebral artery, and I am quite unable to see anything in the symptoms in the other cases of this group in the least degree incompatible with the theory of embolism. Indeed, the history of the cases is much more in accord with this mode of onset than any other, for in all of them it is a fair assumption to make that the blood was impoverished in quality, and therefore more readily coagulable, and that the heart's action was impaired, and the formation of a clot in its cavities rendered possible; and that this can take place we must assume to be proved by the case of the child just referred to, as there was no valvular disease or other obvious source of embolism, and yet there were infarctions in the spleen and kidneys, a sufficient proof of the nature of the obstruction to the middle cerebral artery. We may take it then that, in all probability, embolism of one of the middle cerebral arteries is the cause of the paralysis when it supervenes during convalescence from one of the acute infectious disorders. I believe that the syphilitic cases, too, may be explained by arterial obstruction, only in them the cause is more likely to be thrombosis than embolism. In the case of T. H., where I made a *post-mortem* examination some four years after the onset of the paralysis, you will remember that besides an extensive cortical sclerosis there was found plugging of some of the cortical veins in the motor area, and extensive disease of the cerebral arteries. The case might be regarded as supporting the view held by Dr. Gowers; but I would rather take it that arterial disease was the first change, and that this was followed by a plugging of the affected vessel, the lumen becoming restored after no great interval. It is now well known that changes in the walls of the blood-vessels do occur in cases of congenital syphilis. Ten years ago Dr. Barlow (*Path. Soc. Trans.*, xxviii) demonstrated this fact at the Pathological Society, and showed that even in very young infants the vessels of the brain may become greatly thickened, and their lumen narrowed, or even obliterated, by the growth of a nucleated spindle-celled tissue in the intima between the intima and the fenestrated membrane.

I believe that arterial obstruction will hold good as the cause in the great majority of the other cases also, and my chief reason for this belief is the fact that the mode of onset in the one class is precisely the same as in the other; the child is suddenly seized with convulsions, often more or less limited to one side, and when the fit passes off he is found to be paralysed on the side which has been most convulsed. If we admit that this points to embolism when there is a history of preceding infectious disease, why should we not accept the same explanation when there has been no such precursor?

There is another argument in favour of this view which I have already hinted at, and that is the fact that we do not find similar lesions—namely, atrophy and sclerosis—limited to other parts of the brain. Embolism, as we all know, rarely affects other vessels than the middle cerebrals, and therefore the localisation is the more intelligible on the embolic hypothesis.

I am not unmindful of the fact that, in some form or another, hæmorrhage is sometimes the cause, as crystals of hæmatoidin have been found in the atrophied area of the brain; and in the traumatic cases I should be inclined to think that a meningo-encephalitis, often consecutive to meningeal hæmorrhage, was the cause; whilst this, or capillary hæmorrhage in the motor area, would be an efficient cause, and might conceivably happen in such an affection as whooping cough, where all the blood-vessels of the head must be subjected to severe strain. I cannot help, however, noting once more that I do not recall any instance which would prove that such hæmorrhages were found, or that meningo-encephalitis was set up, in other parts of the brain than the motor area in these cases.

I need say very little about the congenital cases; the pathological conditions found are often much more extreme than in the acquired forms; complete absence of portions of the brain or a large serous cyst are amongst the most usual forms, and in these there is often a considerable increase in the thickness of the skull in the corresponding region. These changes may be due to injuries received during delivery, followed by hæmorrhage into the meninges, or to intra-uterine injury with a similar result leading to arrested development. There can seldom be any difficulty about the diagnosis. Infantile spinal paralysis is very rarely confined to one arm and leg on the same side; and, if it were, the affected limbs would be flaccid, wasted, and cold. Flaccidity and wasting are not met with in the cerebral form; on the contrary, the general nutrition of the limb always remains good, and there is always more or less tendency to rigidity; sensation is rarely affected, and the electrical reactions are unaltered. Disturbances of speech or intellect are common, and the growth of the affected limbs is often impaired; in cases that date from early infancy, the skull on the side opposite the paralysis may show some atrophy, and the circumference on this side of the head may be smaller than on the other.

The prognosis as regards life is good; children rarely die during the initial convulsion, or, if they do, it is before the nature of the affection has been recognised. The bodily health is speedily restored and maintained, and when the intellect has not been affected the child may grow up to be a useful member of society; the leg usually shows some sign of improvement early, and may recover, the arm is much less likely perfectly to regain its strength; when choreiform movements or athetosis have once developed, as a rule, they persist.

During the fit we might put the child into a bath, using a warm one if the temperature were not raised, or if any fever were present a cool bath proportionate to the degree of fever. In the uncertainty which exists as to the exact pathology, there is little else we could do with safety or advantage; to abstract blood would, in the case of embolism or thrombosis, only tend to make the clot firmer, but might be beneficial in a traumatic case, where presumably there is some meningo-encephalitis going on; a blister behind the ear on the side opposite to the convulsed limbs would do no harm and might do good; and of course any source of reflex irritation—teething, worms, etc.—would be sought for, and, if present, relieved as far as possible. After the convulsion a prolonged course of iodide of potassium and alkalies would be the best line to follow, and it is surprising how well children take the iodide, even when administered in an unsparing manner. I have only once known iodism produced, and that was in a little girl nearly 3 years old, who had been taking three grains of the iodide every six hours for about a fortnight. When there is marked contracture, faradisation of the non-contracted muscles will be found useful.

ERRATUM.—In the coloured illustration of the Bacteria found in Scarlet Fever, published last week, two of the drawings were displaced by the lithographer. The description under Fig. 11 applies to Fig. 3, and that under Fig. 3 to Fig. 11.

ON RESPIRATORY CONVULSIONS, WITH ESPECIAL REFERENCE TO LARYNGISMUS STRIDULUS AND ALLIED CONDITIONS IN INFANCY.

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THE young man who commences the practice of medicine amid the crowded population of one of the great manufacturing cities of England becomes very speedily aware of the frequency and importance of certain signs of nervous disturbance in the young infant, which will form perhaps the most frequent, and certainly the most urgent, of the causes of his summons to assist. Of the total number of deaths of children under the age of one year in England, three-tenths are from some form of nervous disease, and of this proportion nearly three-fourths (73.3 per cent.) are returned as due to convulsions. These figures are doubtless imperfect, and due largely to insufficient diagnosis, but they serve to illustrate the frequency of the symptom in early infancy, and the gravity and importance of its study; for great as may be the mortality indicated by these figures, yet convulsions are but, by comparison, rarely in themselves the cause of death. When this does occur, it is usually by spasm interfering with the functions of respiration and circulation, and hence there is a peculiar fitness in making those forms of convulsion which especially affect these organs the subject of our first consideration.

By convulsion, or, as it is popularly called in this country, "a fit of convulsions," is signified an attack of recurring spasms of the voluntary muscles, consisting of energetic alternate contractions and relaxations of particular muscles or groups of muscles. These are due to irritation of some portion of the nervous apparatus governing the movements of the affected parts—an irritation which may be local, of the nature of a distinct entity, as a lesion or a tumour, or, as is generally the case in infancy, general, as a nutritive defect or morbid diathesis, or a toxic condition of the blood, as anæmia, rickets, imperfect aëration, or uræmia.

Now, there are, as Hughlings Jackson[1] has pointed out, three levels or grades of motor centres, varying in the degree of complexity with which they represent muscular movements, and also in the period of their evolution. The first to be evolved in point of time, and the lowest in point of complexity and also in position, consists of the grey cells of the anterior cornua of the spinal cord, of the medulla oblongata and pons; and the nuclei of the ocular muscles in the floor of the aqueduct of Sylvius, are the highest of these lower motor centres. This grade also includes the centres for the regulation of nutrition and respiration and for vaso-motor action. The second grade, or middle level, includes Hitzig and Ferrier's motor centres in the cerebral cortex, Schäfer and Victor Horsley's trunk centres, and Ferrier's sensory region.[2] The third or highest grade includes the brain in front of the middle motor centres, namely, the frontal or præfrontal lobes and the part behind the middle sensory centres. The first and lowest of these levels or grades represents all parts of the animal (indirectly indeed, but most nearly directly of all) in co-ordinated groups; the second grade represents the same parts, but doubly indirectly and in co-ordination of greater complexity; while the third or highest level represents them trebly indirectly and in co-ordination of still greater complexity.[3]

Now, as Hughlings Jackson has shown, there are three kinds of fits, or convulsions, which affect mankind. First, epileptic fits, depending upon discharging lesions of the highest centres, those of the third grade or level, and the last in order of evolution. Secondly, epileptiform, depending upon discharging lesions of the middle or second grade centres, both cortical and central. And, thirdly, respiratory convulsions, which depend upon discharges of the centres of lowest grade or level, the first in order of evolution. Laryngismus stridulus, spasmodic asthma, the fits which occur in whooping-cough, those produced in rabbits by Brown-Séquard and Westphal, and in guinea-pigs by Kussmaul and Tenner, are all examples of these lowest level fits, while those convulsions which commence in one hand and the like are examples of middle level or epileptiform, and those which commence with epigastric or cephalic sensations, of the highest level fits, or epilepsy proper.

In the newly born child, the lowest level forms almost the whole of the developed nervous system, the higher levels being at this period in a condition but little advanced from the fœtal, and even these lower centres are probably not yet fully evolved. The centres for respiration, circulation, and digestion are all at this time in a state of the most active development, the respiratory perhaps the most active of all; and as the higher grades are still so little organised, they can exercise but slight controlling power, and these former centres are easily excited. Hence the greater frequency of fits of this character in the young infant. "The younger the infant," says Jackson, "the more of a mere ordinary reflex mechanism will there be in what there is of its nervous system, and the less check will there be of one part by another."

Varying in degree from the slightest flicker of movement about the lips and facial muscles, a fleeting smile that passes over the face of the sleeping infant, the "angel's whisper," as the mothers poetically call it, to the most severe and universal convulsion, these lower level or respiratory fits are most frequent between the ages of 4 months and 2 years, the period when the dental evolution is most active, and they most frequently affect children of rickety tendencies. Some writers have gone so far as to say that children affected by laryngismus stridulus, which represents most distinctly though not exclusively this class of fits, are always rickety. Of these, Elsässer,[4] who thought that defective ossification of the bones of the skull was the determining cause, has been followed by a large number of later observers, who, however, only see in that particular manifestation an example of a general condition more likely to be effective as an exciting cause through the defective nutrition producing a condition allied to anæmia, or, as Hughlings Jackson thinks, from the weakness and deformity of the chest-walls interfering with the proper and complete aëration of the blood; for, in the venous condition of blood circulating through the pulmonary vessels, we have the natural and most powerful stimulus of the respiratory centres, and a condition which, if rendered permanent by defective expansion of the chest-walls, must lead to continual excitement and irritation of those centres. But though this venous condition of the blood is the most powerful and immediate of the exciting causes of this class of fits, I am not prepared to admit that it is the only one.

In the first place, anæmia from whatever cause is probably the most frequent cause of convulsion, and so nice is the physiological balance between the blood and the organs of the body, that each one by its own proper action renders the nutritive fluid more suitable for the others, and the starvation of one tissue renders the blood less fitted to be the pabulum of the rest, and from this results a continual though partial anæmia, leading in the end to similar results as an actual loss of blood. Moreover, in the young child, from the great preponderance of lower level centres, almost any peripheral irritation may manifest itself as convulsion.

A child may be sucking eagerly, when suddenly he will let the nipple drop, and make one or two crowing inspirations, perhaps accompanied by a squint, and a slight movement of some of the facial muscles, then will follow a discharge of flatus, and in a moment or two he will turn again to the breast. Here the exciting cause was evidently gastric, and although it is customary in modern days to deny the influence which a former generation attributed perhaps too universally to the dental evolution, yet there are many, and myself among the number, who are inclined to believe that the pendulum has in this instance swung too far in the other direction, and that intimately associated as these phenomena are with the gastric system, and connected as this class of fits is with the period of that evolution, irritation connected therewith must be ranked as one of the exciting causes. But in these cases there is also existing a predisposing cause in the centres themselves, already in an excitable or irritable state; a condition of instability, brought about it may be by a slight but persistent degree of venosity, perhaps also temporarily increased by obstruction to the movements of the diaphragm, as by flatus, or undigested food. In fact it is with the centres of the lowest level, as with those of the higher, the instability of the nerve-cell is the true nidus, and the afferent nerves connected therewith either directly or mediately constitute its "epileptogenous zone." In short, to quote the words of Hughlings Jackson, a convulsive centre is "a hyper-physiological state of nerve-cells, induced by some pathological changes, which changes lead to increased but yet, I think, inferior nutrition."

The obstruction to the circulation becomes evidenced when the case is prolonged by swelling of the backs of the hands and the dorsum of the feet. These parts are then often tense and shining, from the anasarca so induced, and in cases of severity and long standing the urine is albuminous. The attacks frequently occur on waking from

[1] Hughlings Jackson, "A Contribution to the Comparative Study of Convulsions," *Brain*, April, 1886.
[2] Ferrier, *Functions of the Brain*, 2nd ed. London. 1886.
[3] Jackson, *loc. cit.*
[4] Elsässer, C. L., *Der weiche Hinterkopf*, etc., Stuttgart, 1843.

sleep; it might be thought that it was the onset of the convulsion that awoke the child, but I have clear testimony that in cases where a child has been sleeping quietly, he has, when awakened by the nurse, immediately been seized with a fit. The minor manifestations of spasm in the facial muscles ("the angel's whisper") are frequently seen during sleep. As the attacks become more frequent, the obstruction to respiration becomes more marked, and there is frequently a manifestation of carpo-pedal contractions, a condition which has been named "tetany," and consists of a rigid contraction of the hands and feet, the thumbs drawn in to the palms of the hands, and the fingers clenched or sometimes adducted, so as to form a sort of cone such as the accoucheur assumes in certain cases, and hence termed the "accoucheur's hand." This condition is sometimes seen in adults, and has been described by Trousseau as peculiar to women who have been over-suckled, or the subjects of severe diarrhœa.

The onset of the convulsion is too rapid to be easily traced, but it often commences in the muscles moving the eyes or the angles of the mouth, and the march of spasm involves the hand, forearm, upper arm, face, thigh, and foot of the same side, extending thence to the bilateral muscles, and finally to the unilateral muscles of the opposite side. The head is thrown back, the nostrils expanded, the lips protrude as in the act of sucking (evidence of the involvement of the centres of deglutition); the heart's action (first irregular and powerful) becomes weaker and more rapid, pulse small, features livid and the eyes upturned, wrists flexed and feet fixed in the position of varus, and occasionally there is involuntary discharge of fæces and urine. The crowing inspiration, which marks the onset of the attack, is lost in the progress of the severe spasms by the almost complete closure of the laryngeal passage, and death ensues from suffocation.

That a disease of this nature should frequently show a character of heredity is not surprising; all observers of large experience have noted this. Dr. John Reid[5] mentions a family of thirteen children, out of which only one escaped. My own experience has been corroborative, and I can point to many families which have lost two, three, or four children from this cause. These attacks are most frequent in the cold season; Barthez and Rilliet thought that the month of March was the most frequent period, but my own experience does not support this view. More boys than girls are the subjects; during the year 1885 the result of an inquiry into 114 cases was as follows:

1885.	M.	F.
January ...	8 ...	5
February ...	9 ...	7
March ...	4 ...	3
April ...	4 ...	5
May ...	3 ...	1
June ...	3 ...	—
July ...	1 ...	2
August ...	6 ...	3
September ...	5 ...	4
October ...	7 ...	8
November ...	9 ...	5
December ...	11 ...	1
Totals ...	70 ...	44

and in 98 of these cases symptoms of rickets were noted, and 11 died—8 males and 3 females. The fatality here recorded agrees very well with that observed by Reid and Henoch, but is very much below that recorded by Wunderlich (*Handbuch der Spec. Pathologie u. Therapie*, iii), who puts it at one-third, Bouchut at one-half, and Steiner who says that the majority die. Perhaps the cause of this difference is that the latter were hospital in-patients admitted on account of the severity of the attacks, while the former include the milder cases seen at the homes or among the out-patients. Violent and prolonged crying is a frequent cause, acting, doubtless, by reducing the inspirations, and so producing increased venosity, as well as by the exhaustion of the laryngeal muscles.

Very closely allied to this disease is whooping-cough, the ordinary paroxysms of which approach very nearly to the character of convulsions, and in the more severe cases they are actually present, especially in young subjects, and during the first year of life. Of the 114 cases which I have recorded above, 90—namely, 55 males and 35 females—were under the age of 2 years, and of these 16 were under 6 months, and 63 between that age and 1 year. Steiner records of 226 children affected with this form of convulsions, 174 in the first year of life. Convulsions of similar origin are occasionally seen at the onset of severe disease of the respiratory organs. I have seen them precede or usher in attacks of lobar pneumonia, of bronchitis, and of acute pleurisy, but they are more common towards the fatal termination of these and allied affections. Spasmodic asthma in adults is an occasional cause of convulsions of a similar nature. Enlarged bronchial glands, fatty enlargement of the liver, or, indeed, any encroachment upon the normal respiratory space, may become a factor in the cause. Kopp published a treatise in 1830, in which he attributed this disease to hypertrophy of the thymus gland; but this theory is now quite abandoned, having been quite discredited by the results of a number of necropsies published by Bednar in 1852. Convulsions of this nature have been noticed in adults with pulmonary tuberculosis, associated with enlargements of the tracheal and bronchial glands. Emotion, especially when of a depressing nature, anger, and fright especially, will produce them, when there is the predisposition, and it is by no means an infrequent sequel to the sudden disappearance of a skin-eruption. Indeed, in early infancy, almost any disturbance of the nervous system may manifest itself in this way, and the toxic derangements, which in adult life show themselves as delirium, will in the former case produce convulsions.

Of the *post-mortem* appearances there is nothing special to observe. In the cases most recently examined, nothing has been observed in the membranes or structure of the brain, and it is remarked that the grey matter seemed to be, if anything, paler than usual; but in earlier accounts—perhaps less under the influence of modern doctrines, which sometimes seem to produce a faculty of observation favourable to the views of the observer—there is noted very generally a state of venous congestion, and some fluid in the ventricles. There is rarely any extravasation, and the congestion, when present, is probably a consequence of the convulsions, not a cause. Steffen[6] sums up the appearances hitherto found as hyperæmia of brain, both membranes and substance, and sometimes effusion of blood: œdema of brain with transudation of fluid between the membranes and into the ventricles: no alteration discernible in nerves or muscles. There is occasionally persistence of the fœtal circulation, and dilatation of the right ventricle has been noted. The lungs are often emphysematous from the spasm, and not infrequently there is some œdema of these organs. There may be traces of pneumonia or catarrhal inflammation, or hyperplasia and caseation of mesenteric or bronchial glands, and it may be that occasionally there will be some redness and swelling of the gastric or intestinal mucous membrane.

These spasmodic affections of the larynx have been found also in connection with other toxic conditions of the blood—for instance, in lead-poisoning; and it has been remarked by Löschner[7] that pneumonia as a complication is followed by abatement or disappearance of the spasm; but catarrh, if the predisposition be present, will bring it on, or if it be disappearing, will aggravate it.

Treatment.—The intimate connection which exists between convulsions of the character which we have been considering, and that dyscratic condition which we call rickets, is the most prominent of the facts which we have hitherto considered. The researches of Kussmaul and Tenner, and the admirable Croonian Lectures of the late Dr. Moxon in 1881, have cleared away the ancient theories of hyperæmia and congestion, and led us to see the true excitant of convulsions, apart from mechanical irritation, in a condition of anæmia, or "kakotrophy." Thus, leaving aside tumours or inflammatory conditions, convulsions follow loss of blood, severe and long-continued drains, such as diarrhœa, superlactation, etc., blood-poisoning, as by uræmia, or the poisons of the exanthematous fevers, etc., when the skin-eruption is suppressed and the like; and, lastly, but most important for our present purpose, when the blood becomes venous from retention of those matters which should be passed off by respiration. It may be objected to this view that asphyxia produces relaxation of muscle, and renders motor centres unexcitable; but it is the case with many other poisons that a large dose paralyses the functions which a smaller one excites and stimulates. A continuous or frequently recurring condition of venosity in the blood circulating through the brain leads to an instability of some of the centres of the lower level, about the floor of the fourth ventricle, and the discharge of even a small portion of these determines, by contiguity, the discharge of others, and finally involves the spinal and general centres. If this be so, then we are led to ask what led to this venous condition of the blood? In laryngismus we have the coincidence of two causes—the malnutrition, evidenced by the rickety condition so frequently present, and the softness of the bones forming the chest-walls, which prevents a full and free expansion of the lungs; and, the predisposition being thus established, a very slight interference, as by flatus, or some other slight cause, is sufficient to determine the discharge. In whooping-cough and in spasmodic asthma a somewhat similar condi-

[5] Reid, John, on "Infantile Laryngismus," *Lancet*, 1849.

[6] Ziemssen's *Cyclopædia of the Practice of Medicine*, vol. vii, p. 978 *et seq*

[7] *Aus der Franz-Josef Kinder-spital in Prag.*, ii, p. 144.

tion arises, in the former case, due probably to a specific irritation of the entrance to the larynx; while in depressing emotion and the acute affections of the respiratory organs, we have the same results.

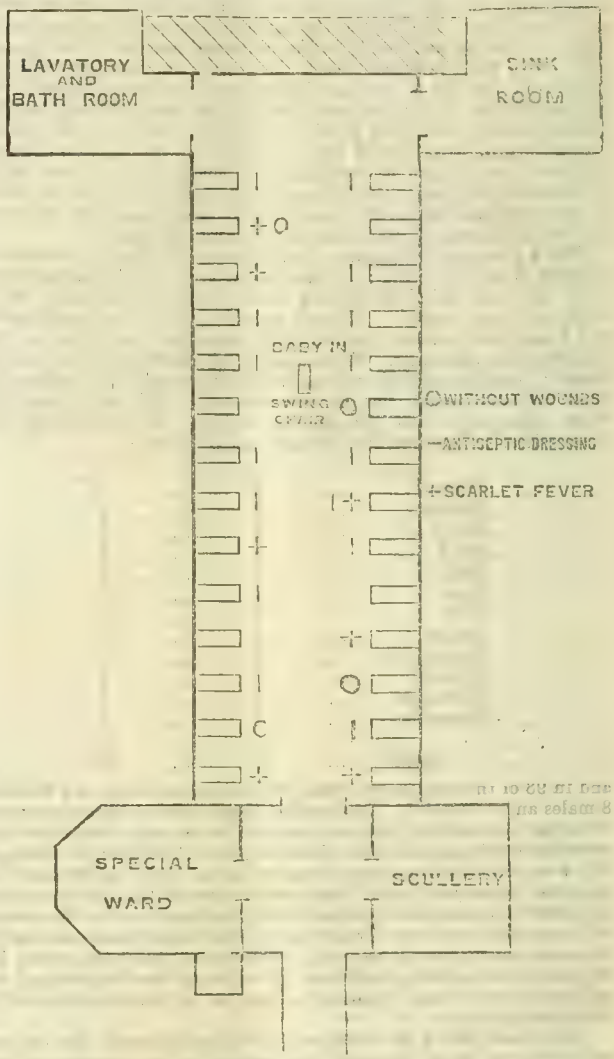
The first indication of treatment is, then, self-evident: it is to provide that there shall be no artificial obstruction to free respiration, that the dress shall not compress the throat, or impede the movements of chest or abdomen. That the air shall be pure and warm, so as not to excite reflex spasm by its contact with the tracheal or laryngeal surface. Cold water dashed suddenly over the head and chest will often put a stop to a paroxysm, or a cloth or sponge wrung out of hot water, and applied suddenly to the throat, or, if suffocation seem imminent, the finger introduced into the pharynx, may induce vomiting and relief. The warm bath is a popular and useful mode of treatment, and the vapour seems to have a soothing effect. If the case be severe and prolonged, the administration of chloroform may be useful, but it is to be borne in mind that this will cause some obstruction to the already over-burdened respiration. A preferable mode, if time permit, will be the administration of a starch enema containing from one to three grains of chloral-hydrate, for a child of 1 year. If there be any evident cause of reflex irritation, such as tense and swollen gums, they may be scarified with the lancet, for the relief which undoubtedly often follows is probably more from the effect of the slight bleeding than from any other cause. Ascarides or lumbricoides may be removed by the appropriate means; for the former I prefer rather copious enemata of quassia, followed by *lavements* of warm water, or, if there be straining, by a starch enema, to which may be added bromide of potassium, one to four grains, according to age. If there is reason to suspect the presence of undigested or indigestible food in the stomach, a stimulant emetic of mustard or ipecacuanha, or zinci sulph., may be given. If there be great turgescence and lividity of the face during the fit, and persisting during the intervals, the application of one or two leeches to the nostrils or temples is a practice which has been often beneficial, and which I should not allow any consideration of modern prejudice to induce me to omit, where the case seemed to me to require it. Such a practice, in the case mentioned, is consonant to reason and to pathological physiology; it relieves the turgid and overfilled vessels of the surface, and it reduces in some degree the amount of toxic matter in circulation, both of which are indications that must be advantageous to the patient. But though I say this, it must not be thought that I advocate depletion in these cases; they are, as I have said before, essentially the result of anæmia or malnutrition, and require nutriment and support. The usual measures of hygiene must be thoroughly carried out, and the diet suited to the age of the child; if it is of an age to take other than milk, the juice of meat, or raw flesh itself chopped, and mixed with a small quantity of salt, is often taken well, and of much value, in rickety cases; a teaspoonful being given twice or thrice a day in addition to other food. Lime-water in milk is useful sometimes, but cod-liver oil in doses not too large (the motions being watched and the dose reduced if the oil appears on the surface) has seemed to me of greater value. The clothing must be warm; flannel should be worn next the skin, and changed and aired night and morning; cold or tepid sponging should be employed; and, when the weather is suitable, frequent carriage in the open air, care being taken to avoid cold winds or any undue exposure. If the bowels are constipated, decoction of aloes, or aloin in suitable doses, will be found useful, and small doses of extract of belladonna (one-twenty-fourth or one-thirty-second of a grain), twice or three times a day, assisted by friction of the abdomen with castor-oil, are often effectual, even in obstinate constipation. The bromides of potassium or ammonium are very useful in these cases, the latter seeming to me to be preferable. They may be given alone or in combination with chloral-hydrate, and are well borne by children; one grain of the latter to three or four of the bromide may be given to a child of 12 months, every three or four hours, but they may be pushed, if required, much further. Occasionally the administration of a few grains of grey powder is useful, and, during convalescence, the ferruginous tonics. Musk is also very useful in these cases, in doses of one-third of a grain to one grain for a child of 12 months, and belladonna, previously mentioned for its use in constipation, is valuable as a respiratory stimulant, and is well borne, as much as fifteen minims of the tincture having been given three times a day to a child of that age. The diet of the young child deprived of its mother's milk is too long a subject to enter upon here, but it is in these cases of the utmost importance, and I must again impress upon the reader the fact that this is a disease of impaired nutrition, and that all means must be directed to the remedying of that evil, so that it may be, and sometimes is, advisable to administer stimulants in the form of brandy, and even, as in severe diarrhœa, which is not an infrequent accompaniment, narcotics, as opium.

REMARKS ON AN OUTBREAK OF SCARLET FEVER IN A SURGICAL WARD.

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THE outbreak of scarlet fever in a surgical ward, and its relation to wounds, is a subject of so much interest and importance, and about which we have so few statistics, that the following details of a recent outbreak at the Pendlebury Children's Hospital may prove instructive. The surgical ward is under the care of Mr. Wright, through whose kindness I am permitted to publish the following.

The hospital, which is situated in a remarkably healthy neighbourhood, four miles from Manchester, is a comparatively new one, and is built on the block system; the wards are large and the ventilation excellent, wounds, as a rule, doing remarkably well.



The above is a rough sketch of the plan of the ward, which shows more clearly than one can explain in words the position of the beds of the cases which were attacked with scarlet fever, the number of antiseptic dressings in the ward at the time, etc.

At the time of the outbreak there were twenty-seven cases in the ward, twenty-three with wounds and four without. Five of the cases with wounds had had scarlet fever previously, one of which was infected. Only one of the cases without wounds was infected, none of these having had scarlet fever previously. Of the six cases with wounds that got scarlet fever, only one was dressed antiseptically;

this was the first case infected, and had been operated upon two days previously.

The source of the outbreak was not known, and it followed no definite course.

Cases with Wounds that got Scarlet Fever.—Case I.—Tommy E., aged 3 years, admitted June 19th, 1886, for congenital talipes, had not had scarlet fever previously. Various mechanical means having been tried unsuccessfully, on November 11th, under chloroform and spray, Mr. Wright removed a wedge-shaped piece of the tarsal bones from the outer side of the foot. He had a good night after the operation; temperature next morning 97 6°; it rose in the evening to 100 4°, and at noon next day he came out in a scarlet fever rash. Fauces injected. He had not vomited. Transferred to the fever ward.

Case II.—Robert G., aged 3 years, admitted October 15th, 1886, for splint sores, had not had scarlet fever previously. November 13th: vomited; refused food; fauces slightly injected; no rash; temperature 99.6°; nothing remarkable about wounds. The temperature rose to 100.6° next day, and a scarlet fever rash appeared over forearms, chest, and abdomen. Transferred to the fever ward.

Case III.—Richard B., aged 6 years, admitted August 31st, 1866, for morbus coxæ. Had not had scarlet fever previously. November 1st, hip aspirated under chloroform. On November 14th, vomited; temperature 101°. Fauces injected. Transferred to special ward. November 15th, temperature 102.4°; indistinct rash about left thigh; this became more marked next day, and he was subsequently transferred to the fever ward.

Case IV.—Joseph H., aged 3 years 9 months, admitted October 25th, 1886, for otitis. Had not had scarlet fever previously. October 28th, incision over mastoid and scraped. He left the hospital on November 14th, his last temperature being 97.6. Two days later he had scarlet fever.

Case V.—Annie H., aged 6 years, admitted October 27th for morbus coxæ. On November 11th, hip aspirated. November 13th, sudden rise of ten perature, 100.4°; fauces slightly injected. November 15th, transferred to special ward; evening temperature 104°; fauces much injected; no rash. Subsequently sent to the fever ward.

Case VI.—William T., aged 7 years, admitted November 3rd, 1886, for morbus coxæ and phlyctenular ophthalmia. Temperature normal until November 24th, when it rose to 99.6°. Fauces congested, and distinct red papular eruption over feet, left thigh, and abdomen. Transferred to the fever ward.

Cases with Wounds that went wrong but did not get Scarlet Fever.—Case I.—Robert D., aged 15, admitted July 10th, 1886, for synovitis of knee. Had scarlet fever when "very little." November 4th, under chloroform and spray, Mr. Wright "erased" the joint. He was much collapsed after the operation, and remained so for a few days, when he rallied, and went on well until November 20th, when the temperature rose from 98° to 103.8°. Fauces normal; no shivering; had not vomited; complained a good deal of some enlarged glands in the left groin; wound dry; no blush in neighbourhood of it. November 21st, temperature had fallen from 105.2° to 98.2°. Wound unhealthy looking, with a distinct blush running from the upper and lower parts, skin indurated and tender; headache, furred tongue, and diarrhœa. He rapidly recovered, and was discharged on December 7th. This was undoubtedly a case of erysipelas.

Case II.—Lilly S., aged 5 years, admitted October 25th, 1886, for acquired talipes equino varus. November 11th, under chloroform and spray, Mr. Wright removed the astragalus, when the deformity was easily corrected. Did well until November 19th, when she complained a good deal of her foot, and the temperature went up to 102.8° from normal. Fauces normal; no vomiting; no rash; glands in groin painful and enlarged. Very slight discharge from wound; no blush. November 22nd. In the last few days the temperature has ranged between 100° and 103°; wound unhealthy, edges swollen and indurated, union given way. Temperature down and steady; free discharge from wound; general condition much improved.

Case III.—James P., aged 4, admitted November 6th, 1886, for morbus coxæ. November 11th, hip excised under chloroform and spray. November 15th. The wound never did well, and now presents a very unhealthy appearance. Temperature has been going up since the 13th, and is now 101.8°. Fauces normal; no rash. He subsequently did well.

Case IV.—Florence S., aged 4 years, admitted August 3rd, 1886, for abscess about hip-joint. August 7th, abscess opened under spray; this continued to discharge, and, on September 29th, hip further explored, and a large abscess, encircling but not perforating the capsule, was found. She did fairly well for some time, when there was evidence of pus being pent up somewhere. A further examination under chloroform discovered, by rectal examination, an abscess on the pelvic surface of the ischium above and close to ischial spine. This was evacuated by chiseling away a portion of the bone above the acetabulum, and forming the margin of the sciatic notch. She went on very well until November 18th, when the wound took an unhealthy appearance, and has remained in an unsatisfactory condition since.

Case V.—Harry B, aged 4 years, admitted September 29th, 1886, for morbus coxæ. Hip aspirated on November 7th. December 1st, evening temperature 102°; no injection of fauces; no rash; he had not shivered or vomited. The track of the aspiration puncture had become inflamed, and the hip tense and shiny. December 7th, a pale but distinct papular eruption on back and abdomen; it was not typical of scarlet fever, but of a hybrid character, somewhat resembling the irritant eruptions frequently seen in connection with wounds. Temperature 105°; pulse 168; tongue covered with a thick white fur; tonsils enlarged but not injected. He went from bad to worse, and died from septicæmia on December 16th, the rash persisting until December 12th.

Case VI.—Hannah T., aged 14 weeks, admitted November 2nd, 1886, for hare-lip and cleft palate. November 6th, plastic operation. Good union resulted, but the health failed immediately after the operation; the temperature gradually rising, and on the fifth day was 103.2°. She developed broncho-pneumonia, from which she died on November 15th. The day before death the fauces were noticed to be injected, and some hours before death a rash appeared on the body generally; it was of a light red colour, mottly, and of a measley character.

The only case without a wound that got scarlet fever was that of Jane W., admitted on July 13th, 1886, for cervical caries: she contracted scarlet fever on December 18th and died on December 20th. The mainly local action of the poison in five of the cases with wounds, none of which had scarlet fever previously, and all of which were dressed antiseptically, and again the fact that only one of the cases with wounds that got scarlet fever was dressed antiseptically, certainly is strong evidence in favour of the antiseptic mode of treatment in some way or other checking the progress of the poison; possibly by preventing decomposition taking place in the wound.

The infection probably takes place through the ordinary channels, and the wound or seat of inflammation, being the weakest part of the organism, is chiefly affected, this taking place from within instead of without, as in the case of ordinary germinal infection. Cases with wounds certainly appear to be more liable to infection than cases without wounds. But why in some cases the scarlet fever should first appear—the unhealthy condition of the wound being secondary—while in others the poison has a mainly local action, I cannot explain.

Dr. Goodhart, writing on this subject in *Guy's Hospital Reports* for 1879, concludes that "surgical cases are more liable to be affected than medical cases, and operation cases most of all; at the same time, it is probable that the presence of any local inflammation in any part furnishes a bed for the cultivation of the poison, and that it is probably embedded through the ordinary channels of infection, and not through the wound."

Mr. Howse, writing in the same *Report*, says "surgical scarlet fever does not differ materially from the ordinary form when the cases are treated antiseptically. If in any respect we are to note anything, it is the very small mortality which attends them. The only explanation of this which suggests itself to my mind is that these cases do, in fact, get the scarlet fever from smaller doses of the poison than persons in perfect health."

ON THE TREATMENT OF FIBROIDS OF THE UTERUS BY ELECTRICITY.

By W. WOODHAM WEBB, M.D., M.R.C.P.Lond., Neuilly-sur-Seine, France.

The Operation.—Dr. Apostoli does not pretend to make any innovation upon the current theoretical notions as to the treatment of fibroids of the uterus. While others with caustics, tents, scrapings, injections, incisions, ergot, and operations aim at renovating the mucous membrane of the organ, setting up a derivative process, bringing about a dissolution and absorption of the tissues, contraction of the tumour, and diminution of its bulk, with coincident relief of the attendant symptoms, he maintains that his way of gaining the same ends is by means simpler, easier, certain, and more exactly regulated. There is no mysticism about the matter. Others had essayed the electrical treatment, but not to their complete satisfaction. To account for this was a piece of plain reasoning. If such and such an agent were known to be able to produce such and such effects, and

those effects have not been obtained, the natural conclusion was that there must have been some defect in the method of application, some mischoice of the seat, or some miscalculation in the amount of power employed. It was not difficult to make out that such was the case here. More careful study of the local action of electricity, and experience in the way of utilising it, disclosed the source of failure. It was proved that much stronger currents than was supposed could be directed upon the internal surface of the uterus, that they could be made to pass through the tissues of a tumour effectively, that the circuit could be completed through the skin harmlessly, and that, by means of the galvanometer the intensity could be exactly adjusted to the nature of the case and the tolerance of the patient. Working downwards from principles to facts, practice was at length brought into accord with theory, and the way opened to success. Tumours could not resist electricity boldly and guardedly administered.

The fact of the two poles having different local effects regulates their use; they both cauterise. The positive pole is coagulating, and it hardens that with which it comes in contact without destroying the vitality. The negative pole, on the contrary, has dissolvent and destructive powers. The coagulating effect of the positive pole is, in the first place, utilised in transforming the hæmorrhagic surface of the interior of the uterus into one that will not allow of sanguineous exudation or excessive secretion, and then in causing contraction of the fibro-muscular mass, a lessening of its blood-supply, a lowering of its nutrition, with a consequent partial atrophy. The negative pole is brought to bear upon the uterine cavity and tumour, when reduction of size by electro-chemical action is the immediate object.

These galvano-caustic operations upon the mucous membrane of the uterus are therefore of two kinds, according to the nature of the case, and the pole required to be used. The manipulations are, however, much the same in both. But when, from distortion or displacement, the cavity of the uterus cannot be reached by the sound, another mode of procedure is rendered inevitable. To pass the disintegrating current through the diseased structure a puncture is made, and this artificial channel may or may not communicate with the cervical canal or the uterine cavity. It is either reserved for repeated introductions of the sound carrying the current, or new punctures may be made from time to time, on suitably presenting parts of the tumour.

Supposing that one of the galvano-caustic operations is about to be done, I will detail the separate stages of it in the order of their sequence. After testing the working power of the battery, the integrity of the regulators and conductors, and the exactness of the indications given by the galvanometer, so that there may be no chance of a shock to the patient by an interruption of the current of electricity during its application, the first duty is to insure the perfect purification of the hands and instruments to be employed. To disinfect the sound absolutely, it is better to pass it through the fire, or the flame of a spirit lamp, and when cold to plunge it into carbolised vaseline. The instruments should be arranged in the order they are wanted, within convenient reach of the surgeon, and immersed in a solution of phenol, in a shallow tray.

The patient, after proper instructions as to what is about to be done and the part she is to play, is then to be placed in position, lying on her back, with the buttocks projecting over the side of the bed, the feet resting upon chairs, the thighs spread out, the abdomen uncovered, and all the dress unloosed. Chloroform is not often necessary, except when a puncture has to be made. The slab of wet clay, with its conductor partly imbedded in its upper side so as to complete the circuit, is now applied to the lower part of the body, avoiding the thighs and the pubic hairs, after observing that there are no pimples or scratches on the skin. Should any be found, they must be protected with collodion, paper, or some bad conductor, so as to guard against the concentration of the current at those spots and the consequent eschars. Putting on the clay at this stage gives time for its close adhesion and the moistening of the skin. Folded linen or a towel is laid over it, and the hands of the patient serve to press it sufficiently.

A free vaginal irrigation with the sublimate solution is to be made, followed by a digital examination of the parts. The sound, fixed by a screw into its insulating handle, with so much of its length uncovered by the celluloid sheath as corresponds with the uterine measurement, is next introduced through the cervical canal into the cavity of the organ. This is a part of the operation which demands the greatest care and ability. It must be done without the speculum. The point is made to slip over the pulpy end of the index finger of the second hand, which serves as a guide when placed against the lower lip of the orifice. Every movement in advance or laterally can be thus directed, and assurance can be gained that the sound is fully inserted, and touches the upper end of the cavity. No force must be used, and a gentle insinuating movement will succeed better than a hurried thrust. In retreating from the vagina, the finger should be trusted to gather proof that, in every part of its length, the insulating celluloid sheath, pressing against the neck of the uterus and extending beyond the vulva, is guaranteeing the safety of the canal. Similar precaution about this matter should be continued throughout the operation, as any slipping of the sheath and baring of the metal would occasion a painful shock, and perhaps derange the position of the sound.

Once satisfied that all is justly arranged and secure, the end of the rheophore coming from the galvanometer is to be made fast in the aperture for it in the handle of the sound, avoiding in the movement any displacement of the instrument, but at the same time making sure that it is not likely to slip out. To give proper support to the sound, and maintain its immobility or direct it, as the point is swept over the mucous membrane of the cavity, it is better to continue the index finger of the hand which holds it in the vagina, or, if it be withdrawn, and the instrument is only kept lightly but firmly between the finger and thumb, the back of the hand should rest against the inner side of the corresponding thigh of the patient.

There must now be a pause of some seconds, so that the woman under operation may recover from any little pain or agitation arising from the introduction of the sound. When this has calmed down the current of electricity may be turned on, commencing slowly, and not going for the first half minute beyond the strength of 20 or 30 milliampères. Augment gradually to 70, 80, or 100 milliampères. For the first sitting it is well to be content with this intensity. The dose that can be borne varies with every patient, and at different times with the same patient, but it should be held as a rule never to cause more than an easily supportable degree of pain in any case. Much, however, depends upon the mode of administration. By cautiously raising the amount and following the indications of the facial expression, gaining the woman's confidence by stopping as soon as she shows signs of impatience, and limiting the current by her power of bearing it uncomplainingly, in subsequent sittings an intensity of 150, 200, or, if necessary, 250 milliampères may be arrived at. The maximum once reached it is continued to the end of the operation without change, unless the patient urges a diminution. The operation may be made to last, according to circumstances, for four, six, eight, or ten minutes.

The current must be stopped as it was begun, never abruptly, for that would produce a shock. Even with all precautions, the inverse current which is set up when that which has been used is suspended mostly causes a sensation of renewal, so that the patient fancies you are recommencing. The vaginal electrode is now to be detached, the sound carefully withdrawn, and the clay removed from the abdomen. If all has been properly done, the skin will be found cool and without any redness. A vaginal irrigation follows, and a strip of iodoform gauze is introduced into the vagina. The patient should be kept in bed for some hours, or, at any rate, made to avoid exercise or fatigue, and cohabitation with her husband should be forbidden. Uneasiness or slight pain in the abdomen is not an uncommon experience, and it is well to forewarn the patient of the probability, telling her at the same time that it will go off with rest. She must also be cautioned not to feel surprised should she find, for the first twenty-four hours, a small appearance of blood, and afterwards a little purulent discharge. Change the gauze, and wash out the vagina with the sublimate solution every day till the next operation.

The preliminary proceedings are the same when it is intended to have recourse to the negative galvano-puncture. The trocar is to be disinfected, fixed in the handle, and a sheath of celluloid fitted to it, so as to leave exposed as much of the point as may be wanted for a puncture of one, two, or more centimètres. Before being used the whole should be dipped in strong carbolic solution. As the negative pole is made use of with these punctures, the trocar may be of steel. Platinum is too soft to retain a point sharp enough to penetrate hard tissues. Taking off the sheath, it is passed into the vagina and its distal end pressed against the spot chosen for the puncture. The trocar is then steadily thrust through it and into the substance of the uterus or tumour, while an assistant with his hand above the pubes holds the mass immovable in its place. The rheophore is attached, and the current set in motion. The depth of the puncture, the force and duration of the current, are matters to be decided upon by the operator in taking account of the peculiarities of the case No formidable punctures are required, and it is advisable to restrict the length of the piercing part of the trocar to the smallest extent that will answer the purpose, always bearing in mind the sometimes abnormal situation of the bladder and the possibility of touching large blood-vessels. The same intensity of current may be employed as for

the cauterisation of the uterine cavity. The daily vaginal irrigation and change of gauze must be attended to, and the patient should be kept quiet, to avoid suffering and any unpleasant consequences from fatigue or irritation.

The repetition of these operations must be determined by a variety of considerations coming out of the general condition of the patient and the changes going on in the diseased parts. Intervals of two, three, or four days may be sufficient when complete repose can be indulged in. With other cases and circumstances, a much longer time may be given. The number of sittings required may be from three or four to more than thirty. Generally the later operations are better supported than the earlier ones, but at no time is the pain more than many patients submit to without murmuring, though where there is any nervousness or apprehension it is prudent to give chloroform to avoid the mischief that might happen from involuntary startings.

There are many practical details and matters of experience, which, when well known and observed, have a great influence upon the success of this method of practice, though separately they may seem to be of comparatively small importance. These would fill up too much space in the JOURNAL, and must be sought for in the writings of Dr. Apostoli, or, what is much better, by personal observation, by anyone who means to take in hand the operations which we are considering.

THERAPEUTIC MEMORANDA.

ANALYSIS OF THE WATER OF LEAMINGTON SPA.

I HAVE read with pleasure your editorial note on the re-opening of the Pump Room and Medicinal Baths at Leamington Spa. In this note one sentence seems to me to call for further explanation. You say that "the one thing which is next to be desired is that there should be an authoritative analysis of the water as it now is," etc. I am happy to be able to assure you that the Corporation have not been neglectful on this point. The question of analysis was most fully gone into four years ago, when the restoration and development of the Bathing Establishment was projected, and an authoritative analysis made by Professor Frankland. This I subjoin, in convenient form.

Analysis of Mineral Matter in Solution.

Results expressed in	Parts per 100,000.	Grains per Imperial Gallon.
Silica	.74	.52
Oxide of iron and alumina	.42	.29
Carbonate of lime	12.78	8.95
,, magnesia	.25	.17
Sulphate of potash	1.04	.73
,, soda	208.63	146.04
,, lime	45.20	31.64
,, magnesia	22.46	15.72
Chloride of calcium	134.83	94.38
,, magnesium	64.97	45.48
,, potassium	3.27	2.29
,, sodium	628.27	439.79
Bromide of sodium	.64	.45
Nitrate of soda	1.22	.85
Carbonate of soda	4.50	3.15
	1129.22	790.45

This analysis shows that the composition of our saline waters remains practically unaltered since the days of Loudoun and Jephson. It shows also that though, as you observe in your note, "chloride of sodium predominates" among the mineral constituents, yet many other important salts are present in large amount, and more particularly the sulphate of soda, forming 18.48 per cent. of the solid residue, and chloride of calcium, forming 11.94 per cent. of the same. The composition of our waters assimilates closely to that of the Kissingen waters, and it is in diseases of the liver arising from sluggish portal circulation and, in the gouty diathesis, that the waters of Leamington Spa are especially indicated. On this latter point I may add that we received most emphatic testimony in favour of our springs from Dr. Garrod in his recent speech on the occasion of the reopening of our baths.

Leamington. R. EARDLEY-WILMOT, M.B.(Lond.).

ALLOW me to say that in 1885 I had a thorough analysis made of all the mineral waters in all the wells by Dr. Meymoth Tidy, Professor Brazier, Dr. Wilson Hake, and Mr. Napier Hake, and, as far as I am aware, it is the only collective published analysis since that of Loudoun in the year 1831.

The names of the above gentlemen are enough guarantee that the work done by them is sufficiently "authoritative." Their analysis will be found in my little book upon the *Saline Waters of Leamington*, published by H. K. Lewis. I believe there is a considerable difference of opinion amongst eminent chemists as to whether it is possible to accurately "combine" the analytical data of mineral waters or not, some holding that it can be done, while others maintain (and Dr. Tidy amongst the number) that it is impossible. You mention sulphite of sodium as existing in the Leamington mineral waters.

Will any of your readers kindly combine the following analytical data and try to find me that salt?

Pump Room Well (No. 2), otherwise known as "Grove's Well."

Analysis by Dr. Meymott Tidy, M.B., F.I.C., F.C.S., Professor of Chemistry, Medical Jurisprudence, and Public Health, the London Hospital, and Analyst for the City of London, made March 20th, 1885.

	Grains per pint.
Sodium	36.35
Magnesium	2.33
Calcium	7.52
Chlorine	56.15
Sulphuric Acid	25.05
Peroxide of Iron	.25
Silica	.14
	127.79

Leamington. FRANCIS WM. SMITH, M.D.

SURGICAL MEMORANDA.

OBSTRUCTION OF OBSCURE HERNIA.

THE following case may be interesting: J. W. sent for me on Christmas Day (Saturday), having been in great abdominal pain from the previous Wednesday, when he had lifted a heavy weight; he had vomited almost incessantly from that period, and the last two days the vomit had been fæcal. I could detect only a very slight fulness in the left groin. This swelling was perfectly free from pain or tenderness, and not hernial; he had had no action of the bowels from the first. The passage of a long tube per rectum, and injection of a large quantity of fluid, had no effect. After giving by the mouth one-grain doses of opium for several hours without much benefit, I resorted to the expedient of placing him with his head down and legs up in the air against the wall of the room. I then rather violently kneaded or punched the abdomen for a quarter of an hour, with such beneficial effect that the patient, at the end of that time, exclaimed "something has given way; I am quite well?" The fæcal vomiting did not recur; flatus readily passed, and the next day the bowels were relieved *per vias naturales*.

Upper Norwood. GEORGE K. POOLE, M.D.

OBSTETRIC MEMORANDA.

SUBSEQUENT HISTORY OF A CASE OF RUPTURE OF THE UTERUS IN WHICH ABDOMINAL SECTION WAS PERFORMED TWENTY-THREE YEARS AGO.

THIS case, which was reported in the *Edinburgh Medical Journal* for August, 1864, and *The New Sydenham Society's Year-Book*, was the first successful one in which abdominal section had been performed in Great Britain for rupture of the uterus during labour at the full term. Its subsequent history presents several points of interest. After her recovery, I represented strongly to Mrs. M. and her husband the great risk she would incur by again becoming pregnant, and both agreed to have separate bed-rooms, an arrangement which was rigidly carried out for several years. During a trip to Wales, however, about eight years afterwards, their former vows were broken, and, in 1873, she again became pregnant. The late Mr. Whitehead, of Manchester, was consulted, and recommended the induction of premature labour, which was successfully carried out by Mr. Jones, of Chapel-en-le-Frith, at about the sixth month. She was afterwards attended by Mr. Chatterton, of Newmills, who likewise brought on premature labour once or twice. I regret much that I am unable to give details of these last operations, as Mr. Chatterton has long left the district, and her excellent medical attendant, Mr. Davenport, whom I met at the time of the rupture, has now been dead for many years. I saw her some time after the first induction of premature labour (in 1874, I think), and she was then in excellent health, and

has continued so up to the last report I had of her in January of the present year.

The case clearly shows that a ruptured uterus can, without any sutures, become so firmly united as to undergo with impunity the strain of two, if not three, subsequent pregnancies.

Eastbourne. R. W. CRIGHTON, M.D.Edin.

PROLAPSE OF CORD IN FOUR MONTHS' PREGNANCY.

THE following case may prove interesting to readers of the JOURNAL. A woman, 35 years of age, consulted me during the evening of February 19th last, complaining of something having "come down" in her vagina during the morning. She was about four months pregnant. Upon examination the umbilical cord was found protruding in a loop about an inch and a half from the vagina; it was of brownish colour. The patient said that when the prolapse occurred she was at stool, and, finding something give way, upon inspection found the blueish white loop of the cord (it had since then turned colour). She had had no pains. I ordered her to bed at once, expecting a miscarriage during the night. Upon calling on the next day I found my prognosis had been correct, miscarriage having taken place with hardly any pains. The placenta not having come away, it was left. When last seen on the 25th, she was progressing favourably, and had no bad symptoms. There was a slight brown discharge, but it was not offensive to the smell. In this case, as in a former miscarriage, the greater part of the placenta will probably be absorbed.

The case is interesting from the fact of a prolapse of the cord at such an early date, and caused by such trivial means. Upon reference I find no allusion to such an occurrence in any author.

Rotherham. CRANLEY M. PERRY.

CLINICAL MEMORANDA.

POISONOUS PERAMBULATORS.

THE greater the number the conveniences we acquire in domestic life, especially where stability is sacrificed to show, the more likely shall we be subjects to accidents of obscure origin. Take the following case as an example.

Mrs. A. consulted me, on June 7th, about her baby, aged 4 months. It had been out on the previous day in a perambulator under a very hot sun. After getting home it commenced to be sick, and vomited a green-coloured fluid. The napkins were stained with blood. Upon inquiry I found the child was wholly breast-fed; and on naked eye examination of this fluid I detected no cause for the vomiting. Upon further inquiries I was told that the child was seen to suck the green strap of the perambulator. I then suspected the mischief to be due, at least in greatest measure, to arsenic, and gave the following mixture: ℞ Liq. ferri dialysat. ℥j; Ruspini's styptic ℥ij; glycerini ℥ss; aq. chlor. ad ℥j. Sig. A teaspoonful every three hours. This had the effect of entirely restraining the hæmorrhage from the bowels, which was mixed with mucus. I regret to say that the child gradually sank from exhaustion.

Mr. Sharples, analytical chemist, has been kind enough to examine the strap, and has found arsenic in abundance.

Preston. D. TURNBULL SMITH, M.B., etc.

A CASE OF ACUTE PLEURITIS SIMULATING IN ITS ONSET PERFORATION OF THE STOMACH.

I GOT an urgent message about 7 A.M. on December 8th to go to see M. D., between 16 and 17 years of age, a young girl working at a factory. I was told that she was suffering from great pain in her stomach. The evening before, on returning from her work, she felt chilly, as if she had caught cold, and went to bed early. She got up as usual to go out to her work, about an hour before I was sent for, and had a cup of tea and a small piece of bread. While taking these, and when in the act of stooping down to fasten her boots, she felt as if a crust of the bread she had swallowed hurt her stomach; in a short time she vomited what she had taken, and almost immediately afterwards felt intense pain in her stomach, and almost fainted.

There was no history of gastric ulcer, but I was told that "her stomach was weak," and she could not eat what the others took;" also that about twelve months ago she was ill "with a bad stomach" for a few days.

I found her in bed, almost in a state of collapse, with pale face and very anxious expression, clammy skin, and pulse small and weak. She was moaning and writhing with pain, which she referred to the epigastrium. The pain was not apparently increased by deep inspiration. There was great tenderness on pressure, confined to the epigastric region.

At the time I feared that I had to deal with a case of perforation of the stomach, due to an ulcer, which had not given very much trouble, and that probably the act of vomiting had caused the ulcer to give way. Happily, the case was not so serious. I gave a full dose of morphine by hypodermic injection, and applied poultices over the epigastrium. This relieved the pain considerably, and towards night it had left the epigastric region, and gone round to the right side of the chest, and was most severe under the right breast. A slight pleuritic friction-sound could now be detected on that side; the temperature went up to 102°, and there was a slight cough. Next day there was a small amount of effusion, the case then ran the ordinary course of acute pleuritis, and the girl was convalescent in about a week.

Portadown. W. E. HADDEN, M.D.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

SWANSEA HOSPITAL.

NOTES OF A CASE OF SUPRAPUBIC CYSTOTOMY, WITH REMARKS.[1]

(Under the care of Mr. J. FARRANT FRY.)

B. R, aged 19, was admitted in August, 1886, with the usual symptoms of stone. On sounding him, the stone was judged to be the size of a small walnut, and probably composed of lithic acid. On August 31st, the patient was placed under the A.C.E. mixture, a soft elastic catheter passed, the urine withdrawn, and ten ounces of boracic acid lotion (1—40) injected into the bladder, the catheter being tied in. No rectal bag was used. Under carbolic spray, an incision three inches long was made in the median line, and slightly overlapping the symphysis pubis; the recti muscles were held aside by retractors, and the cellular tissue, fat, and veins torn and pushed aside by the finger and retractors. On the bladder appearing in the wound, a catgut suture was passed through its walls (by means of a needle on a handle) transversely to the axis of the bladder and the points of entrance and exit of the needle being separate about three-quarters of an inch.

A sinus-forceps was now made to pierce the bladder between the two punctures made by the needle, and, by opening the blades of the forceps, sufficient space was obtained through which to pass the left index finger into the bladder, and catch up the loop of catgut, as in colotomy. The loop and two ends of the catgut were then given to Dr. William J. F. Davies, who kindly helped me, and by them he was able to hold the bladder forwards and fairly fixed, whilst I passed the left index finger into the bladder, found the stone, and removed it between the finger and a scoop. The loop of catgut was now let go and tied, so as to bring the torn edges of the bladder wound into apposition. The abdominal walls were brought together by two silver wire sutures, except at the lower end where a drainage-tube, reaching down to the bladder, was placed. The wound was dressed antiseptically, a morphine suppository placed in the rectum, and the soft catheter, which had remained in the bladder during the operation, was lengthened by tubing, so as to convey the urine into boracic lotion, placed in a bottle under the bed. The wound was dressed antiseptically on the second, fourth, sixth, and eleventh days, and throughout no sign of urine appeared at the abdominal wound. The catheter acted well, and, by placing fresh boracic lotion in the bottle night and morning, and raising the bottle above the level of the bed, the bladder was on each occasion washed out with two ounces of lotion.

The catheter was removed permanently on the sixth day, when the lad was able to hold his urine for two hours, and to pass it "as well as ever," and he left the hospital perfectly well on the sixteenth day.

REMARKS BY MR. FARRANT FRY.—I have brought this solitary case before the meeting in consequence of the favour with which suprapubic cystotomy has been regarded of late by the leaders of the profession. The operation is an old one revived, and, whilst most authorities urge that "the general run of cases of stone in the bladder (475 out of 500 is Sir Henry Thompson's proportion) are provided for by lithotrity," still now and again cases occur in which, either from

[1] Read before the Monmouthshire and South Wales Branch of the British Medical Association.

the condition of the patient, from the state of the bladder, or from the size of the stone, perineal or suprapubic cystotomy is called for, and whilst in some of these perineal lithotomy may be performed, there remain others where, either from the size of the stone or from enlargement of the prostate, it becomes a necessity to open the bladder above the pubes. In choosing which of the two cutting operations shall be performed on a given case, one recognises that perineal lithotomy is the more brilliant and expeditious; but consider, first, the structures which must be, and still more those which may be, divided. Secondly, how the knife is plunged into the darkness of the perineum, to be followed by the finger, which should pass into the bladder, but which, even when it belonged to Fergusson and Keith, has gone wrong. (I have witnessed a perineal lithotomy, and subsequently a *post-mortem* examination, where the bladder had been torn from its connections by the operator in his attempts to reach its cavity.) Thirdly, What are the ultimate results after perineal lithotomy? Statistics show a splendid percentage of recoveries, one operator having had as many as 150 consecutively successful cases; but how seldom do we meet with men who have been cut for stone during childhood, and, when we do, how frequently they would appear to be sterile! Mr. Teevan brought four cases of childless husbands before the Clinical Society, and the only three men I know who underwent perineal lithotomy during childhood are married, but childless.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 14TH, 1887.

GEORGE D. POLLOCK, Esq., F.R.C.S., President, in the Chair.

A BALLOT was held before the meeting began at which the following elections took place:—

Honorary Fellows: W. H. Flower, Esq., F.R.C.S., F.R.S.; Michael Foster, M.D., F.R.S.; Sir William Turner, F.R.C.S.E., F.R.S.

Foreign Honorary Fellows: John S. Billings, Friedrich Esmarch, Richard von Volkman.

Honorary Librarian: Samuel Jones Gee, M.D.

The PRESIDENT, before the discussion began, announced that the Council proposed to present a letter of congratulation to the Queen, which was read to the meeting by the HONORARY SECRETARY, and after the proposal had been duly made and seconded, it was carried unanimously.

Dermatitis Gangrænosa Infantum. By H. RADCLIFFE CROCKER, M.D.—Four groups of cases were described. In the first there was no evidence of varicella antecedent to the gangrenous or ulcerating eruptions, and in most it was distinctly negatived. In the second group were cases in which varicella had preceded the sloughs or ulcers, which either developed immediately upon the varicella pustule or occurred as a sequela, beginning in independent lesions. In the third group vaccination was the immediate antecedent. In the fourth group were placed certain cases of local gangrene resembling cancrum oris; but the individual lesions began in exactly the same way as the independent eruption which followed varicella, and there was a tendency to generalisation, or, at all events, to extension beyond the region in which it started in some of the cases. A general account of the disease was drawn up from an analysis of the preceding and other cases, and it was shown that there was great difference in the severity of the eruption. In some the gangrenous patches were so numerous and extensive as to lead to the death of the patient in a few days; while at the other end of the chain were cases of so mild a character that there were only superficially ulcerating pustules, which came out in crops, thus protracting the disease as a whole for a considerable time, and generally accompanied by intense pruritus; these milder cases appeared to correspond with Mr. Hutchinson's varicella prurigo. Between the two extremes were cases of all grades of severity. Comparison was made between the local and general gangrenous eruptions, and, among other things in common, it was shown that they both attacked girls more than boys, and occurred at about the same ages. The conclusions arrived at were—that the gangrenous eruptions were pathological accidents, so to speak, which, in young children, especially when of tubercular constitution, might supervene upon any pustular eruption, although, no doubt, such a condition is much more common after varicella. Secondly, that the determining factor is probably a micro-organism derived from without, though cultivation and inoculation experiments could alone prove the truth of this theory. Thirdly, that the initial lesions, both of the local and general gangrenous eruptions, present the same characters.—Mr. JONATHAN HUTCHINSON congratulated Dr. Crocker on the results of his careful observations. For himself, he wished it to be understood that he never had ventured to assert that all cases of gangrene of the skin arose from varicella, or vaccinia, but he still thought they were the chief causes. Measles, syphilis, scarlet fever, and probably some other diseases led up to gangrene, and the point that they had in common was that they were all specific animal poisons. That was a point of connection which he thought it important to bear in mind. During recent years he had seen many cases of severe cancrum oris in children who were in very comfortable circumstances as to diet, etc., but they had all had measles. He was glad to find that Dr. Crocker's researches led him to the same conclusion as his own original paper some five or six years ago, namely, that more cases were dependent on varicella than on anything else. But he was bound to admit the existence of a small group where no antecedent specific animal poison could be found to have acted. He did not consider that a tendency to the tubercular diathesis was sufficient to explain the gangrene. Even the rare cases of tubercle of the skin were very unlikely to lead up to a disease like this, which came by rapid onset in many more places than the tubercles. It was very difficult to be sure that in any particular case varicella had been excluded, and he was inclined to think that a few cases might be due to sporadic and overlooked varicella. When irregular skin eruptions became gangrenous, he thought it was generally in cases of a doubtful pus poisoning, starting from one spot, as, in case of a delicate girl, he had seen where they had arisen from a bruised finger. She had also pustular ophthalmia, but recovered completely.—Dr. CROCKER was glad to find his differences with Mr. Hutchinson so very slight. His first case had been the one of much the highest interest as to causation. It had been shown to the Dermatological Society as a case of lichen planus, and three days later had become gangrenous. He had watched it for three weeks previously, and could see no sign of varicella or any specific fever. The evidence as to the effect of tubercle in its production should not be entirely overlooked, but was not as strong.

On a Form of Inflammation of the Lips and Mouth, which sometimes ends Fatally, and is usually attended by some Disease of the Skin. By JONATHAN HUTCHINSON, F.R.S., LL.D.—The paper contained the description of a disease (not, it is believed, previously recognised) in which superficial ulcerations occur in the lips and in various parts of the mouth, followed sooner or later by some form of skin-disease and tending to a fatal termination. The form of skin-disease might vary, but the hands and feet were the parts usually affected, and the nails were especially prone to suffer. In some instances the eruption might consist of bullæ, which were followed by free papillary outgrowths. The patients attacked were usually in middle life, or in early senile periods. No special antecedents could be alleged as the probable cause of the malady. Unless checked by treatment, the disease appeared to run its course in about six months, producing death by exhaustion. There seemed reason to believe that opium given in repeated doses will cure it, and that there was, at any rate in some cases, no tendency to relapse afterwards. All the best marked cases as yet observed had occurred in males, but in several milder ones the patients were women. Of the most characteristic, two were master tanners, one a farmer, one a clergyman, and one a gentleman of no occupation; all these resided in the country. Careful inquiry had failed to support the suspicion that the disease might perhaps be due to contagion from animals. Of these five cases two ended fatally and three in recovery. The patients who died were those first observed, and since the discovery of the signal efficacy of opium, no case had ended in death. The observation as to the efficacy of opium was simultaneously made by the President of the Society, Mr. Pollock, and by the author, two different patients being at the same time under their separate treatment and recovering under this drug. Since that, every case had yielded if the dose of opium were sufficiently pushed. In one, however, the disease did not yield quickly, and for more than a month seemed likely to end in death. As regards permanency of cure, in one case the patient was known to be quite well four years after his recovery, in another there was reason to believe that such was the fact, and in the third a period of two years had elapsed. In two of the milder cases, occurring in younger patients, the disease had repeatedly recurred. A great variety of remedies had been tried without benefit before the use of opium was resorted to. In no single case had there appeared to be any tendency to spontaneous improvement. In all cases the inflammation of the lips and mouth took definite precedence of the skin-symptoms, and in some the latter were very slight. It was not known that any case had as yet been obtained amongst the poorer classes of society. The author desired to abstain for the present from expressing any de-

tailed opinion as to the causes or nature of the malady. He would, however, venture to suggest that it was allied to other forms of disturbed health attended by skin-disease and occurring in early senile periods, such as certain peculiar varieties of psoriasis, pemphigus, lichen planus, and pityriasis rubra. In confirmation of this suggestion, and as an appendix to the paper, a case was narrated (with a portrait in illustration) in which an elderly lady had a kind of spreading eczema-psoriasis of the hands and scalp. She lost her nails and all her hair, and was rapidly failing in health in spite of various measures of treatment, but finally recovered quickly and completely under opium. Her case did not belong to the group described in the paper, because she never at any time had inflammation of the mouth. —The PRESIDENT thanked Mr. Hutchinson for the kind reference he had made to his treatment by opium. It had been a favourite remedy of his in phagedæna. During an epidemic of this at St. George's Hospital, he had used it largely and with most satisfactory results. Since then he had had a long experience of its value in curing the inflammatory conditions in the mouths of young children. He had never, thanks to opium, felt the need of any escharotic.—Mr. C. MACNAMARA begged to bear testimony to the valuable debt he owed to Mr. Hutchinson's most careful researches. He had seen a strong man in middle life, with no suspicion of syphilis, or any other serious ill-health, who had been in India, and almost immediately on his return to England, got severe stomatitis, and fell into a state of great prostration. He had heard Mr. Hutchinson speak of similar cases, and put his friend under his care. Unfortunately, he was too far gone to be able to take or persist in taking the necessary opium, and the case ended fatally from emaciation.—Dr. CROCKER had had a similar case under his care, which bore some resemblance to what Neumann had called pemphigus vegetans. He had not been able to do the patient any substantial good. She came subsequently under Mr. Hutchinson, who cured her with the opium treatment.—Mr. HUTCHINSON found he had few questions to answer, but begged to be allowed to repeat his thanks to Mr. Pollock, to whom the credit of the opium treatment was really due.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

THURSDAY, JUNE 9TH, 1887.

J. W. HULKE, F.R.S., President, in the Chair.

A Case of Optic Atrophy in one Eye and Temporary Hemianopsia in the Other.—Mr. J. B. STORY (Dublin) read an account of the case of a young woman who gradually became blind in the right eye, and had temporal hemianopsia in the other eye. She suffered from headache and slightly from vomiting. One of the things she complained most of was drowsiness about mid-day each day. It was noticed that she got much stouter. She also suffered from irregular menstruation. At the time of reporting the case she was in fair general health, and able to follow her occupation (that of a dressmaker).—Mr. NETTLESHIP remarked that a very similar case had been recorded in the Society's *Transactions*, and in that instance, after death, a tumour was found in the pituitary fossa. Other similar cases had been published, and he had lately seen a case at St. Thomas's Hospital where the same train of symptoms had been produced in the same way.—Dr. HILL GRIFFITH said that he had placed on record a case identical with that of Mr. Story. Cessation of menstruation and sleepiness had been present in his case; and, in several cases that he had seen, the patients had complained of getting stout.—Dr. JAMES ANDERSON briefly described the case he had published, which closely agreed with that of Mr. Story. He said that it was the rule in pituitary tumours that the patient should get very stout.—Dr. COUPLAND mentioned also the concurrence of an increased development of fat in conjunction with disease or enlargement of the pituitary body.

The Permeability of the Suspensory Ligament by Organised Substances.—Dr. HILL GRIFFITH read a communication on this subject. He mentioned several cases of keratitis punctata without any iritis, but with recent patches of choroido-retinitis, and also two cases of retinal gliomata, with separate nodules free in the anterior chamber, and showed naked eye and microscopical specimens. He endeavoured to show from these two groups of cases that solid particles were carried by the nutrient currents through the zonule at the circumlental space.—Mr. JESSOP mentioned a case of an old opaque lens in which, on opening the eye, a gush of cholesterine spangles came from above behind the iris, and fell to the lower part of the anterior chamber, taking up a triangle with the apex upwards. The cholesterine was so large in quantity that it must have come from the vitreous.—In reply to Mr. MARCUS GUNN, Dr. HILL GRIFFITH said that in his case there was evidence of choroiditis gradually passing into atrophy of the usual description.—Mr. LANG, who showed a specimen, with the suspensory ligament *in situ*, said that he was much interested in the association of solitary patches of choroiditis with keratitis punctata, and he thought that the two conditions were always associated; the cases were more frequent in young women, but occurred also in young men. The etiology was obscure and the vision not much affected when the cases were first seen.—Mr. NETTLESHIP agreed with Mr. Lang as to the presence of isolated patches of choroiditis in a large number of cases of keratitis punctata. Opacities of the vitreous were often present, and were sometimes found even when there was no choroiditis, and in some only the keratitis punctata could be seen. The dots on the back of the cornea could only be explained on the hypothesis that there had been migration through the suspensory ligament.—Mr. J. B. STORY could not accept this view, as it would not explain those cases where there was no keratitis punctata. He thought it was very difficult to exclude the theory that there was some cyclitic deposit. —The PRESIDENT thought another explanation was possible apart from the mechanical transfer theory. There might be an inflammatory process, and cyclitis, or choroiditis, or both expressive of some general conditions. Some of the spots were only flocculent precipitates or coagula lying loosely; some might be due to proliferation and disintegration of the epithelium. The anatomical difficulties in regard to the mechanical convection theory appeared to him to be very great.—Mr. SILCOCK mentioned the case of a lady in which a punctate appearance at the back of the cornea was associated with opacities in the vitreous but without choroiditis.—Mr. MACKINLAY observed that he was unable to detect the spaces in the suspensory ligament, even with powerful lenses.—Mr. HUTCHINSON, jun., argued that a transmission of particles might take place in a direction the reverse of the ordinary, as there was reason to believe happened in cases of axillary tumour.—Mr. W. J. COLLINS suggested that particles might pass along the canal of Stilling, and thus the necessity for supposing that they traversed the impervious hyaloid membrane would be obviated.—Dr. HILL GRIFFITH said he was much gratified by the excellent discussion that had taken place; it would not be necessary for him to take notice of all the points mentioned. He had, like Mr. Nettleship, seen cases of descemetitis without iritis, in which he had failed to make out choroiditis; the cases he had recorded were only made out to support the proposition contained in the heading of the paper, and were but put forward as examples of the most usual conditions met with in descemetitis. To Mr. Story's objection that choroiditis did not always produce descemetitis, he would reply that cystitis was not always followed by that condition. He would not accept Mr. Hulke's explanation of a coincident cyclitis to account for his cases, for here, as in diseases of the nervous system, we should avoid a "double lesion" if one be sufficient to account for all existing symptoms.

Successively-occurring Isolated Spots of Choroido-retinitis affecting the Yellow Spot Region.—Mr. BRAILEY narrated the case of an independent gentleman, aged 41, who had been under observation for seven months and a half, during which period he had five times experienced the development of a small relative scotoma at or near the centre of the field of vision of his right eye, which was wearing its full correction (+3.50 sph. and + I.D. cylinder). His left eye had been absolutely blind from glaucoma for twenty years, and was still hard, though painless. The scotomata, as appreciable by him at eighteen inches, varied in size from two to six inches square. Each appeared as a round or oval disc of dim and troubled vision, surrounded by a bright glittering edge. At first the disc was well marked with annoying dimness and distortion of objects, which appeared materially darkened when embraced in its area. Printed letters appeared diminished as well as huddled together. Distant vision, though it might be diminished even to one-half in a moderate light, was not much affected with bright light, whether day or artificial. All colours, except perhaps green, were dulled, as if dashed with grey. Soon the spot began to amend and was more translucent, giving to his sight the impression of an interposed disc of neutral tinted glass, whose sharp edge slightly glittered in places. Each spot had resulted in almost perfect restoration of vision, as estimated by test-types, though the ophthalmoscopic appearances still persisted to some degree. Ophthalmoscopically, each scotoma corresponded to a small, rounded, isolated, not well-defined spot of dull greyish colour. Most of them were in close relation to, though clearly on a lower level than, the retinal blood-vessels, which were here decidedly larger than usual. The optic disc was slightly hazy at its margins, though of normal colour. An ophthalmoscopic drawing was exhibited, which showed three of the spots, one moderately recent, and two in process of fading.—Mr. WAREN TAY thought the case in some respects very

unusual, and considered that the retina must have been affected.—The PRESIDENT said that the patient, being an artist, would observe and describe his visual defects with greater accuracy than ordinary patients.

Living and Card Specimens.—Mr. SILCOCK showed a case of Keratoiritis in a woman probably the subject of congenital syphilis. The peculiarity of the case consisted in the presence of a number of minute dots situated either on the surface of Descemet's membrane, or in the deepest layers of the cornea, and arranged in the form of a circlet which corresponded in position with the pupillary margin of the iris; the affected cornea also presented the usual characteristics of interstitial keratitis. The cornea of the other eye was unaffected.—Mr. CROSS showed a Tumour of the Cornea, probably sarcomatous, in reference to which the PRESIDENT mentioned a case in which he shaved off the growth and applied nitrate of silver freely, with the result of a scar, which had so far not been followed by recurrence. Mr. Cross also exhibited a case of Opaque Nerve-Fibres limited to the Papilla.—Mr. W. J. COLLINS: Extensive Hæmorrhage into a Blind Eye, with Coarctation of Retina.—Mr. LAWFORD: Coredialysis, with complete Anteversion of detached portion of Iris.—Mr. G. E. WALKER: Sequel to case of Cyclotomy in Glaucoma. Mr. Walker also showed a youth with Pulsating Exophthalmos in process of cure. He had been shown at the November meeting, when the symptoms were much more marked. The disease had been caused by a fall down some cellar-steps on to a flagged floor in February, 1886; this produced insensibility for three days; and, on awakening, the boy found he had a swishing noise in his head. No ocular symptoms became manifest until July, when engorgement of the right eye appeared, and, a fortnight later, of the left. In a day or two the latter disappeared, and the proptosis of the right took place. This increasing, he had proposed to tie the carotid in the neck, as he believed a true aneurysm of the artery, where it turned up from the cavernous sinus, had been produced. But on account of the opinion of two gentlemen who believed it was not true aneurysm, but an opening of the carotid into the cavernous sinus, the operation was not performed. From October to the end of January the general symptoms appeared to be stationary, but at that time—January 20th—he was much frightened by being caught in a crush in a theatre, and soon afterwards found the *bruit* had ceased. The extrusion of the eye, its engorgement and pulsation, at first were considerably increased, but afterwards decreased, at first rather quickly, and since then very slowly. He contended that although in this case a happy result had been brought about by an accident, it would be wise in a future case to tie the carotid, and not to trust to the chapter of accidents; and he gave a short account of a case in which he had performed the operation with complete restoration of the use of the eye, although at the time of operation it was lying on the cheek, thrust out from between the lids, and with mere perception of light.—At the conclusion of the meeting, Mr. STORY gave an experimental demonstration on the Pathology of Glaucoma.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

WEDNESDAY, JUNE 1ST, 1887.

Professor GRAINGER STEWART, M.D., F.R.C.P.Ed., President, in the Chair.

Hypertrophy of the Lachrymal Gland.—Dr. ARGYLL ROBERTSON showed a patient from whom he had removed a much enlarged lachrymal gland.

Cerebral Abscess with Recovery.—Mr. A. G. MILLER showed two patients on whom he had operated for intra-cranial abscess, connected with chronic ear-disease. In both cases he thought there could be no doubt that he had to deal with intra-cranial suppuration. In both cases the treatment was successful.

Word-blindness.—Dr. BRAMWELL showed a case of word-blindness, in which the symptom was unusually well-defined. The blindness appeared even greater in respect of single letters than combinations of letters.

Brain Syphilis.—Dr. BRAMWELL showed a young man who had been more or less continuously under treatment for some years for brain syphilis. He had presented a succession of symptoms, but at present the most striking anomaly was a curious form of aphasia in respect of numbers. He seldom read figures correctly, and, when asked to write simple figures, he almost invariably multiplied the sum by ten.

Specimen.—Mr. MILLER exhibited a renal calculus which he had removed by nephro-lithotomy. The kidney was found to be healthy. The patient did well.

Instruments.—Dr. FOULIS drew attention to a mode of using his combined syringe and aspirator (already shown to the Society), whereby it might be used for withdrawing fluid on the syphon principle. He also showed an addition he had made to his vesical catheter, whereby the operation of bladder-washing was more easily carried out, with more complete exclusion of all risks from septic infection. Dr. Foulis also exhibited what he regarded as a most valuable modification of Simpson's forceps. It consists essentially of a strong, rigid bar, firmly attached, by means of a shorter cross bar, to the lock of the forceps, and running parallel with the major curve of the forceps. By means of a handle attached to the distal end of this bar, any necessary movement of the blades, embracing the head, might be effected from without with greater certainty and delicacy.

On the Occurrence of Unusual Poisonous Products in Food-Stuffs.—Dr. PHILIP read a paper with reference to the occurrence of such products founded on certain experimental results. Apart from individual idiosyncrasy, many cases were on record where urgent toxic symptoms had followed the ingestion of ordinary and apparently wholesome food-stuffs. In many instances, little light had been obtained as to the cause of such symptoms. Bacteriological investigation, combined with the more strictly chemical line of research, promised to afford considerable aid. Reference was made to the clinical symptoms in several cases of such poisoning, among others to the cases of supposed ham poisoning, which occurred recently at Carlisle. From the ingesta in some of these cases, fairly pure extracts had been obtained according to a method described, and their physiological effects studied in frogs and in the human subject. The results of these experiments indicated that a poison of some potency had been present. The poison was not detected by the ordinary methods of analysis, and some of its features suggested relationship with the group of bodies tentatively grouped as ptomaines or cadaveric alkaloids. It was probably traceable to some form of fermentation, which, in turn, possibly depended on certain organisms which were discovered in the foods examined. The ascertained presence of such bodies gave important indications for treatment. The endeavour must be made to combine the more strictly symptomatic treatment with the exhibition of such remedies as may be known to possess antagonistic properties to the morbid poison. Such research promised also to throw light on certain abstruse etiological problems.—Mr. HARE made a statement as to the organisms which he had discovered in the portions of ham submitted to him for microscopic examination. Certain preliminary difficulties had presented themselves in the process of staining. Probably some of the ingredients used in the process of curing prevented the tissues from receiving the stain so readily as usual. It was found necessary to prolong the process considerably. When sufficiently exposed, the sections were found to contain micrococci. These were present in groups both at the edge of the section and between the muscular bundles. They appeared to bear close relation to the tissues. The organisms were quite different from those usually discoverable in tainted ham. From their reaction with the staining solutions, it was likely that the organisms had obtained access to the ham after it was cooked. Reference was made to the condition of the cellar in which the ham had been kept subsequent to cooking, as affording a possible explanation of their appearance.—The PRESIDENT emphasised the value of such work from the higher etiological standpoint, and quoted, in illustration, an elaborate research on phthisis, to be shortly published by Dr. Philip.—Dr. LITTLEJOHN spoke of the importance of such cases from the medico-legal point of view.—Dr. BRAMWELL raised the point as to how the ham had been kept during the interval between the breakfast and the date of examination.—Mr. HARE explained that the portions sent to him had been placed in absolute alcohol shortly after the first appearance of poisonous symptoms in some of the guests.—Mr. CATHCART, Dr. P. A. YOUNG, Dr. DODS, and Dr. FOULIS also took part in the discussion.

ACADEMY OF MEDICINE IN IRELAND.

SURGICAL SECTION.

FRIDAY, APRIL 22ND, 1887.

Sir WILLIAM STOKES, President, in the Chair.

Malignant Disease of the Tonsil.—Mr. HENRY GRAY CROLY read a paper on primary sarcoma of the tonsil, and detailed the history of two cases. 1. A lad, aged 17, was admitted into the City of Dublin Hospital on April 22nd, 1886, suffering from a tumour involving the left tonsil and soft palate; the boy was in excellent health until six weeks before. The disease commenced like ordinary tonsillitis, and so much did the swelling resemble tonsillar abscess that an exploratory incision was made by the medical gentleman who first saw the case; no pus escaped. The patient suffered from dyspnœa and dysphagia. A glandular swelling subsequently formed in the left digas-

tric space. Sir James Paget, who was in Dublin at the time, kindly saw the patient with Mr. Croly, and concurred in his view of the case and in the proposed treatment; namely, preliminary tracheotomy and removal of the growth from within. Tracheotomy was performed on May 4th; the patient experienced much relief. The tonsillar and palate swelling and the digastric tumour disappeared almost entirely after the operation, but soon reappeared. Mr. Croly excised the tumour from beneath the angle of the jaw on May 18th, and subsequently the tonsillar and palate growth, by means of the benzoline cautery. The tonsil and digastric tumours were round-celled sarcoma. The disease returned very rapidly in the digastric space, and afterwards in the palate. The patient got drowsy, and suffered from violent headaches; the glands in the neck enlarged; he returned to the country and died in October—six months from the commencement of the disease. The second case occurred in a man over 50 years of age. The sarcoma was confined to the tonsil, and so much did it simulate tonsillar abscess that an incision was made into the tumour. Mr. Croly declined to operate, owing to the extensive infiltration of the cervical glands. The patient returned to the country and died from exhaustion caused by repeated hæmorrhages.—The PRESIDENT said the first case was one of great clinical interest, and of exceptional rarity. Though the operative measure was not attended with success, yet that procedure was fully justified.—Mr. HAMILTON, having seen the case in conjunction with Sir James Paget, was forcibly struck with it as presenting the characteristics of malignant disease.—Mr. THOMSON asked whether Mr. Croly had succeeded by this method in getting away the whole of the tonsil with the cautery.—Mr. W. THORNLEY STOKER said he was fond of the thermo-cautery, and used it freely and frequently; but this was one of the cases in which he would divide the cheek and jaw, and enucleate the gland from its attachment by means of an instrument of less facility.—Mr. KENDAL FRANKS concurred with Mr. Stoker in his objection to the thermo-cautery. Although he had been looking at tonsils a good deal, he had never seen a case of primary cancer. He had, however, operated on cancerous tonsil in connection with disease of the tongue, the details of which he brought before the Academy.—Mr. CORLEY would have considerable hesitation in applying the point of a thermo-cautery to a tonsil, either externally or inside.—Mr. CROLY replied.

Excision of the Wrist-Joint.—Mr. WHEELER read a paper on excision of the wrist-joint.—Mr. CROLY said he had excised the wrist four or five times, adopting Lister's operation. Great stress was laid on early passive motion of the fingers. He aimed at avoiding injury to the tendons, especially of the thumb, and also injury to the radial artery. Another point emphasised by Lister was to cut the end of the ulna in such a way as to prevent it dropping on the styloid side. —A discussion followed, in which Mr. HAMILTON, the PRESIDENT, Mr. W. THORNLEY STOKER, Mr. CROLY, and Mr. TOBIN took part, and which dealt with the merits of Esmarch's bandage, and Mr. WHEELER replied. The splint he used was similar to that employed by Lister, but a little more elevated at the heads of the metacarpal bones. Having put in a drainage-tube, he bandaged the hand to the splint, putting T nicks at each side, so that he need not remove it. The wrist was steady to the splint, while each finger was moved specially. The best time to begin passive movement was on the second or third day following the operation, the metacarpal bone being held steady.

Living Specimens.—Sir WILLIAM STOKES: 1, Case of Excision of Shoulder-Joint and Upper Third of Humerus; 2, Case of Lateral Thyroidectomy. Mr. WHEELER: Excision of Wrist, two cases, in Male and Female. Mr. P. J. HAYES: Excision of Knee. Mr. F. A. NIXON: Patient from whom one Half of the Lower Jaw, including the Condyle, was Removed through the Mouth.

Card Specimens.—Sir WILLIAM STOKES: Cancer of Omentum and Stomach. Mr. HAMILTON: Fracture of Cervical Spine. Mr. FRANKS: 1, Fibro-myoma of Uterus; 2, Round-celled Sarcoma of Colon; 3, Parts removed in Operation for Ununited Fracture of Humerus. Mr. NIXON: 1, Half of Lower Jaw Removed without External Wounds; 2, Revolver Bullet Grooved from Impact on a Rib.

PRESENTATION.—Thomas Lamont Macartney, L.R.C.P. and L.R.C.S.Edin., has, on his leaving Worthen, been presented with a magnificent dining-room marble clock and figure, an illuminated address, and a purse of gold by his friends and grateful patients in and around that district.

MRS. ANNE MCANAFEY, the widow of a farmer, died on Thursday, June 9th, at Ballyross, Glencree, aged 109. An "M.B.Dubl.," of Enniskerry, in a letter to a local newspaper, states that as one is naturally inclined to doubt the attainment of such an age, he had endeavoured to test it carefully, and believed it to be correct.

REVIEWS AND NOTICES.

ALPHITA: A Medico-Botanical Glossary from the Bodleian MS. Selden, B. 35. Edited by J. L. G. MOWAT, M.A. Oxford: at the Clarendon Press. 1887.

UNDER the title of *Anecdota Oxoniensia*, there is being published at the Clarendon Press an interesting series of miscellaneous works, existing hitherto only in manuscript, hidden away in the Bodleian and other Oxford libraries, consisting of rare texts and documents which have been until now practically unavailable for the mass of scholars.

The *Anecdota* complete the second part of the first volume of the mediæval and modern series with a work called *Alphita*, which cannot but be of interest to the medical public. This book is in effect a botanical and medical dictionary copied by an unknown writer in the fifteenth century from some previously existing original, now lost.

As one reads its quaint Latin dealing for the most part with herbs and shrubs and flowers, one scarcely realises that this copy was made amid the clash of arms, at the most important period of the Wars of the Roses, the year following the battle of Hexham and preceding the rupture between Edward IV and the great King-maker. It adds to one's pleasure in reading the book to imagine its writer, a quiet monk or studious physician, happily occupied with his plants and books, while so many other Englishmen were engaged in defacing God's image, or wasting their common country with fire and sword, in the pursuit of a vain and useless quarrel.

While Mr. MOWAT only claims for his work the use of preserving early English plant-names, it has for us an added value in throwing a side light on the history of medicine; but judged even from the more limited standpoint, it is helpful and useful, and we recommend it to those of our profession who are interested either in philology, folk-lore, or botany.

The early form of some English plant-names, for instance, throws an important light on their etymology. The name "dandelion" scarcely suggests its real origin, the French "dent de lion," until we see the latter so used in an early work like the one in question. And then indeed a difficulty remains, namely, why the English word "dole-roune" has been abandoned in favour of the French "dandelion."

"Worm-wood" is an interesting example of what Max Müller calls "mythology," or popular etymology, that is, when a word has in course of time by phonetic decay lost its original signification, its sound is slightly altered to some better understood name, and a popular theory of its meaning in its new form is soon developed (for example, Bull-and-mouth for Boulogne-mouth, on the sign-boards, etc.) The first form of the name of the plant in question was either "ware-mood," a preserver of the mind, owing to a belief in its occult virtues, as Professor Skeat suggests, or "ware-moth," a preservative from moths, as Mr. Mowat believes.[1] But in time "ware-mood" or "ware-moth" ceased to be understood by the people, and then by a slight change passed into the kindred sound "worm-wood;" afterwards, by a process of development not uncommon, in virtue of its new name, being accepted as a vermifuge. Sir John Hill says: "The tops, with the flowers on them, dried and powdered, are good against agues, and have the same virtue with wormseed in killing worms."

Ale-hove, too, the old name for the ground ivy, has a like history. In its original form, it was "hay-hoove," that is, hedge-hoof, which by popular etymology became "ale-hoof," and then, on the strength of its new name, the plant was actually used in the brewing of ale. Gerard says: "The women of our northern parts, especially about Wales and Cheshire, do turne the herb ale-hoof into their ale..... being tunned up in ale and drunk; it also purgeth the head."

Some of the plant-names given must be interesting to collectors of medical folk-lore, their very names pointing to popular remedies for simple affections. "Ear-wort" (houseleek), "liver-wort" (hepatica), and "nose bledehele" (centifolium) need no explanation as to their uses. The book should certainly be read for the "New English Dictionary," as it supplies earlier quotations than the latter (in the case of "Arss-smerte" one hundred years earlier), and also words and forms of words not contained in the dictionary (for example, "aconge," "banifan," and "angel twychches"). But when a comprehensive history of medicine comes to be written, as it some day will, much incidental information will be gleaned from *Alphita*. The essays on

[1] In favour of Mr. Mowat's suggestion, it may be mentioned that Tusser long afterwards advised the London lodging-house keepers to note—

> While worm-wood hath seed, yet a handful or twain
> To save against March to make fleas to refrain;
> Where chamber is swept, and worm-wood is strown,
> No flea for his life dare abide to be known.

so that worm-wood was evidently valued for its insecticidal properties.

medical history already written, as for instance the chapter in M. Paul Lacroix's *Science of the Middle Ages*, deal largely with the unimportant squabbles of the physicians with the barber-surgeons, but ignore the more important conflict between the herbalists and the alchemists. The herbalists represented the practice of a simple empiricism based on the observation of the effects of drugs upon disease, tinctured by no theories of the mode of action of either. The alchemists were filled with marvellous theories of the nature and properties both of diseases and remedies. Our indebtedness to the alchemists as the fathers of chemistry and, indirectly, of physiology has been abundantly acknowledged by Liebig and others, but it has not been perceived how much we owe to the herbalists.

These empirics died out for a time in the Middle Ages, and were replaced by the theorists, who monopolised the practice of medicine to the close of the last century, but it is a question if their legitimate descendants are not to be found in the race of experimenters and observers who commenced a glorious succession with the Hunters, and are now represented by such men as Lauder Brunton. At all events, it can be said of the herbalists that they filled the only place possible for them to usefully occupy in the dawn of science, that which Max Müller defines as the first stage of all sciences—the empirical. Not so with their successors the alchemists and schoolmen; these passed at a bound to the third stage—the theoretical—when they were scarcely fit to occupy even the second stage—the classificatory—the result being that their labour was for the most part unproductive and useless.

If any knowledge is to be gained from our early predecessors, it is to the works of the herbalists, as suggested in such books as this, we must turn, the therapeutics and modes of observation indicated in *Alphita* being far more consonant with modern methods than those adopted so lately as the seventeenth century by such writers as Cooke, of Warwick (*Marrow of Physick*, by James Cooke, of Warwick, fourth edition, 1685). That the herbalists were not unobservant of natural phenomena is shown in such passages as this (p. 146, sub voce Pimpinella):—

"Pimpinella assimilatur saxifragiæ in foliis et in stipite, sed differunt *(sic)* in radicibus, quod pimpinella radicem habet nigram et tortuosam; saxifragia rectam et albam ad modum petrocilini. [Names in] Ge. (German) et ae. (English) pympernele."

In days when stavesacre ointment is vaunted as a parasiticide more effectual than sulphur, it is well to remember that our ancestors knew the fact long ago:—

"Sataffisagria ..... alio nomine dicitur staffisagria campurrigium [that is, caput purgium] i. herba pedicularis quia interfecit pediculos."

The method of stating the properties of plants, too, is commendably simple, for example:—

"Calamentum magis ..... specialiter valet ad retencionem menstruorum"--Anglicé cat-wort.

Or note in its mingled simplicity and accuracy the description of the action of mercury, called in French ..... "foirolle quia fluidam laxamve alvum reddit" (Note, p. 95).

The inventor of the modern atomic theory could scarcely have given a clearer definition of his meaning than the following.—

"Atthomus dicitur ab a quod est sine et thomos *(sic)* divisio quia propter sui parvitatem dividit *(sic)* non potest"—

though he would perhaps scarcely have accepted the English synonym of atoms then given, namely, "motes in ye sunne biem." However, we recommend the careful examination of the results of these early herbalists, feeling quite sure that some of their therapeutical conclusions are not without value, and, at any rate, we guarantee the absence of danger in the experiment, for, as far as we have seen, the only two really poisonous plants mentioned in the book are henbane and hemlock, and no therapeutic note is attached to either.

The weights which were employed in those early times for dispensing seem to be simply the apothecaries' weights of to-day:—

"Troxiscus etiam pondus unius dragma; dragma habet pondus trium scrupulorum; scrupulus habet pondus xx granorum; fr. terna quater que scrupuli pro pondere pone; in dragmam scrupulus surgit ter multiplicatus."

To say that the work is issued by the Clarendon Press is to say the print and paper are alike excellent. The indexing is good, but not full enough, nor in all cases quite accurate. For example, liver-wort is on page 57, not 56. On the whole we recommend the book.

By the way, we wonder if the Gaddesden quoted in *Alphita* is the Goddesdon mentioned by M. Paul Lacroix in his *Science and Literature of the Middle Ages* (p. 156)? "In England human credulity was being scandalously imposed upon by the most ignorant of charactors. For instance, an English surgeon, named Goddesdon, had two sorts of prescriptions, one for the rich and another for the poor; he sold at a high price to the barbers a so-called panacea, which the latter sold again at a greater profit, and this panacea was simply a mixture of frogs pounded up in a mortar. He pompously advertised infallible and secret remedies, in which he placed so little confidence that he took care to exact payment for them beforehand. In one of his books there is a short chapter upon disagreeable diseases, as he terms them, which work their own cure, and, therefore, bring no grist to the doctor's mill."[2]

Étude sur les Hôpitaux d'Isolement en Angleterre. Par Auguste Lutaud et Walter Douglas Hogg. Paris: J. B. Baillière. 1886.

This work has been written by the authors "after several visits and prolonged stays in England" with the object of completely informing themselves as to the provision made for the isolation of fever cases and the various arrangements and regulations devised to limit the spread of infectious disease. The authors remark that England is at present the only country which can afford any instruction derived from experience on this matter.

The investigation appears to have been carried out with extreme care and accuracy, and in the work before us we have a very complete summary of the accommodation for infectious cases provided by the Metropolitan Asylums Board, the London Fever Hospital, and the various provincial isolation hospitals. Together with this, details are given of the means at command in the general hospitals in London and the provinces for isolating any cases of infectious disease which from any cause they cannot send away. The smallest details of each institution are given, as well as a coloured ground-plan showing in each case the structure and design of the institution. The authors speak in very flattering terms of English hospital arrangements, though exception is taken to the plan of placing scarlet fever, measles, and diphtheria in the same ward, the small-pox cases alone being absolutely isolated in the hospitals of the Metropolitan Asylums Board. The authors were much impressed "with the exquisite neatness of the wards and of the patients, the absolute absence of all smells, the general order, and especially with the affectionate care bestowed on the sick." They commend to the Paris authorities the system of ambulances for removal of patients to hospitals which is established in London, where sixty ambulances exist, as compared with only four in Paris. The floating hospital-ships and the temporary tent-hospitals for small-pox are commended. Drs. Lutaud and Hogg remark that the total hospital accommodation for all diseases in London is 10,216 beds, observing that this is only equal to that of Paris with one-thirteenth of the population. But the large number of beds afforded by our workhouse infirmaries they have omitted from the calculation. Incidentally speaking of our maternity arrangements, they write that the maternity hospitals only receive married women, and that "les filles-mères" have to get attendance at their own homes as best they may. Here, again, the existence of workhouse infirmaries appears to be unknown to the authors. But these slight oversights in no way detract from the merit of the laborious and thorough manner in which the authors have collected and laid before the French public authorities the general system and minutest details of our arrangements with regard to infectious diseases, and the criticisms which they occasionally make on the working of our system may be of service, too, to ourselves.

Traité Elémentaire de Pathologie Générale. Par H. Hallopeau. Paris: J. B. Baillière. 1887.

The second edition of this now well-known work is considerably enlarged, and is enhanced in value by an appendix giving the main results of Pasteur's researches and other investigations on bacteriology. The work is not a mere morbid anatomy, but travels over the wider field of the etiology of disease, the nature of morbid processes, the clinical manifestations of disease, and the principles of therapeutics. The author writes in clear and concise language, and adheres to a systematic style throughout, which renders it a pleasure to read his work. He has brought under review the researches of all the best known contributors to pathological science, and analyses their results with practical and critical skill. The result is that each chapter is a complete essay on its subject-matter and an epitome of our present knowledge, and the whole is without doubt calculated to be of great use to all students of pathology.

Of the special sections, that on albuminuria and peptonuria is one of the best; the various conditions under which they occur and the

[2] Probably the person in question was John of Gaddesden, Prebendary of St. Paul's, Professor of Medicine at Merton College, Oxon, ob. 1360, *vide The Healing Art*, I., p. 68.

prognostic value of each are discussed. The necessity of distinguishing between globulin and serum albumen, as pointed out by Jacqoud, is urged, though the author goes further perhaps than many authorities in the slight importance he attaches to the presence of "false albuminuria." The conclusion that albuminuria "should not be considered as pathological unless derangements of health coexist, or the quantity of albumen is large" can hardly be ceded, and it should not be forgotten that individuals whose urine contains substances slightly differing from albumen in chemical or physical properties, or in whom the passage of albumen is paroxysmal, do in many cases eventually develop a true nephritic albuminuria. Cases of peptonuria are divided into four distinct classes, but of them the author considers all these conditions as of but slight clinical import.

M. HALLOPEAU will not admit any one of the explanations of the phenomena of uræmic poisoning as sufficient to explain all the observed facts. Traube's explanation that the symptoms are due to a cerebral œdema is only applicable to the exceptional cases where there is free excretion of urea by the kidney; in the more common cases, where its excretion is diminished, he attributes the symptoms to the presence of urea and other products of albuminous disintegration in the blood.

We cannot agree with the author, that excessive rapidity of heart-action is usually of small importance; he regards it as grave only in pyrexial states and in early childhood, but many of these cases, quite apart from these conditions, end fatally if long continued. Nor can we assent to the proposition that in the physiological condition the frequency of the pulse varies inversely as the intra-vascular pressure; such a statement at any rate requires many limitations, and our means of measuring intra-vascular pressure are not sufficiently precise to base such a rule upon. Mitral regurgitation is much more grave in its results than mitral stenosis, according to M. Hallopeau, and this was certainly the generally accepted belief at one time, but since the history of cases of mitral stenosis has been more carefully followed, the contrary would appear to be the case. The statement that regurgitation and stenosis equally tend to lower arterial tension requires more qualifications than that this may be neutralised if the compensation is sufficient, for in mitral stenosis, where the condition is advanced and the left auricle almost impotent, the arterial tension is often high.

The chapter on the nature of the fever process contains an account of the most recent experiments and explanations; the author arrives at the conclusion towards which most of the facts now tend to point, that the muscles are the chief source of febrile heat, and that the increased combustion is due to some disturbance of innervation, and that the mere increase in oxidation processes does not suffice to explain all the phenomena of fever; there must be in addition some disturbance in the heat regulation.

The work concludes with an able section on the principles which must guide therapeutic treatment; the author attributes the chief power of the drugs to their power of destroying living organisms; quinine, mercury, iodide of potassium, are all regarded as "parasiticides," the well-known beneficial results of local mercurial applications in syphilitic eruptions, he affirms without much apparent proof, can only be attributable to a destructive action of the microbes of the disease.

In the appendix an account of our knowledge of the bacilli of pneumonia, typhoid, anthrax, etc., is given. While admitting that it must be regarded as proved that one form of pneumonia is the result of a microbe, the author holds strongly that another form exists in which the inflammation is simple and non-contagious, and independent of a special organism in its origin.

DRUG ERUPTIONS. By PRINCE A. MORROW, M.M., M.D. New York: William Wood and Co. 1887.

THE author's object has been to collect from all available sources well-authenticated observations relating to every form of cutaneous disorder thus far recorded from the action of drugs; to these have been added numerous personal observations.

As the author justly observes, when the enormously large number of cases of drug eruptions which have been recently reported is contrasted with the comparatively few formerly recorded, it is evident that a prolific cause of cutaneous disorders long escaped recognition.

Dr. MORROW summarises the special clinical attributes of eruptions as their polymorphism, the rapidity with which the eruption develops, their locality, and the improvement of the eruption immediately upon withdrawal of the offending cause, though he points out "in certain diathetic conditions, when a latent predisposition to cutaneous disturbances has been awakened into activity by the drug, the eruption may persist indefinitely."

In some cases, Dr. Morrow states, only long continued and repeated administration produces a cutaneous affection; in some cases doses smaller than those required to produce the physiological effect may promptly determine violent tegumentary disturbance, while large doses of the same drug may produce no effect.

The book is written throughout with great accuracy and care, and the copious references to recent and other literature makes Dr. Morrow's work of great value for reference and instruction.

He describes an eruption from the prolonged use of bromide of potassium, in which the patient suffered from large carbuncular swellings situate on the arm, wrist, thigh, leg, and cheek. Each "commenced by a circumscribed inflammatory swelling, which in twenty-four hours was surmounted by a flat bulla filled with a sero-perulent fluid; the swelling rapidly increased in depth and extent, resulting in the production of a hard phlegmon. Upon rupturing the blister there were disclosed a number of openings, from which a thin pus could be pressed out. The lesions differed from ordinary anthrax in their more indolent and superficial character, the comparative absence of pain, and the rapidity of their involution." The work is brought well up to date, the antipyrin rash being described. Two coloured plates of a severe form of iodide of potassium eruption are given, and we should have been glad to see more such illustrations.

We can recommend Dr. Morrow's volume as a very complete and careful research into the subject on which he writes, and have no doubt it will prove of value to many who may be confronted with the sudden and unexpected appearance of a cutaneous eruption in patients under their care.

NOTES ON BOOKS.

Thompson's Conspectus. Edited by NESTOR TIRARD, M.D., F.R.C.P., Professor of Materia Medica and Therapeutics at King's College, etc. New Edition, with an Appendix, containing notices of some of the more important non-official medicines and preparations. (London: Longmans, Green and Co.)—Dr. Nestor Tirard has undertaken the editorship of the new edition of *Thompson's Conspectus*, a work, we believe, founded originally on the *Dispensatory* of the late Dr. Anthony Todd Thompson. It is an unpretending little volume, but we are told that the writings of the best authors have been consulted, and that no credit is claimed beyond what is due to a careful and accurate compilation. It must be admitted that the notes on the pharmacological action and therapeutic uses of the various drugs and preparations referred to are somewhat meagre, but they might prove useful in the absence of ordinary text-books on these subjects. There are few actual mistakes, and the sins are rather those of omission than of commission. The directions for the treatment of cases of poisoning are fairly good, although in some respects hardly up to the times. Some of the prescriptions are antiquated, but many of them are still used, and are old favourites with prescribers. Dr. Tirard has done his best to put life into an old book, and to make it interesting and useful. Many of these compilations and works of ready reference command an extensive sale, and we see no reason why this should fail to obtain its share of popularity. The book is small and handy, and can be conveniently carried in the coat pocket.

La Névrose. Par le Dr. M. LEVEN. (Paris: G. Masson. 1887.—This work is an attempt to establish a new system of pathology based on the theory that the irritation of nerve-cells is the source of all diseased conditions. "La Névrose" is disease due to irritation of nervous centres, and which manifests itself in the nerves, viscera, skin, mucous membranes, and joints, and which alters the blood and the process of nutrition. The irritation may be primarily cerebral or spinal, or in the sympathetic system, most often the former, but all diseased conditions are due to it in some form. To irritation of nerve-cells Dr. Leven traces fevers, gastric and intestinal disorders of all varieties, every kind of skin-disease and of affections of mucous membranes, anæmia, phthisis, gout, rheumatism, "all the neuralgias and every ill that affects the human frame." Dyspepsia above all is due to irritation of the solar plexus or of the brain; indiscretions in diet may lead to it, but only through irritation of the brain. Dr. Leven will not entertain the notion of any division into functional and organic disease. The original cause of evil, the irritation of the nerve-cell, is attributable to intellectual or physical overwork, to the emotions awakened by the struggle for existence, to improper foods and drinks —above all, to alcohol, and often to an injudicious use of drugs. This is the substance of Dr. Leven's work, and it must be admitted that he

spares no pains to enforce by examples the doctrine of nerve-irritation. No doubt many ailments are due to exhaustion or irritation of nervous centres, and such a condition renders the body less able to overcome the ill-effects of such causes as are here believed to set up nerve-irritation, but it will be long, we think, before Dr. Leven will gain over medical opinion to this universal dependence of disease on a mysterious functional irritability of nerve-cells.

Scheme for Case-Reporting. Arranged by W. H. ALLCHIN, M.B., F.R.C.P., Physician to the Westminster Hospital, etc. (London: H. K. Lewis. 1887.)—This scheme, which extends over upwards of fifty pages, is intended to furnish the student and the practitioner with the data upon the recognition and proper estimation of which a diagnosis is made. The subject has been treated more or less by almost every physician whose duty it has been to instruct students in the use of their powers of observation, but never, so far as we are aware, with the minuteness which characterises the schedule before us. The ability to observe and interpret the physical signs and symptoms in a case is analogous to the power of cross-examination, which is so important a point in the intellectual equipment of a successful barrister; with this difference, however, that while the former has for its object to elicit the truth in the interest of the examinee, the latter aims at quite a different result. So far as completeness and thoroughness are concerned, the plan before us leaves nothing to be desired. A glance at the scores of questions to be asked and facts to be ascertained is enough to show that the comparatively short span of life allowed us in these later days is insufficient for the conscientious application of so elaborate a method, even by the most enthusiastic clinical clerk. For practical purposes, we are inclined to think a less encyclopædic scheme would be more useful in helping the student to marshal his facts in proper array, and in supplying the requisite data for a correct diagnosis. The index itself is almost complete enough to serve this useful purpose.

Massage as a Mode of Treatment. By WILLIAM MURRELL, M.D., F.R.C.P., Lecturer on Pharmacology and Therapeutics at the Westminster Hospital, Examiner in Materia Medica in the University of Edinburgh, and to the Royal College of Physicians of London. Second Edition. (London: H. K. Lewis. 1887.)—Since the first edition of this concise little treatise, the value of massage as a therapeutical agent has become much more generally understood and appreciated. Indeed, there are indications of a tendency to employ it somewhat indiscriminately, the best remedy for which would be the perusal of the practical and common-sense rules laid down in this book for the guidance and information of practitioners who may wish to give their patients the benefit of this innovation, or rather renovation. Useful as massage undoubtedly is in a certain class of cases, its scope, as the author is careful to tell us, "is very limited." Some additional matter of interest has been added in the present edition, and various minor errors have been corrected.

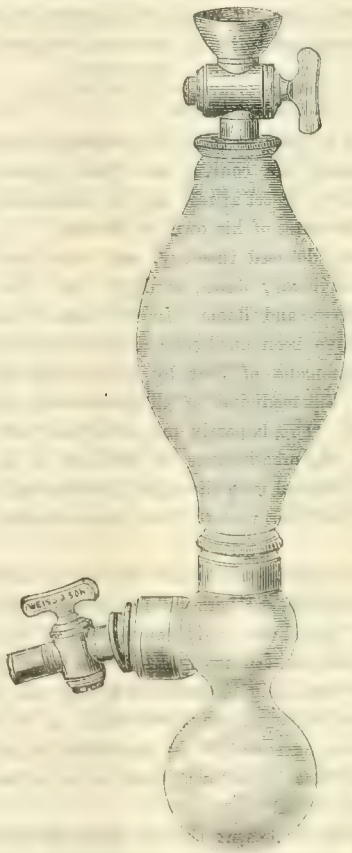
The Bovine Prescriber. By JAMES B. and ALBERT GRESSWELL. (London: Baillière, Tindall, and Cox. 1886.)—This small work is produced as a companion to the *Equine Hospital Prescriber*, and may possibly prove of some assistance to practitioners of bovine medicine. Two of its characteristics are simplicity in prescribing and extreme moderation in matters of dose; the latter must prove quite striking to those acquainted with the "inertia" with which the bovine system receives many active drugs. We quote one instance of smallness of dose from page 34. Half an ounce of hyposulphite of soda is prescribed for flatulent colic in water as a draught, to be repeated every four hours; it is probable that this draught may have to exert its action in the presence of many gallons of fermenting food. Some of the prescriptions are more pretentious than elegant; we note one: cod-liver oil, ten fluid ounces; bromide of potassium, two drachms; phosphate of lime, six drachms; to be given twice daily. We could have wished a little more care in considering "incompatibles" in the construction of some of the prescriptions.

Lehrbuch der Hebammekunst. By Dr. BERNHARD SIGMUND SCHULTZE, Professor of Obstetrics and Director of the Lying-in Institution and Midwifery School at Jena, etc. Eighth edition. (Leipzig: Wilhelm Engelmann. 1887.)—This popular German text-book on midwifery is introduced, in its eighth edition, by four prefaces to former editions, a couple of indexes, and an introduction. We then come to the usual preliminary considerations of comparative female anatomy and measurements, illustrated by not too finely drawn woodcuts, with which students of midwifery are all familiar. Development is gone through very briefly, but stress is naturally laid upon the signs and symptoms of pregnancy. The rest of the book follows the lines consecrated by custom in works of this description, and there is nothing to call for particular commendation. Text-books for students' use in Germany are published without the unnecessary luxury of binding, paper, etc., which add so materially to the cost of production in England, and impose a heavy additional tax on the student in the shape of a large bookseller's account.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

NEW FORM OF ASPIRATOR FOR THE BLADDER.

I BELIEVE the form of aspirator figured in the accompanying woodcut will be found an improvement on those hitherto in use. The principal advantages I claim for it are its simplicity (it having no valves), and that the hour-glass shape of the receiver prevents the return of frag-



ments into the bladder. It is also very convenient to use owing to its lightness, and the vertical instead of the horizontal application of the suction power. The instrument has been constructed for me by Messrs. Weiss and Son, Oxford Street, London.

Indore, Central India. D. F. KEEGAN, Surgeon-Major.

AMENORRHŒA STEM.

IN connection with the paper by Dr. Braithwaite on the Treatment of Scanty Menstruation and Amenorrhœa by stimulation or irritation of the interior of the uterus by means of a Stem, which was written nearly twelve months ago, we may add that the stem which is now used for this purpose is a Greenhalgh's rubber-stem, with the tube made stiff by an internal metal sheath. This improvement renders its ejectment by the uterus much more difficult. The rubber alone is liable to become curved and slip gradually out of position; at the same time, rubber is more stimulating than a smooth surface of vulcanite. These stems, so constructed, are made by Messrs. Mayer and Meltzer, of London and Leeds.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

Subscriptions to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 18th, 1887.

MYTHOLOGY IN MEDICINE.

There has been no such bar to real advance in medicine and in every other science as mythology. It is, in the sense Max Müller uses it, a disease of language, causing words which were once only names and attributes to assume a substantial existence; and, as Shelley says,

> Human pride
> Is skilful to invent most serious names
> To hide its ignorance.

It is inherent in man to seek to substantiate abstract ideas, and then, unfortunately, not content with this process of creation, he allows his doubts to be set at rest and his difficulties to be smoothed away by these creatures of his own production.

Mythology early debased theology, and formed out of the physical phenomena of daybreak, dawn, sunlight, etc., the host of deities worshipped in Greece and Rome. In the realm of science in our own days, chemists have been until comparatively recent times content to explain the phenomena of heat by such myths as "phlogiston" and "caloric." But medicine, of all the sciences, has suffered most from this disease. This is partly due to the fact that the monks and schoolmen, the only practitioners of medicine in the Middle Ages, were thoroughly imbued with the spirit of mythology, which they had inherited from the Greek writers, from whom so much of their learning was drawn.

What wonder if disease was looked upon as an actual living entity by men who called others "heretics" for believing that such words as "justice" and "truth" were only conceptions of the mind, and not real things walking about in daylight? But another reason for mythological language flourishing in medicine so long was that medicine is essentially an inductive science, slowly built up by observing many facts through many ages, and at the same time is, in the eyes of the generality, simply the healing art, while to its professors it is mainly the source of daily bread.

It was impossible to present the art before the people as less than perfect, and, while facts were accumulating with heart-breaking slowness, their places were supplied both for mediciners and medicined by mythical entities, which in their turn could be replaced by facts as these accumulated.

Even after the Reformation, when inductive reasoning began to take the place of the learning of the schoolmen and the empiricism of authority, this latter necessity made mythological medicine die a very slow death. Of course, in the absence of the finer means of research, it was impossible to discover the nature of disease, but it would have been the first step to that discovery to have owned absolute ignorance. To even enlightened physicians like Sydenham, the bacterial theory of the origin of the plague was as unreachable as Newton's laws of gravitation were to Dr. Henry More. But though Sydenham could not reach the nature of the plague, it must have been merely the necessities of his art which made him speak of it as "a royal monarchical disease, which absorbed all others." A mythological method of speech which lingered among the physicians (as distinguished from the surgeons) in full force so late as the time of Dr. Lettsom, in whose life (vol. iii, p. 13) we read such lines as these quoted with approval by the editor:—

> Disease raged wide, and Death with pallid face
> Stalked through the gloomy streets with rapid pace,
> Laughed physic to defiance, claimed his right,
> And o'er his victims triumphed in our sight.

As popular medicine in the present is ever the reflection of the accepted theories of the past, so the belief in specifics and advertised remedies to-day is the direct outcome of the mythology of the physicians of a past age, who looked upon disease as an entity, or, rather, as a series of entities to be driven out by certain remedies. Drugs, according to them, were capable of curing each a different complaint; they each gave attention (for that is the derivation of the verb "to cure") to a separate enemy, and hence we find the importance the older physicians attached to remedies, the little regard they paid to pathology and morbid anatomy. With them "symptoms" and "indications" were everything; "causes" little or nothing.

And so for the uneducated to-day, it is impossible to believe that disease is simply an altered condition of tissues or functions. To them it has an actual, active existence, and must always be preceded by the definite article. They never have bronchitis or rheumatism, or inflammation of a part—but always "the bronchitis," or "the rheumatics," or "the inflammation." If they have pain, they are delighted when its position shifts, for they hope "it" is moving out of their bodies; and their joy is great if they feel it pass into their fingers or toes, for it is then like George Herbert's "religion," standing "a-tiptoe on the strand, ready to pass" to some other region.

A poor person sees no difficulty in the promises of a quack to cure half a dozen different diseases with the same remedy, any more than he would see any difficulty in killing half a dozen foreigners of different nationality with the same sword. If the nostrum he patronises fails to effect his deliverance, he takes another. He has only used the wrong weapon, that is all. But, cured or not, he never questions the existence of the foe, who stands gaunt and grim within his house of life. That may be invulnerable to the weapon used or in the part attacked; but he feels that with a better sword or a more swashing blow, he will finally be able to conquer his enemy.

Nor is this phase of belief confined to the lower orders; the clergy and the laity of the middle and upper classes are equally mythologists. Homœopathy is a striking instance of the truth of this statement. Great lawyers, wise statesmen, subtle theologians accept the dogma of homœopathy as a scientific truth. Yet after all, it is nothing more than a compound myth. "Like cures like, and that which in large doses produces a disease can cure it in small," when translated into English, means that the entity disease can be born from the entity drug—and that the latter, like Saturn, does under certain circumstances, devour its own children.

Unfortunately, moreover, mythological medicine may be found in places where it ought not to be; namely, between the boards of many a system of medicine accepted as an orthodox exposition of modern

scientific knowledge. And it is difficult to object to Holloway Sanatoriums and Whelpton Churches, unless our own teaching be free from taint of mythology.

In the new edition, for instance, of Holmes's *System of Surgery*, one is sorry to find such a sentence as this: "It is possible the effect of parasiticism may be produced by an invisible agent, either introduced from without the body or formed within, acting on the cellular elements after the manner of a ferment. With this suggestion there is linked the further possibility that this agent may be associated with one or other of the minute organisms which have been of late the subjects of so much attention." This is nearly as scientific and satisfactory as the pathology of tumours as known to our ancestors: "The second (cause) is either when the natural heat of the part being diminished, the good humours are ill concocted, or the vicious are not sufficiently evacuated.....the material causes are the humours." It is difficult to decide if the "humours" of the chirurgeon of 1698 or the "invisible agent" of the surgeon of 1887 is the more mythological and unsubstantial. Then, again, in Professor Aitken's *Practice of Medicine* one reads (vol. i, p. 371, 6th edit.) of "pandemic waves of epidemic diseases," and we are gravely told that the propounding of this theory is calculated to do good by drawing attention to the subject! Surely it would do more good to propound no theory, but by patient observation of facts gradually arrive at the truth, rather than by inventing such a myth as "pandemic influences," to satisfy the difficulties of men who might else become patient and intelligent inquirers.

It was only the other week that the medical officer of health of a town where an extensive outbreak of enteric fever had taken place, was asked if it was not due to pollution of the reservoirs of the place; he at once replied that he attributed the appearance and spread of the disease to "epidemic influences." This was the name of the myth he had adopted as satisfactory, to silence the doubts in his own mind and those of others.

For the abiding evil of mythology is, as Max Müller tells us (*Science of Language*, vol. ii, p. 572), "that language assumes an independent power, and reacts on the mind instead of being, as it was intended to be, the mere realisation and outward embodiment of the mind." In other words, instead of the word used being a symbol of the thing signified, it rather represents something not there at all, and, like the scarecrow in the field, keeps us, silly crows as we are, from the wheat we so much need.

RECENT RESEARCHES ON LUPUS AND TUBERCULOSIS OF THE SKIN.

By the recognition of a specific disease of the skin dependent on a local tuberculous process, and the demonstration that tubercle-bacilli are found in lupus, a question of wide general importance has been raised. In the secretions and in the tissues of a tuberculous ulcer, tubercle-bacilli are present in great numbers. In lupus, although present, their number is comparatively small. Nevertheless, although these affections are clinically absolutely distinct, and although the frequency of the bacilli in the one case, and their fewness in the other are well recognised, we find that the tendency of observers, who have given great attention to the subject, is to consider that both these processes are to be classified as forms of local tuberculosis. This hypothesis, however, is not destined to be accepted without criticism.

Professor Schwimmer, of Buda-Pesth, who for the last twenty years has had almost unsurpassed opportunities of studying these diseases, and whose capacity as an accurate observer and scientific thinker are universally recognised, has recently read a paper before the Naturforscher-Versammlung, in Berlin, in which he urges strong reasons for doubting that these two affections can be brought into the same category. At the same time he does not attempt to explain their respective relations to the tubercle-bacilli which are common to them both. Although he accepts as proven that the bacilli found in lupus are characteristic tubercle-bacilli, he regards the opinions of Doutrelepont, Besnier, and Leloir, who consider that lupus patients are destined to fall victims to tuberculosis of the lungs, as not borne out by facts. The grounds on which he separates tuberculosis of the skin from lupus are—first, the comparatively great rarity of tuberculosis of the skin, the relative frequency of lupus, and the difference in the development of the two processes. During a period of eighteen months, in which time ninety cases of lupus were under his care in hospital, he only saw five cases of tuberculosis of the skin. The first of these five cases may be taken as a good example of tuberculous ulceration.

A man, aged 42, phthisical, came into hospital on account of an affection of the rectum. On examination, a semicircular ulcer, with jagged border, was observed which stretched from the tuber ischii to the anus, its long diameter being about five centimètres. The surface of this ulcer was raised, greasy-looking, and, in addition to red granulations, showed numerous small yellowish nodules. The ulcer was exceedingly painful. Secretion from it showed numerous tubercle bacilli, and after some months the patient died of tuberculosis of the lungs and intestine.

The characteristic appearances of these ulcers are jagged, moderately infiltrated edges, the surface of the ulcer presenting a bacon-like aspect. The dirty, greasy, follicular-looking surface secretes a quantity of discharge, and the circumference of the ulcer is painful and moderately swollen. Comparatively rapid breaking-down takes place in tuberculosis of the skin, so much so that the beginning of the process has rarely been observed. As Professor Schwimmer points out, the course and development of lupus, on the contrary, are always extremely slow and chronic, the nodules long remaining unchanged, years often elapsing before they break down.

Secondly, tuberculosis begins almost exclusively in the mucous membranes, and from them encroaches on the skin. In lupus the course is almost always the reverse.

In 135 cases of lupus observed in Neisser's *clinique*, 89.6 per cent. developed primarily on the skin, and only in 10.4 cases primarily on the mucous membrane. Schwimmer considers that if cases were sufficiently numerous to obtain similar statistics, probably in 98 per cent. of the cases of tubercular ulceration of the skin the disease would be found to have begun in the mucous membrane.

Tubercular ulceration may extend to the skin from the mucous membrane of the mouth, from the rectum, from the nose, and from the vulva. Whilst tuberculosis of the mucous membrane without affection of the skin is the rule, in lupus the affection of the mucous membrane without the skin being also affected is rare. In the mucous membrane the two processes behave differently. In tuberculosis of the mucous membrane yellow or white miliary nodules are observed, whilst they are absent in lupus. The tuberculous ulceration spreads quickly, and scarcely ever cicatrizes, which is not the case in lupus.

Thirdly, as regards the different effects of lupus and tubercular

affections of the skin on the general health. Schwimmer asserts that the number of cases in which lupus has led to general tuberculosis has been greatly exaggerated. In ninety cases of lupus, many of them severe, he found in sixty-two cases that the patients were otherwise perfectly healthy individuals, and free from tubercular disease, acquired or hereditary. Of thirty-three lupus cases in private patients treated by him in 1875 and 1876, the history of fifteen of whom he has been able to follow, not one of these has, up to the present time, shown any sign of tuberculosis. The other patients he has lost sight of.

Facts like these raise questions which are not yet solved regarding the influences of lupus-bacilli on the general health, and point, at all events, to the fact that tubercle-bacilli may remain for many years localized in the organism without leading to general tuberculosis. Very different is it with tuberculosis of the skin, which is usually the manifestation of a previously existing constitutional affection, although it may be the first sign of that affection. The disease of the skin would appear, in some cases, to be the portal through which the organism is attacked. On the other hand, in exceptional cases, tuberculosis of the skin, early recognised and treated, may be cured, and the patient saved from general infection. Still, there are cases on record which tend to show that the organism may become tubercular through the existence of lupus.

Doutrelepont saw in a previously healthy individual, who suffered from lupus of the face, a tubercular meningitis arise, which ended fatally. Renouard, in a monograph on the subject, has related several cases in which lupus was followed by general tuberculosis and death. Such cases have impressed him so strongly that he concludes that lupus is a tuberculosis of the skin, and is a primary manifestation of the tubercular diathesis; whilst tubercular ulceration of the skin strictly so-called is a tertiary manifestation of the same diathesis. If the facts really justified such a conclusion, it is difficult to believe, as Schwimmer points out, that so many acute clinical observers should hitherto have failed to recognise the fact.

Fourthly, the relation of the bacilli to lupus and tuberculosis of the skin: although the bacilli of lupus appear identical with those of tuberculosis, their comparative rarity in lupus is a matter of universal acceptance. All authors who have written on the subject agree that twenty to thirty sections must usually be looked through before one bacillus is found, whilst in pure tuberculosis of the skin the bacilli are as numerous as in tuberculous sputum. The mere presence, therefore, of bacilli alone is not sufficient to establish the identity of the process. Professor Schwimmer calls to mind the analogy in form between leprosy and tubercle-bacilli, and the resemblance between tubercle-, lepra-, and syphilis-bacilli, although these three diseases are quite different; whilst Cornil and Babes, in their well-known work, state that the bacilli of smegma can be confounded with those of tuberculosis. In view of these facts, Schwimmer feels justified in asking whether the resemblance of the bacilli in lupus and tuberculosis necessarily establishes their identity.

Professor Schwimmer feels his position as a sceptic weakened by the results of experiment, acknowledging that it is proven that the inoculation on animals of lupus tissue produces tuberculosis. He remarks, however, that these inoculations have never produced lupus. The failure of inoculations with tissues from tubercular or lupus ulcers to produce lupus leaves a missing link in the chain of evidence. On the other hand, it might be replied that these inoculations have been made on animals, and that it is not shown that these animals were susceptible of lupus. The influence of soil must not be forgotten, and it is quite conceivable that tubercle-bacilli in the skin of certain individuals may succeed in producing the destructive process known as lupus vulgaris, whilst in the tissues of animals they may lead to the rapid degenerative changes which we know under the term tuberculosis.

As a further point of difference, and one of a practical nature, Professor Schwimmer calls attention to the different effects of treatment in the two diseases. Caustics and surgical treatment which benefit the lupus patient do not usually assist the subject of tuberculosis. In pure tuberculosis of the mucous membrane neither caustics nor the *curette*, nor incisions, nor thermo-cautery do any good. They cause intense pain, and lead to a quick and purulent breaking-down of the surrounding tissues, but the best treatment of lupus of the mucous membrane is by caustics.

In the discussion which followed Professor Schwimmer's paper, Doutrelepont reminded the audience that the tubercular process, in other organs as well as the skin, might follow various courses, remaining, for example, sometimes localized for years in the joints. In forty cases of lupus he had demonstrated with certainty the presence of bacilli, and numerous experiments had shown that from inoculations by lupus tuberculosis was produced. Koch had stated that he had cultivated lupus-bacilli for sixteen generations without observing any difference between them and tubercle-bacilli.

Lewinski called attention to the analogy of acute miliary tuberculosis and chronic phthisis of the lungs, which, although presenting quite different clinical pictures, were undoubtedly examples of the same process. Geber related a case in which in a lupus-nodule excised from the face of a child he had sought for tubercle-bacilli in vain. A year later the child became afflicted with white swelling, and tubercle-bacilli were found in the discharge. Another nodule was then excised from the face, and this time bacilli were found. Neisser stated that in the Breslau *clinique* the cases showed that there was a much more frequent combination of lupus with tuberculosis than Schwimmer believed to be the case.

The questions which Schwimmer has raised at the Berlin meeting give expression to the doubts and desire for more information which have been felt generally since Koch discovered tubercle-bacilli in lupus, and the proof, more particularly by the French observers, that lupus-tissue produces tuberculosis in animals. The contemptuous scepticism with which the bearing of tubercle and other pathogenic bacilli on diseased processes was at first received on the part of some clinical observers can now hardly be said to exist. Incredulity has given way to doubt, and to a feeling that there is more in all these new doctrines than some years ago could have seemed possible. At the same time it is very evident that much work must yet be done before the foundation of our knowledge of the effects of organisms in disease can be established on an unshaken basis. Whilst science is most indebted to the men who laboriously work out the life-history of these organisms and the changes they produce in the living tissues, it is also, although perhaps not to the same degree, indebted to those men who, like Professor Schwimmer, call a halt and point out the difficulties that are to be overcome and the voids that must be filled up.

It is stated that missionaries in the Congo region have discovered in a beverage made from bananas a preventive of malarial fevers.

MEDICAL EDUCATION AND APPRENTICESHIP.

Last week we spoke of the Report submitted to the Medical Council by the Practical Education Committee, and dwelt upon one of the "two points" which, in the wording of the minutes of the Council, that Committee was appointed to ascertain. That point was the insurance of thorough clinical, therapeutical, and pathological teaching and work in medical schools. The other point was: "To consider the best methods of increasing the practical element in medical education, as by a system of limited pupilage with a registered practitioner."

We discussed the subject at some length in a leading article, bearing the same title as that which stands at the head of these comments, in the Journal (vol. i, 1885, page 1299) just two years ago, and the article gave rise to correspondence (vol. ii, 1885, pages 124, 228) entirely in favour of apprenticed, as compared with hospital, students. The leader was, again, based upon the action of the Medical Council. We dwelt upon the chief difficulties of apprenticeship. When the practitioner has a flourishing practice, he has least time to teach his pupils. The less successful medical men have the most time to teach, but they may be bad teachers, and their practice being small, the pupil cannot readily learn the social duties of practice, one of the real benefits of pupilage. A student who has served part of his term of apprenticeship before entering a hospital is, we observed, often unpopular at his medical school. Mr. Rawdon Macnamara declared before the Council, in 1885, that a student who has gained a smattering of practice was the most difficult to prepare for any examination. It is certainly found that the apprentice believes too much in "knacks," and in facial diagnosis, despising careful clinical study. We remarked that he tended to classify, or even to describe, disease, by rule-of-thumb remedies, and to make such instructive observations as, "diarrhœa, that's castor-oil and tinc. op., followed by mist. cret.," pronouncing the names of the drugs in their abbreviated form. We further noted that it was very unadvisable for a student to work for a practitioner during his first two years of study, and far better for him to spend the third in dressing and clerking in the wards of his hospital. On the other hand, we expressed our opinion that when the student had reached his fourth year it is questionable whether a twelvemonth with a practitioner would not be highly advantageous to him. It would afford the best way for learning practical midwifery, far better than obstetric work in slums, with or without the aid of an overworked and inexperienced hospital midwifery-assistant. The pupil would learn those social requirements which are so important to all who live to cure the sick.

The Report takes a very similar view of the apprenticeship question. To some members of the Committee it seemed advisable that a part of six months to be devoted to personal pupilage should be spent before registration; but to this it was objected that, in the case of university students at least, the time so occupied would shorten the period that ought to be devoted to the study of arts. Other members advocated apprenticeship in the mid-period of studentship. To this it was rightly objected that such a custom would break into the mid-career of school and hospital work. Against pupilage at the end of the curriculum was "the objection that, at that time, the pupil would, in many cases, be found to be above his work, would be indisposed to submit to necessary authority, and in many cases, also, might be, for social reasons, an undesirable addition to a family circle." The last words in the sentence imply, no doubt, not that four years in a medical school deteriorates the character of a student, but that young gentlemen on the eve of qualification are often "marrying men." The previous hints about fourth-years' pupils being—according to their own opinion—above their work coincide with the opinions of one of our correspondents, Mr. Davies, of Sherborne, whose letter appeared in the Journal of July 18th, 1885.

After the paragraphs on the period of the curriculum at which pupilage could be most conveniently taken, the Report quoted a passage from the Report of the Committee on the Visitation of Examinations, which stated that the minimum of four years for professional study, though too short, needed no extension by law, as it had been found that the average period voluntarily spent in student life was nearly five years. That being the case, the Practical Education Committee suggested in its Report that while a certificate that a period of six months has been spent in pupilage with a registered practitioner, or in some institution which involves the personal care of patients, is desirable, these six months should be taken during the long vacations, and after the examinations in anatomy and physiology have been passed.

It is somewhat strange that the Report adopts the mid-period apprenticeship, after agreeing to the objection that such an arrangement would break into the career of hospital work. There is, however, great significance in the active discussion on apprenticeship at the Medical Council, and there can be little doubt that the old institution will be revived in a greatly improved form, for students are no longer "Bohemians," and practitioners are in these days well educated in the science of their profession.

On June 10th, Wm. Hunter, M.D.Edin., F.R.S.Ed., etc., was nominated and elected the first holder of the John Lucas Walker Studentship.

It is persistently rumoured, says a Cairo correspondent, though positively denied by Greene Pacha, that some cases of cholera have occurred at Alexandria.

We understand that, at the last meeting of Lord Justice Fry's Committee of the Senate of the University of London, so much disposition was shown to accept the amendments proposed by the Committee of Convocation, that there is every reason to expect that the scheme will be modified before it is again sent up to the Senate, and that it will then be found to embody all the points to which most importance is attached by Convocation.

THE VICTORIA UNIVERSITY: ADDRESS TO THE QUEEN.

The Duke of Devonshire, as Chancellor of Victoria University, on behalf of the University, has signed and forwarded to the Home Secretary for presentation to the Queen an address on the occasion of the Jubilee.

MR. LUND.

We are glad to be able to report that Mr. Lund is steadily recovering from his recent illness. At present he is staying at the Hall, Bushey, Hertfordshire. The vacancy caused by his resignation of the examinership at the Royal College of Surgeons will be filled on June 27th.

TEMPERANCE CONGRESS.

The second international meeting on the subject of the abuse of alcoholic drinks will be held at Zürich on September 9th and 10th. Professor Forel, of the University of Zürich, is at the head of the

committee of organisation. It is proposed to institute an exhibition of objects illustrating the production and consumption of alcohol. Among the subjects to be discussed will be the results obtained from asylums for intemperate drinkers.

MORTALITY AMONG THE BURMA TROOPS.

THE post at Kaule, to the north of Kawlin, occupied by the Madras Infantry, has, it is stated, been found to be very unhealthy, 80 per cent. of the detachment being in hospital, and it has been decided to abandon the post.

SIR MICHAEL HICKS BEACH.

WE have good authority to state, and the many friends of Sir Michael Hicks Beach will be much pleased to learn, that there is a marked improvement in his health and physical condition, and that this has acted favourably on his eyesight. The cataracts have made but little progress since he left England, and no operation is considered to be necessary at present.

ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS.

AT a meeting of the Council of this Association, held on Tuesday, June 14th, at the residence of the Chairman, Mr. George Pollock, it was agreed that a letter be addressed to Mr. Trimmer, Secretary to the Royal College of Surgeons, asking if the College's petition for the new charter had been sent to the Privy Council Office, and, if not, when it will be sent.

CONVERSAZIONE AT THE ROYAL COLLEGE OF SURGEONS.

ON June 15th the president, Mr. Savory, gave a *conversazione* at the College. Eleven hundred guests were present, including Earl Granville, Sir Frederick Leighton, and other distinguished persons. The museum was illuminated by the Maxim-Weston electric light. The band of the Coldstream Guards played a selection of airs, and the Fraser Quintett gave a series of vocal and instrumental performances in the museum of the College.

THE ENGLISH COMMISSION ON M. PASTEUR'S PROPHYLACTIC.

THE report of the Committee on Hydrophobia now only awaits the signatures of the members. We are in a position to state that the report will contain experimental and other evidence accumulated by the Committee strongly supporting both the theoretical views of M. Pasteur and their practical application. We believe that Mr. Victor Horsley, F.R.S., the Secretary of the Commission, has succeeded in rendering several dogs absolutely refractory to the virus of rabies in any form.

THE JUBILEE SERVICE.

THE service in the Abbey, on Wednesday, June 22nd, at 3 P.M., which will include musical additions, will be held for the benefit of London hospitals. One-third of the proceeds will be given to the Hospital Sunday Fund, which this year will lose the annual collection in the Abbey, one-third to the Westminster Hospital, and the remaining third will be divided between the Hospital Saturday Fund and the Western Dispensary. Tickets of admission will be confined to those who, at the time of application, contribute the sum of £1, 10s., 5s., or 2s. 6d. for each ticket, according to the portion of the building in which they wish to have seats assigned them. All tickets will be issued by the Secretary of the Westminster Hospital, S.W., to whom alone application should be made.

THE POLICE AND SELF-AID.

THE practice which has obtained in many quarters of instructing the members of our constabulary force in ambulance-work is one deserving of the greatest encouragement, inasmuch as to them it is likely to be attended with most useful results. Dr. Biddle has lately been holding a police-class in connection with the Merthyr centre of the St. John Ambulance Association, and medallions were recently presented by the Chief Constable to the successful candidates. The hope was expressed that constables in other divisions of the county would follow the example here set.

METROPOLITAN PUBLIC GARDENS ASSOCIATION.

THE good work in which the Metropolitan Public Gardens Association has been engaged in recovering permanently open spaces for the poor of this too large city is one which should not be allowed to languish for the want of funds. Yet we regret to hear that the income of this Association, which was £6,838, diminished last year to £3,688. Over fifty acres of open space, where the young may obtain invigorating recreation and the aged rest and quiet, have been or now are about to be opened with seats, fountains, shrubs, and flowers, and gymnastic apparatus, at a cost of about £1,200 provided by voluntary contributions.

LONDON SCHOOL OF MEDICINE FOR WOMEN.

LADY GRANT DUFF presented the prizes to the students of the London School of Medicine for Women on Wednesday last. The report for 1886, presented by Mrs. Garrett Anderson, M.D., the Dean of the school, stated that at the beginning of the winter session 1886-87, 22 students entered for their first year of medical study, and five took single classes. There were now 66 attending the school, and of these 24 were receiving clinical instruction at the Royal Free Hospital. Twenty-three of the students were preparing for the degrees of the University of London, 5 for the degrees of the Royal University of Ireland, and 32 for the licence of the Irish and Scotch Colleges. There were also 6 ladies taking single courses of lectures. New laboratories—anatomical, physiological, and chemical—had been added to the building. The expenses of carrying out these and other alterations had been nearly £1,100, and the Council were anxious to raise a fund of this amount, in order to defray the cost without encroaching on the slender resources of the school. During the last two years, the number of students had increased 92 per cent., and this was a very gratifying result.

MR. GODART, THE PATHOLOGICAL ARTIST.

MR. GODART, formerly Librarian of the Medical School of St. Bartholomew's Hospital, has been constantly engaged for thirty-seven years in preparing the large series of pathological drawings which embellish the hospital museum. Mr. Godart has proved himself to be not only a good draughtsman, but also a first-rate colourist. His skill in the latter respect is proved by the faithful rendering of expression and complexion in his coloured drawings of patients, and by the success of his coloured illustrations in Mr. Butlin's *Diseases of the Tongue*. The coming departure of Mr. Godart for Sydney is considered by the medical staff of St. Bartholomew's Hospital as a fitting opportunity for marking their sense of the value of his services by presenting him with some token of their esteem. A meeting will be held in the anatomical theatre of the hospital on Saturday, July 2nd, at one o'clock, to decide on the form which the presentation shall take. In the meantime, contributions may be sent to the Curator, Mr. D'Arcy Power, 26, Bloomsbury Square.

TIP-TILTED NOSES.

THE influence of the shape of a man's nose in determining the good or evil fortune of his life has not escaped the attention of physiognomists. That eminent social philosopher Mr. Shandy, whose lucubrations have attained so wide a currency, thanks to the filial admiration of his son Tristram, truly observed that "no family, however high, could stand against a succession of short noses;" by "short noses" is probably to be understood that form in which the organ is not only curtailed in length, but so distorted in form that it is "tip-tilted like the petal of a rose." This poetical simile but imperfectly expresses the true state of the matter. For a short time, while the *beauté du diable* lasts, the tip-tilted nose may be forgiven in a woman, but for

the greater part of existence it is a continual social agony to its unfortunate possessor. Such sufferers will rejoice to hear that their sad case is not beyond the reach of plastic surgery. Dr. John O. Roe, of Rochester, N. Y., has devised an operation for "the correction of the deformity," which is easily performed. He most philosophically remarks that "the nose does not appear ugly by reason of the fact that its size is disproportionate to that of the face (for noses vary greatly in this respect), but by reason of the disproportionate relations to one another of the different parts of the nose itself." Accordingly, having deadened the sensibility of the interior of the nose with cucaine, he pulls up the end of the nose, reflects the mucous membrane, cuts away the superfluous tissue which causes the organ to be tip-tilted, and then, if necessary, moulds a splint—a saddle, as it were—to the top of the nose so as to make it, while healing, assume the desired aquiline shape. In other cases, where the large end is due to the cartilages of the nose being bulged outwards too much he cuts them through with a thin-bladed knife, and then applies his splint or saddle. In neither case is the operation at all serious. There is no scar, for the skin is not cut through, and the results, if we may judge by the drawings made from photography taken before and after, leave nothing to be desired.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The usual annual circular to the Fellows of the College announces that a meeting of the Fellows will be held at the Hall of the College in Lincoln's Inn Fields on Thursday, July 7th, at two o'clock in the afternoon precisely, for the election of three Fellows into the Council of the College. Mr. John Wood, believing that it is desirable that a vacant space be left for the new blood which many are anxious to infuse into the Council, has determined not to seek re-election. The candidates for re-election are Sir Spencer Wells and Mr. Jonathan Hutchinson. Mr. Willett, Mr. J. Couper (date of Fellowship, 1861), and Mr. Brudenell Carter intend to contest the vacancies. Mr. Rouse, Mr. Cowell, and Mr. Gant are not again candidates. No provincial surgeon has come forward. The annual dinner of the Fellows will be held on the evening of the same day at the Holborn Restaurant. Mr. Crosse, of Norwich, will take the chair. Mr. Woodhouse Braine, of 56, Maddox Street, Hanover Square, is Honorary Secretary, and will furnish full particulars of the dinner.

ILLNESS OF THE CROWN PRINCE.

We are able to state that the progress of the clinical features of the case of the Crown Prince thus far confirms, in Dr. Mackenzie's opinion, the favourable deductions which may be made from the report of Professor Virchow which we have received by telegram from Berlin (see page 1348). The delay in the issue of this important document is due to the fact that precedent was opposed to its publication, and that only serious public considerations and some pressure in high quarters in Berlin have overcome this obstacle. The responsibility of the pathological statement rests with the eminent Berlin professor, than whom there is no higher authority. From the clinical point of view, Dr. Mackenzie is of opinion that the growth has not at all the aspect of malignancy. It has the granular, slightly cauliflower like appearance of an ordinary papilloma, without any sign of infiltration of the surrounding tissues, and at present there is scarcely even a trace of congestion around the base. There was, of course, a good deal of local swelling after the first operation, but in the interval between Dr. Mackenzie's two visits to Berlin, we understand that this completely subsided under the influence of rest and insufflations of astringent powders. The growth occupies about the posterior fifth of the free edge of the left vocal cord, and the rest of the larynx is to all appearance quite healthy. The voice is all but entirely lost owing to the mechanical obstacle offered by the growth to the approximation of the cords. The Prince can just manage to make himself heard by a great effort. He has never suffered from difficulty of breathing, but there was at one time a little trouble in swallowing, which has now disappeared. This was probably, however, unconnected with the disease. Everything seems at present to give grounds to hope for a favourable termination to this important case, the progress of which may be said to be watched with interest by the whole medical world. It will, of course, be self-evident that the full prognosis in such a case must always be a matter of grave anxiety to the most experienced. During the stay of the Crown Prince of Germany in this country, he will be under the care of Dr. Morell Mackenzie, and Dr. Norris Wolfenden will act as resident medical attendant, to carry out the treatment directed by Dr. Mackenzie. Dr. Wegner, of Berlin, has accompanied the Prince as his personal medical attendant.

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The decision of the House of Lords in the case of Caird *v.* Syme, on June 13th, in no way alters the law as to copyright. It has long been settled that the author of any composition, whatever its nature, retains a right of property in his work, until it has with his consent been communicated to the public, or, in other words, been published; but, as soon as it has been published, his rights are gone, except so far as they may be protected by statute. What amounts to publication is a matter which must be answered according to the nature of the composition in question and the circumstances of each case. In the case just decided the composition was a course of lectures delivered by the plaintiff to a class composed of students of the University of Glasgow. One of them took down the lectures in shorthand, and from this the defendant published a book containing the substance of the lectures. The judges in the Scotch Courts and in the House of Lords differed in opinion on the question whether the delivery of the lectures to the class was such a publication as to deprive the plaintiff of his right to his work. The majority of the Lords who heard the case have decided that it was not, on the ground that the lectures were not delivered to the public, but to a class restricted to members of the University of Glasgow. It was agreed by all the learned lords that, if delivered to the public, the author's rights of prohibiting further publication of his ideas would be gone, and the point decided by the majority was merely that delivery of a lecture to a select class is not publication. The decision is in accordance with two previous decisions of English courts, one by Lord Eldon and the other recently by Mr. Justice Kay, and therefore merely declares the law to be what it was known to be already. It is, however, still open to anyone to print and circulate a lecture if the author has delivered it in such a way as to amount to a publication, and disputes as to this may very possibly occupy the attention of the Courts in the future.

SANITARY STATE OF YORK.

There seems to be much room for improvement in the sanitary arrangements of York. In a report recently laid before the Town Council on the health of the city during the first quarter of the present year, Mr. S. W. North, the medical officer of health, refers to the unsatisfactory continuance of cases of typhoid fever in the city, and adds: "the only remedy seems to me to be a far higher standard of cleanliness, both on the surface and below it, than has ever yet been aimed at. Foul middens and privies on the surface and stagnant sewers below are accepted by all who have paid attention to the subject as a sufficient explanation of the continued prevalence of typhoid fever in a town population." Mr. North, some months ago, prepared an elaborate report on the severe prevalence of typhoid fever last year, and in that report expressed his opinion "that no mere local remedy will be of any practical avail, that remedial measures to be effective must apply to the whole city, and that the remedial measures involve a careful survey and consideration of the sewerage arrangements of the whole city." He urged at the same time what had been already pointed out in 1884 by Dr. Airy, the Government Inspector, that a new and efficient system of sewerage and drainage was needed for the city, that the middens and cesspit privies in vogue

should be abolished, and that the scavenging of filth and refuse should be systematically undertaken by the Town Council themselves, and not be left to the irregular action of tenants and private owners. In Mr. North's report the Corporation of this important cathedral town, with its population of 70,000, have plainly indicated to them the proper methods of banishing typhoid fever and other filth diseases from their midst.

CONTAGIUM OF SCARLET FEVER.

In our leading article on the above subject last week, we made a statement which might give an erroneous impression of Dr. Klein's work, and which we therefore take the earliest opportunity of amplifying. We say, "Dr. Klein does not state in how many cases of human scarlatina he found this organism, in what stage of the disease, or where." In speaking thus we were referring to the lecture at the Royal Institution, but our remarks might be taken to refer to all his previous statements on the matter, while in reality Dr. Klein has recorded the following facts in a paper recently read before the Royal Society. In that paper he stated that he examined eleven cases of scarlet fever, four of which yielded positive results as regards the presence of his streptococcus in the blood; three of these were acute cases between the third and sixth day of the illness, with high fever; and the fourth was a case of death on the sixth day.

SURGERY OF THE SPINAL CORD.

We understand that on Thursday, June 9th, Mr. Victor Horsley removed a tumour in the dorsal region of the spinal cord from a patient under the care of Dr. Percy Kidd. The patient had been seen by Dr. Gowers, who diagnosed a localised neoplasm, and suggested operative interference. The tumour measured about one inch and a quarter by half an inch; it was situated within the dura mater, and apparently grew from the ligamentum denticulatum of the spinal cord. It compressed the latter severely, causing violent spasms, pain, and complete paraplegia. Although the operation was necessarily prolonged, the temperature has never reached 100°, and the wound is now practically healed. The patient has already recovered some power over the bladder, and the spasms and pain are rapidly diminishing. We believe this is the first case of the kind in which an operation has been attempted.

INTERFERENCE WITH A PRESCRIBED DIET.

Attempts are often made, though not always with success, by well-meaning friends to evade the rules of the workhouse authorities, who strongly object to any interference with the stipulated diet of the inmates. It was reported at a recent meeting of the Islington Board of Guardians that two women, who were on a visit to an inmate of the workhouse, were found to have concealed about themselves not less than thirteen pounds weight of various articles which they endeavoured to smuggle into the workhouse. The articles are said to have included seven eggs, two kippers, two haddocks, two scones, four ounces of tea, two pounds of sugar, one Spanish onion, one tin of mustard, one bottle of Worcester sauce, a quantity of spring onions, two bunches of radishes, several pieces of fried fish, and a bottle of gin. Success would in all probability have attended this breach of the workhouse regulations had it not been that the visitors sought to beguile the time of waiting by partaking of some of the gin in the bottle. The noise made by the uncorking of the bottle behind the screen (an unnatural one for a workhouse) attracted the attention of one of the officials, which led to detection and the confiscation of the articles.

OXFORD MEDICAL SCHOOL.

Some time since a schedule was drawn up for the guidance of students of materia medica and pharmacy, but a close examination of this document reveals some rather curious *lapsus*. For instance, we are told that, among other things, students will be expected to show a practical acquaintance with the pharmacopœal methods of preparing "iodide of potassium," "sulphate of magnesia," "tartrate of antimony," "sulphide of lime," etc. Now there is no pharmacopœal method of preparing sulphate of magnesium, and if there were we doubt whether a knowledge of the process would be of much service to the intending practitioner. Again, "tartrate of antimony" and "sulphide of lime" are not to be found in the *British Pharmacopœia* under such names. Even creasote is spelt "creosote," but this we are willing to believe is an unrevised printer's error. It might have been hoped that the new Medical Board would have avoided falling into the pernicious practices in the matter of questions which are gradually becoming more or less obsolete in London. There is ample scope in therapeutics and pharmacy without requiring students to be familiar with the recondite manipulations of the wholesale chemist. A knowledge of the preparations in the *British Pharmacopœia* is, no doubt, a necessary part of the equipment of every practitioner of medicine in this country; but the difficulties it presents to the student should be minimised.

FREE LIBRARIES AND INFECTIOUS DISEASES.

Attention has recently been called by Dr. Simson, of Lavender Hill, to the danger which may attend the advantages of free public libraries and others, in the dissemination of infectious diseases. By a curious coincidence, he recognised at the house of a patient suffering from scarlatina a book which he recollected having noticed in the room when in attendance on a previous patient, a few days before, who was also suffering from that disease. On inquiry he ascertained that in the second case the symptoms had commenced within two days of the loan of the book, and circumstances plainly point to the book as the source of infection. The following precautions are observed by some free public libraries; their general adoption would tend very largely to diminish the risks of such a contingency. The sanitary inspector furnishes the librarian with a list of all the houses in which such diseases exist. A circular is then at once sent to any reader resident there forbidding books to be returned until the house is reported free from disease; and when the books are returned they are disinfected in a simple apparatus constructed for the purpose. The instances which reach us of the dissemination of infectious disease in this way are not sufficiently numerous to justify, in our opinion, a condemnation of the establishment of free libraries, though the introduction of some such safeguard as that suggested would be a prudent step to take.

MESENTERIC CYSTS.

Dr. E. Hahn read a paper on Mesenteric Cysts, before the Berliner Medizinische Gesellschaft, on May 11th. These cysts are rare. Victor Angagneur is the only writer who has written a good monograph on the subject. The mesentery consists of connective tissue, adipose tissue, lymphatic- and blood-vessels, and glands. From the connective tissue and fat, fibromata, lipomata, enchondromata, sarcomata, myomata, and cysts may be developed. Carcinomata and dermoid cysts have not been discovered in the mesentery. Rokitansky and Virchow both believed that mesenteric cysts were developed from degenerated glands. Hahn divides mesenteric cysts into (1) blood-cysts, (2) chyle-cysts, (3) serous cysts, and (4) hydatid cysts. According to Angagneur, 90 mesenteric tumours have been observed, of which one-third were cystic. Of these, 17 were subjected to operative measures. In 5 cases of chyle-cysts, abdominal section was performed; in 3 of these cases the cyst was removed, with 1 death; in 2 the cyst was incised and drained, the patient recovering. The fluid, sometimes abundant, is milky, and contains fat and albumen. The cyst wall is composed of connective tissue, with traces of lymphatic tissue, and is not lined with epithelium. Millard and Tilland and Werth have supplied good evidence that these cysts arise from lymphatic glands. Blood-cysts of the mesentery are very uncommon. Dr. Hahn states that two cases have been carefully noted—one occurred in Sir

Spencer Wells's practice, the second was operated upon by Hahn himself. The patient was a girl, aged 8. Two years before operation a swelling, the size of a hen's egg, was discovered in the abdomen; it was attributed to a blow. The swelling was freely movable, and at first caused little inconvenience, but at length became the source of severe pain, much like that which is felt in some cases of floating kidney. The child would be cheerful for a time, and then complain of intense pain, and lie down with the thighs flexed, and the head bent till it nearly touched the knee. This pain would last for two or three days and nights, preventing sleep. An incision over four inches in length was made through the linea alba, the great omentum was pushed aside, and the dull-red, lustreless surface of the tumour was exposed. The incision was enlarged, and the tumour could then be easily raised. A coil of intestine formed a frill in front of the growth. The anterior layer of mesentery was divided, the fluid contents of the cyst emptied, and the collapsed cyst was then dissected away. After checking the hæmorrhage, the operator sewed up the wound in the mesentery with catgut. The child made a rapid recovery. Serous cysts are the most frequent and the most serious form of cystic disease of the mesentery. They often become very large. Simple tapping has seldom caused a serous mesenteric cyst to disappear. Extirpation has been attempted five times, with three deaths. It appears that incision and drainage are preferable to complete removal of the cyst. Hydatid cysts have only been twice noted in literature. A discussion followed the reading of Dr. Hahn's paper. Dr. Gottschalk described a case of serous mesenteric cyst successfully removed by Dr. Landau. The pedicle, formed out of the mesentery, was returned, and drainage was not found necessary. Dr. Gottschalk preferred complete operations to incision and drainage, and in this opinion most British operators will agree with him. Dr. Küster had observed one chyle-cyst and one hydatid cyst of the mesentery. There was generally great difficulty in emptying the cyst, which was enveloped in the folds of the mesentery, the intestine being often stretched over the tumour. He believed that total extirpation was dangerous and unadvisable, incision and drainage answering very well. Dr. Hahn replied that in the case of chyle-cysts and blood-cysts not one death had followed extirpation.

THE BACILLUS OF TYPHOID FEVER.

At a meeting of the Academy of Medicine on April 28th, M. Gabriel Pouchet communicated the results of his attempts to cultivate the typhoid bacillus in various mediums. For the inoculations he used a pure culture provided by Dr. Chantemesse. The proliferation of typhoid bacillus ceases in media of any kind that are rich in organic matter. In peptonised gelatine the cultures are proportionately abundant as the quantity of peptone diminishes and approaches the proportion of 1 per cent. Salts of copper, of potassium, and of ammonium are unfavourable to the development of the typhoid bacillus, and the same is the case with acids. The bacillus is more easily developed in pure than in impure water. The best medium of cultivation appears to be a nutritive gelatine obtained from broth prepared in the same manner as that usually made from veal, by means of intestine from which all fæcal matter has been washed away. It is interesting to compare this experimental result with the fact that the anatomical lesions of typhoid are principally situated in the intestine.

SCOTLAND.

POST-GRADUATE COURSE, ABERDEEN.

A very successful post-graduate course, under the auspices of the Aberdeen, Banff, and Kincardine Branch of the British Medical Association, has just been concluded at Aberdeen. At the final meeting the veteran Dr. Manson, of Banff, on behalf of the graduates, thanked the lecturers and Committee for the privilege that had been afforded them of becoming acquainted with the most recent improvements in medicine and surgery.

GLASGOW UNIVERSITY.

At the Jubilee Service at Westminster the University will be represented by Professor Robertson, LL.D., Dean of the Faculty of Law; Professor Leishman, M.D., Dean of the Faculty of Medicine and University representative on the General Medical Council; and Professor Ferguson, LL.D., Convener of the Board of Examiners for Degrees in Science. Professor Ramsay, Ph.D., who has been appointed to succeed Professor Williamson in the Chair of Chemistry at University College, was for a number of years Assistant to the Professor of Chemistry at Glasgow and Lecturer on Geological Chemistry. From Glasgow he was appointed to the Chair of Chemistry at University College, Bristol. His appointment to succeed one of so high a reputation as Professor Williamson is the most important nomination that has fallen to the lot of a Glasgow student of late years.

TYPHUS FEVER IN GLASGOW.

Dr. Russell's report for the fortnight ending June 4th mentions the number of cases of fever as 22, of which 14 are of typhus, all related to one another. Up to this date this outbreak has cost 4 lives, the treatment of 22 cases in hospital, and the maintenance of 33 persons for a fortnight in the reception-house, besides the expense of disinfection. In hospital there are at present 138 cases of scarlet fever, 49 of measles, 37 of enteric fever, 31 of whooping-cough, 20 of typhus, and 4 of erysipelas, making a total of 279, as compared with 254 a fortnight ago, and 205 at the corresponding period of last year. In the first week of the fortnight the death-rate was 23, and in the second 20.3, the lowest since last September—a lower rate than has yet been recorded at any time for June.

FOOTBALL AND CHARITIES.

We hear so frequently now of the growing evils of football that it is pleasant to be able to record some positive good to suffering humanity which must be placed to its credit. The Glasgow Charity Football Committee met on June 13th for the purpose of allocating to various medical and other charities sums of money derived from football matches. The committee had at its disposal over £1,600, and of this sum £1,200 was devoted to the following charities:—Royal Infirmary, £150; Western Infirmary, £150; Broomhill House, £30; Dunoon Seaside Homes, £30; Saltcoats Home, £30; Deaf and Dumb Institution, £25; Mission to Deaf and Dumb, £25; Lenzie Convalescent Home, £25; Blind Asylum, £30; Eye Infirmary, £25; Hospital for Skin Diseases, £20; Ear Infirmary, £25; Night Asylum for Houseless, £15; City Orphan Homes, £30; Infirm and Imbecile Children, £10; Home for Deserted Mothers, £21; Magdalene Institution, £20; Widows' Friend Society, £25; Training Home for Nurses, £25; Maternity Hospital, £30; Hospital for Sick Children, £20; Mission to Outdoor Blind, £20; Ophthalmic Institution, £40; Royal College of Music for the Blind, £10; Poor Children's Dinner Table, £20; Association for Organising Charitable Relief, £40; St. Andrews Ambulance Association, £20; Glasgow Native Benevolent Society, £20; Old Men's Home, £20; Society for Prevention of Cruelty to Animals, £10; Institution for Orphan Girls, £20; East Park Home for Children, £10; Female Benevolent Society, £15; Dumbartonshire Charities, £100; Anderson's College Dispensary, £10; Glasgow Samaritan Hospital for Women, £15; Glasgow Aged Women's Society, £20; Children's Fresh Air Fund, £10; Glasgow Medical Dispensary, £10.

DUNDEE ROYAL INFIRMARY.

At the annual meeting of the governors and subscribers to the Dundee Royal Infirmary, held on Monday, the medical report submitted showed that during the past year 2,236 patients had been admitted to the hospital, an increase of 138 on the previous year. A great increase in the number of fever patients had taken place, of whom there were 319, as compared with 109 in the preceding year. There were 216 cases of scarlet fever and 73 of typhus. Four nurses had been attacked by fever, but all had recovered. The deaths amounted to a total of 180, equal to 7.9 per cent., as against 8 per cent. last year; excluding 34

cases which had died within forty-eight hours after admission, the percentage of deaths would be 6. In addition to the 2,236 patients admitted to the Infirmary, 2,670 were attended to at the Infirmary waiting-room; in the Dispensary 4,962 teeth were extracted; and the district surgeons visited 7,021 patients at their own houses, all of whom requiring medicines were supplied with such at the expense of the Infirmary. In the pecuniary report it was stated that donations of £670 were received for the children's ward and £150 to the Infirmary, besides legacies to the extent of £1,293. The ordinary revenue of the year amounted to £7,941, being £1,286 short of the expenditure, and making the present deficiency £2,444.

IRELAND.

NORTH OF IRELAND BRANCH.

AT a recent meeting of the Council of this Branch, held in the Royal Hospital, Belfast, under the presidency of Mr. Fagan, F.R.C.S.I., it was arranged that the annual meeting should take place on Thursday, July 7th, and that the annual dinner should be held in the Royal Avenue Hotel the same evening, at 7.30 P.M. Dr. Byers was unanimously elected Secretary of the Branch, in the room of the late Dr. John Moore; and Dr. Gray, of Castlewellan, was unanimously appointed Treasurer. The Branch is to be congratulated upon having secured the services of these two gentlemen. Dr. John M. Palmer, of Armagh, has been nominated for the presidency for the ensuing year, and will no doubt be elected at the annual meeting, as his candidature is not being opposed.

ULSTER MEDICAL SOCIETY.

IT is generally expected that Dr. Whitla, the President for the current year, will be asked to accept re-election to the presidency at the approaching annual meeting. The past year has been one of the most successful in the annals of the Society, and by universal consent the main credit for that success is attributed to the great ability and energy exhibited by the President in the discharge of the duties of his office.

DEATH OF W. T. B. LYONS, ESQ., D.L.

THE death of this gentleman, who had long been a generous patron and staunch friend of medical charities, took place very suddenly on May 4th. He was presiding at a meeting of the Board of Management of the Royal Hospital, to the presidency of which institution he had been elected some time ago in succession to the late Earl of Shaftesbury, when he was seized with an apoplectic attack, from the effects of which he succumbed a few hours later. Mr. Lyons took a deep interest in everything that concerned the welfare of the town of Belfast, and was particularly energetic in his support of all philanthropic movements. He was untiring in his solicitude for the Royal Hospital, and for many years was rarely absent from his place as Chairman of the Board of Management, a position for which his sagacity, integrity, and kindliness of heart pre-eminently fitted him. Some time ago the Board presented him with his portrait as a mark of their personal esteem and high appreciation of his long and valuable services. He will be much missed and sincerely regretted.

SANITARY LEGISLATION CONFERENCE.

THIS Conference held its fifth meeting last Tuesday; Mr. H. RUTHERFORD, barrister-at-law, occupied the chair, and explained that the object of the present meeting was to confer with members of Parliament on the subject of the second reading of the Sanitary Registration of Buildings Bill.

Mr. LACAITA, M.P., thought the principle of the Bill had been very adequately discussed, and the result was that they were all thoroughly agreed that the more buildings were brought into a healthy state by means of sanitary inspection and registration the better. But public opinion, they knew, was not sufficiently advanced to press forward a Bill on the same lines as that proposed by the Sanitary Assurance Association last session, namely, to compel the sanitary registration of all buildings. The present Bill was to some extent a compromise with an uneducated public opinion. The clauses of the Bill had been framed more or less on the principle that registration should be compulsorily enforced in those cases where the actual residents had not got it in their power to ascertain the sanitary state of houses in which they lived; tenement-houses were omitted; but if the Bill became law in its present shape, there would be little difficulty in extending its provisions, in a modified form, to tenement-buildings. As to the persons by whom the buildings ought to be inspected and registered, the principle of the Bill obviously was that inspection should not be conducted by public officers as such, but that it should be in the power of every owner, lessee, or occupier, to go to any licensed practitioner in sanitary science; but, on the other hand, that the public authorities should be responsible for the registration of the certificate when given. The rights of those engaged in sanitary practice had been considered, and those who could prove a *bonâ fide* practice for five years at the passing of the Act would be licensed without examination. At this late period of the session he did not think they could quite expect that the Bill could be passed. It was down for second reading on June 22nd, and he thought it would be necessary to ask on that occasion that it should be read in its original form, and that the amendments made by the Conference should be introduced into the House of Commons as amendments in Committee or at a subsequent session.

A resolution proposed by General Sir PETER LUMSDEN, and seconded by Dr. FARQUHARSON, to the effect that a petition should be presented, was passed unanimously.

THE ILLNESS OF THE CROWN PRINCE.

THE following is a translation of Professor Virchow's report on the portion of the growth removed by Dr. Morell Mackenzie on June 8th, which we have received by special telegram from Berlin:—

The two objects brought to me yesterday by General-Aerzt Dr. Wegner displayed, when examined microscopically, the appearances of a coarse granular papillary outgrowth. Their rounded surfaces had a conglomerate, bluish-white, transparent, shining appearance so far as they were in their natural state, but certain portions which had been exposed to the influence of catechu exhibited a dull, brownish, somewhat crumbling appearance. The portions removed at the operation were somewhat retracted and hidden by the rolling inwards of their edges (*etwas retrahirt und durch das umbiegen der Randtheile verdeckt*). They consisted of a soft, fibrous tissue, from which shorter and longer shreds projected. The larger of the two pieces was 3 millimètres long and 2.5 millimètres thick; the smaller was about 2 millimètres broad and thick. But these measurements probably do not accurately represent the natural dimensions, as the particles have diminished in size, owing to the retraction and to the folding of the sections after their extirpation. Microscopic investigation confirmed the diagnosis arrived at from the naked-eye examination. 1. The surface consisted everywhere of a very thick and dense membrane, with stratified epithelium cells. In many of the cells gelatinous granules of large size were visible; here and there lay a nest of cells lying in concentric layers. Towards the inside there was a similarly stratified layer of cylindrical cells (without cilia) implanted directly on the connective tissue. 2. The surface of the mucous membrane was covered with long papillary excrescences, which, besides the elements of the connective tissue, contained rather large vascular loops (*Gefaessschlingen*). Each nodule visible to the naked eye on the surface was formed by a papilla of this kind. As for the rest, the mucous membrane exhibited scarcely any modification; larger granular and cell-growths were only noticed in scanty quantities; the blood-vessels were only moderately dilated. Both portions removed (*schnitte*) included not only the mucous membrane, but extended through it into the submucous membrane. Hence, besides connective tissue with numerous fine elastic fibres, there was a large number of nerve bundles (with from four to six fibres) and their branches, and of small arteries and veins; at some spots there were masses of the lobules of the mucous glands. Although it is proved by this that the incision reached parts situated deep below the mucous membrane, not a single spot that had undergone any appreciable change was discovered, despite the most careful examination of these more deeply situated parts, especially on the extirpated side. All the essential changes affected the surface, only they prove that the tumour is an epithelial growth associated with papillary excrescences (wrongly described as papilloma), an affection termed "pachydermia verrucosa." At no point was the mucous membrane found to be invaded by the epithelial formations. The specimens now before me are of considerably greater scientific value than that laid before me on May 21st; in the particle then examined only scanty lesions of an

irritative kind were seen; lesions only distantly to be compared with those found in the particles now examined; in all, probably, the irritative changes affected the periphery of the seat of the disease. It is evident that on the present occasion a more central spot was reached. Although this spot has become affected in a very marked manner, the healthy quality of the tissue on the extirpated portions gives grounds for a very favourable prognosis. Whether such a prognosis be justifiable for the malady considered as a whole cannot be concluded with certainty from the two pieces that were removed. However this may be, there is nothing in them calculated to awaken a suspicion of a further and more serious affection of these parts. (Signed) PROFESSOR DR. RUDOLPH VIRCHOW.

Berlin, June 9th, 1887.

HOSPITAL SUNDAY FUND.

AT the public meeting at the Mansion House on June 14th in support of the Hospital Sunday Fund, Mr. John Biddulph Martin, Treasurer of Charing Cross Hospital, was ruled out of order when he endeavoured to explain the reasons which prompted Charing Cross, Westminster, University College, and other hospitals to decline to co-operate with the Council of the Fund in their new departure in requesting the managing bodies of the hospitals to assist in the conduct of public meetings in aid of the Fund, to be held in the localities in which the hospitals are situated. Mr. Martin has, in consequence, addressed the following letter to the Lord Mayor:—

"17, Hyde Park Gate, S.W., June 14th, 1887.

"My dear Lord Mayor,—Having bowed with all submission to your ruling at the meeting held at the Mansion House to-day that the occasion was not the proper one at which to take up the challenge made to certain hospitals to explain their attitude towards the Hospital Sunday Fund, I beg to be allowed to say that the assertion that Charing Cross Hospital, among others, has 'positively declined to help' the operations of the Fund is untrue in fact and in spirit; it is still more untrue to say that this Hospital is 'quietly opposing' the work of the Fund. On the contrary, we wish it all success and enlargement on the lines of its original foundation. I may say, as a single instance to the contrary, that Sir Joseph Fayrer, one of our Council, himself proposed a resolution at the Hospital Sunday Fund meeting at Hampstead.

"I venture to call your attention to the enclosed memo. embodying my own opinions and that of many active workers in the cause of hospitals; and I venture to hope that you will authorise and request the Secretary of the Hospital Sunday Fund to place copies of the same, which I send herewith, in the hands of every member of your Council.

"I would not make this last request but that I am on the point of leaving London, and have not the names of the gentlemen on your Council.—I am, my Lord Mayor, yours faithfully,

"JOHN B. MARTIN, Treasurer, Charing Cross Hospital.

"The Right Hon. the Lord Mayor, Chairman of Hospital Sunday Fund, Mansion House, E.C."

The memorandum points out that the aim of the founders of the Hospital Sunday Fund was to collect for the hospitals and dispensaries of London a multitude of small contributions that could not be reached by the individual efforts of collectors or by special appeals from the pulpit. It was thought, not without reason, that the devotion of one selected Sunday to the cause of hospitals generally would draw contributions from places of worship in which the claims of hospitals had not previously been urged. It was also thought that a certain provoking of one another to good works would arise between parish and parish, or between Anglican and Nonconformist, which would stimulate the generosity of the public without detriment to the ordinary channels of benevolence through which any particular hospital derived its sources of income. Mr. Martin then continues:—

It was hoped, and it has proved to be the case, that a substantial sum would be collected, and that a handsome addition would annually be made to the funds of the London hospitals and dispensaries. But it was equally acknowledged that this subvention was not a clear gain to the charities concerned; they gave up their old-established annual charity sermons, and they ran the risk that some of their supporters would divert their individual subscriptions from the special to the general cause. It was also deemed not impossible that some might salve their consciences by a contribution to the "plate" on Hospital Sunday of an amount which under a less ample cloak for their benevolence they would have been constrained to recognise as inadequate.

Further, it had to be borne in mind that donors to the Hospital Sunday Fund absolved themselves from all responsibility in the matter of selecting a proper object for their benevolence, and divested themselves of any care for, or interest in, the welfare and good management of any particular charity. The full meaning of this argument may best be appreciated by conceiving for a moment the result should all the revenues of the London hospitals pass through the hands of one central distributing fund.

These are considerations which render it clearly impossible to strike an absolute balance of profit and loss between the hospitals and the Hospital Sunday Fund, but the practical result has, no doubt, been the division of a very substantial sum among the charities concerned, and such was the state of matters up to 1886. But the total collections of the Hospital Sunday failing to exhibit the elasticity which had originally been hoped for, and the net sum available for distribution showing a tendency to stagnate at or about £30,000 annually, it was then determined to prepare the way for Hospital Sunday by a series of public meetings, to be held during the preceding week, at which attention should be called to the claims of the Fund on the public benevolence, and in this new departure the hospitals were invited to take a share. This plan did not meet with entire acquiescence, and its result, a sum of £35,000, or of some £5,000 available for distribution in excess of previous years, hardly came up to the hopes of its advocates.....

It is the great aim and object of each individual hospital to develop in its immediate neighbourhood an interest in its own work; to this end we have in some cases a special organization of local canvassers, people's funds, and collecting-boxes; we get up, each in our locality, balls, dinners, and bazaars; we are in this special Jubilee year making extraordinary efforts in this direction, and are endeavouring at the present time by all means to stimulate among our local supporters an *esprit de corps*—an interest in the work of what we would fain have them consider as their own hospital. Under these circumstances, we find it by no means easy to serve two masters—to endeavour, on the one hand, to persuade our local patrons to concentrate their benefactions on a particular hospital, and, on the other, to support officially at public meetings the proposition that this benevolence should be diffused over the metropolis at large. It is the impossibility of thus dividing our allegiance, and no antagonism towards or lack of appreciation of the Hospital Sunday Fund and its work, that stands in the way of our hearty adhesion to the new propaganda.....

But so radical a change of theory as is involved in the Honorary Secretary's proposition that the award should depend not on merits or needs, but on the measure of support accorded to the Fund, and the energy displayed in working for it in a special mode, is one that would need confirmation not only by the delegations from contributory congregations, who form the medium of communication between the Council and the public, but by the public itself, who would undoubtedly view with disfavour the gradually increasing preponderance of a central hospital fund, and a corresponding decline of the individuality and local *prestige* of the metropolitan hospitals.

I repeat that I fully appreciate the benefits hitherto derived from the Hospital Sunday Fund. I am able heartily to wish for it all the expansion which active workers in its cause not unnaturally desire, and for which, in its legitimate sphere, I believe that there is yet ample scope. But the fact that four general hospitals, equally with six charities of a more special character, that show, according to the returns of the Hospital Sunday Fund for 1886, a collective average of 1,133 occupied beds (or 13 per cent. of the whole number) in a district embracing a large portion of the richest as well as of the poorest classes in London, see difficulties in co-operating to the fullest extent with the Hospital Sunday Fund in its present more ambitious plan of campaign, is in itself evidence to the public that the question is one on which no hasty judgment should be pronounced as an *ex parte* statement.

JOHN BIDDULPH MARTIN,
Treasurer of Charing Cross and the Royal Orthopædic Hospitals.

MILK SUPPLY.

SPECIAL interest attaches to the speeches delivered at a considerable gathering of public analysts and medical officers at Horsham. Upwards of one hundred leading medical officers of health and public analysts accepted an invitation to visit the new farms of the Aylesbury Dairy Company, which are on a very large scale, and well provided with very fine breeds of cattle. After the inspection of the stock and of the premises, in which all the arrangements for securing the health of the animals and perfection of sanitary detail were explained by Mr. Allender, some speeches were made in which points of considerable interest were brought out.

Mr. ALLENDER dwelt upon the value of a system in which completeness and efficiency were secured from the initial point of production to the ultimate delivery of the best milk in the best condition at the

home of the consumer, and claimed for this company that it had been the leader and pioneer in the great progress which had been made in improving and safeguarding the milk-supply of great cities. He referred also to the recent declarations of Dr. Klein, and their importance, if established, in relation to the strict veterinary examination of stock.

Mr. ALLEN (President of the Society of Public Analysts) observed that public analysts had great reason to regret that the parliamentary standard of milk was fixed as low as 11½ per cent. The Aylesbury Dairy Company's milk averaged 13 per cent. of solids, and he believed that to be really representative of a high quality of milk such as ought to be supplied. The standard ought not to be degraded, as it was by Parliament, to the lowest milk furnished by a poor cow.

Dr. WYNTER BLYTH advocated the sterilising of milk on a large scale.

Professor BROWN, of the Agricultural Department of the Privy Council Office, who was present with Mr. Lennox Peel, C.B. (Clerk of the Council), made an interesting speech, in which he referred at some length to the researches of Dr. Klein. He said that Dr. Klein's proposition was that the cow was subject to scarlatina contracted from the human being, and, being so subject, might transmit the disease to man. This was a new doctrine, and totally distinct from that previously initiated by Mr. Power, which was that a disease in the cow which was not scarlatina would become scarlatina in man. He expressed regret that a well-known medical journal had committed itself to a statement that Dr. Klein's conclusions were beyond the region of controversy—a declaration which he considered to be worthy the pages of *Punch*, and expressed his satisfaction that the BRITISH MEDICAL JOURNAL had advised waiting until further information was obtained. He believed that further investigations of a prolonged character would be necessary. They would have to find cases of the disease, which he believed to be about the most common one that occurred in the cow, and watch its results. He had observed the same appearances frequently on a dairy-farm in Gloucestershire, at the Agricultural College, in the udders of cows; but during the whole time no outbreak of scarlet fever had occurred at the College, which was supplied with the milk, and only one student was supposed to have had scarlet fever. He had no doubt that there were hundreds of institutions that could afford similar evidence. Sterilisation of milk would mean delivering in sterilised cans and a very elaborate system, which he thought impossible.

Mr. ERNEST HART, commenting upon the preceding speeches and others delivered by various medical officers of health, said it had been a great satisfaction to him to have taken a leading part in the early history of this company in devising and assisting in carrying out a system of sanitary precautions which had for their object to secure milk from all sources of contamination on the farm, in the dairy, and during delivery, and subsequent precautions for the guidance of the consumer. The system adopted by the Aylesbury Dairy Company had been followed throughout the kingdom, and was still the model on which other institutions based their proceedings. The proposal for the sterilisation of milk was one which he did not think practicable. The great object was to secure absolute purity and high quality. He had for some time ceased to be connected with the Aylesbury Dairy Company, but he could not but congratulate the company on the spirit with which they continued to carry out their efforts to produce and to supply milk which was of the highest quality as well as absolutely safeguarded. He believed that to be the true principle for obtaining a good milk-supply for cities. Referring to Professor Brown's criticism of Dr. Klein's report, he expressed profound regret, which he desired to emphasise in the presence of two high officials of the Agricultural Department of the Privy Council, that two departments of the Government separately engaged in a like research should devote so much of their energy to criticising each other. He expressed the hope that in the public interest the scientific staff of the Privy Council would co-operate with the scientific staff of the Local Government Board in carrying out a joint investigation. The present attitude of critical hostility was greatly to be regretted.

Dr. ARMSTRONG (Newcastle-on-Tyne), and Dr. KELLY, medical officer of health (West Sussex), spoke especially on the vast importance of improving the supply from small dairies.

For our own part, we may observe that while the creation of great model farms is in itself a good thing, what is also specially to be desired is the supervision and improvement of the condition of the smaller dairy-farms throughout the country. In this respect, a great effect has been produced by the operations of the Aylesbury Dairy Company in insisting on the sanitation of the large number of farms of which it controlled the milk-supply, and that good influence will, we hope, be extended by the influence of this company and others throughout the country.

MEMORIAL PORTRAIT OF SIR WILLIAM JENNER, BART., K.C.B., M.D., ETC.

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Anyone desiring to have his name added to the General Committee should signify the same without delay to either of the Honorary Secretaries.

Subscriptions may be sent to any one of the Honorary Treasurers or Honorary Secretaries.

THE JOURNEY TO WASHINGTON.

As it is understood that many members of the Association intend to cross the Atlantic with the view of attending the International Medical Congress at Washington after the conclusion of the Dublin meeting, it has been suggested that it would conduce to mutual convenience and increase the pleasure of the trip if members intending to go to Washington could be put into communication with each other. With this object the names of members will be received by Mr. Francis Fowke, the General Secretary of the British Medical Association, and will be published in the JOURNAL. It will then be possible for friends and acquaintances to make arrangements to travel by the same boats, and to engage state-rooms together. Those who have travelled the Atlantic route will be aware that great personal discomfort may be avoided by ensuring congenial companions.

Under ordinary circumstances the berths are allotted in rotation at the offices of the respective steamship companies; but if arrangements are made beforehand, a party of not less than four booking simultanepusly can obtain a separate state-room.

THE GROWTH AND PROGRESS OF PROVIDENT DISPENSARIES.

By ROBERT REID RENTOUL.

THE accompanying table shows that habits of providence and thrift are on the increase, and that, with the improvement in the rate of wages, the working classes are now making efforts to provide for themselves the necessary medical requirements during illness. At present there are few thinking men who will give a negative to the question: Are provident dispensaries a source of usefulness in this country? Some, no doubt, who hold that the medical charity should treat all those who cannot pay the guinea fee, and also those who are driven to dispense drugs, while at the same time they give their advice for sixpence, will object to any plan but their own. It will, however, be granted, if the lowest professional fee is to be 3s. 6d. without medicine, that there is a very large class in this country who cannot, when ill and out of work, pay this fee and the druggist's as well, and at the same time support their wives and families. Recent statements prove this. Mr. H. Farrie, in his pamphlet, *Toiling Liverpool*, has pointed out that, with a population of 36,000,000, about one in five, or 7,000,000, are bread-winners; and also that a little less than 440,000 of these pay income-tax under Schedule D. He further adds: "We may fairly conclude that of this population fully 30,000,000 are dependent upon incomes of less than £3 per week per family, or about £150 per annum." The question arising out of this statement is, I think: Can these bread-winners pay our usual medical fees? If each individual of the family were making £3 weekly, the question would require little answering; and, if each family were certain of continuous employment for the fifty-two weeks, medical men would not have to discuss the very important question of how are we to give the wage-earning classes fair medical aid, without, on the one hand, lessening their self-respect, and, on the other, robbing medical men of those patients who can afford to pay the usual medical fees. In Liverpool, for instance, with its population of 600,000, there are about 40,000 people living in houses valued at a £7 rental, while between 80,000 to 120,000 live in houses of a still smaller rating. These figures show that there is a class in the community who require some special arrangement whereby they may pay their due share for medical treatment. The social condition of the wage-earning classes in most of the English manufacturing towns is nearly the same, although, no doubt, employment may be more constant in some than in others; therefore what applies to Liverpool is applicable to other towns. In the rural districts of the South of England wages are lower than in the North; and, strange to say, it is in the former places that the thrifty habits are the more pronounced, for the labourer is compelled to provide against the rainy day, as the money of the pauperising and pseudo philanthropist is happily absent.

The fact that the working classes are exposed to all kinds of weather and to accidents, and so render them liable to disease, makes it imperative that they shall have the power of seeking immediate help when illness threatens. Sir James Paget, in his address at the opening of the Health Exhibition, has—with the aid of Mr. Sutton, the Actuary of the Registry of Friendly Societies—shown that the 7,375,874 males (who, between the ages of 15 and 65, made up that portion of the population of 1881) had 9,692,505 weeks' illness, or, on an average, about 9 days' illness a man, while the 7,941,330 women between the same ages had 10,592,761 weeks' illness. As Sir James says, "Thus we may believe that our whole population, between the ages of 15 and 65, do, in each year, 20,000,000 weeks' less work than they might do if it were not for sickness." These figures are strengthened by Dr. Farr's statement, who, I think, calculated that for every person who dies, 3 have been seriously ill and 18 ill. But it must be recollected that the above figures include only those above the age of 15 and below 65. All men of experience know that it is at the extremes of life—in infancy and old age—that the heavy sick-list occurs. To this question must be also added the weighty fact that, as the working man and woman increase in years, their market-value decreases. Thus, they form a striking exception to the general rule, as applied to other vocations of life, when age and experience enhance the value of the man.

Seeing that time is money, and that capital without labour is of little value, it is not to be wondered at that the Government of this country do all in their power to stimulate the development of all those free organisations which give medical aid. The physical health and well-being of a country is of such vital importance, that one is inclined to suggest that, along with free education, there should be free medical aid. That this system has been partly adopted may be shown by referring to our Army and Navy Medical Staff, to the Poor Law medical officers, to free vaccination, to urban and rural medical officers of health, and to the Mercantile Marine Medical Service, etc.

Taking it for granted that something must be done by the medical profession so that, on the one hand, the medical charities may be retained for the benefit of the sick poor, while, on the other, the working classes are taught to foster habits of reliance on their own industry, forethought, and mutual assistance, it will be prudent to note some points in the management of the provident scheme. It is of the utmost importance that the establishment of a provident dispensary be the outcome of a public movement, and, further, that it is managed by a committee of influential men, coupled with a few representatives of the medical staff and working men. I think it would be much better if none of the medical staff acted on the committee, but that they nominated some local members of the profession to represent them. I also feel that all the doctors who have resided in the district for five years, and who are of honourable character, should, if they wish, be placed on the medical staff. This would lessen all attempts at forming rings or cliques.

The next important point for consideration is the fixing of a "wage limit," so as to decide who are eligible for benefits. Some societies do not trouble themselves with this, and hence abuses creep in. I think, at the utmost, the "wage limit" should not exceed 50s. per week for the entire family. Supposing such a family consist of husband and wife and four children, and that the two pay 10d. per month and the children 1s.; this will give a monthly payment of 1s. 10d. per month, or 24s. a year, including the entrance fee of 1s. This does not take in the 21s. for confinement, which generally includes the vaccination.

Another important point is, should members pay 1d. for each article of medicine supplied, so as to cover the cost of drugs and dispenser. In Manchester this is done, a rule being in force that such money shall not go to any of the medical staff. It requires some rule of this kind to put a stop to the foolish craving of members for medicine. A very important point is, as to how and when the payments of members are to be made. They should be encouraged to pay quarterly or half yearly, for if their subscriptions are to be taken up weekly, or monthly, it will require a collector at about £60 per annum. Further, no member should be given any benefits until he has been at least three months in the society, as it is disappointing to find that some members cease their payments the instant their illness is over. Few sick societies or insurances give benefits under six to twelve months.

In the JOURNAL of November 27th, 1886, page 1,056, will be found a description of the various plans of hospital co-operation with provident dispensaries. It will be found impossible to succeed if a free hospital is competing with a provident scheme. In the metropolis there are now thirty-nine provident dispensaries. They might be a brilliant success and a credit to the working classes if only the hospital authorities would co-operate. In the Sturge Prize Essay, published in the *Philanthropist* of December, 1886, I show that at 130 hospitals and dispensaries, 50,935 in- and 1,179,661 out-patients were treated during 1885. It is not too much to say that fully three-fourths of these out-patients could pay the small fees of a provident dispensary. The fact that during the same year the patients at 72 hospitals paid £36,334 15s. proves the truth of my statement. I appeal to the kindlier feelings of our hospital brethren not to rob the general practitioner of his rightful fees. Last year, the medical staffs at 82 of the London hospitals were paid £15,225 19s., and Dr. N. Hardy states that the London medical students pay £60,000 annually. Surely the wish for "the greatest good for the greatest number" will eventually induce the medical staffs to think seriously over the great harm done, and which now accompanies, but should not, the great benefits they confer. Sir W. Fergusson said that nine-tenths of the illness of out-patients were of a trivial nature. It is to be noted that in the JOURNAL of February 5th, page 296, the suggestion is made that immediate treatment at the provident dispensary should be given to those who wish to pay a small fee. Such a plan would relieve the hospitals of a great quantity of work. It would, however, be necessary to guard against the abuses of this "dual system."

A reference to the table shows I have collected statistics of 88 provident dispensaries, 5 of these having 33 branches. There is a membership of 293,720. It should be stated that many societies do not include those children of a family in this number, who do not pay (generally not more than four of a family are charged for). All the societies do not state the number of attendances, but of 41 which do, I find that 166,136 members were treated on 700,184 occasions,

Some Statistics from the 1886 Reports of Provident Dispensaries in England.

Name.	Number of Benefit Members.	Number of Times Treated by Doctors.	Medical Staff. C.	V.	R.	D.	Amount Paid to Medical Staff for 1886. £ s. d.	Drug Bill. £ s. d.	Total Income from Benefit Members in 1886. £ s. d.	Income from Honorary Members in 1886. £ s. d.	Total Income. £ s. d.	Total Expenditure. £ s. d.	Cash Balance to Credit. £ s. d.	Deficits. £ s. d.	Invested Funds. £ s. d.
Norwich	3,200	24,343	3	3	0	0	474 4 0	92 8 0	485 19 0	330 17 0	1,396 9 0	753 17 0	211 15 0	—	2,858 0 0
Northampton	6,222	52,929	0	4	0	1	1,751 18 0	312 3 0	2,374 15 0	148 2 0	3,606 8 0	2,561 4 0	1,088 0 0	—	500 0 0
Brighton and Hove and Preston	3,230	—	4	9	0	1	446 13 0	—	429 17 0	760 0 0	1,282 14 0	544 8 0	155 5 0	—	298 6 0
Salisbury and South Wilts	3,700	18,225	2	3	0	0	562 18 0	89 2 0	655 19 0	123 16 0	883 14 0	830 0 0	63 13 0	—	1,640 0 0
Gloucester	620	8,262	0	4	0	0	432 2 0	—	357 0 0	54 5 0	473 3 0	465 3 0	8 0 0	—	—
Kendal	1,992	—	0	5	0	0	446 17 0	—	311 16 0	113 17 0	505 12 0	682 16 0	—	117 4 0	2,215 0 0
Lichfield	233	1,000	0	2	0	0	12 0 0	7 10 0	23 19 0	35 5 0	62 9 0	62 4 0	0 5 0	—	—
Honiton	490	—	0	1	0	0	79 11 0	—	79 11 0	18 15 0	94 13 0	94 13 0	—	—	—
Ottery St. Mary	9,500	—	0	9	0	0	1,070 3 0	232 12 0	1,375 19 0	59 1 0	1,599 0 0	1,581 0 0	18 0 0	—	344 0 0
Burton-on-Trent	2,360	—	0	5	0	0	402 6 0	163 1 0	783 15 0	—	893 12 0	893 12 0	—	109 15 0	—
Bristol Provident Medical Institute	1,300	—	0	2	0	0	406 8 0	58 6 0	513 19 0	38 3 0	736 7 0	593 8 0	171 0 0	—	—
Stony Stratford	2,123	—	0	5	0	0	422 5 0	70 3 0	533 16 0	145 19 0	687 7 0	676 2 0	10 5 0	—	—
Tunbridge Wells	3,712	17,845	0	1	0	0	357 1 0	110 18 0	741 1 0	—	772 2 0	731 8 0	50 18 0	—	—
Hyde	15,479	120,265	2	12	0	1	1,902 16 0	586 8 0	2,475 14 0	231 5 0	3,225 7 0	3,125 16 0	229 10 0	—	—
Reading	3,407	22,640	0	1	0	0	368 16 0	77 0 0	716 9 0	—	725 7 0	706 4 0	29 3 0	—	—
Denton and District	32,065	104,947	1	16	0	1	2,875 19 0	830 15 0	5,707 5 0	716 17 0	6,156 11 0	6,778 11 0	—	996 18 0	—
Leicester (5 Branches)	2,099	26,001	0	1	0	0	315 13 0	86 3 0	490 19 0	—	598 2 0	476 6 0	122 16 0	—	—
Accrington	6,421	—	1	8	0	0	431 14 0	156 1 0	877 7 0	33 13 0	917 15 0	914 15 0	122 16 0	—	100 0 0
Derby	3,942	31,413	3	4	0	0	1,158 2 0	190 9 0	998 18 0	127 17 0	1,689 13 0	1,586 6 0	103 7 0	—	250 0 0
Leamington	16,986	—	0	27	0	0	2,001 16 0	568 15 0	4,242 18 0	106 9 0	4,440 19 0	4,384 2 0	114 4 0	—	—
Manchester (9 Branches)	3,800	31,373	1	7	0	0	647 6 0	123 2 0	877 13 0	117 4 0	1,165 11 0	1,078 9 0	25 16 0	—	—
Bedford	1,900	7,498	2	2	0	1	212 5 0	56 0 0	350 2 0	318 14 0	668 7 0	522 0 0	146 7 0	—	2,000 0 0
Eastbourne and Victoria Home	6,500	26,028	0	6	0	2	550 3 0	129 10 0	541 6 0	500 0 0	1,058 7 0	1,020 0 0	38 7 0	—	245 0 0
Sunderland	16,000	16,836	1	4	0	0	1,472 12 0	386 5 0	2,318 6 0	201 0 0	690 0 0	411 3 0	116 16 0	—	—
Coventry	900	—	0	1	0	0	180 3 0	53 15 0	257 17 0	737 8 0	645 14 0	91 14 0	—	—	399 11 0
Erith Cottage Hospital and Provident Dispensary	3,273	—	4	6	1	1	239 2 0	138 11 0	321 3 0	1,572 0 0	2,251 0 0	1,968 0 0	290 0 0	—	6,304 16 0
Torbay Cottage Hospital and Provident Dispensary	3,609	—	0	6	0	0	374 2 0	154 6 0	593 8 0	102 6 0	723 5 0	708 5 0	40 19 0	—	223 13 0
Grantham	6,217	14,338	3	5	0	1	435 6 0	199 19 0	518 9 0	1,824 5 0	2,474 15 0	2,394 18 0	81 1 0	—	4,221 10 0
Southampton	618	—	0	2	0	0	69 11 0	—	190 15 0	35 6 0	126 1 0	126 1 0	—	—	—
West Cowes	593	—	0	3	0	0	62 2 0	31 10 0	291 8 0	263 13 0	587 13 0	595 9 0	—	7 16 0	—
Bournemouth Provident Institute and Cottage Hospital	610	—	0	4	0	1	182 7 0	87 13 0	172 18 0	179 1 0	630 8 0	407 8 0	744 5 0	—	—
Oswestry	184	—	0	2	0	0	54 4 0	—	37 5 0	12 9 0	76 5 0	63 16 0	6 17 0	—	—
Buckland Newton	612	—	4	7	0	0	—	—	46 7 0	—	—	—	—	—	—
Plymouth	3,106	—	2	5	0	0	403 1 0	159 1 0	574 15 0	614 9 0	1,991 10 0	1,407 5 0	—	34 10 0	3,781 15 0
Altringham Provident Dispensary and Hospital	1,676	—	1	4	0	0	316 17 0	—	281 13 0	48 11 0	358 17 0	341 14 0	17 3 0	—	—
Leighton Buzzard	2,000	4,468	1	3	0	1	235 2 0	147 13 0	333 5 0	69 10 0	400 16 0	400 16 0	—	—	—
Warwick Provident Dispensary and Cottage Hospital	600	—	0	10	0	0	—	36 19 0	108 13 0	487 2 0	869 15 0	406 10 0	51 16 0	—	797 7 0
Ealing Provident Dispensary and Cottage Hospital	490	—	0	5	0	0	194 7 0	23 12 0	208 3 0	103 6 0	360 15 0	320 14 0	40 1 0	—	472 0 0
Deal and Walmer Provident Dispensary and Maternity	588	3,020	2	5	0	1	134 19 0	91 17 0	171 18 0	244 16 0	423 16 0	220 5 0	27 16 0	—	1,907 10 0
Newbury	3,316	—	0	6	0	0	541 18 0	—	491 12 0	48 5 0	610 0 0	610 0 0	—	—	319 19 0
Boston (Lincolnshire)	763	3,602	0	4	0	0	168 10 0	—	164 0 0	23 13 0	187 13 0	177 18 0	9 15 0	—	11 15 0
Rugby	1,143	—	0	3	0	0	197 17 0	44 7 0	197 17 0	103 13 0	328 3 0	354 19 0	—	26 0 0	500 0 0
Winchester	1,081	—	0	10	0	0	211 16 0	—	198 12 0	—	216 0 0	214 12 0	1 8 0	—	397 0 0
Nottingham	3,301	—	0	6	0	0	273 5 0	198 0 0	594 10 0	82 13 0	691 0 0	690 15 0	0 5 0	—	249 0 0
Devonport	7,855	—	0	66	0	0	1,044 0 0	—	1,044 12 0	71 1 0	1,245 8 0	1,219 4 0	26 4 0	—	155 0 0
Suffolk County Medical Club	1,322	—	0	5	0	0	190 11 0	34 3 0	190 11 0	—	190 11 0	190 11 0	—	—	—
Banbury	115	—	0	3	0	0	17 12 0	17 10 0	44 4 0	5 13 0	49 18 0	54 4 0	—	4 6 0	—
Kingsdown (near Bristol)	9,409	46,977	4	8	0	0	756 4 0	483 10 0	1,273 13 0	519 11 0	2,278 12 0	2,129 0 0	288 8 0	—	6,389 0 0
Worcester	3,567	—	3	3	0	1	534 2 0	—	609 18 0	—	609 18 0	583 0 0	26 0 0	—	—
Rugeley	2,584	—	0	4	0	0	245 2 0	76 9 0	424 2 0	91 5 0	515 7 0	499 6 0	16 0 0	—	3,000 0 0
Birmingham	1,739	9,404	1	4	0	0	153 11 0	100 3 0	323 18 0	66 5 0	456 14 0	446 14 0	11 10 0	—	—
Liverpool. Birkenhead (3 Branches)	300	4,076	0	3	0	0	35 11 0	81 2 0	71 2 0	117 6 0	218 3 0	212 12 0	5 11 0	—	—
Liverpool. Waterloo	253	784	0	3	0	0	12 0 0	13 18 0	24 1 0	86 8 0	130 10 0	140 1 0	—	29 11 0	—
Liverpool. Earle Road (Established 1884)	100	—	0	2	0	0	—	—	4 10 0	—	—	—	—	—	—
Liverpool. Woolton (Established 1886)	350	—	5	0	0	1	—	14 0 0	48 0 0	185 0 0	—	—	—	—	—
Liverpool. Provident Medical Society (1 Branch) Established 1886	886	—	0	2	0	1	166 3 0	71 7 0	234 6 0	59 11 0	283 17 0	293 13 0	—	6 16 0	—
Weybridge (2 Branches)	4,000	—	3	10	0	0	142 8 0	77 6 0	264 6 0	286 5 0	550 11 0	647 4 0	—	86 13 0	—
Cardiff Provident Dispensary	1,335	—	0	4	0	1	256 17 0	119 11 0	559 3 0	43 17 0	615 11 0	569 9 0	46 2 0	—	—
Swansea	11,217	43,550	0	5	0	0	982 4 0	266 16 0	1,616 17 0	81 17 0	1,728 15 0	926 7 0	802 16 0	—	—
Battersea	4,857	20,340	0	4	0	1	656 0 0	125 5 0	802 16 0	117 4 0	920 2 0	919 7 0	0 15 0	—	—
Haverstock Hill and Maida Vale	3,227	17,315	0	6	0	1	353 19 0	115 11 0	838 15 0	87 18 0	1,014 8 0	828 15 0	120 0 0	—	—
Kilburn Provident Medical Institute	—	16,095	3	5	0	0	—	107 17 0	—	—	—	—	—	—	—
Clapham General and Provident Dispensary	1,081	7,999	0	2	0	1	136 10 0	58 16 0	168 1 0	64 10 0	241 12 0	239 10 0	2 2 0	—	—
Wandsworth Common	1,210	6,223	3	4	1	1	375 16 0	88 6 0	189 1 0	487 12 0	712 8 0	699 16 0	12 12 0	—	—
St. George's Hanover Square	264	1,628	0	2	0	0	—	14 6 0	33 13 0	29 8 0	62 17 0	56 7 0	6 10 0	—	—
Portobello Road	297	10,570	0	1	0	0	197 18 0	87 6 0	101 4 0	128 10 0	770 13 0	662 0 0	33 13 0	—	—
South London Medical Aid Institute	2,265	10,708	3	4	1	1	382 9 0	225 15 0	602 3 0	325 14 0	940 3 0	910 3 0	9 7 0	—	433 3 0
Royal Pimlico	7,265	—	0	40	0	6	—	—	3,140 0 0	540 11 0	—	—	—	—	—
Metropolitan Provident Medical Association (11 Branches)	700	15,682	4	3	0	1	67 10 0	70 8 0	274 17 0	127 13 0	439 9 0	268 7 0	18 12 0	—	229 0 0
Westbourne															

SOME STATISTICS FROM THE 1886 REPORTS OF PROVIDENT DISPENSARIES IN ENGLAND—*continued.*

Name.	Number of Benefit Members.	Number of Times Treated by Doctors.	Medical Staff.	Amount Paid to Medical Staff for 1885.	Drug Bill.	Total Income from Benefit Members in 1885.	Income from Honorary Members in 1885.	Total Income.	Total Expenditure.	Cash Balance to Credit.	Deficits.	Invested Funds.
			C. V. R. D.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Buckhurst Hill	220	—	0 1 0 0	34 6 0	—	36 16 0	12 9 0	42 4 0	52 12 0	—	3 8 0	—
Paddington	3,009	16,443	3 4 0 0	288 0 0	101 9 0	403 13 0	119 10 0	685 0 0	664 2 0	20 17 0	—	600 0 0
St. John's Wood and Portland Terrace	1,300	3,203	3 3 0 0	150 4 0	85 8 0	308 3 0	306 4 0	614 7 0	537 19 0	19 14 0	—	359 13 0
City Provident Dispensary and Surgical Aid Society	575	—	3 0 1 1	117 3 0	1 16 0	67 15 0	—	484 18 0	485 1 0	0 3 0	—	—
St. Paul and St. Barnabas	1,708	—	0 1 1 1	204 15 0	107 2 0	131 6 0	310 10 0	536 18 0	516 3 0	20 14 0	—	—
Brompton	978	9,873	4 3 0 1	223 13 0	82 2 0	242 6 0	164 3 0	495 0 0	407 13 0	87 7 0	—	101 5 0
Western Dispensary (Provident Branch)	897	9,142	3 3 1 1	406 19 0	135 8 0	360 7 0	372 17 0	1,066 16 0	1,063 10 0	—	46 14 0	—
Gipsy Hill and Upper Norwood	700	—	0 4 0 0	315 16 0	—	254 6 0	114 14 0	369 0 0	326 16 0	42 0 0	—	—
Camberwell	10,960	59,422	0 6 0 0	1,134 18 0	243 2 0	1,134 18 0	285 5 0	1,718 0 0	1,658 11 0	60 16 0	—	1,340 0 0
Kingston-on-Thames	3,918	27,892	2 3 0 1	511 5 0	—	503 8 0	75 14 0	612 3 0	610 3 0	10 0 0	—	201 0 0
Notting Hill Maternity	4,332	—	2 0 1 1	125 4 0	10 19 0	98 12 0	149 0 0	251 1 0	278 9 0	—	27 1 0	—
Wandsworth (High Street)	3,208	29,885	1 0 1 1	295 0 0	77 2 0	532 12 0	110 18 0	759 18 0	705 2 0	54 16 0	—	180 0 0
Forest Hill	828	10,784	0 3 0 1	229 13 0	98 11 0	286 2 0	152 16 0	506 2 0	503 12 0	2 10 0	—	—
Croydon	1,003	—	1 5 0 1	231 18 0	82 3 0	404 5 0	—	531 1 0	525 2 0	5 18 0	—	—
West Dulwich	116	—	0 3 0 0	35 2 0	13 19 0	35 10 0	16 4 0	51 15 0	80 17 0	—	29 0 0	—
North Kensington and Kentish Town	595	—	0 2 0 0	150 8 0	36 17 0	243 9 0	—	417 14 0	318 15 0	98 19 0	—	—
Islington and North London	887	2,052	10 1 0 2	21 11 0	11 17 0	40 15 0	53 10 0	94 9 0	93 11 0	0 18 0	—	—
Child's Hill Provident Dispensary	450	—	0 1 1 0	180 6 0	58 3 0	223 12 0	27 4 0	299 18 0	287 18 0	5 0 0	—	—
88 Provident Dispensaries, and 5 of these having 33 Branches.	293,720	—	98 388 9 38	£34,989 11 0	9,189 3 0	52,252 7 0	16,691 1 0	73,543 5 0	64,969 6 0	6,065 14 0	1,594 12 0	45,567 3 0

this giving, on an average, about 4 visits to each. These 166,136 members paid £30,271 12s. in the year, and of this £21,511 was paid to the medical staff of 171, thus giving to each doctor £125 16s. 6d., or about 7½d. per visit. This compares most favourably with the payment of the medical officers of sick clubs, parochial authorities, health officers, public vaccinators, and ship surgeons. When it is remembered that, by the table, 388 medical men were last year paid £34,989 (and that this sum does not always include the "extra visits," confinement, and vaccination fees) without the trouble of booking visits, making up books, and sending out and stamping accounts, not to mention the calling in of the collector, or county court summons, it makes one feel that, if properly conducted, the provident medical system has a useful future. These 88 dispensaries have £45,567 3s. of invested funds, and, while there is a deficit of £1,594 12s., there is a general balance to their credit of £6,065 14s.

One word as to honorary subscribers. It will be noted that, while the benefit members paid £52,252 7s., the sum of £16,691 1s. was paid by honorary members. I feel that until there is a more equal distribution of wealth, and until the wages of the working classes are higher, the provident system will require help, and cannot be absolutely self-supporting. It may come, as it often does, in the shape of a raffle, ball, or concert, given by a sick benefit society, but it is almost always there. I do not know of any society which is absolutely self-supporting. If one examine the Blue Book, 270, lately issued, containing a report of the Committee of Inquiry on National Providence Insurance, they will find it stated that the Foresters' Society, with their membership of over 700,000, have 13,971 honorary subscribers. In practical Germany, the two laws of July, 1883 and 1884, anent compulsory insurance against sickness and accident, make the employer pay one-third opposite the two-thirds paid in by the workmen. This is the principle of mutual help, and shows that the wage-earner, when unaided, is unable to secure benefits. Societies should have sufficient honorary subscriptions to cover all the working expenses, as rates and taxes, for the services of the dispenser, dentist, and consultants, have to be met by the one-third which is generally deducted from the income from the benefit members before being paid to the medical staff.

One action is absolutely necessary for the success of the provident movement. Our brethren in the hospitals must extend the hand of fellowship and help to bring about hospital co-operation with provident dispensaries. At present the public are using us up, and at the same time are broadly grinning at our giving them so much attention unasked. Let our hospitals be for the benefit of the sick poor, then they will gain the universal respect of the medical profession and the support of the public. The present abuse of our hospitals is an evil, the result of professional rivalry, and unbusiness-like action. It is we who have created this great abuse. A mock philanthropy offers its goods for nothing, and the public do not wish to hurt its feelings by refusing to take them for the giving. Let it always be remembered, and to the discredit of the medical profession, that we have ourselves to blame, for the public have not been the originators of a system which, by supplying people who are not the proper recipients of charitable aid, make a large portion of every city take their first step downwards on the path of pauperism where self-respect perishes. With the help of such practical men as Mr. Ernest Hart and Mr. T. Holmes, and a careful study of the question by others, it is to be hoped that in a few years' time every town will have its provident dispensary. But help must come to us from the hospitals, for the table shows that where there is no hospital co-operation there the provident system is a failure, but that where we have this it is a grand success. No doubt patience is needful. In 1845 the Northampton Provident Dispensary had an income of £26 4s., while in 1885 it had amounted to £2,374 15s. Will our hospital brethren help us?

HABITUAL DRUNKARDS' ACT (1879) AMENDMENT BILL.

ON April 18th, Dr. Cameron introduced a Bill to extend and amend the "Habitual Drunkards Act." The Bill was read a first time. The names on the back of the Bill are those of Dr. Cameron, Sir Lyon Playfair, Sir Trevor Lawrence, and Sir Walter Foster. It is as follows:

A BILL TO AMEND THE HABITUAL DRUNKARDS' ACT, 1879.

Whereas the Habitual Drunkards' Act, 1879, is limited to expire at the expiration of ten years from the passing thereof, and the then next session of Parliament; and whereas it is expedient to provide for the continuance of the said Act, and for the amendment of the same; be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal and Commons in this present Parliament assembled, and by the authority of the same, as follows:

1. This Act may be cited as the Habitual Drunkards' Amendment Act, 1887.

2. So much of the second section of the Habitual Drunkards' Act, 1879, as provides that the said Act shall be in force until the expiration of ten years from the passing thereof, and to the end of the then next session of Parliament, is hereby repealed; and be it enacted in lieu thereof that the aforesaid Act as amended by this Act, shall be and remain in force until otherwise provided by Parliament.

3. Subject to the approval of the inspector of retreats, the licensee of any retreat may from time to time appoint a deputy to act for him during his temporary absence, and such deputy shall during the absence of the licensee have all powers and be subject to all the duties given to or imposed upon the licensee of such retreat under the provisions of the aforesaid Act.

4. So much of section ten of the Habitual Drunkards' Act, 1879, as provides that the signature of an habitual drunkard applying to be admitted to a retreat shall be attested by two justices of the peace is hereby repealed; and in lieu thereof be it enacted that the signature of such applicant shall be attested by a justice of the peace, subject to the provisions with regard to attestation in the aforesaid section prescribed.

5. The Habitual Drunkards' Act, 1879, and this Act, shall be read and construed together as one Act.

ASSOCIATION INTELLIGENCE.

THE President of the Council of the British Medical Association begs to inform the Members that the New Premises, 429, Strand, are now in full occupation, and are open to inspection by the Members. The President of the Council hopes that every Member of the Association will visit the New Offices and inspect the arrangements whenever an opportunity offers.

May 20th, 1887.

NOTICE OF QUARTERLY MEETINGS FOR 1887. ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council*.

Meetings of the Council will be held on July 13th and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, June 23rd and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary*.

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE and on the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE are now closed.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, and HABITS OF INTEMPERANCE, a full Report on OLD AGE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 429, Strand, W.C.

BRANCH MEETINGS TO BE HELD

METROPOLITAN COUNTIES BRANCH.—*Change of Date.*—The annual meeting of this Branch will be held at the Holborn Restaurant, on Friday, July 15th, at 5.30 P.M., not Wednesday, June 29th, as previously announced. President, John S. Bristowe, M.D., F.R.S.; President-elect, Arthur E. Durham, Esq., F.R.C.S. Dinner at 7 P.M.; tickets 7s. 6d. each, exclusive of wine. New rules for the Branch, proposed by the Council, will be submitted to the meeting for adoption.—W. CHAPMAN GRIGG, M.D., GEORGE EASTES, M.B., Honorary Secretaries.

CAMBRIDGESHIRE AND HUNTINGDONSHIRE BRANCH.—The annual meeting of this Branch is proposed to be held at Bishop's Stortford, on Friday, June 24th, 1887. Henry Cribb, Esq., President-elect. It is proposed to have one or two selected subjects for discussion in addition to the President's address, to be followed by communications and exhibition of specimens as time may permit. Members wishing to make communications or to exhibit specimens are requested to state their intention to Dr. Anningson, Cambridge, for insertion in the programme of proceedings. A dinner will be arranged at the Railway Hotel, Hockerill, at (probably) 6.30 P.M., of which the particulars will be given later.—BUSHELL ANNINGSON, Walthamsal, Barton Road, Cambridge.

NORTHERN COUNTIES AND ABERDEEN, BANFF, AND KINCARDINE BRANCHES.—A joint summer meeting of these Branches will be held at the Seafield Arms Hotel, Cullen, on Friday, June 24th, 1887, at 3.15 P.M. An omnibus excursion to the Binn Hill of Cullen *viâ* Old Church and Cullen House, returning by Woodside Road and Seatown Gate, is arranged for those who can attend in the forenoon. Conveyances leave Cullen at 12.15 P.M. Luncheon at Binn Hill at 1.15 P.M. Luncheon and omnibus, 2s. 6d. per head. Dinner (exclusive of wine, but inclusive of attendance) in Seafield Arms Hotel, Cullen, at 3.30 P.M.; 3s. 6d. each. Business (Aberdeen, Banff, and Kincardine Branch): 1. Minutes, etc. 2. Ballot for admission of Dr. A. T. Gordon, Beveridge, Aberdeen, as ordinary member of Branch.—J. W. NORRIS MACKAY, ROBERT JOHN GARDEN, J. MACKENZIE BOOTH, Honorary Secretaries.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—The next meeting of the above District will be held at East Grinstead on Wednesday, June 29th. C. E. Collins, Esq., will preside. The following papers are promised. The Chairman: A Few Remarks on Five Cases of Amputation of the Breast. Mr. Percy E. Wallis: A Case of Intestinal Obstruction with Gangrene in a Young Girl. Gentlemen desirous of contributing short papers on cases are requested to communicate with the Honorary Secretary, T. JENNER VERRALL, 97, Montpellier Road, Brighton.

BORDER COUNTIES BRANCH.—The annual meeting of this Branch will be held at Hawick on Friday, July 1st, at 3 o'clock. The usual election of office-bearers for the ensuing year will take place, and Dr. McLeod will give his Presidential address. Members of the medical profession wishing to join the Association or Branch should give immediate notice to the Secretary, together with the names of their proposers. The Secretary will be glad to receive intimation of papers for reading, and patients or specimens for showing.—H. A. LEDIARD, Honorary Secretary, 41, Lowther Street, Carlisle.

NORTH OF IRELAND BRANCH.—The annual meeting of this Branch will be held in the Belfast Royal Hospital on Thursday, July 7th. Members desirous of reading papers, or of bringing any other business before the meeting, are requested to communicate at once with the Honorary Secretary, JOHN W. BYERS, M.D., Lower Crescent, Belfast.

GLASGOW AND WEST OF SCOTLAND BRANCH.—This Branch will hold a meeting in Greenock on Friday, June 24th, 1887. Members will leave Glasgow at 2.5 P.M. from St. Enoch's Station, arriving at Lynedoch St. Station, Greenock, about 3.3 P.M. They will first visit the Brewery Yards Sugar Refinery, after which they will drive to Messrs. Caird and Co.'s Shipbuilding Yard, Dalrymple Street. About an hour will be spent at each place; then, if time permits, the Watt Library and Museum may be visited, and, if the weather is suitable, the company will drive round the Lyle Road. The Branch will afterwards meet in the Tontine Hotel, where dinner will be served at 6 P.M. Tickets 5s. each, exclusive of wine. Those intending to be present at the dinner should kindly signify their intention not later than Tuesday, June 21st. Members prevented leaving Glasgow at 2.5 P.M. might join the company at Messrs. Caird and Co.'s Building Yard, Dalrymple Street, by leaving town by the 3 P.M. train (Caledonian Railway), and driving from the station.—A NAPIER, Honorary Secretary, Crosshill, Glasgow.

EAST ANGLIAN BRANCH.—The annual meeting of the East Anglian Branch will be held at Swaffham on Thursday, July 14th, under the presidency of R. B. Marriott, Esq. Notices of papers, cases, or any matter of interest to be forwarded to Dr. ELLISTON, Ipswich, or Dr. BEVERLEY, Norwich, Honorary Secretaries.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The annual meeting will be held at Swansea, on Thursday, July 7th. Notices of papers, etc., should be sent to one of the Secretaries before June 22nd.—ALFRED SHEEN, M.D., Cardiff, D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.

YORKSHIRE BRANCH.—The annual meeting will be held at Filey, on Wednesday, July 6th, at 3 P.M. Two representatives of the Branch on the General Council will be elected. Gentlemen intending to be candidates must be nominated, in writing, by two members of the Branch, and the nomination paper returned at once to the secretary. Gentlemen intending to read papers are requested to communicate at once to the Secretary, ARTHUR JACKSON, Sheffield.

SHROPSHIRE AND MID-WALES BRANCH.—The annual meeting of the Branch will be held at the the Salop Infirmary on Friday, July 1st, at 2 P.M. Members desirous of reading papers, reporting cases, etc., are requested to communicate with me before June 24th.—EDWARD CURETON, Honorary Secretary.

BATH AND BRISTOL BRANCH.

THE sixth ordinary meeting was held at the Grand Pump-Room Hotel, Bath, on Thursday evening, May 26th, C. GAINE, Esq., President, in the chair. There were also present twenty-six members and one visitor.

Election of Members.—The following gentlemen were elected members of the Association and Branch: Messrs. H. F. Semple, of Bristol; H. Pritchett, of West Town; and J. N. Bolton, of Yatton.

Communications.—1. Dr. W. H. SPENCER read notes of Cases Illustrating the Antipyretic and Antiseptic Treatment of Phthisis. The following gentlemen took part in the discussion which followed: Drs. SHINGLETON SMITH and J. K. SPENDER, and Messrs. J. MICHELL CLARKE and T. P. LOWE. 2. Mr. R. J. H. SCOTT reported a Successful Case of Gastrostomy, on which remarks were made by Dr. SPENDER and Mr. F. MASON. 3. Dr E. J. CAVE read notes of a Case of Hemiplegia and Hemianæsthesia.

MIDLAND BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held at the Infirmary, Derby, on Thursday, June 9th, under the presidency of Dr. CURGENVEN. About fifty members were present.

Officers, Council, etc.—The Representatives on the General Council of the Association were re-elected. In the Branch Council, Drs. Marshall and Whitelegge (Nottingham) were elected in place of Dr. Handford and Mr. Hatherley, and Dr. Livesay (Derby) and Dr. Pope (Leicester) in the place of Mr. Johnston and Mr. Bond, who retire from lapse of time. Mr. Hatherley (Nottingham) was chosen as President-elect, on the proposition of Mr. J. WHITE, seconded by Dr. WEBB. The Honorary Secretaries and Treasurer were re-elected, with

the exception of Dr. Marshall, who retires, and is replaced by Dr. Handford (Nottingham).

New Members.—Mr. Wm. Windley, Dr. Wm. Stafford, Dr. E. C. Kingdon, Mr. T. P. Greenwood, Dr. W. H. Paterson, and Mr. J. A. Southern were elected members of the Branch.

Reorganisation of the Branch.—The reports of the Secretaries were read to the meeting, and were on the whole slightly in favour of division; but few members had availed themselves of the opportunity of expressing their opinions. A short discussion took place, but no resolution was passed.

President's Address.—Dr. CURGENVEN gave an address on the Advances of Medicine and Surgery during the past fifty years.

Papers.—The following were brought before the meeting. 1. Dr. NEWMAN: Goitre: Treatment by Operation in Swiss Hospitals. 2. Mr. SYMPSON: Report of a case of Myxoma of the Leg. 3. Dr. WEBB: Mistakes in Diagnosis. 4. Mr. HOUGH: The Treatment of Fracture with Plaster-of-Paris Splints.

Luncheon and Dinner.—The President entertained the members at luncheon, and after the meeting about twenty-eight dined at the Midland Hotel.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIFTH ANNUAL MEETING.

THE fifty-fifth Annual Meeting of the British Medical Association will be held at Dublin, on August 2nd, 3rd, 4th, and 5th, 1887.

President: Withers Moore, M.D., F.R.C.P., Senior Physician to the Sussex County Hospital, Brighton.

President-elect: John T. Banks, M.D., D.Sc.(Hon.), F.K.Q.C.P.I., Regius Professor of Physic in the University of Dublin.

President of the Council: Sir B. Walter Foster, M.D., M.P., F.R.C.P., Professor of Medicine in Queen's College, and Physician to the General Hospital, Birmingham.

Treasurer: C. Macnamara, F.R.C.S., Surgeon to the Westminster Hospital, London.

An Address in Medicine will be delivered by W. T. Gairdner, M.D., F.R.C.P.Ed., Professor of Medicine in the University of Glasgow.

An Address in Surgery will be delivered by Edward Hamilton, M.D., Fellow and Professor of Surgery in the Royal College of Surgeons in Ireland.

An Address in Public Medicine will be given by the Rev. S. Haughton, M.D., F.R.S., D.C.L., Senior Fellow, Trinity College, Dublin.

All the rooms required for the purposes of the meeting will, by the kindness of the Provost and Senior Fellows, be provided in Trinity College. The Sections of Medicine, Surgery, Obstetric Medicine, Therapeutics and Pharmacology, and of Pathology, will be held in the Medical School, and the remaining Sections and Subsections in the Museum Buildings of the University. The President's Address will be delivered in the Dining Hall, and the General Meetings will be held in the Examination Hall, where also the stated Addresses will be delivered.

PROGRAMME OF PROCEEDINGS.

TUESDAY, AUGUST 2ND, 1887.

9.30 A.M.—Meeting of 1886-87 Council. Council Room, Museum Buildings.
10 A.M.—Service at the Pro-Cathedral, Marlborough Street. Sermon by the Rev. L. Martial Klein, S.J., F.R.U.I.
11.30 A.M.—First General Meeting. Report of Council. Reports of Committees; and other business. Examination Hall.
4 P.M.—Choral Service at St. Patrick's National Cathedral. Sermon by the Most Rev. the Lord Bishop of Meath.
8.30 P.M.—Adjourned General Meeting from 11.30 A.M. President's Address. Dining Hall.

WEDNESDAY, AUGUST 3RD, 1887.

9.30 A.M.—Meeting of 1887-8 Council. Council Room, Museum Buildings.
10.30 A.M. to 2 P.M.—Sectional Meetings. Medical School and Museum Buildings.
3 P.M.—Second General Meeting. Address in Medicine. Examination Hall.
9 P.M.—Soirée given by the President of the Association and by the Dublin Branch. Royal University of Ireland.

THURSDAY, AUGUST 4TH, 1887.

9.30 A.M.—Meeting of Council. Council Room, Museum Buildings.
10.30 A.M. to 2 P.M.—Sectional Meetings. Medical School and Museum Buildings.
3 P.M.—Third General Meeting. Address in Surgery. Examination Hall.
7 P.M.—Public Dinner. Royal University of Ireland.

FRIDAY, AUGUST 5TH, 1887.

10 A.M. to 1.30 P.M.—Sectional Meetings. Medical School and Museum Buildings.
3 P.M.—Concluding General Meeting. Address in Public Medicine. Examination Hall.
4.30 to 6 P.M.—Garden Party.
9 P.M.—*Conversazione* given by Surgeon-General Hassard, C.B., P.M.O Ireland, and the officers of the Medical Staff. Museum of Science and Art.

SATURDAY, AUGUST 6TH, 1887.

Excursions.

The front hall over the main entrance to Trinity College will be fitted up as a reception-room, and will be opened at 12 o'clock noon, on Monday, August 1st, and on the following days at 9 o'clock in the forenoon, and will remain open until 6 o'clock in the afternoon of each day, for the issue of tickets to members and for supplying all necessary information.

The following discussions and papers are promised up to the present time. Members desirous of reading papers, or joining in the discussions, are earnestly requested to communicate, without delay, with the Secretaries of the respective Sections.

SECTION A.—MEDICINE.

Anatomical Theatre.

A. MEDICINE.—*President*, William Moore, M.D. *Vice-Presidents*, H. C. Bastian, M.D., F.R.S.; J. Magee Finny, M.D. *Honorary Secretaries*, T. Gilbart Smith, M.D., F.R.C.P., 68, Harley Street, Cavendish Square, London, W.; C. J. Nixon, M.D., 2, Merrion Square, Dublin.

Dr. H. Charlton Bastian, F.R.S., will introduce a discussion on Different Kinds of Aphasia, with special reference to their Classification and Ultimate Pathology. The following gentlemen will take part in the discussion: Dr. Hughlings Jackson, F.R.S., Dr. Stephen Mackenzie, Dr. Althaus.

The following papers are promised.

ALTHAUS, J., M.D. On Post-Hemiplegic Paralysis Agitans.
BATEMAN, F., M.D., Norwich. On Puerperal Aphasia.
CHURTON, T., M.D., Leeds. Meningitis after Blows upon the Head.
COX, M. F., M.K.Q.C.P.I., Dublin. On the Employment of Rest in the Treatment of Disease.
KERR, Norman, M.D. Alcoholism.
KNOTT, John T., F.R.C.S.I., Dublin. On the Use of Certain Organic Acids in the Rheumatic, Gouty, and Allied Diathesis.
LAFFAN, T., M.K.Q.C.P.I., Cashel. 1. On Empyema. 2. Some Points in Fever. 3. Some Cases of Paralysis.
NIXON, C. J., M.D. On the Cardiac Murmurs of the Tricuspid Area.
OWEN, Isambard, M.D., F.R.C.P. (Secretary to the Collective Investigation Committee). On the Connection of Disease with Habits of Intemperance.
OWEN, Isambard, M.D., and RICHARDSON, B. W., M.D., F.R.S. On Alcoholism.
PHILIP, Robert W., M.B. The Etiology of Phthisis.
POWELL, R. Douglas, M.D., F.R.C.P. On Angina Pectoris.
QUINLAN, F. J. B., M.D., Dublin. The Treatment of Acute Rheumatism.
RALFE, Charles H., M.D., F.R.C.P. Certain Nephralgias simulating Renal Calculus.
SANSOM, A. E., M.D. On Methods of Precision in Cardiac Diagnosis.
STEWART, T. Grainger, M.D., Edinburgh. On the Incidence of Albumen among the Presumably Healthy and the Diseased.
THOMAS, W. R., M.R.C.P. Some Remarks on the Etiology and Curability of Phthisis.
WHITE, Wm. Henry, M.D. On Mediastinal Sarcoma involving the Lung.

Papers are also promised by Dr. Douglas Powell, Dr. Dudley Buxton, Dr. Gabbett, and others.

SECTION B.—SURGERY.

Chemical Theatre.

B. SURGERY.—*President*, Sir George H. Porter, M.D. *Vice-Presidents*, Alexander Ogston, M.D.; John Fagan, F.R.C.S.I. *Honorary Secretaries*, W. Thomson, F.R.C.S.I., 34, Harcourt Street, Dublin; R. J. Godlee, F.R.C.S.Eng., 81, Wimpole Street, London, W.; C. B. Ball, M.D., F.R.C.S.I., 16, Lower Fitzwilliam Street, Dublin.

Mr. Mitchell Banks, Liverpool; Dr. McEwen, Glasgow; Mr. W. D. Spanton, Hanley; and Mr. C. R. B. Keetley, London, will open a discussion on the Radical Cure of Hernia. Dr. C. B. Ball, Mr. J. K. Barton, Professor Thornley Stoker, Mr. Walter Rivington, Mr. W. J. Walsham, Mr. F. B. Jessett, Mr. J. Langton, Mr. A. W. Mayo Robson, Dr. N. T. Hobart, Mr. H. Langley Browne, Dr. John McArdle, Dr. J. Ward Cousins, and Mr. Geo. Cowell, will take part in the discussion.

The following papers are promised.

BARTON, J. K., Esq. Operative Treatment of Morbus Coxæ.
CORLEY, A. H., M.D. On the Open Operation for Radical Cure of Hernia, with a Test Case.
COUSINS, J. Ward, M.D. 1. Treatment of Retention of Urine by Aspiration through a Capillary Catheter. 2. Plastic Operations on the Penis.
FENWICK, E. Hurry, Esq. Cancer of the Prostate necessitating Colotomy.
FRANKS, Kendal, Esq. 1. On the Radical Cure of Hernia. 2. Three Cases Illustrative of Renal Surgery.
HEUSTON, Francis T., M.D. On a Case of Strangulated Femoral Hernia with Gangrenous Fallopian Tube and Ovary contained in the Sac; and on the Means adopted for Radical Cure of the Hernia.
JESSETT, F. B., Esq. 1. On a Case of Gastro-Enterostomy. 2. On the Removal of Tumours of the Neck, with Cases.

Kocher; L., M.D., Berne. Cachexia Strumipriva and Myxœdema.
McArdle, John, Esq. 1. On Enterectomy. 2. On Radical Cure of Hydrocele.
Meldon, Austin, Esq. On the Treatment of Tetanus.
Pearson, Professor C. J. Strangulated Umbilical Hernia.
Rabagliati, A., M.D. 1. Radical Cure of Hernia. 2. On a Case of Hypospadias in the Female Cured by Operation.
Rivington, Walter, Esq. On External Urethrotomy.
Robson, A. W. Mayo, Esq. 1. Twenty-five Cases of Radical Cure of Hernia. 2. On some Cases of Nephrotomy.
Roth, Bernard, Esq. An Accurate and Practical Method of Recording Cases of Lateral Curvature of the Spine.
Stoker, Professor Thornley. The Theory and Practice of Operation for the Radical Cure of Hernia.
Walsham, W. J., Esq. Litholapaxy in Male Children.
Wells, Sir T. Spencer. Comparison of the Cæsarean Section with Porro's Operation.
Wheeler, W. J., M.D., F.R.C.S.I. Trephining in Mastoid and Tympanic Disease and Cerebral Abscess.

Section C.—Obstetric Medicine.

Surgical Theatre.

C. Obstetric Medicine.—*President*, A. V. Macan, M.B. *Vice-Presidents*, T. More Madden, M.D.; A. L. Galabin, M.D. *Honorary Secretaries*, Wm. J. Smyly, M.D., 56, Fitzwilliam Square, Dublin; Wm. Duncan, M.D., 6, Harley Street, Cavendish Square, London, W.

The following two discussions will take place.

1. On the Prevention of Puerperal Fever. This will be opened by Dr. William Playfair; and Drs. Robert Barnes, Priestley, Atthill, Kidd, Dill, and Galabin have intimated their intention of taking part in the debate.

2. On the Management of Anterior and Posterior Displacements of the Uterus. To be opened by Dr. Halliday Croom, of Edinburgh. Drs. Barnes, Playfair, Priestley, Kidd, Atthill, Galabin, and others, are expected to take part in the debate.

The following papers are promised.

Barnes, Robert, M.D., London. The Theory and Treatment of Placenta Prævia.
Byers, J. W., M.D., Belfast. On the Prevention of Puerperal Fever in Private Practice.
Cameron, Murdoch, M.D., Glasgow. The Pathology of Abortion; with Specimens.
Duncan, William, M.D., London. On the Best Mode of Treating Extensive Vesico- and Recto-Vaginal Fistulæ.
Elder, George, M.D., Nottingham. A Visit to Apostoli.
Grigg, W. C., M.D., London. On the Etiology of Puerperal Pyrexia.
Herman, G. E., M.B., London. Pubo-vesical Cellulitis.
Madden, T. More, M.D., Dublin. 1. On the Treatment of Puerperal Fever. 2. On the Treatment of some Forms of Sterility.
Savage, Thomas, M.D., Birmingham. Tubo-ovarian Cysts.
Smyly, W. J., M.D., Dublin. On the Diagnosis and Treatment of Diseases of the Endometrium.

Dr. Apostoli, of Paris, will also contribute a paper.

Section D.—Pharmacology and Therapeutics.

Medical Theatre.

D. Therapeutics and Pharmacology.—*President*, Wm. Whitla, M.D. *Vice-Presidents*, Matthew Charteris, M.D.; D. J. Leech, M.D. *Honorary Secretaries*, Chas. Y. Pearson, M.D., 1, Sidney Place, Cork; Michael McHugh, M.B., 25, Harcourt Street, Dublin.

The special subject for discussion is the Therapeutics of the Uric Acid Diathesis, which will be introduced by Dr. Burney Yeo, of London. Dr. Latham, Cambridge; Dr. Myrtle, Harrogate; Dr. Mortimer Granville, London; Dr. Carter, Liverpool; Dr. Hellier, Leeds; Dr. Churton, Leeds; Dr. Spender, Bath, and others, will take part in the discussion.

The following papers are promised.

Anderson, E. C., M.D., Wolsingham. Koumiss and Koumissised Peptones; their Varieties, Physiological Uses, etc.
Charteris, Matthew, M.D., Glasgow. The Climatic Treatment of Phthisis.
Cox, M. F., M.K.Q.C.P.I., Dublin. The Treatment of Acute Endo- and Peri-Carditis.
Farrar, Joseph, M.D., Gainsborough. The Use of Acidum Sulphurosum in Typhoid.
James, Prosser, M.D., London. The Effects of Topical Treatment on Mucous Membrane.
Leech, D. J., M.D., Manchester.
Quinlan, F. J. B., M.D., Dublin. Clinical Notes on the Therapeutic Action of Strophanthus Hispidus.
Sansom, Ernest A., M.D., London. The Treatment of some Forms of Aortic Disease.
Unna, P. G., Hamburg. The Improvements of the Dermato-Therapeutics.

Section E.—Pathology.

Theatre of Physiological Laboratory.

E. Pathology.—*President*, Samuel Gordon, M.D. *Vice-Presidents*, A. W. Foot, M.D.; David J. Hamilton, M.D. *Honorary Secretaries*, Theodore D. Acland, M.D., 7, Brook Street, Grosvenor Square, London, W.; Henry T. Bewley, M.B., Willow Park, Booterstown, Co. Dublin.

The following subjects have been selected for discussion.

1. The Pathology of Empyema.

2. The Etiology of Chlorosis.

Dr. Crookshank will give demonstrations or Preparations, Cultivations, etc., of Bacteria.

The following papers are promised.

Anderson, E. C., M.D., Wolsingham. On Leucin and Tyrosin.
Boyd, J. St. Clair, M.D. A Report on Fifty-eight Specimens of Chronic Inflammatory Disease of the Uterine Appendages Operated upon by Mr. Lawson Tait during 1886.
Crookshank, Edgar, M.B., London. On the Micro-organisms associated with Malaria.
Hopwood, E. O., M.D. On the Nature of Contagia.
Jennings, C. E., M.B. On the Origin of Malignant Growths.
Knight, C. T., M.D. Certain Pathological Conditions of the Blood, with especial reference to their Action as Factors in the Manifestations of Empyema, Chlorosis, and Cutaneous Affections.
Mapother, E. D., M.D. Elephantiasis Induced by Posture.
Savage, G. H., M.D. On the Pathology of Peripheral Neuritis, with special reference to that caused by Alcohol.
Thin, G., M.D. On the Nature of Contagia, with special reference to the Acute Infectious Fevers.
Thomas, W. R., M.D. On the Pathology of Bright's Disease.
Unna, Professor, Hamburg. On the Micro-organisms of Lepra.
Williams, C. B., M.D. On the Relation of Bacilli to the Lesions of Tubercle.

Section F.—Public Medicine.

Divinity Theatre.

F. Public Medicine.—*President*, Sir Thomas Crawford, M.D., K.C.B. *Vice-Presidents*, John S. Taylor, M.D.; R. Thorne Thorne, M.D. *Honorary Secretaries*, John Wm. Moore, M.D., 40, Fitzwilliam Square West, Dublin; John F. W. Tatham, M.D., Town Hall, Salford.

The subjects selected for discussion are—

1. The Influence of Modern Preventive Measures on the Prevalence of Infective Diseases. Introduced by T. Donnelly, M.D., Dublin.

2. How to Deal with the Insanitary Property now occupied by Artisans and Labourers. Introduced by Sir Charles Cameron, F.R.C.S.I., Medical Officer of Health for Dublin.

The following papers are promised.

Boyd, M. A., M.K.Q.C.P.I., Dublin. Modern Diet and its Effects on Health.
Churton, T., M.D., Leeds. On the Registration of Plumbers and of Plumbing Work.
Cox, Michael F., M.K.Q.C.P., Dublin. Ill-Health occurring in Female Servants and Shop Assistants.
Flinn, D. E., M.K.Q.C.P.I., Kingstown. The Sanitary Act as Applied to Rural Districts in Ireland.
Laffan, T., L.K.Q.C.P.I., Cashel. Some Remarks on the Irish Labourers' Act, with a Proposal for Meeting the Present Defective Milk-Supply for the Children of the Irish Rural Working Class.
Leatham, Wm., L.K.Q.C.P.I., Coalisland. How to Deal with the Insanitary Property now occupied by Artisans and Labourers.
Lindsay, James A., M.D., Belfast. 1. The Place of Hygiene in the Prophylaxis of Consumption. 2. The Dietary of the Poor.
Madden, T. More, M.K.Q.C.P., Dublin. On Over-Pressure and Brain-Disease in Childhood.
Mouillot, Albert, L.K.Q.C.P.I., Gorey. On an Outbreak of Dysentery at Glynn, Co. Wexford.
Quinlan, F. J. B., M.D., Dublin. Some Experiences in Insanitary Tenement Houses.
Taylor, J. Stopford, M.D. (Vice-President of the Section, and Medical Officer of Health, Liverpool). "The Liverpool Sanitary Amendment Act for Dealing with Insanitary Property: its Powers and Working."

Section G.—Psychology.

Examination Room.

G. Psychology.—*President*, J. R. Gasquet, M.B. *Vice-Presidents*, Frederick Needham, M.D.; Oscar T. Woods, M.D. *Honorary Secretaries*, Conolly Norman, F.R.C.S.I.; Richmond District Lunatic Asylum, Dublin; T. Lyle, M.D., Rubery Hill Asylum, Bromsgrove, Worcestershire.

Dr. Gasquet, the President of the Section, will deliver an address.

The following subject for discussion will be introduced by Dr. George H. Savage: Nervous Disorders following the Use of Anæsthetics.

Dr. D. Yellowlees will open a discussion on Private Treatment *versus* Asylum Treatment.

The following papers are promised.

Keay, John, M.B., Polton. Are Airing Courts, Locked Rooms, and Restraint Necessary in Asylum Practice?
Tuke, D. Hack, M.D., London. On "Folie à Deux."

Section H.—Ophthalmology.

Physical Theatre.

H. Ophthalmology.—*President*, H. R. Swanzy, M.B. *Vice-Presidents*, D. Argyll Robertson, Pres.R.C.S.Edin.; Priestley Smith, M.R.C.S.E. *Honorary Secretaries*, A. H. Benson, M.B., 42, Fitzwilliam Square, Dublin; A. W. Sandford, M.D., 13, St. Patrick's Place, Cork.

The subject for discussion is the Etiology and Treatment of Convergent Concomitant Strabismus, which will be introduced by Mr. Simeon Snell, of Sheffield. Drs. Jeffreson, Cowell, McHardy, E.

Meyer, E. Nettleship, Wood White, P. H. Mules, W. A. Brailey, Vose Solomon, F. Mason, R. Williams, Walter H. Jessop, W. Lang, E. Juler, W. Charnley, and Argyll Robertson, will take part in the discussion.

The following papers are promised.

Benson, Arthur H., F.R.C.S., Dublin. On the Treatment of Stenosis of the Lacrymal Duct by Removable Styles.
Berry, George, M.B., Edinburgh. On Amblyopia, Diplopia, and the Etiology of Strabismus.
Bickerton, T. H., Esq., Liverpool. On Colour-Blindness, with especial reference to its Prevalence amongst Sailors.
Bull, C. S., M.D., New York. (*Subject of paper not received.*)
Charnley, W., Esq. A New Point in Astigmatism.
Frost, W. Adams, F.R.C.S., London. On Squint.
Hewetson, H. B., Esq., Leeds. On Amblyopia from Lead-Poisoning (illustrated); nine cases.
Jessop, Walter H., Esq. (*Subject of paper not received.*)
Jones, A. Emrys, M.D., Manchester. On Atrophy of the Optic Nerve, Associated with Dropping of Fluid from the Nostril.
Landolt, Dr., Paris. On the Re-establishment of Binocular Vision after Strabismus Operations.
Little, David, M.D., Manchester. On Lamellar Cataract.
Mules, P. H., M.D., Manchester. On Squint.
Smith, Priestley, Esq., Birmingham. On Neurasthenic Amblyopia.
Uhthoff, Dr., Berlin. Demonstrations of Preparations relating to (1) Chronic Alcoholism, in its Relations to the Eye; (2) Ophthalmoplegia; (3) Paralysis of Orbital Muscles.

Communications have also been promised by Dr. Karl Grossman, Liverpool; Dr. Lloyd Owen, Birmingham; and Mr. E. A. Browne, Liverpool.

Subsection I.—Otology.

Engineering Theatre.

I. Otology.—*Chairman*, E. Woakes, M.D. *Vice-Chairman*, J. B. Story, M.B. *Honorary Secretary*, D. D. Redmond, L.R.C.S.I., 14, Harcourt Street, Dublin.

Dr. Thomas Barr, Glasgow, will open a discussion on Tinnitus Aurium. Mr. T. Mark Hovell, Dr. Charles Warden, Dr. J. Walton Browne, Dr. J. Ward Cousins, Dr. F. M. Pierce, Dr. James Erskine (Glasgow), and Dr. A. H. Jacob, will take part in the discussion.

The following papers are promised.

Browne, J. Walton, M.D., Belfast. On Caries of the Mastoid.
Erskine, James, M.B. On Tympanophony.
Warden, Charles, M.D., Birmingham. On Tinnitus Aurium.

Subsection J.—Laryngology and Rhinology.

Laryngology and Rhinology.—*Chairman*, W. H. MacNeill Whistler, M.D. *Vice-Chairman*, Kendal Franks, M.D. *Honorary Secretary*, R. A. Hayes, M.D., 56, Merrion Square South, Dublin.

The two following subjects have been selected for special discussion.

1. Phthisis of the Larynx.
2. The Reflex Neuroses of the Naso-Pharynx.

Dr. Prosser James, Dr. Woakes, Mr. Lennox Browne, Dr. R. Ellis, Dr. C. Warden, and Dr. G. Hunter Mackenzie will take part in the discussion.

The following papers are promised.

Mackenzie, G. Hunter, M.D. The Treatment of Laryngeal Phthisis.
Stoker, George, Esq. Intermittent Nasal Neuroses.

Local Honorary Secretary.—George F. Duffey, M.D., 30, Fitzwilliam Place, Dublin.

Members desirous of reading papers, or joining in the discussions, are earnestly requested to communicate, without delay, with the Secretaries of the respective Sections.

Annual Museum.

The Annual Museum will be held on August 2nd, 3rd, 4th, and 5th, in the Anatomical Department of the Medical School of Trinity College, Dublin.

The Museum will be arranged in the four following Sections, and intending exhibitors are requested to communicate with the Secretary of the Section or Sections in which they propose to exhibit.

Section A.—Food and Drugs. (Honorary Secretary, F. J. B. Quinlan, M.D. Univ. Dub., 29, Lower Fitzwilliam Street, Dublin.)

Section B.—Recent Books, Instruments, and Appliances—Medical, Surgical, and Electrical. (Honorary Secretary, John Lentaigne, F.R.C.S.I., 29, Westland Row, Dublin.)

Section C.—Anatomical and Pathological Specimens and Drawings, Microscopes and Microscopical Preparations. (Honorary Secretary, Alex. B. McKee, M.B. Univ. Dub., Royal College of Surgeons, Dublin.)

Section D.—Hygienic and Sanitary Appliances. (Honorary Secretary, H. C. Tweedy, M.D. Univ. Dub., 2, Gardiner's Row, Dublin.)

Particulars should be supplied to the Secretaries of the objects proposed to be exhibited and the amount of space required. No showcases will be allowed.

As it is intended to print a catalogue, with appendix of advertisements, it is requested that inquiries be addressed to the Secretaries as early as possible.

All articles sent to the Museum for exhibition should be addressed to care of Professor Cunningham, Medical School, Trinity College, Lincoln Place, Dublin, and delivered, carriage paid, between the 5th and 26th of July.

Chairman of Museum Committee—Wm. Thornley Stoker, F.R.C.S.I., 16, Harcourt Street, Dublin. Vice-Chairman—D. J. Cunningham, M.D., 69, Harcourt Street, Dublin.

Excursions.

The following excursions on Saturday, August 6th, have been arranged:—

1. *Dublin Bay.*—The London and North-Western Railway Company, has generously granted one of its express steamers for this excursion, which eminent marine zoologists have kindly undertaken to accompany for the purpose of dredging, trawling, and taking soundings in several places between Lambay and Greystones. Lunch will be served on board at two o'clock, and the steamer will return to the North Wall before seven o'clock.

2. *Powerscourt and Dublin Waterworks.*—By train to Bray, drive through Powerscourt Demesne and to the Waterfall; thence to the Waterworks, where lunch will be served at two o'clock. The return journey will be by the Glen of the Downs to Bray, and thence to Kingstown in time for the mail boat.

3. *Glendalough and Ovoca.*—On reaching Rathdrum by rail, conveyances will start for Glendalough, and after an hour's stay will return to Rathdrum. A special train will leave for the Meeting of the Waters, and thence for Glenart Castle, Ovoca, where the party will be entertained by the Earl of Carysfort, K.P., and return to Kingstown at 7 P.M.

4. *The Boyne.*—By rail to Drogheda, thence by cars and carriages to Monasterboice, Mellifont Abbey, Slane, New-Grange Sepulchral Tumulus (where light refreshments will be served), and the Battlefield. Dinner at Drogheda at 4 P.M. Return from Drogheda at 5.41 P.M. by limited mail, or by later trains.

E. D. Mapother, M.D., Chairman, Excursion Committee.

Dr. Ward Cousins gives notice that he will propose the following alteration of By-law 9, for the purpose of making the term of office of the President of Council correspond with the constitution of the annual representative Council:

Present by-law.—"The President of the Council shall be elected by the Council. He shall hold office for three years; and at the first meeting of the Council after the determination of such office, a new President of Council shall be elected for the ensuing three years."

Proposed alteration.—"The President of the Council shall be elected annually by the Council, and shall be eligible for re-election for a period of three years. At the first meeting of the new Council in every year, a President of Council shall be elected for the ensuing year."

Dr. Marshall, of Dover, will move that, as the annual meeting of the British Medical Association has not been held in London since August, 1873, it is the opinion of this meeting that the next annual meeting of the Association should be held in London in the month of August, 1888.

Francis Fowke, *General Secretary.*

SCIENTIFIC GRANTS OF THE BRITISH MEDICAL ASSOCIATION IN AID OF RESEARCHES IN MEDICINE AND SURGERY, BIOLOGY, AND THE COLLATERAL SCIENCES.

The Scientific Grants Committee of the British Medical Association invite applications for grants in aid of medical, surgical, and collateral research; £300 are annually appropriated to this purpose (exclusive of the two Scientific Research Scholarships of the Association at present held by Mr. Watson Cheyne and Dr. Sidney Martin). The Committee will shortly meet to consider applications, which should be forwarded to the office of the Association, 429, Strand, addressed to Mr. Ernest Hart, who acts as the Honorary Secretary of the Committee, and who will furnish particulars of the conditions under which the grants are allotted.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Zooglœic Tuberculosis.—Action of Essences on Bacteria.—Artificial Production of Cataract in Rabbits by Naphthaline.

Dr. A. Chantemesse has lately published an important paper on "Zooglœic Tuberculosis," in the *Revue de Bactériologie*. After alluding to the numerous vicissitudes that tuberculosis has been fated to encounter of late years, he observes that the idea of the duality of pulmonary phthisis, which was thought to be extinct, might possibly appear again in a new form. In fact, besides the tuberculosis (the more frequent of the two) produced by the bacilli of Koch, there is another infectious malady, also capable of being reproduced by inoculation, exactly similar to the bacillus tuberculosis, and yet not produced by that micro-organism. Malassez and Vignal, who first observed it, called it "Zooglœic Tuberculosis." MM. Nocard and Chantemesse have adopted this denomination; but M. Eberth prefers to call it "Pseudo-Tuberculosis," for reasons which do not appear. Dr. Chantemesse informs us that in October, 1885, M. Terrier submitted to him some sealed tubes, containing fragments of cotton-wool, over which M. Terrier had caused to pass a hundred litres of air taken from rooms in which numerous patients suffering from pulmonary tuberculosis were accustomed to take medicated inhalations. No serious precautions had been taken to disinfect these rooms. Some shreds of these pieces of cotton-wool, after being withdrawn from the tubes, were introduced into the peritoneum of guinea-pigs. This double operation was, it is needless to add, performed with all necessary antiseptic precautions. The animals died, one after another, within six weeks, without any outward signs beyond progressive emaciation. The lesions observed after death were exactly the same in all the animals. The mesenteric glands were nearly all enlarged; in the centre of the largest was a thick, creamy, yellow pus, similar to that found in softened tubercles. The spleen was enlarged, and scattered over it were a number of yellowish, indurated spots, real granulations, or else nuclei of similar appearance, about the size of a lentil or a pea; the larger of these granulations were softened in the centre. The liver also was full of small granulations resembling those of tuberculosis. The lungs contained the same granulations, but not in such numbers. The aspect of these granulations appeared to Dr. Chantemesse so exactly similar to those of tuberculosis produced by the bacilli of Koch, that he neglected obtaining any cultures of them. He tried to stain the bacilli by Ehrlich's method, but without success; he next tried that of Gram, but the staining was too deep to allow anything to be seen. Thinking that it might be zooglœic tuberculosis he had to deal with, he tried staining with methylene-blue, and subsequent decoloration by carbonate of soda and alcohol, in the way which had already been employed by Malassez and Vignal; finally, he tried Loeffler's method. He was thus enabled to discover that the new production is embedded in the tissue of the liver, through the substance of which it extends with a rather indefinite line of demarcation. At this point the hepatic cells still preserve their character, although exposed to lateral compression by the accumulation of white corpuscles in the capillaries. Immediately within is seen a whitish zone, irregularly circular in outline, and conspicuous by its difference of colour. This zone is formed of colourless hyaline hepatic cells, which have undergone the necrosis of coagulation. In the capillaries surrounding these degenerated cells are to be found a pretty considerable quantity of white corpuscles stained blue. Lastly, the central spot contains a great number of fragments of leucocytes, and in their midst more or less voluminous masses stained deep-blue. These masses are formed by an accumulation of micrococci embedded in a uniting medium or "gangue." These micrococci measure from 0.4 to 0.6 μ, one of their diameters being a little longer than the other; they are generally packed close and without order one against the other, within the granular substance that surrounds them; sometimes, however, they are spread out in the form of a short chain. In the spleen and the mesenteric glands, where the neoplasm is of older date, it was not possible to stain these micro-organisms. In the lungs where the nodule was young, the micro-organisms were easily stained. It appears, therefore, that Dr. Chantemesse has found productions formed by lymphoid infiltration accompanied by hyaline degeneration of the tissues, in the centre of which was a microbian accumulation causing coagulation-necrosis and inflammatory reaction. There can be no doubt that we have here an infectious parasitic disease, its origin, the progress of the lesions, and the presence of micro-organisms in the midst of recent granulations sufficiently demonstrate the fact. It is therefore a zooglœic tuberculosis similar to that described by Malassez and Vignal, and by Nocard and Eberth. Dr. Chantemesse, after reviewing three previous publications, points out that in 1884 MM. Malassez and Vignal discovered, among a large number of preparations from cases with all the clinical signs of tuberculosis, four that did not appear to contain any of Koch's bacilli. He also observed that the inoculation of three of these preparations brought on an affection the course of which was similar to that caused by Koch's bacilli; the organic lesions closely resembled those produced by the bacilli of Koch, and contained micrococci nearly similar to those found in guinea-pigs inoculated with cotton-wool impregnated with the products of respiration of tuberculous patients. Dr. Chantemesse also states that M. Nocard, having to examine the lungs of a fowl taken from a hen-roost in which a number of fowls which had been shut up to be fattened had succumbed to an infectious disease, found these organs stuffed with tubercles, and in these tubercles were to be seen zoogloea differing but little from those described by MM. Malassez and Vignal. He also mentions that Eberth had found in the same animals a micro-organism twice the width of the tubercle-bacillus, and three or four times longer than its diameter, and he concludes that the morphology of these micro-organisms is as yet too obscure to allow of their identification, and that we must wait to be able to do so until pure cultivations of these organisms have shown us the different forms they may affect. Dr. Chantemesse adds that it should be remembered that the zooglœic tuberculosis observed by MM. Malassez and Vignal, and the disease which he himself has described, proceeded, the one from a subcutaneous tubercle of a child declared to have died of meningitis, and the other from sterilised cotton-wool, through which several litres of the air of a ward inhabited by phthisical patients had been passed.

In the *Annales de l'Institut Pasteur*, No. 4, April 2nd, 1887, M. Chamberland examines the action of essences on the bacteria of charbon, and on many other less well known microbes. The number experimented upon was 115; only fourteen allowed the development of the charbon bacillus in yeast-water saturated with their vapour. Among these was essence of cloves, which is sometimes used to arrest dental caries. But out of 102 essences that by their presence prevent the development of the organism, only eight seem to kill it definitively, for it usually revives as soon as the essences have evaporated. The essence of cinnamon alone appears completely to destroy the germs in four days, whilst bacteridian germs placed in fresh yeast-water have been cultivated after having been for four days in contact with other essences. Essence of China cinnamon does not stop the development of filamentous bacteria, but essence of vespetro seems to kill it completely in eighteen hours. Placed in contact with carbuncle bacillus, or its germs, in solution (essence ½ cc., alcohol 10, saponine solution at 1-100th, 20, water 70), seven essences kill that bacterium in doses varying from 1-13,200th to 1-24,200th. These essences have about the same antiseptic power as sulphate of copper. Among these seven essences are three of great antiseptic power, either in solution or in vapour: essence of China cinnamon, of Ceylon cinnamon, and of origanum. The essences must be used fresh; when they become oxidised by exposure to air, they lose part of their properties. M. Chamberland next compares the antiseptic action of thymic acid and of different metallic salts upon bacteria. The bichlorides of mercury, and of ammoniac and nitrate of silver, act at a strength of 1-80,000th; after these come thymic acid, persulphate of iron, chloride of zinc, etc. In order to study the antiseptic power of certain substances upon organisms in general, he prepared solutions of these substances at 1-100th, of which he poured 1 cc. into a series of small flasks containing severally 5 cc., 10 cc. and 20 cc. of neutral yeast, which gave him solutions of 1-600th, 1-1100th, and 1-2200th; to each of these he added ½ cc. of washings of garden-soil. He found that the most energetic antiseptics were sublimate of mercury and thymic acid. Sulphate and acetate of copper and bichromate of potash, although very active, allowed vegetations to grow; next to them in power were China cinnamon, persulphate of iron, carbolic acid, alum, and sulphate of quinine. Boric acid, hyposulphite of soda, salicylate of soda, arseniate of potash, bisulphide of soda, chloride of alumina, and chloride of lime are comparatively weak antiseptics.

At a recent meeting of the Société d'Ophthalmologie, a communication was made concerning the artificial production of cataract by naphthaline. M. Dor, continuing the experiments of M. Bouchard, administered pure naphthaline through the mouth to rabbits in doses of one gramme for each kilogramme of the animal's weight. About the third or fourth day the ophthalmoscope showed whitish spots on the retina; on the ninth day opacity was complete. *Post-*

mortem examination revealed white points in the retina and choroid, also in the lungs, kidneys, heart, and brain. These nuclei were full of leucocytes, and contained crystals. The retina presented the same appearance as in leucæmia and albuminuria. Naphthaline, therefore, disorganises the blood. M. Dor differs from the latter inasmuch as he has not seen synchysis produced. As, however, M. Panas uses naphthaline powdered and emulsified in glycerine, it is possible that in this state it may enter the circulation, and thus into the vitreous, and there produce synchysis.

SWITZERLAND.

[FROM OUR OWN CORRESPONDENT.]

The Swiss Hospital for Poor Children at Cannes.—Professor Horner's Bequest.—"Davos English Library Society."—Swiss Military Sanitary Societies.—Cremation Movement.—Professor Ad. Vogt.—Health Resorts in Switzerland.—Copper in Effervescent Waters.—Daviel's Grave.—Dr. Jenny.

ACCORDING to the *Arbeiterstimme*, May 25th, some Geneva philanthropists have collected 25,000 francs for the purpose of establishing a seaside home for Swiss pauper children at Cannes.

The late Professor Horner has bequeathed 10,000 francs to endow a free bed for paupers in the Ophthalmic Hospital about to be opened at Zurich.

A Davos English Library Society has been lately founded at Davos-Platz, with the view of supplying patients staying there with books of general interest. The yearly subscription is 10 francs, and may be paid either in money or in books. The library is managed by a committee, which consists of a president, treasurer, and twelve other members.

A general meeting of the Swiss Military Sanitary Society was held on May 22nd, at Lucerne, thirty-two delegates being present. There are now in Switzerland ten societies of the sort, with nearly 350 members.

As it turns out, cremation counts many more adherents amongst the Swiss people than might have been supposed. In the beginning of May a crowded meeting was held at Gagle, the Rev. M. Lindner in the chair, at which a resolution was unanimously passed in favour of that mode of disposing of the dead. At St. Gall a sum of about 16,000 francs has been quietly collected for the erection of a local crematory. The construction of a furnace at Zurich has been decided on, and the project will very soon be carried into execution. The same may be said with regard to Geneva, where M. Empeyta, a member of the Grand Conseil, will shortly ask that body to grant 50,000 francs for the purpose of building a crematory. The Berne Society of Public Hygiene and Social Aspirations will at an early date arrange a series of meetings, with the object of familiarising the population of the whole canton with the idea of cremation, and securing public acceptance for it.

The leading spirit of that Society is Dr. Adolf Vogt, Professor of Hygiene in the Berne University. There is no truer, stauncher, and more warm-hearted friend of the working-classes in the ranks of the Swiss medical profession. He is now also the treasurer of the newly-organised so-called "Reservelasse Commission," that is, the permanent central Strike Committee, residing at Berne, and including another distinguished friend of the poor, M. Alexis Reichel, one of the leading Swiss barristers and men of letters.

The *Bund*, May 17th, 1887, states that in Switzerland there are at present as many as 450 health-resorts (*Curorte*) of various descriptions. They are distributed as follows; Canton Berne, 90 health-resorts; Canton Grisons, 50 health-resorts; Canton Vaud, 30 health-resorts; Canton Schwyz, 20 health-resorts; Canton Valois, 18 health-resorts; Canton Tessin, 10 health-resorts; Canton St. Gall, 30 health-resorts; Canton Appenzell, 25 health-resorts; Canton Lucerne, 25 health-resorts; Canton Zurich, 20 health-resorts; Canton Solothurn, 19 health-resorts; Canton Unterwalden, 19 health-resorts; Canton Argovia, 18 health-resorts; Canton Basle, 15 health-resorts; Canton Uri, 13 health-resorts; Canton Thurgovia, 12 health-resorts; Canton Glaris, 8 health-resorts; Canton Fribourg, 7 health-resorts; Canton Neufchâtel, 7 health-resorts; Canton Schaffhausen, 7 health-resorts; Canton Zug, 7 health-resorts; total, 450.

The State analyst of the Zurich Canton writes that he has found copper in four out of eight specimens of effervescent water sold in the streets. He believes that this arises from the waters being transported in badly-tinned vessels.

The grave of Jacques Daviel, the great ophthalmic surgeon, has lately been discovered in the cemetery of Grand Saconex, near Geneva. As is known, Daviel went to that town to undergo there a course of treatment for the relief of certain sequelæ of an apoplectic stroke. According to the *National Suisse*, May 18th, 1887, it was mainly Dr. Haltenhoff who succeeded in discovering the grave, which had remained unknown to the world from 1768. A beautiful monument is to be erected by Swiss and French surgeons.

Dr. J. J. Jenny has just died, aged 84, at Fuellinsdorf. He had continued in very active practice since his 24th year to the last; in other words, he had been in harness for sixty years.

CORRESPONDENCE.

ROYAL MEDICAL BENEVOLENT COLLEGE.

SIR,—I have ventured to send a copy of the subjoined letter to Mrs. Durham. The necessity for help to educate the daughters of medical men is a fact recognised by the late Dr. Lanchester and myself, with others, years since. There are more difficulties surrounding the subject than are at once apparent, but they are not insurmountable. But to start a new scheme just now, which, however good in itself, must be costly, is to imperil gravely our efforts to place the education of the sons of medical men at Epsom College in a secure position, by drawing off funds which I am so earnestly pleading for. Help our College, make the education of the boys safe, and we may hope to carry Mrs. Durham's proposition to educate the girls into practical effect.—I am, etc.,

C. HOLMAN.

Reigate.

[*Copy.*] Reigate, June 11th, 1887.

My dear Madam,—No one can more appreciate the necessity for aid in educating the daughters of practitioners of medicine than myself. This want has been recognised at the Council of Epsom College, by Mr. France, and by the late Dr. Harvey Owen, who have given me five scholarships in perpetuity for girls at St. Anne's Schools; the Army Medical Benevolent Society, of which I am president, educates three girls at the High School, Notting Hill. But I would ask, is this an opportune moment to press a new scheme upon the profession, when Epsom College for Boys needs all the pecuniary assistance it can obtain? If you will aid me to restore the financial balance of Epsom now, no one will work for you and with you more heartily in the future than yours most faithfully, C. HOLMAN,

To Mrs. Durham. Treasurer, Epsom College.

SIR,—Dr. Holman's letter in the JOURNAL of June 11th fully shows how desirable it is that the projected fund should be raised, so as to place the position of the pensioners and foundation scholars on a secure footing, instead of the college having to reduce both, as at present is the case.

The appeal of the College is now before the medical profession, and it only remains for the members to subscribe according to their ability. I hope they will generously respond to the appeal, so as to enable the Treasurer of the College, Dr. Holman, to start in his new capacity with a handsome amount, and meet the claims of our necessitous brethren. Even if Dr. Holman's official statement of the inability of the Council to give help where it is greatly needed was insufficient, I may say that since you were good enough to refer people to me with regard to the fund, I have had many letters from persons who are totally destitute of means who are trusting that the profession will not turn a deaf ear to the call of charity. There can be little wonder at this, when the college is so limited in funds that it has actually to reduce its former help, although the claims must necessarily be growing. I am very glad to say, however, that I have also had a number of letters from members of our profession, offering their mites towards the fund; but now, of course, all such communications should be forwarded direct to Dr. Holman, or to the Local Secretaries of the college, if those gentlemen, together with the officers of the Branches of the British Medical Association, will organise themselves into working parties, and arrange to collect subscriptions.

Dr. Holman's letter, together with the advertisement to which he refers, will show the high class scholastic advantages to be obtained at the college, and its suitability in every respect as an educational establishment, and it should not be allowed to droop for want of support.

I sincerely hope that this object will now be heartily taken up by all in connection with the medical profession, and that you, Sir, as opportunity arises, will press the matter upon your readers' attention to bring it to a success, so that the Queen's Jubilee may leave a durable commemorative work for good, which for years to come would benefit those amongst us who at present sadly require it.

I think it will be allowed that the Royal Medical College, of which

Her Most Gracious Majesty the Queen is patron, should not be left without a fitting memento of her Jubilee.—I am, etc.,

Crewe. JAMES ATKINSON.

THE ORPHAN DAUGHTERS OF MEDICAL MEN.

SIR,—Whilst sympathising with Mrs. Durham in her wish to provide for the orphan children of the profession, I wish to point out that in the Royal Asylum of St. Anne's Society, which dates from the reign of Queen Anne and has recently been removed from Streatham to splendid buildings at Redhill, we have ready to hand an institution "affording home, clothing, maintenance, and education to orphan and other necessitous children of parents who have once moved in a superior station of life." The committee very properly insist very rigidly upon maintaining this last clause, and hence the high character of the institution.

I am a governor of Epsom and also of St. Anne's, and my invariable reply to the numerous applications I receive for my vote for the latter is that I subscribe solely to benefit the daughters of my less fortunate brethren. The list of candidates for the June election shows how great their need is, for of fifty-nine girls six are daughters of medical men, and not one of them was successful. It would be a thousand pities to spend in organising a new female medical college, with all its attendant expenses and drawbacks, the money which would secure the election next December of all these poor children. Already the council of the Epsom College possesses four nominations to St. Anne's, and, as I learn from the recent report, will shortly possess a fifth. Without wishing to divert money from Epsom, I may venture to point out that St. Anne's has the advantage of being actually beneath the eye of its new treasurer, Dr. Holman, of Reigate, and, that medical subscribers may be quite confident that he will look after the girls at Redhill as well as he has hitherto the boys at Epsom.—I am, etc., CHRISTOPHER HEATH.

*** A short notice of the work of this excellent Society was published in the JOURNAL on March 5th, 1887, p. 523. The offices of the Society are at 58, Gracechurch Street, and the Secretary, Mr. R H. Evans, would doubtless forward full particulars to any applicant.

SIR,—With respect to Mrs. Durham's letter on this subject in the Journal of June 11th, it is only fair to publish the fact that a very excellent school already exists to meet the want at Grove Park, Denmark Hill. This institution was established at Pelican House two years ago, by Mrs. Bennett, the widow of a medical man, and she is assisted by a large and able staff of instructors. Others than the daughters of medical men are received, so that the school is not composed of one class. I may add that there are four open scholarships carrying free education, and that the management of the school has won the confidence of all who have inquired into it.—I am, etc.,

June 14th, 1887. DYCE DUCKWORTH.

SIR,—May I answer your correspondent, Mrs. Durham, by calling attention to an advertisement in this issue of your JOURNAL, by which she will see that a college for the daughters of medical men, on the lines she advocates, has already been established in connection with Pelican House School, Grove Park, Denmark Hill, and is in full working order? Many applications have been received, and pupils entered; four house scholarships have been awarded since January 1st to deserving cases, bringing the cost of education to a minimum; and two free scholarships, given by private individuals, are now attached, but have not yet been awarded. These will provide an education, *free of all cost*, to orphans and children of medical men who are unable through ill-health or misfortune to provide an efficient education for their children otherwise.

The fact has been made painfully manifest how difficult it is for many provincial medical men to bring their sons up to a profession and at the same time educate their daughters in a fitting manner. It is to be hoped that the admirable proposition of Mrs. Durham to the wives of medical men will be warmly taken up, and that the result will be as successful as the effort deserves. I shall be pleased to supply any further information on application.—I am, etc.,

LEONARD WALTER PEAD, Captain, M.A.Oxon.,
Secretary to College for Daughters of Medical Men.

Dulwich Grove, S.E.

THE COLLEGES AND THE JUBILEE.

SIR,—We are now on the eve of a great Jubilee, in commemoration of which it is anticipated there will be a liberal conferment of titles and distribution of marks of distinction by Her Most Gracious Majesty to eminent men, among whom it is fair to suppose our profession will yield its portion represented by chiefs of colleges and hospitals. This is all that can be expected from that high source.

A question arises whether it may not be possible for the profession itself to have lustre shed over a wider range spontaneously by the governing bodies of our colleges constituting, in memorial of this great national occasion, honorary lists by promotions in their ordinary lists. For example, let the College of Physicians confer the Fellowship, as an honorary distinction, on some of its Members, and the Membership on some of its Licentiates; and so with the College of Surgeons as respects its Members, the selection being made in every case from those whose services, whether in civilian or military capacity, have rendered them prominent among their equals. Hitherto these governing bodies have clung to the principles that have guided guilds rather than to those that influence scientific bodies; reforms are urgently needed in them, as testified by crowded assemblies raising their voices against abuses and disabilities, and now the fitting time has come in the Jubilee so heartily accorded by the entire nation to our gracious and liberal Sovereign, for them to hold out the hand of good fellowship to the great masses of their constituents; this is wanted to consolidate the interests of a great profession, so as to augment their united influence towards the benefit of the public, in doing which union is strength, as is proved by the results of the independent efforts of our Association.

A mere scanning of our *Medical Register* evinces how more ready to receive than to give, *causâ honoris*, after the fashion we now advocate, are our own corporate bodies, which have not as yet felt the more generous impulses so frequently testified to in the action of those of the Irish and Scotch capitals, and also by our seats of learning at Oxford and Cambridge, and all of us are proud to acknowledge these recognitions. Our profession would be placed on a higher platform when our British corporate bodies make themselves competent to confer honours as well as the mere diploma to practise in our noble profession, and I now venture to suggest this as leading up to that end.—I am, etc., SENEX.

THE GENERAL MEDICAL COUNCIL AND THE APOTHECARIES' SOCIETY.

SIR,—The letter of "F.R.C.P.," in the JOURNAL of May 28th, is characteristic of the extraordinary ignorance which prevails in high places of the condition of things in the lower walks of the profession. "F.R.C.P." proposes that the Apothecaries' Hall should create a sort of lower grade of practitioners, who would practise among the poor of our large towns, and thinks that as a consequence unqualified and counter practice would be to a large extent prevented, and the congestion of the out-patient department of the hospitals relieved, his assumption of course being that the poor are at present insufficiently supplied with efficient medical men who are willing to attend them for fees which they can afford to pay.

That this is not the case, but that the exact opposite is the truth, is a perfectly plain and patent fact; in the town of nearly half-a-million in which I reside, I suppose that there is no poor person who has not within half a mile or so of his own door some half-dozen thoroughly well qualified and experienced medical men, who will engage to attend a confinement for half a guinea or less, and to attend a patient at his own home for one week, supplying him with medicine, for a sum of from 3s. 6d. to 5s., and who will not only engage to do this, but will do it and do it efficiently and honestly; it is needless to add that many of them are not making a living, but so keen is the competition that more remunerative charges are impossible. What is true of this town is true of others—witness London with its sixpenny dispensaries—and it is certain that in any of them any one who has any means at all can always command and pay for the services of a duly qualified practitioner.

The reasons for the overcrowding of the hospitals are not far to seek, and I do not intend to discuss them here, but the question may legitimately be asked: "If qualified men are so abundant and so cheap, why do people seek the advice of unqualified ones?" The answer is simple enough, they do not distinguish and under the present law, or want of law, cannot distinguish the one from the other.

If Jones, who has never attended a lecture or seen the inside of a hospital in his life, puts on his brass plate "Mr. Jones," and "surgery," in large letters in his window, and if Brown, who keeps a chemist's shop, advertises himself as "Dr. Brown," on the strength of a "degree in dental surgery," obtained without examination from an American university, which has no existence and never had; if, I say, they can do this and do it, as they do, with impunity, nineteen out of twenty ordinary people will be unable to distinguish them from medical men. The fact is, things have come to such a pass, that it is difficult to see of what advantage it is to a young man who intends to

practise amongst the poor, to get qualified at all. He will discover, before he has been three months at work, that he has spent his time and money in getting what, from a commercial point of view at any rate, is quite a superfluity.—I am, etc., M.R.C.S. and L.S.A.

SIR,—Mr. Upton, in his letter published in the JOURNAL on June 4th, admits that "the inspectors under the Act [Medical Act, 1886] have no duty in connection with any examination conducted under Section 5," and he also quotes the resolution passed by the Medical Council on May 17th, "that the assistant-examiners to be appointed for the Apothecaries' Society of London be examiners in surgery," and yet he contends that the Medical Council has made the examination of the Apothecaries' Society a qualifying examination under the Act. In this view I do not concur. Had the Medical Council appointed assistant-examiners to the final examination of the Society, without limit as to the subjects of that examination in which they should take part, then, however few the assistant-examiners sent by the Council—had only one even been so appointed—the examination would have been a qualifying examination under the Act. But the Council has specifically limited the duties of the examiners appointed by it to the subject of surgery alone, and, therefore, it is not a qualifying examination; and would not be a qualifying examination had the Council sent thirty instead of three examiners, so long as their functions were limited to surgery. Mr. Upton says: "By virtue of Section 5, Subsections 1 and 2 of the Act of 1886, any persons, whatever their qualifications, may be appointed by the General Council to assist at the examination, and to secure the maintenance of the required standard of proficiency in medicine, surgery, and midwifery. The Act in no way provides that the assistant-examiners shall possess any special qualifications, but their appointment by the General Council is deemed to be sufficient evidence of their fitness for the discharge of their duties." In all this I quite agree; and had Messrs. Makins, Walsham, and Andrew Clark, specialists in surgery though they be, been commissioned to examine, not only in surgery, but also in medicine and midwifery, then, even although not one of them for years had so much as lifted a stethoscope, nor any of them ever in their lives have been present at a confinement, yet the examination would technically have been a qualifying examination. But these gentlemen were appointed by the Council not for medicine, surgery, and midwifery, but for surgery alone, and hence the flaw that must be got rid of if the diplomas are to be legally registrable after June 30th. No doubt, even as the matter stands, Mr. Miller would register the Society's Licentiates, but the gentlemen so registered would be at the mercy of anyone who chose to raise an action involving the legality of their position, either in the Court of Queen's Bench in England or in the Court of Session in Scotland. Until now the General Medical Council has been very much what Dr. Bruce is of opinion it ought only to be—a Council of Medical Education and Registration; but, in future, it is also to be directly concerned with examinations, and in the new function imposed upon it the requirements and conditions laid down by the Act concerning examinations must be given effect to. I hold that in an important particular in constructing examinations under Section 5 the Council has set aside what the Act clearly prescribes. Were the Colleges of Physicians and Surgeons in London to unite with all the universities in England to hold a joint examination, even this would not be a qualifying examination unless it were inspected in medicine, surgery, and midwifery by inspectors sent by the Medical Council. These inspectors have no functions under Section 5 of the Act; are we, therefore, to assume that in medicine and midwifery a single corporation can, without supervision or assistance from the Medical Council, do what would be incompetent in the case of the united universities and colleges of England? I cannot think so; and it appears to me that unless the explicit requirements of the Act be given effect to before the last day of the present month, the Medical Council and the Apothecaries' Societies will find themselves involved in difficulties of registration from which only a special Act of Parliament could extricate them.—I am, etc., D. C. MCVAIL.

Western Medical School, Glasgow, June 6th, 1887.

INTRA-LARYNGEAL SURGERY AND MALIGNANT DISEASE OF THE LARYNX.

SIR,—Before proceeding to analyse the evidence brought forward by Mr. Lennox Browne for the purpose of contesting some of the views expressed in my last letter, it is absolutely necessary to clearly define the point at issue, inasmuch as an attempt is now being made to entirely shift the position.

In my last letter I neither denied the possibility of the occasional transformation of a benign into a malignant growth, nor did I claim an exceptional position in this respect for laryngeal neoplasms—in fact, I plainly stated the reverse—but I asked for proofs concerning the alleged "special" liability of benign laryngeal growths to undergo such metamorphosis under the influence of repeated intra-laryngeal operations. I added that if this statement could be shown to be correct, it would, in my opinion, simply mean the death-knell of intra-laryngeal surgery.

Mr. Lennox Browne is pleased to call this latter statement a "gross exaggeration not worthy of detailed refutation." That is a strong expression, especially if used by one whose own position in this matter is one of continued vacillation. When I said that the mischievous assertion just referred to had been made before this, but never been supported by proofs, I certainly had his own statements concerning this question in my mind.

Amongst sundry other propositions, plainly intended to discourage, if not to discredit, intra-laryngeal operations, will be found on page 254 of his book, *The Throat and its Diseases*, the following remarkable statement, printed in italics: "Whilst primary malignant or cancerous growths are of rare occurrence within the larynx itself, benign growths frequently (!) assume a malignant or even cancerous character by the irritation produced by attempts at removal." This proposition is then discussed at considerable length.

Need I say, Sir, that the crucial point of the whole controversy is to be found in the use of the word "frequent?" Mr. Browne must not hope that by speaking in his present letter, very modestly though somewhat ungrammatically, of the warning that "removal of a laryngeal neoplasm.....*may* assume a malignant or even cancerous character," he will be allowed to escape from his original statement, against the tendency of which alone my protest is directed. If he had been content to speak, as other authors have done, of the possibility of a papilloma becoming transformed into an epithelioma, and to mention that in a few cases prolonged or frequently repeated intra-laryngeal operations appeared to have hurried, if not caused, such transformation, probably nobody would ever have said a word against his teaching. But Mr. Browne has deliberately sought to discourage intra-laryngeal operations generally by depicting a theoretical danger in a manner which, in my opinion, is absolutely unwarrantable, and, as I found to my sincere regret that his teaching had actually been accepted to some extent, as witnessed by your leader, I considered it my duty to protest against his misleading doctrine. That, Sir, is the point at issue.

Mr. Browne's present moderation is not very surprising to me. It is not the first time that he has changed front in this question. In 1881, when directly challenged to substantiate the above dangerous statement, in the discussion on "The Indications for Extra- or Intra-laryngeal Treatment of Laryngeal Polypi," on the occasion of the seventh International Medical Congress, he said, *verbatim* (*vide Transactions*, vol. iii, p. 235): "It cannot be too explicitly laid down that the more facile the operator the less frequent will be extra-laryngeal operations. An axiom, therefore, to this effect can be enunciated as the result of this discussion." The remark I then made (*loc. cit.*, p. 236) that I was "exceedingly surprised to hear from Mr. Browne that he had changed so completely the views concerning this question, which he had only three years ago submitted to the profession in his text-book," remained unanswered.

Now again, six years later, he returns, though in a modified form, to his former views, and speaks of a "gross exaggeration" when I draw the only possible logical conclusion from his own original statement. I leave all this to the judgment of the reader, but I repeat emphatically that I fail to understand how a man can conscientiously continue to perform intra-laryngeal operations when he believes that by doing so he will "frequently" change a benign into a malignant growth. There is no "hunting with the hounds and running with the hare" possible in this question.

At last Mr. Browne has brought forward, in reply to my challenge, what he considers to be "proofs" of the frequency of malignant changes of previously benign laryngeal growths after intra-laryngeal operations. I may say at once that he has correctly anticipated his failure to convince me of the justice of his original statement. As, however, I should not like to appear as one who obstinately refuses to yield to really convincing arguments, I may be allowed to define what I should look upon as real "proofs" in the question under discussion.

The statement, namely, that benign laryngeal growths "frequently" assume a malignant or even cancerous character by the irritation produced by attempts at removal can, in my opinion, only be proved by a careful calculation of the total number of all cases in which laryngeal growths of an undoubtedly benign character were submitted to repeated intra-laryngeal interference, and by the demonstration that in a proportion of all these cases which justifies the use of the

word "frequent," say in 20 per cent, or even in 10 per cent. only, malignant disease of the larynx followed within a reasonable time the attempts at removal. It will be for the readers of this letter to say whether my demand is fair or otherwise.

Now let us see how far Mr. Browne complies with this condition. To begin with, he does not challenge my statement that at the time when I first contested his assertion, namely, in 1878, there were in a number of about 500 cases of laryngeal papillomata operated upon by the intra-laryngeal method—or I might have said, of 842 benign growths of various histological composition operated upon by the leading laryngologists of the world, and then collected by me—two cases altogether in which after the operation a change into malignant growth was stated to have occurred. How could he, under these circumstances, make his assertion in 1875, and repeat it in 1878? Or does a proportion of 2 in 842 or more (Paul Bruns had in 1878 already collected more than 1,000 cases operated upon by the intra-laryngeal method) justify the word "frequent?"

At present Mr. Browne bases his evidence upon more recent utterances, and begins his argument by giving us a number of "authoritative opinions" taken from text-books published since he first made his assertion.

Apart from the fact that in this question not opinions but facts and numbers are wanted, it will be, I think, generally admitted that such opinions could only claim to be of value for the decision of the question if based upon large personal experiences of those who express the opinion. Where does one of the authors quoted say that he has personally observed a single instance of degeneration of benign into malignant growths? Solis Cohen, whose opinions, though much more guardedly expressed, most nearly approach those of Mr. Browne, bases his general statement upon two cases altogether, which occurred in the practice of others. In Fauvel's description he appears to have entirely overlooked that this author speaks of "supposed" benign tumours on which attempts at removal had been made. Moreover, in the full description of the three cases referred to which I have since read, I find it stated in the first only that an intra-laryngeal operation had been performed. The tumour then removed was found to be "de nature epithéliale," and is expressly designated as "sarcome" by Fauvel himself. Gottstein says, *verbatim*: "In a few (!) cases the disease was observed to be due to trauma, and it appears that, under certain unknown conditions, papillomata may undergo cancerous degeneration." Bosworth states: "Occasionally we may trace their incipiency (namely, the incipiency of malignant growths) to traumatic causes." And Seiler simply says, according to Mr. Browne's own quotation, that benign neoplasms "have been known" to change their character from a benign into a malignant form.

Again, I must here ask the reader to remember the real point at issue. All the statements just quoted are merely to the effect that an occasional transformation of benign into malignant growths occurs, either under unknown conditions or from traumatic causes—a possibility, not only not contested, but directly admitted by myself. But where does one of the authors quoted support Mr. Browne's assertion concerning the frequency of this occurrence? Where is it stated that there is a "special" liability of benign laryngeal growths to undergo malignant degeneration after repeated intra-laryngeal interference?

Now for Mr. Browne's "facts." I was somewhat curious to learn what he would bring forward under that heading, and naturally expected a formidable array of unquestionable cases which had entirely escaped my notice. But what does he produce? Two hundred, or one hundred, or even fifty cases? No. In the whole range of literature he finds altogether five—say five—new cases, and these are sufficient for him to wind up with an appeal to you and your readers to pronounce judgment whether I have been correct in saying "that the proportions (not the proportions 'of proof,' as he misquotes me, but the proportions of malignant degeneration after intra-laryngeal operation to the total number of operated cases!) have not changed at all since" (namely, since I challenged his statements for the first time); or, if so, only for the better. Now let us see what these five cases are worth. The first case (Clinton Wagner's) I will admit at once. The third case (Tauber's) is very inconclusively reported. Mr. Browne's quotation: "The growth was microscopically examined" refers, in Dr. Tauber's description, apparently not to the fragments removed by intra-laryngeal operation, but to the examination of the parts after death. Still, I will give him the benefit of the doubt. Fauvel's case was, according to Loewenberg's microscopic examination, *a priori* malignant. Mr. Browne himself doubts, therefore, whether it is a case to be put into court on the present occasion. To speak of a change of character "under treatment," when recurrence took place "two years and a half" later, appears to me wholly inadmissible. But what am I to say of the two remaining cases, Newman's, in which the papilloma was followed *five* years after its removal by an epithelioma, and Gussenbauer's, in which the epithelioma occurred *ten* years after the nodule on the vocal cord had been removed by intra-laryngeal operation? I should, indeed, have considered it impossible that even Mr. Lennox Browne was to that degree blinded by his preconceived ideas as to seriously believe himself, still less make his readers believe, that the intra-laryngeal interference, which had taken place so long before the occurrence of the malignant neoplasm, could have caused its appearance! However this may be, it appears to me simply monstrous to accuse an irritation caused by the intra-laryngeal interference of having produced, after an interval of two and a half, five, and ten years, malignant disease of the larynx, and I positively reject evidence of such a character. The last three cases illustrate, it appears to me, in the most forcible way that "inclination to constitutional vice" of which I spoke in my last letter. I am perfectly willing to acknowledge that this expression in a very imperfect way covers our ignorance of the actual progress in such cases, but we are not entitled to ignore the most important factor because its exact nature is as yet unknown to us.

Mr. Browne's whole "facts" can therefore be summarised thus, that he has, in justification of the correctness of his original statement, brought forward exactly two new cases, one of which is, to say the very least, of very doubtful character. I will supply him with some additional evidence. Beschorner (*Berliner Klinische Wochenschrift*, No. 14, 1877, p. 187) has reported a case in which a papilloma apparently assumed a gradually more malignant character, though at the time of the publication no typical malignant disease could as yet be discovered, and Stoerk (*Klinik der Krankheiten des Kehlkopfs*, p. 400) reports a similar case.

Here we have, then, altogether, four more or less certain new instances of transformation of benign into malignant growth in cases in which intra-laryngeal interference had taken place. This, together with the two uncertain cases formerly reported (Gibb's and Rumbold's) makes altogether six such cases in the whole literature of laryngology.

The question now arises: Does the addition of these four new cases change for the worse the percentage of cases in which malignant degeneration followed intra-laryngeal interference?

Mr. Browne seems to believe that, since 1878, no other intra-laryngeal operations have been performed than those which he quotes. At any rate, he leaves them entirely out of consideration.

The fact, however, is, that these operations have become so exceedingly common, that most of the leading laryngologists, who formerly used to publish their cases; have long since discontinued doing so. Allow me, therefore, Sir, to submit here the following list of intra-laryngeal operations, performed by a few only of these gentlemen, with the conclusions which may legitimately be drawn from them. There were reported as instances of laryngeal neoplasms operated upon by the intra-laryngeal method:—

	Cases.
By Fauvel (1862-78)	343
,, Mackenzie (1862-80)	223
,, v. Bruns (1868-78)	200
,, Tobold (1861-74)	70
,, Stoerk (1871-80)	60
,, Oertel (1862-74)	59
,, Schroetter (1870-73)	48
,, Schnitzler (1872-74)	35
,, Paul Bruns (1871-78)	35
	1,073

Since then Boecker has operated upon more than 300 cases, and Elsberg reports 300, and Massei, 200 cases, of laryngeal growth, unfortunately without stating exactly how many of them were operated upon by the intra-laryngeal method. Now, if a rough calculation be made on the basis that the authors named in the above table have continued to treat annually, by the intra-laryngeal method, a similar proportion of cases, it will be seen that the number of their operations alone would amount at the present moment to something like 1,073 + 930 = 2,003. If to these Boecker's 300 cases, and, say, only 100 cases of operation from Elsberg's and Massei's accumulated 500 cases be added, we have 2,400 cases. If again it be remembered that a large number of the best known and busiest laryngologists have never published their cases of intra-laryngeal operations, and if, further, the isolated publications of such operations, the number of which is simply legion, be considered, it will be seen that, at the most modest computation, there have been, up to the present, at least 3,000 intra-laryngeal operations performed. The real number is probably much greater.

Thus, by stretching the point at issue as much as possible in favour of Mr. Browne's contention—namely, by admitting on the one hand doubtful cases, and by computing on the other the total number of intra-laryngeal operations for the removal of polypi as low as possible—we arrive at the magnificent proportion of 6 transformations into malignant growth in 3,000 operations; or, if we take, with most authors of large experience, the proportion of papillomata to other benign growths as 2 : 1, of 6 transformations in 2,000 cases of papillomata operated upon by the intra-laryngeal method!

I have now only to ask the readers of this letter two questions, and my task is done:

1. Is Mr. Lennox Browne justified in speaking of the "frequent" change of benign into malignant growth after intra-laryngeal operation in the face of the above calculation, which would give 1 degeneration in 500 cases of all classes of benign laryngeal growths operated upon by the intra-laryngeal method, or 1 degeneration in 333 cases of papillomata thus operated upon?

2. The proportion of degeneration I found in 1878 for the total number of operated cases was 2 : 843, or 1 in about 250 cases of papillomata. At present it would be 2 : 1,000 cases of all sorts of benign laryngeal neoplasms, or 1 to 333 cases of papillomata. Have I misstated the case when I said that I firmly believed that the proportion had since 1878 hardly altered at all, or, if so, only for the better?

I leave the answer to these questions to the reader.

Disagreeable as this controversy has been to me, I hope it has not been useless. The ridiculous disproportion between the statements made by Mr. Browne and the facts upon which they are based has been exposed, and this is certainly a gain. It is irrelevant whether Mr. Browne himself sees and admits or not what a terrible situation would have been created, both for the patient and the operator, if his statements had been justified. The purpose which I have had in view—namely, to settle the question of the justifiability of intra-laryngeal operations in cases of benign growths—has been fully attained, and I shall not reply to further letters of Mr. Browne's, unless they bring new and important facts.—I am, etc.,

Wimpole Street, W. FELIX SEMON, M.D., F.R.C.P.Lond.

SIR,—I will only answer one paragraph in Mr. Lennox Browne's letter of last week, in which he refers particularly to my remarks on Fauvel's case of sarcoma of the larynx. The very small number of instances which Mr. Browne is able to quote of innocent tumours of the larynx excited into malignant tumours affords an admirable proof of the comparative infrequency of the change; and this one case of Fauvel's shows how very difficult it is to offer reasonable proof of the actual effect of operative interference in some of the reputed cases.

Even if my assumption be correct that the original growth in the case referred to was innocent, at least eighteen months elapsed after it had been removed by the intra-laryngeal method before there was the least sign of the existence of a new growth; and it was not until the lapse of two or three years after the completion of the removal that the patient again sought the advice of Dr. Fauvel. Mr. Browne considers that my supposition that the second tumour was of a different kind from the original growth is an acknowledgment of "a change of character under treatment." I cannot myself conceive any reason for attributing the second growth to the means taken to remove the first. It would be quite as reasonable to attribute the occurrence of an epithelioma in the scar of an old burn or a cured lupus to the fact that carron-oil had been used in the treatment of the first or Volkmann's spoon in the cure of the second.

I would not trouble you, Sir, even with this short note, were it not for the great importance of the subject. I feel sure the disposition of innocent laryngeal growths to become malignant has been curiously exaggerated, and it is of importance both to the profession and to the public that we should get at the bottom of the matter.—I am, etc.,

82, Harley Street, W. HENRY T. BUTLIN.

*** It would be undesirable that this controversy should be further prolonged.—[ED.]

ON THE BEHAVIOUR OF FLUID IN THE CHEST AND THE TREATMENT OF EMPYEMA.

SIR,—Although I was far from wishing to provoke Mr. Godlee even to friendly strife, I confess that I should have been surprised had the innate militancy of surgery passed my presumption by. Thus it was with some misgiving that I peered into your last week's issue lest I should find myself down for an operation. This anticipation was correct, and my hour had come. It would be ingratitude on my part not at once to acknowledge that, already knowing Mr. Godlee to be a brilliant surgeon, I now find him to possess that most happy of all surgical attributes, tenderness towards his patient. His criticisms on my paper on the behaviour of fluid in the chest and the treatment of empyema are, need I say it, most respectfully answered by a careful consideration, rather than by ready retort; and, having had my say, I shall do no more than seems to me to be necessary to put my meaning a little more clearly. And, in the first place, I made no attempt to do away at a stroke with the laws of physics; I performed the humbler part of calling in question what I take to be a too absolute insistence upon the action of one law as applied to the evacuation of empyemata by incision. The question is: Does the discharge of so much pus from the pleura by this method necessitate a pneumothorax of corresponding volume? Mr. Godlee seems to me to say, Yes. I say, No; and I base that opinion upon several well-attested clinical facts, namely, the rapid healing of many empyemata, the speedy re-establishment of respiration in the compressed lung, the comparative infrequency of pneumothorax under circumstances when one would have expected it, etc. I will not say that these phenomena may not severally be explained in particular cases in other ways. Mr. Godlee quite justly says that some may be by the existence of pleural adhesions. Nevertheless, all taken together, they seem to me to allow of the opinion that the pleural surfaces come much more readily into apposition, and remain so, after the evacuation of pus by incision, than prevalent teaching (I did not say Mr. Godlee's teaching) seems to me to indicate, and that, in consequence, in many cases the pneumothorax is a very limited affair.

Mr. Godlee objects to my comparison between the opening of the chest and emptying the bladder by a catheter. I do not claim that it is exact; it is obviously not so, but it is sufficiently so to illustrate the point needing demonstration. I gave a case where four ounces of pus were evacuated by incision, and the empyema forthwith healed. What happened in that case? The cavity of the abscess was obliterated from the very first. Is there any contravention of physical law to say that the intra-thoracic tension being relieved by the incision there was a rush towards the opening; to suppose that the pus being let out the surrounding parts closed in and the abscess-sac was temporarily obliterated until such time as adhesion made this condition a permanent one? Mr. Godlee seems to have misunderstood my meaning here. At least, I cannot see in this explanation any "obscure force" in which I wish my readers to believe. Where is the unlikelihood of the hypothesis? I will not even admit that what I contend for is hypothetical; on the contrary, the conditions are such as must exist. The question is only one of more or less. The approximation of the lung to the external opening is one of the most natural possible. It happened in the case I have mentioned, I admit, in an unusually complete degree; but more or less many empyemata could tell the same tale, and the pneumothorax is a strictly limited one.

To this extent we must agree to differ. I still think that the natural history of many cases of empyema makes it difficult to suppose that the main force at work in their healing is the contraction of the lymph covering the pleural sac, although I by no means underrate the importance of this process. It does, however, appear to me to be a strong argument in favour of his contention to be able to say, as Mr. Godlee can, and it accords with my own knowledge, that the actual cavity is a very considerable one in many empyemata, "even in those in which very rapid closure is going to occur." Nevertheless, I will say that when this is the case, I never feel very sanguine about the issue; and from my point of view now I am more concerned to insist that I have often been surprised to find how close the lung has come to the surface after the evacuation of even large quantities of pus; and I may repeat that it does not appear to me to be a very easy matter to determine the size of a cavity the limits of which are fixed, as they are at that stage, by apposition only. The cavity may readily seem of large size to the too anxious finger.

As regards excision of the rib, a paper by Mr. Arbuthnot Lane in the *Guy's Hospital Reports* for 1882 first called me to arms. I thought then, with no inconsiderable experience, that the operation is unnecessary for any but exceptional cases. I think so more strongly now. To say that it is unnecessary is to me equivalent to saying that it is inexpedient. The surgery which is not necessary and yet expedient must, I think, be an æsthetic development of "the art and practice" of which perhaps a physician could hardly be expected to know much.—I am, etc.,

JAMES F. GOODHART.

SIR,—One word was omitted in the third paragraph of a letter of mine on "The behaviour of fluid in the chest and the treatment of empyema" in the JOURNAL of June 11th, which is so essential to the meaning of the sentence, that I trust you will allow me to supply it. In speaking of the recorded cases where, after an incised wound through the thoracic parietes, the lung has not collapsed, I wrote:

"But it would clearly be a mistake to say (if anyone should do so) that such is always the case." The word "always" was omitted.—I am, etc., RICKMAN J. GODLEE.

ELECTROLYSIS IN THE TREATMENT OF UTERINE FIBROMA.

SIR,—I have read with great interest your review of the books by Dr. Lucien Carlet and Dr. Apostoli, of Paris, and also the excellent letter by Dr. Woodham Webb in the JOURNAL of May 7th. For many months past (since February, 1886) I have been working in conjunction with my colleague, Dr. Steavenson, at the subject of electricity in the treatment of uterine troubles, selecting such cases as seemed appropriate for treatment. But I have not considered that the small number I have as yet collected justified me in publishing the results, for in such diseases as chronic metritis, endo-cervicitis, and uterine fibroid there are so many methods of treatment that, in my judgment, one should be exceedingly careful before forming an opinion as to whether one method of treatment is so superior to all others as to cause it to be looked upon as the best. It is obvious that such an opinion can only be formed after a very considerable number of cases have passed under observation. It is, of course, in the treatment of uterine fibroids that we must all be most anxious for brilliant results, but it takes a long time, even in very large hospitals, to collect many such tumours. Up to the present, I am well satisfied with the results I have obtained by the use of electrolysis.

I should not have trespassed upon your space were it not that I desire to point out that such an important method of treatment as electrolysis is not being overlooked in London, where already, to my knowledge, there are a few in the field who are endeavouring to test its efficiency from a critical point of view.

It is only right to add that it was owing to the suggestion of Dr. Steavenson, and to the works of Tripier and Apostoli, that I was induced to give this treatment a trial. In the hands of the latter there can be no doubt that the results achieved have been excellent.—I am, etc.,

R. A. GIBBONS, M.D., M.R.C.P.,
Physician to the Grosvenor Hospital for Women and Children.

SIR,—In connection with your review of Dr. Apostoli's recent publications and Dr. Webb's letter on the above subject, which appeared in the JOURNAL for May 7th, it may be of interest to your readers to hear the opinion on this mode of treatment of Dr. A. Tripier, of Paris, who was the first to study systematically the effects of the various form of electricity in uterine affections, and whose experience in this department is probably greater than that of anyone else. He has addressed to me two letters on the above subject, in which he speaks in the highest terms of M. Apostoli's qualifications, and from which, with his consent, I extract the following passages:—

More than twenty years ago M. Tripier had treated uterine fibroma with faradisation, and thereby given not only considerable relief to subjective symptoms, but also obtained the dispersion of the peri-uterine engorgement which is often present in these cases, without, however, reducing the tumours. Later on he likewise made use of positive and negative electrolysis, but without any very positive results. Finding that about the latter date Apostoli was inclined to further investigate the subject, he advised him to use a current of moderate power, and for a considerable length of time, and to cover the electrodes with a protecting substance. Apostoli, however, went entirely the opposite way to work, for he used a current strength of enormous power, up to 250 milli-ampères, and that for a very short time only. In this manner he obtained energetic cauterisation, but left the question whether the effects produced were owing to the action of the current, or simply to the sore which was established, unsettled. He has, however, established the fact that the uterus may swallow an enormous dose of electricity for a short time, and that large fibromas may be by this proceeding considerably reduced in size in a few months. It is true that this is brought about at the price of considerable suffering to the patient, and of risks which M. Tripier would not be disposed to run.

With regard to chronic metritis, M. Tripier considers M. Apostoli's proceeding to be much inferior to his own, as it leads to the formation of cicatrices. For endometritis Tripier prefers his iodine injections; for simple engorgement, faradisation; and for fibrous hypertrophy, again injections.

Finally, M. Tripier does not believe in the distinction which Apostoli has drawn between positive electrolysis, which is said to be hæmostatic, and negative, which is declared to be hæmorrhagic. In several cases which he has seen, negative electrolysis has proved rather hæmostatic than hæmorrhagic.

Thus far M. Tripier. In conclusion, allow me to refer shortly to the historical retrospect of the treatment of tumours by electrolysis which Dr. Webb has given in the JOURNAL for May 7th. In this he speaks of the suggestions of Legros and Onimus in 1868, of Ciniselli in 1869, of certain trials of American surgeons from 1871 to 1878, and of my own efforts in this direction in 1873. This gives an erroneous view of the subject. On referring to the old volumes of the BRITISH MEDICAL JOURNAL, I find that my first paper on the electrolytic treatment of tumours and other surgical diseases appeared in that JOURNAL for January 12th, 1867. This was followed by other communications on May 11th and 18th, and August 24th and December 7th. My researches on this subject date, therefore, at least six years further back than Dr. Webb has been led to assume, and are shown to be prior to those of Legros and Onimus in 1868, and of Ciniselli in 1869.

Dr. Webb likewise states that my results were "not considerable." If this be so, I am inclined to attribute the circumstance chiefly to the apathy of the profession which existed at the time when I brought forward my researches. It was the time when ovariotomists were stigmatised as "belly-rippers, whose sole object was money." Nevertheless, I must demur to Dr. Webb's statement. I have successfully electrolysed a very large number of nævi, some of which had been treated by eminent surgeons with other procedures, and without result. I have had likewise very gratifying success in the treatment of bronchocele. In one of these latter cases, in which the patient was almost *in articulo mortis* when I saw him, Sir William Ferguson had been consulted, but had refused to interfere, and pronounced the case hopeless. With electrolysis the patient was, within a week, out of danger, and eventually made an excellent recovery. Sir William Ferguson, who had then an opportunity of examining him again, expressed to me his gratification at the successful result of my treatment in a case which he had thought beyond surgical interference. Surely such a result cannot be called "inconsiderable."—I am, etc.,

Harley Street, W. JULIUS ALTHAUS, M.D.

SIR,—Dr. Elder's letter, following as it does the article from Dr. Webb, in which he partly describes Apostoli's treatment of uterine fibroids and other diseased pelvic conditions by means of strong and accurate doses of electricity will, I hope, draw attention to the subject in this country. There is little to add to Dr. Elder's remarks; but, in reference to Case II, it may be said that the woman had been previously treated by seven medical men by ergot, injections of iron, plugging, etc., and had received no benefit. A month ago I should have certainly advised removal of the ovaries. Now I shall put in practice what I learned from Apostoli; and an almost identical case is waiting until my appliances are in order.

Doubtless, as Dr. Playfair says, this treatment by strong currents is "a very double edged weapon," and much may be done to crush it in infancy by injudicious and ignorant use. What the ultimate results will be, we cannot say; but it is possible for anyone to go and see the women who are being treated for himself. I simply presented my card, and was shown all that was to be seen, and was given every information I wished, either by Dr. Apostoli, Dr. Webb, or by the patients themselves, besides having the privilege of reading the careful notes which are kept of all the cases.—I am, etc.,

Edinburgh. SKENE KEITH.

SIR SPENCER WELLS ON PORRO'S OPERATION.

SIR,—This interesting article begins with the following sentences: "So far as I have been able to ascertain, the case I now publish is the third in the United Kingdom where mother and child have both been saved by Porro's operation. The first was Dr. Godson's, the second Dr. Galabin's."

A fourth successful case was recorded in your columns of April 10th, 1886,[1] by your obedient servant, LAWSON TAIT.

7, The Crescent, Birmingham, June 11th, 1887.

ADENO-ENCEPHALOID CANCER OF THE BLADDER.

SIR,—Dr. Neale and Mr. Marriott record a most interesting case of tumour of the bladder in the JOURNAL of May 21st. They are certainly to be congratulated on having published a case which will take an important place in the history of vesical neoplasms, for the growth is probably of extreme rarity, and, as regards literature, is, I believe, unique. A microscopical section of the tumour was submitted to Professor Greenfield, who recognised the growth as being "intermediate between malignant adenoma and encephaloid."

[1] See report of Birmingham and Midland Counties Branch, BRITISH MEDICAL JOURNAL, 1886, vol. i, p. 698.

I write to point out how valuable a detailed account of the necropsy would be, for no doubt is left on the mind on reading the case that the growth took its origin in those sparsely scattered glandular crypts which are sometimes found at the neck of the bladder, and which seem to be the representatives of the urethral glands. There is no reason why carcinoma should not attack these glands, and most probably a very small proportion of cases of vesical carcinoma originate in this way; but at present the literature does not contain a recorded case. The nearest approach is a case published by Kaltenbach (Langenbeck's *Archiv*, xxx, 1884), in which he removed a "papillary adenoma" from the anterior wall of the bladder of a woman, aged 33.—I am, etc., E. HURRY FENWICK.

Old Burlington Street.

A NEW DEPARTURE.

SIR,—It is no uncommon thing to see in provincial newspapers piteous appeals for funds on behalf of special hospitals in London. I would ask your attention now to an appeal, which I have recently noticed, for patients on behalf of one of these institutions. The enclosed advertisement has been appearing from time to time in the *Western Mail*, Cardiff, signed "Walter E. Scott, Secretary," on behalf of St. Peter's Hospital for Stone. You will see the advertisement winds up with the note "Private Wards for Paying Patients." I am at a loss to understand the meaning of such an advertisement, unless it be to hold out a bait to patients to mistrust their professional advisers in the country and go for treatment to a special hospital in London. In our large provincial towns it cannot be denied that there are surgeons who are quite competent to deal successfully with cases of "stone, stricture, and urinary diseases," and it seems to me a piece of impertinence, if nothing worse, for "St. Peter's Hospital for Stone" to advertise in the provincial press for patients, "paying" or other. How much longer will an infatuated public supply funds for the support of these unnecessary special hospitals?—I am, etc.,

Cardiff, June 13th. ALFRED SHEEN, M.D.

THE ACCIDENT TO THE COW-BOY KING.

SIR,—When interviewed by your representative in reference to the accident to "Buck Taylor," I incidentally compared the accident in its effects to a Macewen's osteotomy, or still better, to an osteoclasis of the femur, because, there being nothing in the manner of application of the fracturing force to cause overriding of the fragments, only half an inch shortening was produced. By this rough and unqualified comparison, I unintentionally led your representative to think that Macewen's osteotomy causes half an inch shortening. In justice to that operation, I wish to point out that it causes no shortening whatever.

The same comparison conversely suggested that Taylor's fracture is transverse (as is that of an osteotomy or satisfactory osteoclasis). But it is impossible to diagnose that without injurious manipulations. An oblique fracture might cause very little shortening, especially if the periosteum was little damaged, and the thigh hanging over a horse's side at the time of injury.—I am, Sir, your obedient servant,

10, George Street, Hanover Square, W. C. B. KEETLEY.

DR. WEYER AND REGINALD SCOT.

SIR,—I read, in the kind discussion of my book *Doctor Johan Weyer, the First Opponent of the Witch Mania* (1885), in No. 1,371, p. 785, of the JOURNAL, as follows: "The rare and curious volume of the Englishman Reginald Scot, *The Discoverie of Witchcraft*, published in 1584, was a courageous protest in the same direction, though whether Scot was acquainted with Weyer's writings we cannot say."

When I wrote the biography of Dr. Weyer I was only acquainted with the title of R. Scot's book, and mentioned it and the vehement opposition James I. made against it. I have since seen the book itself in the British Museum, and take the liberty of communicating to you that R. Scot knew Dr. Weyer very well. He quotes him at least six times, and calls him (vol. iii, chapter xi, p. 58, of the first edition, 1584) "the most famous and noble physitian, John Wier."

Weyer's instructor during his Bonn period (1532), Cornelius Agrippa, is repeatedly quoted in Scot's book. R. Scot evidently gained impulse and suggestion for his fine work from the strife and writings of both eminent men.—I am, etc., C. BINZ, M.D.

Bonn, June 12th, 1887.

UNFOUNDED CHARGES AGAINST A MEDICAL MAN.

SIR,—I notice in the JOURNAL of May 28th your comments upon the late charge against Dr. Ralph Hodgson, of Lewisham. His case is, indeed, fraught with the most grievous accusations against his honour and morality, which have always been considered unimpeachable by friends and all who knew him. There are many who could testify to his wonderful energy, tact, and perseverance in his work, and also to his capabilities as a medical man; the unswerving steadiness with which he has devoted himself to his practice and to the good of his patients has called forth frequent praise from those who knew him intimately; and this man, for whom all who know him have a good word, is charged with the most atrocious and abominable act that a medical man can be guilty of; true, he is acquitted, but the wrong suffered is irretrievable—his prospects undermined, his reputation questioned, his health most materially damaged, and he himself plunged into debt. The expenses of his defence, I understand, amount to between £500 and £600, which he was not in any way prepared for.

May I ask that, through your valuable aid, a subscription may be raised to mitigate in some degree the sharpness of his sufferings, which I have proof of as having been most acute, to enable him to pay for his defence? Surely many of those who knew him would be glad to help a friend in a trial such as this, to which the majority of us may at any time be exposed.—I am, etc., F. SEPTIMUS BARNETT.

91, Mildmay Park, N., June 8th, 1887.

HAMMER-TOE.

SIR,—I cannot accept the conclusions of Mr. Anderson set forth in the report of his paper read before the Clinical Society, although I note with satisfaction that he regards the first inter-phalangeal joint of the second toe (where this deformity usually occurs) and the metatarso-phalangeal joint of the great toe as belonging, "developmentally," to the same series. I have pointed out in the JOURNAL of May 28th that they have a similar function: each being situated behind the joint where the pressure of the toe against the ground is greatest; each having a tendency to rise upwards in consequence of the backward traction of the flexor muscles.

Now the smaller toes, when at rest, are flexed, unlike the great toe, which is extended and turned towards the middle line of the foot; in this position they are most generally packed in the boot; the latter often completely over-riding the second toe, almost always projecting over it. The end of the second toe is thus pressed downwards by the action of the flexor longus pollicis, while its own flexor draws the end backwards, both effects combining to throw up the first joint into the position of hammer-toe. We know that ligaments shorten on the one hand as they lengthen on the other when the joints they sustain are held in new positions for prolonged periods. Every orthopædic case is an illustration of this. We know, too, that muscles, readily adapting themselves to altered length when in a state of rest, tend, by their tonic contraction, to hold the part in the position acquired. These agencies, as it seems to me, are fully sufficient to account for many cases of acquired hammer-toe, and to afford an explanation why the second is the toe most often affected. It may be added that there is usually no effort made to bring in the counteracting influence of the extensor muscles when the boot is removed.

The packing of the toes is not, however, always in the same order. I am familiar with a case of acquired hammer-toe in one foot where it is clearly caused in the manner indicated, but on the other side the second toe over-rides the first and remains straight.

With respect to those cases where the influence of the boot is less manifest, it must be remembered that "well-fitting" is only a relative term. It is indeed rarely that the toes have perfect freedom. How often do we see a boot in which the inner margin of the great toe comes out fully into line with the inside of the foot, still less beyond it, as, in nature, it does? How often do we see a foot in which the two first toes show no signs of being pressed together?

So much for cases of acquired deformity; but Mr. Parker points out that it occurs in infancy, and "is, therefore, quite independent of boots." They who are in the habit of observing the feet of infants in cases which do not come before the surgeon as such, know that one frequently finds the end of the fourth toe so completely turned that the nail is hidden by the adjoining one, just as it often is in those who have long worn tight boots. I do not see how anyone can doubt that this is a deformity acquired by one or more ancestors and transmitted. I see no reason why congenital hammer-toe should require a different explanation from these and other varieties of the deformity of the toes found in new-born infants.

I would suggest that some of your readers who live in districts where numbers of the inhabitants go barefooted should give their experience as to how far, among such persons, this common deformity is found.—I am, etc., T. S. ELLIS.

Gloucester.

MEDICO-LEGAL AND MEDICO-ETHICAL.

QUEEN'S BENCH DIVISION.

(Before Mr. Justice MATHEW.)

REG. *v.* THE GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION.

JUDGMENT was delivered on Wednesday morning in this case, which was an application on behalf of Mr. H. F. Partridge, for a *mandamus* ordering the General Council of Medical Education of the United Kingdom to restore the name of Mr. Partridge to the register of dentists, kept under the Dentists' Act, 1878. The rule was argued last sittings before Mr. Justice Mathew and Mr. Justice A. L. Smith. Mr. Justice Mathew, in delivering the judgment of the Court, said that the applicant had, since 1867, practised in the metropolis as a dentist, and it was admitted that when the Act passed he would have been entitled to be registered as a dentist if an application had been made by him in accordance with the provisions of Section 7. He had not, however, applied for registration in respect of this qualification. In 1878 he obtained from the Royal College of Surgeons, Ireland, a diploma in dentistry, and as a licentiate of this body, which was one of the medical authorities referred to in the Act, he applied for and procured registration under the statute (Section 6). The diploma had been granted on the terms that the holder should not seek to attract business by advertising, or by any practice considered by the College unbecoming, and that the diploma might be cancelled on its being proved to the satisfaction of the President and Council that he had done so. In the year 1883, the Royal College of Surgeons of Ireland, upon the ground that Mr. Partridge had advertised for business, cancelled his diploma, and thereupon the General Council directed his name to be erased from the register. Section 11 contains provisions as to the corrections to be made from time to time in the register, and it was argued for the General Council that, where the original qualification no longer existed, the Council were bound to correct the register and erase the name. It was argued for the applicant that the name of a person qualified either by practice or diploma, and once properly placed on the register, could only be erased in the manner and upon the grounds specified in the statute. It was urged that the mere fact that the diploma had been cancelled by the medical authority which had granted it was not a ground upon which the General Council was justified in disqualifying the applicant, or exposing him to the penalties imposed by the Act upon unqualified practitioners. We are, continued Mr. Justice Matthew, of opinion that the contention of the applicant is right, and that he is entitled to have his name restored. (His lordship here read Section 13, and also referred to Section 15.) It appears to us that, in such a case as the present, the Medical Council possessed no further powers of dealing with the register than those conferred in the Sections referred to. It was admitted that the Council had not decided that Mr. Partridge had done anything to justify the removal of his name under Section 13, but had considered that it was bound to erase his name when the determination of the medical authority granting the diploma had come to its knowledge. This is a course which, it seems to us, they were not entitled to adopt; otherwise, where a medical authority has withdrawn a diploma on the ground, for instance, that a particular theory of dental surgery had been adopted or discarded, the name of the holder must be struck from the register. But this is a ground upon which the General Council, under Section 13, is expressly prohibited from erasing a name. The third clause of Section 13 appears to show that the Council was not intended to be bound by any determination of the medical authority, even with respect to the grounds for erasing a name specified in Section 13, but was required to adjudicate independently. This view is strengthened by an examination of the provisions in the last clauses of Sections 13 and 14. The Act clearly appears to be framed to restrict the right of the General Council to interfere with registered dental practitioners in the practice of their profession to the cases where there are the grave reasons for disqualification specified in Section 13.

The rule for a *mandamus* was accordingly made absolute, but, on an application on behalf of the Council, was ordered not to be drawn up for a week.

Mr. Finlay, Q.C., and Mr. Lyon were for the applicant; and Mr. Kennedy, Q.C., and Mr. Muir Mackenzie for the Council.

BROWN DEFENCE FUND.

	£	s.	d.
Amount already acknowledged	24	1	6
Messrs. Oram and Read	1	1	0
Dr. A. W. Thomas..	0	10	6
Dr. E. Adams (Liverpool)	0	5	0

G. STANLEY MURRAY, M.D., Putney.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Friday, June 10th.

Dog-Owners' Bill.—Lord MOUNT-TEMPLE, in moving the second reading of this Bill, said he believed that the prejudice which existed in large town against dogs would be removed if the law which protected those persons who received injuries from savage animals was made more effective. The object of the Bill was to enable a person who had been bitten by a dog to recover compensation from the owner.—The LORD CHANCELLOR said he could not recommend their lordships to accept the alteration of the law proposed by the noble lord, because the Bill lent itself to actions which ought not to be encouraged.—Without further discussion, the motion was negatived without a division.

Smoke Nuisance Abatement (Metropolis) Bill.—Lord STRATHEDEN and CAMPBELL said he had been requested by the Government to postpone the Committee stage of the Bill which was read a second time on May 9th. The Government having assented to the second reading, he had no right to assume that they were in the least opposed to the objects of the Bill, and it was only a question of the way and the machinery by which those objects should be attained.—Earl BROWNLOW said the fact was, the Bill dealt with a matter of great importance, and, having quite lately assumed the responsibility of representing the Home Office in that House, he had to ask the noble lord in charge of the Bill to give him a little time to master the facts of the case and the questions that were involved.—The Committee was then put off till Monday.

Tuesday, June 14th.

Rabies in Dogs.—On the motion of Viscount CRANBROOK, the following were nominated as the Select Committee on rabies in dogs: the Lord President (Viscount Cranbrook), the Duke of Beaufort, the Earl of Coventry, the Earl of Carnarvon, the Earl of Onslow, the Earl of Zetland, the Earl of Kimberley, Lord Walsingham, Lord Ribblesdale, Lord Poltimore, Lord Belper, Lord Mount-Temple.

HOUSE OF COMMONS.—Thursday, June 9th.

Surgeon-Major Sandford Moore.—Dr. TINDAL-ROBERTSON asked the Secretary of State for War whether he would have any objection to lay upon the table of the House the report of the case of Surgeon-Major Sandford Moore submitted to him by the Medical Director-General.—Mr. E. STANHOPE said the production of the report would create a very undesirable precedent, and he regretted, therefore, that he was unable, in the interests of the service, to meet the wishes of his hon. friend.

Monday, June 13th.

Scarlatina Infection from Milk.—Sir U. KAY-SHUTTLEWORTH asked the Chancellor of the Duchy of Lancaster whether he could give the House information as to any investigations which the veterinary officials of the Agricultural Department had been instructed to make into Dr. Klein's theory of scarlatina infection from the milk of diseased cows; whether, at present, any confirmation of that theory had been obtained by the investigations of other medical or veterinary observers; and whether he could lay upon the table of the House any reports on the subject and any communications which had passed between the Agricultural Department and the Local Government Board.—Lord J. MANNERS said the inquiry respecting the alleged scarlatina outbreak by the agency of the milk of diseased cows was still being carried on; but up to the present time the investigations of medical and veterinary observers did not justify any positive conclusion. Communications on the subject had taken place between the Local Government Board (with which they were anxious to co-operate) and the Agricultural Department, and a report would be laid before Parliament as soon as the inquiry was completed.

Tuesday, June 14th.

Drunkenness in the Police.—Mr. MATTHEWS, in reply to Mr. PRICE, said it was not the practice to call medical evidence in order to discover whether a police-constable was drunk.

Sir WALTER FOSTER has given notice of the following question:—To ask the Under-Secretary of State for India whether it is the case that an executive officer of the Medical Staff in India, who officiates for less than one month as Deputy Surgeon-General in the absence of the Deputy Surgeon-General on sick leave or furlough, receives no allowance for the period, although he performs the duties in addition to his other duties: Whether, in such an instance, the "half-staff" of the appointment reverts to the State; Whether the acting officer would be held pecuniarily liable in the event of loss of stores or other mistakes; Whether officers officiating on the Military (Combatant) Staff in a similar way would draw the "half-staff" for broken periods; And why the difference is made in the case of the medical officer.

NAVAL AND MILITARY MEDICAL SERVICES.

CHANGES OF STATION.

THE following changes of station among the officers of the Medical Staff of the Army have been officially notified as having taken place during the past month :—

	From	To
Surgeon-Major J. Fleming, M.D.	Aldershot	Mauritius.
,, D. C. G. Bourns	Half Pay	Warley.
,, D. C. Grose	Bengal	Belfast.
Surgeon G. Laffan, M.D.	Leeds	York.
,, C. Seymour, M.B.	Egypt	Aldershot.
,, F. R. Barker, M.B.	Aldershot	Cupar.
,, T. Dorman, M.D.	Aldershot	Dumfries.
,, T. M. Corker, M.D.	Buttevant	Cork.
,, A. E. J. Croly	Dublin	Curragh.
,, W. D. A. Cowen	Portsmouth	Dorchester.
,, J. Watson, M.D.	Curragh	Belfast.
,, E. R. Egan, M.B.	Curragh	Dublin.
,, A. H. Burlton	Canterbury	Lydd.
,, E. Landon	Warley	London.
,, J. M'M. Bolster	Dublin	Cork.
,, P. H. Fox	Dublin	Castlebar.
,, E. O. Milward	Portsmouth	Gosport.
,, J. O. G. Sandiford, M.D.	Bandon	Cork.
,, G. E. Twiss	Birr	Dublin.
,, G. Coutts, M.B.	Madras	Hulme.
,, W. J. Baker	Bengal	Portsmouth.
,, H. K. Allport, M.D.	Bengal	Alderney.
,, S. Townsend, M.D.	Bengal	Cork.
,, J. Gibson, M.B.	Bengal	Dublin.
,, F. A. Harris	—	Chatham.
,, R. C. Johnston, M.B.	Curragh	Dublin.
,, C. R. Thiele, M.B.	Honduras	Jamaica.
,, J. Semple	Newry	Belfast.
,, W. B. Thomson	York	Altcar Camp.
,, H. Mitchell	Portland	Portsmouth.
,, G. E. Hale	Egypt	Devonport.
,, C. W. Johnson, M.B.	York	Pontefract.
,, A. T. I. Lilly	Egypt	Portsmouth.
,, C. C. Reilly	Portsmouth	Gosport.
,, W. Turner	Egypt	York.
,, H. E. Cree	York	Newcastle.
,, W. H. Starr	Egypt	Woolwich.
,, A. P. H. Griffiths	Egypt	Netley.
,, W. S. Boles, M.B.	Egypt	Woolwich.
,, H. L. G. Chevers	Egypt	Aldershot.
,, H. W. Austin	Devonport	Penally.
,, R. E. Kelly, M.D.	Cork	Mitchelstown.
,, J. F. Donegan	Devonport	Plymouth.
,, F. R. Newland, M.B.	Dublin	Naas.
,, R. J. Windle, M.B.	Portsmouth	Gosport.
,, G. Scott, M.B.	Glasgow	Dunbar.
,, W. J. Trotter	Curragh	Dublin.
,, V. E. Travers-Smith, M.D.	Colchester	Warley.
,, F. J. Morgan	Devonport	Fort Staddon.
,, S. F. Clark, M.B.	Dover	Lydd.
Quartermaster H. Johnson	Gibraltar	Aldershot.
,, H. Copping	Egypt	Shorncliffe.

THE NAVY.

FLEET-SURGEON W. F. C. BARTLETT has been placed on the retired list, with the rank of Deputy Inspector-General of Hospitals and Fleets. His commissions are dated : Surgeon, October 17th, 1856 ; Staff-Surgeon, June 17th, 1865 ; and Fleet-Surgeon, December 29th, 1877. He was Assistant-Surgeon to the *Raleigh* when she was wrecked on the coast of China on April 14th, 1857 ; served in the hospital ship at Hong Kong during the China war of 1857-60 (medal) ; and was Fleet-Surgeon of the *Agincourt* during the Egyptian war in 1882 (medal, and Egyptian bronze star).

The following appointments have been made at the Admiralty during the past week :—JAMES FLANAGAN, Fleet-Surgeon to the *Castor* ; E. MEADE, Fleet-Surgeon to the *Cambridge* ; G. MAIR, Fleet-Surgeon to the *Iron Duke*.

Staff Surgeon W. H. CAMERON died at Morefield, Aberdeen, on June 11th. He entered the Royal Navy as Surgeon, July 3rd, 1855 ; became Staff-Surgeon, January 23rd, 1866 ; and retired April 1st, 1870. He served in the *Agincourt* in the expedition to Bruni Borneo in 1846, and in the *Bulldog* during the Sicilian insurrection in 1849 ; in the *Beagle* in the Black Sea during the Crimean war ; was present at the capture of Kertch, Yenikalé, and Kinburn, and all the operations in the Sea of Azoff, and was at the battle of Balaklava (Crimean and Turkish medals, Sebastopol, Balaklava, and Azoff clasps).

INDIAN MEDICAL SERVICE.

THE undermentioned Surgeons, recently appointed to the Bengal Establishment, have been appointed officiating medical officers to the regiments specified : J. H. SELLICK, to the 14th Bengal Lancers, *vice* Surgeon G. H. Fink ; J. H. MORWOOD, M.D., to the 2nd Bengal Infantry, *vice* Surgeon G. M. Nixon ; D. W. SCOTLAND, to the 23rd Pioneers, *vice* Surgeon J. F. Evans ; and C. N. BENSLEY, to the 29th Punjab Infantry, *vice* Surgeon G. J. H. Bell.

Surgeon-Major G. KING, M.B., Bengal Establishment, Superintendent of the Royal Botanic Gardens at Calcutta, is allowed leave of absence for two months and twenty-five days, from June 27th ; Surgeon D. PRAIN will act for Surgeon-Major King during his absence.

Surgeon E. W. REILLY, Madras Establishment, is appointed to the civil medical charge of Tantabin Sub-division, Shwebo District, from January 1st.

Surgeon-Major C. E. MCVITTIE, Madras Establishment, is appointed to be Civil Surgeon of Shwebo, *vice* Surgeon E. Cretin, from the date on which he may assume charge of his duties.

Surgeon W. DEANE, Bengal Establishment, is appointed to be Civil Surgeon of Kyaukse, *vice* Surgeon H. J. Dyson, transferred, from the date on which he may assume charge of his duties.

Surgeon H. J. DYSON, Bengal Establishment, is appointed to the civil medical charge of the Myotha Sub-division, from the date on which he may assume charge of his duties.

Surgeon H. G. L. WORTABET, M.B., Madras Establishment, is appointed to be Civil Surgeon of Minbu, *vice* Surgeon W. Deane, transferred, from the date on which he may assume charge of his duties.

Surgeon-Major J. SMITH, Madras Establishment, Medical Officer at Ootacamund, is appointed Zillah Surgeon at Coimbatore.

Surgeon-Major J. F. FITZPATRICK, M.D., District Surgeon of Coimbatore, is appointed Medical Officer of Coonoor, with charge of Kotagherry, *vice* Surgeon G. L. Walker, M.D., who vacates.

Brigade-Surgeon R. E. PEARSE, Madras Establishment, Principal Medical Storekeeper at Madras, has leave of absence for one year on medical certificate.

Surgeon-Major R. BOUSTEAD, Bombay Establishment, having returned from furlough, has been posted to general duty in the Presidency Circle.

THE VOLUNTEERS.

MR. C. H. HEAP has been appointed Acting Surgeon to the 2nd Volunteer (Dorsetshire) Brigade Southern Division Royal Artillery (formerly the 1st Dorsetshire Artillery).

Acting Surgeon WILLIAM COATES, from the 20th Lancashire (2nd Manchester) Volunteers, is appointed Surgeon to the Manchester Division of the Volunteer Medical Staff Corps ; Mr. G. H. DARWIN is also made Surgeon, and Mr. T. C. RAYNER, Quartermaster, to the same corps.

RANK OF ARMY MEDICAL OFFICERS.

MEDICAL STAFF writes : The account of your interview with a high Government official in the JOURNAL of May 28th, and the views elicited on that occasion are of so important and, I regret to add, startling a nature that I crave a little of your valuable space to notice, paragraph by paragraph, the article in question.

Paragraph 1 is merely introductory.

Paragraph 2. Whatever the astonishment of Whitehall Yard may be, it will be simply nothing compared to the amazement of army medical officers when they read this paragraph. Under the present system of promotion by selection, it would be simply madness for any medical officer to submit a complaint to the authorities. He would become a "marked man," would be looked upon as a mutineer or ringleader, and might just as well retire from the service, as he would never be promoted. We all understand this very well, and so can only express our disgust and grievances through the public press.

Paragraph 3. "Relative rank was the cause of much inconvenience." Very likely ; so military jealousy has swept it away. Strange it is that nothing has been said explaining when the inconvenience or anomaly was felt. Anyhow, the effect has been disastrous, as we have been lowered in the social and military scale, and, so far as the command and discipline of the Medical Staff Corps is concerned, the new arrangement will never work.

Paragraph 4. I submit that "reasonable doubts" must be felt, else why this universal agitation and dissent coming from medical officers in all parts of the world ?

Paragraph 5 is an astounding one. Surely we "have to administer discipline and military law," as we command the Medical Staff Corps, as well as being "engaged solely for health purposes." If a titular designation belongs to the "purely fighting branch of the army," why has it been recently given to the Commissariat, the Ordnance, and the Paymasters ? They are non-fighting, and the latter command no men at all. It is sad to be told that, to please the military and smooth away their jealousies, we are to be sacrificed. In the army a military status is required, as well as being "a good doctor."

The last paragraph requires no comment. It is very suspicious that this new Warrant was only sprung on us just when the department had been filled up to its maximum strength ; and the announcement that there will be no examination next August is most significant. The "coming man" is held to be responsible for this manœuvre, as well as for the inspired articles and letters against us in a medical contemporary of yours.

To settle the important matter as to the wishes of officers of the Medical Staff, let 1,000 voting-cards be printed and circulated, to be filled up and returned to the Editor of the BRITISH MEDICAL JOURNAL, marked *confidential*. We should be happy to defray printing and postage ; and by sanctioning this you would confer one more great favour on the Medical Staff.

"MR." (Egypt) writes : Mr. Stanhope's reply in the House to Dr. Clark's question (JOURNAL, May 14th, Medico-Parliamentary) is open to grave objection. We are astounded that he does not suppose that we wish for titles such as colonel major, and captain. One would imagine that the recent correspondence in your pages and the representations of the Parliamentary Bills Committee would have removed any doubts he may have entertained on the subject. These titles are the only practicable designations by which can be known to all the relative positions of officers in and of the Medical Staff itself. As it is now, we are all called "Dr.," to which title the large majority of us have about as much claim as Mr. Stanhope himself.

Supposing it possible that this universal "doctor" dubbing could be avoided, we should then find in many cases that the Surgeon-General would be "Mr." Jones, and the last-joined Surgeon "Dr." Smith ; which of these would then be the senior socially, the Surgeon who is a "Doctor of Medicine," or the Surgeon-General who is merely a "professional gentleman ?" (*vide* Dod's *Peerage*).

Mr. Stanhope's fears that the bestowal of titular rank would dissociate us from our profession are groundless ; a medical man is invariably known as such by all with whom he comes in contact ; and were it possible that one of our number could ever attain the rank of "Honorary Field-Marshal Commanding-in-Chief," the superadded "Medical Staff" would set forth his honourable profession. Carry Mr. Stanhope's theory a step further, and it would almost appear incumbent on those baronets, knights, etc., in the profession, who may be graduates also, to resign their titles, and to avoid dissociation by return to their honourable designation of "Dr." Apart altogether from this side of the question, there is yet another cogent reason why we should have military titles in common with every officer who holds Her Majesty's commission, namely, that were the army like a scientific society, where each member takes rank according to his individual merits and attainments, our professional titles would "place" us, but the army is a body in which the genius of a Newton in the person of a subaltern must bow to the mediocrity of a ploughman if invested with the rank of a "major." Nothing other than military rank and military title will

protect the grey-haired military surgeon from the supercilious treatment to which he is subjected by officers who, unable justly to appreciate his services, have not the good taste to respect his years.

It is a significant fact that rank has been given to all those departments for which the "combatant" officer can qualify, but pertinaciously withheld from those departments for which the "State" cannot supply the necessary mental attainments.

BRIGADE-SURGEON writes: I have read with great satisfaction the numerous letters published in the valuable pages of the JOURNAL in favour of military rank for the officers of the Medical Staff.

I wish to state that almost the whole body of medical officers in the army are at this moment in favour of real rank being granted to the Department. The Medical Staff see the urgent necessity for the science of medicine to obtain a recognised standing in the army. And any rank that is granted must be a levelling up of the profession of medicine to that now occupied by the Royal Engineers, the Army Pay and Commissariat Departments. They have true military rank, and are designated accordingly.

It is now more than twenty-six years since I joined the service, and I feel that I am justified in freely expressing my opinion that the time has now come for the medical profession to be placed on a proper footing in the army. I have communicated with a large number of military surgeons of all grades, and I have not met one who is not in favour of the movement you are so faithfully supporting.

We of the Medical Staff, in tendering our claim for true rank, have no desire to sink the science of medicine, but, on the contrary, our desire is to elevate it and have its position recognised beyond the possibility of doubt.

VOLUNTEER MEDICAL OFFICERS.

SPES writes: The recent correspondence and remarks in your columns on the subject of instruction for volunteer medical officers has hitherto, I think, failed to mark the key stone of the difficulties now complained of; these, and many others, arise from the absurd system (one cannot call it an organisation) which the War Office preserves for this branch of the service.

This is my text. But before enlarging on it I would earnestly beg my volunteer brothers not to cast, in their disappointment, any reflection on the Director-General. His title, though expressive of omnipotence, by no means indicates his real position, he has his difficulties. Even in the development of our purely departmental corps, the Volunteer Medical Staff Corps, his opinion was over-ridden by conflicting interests in one point at least, which is not unlikely some day to produce unpleasant results. No man is more keenly anxious for the welfare and efficiency of the medical branches, and if his knowledge, experience, and wishes, were the only motive power, these services would have little to complain of, or the rest of the army either. Now to my text. A very jolly place is the Aldershot Depôt for volunteer medicos. This I know personally. But why should an acting surgeon of the volunteers attend this Aldershot School of Instruction, except it be for his own personal satisfaction? He does not need the instruction, for if his corps were called on service by regulation he ceases to exist (Volunteer Regulations, 1884, Paragraph 296). Of course there is always the chance of his promotion, but as the majority never reach the rank of Surgeon, it is perhaps wise of the authorities not to bother about training him until he becomes a service-liable officer.

The question as regards the volunteer regimental surgeon is more difficult; but let us look at some facts, I was first gazetted to a battalion in the middle of May, and in the first week of the following October I passed my Medical Officer Examination without trouble, getting up the work by quiet reading in spare time. Recently I have coached a class of volunteer medicos, we were all busy general practitioners, but our spare time during four weeks was sufficient. They all passed well; I do not want to boast—simply to mention the facts, and remind others that these things are so, and that the authorities know it. The authorities know further that the duties of regimental surgeons are comparatively limited, and that under the existing system and regulations these men can never occupy any other position but that of Regimental Deputy-Surgeon. It is the system which is at fault, not the Director-General. Let us all claim to be organised into a volunteer medical staff, a necessary and much needed complement of our volunteer army, and then the avenues of study at Aldershot and elsewhere will be thrown open to us to qualify, not only as regimental surgeons, but also for the higher duties of field-hospitals, and of the sanitary and other important offices which form part of a medical staff organisation. This need not interfere with the present system of recruiting medical officers of volunteers. Volunteer corps may go on enlisting them as before, and draw the annual grants earned by them, only they would all be brought under the control of the Director-General, one of the number being detailed as regimental surgeon on service, the remainder filling places in a scheme of organisation of field-hospitals, etc., evolution would accomplish more.

HOSPITAL AND DISPENSARY MANAGEMENT.

STAFFORDSHIRE COUNTY LUNATIC ASYLUM, BURNTWOOD.

THERE is not much of importance to notice in the report of this Asylum for 1886, the year having apparently been very uneventful. The total number of patients underwent slight diminution, 137 cases were admitted, an increase of 12 over the previous year, but the number of discharges and deaths showed a similar increase. Dr. Spence reports that "the type of the mental disorder in those admitted has not varied materially from that observed in recent years, save that the number of patients suffering from general paralysis of the insane does not appear to be quite so great as formerly, and that the tendency to suicide has been unusually frequent and very active in its character." The physical condition of the fresh cases was as usual very unsatisfactory, so much so that fifteen of them died during the year. The recovery-rate for the year was 36.5 per cent. of the admissions. The death-rate, calculated on the average number resident, was 13 per cent.; of the 73 deaths, nearly two-thirds were due to chronic forms of brain disease, pulmonary consumption, or epilepsy. The cause of death was ascertained by *post-mortem* examination in 48 cases. Of the 556 patients remaining at the close of 1886, a large proportion, namely 26 per cent., suffered from epilepsy; it is obvious that this must affect prejudicially the recovery rate, and must tend to increase the annual mortality. The cases of general paralysis at the end of the year were only 16 in number. The dietary includes beer, which is given to all but epileptics of the severest type. The report of the Visiting Commissioners in Lunacy is very satisfactory. The statistical tables include all those suggested by the Medico-Psychological Association; so far as we have tested them, the calculations are made with perfect accuracy, a compliment we wish we could oftener pay when reviewing asylum reports.

HEREFORD COUNTY AND CITY LUNATIC ASYLUM.

THERE are several interesting points of contrast between this and the Burntwood Asylum. As already noticed, epileptics are very numerous (26 per cent.) in the latter institution, while at Hereford the proportion is only about half as great, namely, 14 per cent. At Burntwood more than half the admissions during 1886 were cases of acute mania or acute melancholia; but at Hereford only one-fifth of the admissions were suffering from these forms of insanity. The average age of the inmates of Hereford Asylum is 49 years, as compared with 42 years at Burntwood; at the latter institution only about 14 per cent. of the patients are more than 60 years old, while at Hereford more than 27 per cent. are above this age. These facts help to explain why the recovery-rate at Hereford in 1886 was only 21.3 per cent. of the admissions; it might be expected that, with so large a proportion of senile inmates, the mortality would have been high; but it was, on the contrary, very low, being only 4.8 per cent. of the average population. Reference to Table V shows that there were no deaths from epilepsy or pulmonary consumption, which were amongst the most important causes of death at Burntwood.

In consequence of the low mortality and recovery-rate, so great an accumulation of cases has occurred that the asylum is overcrowded, and it has been necessary to enter into a contract with Abergavenny Asylum for the admission there of 25 patients. Dr. Chapman writes: "The appeal made to the unions at the beginning of the year to moderate the influx of 'workhouse cases' seems to me to have been a complete failure; the admissions are certainly 7 less than the average of the previous ten years, but the cases I miss from among them are not these 'workhouse cases,' but the more manageable of the recent and curable cases that ought certainly to have been sent to the asylum."

It is satisfactory to find that sanitary matters are receiving attention at this asylum. An entirely new main sewer has been constructed, which is disconnected from all the branch drains and from the ventilating pipes around the asylum buildings. It is rather surprising to find that in severe weather it is necessary to close all air-inlets in order to secure a temperature of 50° (!) in the day-rooms and corridors, the dormitories being much colder. The truth of Dr. Chapman's remark—"even this temperature is too low for the large feeble population we have, whilst the increasing proportion of those with dirty habits makes a want of ventilation a greater evil"—is incontestable. It is so rare to find anything humorous in an asylum report that we cannot refrain from quoting the following: "The relatives of a patient who has been bedridden from paralysis for some years, and whose decease might reasonably have been expected some time back, expressed their opinion that he was not being properly treated; had he been, he would have died long ago; but they were sure the doctors were keeping him alive to experiment upon him!" The preparation of the statistical tables leaves nothing to be desired—as we should expect from Dr. Chapman—save that, in Table V, two deaths are attributed to "disease of the brain," without the disease being more definitely specified.

CONSUMPTION HOSPITAL, BROMPTON.

THE forty-sixth annual report of the Committee of Management, read at the annual Court of Governors, shows that, of 1,911 in-patients under treatment in 1886, 1,341 had been discharged, many materially benefited, 252 had died, and 318 remained in the hospital on December 31st. The daily average number of beds occupied had been 297, and the average period of residence of each patient was 67 1-3 days. No fewer than 14,050 new out-patient cases had received advice and medicines, whilst the attendances had numbered 75,362.

TRICHINOSIS IN ITALY.—Professor Segge, of Camerino, has found trichinæ in the muscles of a person who had not left Italy for sixteen years.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

HEALTH OF CORK.

THE monthly report for the four weeks ending April 16th, presented to the Town Council at its last meeting, was as follows:

The births registered numbered 144, being equal to 23.36; and the deaths, including 40 which took place in the workhouse, were 164. The two deaths from infectious diseases were due to typhoid fever. The annual mortality gives a total ratio of 26.6 per 1,000, and, excluding the deaths which took place in the workhouse, which were unusually numerous, there was an urban death-rate of 19.79. The infant mortality was 1.6; and from infectious diseases 0.32. Both the birth- and death-rates were higher than they were for the corresponding month last year, the increased death-rate being chiefly due to the high mortality at the workhouse, 6 per cent.. of the entire deaths having taken place there.

THE OBLIGATIONS OF POOR-LAW MEDICAL OFFICERS.

M.B. writes: A. and B. are practitioners in a small town. A. holds one of the medical districts in the union, is also surgeon to the workhouse, and vaccination officer. B. holds the other district, but owing to the difficulty of getting suitable house accommodation has to reside fifty yards outside his particular district. A. does not do the work connected with the Poor-law appointments personally; this being all done by an assistant. To get command of the whole of the appointments, A. causes his assistant to live in B.'s district, and apply for his appointment.

The Local Government Board has sanctioned B.'s reappointment for one year, but requests the board of guardians to re-consider without prejudice the appointment of a resident medical man.

These are the facts of the case; the points I wish information on are the following:

1. Is not A. breaking the regulations of the Local Government Board by not doing the work of his appointments personally; and would not the Local Government Board, if informed on the subject, object to its being done by an assistant?

2. If B. is obliged to move into his district on account of the agitation fomented by A., would not B. be justified in asking the Local Government Board, in common fairness, to order A. to carry on the work in accordance with their regulations, namely, personally to do it?

*** The regulations of the Local Government Board are clear and positive on the points raised in B.'s query, which run: "That every district or workhouse medical officer shall perform the duties of his office personally, unless he is precluded from doing so by sickness or some other temporary cause, which must be reported to the guardians, and their sanction distinctly given." It is, therefore, obvious that A. is violating the law.

Under the circumstances mentioned in our correspondent's letter he would be perfectly justified in laying the facts before the Local Government Board, but it would be far more effective if he could get an outsider, who may be a guardian of the poor, clergyman, or justice of the peace, to make the complaint. The Local Government Board do not generally exhibit a disposition to take up the complaint of a medical man, whereas they might attend to that of an "outsider."

NOTIFICATION OF INFECTIOUS DISEASES.

M.O.H. asks where he can get the fullest information respecting the question of notification of infectious diseases? In which towns is "notification" now compulsory, by what process has this been brought about, and what are the details of its working?

*** Probably the best source of practical information on this subject is the *Sanitary and Medical Records Diary for 1887* (Smith, Elder and Co.).

HEALTH OF ENGLISH TOWNS.

In the twenty-eight large English towns, including London, dealt with by the Registrar General in his Weekly Return, which have an estimated aggregate population of 9,245,099 persons, 6,237 births and 3,340 deaths were registered during the week ending Saturday, June 11th. The annual rate of mortality, which had increased from 19.7 to 20.4 per 1,000 in the three preceding weeks, declined again during the week under notice to 19.5. The rates in the several towns, ranged in order from the lowest, were as follow: Leicester, 11.3; Portsmouth, 13.2; Bristol, 13.3; Derby, 13.9; Plymouth, 14.2; Nottingham, 15.1; Brighton, 15.9; Birmingham, 16.6; Bradford, 17.4; London, 17.5; Bolton, 17.6; Hull, 17.8; Halifax, 17.8; Leeds, 18.9; Sunderland, 19.7; Norwich, 20.2; Sheffield, 21.0; Wolverhampton, 21.3; Cardiff, 21.5; Preston, 21.9; Liverpool, 22.3; Huddersfield, 22.6; Blackburn, 23.2; Salford, 23.6; Newcastle-upon-Tyne, 24.6; Oldham, 27.6; Manchester, 28.9; and the highest rate during the week, 29.4 in Birkenhead. In the twenty-seven provincial towns the death-rate averaged 20.0 per 1,000, and exceeded by 2.5 the rate recorded in London, which, as before stated, was only 17.5 per 1,000. The 3,340 deaths registered in the twenty-eight towns during the week under notice included 227 which were referred to measles, 127 to whooping-cough, 55 to scarlet fever, 31 to "fever" (principally enteric), 29 to diarrhœa, 17 to diphtheria, and 3 to small-pox; in all, 489 deaths resulted from these principal zymotic diseases, against 522 and 521 in the two preceding weeks. The zymotic death-rate was equal to 2.8 per 1,000. In London the zymotic rate was 3.0, while it averaged 2.6 per 1,000 in the twenty-seven provincial towns, among which it ranged from 0.0 in Derby and in Leicester, to 4.6 in Manchester, 4.8 in Salford, 5.4 in Oldham, and 8.4 in Norwich. The fatal cases of measles, which had risen in the four preceding weeks from 235 to 252, declined again during the week under notice to 227, and caused the highest death-rates in Brighton, Birkenhead, Sheffield, Newcastle-upon-Tyne, Salford, Oldham, Manchester, and Norwich. The deaths referred to whooping-cough, which had been 143 in each of the two previous weeks, declined last week to 127, and showed the highest proportional fatality in Norwich. The 55 fatal cases of scarlet fever showed a slight further increase upon recent weekly numbers; this disease was proportionally most prevalent in Birkenhead and Blackburn. The deaths referred to different forms of fever, which had been 22 in each of the two preceding weeks, increased to 31 during the week under notice. The 29 fatal cases of diarrhœa showed a decline from those returned in recent weeks, and caused the highest death-rates in Salford and Preston. The deaths from diphtheria, which had steadily increased from 20 to 26 in the four preceding weeks, declined during the week under notice to 17, and included 9 in London, 3 in Oldham, and 2 in Bradford. Of the 3 fatal cases of small-pox recorded in the twenty-eight towns, 2 occurred in Sheffield, and 1 in Birmingham. The Metropolitan Asylum Hospitals contained only 1 small-pox patient on Saturday, June 11th, against 4 at the end of each of the two previous weeks, and no new cases were admitted during the week under notice. The death-rate from diseases of the respiratory organs in London during last week was equal to 3.2 per 1,000, and slightly exceeded the average. The causes of 70, or 2.1 per cent. of the 3,340 deaths registered during the week under notice in the twenty-eight towns were not certified, either by registered medical practitioners or by coroners.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, June 11th, 901 births and 546 deaths were registered in eight of the principal Scotch towns, having an estimated population of 1,299,000 persons. The annual rate of mortality, which had been 22.6 and 19.8 per 1,000 in the two preceding weeks, rose again to 21.9 during the week under notice, and exceeded by 3.0 per 1,000 the mean rate for the same period in the twenty-eight large English towns. Among these Scotch towns, the rate was equal to 18.7 in Leith, 19.2 in Greenock, 20.9 in Edinburgh, 21.7 in Dundee, 21.7 in Aberdeen, 22.5 in Glasgow, 22.7 in Perth, and 27.3 in Paisley. The 546 deaths registered during the week under notice in these towns included 76 which were referred to the principal zymotic diseases, against 82 and 50 in the two preceding weeks; of these 35 resulted from whooping-cough, 12 from diarrhœa, 9 from scarlet fever, 8 from measles, 8 from "fever," 4 from diphtheria, and not one from small-pox. These 76 deaths were equal to an annual rate of 3.0 per 1,000, which slightly exceeded the mean zymotic death-rate during the same period in the twenty-eight large English towns. The highest zymotic rates in the Scotch towns during the week under notice were recorded in Perth, Dundee, Glasgow, and Leith. The fatal cases of whooping-cough, which had been 43 and 32 in the two preceding weeks, rose again during the week under notice to 35, of which 11 occurred in Glasgow, 9 in Edinburgh, 6 in Dundee, 4 in Greenock, and 4 in Leith. The 12 deaths referred to diarrhœa exceeded the number in any recent week, and included 4 in Aberdeen and 3 in Glasgow. The fatal cases of scarlet fever, which had been 6 and 5 in the two previous weeks, rose again during the week under notice to 9, of which 6 were recorded in Glasgow, and 2 in Dundee. The 8 deaths from measles exceeded by 4 the number in the preceding week, and included 6 in Glasgow. The fatal cases of fever, which had declined from 6 to 2 in the three previous weeks, rose again during the week to 8, of which 5 occurred in Glasgow. The 4 deaths referred to diphtheria exceeded those returned in any recent week, and included 3 in Glasgow, and 1 in Edinburgh. The death rate from diseases of the respiratory organs in these Scotch towns during the week under notice was equal to 4.5 per 1,000, against 3.2 in London. The causes of 72, or 13.2 per cent., of the 546 deaths registered during the week in these Scotch towns were uncertified.

HEALTH OF IRISH TOWNS.

IN the week ending Saturday, June 11th, 418 deaths occurred in the sixteen principal town-districts of Ireland. The average annual death-rate represented by the deaths registered during the week was 25.1 per 1,000 of the population. The deaths registered in the several towns, alphabetically arranged, corresponded to the following annual rates per 1,000: Armagh, 25.8; Belfast, 21.8; Cork, 16.9; Drogheda, 38.1; Dublin, 30.0; Dundalk, 30.6; Galway, 20.2; Kilkenny, 21.1; Limerick, 33.7; Lisburn, 33.8; Londonderry, 21.4; Lurgan, 15.4; Newry, 21.1; Sligo, 0.0; Waterford, 16.2; Wexford, 12.8. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.7 per 1,000, the rates varying from 0.0 in ten of the districts to 4.6 in Waterford; the 7 deaths from all causes registered in that district comprising 2 from whooping-cough. Among the 94 deaths from all causes registered in Belfast are 1 from scarlatina, 6 from typhus 2 from whooping-cough, 1 from simple continued fever, and 2 from enteric fever; of the 25 deaths in Limerick 1 was caused by diphtheria; and the 9 deaths in Drogheda comprise 1 from scarlatina. In the Dublin Registration District, the births registered during the week amounted to 202, and the deaths to 211. The deaths represent an annual rate of mortality of 31.2 in every 1,000 of the estimated population; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 30.0 per 1,000. Thirty-one deaths from zymotic diseases were registered, being 7 over the number for the preceding week, and 2 below the average for the twenty-third week of the last ten years: they comprise 18 from measles, 3 from scarlet fever (scarlatina), 2 from whooping-cough, 1 from diphtheria, 1 from ill-defined fever, 2 from enteric fever, 2 from diarrhœa, etc. Thirty-seven deaths from diseases of the respiratory system were registered, being equal to the average for the corresponding week of the last ten years, and 17 over the number for the week ending June 4th; they comprise 19 from bronchitis, 5 from croup, and 6 from pneumonia or inflammation of the lungs. The deaths of 18 children under 5 years of age (including 10 infants under 1 year old) were ascribed to convulsions. Three deaths were caused by apoplexy, 2 by epilepsy, 8 by other diseases of the brain and nervous system (exclusive of convulsions), and 15 by diseases of the circulatory system. Phthisis or pulmonary consumption caused 41 deaths, mesenteric disease 2, and cancer 3. Three accidental deaths and 1 case of suicide were registered. In 25 instances the cause of death was "uncertified," there having been no medical attendant during the last illness.

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending Saturday, June 4th, that the annual death-rate recently averaged 27.9 per 1,000 in the three principal Indian cities; it was equal to 23.9 in Bombay,

29.8 in Calcutta, and 30.1 in Madras. Cholera caused 77 deaths in Calcutta; 21 deaths were referred to measles and 6 to small-pox in Bombay; while "fever" was fatally prevalent in each of these Indian cities. According to the most recently received weekly returns, the mean death-rate was equal to 26.8 per 1,000 in twenty-one of the largest European cities, which exceeded by 7.3 per 1,000 the mean rate during last week in the twenty-eight largest English towns. In St. Petersburg the rate of mortality was equal to 30.4 per 1,000, against 33.7 and 34.1 in the two preceding weeks; the 541 deaths included 4 from small-pox, 18 from measles, and 14 from typhus and typhoid fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged 25.7 per 1,000, and ranged from 20.6 in Christiania to 26.9 in Stockholm; diphtheria caused 6 deaths in Copenhagen and 7 in Christiania; measles 15 in Stockholm, whooping-cough 8 in Copenhagen; and 3 deaths were referred to scarlet fever in Christiania and 3 in Stockholm. In Paris the death-rate was equal to 25.9 per 1,000 (against 24.7 and 25.4 in the two preceding weeks), and exceeded by as much as 8.0 the rate recorded in the corresponding week in London; the deaths included 43 from diphtheria and croup, 13 from small-pox, and 16 from typhoid fever. The 190 deaths in Brussels gave a rate of 21.9 per 1,000, and included 11 fatal cases of measles and 2 of diphtheria. No returns from Geneva appear to have been received for some time past. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was equal to 22.2 per 1,000, the several rates being 16.9 in Rotterdam, 23.3 in Amsterdam, and 24.3 in the Hague; 6 deaths were referred to measles and 5 to diphtheria in Amsterdam, but no zymotic disease appears to have been fatally prevalent either in Rotterdam or the Hague. In nine German and Austrian cities the death-rate averaged 26.7 per 1,000, and ranged from 18.2 and 19.2 in Berlin and Dresden, to 33.8 and 42.9 in Breslau and Munich; small-pox caused 5 deaths in Prague, 4 in Buda-Pesth, and 1 in Trieste; 49 deaths were referred to measles in Munich and 40 in Vienna; and diphtheria and croup were fatally prevalent in most of the German and Austrian cities. In the three principal Italian cities the death-rate averaged 29.5 per 1,000, and ranged from 20.5 in Venice to 33.6 in Turin; 8 deaths were referred to small-pox in Rome and 5 in Turin; and 18 fatal cases of measles occurred in Rome, 8 in Turin, and 3 in Venice. In Cairo the death-rate was equal to 44.4, and in Alexandria 34.5 per 1,000; typhoid fever caused 20 deaths in Cairo and 3 in Alexandria; small-pox 4 in Alexandria; while diarrhœal diseases were fatally prevalent both in Cairo and in Alexandria. In four of the largest American cities the rate of mortality averaged 23.6 per 1,000, and ranged from 14.6 in Baltimore to 27.3 in New York. The 748 deaths in New York included 45 from diphtheria, 11 from scarlet fever, and 5 from small-pox; 30 deaths were referred to measles and 13 to typhoid fever in Philadelphia; and 13 fatal cases of diphtheria and 7 of scarlet fever occurred in Brooklyn.

UNIVERSITY INTELLIGENCE.

THE OXFORD MEDICAL SCHOOL.

SIR,—Will you allow me to correct an error in the account which you gave in the JOURNAL of June 11th, at p. 1311, of the organisation of medical teaching at Oxford? The error is contained in the statement that "the final touch was given last week by the appointment of Professor Dunstan as a teacher of materia medica." I wish to say that no such appointment has been made, and that my lectures during the present term have had for their subject "Organic Chemistry in its Relation to Physiology."—I am, etc.,

WYNDHAM R. DUNSTAN.

University Museum, Oxford, June 13th, 1887.

OBITUARY.

ARTHUR WALTER READ, L.R.C.P.EDIN.

DR. ARTHUR WALTER READ, of Coventry, who died at Paris on Tuesday, June 7th, at the early age of 41, was the second son of the late Mr. Charles Read, watch manufacturer, of Birmingham. He studied at Birmingham and St. Bartholomew's Hospital, and having obtained the titles of M.R.C.S.Eng. and L.S.A.Lond. in 1866 and L.R.C.P. Edin. and L.M. in 1868, he commenced practice at Coventry. He held several public appointments, among them senior honorary surgeon of the Coventry and Warwickshire Hospital, surgeon to the Second Volunteer Battalion Royal Warwickshire Regiment, surgeon to the Coventry Volunteer Fire Brigade, etc. He was also a popular lecturer to working men in connection with the Coventry Branch of the St. John Ambulance Association. The announcement of his death, which was somewhat sudden, was received with general deep regret.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS, EDINBURGH.—Passed Licence Examination in June:

J. J. Jackson, L.R.C.S.Ire.; A. J. Tomkins, M.R.C.S.Eng.; R. F. McArdle, L.R.C.S.Ire.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At a Special Examination for the Licence to practise Medicine of the College, held on Tuesday and Wednesday, May 24th and 25th, 1887, the undermentioned candidates were successful:

Oliver John Garrett, Manchester; Arthur Henry Wyborn, London.

At the ordinary monthly Examinations for the Licences of the College held on Monday, June 6th, 1887, and following days, the undermentioned candidates were successful:

For the Licences to Practise Medicine and Midwifery.—P. J. Barry, Ferenure, Dublin; E. J. Brady, Dublin; J. S. Crone, London; J. A. Foreman, Antigua, West Indies; H. Gell, Didsbury, Manchester; A. W. Gray, Birmingham; A. H. G. Johnston, Ambleside, Westmorland; N. Nelson, Carndonough, co. Donegal; R. D. Pennefather, Rathcormac, co. Cork; W. H. Torbock, Fowey, Cornwall; E. H. Wheeler, Booterstown, co. Dublin.

For the Licence to Practise Medicine only.—S. M. Cox, Sandymount, Dublin; E. T. Cummings, Lurganboy, co. Leitrim; A. E. Dyas, Kells, co. Meath; R. L. Fitzgerald, Rathmines, Dublin; H. L. Hudson, Sheffield; E. J. Jacob, Maryborough, Queen's co.; J. C. Lavertine, Castleconnell, co. Limerick; P. J. Moloney, Dungarvan, co. Waterford; J. B. Moore, Cavan; F. J. McArdle, Preston; H. E. Rawlings, Swansea; E. T. B. Russell, Dublin; F. J. S. Corneville, Hassocks, Sussex; J. Stewart, Enniskillen, co. Fermanagh; E. Teichelmann, Birmingham; P. J. Ward, Ballinasloe, co. Galway.

For the Licence to Practise Midwifery only.—T. H. H. S. Torney, Dublin.

The undermentioned candidates passed the Examination for the Licence to practice as a Midwife and Nursetender.

Jane Rebecca Brandon, Rotunda Lying-in-Hospital; Elizabeth Minier, Rotunda Lying-in-Hospital.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen, having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received Certificates entitling them to practise as Licentiates of the Society, on June 9th, 1887:

Bence, Frederic Herbert, 131, Lancaster Road, Notting Hill.
Bloomer, Frederick William, 54, Russell Street, Wednesbury.
Carter, John George, 317, Brixton Road, S.W.
Clifford, Thomas, 26, Thornhill Terrace, Sunderland.
Cockill, William Baron, 23, Trittiville Gardens, Uxbridge Road.
Dodd, George Herbert, Rush Court, Wallingford.
Raby, Leonard, 42, Southwold Road, Clapton.
Richards, George Frederick, The Firs, Beckenham Road, Penge.
Sandoe, John Worden, Bodmin, Cornwall.
Wakefield, Robert Clark, 74, Ladbroke Grove Road, Notting Hill.

MEDICAL VACANCIES.

The following vacancies are announced.

BIGGLESWADE DISTRICT.—Medical Officer. Salary, £120 per annum and fees. Applications by June 21st to T. J. Hooper, Esq.

BIGGLESWADE UNION CONTAGIOUS DISEASES HOSPITAL.—Medical Officer. Salary, £40 per annum. Applications by June 21st to T. J. Hooper, Esq.

BIGGLESWADE UNION, WORKHOUSE, AND INFIRMARY.—Medical Officer. Salary, £40 per annum. Applications by June 21st to T. J. Hooper, Esq.

BIRMINGHAM GENERAL HOSPITAL.—Assistant House-Surgeon. Applications by July 2nd to Henry Fox, Esq., R.N.

CLINICAL HOSPITAL FOR WOMEN AND CHILDREN, Park Place, Manchester.—House Surgeon. Salary, £80 per annum. Application to Mr. Hubert Teague, Secretary, 38, Barton Arcade, Manchester.

DURHAM COUNTY HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board, etc. Applications by June 18th to the Honorary Secretary.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Resident Clinical Assistant. Applications by June 23rd to the Secretary.

H.M. PRISONS IN SCOTLAND.—Resident Surgeon. Salary, £200 per annum, with residence or allowance in lieu thereof. Applications by June 18th to the Secretary, Prison Commissioners for Scotland, 130, George Street, Edinburgh.

HOSPITAL FOR CONSUMPTION, Brompton, S.W.—Resident Clinical Assistant. Applications by June 18th to the Secretary.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, W.C.—Assistant-Physician. Applications by June 29th to the Secretary.

HOSPITAL FOR WOMEN, Soho Square, W.—House-Physician. Salary, £75 per annum, with board, etc. Applications by June 22nd to the Secretary.

LEEDS UNION, TOWNSHIP OF HEADINGLEY-CUM-BURLEY.—Medical Officer. Salary, £55 per annum, and fees. Applications by June 20th to John King, Esq.

LIVERPOOL DISPENSARIES.—Assistant-Surgeon. Salary, £80 per annum, with board, etc. Applications by June 27th to the Secretary.

MANCHESTER CLINICAL HOSPITAL FOR WOMEN AND CHILDREN.—House-Surgeon. Salary, £80 per annum, with board, etc. Applications by June 30th, to H. Teague, Esq., 38, Barton Arcade, Manchester.

MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT.—Honorary Assistant Physician. Applications by June 30th to the Secretary.

MASON SCIENCE COLLEGE, Birmingham.—Professor of Physiology. Applications by June 30th to G. H. Morley, Esq.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street, W.—Anæsthetist. Applications by June 24th to the Secretary.

NATIONAL DENTAL HOSPITAL, 149, Great Portland Street, W.—Lecturer on Operative Dental Surgery. Applications by June 24th to the Secretary.

PADDINGTON PROVIDENT DISPENSARY.—Medical Officer. Applications to the Honorary Secretary.

PARISH OF ST. MARY, Newington.—Medical Officer of Health. Applications to the Vestry Clerk, Vestry Hall, Walworth, S.E.

QUEEN'S HOSPITAL, Birmingham.—Honorary Surgeon. Applications by June 18th to the Secretary.

ST. LUKE'S HOSPITAL, E.C.—Resident Clinical-Assistant. Application by June 24th to the Secretary.

UNIVERSITY COLLEGE, LONDON.—Professor of Medicine. Applications by June 20th to the Secretary.

WESTMINSTER GENERAL DISPENSARY, Gerrard Street, Soho.—Honorary Surgeon. Applications by June 23rd to the Secretary.

WESTMINSTER HOSPITAL, S.W.—Assistant Surgeon. Applications by July 12th to the Secretary.

WESTMINSTER HOSPITAL, S.W.—Surgical Registrar. Salary, £40 per annum. Applications by June 28th to the Secretary.

MEDICAL APPOINTMENTS.

ACHESON, Howard W., L.R.C.S.I., L.M., L.K.Q.C.P.I., appointed Medical Officer to the Killenagh and Wells Dispensary, Gorey Union, *vice* Henry Borthistle, L.R.C.S.I., L.R.C.S.Edin., deceased.

BEATLEY, William Crump, M.D.Durh., M.R.C.S.Eng., appointed Honorary Physician to the Newcastle-upon-Tyne Dispensary, *vice* R. Young, M.A., M.D., resigned.

CAVE, Edward, M.D., appointed House-Physician to the Newcastle-on-Tyne Infirmary, *vice* John Waldy, M.R.C.S., L.R.C.P., resigned.

CHAFFEY, W. C., M.B.Lond., L.R.C.P.Lond., M.R.C.S.Eng., appointed Assistant Physician to the Royal Alexandra Hospital for Sick Children, Brighton.

FRAZER, William, B.A., M.D., M.K.Q.C.P., appointed Honorary Physician to the National Sanatorium for Consumption and Diseases of the Chest, Bournemouth, *vice* J. Roberts Thomson, M.D., F.R.C.P., resigned.

GARROD, Archibald H., M.B.Oxon., M.R.C.P., appointed Casualty Physician to St. Bartholomew's Hospital.

GOWANS, W. Bruce, M.B., C.M.Edin., appointed District and Dispensary Surgeon to the Perth Infirmary, *vice* Leigh Hunt, M.B., C.M., resigned.

HASWELL, J. F., M.B., C.M.Edin., appointed House-Physician to the Liverpool Northern Hospital, *vice* George Thomson, M.B., C.M.Edin., resigned.

HEGARTY, A., M.D., appointed Medical Officer to the Draperstown Dispensary of Magharafelt Union, *vice* S. R. Morewood, M.B., resigned.

HUNT, Leigh, M.B., C.M., appointed Visiting Medical Officer to the Perth Infirmary.

JONES, Lewis, M.D.Cantab, M.R.C.P., appointed Casualty Physician to St. Bartholomew's Hospital.

KINGSFORD, Edward, F.R.C.S., L.S.A., appointed District Medical Officer to the Bedfont and Sunbury Districts of the Staines Union, *vice* L. F. Lundy, M.R.C.S., L.S.A., resigned.

MELSON, George Hyde, M.B.Lond., M.R.C.S.Eng., and L.S.A, House-Surgeon to the Queen's Hospital, Birmingham, appointed House Physician, *vice* William Richards, M.B.Edin., resigned.

MOORE, Norman, M.D.Cantab., F.R.C.P., appointed Lecturer on Pathological Anatomy to St. Bartholomew's Hospital.

ORMEROD, Edward Arderne, M.D.Oxon, F.R.C.P., appointed Demonstrator of Morbid Anatomy to St. Bartholomew's Hospital.

PALIN, H. Venables, M.B., C.M.Edin., etc., appointed Medical Officer No. 1 District Wrexham Union, *vice* John Dickenson, deceased.

PERMEWAN, William, M.B., M.R.C.S., L.S.A., appointed Assistant House-Surgeon to the Liverpool Northern Hospital, *vice* J. F. Haswell, M.B., C.M.Edin., resigned.

RICHARDS, William, M.B. and C.M.Edin., appointed Resident Surgeon to the Birmingham General Dispensary, *vice* T. E. Gordon, M.D., M.R.C.S., resigned.

SHERRINGTON, Charles Scott, M.A., M.B.Cantab, M.R.C.S., L.R.C.P., appointed Professor of Systematic Physiology to St. Thomas's Hospital, Medical School.

THOMSON, J. Roberts, M.D., F.R.C.P., appointed Consulting Physician to the National Sanatorium for Consumption and Diseases of the Chest, Bournemouth.

TURNER, A., M.B. and C.M.Edin., appointed Assistant Medical Officer to the Dorset County Asyium.

WHITE, Ernest W., M.B.Lond., M.R.C.P.Lond., M.R.C.S.Eng., L.S.A.Lond., A.K.C., appointed Resident Medical Superintendent of the City of London Asylum, *vice* Octavius Jepson, M.D., resigned.

WILLIAMS, J. T. C., L.R.C.P., M.R.C.S., L.S.A.Lond., appointed House-Surgeon to the Carmarthen Infirmary, *vice* W. L. Edwards, L.R.C.P., M.R.C.S., resigned.

WILLOUGHBY, A. H., M.R.C.S., L.R.C.P., appointed District Medical Officer to the Shepperton District of the Staines Union, *vice* Dr. Warwick, resigned.

NATIONAL HEALTH SOCIEY.—The fourteenth annual report of the National Health Society gives ample indications of the vitality of this very useful association, and of the admirable work performed under its auspices in spreading where most needed knowledge of the rudiments of sanitary science and of the laws of health. Throughout 1886 lectures on the various branches of these subjects were delivered in town-halls, drawing-rooms, workmen's clubs, mother's meetings, and institutes of various kinds by such qualified lecturers as Miss Barnett, Dr. Schofield, Mrs. Defries, Dr. W. H. Gell, Mr. Shirley Murphy, Mr. Frederick Treves, etc., and were uniformly successful. The Society continue to arrange for special series of drawing-room lectures in London or the suburbs on the Laws of Health, House Sanitation, Care of the Sick, Prevention of Infectious Disease, Household Management, Training of Children, etc., and also for short courses of simple practical lectures on the same subjects adapted for the instruction of district visitors, mission women, nurses, cottage mothers, young people of both sexes, and others. One very sensible suggestion urged by the Society upon the London School Board secured the substitution in the Board's code of the words "laws of health" for "physiology," and it is satisfactory to note that at the last examination of girls in the laws of health and domestic economy for the Society's prizes, 755 girls from 64 schools presented themselves, being an increase of 54 per cent. of children and 33 per cent. of schools on the numbers at the preceding examination.

BEQUESTS AND DONATIONS.—The Surgical Aid society has received £1,210 10s., under the will of Miss Turner.—Mr. Samuel Fox, of Deepcar, Yorkshire, and Burford, Oxfordshire, bequeathed £500 to the Sheffield General Infirmary, and £250 to the Sheffield Public Hospital.—Mr. James Orr, of Abbotsford Place, Glasgow, bequeathed £300 to the Glasgow Royal Infirmary, and £300 to the Glasgow Western Infirmary.—The City of Dublin Hospital has received £250, under the will of Mr. William Bannon, and £100 under that of Mr. Richard Kemmis.—Mrs. V. Edwards has given £250, additional, to the Hospital for Consumption and Diseases of the Chest, in commemoration of the Queen's Jubilee.—The Royal Hospital for Diseases of the Chest, City Road, has received £24 from a collection by the Total Abstinence Sons of the Phœnix (making a total of £274), and fifty guineas from the Mercers Company.

MEDICAL MAGISTRATE.—The Lord Chancellor has placed the name of Mr. J. Lloyd-Roberts, M.D., upon the Commission of the Peace for the Borough of Denbigh. Mr. Lloyd-Roberts is medical officer of health to the St. Asaph rural and various other sanitary authorities. For many years he was Secretary of the North Wales Branch of the British Medical Association, and, on retiring from that post, was, in 1885-86, elected President of the Branch.

INEBRIATE WOMEN.—At a conference recently held at Liverpool under the auspices of the Reformatory and Refuge Union, Dr. Norman Kerr read a paper on "The Treatment of Female Inebriates," in which it was pointed out that while drunkenness was decreasing among men, it was increasing among women. He concluded by moving a resolution in favour of a permanent legislative measure for the compulsory protection of the diseased inebriate against herself.

SEVEN children were taken to the Northern Hospital, Liverpool, a few days since, suffering from the poisonous effects of eating palm-oil nuts picked up in the street.

ADDRESS TO THE QUEEN.—The Council of the Harveian Society are preparing a loyal address from the Society for presentation to Her Majesty on the completion of the fiftieth year of her reign.

A SEVERE earthquake occurred at Vernoje, Turkestan, on June 9th. Over one hundred persons perished, the majority being children; many others received wounds, and the hospital and other buildings suffered severely.

SANITARY INSPECTORS.—At the examinations held by the Sanitary Institute of Great Britain at the Parkes Museum this month, four persons passed the examination for local surveyors, and forty-four that for inspector of nuisances.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY.—BRITISH GYNÆCOLOGICAL SOCIETY, 8.30 P.M.—Specimens will be shown by Dr. Francis Imlach, Dr. Fancourt Barnes, Mr. Lawson Tait and others. Dr. A. V. Johnstone (Danville, Kentucky): The Endometrium in the Cycle of the Rut. Council, 8 P.M.

THURSDAY. OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM, 8 P.M.—Mr. Lockwood: Specimens illustrating the Anatomy of the Capsule of Tenon. Collection of evidence regarding Toxic Amblyopia. Communications will be made by Messrs. Nettleship, Mellardy, Edgar Browne, Hill Griffith, Foster, Juler, Shears, Morton, Gunn, and others.

FRIDAY.—WEST LONDON MEDICO-CHIRURGICAL SOCIETY, 8.30 P.M.—Annual Meeting. Election of Officers and Council. President's Retiring Address.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which should be forwarded in stamps with the announcement.

BIRTHS.

GATLEY.—May 13th, at Ayton, Berwickshire, the wife of H. Ralph Gatley, L.R.C.S. and P.Ed., of a daughter.

SCOUGAL.—On June 13th, at Brooklands, Gledholt Road, Huddersfield, the wife of E. F. Scougal, M.A., M.B., of a son.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin, M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2, o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p., Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 1.45; o.p., M. Th., 1.30: Eye, Tu. F. S., 9; Ear, M. Th., 3; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electrician, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30; Operations, Tu., 1.30; Ophthalmic Operations, F., 9.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, M., 9; Skin, Th., 1; Dental, W.S., 9.15.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY.....10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY..10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY.....10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's—1.30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M: North-west London; Chelsea Hospital for Women.

FRIDAY.....9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY.....9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

TO CORRESPONDENTS.

OUR correspondents are reminded that prolixity is a great bar to publication, and, with the constant pressure upon every department of the JOURNAL, brevity of style and conciseness of statement greatly facilitate early insertion. We are compelled to return and hold over a great number of communications, chiefly by reason of their unnecessary length.

QUERIES.

PORT WINE STAIN.

M.R.C.S. writes: A little girl, aged 5, has a large red stain occupying one side of her face, disappearing on pressure, increasing or diminishing with causes affecting capillary circulation. What had best be done? Are caustics or scarifications satisfactory?

INSTRUCTION IN MIDWIFERY.

A MEMBER asks whether there are any schools in England corresponding to the Rotunda School of Midwifery in Dublin, or if there is any place in England where a large amount of practice in midwifery may be obtained within a limited space of time?

ROYAL MEDICAL BENEVOLENT COLLEGE, EPSOM.

A ROMAN CATHOLIC PARENT writes: May I ask the Secretary of the Royal Medical College, Epsom, through the medium of the JOURNAL, what, if any, provision is made in the College scheme for the sons of Roman Catholic parents? I see no mention of any provision being made as to religious education or training. Is the College simply for one section of the profession, that is, for the sons of medical men only whose fortune it is to be born Establishmentarians? I think this is an important question at the present day, when a large percentage of the medical practitioners of this country are either Roman Catholics or Protestant Dissenters of some form or another.

ANSWERS.

JOSEPH FIRTH.—The questions should be addressed to your own medical adviser, or to any competent physician.

WM. JAS. SPENCE (Syston) writes: I should recommend "Cystitis," before introducing the catheter, to smear it with an ointment composed of cucaine gr. vi, vaseline 3ss. I have found this procedure most effective in a similar case.

RUSTICUS.—It will be far better that it should be subjected to strict scientific test by an expert who knows exactly how to act in such a matter, and you can institute comparative tests.

INCOME TAX.

M.D. asks if country practitioners having a surgery and dispensing their own drugs are entitled to the abatement of the income tax to the amount of two-thirds of the rent of the dwelling-house as used for business premises. He claimed this abatement last year and was refused, but intends to claim it again this year.

*** The Income Tax Repayment Agency (16, Artesian Road, W.), to whom we have submitted the question, replies that a certain proportion of the rent should certainly be allowed. Unfortunately, what that proportion should be is left to the discretion of the Commissioners, the words of the Act being "not exceeding two third parts of the rent *bonâ fide* paid for such dwelling-house, with the appurtenances, as the said respective Commissioners shall on due consideration allow."

The Agency adds that it strongly advises all persons who are dissatisfied with the decision of the General Commissioners, to claim to be assessed the following year by the Special Commissioners, from whom they are much more likely to have an equitable interpretation of the Act. For full directions see Chapman's *Income Tax*, now in its third edition.

LA PAZ.—We have submitted your letter, in which you say you were not allowed by the General Commissioners to put as a deduction salary paid to a *locum tenens*, to the Income Tax Repayment Agency, 16, Artesian Road, W., and have received the following reply: "There is no doubt that 'La Paz' should have deducted the income tax from the salary of the *locum tenens* giving him a certificate of deduction. With this the latter could claim back the tax if entitled to it; thus there would have been no injustice done to any one, for 'La Paz' would have recouped himself the extra tax paid by keeping the amount deducted from the salary. Another more interesting question is the following: Suppose a medical man's total income is £500, and that he pays just over £100 to *locum tenens* or assistants, deducting from that sum the tax which he keeps, is he entitled to claim abatement by reason of his income being under £400? We most emphatically say he is. In his claim he should put down his full income, and in space No. 3, 'Particulars of Deductions from Income,' he should put down salary paid and tax deducted. Thus, again, there would be no injustice or hardship. But it is quite possible that the General Commissioners, taking the law from the mouth of the surveyor, might not allow the deduction, and it might be necessary to ask for a case for a judicial decision. We may mention the case of Stevens *v.* Bishop, to show what can be done. Within the last fortnight a judgment has been given against the Inland Revenue, who for upwards of forty years have been unjustly and illegally charging tithe owners on the gross, instead of the net, amount of their tithes. For upwards of forty years the authorities at Somerset House have maintained, *more* the surveyor mentioned by 'La Paz,' that 'such was the law.' Now it has been decided that 'such was not the law.' In respect to assessments, we would again recommend all persons who do not claim exemption to claim to be assessed by the Special Commissioners. They are officials, not amateurs, as the General Commissioners are.

A PUZZLED PROVINCIAL.—An M.B., we suppose, should call himself so, and nothing else. But a great many very respectable and some eminent M.B.'s call themselves "Doctor"; and it is a courtesy title which is, we believe, commonly conceded to those who wish it. Some object to it, and prefer to be designated as Mr. ——, M.B., which is their proper style.

International Medical Congress.

SUBSCRIBER.—Notices of the International Medical Congress have appeared from time to time in the JOURNAL (see Journals for September 4th, 1886, page 471; November 20th, 1886, page 990; February 26th, 1887, page 478; March 12th, 1887, page 585; April 23rd, 1887, page 900, etc.)

Any further information can be obtained by writing to the Secretary-General, Dr. J. B. Hamilton, Supervising Surgeon-General of the United States Marine Hospital Service, Washington.

Book on Mode of Commencing Practice.

The Young Doctor's Future, price 4s., is published by Smith, Elder and Co., 15, Waterloo Place, S.W.

Annuities.

MR. EDWIN H. BAVERSTOCK (36, Queen Square, W.C.) writes: "Inquirer," by going to the Government Annuity Office, 19, Old Jewry, known as the National Debt Office, can ascertain all particulars. £200 a year on female life of 42 would roughly cost £3,700; the exact cost, however, is regulated by the price of stock on the day of purchase. A certificate of birth from the General Register Office, Somerset House, would be needed. The first half year will become payable on October 11th ensuing, provided the annuity is bought before July 5th. Annuities can also be purchased through the Post Office, but the cost is much greater. If "Inquirer" will write to me I shall be happy to answer any question.

WE are informed that the Prudential Assurance Company, Limited, grant immediate annuities, and that an immediate annuity of £201 6s. 8d. would cost £3,200 on a lady, aged 42.

NOTES, LETTERS, ETC.

New Theory as regards the Origin of Various Septic Diseases.

DR. J. P. ATKINSON (Surbiton) writes: We have hitherto been led to believe that such diseases as scarlatina, enteric fever, cholera, and diphtheria have their origin in the absorption of decomposing animal matter, taken into the system either through the air or food, and hence they have been termed filth-diseases. The facts bearing upon this view regarding their origin have been made very clear to every one, and the result has been that we have been able by strict sanitary arrangements not only to lessen the number of persons attacked, but also the type of disease. The theory now started is that, at any rate, scarlatina and diphtheria can be and are conveyed directly from the cow through the milk; and, if this be correct, it follows either that the milk which is secreted in the mammary glands is primarily at fault, or else, as in the case where sores exist on the udders, as in cow-pock, etc., it is simply the vehicle for conveyance of the poison.

Now, as regards milk being secreted in a diseased state, we have very little proof, except in the case of such constitutional diseases as struma, syphilis, etc., and here I believe there is simply a deficiency in certain phosphatic salts, etc. Dr. Klein, in his report on the Hendon cows, says:—"The milk pure does not contain the organism," but one is bound to admit that, where sores exist on the udder, the milk may, as Dr. Klein suggests, readily become infected, and thus convey disease to those who drink it, though we certainly have never heard of cow-pock being so spread.

A question naturally arises in one's mind as to whether animals suffer from exactly the same diseases as human beings, but it has not, I believe, as yet been answered satisfactorily. For instance, some assert that cholera can be produced artificially in animals, but Koch says he has never heard of nor has been able to produce it in animals. Again, a reliable veterinary authority asserts that he has never seen any well authenticated reports of cases of diphtheria in cattle, whereas Dr. Renshaw, of Manchester, says that he has been able to reproduce it from the human subject.

Again, the same veterinary authority above quoted states that it is very doubtful whether true scarlet fever ever exists amongst cattle, whereas Dr. Klein has been able to show that a disease, at any rate resembling scarlatina, can be brought about in calves by inoculation from cows which are said to have produced scarlatina in the human subject; but the question after all is, are these identical diseases with those affecting man? There do not, as far as I am able to learn, appear to be epidemics of these diseases amongst the cows and calves in the same dairy, nor yet particularly amongst the families of the milkmen.

Again, there is no proof of scarlatina being conveyed from the milkmen to the cows, which there surely ought to be if both are liable to the same disease, and it may with certainty be said that diphtheria and scarlatina are not as common amongst cattle as human beings. I would suggest in all cases where there is an idea about that cows are the cause of any prevailing epidemic, the temperature of the animals should be regularly taken each day, for no septic disease of any serious import can arise where this is proved to be normal. And one thing, I think, is certain; we have no right to ruin any tradesman who is using every precaution to prevent the carriage of infection through the goods he supplies by publicly proclaiming their sale, unless we are able clearly to prove there is some cause at work of which the purveyor himself is entirely ignorant. Even in these cases we ought to urge upon the constituted authorities the necessity of granting some sort of compensation for the loss of business.

Strophanthus and Acute Heart Failure.

CAMPBELL BOYD, L.K.Q.C.P.I., L.R.C.S.I., writes: As the majority of literature up to the present time regarding this interesting drug has been relative to its action in chronic heart lesions, I send you the following notes which I trust will prove interesting to your readers, as they are taken from a case of acute heart failure from suppuration and exhaustion. The patient, a male, aged about 50, suffered from an extensive cervical carbuncle encroaching on the scalp. It was opened to relieve the urgent head symptoms and the tension of the scalp; suppuration was very profuse but of an unhealthy character, and so thick and flaky that tubes were useless. Twelve days afterwards a second abscess was opened. The patient was now getting low, although up to this time he was taking a large quantity of liquid nourishment, with a liberal supply of stimulants, and a mixture containing quinine, strychnine, and digitalis, given alternately with tincture of iron. Notwithstanding all this, the inflammation continued to spread down the muscles of the neck. The temperature ranged from 100° to 104° F.; there were profuse perspirations, the pulse became rapid, weak and shallow, food was being refused; the patient was getting listless, with foul breath, face blue and dusk, particularly the ears and lips, eyes discoloured and extremities cold, lungs dull at the bases from passive congestion, in fact a general septic condition. Matters were now assuming a serious aspect, and everything depended on my being able to sustain the cardiac action; but the customary remedies failing, I determined to give strophanthus a trial. I now administered six drops of the tincture, with the following result. He gradually fell off to sleep, although he had not had any for 36 hours, slept over two hours, during which time his eyelids were half open, and his eyes were observed constantly rolling, and the limbs twitching from time to time. He awoke greatly refreshed, which was a fortunate result, for at my evening visit I found him much quieter, and his pulse improved both in power and frequency. The dose was repeated every six hours, and always with the same result—a quiet sleep; and this was the patient's greatest comfort, as he says it had a lulling effect and he could always calculate on having one-and-a-half to two hours' sleep. I may here state, that with the object of improving the pus, one-tenth of a grain of calcium sulphide and tinc. ferri were regularly given between the drops and with good results.

Three days from beginning the strophanthus I administered chloroform, when another large abscess was opened, and again in seven days the fourth was opened and tubes inserted, which made a good drain, as the pus was now healthy. From this date the patient made rapid progress, the temperature became normal, the pulse improving from day to day, also the appetite. Although he was so exhausted on the last day of operating as to be unable to turn himself in bed, within one week he was sitting up, and before a second week he was at the seaside.

On thinking over this case, I would suggest the following points as worthy of note. First, that this is a conclusive test case, seems to me to be fairly proved; and it will tend to strengthen the reputation of strophanthus as a cardiac tonic, by diminishing in number and increasing in power the ventricular contractions. Secondly, its hypnotic action; this, so far as I have read, has not been recorded. In this case it was indisputable, but I do not think that it is a direct sedative on the nerve system, but acts indirectly by improving the cerebral circulation and increasing the oxygenation in the lungs. Thirdly, complete absence of sickness or any tendency thereto; which cannot be said of digitalis. Fourth, its antipyretic action; from the first day of administering it the temperature began to gradually fall to normal; this apyrexial action is casually mentioned by Professor Fraser in his excellent note on this drug in the JOURNAL of August 8th, 1885, but he could not, at that stage of his investigations, speak with any degree of precision. Fifthly, no twitching of the muscles was observed after the first dose.

The preparation used was supplied by Messrs. Burroughs, Wellcome and Co.

Relative Proportion of Medical Men to the Population of the United Kingdom and of Australia.

MEMBER writes: Kindly permit me to make a few remarks about Australia with reference to the table of "The Relative Proportion of Medical Men, etc," which appeared in the JOURNAL of January 1st. You say "the only set-off to this is that there is far less pauperism and fewer hospitals." Undoubtedly the former is correct but not the latter, for I believe the hospitals to be quite as numerous in proportion to population as at home. It must not be supposed, as too frequently is the case, that there is no poverty, for taking up yesterday's newspaper of an up-country town of about 37,000, I observe that there were during the past week no less than 641 recipients of out-door relief at the Benevolent Asylum, and 245 out-patients at the hospital. As a "set-off" against Australian practice, I may mention two potent drawbacks—first, that there is far less sickness than at home; and, secondly, the clubs, having no wages clause, are open to all, hence the tradespeople, publicans, farmers all take refuge in them. For 3d. or 4d. a week attendance has to be given on every member of a family up to the age of 20 or 21 within a radius of three miles of the society's meeting hall, and this work cannot be deputed to an assistant, qualified or not, for no club would submit to it.

Again, practice in the colonies is more of a consulting character and not of a visiting nature, as at home. In addition to the innumerable clubs, there is in most large towns a medical benefit society for those who do not care to belong to a club; and, as if this were not sufficient, there is probably a blue ribbon temperance society which entitles the purchaser of a pound of tea to medical attendance and medicine gratis for a week. I feel sure that information of this nature will prove serviceable to many of your readers, and may be the means of preventing some from making a false move.

Poisoning by Paraffin.

A JUNIOR PRACTITIONER writes: The following case might prove of some interest to your readers.

M. B., a girl, aged 2 years, was brought to my surgery, and it was stated that she had been drinking out of a can of paraffin some few minutes before. Her clothes and her breath had a strong odour of paraffin, but at the time she showed no constitutional symptoms. I injected one twenty-fifth of a grain of apomorphine hypodermically, which in five minutes produced copious emesis, the retching lasting about a quarter of an hour. Some of the vomit, which smelt strongly of paraffin, had a "coffee ground" appearance. A mixture containing carbonate of magnesia was given, and she was sent home. Within half an hour I was sent for to see the child. I found her in a state of collapse; the skin was pallid and cold, pupils dilated, pulse very weak and small, and she was with difficulty aroused. The mother informed me that the child had been vomiting slightly since her return home, and had brought up some red blood. The breath still had a strong odour of paraffin. I injected mxx of sp. ætheris hypodermically, and ordered milk and brandy frequently, with a sinapism to the præcordium. There appeared to be some spasm of the pharynx, as much of the milk given flowed out by the corners of the mouth. The next day when I called the child was well, and running about. It is probable that not more than a mouthful or so of the paraffin was swallowed, but the exact quantity could not be determined. Was the collapse a symptom of the apomorphine injected, or of the paraffin swallowed?

Animal Vaccine.

M. H. C. GLANVILLE (Paris) writes: Two summers ago, when in Switzerland, I had occasion to visit the Swiss Vaccine Institute, Geneva, and the results obtained by the vaccine from this institution are most favourable, no doubt due to an excellent installation and experience of M. Haccius, the director, who has scientifically and practically studied the question.

The stable, which is capable of lodging five calves, has the floor cemented, and is constantly kept fresh by ventilation, and disinfected with carbolic acid. The feeding is arranged in a manner so as to avoid irritation to the incisions, which are often as many as a hundred. The nourishment is exclusively formed of

milk and eggs. The animal to be inoculated is fixed on an ingeniously constructed table, and is then shaved from the umbilical region to the posterior part of the abdomen. The inoculations are made with a lancet, the incisions being about one centimètre in length. All the instruments used are soaked in carbolic acid, and washed in boiling water. If any fever or diarrhœa follows, the vaccine is not used. The choice of calves destined for inoculation is made with the greatest care and precaution; only those in perfect health, and weighing from 200 to 400 pounds, are chosen. The vaccine is destroyed if the animal from which it has been taken is found to be unhealthy. No vaccine, I was assured, left the institution unless the animal had been killed and its state of perfect health established by a microscopical examination of the lungs, etc. Of 3,556 vaccinations, 3,496 (98.3 per cent.) were successful, and 60 (1.7 per cent.) unsuccessful.

Salicylate of Sodium in Acute Tonsillitis.

Mr. Lennox Browne writes: Kindly allow me to register the fact in your columns that, as the result of investigations extending over some years, I drew attention to the close connection between tonsillitis and rheumatism, in the first edition of my work, *The Throat and its Diseases*, which was published in May, 1878, and that at that date I advocated, amongst other remedies, salicylate of sodium, giving a formula for its administration.

Although I believe I may claim priority in actually insisting on this intimate association of rheumatism and tonsillitis, it is probable that Sir Thomas Watson had the same fact in view when advocating—as he was the first to do—guaiacum as a remedy for quinsy.

Inhalations of Oxygen in Eclampsia.

Dr. Reimann (Kiev, Russia) writes: In No. 1370 of the British Medical Journal is mentioned a paper about Inhalations of Oxygen in Eclampsia, by Dr. Lvoff. Allow me to state that this question was treated by me in two short papers in the *Centralblatt für Gynäkologie*, Nos. 43 and 49, 1885. There are mentioned the seven cases of puerperal eclampsia, treated by oxygen, known up to that time (all in Russia), among them the case related in the essay of Dr. Lvoff, in the *Journal of Medicine*. It is true that I came to another conclusion about the use of oxygen in such cases than Dr. Lvoff, resting upon the issue of the greater number of these cases.

The L.S.A. Retrospective as a Double Qualification.

L.R.C.P. writes: According to the decision of the General Medical Council, the licence of the Apothecaries' Society, London, will be a licence to practise surgery, as well as medicine, after July 1st, 1887. Should not those men who have already passed the examination in surgery (conducted by the same examiners—Messrs. Makins, Walsham, and Andrew Clark—as were recently appointed by the General Medical Council) be also recognised by the General Medical Council as possessing a licence to practise surgery?

The Treatment of Gleet.

Dr. Fred. A. A. Smith (Cheltenham) writes: In answer to "J. B.," of May 7th, 1887, I beg to forward the following observations. Some years ago, a captain in the army consulted me about a gleet he had had for a long time. Nothing seemed to do him any good; at the same time he was anything but a temperate man, and, practically, was a very bad subject for treatment. I ordered him an ordinary alum lotion to be used as an injection, and for medicine acid nit. dil., ℥xv; dec. cinchonæ flav., ʒj, t. d. Returning home from his club in the evening, he took by mistake a dose of the alum lotion, and used the acid mist. as an injection. The consequence was that he suffered great pain for over half an hour, but cured his gleet. Noting this, I tried on my next case acid nit. dil., ℥v; dec. cinchonæ flav., ʒj as an injection t. d., and found my patient got rapidly well. I have since used this treatment in several cases with very happy results. Although constitutional treatment is no doubt very useful, still I am inclined to think that the disease is essentially local, and requires local remedies.

COMMUNICATIONS, LETTERS, etc., have been received from:

Mr. H. N. Smith, Brighton; Mr. Christopher Heath, London; Mr. Watson Cheyne, London; Mr. F. E. Dunsford, London; Mr. J. F. Pink, London; Mr. C. B. Keetley, London; Mr. Wm. Duncan, London; Dr. W. E. B. Davis, London; Surgeon A. Hayes, Cairo; Mr. R. W. Doyne, Oxford; Mr. L. W. Read, London; Dr. C. Bell Taylor, Nottingham; Dr. Tatham, Salford; Dr. F. W. Smith, Leamington; Dr. T. Smith, Preston; Dr. J. Altham, Penrith; Surgeon J. G. Flood, Dover; Mr. J. B. Fairmann, Rotherham; Mr. R. J. Godlee, London; Reverend C. R. Drury, Chichester; Mr. H. R. Gatley, Ayton; Dr. Hardwicke, Dovercourt; Dr. M. M. Basil, Manchester; Dr. E. White, Stone, near Dartford; Dr. Barnett, Belfast; Mr. Lennox Browne, London; Dr. Reimann, Kiev; Dr. Bramwell, Perth; Dr. D. J. Lawson, Portland, Dorset; Dr. Hutchinson, Glasgow; Mr. Lawson Tait, Birmingham; Dr. J. Ogilvy, Bournemouth; Dr. Rentoul, Liverpool; Mr. H. T. Butlin, London; Mr. A. Edington, Edinburgh; Dr. D'Arcy Power, London; Dr. Cullimore, London; Mr. A. H. Benson, Dublin; Mr. L. J. Carroll, Salford; Dr. J. Edwards, London; Dr. Allt, London; Mr. G. Fardous, Plymouth; Dr. Styrap, Shrewsbury; Dr. Klein, London; Dr. F. P. Atkinson, Surbiton; Mr. A. T. Heath, London; Dr. R. H. Fox, London; Mr. Baverstock, London; Mr. F. E. Dansford, London; Mr. Neison, London; Dr. A. Duke, Dublin; Mr. Jones, Swinton; Dr. Langdon Down, London; Mr. Johnston, Leicester; Dr. R. E. Wilmot, Leamington; Dr. Sherbury, Hull; Mr. R. Baker, London; Dr. Rasch, London; Mr. H. N. Custane, London; The Income Tax Repayment Agency, London; Mr. J. E. Cooney, London; Dr. De Watteville, London; Mr. G. H. Mapleton, St. Kitts; Mr. Land, Tonbridge; Mr. J. H. Parkinson, Sacramento; Mr. W. J. Baker, Millbrook, Southampton; Dr. F. A. A. Smith, Cheltenham; Dr. G. A. Gibson, Edinburgh: Dr. Mackenzie, Glossop; Mr. J. Blackford, London; Messrs. E. H. Hill and Co., London; Dr. F. H. Spencer, Wonford; Dr. G. W. Crighton, Eastbourne; Mr. Cresswell Baber, Brighton; Our Dublin Correspondent; Mr. W. Needham, Colwyn Bay; Professor M. Ward, Staines; Dr. Scott, Ilkley; Mr. Sykes, Mexborough; Mr. J. B. Clarkson, Boston; Mr. P. M. Lallan, Tara, co. Meath; Dr. B. Nicholson, South Norwood; Mr. F. H. Wigmore, Liverpool; Mr. T. Simpson, Lincoln; Mr. G. M. Allender, London; Messrs. G. W. Christie and Co., London; Mr. G. S. Blake, Dublin; Dr. H. T. Preston, Kidderminster; The Secretary of the Zenana Medical College, London; Mr. J. F. Ebner, London; Dr. Hurley, Bath; Mr. W. Thomson, Manchester; Dr. Fox, London; Dr. Gowers, London; Dr. Hilliard, Aylesbury; Major H. Cooper, London; Mr. W. J. Spence, Syston; Dr. J. W. Watkins, Newton-le-Willows; Mr. R. J. H. Scott, Bath; Mr. H. V. Palin, Wrexham: Mr. G. B. Batten, Dulwich; Mr. F. S. Barnett, London; Mr. J. Maitland, Callander; Dr. N. Tirard, London; Dr. A. Sheen, Cardiff; Mr. H. T. Evans, Treharris; Mr. A. Smart, Linton; Mr. C. W. Hunt, Manchester; Staff-Surgeon J. A. Robertson, Kingston; Our Vienna Correspondent; Mr. V. K. Cooper, Durham; Dr. Goodhart, London; Mr. W. H. Bennett, London; Mr. J. Chalmers, London; Mr. E. Fletcher, Leeds; Mr. M. Fairdell, Southport; Mr. F. Spencer, Bath; Mr. F. B. Brierley, Tattenhall; Mr. F. L. Macartney, Liverpool; Dr. Woodham Webb, Neuilly-sur-Seine; L.R.C.S.I.; Mr. W. C. Beattey, Newcastle-on-Tyne; Dr. Uhthoff, Brighton; A. B. C.; Dr. W. Pearce, London; Mr. P. R. Cresswell, Glamorgan; Mr. C. S. Barrett, Shipton-in-Craven; Mr. E. F. Scougal, Huddersfield; Dr. Jelly, London; Our Manchester Correspondent; Mr. W. J. Meharry, Belfast; Dr. Binz, Bonn; Mr. F. Arnold Hargar, Delagoa Bay; Mr. G. H. Melson, Birmingham; Dr. Holman, Reigate; Dr. J. W. Moore, Dublin; Dr. W. J. Laurie, Ayr; Mr. R. Pollard, Torquay; Mr. J. Hogg, Liverpool; Mr. A. Jackson, Sheffield; Mr. H. Kelvin, Manchester; The Secretary of St. Mary's Hospital, London; Dr. Murrell, London; Professor D. MacAlister, Cambridge; Mr. T. G. Nasymth, Cowden Heath; Our Paris Correspondent; Mr. J. Atkinson, Crewe; Sir D. Duckworth, London; Mr. H. P. Pike, Gloucester; Mr. G. M. Edmond, Aberdeen; Dr. W. A. Carline, Lincoln; Dr. H. R. Crocker, London; Mr. E. D. Bower, Gloucester; The Honorary Secretaries of the Nottingham Dispensary; Mr. S. Keith, Edinburgh; The Secretary of the Queen's Jubilee Hospital; Dr. G. Stanley Murray, London; Dr. Hack Tuke, London; Sir H. Pitman, London; Mr. W. Richards, Birmingham; Mr. J. N. Fadycar, Edinburgh; Mr. E. F. Le Louet, London; Messrs. Churchill, London; Brigade-Surgeon T. Young, Bournemouth; Dr. D. Newman, Glasgow; Dr. Maguire, London; Mr. C. Rothwell, Bolton; The Medical Officer of Health of Ealing; Neurologist; Mr. Mark Judge, London; Messrs. Mann and Taylor, London; Mr. M. Collier, London; Mr. A. H. Allen, Sheffield; Professor Dunstan, Oxford; Dr. E. Cresswell Baber, London; Mr. H. Burns, London; Mr. T. L. Hall, Dilwyn; Mr. J. Lloyd Roberts, Denbigh, etc.

The General Secretary of the British Medical Association acknowledges an Essay on Abortion in competition for the Ward Cousins Prize Essay, with the motto "Double Florin."

A letter addressed to Professor W. S. Forbes, M.D., of Philadelphia, is lying at the office of this Journal, 429, Strand, W.C.

BOOKS etc., RECEIVED.

Vittel (Vosges, France) Medical Picturesque, and Anecdotal. By Paul Rodet, M.D. London: J. and A. Churchill. 1887.

Lewis's Pocket-Case Book for Practitioners. Designed by A. T. Brand, M.D. London: H. K. Lewis. 1887.

The Management of Pregnancy, Parturition, and the Puerperal State, Normal and Abnormal. By Paul F. Munde, M.D. London: H. K. Lewis. 1887.

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LECTURES
ON
CERTAIN DISEASES OF THE JAWS.

Delivered at the Royal College of Surgeons of England, June, 1887.

By CHRISTOPHER HEATH, F.R.C.S.,
Hunterian Professor of Surgery and Pathology.

Lecture II.—Tumours of the Jaws.

Mr. President and Gentlemen,—In my last lecture I discussed the cystic affections of the jaws, and referred, among others, to the dentigerous cyst due to a misplaced tooth. It does not, however, require the development of a cyst to render a misplaced tooth important, for there are many recorded instances in which mere displacement of a tooth from its normal position has given rise to deformity and the suspicion of grave disease.

Even more remarkable, however, than mere malposition are certain modifications which the molar teeth occasionally undergo during their development, giving rise to most interesting tumours of the jaw, which have been specially studied and described under the name *Odontomes* by Broca. These tumours depend upon some modification of the germ of the tooth before the formation of the cap of dentine, and belong to Broca's second class, *odontomes odonto-plastiques* or *odontomes bulbaires*. The result is the formation of an irregular mass of dental tissues in no way resembling a tooth in shape.

There are, I believe, but nine cases of this form of odontoma recorded, and these all occurred in the lower jaw. The first case was communicated to the Faculty of Medicine of Paris in 1809 by M. Oudet. The patient, a man aged 25, had on the right side of the lower jaw a mass occupying the position of the premolar teeth, which on removal proved to be composed of dentine and enamel. A similar mass on the left side was not removed. The second case occurred some years back, in the practice of Sir William Fergusson, by whom the tumour was removed with a portion of the jaw, and is described by Sir J. Tomes, from whose work a drawing of a section of the tumour is taken (Fig. 1). The second molar of the lower jaw was represented



Fig. 1.

by an irregularly flattened mass, composed of enamel, dentine, and bone, derived from calcification of remants of the dentine pulp, thrown together without any definite arrangement, by which the wisdom tooth was held down. The dental mass, when removed from its receptacle in the bone, presented no resemblance to a tooth. Little beads of enamel here and there projected from the surface, which was generally rough and irregular. The naked-eye appearance of the section is accurately given in the woodcut, the radiate character in which shows the arrangement of the component tissues, which, by the aid of the microscope, are seen at places to alternate. The alternation is mainly effected by the dentine and bony tissue, and these, indeed, form the great bulk of the mass. The appearances presented, prior to the operation, consisted in enlargement of the jaw posterior to the first permanent molar tooth, with a hard, brown-looking body projecting but slightly from the surface of the gum. This projecting portion was, in fact, the upper surface of the aberrant tooth ; and the nodules of enamel were, for the most part, situated in this part of the mass.

The third case occurred to Dr. Forget in the person of a young man, aged 20, who presented himself in 1865 with a disease of the lower jaw, from which he had suffered since he was 5 years old. Upon looking into the mouth, a round, smooth tumour, hard and unyielding, was seen occupying nearly the whole of the left side of the jaw. None of the teeth beyond the first bicuspid were present. Dr. Forget removed the portion of the jaw involved by sawing through it in front of the bicuspid tooth, and also through the ramus at the level of the inferior dental foramen. The portion removed is seen in the accompanying drawing (Fig. 2). An examination of the portion which had

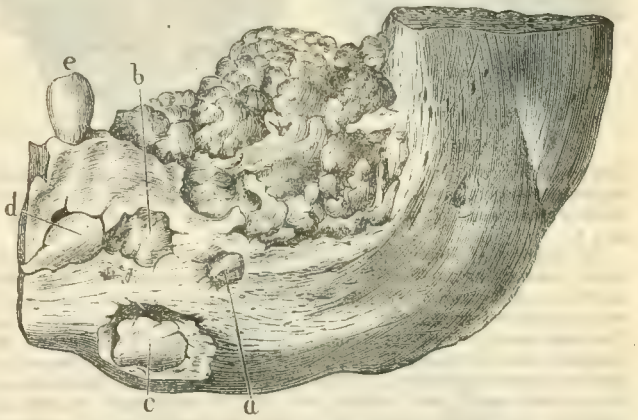


Fig. 2.

been removed showed that the jaw between the ramus and the first bicuspid tooth was converted into a cavity, which was occupied by a hard oval mass, of the size of an egg, having an uneven surface covered here and there with minute tubercles, which were invested by a layer of enamel, penetrating into the substance of the bone, and easily recognisable by its shining appearance and peculiar colour. A section of the tumour showed that it consisted of a compact tissue of the consistence of ivory, of a greyish-white colour, in the interior of which it was possible to perceive, with the naked eye, a kind of regular arrangement of the elements which entered into its composition. Between the tumour and the osseous cyst was a thick membrane, apparently of a fibro-cellular structure. At the anterior extremity of the base of the tumour was a depression in which the crown of an inverted molar tooth was wedged in between it and the maxilla. This tooth is seen in Fig. 2, *c*, where a portion of bone has been cut away ; *a* and *b* mark portions of the tumour projecting through the jaw, and *d* is the second bicuspid tooth lying below the first, *e*.

The microscopic examination of the tumour showed it to be composed principally of dentine, with enamel on the surface and dipping into the crevices, at the bottom of which, as well as in other parts, portions of cementum were found.

The fourth case of the kind was brought under the notice of the Odontological Society of Great Britain, in December, 1862, by the late Mr. W. A. Harrison, F.R.C.S. The specimen closely resembled those already described, and came from the left side of the lower jaw of a lunatic, where it occupied the space between the incisor and molar teeth. It came away spontaneously, leaving a long deep groove, large enough to receive the last joint of the thumb, which soon granulated and contracted.

The fifth case is given in Heider and Wedl's *Atlas zur Pathologie der Zähne*, and closely resembles Sir J. Tomes's case, the second molar tooth of the right side being developed into a large irregular mass, and holding down the wisdom tooth. It was easily removed.

Mr. Annandale has reported a sixth case, occurring in the lower jaw of a young woman, aged 17, who had never had any molar teeth on the left side. A nodulated mass, which somewhat resembled a piece of necrosed bone, projected above the gum, and was firmly fixed. Mr. Annandale dislodged the growth, and removed it through the mouth. It measured an inch and a half by an inch and a quarter, and weighed 300 grains, and on section showed that a cap of enamel, varying in thickness, was arranged over a portion of the irregular surface of the mass. Beneath this, well-formed dentine, forming a considerable thickness, was met with, and still deeper in the substance of the mass, true bone, containing lacunæ, canaliculi, and Haversian canals, was seen to be intermingled in a confused manner with portions of dentine, so as to form the substance called by histologists "osteo-dentine."

The seventh case occurred in the practice of Dr. Goodwillie, of

New York, and is mentioned in Agnew's *Surgery*, vol. ii. It appears to have been removed with the angle of the jaw.

An eighth case has been recorded by myself in the *Clinical Society's*

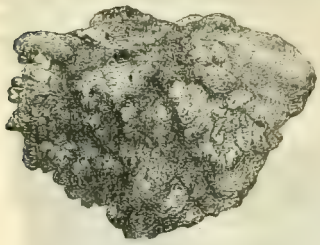


Fig. 3.



Fig. 4.

Transactions, vol. xv. The mass measured an inch and a quarter antero-posteriorly, an inch transversely, and an inch and a half from above downwards. It weighed 315 grains, and is shown in Figs. 3 and 4.

Dr. Arkovy, of Buda Pesth, has recently recorded a ninth example, closely resembling the foregoing. All these specimens were met with in young adults, and only the first, fifth, sixth, eighth, and ninth were extracted from the jaw by the surgeon; in Mr. Harrison's case the mass coming away spontaneously, and in Mr. Tomes's and M. Forget's cases a considerable portion of the lower jaw being removed by such experienced surgeons as Sir William Fergusson and M. Maisonneuve. In my own case I must confess that I did not appreciate at first the nature of the tumour, and recommended the removal of a portion of the jaw, and it was only during a subsequent operation, undertaken for supposed necrosis, that the true nature of the case became apparent.

A *fibrous epulis*, if allowed to grow to a large size, will produce external deformity of the face, and although attached to the upper jaw, may hang down so as to simulate disease of the lower jaw. This was well seen in a woman aged 27, who had an epulis of the upper jaw of seven years' growth, which hung down to the level of the angle of the jaw, and who was under the care of Mr. Erichsen, by whom the tumour was removed in 1861, with perfect success. Perhaps the most remarkable case of epuloid growth on record, however, is Mr. Liston's well-known patient, Mary Griffiths, from whom, in October 1836, he removed the growth shown in the accompanying drawing, Fig. 5.



5

The patient had laboured under the disease for eight years, and had been subjected to a partial removal of the growth when of inconsiderable size. The tumour was of a simple fibrous structure. The growth sprang originally from the gums and sockets of the incisors and canine tooth of the left side; at an early period it protruded from the mouth, unconfined and uninfluenced by the pressure of the lips or cheek. It had assumed a most formidable size and appearance, concealed the palate and pharynx, and gave rise to great inconvenience and continued suffering. The surface had been broken by ulceration, but upon a close inspection of the projecting part and of that covered by the cheek, it was found to possess a firm consistence, and to present the same peculiar botryoidal arrangement of its parts as the others of a simple and benign nature. The operation proved perfectly successful. The preparation is in the Museum of the College of Surgeons (2193).

A case very similar in many respects to the preceding one was successfully operated upon in 1869 by Professor Kinloch, of Charleston. The patient was a negress, aged 25, and presented much the appearance shown in Fig. 5, the mouth being enormously distended by a protruding growth, which appeared to have originated in the alveolus, but to have involved the superior maxilla. Dr. Kinloch removed the whole mass, which weighed nearly two pounds, and the patient made a good recovery.

Fibroma of the lower jaw closely resembles the fibrous tumours of other parts of the body, and especially in connection with the uterus. It is dense in structure, but not unfrequently lobulated, and, on section, slender bundles of intersecting fibres may occasionally be traced in it, of which there are good examples in the Museum of the College of Surgeons. The fibrous tumour usually springs from one of two situations, either the interior of the antrum or from some portion of the alveolus. In both cases it is intimately connected with the periosteum, in this respect resembling epulis. Occasionally the growth appears to follow some slight injury, as in the case of a lady, a patient of Dr. Neale, from whom, in 1870, I successfully removed a fibrous tumour occupying the interior of the antrum, which had followed a blow given by her child, and which may have been a fibrous odontoma. The fibrous tumour grows slowly, but surely, involving in its progress the surrounding structures. When arising in the antrum, it first expands the walls of that cavity, bulging out the face and forming tumours in the palate and floor of the orbit, and subsequently produces absorption of the osseous walls, and spreads unchecked in all directions. (See St. George's Hospital Museum, II, 160.)

When it arises from the alveolus, a fibrous tumour may encroach on both the facial and the palatine surfaces of the jaw, crushing in the antrum, although not involving its interior. Of this a good example is seen in a preparation (2238) in the College of Surgeons, of an upper jaw removed by Mr. Liston. Here the tumour, which is affixed to the alveolar border near the molar teeth, extends inwards so as to cover the palatine portion of the jaw, and outwards so as to conceal all the bicuspid and molar teeth, with the exception of the last. The walls of the antrum are pressed inwards, but its interior is healthy. The patient was a woman, thirty years old; and the tumour was observed four years before its removal, which was successful. On the other



Fig. 6.

hand, fibrous tumours, though commencing in the alveolus, may secondarily involve the antrum when they have attained considerable size, producing complete absorption of its walls, and projecting into the nose and through the palate. Of this a preparation in the College of Surgeons' Museum (2236) of an upper jaw, also removed by Mr. Liston, affords a good example. Here the patient was only 21, and the growth first appeared on the outer side of the gum of the left upper jaw four years before the operation. It was cut off six months

after its first appearance, but returned, and eighteen months after was removed, with a portion of the alveolar process, but reappeared in a few weeks. Fig. 6, from Liston's *Practical Surgery*, shows the patient before the operation. It may be noticed here, as in the case of a large epulis, that disease of the upper jaw often resembles, externally, a tumour of the inferior maxilla.

The enormous size to which fibrous tumours of the upper jaw may grow without destroying the patient is well seen in the accompanying drawing (Fig. 7) of Mr. Liston's celebrated case of Mrs. Frazer, from

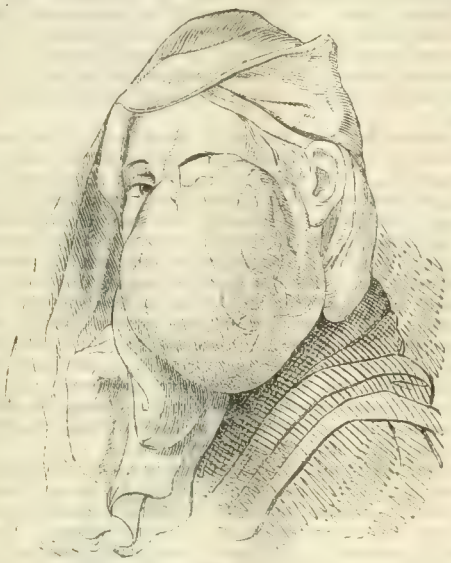


Fig. 7.

whom that eminent surgeon successfully removed the growth. The tumour is preserved in the Museum of the College of Surgeons (2241), and its diameters are, vertically, 7 inches; transversely, 7 inches; from before backwards, nearly 6 inches. Contrary to the ordinary practice, a portion of the integument was removed with the tumour, measuring 12 inches in length and 10 in breadth, and this left a gap in the skin of the face upon the patient's recovery. The growth of this tumour was connected apparently in a curious way with the performance of the uterine functions. The patient was 40 years old, and the tumour began to grow six years before its removal, in consequence of a blow in the region of the antrum. Its progress at first was slow and not painful, but at the end of two years a distinct tumour was felt in the cheek. During the next two years it grew rapidly, especially during a period of gestation, but still without much pain. In the fifth year of its growth she bore a second child, after which the catamenia ceased to flow, and the tumour was subject to monthly augmentations of its vascularity, and slight hæmorrhages occurred from its inner, though not ulcerated, surface, and from the adjacent parts of the gum.

A remarkable feature, noticed in a case of fibrous tumour of the antrum, in a young man aged 18, under the care of Sir J. Paget in 1860, was a distinct pulsation in a portion of the tumour which projected into the orbit. The pulsation was slight but decided, and was synchronous with the radial pulse. The case was clearly not one of malignant disease, but proved to be an ordinary fibrous tumour upon removal. No satisfactory explanation seems possible of the case, which I believe to be unique. Suppuration has occurred in connection with fibrous tumours of the jaw, but only, I believe, when they have been punctured with a view to exploration and diagnosis. Of this the tumour removed from Janet Campbell, and preserved in the Museum of the College of Surgeons (2239) is an example. Simple fibrous tumours occasionally recur after removal, but it is doubtful whether in these cases the whole of the disease has been eradicated. According to O. Weber, they are usually connected with the lining of the Haversian canals of the surrounding bone, and though he believes that these processes may sometimes be effectually detached, he advises the practice ordinarily followed of removing a portion of the bone.

Fibrous tumours of the jaw, like those in other parts of the body, and especially in the uterus, are liable to calcareous degeneration, or, as is sometimes incorrectly stated, to ossific deposit. A good specimen of the kind is preserved in the Museum of St. Thomas's Hospital (I. 18). A thin section of this tumour has been dried and preserved, in order to show the amount and distribution of the calcareous matter (I. 19).

A remarkable example of calcareous degeneration of a fibrous tumour occurred in the practice of Sir W. Fergusson, and the preparation is now in the Museum of the College of Surgeons (2242). It is a fibrous tumour of the left upper jaw, of some years' growth, from a woman aged 50, containing numerous calcareous particles and acicular crystals, and, in addition, enclosing a suppurating cavity, in which was a mass about an inch in diameter, found by Dr. Goodhart to consist of acicular crystals of mineral matter, entangling in places nucleated and shrivelled cells. This is clearly an example of extreme calcareous degeneration undergoing necrosis.

Fibrous tumour is the commonest form of growth in the lower jaw, and, as pointed out by Paget, this may take the endosteal or periosteal form. The formation of fibrous tumours between the plates of



Fig. 8.

the lower jaw originates, I believe, in the majority of cases in some inflammatory deposit due to the irritation of decayed teeth. By the slow growth of the tumour the jaw is expanded, the outer plate yielding more readily than the inner, as is well seen in a preparation in University College Museum (Fig. 8), which also shows a curious transportation of the wisdom tooth close up to the condyle of the jaw by the growth of the tumour, being probably connected with it in some way. In the College of Surgeons' Museum (2219) is a good specimen of endosteal fibrous tumour, which Sir Spencer Wells removed with the jaw from the symphysis to the angle, in a woman aged 27. The tumour occupied the left side of the lower jaw, and had existed for four years, being connected with decayed teeth, one of which on being extracted shortly before the operation brought a small portion of the tumour away with it.

It may, I think, be doubted whether a milder treatment than that of removal of the whole thickness of the bone containing tumours of this description might not sometimes be adopted with advantage. A specimen in the Museum of King's College, which is represented in Fig. 9, admirably illustrates this view. It is a fibrous tumour, removed, when I happened to be present, by Sir William Fergusson, from a woman who had undergone two previous operations. Having sawn the jaw partly through on each side of the tumour, the operator applied the bone-forceps to complete one of the sections, when the outer plate of the jaw with the greater part of the tumour came away, leaving only a small portion of it adhering to the inner plate. Owing to the jaw being already divided, it was considered better to complete the operation as originally intended, and the patient made a good recovery. The preparation referred to illustrates also the connection of the teeth with fibrous tumours, a diseased molar tooth being implanted in the upper part of the tumour.

Though of slow growth under ordinary circumstances, a fibrous tumour of the jaw, if irritated by the injudicious application of useless remedies with the view of producing absorption of the growth, may assume enormous proportions, and destroy life by the irritation and continuous discharge it gives rise to. A preparation in King's Col-

lege Museum shows a fibrous tumour of large size, involving nearly the whole of the left side of the lower jaw. Its interior is hollowed out into a large cavity with sloughing walls; and there is a large aperture communicating with it, surrounded by healthy skin. The patient's portrait, taken about six weeks before her death, is seen in Fig. 10. The case was evidently one of ordinary fibrous tumour de-



Fig. 9.

pending originally upon diseased teeth, which, by dint of incisions and injections of iodine into the growth, followed by a seton introduced through the skin, was brought into such a condition that, upon the receipt of a blow, it rapidly brought the patient to her death-bed.



Fig. 10.

A remarkable and unique feature in connection with the case of large tumour above referred to is seen in Fig. 11, which shows the front of the base of the skull of the patient. The long-continued pressure of the tumour of the lower jaw has given rise to a remarkable

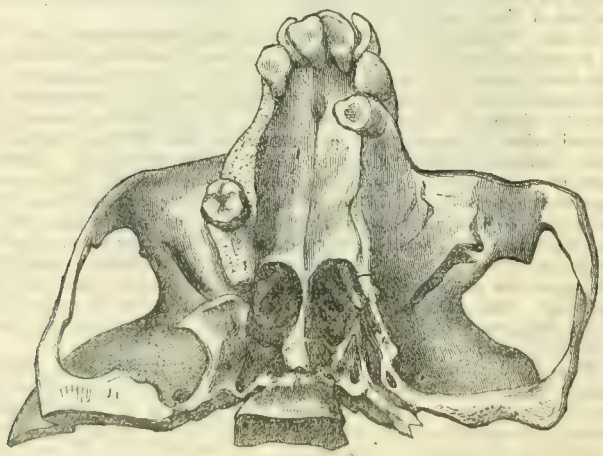


Fig. 11.

contraction of the hard palate and alveolus, the teeth being crushed together so as to overlap one another; and at the same time an expansion of the malar bone and zygoma has ensued, which is accurately shown in the figure.

A large tumour of the same kind, weighing eighteen ounces, which has encroached upon the condyle and coronoid process and projected into the mouth as well as on the surface, is preserved in University College Museum (652), and was removed by Mr. Liston in 1846; and a similar growth, successfully removed by Professor William Beaumont, of Toronto, from a boy of 7, which is considerably infiltrated with calcareous matter, is in the Museum of the College of Surgeons (2218), and was originally considered to be cartilaginous. It weighed eight ounces avoirdupois, with a long diameter of $3\frac{4}{10}$ inches and a short diameter of $2\frac{8}{10}$ inches, and involved the whole of the left side of the bone.

Fibrous tumour is most frequently developed in the side of the lower jaw, where the space between the plates is larger than elsewhere, and may occupy the dental canal, as in a case of Mr. Cock's, in which the dental nerve passed through the tumour, necessitating its removal in two parts. Occasionally, however, fibrous tumour invades the symphysis, and here, owing to the restricted amount of expansion of which the bone is capable, absorption of the anterior surface takes place at an early date, and the tumour projects, involving also the adjacent bone. A preparation in University College (655) shows the symphysis affected in this way, which was removed, with a portion of healthy bone on each side, by Mr. Liston. A section shows the structure very well, and at the lower part a small cyst has been developed. In connection with this subject, another preparation in the same museum (654) is deserving of notice, being a fibrous tumour, of the size of an orange, connected with the back of the symphysis, and apparently, therefore, of the periosteal variety.

The *periosteal variety* of fibrous tumour is not distinguishable from epulis except by its size. Like epulis, it has spicula of bone springing from the jaw, permeating it for a short distance; and beyond them radiating lines may be seen in the fibrous tissue. Preparation 2221 in the Museum of the College of Surgeons, for which I was indebted to Mr. Lee, of the Salisbury Infirmary, illustrates this form of disease very well, the fibrous growth being closely connected with the periosteum of the front of the jaw. The disease may, however, almost completely surround the jaw, as the preparation in St. Bartholomew's Hospital, drawn by Sir J. Paget in his *Surgical Pathology*.

Enchondroma of the upper jaw is of uncommon occurrence, but the jaw may become involved in cartilaginous tumours springing from other bones of the face. Of this there is an example in St. George's Hospital Museum (XVII. 66), taken from a young woman who, seven years before her death, began to suffer from soft elastic tumours on the inner side of the orbits. Two years after, the right maxillary bone was fuller below the orbit than the left, and the right half of the bony palate was larger and more depressed than the other; but in neither of these parts was there any softening. Gradually the eyeballs were protruded, and the sight was lost. Two years later, it was noticed that the superior maxillary bones projected nearly an inch beyond the inferior, so that she had some difficulty in masticating. A portrait of this patient is preserved in St. George's Museum. The tumour was found to project into the cranium, the orbits, the antra, and the nasal, zygomatic, and pterygo-maxillary fossæ. All the fossæ were quite filled up by the growth, and the bones of the face and orbits extensively absorbed. The hard palate was pressed downwards, so that the teeth on the two sides deviated from their natural line, and the left central incisor crossed that of the right side. Microscopical examination of the tumour showed it to be composed principally of cartilage.

In the Museum of St. Bartholomew's Hospital is another *post-mortem* specimen of cartilaginous tumour of the face, from a lad of 16 (XII. 1773), occupying the situation of the superior maxillary bones, which are completely absorbed. Above, the tumour has extended through the left side of the base of the skull into its cavity, where it forms a large projection in the situation of the anterior lobes of the cerebrum; below, it is united to the soft palate; in front, it protrudes and distends the left nostril, and has caused the ulceration of a part of the integuments of the face. The outer surface of the tumour is nodulated; its interior, shown by the section, is formed of close-set nodules and masses of cartilage, partially and irregularly ossified, and in some parts intersected by layers of a softer, probably fibrous tissue. A portion of its external surface projecting below the left nostril has sloughed. This case is drawn in Mr. Stanley's illustrations to his work on *Diseases of the Bones*, and both it and the preceding preparation illustrate very well the tendency of cartilaginous tumours to invade all the surrounding structures, and fill the several cavities.

A remarkable case of recurrent cartilaginous tumour of the face, originating in the upper jaw, was under my own care, of which the following are the particulars:—The patient, aged 34, was admitted into University College Hospital on January 1st, 1868, with a large tumour of the right side of the face. When about 17 years of age he noticed a pimple on the right side of the nose, which increased pretty rapidly, and three months after (1851) he went into St. Thomas's Hospital, when Mr. Le Gros Clark operated, and removed a tumour as large as a walnut. He quite recovered, and was well for a few months, but within a year the tumour had returned. He was then admitted into King's College Hospital, under Mr. Partridge, who, in June, 1852, removed the tumour, which was of an osteo-cartilaginous character, oblong in shape, and of the size of a large walnut, projecting slightly into the antrum, and involving the nasal process of the superior maxillary bone, but in no way implicating the mouth or orbit. From this operation the patient made a good recovery, except that a small fistulous opening was left in the cheek. The man continued in good health until 1857, when he went to America, and soon after arriving there he found the tumour beginning to appear again, and in 1860 Professor Gunn operated at Anne Harbour, in the state of Michigan, and removed the entire right upper jaw. The tumour, however, began to grow again rapidly, and projected on the face. The surgeons at Maple Rapids, where he lived, wanted to operate again, but the patient declined, and returned to England in 1865. Soon after this an abscess formed in the upper part of the tumour, which was lanced with great relief, but the incision thus made has never closed, owing to the stretching of the skin by the tumour.

The patient's appearance on admission was most unsightly (Fig. 12), the right side of the face being greatly disfigured by a large tumour, by which the eye was thrust completely aside, but without loss of



Fig. 12

vision. Immediately to the inner side of the eye was an open granulating sore of the size of a florin, the result of the incision for the evacuation of matter already referred to. The tumour appeared externally to consist of two portions, separated by a horizontal sulcus, at the bottom of which the fistulous opening resulting from the second operation was still visible. The upper and more prominent portion had invaded the orbit, reaching to its upper border, and extending beyond the middle line of the nose. A small portion of this had, within the previous two months, projected through the left nasal bone. The lower portion of the tumour involved the ala of the nose and adjacent portion of the cheek, both of which were much distorted; on a small projecting portion of this the skin was adherent. Both nostrils were completely blocked, and had been so for months. Within the mouth it was seen that the whole of the right side of the hard palate had been removed; and in its place there was a smooth, red, oval mass, coming down to the level of the teeth of the opposite side. The scars in the middle line of the lip and on the cheek, resulting from former operations, were still visible. The tumour was solid, and not tender to the touch, the most prominent point being apparently osseous. There was no enlargement of the glands in the neck or elsewhere, and the man appeared in good health. The tumour had made decided progress within the previous few months, and he was anxious to have it removed, to which, after a consultation with my colleagues, I agreed.

The patient made an uninterruptedly good recovery from the operation. The wound was kept clean by syringing with Condy's fluid; a plug of lint in the frontal sinus was removed on the third day after the operation, and the sutures on the eighth day, the incision being well united. The right eye, which had been much displaced, began gradually to recover its proper position. A fortnight after the operation, the patient was up and about the ward, and on February 1st he went out for a walk. On Sunday, February 2nd, he again went out, the house-surgeon not being aware that there was a bitter east wind. This he felt a good deal, and the next day his face was noticed to be swollen and red. This had increased on the following day, when I saw him, and it was evident that an attack of erysipelas was coming on. The patient was at once placed in a separate ward, and active treatment adopted. The erysipelas spread, however, and affected the throat, so that on February 7th he was able to swallow but little, and was becoming rapidly exhausted. By the frequent use of the stomach-pump nourishment was introduced into the stomach, and he rallied for a day or two. Symptoms of pyæmia, however, now manifested themselves, and the patient rapidly lost ground, and, after lingering for a week, died on February 17th.

At the *post-mortem* examination the incisions in the face were cicatrised, but the site of the tumour was granulating and encrusted with mucus in parts. On removing the brain, it and the membranes were found perfectly healthy; but the plate of bone between the frontal sinus and the cranial cavity was so thin that it broke in the removal of the brain. There was no appearance of any remnant of tumour either in the frontal sinus or elsewhere, the walls of the large cavity left by its removal being healthy (University College, 616). In the thorax there was abundant evidence of pyæmia, the lungs being filled with pyæmic abscesses. The tumour weighed nine ounces, and consisted of a loose cartilaginous material enclosed in a bony cyst, from which spicula were sent into the interior. At two points, and particularly at the most prominent portion of the tumour, the bone was of considerable thickness.

In many cases of enchondroma a certain amount of fibrous tissue is found mixed with the cartilage, and in some cases, particularly those of slow growth and of long standing, the fibrous has, to the naked eye, almost replaced the cartilaginous element. Of this, an enchondromatous tumour, removed by Mr. Square, of Plymouth, in November, 1866, and kindly given me by that gentleman, is an excellent example. The tumour was of the size of an orange, and occupied the right superior maxilla of a woman, aged 47. It had been growing ten years, and Mr. Square successfully removed it. The preparation, now in the Museum of the College of Surgeons (2216), and of which a section has been made, shows a surface closely resembling a fibrous tumour, but in which cartilage cells are readily found under the microscope. The preparation shows a deep groove in the buccal surface of the tumour caused by the teeth of the lower jaw.

The ossific deposit, beginning at several separate points, which is not infrequently found in connection with enchondromata of other parts of the body, may take place in enchondroma of the upper jaw. A very excellent example of this was published by the late Mr. Maurice Collis, of Dublin (*Dublin Quarterly Journal*, August, 1867), and the appearance of the patient is well shown in the lithographic illustrations which accompany that paper.

Enchondroma of the lower jaw is not common, but is found of two forms, the endosteal and periosteal, thus resembling fibroma. A case is recorded by Sir Astley Cooper, in his "Essay on Exostosis," and is remarkable both for the sound pathological views and strictly conservative treatment he therein advocates. The patient was 19, and had had a growth in the side of the lower jaw for three years. Sir Astley exposed the tumour and gouged it away, exposing the dental nerve, and the patient made a good recovery. Sir James Paget has recorded (*Medico-Chirurgical Transactions*, 1871), a very similar case of cartilaginous tumour in the lower jaw of a lady 45 years old. It had been growing during two or three years, extended along the space between the first bicuspid and last molar teeth, was deep set in the jaw, expanding both the walls, and rising to almost the level of the molar teeth. He gouged it out, leaving the base of the jaw untouched, and not cutting any part of the cheek or lip. It did not recur.

The periosteal form of enchondroma springs from the membrane covering any portion of the bone, but most frequently affects the body. It grows to an enormous size, and may cause death either by interfering with respiration, as in Sir Astley Cooper's case, or with deglutition, as in the case from which the preparation in the College of Surgeons (2215) was taken.

(*To be continued.*)

OBSERVATIONS ON THE SALICYL TREATMENT OF ACUTE RHEUMATISM.

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EVERYONE who attempts to arrive at a definite verdict with regard to the efficacy of a medicinal remedy for a given disease must necessarily find himself confronted with difficulties of many kinds: difficulties in the accumulation of sufficient material; difficulties in securing uniformity of conditions; difficulties in connection with the ever-varying progress and development of the disorder under consideration; difficulties in grasping and appreciating properly a complex assemblage of symptoms; and, last but not least, difficulties in exhibiting that mental serenity, accuracy of perception, and judicial impartiality which alone can guide the observer to a right interpretation of his impressions.

With a full regard for these difficulties, I think that we are now, nevertheless, in a position to speak with very considerable confidence as to the merits of the salicyl compounds in the treatment of acute rheumatism. The method has been before the profession for upwards of ten years, and opportunities of observing its effects are almost of daily occurrence. Moreover, the tests of its action are exceptionally simple and clear, namely, the relief of the pain, the reduction of the fever, and the influence on the duration of the disease. There is almost a universal consensus of opinion that, judged by these tests, the treatment of acute rheumatism by the salicyl compounds is superior to any other method which has been as yet introduced. As to the relief of pain and the reduction of fever there can be no question whatever; but as to the influence of the drug in shortening the duration of the rheumatic process, pure and simple, there is not as yet complete unanimity. For my own part, I hold a very strong opinion in the negative as regards this last point.

At the same time, it is pretty generally admitted that the good effects of the drug are by no means equally manifested in all cases, and in some it appears to fail altogether. Some observers have been so impressed with the instances in which the action has been unsatisfactory that they have at once rashly concluded that the salicyl compounds are very much over-rated drugs as remedies for this disorder, and that they cannot be relied upon. But, bearing in mind the marvellous relief which follows their use in the majority of cases, it would surely be more logical to attribute the disappointing results to the operation of some exceptional modifying condition, the nature of which should be carefully searched out, in the hope that we might be able to distinguish beforehand those cases in which the remedy will succeed from those in which it will fail. Inquiries are repeatedly being made in the columns of our medical journals for guiding indications in the use of the salicyl compounds for this disorder, and the object of this paper is to attempt to define with sharper outlines and greater precision the relation and scope of this method of treatment, so far as my own observations and experience enable me.

In the first place, it is important to frame a good working hypothesis as to the nature of the rheumatic process. I use the term "working hypothesis" advisedly, for the subject is too complex and difficult to admit of absolute demonstration in the present state of our knowledge; and it is thus quite scientific to accept that hypothesis which covers the largest number of known facts with regard to the matter under consideration. The prevailing views of the nature of the rheumatic process are four in number: 1. That it is due to the accumulation in the system of certain products of tissue-change—probably of an acid nature—by interference with their elimination as the result of cold; this is, broadly speaking, the humoral theory. 2. That it is due to cold acting directly or indirectly upon the vasomotor or trophic nerves of the joints, and so exciting inflammation in them; this is the neurosal theory. 3. That it is due to the operation of microbes, in a manner closely analogous to what occurs in malarial fevers; this is the miasmatic theory. 4. That, under the influence of cold, operating through the medium of the nervous system, a disturbance occurs in the metabolism of the tissues, leading to the formation and accumulation in the blood of abnormal substances, on which the outward manifestations of the disease depend; this may be termed the neuro-humoral theory, inasmuch as it combines elements of both the humoral and neurosal teaching. I assume that in all these theories, except perhaps the miasmatic, a special inherited predisposition would be regarded as a necessary factor in the evolution of the actual disease.

I shall refrain from enumerating the arguments for and against each of these views, and shall merely state that I give my adhesion unhesitatingly to the last, or neuro-humoral theory. I cannot pretend to say whether the incidence of the disturbing influence is general or partial in its distribution; but the important fact to remember, as it seems to me, is that as a result of the nutritive disturbance, abnormal substances are formed and accumulate in the blood, and that to the secondary effects of this offending material most of the striking outward phenomena of rheumatic fever are due. Dr. Latham, in an extremely elaborate and able series of papers published in the JOURNAL in April, 1886, brings forward very cogent evidence to show that glycocine is the most important of these abnormal substances; and I am convinced that, though he may be in error on some points of detail, the principle is correct so far as one can test it by clinical observation.

I propose briefly to consider the bearing of this doctrine upon the joint affection, so far as may be necessary to elucidate the principles of treatment. The synovial sacs are known to be in direct communication with the vessels of the absorbent system, and it is a matter of general clinical experience that the joint cavities tend to become involved in serious toxic conditions of the blood, as in pyæmia, for instance. The liability to joint-inflammation in rheumatic toxæmia is, therefore, by no means surprising. The nature of the mischief which is set up is that of simple inflammation caused by irritation from abnormal chemical ingredients in the synovia or lymph-fluid which bathes the articular surface. It is identical in every respect with such inflammation as would be set up by the presence of any ordinary irritant in the joint-cavity. As a rule it is slight and fleeting, affecting only the more superficial parts, and not extending to the cartilaginous and fibrous structures around. If, on the other hand, the irritation be very severe, frequently recurrent, or of long duration, then greater damage is inflicted upon the joint, which undergoes more or less considerable structural change. We arrive, then, at the following conclusions: 1. That the joint-affection is merely an incident in the rheumatic disorder, which might conceivably be wanting altogether without vitiating the nature and reality of the rheumatic process; 2, that it is secondary in its origin; and (3) that the changes which take place in the joint-structure have no special feature belonging to them which serves to distinguish them from any other kind of simple arthritis.

The primary chemical change in the blood to which I have referred as the necessary etiological antecedent of the joint-affection also leads to secondary changes in the blood itself, of which, perhaps, the most important is a rapid destruction of the red-corpuscles. By careful hæmacytometric observations, I have found that the proportion is often reduced to nearly a half of the normal amount, that the destruction continues until the temperature begins to fall, and then, after a variable interval, the number begins to increase again. No one can fail to have noted the rapid development of anæmia in acute rheumatism, and the marked pallor which, as a rule, accompanies the chronic variety. The fact, however, is scarcely mentioned in most text-books, and yet it has an important bearing in many directions.

Apart from the anæmia and the various troubles directly dependent upon it, there are at least two phenomena on which this corpuscular destruction throws much light. First, the highly pigmented condition of the urine, which is due to the liberation of a large amount of hæmoglobin; and, secondly, the excessive coagulability of the blood, which is due to the liberation of certain fibrin-factors. Moreover, such a destructive change as this must of necessity load the blood with extractive matters, and in many other ways, impossible exactly to identify in detail, greatly disturb its chemical composition—facts which, taken together with the primary toxæmia, go far, in my opinion, to account for the occurrence of endocarditis, and possibly also the phenomena of hyperpyrexia. Interesting and suggestive as these pathological conditions are, I cannot now follow them further, but hasten again to take up the therapeutic thread which has been temporarily dropped.

The first question to be answered is this: On what principle do the salicyl compounds produce their effect? If it be true that there is nothing of a specific nature in the joint inflammation; if it be true that acute rheumatism is at bottom a metabolic disturbance attended with chemical alteration of the blood; and if it be true that the joint affection is but the direct outcome of chemical irritation, then it appears to me that there are only three possible hypotheses which can be suggested as to the way in which the remedy acts: (1) That the drug directly allays the joint inflammation; (2) that it strikes at the root of the morbid process as such; and (3) that it in some way neutralises and prevents the chemical irritation of the joint.

Now we do not find that the salicyl compounds have any influence on arthritis which is unconnected with rheumatism or the disorders allied to it, so I cannot accept the first view. Then, against the next alternative, we see that, however much the drug relieves the pain and reduces the fever, the rheumatic condition returns immediately the remedy is suspended, a fact which irresistibly suggests the conclusion that the drug operates by checking the outward manifestations rather than by curing it at its seat of origin. We are thus driven by a process of exclusion to the third hypothesis, namely, that the salicylates act by neutralising and preventing the chemical irritation of the joint. This, too, is the view which, as we shall find, covers known clinical facts best.

Dr. Latham, in the lectures already referred to, not only brings forward a mass of strong evidence in support of this doctrine, but is further able to suggest the probable nature of the chemical action of the salicyl compounds. Without entering into the clinical details with which his paper abounds, his view is that whatever salicyl compound is given, salicylic acid is set free in the system, which combines in the blood with glycocine and uric acid or their immediate antecedents, and so prevents all secondary manifestations traceable to this source.

We are now in a position to consider the circumstances under which these remedies are alleged to fail. Probably the most common source of failure consists in a faulty mode of administration. Either the drug is not given in sufficiently large doses nor at sufficiently short intervals. For a young adult, in a case of average severity, the dose should not be less than 20 grains, nor should the intervals between them exceed three hours. In cases of unusual severity, the dose should be repeated every two hours. Of course, it is not necessary to maintain this high dosage. As soon as the symptoms begin to yield, the quantity should be gradually diminished. If the drug be pure we need not fear its toxic effects. When they occur they are seldom alarming, and in any case quickly disappear on reducing the dose or temporarily suspending the drug. There seems good reason for believing that toxic symptoms are less liable to occur when these compounds are derived from willow-bark than when (as is most usual) they are prepared synthetically.

Failure in many cases may be explained by the fact that inflammatory changes have been set up in the joint which are too severe and deep-seated to subside immediately on the removal of the primary irritation. The salicylates remove the latter, but have no direct influence over the inflammatory change in the joint. Thus, we find that the salicyl compounds always answer best in the early stages of the disease, before the joint mischief has had time to make any headway. The longer the treatment is deferred after the invasion of the disease, the more disappointing are its results, other things being equal. Then, again, the treatment is always more satisfactory in first attacks than in subsequent ones, and this in direct proportion to the frequency of recurrence and the shortness of the intervals between consecutive attacks. Precisely similar arguments apply to cases of sub-acute and chronic rheumatism. In these instances it is not that the salicylates act otherwise than in early acute attacks; but, while in the latter the joint-inflammation, though sharp, is short, and quickly subsides on removal of the primary source of irritation, in the former, structural changes of an inflammatory origin have taken place which give rise to persistent pain, beyond the reach of salicyl influence, requiring time and careful local treatment to regain their normal condition.

A third important source of alleged failure is to be found in the association with the rheumatic condition, of more or less grave deterioration of the general health, with nervous debility and depression. It will be more convenient, however, to defer the consideration of this matter until the question of relapse has been discussed. No more frequent charge is brought against the value of the salicylates as a remedy for rheumatism than the indubitable tendency for the symptoms to return as soon as the drug is suspended.

I would explain the relation of the salicyl treatment to relapses in the following way: The cases treated by the expectant method show clearly that acute rheumatism tends to subside spontaneously after an average duration of about three weeks. As a rule, the more frequently the attacks recur, the longer their average duration, until they merge into chronic rheumatism. Now, it has already been shown that the salicylate treatment has no direct effect on the rheumatic process, but produces its influence by chemically repressing or preventing some of its earliest secondary manipulations.

Accordingly, if the drug be suspended during the early days of the fever, relapse is practically certain; later on, relapse is less likely to occur, until at last, when the metabolic disorder which constitutes the essence of the rheumatic process has naturally subsided, relapses do not occur at all. Applying these facts to actual practice, it is necessary to continue the use of the drug, in reduced doses, for at least three weeks from the date of onset, and even then, on the slightest return of symptoms, to recommence its administration, and to continue it at least for another week or ten days. In this light, so far from the occurrence of relapses depreciating the practical value of the drug, they show up the specificity and certainty of its operation, within its own limits of activity, in a most striking manner.

To return to the influence of debility as accounting for failure of the salicylates in certain cases. It is well known that a common cold lasts longer, and is thrown off with greater difficulty in proportion to the want of vigour and robustness in the person affected, other things being equal. It is precisely the same in acute rheumatism. In proportion as the patient is debilitated and in feeble general health at the onset of a rheumatic attack, the greater the difficulty in reacting from the disturbance which has been set up, the more tedious its progress, and the less complete the recovery. The rheumatic process once started in a weakly subject is certain to be much more protracted than usual, and sometimes exceedingly so. Hence it follows that, under these circumstances, the salicyl treatment would have to be continued much longer than usual, in order to prevent relapse. But there are practical difficulties in carrying this out owing to the toxic and debilitating effect of the drug when given in full doses, at short intervals, and for a long period. Thus, it can readily be seen why the results of salicyl treatment in such cases are so unsatisfactory. The dilemma is this: either the drug is suspended before the rheumatic process is over, in which cases relapses will certainly occur, or it is continued so long as to depress the vitality of the patient, and make it almost impossible for him to throw off the disorder.

With reference to heart-complications, I believe that they occupy exactly the same secondary relation to the chemical changes in the blood as does the joint-affection. Consequently, in the same manner as the joint-inflammation can be prevented by early and vigorous salicyl treatment, so I believe that cardiac inflammation may be prevented. I have never yet seen cardiac complications occur after the first twenty-four hours of salicyl treatment in a case which was known to be uncomplicated at the outset, and in which it was clear, from the rapid diminution of the joint-pains and fever, that the patient was properly under the influence of the drug. When such complications occur during the first day of treatment, it is probable that the inflammation had already begun when the patient first came under observation; and, as with the joint-inflammation, the salicylates have no direct influence of any kind on the inflammatory mischief *per se*.

I venture to hope that these observations, if carefully followed up, will do some little to place one of the most valuable therapeutic discoveries of modern times on a more rational and solid foundation, and enable us to employ the method more intelligently and with greater promise of success.

THE ETIOLOGY OF RHEUMATISM CONSIDERED FROM A BACTERIAL POINT OF VIEW.

By ALFRED MANTLE, M.D., Stanley, Durham.

After demonstrating the bacteria which he had found present during the rheumatic process, Dr. Mantle remarked that although great advances had been made regarding the etiology of disease generally during the last decade, very little had been done to elucidate the causation of rheumatism.

The most common explanation given was that the disease originated from exposure to cold; this, indeed, might be a factor in the production of rheumatism and many other diseases; but until more was known of what this meant, why it was that one particular exposure, probably after many, brought about a certain train of symptoms, the cause assigned did not greatly help us. Pneumonia was frequently spoken of as being produced by cold, but it was now well known that certain micro-organisms were present during the course of the disease, which had (experimentally) caused the disease in the lower animals.

He had investigated, for bacteria, a number of cases of so-called "cold" or catarrh, which had usually been ushered in with chilliness or shivering, sometimes amounting to a rigor, and with a slight rise of temperature; lassitude and more or less aching of the body had been complained of, with or without increase in the lachrymal and nasal secretions. In all of these cases bacteria had been found to be present in the acute stage. This fact was mentioned to suggest that probably the commonly related story of having "caught cold," given as the cause of so many diseases, meant after all not merely a chilling of the body as generally understood, but in many cases the reception of some morbid germ which had found an environment

suitable for its development, the feeling of cold being the first intimation received of its advent.

In many cases of rheumatism, there was no history of exposure, and in the case of hospital patients suffering or convalescing from other diseases, the occurrence of rheumatism showed that the disease might originate without exposure to cold.

Dr. Maclagan, to whom we were indebted for having brought before the notice of the profession the action of salicine in the treatment of rheumatism, had described an analogy between rheumatism and malarial fever. Undoubtedly there were some points of resemblance, more especially in the course which the fever sometimes took in rheumatism, and the irregularity in duration of the disease. It was difficult, however, to believe that the poison was of a malarial nature when we called to mind the large amount of rheumatism seen in localities not at all favourable to the development of malarial fever. It was important also to remember that we never saw intermittent fever presenting any local lesions simulating rheumatism.

He hoped to show a much closer analogy, as well as relationship, between rheumatism and certain other diseases. In determining the nature of a morbid poison and its action upon the body after its introduction, we ought to note carefully: first, the symptoms produced, and secondly, the structures affected. By making such clinical observations and noting the uniform manner in which a poison operated upon the system in producing like symptoms, and altering the same structures, we were enabled to distinguish the poison of one disease from another. Different diseases had thus been separately diagnosed, and a name given to them based on some leading symptom or lesion observed during the course of the disease. If on comparing some diseases generally believed to be distinct, and caused by distinct poisons, we found a great similarity both in the symptoms presented and the structures affected, we should be led to think their respective poisons must be of a similar nature, and if these diseases were brought about by the action of organisms, a further thought would be suggested, namely, that these organisms might be generically related. Such a similarity was to be observed in the case of acute rheumatism, scarlatina, erythema nodosum, infectious and non-infectious sore throat. In all these diseases, the structures commonly affected were the throat, the skin and the serous membranes, particularly those of the joints and chest. These were seen involved in varying degrees, for while one of these structures was principally affected in one disease, the others being impaired only slightly or not at all, in another disease several or all were more or less affected. In acute rheumatism the throat was commonly affected, as also the joints, and in not a few cases the serous membranes of the chest. There was increased action of the skin, and an eruption of miliaria or erythema was not infrequently observed, followed in some cases by desquamation. In scarlatina the throat and skin always suffered, and the serous membranes of the joints and chest were frequently involved. Similar lesions were found, though in a minor degree, in some epidemics of infectious sore throat, a disease closely allied to scarlatina, the skin apparently escaping.[1]

In erythema nodosum the skin was always affected, in most cases the joints also, the throat being usually complained of at the outset. Lastly, in acute tonsillitis, the throat was the principal seat of the disease, but the joints were commonly complained of too.

After dealing at length with rheumatic symptoms observed in the aforementioned diseases, based on numerous cases, in order to show the identity of such symptoms with those of true rheumatism, the *relationship* of these diseases to rheumatism was next pointed out. Rheumatism and scarlatina were not infrequently observed in the same house, scarlatina attacking the younger members of a family, rheumatic fever the older, scarlatina usually entering the house first. Erythema nodosum had also been observed in one member of a household, whilst two others suffered with acute rheumatism. Acute tonsillitis had frequently been observed under the same conditions. Moreover, scarlatina, erythema nodosum, or tonsillitis, might be developed during an attack of acute rheumatism.

There appeared to be certain conditions of the body similarly favourable to the development of rheumatism, scarlatina, and erythema nodosum. The frequency of the rheumatic manifestation, when the uterine function was either increased or interfered with, was very noticeable. During the latter months of pregnancy, after parturition and during lactation, as well as in younger patients with disordered menstruation, and women at the menopause, the poison of rheumatism seemed to find a suitable pabulum. The scarlatinal poison was also known to find a suitable pabulum during pregnancy and in the parturient state, insomuch that old practitioners had said that puerperal fever was always caused by the infection of scarlatina. Erythema nodosum was frequently spoken of as being developed in those who were the subjects of amenorrhœa and dysmenorrhœa.

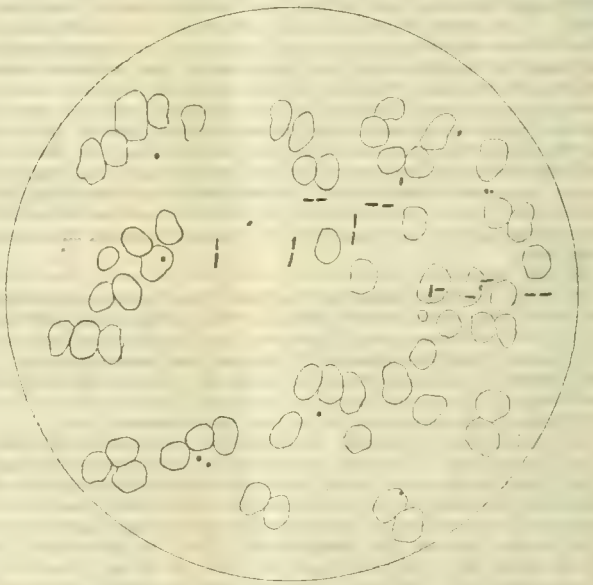
Referring to the question of communicability and epidemicity of rheumatism, Dr. Mantle considered there were as cogent reasons for believing acute rheumatism to be sometimes communicable and epidemic as there were in the case of pneumonia. Recently he had attended in one house a girl with erythema nodosum. During her convalescence the mother developed a first attack of acute rheumatism, and in another week the father, who had been nursing his wife, was likewise attacked with rheumatic fever for the first time. Scarlatina and erythema nodosum were prevalent in the neighbouring houses.

Four years ago, a lady who was nursing her husband in a third attack of acute rheumatism, took the disease. Dr. Robson, near Sheffield, had observed in his practice that year an unusually large number of cases of rheumatic fever, including two very interesting instances of apparent communicability of the disease. In a solitary farm-house, the father suffered with rheumatic fever; his two sons, who were living in the same house, and were frequently in contact with him, both took the disease, each having a severe attack of rheumatic fever.

In another instance, a young lady, who was suffering from an attack of acute rheumatism, was frequently visited by her sweetheart, who in a few days took the same disease. In the month of May he witnessed four cases of rheumatism in separate houses within a radius of fifty yards, also ten cases in a small village, in the space of three months.

Undoubtedly it was more usual to see sporadic cases of rheumatism, but he quite conceived the possibility of an organism having greater infective properties at one time than another, which was frequently observed with other fevers. He suggested that more facts concerning the communicability and epidemicity of rheumatism might be obtained through the Collective Investigation Committee.

The result of these analogies and clinical observations had led him to believe that all these diseases were brought about by poisons of a similar nature, though possibly specifically distinct, and that they were probably caused by the action of bacteria introduced into the system through the mucous membrane of the throat, for in nearly all of them the first signs of the disease were manifested in the throat. He felt, however, that valuable as these facts were, bacteria had yet to be found during the rheumatic process. Having, then, studied the methods usually employed in investigating disease for bacteria, he applied them in cases of rheumatism. He would give the results of his investigation so far as it had gone.

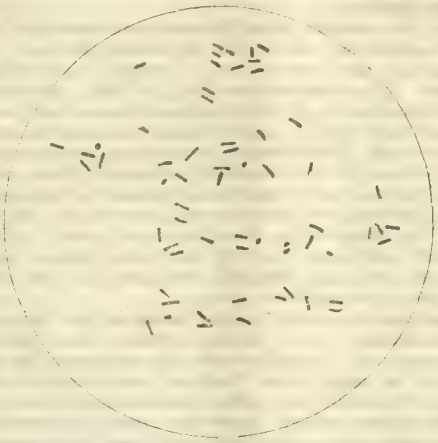


Cover-glass preparation of Blood: Acute rheumatism. ($\frac{1}{12}$ oil-immersion. No. 2 ocular.) Klönne and Müller's.

A typical case of acute rheumatism being under his care, under strict antiseptic precautions, and by means of a sterilised hypodermic syringe, about a drachm of serum was withdrawn from the knee-joint. Several sterilised tubes of gelatinised meat-infusion were at once

[1] See author's paper, Infectious Sore Throat, in which Rheumatism Played a Prominent Part, JOURNAL, Vol. ii, 1885, page 960.

inoculated, and in each tube a copious growth took place. In six other cases serum had been withdrawn in the same way, with like results. Serum being not always available, whilst blood was, and feeling it to be of equal importance to discover if organisms were present also in the blood, in sixteen cases of acute rheumatism, including some which would be called subacute, blood had been taken from the general circulation, with every precaution to prevent contamination from without, when in every case bacteria had been found.



Cover-glass preparation of Serum. ($\frac{1}{50}$ oil-immersion. No 5 ocular.) Klonne and Müller's.

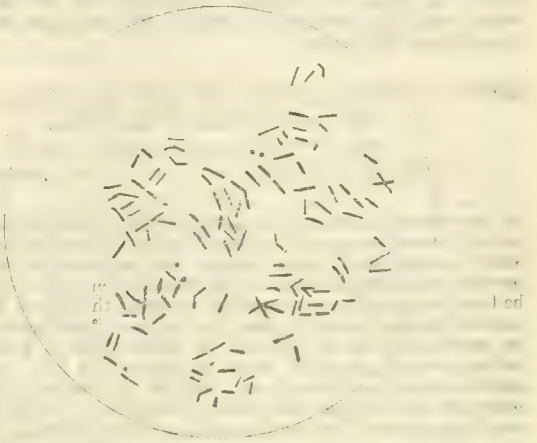
In all of these cases there was considerable fever, joint-inflammation, and sweating, and in most the usual complications. His attention, however, had been directed to the less acute and chronic forms of the disease, both in children and adults. He believed as much rheumatism remained undetected in children, and boys and girls about the age of puberty, as was detected. The importance of marking the most insignificant joint-pains in children could not be over-estimated. Such children, if brought to us, were said to be suffering from "growing-pains." There was no proof physiologically that normal growth of the joint-structures caused pain. The course the disease here took was most insidious, so much so that he would call it "insidious rheumatism." Its progress, however, was in most cases very sure, and sooner or later we saw an acute outburst of the disease, either in the form of rheumatic fever, tonsillitis, erythema, pericarditis, endocarditis, or chorea, or the heart might become slowly involved, and the joints slowly disorganised, producing the so-called rheumatoid arthritis of the young. The blood of ten such cases had been examined by him for bacteria, with the same results as in the acute form of the disease.

Chronic rheumatism in adults, both with and without deformity, had also been investigated. In some of these the disease had come on insidiously, being apparently located in one or two joints, though the changes which had taken place in the valves of the heart showed the disease had not been so limited. In other cases a history of an acute attack was found, the patients stating they had never been free from pains for long together since their first seizure. This he thought opened out a very important fact, that in some cases, when once a child or adult has had rheumatism, a "status rheumaticus" was produced, which showed itself by a recurrence of pains of greater or less severity, usually more manifest when the body was in a depressed condition.

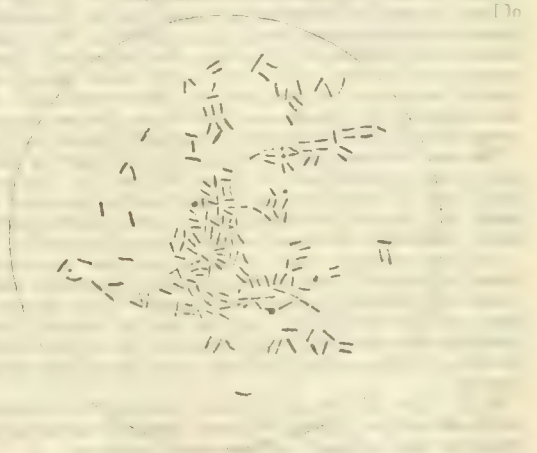
In all of these, as well as in that other form of rheumatism known as rheumatoid arthritis, he had found bacteria. Though there was much difference of opinion, he believed that rheumatoid arthritis was only a manifestation of the one disease rheumatism, for a careful history generally disclosed rheumatic pains or fever having been suffered from when young, or an inheritance of rheumatism. He had only had the opportunity of investigating one case of gonorrhœal rheumatism, in which he found similar organisms in the blood as in other forms of rheumatism. He believed rheumatism occurring during gonorrhœa was not directly dependent upon this disease for its causation, or, instead of seeing an odd case now and then develop rheumatism, we should meet with it much more frequently. It was probable that those in whom it did occur were predisposed to rheumatism by inheritance, or by a peculiar condition of body resulting from an exhausting discharge, making a suitable nidus for the rheumatic poison. The obstinate and destructive character of the joint-affection was explainable by the neglect which, for obvious reasons, this form of rheumatism received, for good results were obtainable when the patient at once took to his bed.

Before describing the bacteria that he had discovered in rheumatism, Dr. Mantle wished it to be understood that he did not bring forward this subject as completed; it was merely a preliminary report.

He had found two kinds of bacteria, a micrococcus and a small bacillus. Cover-glass preparations of blood and serum showed micrococci as single cocci or pairs (diplococci) and in acute cases zoogloea masses; in addition, small short thick bacilli were also seen either singly, in pairs, or in colonies. Plate-cultivations had been made both of serum and blood, and both kinds of bacteria had been observed under a low power of the microscope, and pure cultivations of each had been made in gelatinised meat-infusion and nutrient agar-agar. He had found that in an acid medium these bacteria grew best. At a temperature of 30° C., a rapid growth took place chiefly on the surface, which presented a prettily reticulated brown appearance. The macroscopical appearances differed in a neutral or alkaline medium; the growth was not so rapid, and its surface had a greyish-white appearance. The bacilli had been observed to become longer and more rod-shaped in an acid medium, and sporulation had been noticed.



Third Cultivation of Bacilli in Acid medium. ($\frac{1}{50}$ oil-immersion No. 5 ocular.) Klonne and Müller's.



Second Cultivation of Bacilli in neutral medium. ($\frac{1}{50}$ oil-immersion. No. 5 ocular.) Klonne and Müller's.

These bacteria were easily stained with methyl-violet, fuchsine, or by Gram's method. The utmost caution had been exercised to prevent contamination from without. In two cases of purpura rheumatica, he had found no bacilli. In the one case of gonorrhœal rheumatism, only bacilli had been found in the blood. He had observed bacilli in the desquamating cuticle of one case of acute rheumatism in which desquamation was marked. He thought micrococci were more noticeable in the acute stage of the disease, but had observed both kinds in chronic cases, examined at frequent intervals. Experimentation only could decide if these organisms were the cause of the disease. One thing was certain, that it was not the organisms in that or any other

disease which directly caused the symptoms, but the chemical products the result of their action upon the tissues. This, he thought, opened out the interesting question, might not lactic acid, which had been said to play such an important *rôle* in the production of rheumatism, be the chief ptomaine of this disease? The well-known experiments of Dr. Richardson, and the observations by Sir Walter Foster of the development of rheumatism during the administration of lactic acid, suggested its being an important factor in the production of the disease. The manifestation of similar symptoms in other diseases might be accounted for by the ptomaines being of a similar nature. He had found that cultivations of bacteria found respectively in rheumatism, tonsillitis, erythema nodosum, and scarlatina produced lactic acid fermentation in sterilised milk.

In conclusion, Dr. Mantle stated that he hoped to give the results of further research into this interesting question at a future time. He felt, however, convinced that rheumatism was produced by the agency of a bacterium, which he thought in most cases entered the system through the lymphoid structure of the tonsil. The necessary pabulum being found, the organism multiplied, its morbid action was confined chiefly to the lymphatic system, the serous membranes being affected in preference to other structures. The fact of salicine—a potent germicide—being so successful in the treatment of the disease strengthened this theory.

NOTE ON SOME POINTS IN THE NATURAL HISTORY OF ACUTE RHEUMATISM.

By ARTHUR DOWNES, M.D.,
Medical Officer of Health to the Chelmsford Combined Districts.

In the admirable memorandum, and in the not less excellent card on acute rheumatism issued by the Collective Investigation Committee of this Association, I do not observe any reference to the question of heredity as a possible factor in the causation of this disease. It may be that the compilers were anxious to curtail the field of their inquiry, and in this they would be wise, for in every investigation of Nature we must be content to seek and to learn a little at a time, to crawl before we walk, to walk before we attempt to run. One is loth to criticise even the details of an enterprise endowed with such promise of success, and having such possibilities before it; yet the fear presents itself that some of the inquiry-cards are over-freighted by their load of questioning.

Still, in any systematic inquiry, it seems to me that the problem of heredity must of necessity be among the first for solution. Apart from its intrinsic importance to the community, to say nothing of its interest as a question of pure science, the influence of heredity constitutes one of the two great branches into which etiology divides. Its general tendency is opposed to that of the environment—the *influence des milieux* of the French—and I fail to see how we may scientifically gauge the effect of the one while we remain ignorant of the other.

The men who can throw most and the best light on this matter are the general practitioners, to whose abilities Dr. Stephen Mackenzie lately paid in these columns a well-merited tribute of acknowledgment, and whose opportunities for acquiring trustworthy knowledge of family tendencies to disease are well summed up by him.

I do not remember that the text-books give much information on heredity in regard to acute rheumatism; systematic writers, indeed, commonly contrast gout in this respect. From time to time, however, one meets, both in practice and in medical literature, with instances of marked family predisposition to rheumatic fever. I came across such an one while lately inquiring into a little epidemic of erysipelas.

S. P., aged 51, an agricultural labourer, was attacked by facial erysipelas early in August, followed shortly by acute rheumatism, from which he had previously suffered eleven years ago. F. P., brother of the above, aged 47, living in a cottage hard by, came in to lift his brother up in bed. On August 20th he, too, sickened with erysipelas, which in its turn was likewise followed, in about fourteen days, by acute rheumatism, with pericarditis, from which he died on October 1st. I did not inquire exhaustively into the family history, but I learned that two other brothers, W. P. and J. P., have had rheumatism of some kind; that last Easter, two young women, daughters of S. P. and F. P. respectively, had come home almost simultaneously from different situations ill with acute rheumatism, one of these being a second attack; that another daughter of S. P. had had it two years ago, and a daughter of F. P. had died of the same disease nine years back. Influences of locality appeared to me quite insufficient to explain this exceptional incidence on a particular family.

There is another point of interest in this history. Both in S. P. and F. P. an attack of erysipelas appeared to act as the exciting cause of the rheumatism supervening in individuals already specially predisposed to it. Trousseau (*Sydenham Society's Transactions*, iv, 442) describes a similar sequence, and compares erysipelas in this relation with scarlet fever. There is, indeed, a curious connection between a number of pathological states which group themselves around rheumatic fever, for the unravelling of which we look hopefully to collective investigation.

Urticaria, for example, is well-known as an occasional concomitant of acute rheumatism, and Hebra (*Sydenham Society*, i, 310) asserts that urticaria is more common when erysipelas is prevalent than at other times. The same author (*Ibid.*, p. 291) considers erythema nodosum to be allied to the erysipelatous diseases, and I once received (*apropos* of some note I had published) a communication from a practitioner in the Black Country, drawing my attention to a sequence which he believed he had observed between erythema nodosum and scarlatina; in fact, to use his own comparison, he regarded the former as certain a harbinger of the latter as the cuckoo is supposed to be of spring. I am bound to say that I have only once, during the eight years which have since gone by, observed a concomitance of these two diseases, but then erythema nodosum does not often come to my notice as a non-practising official.

This leads me to speak of another feature in the clinical relations of acute rheumatism. It is half a century since Rayer described the occurrence of a papular rash (E. papulatum) in this disease, and nearly as much since Bouilland and Schönlein respectively pointed out its relations to erythema nodosum, and to a form of purpura. The latter, indeed, under the names of purpura rheumatica (Reder), peliosis rheumatica (Schönlein), and rheumatocelas (Fuchs) has been described as an independent disease. I do not pretend to have studied the pathology of this affection, but in what I have personally observed of it, I have seen nothing but acute rheumatism *plus* certain cutaneous and other results of multiple thrombosis and embolism. This was Trousseau's view. Acute rheumatism, he argued, is the morbid state in which the blood contains the greatest proportion of fibrin, and that is not a condition predisposing to hæmorrhage. May it not be, then, that the petechiæ and ecchymoses which one meets with in acute rheumatism depend on numerous obliterations of veins and consequent extravasations of blood? (*loc. cit.*, iv, 448-9).

I believe that these irregular forms of acute rheumatism—at least so I regard them—are more common than is generally supposed, and I think that not seldom they are relegated to the vague and unsatisfactory category of "blood-poisoning." In one of my annual reports about three years ago, I gave a short description of six cases, one of which I saw myself, occurring in the practice of my friend, Mr. Arthur Goodchild. The chief features of these cases, as observed by him, were: 1. Articular rheumatism, with possibly cardiac complications; 2. Erythema nodosum; 3. An eruption, sometimes occurring in crops, papular, measles-like, or purpuric; 4. Orchitis in two; and 5. Albuminuria, intense and persistent, or, in two cases, intermittent. These symptoms were not necessarily all present in the same case. I have not been able to find any previous notice of the occurrence of orchitis or of albuminuria—both highly important observations, it seems to me. These cases were all males, and all young, some, indeed, small children. I mention this because the writer of the article on Peliosis Rheumatica in Hebra (*loc. cit*, iv, 422-3) says that it had never been seen in children. On the other hand, an article by Aug. Schmitt, "On Peliosis Rheumatica of Children," is referred to in *Syd. Soc. Year-Book*, 1860, p. 403. Unless this article happens to resemble the famous chapter on "Snakes in Iceland," it should, with Mr. Goodchild's experience and my own, modify Hebra's assertion. A similar train of irregular symptoms accompanying acute rheumatism was described by Trousseau under the misleading name of erythema papulatum.

TINCTURE OF SIEGESBECKIA ORIENTALIS IN RINGWORM.

By J. HUTCHISON, M.D.,
Physician to Anderson's College Dispensary, Glasgow

Of the drugs now generally prescribed in the treatment of tinea in its several varieties some are exhibited in the form of ointments, and ointments are always more or less disagreeable to use; others, free from greasy annoyances, give the patient more or less pain in the application. The preparation I have been using for some time past is devoid of both these drawbacks, and at the same time is a speedy and reliable means of curing the disease.

Siegesbeckia orientalis is a shrub, the green parts of which have quite a reputation in the Mauritius. For internal administration a syrup is prepared by pounding the green plant, adding sugar, and straining. This syrup is considered a powerful alterative, and is given in syphilis, gout, scurvy, scrofula, etc. For external use a poultice is made of the bruised leaves, and applied to gangrenous and sloughing sores with marked healing effect. By the enterprise of Messrs. Thos. Christy and Co., London, the plant has been introduced into England and placed within the reach of medical men here. From them I received a supply of the tincture, and have been prescribing it with varying degrees of success in different diseases. It is, however, to its value in treating the several varieties of tinea that I now wish to draw attention.

I have used it in fifteen cases of ringworm; of these, eight were cases of tinea circinata, four of tinea sycosis, two of tinea tonsurans, and one of tinea versicolor. The site of the eight cases of tinea circinata was in six of them upon the neck, and in two upon the calf of the leg. None of the patients called upon me till the disease was well developed, when the red, raised, circular, bounding edge, and the pale central area with its branny desquamation, left little doubt of the diagnosis. The four patients who were afflicted with tinea sycosis all blamed a "foul shave" for their ailment. In all of them the disease was upon the chin, and presented the characteristic fig-like appearance. The two cases of tinea tonsurans showed the roundness of the diseased patches, the scaly eruption, and the brittleness of the hairs peculiar to that form of the trouble. The one case of tinea versicolor was also typical.

My prescription in all of them was the same, namely, equal parts of tincture of siegesbeckia and glycerine, and this I ordered to be well rubbed into the affected area night and morning. The drug appears to act both as a stimulant and a parasiticide, and the method of cure was for the diseased patch to become broken up into a number of smaller patches, with sound skin intervening. These smaller patches became again broken up till they disappeared altogether, and in their place was left a red blush, as if the part had been struck a smart tap with a cane. This redness, however, only remained for a day or two. The two cases of tinea tonsurans were the most stubborn to give way, but even in their cases more frequent applications, and continuing the treatment over a longer period, brought about the result desired, and that, too, without resorting to epilation.

SURGICAL MEMORANDA.

STIFFNESS OF THE GREAT TOE IN ADOLESCENTS.

WHEN, in the JOURNAL of April 2nd, Mr. May asked for information regarding this condition, I wrote to him direct, stating that he should support the instep, as the condition was in almost every case dependent on some giving way of the arch of the foot.

I was recently consulted by a student of medicine who complained of this condition. It had troubled him for several years, and the symptoms were as already described by several writers. All sorts of remedies had been applied *to the joint* without any good effect. The deformity could be noticed even with the boot on, as one writer observes. When I suggested a slight giving way of the arch, he naturally did not feel flattered, and stoutly denied that he had any flat foot; but, on careful examination and comparison, he was obliged to admit that the left arch was rather lower than the right, especially towards its anterior part. I then demonstrated that a similar condition could be produced on his sound foot by firmly pressing the ball of the great toe upwards.

When standing on one foot, so that it has double weight to bear, if the weight be thrown slightly forwards on to the ball of the great toe, it will be found impossible to hyper-extend the toe even in a foot perfectly normal. The position seems to be that the tarso-metatarsal joint is extended; the metatarsal bone and phalanges then occupy the same straight line; and the extensor proprius hallucis muscle is practically powerless in its attempts to hyper-extend the toe. The fibrous slips which connect the tendon of the extensor proprius hallucis (or its sheath) to the head of the first metatarsal bone and to the phalanx of the great toe (Duchenne) cannot be brought into action.

Considerable error arises from the idea that the arch of the foot can only give way at a particular point; and the truth seems to be that it may give way almost anywhere, just as curvature of the spine may commence and be most marked at almost any intervertebral articulation. The term flat-foot ought, therefore, to be used in a wide sense; and it has been proved by experiment that the exclusive importance generally ascribed to the inferior calcaneo-scaphoid ligament and tibiales muscles in supporting the arch is a mistake. This point has been urged by Dr. Symington in the *Journal of Anatomy and Physiology*, vol. xix, page 83. It is also supported by Professor Humphry in a later number (October, 1886). The condition, then, for which the names "hallux flexus" and "hallux rigidus" have been proposed is merely a modification of flat-foot, and these names would have the disadvantage of directing attention away from the point which really required treatment—namely, the instep.

But, further, the condition has been already described under the heading of "flat-foot with arthritic symptoms" by Mr. Golding-Bird (*Guy's Hospital Reports*, vol. xli, page 451). In referring to the complaint, he states: "It is usually mistaken for gout, and the patient is treated, accordingly, ineffectually. Some cases of flat-foot complain of pain hardly, if at all, in the usual place, but in the ball of the great toe." The straight and rigid position of the great toe is also described.

Professor Humphry has also described the bony outgrowths "similar to those which are common in chronic rheumatic arthritis." He states that they are "caused, no doubt, by the undue pressure to which the upper parts of the articular surfaces are subjected in consequence of the preternaturally extended condition of the several joints." (*Journal of Anatomy and Physiology*, October, 1886.)

W. SCOTT LANG, M.D., M.R.C.S., F.R.C.S.E.,
Demonstrator of Anatomy, School of Medicine, Edinburgh.

MR. MARSH'S suggestion, connecting this affection with puberty, (JOURNAL, May 28th, p. 1157) reminds me of the following case.

A boy of about 12 years became subject to attacks of pain and great tenderness of the first left metatarso-phalangeal joint, with partial stiffness. After a year or two the attacks became less frequent and severe, being noticeably worse in damp weather and on exercise; and they have since almost entirely left him. The patient is now 34. The proximal end of the first phalanx is much enlarged, causing the boot-deformity described by Mr. Marsh; and the joint cannot be extended beyond a straight line, whilst that of the right foot he can extend 60° beyond the straight line. There is also some tenderness and "cracking" crepitus on movement in the inter-phalangeal joint. The foot is not flat; nor is there history of tight boots or of excessive walking, nor of gout or rheumatism, except doubtfully of gout in the mother's family. There is, however, one fact of interest. A year or two before the toe-affection began, patient for one or two years practised masturbation, but quite ceased before puberty came on at the age of 14. It is curious that the boy himself ascribed his toe-pains to the habit named. Is it possible that the unhealthy activity of the sexual centres thus early may have had an influence in the causation? Other joint-lesions are often now connected with central nervous influence.

R. HINGSTON FOX, M.D.
Finsbury Circus.

UMBILICAL HERNIA: RUPTURE OF THE SAC: OBSTRUCTION OF THE BOWELS: GREAT FÆCAL ACCUMULATION.

I SUBMIT the following case for publication, as it is one of the many cases a country practitioner has to face without any previous warning, far away from home and from the aid of any consultant or even trained nurse.

On the morning of December 31st, in passing through an outlying village, I was asked to see H. D., "who was very ill and sick." I found a very corpulent woman, aged 55, in a state of partial collapse, with stercoraceous vomiting, the cause an immense obstructed umbilical hernia of eight or nine days' standing. The skin over the mass of extruded material presented a dark, uneven, nodulated, and hard surface, but was warm. The tumour measured horizontally 12 inches, vertically 8 inches, and protruded four or five from the abdomen.

The hernia, in a very much smaller condition, had existed for twelve years. Nine days previously, after violent coughing, H. D. had felt something give way, and the tumour at once began to assume its larger dimensions. On examination, I concluded that the hernial sac had been ruptured, and the intestines escaped into the adjacent subcutaneous tissue.

With much difficulty I discovered the umbilical orifice, dilated it with my finger, and in three hours managed to pass back the bowels first through the rent in the old thickened sac, and then through the stricture into the abdomen. Stercoraceous vomiting continued all the time. The omental protrusion was irreducible.

As soon as the hernia was returned and a bandage with a pad ap-

plied, the patient was placed in a comfortable position, and warmth applied to the body and extremities. Before leaving, I was gratified by the sound of abundance of wind.

The patient continued to progress favourably for about twelve hours, the sickness ceased, liquid food was administered, and the bowels acted slightly. She had a smile upon her face when spoken to, and was quite collected and quiet. I last saw her at about three o'clock in the afternoon of December 31st. On calling next morning, I was informed that, during the night, H. D. suddenly had a fit and since then had been getting worse. I found her rapidly sinking, unconscious, with hemiplegia of the left side, and the characteristic drawing of the face, with continual spasmodic movements of the right arm and leg. She died twenty-one hours after the seizure. I concluded that apoplexy had robbed me of a very promising case.

Burnham House, Bucks. ALFRED E. WILMOT.

PLUGGING THE POSTERIOR NARES.

THE method I have found most effectual is to pass an india-rubber catheter, armed with a piece of twine of sufficient length, along the floor of the nose, until it can be seen projecting between the fauces at the back of the throat; the twine can then be seized by a pair of forceps, and drawn forward through the mouth; a pledget of lint or rag is then fastened to the string, drawn back into the posterior nares, and the catheter withdrawn. Of course, if necessary, a similar proceeding may be effected on the other side; it is very simple, and causes the patient very little pain or inconvenience, besides being most effectual.

Upper Norwood. GEORGE K. POOLE, M.D.

FULMINATING ATLO-AXOID DISEASE.

PUBLISHED cases of atlo-axoid disease prove its insidious character and masked symptoms; none more clearly than that recorded by Mr. Buckley in the JOURNAL, April 3rd, 1880, where a lad was under observation in hospital for a month with bronchitis, and died suddenly from a slap on the back, without spinal trouble being suspected.

Mr. William Adams, in Quain's *Dictionary*, writes: "Occasionally disease of the cervical spine is ushered in with obscure cerebral symptoms resembling subacute meningitis."

The following case is published as an example of cerebral symptoms occurring at the close of the disease: L. H., aged 24, single, the daughter of a linendraper. The family-history was good, and there was no previous severe illness or injury. She was slimly built and thin, but always quick and active.

On May 22nd, she complained of pain in the right hypochondrium. On May 23rd, she went to a dispensary, and was given medicine for the liver. On the two following days, she was better, and continued serving in the shop. On May 26th, she was seized with intense neuralgia over the occiput, and again walked to the dispensary, obtaining medicine for neuralgia. At 6 P.M., I found her lying on her back on a couch. The pulse was 100; the respirations slow; the temperature was 101°. She had been sick once or twice, and constantly felt sick. She was easily roused, but only with difficulty made to answer questions.

On May 27th, I found her sitting up in an arm-chair. The occipital pain was less, but she was still somewhat lethargic. The pulse was 100; the respirations 28; temperature 99°. On the following day, she relapsed. The occipital pain was acute. The pulse was 100, and the temperature 99 4°. On making her sit up, she held her head stiffly. She complained of pain running down the back of the neck. Pressure nowhere over the spine increased pain, but I fancied jarring on the top of the head did do so. The only easy position was on her side, with the right cheek on the pillow. Two hours after my visit, her sister (having been away only two minutes) found her breathing heavily face downwards, having apparently vomited on the corner of the pillow. The sister lifted her on to her back, when the heavy breathing at once ceased. On my arrival shortly afterwards, L. H. was quite dead.

I could obtain no *post-mortem* examination, but no doubt could arise as to the sudden compression of the cord, for the patient being very thin, I could move the atlas and axis separately as easily as in the dry threaded spine of the dissecting-room. I noticed nothing peculiar about the pharynx on my first visit, nor could I detect anything with the finger after death. Though disinclined to swallow solids, she had taken liquids with avidity.

The duration of her disease cannot be surmised; the onset of acute symptoms was followed by death in fifty-six hours.

CHARLES SANDERS, M.D.Lond., M.R.C.S.

WOUND OF ULNAR NERVE TREATED SUCCESSFULLY BY RESECTION AND SUTURE.

A SCHOOL-GIRL, aged 10, was admitted into the Lincoln County Hospital on July 12th, 1886, with loss of power and sensation in the parts supplied by the left ulnar nerve, due to a wound inflicted in the previous February through her having fallen upon a portion of broken jug when descending some stairs. On admission, a scar a quarter of an inch in length was seen to run transversely across the course of the nerve, an inch and a half below the internal condyle; sensation was lost in the little finger, but not in the ulnar side of the ring; the interossei, the adductor pollicis, and the muscles composing the hypothenar eminence were much wasted; there was marked hollowing of the palm, and the first phalanges were somewhat hyper-extended, while the second ones were slightly flexed. The skin of the hand was smooth and shiny.

On July 17th, the patient being under the influence of chloroform, after Esmarch's bandage had been applied, a longitudinal incision was made for an inch and a half along the course of the nerve, taking the cicatrix as its centre. On exposure, the nerve was found to have been completely divided, and its extremities united at an angle, so that the upper one, which was markedly bulbous, overrode the lower. The damaged portion was excised, and the divided ends of the nerve accurately approximated by three chromic catgut ligatures. The edges of the wound were brought together by half-a-dozen chromic catgut sutures, a drainage-tube inserted, and antiseptic dressings applied.

For the first week the case progressed satisfactorily; but afterwards the wound suppurated, and ultimately healed by granulation, so that the patient did not leave the hospital until August 30th, when there was slight return of sensation in the little finger.

When last seen, on April 23rd, 1887, the skin of the hand was normal in appearance; sensation was perfect in the little finger and ulnar side of the hand; there was neither marked hollowing of the palm nor hyper-extension of the first phalanges, and the muscles reacted well to the voltaic current.

Notwithstanding that a period of between five and six months had elapsed between the occurrence of the accident and the performance of the operation, and that the operation-wound healed by granulation, complete return of function of the nerve was established. It seems probable that the ultimate successful issue of the case was dependent upon the deeper portion of the wound having become united prior to the occurrence of suppuration in the more superficial part.

T. SYMPSON, F.R.C.S.,
Surgeon to the Lincoln County Hospital.

CLINICAL MEMORANDA.

RUBEOLA SCARLATINOSA.

I NOTE some remarks under "Clinical Memoranda" in the JOURNAL of May 28th bearing on the above subject, but fail to find any such disease mentioned in the 1885 edition of *Nomenclature of Diseases* published by the Royal College of Physicians of London. In this, epidemic rose-rash is enumerated, of which curious affection I have lately attended a number of cases, and a few are still under the care of my colleague, Dr. C. W. Johnson, M.S. Between twenty and thirty have occurred in all, of which total only two have been in adults. The incubation, as far as I have been able to fix it, has been rather that of measles than of scarlatina. Amongst the early symptoms, vomiting has been pretty constant; a throat-implication resembling that of scarlatina in about one-half of the cases; a tongue resembling that of scarlatina not quite so frequent. This has rapidly cleaned even before the rash has quite subsided. Temperature and symptoms generally were taken high at the onset in the adults, in both of whom the rash was most abundant; in one man it was indistinguishable from scarlatina, and covered the entire surface, yet it subsided without even the amount of branny desquamation that is not uncommon in measles. In this case the eyes were much injected, and there was some delirium. Bronchial symptoms were also present. The rash has been multiform, but chiefly resembling that of scarlatina, appearing in the sequence observed in measles, and lasting about three days; desquamation variable, complete in two or three cases, slight in some others, and absolutely *nil* in the majority. Three of the patients have previously been treated by me for measles, and I believe that others of them had suffered from that disease. The contagion has been of varying intensity; in some families every child has suffered; in two families of eight children respectively only one child was affected in each. In no case did an adult member of the affected families suffer. The precautionary measures were alike throughout:

segregation of the sick as far as possible, the free use of disinfectants, and suspension of a curtain moistened with disinfectant solution over the doorway.

No case caused anxiety. In those treated by myself, carbonate of ammonia was invariably used, and apparently with benefit. Convalescence was rapid and complete, and no sequelæ have been observed. ROBERT BATHO, M.D.Brux., M.R.C.P.Lond.

Pontefract.

OLEUM DEELINÆ IN THE TREATMENT OF ECZEMA.

RECENT writers on the treatment of eczema seem not to have noticed or been influenced by a paper in the *Practitioner*, from the pen of Dr. John Roberts, of Chester. He strongly recommends the use of oleum deelinæ, so called on account of its being manufactured by the Dee Oil Company. This is a clear inodorous oil, not unpleasant to use, and very easily absorbed. I have used it in a large number of cases, with far better results than from any other method of treatment. It is of most use in cases of papular eczema, or in the vesicular type of the disease, if there be not co-existent too much erythema and inflammation. Used, as by Dr. Roberts, uncombined with other oils, I have sometimes found it irritating, but by mixture with equal parts of castor-oil, this objection has been obviated, and the utility of the oil was not interfered with.

The following cases are fair examples of many in which the use of oleum deelinæ effected a cure after other remedies had been used without success.

J. A., aged 66, a retired publican, suffered from gouty eczema of the papular type on the back and arms. He had been for twelve months continuously under medical treatment, without improvement in his eczema. He suffered horribly from itching, was unable to sleep, and had become irritable and nervous. He was ordered alkalies internally, and to use rags soaked in oleum deelinæ and oleum olivæ (1 in 4). In twelve days he was much better, and in five weeks ceased to attend, as he was well. A little thickening of the skin remained, but there were no papules, and no itching was complained of.

E. S., a small, ill-developed boy of 9, was brought, after having suffered from eczema nearly all his life. The eruption was not pustular, but a compound of vesicles and papules. The skin was thickened and very irritable. He was ordered olei morrhuæ ℥j bis die, and directed to use the following oil: Olei deelinæ; olei ricini āā ℥j; oleii olivæ ℥ij; m. ft ol. He improved steadily under this treatment, and in three weeks' time was nearly cured. The thickness of the skin had not disappeared, but the irritation had subsided, and no fresh vesicles or papules had been formed.

ROBERT M. SIMON, M.B.Cantab., M.R.C.P.London,
Assistant Physician to the Birmingham General Hospital.

REPORTS

OF

HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

YORK COUNTY HOSPITAL.

A CASE OF POISONING BY CHLORIDE OF ZINC, WITH ABSOLUTE DESTRUCTION OF STOMACH.

(Under the care of W. H. JALLAND, F.R.C.S.)

[The notes of this case were taken by Mr. T. BIRT, Assistant House-Surgeon.]

G. S., a labourer, aged 33, was admitted on June 17th, 1886. He had tried to commit suicide five days before by taking a saturated solution of impure chloride of zinc.

According to his wife's account, on her return home she found him vomiting, and he told her that he had taken the poison about six hours previously, and that he immediately began to vomit afterwards, that the amount taken was about three or four ounces. She noticed that his mouth and tongue were white, and that he was incessantly vomiting a bloody fluid. He complained of great pain and a burning sensation in his throat, and in the region of his stomach. Towards the evening of that day he became convulsed, and had many very violent epileptiform fits during the night. He was rather better on the following day, but had many attacks of difficulty of breathing, with convulsions, and vomiting of a bloody fluid.

This condition continued up to the time of his admission, four days later, when he was found to be suffering from some superficial ulceration and congestion of the pharynx, causing a good deal of soreness and difficulty of breathing and swallowing; he also complained of a burning pain, which he referred to the ensiform cartilage, and there was marked tenderness on palpation over the whole of the epigastrium. This substernal pain was present from the time of his admission up to the time of his death, with occasional exacerbations, as when he swallowed, but was apparently not very severe nor agonising in character. He seemed to have much difficulty in swallowing fluid, and would almost immediately return, apparently, the whole quantity which he taken slightly blood-tinged, with but little retching, and increase of the substernal pain. He would also, independently of taking food, vomit some blood-tinged fluid or pure blood. At times he had attacks of dyspnœa, chiefly inspiratory. He was emaciated and very anæmic, with a small and rather rapid pulse, and usually a normal or slightly subnormal temperature; his respiration, save in the above-mentioned paroxysms, was quiet, regular, and rather slow. He had no more epileptiform attacks other than the respiratory convulsions, which usually only occurred towards or during the night. His mental condition was depressed, but not markedly melancholic. He was ordered a liquid diet, confined to his bed, and to relieve the condition of his throat, belladonna (in ten-minim doses, three times a day), in combination with iron, was administered.

During the following week he still continued to bring up blood-tinged fluid and pure blood, sometimes to the amount of two or three ounces; to check this, he was given a mixture containing tr. hamamelis, ♏. xx, and tr. opii, ♏. v, every four hours, together with ice to suck, and the hæmorrhage gradually abated, the other symptoms remaining as before. His temperature never rose more than one or two degrees above the normal.

July 1st. Bismuth, potash, and morphine, both separately and in combination, were used to relieve the substernal pain and the vomiting after food, with very slight success; and on July 7th, to alleviate the dysphagia the pharynx was painted with a 5 per cent. solution of cucaine, before taking food; this also was of but slight benefit; deglutition was difficult and prolonged, and was soon followed by the return of the fluid taken. There were now rarely any traces of blood in vomited matters, and the vomiting was almost always dependent on taking food. The respiratory troubles had ceased, and the patient got up every day, and with the exception of the substernal pain, dysphagia, and inability to retain food, he had but few symptoms, his temperature being normal and his general health fairly good, though rather more emaciated than when admitted. The bowels acted about once a week, a very small, pale, solid motion being passed; he would also occasionally complain of a "griping pain in the bowels."

This condition continued up to July 31st, when he seemed to be losing ground, the vomiting becoming more frequent, and the difficulty in swallowing being more pronounced, so that he had to be fed by nutrient enemata and nutrient suppositories. No improvement taking place by these means, the advisability of performing gastrostomy was considered, but there was some suspicion that he drank and retained milk in the night time when the nurse's back was turned; and as he was a profound malingerer, the question of operation was put off.

From this time until the beginning of September he steadily improved; at first he retained small quantities of milk and beef-tea, and day by day took more food, till shortly before his death he was taking eight pints of strong beef-tea and one or two pints of milk a day. He became much fatter and more active, and only complained of the burning substernal pain and puffiness of the eyelids in the morning. No albumen was found in the urine, which was normal.

At the commencement of September, he became gradually weaker though taking this large amount of food. He now took to his bed, and on September 6th he seemed much collapsed, being cyanosed, with slight dyspnœa and a feeble pulse, but with no other physical signs. He remained in this state till the following evening, when he gradually sank.

The necropsy was performed thirty hours after death. On reflecting the abdominal parietes, nothing could be seen of the stomach, and on drawing aside (that is drawing outwards) the spleen from a thickened mass in the position of that viscus, some inflammatory adhesions were broken through, and a small abscess-cavity the size of a hazel-nut, with greyish walls, containing a little reddish pus, was opened. The stomach was found to be represented by an organised inflammatory matting of the gastro-hepatic omentum, and the upper portion of the great omentum, both of which had lost their characteristic shining appearance, to the adjacent viscera, as follows: behind and below to the pancreas, the pillars of the diaphragm, and the vertebral column; above, to the under-surface of the left lobe of the liver; on the left side, to the upper portion of the inner surface of the spleen,

which was drawn inwards into the epigastric region of the abdomen; and on the right side, to the under surface of the left lobe of the liver.

With great difficulty, owing to the adhesions, this mass was removed with portions of the neighbouring structures adhering to it, and on examination no traces of the muscular, mucous, or serous coats of the stomach could be found in it; it seemed to consist entirely of an irregular, sausage-like mass of organised, inflammatory, peritoneal adhesions, about five inches in length and four inches in circumference, its outer surface was very irregular and ill-defined, greyish-brown in appearance, much resembling a pleuritic adhesion. On opening this mass no trace of a mucous membrane could be seen between the termination of the œsophagus and the commencement of the duodenum, which was dilated to the size of a half-crown, the general appearance of the cavity being much like that of a chronic abscess. In size it measured four inches from the œsophagus to the duodenum, and about three-quarters to one inch in diameter, there being an irregular constriction about the middle of the mass. The walls of the mass were thin opposite the liver and the spleen, but about the pancreas and the attachment of the great omentum they were three-quarters of an inch in thickness. The common bile duct and the cystic duct were not involved, and opened into the duodenum as in the usual position. Beyond the lesion above described there were no evidences of a past attack of general peritonitis, no cicatricial contraction of the œsophagus or pharynx, and, with the exception of slight congestion of the bases of both lungs, the other viscera were perfectly healthy.

Remarks.—I think that the case is worthy of note, in that it is not by any means a form of suicide commonly met with, and for the pathological and physiological interest that it affords. In the first place, there would most probably be some arsenic in the impure chloride of zinc, and that might have had much influence in producing the vomiting immediately it was taken. Next, the reflex epileptiform convulsions, the dyspnœa not dependent on œdema of glottis but probably reflex from stomach by means of the vagi. The mechanism of vomiting; the patient did not retch, but his mouth filled as in cases of pyrosis. The duration of life with no gastric mucous membrane to metabolate proteids, leaving all that part of digestion to the pancreas and intestinal glands. The absence of rise of temperature, which was nearly always normal or subnormal. The few symptoms; the position of the pain, which was never agonising, its peculiar character and long duration; the absence of signs of peritonitis, and the persistence of symptoms simulating, as regards vomiting and deglutition, stricture of the œsophagus.

REPORTS OF SOCIETIES.

BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.

Thursday, June 2nd, 1887.

E. Noble Edwards, M.R.C.S., President, in the Chair.

Peripheral Neuritis.—Mr. Paley showed a case of peripheral neuritis in a woman, aged 38, who had indulged largely in alcohol for some years. No history of syphilis. Both arms and legs almost completely paralysed. Acute pain and great tenderness of muscles, with much wasting. Hyperæsthesia, with marked delay in nerve transmission. Muscles of forearm and leg showed reaction of degeneration well. Double "ankle drop" and partial wrist drop. Trunks of external popliteal, ulnar and median nerves acutely tender and apparently swollen. She was childish and had delusions. With good food, total abstinence from alcohol, and the administration of pot. iodid. and tinct. belladonnæ distinct improvement had been obtained.—Dr. Hollis thought such cases rare.—Mr. Larking mentioned a case of vomiting, with hyperæsthesia of the skin.—Dr. Black thought the tenderness of the muscles due to perverted sensation of terminations of sensory nerves, not to inflammation of the muscles. He doubted whether these cases were due to alcohol.—Dr. Mackey believed the favourable termination of these cases was rather in favour of the alcohol theory.—Dr. Whittle mentioned a case with extreme local tenderness.

Aneurysm of Aorta.—Dr. Hollis showed a case of aneurysm of the arch of the aorta, with obscure nervous symptoms.—Mr. Baber asked as to the condition of the recurrent laryngeal nerve.—Dr. Whittle remarked on the association of aneurysm with phthisis in the case.—Dr. Ewart mentioned a case of aneurysm of the aorta pointing near the scapula.

Hydatiform Degeneration of Chorion.—Mr. Jeffree showed a specimen of hydatiform degeneration of the chorion, and gave particulars of the case. The patient was aged 25, and the abortion took place three months after menstruation, when the abdomen was as large as with a full-time pregnancy. For six days before there was hæmorrhage, with uterine pains, and the passage of cysts per vaginam. The whole contents of the uterus were suddenly expelled after two or three strong pains, followed by profuse hæmorrhage. During the three months morning sickness was unusually severe. The urine was albuminous.

Diabetic Collapse.—Dr. Mackey mentioned a case of diabetic collapse in a lady of 27, fatal in 48 hours. Patient had been under medical treatment for six weeks only, but the nature of the malady had not been recognised. She had complained of debility, and there was much emaciation. There was no dyspnœa, and no acetone in the urine.

ACADEMY OF MEDICINE IN IRELAND.

Medical Section.

Friday, May 27th, 1887.

James Little, M.D., President, in the Chair.

Exhibition.—Dr. Knight exhibited a case under treatment by rectal inflation, after the method of Bergeon, and also showed the instrument devised for that purpose and the method of using it.

Some Notes on the Mineral Springs of Auvergne.—Mr. M. A. Boyd contributed a paper on the mineral springs of Auvergne. Of Royat he did not intend to speak, as it was now so well known to the members of the Society through the communication of Dr. Cruise last year. La Bourboule, Mont Dore, and Chatel Guyon, which he visited in the autumn of last year, and the effects and properties of which he studied during his stay, would occupy the principal portion of his remarks. La Bourboule was, in his opinion, one of the best springs on the continent, and though the strongest arsenical spring known, was one of the best mineralised and easiest borne by the invalid. Its bathing establishment is now one of the finest in France, and fitted up with every apparatus needed for the administration of the waters in the form of steam spray, douche, or pulverisation for diseases of the naso-pharynx and larynx. It is in the treatment of obstinate skin diseases, such as psoriasis, eczema, and lichen, suppurating tubercular glands, and all forms of tubercular disease, including phthisis, that its waters are best known, and many cases of obstinate skin diseases, unrelieved by Royat, rapidly get well by an after-course of La Bourboule. The Bourboule waters bear exportation well, and were, in his opinion, an admirable form in which to administer arsenic to those cases requiring it. It exists in the waters in the form of arseniate of soda combined with bicarbonate of soda and chloride of sodium, at a temperature, coming from the spring, of 140° F. Mont Dore, which enjoys a cooler climate than La Bourboule, being about 4,000 feet above the sea level, contains many valuable springs of a lower temperature than those of La Bourboule—113° F., with arsenic in combination with iron, but in a lesser quantity than in those of La Bourboule. The vapour establishment of Mont Dore is the great feature of the place. Two large inhalation halls containing the waters in a state of steam spray are filled with patients undergoing this method of treatment for diseases of the respiratory organs. Here may be found, side by side, asthma, emphysema, and cases of phthisis, with tubercular cavities in the lungs—a system which is open to the very gravest objection, as the bacilli of phthisis is most at home in such a moist warm atmosphere, and likely to find a fitting receptacle in the lungs of the uninfected breathing such air. There was no doubt about its efficacy in cases of bronchial asthma, bronchitis, and emphysema, though its effects in spasmodic asthma and phthisis were very doubtful. The season was a short one at Monte Dore—from end of June to beginning of September. Chatel Guyon, which is called the Kissingen of France, is also a thermal spring possessing considerable aperient action, which is owing to the presence in it of chloride of magnesium in combination with chloride of sodium and bicarbonates of soda, lime, and iron. The situation of the place is in one of the beautiful Auvergne valleys, about six miles from Royat, and the waters enjoy a wide reputation for the cure of obstinate constipation, the beneficial effects of the waters continuing after leaving the spring. It is resorted to principally by dyspeptics and gouty patients; while its baths, containing a large quantity of carbonic acid, have a most beneficial effect on cases of uterine disease, diabetes, and Bright's disease.—Dr. Finny had himself sent two patients to the Auvergne district last year. The large quantity of arsenic in the water brought under notice by Mr. Boyd, and the large doses recommended, suggested the utilisation of that water for anæmia, the idiopathic variety of which resisted all other treatment except arsenic.—The President said the therapeutic history of mineral waters remained

yet to be written. *A priori* conclusions were fallacious; but perhaps for the practical physician it was enough to be assured that a patient sent to Aix-la-Chapelle would have syphilis removed, or that one sent to Wiesbaden would be relieved of gout. In order, however, to arrive at a sound conclusion it was important to have reliable statistics——for instance, the number of cases of eczema sent to Royat which came back worse, better, or unaffected; and so on in respect of the other springs to which specific curative properties were attributed.—Mr. BOYD replied. He found Royat hot in the end of July and beginning of August, while Mont Dore was cool enough for anybody, and the evenings were cold enough to require an overcoat. The scenery enhanced the value of the Auvergne district, which was called the Switzerland of France, and was unparalleled for a walking tour as regards delightful views and bracing air.

Pityriasis Rubra.—Dr. WALLACE BEATTY read notes of a case of pityriasis rubra which had been under his care, and he showed coloured plates illustrating it. The patient, a woman aged 71, was admitted into the Adelaide Hospital on April 15th last, affected with this disease, which had commenced a year before; it began first on the inside of the thighs, and spread thence to the legs, body, and arms, and finally to the face, which was only affected about ten days before her admission to hospital. The patient presented a very remarkable appearance. On the trunk and extremities the skin was of a red colour, and more or less copiously covered with thin dry papery-white scales; the scales were scanty or wanting in the axillæ and other flexor surfaces, and here the redness was very marked. Elsewhere they were numerous and close together; they were of irregular shape, and varied in size, the average being about one-third or one-half inch in diameter; but some were much larger, others smaller. They were partly attached and partly free. They could be peeled off readily without pain. The surface on which they rested was soft and free from moisture. Each scale was marked with very fine and closely-set ridges corresponding to the lines of the skin. The back, hips, external surface of thighs, the shoulders and chest were remarkably scaly—the appearance was not at all unlike as though pieces of tissue-paper, torn into small pieces of various sizes, were partially stuck on to the skin close to one another, and left partially free. The legs and feet were œdematous. As to thickening and infiltration of skin it was considerable on the forearm, but elsewhere was slight. The scalp was more or less scaly; the scales were most numerous round its borders. The face had a remarkably tightened appearance, which was due to the fact that the epidermis, which was parchment-like, was not exfoliated as upon the rest of the body, but was in most places simply cracked here and there, the borders only of these cracks showing white where the epidermis was detached from the skin beneath to the extent only of about one-half to one line. The auricles were thickened, stiff, and covered with white scales. At the back of the left auricle the surface was eczematous (moist, with sero-purulent exudation). On the fingers and toes the epidermis had not exfoliated, but was dry and cracked here and there somewhat similar to the face. The subjective sensations were mainly itchiness. The patient was treated with arsenic and bromide of potassium, and got very rapidly better. On the 21st of May she left the hospital, the only remains of the cutaneous affection being on the backs of the knees and legs, which were red and scaly. Her mind, however, had during the preceding ten days been disturbed with delusions. The universal involvement of the skin, its freedom from moisture, its excessive scaliness—the scales being all exfoliated epidermis—were the characteristic features of the affection, which distinguished it from eczema, to which disease it bore the closest resemblance. The eczematous condition at the back of the left auricle disappeared in a few days as soon as the auricle lost its stiffness, so it must be regarded as a secondary affection.—Dr. FINNY verified Dr. Beatty's description of the case, but expressed disappointment that more attention was not directed by him to show the intimate connection of the disease with others, or to demonstrate its own special identity beyond the opinion that it was a separate disease from psoriasis or eczema. He had himself under treatment a woman in whom the epidermic scales were larger than in Dr. Beatty's case (as seen by the specimens on view), and were more universally spread as affecting the mucous membrane of the nose, mouth, and vagina, as well as the whole body; and in that case there was a history of eczema. He had also met with two other cases. One was that of a young man who had been in Glasgow, under Dr. M'Call Anderson, whose prescriptions he had. The whole history of the case was plainly one of eczema, showing a connecting link with that disease. Another case illustrating the connection of dermatitis exfoliativa with other diseases was that of a clerk who suffered from psoriasis diffusa, and who had been frequently under treatment for that disease. Dr. Duncan Bulkley, who was passing through Dublin, saw the case, and concurred in the view that it was one of dermatitis exfoliativa (photograph exhibited), and the scales covered him from head to foot. Here, then, was a case connecting the disease with psoriasis.—Dr. WALTER SMITH said that instances of skin-disease assuming a generalised type, and invading the whole body, were sufficiently rare to call for immediate notice, and to raise a question as to their nature. The affections named as possibly invading the whole surface of the body were few—namely, universal eczema, universal psoriasis, the so-called pityriasis, extensive ichthyosis, and possibly one or two others. A question being raised as to diagnosis, the question of nomenclature was not one merely of words, but of the natural affinity of a generalised eruption of the skin and the probability as to substantive affections liable to invade the whole surface of the body; or, again, was it a rare accident liable to supervene on antecedent conditions of the skin? The microscope would not help to decide the point; it must be decided by clinical investigation. He objected to "pityriasis rubra" as etymologically incorrect. Anyone glancing at the scales would see the term was inapplicable. He also objected to using a generic term like "pityriasis," applying it at one time to a specific parasitic disease, and at another to a generalised of totally different etiology. Therefore the term "dermatitis exfoliativa," though it did not mean much, was preferable, because it did not involve etymological or verbal inaccuracy, and did not bind one to any particular pathology. It might be, as regards diagnosis, that Dr. Beatty was satisfied his case differed materially from eczema. But that was not the point; it was a wider one. There were moist forms of eczema, and dry forms, on the other hand, connected with extensive psoriasis, so that the diagnosis of it as an independent affection was not quite certain. There were grave cases of the disease which tended to death. But there were, from a clinical point of view, two groups of generalised inflammation of the skin: first, a group of cases arising as a primary substantive affection without history or evidence of prior skin-disease; and, secondly, a group grafted upon antecedent conditions of the skin, whether eczema, pemphigus, or psoriasis. A subdivision would be made into the acute cases and the chronic. The acute were those that recovered. All the Dublin cases recovered, being of the acute type. Those cases developed rapidly over the surface of the body, ran a defined course, and, without complication, yielded to treatment. The other group assumed from the first a chronic form, or a relapsing, which came to the same thing. Thus a case was recorded of thirty attacks in thirty years, and another of seventeen different attacks in a lifetime.—Dr. MAPOTHER said the rarity of the disease was shown by the fact that, in his experience of twenty-five years in St. Vincent's Hospital, not more than three cases occurred of exfoliative dermatitis. The case most recent in his memory was that of a girl aged 11, who was treated early last year for an initial attack. She had been perfectly healthy and free from disease till admitted in April, 1886; and it was remarkable that whilst in hospital she contracted scarlatina of rather a severe type, but the zymotic disease did not appear to interfere with the course of the other, and she made a good recovery. The other cases also recovered.—Dr. J. W. MOORE said the poly-typical nature of eczema was forcibly brought home to him on a recent occasion in connection with a case in the Meath Hospital. A young woman, deaf and dumb, who nevertheless was sufficiently intelligent to communicate that she had been ailing only three or four days before admission, had distinct patches of eczema about her ears; and, on exposing the chest, there were two or three places where the eruption was of the usual vesicular type, while everywhere else it was papular or papulo-squamous. There was no suspicion of syphilitic taint. She was treated by means of baths, an ointment of salicylic acid, and mild aperients, and in a fortnight or three weeks she perfectly recovered. Small as were the vesicular manifestations, the disease was one of acute eczema, thus bearing out Dr. Smith's observation that the most acute cases do best. The so-called pityriasis rubra, he had little doubt, was only a variety of general eczema.—The PRESIDENT, having seen the patient, said there was nothing about her skin that had the eczematous appearance; there was an entire absence of the weeping. At the same time every dermatologist who had seen skin-diseases had occasionally seen cases in which the affection of the skin in certain parts of the body would deserve the appellation of eczema, and yet in other parts would deserve the appellation of psoriasis.—Dr. BEATTY replied. His main object was to report the case, not to discuss the connection between the particular disease and other skin-diseases. During the last five years he had seen a great many cases of eczema at the Adelaide Hospital, but not one at all resembling the description of the disease in question. The scales seemed to be entirely exfoliated, and the fact that the disease was general and dry separated it from all the other cases. He would not be justified, however, in forming the opinion

from one case that the disease was a substantive independent one; but he agreed with Dr. Smith that the name he gave the disease was a bad one, and he used it as given by the writer who first described it—namely, Duvergie.

REVIEWS AND NOTICES.

OUTLINES OF THE PATHOLOGY AND TREATMENT OF SYPHILIS AND ALLIED VENEREAL DISEASES. By HERMANN VON ZEISSL. Second Edition, revised by MAXIMILIAN VON ZEISSL. Translated, with Notes, by H. RAPHAEL, M.D., New York. Pp. 402. London: H. K. Lewis. 1887.

THE second edition of Professor ZEISSL'S work, Dr. Raphael's translation of which is now before us, was published in Vienna in 1884, having been revised by the son of its distinguished author, with the addition of some portions of the well-known *Lehrbuch für Syphilis*, which first appeared many years ago.

The present work is divided into three parts, headed respectively Gonorrhœa, Soft Chancre or Chancroid, and Syphilis. The first of these, which occupies 107 pages, contains a good account of gonorrhœa and its complications, but nothing especially new or worthy of note. With regard to the "gonococcus" of Neisser, which has received so much attention of late years, it is remarked that "the hypothesis that an animal or vegetable parasite forms the basis of a gonorrhœal contagium has not yet been satisfactorily demonstrated." In the section on treatment we read that if gonorrhœal patients were to submit themselves to an appropriate diet "and remain strictly at rest, and in addition make daily applications of cold water for several hours to the genital organs and perineum, most cases of gonorrhœa would get well within four or six weeks without injections or internal medicine, or at the most with the aid of very little medicine." We quite agree with the author so far as diet and rest are concerned, but we think that a patient—supposing one could be found to do it—who made "daily applications of cold water for several hours" would run considerable risk of developing something worse than gonorrhœa before the four or six weeks had elapsed.

Syphilis, of course, takes up the largest portion of the work, and is for the most part excellently dealt with. The general description of the disease and of its various manifestations on the skin, mucous membrane, etc., is admirable, and the same may be said of the section on the larynx and trachea by Professor von Schrötter, and of that on the eye by Professor Mauthner, who, it may be mentioned, does not consider interstitial keratitis to be peculiar to syphilis. But some portions of the work which relate to acquired syphilitic disease of the viscera are decidedly disappointing. For example, in a book of this size, a space of little more than half a page can hardly be considered sufficient for the lungs and bronchi; nor can the syphilitic affections of the spleen be adequately discussed in ten lines, or those of the kidney in six lines, the space here allotted to these subjects respectively. We are also rather surprised to learn that "we have no positive evidence that syphilis exercises any influence in the production of joint-affections;" and again, with reference to the inherited form of the disease, that "As a sign of hereditary syphilis *manifesting itself in the earliest period of infancy*, Hutchinson mentions the peculiar curving of the upper incisor teeth" (our own italics).

Passing to the all-important subject of treatment—a subject on which, probably, no one in Europe had better opportunities for forming an opinion—we find Professor Zeissl's method briefly stated (p. 335) as follows: "In patients affected with an initial primary lesion, but who are still entirely free from specific phenomena, such as glandular enlargement or eruptions, the treatment is confined to the local lesion. If the first syphilitic phenomena appear on the common integument in the form of a macular or papular eruption, we prescribe no anti-specific remedies for the patient, even when suppurating papules are present in the mouth, on the lips, or on the tonsils, etc.....If the eruption has not entirely disappeared at the end of eight weeks, or if no improvement is perceptible, we then prescribe the preparations of iodine. If the symptoms of the disease have not entirely disappeared after the expiration of eight weeks more, the treatment with mercury may be resorted to without any fear concerning the future course of the disease." Again, we read: "In our opinion mercury should not be used till eight or ten weeks after the first eruption has appeared, unless the latter is too slow to disappear under expectant or iodine treatment, or *dangerous phenomena threatening some of the organs of sense, the viscera, or the central nervous system supervene.*" Now, from the latter portion of this quotation (which we have italicised), it would naturally be inferred that, if dangerous phenomena do supervene, mercury ought to be given at once. But on turning to the section on syphilis of the nervous system, we find (p. 280) that "the predisposing causes for the development of this form of syphilis, as for all the other grave forms, are: too *early* use of mercury," etc.

Thus, it would appear that, if there are no dangerous symptoms, mercury, if administered at all, is not to be given till a certain time has elapsed; while, if dangerous symptoms do arise, we are to give the very drug which Professor Zeissl places first among the predisposing causes of all grave forms of the disease. This is a line of treatment somewhat difficult to understand, and it is not made less so by the following: "Iodine in proper quantities, in conjunction with a carefully-regulated regimen, is sufficient to *cause the symptoms of syphilis to disappear, or at least to be weakened, so that only a few mercurial inunctions will be necessary to complete the cure, without fear of a relapse occurring in the years to come.*"

From the foregoing extracts it will be seen that the author's views on the treatment of syphilis are not those which are most generally held at the present time. Few, we fancy, would share his confidence in the "expectant" form of treatment, or in the preparations of iodine as a permanent remedy; and it would be very interesting to know on what evidence he bases his statement that the early administration of mercury is a predisposing cause of all grave forms of the disease.

The English reader who does not know German, and who wishes to learn the views of the renowned Vienna syphilographer on a subject which he made a life-long study, will feel grateful to Dr. Raphael, not only for the translation, but for his own additions to the text, which are both useful and to the point.

DIE BEHANDLUNG DER WUTHKRANKHEIT, EINE EXPERIMENTELLE KRITIK DES PASTEURSCHEN VERFAHRENS (The Treatment of Rabies an Experimental Investigation of Pasteur's Method). Vienna: Seidel. 1887.

A FEW weeks ago we gave, in a leading article, the conclusions respecting Pasteur's method of preventive inoculations of Professor A. von Frisch, of Vienna, who made a special investigation into the subject in M. Pasteur's own laboratories. Those conclusions were adverse to that method, at least to its "intensive" modification, while at the same time several statements of Pasteur were confirmed, and the ascertained facts were marshalled with scientific precision. Since then Von Frisch has prosecuted his researches in Vienna, having had placed at his disposal two dogs infected with rabies in Paris, and having procured other dogs, the subjects of ordinary rabies in Vienna. His further conclusions have just been published in this small volume.

The chief point to be remembered is that a man is already infected, or supposed to be so, with rabies, before being subjected to the "preventive" treatment. Pasteur supposes that in the matter used for inoculation—namely, small portions of the spinal cord of an animal that has died of rabies dried for a certain time, varying in each case, and them emulsified in sterilised broth—there may exist, in the first place, the "microbe de la rage," and besides this a substance which renders the bodies of inoculated subjects an unfavourable abode for the development of that microbe. The drying process, according to the time expended, is supposed to gradually destroy the microbe, while leaving the other substance unaltered. It is evident that this theory can only be efficiently tested—that is, as to its assumed results—by subjecting animals which have been already infected to this treatment. This, according to Dr. von Frisch, has not yet been thoroughly done. Pasteur, it is true, subjected twenty dogs, which had all been bitten by rabid dogs, to his preventive treatment before applying the latter to human beings, but it is impossible to say how many of the bitten dogs were really infected, or, indeed, whether any of them were infected. The only certain method of producing rabies yet known is to introduce a portion of the spinal cord of an animal that has died of rabies beneath the dura mater of another dog, after trephining the skull; and the preventive inoculations should then be made after this subdural infection. Pasteur has made but very few experiments in this way—in fact, but four—and only claims a "succès partiel" in these, for two of the animals died, despite the preventive inoculations, on the fourteenth and twenty-ninth days respectively. Von Frisch, on the other hand, has not only made a large number of such experiments, but has modified them in various ways. His conclusions may be given in his own words:—

"Rabbits and dogs which, after trepanation and subdural infection, were subjected to preventive inoculations, all fell ill subsequently, and

died of rabies. The same result followed attempts to abridge the period occupied by the inoculations (ten days) by leaving out some stages. Of the animals subjected to inoculations after subcutaneous injection with street-rabies, a part survived if the inoculations were commenced within twenty-four hours after infection, but if five days elapsed they all died of rabies. The intensified method of Pasteur (inoculations every two hours, the whole series of spinal cords being gone through in at most twenty-four hours, two or three repetitions of this procedure being made) was not only powerless to prevent rabies after subdural infection—all the animals died of rabies—but it was found that the spinal cords of the animals experimented on had acquired an increased virulence through the inoculations. Of dogs and rabbits subjected to the intensified method alone, without previous infection of any kind, by far the greater part died of rabies as a consequence of the (preventive !) inoculations. Dogs which survived the intensified method *per se* were not found to be perfectly resistant to subsequent infection, whether subdural or subcutaneous. The intensified method of preventive inoculation, practised on man by Pasteur after bites on the face, or several deep bites on other unprotected parts, was not only of no effect in the majority of animals after previous subcutaneous infection with street-rabies, but even hastened the appearance of rabies; moreover, the spinal cords of the animals after death showed an increased virulence when portions were inoculated into rabbits. It is highly probable, therefore, that this method may be very dangerous to human beings ('auch für die Menschen mit ernster Gefahr verbunden sein dürfte')."

After an exhaustive examination of the statistics published up to the present by Pasteur, Von Frisch concludes that they tell neither for nor against his method. This method has revealed facts of the highest interest scientifically, especially as regards the shortened period of incubation and the attainment of a "fixed virus," and the Vienna professor thinks it is hardly to be doubted that Pasteur's researches will pave the way to protect animals against rabies some day or other. "But the usual error has been made" (he goes on to say), "namely, that of bringing the scientific results of laboratory work into practice prematurely. Unfortunately, in these 'lyssa' inoculations the great distinction is this, that human beings and not animals are the object of doubtful scientific investigations. To begin with, it does not seem justifiable to me to make man the object of doubtful experiments."

It cannot be denied that in the face of the published facts regarding the method, any medical man who advises a resort to M. Pasteur after a bite by a supposed mad dog incurs a certain responsibility.

HUNTERIAN LECTURES: ON SOME INJURIES AND DISEASES OF THE NECK AND HEAD, THE GENITO-URINARY ORGANS AND THE RECTUM. By EDWARD LUND, F.R.C.S. London: J. and A. Churchill. 1886.

THESE are very practical remarks on a large variety of subjects, trivial as well as serious, which come under the notice of the surgeon in general practice, and will be read with interest. There is a charm in the honesty of the lecturer in the way he points out his own mistakes, and what he has learned by them, and it would be well if teachers recognised how much can be taught as well as learned by failures. But it is not many who feel strong enough to act upon this principle. The lectures are also full of valuable practical hints, and they represent the results of the experience of a surgeon whose bias is towards the mechanical and common sense. Many of these results have no doubt been arrived at by other practical surgeons, but it is useful to have them in some form such as this book affords for reference; and the reading is pleasant as well as instructive, all the more pleasant, perhaps, for the subjects being of a wide range and general interest, and the lectures not being devoted to an exhaustive study of any one subject, however important. In this these lectures differ from any other Hunterian lectures that we remember.

In the first lecture the author discusses certain injuries and diseases of the neck and face, and urges the importance of the careful suturing and careful cleansing of facial wounds, the relief given to pain in the jaws, and that not very uncommon lock-jaw which arises from periosteal inflammation by deeply incising over the root of an offending tooth, the best time and the best means of evacuating glandular abscesses, the simplest treatment of burns and scalds in children, lupus, and epithelioma, and nævus, and for the latter he adheres to the old-fashioned, and we think unsatisfactory, method of vaccination, though in the deeper form of disease he uses the actual cautery. Hare-lip and cleft-palate are just referred to, and a useful caution is given to young surgeons not to mistake the cornua of the hyoid for the projections of the plate of false teeth which are supposed to have been swallowed. When removal of the tongue is justifiable and his adherence to the method of operation suggested by Mr. Whitehead complete the first lecture.

The second lecture is devoted to the bladder and genito-urinary organs. Here we find some interesting but not uncommon cases of over-distension, which are specially instructive to young practitioners, and he recommends the surgeon always to carry a portable form of catheter with him. Tapping the bladder above the pubes he advocates as neither difficult nor dangerous, and he uses a trochar, which makes a linear wound, the trochar, therefore, no longer bearing out its name.

A simple and practical truss for hernia in children he forms by adapting an ordinary skein of Berlin wool, which allows of frequent washing and changing, and he figures the rational treatment of umbilical hernia, which we should hardly have thought to be unknown, though certainly most text-books do not give it. The diagnosis of stone includes some remarks on the production of a metallic "click" on suddenly closing the end of a female, or straight catheter, and this has since been noticed by Dr. Freyer in his work on litholapaxy, but we think Mr. LUND's explanation of it the most correct. Stricture of the urethra, its causes and treatment, forms naturally part of the substance of this lecture, and we find gradual dilatation preferred to any other kind of treatment. He mistrusts the results of internal urethrotomy, but does not refer to the combination of internal and external urethrotomy which Mr. Reginald Harrison has so strongly advocated.

In his third lecture, which treats mainly of diseases of the rectum, he urges the importance of a thorough examination in all cases, but we miss any reference to what we feel to be a very important means of examination in many cases. Manual exploration judiciously practised is, perhaps, the most valuable of all methods, and we cannot help regretting its omission from many modern standard works on diseases of these parts. It is attended with some difficulty and risk, but it will tell what no olivary bougie or any length of tube will discover. There is a suggestive remark that when the rectum is much dilated, some constriction may be suspected higher up; and another we notice that in suspected disease of the rectum, the appearance of the anus will often afford a clue to the character of the affection; if the anus is contracted and drawn up, the cause of the trouble is rather that of irritation as from fissure, etc.; if the anus is flat or bulging, there is relaxation of tissues and a tendency to prolapse. The author follows Mr. Whitehead in his views as to the cause and treatment of hæmorrhoids, and gives sound practical advice about the palliative as well as the remedial measures for their treatment. He details the operation which has been recently given fully by Mr. Whitehead himself in the pages of this JOURNAL (February 26th, page 449), and he has discarded other methods in favour of this.

The lectures are valuable as showing the opinions of an able practical surgeon on many ailments which come under the notice of practitioners, and they form a pleasant, readable book, which many will welcome from the pen of a teacher universally respected.

HEALTH AT SCHOOL CONSIDERED IN ITS MENTAL, MORAL, AND PHYSICAL ASPECTS. By CLEMENT DUKES, M.D.Lond. London: Cassell and Co., Limited.

THE publication of this volume is a proper sequel to the article on Health at School which the writer contributed to the *Book of Health*, and of which, indeed, it is an amplification. Dr. DUKES claims that medical thought should guide parents and schoolmasters in all questions relating to the management and education of children throughout their whole school career, and lays down the rules which should be observed in the construction and arrangement of the school-house, and in the use to which it is subsequently put. To medical men there is little in the book that can be regarded as open to criticism; the lessons taught by the author are simple and reasonable, and his views might well be accepted by parents as those which should guide them in the school requirements they have a proper right to insist upon in the interest of their children.

The author discusses his subject comprehensively, and shows that the conditions which are needed for the preservation of health are intimately related to the prevention of immorality, and he maintains this position whether discussing the method of construction of the school, the arrangement of the dormitory, the food and clothing, or the work and play of every boy, which should be arranged in accordance with medical rather than the clerical judgment that too often now alone exerts its influence.

An excellent chapter on "Illness" describes the details of the

arrangement of sanitoria and the regulations which should be made and enforced for the prevention of the introduction of infectious disease into schools. No material, however, is given upon which an estimate can be formed of the amount of isolation accommodation which is required. This is, indeed, much needed, and Dr. Dukes would add to the value of his work if, in a subsequent edition, he would give at length the results of his experience on this point.

A reasonable protest is made by the author against the unwise interference of parents with the management of their boys' school life. This can obviously be best considered by those to whom the life is most thoroughly known, but every opportunity should of course be given for parents, or, better still, their own medical adviser to communicate freely with the school medical officer. We believe this book will commend itself both to masters and parents, and that it will lead to the increased influence of medical thought in the education of the young.

NOTES ON BOOKS.

Carlsbad: Its Thermal Springs and Baths. By J. KRAUS, M.D. Third edition. 12mo.; pp. 138. (London: Trübner and Co. 1887.)—Dr. Kraus has, we think, succeeded in his object of giving a complete account within small compass of the Carlsbad mineral waters and baths. His remarks are founded on long experience in the employment of the waters, and are essentially practical. They supply much information of a useful kind, and of almost every description, for visitors, and also for medical men at a distance. Carlsbad waters and their salts are so well known that it is needless to mention in detail the diseases that are treated with them; but some of the chief affections for which patients are sent to Carlsbad may be considered to be chronic gastric catarrh, congestion of the liver, chole-lithiasis, gravel, and catarrhal affections of the kidneys and bladder, gout, and diabetes. The agent that operates successfully on them is a warm water containing carbonate of soda, sulphate of soda, and common salt. One might suppose that such a remedy used at home would be as effectual as when used at a spa; but such is not the case. Dr. Kraus's work is entirely practical. He does not indulge in much that is theoretical or novel. We shall, therefore, only allude to some of his observations made for the benefit of his patients. "Continuous and exciting conversation during the time of drinking is to be avoided"—a precept not very easily carried out, but which is facilitated by the pleasant outdoor life of Carlsbad, and the abundance of excellent open-air concerts. The alleged frequency of diabetes in the Semitic race is ascribed to their "constant activity and increased mental irritability." Of the disobedience of patients he says: "Is it not natural that now and then one of them should occasionally pay for it with his life? The sad thing is that in such cases it is not the disobedient patient that is blamed, but the Carlsbad water?" The pity reserved for the waters and denied to the patient is an amusing examplification of sympathetic enthusiasm, which has at least two aspects. Dr. Kraus further remarks: "The rigorous diet of old times would be unjustifiable now. We have a large and quite different class of guests to deal with, and I think I am not going too far when I maintain that constitutions have also become weaker and less capable of resistance, and for this reason need a more generous nourishment." In conclusion, while considering Dr. Kraus's a most useful book, we think that he had better have his English—creditable though it is to him—revised by a friendly hand. Such phrases as the following might be improved: "The preparation of the products of our mineral springs is reducible to his initiation"; "It was found impossible hitherto to find"; "causing in most cases not a disagreeable eructation." The circumflex over spâ is a novelty to us.

Ueber Wirkung therapeutischen Werth und Gebrauch des neuen Karlsbader Quellsaltzes. Von Dr. W. JAWORSKI. Folio, pp. 33. (Wien. 1886.)—This is an elaborate scientific inquiry into the action of the new pulverised Carlsbad spring salt, and of its relation to the Carlsbad water. Whether future experience will confirm the results of Dr. Jaworski remains to be seen, but meantime he deserves thanks for his laborious undertaking. We shall here merely note a few of the results he has obtained. He draws a strong distinction between the action of the remedies on the chemistry of the stomach and on that of the intestines. The new spring salt is very superior to the old Sprudel one, and contains a far greater range of the constituents of the parent water. The spring salt comes nearer to the constituents of the parent water than any artificial preparation. At the same time it is impossible to make any solution of the new salt in water, that is identical in composition with the parent water. While the quantity of the chloride of sodium is nearly the same in the water and in the solution of the salt, there is a deficiency of about one-third of carbonate of soda in the solution. The mother water operates more on the chemistry of the stomach; the new salt on the intestinal canal. The old Sprudel salt acts most on the latter, and is, in fact, chiefly a purgative. The natural water acts more rapidly than the warm solution of the salt on the chemical processes of the stomach. The exercise usually prescribed during the drinking of the water has no effect on the action either of the natural water or of the salt on the stomach, but it aids the action of the intestinal canal. These are only a few of the more practical conclusions at which he arrives.

Cardiac Affections of Rheumatic Origin treated at Aix les Bains. By LEON BLANC, M.D. 8vo, pp. 48. (London: J. and A. Churchill. 1887.)—If Dr. Blanc adds one more to the numerous *brochures* on Aix les Bains, he has at least a good excuse, as he brings forward a new point in the treatment of disease at that place. We all know that Aix waters are efficient remedies in gout and rheumatism: why should they not be used against the cardiac affections induced by them? Hitherto they have not been so employed, owing to the general dread that has very justly prevailed of using hot baths indiscreetly in disorders of the circulation. Dr. Blanc endeavours to show, and we think successfully, that Aix waters have been and may be employed with success in mischief produced by rheumatism, in pericarditis and endocarditis. In the great majority of such cases Dr. Blanc finds mitral regurgitation to be present. Cases of it undoubtedly improve under the use of the Aix waters, particularly in the form of douche. Dr. Blanc adduces many cases of this kind that have been treated by himself, and we observe that other modern writers on the Aix waters entertain similar sentiments. For the origin of the idea Dr. Blanc does not go further back than Dr. Vidal in his reports on Aix in 1867; but before that time the waters of Vichy, Plombières, and other warm sources had occasionally been used in that way; nay, even the cold sulphur waters of Enghien. Beneke, too, a long time ago wrote at length on the use of the warm salt waters of Nauheim in the treatment of such cases. Nevertheless Dr. Blanc's carefully-written *brochure* is worth study.

The Water-Supply of Ancient Roman Cities. By Professor W. H. CORFIELD.—This address, published by the Sanitary Institute (74 A, Margaret Street), before whom it was delivered, deals especially with the old Roman water-supply of Lyons (Lugdinum). According to Mr. James Parker, the great authority on the subject, the water-supply of ancient Rome was equivalent to about 332 gallons per head per day, assuming the population of Rome to have been about a million. In London we get only 30 gallons a head daily, and in many other of our cities less. It was delivered in a stream 20 feet wide by 6 feet deep constantly pouring into the city at a fall six times as rapid as that of the River Thames. Lugdinum was difficult to supply; it was situated upon a hill and was of great size. The waterworks constructed there by the ancient Romans, and especially by the Emperor Claudius, are the most remarkable of the Roman waterworks extant. They have been carefully studied and are here described and figured by Dr. Corfield. The supply was brought from the hills of Mont d'Or and from the sources of the Grer, at a point over 50 miles from the city, crossing ten or twelve valleys, one being over 300 feet deep and about two-thirds of a mile in width. Recourse was evidently had to the system of inverted siphons, of which it had been alleged that the Romans were ignorant. Professor Corfield gives a very interesting study of the remains of these extensive aqueducts, and shows that the engineers of the Emperor Claudius were practically well acquainted with the principles of hydraulics. He comments on the labour and expense wisely incurred in obtaining drinking water from unimpeachable sources.

Brady and Martin's Illustrated Catalogue of Surgical Instruments, Medical Appliances, etc., with Notes on New Remedies. (Newcastle-on-Tyne.)—This work, the present edition of which is considerably enlarged, and has undergone careful revision, gives within the limits of its 240 pages, a very full and descriptive list of instruments in use in every department of medical and surgical practice, the value of which is much enhanced by the numerous excellent illustrations. In many instances not only is the instrument itself shown, but the mode of its application, and in all cases the price is stated. The alphabetical arrangement adopted, together with an exhaustive index, will facilitate reference to its columns—throat and mouth, ear and nose, tooth, uterine and midwifery, etc., instruments, being grouped

together under these various heads. A separate list is devoted to microscopes and accessories, chemical apparatus and preparations used in histological and physiological research, and for purposes of medical diagnosis, while at the end of the book under the head of "Notes on New Remedies," there are notices of some of the more important non-official drugs and preparations. This work will, we believe, prove a useful and convenient book of reference, and will assist practitioners in selecting the instruments and appliances best suited to their needs.

Elementary Practical Biology, Vegetable. (By THOMAS W. SHAW, M.D., B.Sc. Lond.) London: J. and A. Churchill, 1887.—In view of the general establishment of botanical laboratories in the teaching schools of the country, and the marked practical tendency of examinations in botany everywhere, it might have been hoped that the preparation of needful guides for the use of students would be undertaken only by botanists whose experience and knowledge fitted them for the task. The book before us blights such hopes. Had the author acted upon the precept enunciated in his preface "all knowledge in biology must be acquired practically," this book could not have appeared in its present form. Doubtless the author has examined some of the plants mentioned in his book; we may allow that he has seen most of them, but his pages are tell-tale evidence of a small superficial acquaintance with them, and, indeed, of botany altogether. Neither the directions for work nor the descriptions are of that thorough character which should be impressed upon all elementary guides to practical work, and, in addition, pitfalls of the nature of errors of fact, ambiguous statements, confusion of terms, and mis-spelling of names are so plentifully scattered through the book, that it would prove a most treacherous guide in the hands of a student.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS,
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

A MODIFIED FORM OF URETHROTOME.

BY WM. JAS. FLEMING, M.D.,
Surgeon to the Glasgow Royal Infirmary.

A LARGE majority of surgeons are agreed that internal division is the best treatment of many strictures of the urethra. Of the innumerable instruments for the performance of this operation which I have seen or been able to find described, all of them, while possessing many good and ingenious qualities, have had also some one or more faulty features. My aim has been to combine in one instrument all the good and eliminate all the bad points, so that I do not claim for my instrument many original features, only that it possesses the merits and avoids the faults of its predecessors.

There seem to me to be required in a perfect urethrotome at least seven qualities, namely:

1. To be used with one hand.
2. To cut either from before back, or from behind forward.
3. To incise any part of the circumference of the urethra.
4. To be easily regulated, so as to cut any depth, even when the blades are out of sight in the urethra.
5. To be of the smallest calibre possible when the blades are sheathed.
6. To be adapted to carry a guide-bougie.
7. To be easily cleaned.

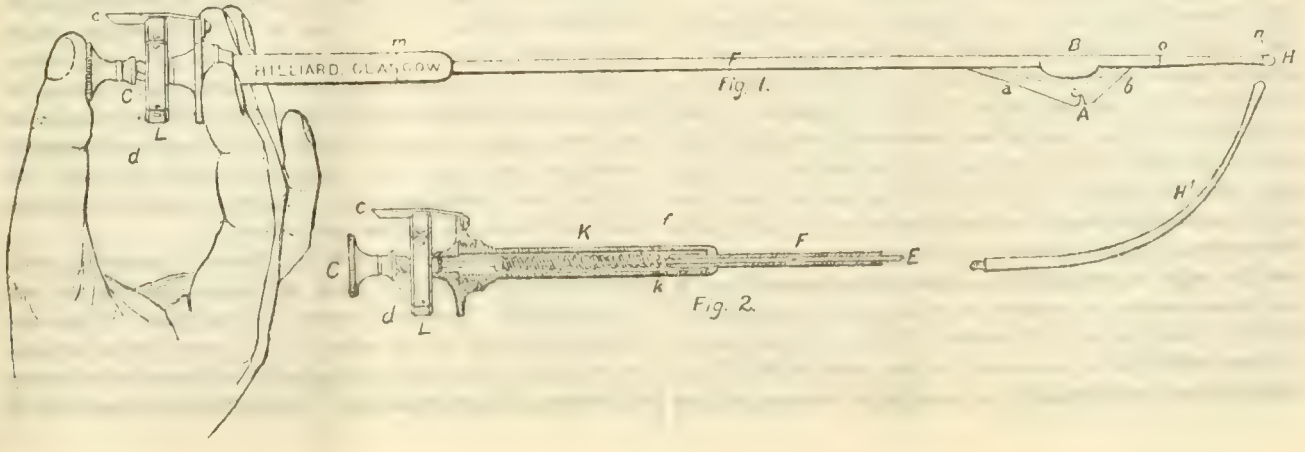
The value of the first of these may not be apparent, but with one hand you have a much more delicate sense of touch, which is all you have to rely upon in this operation. Who would hold a probe or a catheter with both hands? It is also advantageous to be able to grasp and steady the urethra with the free hand. To attain this the projection of the knives must be produced by flexion of the fingers, because this is more powerful than extension, and much more completely under our control, I presume in consequence of our habituation to use all instruments by the aid of the flexor muscles. That this instrument possesses the other qualities of a perfect urethrotome, as given above, will be seen from the following description.

It consists essentially of a jointed knife (A, Fig. 1) which can be projected from a sheath (B) to regulated distances. This is effected by pressure on the button (C, Figs. 1 and 2), which is continuous with the steel rod (E, Fig. 2) tightly fitting the tube (F), the end of this rod being the knife (*a*), and the rod being reduced and tempered for a short distance from the knife. The other blade (*b*) also runs into a fine tempered end-piece, which rests against the solid probe-point, either straight (H) or curved (H'), which screws on at (*o*). The blades are withdrawn on removal of the pressure, by the spring (K, Fig. 2). The extent of projection of the knives is regulated by the graduated wheel (L) turning on the screw (*d*) and held in place after setting to the required number (French gauge) by the spring wedge (*c*). The whole tube (F) carrying the knives is only slotted for a short distance, and the steel rod is square, and fitted to a square box at the point *f*, Fig. 2. To clean the instrument, screw off H, turn the milled head (C) until the two parts of the rod which are united by a screw at *k*, Fig. 2, are separated. The anterior part of the rod, with the blades, can then be drawn out at the end (*o*). The spring-box unscrews at *m*, Fig. 1.

Fig. 3 is the conducting bougie, which can be screwed on at *n*, Fig. 1, in place of the probe-point.

The tube carrying the knife-rod is only slotted for 2¼ inches, and is thus rigid. The square socket at *f*, Fig. 2, prevents twisting of the knives. The instrument has been most satisfactorily made for me by Messrs. Hilliard and Son, Renfield Street.

Fig. 3.



MR. JAMES PATRICK TULLOCH, M.B., Colonial Surgeon for the Island of Tobago, is gazetted an official member of the Legislative Council of that island.

STRYCHNINE-POISONING.—At Leeds, a married woman who visited a druggist's shop for the purpose of obtaining a small quantity of pennyroyal, was, it is stated, given by the shopman strychnine in mistake, which she swallowed. Death ensued in half an hour.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1887.

SUBSCRIPTIONS to the Association for 1887 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

The British Medical Journal.

SATURDAY, JUNE 25th, 1887.

CORONERS AND THEIR COURTS.

CORONERS have large powers invested in them, which should be exercised wisely and with the utmost discretion. For the last few weeks, both in the medical and lay Press, many comments have been made respecting the exercise of the undoubted right of the coroner to hold his court in private, or, in other words, to exclude the representatives of the press from the court-room, in order that no account of the inquest should appear in the newspapers. Such a case has lately been prominently before the public. The inquest in question was held near Ipswich—not by the Ipswich coroner, as commonly reported, but by Mr. Vulliamy, one of the county coroners; and the inquiry was concerning the death of a young girl under sixteen years of age, who was found drowned in a pond. There were reports that she was *enceinte*. Beyond this we know nothing; and the most unsatisfactory verdict of the jurors—namely, "Found drowned"—reveals nothing more than was known before the inquiry commenced. Before even this verdict was arrived at, several adjournments took place, the jury declaring on more than one occasion that they would not proceed until the reporters were admitted. It was only on a letter from the Lord Chancellor being read, confirming the ruling of the coroner on the question in dispute, and after threatening the jurors with fines and penalties, and ultimately committing one of the reporters to prison for contempt, that this unseemly conflict was brought to a close. The details of the case have been reported from time to time in the daily press. The action taken by the coroner appears to pervert one of the most essential characteristics of a coroner's inquiry—namely, its publicity.

The Coroner's Court is an open court, and it frequently happens that, owing to the reported proceedings of a first inquiry, many important witnesses come forward, and facts are brought to light at the adjournment which materially aid in eliciting the truth and furthering the ends of justice. Mr. Vulliamy has certainly not added to the dignity of his court or to the popularity of his position by the arbitrary course he adopted; and, although we quite admit that there may be rare occasions when it is desirable for the ends of justice or for other purposes that the court should be cleared, yet we feel quite sure that this might be accomplished without giving grave offence to those whose services as reporters are of no mean value, and, as a rule, are necessary to the public interests. It is to be hoped that the comments which the course adopted by the coroner for Suffolk has called forth may be instrumental in reminding all coroners that they have to exercise the various functions of their office "within the limits of a sound discretion."

In another recent case the coroner for Tunstall has fallen foul of his jury on the question of a rider which they desired to attach to their verdict; this led to what a contemporary calls "some remarkable proceedings." Here again the coroner, Mr. John Booth, was right in law. The verdict is one thing; the rider is another thing; and Mr. Booth declined to allow the rider to be tacked on to the verdict as recorded in the inquisition-paper. The verdict in the case was "Accidental death;" and the rider, "That a stricter supervision by the responsible manager was wanting," the deceased having met with his death in connection with work at the Clanway Colliery. The coroner was determined, and the jury persistent; and, after a "lively altercation," the jurors were bound over in the sum of £50 each to appear at the next Stafford Assizes, "to answer for their conduct," or rather, we presume, to receive the further advice and admonition of the presiding judge. All this might have been avoided, we venture to suggest, had the coroner exercised a sounder discretion, and, whilst informing his jury that, although he could not place their rider on the formal inquisition-paper, yet he would specially record it on his notes, and cause a copy of the verdict, with the rider added, to be forwarded to the chairman of the colliery company. Some such proposition as this would probably have satisfied the jury and the public, and would have prevented an occurrence which has been unseemly in the first instance, and which may end in a *fiasco* at the assizes.

In commenting generally on both the above cases, we are bound to admit that some country juries are occasionally difficult to deal with. They sometimes entertain certain notions of their own which are contrary to law and fact; and it may happen that the foreman, from his local position, assumes an unwise authority and influence over his brother-jurymen. Hence it occurs that conflicts of opinion arise which are edifying to no one. In such cases the coroner, with the full knowledge that he has the power of the law to support him, will find that, with the exercise of firmness, courtesy, tact, and discretion, difficulties which the strict enforcement of the law might tend to exaggerate may be easily removed, if not altogether avoided.

PERIODICITY OF FILARIÆ.

A VALUABLE and interesting paper by Dr. Myers, recording experiments on *filaria sanguinis hominis* made in South Formosa, has been published in the *Medical Reports of the Chinese Imperial Customs*. From his observations Dr. Myers feels justified in re-asserting that the filarial mosquito, or, at least, that species which acts as such on the mainland, is absent from the south part of this island, while, judging from the absence of filarial disease from all parts of Formosa, it is almost certain that this essential intermediary, for some reason as yet unknown, cannot, or does not, exist there. People are constantly coming and going from Amoy, water tanks arrive every day, but still the closest search has failed to discover a trace of the Amoy insect anywhere in the southern half of Formosa.

The remarkable facts recorded by Dr. Manson in connection with the *filaria sanguinis hominis* are so well known that they need not be recapitulated. There are, however, problems raised by his investigations which are not yet solved. If the parent worm produces embryos at the extraordinary rate suggested by Manson, what becomes of the excess of filariæ of the blood? Again, the extraordinary fact of

periodicity has not received an explanation. In the filaria-infected patient every drop of blood extracted from the finger during the night contains filariæ, whilst none are found in blood extracted during the day. This fact, when first stated in the Pathological Society of London (when Manson's specimen of the parent worm was exhibited), was received with evident incredulity, although within the year the fact was demonstrated by Dr. Stephen Mackenzie in the London Hospital.

These problems are discussed very fully by Dr. Myers in this paper. Taking the average number of filariæ found in a drop of blood as thirteen, Dr. Myers estimates that there would be a million and a half present in the whole vascular system. If Manson's calculation of the daily produce of the minute *filaria corvi torquati* be near the mark, the daily produce of the *filaria sanguinis hominis* will be close on two millions. By this calculation the parent worm would produce about half a million more each day than appeared in the blood. What becomes of the excess? They do not rest in the organs, for both Manson and Myers have found that they are not present in blood aspirated from the spleen. Myers further aspirated the liver several times with the same negative results. Continuing the investigation he has been led to the supposition that the absence of oxygen is the cause of embryo mortality. In support of this hypothesis he relates a number of experiments in which the embryos were exposed to the influence of arterial and venous blood. In a drop of blood drawn from the basilic vein, with eight embryos on a slide, the filariæ were found not to show the same vigour as those in blood drawn by a prick from the finger. By the third day none were to be seen on the slide. Those extracted in the usual way from the finger, besides being much brisker from the first, and preserving their vitality much longer, had not all disappeared from the slide till the morning of the ninth day.

In this desire for oxygen on the part of the filaria is to be found (so Dr. Myers suggests) the cause of the periodicity of their appearance in the circulation. Quoting the authority of physiologists as to the fact that the amount of the absorbed oxygen discharged during the night is as 58 to 175 of that eliminated as carbonic acid in the day for a young man undergoing ordinary labour, he infers that the blood must be markedly richer in free oxygen at night than during the day.

Accepting as a fact that parturition in the parent worm is continuous and extremely prolific, then removal of those filariæ which have had their chance of mosquito-withdrawal, but have escaped selection, is necessary in view of the swarm which will inevitably enter the blood from the lymphatic system at the next period of its suitability for their reception.

The marked difference between the condition of that fluid when favourable for the development of filariæ and its state when hostile to their existence seems due either to the presence of an excessive amount of carbonic acid or to the absence of a sufficient quantity of free oxygen. The former necessarily involves the latter, and experiments seem to show (*a*) that direct contact of carbonic acid in presence of excess of oxygen is not, immediately at least, injurious; that (*b*) exclusion of oxygen, either directly or by surrounding the blood with carbonic acid, brings about the destruction of the parasites; and that (*c*) the behaviour of the filarial embryo, both in the human blood and when contained in the mosquito, indicates a desire for this gas. Consequently it is assumed that not improbably the presence of oxygen is essential to further development, and its withdrawal or diminution in quantity conducive to death. It is also to this larger proportion of oxygen in the blood exciting the vitality of the filariæ that Dr. Myers attributes their presence in the peripheral circulation during the night.

Dr. Manson, it will be remembered, threw out the ingenious hypothesis that elephantiasis is induced by the obstruction of the lymphatic glands by immature ova, caused by the parent worm aborting; the immature ova having the size and form fitted to cause such obstruction. Dr. Myers suggests some difficulties in the way of accepting unconditionally this hypothesis of Dr. Manson's that elephantiasis is primarily caused by obstruction in the lymphatic glands by immature filariæ, confined in the unstretched chorion. Five times larger than the lymph cells, these premature filariæ are supposed gradually to plug the efferent vessels obstructing the lymph flow, and thus leading to hypertrophy.

Dr. Myers considers that this theory does not make sufficient allowance for the anastomosing vessels, which would aid the passage of lymph and even carry away the embolic ova as well as the lymph. He also points out that the affection is not generally distributed over the whole of the parts on the distal side of the glands. Believing in the solvent effect of lymph, or liquor sanguinis on a debilitated embryo, Dr. Myers suggests that, presuming the ovum even temporarily arrested in the capillary, the surrounding fluid aided by the back pressure and the motion of the contained embryo, if it did not disintegrate, would modify and soften the embryo so as to allow its passage and lead to its subsequent solution in the glands. He also offers the hypothesis that temporary inability of the parent to discharge young with the vitality necessary for withstanding glandular influences may also account for the occasional absence of embryos in the blood, their reappearance being due to the recovery of the worm or to the arrival of a new and healthy parent.

Dr. Myers's own suggestion is that the parasite, after originating the morbid process (elephantiasis), ceases to take any direct part in the action; and that the consequent disease is due to the perpetuation of a condition of mal-nutrition.

HOW THE ABOLITION OF RELATIVE RANK IS REGARDED IN INDIA.

WE have had an opportunity of perusing a letter from a medical officer now serving in India in the highest grade of his profession. This letter was addressed to a friend filling an important office in one of our universities. The writer is not an "agitator" (the term in use, we understand, to describe those who do not accept the optimistic view of that clever bit of official legerdemain, the abolition of relative rank); his letter was not intended for publication, and it does not contain a sensational statement from beginning to end. We are told by Sir Ralph Thompson, by his official superior the Secretary for War, and—with regret we add—Sir Thomas Crawford, the Director-General of the Army Medical Staff, that this abolition has made no difference in the official and social position of the medical officers of the army. The letter before us tells a different story. "My object in writing to you," says the writer to his correspondent, "is to show you the injury done to the medical services of both armies in India, first by the abolition of relative rank, and, secondly, by the official reply given by the Under-Secretary of State for India to a question put in the House of Commons on the rank of the medical staff of the army of India. The only possible construction that can be put on

that answer is that medical officers in that army have no rank at all, excepting what belongs to their academical titles. Up to the date of the issue of this new Warrant, and the statement by authority in the House of Commons, every medical officer in the British and Indian armies had recognised rank, which was never called in question. It was called 'relative,' but it was definite, known, and recognised throughout the service as a distinct rank, carrying with it social and official privileges, quite apart from any concurrent advantages of pension, etc., and during my long service I not only never heard its reality questioned, much less that it was a mere 'term' having no meaning. I have not seen in India any official document declaring that medical officers having been deprived of their relative rank have no rank at all; but I have eyes to see and ears to hear, and I declare, without fear of successful contradiction, that not within living memory has the medical department in India been placed in such a position of inferiority as it has occupied since the publication of this Warrant." The writer concludes by saying that as a merely personal question he need concern himself little about it. His friendships are formed, his position is secure, and the end of his official life is at hand; but with his juniors the case is different, and he has had occasion to see and note the fact, and not unnaturally he asks his friend to awaken the university authorities to such action as they can take in behalf of a class of officers with whom faith has been broken, and who, finding themselves without sympathy or support in the quarter from whence they looked for both, turn to their *alma mater*.

We have a word to say on this matter for ourselves. We cannot pretend ignorance of the fact that in official quarters this agitation is regarded as one of Press origin. Nothing of the kind. The Press has no conceivable object in originating or fostering discontent in any branch of the military service; quite the reverse. The subject is most distasteful to us. We can ill afford the space it occupies in our columns, which we would rather see given up to the advancement of professional knowledge, pure and simple. We affirm that so far from the JOURNAL having taken the initiative in this painful agitation, not a line appeared in our leading articles until the editor's table groaned with letters from all parts of the world, not two per cent. of which have ever seen the light. But having taken up this cause we are resolved not lightly to abandon it. This JOURNAL has a duty to discharge, not only to the officers who suffer under the undeserved contumely of those in power, but to the great body of the profession to which those officers belong, and this duty we are resolved to do. Unlike the combatant ranks, we have no "colonels" who care to speak for their medical brother officers in the House, but we can reach the public ear through other channels not less honourable, and perhaps in the long run more effective.

UNQUALIFIED PRACTITIONERS.

WITHIN the last few years several cases have come before the courts in which the rights of qualified as against unqualified practitioners have been in question, and we are glad to say that the courts have always been disposed to uphold and support those who are duly qualified. The last case in point, Howarth *v.* Brearley, was heard the other day before Lord Coleridge and Mr. Justice Denman, on appeal from the local court at Salford. The action was brought to recover a sum claimed as due for medical attendances and medicines supplied to the defendant; but it appeared that the attendances had been given and the medicines prescribed by an unqualified assistant, Mr. Fitzmaurice, the qualified principal, on whose behalf the action was brought, taking himself no part in the business. On this fact being established, the judge at the trial decided against the plaintiff. This decision was upheld on appeal. Lord Coleridge, in giving judgment, said emphatically, "the attendances were really by the unqualified person, and the Act (21 and 22 Vic., c. 90, sec. 32) said that no person should recover for medical services unless he was qualified and registered. The medical man whose representative sued had not himself rendered any medical services—that is, had not attended or prescribed; and a medical man could not recover for attendances not really rendered by him." Mr. Justice Denman added that "a qualified practitioner could not authorise an unqualified person to act for him in medical attendance. It would be a mockery to apply the doctrine of master and servant to such a case, and it would entirely defeat the intention and object of the Act." According to the report in the *Times*, the case of Davies *v.* Makuna, decided by the Court of Appeal in 1885, was not cited, but the judgment now given is in accord with the former one.

There, as our readers may remember, an unqualified principal had been carrying on business as a general medical practitioner, chiefly with the aid of qualified assistants, but had to some extent practised on his own account. He brought his action on a covenant to restrain one of his assistants from practising in the neighbourhood where he had been employed; but failed, on the ground that the Apothecaries Act (55 George III, c. 194, sec. 14) prohibits persons not duly qualified from practising as apothecaries in England or Wales, and consequently that the agreement containing the covenant was illegal, and he could not enforce it. The ground taken by the Court of Appeal was broader than that now in question, for they, in effect, held that any practice as an apothecary by an unqualified person is absolutely prohibited by law. The section of the Medical Act, on the words of which Lord Coleridge and Mr. Justice Denman have now decided that charges for attendance rendered by an unqualified assistant are not recoverable, does not absolutely prohibit such attendance. But the late decision shows that if an unqualified assistant is employed, he must be employed as an assistant only, and not as a deputy.

Unqualified persons are now employed, we believe, in many cases because their services cost less than those of duly qualified assistants. If medical practitioners realise that such cheap services must be paid for by themselves, and cannot legally be charged to their patients, they may doubt whether the arrangement is likely to be a profitable one, and may be more disposed to employ assistants who have gone through the proper course of training to qualify them for the work in which they are employed. In our opinion such a result is most desirable.

A MEETING of the Anatomical Society will be held at the rooms of the Medical Society of London, on Thursday, July 7th, at 4 P.M.

PROFESSOR ESMARCH, of Kiel, has been "ennobled;" whether he owes this honour more to his eminence as a surgeon, or to the fact that his wife is a member of a princely family, we are not aware.

THE presentation made to Dr. Waters, of Chester, at the annual meeting of the Lancashire and Cheshire Branch (see p. 1404), consisted of a large silver tray, upon which stood a pair of silver candlesticks, and a silver tea-kettle, coffee-pot, teapot, and sugar-sifter, all of Georgian dates.

THE University of London having determined to commemorate the fact that the grant of its charter was one of the first events of the present reign, and that thus the Jubilee of the University coincides with that of the Queen, by erecting a statue of Her Majesty, who is a visitor of the University, a circular has been issued to all graduates inviting subscriptions.

A MEETING of the Council of the Association for the Advancement of Medicine by Research, will be held at the Examination Hall on the Embankment, on Tuesday, June 28th, at 5 o'clock, to receive the report from the Treasurer, and the Secretary, and from the sub-committees, and to transact other business of importance.

THE following gentlemen have intimated their intention to attend the International Medical Congress at Washington in September next: Dr. T. Pritchard Davies, Kent County Asylum, Barming Heath, near Maidstone; Dr. John H. Galton, Chunan, Sylvan Road, Upper Norwood, S.E.; and Dr. J. Comyns Leach, the Lindens, Sturminster Newton, Dorset. (See also JOURNAL, Feb. 26, p. 478.)

HOSPITAL SATURDAY IN BIRMINGHAM.

THE sum of £6,500 has been divided among fifteen local medical charities, as the net available proceeds of the recent Hospital Saturday collection in Birmingham. The total amount collected in manufactories was £6,675 5s., and by ladies in the streets £145 1s. 6d., giving a total of £6,820 6s. 6d. against £6,703 9s. 3d. in 1886.

QUEEN'S COLLEGE, BIRMINGHAM: PROFESSORSHIP OF SURGERY.

THE surgical chair, vacant by the resignation of Mr. Furneaux Jordan, has been filled by the election of Mr. Bennett May. Professor May is M.B. and B.S. of London University, a Fellow of the Royal College of Surgeons of England, and Surgeon to the Queen's Hospital. He has for some time held the post of demonstrator of operative surgery in the College, where he was previously demonstrator of anatomy. He was for some years also resident surgical officer to the General Hospital.

BRITISH ASSOCIATION MEETING IN MANCHESTER.

THIS meeting promises to be a very successful one if the forward state of the arrangements in Manchester, and the promise of the presence of a large number of distinguished strangers, be any indication of success. Amongst those who have expressed their intention to be present may be mentioned Kundt, Quincke, and Kohlrausch, Lothar Meyer, Oscar Liebreich, Wislicenus, Asa Gray, Chauveau, Gegenbaur, Weismann, Wiedersheim, Kühne, de Bary, Marey, His, Minot, Lortet, and Cohn.

THE SECESSIONS AT UNIVERSITY COLLEGE.

A MEETING of the Members of University College, London, will be held on Wednesday next to supply the vacancies created by the resignation of Lord Kimberley, Lord Justice Fry, Sir Julian Goldsmid, Dr. Buchanan, Mr. Cozens Hardy, M.P., Dr. Blake Odgers, Mr. Prevost, and Dr. F. J. Wood. The members proposed by the Council are as follows:—*For President:* John Eric Erichsen, LL.D., F.R.S. *For Vice-President:* Right Hon. Sir Ughtred J. Kay-Shuttleworth, Bart., M.P. *For Treasurer:* Sir Robert Nicholas Fowler, Bart, M.A., M.P. *For Councillors:* J. Bourne Benson, LL.D., B.A., Kenelm Edward Digby, John Russell Reynolds, M.D., F.R.S., George John Romanes, M.A., LL.D., F.R.S. The officers who have resigned have issued a circular letter defending the step they have taken, but only containing arguments with which everybody is quite familiar.

ASSOCIATION FOR PROMOTING A TEACHING UNIVERSITY FOR LONDON.

THE Executive Committee of the Association for Promoting a Teaching University for London intends shortly to present to Her Majesty a petition, setting forth the objects and proposals of the association. The Executive Committee is in sympathy with the movement started by the Councils of University College and King's College, London, for a new university founded upon principles closely resembling those which the association has advocated. As the funds of the association are exhausted the treasurer, Mr. John Marshall, 10, Savile Row, W., appeals for further aid in carrying on its work, which has now a fair prospect of success.

A ROYAL COMMISSION.

THE Government are being pressed from such divers directions and in such influential quarters to deal with the question of conferring a degree-giving power on some alternative bodies in London other than the existing universities, that it is understood that a Royal Commission will be necessary. The pending application of the Royal College of Physicians and Royal College of Surgeons for a medical faculty of their own is not yet in, but already notices of opposition of very weighty character have been lodged by the universities of Scotland, Ireland, and England.

THE HEALTH OF THE CROWN PRINCE.

THE health of the Crown Prince has, we are happy to state, not been injuriously affected by the festivities connected with the celebration of the Queen's Jubilee. It has been thought well to suspend active treatment during the week. The marked improvement in the local condition which followed the last operation has been fully maintained. It is highly satisfactory to know that there is not the slightest evidence of any tendency on the part of the small tumour which still remains unremoved to grow. Some slight relaxation of the upper part of the larynx is yielding to simple local applications. We understand that Dr. Morell Mackenzie will repeat the operation within the larynx at an early date, and that any portion of the tumour then removed will be forthwith transmitted to Professor Virchow for microscopical examination, as after the previous operations.

A DEATH UNDER CHLOROFORM.

THE death of a patient while under the influence of chloroform occurred last week at University College Hospital. The facts, as stated at the inquest by Mr. Frank Collins, the house-surgeon, were that the deceased, Louisa Peacock, a housekeeper, aged 41, was admitted suffering from pleurisy, with effusion on the left side. The chest was punctured on June 20th, but as fluid did not flow it became necessary to repeat the puncture; the patient seemed rather nervous about it, and asked that chloroform should be given to her. Before the administration was completed the pulse stopped, and the heart ceased in five seconds. Artificial respiration was performed, and the patient breathed, but the pulse did not return. The fluid was drawn off in order to give her the best chance, and various means of restoration used for an hour and a-half, but without success. A *post-mortem* examination showed the heart to be fatty and empty. Death was attributed to syncope. In reply to a question from the coroner (Dr. Wynn Westcott), it was stated that the quantity of chloroform administered was about two drachms.

JOHN LUCAS WALKER STUDENTSHIP.

WE briefly announced last week that Dr. William Hunter, F.R.S.E., etc., had been elected the first holder of the John Lucas Walker Studentship. After an exceptionally brilliant undergraduate career, culminating in the Ettles Scholarship, Dr. Hunter took his M.B. degree at Edinburgh University in 1883. He then acted for six months as assistant to Professor Rutherford, and for the following six months as one of the resident physicians in the University wards of the Royal Edinburgh Infirmary. Since that time he has been engaged in pathological researches at Vienna, Leipsig, and Edinburgh. His graduation thesis for the degree of M.D. on "The Physiology and Pathology of Transfusion and the Fate of Extravasated Blood," was awarded a gold medal. A paper by him on the "Duration of Life of Red Blood-corpuscles after Transfusion, in its Bearing on the Value of Transfusion in Man," which contained the

results of a research, for the prosecution of which he had received a grant from the Scientific Grants Committee of the British Medical Association, was published in the JOURNAL last January, and other papers have appeared in the *Journal of Anatomy and Physiology* and elsewhere. Dr. Hunter's past success as an investigator of pathological problems, and the opportunities which he has had of becoming acquainted with the methods employed in such work, as well as with morbid anatomy and histology, render him extremely well qualified to occupy worthily the post to which he has been elected.

SIR CHARLES WILSON ON THE MEDICAL DEPARTMENT OF THE ARMY.

AT the Mayor of Southampton's Jubilee Banquet, on June 11th, Colonel Sir Charles Wilson, K.C.B., K.C.M.G., now at the head of the Ordnance Survey, responded to the toast of the Army. He reviewed its present position, contrasting its organization with what it was fifty years ago, when Her Majesty came to the throne. Coming to the medical department, he thus expressed himself:—"Where, however, the greatest improvement was to be seen was, he thought, in the medical department. If a soldier now-a-days was wounded, he was picked up at once, carried to a good hospital at the rear, and attended with as much care and assiduity as he would be in the best institution of the kind at home. He could testify from his own experience as to the devotion the doctors showed during the Soudan campaign. For three days and three nights none of the surgeons in the Camel Corps had any sleep at all, for they were engaged all the time performing operations or attending to the sick and wounded, and when they reached the Nile, after the last fight, one of the doctors actually fainted, while attempting an operation, from pure fatigue and want of sleep. Indeed he did not think any body of men could possibly have carried out their duties with such devotion as the doctors did during the Nile campaign." This passage was loudly cheered by the company, consisting of nearly 300 guests.

JUBILEE HONOURS.

THE list of Jubilee honours, which has, altogether, fallen rather flat, and is, on the whole, not strikingly interesting, is not calculated to produce much sensation in the medical profession. It will be seen with satisfaction that Scotland is recognised, in the person of Professor Macleod, the accomplished surgeon to the Queen in Scotland; and that Dr. Garrod receives knighthood. Both distinctions have fallen upon men highly esteemed in their profession, and of no small scientific merit. The knighthood of Professor Aitken will be welcomed by both the civil and military members of the profession. The other Jubilee honours gazetted are:—*To be Knights Commanders of the Bath:* John Simon, Esq., F.R.C.S., F.R.S., C.B., late Medical Officer, Privy Council Office; Arthur Mitchell, Esq., M.D., C.B., Commissioner in Lunacy for Scotland; Surgeon-General John Harrie Ker Innes, C.B., half-pay, Surgeon to the Queen; Inspector-General of Hospitals William Mackenzie, M.D., C.B., C.S.I., Indian Medical Service, Honorary Physician to the Queen; Inspector-General of Hospitals and Fleets James Jenkins, C.B., Royal Navy. *To be Companions of the Bath:* Inspector-General of Hospitals and Fleets James Nicholas Dick, Royal Navy; Surgeon-General Herbert Taylor Reade, V.C., Medical Staff; Deputy Surgeon-General Jeffery Allen Marston, M.D., Medical Staff. *To be Knight Commander of St. Michael and St. George:* James Alexander Grant, Esq., M.D., of Ottawa, in the Dominion of Canada. *To be Companion of the Distinguished Service Order:* Fleet-Surgeon Thomas D'Arcy Bromlow, M.D., Royal Navy (for operations in Burmah). The Queen has been graciously pleased to confer the decoration of the Royal Red Cross upon the undermentioned Nursing Sisters, under the provisions of Clause 5 of Her Majesty's Warrant, dated April 23rd, 1883; namely: Miss Louisa Jane Mackay, Army Nursing Sister; Miss Christina Fergusson, Army Nursing Sister; Miss A. B. Holland, Army Nursing Sister; Miss Edith King, Stafford House Committee; Miss Emma Durham, Stafford House Committee. The list is meagre, and there are so many obvious omissions that it is better to pass it without comment.

ACCIDENTS ON JUBILEE DAY.

No fewer than ninety-seven persons applied for relief at Charing Cross Hospital on Jubilee Day, and were attended to by the House Surgeon, Mr. A. E. Nelham, and his staff of dressers. The majority of the cases were abrasures, bruises, and slight sprains. There were but three fractures of bones of the extremity, namely, one Pott's, one Colles', and one radius and ulna, and one dislocation (subcoracoid of humerus). Six or seven persons were admitted with epilepsy, one case at least was clearly traumatic. A policeman was brought into the surgery with temporary paraplegia due to a heavy blow over the upper dorsal vertebræ from a stretcher pole. Motion and sensation were completely paralysed for over an hour, but both ultimately returned. One man was brought in comatose from a fall of fourteen feet from a lamp post. It is doubtful whether his skull is fractured. A man, named G. Bennett, was brought in dead, having been killed by the kick of a horse. The necropsy which was made at 3 o'clock on Wednesday afternoon revealed very extensive injuries of the chest. There was a transverse fracture of the manubrium sterni, at the junction of the fourth costal cartilage, together with transverse laceration of the subjacent pericardium. There was a transverse rupture of the left ventricle, exactly corresponding to the fracture in the sternum. There was also separation of the fourth and fifth costal cartilages on the left side from the sternum, fracture of the second, third, and fourth ribs on the left side near the sternum, with perforation of the left pleural cavity by the anterior extremity of the second rib, and fracture of the third and fourth ribs on the right side near the sternum. At St. George's Hospital, a man was admitted with fracture of the base of the skull, having been dragged off a coping by another man who was endeavouring to save himself from falling. He died three hours after admission. One case of fracture of the femur was admitted. A considerable number of persons were brought in with symptoms of syncope, mild sunstroke, and hysteria from fright. A few casualties were admitted at other hospitals. The worst accidents, it will be seen, arose from falls from heights, and from kicks from horses' hoofs. The horses of the constabulary and household cavalry were used to crowds of human beings, but the hussars' chargers grew dangerously restless as the multitude thronged at their heels, especially when the cheering commenced, and many began to kick. This cost the life of one unfortunate sightseer at least, and several persons were wounded in the face by gravel thrown up by the chargers' hoofs. A boy was admitted into St. George's Hospital on Wednesday with fracture of the tibia and fibula; he was one of the guests at the children's fête in Hyde Park, and met with the accident through a fall from a tree.

AMBULANCE WORK ON JUBILEE DAY.

THE demands for surgical and ambulance aid on Jubilee day in London were met with great promptness and efficiency. The Volunteer Medical Staff Corps, under Surgeon-Major Norton, with seventy of the police, bearing stretchers, haversacks, and water-bottles, occupied thirteen stations along the route taken by the procession, which were distinguished by the Red Cross flag of the corps. Mr. Mackellar, Chief Surgeon of the Police, with other medical officers, was in attendance at Westminster Abbey, and six horse ambulances, three of which belonged to the St. John Ambulance Association and three to the police, were stationed in side streets out of the way of the procession, in charge of Mr. Furley and the divisional surgeons of the police. The services of the Ambulance Corps were frequently called into requisition. The reports of the commanders of companies of the Staff Corps, Surgeon-Majors Platt and Casson, and Surgeons Squire and Willett, give over four hundred casualties, besides many others not returned, owing to the press of cases at one time. In addition to the case of the man who died in Charing-Cross Hospital, fully recorded above, there were seventeen heat-strokes, nine fits,

one fracture of the base of the skull, one fractured collar bone (which happened to one of the police bearers), two cases of hysteria, ten horse kicks and minor wounds; the other cases were fainting fits. The police worked admirably in conjunction with the Volunteer Medical Staff Corps. That such a gigantic festival would of necessity be attended with some serious casualties was of course a foregone conclusion, though it is satisfactory to note that the cases admitted into the hospitals have been neither so large or of so grave a character as the circumstances would have led us to expect.

METROPOLITAN HOSPITAL SUNDAY FUND.

It is not at present possible to form any accurate estimate of the sum which will be raised by the Metropolitan Hospital Sunday Fund this year; the amount received at the Mansion House up to Wednesday last was nearly £9,000. The serious objection felt by many hospital managers to the "new departure" involved in the request that assistance should be afforded by the hospital officers in getting up meetings in the neighbourhood of the hospitals has found expression in the able memorandum drawn up by Mr. John Biddulph Martin, the chairman of the Economic Section of the British Association; the arguments he has put forward demand the most careful consideration of all friends of hospitals, not less than of those who are specially interested in the Hospital Sunday Fund. We are glad to see that the threat uttered by Sir E. H. Currie, the honorary secretary to the Fund, to the effect that hospitals which would not assist in getting up local meetings should be punished by receiving smaller grants, has been repudiated in no uncertain terms by Sir Sydney Waterlow, the chairman of the Distribution Committee. The committee, he says, is bound by its constitution to recommend awards to institutions only on the ground of their "needs" and "merits," and has never mulcted or threatened to mulct any hospital on any grounds such as those referred to.

EBERTH'S RODS IN TYPHOID STOOLS.

In the *Vratch*, No. 22, 1887, p. 438, Dr. G. O. Shpolansky, of the Odessa Town Hospital, writes that he and Dr. N. A. Stroganoff, prosector of the same hospital, have examined bacterioscopically stools in 96 cases of enteric fever, with the object of solving the following two questions of paramount practical importance: 1. Whether Eberth's microbes are present in all cases of the disease or not? and 2. Whether the microbes are still present in the stools of convalescent patients? The main outcome of their researches may be summarised thus. The typhoid bacilli were found in 90 of 96 cases. Of those examined, 88 recovered and 8 died. In one of the latter no bacilli could be detected in the stools during life. In one of three convalescent patients examined no bacilli were found after the temperature had finally returned to the normal range. In the remaining two the microbes were still daily discovered for nine and fifteen days respectively after the defervescence. In view of the facts stated under the first head, a bacterioscopic examination of the stools should be undertaken in every case where any suspicion as to typhoid fever may arise; and in consequence of those adduced under the second, the stools of the patients recovering from enteric fever cannot be considered innocuous for at least fifteen days after the defervescence.

IRRITATION OF THE SKIN OF THE NECK AS A LOCAL ANÆSTHETIC.

In the *Gazette des Hôpitaux*, M. Brown-Séquard publishes a note on the effect of irritation of the anterior portion of the neck. From the results of numerous experiments on animals, he is led to believe that a slight incision in the skin of the neck, especially in the neighbourhood of the larynx, is sufficient to cause sensibility to disappear in two-thirds of the front of the neck. M. Brown-Séquard found that the skin over the whole of the anterior cervical region could not be cut without producing a decrease of sensibility to the exciting causes of pain, and especially to galvanism (applied by means of Du Bois-Reymond's apparatus) over the front half of the neck. Generally, however, complete analgesia is only found in the part corresponding to the larynx and the trachea, although sometimes it extends throughout the entire neck, the lower jaw, and a part of the thorax. After a longitudinal incision in the middle line, or transversely from side to side in the anterior cervical region, it was observed in a great number of experiments, especially on dogs and monkeys, that throughout two-thirds of the anterior part of the neck, the flesh could be cut, twisted, galvanised, or even burnt, without causing very much pain, and sometimes without appearing to cause any. The effect of irritation in this region was somewhat greater in monkeys than in dogs.

ACTINOMYCOSIS IN A GARDENER.

A case of actinomycosis occurring in the human subject is reported by Dr. Hanken, of Dortrecht, which appears to belong to what Dr. Israel classes as cases of migration of fungi through the mouth and pharynx. The patient was a gardener, aged 34, who had nothing to do with the care of cattle. He applied for advice on account of long-standing dyspepsia. It was observed that there were four tumours on the lower jaw, situated between the left mental foramen and the angle of the jaw. They were movable and somewhat elastic on palpation. The teeth were fairly healthy, with the exception of the four second molars, all of which were carious; the roots, however, could be palpated without causing pain. The diagnosis appeared to lie between gummata and cold cutaneous abscesses due to irritation from carious teeth in a tuberculous subject. No signs or history of syphilis could be made out, so it was decided to draw the two diseased molars on the left side, open the tumours and scrape them out with a sharp spoon. The contents were found to consist of a viscous chocolate-coloured fluid, in which opalescent granules, the size of a pin's head, were suspended; these proved, on microscopic examination, to be actinomycetes.

FRENCH SURGERY AND SPECIALISM.

An anonymous writer in the *Journal de Médecine de Paris* complains that French surgery is dying, whilst in neighbouring countries surgery is flourishing and full of life. It is dying, though represented by a group of eminent men, and possessing all the elements of life, by a slow process of suicide, effected by routine, blind opposition to progress, and pride on the part of surgical authorities. These masters, of such high capacity, says the writer, force their opinion on law makers and law directors; they are listened to, the public bows to their opinion, and little by little the evil increases. A further complaint is made that the professional authorities, great twenty years ago, and remaining great through a kind of mirage-effect, try to enforce the rule of their antiquated ideas and succeed. Younger men, ready enough to reform, are held in check by the examinations and the methods of election to appointments. The real evil which influences the leaders of surgery is, we are told, a morbid dread of specialism. Every form of specialism is eyed with suspicion in French universities, faculties, colleges, and hospitals, and every outcome of a specialist's experience is treated as quackery. A specialist is held to be necessarily a quack, or an ignorant man if not a quack. Any surgeon who voluntarily takes up specialism is a ruined man as far as his chances of making way in the higher walks of the profession are concerned. The writer proposes as a remedy the thorough specialisation of hospital surgeons. After the usual examinations for hospital appointments, a final examination in a speciality, selected by the candidate should be held, and those who pass should fill appointments where they might practise the chosen speciality. The writer in the *Journal de Médecine* draws too gloomy a picture of his subject, as many brilliant and thoroughly scientific specialists flourish in France. Nevertheless, the management of special departments leaves room for improvement. Surgeons are shifted about from one hospital to another after a system theoretically good but practically defective. The idea that a consulting surgeon should be able to do all kinds of

surgery is logical, but visionary. The system involves great hardships to many surgeons, who find a particular speciality to their taste, and practise it with skill and success, yet may be obliged to give up their wards and to conduct a perfectly different department in another hospital. On the other hand, it must be noted that specialities are not fairly treated in many London hospitals. Should any speciality be honoured by the institution of a department for its practice, it is the duty of hospital authorities to select a surgeon or physician most fitted for and most devoted to that speciality. Yet we find that it is frequently understood that only a general physician or surgeon to the hospital should undertake certain special departments. This was never the case with the obstetric wards, and for some time the ophthalmic and aural cases have almost invariably been entrusted to specialists, though not many years ago there was violent opposition to specialising eye and ear cases. Yet in many hospitals orthopædic surgery and dermatology are specialised as departments, but are conducted solely by members of the general staff. This is a mistake, for a patient with a skin disease or a club-foot needs a physician or surgeon devoted to the study of his malady just as much as a man with defective sight, or a woman with uterine disease, is best treated by a practitioner specially versed in ophthalmic surgery or gynæcology.

TOTAL EXTIRPATION OF THE CANCEROUS UTERUS.

We have already had occasion to note how frequently this operation has been performed in Germany, and how some German writers believe that their countrymen remove more uteri than would appear justifiable. Dr. Fritsch has recently published in the *Archiv für Gynäkologie* a communication on sixty cases of removal of the uterus through the vagina for cancer, the condition for which alone the operation is indicated. Seven out of the 60 patients died after the operation, a mortality of 11.6 per cent. Two died from hæmorrhage, 1 after syringing the vagina, 3 from peritonitis, and 1 from ligature of the left ureter. In the last case the kidneys were contracted. Of the 53 survivors from the operation, 17 had died already from recurrence, in 6 still living recurrence was reported by competent observers, 3 patients had not been heard of since their discharge, and 3 were only operated upon in September and October 1886. Twenty-four remained in good health, 9 of these being reckoned as cured, two years having passed without recurrence. Dr. Fritsch does not agree with Ruge that three distinct forms of uterine cancer exist—cancer of the body, cancer of the canal of the cervix, and cancer of the surface of the vaginal portion. The last two forms are not always to be distinguished from each other. In both, Dr. Fritsch observes, the disease always begins on the boundary line between the squamous and the cylindrical epithelium. It is more important to divide cervical cancer into the exuberant or hypertrophic fungating form of the exedent, or rapidly ulcerating type. Dr. Fritsch objects to supra-vaginal amputation of the cervix; firstly, because in some cases of cervical cancer nodules have been found in the fundus; secondly, because the operation is liable to be followed by severe atresia; and, lastly, because hæmorrhage cannot be so readily controlled as during total extirpation. The operation, Dr. Fritsch observes, should only be performed when a permanent one appears probable. The uterus must be freely movable. When its mobility is impaired, cancerous deposit in Douglas's pouch or in the broad ligaments will almost certainly be discovered. The fungous type is the least serious, provided that the vaginal mucous membrane is not involved. On the other hand, in cancer hardly visible at the os externum, the parametric tissue is often extensively infiltrated. Dr. Fritsch is opposed to preliminary scooping out of diseased tissues or other partial operations, which, in his opinion, disturb the lymphatics and promote the spread of the disease. With regard to the stages of the operation, as performed by Dr. Fritsch, his principle is to keep the peritoneum open for as short a period as possible, and not to lay it open till the most difficult steps have been performed, and to get the uterus as freely movable as possible by detachment of the broad ligaments from their lateral inferior connections, so that the operator may know in time if really total removal of the growth is possible. Should the parametric tissues be found to be involved, the surgeon must proceed no further. Dr. Fritsch neither sews up the flaps nor drains; he plugs the vagina with iodoform. The greatest difficulties are encountered when the uterus is large. Dr. Fritsch has in these cases combined abdominal section with the vaginal operation. He does not believe that the patient need lie in any particular position after operation; the scanty secretion from the wound can be removed by pledgets of iodoform gauze. After recovery, a smooth and straight scar in the vault of the vagina is more favourable than a hard funnel-shaped cicatrix. No doubt timely performance of total amputation of the uterus through the vagina promises the best results, as uterine cancer does not appear to recur rapidly when completely removed. The operation, however, is difficult and tedious even for experts.

OXYGEN BATHS IN FEBRILE CONDITIONS.

A Spanish observer, Dr. F. Valenzuela, starting from M. Paul Bert's results showing the destructive action exerted by oxygen of high tension on vegetable and micro-organic life, has recently made a number of interesting observations on the power of an atmosphere of pure oxygen to affect the febrile state. He found that the temperature of healthy rabbits, after being kept for an hour in pure oxygen, at pressures of from 760 millimètres to 1,520 millimètres, underwent a marked diminution, amounting in the last case to as much as 11° F. Again, rabbits into which septic matter had been injected so as to induce pyrexia, suffered a decided diminution of the fever by immersion for one or two hours in an atmosphere of pure oxygen. In one experiment, where two rabbits were similarly injected, one which was twice bathed in oxygen at a tension seven times as high as that which it has in the atmosphere recovered, while the other, which was left untreated, died on the third day. Several observations were also made on hospital patients. Two cases of acute pneumonia, treated with oxygen "baths" at a pressure of 960 millimètres, ran a peculiarly rapid and favourable course. In a phthisical case with a temperature of 103.6° F. an oxygen "bath" brought the thermometer down to 101.3°. The next evening the temperature rose as before, and was again reduced in the same manner; slight hæmoptysis, however, was caused by the "bath." The next day there was no rise of temperature. After two days, a third "bath" was given, and from that time the febrile condition appeared to improve, for though the temperature sometimes rose above normal, the pyrexia was never so pronounced as it had been. From a second case of the same kind reported, there would seem to be a decided danger of these oxygen "baths" producing hæmoptysis. On the temperature, however, they appear to exert a very beneficial effect.

SUBCUTANEOUS INJECTION OF CUCAINE IN SURGICAL PRACTICE.

In the *Vratch*, No. 50, 1886, p. 892, Dr. F. J. Barsky, of Kharkov, writes that subcutaneous injection of cucaine is extensively used in the *clinique* of Professor W. F. Grube as an anæsthetic in cases of removal of superficial new growths, such as sarcomata, fibrosarcomata, lipomata, carcinoma of jaw, epithelioma of lip, atheromata, etc.; also in cases of simple incision, scooping out with a sharp spoon, cauterisation, destruction of hæmorrhoids with Paquelin's thermo-cautery, radical cure of hydrocele, removal of foreign bodies (needles, etc.), amputation of fingers, evulsion of nails, rhinoplastic and osteoplastic operations, gouging out bone, etc. The result of those observations may be summed up as follows: 1. An injection of five centigrammes of cucaine is sufficient to produce complete anæsthesia of an area measuring from four to six square centimètres. 2. Anæsthesia is complete in five to seven minutes, and lasts from twenty to thirty minutes. 3. Tactile sensibility is preserved, but only to a very slight degree. 4. Artificial local anæmia, produced by pressure with a drainage-tube or otherwise, seems to intensify the anæsthetic effect. 5. The dose used varied be-

tween one centigramme (a syringeful of a 1 per cent. solution), and two decigrammes (four syringefuls of a 5 per cent. solution), but those most often employed were five centigrammes and one decigramme. As a rule, the doses up to twelve centigrammes did not produce any general effects; but in a nervous woman, aged 38, with sarcoma of the parotid gland, eight centigrammes gave rise to formication and numbness over the body, paleness of the face, giddiness, weakness of the pulse, dryness of the mouth and pharynx, difficulty of swallowing, dyspnœa, oppression in the chest, and vomiting. In a strong peasant, aged 45, with dry gangrene of two phalanges, one decigramme produced only dryness of the mouth; twelve centigrammes caused only a slight acceleration of the pulse; fifteen centigrammes produced, in from ten to twenty minutes, acceleration and weaking of the pulse, dryness of the mouth, sometimes giddiness and pallor, and once a condition resembling syncope. A dose of two decigrammes, in an anæmic girl, aged 13, in whom the os calcis was scooped for caries, gave rise, in fifteen minutes, to dilatation of the pupils, and on the next day to headache and general *malaise*. 6. Inhalation of amyl nitrite (one, two, or three drops on a piece of cotton-wool) seems to be the best physiological antidote to cucaine; its action manifests itself very rapidly after a few whiffs. 7. The osseous system, even in its superficial parts, is very incompletely anæsthetised by cucaine. 8. Cucaine has no influence on the process of healing. 9. Cucainisation presents many advantages compared with other local anæsthetic agents; the chief ones being rapidity of action, ease of application, harmlessness in regard to the tissues with which the drug comes in contact, and convenience for use in regions which are inaccessible, or nearly so, to other local anæsthetics. 10. Cucaine will supersede chloroform in many cases, as in cardiac or pulmonary disease, etc., or where the use of chloroform is difficult owing to the position of the patient—for example, that *à la vache* in operating for hæmorrhoids, etc. Professor Grube and Dr. Barsky have lately tried with success a combination of cucaine with morphine, as recently recommended by Professor Schnitzler.

THE ARMY MEDICAL SERVICE AND THE BRITISH MEDICAL ASSOCIATION.

THE happy results of the exertions of the Parliamentary Bills Committee of the British Medical Association on behalf of the Army Medical Service are showing themselves in all directions. Army medical officers have joined the Association in great numbers of late years, and are recognising the fact that most of the concessions obtained by the warrants of the last twenty years have been mainly due to the work of the Committee. The Chairman of the Committee continues to receive telegrams and letters of thanks from army surgeons in all parts of the world. Thus far it is a significant fact that the views of the Director-General on the subject of relative and honorary rank find no support in his department, with which, on these points, we regret to find that he seems hopelessly at variance. It is much to be hoped that the Director-General will take means to secure for himself from the Secretary of State at War more accurate information of the feeling of the department than seems to be in the possession of Sir Ralph Thompson. The cordial feelings of the department towards the Association was manifested very markedly at the reception of the South-Eastern Branch at Netley on June 16th, and the South-Eastern Branch at Aldershot on June 17th. The intimate association of the civil and military branches of the Association can but be mutually advantageous. No doubt the proceedings at Dublin will tend yet further to strengthen it.

SCOTLAND.

EDINBURGH AND THE JUBILEE.

One of the most marked features of the Jubilee celebrations in Edinburgh was a torchlight procession by the students (nearly all of them students of medicine) of the University. Tuesday was a university holiday, and over six hundred of the undergraduates, organised by the Students' Representative Council, paraded the principal streets and squares of the city, testifying their loyalty in a most picturesque and hearty manner.—At the Jubilee service held on Tuesday in Westminster Abbey the University was represented by Principal Sir Wm. Muir.

EDINBURGH UNIVERSITY.

THE following scholarships have just been awarded (after competitive examinations) in the Faculty of Medicine: the Vans Dunlop Scholarship for the subjects in the preliminary examinations, to W. E. Fisher and H. S. W. Jones, equal; the Vans Dunlop Scholarship in Physiology and Surgery, to J. W. Crarer; the Vans Dunlop Scholarship in Anatomy, Physiology, Materia Medica, and Pathology, to Robert Muir. The Thomson Bursary for the subjects of the preliminary examination was given to W. C. Milroy, a preferential candidate; and the Grierson Bursary for the subjects of the preliminary examination, to David Macmillan. The Edinburgh Association for the University Education of Women has received from Dr. Gunning, Rio Janeiro (whose munificence to the Faculty of Medicine we formerly recorded), a gift of £1,000 to found a bursary or bursaries in connection with the Association. The clinical portion of the final professional examination terminated last Friday. On Monday and Wednesday this week the further examinations in surgery, midwifery, practice of physic, and medical jurisprudence took place; and since then the oral examinations in the same subjects have been held daily.

MONTROSE ASYLUM AND INFIRMARY.

THE annual meeting of the Directors of the Montrose Asylum and Infirmary Board was held last Tuesday. The report submitted by Dr. Howden, the Medical Superintendent of the Asylum, stated that on May 14th, 1886, there were 485 inmates, of whom 78 were private patients, and 407 parochial patients. During the year there were 132 admissions, making in all 617 cases under care. Of these, 91 were discharged, and 31 died during the year, and on May 14th, 1887, 495 remained on the register, an increase of 10 on the previous year; of the 495, 84 were private patients, and 411 parochial ones. Of this total, 224 were men and 271 women. The increase in the number of the patients was due to a larger number of admissions and a low death-rate. In the place of Dr. A. Kay, Dr. Stone was elected one of the medical officers to the Infirmary in conjunction with Dr. Lawrence. The post of chaplain to the Asylum was filled by the appointment of the Rev. Mr. Landreth, Logie-Pert. The other officials were re-elected. The usual grant of £200 was made to the Infirmary.

IRELAND.

H.R.H. PRINCE ALBERT VICTOR has kindly consented to open "The Royal Jubilee Wards" in this hospital on Wednesday next, June 29th, at 1.15 P.M.

WE understand that two most influential members of the Council of the Royal College of Surgeons in Ireland have resigned their seats in consequence of certain action on the part of one of the two in connection with a reopening of negotiations between the College and the Apothecaries' Hall of Dublin with the object of forming another conjoint examination board for Ireland between these two corporations. The Council of the College has deprecated the resignation of these gentlemen, and requested them to withdraw it.

HONOURS FOR THE ASSOCIATION

IN connection with the visit of the Association to Dublin, the Senate of the University of Dublin on Wednesday last approved the grace sent down by the Provost and Senior Fellows of Trinity College to confer the honorary degree of M.D. on Professor Gairdner, of Glasgow; Sir Spencer Wells, Bart.; Sir John Simon, K.C.B.; Sir James Paget, Bart.; and Dr. Waters, of Chester. The degrees will be publicly

conferred on Thursday next, at 5 P.M. His Royal Highness Prince Albert Victor and His Excellency the Lord Lieutenant will also be among those who will receive honorary degrees on the same occasion, which will consequently be one of unusual interest and importance.

ROYAL HOSPITAL, BELFAST.

At the meeting of the Board of Management last Saturday Dr. Dunlop, House-Surgeon, and Dr. Calwell, House-Physician, tendered their resignations. Dr. Dunlop is a candidate for the post of House-Physician, and for that of House-Surgeon Dr. Arthur Powell is, up to the present, the only candidate. Dr. Powell is Demonstrator of Anatomy in the Royal College of Surgeons, Dublin.

HEALTH OF BELFAST.

The monthly report for May shows that the health of the town is in a satisfactory state, the average-death-rate from all causes being 23.3 per 1,000. The zymotic rate was exceptionally low, being only 1.9 per 1,000, while the deaths from diseases of the respiratory organs were slightly above the average. There were 75 deaths from phthisis, out of a total mortality of 393. There were 624 births in the month, showing a large natural increase. The population of Belfast is now estimated at 224,000.

DEATH OF DR. GEORGE H. HALPIN, OF WICKLOW.

This gentleman died at his residence in Wicklow, on June 21st. Deceased, whose loss is much regretted, was physician to Wicklow Fever Hospital, surgeon to Wicklow, Ashford, and Rathnew Constabulary, and Admiralty surgeon for Wicklow.

THE WATER-SUPPLY OF TUAM.

The water-supply of this town is obtained from wells or the river, the great majority using the latter. The entire sewage of the Curragh Mill, where about one hundred hands are employed, goes into the river, also the sewage of the Roman Catholic Bishop's residence; and sheep are constantly washed there. That a pure supply of water is required for the inhabitants of Tuam, is beyond all question, and the sooner the apathy and indifference of the authorities is thrown off, the better for the health of the residents.

NEWTOWNARDS UNION.

Dr. Stuart, medical officer of Donaghadee Dispensary District, has resigned, in consequence of ill-health. The dispensary committee have recommended the guardians to grant him a retiring allowance after his long and valuable services.

CERTIFICATES IN SANITARY SCIENCE.

It appears from an address recently delivered by Dr. John William Moore to the Subsection of State Medicine in the Academy of Medicine in Ireland, and since reprinted in pamphlet form, that to the University of Dublin belongs the merit of having been the first institution in the United Kingdom to establish a qualification in State Medicine—a result due chiefly to the untiring and enthusiastic efforts of the late Regius Professor of Physic, Dr. William Stokes, ably seconded by the Rev. Dr. Haughton, then Medical Registrar of the School of Physic. So long ago as June, 1871, the first examination for the diploma took place, when it was granted to Dr. Arthur Wynne Foot, Dr. Gerald Francis Yeo (now Professor of Physiology at King's College, London), Dr. John Todhunter, and to Dr. Moore himself.

JERVIS STREET HOSPITAL.

Last Saturday morning the Medical staff of the Hospital entertained a number of gentlemen, including several medical men, at breakfast in the board room of the hospital. After breakfast, Dr. MacSwiney, in a few words of welcome to the guests, stated that the new hospital, having, as it were, risen into new life out of the ashes of the old institution, was now in full working order. They had eighty beds occupied, and they invited their friends to go over the building and to inspect the various arrangements. The visitors were then conducted round the lofty and well-ventilated wards and various offices, and on to the extensive flat roof which is utilised as an airing ground and promenade for the patients, for whom there is easy ascent to it by a lift. The arrangements connected with the out-door or dispensary department are very complete. Indeed, every portion of the hospital is excellently adapted for the different purposes required.

THE CORK STREET FEVER HOSPITAL.

The eighty-third annual report of this institution has just been issued. Out of 709 cases treated in the hospital during the year, 59 deaths occurred, being a mortality of only 10.31 per cent. on the cases treated. There was a prolonged epidemic of scarlet fever in the city, which made the number of admissions during the the year 56 more than during the previous year. On the other hand, there was a noticeable decrease in all other zymotic diseases. The medical report by Mr. William Stoker states that "experience tends strongly to support the suggestion that the praiseworthy efforts of the sanitary authorities in clearing away fever-dens, and the work of the Artisans' Dwellings Company, are the main agencies in this result. The houses of this company now stand on the Coombe area, which in former years contributed nearly a tenth of our number, yet from them we now very scarcely indeed receive a case, although the other portions of the Poddle valley appear with their accustomed frequency in our reports." The epidemic of scarlet fever was of a mild type, the mortality having been only 8.72 per cent. Typhus fever happily continues to diminish. But 62 cases were treated during the year—a number below any previous record in the hospital.

BRITISH MEDICAL ASSOCIATION.

ADDRESS TO THE QUEEN.

The following loyal address, which was adopted by the Council at its meeting on April 13th last, was duly forwarded, on June 17th, to the Right Honourable Henry Matthews, Q.C., Secretary of State, for submission to Her Majesty:

To Her Most Gracious Majesty,

VICTORIA,

Queen of Great Britain and Ireland and Empress of India.

We, the President, the President of the Council, the Treasurer, and Council of the British Medical Association, humbly approach your Royal and Imperial throne with the profoundest feelings of respect and veneration, desiring to assure your Majesty of our continued and heartfelt devotion to your Person and your Rule.

We would express our grateful acknowledgments to the Almighty Disposer of events, that He has seen fit to prolong a life which has been devoted to the well-being and happiness of your Majesty's subjects, and to lengthen a reign which has been so fruitful in all matters pertaining to the advancement of Art, Science, Literature, and Industry, and so largely instrumental in promoting peace throughout the civilised world.

To our own Profession your Majesty has ever shown an appreciative kindness and good will, which was conspicuously manifested last year when your Majesty graciously condescended to lay the foundation stone of the Examination Hall for the two Royal Colleges, on which occasion your Majesty addressed most kindly words to the President of the College of Physicians, and through him to the profession generally. It now only remains for us to offer a fervent prayer that the Almighty may be pleased to preserve your Majesty's life in health and happiness for many years to come, that your Majesty may continue to seek His honour and glory, and so study to preserve the people committed to your Majesty's charge in health, peace, and godliness.

W. Withers Moore, Brighton, *President.*
B. Walter Foster, Birmingham, *President of the Council.*
J. T. Banks, Dublin, *President-Elect.*
C. Macnamara, London, *Treasurer.*

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held at the Offices of the Association, No. 429, Strand (corner of Agar Street), London, on Wednesday, the 13th day of July next, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

June 23rd, 1887.

THE President of the Council of the British Medical Association begs to inform the Members that the New Premises, 429, Strand, are now in full occupation, and are open to inspection by the Members. The President of the Council hopes that every Member of the Association will visit the New Offices and inspect the arrangements whenever an opportunity offers.

May 20th, 1887.

NOTICE OF QUARTERLY MEETINGS FOR 1887.

ELECTION OF MEMBERS.

ANY qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member *by the Council* or by any recognised *Branch Council.*

Meetings of the Council will be held on July 13th and October 19th, 1887. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting, namely, June 23rd and September 29th, 1887.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election.

FRANCIS FOWKE, *General Secretary.*

COLLECTIVE INVESTIGATION OF DISEASE.

INQUIRIES are being pursued on the following subjects

DIPHTHERIA, THE ETIOLOGY OF PHTHISIS,

Memoranda on the above subjects, and forms for communicating observations on them, may be had on application.

The Inquiries on OLD AGE and on the CONNECTION OF DISEASE WITH HABITS OF INTEMPERANCE are now closed.

Reports are in preparation upon the Inquiries made into ACUTE RHEUMATISM, DIPHTHERIA, and HABITS OF INTEMPERANCE, a full Report on OLD AGE, and a Supplementary Report on PUERPERAL PYREXIA. All the above will be published in the JOURNAL as soon as completed. Tables of the Chorea and Acute Rheumatism cases will be published in separate form.

The Returns made to the GEOGRAPHICAL INQUIRY are being tabulated for report.

Application for forms, memoranda, or further information, may be made to any of the Honorary Local Secretaries, or to the Secretary of the Collective Investigation Committee, 429, Strand, W.C.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH.—*Change of Date.*—The annual meeting of this Branch will be held at the Holborn Restaurant, on Friday, July 15th, at 5.30 P.M., not Wednesday, June 29th, as previously announced. President, John S. Bristowe, M.D., F.R.S.; President-elect, Arthur E. Durham, Esq., F.R.C.S. Dinner at 7 P.M.; tickets 7s. 6d. each, exclusive of wine. New rules for the Branch, proposed by the Council, will be submitted to the meeting for adoption.—W. CHAPMAN GRIGG, M.D., GEORGE EASTES, M.B., Honorary Secretaries.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—The next meeting of the above District will be held at East Grinstead on Wednesday, June 29th. C. E. Collins, Esq., will preside. The following papers are promised. The Chairman: A Few Remarks on Five Cases of Amputation of the Breast. Mr. Percy E. Wallis: A Case of Intestinal Obstruction with Gangrene in a Young Girl. Gentlemen desirous of contributing short papers on cases are requested to communicate with the Honorary Secretary, T. JENNER VERRALL, 97, Montpellier Road, Brighton.

EAST ANGLIAN BRANCH.—The annual meeting of the East Anglian Branch will be held at Swaffham on Thursday, July 14th, under the presidency of R. B. Marriott, Esq. Notices of papers, cases, or any matter of interest to be forwarded to Dr. ELLISTON, Ipswich, or Dr. BEVERLEY, Norwich, Honorary Secretaries.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The annual meeting will be held at Swansea, on Thursday, July 7th. Notices of papers, etc., should be sent to one of the Secretaries before June 22nd.—ALFRED SHEEN, M.D., Cardiff, D. ARTHUR DAVIES, M.B., Swansea, Honorary Secretaries.

YORKSHIRE BRANCH.—The annual meeting will be held at Filey, on Wednesday, July 6th, at 3 P.M. Two representatives of the Branch on the General Council will be elected. Gentlemen intending to be candidates must be nominated, in writing, by two members of the Branch, and the nomination paper returned at once to the secretary. Gentlemen intending to read papers are requested to communicate at once to the Secretary, ARTHUR JACKSON, Sheffield.

SHROPSHIRE AND MID-WALES BRANCH.—The annual meeting of the Branch will be held at the Salop Infirmary on Friday, July 1st, at 2 P.M. Members desirous of reading papers, reporting cases, etc., are requested to communicate with me before June 24th.—EDWARD CURETON, Honorary Secretary.

BORDER COUNTIES BRANCH.—The twentieth annual meeting will be held on Friday, July 1st, 1887, at the Tower Hotel, Hawick. The chair will be taken at 3 P.M. A meeting of the Council will precede. The following papers will be read. Dr. Eaton (Cleator Moor): Sketch of the Coroner's Court, and its Principal Relations to the Medical Profession. Dr. Rutherford: Notes of a Case of Umbilical Hernia treated by Elastic Pressure. Dr. Somerville: Notes of Three Cases of Puerperal Mania. Dr. J. A. Campbell: The British Medical Association: what it might do. There will be the usual election of office-bearers for the year, and Dr. McLeod (Hawick) will deliver his Presidential address. Dinner at the Tower Hotel at 6 P.M.; 5s. a head.—H. A. LEDIARD, Honorary Secretary, 41, Lowther Street, Carlisle.

NORTH OF IRELAND BRANCH.—The annual meeting of this Branch will be held in the Royal Hospital, Belfast, on Thursday, July 7th, at 4 P.M. Business: 1. To receive the Council's report and the Treasurer's statement. 2. To elect office-bearers for the ensuing year. 3. To elect two members as representatives of the Branch on the Council of the Association; and also two representatives on the Parliamentary Bills Committee. 4. The President (Mr. John Fagan) will deliver an address. 5. Dr. John Dysart McCaw will read a short paper: Practical Obstetrics: a Personal Retrospect of Twenty Years' Practice. 6. Dr. Calwell will read Notes of Four Cases of Sudden Death associated with Pulmonary Congestion. He will also show a case of Pseudo-Elephantiasis. 7. Dr. Alex. Dempsey will read Notes of Two Cases of Laceration of the Cervix, in which he performed Emmet's operation (Trachelorrhaphy). 8. Dr. J. Walton Browne will read a paper on Median Lithotomy. He will also show several interesting pathological specimens. 9. Dr. Burden will exhibit a series of microscopic sections of a fibro-cystic adenoma of the parotid gland. The annual dinner will be held on the same evening, at 7.30 P.M., at the Royal Avenue Hotel. Tickets (exclusive of wine) 6s. It is particularly requested that gentlemen intending to be present will communicate, as soon as possible, with the Honorary Secretary, JOHN W. BYERS, M.D., Lower Crescent, Belfast.

WEST SOMERSET BRANCH.—The forty-fourth annual meeting will be held at Ilminster on Thursday, June 30th, at 3 P.M., at the residence of Edward Stephens, Esq., President-elect. The dinner will be at the George Hotel, at 5 P.M. Gentlemen wishing to read papers or make communications to the meeting are requested to send notice of the same forthwith to the Secretary.—W. M. KELLY, M.D., Honorary Secretary, Taunton.

SOUTH EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of this District will take place at the Bull Hotel, Dartford, on Friday, July 22nd; H. L. Bernays, Esq., in the chair. Gentlemen desirous of reading papers or exhibiting specimens, are requested to inform the Honorary Secretary of the District, A. W. Nankivell, F.R.C.S., St. Bartholomew's Hospital, Chatham, not later than July 5th. Further particulars will be duly announced.—A. W. NANKIVELL, Honorary Secretary of District.

LANCASHIRE AND CHESHIRE BRANCH.

THE fifty-first annual meeting was held in the Pendlebury Memorial Hall, Stockport, on Wednesday, June 15th, 1887. The chair having been taken by the retiring President, Dr. HARKER, of Lancaster, the minutes of the last annual meeting were read and approved. Dr. Harker then introduced the President for 1886-87, J. A. BALL, Esq., M.B., of Heaton Norris, who delivered an address on the position of the general practitioner in the profession. At the conclusion of the address a vote of thanks to the President was proposed by Dr. BARRON, seconded by Dr. HARKER, and carried by acclamation.

Report of Council.—The Honorary Secretary, Dr. GLASCOTT, read the report of Council, which stated that the position of the Branch was financially and in every other respect satisfactory. The report referred to the successful annual meeting held at Lancaster on July 7th, 1886, and to the intermediate meeting at Birkenhead in March last. Death or removal, it was stated, accounted for a loss of 46 members; but the loss had been to a great extent made good, and the total number of members of the Branch was now 895. Reference was made to the resolution passed at the Birkenhead meeting, after a paper by Mr. Berry, of Wigan, which provided that a petition should be presented to the Council of the Association asking it to take steps to bring to the notice of the Home Secretary the hardships medical men suffered owing to the present method of summoning them to sessions or assizes, and to point out the inadequacy of the fees paid. The Branch had, in answer to the circular issued by the Sub-committee of the Council of the Association, expressed the opinion that the travelling expenses of representatives on the Council of the Association ought to be paid by the Association.—On the proposal of

Dr. MOULD, seconded by Dr. BERRY, the report of Council, together with the financial statement, was received and adopted.

Election of Office Bearers.—President-Elect.—It was proposed by Mr. TAYLOR, seconded by Dr. RAYNER, and carried, that Dr. Watkins, of Newton-le-Willows, be elected President-elect for 1887-88.

Vice-President.—It was proposed by Dr. BARNISH, seconded by Dr. MARTIN, and carried, that Dr. Macfie Campbell and Dr. Starkey Smith be elected Vice-Presidents for 1887-88.

Honorary Secretary.—It was proposed by Dr. WATERS, seconded by Dr. BALL, and carried, that Dr. Glascott be re-elected Honorary Secretary for the ensuing year.

Election of Council and Representatives.—The President having appointed Dr. Barr and Dr. Godson as scrutineers, the balloting papers for the Representatives on the Council of the Association and the Council of the Branch were collected, the following gentlemen being declared duly elected.

Representatives on the Council of the Association.—Five representatives on the Council of the Association.—Barron, Geo. B., M.D., Southport; Davidson, Alex., M.D., Liverpool; Glascott, Charles E., M.D., Manchester; Hardie, James, Esq., Manchester; Taylor, James, Esq., Chester.

Council of the Branch.—Fifty Members nominated by the Council.—Alexander W., M.D., Liverpool; Bailey, F. J., Liverpool; Barnish, W. C., Wigan; Barr, J., M.D., Liverpool; Berry, W., Wigan; Braidwood, P. M., M.D., Birkenhead; Brown, R. C., M.D., Preston; Buckley, S., M.B., Manchester; Burton, J. E., Liverpool; Cameron, A. F. H., Liverpool; Carter, W., M.D., Liverpool; Cullingworth, C. J., M.D., Manchester; Corns, J., M.D., Oldham; Dickinson, E. H., Liverpool; Dreschfeld, J., M.D., Manchester; Fawsitt, T., Oldham; Fernie, H. M., Macclesfield; Fitzpatrick, W. H., M.D., Liverpool; Glynn, T. R, M.D., Liverpool; Godson, A., M.B., Cheadle; Granger, F., Chester; Hall, W., jun., Lancaster; Harker, J., M.D., Lancaster; Harrison, Damer, Liverpool; Hopper, A. R., Liverpool; Hunt, De Vere, Bolton; Johnson, C., Lancaster; Johnstone, J., M.D., Bolton; Jones, Leslie, M.D., Manchester; Jones, T., M.B., Manchester; Lambert, J., M.D., Birkenhead; Leech, D. J., M.D., Manchester; Martin, W. Y., M.D., Walkden; McNaught, J., M.D., Boothfold; McNicoll, E. I., Southport; Mould, G. W., Cheadle; Puzey, Chauncey, Liverpool; Rayner, Edwin, M.D., Stockport; Renshaw, C. J, M.D, Ashton-on-Mersey; Roberts, D. Lloyd, M.D., Manchester; Ross, J., M.D., Manchester; Shuttleworth, G. E., M.D., Lancaster; Southam, F., Manchester; Thomson, G., M.D., Oldham; Thorp, C., Todmorden; Vacher, F., Birkenhead; Waters, E., M.D., Chester; Weaver, F. P., M.D, Frodsham; Woods, G. A., Southport; Young, A. H., M.D., Manchester.

Presentation of the Testimonial to Dr. Edward Waters, of Chester.—The PRESIDENT, in making the presentation to Dr. Waters, said nobody could surpass him in his admiration of Dr. Waters's character, and in his appreciation of that gentleman's work in furtherance of medical education, and in improving the position of the medical practitioner. The British Medical Association, at its meeting last year, voted Dr. Waters the medal for distinguished merit—a medal which had only been granted twice before; and since that time Dr. Waters's fellow citizens and fellow practitioners at Chester had presented him with a most magnificent testimonial. The Lancashire and Cheshire Branch now offered him a very humble present, which they hoped Dr. Waters would hand down to his family as a memorial of the esteem in which he was held in the profession of which he was such a distinguished ornament.—Dr. WATKINS (who has acted as treasurer to the presentation fund) then unveiled the gifts, and the PRESIDENT said: Dr. Waters, on behalf of your many admirers, I have to ask your acceptance of these gifts.—Dr. WATERS, in the course of his reply, said it was utterly impossible for him to thank them as he could wish for the honour paid him by the presentation of such a testimonial. He stood before them not merely in an exceptional but in an unprecedented position, for there was no previous example of the kind in the annals of the Branch. He was bold enough to think that he was that day in the presence of many men who regarded him not only with esteem, but with affection. It was many, many years since he had joined the Lancashire and Cheshire Branch. His connection with it seemed to have somewhat of a providential character, and he thought there was scarcely a man in the kingdom who had had such strong inducements held out to him to settle in some large place as he had. With the help of Hughes Bennett he became acquainted with the most distinguished men on the Continent, and especially in Paris, who strongly urged upon him to practice in one of the capitals, but he ultimately settled in the quiet, stagnant, but to him charming city of Chester. Had he not done so, he would not have occupied the proud position he did that day. After adverting to his presidential connection with the British Medical Association, Dr. Waters gave a *résumé* of the efforts he had made with the object of securing medical legislation, and the parliamentary difficulties he had met with in this connection, observing that it seemed to him that pretty well all his life he had been mixed up with the Medical Act, and he contended that the Act of 1886, to which the President had referred, was the result of the efforts of the British Medical Association alone, a fact which the universities and corporations could not deny. Referring to the efforts to put down quackery, Dr. Waters facetiously remarked that to do this was out of the question when three-fourths of the members of the House of Commons preferred the opinion of a bone-setter before that of Sir James Paget. It was, however, a matter for congratulation that a man who was not qualified could not claim payment, as this had been finally settled in the High Court. With respect to the magnificent testimonial presented to him in Chester in March last, he was powerless to express the pride and gratification he experienced on receiving so striking a mark of good-will from those amongst whom the whole of his working life had been passed, but though he appreciated to the fullest extent and with never ending gratitude the kindness of all, still those sentiments were, if possible, strengthened by the fact that that testimonial also originated with his professional brethren. The testimonial, of which he was now the recipient, was one of peculiar value. He recognised that it came from his professional peers, from men distinguished in science and literature, men who were really judges of what a man was entitled to. Therefore he must value the testimonial more than anything he had received in his lifetime, and he need hardly say that it would be treasured by his family.

Paper and Communications.—Dr. BARRON showed a man in whom he had removed the astragalus twenty-two years before.—Dr. DAMBRILL-DAVIES showed a number of porcelain-glass drainage tubes.—Dr. DAVIDSON exhibited some microscopic specimens from (1) a case of Addison's disease, (2) a case of dissecting aneurysm of the aorta, (3) a case of aspergillus niger of the lung.—Dr. CULLINGWORTH mentioned the case, and showed the patient, aged 62, on whom two ovariotomies and a lithotomy had been performed within a period of twenty-seven months.—Dr. MCKEOWN made some observations on one of the conditions under which squint is developed.

Dinner.—At the conclusion of the meeting the members were conveyed by special train to the Manchester Jubilee Exhibition, where one hundred and ten members and visitors dined together in the palm house. Among the guests were Sir Andrew Clark, Mr. Wheelhouse, Mr. Savage, the Mayor of Stockport, and Lieut.-Colonel Wilkinson.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE annual meeting of the Birmingham Branch of the British Medical Association was held at the Medical Institute, Edmund Street, on the 15th inst. Mr. LAWSON TAIT, President of the Branch, occupied the chair. Dr. T. W. THURSFIELD was chosen President-elect.

President's Address.—Mr. TAIT gave an address, a report of which will appear in a subsequent number.

Annual Dinner.—In the evening the annual dinner of the Branch was held in the Grand Hotel; Mr. Tait presided, with Drs. Saundby and Rickards as vice-chairmen. Dr. J. Syer Bristowe, President of the Metropolitan Counties Branch, Rev. Canon Wilkinson, Mr. Oliver Pemberton, Mr. Jaffray, Mr. Hawkes, Coroner for the Borough, Mr. Grig Smyth, of Bristol, his Honour Judge Chalmers, Dr. Thursfield, of Leamington, Dr. Strange, and the Rev. G. J. Emanuel were among the company.—Dr. BRISTOWE submitted the second toast, "Success to the British Medical Association," an Association which, he said, had begun very humbly near Worcester, and which had now grown into one of the most influential and useful in the Empire.—Dr. STRANGE responded.—Lord Leigh, the Town Clerk of Birmingham, Sir Walter Foster, Professor Annandale, Mr. Gordon Lloyd, and several others telegraphed apologies. A telegram also arrived from the Southern Branch assembled at dinner, and the PRESIDENT at once suitably responded.

MEDICAL MAGISTRATE.—Colonel Pearson R. Cresswell, F.R.C.S., commanding the 2nd Glamorgan Volunteers, and Chief Surgeon to the Dowlais Iron Works, has been placed on the commission of the peace for the county of Glamorgan.

THE first performance of the original play, entitled "After," by Mr. Scott Battams, Resident Medical Officer of the Shadwell Children's Hospital, which was recently given at the Vaudeville Theatre, was most successful.

BRITISH MEDICAL ASSOCIATION.

FIFTY-FIFTH ANNUAL MEETING.

THE fifty-fifth Annual Meeting of the British Medical Association will be held at Dublin, on August 2nd, 3rd, 4th, and 5th, 1887.

President: Withers Moore, M.D., F.R.C.P., Senior Physician to the Sussex County Hospital, Brighton.

President-elect: John T. Banks, M.D., D.Sc.(Hon.), F.K.Q.C.P.I., Regius Professor of Physic in the University of Dublin.

President of the Council: Sir B. Walter Foster, M.D., M.P., F.R.C.P., Professor of Medicine in Queen's College, and Physician to the General Hospital, Birmingham.

Treasurer: C. Macnamara, F.R.C.S., Surgeon to the Westminster Hospital, London.

An Address in Medicine will be delivered by W. T. Gairdner, M.D., F.R.C.P.Ed., Professor of Medicine in the University of Glasgow.

An Address in Surgery will be delivered by Edward Hamilton, M.D., Fellow and Professor of Surgery in the Royal College of Surgeons in Ireland.

An Address in Public Medicine will be given by the Rev. S. Haughton, M.D., F.R.S., D.C.L., Senior Fellow, Trinity College, Dublin.

All the rooms required for the purposes of the meeting will, by the kindness of the Provost and Senior Fellows, be provided in Trinity College. The Sections of Medicine, Surgery, Obstetric Medicine, Therapeutics and Pharmacology, and of Pathology, will be held in the Medical School, and the remaining Sections and Subsections in the Museum Buildings of the University. The President's Address will be delivered in the Dining Hall, and the General Meetings will be held in the Examination Hall, where also the stated Addresses will be delivered.

PROGRAMME OF PROCEEDINGS.

TUESDAY, AUGUST 2ND, 1887.

9.30 A.M.—Meeting of 1886-87 Council. Council Room, Museum Buildings.
10 A.M.—Service at the Pro-Cathedral, Marlborough Street. Sermon by the Rev. L. Martial Klein, S.J., F.R.U.I.
11.30 A.M.—First General Meeting. Report of Council. Reports of Committees; and other business. Examination Hall.
4 P.M.—Choral Service at St. Patrick's National Cathedral. Sermon by the Most Rev. the Lord Bishop of Meath.
8.30 P.M.—Adjourned General Meeting from 11.30 A.M. President's Address. Dining Hall.

WEDNESDAY, AUGUST 3RD, 1887.

9.30 A.M.—Meeting of 1887-8 Council. Council Room, Museum Buildings.
10.30 A.M. to 2 P.M.—Sectional Meetings. Medical School and Museum Buildings.
3 P.M.—Second General Meeting. Address in Medicine. Examination Hall.
9 P.M.—Soirée given by the President of the Association and by the Dublin Branch. Royal University of Ireland.

THURSDAY, AUGUST 4TH, 1887.

9.30 A.M.—Meeting of Council. Council Room, Museum Buildings.
10.30 A.M. to 2 P.M.—Sectional Meetings. Medical School and Museum Buildings.
3 P.M.—Third General Meeting. Address in Surgery. Examination Hall.
7 P.M.—Public Dinner. Royal University of Ireland.

FRIDAY, AUGUST 5TH, 1887.

10 A.M. to 1.30 P.M.—Sectional Meetings. Medical School and Museum Buildings.
3 P.M.—Concluding General Meeting. Address in Public Medicine. Examination Hall.
4.30 to 6 P.M.—Garden Party.
9 P.M.—*Conversazione* given by Surgeon-General Hassard, C.B., P.M.O Ireland, and the officers of the Medical Staff. Museum of Science and Art.

SATURDAY, AUGUST 6TH, 1887.

Excursions.

The front hall over the main entrance to Trinity College will be fitted up as a reception-room, and will be opened at 12 o'clock noon, on Monday, August 1st, and on the following days at 9 o'clock in the forenoon, and will remain open until 6 o'clock in the afternoon of each day, for the issue of tickets to members and for supplying all necessary information.

The following discussions and papers are promised up to the present time. Members desirous of reading papers, or joining in the discussions, are earnestly requested to communicate, without delay, with the Secretaries of the respective Sections.

SECTION A.—MEDICINE.

Anatomical Theatre.

A: MEDICINE.—*President*, William Moore, M.D. *Vice-Presidents*, H. C. Bastian, M.D., F.R.S.; J. Magee Finny, M.D. *Honorary Secretaries*, T. Gilbart-Smith, M.D., F.R.C.P., 68, Harley Street, Cavendish Square, London, W.; C. J. Nixon, M.D., 2, Merrion Square, Dublin.

Dr. H. Charlton Bastian, F.R.S., will introduce a discussion on Different Kinds of Aphasia, with special reference to their Classification and Ultimate Pathology. The following gentlemen will take part in the discussion: Dr. Hughlings Jackson, F.R.S., Dr. Stephen Mackenzie, Dr. Althaus.

The following papers are promised.

ALTHAUS, J., M.D. On Post-Hemiplegic Paralysis Agitans.
BATEMAN, F., M.D., Norwich. On Puerperal Aphasia.
BUXTON, Dudley, M.D. (*Subject of paper not yet received*).
CHURTON, T., M.D., Leeds. Meningitis after Blows upon the Head.
COLLIER, William, M.D.Cantab. On Lymphadenoma.
COX, M. F., M.K.Q.C.P.I., Dublin. On the Employment of Rest in the Treatment of Disease.
DRUMMOND, David, M.D. On Symptoms suggestive of General Paralysis of the Insane, depending upon the Circulation in the Blood of Digestive Impurities, in an Insidious Case of Non-Alcoholic Cirrhosis of Liver.
KERR, Norman, M.D. Alcoholism.
KNOTT, John T., F.R.C.S.I., Dublin. On the Use of Certain Organic Acids in the Rheumatic, Gouty, and Allied Diathesis.
LAFFAN, T., M.K.Q.C.P.I., Cashel. 1. On Empyema. 2. Some Points in Fever 3. Some Cases of Paralysis.
NIXON, C. J., M.D. On the Cardiac Murmurs of the Tricuspid Area.
OWEN, Isambard, M.D., F.R.C.P. (Secretary to the Collective Investigation Committee). On the Connection of Disease with Habits of Intemperance.
RICHARDSON, B. W., M.D., F.R.S. On Alcoholism.
PHILIP, Robert W., M.B. The Etiology of Phthisis.
POWELL, R. Douglas, M.D., F.R.C.P. On Angina Pectoris.
QUINLAN, F. J. B., M.D., Dublin. The Treatment of Acute Rheumatism.
RALFE, Charles H., M.D., F.R.C.P. Certain Nephralgias simulating Renal Calculus.
SANSOM, A. E., M.D. On Methods of Precision in Cardiac Diagnosis.
STEWART, T. Grainger, M.D., Edinburgh. On the Incidence of Albumen among the Presumably Healthy and the Diseased.
THOMAS, W. R., M.D., M.R.C.P. Some Remarks on the Etiology and Curability of Phthisis.
WHITE, Wm. Henry, M.D. On Mediastinal Sarcoma involving the Lung.

SECTION B.—SURGERY.

Chemical Theatre.

B. SURGERY.—*President*, Sir George H. Porter, M.D. *Vice-Presidents*, Alexander Ogston, M.D.; John Fagan, F.R.C.S.I. *Honorary Secretaries*, W. Thomson, F.R.C.S.I., 34, Harcourt Street, Dublin; R. J. Godlee, F.R.C.S.Eng., 81, Wimpole Street, London, W.; C. B. Ball, M.D., F.R.C.S.I., 16, Lower Fitzwilliam Street, Dublin.

Mr. Mitchell Banks, Liverpool; Dr. McEwen, Glasgow; Mr. W. D. Spanton, Hanley; and Mr. C. R. B. Keetley, London, will open a discussion on the Radical Cure of Hernia. Dr. C. B. Ball, Mr. J. K. Barton, Professor Thornley Stoker, Mr. Walter Rivington, Mr. W. J. Walsham, Mr. F. B. Jessett, Mr. J. Langton, Mr. A. W. Mayo Robson, Dr. N. T. Hobart, Mr. H. Langley Browne, Dr. John McArdle, Dr. J. Ward Cousins, Dr. Kendall Franks, and Mr. Geo. Cowell, will take part in the discussion.

The following papers are promised.

BARTON, J. K., Esq., Dublin. Operative Treatment of Morbus Coxæ.
CORLEY, A. H., M.D. On the Open Operation for Radical Cure of Hernia, with a Test Case.
COUSINS, J. Ward, M.D. 1. Treatment of Retention of Urine by Aspiration through a Capillary Catheter. 2. Plastic Operations on the Penis.
FENWICK, E. Hurry, Esq. Cancer of the Prostate necessitating Colotomy.
FRANKS, Kendal, M.D. 1. On the Radical Cure of Hernia. 2. Three Cases illustrative of Renal Surgery.
HEUSTON, Francis T., M.D. On a Case of Strangulated Femoral Hernia with Gangrenous Fallopian Tube and Ovary contained in the Sac; and on the Means adopted for Radical Cure of the Hernia.
JESSETT, F. B., Esq. 1. On a Case of Gastro-Enterostomy. 2. On the Removal of Tumours of the Neck, with Cases.
KOCHER; L., M.D., Berne. Cachexia Strumipriva and Myxœdema.
LAFFAN, T., M.K.Q.C.P.I., Cashel. A Note on the Treatment of Spinal Abscess.
MCARDLE, John, Esq. 1. On Enterectomy. 2. On Radical Cure of Hydrocele.
MELDON, Austin, Esq. On the Treatment of Tetanus.
PEARSON, Professor C. Y. Strangulated Umbilical Hernia.
RABAGLIATI, A., M.D. 1. Radical Cure of Hernia. 2. On a Case of Hypospadias in the Female Cured by Operation.
RIVINGTON, Walter, Esq. On External Urethrotomy.
ROBSON, A. W. Mayo, Esq. 1. Twenty-five Cases of Radical Cure of Hernia. 2. On some Cases of Nephrotomy.
ROTH, Bernard, Esq. An Accurate and Practical Method of Recording Cases of Lateral Curvature of the Spine.
STOKER, Professor Thornley. The Theory and Practice of Operation for the Radical Cure of Hernia.
WALSHAM, W. J., Esq. Litholapaxy in Male Children.
WELLS, Sir T. Spencer. Comparison of the Cæsarean Section with Porro's Operation.
WHEELER, W. J., M.D., F.R.C.S.I. Trephining in Mastoid and Tympanic Disease and Cerebral Abscess.

SECTION C.—OBSTETRIC MEDICINE.

Surgical Theatre.

C. OBSTETRIC MEDICINE.—*President*, A. V. Macan, M.B. *Vice-Presidents*, T. More Madden, M.D.; A. L. Galabin, M.D. *Honorary*

Secretaries, Wm. J. Smyly, M.D., 56, Fitzwilliam Square, Dublin; Wm. Duncan, M.D., 6, Harley Street, Cavendish Square, London, W.

The following two discussions will take place.

1. On the Prevention of Puerperal Fever. This will be opened by Dr. William Playfair; and Drs. Robert Barnes, Priestley, Atthill, Kidd, Dill, and Galabin have intimated their intention of taking part in the debate.

2. On the Management of Anterior and Posterior Displacements of the Uterus. To be opened by Dr. Halliday Croom, of Edinburgh. Drs. Barnes, Playfair, Priestley, Kidd, Atthill, Galabin, and others, are expected to take part in the debate.

The following papers are promised.

APOSTOLI, Dr., Paris. On the Electric Treatment of Fibroid Tumours of the Uterus; Full Statistics and Remarks on all the Cases treated from July, 1882, to July, 1887.
BARNES, Robert, M.D., London. The Theory and Treatment of Placenta Prævia.
BYERS, J. W., M.D., Belfast. On the Prevention of Puerperal Fever in Private Practice.
CAMERON, Murdoch, M.D., Glasgow. The Pathology of Abortion; with Specimens.
DUNCAN, William, M.D., London. On the Best Mode of Treating Extensive Vesico- and Recto-Vaginal Fistulæ.
ELDER, George, M.D., Nottingham. A Visit to Apostoli.
GRIGG, W. C., M.D., London. On the Etiology of Puerperal Pyrexia.
HERMAN, G. E., M.B., London. Pubo-vesical Cellulitis.
MADDEN, T. More, M.D., Dublin. 1. On the Treatment of Puerperal Fever. 2. On the Treatment of some Forms of Sterility.
SAVAGE, Thomas, M.D., Birmingham. Tubo-ovarian Cysts.
SMYLY, W. J., M.D., Dublin. On the Diagnosis and Treatment of Diseases of the Endometrium.

SECTION D.—PHARMACOLOGY AND THERAPEUTICS.

Medical Theatre.

D. THERAPEUTICS AND PHARMACOLOGY.—*President*, Wm. Whitla, M.D. *Vice-Presidents*, Matthew Charteris, M.D.; D. J. Leech, M.D. *Honorary Secretaries*, Chas. Y. Pearson, M.D., 1, Sidney Place, Cork; Michael McHugh, M.B., 25, Harcourt Street, Dublin.

The special subject for discussion is the Therapeutics of the Uric Acid Diathesis, which will be introduced by Dr. Burney Yeo, of London. Dr. Latham, Cambridge; Dr. Myrtle, Harrogate; Dr. Mortimer Granville, London; Dr. Carter, Liverpool; Dr. Hellier, Leeds; Dr. Churton, Leeds; Dr. Spender, Bath; Dr. J. Milner Fothergill, London; Dr. Austin Meldon, Dublin; Dr. Philip Crampton Smyly, Dublin, and others, will take part in the discussion.

The following papers are promised.

ANDERSON, E. C., M.D., Wolsingham. Koumiss and Koumissised Peptones; their Varieties, Physiological Uses, etc.
CHARTERIS, Matthew, M.D., Glasgow. The Climatic Treatment of Phthisis.
COTTLE, Wyndham, M.D., London. (*Subject of paper not received.*)
COX, M. F., M.K.Q.C.P.I., Dublin. The Treatment of Acute Endo- and Peri-Carditis.
DRYSDALE, C. R., M.D., London. On the Climatic Treatment of Phthisis.
FARRAR, Joseph, M.D., Gainsborough. The Use of Acidum Sulphurosum in Typhoid.
FOTHERGILL, J. Milner, M.D., London. (*Subject of paper not received.*)
HARKIN, A., M.D., Belfast. On the Treatment of Epistaxis.
JAMES, Prosser, M.D., London. The Effects of Topical Treatment on Mucous Membranes.
LEECH, D. J., M.D., Manchester. On Spartein.
LINDSAY, J. A., M.D., Belfast. On the Climatic Treatment of Phthisis.
MELDON, Austin, M.K.Q.C.P.I., Dublin. The Use of Chlorate of Potash and of Phosphorus in the Treatment of the Uric Acid Diathesis.
MORRIS, Malcolm, F.R.C.S., London. Nature and Treatment of Ringworm of the Scalp.
QUINLAN, F. J. B., M.D., Dublin. Clinical Notes on the Therapeutic Action of Strophanthus Hispidus.
SANSOM, Ernest A., M.D., London. The Treatment of some Forms of Aortic Disease.
SCHETELIG, A., M.D., Bad Homburg. A Treatise on the Cure of the Gouty by Mineral Waters and Diet.
SMITH, Walter G., M.D., Dublin. Notes on the Treatment of Lupus and on the Use of Iodol.
TOY, George, M.D., Dublin. On Idiosyncrasy.
UNNA, P. G., Hamburg. The Improvements of the Dermato-Therapeutics.
WILD, R. B., M.B., B.Sc., Manchester. The Action of Quinine and Allied Substances on the Kidneys.

SECTION E.—PATHOLOGY.

Theatre of Physiological Laboratory.

E. PATHOLOGY.—*President*, Samuel Gordon, M.D. *Vice-Presidents*, A. W. Foot, M.D.; David J. Hamilton, M.D. *Honorary Secretaries*, Theodore D. Acland, M.D., 7, Brook Street, Grosvenor Square, London, W.; Henry T. Bewley, M.B., Willow Park, Booterstown, Co. Dublin.

The following subjects have been selected for discussion.

1. The Pathology of Empyema. To be introduced by Dr. Markham Skerritt, Bristol. Dr. Stephen Mackenzie, London, and others will take part in the discussion.

2. The Etiology of Chlorosis. To be introduced by Dr. A. W. Foot and Professor A. Gamgee.

Dr. Crookshank will give demonstrations or Preparations, Cultivations, etc., of Bacteria.

Dr. G. Sims Woodhead will show large sections of Morbid Conditions of the Lungs by means of the Magic Lantern.

The following papers are promised.

ANDERSON, E. C., M.D., Wolsingham. On Leucin and Tyrosin.
BOYD, J. St. Clair, M.D. A Report on Fifty-eight Specimens of Chronic Inflammatory Disease of the Uterine Appendages Operated upon by Mr. Lawson Tait during 1886.
CROOKSHANK, Edgar, M.B., London. On the Micro-organisms associated with Malaria.
CUNNINGHAM, D. J., M.D., Dublin. The Sectional Anatomy of Inguinal Hernia. Illustrated by a series of frozen sections.
DELEPINE, S., M.D. On the Organisation of Clot after Ligation of a Tied Artery.
GAMGEE, Arthur, M.D., F.R.S. On the Pathology of Chlorosis and Anæmia.
JENNINGS, C. E., M.B. On the Origin of Malignant Growths.
KNIGHT, C. T., M.D. Certain Pathological Conditions of the Blood, with especial reference to their Action as Factors in the Manifestations of Empyema, Chlorosis, and Cutaneous Affections.
MAPOTHER, E. D., M.D. Elephantiasis Induced by Posture.
SKERRITT, E. Markham, M.D.Lond., F.R.C.P. 1. Actinomycosis Hominis. 2. On the Pathology of Empyema.
THIN, G., M.D. On the Nature of Contagium in the Exanthemata—a Critical Review.
THOMAS, W. R., M.D. On the Pathology of Bright's Disease.
UNNA, Professor, Hamburg. On the Micro-organisms of Lepra.
WOODHEAD, G. Sims, M.D., and MACFADYEAN, J., M.D. On Tubercle in the Dairy.

SECTION F.—PUBLIC MEDICINE.

Divinity Theatre.

F. PUBLIC MEDICINE.—*President*, Sir Thomas Crawford, M.D., K.C.B. *Vice-Presidents*, John S. Taylor, M.D.; R. Thorne Thorne, M.D. *Honorary Secretaries*, John Wm. Moore, M.D., 40, Fitzwilliam Square West, Dublin; John F. W. Tatham, M.D., Town Hall, Salford.

The subjects selected for discussion are—

1. The Influence of Modern Preventive Measures on the Prevalence of Infective Diseases. Introduced by T. Donnelly, M.D., Dublin.

2. How to Deal with the Insanitary Property now occupied by Artisans and Labourers. Introduced by Sir Charles Cameron, F.R.C.S.I., Medical Officer of Health for Dublin.

The following papers are promised.

BOYD, M. A., M.K.Q.C.P.I., Dublin. Modern Diet and its Effects on Health.
BROWN, John, L.R.C.P.Lond., Medical Officer of Health, Bacup. The Prophylactic Advantages of the Early and Continued Inunction of Carbolised Oil in Scarlet Fever.
CHURTON, T., M.D., Leeds. On the Registration of Plumbers and of Plumbing Work.
COX, Michael F., M.K.Q.C.P., Dublin. Ill-Health occurring in Female Servants and Shop Assistants.
DRYSDALE, Charles R., M.D., Senior Physician to the Metropolitan Free Hospital of London. 1. The Influence of Easy Circumstances on Longevity. 2. The Superior Efficacy of Animal Vaccination.
FLINN, D. Edgar, F.R.C.S.I., M.K.Q.C.P., Kingstown. 1. The Development of our Irish Health-Resorts. 2. The Sanitary Act as Applied to Rural Districts in Ireland.
GRIMSHAW, Thomas Wrigley, M.D.Univ.Dub., F.K.Q.C.P. (Registrar-General for Ireland). Class Mortality Statistics.
JAMES, J. Brindley, M.R.C.S.Eng., London. Hospital Organisation.
LAFFAN, T., L.K.Q.C.P.I., Cashel. Some Remarks on the Irish Labourers' Act, with a Proposal for Meeting the Present Defective Milk-Supply for the Children of the Irish Rural Working Class.
LEATHAM, Wm., L.K.Q.C.P.I., Coalisland. How to Deal with the Insanitary Property now occupied by Artisans and Labourers.
LINDSAY, James A., M.D., Belfast. 1. The Place of Hygiene in the Prophylaxis of Consumption. 2. The Dietary of the Poor.
LOWNDES, Frederick Walter, M.R.C.S.Eng., Liverpool. The Disposal of the Dead—Burial or Cremation.
MADDEN, T. More, M.K.Q.C.P., Dublin. On Over-Pressure and Brain-Disease in Childhood.
MOUILLOT, Albert, M.B., Gorey. On an Outbreak of Dysentery at Glynn, Co. Wexford.
QUINLAN, F. J. B., M.D., Dublin. Some Experiences in Insanitary Tenement Houses.
TAYLOR, J. Stopford, M.D. (Vice-President of the Section, and Medical Officer of Health, Liverpool). "The Liverpool Sanitary Amendment Act for Dealing with Insanitary Property: its Powers and Working."
THOMAS, W. R., M.D., M.R.C.P., Sheffield. On some Uncommon Cases of Lead-Poisoning from Drinking Water.

SECTION G.—PSYCHOLOGY.

Examination Room.

G. PSYCHOLOGY.—*President*, J. R. Gasquet, M.B. *Vice-Presidents*, Frederick Needham, M.D.; Oscar T. Woods, M.D. *Honorary Secretaries*, Conolly Norman, F.R.C.S.I., Richmond District Lunatic Asylum, Dublin; T. Lyle, M.D., Rubery Hill Asylum, Bromsgrove, Worcestershire.

Dr. Gasquet, the President of the Section, will deliver an address.

The following subject for discussion will be introduced by Dr. George H. Savage: Nervous Disorders following the Use of Anæsthetics.

Dr. D. Yellowlees will open a discussion on Private Treatment *versus* Asylum Treatment.

Dr. J. Wiglesworth will open a discussion on the Use of Electricity in the Treatment of Insanity.

The following papers are promised.

KEAY, John, M.B., Polton. Are Airing Courts, Locked Rooms, and Restraint Necessary in Asylum Practice?

TUKE, D. Hack, M.D., London. On "Folie à Deux."

TWEEDY, H. C., M.D. Expectancy as an Element in the Exaggeration of Railway Injuries, Real or Imaginary.

SECTION H.—OPHTHALMOLOGY.

Physical Theatre.

H. OPHTHALMOLOGY.—*President*, H. R. Swanzy, M.B. *Vice-Presidents*, D. Argyll Robertson, Pres.R.C.S.Edin.; Priestley Smith, M.R.C.S.E. *Honorary Secretaries*, A. H. Benson, M.B., 42, Fitzwilliam Square, Dublin; A. W. Sandford, M.D., 13, St. Patrick's Place, Cork.

The subject for discussion is the Etiology and Treatment of Convergent Concomitant Strabismus, which will be introduced by Mr. Simeon Snell, of Sheffield. Drs. Jeffreson, Cowell, McHardy, E. Meyer, E. Nettleship, Wood White, P. H. Mules, W. A. Brailey, Vose Solomon, F. Mason, R. Williams, Walter H. Jessop, W. Lang, E. Juler, W. Charnley, Henry Eales, Frank Hodges, and Argyll Robertson, will take part in the discussion.

The following papers are promised.

BENSON, Arthur H., F.R.C.S., Dublin. On the Treatment of Stenosis of the Lacrymal Duct by Removable Styles.

BERRY, George, M.B., Edinburgh. On Amblyopia, Diplopia, and the Etiology of Strabismus.

BICKERTON, T. H., Esq., Liverpool. On Colour-Blindness, with especial reference to its Prevalence amongst Sailors.

BULL, C. S., M.D., New York. (*Subject of paper not received.*)

CHARNLEY, W., Esq. A New Point in Astigmatism.

FROST, W. Adams, F.R.C.S., London. On Squint.

HEWETSON, H. B., Esq., Leeds. On Amblyopia from Lead-Poisoning (illustrated); nine cases.

JESSOP, Walter H., Esq. (*Subject of paper not received.*)

JONES, A. Emrys, M.D., Manchester. On Atrophy of the Optic Nerve, Associated with Dropping of Fluid from the Nostril.

LANDOLT, Dr., Paris. On the Re-establishment of Binocular Vision after Strabismus Operations.

LITTLE, David, M.D., Manchester. On Lamellar Cataract.

MULES, P. H., M.D., Manchester. On Squint.

SMITH, Priestley, Esq., Birmingham. On Neurasthenic Amblyopia.

TAYLOR, Charles Bell, M.D., F.R.C.S.Ed., Nottingham. 1. Five Hundred Cases of Cataract Extraction without Iridectomy. 2. A New Operation for Internal Squint. 3. On the Treatment of Lachrymal Obstruction without Incising the Canaliculus.

UHTHOFF, Dr., Berlin. Demonstrations of Preparations relating to (1) Chronic Alcoholism, in its Relations to the Eye; (2) Ophthalmoplegia; (3) Paralysis of Orbital Muscles.

WILLIAMS, Richard, M.R.C.S.Eng., Liverpool. On the Actual Cautery in the Treatment of Conical Cornea.

Communications have also been promised by Dr. Karl Grossman, Liverpool; Dr. Lloyd Owen, Birmingham; and Mr. E. A. Browne, Liverpool.

SUBSECTION I.—OTOLOGY.

Engineering Theatre.

I. OTOLOGY.—*Chairman*, E. Woakes, M.D. *Vice-Chairman*, J. B. Story, M.B. *Honorary Secretary*, D. D. Redmond, L.R.C.S.I., 14, Harcourt Street, Dublin.

Dr. Thomas Barr, Glasgow, will open a discussion on Tinnitus Aurium. Mr. T. Mark Hovell, Dr. Charles Warden, Dr. J. Walton Browne, Dr. J. Ward Cousins, Dr. F. M. Pierce, Dr. James Erskine (Glasgow), and Dr. A. H. Jacob, will take part in the discussion.

The following papers are promised.

BROWNE, J. Walton, M.D., Belfast. On Caries of the Mastoid.

ERSKINE, James, M.B. On Tympanophony.

WARDEN, Charles, M.D., Birmingham. On Tinnitus Aurium.

SUBSECTION J.—LARYNGOLOGY AND RHINOLOGY.

LARYNGOLOGY AND RHINOLOGY.—*Chairman*, W. H. MacNeill Whistler, M.D. *Vice-Chairman*, Kendal Franks, M.D. *Honorary Secretary*, R. A. Hayes, M.D., 56, Merrion Square South, Dublin.

The two following subjects have been selected for special discussion.

1. Phthisis of the Larynx.

2. The Reflex Neuroses of the Naso-Pharynx.

Dr. Prosser James, Dr. Woakes, Mr. Lennox Browne, Dr. R. Ellis, Dr. C. Warden, and Dr. G. Hunter Mackenzie will take part in the discussion.

The following papers are promised.

MACKENZIE, G. Hunter, M.D. The Treatment of Laryngeal Phthisis.

STOKER, George, Esq. Intermittent Nasal Neuroses.

Local Honorary Secretary.—George F. Duffey, M.D., 30, Fitzwilliam Place, Dublin.

Members desirous of reading papers, or joining in the discussions, are earnestly requested to communicate, without delay, with the Secretaries of the respective Sections.

ANNUAL MUSEUM.

THE Annual Museum will be held on August 2nd, 3rd, 4th, and 5th, in the Anatomical Department of the Medical School of Trinity College, Dublin.

The Museum will be arranged in the four following Sections, and intending exhibitors are requested to communicate with the Secretary of the Section or Sections in which they propose to exhibit.

SECTION A.—Food and Drugs. (Honorary Secretary, F. J. B. Quinlan, M.D.Univ.Dub., 29, Lower Fitzwilliam Street, Dublin.)

SECTION B.—Recent Books, Instruments, and Appliances—Medical, Surgical, and Electrical. (Honorary Secretary, John Lentaigne, F.R.C.S.I., 29, Westland Row, Dublin.)

SECTION C.—Anatomical and Pathological Specimens and Drawings, Microscopes and Microscopical Preparations. (Honorary Secretary, Alex. B. McKee, M.B.Univ.Dub., Royal College of Surgeons, Dublin.)

SECTION D.—Hygienic and Sanitary Appliances. (Honorary Secretary, H. C. Tweedy, M.D.Univ.Dub., 2, Gardiner's Row, Dublin.)

Particulars should be supplied to the Secretaries of the objects proposed to be exhibited and the amount of space required. No show-cases will be allowed.

As it is intended to print a catalogue, with appendix of advertisements, it is requested that inquiries be addressed to the Secretaries as early as possible.

All articles sent to the Museum for exhibition should be addressed to care of Professor Cunningham, Medical School, Trinity College, Lincoln Place, Dublin, and delivered, carriage paid, between the 5th and 26th of July.

Chairman of Museum Committee—Wm. Thornley Stoker, F.R.C.S.I., 16, Harcourt Street, Dublin. Vice-Chairman—D. J. Cunningham M.D., 69, Harcourt Street, Dublin.

EXCURSIONS.

THE following excursions on Saturday, August 6th, have been arranged:—

1. *Dublin Bay.*—The London and North-Western Railway Company, has generously granted one of its express steamers for this excursion, which eminent marine zoologists have kindly undertaken to accompany for the purpose of dredging, trawling, and taking soundings in several places between Lambay and Greystones. Lunch will be served on board at two o'clock, and the steamer will return to the North Wall before seven o'clock.

2. *Powerscourt and Dublin Waterworks.*—By train to Bray, drive through Powerscourt Demesne and to the Waterfall; thence to the Waterworks, where lunch will be served at two o'clock. The return journey will be by the Glen of the Downs to Bray, and thence to Kingstown in time for the mail boat.

3. *Glendalough and Ovoca.*—On reaching Rathdrum by rail, conveyances will start for Glendalough, and after an hour's stay will return to Rathdrum. A special train will leave for the Meeting of the Waters, and thence for Glenart Castle, Ovoca, where the party will be entertained by the Earl of Carysfort, K.P., and return to Kingstown at 7 P.M.

4. *The Boyne.*—By rail to Drogheda, thence by cars and carriages to Monasterboice, Mellifont Abbey, Slane, New-Grange Sepulchral Tumulus (where light refreshments will be served), and the Battle-field. Dinner at Drogheda at 4 P.M. Return from Drogheda at 5.41 P.M. by limited mail, or by later trains.

E. D. MAPOTHER, M.D., Chairman, Excursion Committee.

Dr. WARD COUSINS gives notice that he will propose the following alteration of By-law 9, for the purpose of making the term of office of the President of Council correspond with the constitution of the annual representative Council:

Present by-law.—"The President of the Council shall be elected by the Council. He shall hold office for three years; and at the first meeting of the Council after the determination of such office, a new President of Council shall be elected for the ensuing three years."

Proposed alteration.—"The President of the Council shall be elected annually by the Council, and shall be eligible for re-election for a period of three years. At the first meeting of the new Council in every year, a President of Council shall be elected for the ensuing year."

Dr. MARSHALL, of Dover, will move that, as the annual meeting of the British Medical Association has not been held in London since August, 1873, it is the opinion of this meeting that the next annual meeting of the Association should be held in London in the month of August, 1888.

FRANCIS FOWKE, *General Secretary.*

SPECIAL CORRESPONDENCE.

A WINTER TRIP TO "THE FORTUNATE ISLANDS."

VII.

Queries from Correspondents.—Amusements and Occupations at Orotava.

I WAS disposed to have abruptly ended these letters, considering that enough had appeared. Since the break in their publication I am, however, somewhat overwhelmed by complimentary remonstrances, and by requests to add to the series further information of many kinds, and descriptive notes which would, however, trench too far on the space at command, were I to fulfil the desires of all my correspondents. With a view, however, to meet the wishes most frequently and urgently expressed, and to answer questions which have been put to me personally since my return from Orotava, I will give briefly some further notes. I may say that I have been unable to answer all the letters addressed to me, or even to see those who have called upon me on the subject, but most of the unanswered queries will find a reply either in the following pages or in an appendix which I hope to add to these letters when republished.

My correspondents desire to know what society there is in Orotava; what amusements; what occupations; whether the accommodation is good; whether there is lawn-tennis; what language is spoken; whether the weather is as pleasant all through the winter months as it was when I was there; whether the scenery is really as beautiful as I describe it; how to get there and how to get back; whether the place is full of invalids; whether there are any rides, drives, and excursions; how many inhabitants; what is the native food like, and so forth.

Now, I am not writing a gazetteer, or a guide-book, but only some scattered notes of winter travel from the point of view of a doctor in search of a holiday. Railway and steamboat routes can be found in their proper places; I need only say that the steamboat passage from Plymouth is made in very fine ocean steamers of the New Zealand lines, and occupies only five days; from Liverpool in excellent but smaller boats (2,000 tons) of the African steam lines, and by the latter at the low cost of £15 for the return trip, which usually occupies eight days each way. As to the climate, it is as I have described it from October to the end of March; after that time it becomes oppressive at Puerto Orotava, but half-an-hour's drive up into the hills at La Paz, or Villa Orotava, or still better perhaps to the lovely promontories on the hills overlooking the sea, near Matanza, brings you into a region of refreshing breeze; while at Laguna and other points which I have mentioned in previous letters, cool climates may be found. The summer resources of Teneriffe are at present hardly at all developed for visitors; and even the winter arrangements are only in their infancy.

"How is it," I am asked, "that so little has been heard before this of this beautiful and equable climate, of which you speak with so much enthusiasm, and that it has been reserved for you to become the Columbus of this new paradise?" This, of course, is "rote sarkastikal," and it is unsigned. But the question is a fair one, although overstated on both sides of the implied argument. It might be argumentatively sufficient to reply that I am not the discoverer of its climatic qualities or of its beauties, nor even its first eulogist. Humboldt is far more enthusiastic, and Belcastel more detailed and affirmative. Is it a fault to be enthusiastic? Confiteor; that is, you see, a question of temperament. I am a sun-worshipper, and when I escape from the canopy of coal-smoke, the foul fogs, and the damp and piercing winds which martyrise men of my temperament in London in some of the winter months, and emerge into the bright sun-light, the glorious radiance, the gracious canopy of the blue skies, the soft and refreshing air, the strange and varied vegetation, the opulent abundance of flowers which greet the traveller from October till April in the East and the South it is my happiness to feel an enthusiasm which my pen appears to betray. It would be a misfortune if it were to mislead others of a different way of thinking into journeys which they might feel to be a bore and a disappointment. I suspect that one or two of my correspondents are of that class. I have met Englishmen in Cairo unutterably bored, and who made it their boast that they had never gone out to see the pyramids (only a few hours' drive), and who were chiefly concerned at the poorness of the opera-house, at the stupidity of the Arab servants who could not brew club drinks, and the small number of dances. I have known visitors at Cannes who spent their days and weeks at the Beausite watching Renshaw play tennis, grieving over their failures to imitate his volleying, and trying new ways of "screwing;" who had never gone into the Esterel Mountains, and to whom the beauty of coast, and hill, and stream were alike unknown. These are types of whom examples can be recalled by almost every day's observation. They have another kind of enthusiasm, a zeal which they call indifference, but which is not less consuming than high-pressure exploration, only at the other end of the candle. Orotava is not for them. I believe there is a tennis-court; I was never in it. There is also cock-fighting; on a small scale and on Sundays. There is a very pleasant and pretty kind of music playing on the three-stringed guitar, full of turns and trills, and sentimental passages of rather pleasing monotony. The barber of Orotava and his father-in-law are very skilful performers; and many a pleasant evening we passed sitting out on the galleries looking over the gardens, beneath a sky enamelled with countless stars, and listening to the love-songs, the laments of the Cid, and the patriotic declamations which were trilled and twittered in sweet minor tones by this most accomplished and musical *barbiere*. Besides this we had a good deal of very pretty singing and playing from various amateurs, some highly accomplished and others by no means equally so. More than one of the fair ladies of Orotava showed special musical accomplishment. Once or twice there was a dance. Then we had twice a public musical performance in the botanical gardens by the Musical Society of Orotava, including the music of the *Estudiantina* winding in procession through the grounds, a very interesting and quaint performance, but not remarkable from the point of musical merit. We had also a grand gala day on which the manhood and chivalry of Orotava distinguished themselves by "tilting at the ring" under the eyes of the youth and beauty of its fair ladies. Each time that a happy horseman carried off a ring, a long ribbon attached to it fluttered in the wind, and after proudly wearing it for a round or two as a badge he presented it to one of the fair spectators. It was pretty, and carried on in this valley recalled at a far distance the reminiscences of Spanish chivalry which Teneriffe has much cause to remember and her conquerors to cherish. But the feats of horsemanship struck me as easy enough, and, in fact, a young English stockbroker, not a brilliant horseman from our point of view, carried off a great many of the honours on the first occasion; on the second he showed only as a spectator. Not that the Spaniards are not very good horsemen; they are almost born to it in Orotava, where the ground is most easily covered on horseback; their seat is firm and good, but the style of riding is a little stiff and the seat not suited for crossing country or for exercises of agility. Horses, I should add, are abundant, and may be hired at a very cheap rate. They are small and not showy, but are very hardy, sure-footed, and have good manners. This is, perhaps, the place in which I may be permitted to say how fully the Spanish families resident in Teneriffe support the Spanish character for courtesy, kindness, and good-breeding. The whole population is Spanish, and is remarkable for amiability, peacefulness, and good manners. There is an undue tendency to begging, especially among the children, who run after the carriages calling for a "*cuartito*," but by habit rather than by interest, and very good-naturedly. They do not seem disappointed if they get nothing. Indiscriminate mendicancy is a curse to a population, as well as an annoyance to visitors. It is to be hoped that the habit will be repressed by the authorities, especially should strangers rigidly refuse to scatter "*cuartitos*" at the playful request of these merry, smiling little petitioners. Excursionists often do much to demoralise a population by thoughtless scattering of small coin. Those who seriously wish well to the poor will hear of some excellent charities from Dr. Perez, or from the daughters of the Marquis of Candia, who are earnest in well-doing, and some of whose good works stand in urgent need of support. The courtesy of the estate-owners of Teneriffe is such that their gardens are, so far as I have seen, open most freely and graciously to all visitors. The customary salutation of a Spaniard who receives you at his house, on however casual a visit, is to assure you that his house and all that is in it is at your disposal, and to beg that you will make use of it as if it were your own. This, of course, must not be taken as more than a gracious civility in words. It so entirely pervades the habit of expression in Spanish forms of every-day politeness that it sometimes takes you by surprise by breaking out, so to speak, unexpectedly. We were walking through Villa Orotava with Count Salazar, who was kindly acting as *cicerone* to some of the gardens and houses to my wife and myself, when, passing a villa, he added, "This is my house," and, with a bow, "and yours," which means, however, only in Spanish form, "I hope you will come in."

So that Orotava is inhabited, you see, by Spaniards and men of the world; the streets are grass-grown, and the houses white-washed and closed by heavy green puertillos or wooden lattices, and are built chiefly

to exclude light, of which there is, if anything, as in most Southern places, only too great and too continuous a supply. Commercially, Teneriffe saw its best days in the earlier part of this century; when Teneriffe wine was a favourite with many, and largely consumed here, and when cochineal furnished the fashionable dyes; oïdium and alizarine have ruined its commerce. But steam may revive it in bringing to Orotava troops of health- and holiday-seekers; and in carrying off new potatoes, French beans, and such like early vegetables and fruits, which may be grown here to order as easily in winter as in summer. I do not think I have mentioned that three crops of potatoes may be obtained yearly, and almost at any date required, and that the soil is so rich in mineral matter and the climate so favourable, that as many as nine crops of lucerne (the principal horse-fodder) are often cut yearly.

This brings me incidentally to the question how it is that so little has been heard heretofore of Orotava as a holiday-place or a health-resort till now, and the Columbus conundrum of my critical friend. I conceive that it is, first, because it was till quite lately difficult and costly to get there, and uncertain how and when you could get away; and, secondly, because the lovely prospect of the Puerto was till last year unadorned by a good hotel. The wise policy of the Spanish Government in making Teneriffe and Grand Canary free ports has made them coaling stations for the great ocean-steamers, which previously found nothing to attract them to these ports. I tried three years ago to cross from Madeira, but found the dates of departure and arrival far too rare and uncertain; they are now frequent, and fixed with something like accuracy early in the year. Then it was only last year that Mr. Harris, a retired officer, who was sojourning at Orotava for health and pleasure, finding the great need of a first-class hotel and sanatorium, and that some of the leading residents were desirous of co-operating, created a small company, and opened in October last the hotel and sanatorium of which I have spoken, and which I found already full of English visitors, and, although it had only been at work for a few months, equipped in most respects on a scale fitted to meet European requirements. In many respects it is one of the most delightful hotels in the South, and more like a club in a tropical garden by the sea. Next year it is to be enlarged, and its staff of servants remodelled. Three minor dependencies of the hotel were also filled. There is room for development. The accommodation at Orotava is limited, and would be easily overpowered if there were anything like the "rush" of visitors which some of my correspondents predict. I should think that the five-days' sea-journey—which I so much enjoyed, but which is not equally agreeable to many others—will stave off the multitude, and will equally deter confirmed invalids. But, for fear of disappointment as to quarters, I should recommend the delicate or the fastidious to write, in good time to get an answer, to Mr. Harris, the managing director, at the Grand Hotel, Orotava, or to the London agents (Messrs. Sinclair, Hamilton and Co., 17, St. Helen's Place). I should be sorry to mislead invalids into expecting too much from so newly-organised an establishment, of which the resources can evidently not expand suddenly and without limit. Any particular question as to invalids should, I think, be addressed to Dr. George V. Perez, at Puerto Orotava. I have not his authority for saying so; but I feel sure that he will give all the information needed, and he is as wise and trustworthy as he is kindly and conscientious. I cannot include in this letter, which has been wholly monopolised by the "small things" of every day, the account which I promised some of my friends to give of one or two ordinary rides, drives, and excursions, in order to afford an idea of what is really the chief occupation of the visitors to Orotava; but I will in another letter speak of some of these.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Glaucoma.—Etiology of Interstitial Keratitis.—Surgical Treatment of Laryngeal Phthisis.—Memorial to J. David.—Grants by the French Association for the Advancement of Science.—The Recent Work of the Pasteur Institute.

M. VACHER has, in two years, seen six cases in which iridectomy and sclerotomy had not prevented the development of glaucoma. In these cases he performed posterior ophthalmotomy, with excellent results in five out of the six.

M. Trousseau, in forty cases of interstitial keratitis, found in thirty-seven, symptoms, more or less marked, of hereditary syphilis. M. Haltenhoff mentions three cases of interstitial keratitis in seventy-two cases of acquired syphilis. In the cases of hereditary syphilis the interstitial keratitis was almost always double; in acquired syphilis, on the contrary, one eye only was affected. M. Galezowski has observed interstitial keratitis from acquired syphilis; it affected only one eye, however, and did not invade the entire surface of the cornea. M. Gorecki related a case of perforation of the retina in a girl, aged 12, who was under treatment for syphilitic interstitial keratitis.

At a recent meeting of the Société Médicale des Hôpitaux, M. Gouguenheim described the results obtained by M. Ehring by his surgical treatment of tubercular laryngitis. This consists in scraping and cleaning the ulcerations, or, when this is impracticable, in making lactic acid or iodoform injections under the laryngeal mucous membrane after the application of cucaine. Of 200 patients thus treated last year, 28 were cured. M. Gouguenheim showed specimens which proved that tubercular ulcers had been cured. The nature of the disease was established by the presence of the characteristic bacillus in the microscopic preparation which had been examined by Professor Virchow. M. Labbé said these statements embodied facts of an extraordinary nature, which could not be accepted without reserve.

M. Panas has offered to the Academy of Medicine a bronze medallion of Jacques David, the inventor of the operation of cataract by extraction. A subscription is being raised to erect a monument to the memory of the distinguished oculist at his birthplace, La Barre, in Normandy.

At the last general meeting of the Committee of the French Association for the Advancement of Science, the following grants were made: 1,500 francs to M. Boulle to assist in the publication of his work on *The Quaternary and Pre-historic Times in Auvergne*: 2,650 francs to MM. Bucquoy and Dantzenberg for the purchase of ten copies of Rousillon's work on *Marine Shell-fish*; 3,300 francs to M. Marcellin Langlois for the purchase of a hygrometer; 4,300 francs to M. Letellier to assist him in the continuation of his zoological researches on the soil in the neighbourhood of Alençon.

The number of persons treated at the Pasteur Institute in the month of March, 1887, was as follows: French and Algerians, 121; foreigners, 50; total, 171. In 28 cases, the fact that the disease was rabies was established by the inoculation of medulla, or by the development of hydrophobia in persons bitten at the same time. It was proved by veterinary observation in 115 cases. In 28 of the cases the patient had been bitten by animals only suspected of rabies. A man named Sans, who was bitten by a mad wolf, and cauterised fourteen hours later, died during treatment.

CORRESPONDENCE.

☞ TO CORRESPONDENTS. ☜

OUR correspondents are reminded that prolixity is a great bar to publication, and, with the constant pressure upon every department of the JOURNAL, brevity of style and conciseness of statement greatly facilitate early insertion. We are compelled to return and hold over a great number of communications, chiefly by reason of their unnecessary length.

REG. v. THE GENERAL MEDICAL COUNCIL.

SIR,—You announced in the JOURNAL of June 18th that Mr. Partridge has been successful in his encounter with the General Medical Council, and has obtained a mandamus from the Queen's Bench Division, compelling the Medical Council to restore his name to the *Dentists' Register*. The facts of the case were simple. Mr. Partridge having obtained a qualification from the Royal College of Surgeons in Ireland, was entered on the *Dentists' Register*. In 1885 Mr. Macnamara reported to the Council that Mr. Partridge, had been removed from the roll of Licentiates of his College for having advertised, contrary to an express stipulation, and he requested the Medical Council to remove that qualification from the *Register*, as he no longer held it. After considerable debate as to whether a name could remain on the *Register* without a qualification, the Council decided to remove his name, and did so, with the result as already stated, that Mr. Partridge went to law with them and has got the best of it. It may be hoped this will be a lesson to the members of the Council to try and exercise a little common sense in the future. There can be no doubt that in this instance they entirely failed to appreciate the nature of the responsibilities with which they have been entrusted. They are authorised to take a name off the *Register* when a person has been convicted of felony or misdemeanour or been guilty of any infamous or disgraceful conduct in a professional respect. But they are not to act upon hearsay. "The General Council may, and, upon the appli-

cation of any of the medical authorities, shall cause inquiry to be made into the case of a person liable to have his name erased under this section, and on proof of such conviction or of such infamous or disgraceful conduct shall cause the name of such person to be erased from the *Register*." Anyone who will take the trouble to refer to the debate on this case will be able to judge for himself how far the Council complied either with the spirit or the letter of this portion of section 13. Is there anyone who would seriously contend that advertising in the lay papers is derogatory in a dentist? I do not, and I am by no means certain that it would not be better if members of the medical profession were allowed to advertise in certain prescribed lines, and heavily fined for every indirect puff which appeared in the daily or society papers. In some of the colonies it is perfectly legitimate for a new comer to announce his arrival and his intention to follow his calling by a series of advertisements in the local papers of the town he has selected as the site of his professional career. Everybody does it, and, so far as I am aware, no harm is done to their professional or social status thereby. In removing Mr. Partridge's name the Council was much influenced by the belief, which many of its members adhered to, that no person's name could appear on the *Register* without a qualification attached thereto. Mr. Justice Mathew's decision will save them from all anxiety on that score in the future. Indeed, if they could have only read the Medical Act, which, by the way, they are eternally quoting as if they understood it, by the light of a little common sense, they would have seen that the possibility of a name being left on the *Register* without a qualification was distinctly contemplated when it was stipulated that no person's name should be struck off on account of his holding any particular views or doctrines. Even the most persistent advocates of the so-called accuracy of the *Register* would not, I suppose, want to remove a practitioner's name whose only registered qualification was the M.R.C.P. of London, because he had fallen foul of that august body by entering into partnership. The worst of it is that the profession has to pay the piper.—I am, etc.,

A CONSULTING JUNIOR.

THE NEW LUNACY BILL.

SIR,—With reference to the resolution as to clauses in the New Lunacy Bill, which was adopted by a conjoint meeting of the Gloucestershire, Worcestershire and Herefordshire, and Bath and Bristol Branches of the Association, and to the editorial note which accompanied the notice of it in the JOURNAL of June 4th, you will perhaps do me the favour to permit me to make a brief explanation.

In introducing the resolution, we were quite aware that the principle of magisterial intervention might be considered to be essential to any Bill which would satisfy the public, and no attempt, therefore, was made to introduce any resolution antagonistic to it. It was, however, thought desirable that an attempt should be made to limit the functions of the magistrate to those which he could properly and efficiently discharge, and to deprive him of the temptation to meddle and interfere in a purely medical matter, of which the ordinary non-medical magistrate could be supposed to have no skilled knowledge, and be able to form no opinion of the smallest value.

It was considered, moreover, that a profession such as ours should not, without strong remonstrance, suffer itself to be publicly snubbed by having its legitimate functions handed over to non-medical and unqualified persons.

With reference to the second point, the exclusion of the houses of medical men as residences for insane persons of all classes, there seemed to be no doubt as to the plain meaning of the words of the Bill.

"No order shall be made under this section (3, which provides all the machinery for the examination, certification, and confinement of patients) for the reception of a single patient in a house belonging to or kept by a medical practitioner, unless the single patient is, by the medical certificates upon which the order is made, certified to be suffering from unsoundness of mind of a temporary character, or from decay of mind in old age, or to be desirous of voluntarily submitting to care and treatment."

Section 28 was known to modify this clause to the extent of permitting the Lord Chancellor, or a judge of the supreme court, to order Chancery patients to be so received; but no doubt was entertained that, practically and for all ordinary purposes, the previous clause was left in all its bare and ungracious exclusiveness, and that, as a matter of fact, it did propose to close the houses of medical men, because they were medical men, to any but the three classes which comprise but a very small proportion of cases of insanity.

It was felt that this would be a grave and most undeserved injustice to the profession, and inflict serious inconvenience and injury upon the public.—I am, etc.,

FRED. NEEDHAM, M.D.

Barnwood House, Gloucester, June 6th, 1887.

*** Dr. Needham's letter explains and modifies the sense of the resolution, which, necessarily, was in a condensed form. Our comment partly concerned the view, expressed in the resolution, that certain clauses of the Bill provide for "the special exclusion of the houses of medical men as residences for insane single patients of all classes," which we did not, and do not, understand these clauses to do. We understand them to mean that, as regards three specified classes of single patients, admission into houses of medical men would be made under Clause 3; and admission of all other classes of single insane patients (whether "Chancery" lunatics or not) under Clause 28. And the "Memorandum" of the Bill defines the object of Clause 28 to be that "after the passing of the Act, orders for the reception of single patients in houses belonging to or kept by medical men are to be made by the judge in lunacy, except in cases of temporary lunacy, decay of mind in old age, and voluntary submission to treatment." On that departure from the general method of the Bill we long ago commented adversely. If we interpret Clause 28 in the same sense as in the above letter, we agree with the writer's observation on the point.

EPSOM COLLEGE.

SIR,—I have the pleasure to inform you that at the annual meeting of the South-Eastern Branch, held at Aldershot on June 17th, the sum of twenty guineas was voted towards the funds of Epsom College. Under the fourth by-law of the College, the President and Secretary of the Branch for the time being receive the rights of governors of our institution for twenty years. I hope this example may be followed by other Branches of the Association.

I should desire to correct two errors in my letter to Mrs. Durham in last week's JOURNAL. Mr. France and the late Dr. Harvey Owen gave "us" (the Council) five scholarships to Queen Anne's Schools; and, secondly, I am President of the "Surrey," not of the "Army," Medical Benevolent Society.—I am, etc.,

C. HOLMAN.

Reigate, June 20th, 1887.

MEDICAL DEFENCE FUNDS.

SIR,—It was stated a short time ago that a surplus of £500 is in the hands of the managers of the Messrs. Bower and Keates Defence Fund, and that the ultimate disposal of this sum is not decided upon. As a subscriber to the fund, I think that most other subscribers would agree with me in desiring to see this surplus devoted to maintain the principle for which it was raised—that is, to help medical men who have been pecuniary sufferers from cruel charges, which have been proved in a court of justice to be absolutely unfounded.

There is no lack, alas, of earnest appeals for help to the profession from the friends of such sufferers. No fewer than four defence funds are now asking for subscriptions. These are for Dr. Kennedy, of Dublin, Dr. Langmore, Mr. Brown, and in this week's JOURNAL for Dr. Ralph Hodgson, of Lewisham.

There ought to be neither difficulty nor hesitation in thus disposing of this £500, which was collected not only for special individuals, but on the principle that it was our duty to protect worthy members of our profession who are the victims of atrocious and groundless charges.

It is becoming a serious matter, the large increase in the number of these reckless and unfounded charges against medical men, and apparently there is no way of helping a ruined sufferer but these appeals to the generosity of the profession, and as these appeals keep increasing, it is but natural to suppose that the responses may decrease.

The efforts that were made last year to establish a general defence fund in connection with the British Medical Association failed only through the inability of the Association to take the direction of its management, but the warm support the object received ought to encourage the promoters to devise some other scheme that would still be workable through the organisation of this Association.—I am, etc.,

J. SINCLAIR HOLDEN, M.D.

Sudbury, Suffolk, June 20th, 1887.

TINCTURE OF THE MURIATE OF IRON.

SIR,—In sending my remarks on the tincture of the muriate of iron to you for publication, my object was to extend the knowledge of the valuable properties of the medicine, and I certainly did not anticipate, in doing so, that I should be called upon to give its composition, which the numerous letters I have from practitioners in England indicate is necessary. Those letters are so numerous that I cannot afford time to reply to all of them. Will you, therefore, oblige me by publishing a copy of the process of making the tincture of the muriate of iron, which I now send for the information of those who

have politely expressed a desire to have it? I also add the address of Messrs. Robertson and Co., apothecaries, 35, George Street, Edinburgh, who have always a supply of it, and who can be implicitly relied on to give a genuine supply of it when *a prescription is written for it.*—I am, etc.,

C. BELL.

"*Ferri Muriatis Tinctura, E.D. Process Edin.*—Take of the red oxide of iron, 6 ounces; muriatic acid 1 pint. Digest the oxide in the acid for three days in a glass vessel with occasional agitation, then add the spirit, and filter." *Vide* Sir Robert Christison's *Dispensatory.*

OPERATING PHYSICIANS.

SIR,—The suggestion made by "Surgeon" in your issue of May 28th is what has long commended itself to my judgment as the proper solution of this question. The suggestion is this—"The physicians and surgeons of general hospitals should advise their managing committees to make all future appointments to the gynæcological department surgical. Their ground would be that such work is surgical, and that it is not consonant with the best professional feeling that physicians should practise surgery." Gynæcology has been for many years becoming more and more surgical; and now it is more than half surgical. How rarely it happens that an obstetric physician, so called, has simply to prescribe for his patient; he has almost always something to do for her more or less surgical, even if it be only a pessary to insert. This has recently been well illustrated at the hospital with which I am connected, when, it being necessary to appoint one of the honorary staff as my deputy in case of absence or illness, it was found that this deputy must be one of the surgeons, not one of the physicians. I do my operations nearly every week, and take everything which comes in my department. If the proposed change is ever effected it should be remembered that a C.M. or M.D. degree is quite as much a surgical qualification as a Fellowship or Membership of the College. The question, however, is not as to the exact qualification in surgery, but as to the title of the officer appointed.—I am, etc.,

OBSTETRIC PHYSICIAN.

A NEW OPERATION FOR HEPATIC ABSCESS.

SIR,—The communication on this subject in the JOURNAL of June 11th by Dr. Zancarol, of Alexandria, demands a few remarks. The writer does not appear to be in the least acquainted with a large amount of work done in this connection, especially by English surgeons in India; otherwise, at this time of day, he could hardly announce the operation he has described as a new one. On the whole, all that is new in it is more honoured in the breach than in the observance; the essential steps of the operation are nearly as old as the practice of western surgery in the tropics. The free opening of a hepatic abscess-cavity in proper cases, and thoroughly irrigating it with a variety of solutions, are every-day proceedings in almost every hospital in India. During my residence in India, I saw it done repeatedly in the Calcutta Medical College Hospital. What appears in the operation to be new is the use of the thermo-cautery instead of the knife. One can hardly venture to claim the application of the thermo-cautery for making the necessary opening as constituting a new operation. The use of the thermo-cautery instead of the knife is a very broad surgical question, and Englishmen, as a rule, prefer the latter, and that most properly.

But to analyse the operation in detail. The exploratory repeated punctures described certainly do no harm. In India, very often it is the only operation done for the first few days, even in cases where the abscess is distinctly pointing. Aspiration with antiseptic precautions may be used once or oftener, even when a larger opening is seen to be necessary. The abscess-cavity is thus made smaller, and it is thought that the opening afterwards is made under more favourable conditions. However, cases of liver-abscess which require evacuation are not those where the "exploratory punctures may have to be repeated several times" at one sitting to find its whereabouts. The large gap made by the thermo-cautery, with or without resection of a rib and strong retraction of the sides of the opening, "so as to enable the surgeon to see the whole cavity with ease," are proceedings quite uncalled for. A free incision in suitable cases, and very rarely resection of a piece of rib, are certainly proper surgical measures; but it is not easy to see how the patient is a gainer by having his liver-abscess cavity seen throughout its whole extent with ease. The information thus got, at considerable risk, is of no value. The extent of the cavity, its position, and its perfect irrigation can all be secured without "seeing it with ease." We do not want to see the entire cavity of an empyema, of a large abscess about the thigh, of the uterine canal, so as to treat purulent conditions in any of these cases efficiently.

Dr. Zancarol's idea as to the retractor preventing the discharges entering the pleural or peritoneal cavity is rather a novel one. This part of the paper is best left without any comments. All this amount of ado to get the abscess-cavity clear soon after opening it is useless, if not mischievous. It is against the principle followed in the treatment of all large abscess-cavities. Nothing is to be gained by clearing and scraping the walls immediately after opening it.

The concluding paragraph of the paper is a tissue of clinical errors. Here it is: "As a rule, the temperature becomes normal immediately after the first washing, but if fever should reappear, or if the pus is abundant, the washing-out should be repeated every twelve hours; if, in spite of all this, the fever persists or diarrhœa sets in, this would indicate that other abscesses exist in the liver, and such cases are invariably fatal."

Now it is a clinical fact that when a hepatic abscess is formed and mature for opening, the temperature is often normal. There is very little tension, the inflammatory material thrown out to form the abscess-wall is uncommonly well defined, and there is little activity round it; I suppose all these considerations account for the fact. Be the reason, however, what it may, the clinical fact remains that the temperature is often normal when there is a large abscess in the liver. To claim the normal temperature as a result of the operation is to ignore all clinical teaching. Then the hopeless prognosis in the concluding clause is not justified by experience. High temperature in hepatic disease in the tropics is certainly a matter of much graver import than the same degree of pyrexia in similar conditions in England; but granting all this, the "invariably fatal" prognosis is certainly by no means true. At any rate, it is not so in India. Is it possible that the over-activity of the treatment may have a partial effect on the prognosis?

The paper would have been a good deal more instructive if the result of the fifty cases under treatment had been given, and the *post-mortem* results in cases of death.—I am, etc.,

Manchester. M. M. BASIL, M.A., M.B.Ed.

SURGICAL SCARLET FEVER.

SIR,—Of various communications in your columns lately on the conditions of origin and diffusion of scarlet fever, not the least interesting and intelligible to many of us (who find "streptococci" a trifle remote) is that of June 18th, by Mr. R. W. Murray, on the outbreak in a surgical ward of the Pendlebury Children's Hospital. Taking Mr. Murray's data, I have been attempting to picture to myself the sequence of events. No doubt others would read the same set of facts differently; and I can recommend the tabulating of the details in various ways as a good exercise. Omitting all such tabular arrangements, I propose to throw the events, as they present themselves to my judgment, into a brief narrative form.

There was a great deal of suppuration going on in this ward. Twenty-three cases had wounds; we hear more particularly of twelve of these, among which were six cases of morbus coxæ, and one case of chronic knee-joint disease. A good many of these cases had been in the ward for months. The time of the event is December. Thursday, November 11th, was a day of operations among the patients in the wards—two cases of removal of bone from the tarsus for club-foot, one case of excision of hip, one case of aspiration of hip, and probably another hip-joint case (Florence S.), for which the date of exploratory or partial operation is not given precisely. Two days afterwards, there is an explosion of scarlet fever in the ward, affecting five children almost simultaneously, including Hannah T., an infant operated on for hare-lip and cleft palate, and dying with broncho-pneumonia; on the day (November 14th) following that outbreak, a child with otitis was discharged, and developed scarlet fever at its home on November 16th having caught it, doubtless, either at the same time as the first set, or from them. The next incident brings us to November 20th-22nd; the case of excised knee develops erysipelas, and one of the club-foot cases has constitutional disturbance, unhealthy state of the wound, and painful swollen glands in the groin. Two days from the erysipelas, we find in the ward a fresh case of scarlet fever (November 24th) in a child with morbus coxæ. We then go on to December 7th, on which day a child with morbus coxæ comes out in a "hybrid" surgical rash (temperature 105° F.), and goes on from bad to worse, until he dies of "septicæmia," on December 16th. Two days after his death (December 18th), the last case of scarlet fever occurs in a child with cervical caries (without wound), ending fatally on December 20th.

Setting aside all prejudice in favour of one single mode of origin of scarlet fever, these events will suggest a form of hospitalism—a form of it peculiar to the age of childhood, and to an aggregation of chronic suppurative cases. Mr. Murray has two groups of cases, one in which the wounds did badly, or developed erysipelas or other hybrid eruption, and another in which scarlet fever ensued. The probability is that the anomalous or nondescript state of matters in the former class

gave rise to a communicable principle, which produced scarlet fever in the latter. It is almost certain that the operations on November 11th somehow determined the simultaneous explosion of November 13th-14th; it is highly probable that the erysipelas of November 22nd was the source of the scarlatinal case on November 24th, and that the "hybrid" surgical exanthem, fatal on December 16th, was the source of the last case of scarlatina on December 18th. There is, of course, no reflection on the cleanliness of the ward, but merely suggestion that there may be forms of "hospitalism" special to children's wards which involve other considerations not yet thoroughly discussed. As I am not a specialist on scarlatina, or on anything else, I do not append my name, but subscribe myself

DE NOVO NECNON AB OVO.

INTRA-LARYNGEAL SURGERY AND MALIGNANT DISEASE OF THE LARYNX.

SIR,—Independently of any question of ethics, I am not surprised, in view of the great amount of space you have accorded the subject, that you should think it "undesirable that this controversy should be further prolonged," and I will not offer rejoinders that are almost obvious to many points in Dr. Semon's second lengthy letter.

It is, indeed, surprising that, conceding such a large amount of agreement to your editorial caution, founded, as he is good enough to say, on my teaching, he should have thought it necessary to discourse at such length on the comparatively minor point of "frequency" or "special" character of the liability in question. It is sufficient for me that he admits six recorded cases, and as there are undoubtedly many instances in which benign laryngeal growths successfully removed by endo-laryngeal operations have not been reported, it is hardly open to question that there are also others amongst them in which malignant transformation has taken place.

I beg, therefore, "very modestly," and I trust not "ungrammatically," to express my gratification that the views I was the first to pronounce are accepted, and have been confirmed by cases to the extent admitted by Dr. Semon, but I must also ask to rebut his charge of "continued vacillation."

Believing that it is no disgrace for a surgeon to possess an open mind, such an indictment would sit lightly on me; but, in point of fact, my contention at the Congress of 1881, quoted against me by Dr. Semon, "that the more facile the operator the less frequent will be extra-laryngeal operations," is in no sense contradictory of my argument as to the power of irritation by endo-laryngeal operations to induce malignancy in a benign growth. It is, on the contrary, a legitimate corollary of that proposition. This appeared so obvious, that I did not deem an answer necessary to Dr. Semon's retort when made on the occasion to which he now again refers. By the rules of debate at the Congress I should also have been prevented from speaking a second time. All the facts of the case being considered, I can well understand that this controversy has been "disagreeable" to Dr. Semon. Since, however, it was of his own invitation, no one but he is responsible for his discomfort. I cordially join with him in the hope, and I may add the belief, that the discussion "has not been useless."—I am, etc.,

LENNOX BROWNE.

36, Weymouth Street.

*** We must now declare the discussion closed.

NAVAL AND MILITARY MEDICAL SERVICES.

JUBILEE HONOURS.

SURGEON-GENERAL SIR J. H. K. INNES, who has been nominated a Knight Commander of the Bath, began his career in the army as an Assistant-Surgeon, April 8th, 1842; became Surgeon, March 11th, 1853; Deputy Inspector-General, December 31st, 1858; and Inspector-General, July 24th, 1872; and retired on half-pay, January 27th, 1880. Sir John Ker Innes (says *Hart's Army List*) served as a volunteer in the Crimea (his regiment being in India) from March 15th to July 4th, 1855, and was engaged in the attack on the Redan on June 18th (medal with clasp, and Turkish medal). Served throughout the Indian campaign of 1857-58 with the 1st Battalion 60th Rifles, including the action on the Hindun (wounded and horse shot), battle of Budlee ke Serai, storming the heights before Delhi, siege assault and capture of the city. Was Principal Medical Officer of Sir John Jones's Force throughout all the subsequent operations in Rohilkund and with Brigadier Troup's Force in Oude during the winter of 1858-59 (medal with clasp, C.B.). Was attached to the headquarters of the army of the Crown Prince of Prussia as British Medical Commissioner during the Franco-German war of 1870-71, for which he was awarded the Steel War Medal, and received from the Emperor the Iron Cross. Served in the Afghan war of 1878-79 as Principal Medical Officer, and made all the medical arrangements for the campaign: was at the assault and capture of Ali Musjid and the subsequent advance of the column through the Khyber Pass (medal with two clasps).

Inspector-General Sir WILLIAM MACKENZIE, M.D., C.S.I., who is also made a Knight Commander of the Bath, entered the Madras Medical Establishment as Assistant-Surgeon, January 14th, 1835, and attained to the rank of Inspector-General, August 10th, 1886; he retired August 15th, 1871. He was nominated Companion of the Bath, March 21st, 1859, and Companion of the Star of India, May 24th, 1886, and was made Honorary Physician to the Queen, March 14th, 1868. He has, however, no record of war service.

A similar honour has been conferred on Inspector-General Sir JAMES JENKINS, M.D., who entered the Royal Navy as Surgeon, December 27th, 1841; became Staff-Surgeon, March 3rd, 1854; Fleet-Surgeon, October 6th, 1863; Deputy Inspector-General of Hospitals and Fleets, March 22nd, 1872; and Inspector-General, March 18th, 1878; he retired July 2nd, 1878. Sir James was Surgeon-in-Charge of the Naval Brigade in the Crimea, during the Russian war, in the winter of 1854, and until the capture of Sebastopol. He was at the capture of Kinburn, and landed afterwards to attend the wounded (Crimean and Turkish Medals, and Knight of the Legion of Honour). He served as Staff-Surgeon of H.M. Hospital Ships *Belleisle* and *Simoom* during the China war, from 1857-61 (China Medal, two clasps); nominated C.B. in 1867, and Honorary Surgeon to the Queen, November, 1882.

Inspector-General J. M. DICK, who is made a Companion of the Bath, ranks as Surgeon in the Royal Navy, August 17th, 1853; Staff-Surgeon, September 27th, 1861; Fleet-Surgeon, August 14th, 1868; Deputy Inspector-General, February 26th, 1880; and Inspector-General, February 27th, 1884. From the *Royal Navy List* we learn that Inspector-General Dick, as Assistant-Surgeon during the Russian war in 1854-55, served in the *President*, flag of Rear-Admiral Price, and was present at the attacks on Petropaulovski, by the combined English and French squadrons on August 31st and September 4th, 1854, when he was specially mentioned for his care of the large number of wounded; in September, 1854, he was also present at the capture of the Russian vessels, *Sitka* of ten guns, and *Anadir* of four guns. In April, 1862, as Surgeon, he was present in the boats of *Flying Fish* at the capture of a slaver in Rio Nunez, West Coast of Africa. In July and August, 1868, when in *Satellite*, he was Senior Medical Officer in charge of the Naval Forces and Indian Troops; in the operations on shore against pirates in the Nicobar Islands, Bay of Bengal; was Senior Naval Medical Officer during the Abyssinian war, 1867-68, and for his services was specially promoted to the rank of Fleet-Surgeon (Medal); during the civil war in Spain, when Fleet-Surgeon of the *Lord Warden* flag-ship, in 1873, he proceeded into Cartagena during the bombardment as a volunteer to assist the wounded; M.K.Q.C.P.; received from the Admiralty an expression of their high estimation of the zeal, energy, and skill shown by him in the performance of his duties in connection with the R. N. Hospital, Malta, of which he was the principal officer during the Egyptian campaign, 1882.

Surgeon-General H. T. READE, V.C., who is also named a C.B., entered the army as Assistant-Surgeon, November 8th, 1850; was made Surgeon, November 3rd, 1857; Surgeon-Major, September 7th, 1871; Brigade-Surgeon, November 27th, 1879; Deputy Surgeon-General, March 27th, 1880; and Surgeon-General, November 30th, 1886. He served in medical charge of the 61st Regiment at the siege of Delhi, from July 1st, 1857, to the final capture of the city on September 20th; was present at the repulse of the sorties of July 4th, 9th, 18th, and 23rd; accompanied the regiment at the assault of the city on September 14th; and subsequently, with a small party of the 61st, repulsed an attack of about 300 Sepoys on some wounded men, whose lives were thereby saved; on September 16th he was one of the first up the breach at the storming of the magazine, and with a sergeant spiked a gun—mentioned in despatch, and recommended for promotion "for unwearied exertions and gallant conduct in the field" during the siege and assault of Delhi (medal with clasp, and Victoria Cross); he was awarded the Victoria Cross for the following service:—"During the siege of Delhi, on September 14th, 1857, while Surgeon Reade was attending to the wounded at the end of one of the streets of the city, a party of rebels advanced from the direction of the bank, and, having established themselves in the houses in the street, commenced firing from the roofs. The wounded were thus in very great danger, and would have fallen into the hands of the enemy, had not Surgeon Reade drawn his sword, and, calling upon the few soldiers who were near to follow, succeeded, under a very heavy fire, in dislodging the rebels from their position. Surgeon Reade's party consisted of about ten in all, of whom two were killed and five or six wounded. Surgeon Reade also accompanied the regiment at the assault of Delhi, and, on the morning of September 16th, 1857, was one of the first up at the breach in the magazine, which was stormed by the 61st Regiment and Belooch Battalion, upon which occasion he, with a sergeant of the 61st Regiment, spiked one of the enemy's guns."

Deputy Surgeon-General J. A. MARSTON, M.D., likewise nominated a C.B., entered as Assistant-Surgeon, November 10th, 1854; became Surgeon, June 8th, 1867; Surgeon-Major, March 1st, 1873; Brigade-Surgeon, November 27th, 1879; and Deputy Surgeon-General, November 18th, 1882. He served in the Egyptian war of 1882 as sanitary officer, and was at the battle of Tel-el-Kebir; he was mentioned in dispatches for his services, was promoted to be Deputy Surgeon-General, received the medal with clasp, the Third Class of the Order of the Osmanieh, and the Egyptian bronze star. He is at the head of the Sanitary and Statistical Branch of the Army Medical Department.

Fleet-Surgeon T. T'A. BROMLOW, M.D., is appointed a Companion of the Distinguished Service Order for his services during the recent operations in Burmah. His commissions are dated: Surgeon, December 8th, 1863; Staff-Surgeon, April 14th, 1877; and Fleet-Surgeon, October 2nd, 1844. Besides the scarcely finished campaign in Burmah, for which he is now honoured, he served during the naval and military operations at Suakin as Staff-Surgeon of the *Turquoise*, and received the medal granted for the campaign.

RANK OF ARMY MEDICAL OFFICERS.

"DISGRACED AND INSULTED" writes: In the JOURNAL of May 28th, in an article headed "Relative Rank," you state: "The Director-General explained the sense in which authorities understand the term 'substantive military rank,' to be that it belonged exclusively to those who have to administer discipline and military law. Medical officers are engaged solely for health purposes; they are not responsible for duties which pertain to all that is understood by military command." If such is the case, I should like the following questions answered. What is the Medical Staff Corps? By whom is it officered? Who is responsible for the internal administration of the corps? By whom are its prisoners told off? Whose duty is it to pay the men? Who is responsible for the correctness of the corps defaulter sheets, account books, etc? From what branch of the service are the officers of bearer columns derived? If the medical officers perform none of these duties, it seems a pity that they should be compulsorily made to waste their money in the purchasing of numerous books on drill and military law, and their time at Aldershot, and subsequently, in reading up subjects, and in the performance of duties which it is stated in no way concern them. If on the other hand the

officers of the Medical Staff do perform these duties, why are they alone debarred from holding any rank? By Sir Thomas Crawford's own showing medical officers should at least hold substantive rank in their own corps. Again, "titular designations," he says, "belong and always have belonged to the purely fighting branch of the army," in which I presume he includes paymasters who remain at the depôt when their regiments take the field, and Commissariat officers who are only under most extraordinary circumstances exposed to the enemy's fire. The Director-General talks about redress being at once accorded by the military authorities. We entered the service with the distinct understanding that we were to hold relative rank.

We now find that the only rank we ever held has been ruthlessly taken from us. Where then is our redress? As to saying that the position of army medical officers remains the same, anyone understanding anything about military matters must at once see that such a thing is impossible, in spite of italics or anything else which may appear in the *Army List*; for the fact still remains that we now have no rank, and anyone living in a mess, and being in daily and intimate association with officers of his own standing, will very soon see that that is at least the interpretation which combatant officers put on the present state of things.

As the service now stands, if we are to be military surgeons we must have military rank; if not, let us by all means cast off all things military, and become pure civilians. Until this question is definitely settled I would strongly advise all intending candidates not to join the Medical Staff, as the medical service of the army has once again become no place for a gentleman.

SURGEON-MAJOR, M.S., writes: I have been very much surprised that no one seems to have taken up the challenge (if I may so call it) of the Secretary of State for War, who, in reply to a question in the House, is reported to have said that he had no reason to suppose that military surgeons were desirous of being called by military titles; which, however, he most gratuitously added, were dissociated from the duties of their honourable profession. Now, I am under the impression that the majority of the department are desirous that their position in the service should be generally recognisable by their titles; indeed, I imagine it is only a few of the faddist type who would object. If our present chief (though he personally may not be very enthusiastic in the matter) only knew our wishes, he would doubtless be more energetic in pressing the question for the consideration of the authorities, and as the change seems to lie in our own hands, it seems to me most important that the necessary steps to ascertain our views should be at once taken. As for the apparently implied sneer of military titles dissociating us from our medical duties, does anyone suppose that it would have more effect than our present custom of wearing military trappings, uniform, badges, medals, swords, etc.; and of exercising and being subordinate to military command, which have not apparently involved any slight on our honourable profession? Is it because we have the advantage over other departments, that on our entering the military service we already belong to an honourable profession? We therefore should expect no advancement in the service we have entered, and though deprived of the chances of distinction in civil life, we should not look for the advantages of our military service, though of course we are quietly to accept all its disadvantages. As an argument to me, at all events, it sounds odd to be told that because I am what I was twenty years ago, a surgeon, I must not expect to have any military recognition in my title, of my twenty years' service, mostly in unhealthy climates, to say nothing of the dangers, privations, and health-destroying hardships of three or four campaigns, and epidemics necessitated by my military position. However, if the Secretary of State for War is correct, there is no more to be said until experience will have enlightened us; but the question is surely of sufficient importance to be decided at the earliest opportunity, and if not done officially, still as I think it ought to be done, if you, Sir, would only give a hint as to the most appropriate method, you would confer a further favour on hundreds who would on their part be only too glad to supply the needful if required.

M.D.EDIN. and WAR MEDALLIST writes: The Horse Guards tendency to nullify the military standing of military surgeons is a grave evil, and injurious to the popularity and efficiency of the service. Successive Royal Medical Warrants came out improving, adding to, and sometimes unfavourably modifying the rank and status of army medical officers, and for some years past a considerate army rank had been accorded.

But now, forsooth, all is to be altered, and the position of army surgeons improved off the face of Her Majesty's *Army List* by the withdrawal of their army rank. They are told—but they do not and cannot see or believe it—that their "relative rank" is no rank; and the powers that be seem anxious to proceed on the lines of taking away from him that hath not that which he hath! If the rank referred to is deficient, the duty of the authorities is to confer on all medical officers of the army due honorary army rank, and to no longer entertain hostile propositions against officers without whose aid no army can exist. No wise government, no true friend of the soldier, should willingly curtail the very moderate advantages and attractions the army offers our profession, while seeking our best services and best years.

While the attractions to medicine and surgery lead many men to choose the Æsculapian art, an added predilection for the field and martial life guide a varying proportion of qualified men to take post as military surgeons. These men are—shall we say—"doctors first, soldiers second," and altogether army surgeons. While they love and hold to their special calling, they participate and willingly share in the pomp and circumstances of military life, whether in peace or war. This partiality should be encouraged rather than discountenanced, and the military spirit in our schools of medicine fostered (in this very military age, and with every division of Europe, as at present, apparently only awaiting the match of actual warfare) and not quenched. The personal comfort and the respect and standing of every individual in the army, high and low, is affected by the military status or rank held; and it is sheer folly, and worse, for any person acquainted with military life and duty to assert that army rank is a matter of indifference to army medical officers, for the reverse is undoubtedly the case.

TENAX (Cairo) writes: The Director-General, in his interview with Mr. Hart, has expressed his belief that it is only the small minority of the officers of the Medical Staff who wish for honorary rank. He cannot know the heartfelt hopes and fears of those officers above whom his present position and the nature of his duties so far remove him.

No officer would have the temerity to write an individual complaint of the action taken by the "authorities" in any matter, but to do so on this question would lead to a result far from difficult to prophesy. But if you, Sir, through your columns, will invite every officer of the Medical Staff to send you his card with merely the words "I do," or "I do not," wish for military rank, written and signed on the back, the views of the majority of us can easily be arrived at, and submitted for the information of the Director-General. I venture to predict that such a course would elicit a further fact that the "good surgeons" are the very men who wish for recognised and recognisable rank and status.

The Director-General says that rank and title belong "exclusively to those who have to administer discipline and military law," then I submit that the following, taken from the Regulations now in force establish incontrovertibly our claim to military rank and title:

"The officers of the Medical Staff shall be the officers of, and shall command the Medical Staff Corps, as well as all patients in military hospitals, and such officers, non-commissioned officers and men as may be attached for duty to the Medical Staff Corps."—Article 307A, Royal Warrant, Clause 182, Army Circulars 1884.

"The principal medical officer, subject to the general officer commanding the district or command, has supreme authority in matters of discipline affecting the Medical Staff Corps in his District."—Regulations for the Medical Department of Her Majesty's Army, 1885.

Can the captains, majors, etc., of the Pay Department show equal claim to the titles given to them and withheld from us?

"Spades" we are, and "spades" we should be called, instead of being "shovelled" out of our proper titles.

MEDICAL STAFF (Bermuda) writes: I cannot let the opportunity pass without thanking you for the gallant manner in which you are fighting the battle of justice for the Army Medical Department. Whatever be the actual results of this campaign, one thing is certain—we shall ever owe you our deep and lasting gratitude.

From the principal medical officer down to the junior army surgeon, in these islands, the effect of the late Warrant was to cause a feeling of despondency and dismay, and in my own case regret, that I had ever allowed myself to be gulled into the service with the idea that one would be treated as a gentleman. But to be a mere camp-follower, subject to the orders and tyranny of a yesterday's schoolboy who now calls himself a combatant officer, without any compensating advantages whatever, cannot well be regarded as an honourable and gentlemanly position to hold. It is absolute nonsense for Mr. Stanhope to say our position is unaltered. Certainly not an officer here shared this opinion, and I was told by a number of officers that we were reduced to the position of civilians attached to the army, to be forced to endure all the hardships and inconveniences of military life, but to be carefully denied the few advantages the service can offer. It was also openly stated by several senior men that in all probability we should have to remove the badges of rank from our shoulder-straps, thus reducing us forthwith to warrant grade; and I must say this would have been a logical sequence.

This subject is one that so vitally affects our comfort and best interests in the army, it is difficult to resist the temptation of dilating upon it. But you seem to have entirely grasped the matter in your masterly leaders in the JOURNAL, so it is unnecessary for me to say more than that one and all of us in these islands are in favour of honorary rank. The longer one remains in the service in these days of the departmental system, the more one is convinced of the absolute necessity of definite and real rank in the army. But, with all respect, allow me to give you one word of caution before it is too late. We must have honorary rank in the same way that the other departments have it. To be called Surgeon Captain or Surgeon-Major, as the case may be, will not remove the difficulty, and after a time the authorities will again refuse gradually to recognise these as more than mere names. The greater part of us are fond of our profession, and for that reason, if for no other, are determined that it shall not be easily slighted. The term Surgeon-Major is in use now, as you know, but the Horse Guards refuse to recognise such a title as equal to that of plain "major." And you must remember the farrier-major, drum-major, etc., are non-commissioned officers. Officially it should be stated thus, if we are to have the peculiar compound titles such as Surgeon-Captain: Smith, J., Surgeon-Captain, with the honorary rank of captain. Ranking with captain, or subterfuges of this nature, must not be accepted; they are nothing more than frauds. I again thank you for the trouble you have taken in our behalf.

A RETIRED SURGEON-GENERAL writes: Allow me to make a few remarks on Sir Thomas Crawford's views on this subject as given in the JOURNAL of May 28th.

"It was found that relative rank, as the term is understood in the combatant ranks of the army, was the cause of much inconvenience, and acted frequently to the injustice of senior officers, who were by its operation often placed in positions of inferiority to their juniors in the service; and the Director-General was emphatic in his assurance that it was to do away with this anomalous state of things that relative rank was abolished, not with the least intention of affecting the Medical Staff or lowering their position by a side wind."

I have read this sentence over carefully several times, and I am not sure I quite understand it. I have never found "relative rank" was misunderstood by combatant officers, but I have often known them resent it, and attempt to set it aside. Relative rank is adjusted according to dates of commission, and as these are always given in the *Army Lists*, aides-de-camp and staff-officers, who have to assign officers their position according to rank, rarely if ever make any mistake about it, "was the cause of much inconvenience, and acted frequently to the injustice of senior officers, who were by its operation often placed in positions of inferiority to their juniors in the service."

Much inconvenience to whom; and which senior officers were often placed in positions of inferiority to their juniors, military combatant or medical officers The sentence does not set this forth very clearly, I think; military men, or I will use the words "combatant officers," for we are all, or consider ourselves so, military men, think it a hardship even to be placed in a position of inferiority to medical officers. The most junior lieutenant that walks would consider he only had his proper position if he were assigned a place, say at table or in quarters, superior to a surgeon-general. In all *Army Lists*, drawn up, remember, in the adjutant-general's office, the surgeon or even surgeon-major in a regiment is always placed in the lowest position, after quartermaster, adjutant, paymaster, etc., and these are ranked strictly according to date of commission. Why is this? Simply because it is ingrained in the military mind that the doctor comes last, is something apart, a thing to be borne with, tolerated, but no

treated on anything like equal terms. At least that is my firm conviction after some thirty-two years' experience, and I think the matter, now the question has been raised, should be settled once for all.

The Director-General goes on to say, "the authorities understand the term substantive military rank" to be that it "belonged exclusively to those who have to administer discipline and military law."

Sir Thomas has served in India, and must be perfectly well aware that in the Pay and Commissariat Departments, not to mention numberless others, there are captains, majors, colonels who spend their whole time at the desk, and have nothing whatever to do with discipline and military law; and as regards being "combatant," never by any means join in campaigns. Medical men are, out and away, more entitled to the term "combatant" than these officers.

The fact of the matter is, and all military medical officers feel it, our present titles are a snare and a delusion, and I am afraid are meant to be so by the Horse Guards, who have some extraordinary prejudice against the Medical Department. In India the feeling does not exist with the Government. Medical officers are treated with great respect, and their place hitherto has been always maintained, but one sees the difference directly one returns to Europe. I could give you one or two very striking examples of this, but I forbear.

Sir Thomas Crawford is a K.C.B., and very worthily so, and of course now his rank is amongst K.C.B.'s, and he can afford to let the purely medical rank slide; but I would ask him would he appreciate his rank as much as he does now if it were announced as only a "relative K.C.B.," liable to be manipulated occasionally, as it pleased Sir Albert Woods, on state occasions. A Surgeon-General may soon find out the simple truth that his "relative rank" is such as the authorities choose to take it.

Allow me to make a remark about "good doctors." In former times, when a man was attached to a regiment, often for all his service, to be a "good doctor" was everything; a man's position altogether depended upon his personal character; his relative rank was low, and unless he ingratiated himself with the colonel and officers, his position became untenable. I thought one of the objects of the recent changes in the department was to do away with this purely personal position. A "Colonel" is a "Colonel," whether he is a "good Colonel" or not. I have known some uncommonly disagreeable "Major-Generals," but it in no way affected their rank or standing. Why should it be left to the medical profession alone to have to depend upon their personal characteristics for their rank and position? A medical officer in the performance of his duty towards Government may have occasionally to run counter to Colonels and even Generals commanding a division, but it surely is unfair that he should suffer in consequence.

The Director-General expresses his astonishment that "no complaint has reached him or the military authorities on the subject." The change, if change there be, is so recent that there has been no time for any complaint perhaps, whilst if remonstrance—respectful remonstrance such as has found its way into your columns—were delayed, it might presently be said, "Oh, it is now too late; you should have spoken at the time." The grievance, it may be said, is, after all, purely a sentimental one. Who cares for rank? Cannot you perform the duties of your "noble" profession just as well whether you are assigned rank or not? Half the grievances of this world are purely sentimental, that is affect our minds more than our physical well-being. And as to our "noble" profession not caring about such a trumpery thing as rank, when the military, clerical, and legal professions are willing to forego it, then it will be time enough to ask us to forego it likewise. If the greater number, or any great number, of the medical service, are dissatisfied with the present nomenclature, we may depend upon it there is amply sufficient reason for it, for medical officers are not as a rule wanting either in common-sense or discernment.

I make the above remarks with all due reference to the Director-General, for whom I have the greatest possible respect; but if he fancies the present titles and rank are fully satisfactory to the service, it might easily be ascertained by a circular calling upon senior officers for their opinions.

NAVAL SURGEONS.

SURGEON M.S. (Cairo) writes: In the JOURNAL of May 14th, under the above heading, I think you are mistaken, if you will allow me to say so.

Surgeon-Major Low, who has, I believe, lately retired, after having served, I think, three years in the navy, joined the army, and his naval service was allowed to count for everything.

*** The writer of this note has been misinformed. Surgeon-Major Low (Edw. Litton, M.B.), entered the Army Medical Service on December 14th, 1858, and in the regular course of service in the Army Medical Department, after twenty years, was promoted to be surgeon-major, with the relative rank of lieutenant-colonel. Surgeon-Major Low retired on October 11th, 1882, with the honorary rank of brigade-surgeon, but remains eligible for temporary employment. His war services included the China war of 1860-61, the Ashantee war of 1873-74, and the Afghan war of 1878-80.

DATES OF COMMISSIONS OF ARMY SURGEONS.

A.M.D. writes: Can you give me any idea whether anything is being done towards the repair of the injustice which army surgeons suffer, in that their commissions are dated after leaving Netley, whereas surgeons in the Indian army, and also in the navy, have their commissions dated—the Indian surgeons the day of joining at Netley, and the naval surgeons when joining at Haslar; which gives both Indian and naval surgeons an advantage of four months' seniority over the army surgeons who passed the same competitive examination at Burlington House with them? I know this injustice has often been alluded to in your columns, but it has remained standing now for over ten years without remedy, probably because the officers affected by it were comparatively small in number and junior in the army, therefore weak-voiced and easily ignored. Now the numbers have grown (and the boys have grown older too). The number of surgeons in the army, whom this invidious and unfair distinction affects, amounts to over 500, and it is time the tongues of this large body were loosened. Dr. Tanner, M.P., on February 1st, very kindly gave notice in the House of Commons of his intention to ask why the distinction should be drawn between the services to the detriment of the army surgeons, but though I have carefully scanned all Parliamentary reports since, I have not seen that this question, so important to such a large number, has been asked or how it has been disposed of. As I see you have been asked on several occasions, lately, by intending candidates, as to the relative advantages of the army, Indian, and naval medical services, it might be well for them to bear in mind, in making their selection, that in the army they are handicapped by being placed junior in position to their contemporaries in the Indian and naval services, although they may obtain higher marks at the competitive examination, and also since relative rank was abolished by the last Royal Warrant, any army medical officer's rank, status, or position, is a matter of considerable doubt and uncertainty.

*** No official notice, as far as we are aware, has been taken of the representations which have been made public on this subject. We cannot understand why such an extraordinary and seemingly unjust distinction between the medical officers commissioned for duty in the three public services of the army, the navy, and India, should be allowed to continue, in whatever way the distinction may have originated. It seems desirable to continue calling the attention of the Government to the matter, as opportunities occur, in the House of Commons until it is satisfactorily arranged

REMARKS UPON THE PAY AND ALLOWANCES OF JUNIOR OFFICERS OF THE ARMY MEDICAL STAFF SERVING IN INDIA.

THE home pay of a surgeon under five years' service is £200 a year, plus fixed allowances amounting to £88; or in the aggregate £288 a year.

A surgeon at home also receives 10s. a day when travelling on duty in addition to all his travelling expenses by train, etc., and to the free conveyance of 12 cwt. of baggage; and if serving with cavalry, a horse is provided for him at the public expense.

In India, a surgeon's pay is Rs.317 8a. a month, (or Rs.3,810 a year), which sum includes house rent and all Indian allowances, except a free pass for himself and 5 maunds of baggage, (less than 4 cwt.), when sent by train on duty.

A surgeon in India has to purchase a tent, (the first cost of which is no trifle), to keep it equipped for service; and when on the march or on service, to provide transport for his tent, his baggage, and himself.

He is now a regimental officer with his duties limited to his regiment. He has to discharge all the duties for which he may be detailed, at, or within fiv miles of his station, and he has to accompany troops of every branch of t Service, when sent beyond the five-mile limit for district manœuvres, without horse being provided for him, or an allowance given to him for one, even though he may be attached to cavalry, so that practically a medical officer has to kee a horse at his own cost for the Public Service, as he could not possibly in tropical climate discharge his duties on foot.

It is, therefore, evident that expenses largely in excess of those that have to be incurred at home are thrown upon medical officers in India; and as their emoluments all told do not equal the equivalent of their home pay and allowances, the hardship of their case can hardly be disputed.

The rate of exchange last year ranged from 1s. 6d. to 1s. 4d. per rupee. At the former rate, the equivalent in rupees of £288 is Rs.3,840, or Rs.30 more than the amount, Rs.3,810, received in India by junior surgeons.

At 1s. 4d. per rupee, the value in rupees of £288 is Rs.4,320, or Rs.480 more than a junior surgeon's pay in India.

When converted into English money, the above calculations show that a junior surgeon receives annually, when the exchange is at 1s. 6d., £2 5s.; and when the exchange is at 1s. 4d., £34 less than the equivalent of his English pay and fixed allowances, without taking into calculation the value of the travelling and baggage allowances, and the use of a horse, which are given to him at home.

The conditions under which junior, or as they were formerly called assistant, surgeons served under the East India Company may here be referred to, as showing how far more liberal they were in those cheap and remote times than they now are with the position of medical officers raised and their expenses and duties largely increased.

Under the East India Company medical officers in India received the pay accorded to combatant officers of the rank they held. Surgeons then ranked as captains, and received captains' pay. Assistant surgeons ranked as lieutenants, and received lieutenants' pay, plus Rs. 30 a month, as palkee or conveyance allowance.

Medical officers also received for regimental and other charges monthly staff salaries of Rs.300 for a surgeon, and Rs.165 for an assistant surgeon, together with head money, and further allowances for any extra charges they might hold in addition to that of a regiment.

Under these rules, under the most unfavourable circumstances, an assistant surgeon always received Rs.256 pay, plus Rs. 30 conveyance allowance, or Rs.286 a month.

In 1864 the Secretary of State applied to India Her Majesty's Warrant of 1858. He at the same time abolished all allowances, and sanctioned for medical officers consolidated salaries, and, to compensate somewhat for the special expenses their duties entailed, sanctioned salaries for each grade higher in amount than the pay of their army rank.

From the date of the Secretary of State's letter of 1864, an assistant surgeon in India under five years' service ranking with a lieutenant, received Rs.317 18a. a month, and an assistant surgeon of over five years' service, who still ranked as a lieutenant, received Rs.335 12a. a month. In the former case he received Rs.50 14a., in the latter Rs. 79 2a. more than the pay of a lieutenant.

An assistant surgeon, after six years' service, obtained the rank of a captain, and was at once given the pay of his grade in the Service, Rs. 433 10a., or Rs.18 10a more than the pay of a captain (Rs.415 6a.)

This system of payment was always carried out, and is still carried out through the higher grades of the Service, (brigade surgeons alone excepted), and shows conclusively that rank as a claim to pay has always been recognised in the Service in India.

No exception was ever made to this rule until after the publication of Her Majesty's Warrant of 1879, under which medical officers entered the Service with the rank of captain and at once received the pay and all the allowances and advantages that that rank carried with it when serving at home or in the Colonies.

In India alone, and there in the junior grades alone, this Warrant has not been recognised, and surgeons with the rank of captain are now given the rate of pay that was fixed on more than 22 years ago for assistant surgeons holding the rank of lieutenant, and for six years of their service this injustice is continued, as they are not allowed in India the pay of their rank until they have served six years—the period the cancelled Warrant of 1858 required them to serve to entitle them to the rank and pay of captain.

In fact, junior medical officers with the rank of captain now receive only

Rs.30 14a. a month more pay than assistant surgeons with the rank of lieutenant received more than 40 years ago, though they can now never get the staff salaries or other allowances which were then obtainable, and which so appreciably increased their emoluments.

Medical officers of the Army Medical Staff do not elect to serve in India. They have no option in the matter. They are ordered to India for five years, and this explains why the remuneration and the terms of service granted to the Indian Medical Service are so much more advantageous than those granted to junior members of the Army Medical Staff.

The services of the latter can be obtained by compulsion. The Indian Service could not be recruited on the terms given to juniors of the Army Medical Staff. No officer of either Service would serve voluntarily in India on those terms, yet matters are so arranged between the India Office and the War Office, that out of a total of 204 surgeons of the Army Medical Staff serving in India, one hundred and seventy three are under six years' service, and receive less pay and allowances than they would receive in the Colonies, or even at home.

The Government of India deprives these officers of more than Rs.100 a month each, and throws on them expenses which they are not called on to defray in any other part of the British Empire, and for which special allowances were formerly given in India, and then expresses surprise that discontent prevails in the Service.

P.S.—Surgeons of the Indian Service receive on landing the same pay as surgeons of the Army Medical Staff, but within short periods they receive large increments of pay for officiating or permanent charges, civil stations, etc., and after five years' service, their pay for regimental charges alone, (Rs.690 for cavalry, and Rs.600 for infantry), average about 50 per cent. more than the highest pay an officer of the Army Medical Staff can receive until he is promoted after twelve years' service.

Sir J. Gorst's answer to Dr. Tanner in the House of Commons has at last revealed the innocent motive with which rank was recently abolished in the Army Medical Staff, viz., to stop the claims of medical officers in India to the rates of pay to which Her Majesty's Warrant of 1879 entitled them, and to continue to them the rates of pay they received under Her Majesty's obsolete Warrant of 1858.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, June 16th.

Rabies in Dogs.—On the motion of Lord BALFOUR, the Earl of Milltown was added to the Select Committee on Rabies in Dogs.

Monday, June 20th.

Smoke Nuisance Abatement (Metropolis) Bill.—On the order of the day for going into Committee on this Bill, Lord STRATHEDEN and CAMPBELL complained of the opposition which had sprung up on the part of the Government to a measure which had three times received the approbation of the House. That opposition he thought might be traced to the Home Office and the police, the former thinking that it would impose upon them some new responsibilities, and the latter that an additional demand would be made upon their vigilance. He expressed his willingness to modify any of the clauses to which Her Majesty's Government might object.—Earl BROWNLOW, while approving on behalf of the Government the object of the Bill, extremely regretted that the machinery of the Bill was not better calculated to carry out the object in view. It was proposed, among other things, to give the police and local authorities concurrent powers. In the last ten years the number of cases of smoke nuisance reported by the police in the metropolis was 12,855. In 9,256 of these cases the nuisance was abated after caution; in 816 abatement took place after inspection by the engineer, and there had been 1,574 convictions. He objected also to the proposal to bring private residences under the operation of the Act. The Bill provided no safeguards whatever for the occupiers of private premises. He believed the nuisance was actually on the wane, while in the country districts where the administration of the Act was in the hands of the local authorities, the law was completely a dead letter. The police had at present certain difficulties, as in the case of hotels and eating-houses, over which they had no jurisdiction. These and other points were being inquired into by the Home Office, and he hoped the noble lord would not proceed with the measure during the present session.—Earl GRANVILLE asked for a more definite indication of the course of the Government with regard to the Bill.—The Earl of HARROWBY thought the time had come when the Government should take a more definite step in advance on the question. The whole condition of the smoke of London was a misery to rich and poor alike, and was becoming more and more a scandal every year.—The Duke of WESTMINSTER said he had been for some years in communication with the Smoke Abatement Institution, which had taken great trouble and interest in the matter. He urged the Government to take further action, because he believed the nuisance was annually increasing. At the beginning of the century there were about one million tons of coal consumed in London, and at the present time the quantity annually consumed in the metropolis was 8,000,000 tons. He moved to refer the Bill to a Select Committee.—After some remarks from Lord MOUNT-TEMPLE, Lord CRANBROOK said the Government were perfectly alive to the gravity of the subject, but with the multiplicity of local authorities in London the machinery provided in the Bill would inevitably fail. It was, moreover, hopeless to expect that in the present session such a Bill could pass both Houses; at the same time, after the opinions expressed in so many quarters in favour of the measure, he would consent to its being referred to a Select Committee.—Lord STRATHEDEN and CAMPBELL withdrew his motion to go into Committee, and the amendment to refer the Bill to a Select Committee was agreed to.

HOUSE OF COMMONS.—Thursday, June 16th.

Vaccination.—Mr. RITCHIE, in answer to Mr. BURT, said it was not the fact that the vaccine now in use was obtained by the inoculation of the cow with matter from the human subject suffering from small-pox.

Friday, June 17th.

Treatment in Workhouse Infirmaries.—Mr. CONYBEARE asked the President of the Local Government Board whether the police regulations required or permitted the constant presence of a police-constable night and day in the bedroom of a sick girl in a workhouse infirmary, where a young girl awaiting her examination before the magistrate on a charge of infanticide was said to have been so treated in the new infirmary of Croydon Workhouse; whether he would inquire into the prevalence of the practice, and direct its discontinuance.—Mr. RITCHIE said he found the girl in question was under police supervision in the workhouse infirmary, but it was not the fact that a policeman slept on a bed placed in her room. The policeman in charge was changed every eight hours, and there was a screen round the girl's bed five feet and a half high. He considered such an arrangement highly unsatisfactory, and had been in communication with the Secretary of State on the subject, with a view to arrange that, in future, supervision in similar cases should be undertaken by a female warder. He thought it right to add that this was a very exceptional case, and was by no means illustrative of ordinary police action.

Indian Medical Staff.—Sir W. FOSTER asked the Under Secretary of State for India whether it was the case that an executive officer of the Medical Staff in India who officiated for less than one month as deputy surgeon-general, in the absence of the deputy surgeon-general on sick-leave or furlough, received no allowances for the period, although he performed the duties in addition to his other duties; whether in such an instance the "half staff" of the appointment reverted to the State; whether the acting officer would be held pecuniarily liable in the event of loss of stores or other mistakes; whether officers officiating on the Military (combatant) Staff in a similar way would draw the "half staff" for broken periods; and why the difference was made in the case of the medical officer.—Sir J. FERGUSSON, for Sir J. Gorst, said the Secretary of State was not in possession of official information necessary for completely answering the question. He would, therefore, cause inquiry to be made into the matter.

THE following notices of questions have been given:—Dr. Farquharson, to ask the Secretary of State for War, whether he is aware that considerable dissatisfaction exists in the Army Medical Department at the result of recent examinations for promotion from the rank of surgeon-major to that of brigade-surgeon; whether it is the case that the unsuccessful candidates heard for the first time, after their failure, that they were not allowed a second chance, but must be passed over when their time for promotion comes: whether this rule applies equally to combatant officers; and whether, in consideration of the fact that several medical officers, of long service and proved capacity, presented themselves for examination on foreign service, and under unfavourable conditions, in the belief that another opportunity would be afforded them of satisfying the requirements of the Board, he will consider whether he cannot relax the rule in their favour.—Admiral Sir Edmund Commerell, to ask the Secretary of State for the Home Department, whether he is aware of the anomalous manner in which the Rabies Order of 1886 is applied by local authorities.

SIR JOHN LUBBOCK, Bart., will preside at the distribution of prizes to the students of Charing Cross Hospital on Tuesday, June 28th, at 3.30, at the Medical School, Chandos Street.

LONGEVITY.—Of thirty-four notices of death in the columns of the *Times* of June 18 last, ten were of persons upwards of 70 years of age, the youngest being 71, and the eldest 88. The aggregate of the ages is 783, showing the high average of 78¼ years.

A JOINT committee of the Irish Branch of the British Medical Temperance Association and of the Dublin Temperance Societies has been formed to entertain the members of the British Medical Association at breakfast in Dublin on Thursday, August 4th. It is hoped that the attendance at the breakfast will be an unusually large one. Members who intend visiting Dublin will greatly oblige by sending name and address on a postcard to Dr. Cosgrave, Hon. Sec., Irish Branch, B.M.T.A., 24, Gardiner Place, Dublin, in order that the invitations may be sent out in good time.

OBITUARY.

JOHN TOPHAM, M.D., F.R.C.P.Lond.

Our profession has lost an amiable and accomplished member by the death of Dr. Topham, who died on June 17th, after a long and painful illness endured with great fortitude and resignation.

Dr. Topham was a son of the late Rev. John Topham, for many years vicar of Droitwich. His professional education was received at University College, London, where he took a high place amongst the students, and secured many distinctions in the class competitions. He graduated in the University of London, taking the degree of M.B. in 1843, and gaining a scholarship in surgery at the examination for honours. He spent some time in Paris, and took the degree of M.D. (London) in 1846; he settled in Wolverhampton, and was virtually the founder of the South Staffordshire Hospital in that town. His wife being threatened with pulmonary disease, he removed to Rome, where he resided and practised from 1860 to 1870. He was highly esteemed, and had many friends amongst the Anglo-American population of that city. His wife's better health warranting his return to England, he took up his abode in Torquay, and lived there for some years, but for a considerable time his home had been in London. Endowed with an ample fortune, he gave up practice after his removal to town, and indulged his love for science and music. He was one of the most constant frequenters of the Royal Institution and of the concerts of the Philharmonic Society.

He became an Extra-Licentiate of the College of Physicians in 1848, a Member in 1861, and was elected to the Fellowship in 1880.

HOSPITAL AND DISPENSARY MANAGEMENT.

EYE, EAR, AND THROAT HOSPITAL, CORK.

The seventeenth annual meeting was presided over by the Mayor of Cork. During the past year 3,142 patients were under treatment, of which number 260 were admitted to the wards. This exceeds the patients treated in the year preceding by 600. Forty-seven cases on admission were found absolutely hopeless, but the remainder were more or less relieved. There was not a death in the hospital during the year. The medical staff in their report draw attention to the urgent necessity for increased accommodation, especially in the extern department, where extreme discomfort is experienced from overcrowding, and the working of the hospital is seriously interfered with from want of room. The advantages afforded by the hospital for studying affections of the eye, ear, and throat were largely availed of during the past session by students of the Queen's College and others. The following rough classification of affections of the eye treated during the year affords ample proof that the institution is one which deserves support: Affections of the eyelids, 401; conjunctiva, lachrymal apparatus and nasal duct, 360; cornea, 506; iris, 89; crystalline lens (cataract, luxation, etc.), 107; vitreous humour, 59; retina, choroid, and sclerotic, 103; optic nerve, 87; foreign bodies in the eye, 147, etc. A vote of thanks to the surgical staff for their services was adopted, and the proceedings terminated.

DEVONSHIRE HOSPITAL, BUXTON.

The annual report states that from May 1st, 1886, to April 30th, 1887, 2,459 in-patients were admitted to the Hospital, of whom 2,238 were sent away as improved, 49 as no better, 24 at own request, and 121 remained on the books at the end of April. Deducting 64 practically unreported cases, and the 121 cases still under treatment, together 185, from the total number admitted, 2,274 cases remain to be accounted for, and only 49 of these are reported as having received no benefit during their residence in the hospital. During the year 1886, 1,443 of the patients were reported by post-card as improved six weeks after discharge, and 7 as having died. Of the total cases under treatment, rheumatism accounted for 1,285, rheumatoid arthritis for 493, subacute rheumatism for 17, specific rheumatism for 4, rheumatic synovitis for 11, gout for 12, lumbago for 98, and sciatica for 202.

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET.

The report presented at the anniversary festival of the Hospital for Sick Children, Great Ormond Street, gives the number of in-patients for the year as 1,094, the number of out-patients as 15,066. At Cromwell House, Highgate, 264 children were admitted, namely, 121 chronic cases and 143 convalescent. It was stated that it was proposed to erect a new wing, with wards to be devoted to special purposes.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

HEALTH OF FOREIGN CITIES.

It appears, from statistics published in the Registrar-General's return for the week ending Saturday, June 11th, that the annual death-rate recently averaged 28.0 per 1,000 in the three principal Indian cities; it was 21.5 in Bombay, 29.6 in Calcutta, and 32.6 in Madras. Cholera caused 67 deaths in Calcutta; 6 deaths were referred to small-pox in Bombay, and 1 in Madras; while "fever" was fatally prevalent in each of these Indian cities. According to the most recently received weekly returns, the annual death-rate averaged 25.1 per 1,000 persons estimated to be living in twenty-one of the largest European cities, and exceeded by 6.2 per 1,000 the mean rate during the week in the twenty-eight large English towns. The death-rate in St. Petersburg was equal to 28.3 per 1,000, and showed a further decline from the rates recorded in recent weeks; the 503 deaths included 7 from small-pox, 16 from measles, and 8 from typhoid fever. In three other northern cities—Copenhagen, Stockholm, and Christiania—the death-rate averaged only 23.0 per 1,000, and ranged from 19.0 in Christiania to 23.7 in Copenhagen; measles caused 19 deaths in Stockholm, and whooping-cough 4 in Copenhagen; while diphtheria and croup were fatally prevalent in each of these cities, especially in Copenhagen, where as many as 17 deaths from diphtheria occurred. In Paris the death-rate was equal to 24.5 per 1,000 (against 25.4 and 25.9 in the two preceding weeks), and exceeded by as much as 7.0 per 1,000 the rate recorded in the corresponding week in London; the deaths included 20 from typhoid fever, 13 from small-pox, 58 from measles, and 50 from diphtheria and croup. The 206 deaths in Brussels, of which 6 resulted from measles and 3 from diphtheria, gave a rate of 23.8 per 1,000. No returns from Geneva appear to have been received for some time past. In the three principal Dutch cities—Amsterdam, Rotterdam, and the Hague—the mean death-rate was 20.0 per 1,000, the several rates being 18.7 in Rotterdam, 19.9 in the Hague, and 20.7 in Amsterdam; 4 deaths were referred to measles and 2 to croup in Amsterdam; 2 fatal cases of whooping-cough and one of diphtheria occurred in the Hague. The Registrar-General's table includes nine German and Austrian cities, in which the death-rate averaged 25.2 per 1,000, and ranged from 17.2 and 20.4 in Dresden and Berlin to 31.9 and 33.3 in Prague and Munich. Small-pox caused 5 deaths in Trieste 4 in Buda-Pesth, 4 in Prague, and 2 in Vienna; as many as 51 deaths resulted from measles in Munich, and 29 in Vienna; 7 fatal cases of scarlet fever occurred in Prague, and diphtheria was fatally prevalent in most of these cities. The death-rate in Rome was equal to 31.2 per 1,000, and in Venice to 26.2; measles caused 18 deaths in Rome and 4 in Venice; and fatal cases of small-pox were recorded in Rome. In Cairo the death-rate was equal to 46.8, and in Alexandria to 32.0 per 1,000; diarrhœal diseases were fatally prevalent in each of these cities, and 7 deaths resulted from typhoid fever in Cairo and 7 in Alexandria. In four of the largest American cities the recorded death-rate averaged 22.6 per 1,000, and ranged from 16.0 in Baltimore to 25.5 in New York. Diphtheria caused 69 deaths in New York, 17 in Baltimore, and 11 in Philadelphia; small-pox 7 in New York, and measles 30 in Philadelphia.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Bolton.—Mr. Sergeant presents a very favourable report for the year 1885. The death-rate was exceptionally low, while the general healthiness of the town was further exemplified by the freedom it enjoyed from infectious diseases. The mortality from these causes was less than that recorded for any previous year, the zymotic death-rate being 1.9 per 1,000. Small-pox attacked seven persons in five separate and distinct centres without any ascertained connection. The measures taken for isolation and disinfection kept the disease in check, and in only two instances did the disease spread beyond the persons first attacked. Diphtheria gave rise to five deaths, a proportion somewhat higher than usual. In each case reported a careful inquiry was made concerning the conditions likely to produce the disease, and any defect discovered was at once remedied. The work of isolation at the hospital has been well carried out during the year, with gratifying results. In addition to the various tables appended to the report, an illustration is inserted of the incinerator recently erected at the Bolton Fever Hospital, which, though somewhat roughly executed, is nevertheless sufficient to convey a clear idea of the original, and is stated to be both economical in use and simple in construction.

Mid-Warwickshire.—The health of this district continues to be very satisfactory. The general death-rate for 1885 was 16.3 per 1,000, a slight increase on former years. This Dr. Wilson thinks is entirely due to the special fatality in lung-disorders which prevailed in the winter and spring. The death-rate from zymotic diseases was considerably below the average, and less than one-half of that which prevailed throughout the country generally. Referring to the incidence of these diseases in the district, Dr. Wilson reports that such outbreaks as did take place were of a limited character. The single death attributed to small-pox was in the Rugby district, and appears to have been introduced from Bedfordshire. Only 5 deaths occurred from scarlatina, and none of them were in the urban districts. The majority of the cases of typhoid fever and diphtheria were isolated, and were originated by local insanitary conditions, such as polluted wells, choked-up drains, or foul cesspools. Although not so common

as they were, cases crop up now and again of wells at farmhouses becoming polluted, owing to their proximity to manure-heaps or farmyard-drains. During the year nine certificates were given for the closing of schools in the rural districts, but none were required in the urban districts. Dr. Wilson states that this measure invariably checks the further spread of scarlatina and measles, when they threaten to become prevalent. If a little more vigilance were exercised on the part of teachers in reporting early and suspicious cases, it would not become so frequently necessary to resort to it. The corrected death-rate for the combined district was 16.3 per 1,000, differing very considerably in the various localities. The zymotic death-rate varied from *nil* in Lillington and Milverton to 1.5 per 1,000 in the Southam district.

Birkenhead.—Mr. Vacher's statistics for 1885 are compiled with great care and exactness, and show that the borough maintains its relative healthiness, though no marked improvement is recorded. The zymotic death-rate was somewhat below the average, measles and whooping-cough being the only two diseases which were fatally prevalent. Small-pox was repeatedly introduced into the borough, even after the last traces of the epidemic of 1884 had disappeared. Of twelve cases occurring during the last nine months of the year, Mr. Vacher reports that all but one were separate importations of the disease. A complete history of each case is given, and the disease is shown to have been more under control in 1885 than it had been previously. The fact that, out of the twenty-four fresh cases reported, twenty-one (that is, 87 per cent.) were treated in hospital, appears to indicate that the disease being less wide-spread and less fatal is in great part due to the hospital accommodation offered being freely used. With regard to there being only twenty-one cases of diphtheria reported, and yet fourteen deaths, Mr. Vacher gives the opinion that what is and what is not diphtheria is not always clearly apprehended. The large number of uncertified deaths is again a subject for comment. The manifold means of obtaining medical relief in the borough negatives the plea of poverty as an excuse for neglect of parental duty in this respect. The appendix to Mr. Vacher's report is not the least valuable part of it. It contains tabular statements of the year's mortality, classified according to diseases, ages, and localities; a weekly register of deaths and of meteorological results; a monthly summary of deaths from all causes and zymotic diseases, with the rates per 1,000 per annum, together with a table specifying the occupation or "description" of each person whose death was entered during the year; a return of deaths in the Birkenhead Union Hospital and Workhouse; and a sketch map showing the boundaries of the wards, etc. The death-rate for the year was 19.5 per 1,000, Birkenhead standing sixth on the list of the twenty-eight cities and boroughs, with a higher birth-rate and greater density of population than is found in the majority.

St. Matthew, Bethnal Green.—The reorganisation of the sanitary department of this district was, perhaps, the most important event in the history for 1885, and Dr. G. P. Bate commences his report for the half-year with a full and well-considered account of the changes effected. A scheme for the better management of the department was drawn up as far back as 1883, and even now the alterations are not quite all Dr. Bate had hoped for, and some of the most important were still under consideration. The births, deaths, and marriages for the year all showed a decrease, and this leads to the conclusion that the population is stationary, or nearly so. On that estimate, a death-rate of 22.08 per 1,000 is shown. The total number of deaths referred to zymotic diseases was 497, of which 145 were cases of children during the first year of life; 152 deaths were from measles, 90 from whooping-cough, and 72 from diarrhœal diseases. The cases of small-pox reported numbered 258, and of these 191 were removed to hospital, where 18 died. The regulations for the removal of patients are given at length, as is also a correspondence with the School Management Commitee of the London School Board, upon the advisability of excluding children from houses where infectious diseases are known to exist. The deaths from tubercular diseases, including phthisis, numbered 515, and there was also a high mortality from diseases of the respiratory organs.

Birmingham.—Dr. Alfred Hill had the gratification of being able to announce the fact that the year 1885 was distinguished by a higher sanitary condition than any preceding year of which he had cognisance. This conclusion is based not on total rate of mortality alone, but on a number of other facts, such as diminished mortality in infants under one year of age, and in children under five years of age, diminished mortality from zymotic or preventable disease, and a higher death-age than has been observed in previous years. It is especially worthy of notice that, in spite of continued increase of population, with the necessarily attendant evil of increased density, the absolute number of deaths is less, with two exceptions, than in any year since 1870, and less than in 1867 and 1868. The rate of mortality at all ages was 19.1 per 1,000, against 21.1 per 1,000 in 1884; and Dr. Hill refers the whole of this reduction to zymotic disease. The fatality of each member of this group was considerably less than the average of the preceding ten years. Diarrhœa was, as usual, the most fatal, whooping-cough coming second, while, of scarlet fever Dr. Hill remarks that "no approach to so low a mortality has hitherto been recorded." The average annual number of deaths from this cause is 301, and only 36 were registered in 1885, or ten per cent. of that number. There were 79 cases of small-pox reported during the year, 64 of which occurred in the first quarter. The appendix to the report contains a map, showing the portions of the town affected by scarlet fever, measles, and typhoid, together with some valuable tables of statistics.

Cardiff. *Forty Years' Retrospect: Outbreak of Typhus.*—The report presented by Dr. H. J. Paine at the close of 1885 was not confined to that particular year, but embraces a far wider scope. It is, in fact, a summary of the sanitary history of Cardiff from a time immediately antecedent to the Public Health Act of 1848. A record extending over so long a time in a populous and rapidly growing town, under one Board and the same medical officer, is certainly a matter of uncommon occurrence, and it cannot fail to be interesting to all who are engaged in the struggle against zymotic and other diseases. Dr. Paine gives in detail a history of the epidemic visitations, with a description of the local conditions existing at each outbreak to favour its introduction or to influence its prevalence. Dividing the period of forty years into four decennial periods, the first decade shows an excess of births over deaths amounting to 258. In the second decade the first section of the new sewerage came into operation, and the first main of the new water-supply became available. From that time, and progressively, as other important sanitary improvements were carried out, there was a concurrent increase in the excess of births over deaths up to the end of 1884, at which time the relative proportion of births to deaths exceeds that of almost all other populous towns. During 1885, typhus fever was epidemic, and at one time threatened to assume large proportions. The first cases visited were in a family of eight members, all of whom had the disease in a severe form, but ultimately recovered. The nurse who took charge of the sick contracted the disease and died; and a long series of cases, resulting in nine deaths, were more or less directly traced to this source. Seventeen cases of small-pox were reported. The deaths from scarlatina were much below the average. The death-rate for 1885 was 25.6; but Dr. Paine, estimating it on the number of inhabited houses, gives it as 23.1. The mortality was considerably in excess of the average throughout the whole year; this was mainly due to the prevalence of infantile diseases. Measles especially was very fatal, causing 198 deaths; while diarrhœa, as an epidemic, was almost entirely infantile, only eighteen out of ninety-nine cases being above the age of five years.

Dublin.—In reporting on the state of the public health in 1885, Sir Charles Cameron states that the mortality was below the average for the previous decade, but was greater than in most of the large towns of the United Kingdom, though less than that of the majority of Continental cities. The most fatal zymotic disease during 1885 was measles, which caused 250 deaths, as against 21 in 1884. The victims of this disease were almost exclusively children of the poorest sections of the population. Every effort was made to induce their parents to send the patients to hospital, and in a large number of cases they complied with the request. Next in order of fatality was whooping-cough, with 163 deaths, diarrhœa and dysentery coming third on the list with 139 deaths. Scarlet fever was much less prevalent and fatal than in 1884, 131 deaths having been ascribed to it, against 257 in the previous year. The deaths from typhus fever were 46 in 1885 and 76 in 1884. This disease has of late years declined in Dublin, and Sir C. Cameron thinks it may be owing to the less congested condition of the tenement houses and the opening up of spaces in the most densely populated parts of the city. Constitutional diseases have always caused a large mortality. Out of a total of 7,741 deaths in 1885, 1,626 were ascribed to constitutional diseases—988 of them to phthisis or pulmonary consumption. Diseases of the respiratory organs were fatal in 1,691 instances. The death-rate from phthisis and bronchitis and lung complaints was 10.62, or more than one-third of

the total death-rate. No death from small-pox has been registered in Dublin since 1881, though one took place in the Cork Street Fever Hospital during the year under notice, which was debited to another township. The utmost precautions were taken, and with great success. Only two other cases resulted, and these from the clothing and bed-clothes, which had been sent to a laundry from the house originally infected. A series of charts exhibit the deaths from all causes and from the principal zymotic diseases, one specially illustrating the relation between cold and the respiratory organs. The death-rate for 1885 was 30.69 per 1,000, one below the average for the previous ten years, but, in view of the unrecorded deaths previous to 1880, Sir Charles Cameron takes it to be really much below the average.

COMPLIMENTARY DINNER TO DR. HERBERT ASHDOWN.

LAST week in the Victoria Hall, Waterloo Hotel, a complimentary dinner was given by a large number of the medical profession, resident in Edinburgh, to Dr. Herbert Ashdown, late Senior Demonstrator of Physiology in the University of Edinburgh. The object of the dinner was to express to Dr. Ashdown the high esteem in which he is held by his professional brethren, more especially in view of the recent circumstances, which necessitated his resignation of his University appointment. The large and representative company was presided over by Dr. George A. Gibson, Secretary of the Royal College of Physicians, Edinburgh. Mr. Cathcart, F.R.C.S., acted as croupier. Letters of apology for absence, expressive of sympathy, were announced from the President of the Royal College of Physicians, Edinburgh, the President of the Royal College of Surgeons, Edinburgh, Dr. John Smith, Dr. Joseph Bell, Dr. Peel Ritchie, Dr. Halliday Douglas, Dr. Halliday Croom, etc., and a number of leading non-professional citizens. In proposing the toast of the evening, the chairman spoke in the highest terms of Dr. Ashdown's professional attainments and services to the University, whose servant he had long been. Dr. Ashdown had been the loyal and warm friend of all that was best in the University and the Edinburgh school. They were there that night to show their appreciation of his services and to testify to their regard for him as a Christian gentleman. They also wished to state to the world, in regard to the difficult position in which Dr. Ashdown had recently been placed by circumstances over which he had no control, that Dr. Ashdown's conduct throughout had been everything that it could and ought to have been. In fact, they wished to show to the world their thorough approval of his conduct. The chairman concluded by asking, in name of the profession in Edinburgh, Dr. Ashdown's acceptance of the accompanying address, signed by ninety-eight of his professional brethren.

"To Herbert H. Ashdown, Esq., M.B., F.R.S.E., late Senior Demonstrator of Physiology, University of Edinburgh. We, the undersigned, members of the medical profession in Edinburgh, and of the teaching staff in the University, desire to take this opportunity of testifying to the high esteem in which you are held amongst us, and our sympathy with you in the difficult position which recent circumstances have compelled you to occupy. Your brilliant career as a student, and your success as a teacher both of anatomy and physiology in the University of Edinburgh, have earned for you the respect of all with whom you have been brought in contact, while your high scientific attainments are recognised by a wider circle of fellow-workers. Your published writings have reflected credit on the school with which you have been long and honourably connected. Personally, your geniality of disposition, your sympathetic nature, your devotion to duty, and your stainless character, have attached to you, in close friendship, a large number of the best men among your contemporaries. The feelings they entertain towards you afford the strongest testimony to your worth. In conclusion, we heartily assure you of our constant interest in your welfare. We anticipate for you a bright future, and feel certain that this is guaranteed by the possession of those qualities which have already gained for you so distinguished and honourable a place."

The address was beautifully illuminated on vellum by Messrs. Caldwell, of Edinburgh. The toast was received with enthusiasm, and drunk with Highland honours.

Dr. Ashdown, in returning thanks, said he had had to pass through a trying ordeal, and he could only thank them for the kindness and sympathy which they had extended to him throughout it. He would bear the address as a passport to those who did not know him so intimately, and it would stimulate him to greater energy, greater zeal, and more abundant work.

The toast of the University of Edinburgh, proposed by Dr. James, and that of the Edinburgh Medical School, proposed by Mr. Fitzroy Bell, advocate, were duly honoured.

THE HUTTON FUND.

SIR,—May I again appeal to your kindness, and ask you to insert the enclosed list of subscriptions? The list will be kept open until Friday, July 15th, up to which date Dr. Cumberbatch, 25, Cadogan Place, Belgrave Square, will be glad to receive and acknowledge contributions.—I am, etc.,

W. HOWSHIP DICKINSON, Secretary to the Committee.

	£	s.	d.
Amount already acknowledged	968	19	6
Mrs. Thexton	15	0	0
Mrs. Benson	10	0	0
Hon. L. Vesey Fitzgerald	8	0	0
Matthew Arnold, Esq.	5	5	0
W. Wickham, Esq.	5	5	0
Nalder Hollyer, Esq.	5	5	0
John Muir, Esq.	5	5	0
Mrs. Bosworth	5	0	0
Charles Gore, Esq.	5	0	0
T. Ridge Jones, M.D.	5	0	0
Mrs. Agg Gardiner	5	0	0
W. Denman Benson, Esq.	5	0	0
Lord de Saumarez	5	0	0
A Friend	5	0	0
Edwin Humby, M.D.	2	2	0
Mrs. W. Wood	2	1	0
Miss White	2	0	0
W. Wightman Wood, Esq.	2	0	0
Mrs. G. F. Prescott	2	0	0
E. L Webb, M.D.	1	1	0
J. Rushforth, Esq.	1	1	0
W. S. Falls, M.D.	1	1	0
Lady Vavasour	0	10	6
Total	1071	16	0

MEDICAL NEWS.

SOCIETY OF APOTHECARIES OF LONDON.—The following gentlemen, having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received Certificates entitling them to practise as Licentiates of the Society, on June 16th, 1887:

Barton, George Pigott, Lympstone, Exeter, Devon.
Benson, Alfred Hugh, Marchlands, Stoke Bishop, Bristol.
Best, Norrys Dewes, Lime House, Walsall.
Brewis, Andrew Seymour, 2, Eskdale Terrace, Newcastle-on-Tyne.
Hill, Edward Brereton, Longfleet, Poole, Dorset.
Mallard, Frank Reginald, Rosendale Road, West Dulwich, S.E.
Saunders, Henry, 109, High Street, Eton.
Shemmonds, John Onley, 22, Cambridge Road, Kilburn, N.W.
Wheeldon, Frederick John, 241, Stockport Road, Manchester.

MEDICAL VACANCIES.

The following vacancies are announced.

BIRMINGHAM GENERAL HOSPITAL.—Assistant House-Surgeon. Applications by July 2nd to Henry Fox, Esq., R.N.

COVENTRY AND WARWICKSHIRE HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications by July 6th to the Secretary.

EAST SUFFOLK AND IPSWICH HOSPITAL.—House-Surgeon. Applications by July 12th to the Secretary.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, W.C.—Assistant-Physician. Applications by June 29th to the Secretary.

INVERARAY AND GLENARAY PAROCHIAL BOARD.—Medical Officer. Salary, £90 per annum. Applications to the Inspector of Poor, or to the Town Clerk of Inveraray by July 9th.

KENT COUNTY LUNATIC ASYLUM, Chartham Downs.—Second Assistant Medical Officer. Salary, £120 per annum, with board, etc. Applications by July 9th to Allen Fielding, Esq., solicitor, Canterbury.

LIVERPOOL DISPENSARIES.—Assistant-Surgeon. Salary, £80 per annum, with board, etc. Applications by June 27th to the Secretary.

MANCHESTER CLINICAL HOSPITAL FOR WOMEN AND CHILDREN.—House-Surgeon. Salary, £80 per annum, with board, etc. Applications by June 30th, to H. Teague, Esq., 38, Barton Arcade, Manchester.

MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT.—Honorary Assistant Physician. Applications by June 30th to the Secretary.

MASON SCIENCE COLLEGE, Birmingham.—Professor of Physiology. Applications by June 30th to G. H. Morley, Esq.

TEIGNMOUTH URBAN SANITARY DISTRICT.—Medical Officer of Health. Applications to W. R. Hall Jordan, Esq.

UNIVERSITY COLLEGE, London.—Assistant Physician. Applications by June 30th to the Secretary.

UNIVERSITY COLLEGE, London.—Assistant-Surgeon. Applications by June 30th to the Secretary.

UNIVERSITY COLLEGE, London.—Assistant Obstetric Physician. Applications by June 30th to the Secretary.

WELLINGTON (SOMERSET) RURAL SANITARY DISTRICT.—Medical Officer of Health. Salary, £52 per annum. Application to R. A. Were, Esq.

WESTMINSTER HOSPITAL, S.W.—Assistant Surgeon. Applications by July 12th to the Secretary.

WESTMINSTER HOSPITAL, S.W.—Surgical Registrar. Salary, £40 per annum. Applications by June 28th to the Secretary.

WHITTINGTON URBAN SANITARY DISTRICT.—Medical Officer of Health. Salary, £12 per annum. Applications to H. T. Twelves, Esq., Whittington Moor, Chesterfield.

MEDICAL APPOINTMENTS.

AYRES, Charles J., M.R.C.S., L.R.C.P., appointed House-Surgeon to the Royal Westminster Ophthalmic Hospital, *vice* H. Parker, M.R.C.S., resigned.

BAIGENT, William, M.B., B.S., late Assistant Medical Officer to Dunston Lodge Asylum, appointed House-Surgeon to the Newcastle Infirmary.

BARON, Barclay J., M.B., C.M.Edin., appointed Lecturer on Practical Pathology and Morbid Anatomy at the Bristol Medical School.

BIGGAM, J., M.B., appointed Medical Officer of Health to the Upper Sedgley Urban Sanitary District, *vice* T. A. Walker, M.R.C.S., L.R.C.P., resigned.

CLARKSON, Edward, L.R.C.P.Edin., L.R.C.S.Edin., appointed Medical Officer and Public Vaccinator to the Ongar Union, *vice* Joseph Clegg, M.R.C.S., L.S.A., resigned.

HEBBLETHWAITE, Harold, M.R.C.S., L.S.A., appointed Medical Officer of Health to Burnley-in-Wharfedale, Yorks.

KIDD, Cameron, M.R.C.S., L.R.C.P., appointed Resident Medical Officer to the Victoria Hospital for Children, Chelsea, *vice* W. A. Wills, M.B., resigned.

PIRIE, John, M.B., C.M., appointed House-Surgeon to the Whitehaven and West Cumberland Infirmary, *vice* C. J. J. Harris, M.R.C.S., L.S.A., resigned.

SHETTLE, Harry Wynter, L.R.C.P.Ed., M.R.C.S., appointed Assistant-Surgeon to the Royal South Hants Infirmary, Southampton, *vice* A. B. Wade, M.B., C.M., M.R.C.S., appointed Surgeon.

WADE, Arthur Breedon, M.B., V.C.M., M.R.C.S., appointed Surgeon to the Royal South Hants Infirmary, Southampton, *vice* George King, M.B., M.R.C.S., deceased.

A VICTIM OF FASHION.—A sensational illustration of the fatal effects of tight lacing was afforded last week by the death of a single woman aged 52, who died quite suddenly in the street. Mr. A. A. Varne, the house-surgeon of the North West London Hospital, to which institution the lifeless body was taken, stated that the deceased was a woman who laced very tightly, so much so that she could hardly breathe, and it was owing to the impossibility of proper expansion of the lungs that syncope had been produced. Two years ago he had been called to her in the street; she had fallen down and "broken a blood-vessel." Here is a text which popular health lecturers will be able to use effectively, it may be hoped, and—we fear—for many a long day.

PRESENTATION.—On Saturday last a large number of the past and present students of Newcastle Infirmary gathered together in the library of the Infirmary to present a testimonial to the esteemed house-physician, Dr. Waldy, on his retirement from the post. Professor Phillipson, who occupied the chair, gave high testimony to the ability and courtesy of Dr. Waldy, whose official connection with the hospital had lasted over four years. The testimonial included two handsome cases of surgical instruments.

MEDICAL MAGISTRATE.—The name of Dr. Gray, of Castlewellan, one of the Vice-Presidents and the Treasurer of the North of Ireland Branch of the British Medical Association, has been placed by the Lord Chancellor upon the Commission of the Peace for the County of Down.

MRS. SCHARLIEB, M.B. and B.S.Lond., has been elected joint lecturer in Forensic Medicine at the London School of Medicine for Women. Mrs. Scharlieb took the Scholarship and Gold Medal in Obstetric Medicine and honours in all the other subjects at the M.B. and B.S. examinations in 1882. She went to Madras, where she had a large practice and held several public appointments, but has been compelled to return, being unable to endure the climatic conditions.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d. which should be forwarded in stamps with the announcement.

BIRTH.

JULER.—On June 16th, at 77, Wimpole Street, W., the wife of Henry Juler, F.R.C.S., of a son.

MARRIAGES.

MACDONALD—SYMES.—June 15th, at Bradford Peverell, by the Rev. R. G. Watson, Rector of Gussage All Saints, assisted by the Rev. E. J. Pope, Rector of Bradford Peverell, Peter William MacDonald, M.D., Medical Superintendent of the Dorset County Asylums, to Lydia Josephine Squire, eldest daughter of Joseph Gustavus Symes, late Medical Superintendent of the Dorset County Asylums, and grand-daughter of the late Rear-Admiral Symes, of Crewkerne.

SPICER—MELLOR.—On June 15th, at Taunton, W. T. Holmes Spicer, M.A., M.B., 77, St. George's Road, S.W., to Florence, third daughter of the late Enoch Mellor, D.D.

DEATHS.

INNES.—On June 18th, at 11, Upper Phillimore Gardens, aged 45, Cosmo Innes, M.Inst.C.E., Secretary of the London Sanitary Protection Association, youngest son of the late Cosmo Innes, Professor of History in Edinburgh University.

OXLEY.—On June 14th, at Llandudno, Martin G. B. Oxley, M.D., of Liverpool, aged 46.

WILSON.—On June 21st, at his residence, 320, Kensington, Liverpool, John Henry Wilson, M.D. Friends will please accept this (the only) intimation.

HOURS OF ATTENDANCE AT THE LONDON HOSPITALS.

CHARING CROSS.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; Skin M. Th., 1.30; Dental, M. W. F., 9.

GUY'S.—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu. F., 12.30; Skin, Tu., 12.30; Dental, Tu. Th. F., 12.

KING'S COLLEGE.—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, Tu. Th. S. 2; o.p., M. W. F., 12.30; Eye, M. Th., 1; Ophthalmic Department, W., 1; Ear, Th., 2; Skin, Th.; Throat, Th., 3; Dental, Tu. F., 10.

LONDON.—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p. W. S., 1.30; Eye, W. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9.

MIDDLESEX.—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1.30; o.p., W. S., 1.30; Eye, W. S., 8.30; Ear and Throat, Tu., 9; Skin, Tu., 4; Dental, daily, 9.

ST. BARTHOLOMEW'S.—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, Tu. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9.

ST. GEORGE'S.—Medical and Surgical, M. Tu. F. S., 1; Obstetric, Tu. S., 1; o.p. Th., 2; Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2: Orthopædic, W., 2; Dental, Tu. S., 9; Th., 1.

ST. MARY'S.—Medical and Surgical, daily, 1.45; Obstetric, Tu. F., 1.45; o.p., M. Th., 1.30: Eye, Tu. F. S., 9; Ear, M. Th., 3; Throat, Tu. F., 1.30: Skin, M. Th., 9.30; Electrician, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30; Operations, Tu., 1.30; Ophthalmic Operations, F., 9.

ST. THOMAS'S.—Medical and Surgical, daily, except Sat., 2; Obstetric, M. Th., 2; o.p., W., 1.30; Eye, M. Th., 2; o.p., daily, except Sat., 1.30; Ear, M., 12.30; Skin, W., 12.30; Throat, Tu. F., 1.30; Children, S., 12.30; Dental, Tu. F., 10.

UNIVERSITY COLLEGE.—Medical and Surgical, daily, 1 to 2; Obstetrics, M. Tu. Th., F., 1.30; Eye, M. Tu. Th. F., 2; Ear, S., 1.30; Skin, W., 1.45 S., 9.15; Throat, Th., 2.30; Dental, W., 10.30.

WESTMINSTER.—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 3. Eye, M. Th., 2.30; Ear, M., 9; Skin, Th., 1; Dental, W.S., 9.15.

OPERATION DAYS AT THE LONDON HOSPITALS.

MONDAY—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's (Ophthalmic Department); and Royal Westminster Ophthalmic.—2 P.M.: Metropolitan Free; St. Mark's; Central London Ophthalmic; Royal Orthopædic; and Hospital for Women.—2.30 P.M.: Chelsea Hospital for Women.

TUESDAY—9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.30 P.M.: Guy's; St. Bartholomew's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Westminster; St. Mark's; Central London Ophthalmic.—2.30 P.M.: West London; Cancer Hospital, Brompton.—4 P.M.: St. Thomas's (Ophthalmic Department).

WEDNESDAY—10 A.M.: National Orthopædic.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: Middlesex.—1.30 P.M.: St Bartholomew's; St. Mary's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: London; University College; Westminster; Great Northern Central; Central London Ophthalmic.—2.30 P.M.: Samaritan Free Hospital for Women and Children; St. Peter's.—3 to 4 P.M.: King's College.

THURSDAY—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: St. George's—1 30 P.M.: St. Bartholomew's (Ophthalmic Department); Guy's (Ophthalmic Department); Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Central London Ophthalmic; Hospital for Diseases of the Throat; Hospital for Women.—2.30 P.M: North-west London; Chelsea Hospital for Women.

FRIDAY—9 A.M.: St. Mary's (Ophthalmic Department).—10.30 A.M.: Royal London Ophthalmic.—1.15 P.M.: St George's (Ophthalmic Department).—1.30 P.M.: Guy's; Royal Westminster Ophthalmic.—2 P.M.: King's College; St. Thomas's (Ophthalmic Department); Central London Ophthalmic; Royal South London Ophthalmic; East London Hospital for Children.—2.30 P.M.: West London.

SATURDAY—9 A.M.: Royal Free.—10.30 A.M.: Royal London Ophthalmic.—1 P.M.: King's College.—1.30 P.M.: St. Bartholomew's; St. Thomas's; Royal Westminster Ophthalmic.—2 P.M.: Charing Cross; London; Middlesex; Royal Free; Central London Ophthalmic.—2.30 P.M.: Cancer Hospital, Brompton.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

QUERIES.

HERPES FRONTALIS.

L.R.C.S.I. asks for information about herpes frontalis. A patient of his had a rather severe attack some twelve months since, and although it appears perfectly well without any mark, still he complains of a numbness of the part with an occasional twitching of the under eyelid.

VARICOSE VEINS AND CYCLING.

DR. J. B. RICHARDSON (Torquay) writes: While out yesterday, I met a patient riding a small bicycle. In conversation I stated that I thought bicycling produced varicose veins. Upon this, he made the following statement. A friend who suffered severely from enlarged veins, so much so that his medical man advised him to sit with his legs elevated during some hours in the day, was complaining of the annoyance they caused him, when a cyclist said, "Why don't you try bicycling; it is the best thing known." He followed the advice with the best results, his veins now giving him no trouble, and being much reduced in size. Can any of my medical brethren call to mind any such case, or is it one of the many curious stories we hear?

ANSWERS.

ESPERANCE.—"Physician and Surgeon" is, under such circumstances, the correct designation.

L.P.—1. "Painters," Leadenhall Street, London, E.C. 2. Dr. J. B. Hamilton, Supervising Surgeon-General of the United States Marine Hospital Service, Washington, U.S.A.

PROGRESS OF PROVIDENT DISPENSARIES.

IGNORAMUS writes: In the interesting statistics of dispensaries, on page 1352, of the JOURNAL of June 18th, under the column "Medical Staff" appear the mysterious letters "C.," "V.," "R.," "D." I at first thought they meant cured, visited, recovered, and died—but that would scarcely apply to the medical staff.

*** C. stands for consultant; V. for visiting; R. for residents; and D. for dental.

PORT WINE STAIN.

F. AUGUSTUS COX, M.B., writes: Multiple scarification may be tried, local anæsthesia having been produced either by means of the ether spray or with a mixture of ice and salt. If caustics be preferred, ethylate of sodium is the best, but must be used with caution. Several applications will be required.

NOTES, LETTERS, ETC.

TESTIMONIAL TO DR. EDWARD WATERS.

Fourth List of Subscriptions.

	£	s.	d.
Dr. Geo. H. Kidd, Dublin	5	5	0
Mr. Ernest Hart	3	3	0
Dr. J. M. H. Martin	1	1	0
Dr. Denis Chas. O'Connor, Cork	1	1	0
Dr. E. H. Dickinson	1	1	0
Dr. D. Lloyd Roberts, F.R.S.E.	1	1	0
Mr. Jas. Hall, Preston	1	1	0
Mr. J. N. Patterson	0	10	6

A balance-sheet will be issued after the receipt of the unpaid subscriptions. The Honorary Treasurer is Dr. John W. Watkins, Stonelegh, Newton-le-Willows, Lancashire.

PAINLESS DESTRUCTION OF NÆVI.

DR. CHAS. ROTHWELL writes: About the time that Mr. Hunter's case of painless removal of nævus was being commenced my case was just recovering; but as there are two or three points of difference between them, as well as the recommending a new operation, it may be as well to state them.

The nævus, situate on the outer surface of the right arm just above the elbow, and as large as a florin, was unusually prominent and spongy, the child being under six months old. Dr. Böing's operation (which, by the way, can be found in Wright's current *Medical Annual*) was fairly successful with 2 per cent. of the sublimate, except that it failed to take effect on about one-eighth of an inch all round the edge of the nævus, the remainder healing without a trace of cicatrix. This failure might be owing to the contraction of the collodion, heightened by the surface of the nævus being a curve. But the chief point to mention is that within a week after the application the fore-arm and hand swelled so as to cause anxiety to myself, as well as pain and febrile restlessness during two days and a night to the patient. Although only half the prescribed strength of sublimate was used, was it wise to use it at all in so young a child?

ENGLISH AND FOREIGN BATHS.

M.D. writes from Vichy as follows: *A propos* of your remarks in the JOURNAL of June 11th, concerning the medical baths at Leamington, that "we should be glad to see public favour accorded more liberally to our native watering places," etc., but "to render this possible these institutions must be put upon a better footing," etc., is it not possible that one of the reasons so many English men and women come abroad when recommended baths is, that life in these foreign thermal resorts is at once so easy and so pleasant? I know, or rather knew, Leamington well, and as a town in itself, or as regards the beauty of its surroundings, it is far superior to the French resort from whence I write this letter. But then life is so pleasant here. Three times a day an admirable band discourses music in the open; there is a magnificent casino, where one finds everything one can possibly want to while away the time: newspapers, billiards, theatre, etc. The hotel I am staying in is scrupulously clean and well-served, the servants civil and obliging, and the *cuisine* admirable—indeed, the *table d'hôte* is remarkable for its quality and quantity; price of dinner, wine included, six francs. I would infinitely prefer remaining in England, if I could get the same accommodation and *agrements* as I do here; but where are these to be found? Then it must be remembered that often one or two, or it may be more, members of a family accompany the real invalid, and for them, if not for him, amusements are necessary. In matters of carriages, also, where you would expect the English to excel, it strikes me we are far behind. Here I can get a neat, clean, comfortable Victoria, with a spirited, fast-trotting mare, for three francs an hour; this is a great boon to an invalid.

COMMUNICATIONS, LETTERS, etc., have been received from:

Dr. Clement Dukes, Rugby; Mr. A. P. Luff, London; Mr. C. Hime, Londonderry; Dr. Kelly, Taunton; Mr. J. R. Rygate, Bridgwater; Mr. Lawson Tait, Birmingham; Mr. W. Sykes, Mexborough; Mr. J. B. Richardson, Torquay; Our Swiss Correspondent; Mr. L. Humphry, Cambridge; Dr. Felix Semon, London; Mr. R. J. Baron, Clifton; The Secretary of the Local Government Board, London; Dr. Horace Dobell, London; Dr. T. R. Glynn, Liverpool; Mr. G. Hope, London; Rev. J. A. Hatchard, St. Leonards-on-Sea; Mr. W. J. Walsham, London; "A.M.S.," London; Mr. C. A. Ballance, London: Messrs. Cassell and Co., London; Dr. H. Gibbes, London; Mr. J. H. Davis, Chippenham; Dr. A. Money, London; Dr. Macpherson, London; Mr. T. Hughes, Liverpool; Dr. Laffan, Cashel; Dr. G. H. Fitzgerald, Newcastle; Mr. J. R. Dykes, Wellingborough; "H.C.," Wakefield; Dr. Styrap, Shrewsbury; Dr. Tatham, Salford; Dr. H. C. Cameron, Glasgow; Mr. R. H. Cogan, Bradford; Dr. Willoughby, London; Messrs. G. Mason and Co., London; Dr. Dickinson, London; Mr. G. Whittle, Liverpool; Dr. Gray, Castlewellan; Mr. A. E. Livsey, Liverpool; Dr. J. Haycraft, Edinburgh; Dr. Armstrong, Durham; Rev. T. Dixon-Spain, Bath; Our Vienna Correspondent; Mr. F. W. Smith, Leamington; Dr. Rentoul, Liverpool; Dr. B. Carrington, Eccles; Dr. S. G. Campbell, Glasgow; Mr. A. W. W. Nankivell, Chatham; Mr. T. A. Helme, Strasbourg; Mr. Kenneth Millican, London; Dr. Campbell, London; Dr. Danford Thomas, London; Mr. W. Baigent, Newcastle-on-Tyne; Mr. G. P. Atkinson, Pontefract; Mr. Lennox Browne, London; Mr. A. Haviland, Edinburgh; Mr. A. W. Luke, London; Mr. J. S. Yeates, Penrith; Dr. Cosgrave, Dublin; Mr. T. A. Cox., London; Mr. L. A. Dunn, London; Mr. E. Trimmer, London; Mr. Nathan Row, Newcastle-on-Tyne; Mr. H. W. Shettle, Southampton; Dr. Pitt, London; Our Berlin Correspondent; Dr. W. B. Hadden, London; Dr. A. Scherbakoff, Moscow; Surgeon G. Arthur, Washington; Dr. Creighton, London; Mr. W. G. Wharry, Scarborough; Mr. Dale, Stockton-on-Tees; Mr. W. H. Bennett, London; The Sanitary Commissioner, Punjab; Dr. W. R. S. Jefferis, Chatham; Mr. J. Spicknar, London; Dr. Noel Paton, Edinburgh; Mr. W. L'Heureux Blenkarne, Leicester; Mr. A. Edington, Edinburgh; Mr. J. Christal, Cootehill; Dr. Holman, Reigate; Dr. Fernside, London; Dr. J. S. Holden, Sudbury; Mr. R. B. Cooke, Scarborough; Our Manchester Correspondent; Dr. F. P. Atkinson, Surbiton; Mr. W. R. Thomas, Sheffield; Dr. Maxwell, Woolwich; Mr. J. R. Hamilton, Hawick; Mr. R. Kirk, Partick; Dr. Illingworth, Clayton-le-Moors; Dr. Bigger, London; Mr. S. Paget, London; Dr. P. Robertson, Ventnor; Mr. N. E. Davies, Sherborne; Mr. C. Bell, Edinburgh; Mr. W. Bevan, Lynmouth; Dr. H. P. Smith, Southsea; Mr. H. Davis, Tuam; the Secretary of St. Mary's Hospital.

THE General Secretary of the British Medical Association acknowledges the receipt of three Essays on Pathology and Treatment of Abortion, with the mottoes: "Μελετη το Παν;" "Vigilantia;" and "Look into the seeds of time, and say which grain will grow and which will not."

BOOKS ETC., RECEIVED.

The Mineral Waters of Vichy. By Dr. C. E. Cormack. London: J. & A. Churchill. 1887.

Fairlie Clarke's Manual of the Practice of Surgery. Revised and partly rewritten by Andrew Clark, F.R.C.S. Fourth edition. Illustrated. London: Henry Renshaw. 1887.

Transactions of the American Gynæcological Society. Vol. II., for the year 1886. New York: D. Appleton and Co. 1887.

Travels in the Interior: or the Wonderful Adventures of Luke and Belinda. By Luke Theophilus Courteney. Edited by a London Physician. Illustrated. London: Ward and Downey. 1887.

An Introduction to the Study of Embryology. By A. C. Haddon, M.A.Cantab., M.R.I.A. Illustrated. London: Charles Griffin and Co. 1887.

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